

Beaver County Intermunicipal Development Plan Updates

Discussion Paper

FINAL

May 2019



ISL Engineering and Land Services Ltd. Is an award-winning full-service consulting firm dedicated to working with all levels of government and the private sector to deliver planning and design solutions for transportation, water, and land projects.











Beaver County Intermunicipal Development Plan Updates



Table of Contents

1.0	Purpose	1
2.0	Municipal Government Act	2 2
3.0	Land Use Planning Review and Analysis 3.1 Village of Holden / Beaver County 3.2 Village of Ryley / Beaver County 3.3 Town of Tofield / Beaver County 3.4 Town of Viking / Beaver County	3 3 9 15 21
4.0	Village of Holden / Beaver County Population and Land Analysis 4.1 Population Histories and Projections 4.2 Land Requirement Projections	27 27 28
5.0	Village of Ryley / Beaver County Population and Land Analysis	32 32 33
6.0	Town of Tofield / Beaver County Population and Land Analysis	37 37 38
7.0	Town of Viking / Beaver County Population and Land Analysis	42 42 43
8.0	Direction for Updated Intermunicipal Development Plans	47 47 48 49 50

APPENDICES

Appendix A Historical Population Growth Analysis and Projections

Appendix B Estimated Land Supply Requirements

TABLES

Table 1: Village of Holden / Beaver County Population Estimates	27
Table 2: Village of Holden Land Requirements at Various Intervals	29
Table 3: Holden 50-Year Land Requirements Beyond Boundary	30
Table 4: Village of Ryley / Beaver County Population Estimates	32
Table 5: Village of Ryley Land Requirements at Various Intervals	34
Table 6: Ryley 50-Year Land Requirements Beyond Boundary	35
Table 7: Town of Tofield / Beaver County Population Estimates	37
Table 8: Town of Tofield Land Requirements at Various Intervals	39
Table 9: Tofield 50-Year Land Requirements Beyond Boundary	40
Table 10: Town of Viking / Beaver County Population Estimates	42
Table 11: Town of Viking Land Requirements at Various Intervals	44
Table 12: Viking 50-Year Land Requirements Beyond Boundary	45
FIGURES	
Figure 1: Provincial and Municipal Planning Framework	1
Figure 2: Highway 14 Corridor Plan – Village of Holden	8
Figure 3: Highway 14 Corridor Plan – Village of Ryley	14
Figure 4: Highway 14 Corridor Plan – Town of Tofield	20
Figure 5: Highway 14 Corridor Plan – Town of Viking	26







MAPS	Followin	ng Page
Map 3.1:	Village of Holden/Beaver County Existing IDP Future Land Use Concept	8
Map 3.2:	Village of Holden/Beaver County Existing IDP Plan Areas	8
Map 3.3:	Village of Holden/Beaver County Consolidated Map Future Land Use Concept	8
Map 3.4:	Village of Holden/Beaver County Consolidated Land Use Bylaw Districting	8
Map 3.5:	Village of Ryley/Beaver County Existing IDP Future Land Use Concept	8
Map 3.6:	Village of Ryley/Beaver County Existing IDP Plan Areas	14
Map 3.7:	Village of Ryley/Beaver County Consolidated MDP Future Land Use Concept	14
Map 3.8:	Beaver County Equity Industrial Park ASP Land Use Concept	14
Map 3.9:	Village of Ryley/Beaver County Consolidated Land Use Bylaw Districting	14
Map 3.10:	Town of Tofield/Beaver County Existing IDP Future Land Use Concept	20
Map 3.11:	Town of Tofield/Beaver County Existing IDP Plan Areas	20
Map 3.12:	Town of Tofield/Beaver County Consolidated MDP Future Land Use Concept	20
Map 3.13:	Town of Tofield Northeast ASP Land Use Concept	20
Map 3.14:	Town of Tofield/Beaver County Consolidated Land Use Bylaw Districting	20
Map 3.15:	Town of Viking/Beaver County Existing IDP Future Land Use Concept	26
Map 3.16:	Town of Viking/Beaver County Existing IDP Plan Areas	26
Map 3.17:	Town of Viking/Beaver County Consolidated MDP Future Land Use Concept	26
Map 3.18:	Town of Viking/Beaver County Consolidated Land Use Bylaw Districting	26
Map 4.1:	Holden Land Supply Status	31
Map 4.2:	Holden Fringe Area Land Supply Status	31
Map 4.3:	Ryley Land Supply Status	36
Map 4.4:	Ryley Fringe Area Land Supply Status	36
Map 4.5:	Tofield Land Supply Status	41
Map 4.6:	Tofield Fringe Area Land Supply Status	41
Map 4.7:	Viking Land Supply Status	46
Map 4.8:	Viking Fringe Area Land Supply Status	46

Development Plan Updates





The purpose of this discussion paper is to provide an information base for updating the Intermunicipal Development Plans between Beaver County and the Towns of Viking and Tofield and the Villages of Ryley and Holden (the "Municipalities"). This discussion paper provides the project team and municipalities a foundation for updating each IDP through a review of existing policy, legislation and land use planning analysis. It evaluates existing Intermunicipal Development Plans (IDPs), Municipal Development Plans (MDPs), Area Structure Plans (ASPs), Land Use Bylaws (LUBs), recent annexations and supporting studies, and the Highway 14 Corridor Plan to ensure policy alignment among each IDP is consistent with the provincial and municipal planning framework (see Figure 1). This paper discusses:

- Existing conditions and policy framework for statutory plans;
- · Key directions for future growth and development;
- · Intermunicipal issues and constraints;
- · Population histories and projections;
- · Estimated land supply requirements; and
- · Proposed considerations for updating the IDPs.

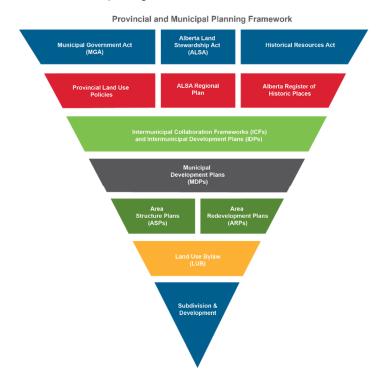


Figure 1: Provincial and Municipal Planning Framework

The updated IDPs will ensure that intermunicipal land use planning is coordinated with the mandated requirement for Intermunicipal Collaboration Framework (ICF) agreements. The IDPs must be included with the ICFs prepared by TSI in order for the planning and municipal planning framework to provide a forum for neighbouring municipalities to work more closely together to better manage growth, coordinate service delivery, and optimize resources for citizens. The ICF agreements will need to link intermunicipal land use planning to how servicing will support development, as well as regional service delivery and funding.







Key Changes

2.1.1 Review of New Regulations

The updated Intermunicipal Development Plans (IDPs) for the municipalities will address the mandatory elements of IDP content now required under Section 631 of the Municipal Government Act (MGA). The MGA was amended by three bills over a period of three years: Municipal Government Amendment Act (2015), Modernized Municipal Government Act (2016) and An Act to Strengthen Municipal Government (2017). Most of the changes contained in the three amending bills and their associated regulations came into force on October 26, 2017 or April 1, 2018.

The MGA requires municipalities to adopt ICFs with an adopted IDP within two (2) years from the date these regulations came into force on April 1, 2018. IDPs must meet all of the requirements of Section 631 of the MGA, which include:

- a. IDPs must address
 - the future land use within the area, i.
 - ii. the manner of and the proposals for future development in the area,
 - iii. the provision of transportation systems for the area, either generally or specifically,
 - the co-ordination of intermunicipal programs relating to the physical, social and economic iv development of the area.
 - ٧. environmental matters within the area, either generally or specifically, and
 - vi. any other matter related to the physical, social or economic development of the area that the councils consider necessary; and
- IDPs must include
 - a procedure to be used to resolve or attempt to resolve any conflict between the municipalities that have adopted the plan,
 - a procedure to be used, by one or more municipalities, to amend or repeal the plan, and ii.
 - iii. provisions relating to the administration of the plan.

The IDP updates will be prepared in accordance with the new requirements of the MGA.

2.1.2 Land Use Planning Review and Analysis

Each municipality is embarking on this process of updating their IDPs primarily in response to new regulations under the MGA. Even if such plans were not mandated by legislation, IDPs are extremely beneficial tools for municipalities to pursue and update in order to secure future growth areas for the partnering municipalities, establish development policies of mutual interest, facilitate joint economic development initiatives, and provide mechanisms for cooperation in service provision. Clearly defined processes regarding intermunicipal consultation and dispute resolution are also required to ensure that all parties have a clear understanding of the 'rules' should an issue arise between the affected municipalities.

Our approach in this discussion paper recognizes that the scale and scope of an IDP can vary greatly dependent on the size of the municipalities involved, the growth pressures to be addressed, and the amount of development activity anticipated within the area prescribed to be of joint interest. The methods for determining recommendations for updating the IDPs for the participating municipalities will involve reviewing the strengths, weaknesses, opportunities, and challenges of existing statutory plans and supporting studies, while conducting research and applying best practices to each IDP.









3.0Land Use Planning Review and Analysis

The review outlined below will evaluate existing Intermunicipal Development Plans (IDPs), Municipal Development Plans (MDPs), Area Structure Plans (ASPs), Land Use Bylaws (LUBs), recent annexations and supporting studies, and the Highway 14 Corridor Plan to provide recommendations to ensure policy alignment among each updated IDP is consistent with the provincial and municipal planning framework.

3.1 Village of Holden / Beaver County

3.1.1 Intermunicipal Development Plan (IDP) Review

Village of Holden / Beaver County IDP

The Village of Holden and Beaver County IDP (Village of Holden Bylaw No. 1-2008, as amended; Beaver County Bylaw No. 08-933, as amended) was originally adopted by their Councils in 2008, and addresses the principles, policies and considerations for lands lying adjacent and in proximity to the boundaries of the Village and County. IDP Map 2 – Land Use Concept, directs future residential development in the Urban Fringe Area north of the Village on portions of SW 23. Recreational Residential is identified north of the Village on a portion of SW 23 and east of the Village on portions of NW 13 (refer to Map 3.1). Key policies to consider for updating the IDP include:

Policy C.2 Urban Fringe Area	Identifies land within the County where growth patterns remain as anticipated, primarily in the urban expansion area and the priority area for future annexation by the Village. The IDP identifies future residential expansion on portions of SW 23 for the Village of Holden (see Map 3.1).
	Policies for the Urban Fringe Area will be revised based on the recommendations from the population projections and estimated land supply requirements to direct and update existing policies. Short-term annexation areas are to be further identified and refined in the Urban Fringe Area.
Policy D.1 Referral Area	Identifies land within the County that are intended for future long-term growth areas for the eventual growth of the Village of Holden. The IDP identifies long-term growth areas for the Village on portions of land north of Highway 14, including portions of NE 15, and the entireties of SE 22, SE 23, SW 24, and NW/SW 13 (see Map 3.2).
	Future land use designations for the referral areas is recommended and may be discussed for updating the IDP based on the population projections and estimated land supply requirements. Updated policies are recommended for future referral areas.
Policy E.1 County Development Area	Includes land within the County that are not identified for future Village expansion, and can be developed for purposes as either serviced or unserviced developments in the County. The IDP outlines future development areas for the County on lands south of Highway 14, including SE 15 and portions of NE 15, SW/SE 14 and SW 13. Future County Development Areas are also located on NW 23 to the north, which includes the Village's wastewater lagoon (see Map 3.2).
	Policies in the IDP will be updated to ensure that future land uses identified for County Development Areas are still viable and consistent with the Village's future aspirations.
Policy M.1 Annexation	The County recognizes and agrees that the Village will need additional land in the future and will support annexations that will provide for 20 years of projected growth within the boundaries of the Village (see Map 3.2). No short-term annexation areas have been identified. However, by virtue of the Urban Fringe and Referral Areas as eventual growth



areas for the Village, the IDP infers the Urban Fringe Area as being within a shorter term timeframe as the Referral Area.

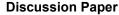
IDP policies will be reviewed and update the hierarchy established by the land requirements based on the population projections and estimated land supply analysis to review 20 years of projected growth and land needs.

Update to IDP Policy Framework

The existing IDP policy framework describes future growth directions for the Village north of Highway 14 (Urban Fringe and Referral Areas), while future development areas in the County are intended to be primarily south of Highway 14 within the IDP plan area, except for portions of land north of Holden on NW 23 (refer to Map 3.2). Recommended updates to the IDP policy framework include the following:

Plan Boundaries and Land Use Concept	Update the existing Village of Holden and Beaver County IDP to align with general growth directions indicated in IDP Map 1 – Plan Area Boundaries and IDP Map 2 – Future Land Use Concept. Provide policy direction for titled land without planned future land use designations, and identify short-term annexation areas as per the Village's estimated land supply requirements.
Population Projections and Estimated Land Supply Requirements	Future land uses and policies will be updated to reflect the anticipated growth patterns for compatible land uses in the Village and County in accordance with the population projections and estimated land supply requirements, and growth directions outlined in the IDP plan areas.
Annexation Areas (short- term/long-term)	Update IDP policies to more definitively identify short-term and long-term annexation areas. Outline policy triggers or circumstances under which annexation would be warranted based on, but not limited to: • Land supply/growth needs; and • Landowner/developer requests (e.g. future ASPs, municipal servicing connections, etc.).
Update Land Use Policy Framework	 Update Section G. Land Use Policies to include separate subsections for: Agriculture – policies respecting continuation/growth of agricultural activities where applicable and CFO restrictions; Country Residential Development – identify potential development nodes within the plan area outside of the Urban Fringe Area and coordinate policy content with the Village and County IDP; Industrial and Commercial Development – identify potential development nodes within the plan area outside the Urban Fringe Area and coordinate policy content with the Village and County IDP; Natural Environment and Open Space – outline policies respecting wetlands, flood plains, trails, and municipal reserve/environmental reserve allocation, and coordinate policy content with any recreation plans for the Village and County; and Area-Specific Policies – can be included to apply to pre-existing land uses, if applicable (e.g. lagoons, public facilities/utilities, etc.). Update policies for shared development and services to align with: Existing or potential joint development areas; Revenue and cost sharing; and Intermunicipal Collaboration Framework (ICF) agreements prepared by TSI.
Update Administration	Update Section N. Dispute Resolution and include an updated Section I. Plan Administration policy framework to include sections for:







Beaver County Intermunicipal Development Plan Updates

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- Administrative Roles and Responsibilities update policies for subdivision and development permit applications, appeals, statutory plan and land use bylaw adoption and amendments, and intermunicipal/joint council committee;
- **Referrals and Communications** update policies for Referral Areas within both the Village and County (timelines, dates, etc.); and
- Dispute Resolution update policies on disputes that may be triggered by lack of agreement on IDP amendments, or unresolved objection to proposed adoption or amendment of statutory plans or a land use bylaw that has been given first reading but believed to be inconsistent with the IDP.

3.1.2 Municipal Development Plan (MDP) Review

Village of Holden MDP

The Holden MDP (Bylaw No. 2-2013, as amended) directs commercial uses along 50 Street and major roads, and locates residential uses primarily north and northeast of Highway 14 and the CN railway. General development patterns in Holden display light industrial uses located between Highway 14 the CN railway, and industrial land planned east of 48 Street on portions of NE 14 and SE 14 (refer to Map 3.3). The IDP will align with the general development pattern in the Village and County, while key MDP policies for future land uses provide direction to IDP policy, which include, but are not limited to:

- Objective 3.8.2, Policy 2 Setbacks and buffering from transportation and utility lines and facilities.
- Objective 5.1.3, Policy 10 High density residential to be located adjacent to arterial or collector roads.
- Objective 5.1.3, Policy 1 Seniors' housing and apartments to be located close to commercial
 uses.
- Objective 5.1.3, Policy 2 Only compatible housing types to be sited adjacent to one another.
- Objective 5.2.2, Policy 2 Commercial to be located adjacent to major roads and highways.
- Objective 5.4.2, Policy 1 Institutional uses to be located in accordance to Map 2: Future Land Use.

Beaver County MDP

The Beaver County MDP (Bylaw No. 98-800, as amended) identifies recreational residential and residential uses on lands north of the Village on portions of NW/SW 23, and recreational residential on two lots east of the Village on portions of NW 13, while the balance of lands surrounding the Village are designated as agricultural (refer to Map 3.3). Overall, policies outlined in the MDP continue to focus on preservation of agricultural land and the continuation of agricultural activities in the County by locating compatible urban uses in proximity to urban centres. However, key policies in Section 6.0 (Urban Expansion) recognize the need to promote economic diversification and growth on future lands within the IDP area which include, but are not limited to:

- Policy 6.1 Holden should be encouraged to expand in areas that would minimize removal of higher agricultural land, regionally significant resources, and environmentally sensitive areas.
- Policy 6.2 Future urban expansion and annexation will be supported on lands if it is immediately
 adjacent to municipal boundaries, suited to urban uses and servicing, staging conforms to the
 municipality's MDP, and lands are identified for expansion and annexation in the IDP.

MDP Considerations

The Village of Holden and Beaver County MDPs identify the future development pattern within the Village of Holden and Beaver County, provide each Council and Administration with a basis for decision-making on land use, transportation and servicing matters within their municipality, and inform citizens and businesses on municipal priorities. For this project, both MDPs were reviewed to ensure consistency of policy and land use planning between the MDPs and the updated IDP as required under Section 632(3) of the MGA. It is







recommended that future growth directions and policies in the IDP be updated and compatible with Holden's MDP Map 2: Future Land Uses, and County IDP Map 1D: Holden Intermunicipal Development Plan Area and County IDP Map 5: Village of Holden CFO Restriction. Future expansion for the Village will need to be discussed with the Intermunicipal Committee (IMC).

3.1.3 Area Structure Plan (ASP) Review

Section 633 of the MGA sets out a framework for the subdivision and development of land through a planning document called an Area Structure Plan (ASP). An ASP designates proposed land uses, lays out transportation networks and the general location of public utilities, assigns population densities, and identifies the proposed sequence of development for the subject area. Municipalities adopt ASPs by bylaw.

Village of Holden / Beaver County ASPs

No existing or proposed ASPs are located within the Village of Holden or Beaver County in the IDP plan area.

ASP Considerations

It is recommended that future ASPs be reviewed in accordance with Section 633 of the MGA, and that policy direction for ASPs identified within the IDP plan area be consistent with the policies of the updated IDP and applicable MDPs, and be implemented by appropriate Land Use Bylaw districting. Future ASPs should align with IDP plan areas and lands identified for future growth directions.

3.1.4 Land Use Bylaw (LUB) Review

Village of Holden LUB

The Village of Holden LUB (Bylaw No. 3-2013, as amended) was adopted by Council in 2013. The Village consists of large and small lot residential, commercial, industrial, institutional, community parks and open spaces, and urban reserve land uses. The central area of the Village is primarily occupied by downtown commercial uses, with much of the residential uses located north of Highway 14 and the CN railway. General development patterns in Holden display light industrial uses located between Highway 14 and the CN railway (refer to Map 3.4).

Beaver County LUB

The Beaver County LUB (Bylaw No. 98-801, as amended) was adopted in 1998 and consolidated on July 19, 2017 with amendments up to and including Bylaw No. 17-1047. The County lands surrounding the Village are primarily zoned Agricultural District, with few industrial or commercial zoned lands in the IDP area. A Rural Industrial District is located north of the Village on a portion of NW 23, while three lots are zoned for Rural Commercial District on portions of SW 14 located south of the Village and adjacent to Range Road 161B. The Rural Industrial District north of the Village is the current location of the wastewater lagoon, while the transfer station is located east of the Village on a portion of NW 13 (refer to Map 3.4).

LUB Considerations

Based on a review of the Village and County LUBs, it is recommended that existing zoning within the Village and County be used to determine compatible land uses in the IDP plan area, and growth directions for future uses are consistent with implementing the land use concepts for the IDP and their respective MDPs.

3.1.5 Highway 14 Corridor Plan

The Highway 14 Corridor Plan was initiated in 2008 by Beaver County, the Villages of Holden and Ryley, and Towns of Tofield and Viking to plan for the orderly development of the Highway 14 Corridor running









Load Corridors.

through Beaver County. The Highway 14 Corridor is an eastern gateway to Saskatchewan and is increasingly becoming a gateway for industrial traffic traveling to Fort McMurray. Specifically, Highways 14 and 36, and the segment of Highway 834 north of Highway 14, have been designated as provincial High

The following is a summary of key issues and opportunities to consider (see Figure 2):

- The Village of Holden is identified has an urban growth node located adjacent and north of Highway 14.
- The Village of Holden has a significant amount of land available for residential, commercial and industrial development.
- The Village offers sanitary services, while water service is provided by the Highway 14 Regional Water Services Commission (H14RWSC).
- The Village also has opportunities for highway commercial and industrial development.
- Located south of Holden, lands have been identified as a County Development Area within the Holden/Beaver County IDP. It is suggested that the lands be developed for agricultural and compatible light industrial purposes. Water services may be available to the lands from the H14RWSC's regional water line.
- The lands north of Holden have been identified for urban expansion as well as a County
 Development Area. It is proposed that SW 23 and NW 23 be developed for residential and
 recreational purposes.
- When developed for residential purposes, the lands adjacent to Holden and south of the sewage lagoon are subject to a 300 metre development restriction.
- It is proposed that the lands adjacent to the sewage lagoon be developed for recreational purposes (golf course or other recreational use).





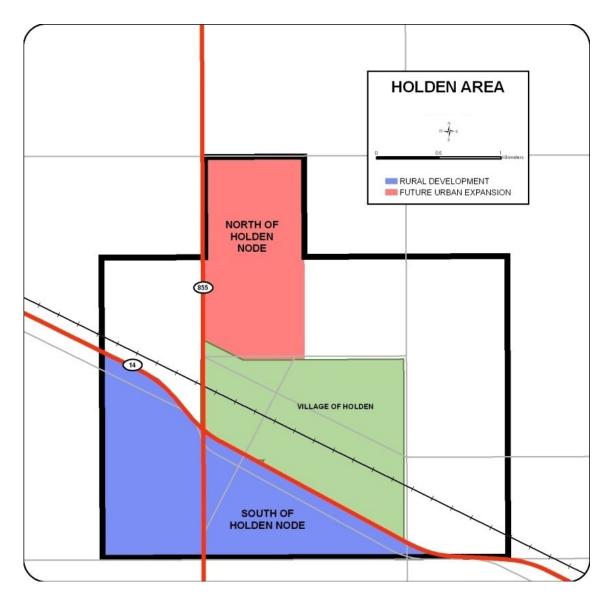
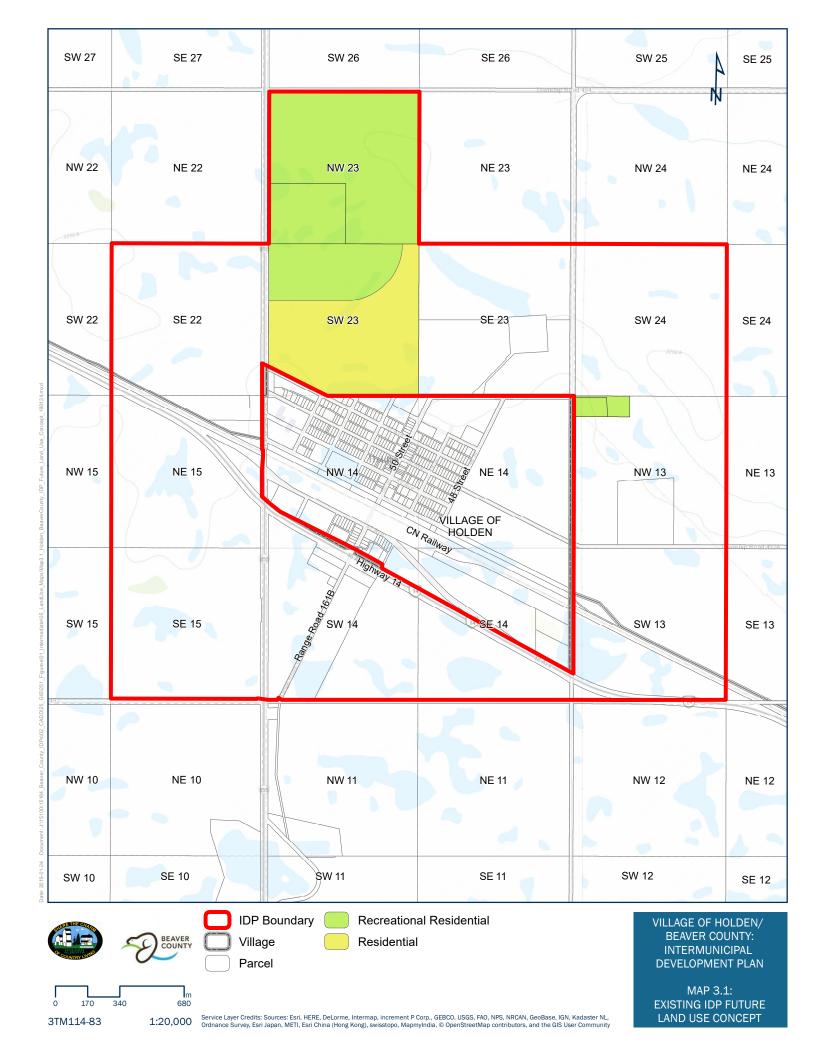
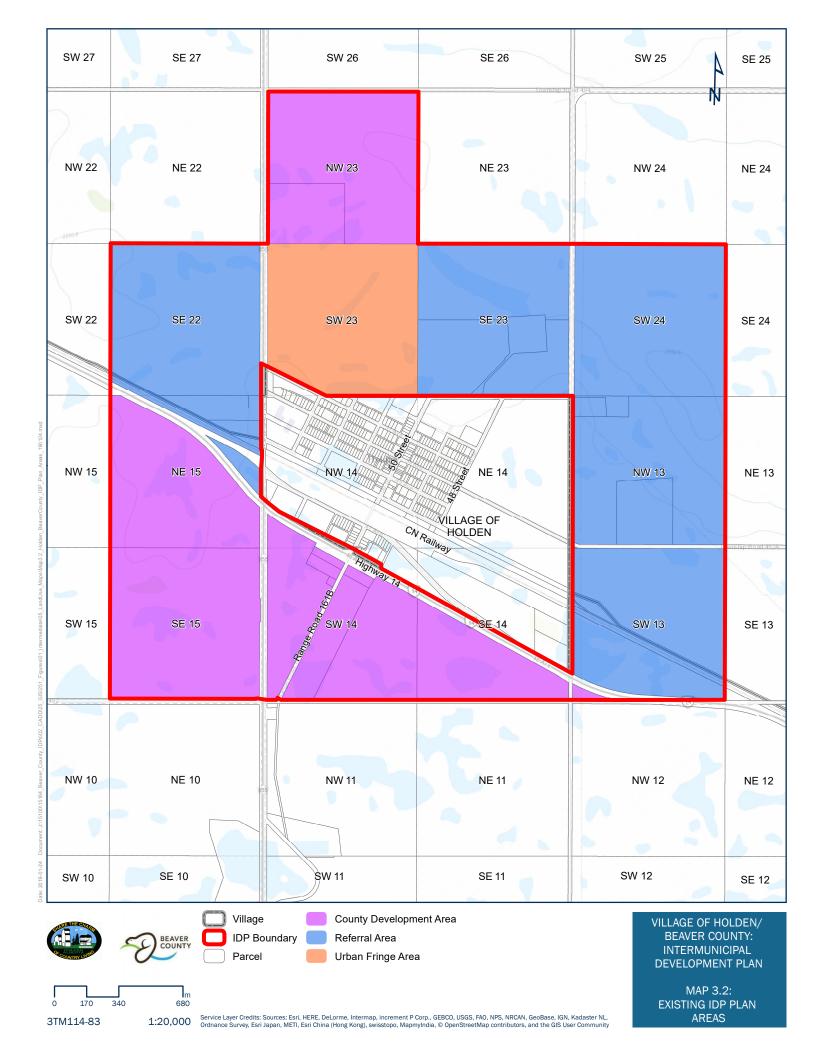
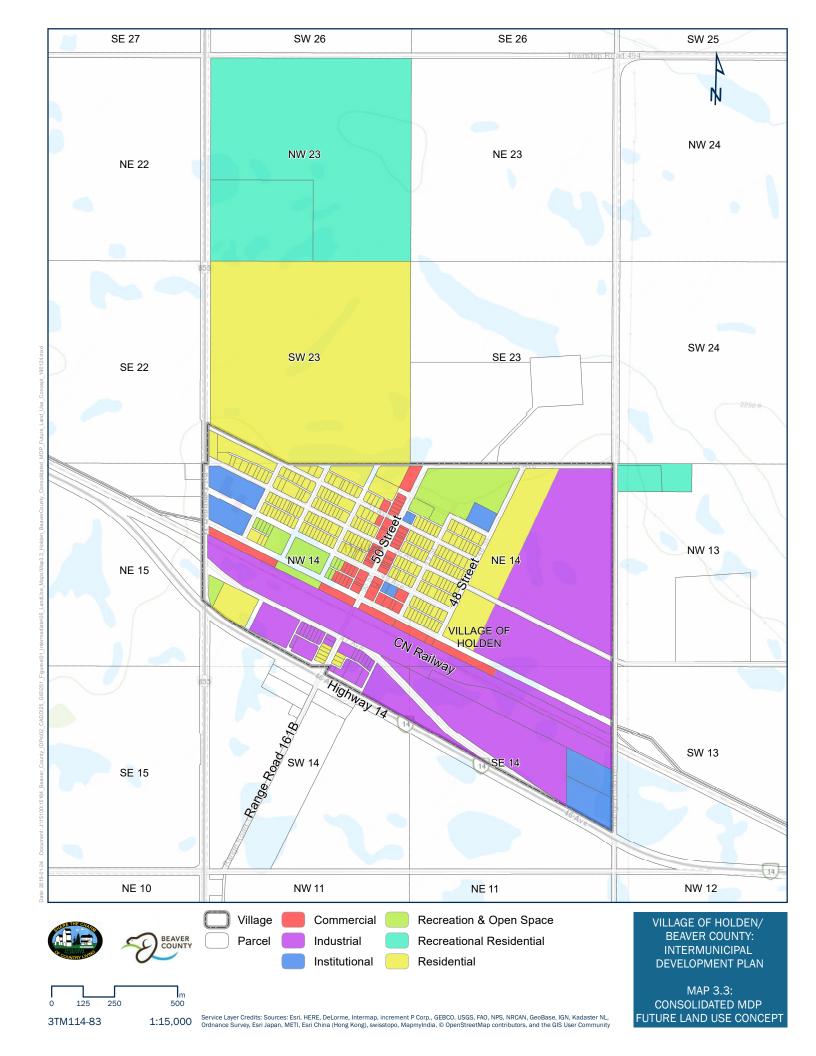
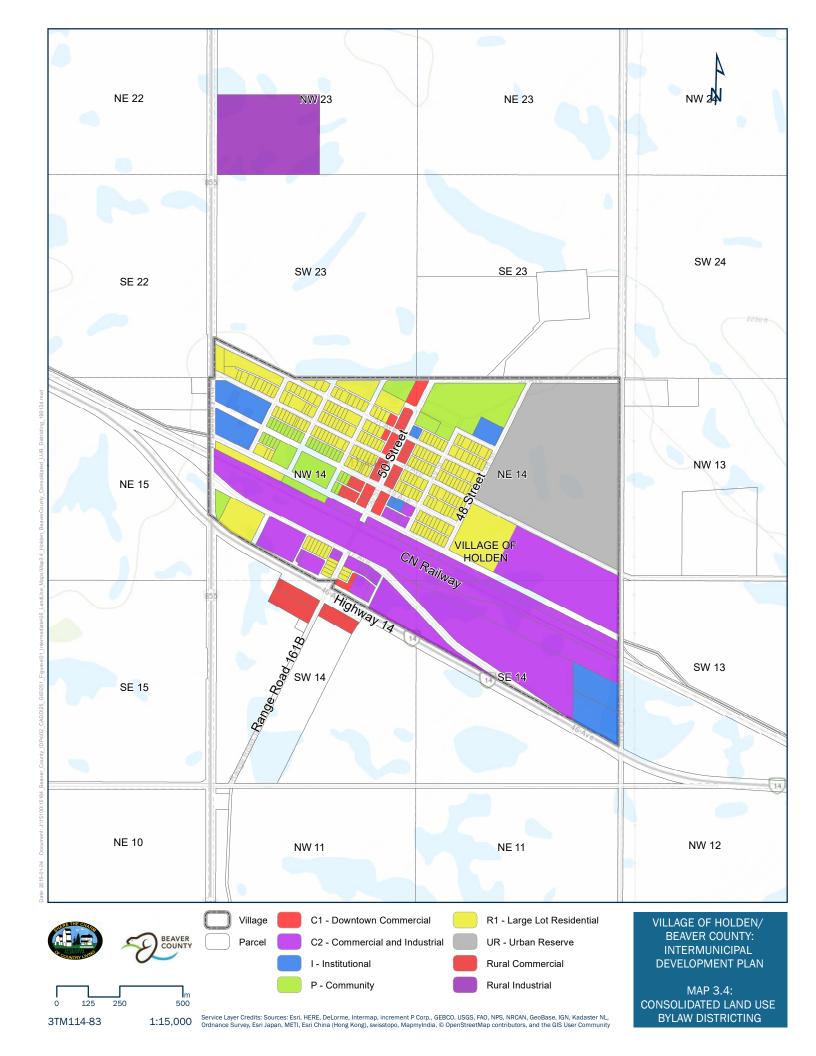


Figure 2: Highway 14 Corridor Plan – Village of Holden













3.2 Village of Ryley / Beaver County

3.2.1 Intermunicipal Development Plan (IDP) Review

Village of Ryley / Beaver County IDP

The Village of Ryley and Beaver County IDP (Village of Ryley Bylaw No. 2008-882, as amended; Beaver County Bylaw No. 08-943, as amended) was originally adopted by their Councils in 2008, and addresses the principles, policies and considerations for lands lying adjacent and in proximity to the boundaries of the Village and County. IDP Map 2 – Land Use Concept, directs future residential development in the Urban Fringe Area north and south of the Village of Ryley on portions of SW 9, SW 4 and SE 4. General industrial and commercial/light industrial is planned east of the Village and along Highway 14 and Highway 854, while a landfill and composting site is identified within the Village on NE 9 (refer to Map 3.5). Key policies to consider for updating the IDP include:

Policy C.2 Urban Fringe Area	Identifies land within the County where growth patterns remain as anticipated, primarily in the urban expansion area and the priority area for future annexation by the Village. The IDP identifies future residential expansion on portions of SW 9, SW 4, and SE 4 for the Village, while NE 9 contains a future expansion of an industrial landfill (see Map 3.5). Policies for the Urban Fringe Area will be revised based on the recommendations from the population projections and estimated land supply requirements to direct and update existing policies. Short-term annexation areas are to be further identified and refined in the Urban Fringe Area.
Policy D.1 Referral Area	Identifies land within the County that are intended for future long-term growth areas for the eventual growth of the Village, except for the Beaver Regional Waste Management Services Commission lands on NE 10. The IDP identifies long-term growth areas for the Village on lands west and east of the Village, including SE 5, NE 8, NW 9, and NW/SW 10 in their entireties and portions of NE 5 and SE 8 (see Map 3.6). Future land use designations for the referral areas are recommended and may be discussed for updating the IDP based on the population projections and estimated land supply requirements. Updated policies are recommended for future referral areas.
Policy E.1 County Development Area	Includes land within the County that are not identified for future Village expansion, and can be developed for rural purposes as either serviced or unserviced developments. The IDP outlines future development areas for the County on lands southeast of the Village, including NW 3, SW 3, SE 3, and a portion of NE 34 (see Map 3.6). Policies in the IDP will be updated to ensure that future land uses identified for County Development Areas are still viable and consistent with the Village and County, and Area Structure Plans in effect.
Policy M.1 Annexation	The County recognizes and agrees that the Village will need additional land for growth and will support annexations that will provide for 20 years of projected growth within the boundaries of the Village (see Map 3.6). No short-term annexation areas have been identified. However, by virtue of the Urban Fringe and Referral Areas as eventual growth areas for the Village, the IDP infers the Urban Fringe Area as being within a shorter term timeframe as the Referral Area.
	IDP policies will be reviewed and update the hierarchy established by the land requirements based on the population projections and estimated land supply analysis to review 20 years of projected growth and land needs.



Update to IDP Policy Framework

The existing IDP land use concept indicates future growth directions for residential development north and south of the Village, while long-term growth directions in the northeast are planned for future general industrial (Urban Fringe and Referral Areas excluding NE 10). Future development areas in the County are intended to be primarily southeast of the Village within the IDP plan area, which are designated for a mix of commercial/light industrial and general industrial land uses (refer to 3.5). Recommended updates to the IDP policy framework include the following:

Plan Boundaries and Land Use Concept	Update the existing Village of Ryley and Beaver County IDP to align with the general growth directions indicated in IDP Map 1 – Plan Area Boundaries and IDP Map 2 – Future Land Use Concept. Provide policy direction for titled lands without planned future land use designations. Provide policy direction for titled land without planned future land use designations, and identify short-term annexation areas as per the Village's estimated land supply requirements. It is recommended that the Village municipal boundary be updated to reflect the recent
	annexation of NE 9 from the County to the Village effective January 1, 2016. It is also recommended the IDP area be expanded to include SW/SE 16 and SW 15 as a result of the recent annexation for Referral Area purposes.
Population Projections and Estimated Land Supply Requirements	Future land uses and policies will be updated to reflect the anticipated growth patterns for compatible land uses in the Village and County in accordance with the population projections and estimated land supply requirements, and growth directions outlined in the IDP plan area.
Annexation Areas (short- term/long-term)	Update IDP policies to more definitively define short-term and long-term annexation areas. Outline policy triggers or circumstances under which annexation would be warranted based on, but not limited to: • Land supply/growth needs; and • Landowner/developer requests (e.g. future ASPs, municipal servicing connections, etc.).
Update Land Use Policy Framework	 Update Section G. Land Use Policies to include separate policy sections for: Agriculture – policies respecting the continuation/growth of agricultural activities where applicable and CFO restrictions; Country Residential Development – identify potential development nodes within the plan area outside of the Urban Fringe Area and coordinate policy content with the Village and County IDP; Industrial and Commercial Development – identify potential development nodes within the plan area outside the Urban Fringe Area and coordinate policy content with the Village and County IDP (the Village advised this may be too aspirational however); Natural Environment and Open Space – outline policies respecting wetlands, flood plains, trails, and municipal reserve/environmental reserve allocation, and coordinate policy content with any recreation plans for the Village and County; and Area-Specific policies – can be included to apply to pre-existing land uses, if applicable (e.g. lagoons, public facilities/utilities, etc.). Update policies for shared development and services to align with: Existing and potential initial development areas:
	 Existing and potential joint development areas; Revenue and cost sharing; and Intermunicipal Collaboration Framework (ICF) prepared by TSI.







Beaver County Intermunicipal Development Plan Updates

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Update Section L (Plan Administration) and Section N (Dispute Resolution) and include an updated plan administration policy framework to include sections for:

- Administrative Roles and Responsibilities update policies for subdivision and development permit applications, appeals, statutory plan and land use bylaw adoption and amendments, and intermunicipal/joint council committee;
- Referrals and Communications update policies for Referral Areas within both the Village and County (timelines, dates, etc.); and
- Dispute Resolution update policies on disputes that may be triggered by lack of agreement on IDP amendments, or unresolved objection to proposed adoption or amendment of statutory plans or land use bylaw that has been given first reading but believed to be inconsistent with IDP.

3.2.2 Municipal Development Plan (MDP) Review

Village of Ryley MDP

The Village of Ryley does not currently have an MDP, but the MGA requires all municipalities to adopt an MDP by April 1, 2021 if one is not already in place. The Village of Ryley is currently engaged in the process of preparing its MDP.

Beaver County MDP

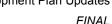
The Beaver County MDP (Bylaw No. 98-800, as amended) identifies residential uses on lands north and south of the Village in SW 9 and on portions of SW 4 and SE 4, while commercial uses are designated along Highway 14 and east of the Village along Highway 854. General industrial uses are designated east of the Village of Ryley in NW 10 and SW 10 and on portions of NW 3, SW 3, SE 3, and NE 34 (refer to Map 3.7). Overall, policies outlined in the MDP continue to focus on preservation of agricultural land and the continuation of agricultural activities in the County by locating compatible urban uses in proximity to urban centres. However, key policies in Section 6.0 (Urban Expansion) recognizes the need to promote economic diversification and growth for future land uses on lands within the IDP area which include, but are not limited to:

- Policy 6.1 Ryley should be encouraged to expand in areas that would minimize removal of higher agricultural land, regionally significant resources, and environmentally sensitive areas; and
- **Policy 6.2** Future urban expansion and annexation will be supported on lands if it is immediately adjacent to municipal boundaries, suitable to urban uses and servicing, staging conforms to the municipality's MDP, and lands are identified for expansion and annexation in the IDP.

MDP Considerations

As mentioned previously, the Village of Ryley does not currently have an MDP, but the preparation of one is in progress. The Beaver County MDP identifies the future development pattern within Beaver County, provides each Council and Administration with a basis for decision-making on land use, transportation and servicing matters within their municipality, and informs citizens and businesses on municipal priorities. For this project, the Beaver County MDP was reviewed to ensure consistency for land use planning between it and the updated IDP as required under Section 632(3) of the MGA. It is recommended that the Village's preparation of an MDP, that policies be consistent with its relevant IDP as required in Section 632(3) of the MGA. A future MDP development strategy for the Village should align with existing development patterns and support compatible land uses in the IDP's future land use concept. Amendments to Beaver County's MDP Map 1C will be required to designate NE 3 as General Industrial and amend the land use designations to align with the Equity Industrial Park ASP proposed land use concept. Future expansion for the Village will need to be discussed with the IMC.







3.2.3 Area Structure Plan (ASP) Review

Section 633 of the MGA sets out a framework for the subdivision and development of land through a planning document called an Area Structure Plan (ASP). An ASP designates proposed land uses, lays out transportation networks and the general location of public utilities, assigns population densities, and identifies the proposed sequence of development for the subject area. Municipalities adopt ASPs by bylaw.

Village of Ryley ASPs

No existing or proposed ASPs are located within the Village of Ryley. However, two outline plans are under preparation to investigate the developability of two sets of undeveloped lands. The locations of the two outline plans are illustrated in Map 4.3. The western outline plan is investigating the potential for residential development while the eastern outline plan is investigating the potential for both residential and commercial development. Should the outline plan investigations confirm the viability of the subject lands for development, the Village indicates it will require the outline plans to be advanced as more detailed ASPs.

Beaver County ASPs

Beaver County's Equity Industrial Park (EIP) ASP is located east of the Village and Highway 854, and includes NW 3 and NE 3 as well as those portions of SW 3, SE 3 and NE 34 north of Highway 14. The EIP ASP designates medium and light industrial on portions of NW 3 and NE 3, while Wetland Conservation and Low Impact/Eco-Friendly Industrial is designated on portions of SW 3, SE 3 and NE 34. The EIP ASP land use policy generally aligns with the vision of the IDP and County MDP by encouraging industrial growth in designated locations throughout the County (see Map 3.8).

ASP Considerations

It is recommended that future ASPs be reviewed in accordance with Section 633 of the MGA, and that policy direction for ASPs identified within the IDP plan area be consistent with policies of the IDP and applicable MDPs, and be implemented by appropriate Land Use Bylaw districting. It is recommended that amendments to Beaver County's MDP Map 1C be required to designate NE 3 as General Industrial and amend the land use designations on MDP Map 1C to align with the Equity Industrial Park ASP (see Map 3.8).

3.2.4 Land Use Bylaw (LUB) Review

Village of Ryley LUB

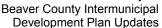
The Village of Ryley LUB (Bylaw No. 2010-889, as amended) was adopted by Council in 2010. The Village consists of residential, commercial, industrial, institutional, community parks and open spaces, and urban reserve land uses. The central area of the Village is primarily occupied by commercial uses along 50 Street, with much of the residential uses located north of Highway 14 and the CN railway. General development patterns in Ryley display commercial uses located adjacent to Highway 14 and south of the CN railway, and industrial uses mostly located along the east and north fringe areas of the Village. A significant amount of urban reserve is available in the north and northwest portions of land in the Village of Ryley (refer to Map 3.9).

Beaver County LUB

The Beaver County LUB (Bylaw No. 98-801, as amended) was adopted in 1998 and consolidated on July 19, 2017 with amendments up to and including Bylaw No. 17-1047. The County lands surrounding the Village are primarily zoned Agricultural District. Lands to the east of the Village and Highway 854 are zoned for rural industrial on a portion of NW 3, low impact eco-friendly industrial on portions of SW 3, SE 3, and NE 34, and landfill composting districts on NW 10 in the IDP area and numerous additional quarter sections further east of the Village. An operating landfill is located in the Village on a portion of SE 9, while NW 10 is the Beaver Regional Waste Management Services Commission lands (refer to Map 3.9).









LUB Considerations

Based on a review of the Village and County LUBs, it is recommended that existing zoning within the Village and County be used to determine compatible land uses in the IDP plan area, and growth directions for future uses that are to be consistent with implementing the land use concepts for the IDP and MDPs for the Village and County. It is recommended that the Village municipal boundary and LUB zoning be updated to reflect the recent annexation of NE 9 from the County to the Village effective January 1, 2016.

3.2.5 Highway 14 Corridor Plan

The Highway 14 Corridor Plan was initiated in 2008 by Beaver County, the Villages of Holden and Ryley, and Towns of Tofield and Viking to plan for the orderly development of the Highway 14 Corridor running through Beaver County. The Highway 14 Corridor is an eastern gateway to Saskatchewan and is increasingly becoming a gateway for industrial oversized load traffic traveling to Fort McMurray. Specifically, Highway 14 and 36, and the segment of Highway 834 north of Highway 14 have been designated as provincial High Load Corridors.

The following is a summary of key issues and opportunities to consider (see Figure 3):

- The Village of Ryley is an urban growth node located adjacent and north of Highway 14.
- The Village of Ryley area is dominated by two large industrial landfills, being the Clean Harbors and Beaver Regional landfills.
- The Village offers sanitary services, while water service is provided by Highway 14 Regional Water Services Commission.
- The Village has numerous residential infill development opportunities.
- The County has initiated development within the Equity Industrial Park, which is planned to be a
 comprehensively planned industrial area designed to take advantage of the topography,
 infrastructure and locational attributes of the area. Proposed uses within the Park include light
 industrial business and general industrial.
- Located south of Ryley, lands have been identified as a potential area for urban residential
 expansion. However, the Village indicated these are likely better suited for non-residential
 expansion. In the Ryley/Beaver County IDP, these lands have been designated as a Fringe Area
 and could provide for the long-term growth of the Village.
- Located northwest of the Village of Ryley, the SW 9 is designated for future residential expansion
 yet it is encumbered by legislated development setbacks from the nearby industrial landfill. The
 Village indicated a desire to alternate or additional urban residential expansion elsewhere within the
 IDP.
- Additional Urban Expansion Areas include west of Highway 854 and north of Ryley (annexed in 2016) and a quarter section to the northwest of the Village. It is proposed that the lands west of Ryley in the County be developed for residential purposes (with commercial adjacent to Highway 14), while the lands north of Ryley be developed for industrial purposes (Clean Harbors expansion).

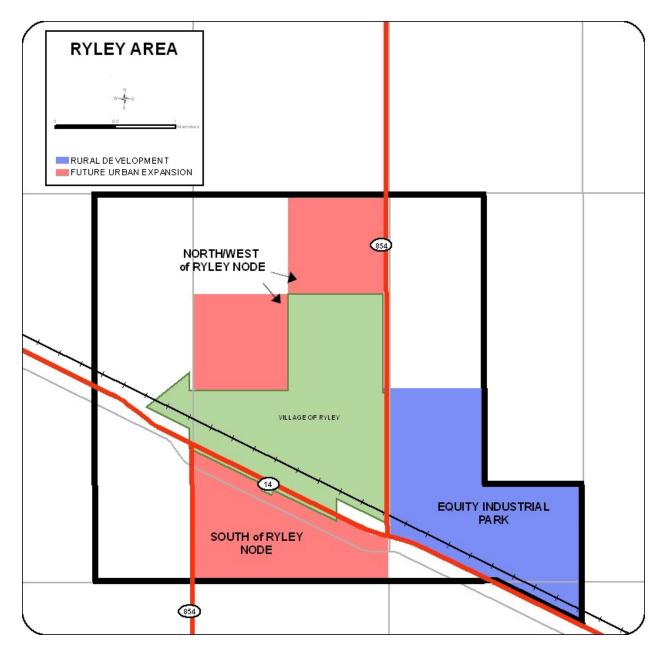
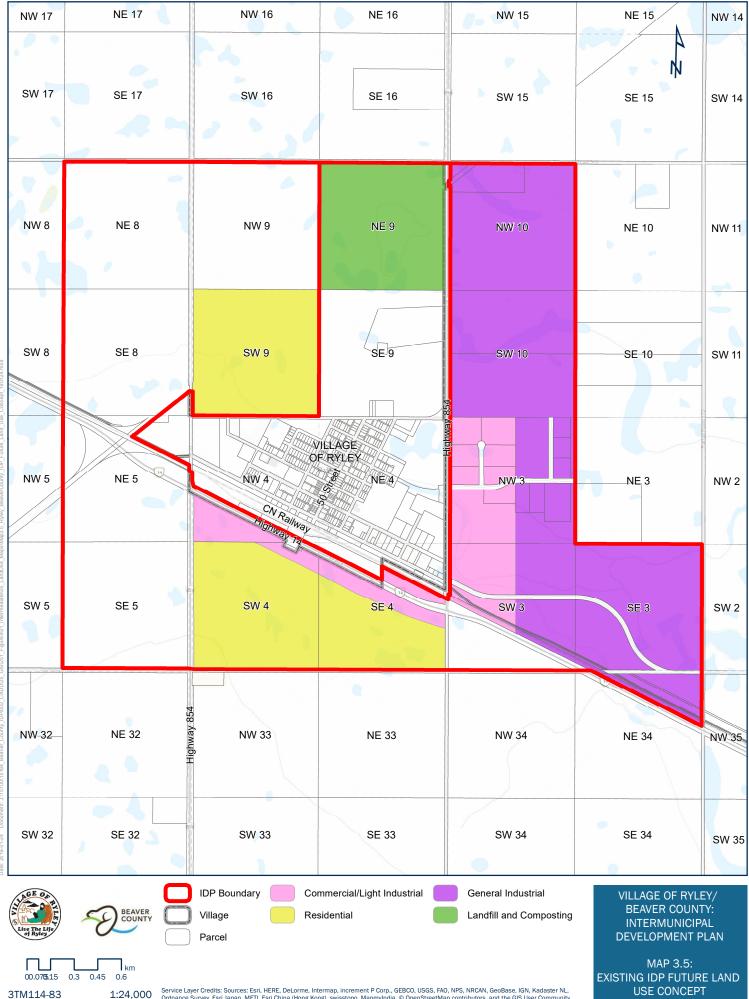


Figure 3: Highway 14 Corridor Plan – Village of Ryley

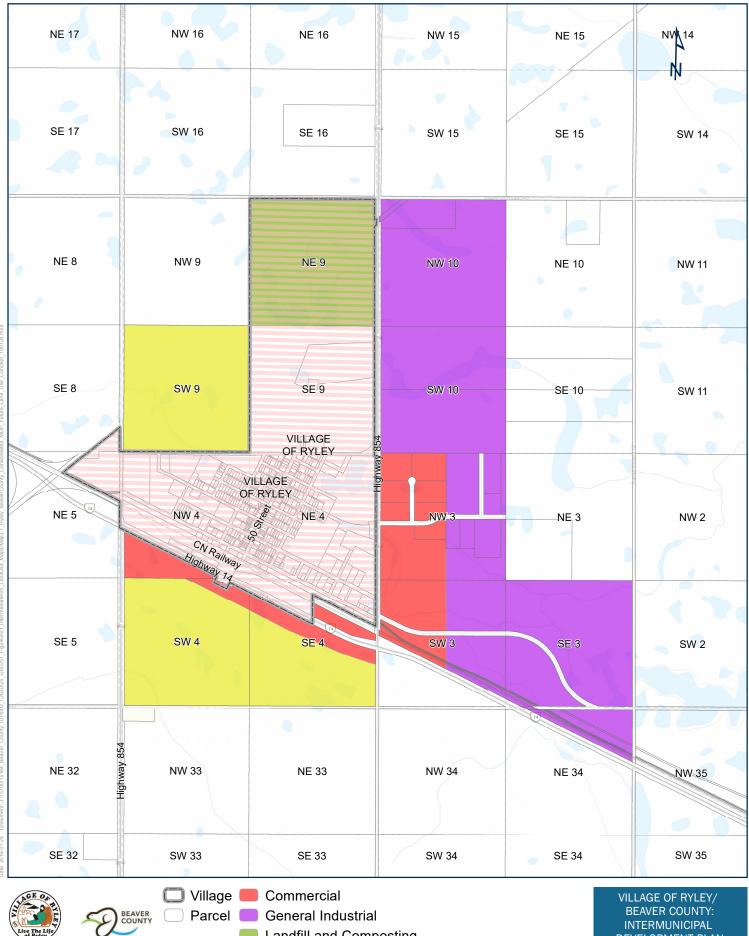




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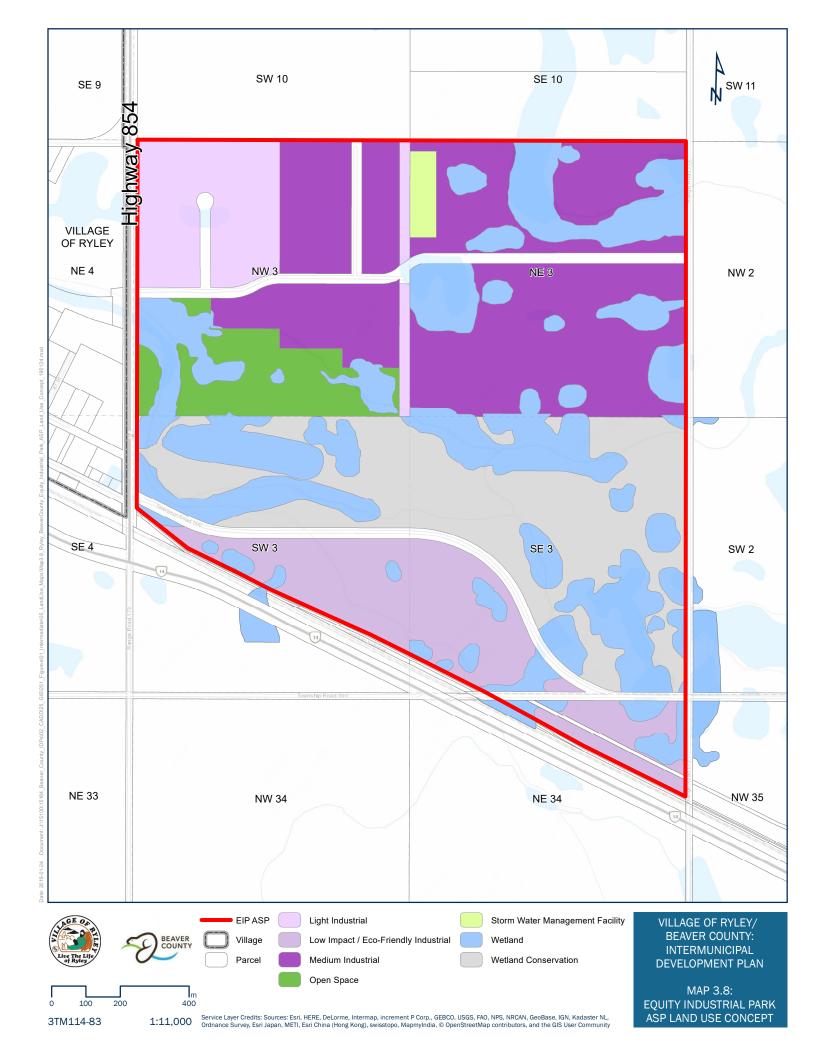
PLAN AREAS





DEVELOPMENT PLAN MAP 3.7:

CONSOLIDATED MDP **FUTURE LAND USE CONCEPT**









3.3.1 Intermunicipal Development Plan (IDP) Review

Town of Tofield / Beaver County IDP

The Town of Tofield and Beaver County IDP (Town of Tofield Bylaw No. 1200, as amended; Beaver County Bylaw No. 08-942, as amended) was originally adopted by their Councils in 2008, and addresses the principles, policies and considerations for land lying adjacent and in proximity to the boundaries of the Town and County. IDP Map 2 – Land Use Concept directs future residential development in the Urban Fringe Area west and east of the Town of Tofield. Green spaces/institutional uses are planned north of the Town, which is the location of two lagoons. Future commercial uses are planned adjacent to Highway 14 and Highway 834 adjacent to the southeast corner of the Town, while industrial uses are planned adjacent to Highway 14 within the far west portion of the Town (see Map 3.10). Key policies to consider for updating the IDP include:

Policy C.2 Short-Term Annexation Area	Designated land that were the primary urban expansion area and short-term annexation area by the Town, which includes land on SE/NE 3, SW/SE 12, and NW 6 (see Map 3.10). These lands were since annexed into the Town on January 1, 2010. Policies need to be updated to identify the next future short-term annexation areas and outline policy triggers or circumstances under which annexation would be warranted.
Policy D.2 Urban Fringe Area	Identifies land within the County where growth patterns remain primary in the Urban Expansion Area and the priority area for future annexation by the Town. The IDP identifies future residential expansion and commercial uses within the south half of NE 36, within SW/SE 11, within NW/NE 2, SW/SE 7, NE/SE 6 and the north half of NE 36 for the Town of Tofield, while future green spaces/institutional and commercial uses are designated on portions of NW/NE 12 (see Map 3.11). Policies for the Urban Fringe Area will need to be revised based on the recommendations from the population projections and estimated land supply requirements to update to existing policies.
Policy E.1 Referral Area	Identifies land within the County that are intended for future long-term growth areas for the eventual growth of the Town. The IDP identifies long-term growth areas northwest, east
Neleliai Alea	and northeast of the Town, including SW/NW 3, the balance of NE 3, SE/NE 10, NW/NE 11, NW/NE 7, SW 8, NW/SW 5, NW 31, and the portion of NW 31 north of Highway 14 (see Map 3.11).
	Future land use designations for the referral areas are recommended and may be discussed with the IMC for updating the IDP.
Policy F.1 County Development Area	Includes land within the County that are not identified for future Town expansion, and can be developed for purposes as either serviced or unserviced developments. The IDP outlines future development areas for the County on lands south of the Town and Highway 14, including portions NE/SE 33, NW/SW 34, NE/SE 34, SW/SE 35, SW/SE 36, as well as portions of NW/NE 35 and SW 31 south of Highway 14 (see Map 3.11).
	Policies in the IDP and land use concept will be updated to ensure that future land uses identified for County Development Areas are still viable and consistent with the Town and County. The existing County Development Areas do not have future land use designations in the IDP plan area.



Policy N.1 Annexation

The County recognizes and agrees that the Town will need additional land for growth and will support annexations that will provide for 20 years of projected growth within the boundaries of the Town (see Map 3.11).

IDP policies will be reviewed and update the hierarchy established by the land requirements based on the population projections and estimated land supply analysis to review 20 years of projected growth and land needs. New short-term annexation areas will need to be identified for the Town and County.

Update to IDP Policy Framework

The existing IDP land use concept indicates future growth directions for residential development predominately west and east of the Town in the Urban Fringe Areas, while commercial and green spaces/ institutional uses are designated north of the Town and additional commercial to the southeast. The longterm growth directions in the Referral Areas are west, northwest, northeast, and east of the Town. Future development areas in the County are intended to be primarily south of the Town and Highway 14 within the IDP plan area, which is intended for serviced or unserviced development in the County (refer to Map 3.11). Recommended updates to the IDP policy framework include the following:

Plan Boundaries and Land use Concept	Update the existing Town of Tofield and Beaver County IDP to align with general growth directions indicated in IDP Map 1 – Plan Area Boundaries and IDP Map 2 – Future Land Use Concept. Provide policy direction for titled lands without future land use designations, and consider revisiting future land use east of the future Highway 834 realignment due to the barrier it will create for residential growth. Alternative land uses could be reverting back to agriculture east of the realignment, or industrial to leverage Highway 834's role as a High Load Corridor. If industrial, a joint initiative could be considered similar to that employed adjacent to the Town of Viking. It is recommended that the IDP boundary be updated to reflect the recent annexation of portions of NE/SE 3, SW/SE 12, and NW 6 from the County to the Town effective January 1, 2010.
Population Projections and Estimated Land Supply Requirements	Future land uses and policies will be updated to reflect the anticipated growth patterns for compatible land uses in the Town and County in accordance with the population projections and estimated land supply requirements, and growth directions outlined in the IDP plan area.
Annexation Areas (short-term/long- term)	Update the IDP to identify new short-term annexation areas. The Town of Tofield recently annexed potentially within lands within NE/SE 3, SW/SE 12, and NW 6, which were identified as for the Town's short-term annexation area in 2008 (see Map 3.11). New annexation areas may need to be designated, and policy triggers or circumstances can be included under which annexation would be warranted based on, but not limited to: • Land supply/growth needs; and • Landowner/developer requests (e.g. future ASPs, municipal servicing connections, etc.).
Update Land Use Policy Framework	 Update Section H Land Use Policies, to include separate policy subsections for: Agriculture – policies respecting the continuation/growth of agricultural activities where applicable and CFO restrictions; Country Residential Development – identify potential development nodes within the plan area outside of the Urban Fringe Area and coordinate policy content with the Town and County IDP; Industrial and Commercial Development – identify potential development nodes within the plan area outside the Urban Fringe Area and coordinate policy content with the Town and County IDP;





Beaver County Intermunicipal Development Plan Updates

FINAL

	 Natural Environment and Open Space – outline policies respecting wetlands, flood plains, trails, and municipal reserve/environmental reserve allocation, and coordinate policy content with any recreation plans for the Town and County; and Area-specific policies – can be included to apply to pre-existing land uses, if applicable (e.g. airports, lagoons, public facilities/utilities, etc.). Update policies for shared development and services to align with: Existing and potential joint development areas; Revenue and cost sharing; and Intermunicipal Collaboration Framework (ICF) agreements prepared by TSI.
Update Administration Policy Framework	 Update Section M (Plan Administration) and Section O (Dispute Resolution) to include an updated plan administration policy framework to include sections for: Administrative Roles and Responsibilities – update policies for subdivision and development permit applications, appeals, statutory plan and land use bylaw adoption and amendments, and intermunicipal/joint council committee;
	 Referrals and Communications – update policies for Referral Areas within both the Town and County (e.g. timelines, dates, etc.); and Dispute Resolution – update policies on disputes that may be triggered by lack of agreement on IDP amendments, or unresolved objection to proposed adoption or amendment of statutory plans or a land use bylaw that has been given first reading but believed to be inconsistent with the IDP.

3.3.2 Municipal Development Plan (MDP) Review

Town of Tofield MDP

The Town of Tofield MDP (Bylaw No.1223, as amended) directs commercial uses along the downtown adjacent to 50 and 51 Street, and along Highway 14 and north of the Town along Highway 834. Future residential uses are primarily north of Highway 14 and the CN railway. Future industrial uses are located predominately north of Highway 14, adjacent to and south of the CN railway, and future planned industrial expansion is located in western Tofield within NE/SE 3 (refer to Map 3.12). Key policies for consideration for updating the IDP include, but not limited to:

- **Policy 6.1** All development and subdivision shall adhere to goals and policies and follow the land use concepts as show on Map 2 and Map 3;
- **Policy 6.14** land in the Urban Reserve District will be developed in accordance with the land use identified on the Future Land Use Map (Map 3);
- **Policy 8.4** higher density residential development will locate in areas accessible to an arterial or collector road and is accessible to schools and community facilities;
- Policy 8.7 incompatible land uses will be buffered using landscaped buffers;
- Policy 10.3 highway commercial will be encouraged along Highway 14; and
- Policy 12.2 industrial will be encouraged and maintained on a large land base in the Town.

Beaver County MDP

The Beaver County MDP (Bylaw No. 98-800, as amended) identifies future residential uses on lands west and east of the Town, and green space and institutional areas north of the Town, where two lagoons are currently situated. Future commercial areas are located north of the Town along Highway 834 and southeast of the Town adjacent to Highway 14 (refer to Map 3.12). Overall, policies outlined in the MDP continue to focus on preservation of agricultural land and the continuation of agricultural activities in the County by locating compatible urban uses in proximity to urban centres. However, key policies in Section 6.0 (Urban Expansion) recognizes the need to promote economic diversification and growth on future land uses within the IDP area which include, but not limited to:





- Policy 6.1 Tofield should be encouraged to expand in areas that would minimize removal of higher agricultural land, regionally significant resources, and environmentally sensitive areas; and
- Policy 6.2 Future urban expansion and annexation will be supported on lands if it is immediately adjacent to municipal boundaries, suitable to urban uses and servicing, staging conforms to the municipality's MDP, and lands are identified for expansion and annexation in the IDP.

MDP Considerations

The Town of Tofield MDP (Bylaw No.1223, as amended) and Beaver County MDP (Bylaw No.98-800, as amended) identifies the future development pattern within the Town of Tofield and Beaver County, provides each Council and Administration with a basis for decision-making on land use, transportation and servicing matters within their municipality, and informs citizens and businesses on municipal priorities. For this project, both MDPs were reviewed to ensure consistency of policy and land use planning between the MDPs and the updated IDP as required under Section 632(3) of the Act. It is recommended that future growth directions in the IDP are compatible with Tofield's MDP Map 3: Future Land Uses, Beaver County's MDP Map 1B: Tofield Intermunicipal Development Plan Area and Map 3: Town of Tofield CFO Restriction Area. The Town of Tofield is currently reviewing its MDP.

3.3.3 Area Structure Plan (ASP) Review

Section 633 of the MGA sets out a framework for the subdivision and development of an area of land through a planning document called an Area Structure Plan (ASP). An ASP designates proposed land uses, lays out transportation networks and the general location of public utilities, assigns population densities, and identifies the proposed sequence of development for the subject area. Municipalities adopt ASPs by bylaw.

Town of Tofield ASPs

The Town of Tofield approved the Northeast Tofield ASP in 2008, which includes approximately 33 hectares of land that is bound by 47 Street (Highway 834) to the west, Cookson Avenue to the south, and the Town's municipal boundary to the north and east. The ASP is predominately large lot and low density residential with portions of medium density residential (refer to Map 3.13). ASPs should comply with the land use concepts of the IDP and the Town's MDP.

Beaver County ASPs

No existing ASPs are currently located within Beaver County in the IDP plan area.

ASP Considerations

It is recommended that IDP policies will require future ASPs to be reviewed in accordance with Section 633 of the MGA, and that policy direction for future land uses in the IDP be compatible with adopted ASPs, shall be consistent with policies of the applicable MDP, and be implemented by appropriate Land Use Bylaw districting.

3.3.4 Land Use Bylaw (LUB) Review

Town of Tofield LUB

The Town of Tofield LUB (Bylaw No. 1222, as amended) was adopted by Council in 2010, and the Town is currently in the process of reviewing and updating its LUB. The Town consists of residential, commercial, industrial, institutional, community parks and open spaces, airport, and urban reserve land use districts. The central area of the Town is primarily occupied by commercial uses along 50 Street and 51 Street, with much of the residential uses located north of Highway 14 and the CN railway. General development patterns in Tofield display highway commercial and industrial uses located adjacent to Highway 14 and south of the CN







Beaver County Intermunicipal Development Plan Updates

FINAL



railway, and additional industrial uses mostly located in the west near the airport and southeast along the fringe areas of the Town. A significant amount of urban reserve is available in the north, west, northeast and southeast portions of the Town of Tofield (refer to Map 3.14).

Beaver County LUB

The Beaver County LUB (Bylaw No. 98-801, as amended) was adopted in 1998 and consolidated on July 19, 2017 with amendments up to and including Bylaw No. 17-1047. The County lands surrounding the Town are primarily zoned Agricultural District. Portions of land to the north of the Town are zoned rural industrial on NW/NE 12, while portions of land are zoned country residential in NW 34 located south of the Town and Highway 14. An airport vicinity overlay applies to lands located immediately west and southwest of the Town of Tofield on all or portions of NW/NE2, NW/NE 3, SW 3, NE 34, and NW/NE 35 (refer to Map 3.14). The airport vicinity overlay will impact the height of proposed development over 10 m (32.8 ft.) and may be more suited for industrial uses.

LUB Considerations

Based on a review of the Town and County LUBs, it is recommended that existing zoning within the Town and County be used to determine compatible land uses in the IDP plan area, and growth directions for future uses are consistent with implementing the land use concepts for the IDP and MDPs for the Town and County. It is recommended that the Town municipal boundary in the IDP be updated to reflect the 2010 annexation from the County identified in both the MDP and LUB from the County.

3.3.5 Highway 14 Corridor Plan

The Highway 14 Corridor Plan was initiated in 2008 by Beaver County, the Villages of Holden and Ryley, and Towns of Tofield and Viking to plan for the orderly development of the Highway 14 Corridor running through Beaver County. The Highway 14 Corridor is an eastern gateway to Saskatchewan and is increasingly becoming a gateway for industrial oversized load traffic traveling to Fort McMurray. Specifically, Highway 14 and 36, and the segment of Highway 834 north of Highway 14 have been designated as provincial High Load Corridors.

The following is a summary of key issues and opportunities to consider (see Figure 4):

- The Town of Tofield is an urban growth node located adjacent and north of Highway 14.
- Highway 834 has been designated a "High Load Corridor" by Alberta Transportation. The department is planning to realign Highway 834 to east of Tofield. This realignment will also include changes to Highway 14.
- Located at the west access to Tofield, these lands would provide Tofield with an opportunity for industrial expansion (since annexed in 2010). The airport, as well as the KNM plant, is located immediately east of the property within the Town of Tofield.
- Located south of Tofield, lands have since been identified as a County Development Area within the Tofield/Beaver County IDP. It is suggested that the lands be developed for mixed uses including recreational, residential, with some minor commercial and industrial activities.
- Located east of Tofield and adjacent to the proposed realignment of Highway 834, lands have been
 identified for future annexation by the Town of Tofield for commercial and residential purposes. The
 proposed realignment of Highway 834 makes these lands a logical and desirable location for future
 urban expansion, as the lands will have vehicular access opportunities from both Highways 14 and
 834.

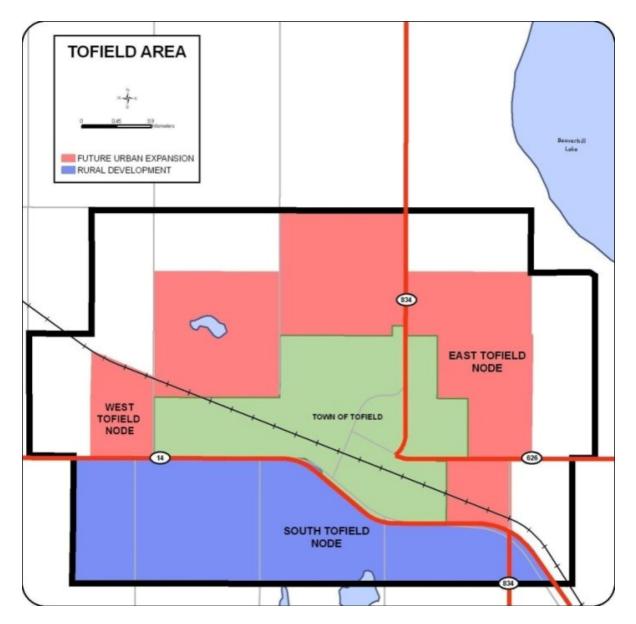
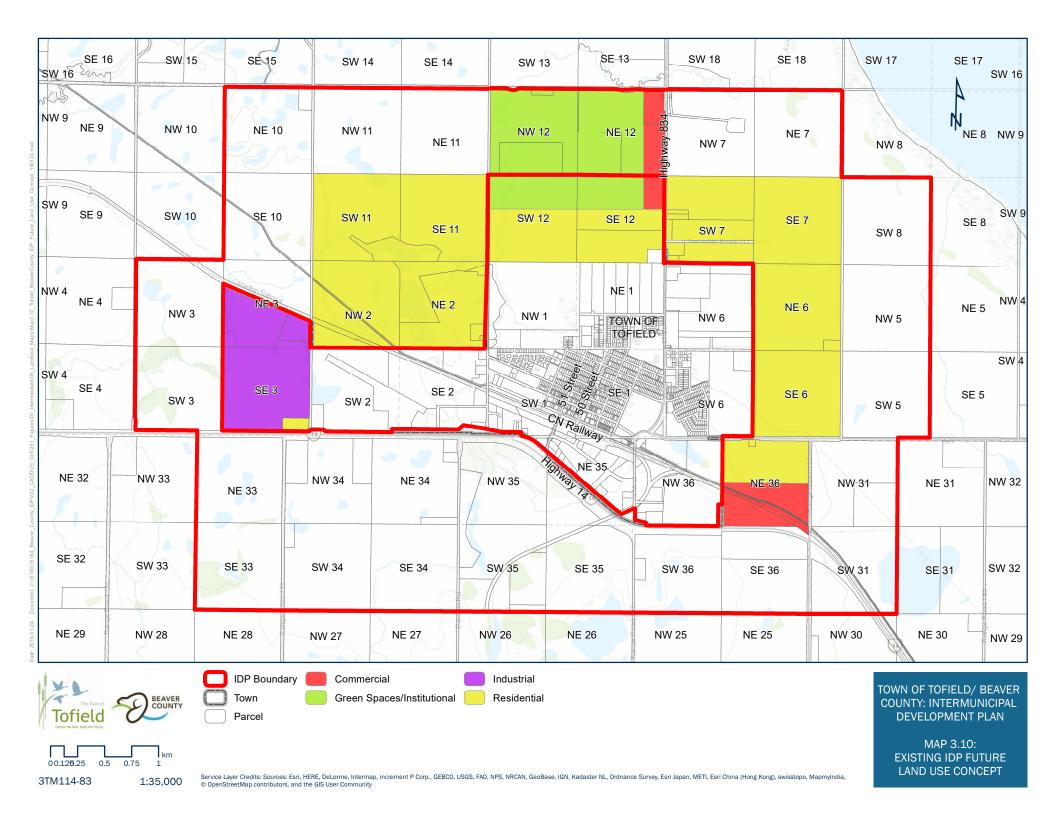
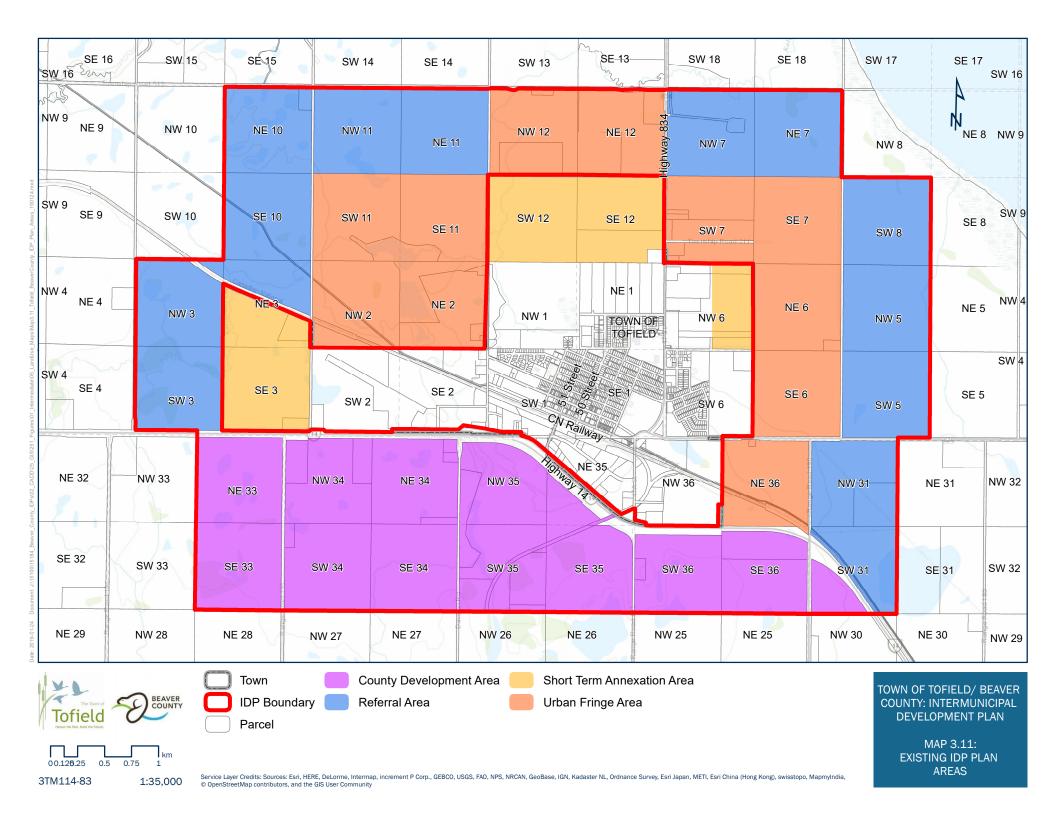
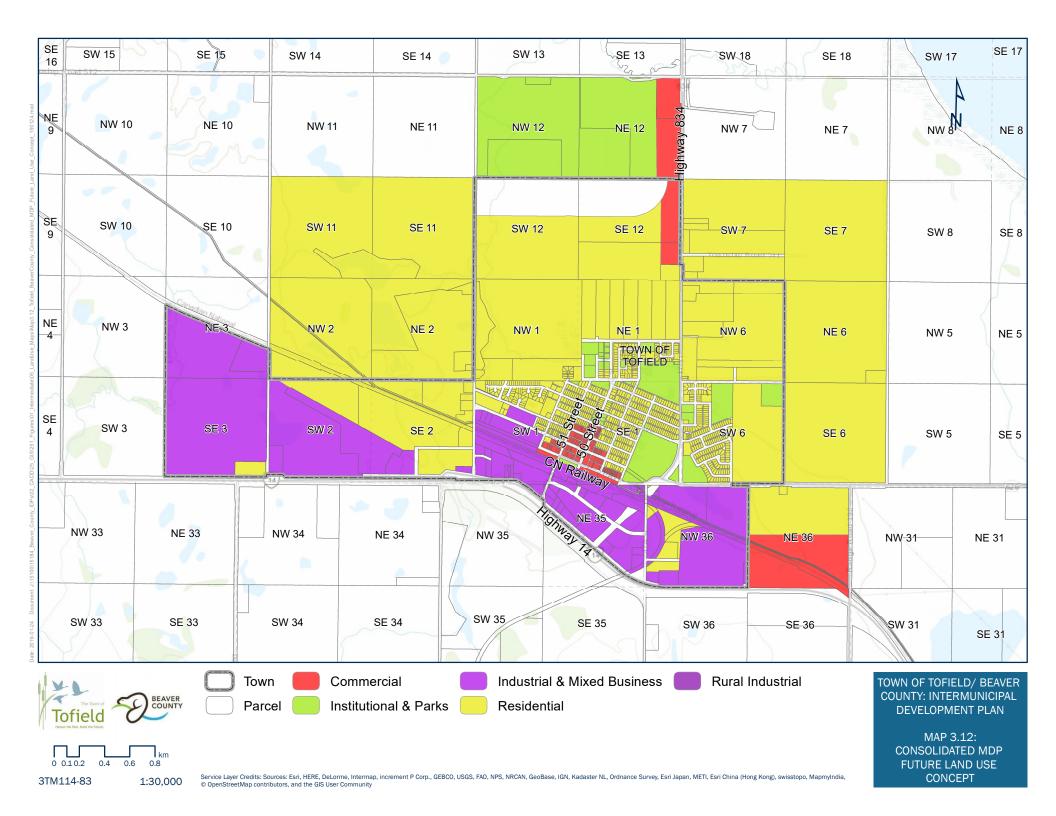


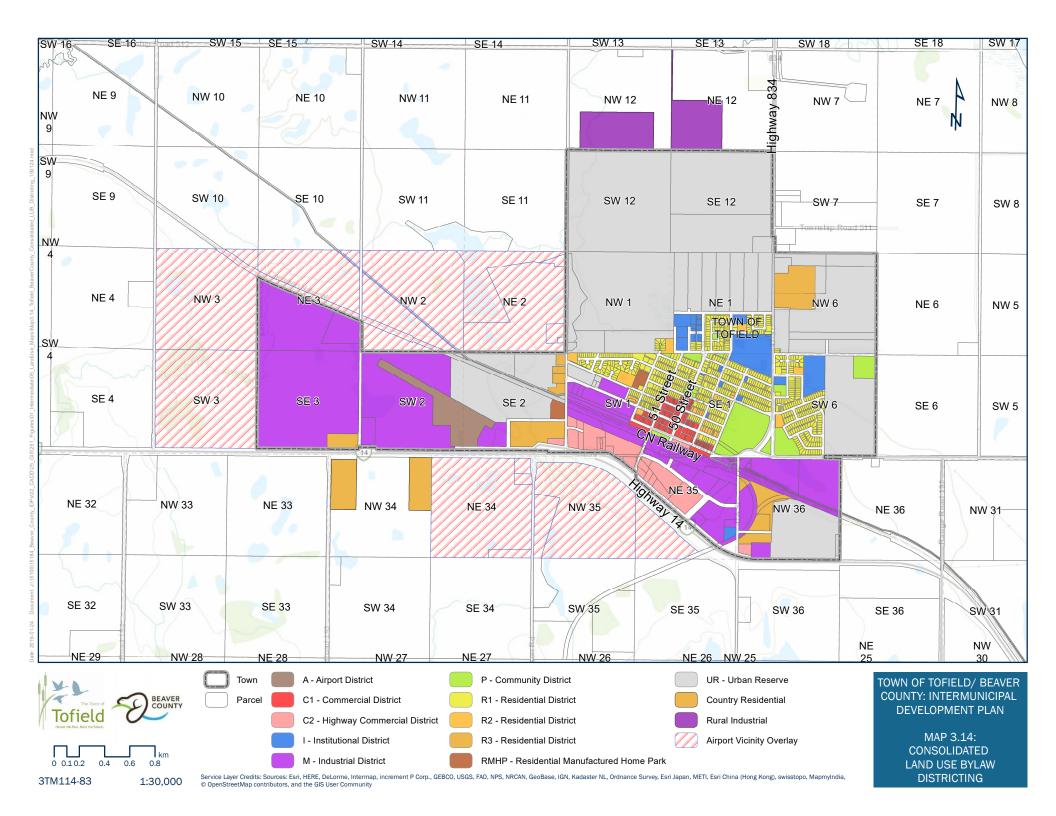
Figure 4: Highway 14 Corridor Plan – Town of Tofield















3.4.1 Intermunicipal Development Plan (IDP)

The Town of Viking and Beaver County IDP (Town of Viking Bylaw No. 2017-658, as amended; Beaver County Bylaw No. 16-1043, as amended) was originally adopted by their Councils in 2008 and amended in 2016, and addresses the principles, policies and considerations for lands lying adjacent and in proximity to the boundaries of the Town and County. IDP Map 2 – Land Use Concept directs future residential development in the Urban Fringe Area north of the Town of Viking in portions of SW/SE 1 and residential and green space within SW 31. Future commercial land uses are designated on lands south of Highway 14, north of the Town along 61 Avenue (Township Road 480 and in the northwest corner, and west of the Town adjacent to Highway 36. Future Industrial development is located primarily west of the Town and adjacent to Highway 14 and 36 respectively. Residential development with local industrial is designated on a portion of NE 36, north of the Town (refer to Map 3.15). Key policies to consider for updating the IDP include:

Policy C.2 Short-Term Annexation Area	Designates land that were the primary Urban Expansion Area and short-term annexation area by the Town which includes portions of land on NE 35. These lands were annexed into the Town effective on July 1, 2018.
Alca	The Town of Viking recently annexed a portion of land within NE 35, which was designated for the Town's short-term annexation area. New annexation areas may need to be determined. Policies will need to be updated to identify potential future short-term annexation areas and outline policy triggers or circumstances under which annexation would be warranted. Depending on available land supply, future annexation areas can be discussed with the IMC.
Policy D.2 Urban Fringe Area	Identifies land within the County where growth patterns remain as anticipated, be the primary urban expansion area and the priority area for future annexation by the Town. The IDP identifies future residential, commercial and/or industrial expansion on portions of SW/SE 1, NE/SW 36, NW 25, and SW 31 for the Town of Viking (see Map 3.15).
	Policies for the Urban Fringe Area will be revised based on the recommendations from the population projections and estimated land supply requirements to direct and update to existing policies. Short-term annexation areas may be further refined and identified from the Urban Fringe Area.
Policy E.1 Referral Area	Identifies land within the County that are intended for future long-term growth areas for the Town of Viking. The IDP identifies long-term growth areas for the Town on portions of land northwest of the Highway 14, including SE 3, and NE 34, as well as SW/SE2. Long-term growth areas are also designated for lands northeast, east and southeast of the Town, including SW/SE 6, SW 5, NW/SW 32, SE 31, NE 25, NW/NE 30, and NW 29.
	Future land use designations for the Referral Areas are recommended and may be discussed with the IMC for updating the IDP based on the population projections and estimated land supply requirements. Updated policies are recommended for future Referral Areas.
Policy F.1 Joint Development Area	Designates lands to be developed by the County and Town as a joint business industrial park in accordance with an memorandum of agreement that the Town and County agreed to for portions of land located within NW/NE 35 and SE 35 (see Map 3.16).
Alea	Policies in the IDP will be updated to ensure that future land uses identified as joint development areas are still viable and consistent with the Town and County and discussed with the IMC.



Policy G.1 County Development Area	Includes land within the County that are not identified for future Town expansion, and can be developed for purposes as either serviced or unserviced developments. The IDP outlines future development areas for the County on lands southwest of the Town, south of Highway 14, west of Highway 36, all or portions of SE 3, NW/NE 26, NE 27, NE/SE 34, NW/SW/NE 35, as well as SE 35 (see Map 3.16).
	Policies in the IDP will be updated to ensure that future land uses identified for County Development Areas are still viable and consistent with the Town and County and potential future Area Structure Plans.
Policy O.1 Annexation	The County recognizes and agrees that the Town will need additional land for growth and will support annexations that will provide for 20 years of projected growth within the boundaries of the Town. The Town and County have agreed that the Joint Development Area is to be excluded from future annexation applications by the Town. New short-term annexation areas can be discussed with the IMC. Additionally, the updated IDP will confirm with the IMC on whether the Joint Development Area is still unavailable for future annexation by the Town.
	IDP policies will be reviewed and update the hierarchy established by the land requirements based on the population projections and estimated land supply analysis to review 20 years of projected growth and land needs. New short-term annexation areas will need to be identified for the Town and County.

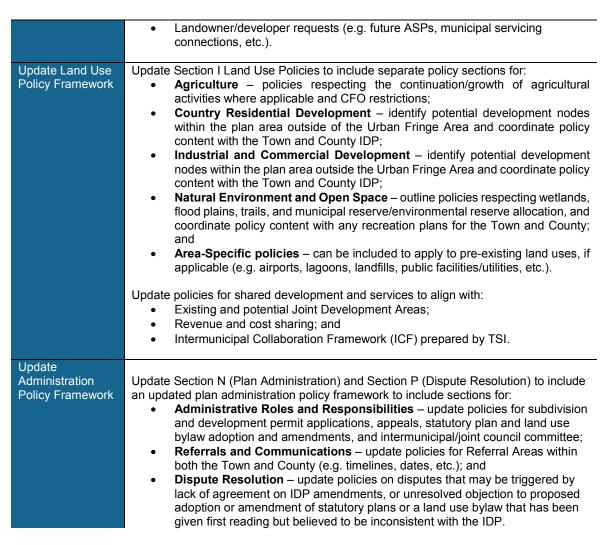
Update to IDP Policy Framework

The existing IDP land use concept indicates future growth directions for the Town north of Highway 14 with residential land uses in the north and southeast, while future industrial land uses west and south of the Town of Viking. Future commercial land uses are located adjacent to Highway 14, Highway 36, and north of the Town. Green space and a mix of residential and industrial land uses are designated north and northeast of the Town (refer to Map 3.15). Recommended updates to the IDP policy framework include the following:

Plan Boundaries and Land Use Concept	Update the existing Town of Viking and Beaver County IDP to align with general growth directions indicated in IDP Map 1 – Plan Area Boundaries and IDP Map 2 – Future Land Use Concept. Provide policy direction for titled lands without future land use designations. It is recommended that the IDP boundary be updated to reflect the recent annexation of land from the County to the Town effective on July 1, 2018, and that the ultimate intended land use within those lands be confirmed by the Town. The current IDP designates the recently annexed lands as commercial while the Town's IDP identified them for future industrial. Meanwhile, evidence provided before the Municipal Government Board suggested both commercial and industrial with emphasis on the former due to an absence of commercial land supply at the time. Since then, Town Administration has stated the lands would be developed for industrial.
Population Projections and Estimated Land Supply Requirements	Future land uses and policies will be updated to reflect the anticipated growth patterns for compatible land uses in the Town and County in accordance with the population projections and estimated land supply requirements, and growth directions outlined in the IDP plan areas.
Annexation Areas (short-term/long-term)	Update the IDP to identify potential new short-term annexation areas. The Town of Viking recently annexed a portion of land on NE 35, which was designated as the Town's short-term annexation area in 2008. New annexation areas may need to be determined and policy triggers or circumstances under which annexation would be warranted based on, but not limited to: • Land supply/growth needs; and







3.4.2 Municipal Development Plan (MDP)

Town of Viking MDP

The Town of Viking MDP (Bylaw No. 2012-641, as amended) directs commercial uses along 50 Street and 54 Street/Highway 36, and locates residential and institutional uses primarily north of Highway 14 and the CN railway. General development patterns in Viking display light industrial uses along the CN railway and east of Town on portions of NW/NE 31. Recreation and open spaces are located primarily on lands in the southeast of Viking (refer to Map 3.17). Key policies for consideration for updating the IDP include, but not limited to:

- Objective 3.1.1, Policy 1 The future development pattern for the Town is shown on the Future Land Use (Map 1). Development shall generally conform to this map and the policies within this Municipal Development Plan.
- **Objective 5.1.2, Policy 6** Ground oriented medium density residential development will be permitted in each neighbourhood. Medium density residential sites should be spread throughout each neighbourhood rather than being concentrated in any one area.
- Objective 5.1.2, Policy 11 High-density housing sites should locate adjacent to arterial or collector roads.





- Objective 5.1.3, Policy 1 Seniors' housing and apartment buildings should be close to commercial facilities.
- Objective 5.1.3, Policy 10 Multi-family units may be permitted in the downtown area on the second-storey of commercial buildings or adjacent arterial or collector streets.
- Objective 5.2.2, Policy 5 The Future Land Use Map (Map 1) illustrates the Town's preferred plan for the phasing of new residential developments based on current development locations, infrastructure capacity within the Town and best planning practices.
- Objective 5.2.2, Policy 2 All future primary, general and highway commercial development should occur on lands designated Commercial on the Future Development Plan. All future neighbourhood commercial development may occur where specifically indicated in the Town's Land Use Bylaw within areas designated Residential on the Future Development Plan.
- Objective 5.3.1, Policy 2 The Town will encourage concentrated industrial growth by directing future industrial development to the industrial area in order to minimize conflicts with neighbouring land uses, to facilitate the economical provision of municipal services, and to promote an efficient industrial land use pattern.
- Objective 5.3.1, Policy 3 Only light industrial uses will be allowed within the Town boundary.

Beaver County MDP

The Beaver County MDP (Bylaw No. 98-800, as amended) identifies Residential uses on lands north and southeast of the Town in portions of SW 1, SE 1 and SW 31. Industrial uses are designated for lands west and south of the Town and adjacent to Highways 36 and 14, while commercial uses are located north and south of the Town (refer to Map 3.17). Overall, policies outlined in the MDP continue to focus on the preservation of agricultural land and the continuation of agricultural activities in the County by locating compatible urban uses in proximity to urban centres. However, key policies in Section 6.0 (Urban Expansion) recognize the need to promote economic diversification and growth for future uses on lands within the IDP area which include, but not limited to:

- Policy 6.1 Viking should be encouraged to expand in areas that would minimize removal of higher agricultural land, regionally significant resources, and environmentally sensitive areas; and
- Policy 6.2 Future urban expansion and annexation will be supported on lands if it is immediately adjacent to municipal boundaries, suitable to urban uses and servicing, staging conforms to the municipality's MDP, and lands are identified for expansion and annexation in the IDP.

MDP Considerations

The Town of Viking and Beaver County MDPs identify the future development pattern within the Town of Viking and Beaver County, provides each Council and Administration with a basis for decision-making on land use, transportation and servicing matters with their municipality, and informs citizens and businesses on municipal priorities. For this project, both MDPs were reviewed to ensure consistency between them and the updated IDP as required under Section 632(3) of the MGA. It is recommended that future growth directions and policies in the IDP be updated and compatible with the specific land use policies for the Town of Viking and its MDP Map 2: Future Land Uses, and Beaver County IDP Map 1E: Viking Intermunicipal Development Plan and Map 7: Town of Viking CFO Restriction Area.

3.4.3 Area Structure Plans (ASPs)

Section 633 of the MGA sets out a framework for the subdivision and development of land through a planning document called an Area Structure Plan (ASP). An ASP designates proposed land uses, lays out transportation networks and the general location of public utilities, assigns population densities, and identifies the proposed sequence of development for the subject area. Municipalities adopt ASPs by bylaw.









Town of Viking / Beaver County ASPs

No existing or proposed ASPs are located within the Town of Viking or Beaver County in the IDP plan area.

ASP Considerations

It is recommended that future ASPs be reviewed in accordance with Section 633 of the MGA, and that policy direction for ASPs identified in the IDP plan area be consistent with policies of the IDP and applicable MDPs, and be implemented by appropriate Land Use Bylaw districting.

3.4.4 Land Use Bylaw (LUB)

Town of Viking LUB

The Town of Viking LUB (Bylaw No. 2012-640, as amended) was adopted by Council in 2012. The Town consists of residential, commercial, industrial, institutional, community parks and open spaces, airport, and urban reserve land use districts. The central area of the Town is primarily occupied by central commercial zoning along 50 Street, with much of the residential zoning located north of Highway 14 and the CN railway. General development patterns in Viking display highway commercial and industrial zoning located adjacent to Highway 14 and the CN railway, and industrial zoning east of the Town adjacent to the wastewater lagoon in NE 31. A small supply of urban reserve is available on lands north in the Town, and south of 61 Avenue (Township Road 480). The Town recently annexed two lots west of Highway 36 effective on July 1, 2018, which are currently zoned for urban reserve (refer to Map 3.18).

Beaver County LUB

The Beaver County LUB (Bylaw No. 98-801, as amended) was adopted in 1998 and consolidated on July 19, 2017 with amendments up to and including Bylaw No. 17-1047. The County lands surrounding the Town are primarily zoned Agricultural District. Portions of land to the west of the Town are zoned Rural Industrial District within portions of NW/NE 35 (refer to Map 3.18).

LUB Considerations

Based on a review of the Town and County LUBs, it is recommended that existing zoning within the Town and County be used to determine compatible land uses in the IDP plan area, and growth directions for future uses are consistent with implementing the land use concepts for the IDP and MDPs for the Town and County. It is recommended that the zoning for the Town of Viking be updated to incorporate recently annexed lands west of Highway 36. It is recommended that the Town municipal boundary be updated to reflect the recent annexation from the County to the Town effective on July 1, 2018.

3.4.5 Highway 14 Corridor Plan

The Highway 14 Corridor Plan was initiated in 2008 by Beaver County, the Villages of Holden and Ryley, Towns of Tofield and Viking to plan for the orderly development of the Highway 14 Corridor running through Beaver County. The Highway 14 Corridor is an eastern gateway to Saskatchewan and is increasingly becoming a gateway for industrial oversized load traffic traveling to Fort McMurray. Specifically, Highway 14 and Highway 36, and a segment of Highway 834 north of Highway 14 have been designated as provincial High Load Corridors.

The following is a summary of key issues and opportunities to consider (see Figure 5):

- The Town of Viking is an urban growth node located adjacent and north of Highway 14.
- A significant amount of traffic on both Highway 14 and Highway 36 is industrial in nature, as both Highway 14 and Highway 36 have been designated as "High Load Corridors" by Alberta Transportation.
- The Town offers water and sanitary service.





- The County and Town are cooperatively planning for the development within the Viking/Beaver Business Park. The proposed land use within this node is Light Industrial Business. The location of the Viking/Beaver Business Park is adjacent to the west boundary of the Town of Viking. Existing land uses within the area enable the lands to be developed for light industrial purposes without any conflicts from neighbouring properties.
- Urban Expansion Areas north and east include lands north of 61 Avenue (Township Road 480) and east of Highway 36, and lands east of Range Road 130 and north of Highway 619. It is proposed that the lands north of Viking be utilized for both commercial and residential purposes, while the lands east of Viking adjacent to Highway 619 be utilized for residential purposes.
- The lands south of Viking and east of Highway 36 have been identified as an urban expansion area for highway commercial and industrial purposes.
- The lands further south of the South of Viking Node may have potential for rural residential expansion. There is the ability to take advantage of a former water line running from this area north to Viking to service lands with municipal water from the regional water line.

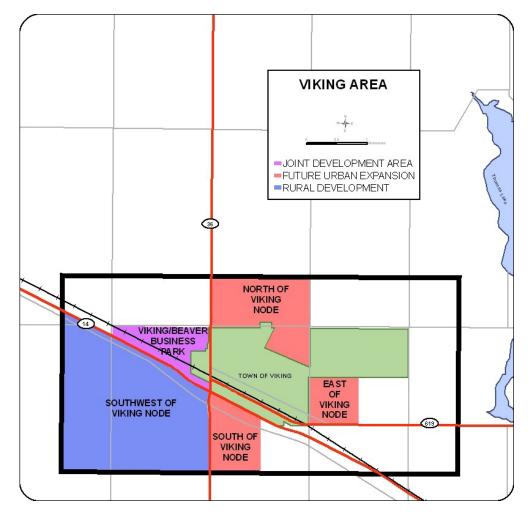
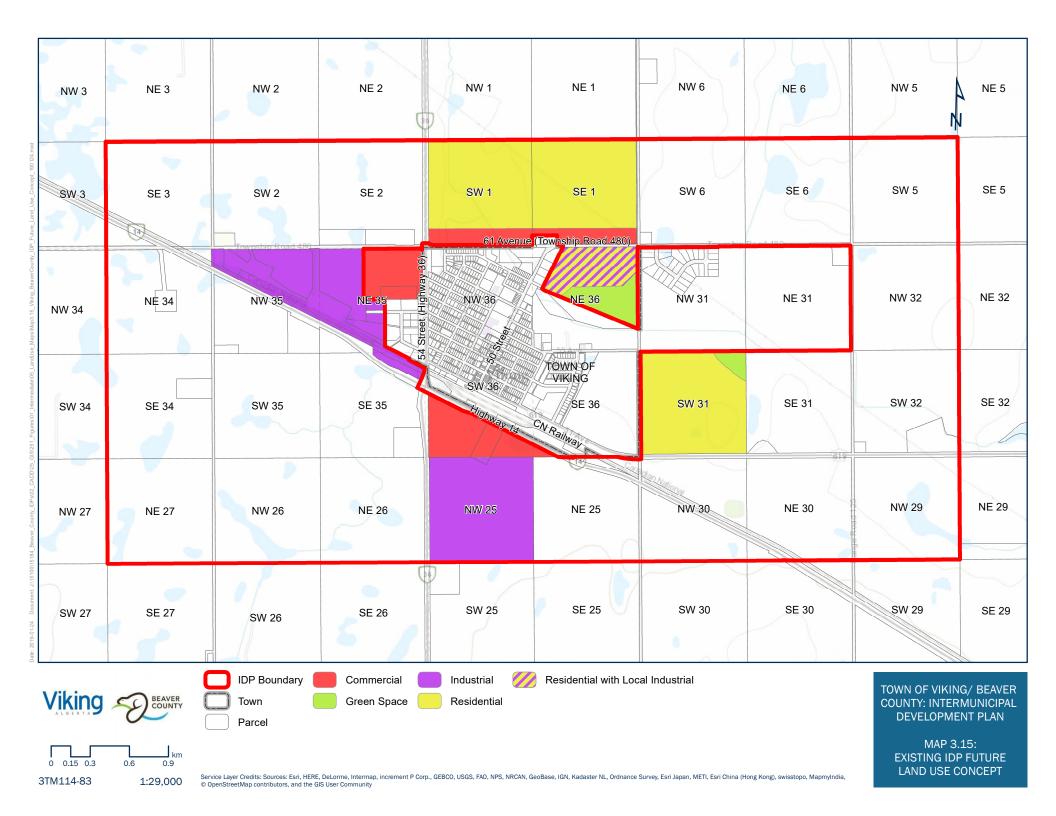
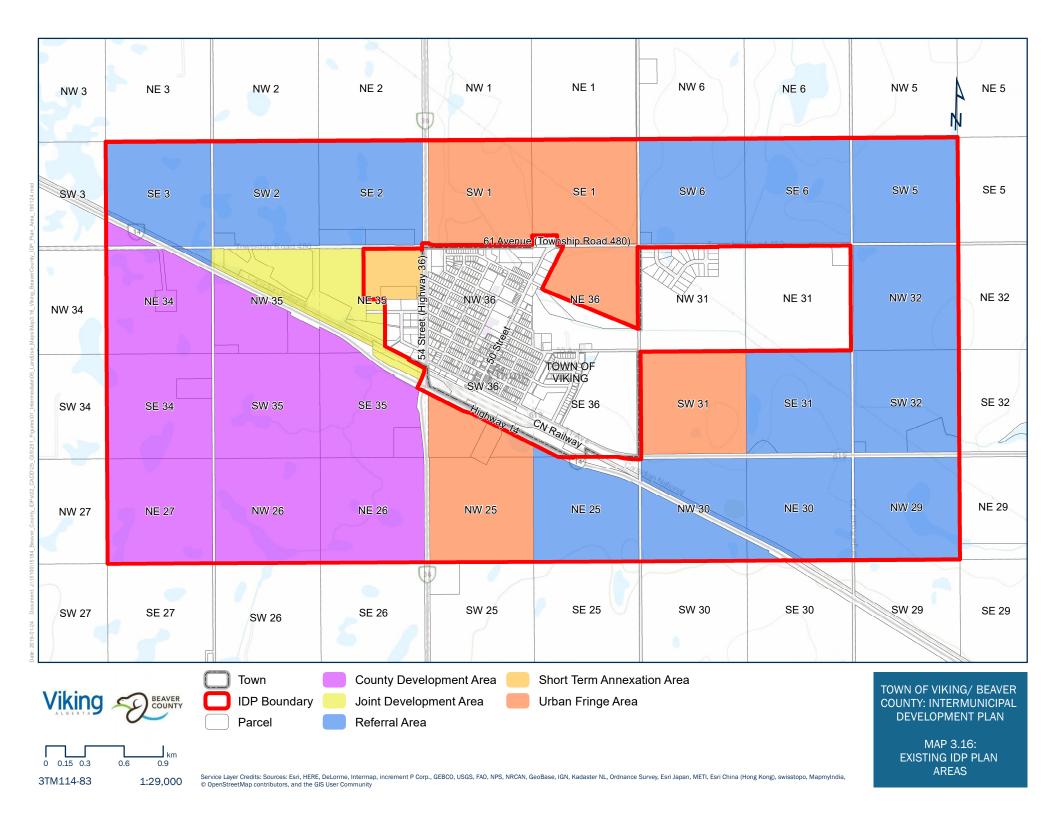
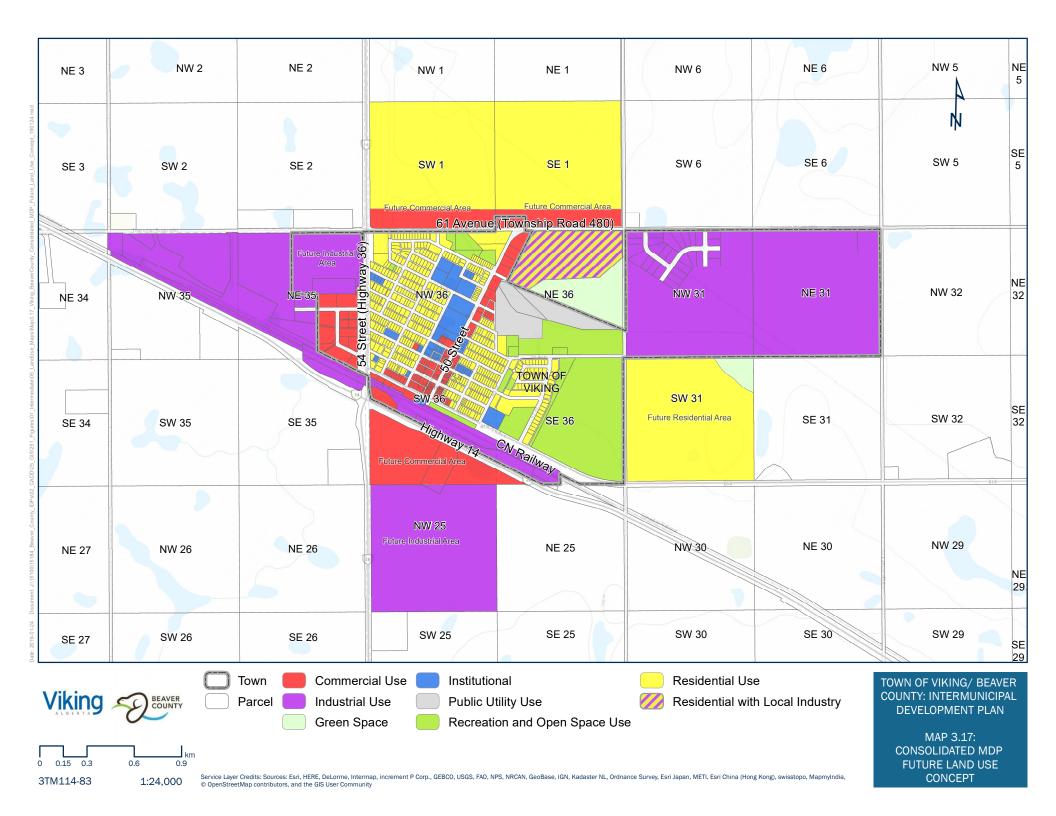


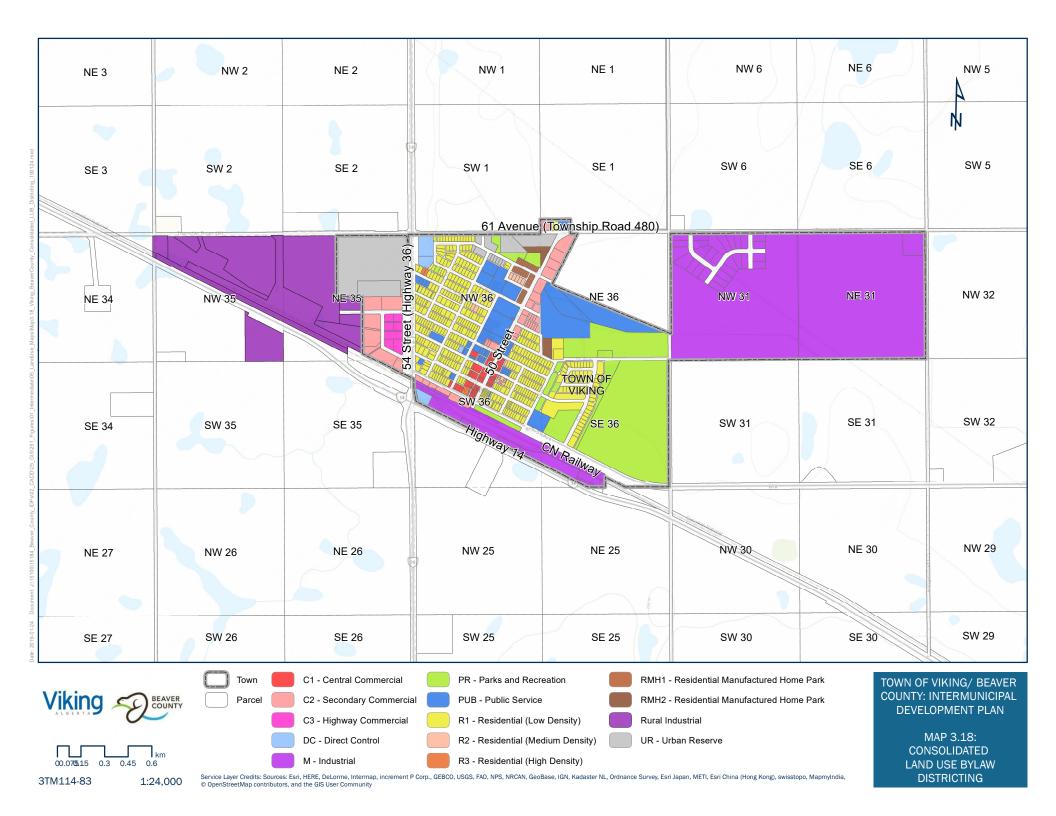
Figure 5: Highway 14 Corridor Plan - Town of Viking

















Village of Holden / Beaver County Population and Land Analysis

4.1 Population Histories and Projections

Appendix A contains the historical population growth analysis and initially recommended population projections for the Village of Holden and the County. Federal and municipal census results are presented in Appendix A for the Village and go back as far in history as possible, while the same currently go back 50 years for the County. Percentage changes and average annual growth rates are calculated between each federal census, and again between each municipal census. Changes between federal and municipal censuses are not calculated as it is recognized that methodologies and collection success rates can vary between Statistics Canada and municipalities. Due to a lack of historical population count data customized to the IDP study area, a method for projecting future population growth within the IDP plan area of the County surrounding the Village is not possible at this time.

The second table in Appendix A analyzes historical growth over selected timeframes. In absence of positive historical population growth among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County. Time periods are in five-year intervals up to 50 years for analysis of the federal census population counts for the Village and County. Similar analysis of the historical municipal census counts is not undertaken as no recent censuses have been conducted and the frequency in which they are conducted vary. Percentage changes, average annual growth rates, and average people per year are provided for each interval.

Appendix A presents the outcomes of the recommended low, medium, and high population projection scenarios for Holden and Beaver County over 50 years both annually and in five-year intervals. A base year of 2016 and two horizon years of 2048 (30 years) and 2068 (50 years) are used. The base year population estimate is informed by each municipality's 2016 recent federal census population count.

Table 1 below summarizes ISL's recommendations for low, medium, and high population growth scenario projections for the Village and the County at 5-year intervals. The low, medium, and high scenarios for both the County and the Village are based on 0.3%, 0.5%, and 0.7% average annual growth rates.

Table 1: Village of Holden / Beaver County Population Estimates

			Beaver County	,	\	/illage of Holde	n
Year	Year	Low	Medium	High	Low	Medium	High
Teal	Count	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%
2016	-2	5,905	5,905	5,905	350	350	350
2017	-1	5,923	5,935	5,946	351	352	352
2018	0	5,940	5,964	5,988	352	354	355
2023	5	6,030	6,115	6,200	357	362	368
2028	10	6,121	6,269	6,421	363	372	381
2033	15	6,213	6,428	6,648	368	381	394
2038	20	6,307	6,590	6,884	374	391	408
2043	25	6,402	6,756	7,129	379	400	423
2048	30	6,499	6,927	7,382	385	411	438
2053	35	6,597	7,102	7,644	391	421	453
2058	40	6,697	7,281	7,915	397	432	469
2063	45	6,798	7,465	8,196	403	442	486
2068	50	6,900	7,653	8,487	409	454	503





4.1.1 Land Supply Status

An analysis of land supply enables an understanding of remaining land supply within a particular area. Once combined with future growth projections, the results of the land supply analysis can either confirm sufficient lands are available to accommodate future growth, or determine if there is a deficit in land supply to accommodate future growth. A typical land supply analysis aggregates lands into two overarching land use categories.

Absorbed land supply is defined as lands zoned under the land use bylaw (LUB) and subdivided for development. Absorbed land supply is typically unavailable to accommodate future growth except for through infill, intensification, and redevelopment.

Unabsorbed land supply (or available land supply) is defined as lands not yet zoned and/or subdivided for its ultimate intended development. Future land uses within unabsorbed land supplies are typically based on LUB districting, approved area structure plan (ASP) land use designations, and future land uses identified in applicable municipal development plans (MDPs), IDPs, etc.

The approach to the land supply analysis for the Village of Holden / Beaver County project largely adheres to the above definitions. In short, the preliminary allocation of land use categories drew from registered parcel designations (e.g. ER, MR, PUL, etc.), LUB districting, and ASP land use designations where available. Where ambiguities or peculiarities were observed in the use of lands, the directions from the above were audited through reviewing parcel ownership information (e.g. publicly-owned vs. privatelyowned), aerial photography, tools such as Google Street View where coverage is available, and professional judgement. This auditing process resulted in some evidence-based overrides to preliminary land use category assignments. Future consultation with Village and County staff may introduce some additional overrides.

See Maps 4.1 and 4.2 for graphical depictions of the land supply statuses in the Village of Holden and the rural fringe beyond the Village within the IDP study area respectively. Appendix B includes associated land supply status tables for both the Village and the rural fringe.

Land Requirement Projections 4.2

The following is a summary of the work in progress on the land requirements projections for the Village of Holden / Beaver County IDP project. The preliminary proposed land requirements assumptions are summarized below, followed by the resulting preliminary land requirements projections by core land use residential, commercial, and industrial (institutional is embedded within residential) - for the Village and County under the low, medium, and high scenarios.

4.2.1 Land Requirements Assumptions

In addition to the population changes projected by scenario for the Village and County, the following assumptions have been utilized for the calculation of preliminary 50-year land requirements.

- Infill/intensification/redevelopment allowance: 5% of future population growth will occur within its previously absorbed residential land supply
- Overhead land uses:
 - a. Residential: 35% of gross developable land requirements will be provided as overhead land uses including open space (e.g. parks), public utilities (e.g. storm ponds), and circulation (e.g. roadways)





- b. Non-residential (i.e. institutional, commercial, and industrial): 30% of gross developable land requirements will be provided as overhead land uses
- Market allowance (this is a contingency factor to enable fair market competition among multiple
 developers to achieve an affordable land development market, and to acknowledge that some owners of
 greenfield lands may never be motivated to turn their lands over for urban development): additional 30%
 land requirements on top of gross land requirements¹
- · Core land use relationships to residential:
 - a. The current relationship of absorbed institutional lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - b. The current relationship of absorbed commercial lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - c. The current relationship of absorbed industrial lands to absorbed residential lands will be constant throughout the 50-year growth horizon

4.2.2 Village of Holden Land Requirements for Preliminary Scenarios

Table 2 presents the total unabsorbed land supply in the Village of Holden by core land use (residential, institutional, commercial, and industrial) for comparison with the estimated land requirements for the same core land uses at 10-year and 25-year intervals by population growth scenario. Values in bold indicate where the land requirements for that land use exceed the unabsorbed land supply.

Table 2: Village of Holden Land Requirements at Various Intervals

Land Supply/Deguinement	Area (gross developable hectares)				
Land Supply/Requirement	Residential ²	Commercial	Industrial		
In-Boundary Unabsorbed Land Supply	12.7	13.7	41.0		
Low	Scenario				
10-Year Land Requirements	1.5	0.3	0.1		
20-Year Land Requirements	2.8	0.6	0.3		
25-Year Land Requirements	3.5	0.7	0.3		
30-Year Land Requirements	4.2	0.8	0.4		
40-Year Land Requirements	5.5	1.1	0.5		
50-Year Land Requirements	7.0	1.4	0.6		
Mediur	n Scenario				
10-Year Land Requirements	2.5	0.5	0.2		
20-Year Land Requirements	4.8	1.0	0.4		

¹ For some similar small towns in Alberta, the market allowance assumption is much higher. For example, prior to the Town of Bon Accord's recent annexation, it had nearly two full quarter sections of gross developable lands designated for future residential development, but the owners of these lands were not motivated to develop. Therefore, Bon Accord effectively had a 100% residential market allowance and had to annex additional lands in 2018 to accommodate future residential growth.

² Residential includes all associated institutional land requirements.



Land Supply/Baguirament	Area (gross	Area (gross developable hectares)				
Land Supply/Requirement	Residential ²	Commercial	Industrial			
25-Year Land Requirements	6.0	1.2	0.6			
30-Year Land Requirements	7.2	1.4	0.7			
40-Year Land Requirements	9.6	1.9	0.9			
50-Year Land Requirements	12.2	2.4	1.1			
н	igh Scenario					
10-Year Land Requirements	3.6	0.7	0.3			
20-Year Land Requirements	6.9	1.4	0.6			
25-Year Land Requirements	8.6	1.7	0.8			
30-Year Land Requirements	10.3	2.1	1.0			
40-Year Land Requirements	14.1	2.8	1.3			
50-Year Land Requirements	18.1	3.6	1.7			

Table 3 below and the following observations summarize of the beyond boundary 50-year estimated land requirements by core land use for the Village of Holden by the three population growth scenarios.

Table 3: Holden 50-Year Land Requirements Beyond Boundary

Growth Scenario	Land Requirements Beyond Boundary ³ (gross developable hectares)					
Ocemano	Residential ⁴	Commercial	Industrial	Total⁵		
Low	-5.7	-12.3	-40.3	0.0		
Medium	-0.5	-11.2	-39.8	0.0		
High	5.4	-10.1	-39.3	5.4		

- Low Scenario 0.3% average annual growth rate (AAGR)
 - a. No residential land requirements beyond boundary (5.7 gross ha surplus before removing undevelopable lands such as wetlands, pipeline corridors, oil/gas wells and their setbacks, contaminated lands, etc.)
 - b. No commercial land requirements beyond boundary (12.3 gross ha surplus before removing undevelopable lands)
 - c. No industrial land requirements beyond boundary (40.3 gross ha surplus before removing undevelopable lands)
- Medium Scenario 0.5% AAGR
 - a. No residential land requirements beyond boundary, though the land supply is effective depleted at the 50-year mark (0.5 gross ha surplus before removing undevelopable lands)



³ Negative values denote a surplus of lands in boundary remains after 50 years.

⁴ Residential includes all associated institutional land requirements.

⁵ Totals exclude land requirements where there are negative values.



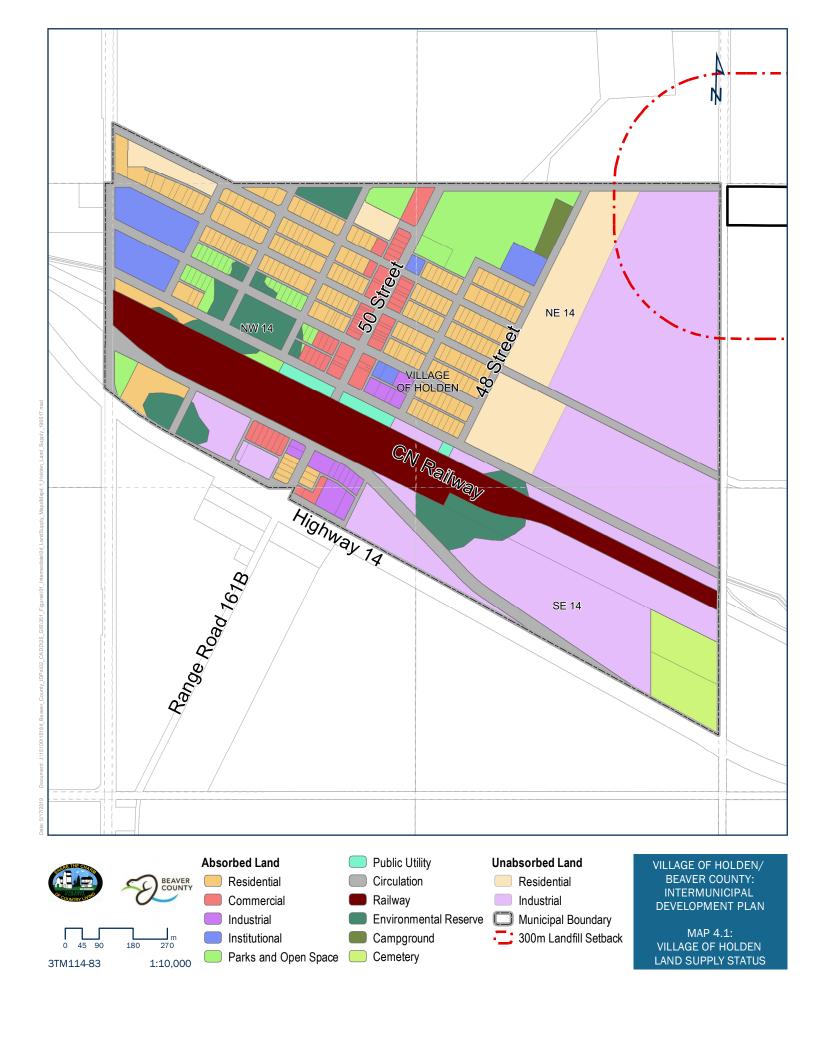


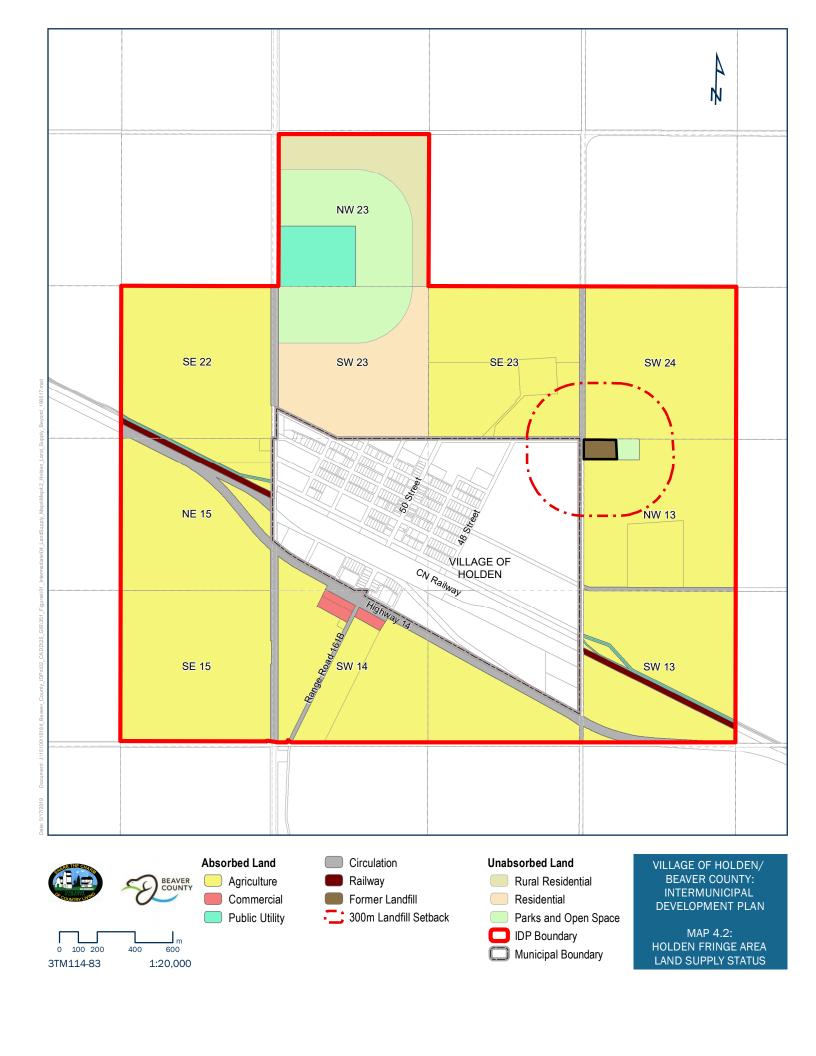
- b. No commercial land requirements beyond boundary (11.2 gross ha surplus before removing undevelopable lands)
- c. No industrial land requirements beyond boundary (39.8 gross ha surplus before removing undevelopable lands)
- High Scenario 0.7% AAGR
 - a. At least 5.4 gross ha of residential land required (could increase after adding in undevelopable lands)
 - b. No commercial land requirements beyond boundary (10.1 gross ha surplus before removing undevelopable lands)
 - c. No industrial land requirements beyond boundary (39.3 gross ha surplus before removing undevelopable lands)

4.2.3 Rural Fringe Land Requirements

The land supply status within the Holden Fringe Area table in Appendix B indicates the rural fringe has 22.0 gross ha of unabsorbed rural residential land supply and no unabsorbed rural commercial and industrial land supplies whatsoever. It is conceivable however that sufficient agricultural lands within the IDP study area can and will be converted to accommodate rural growth pressures over the next 50 years and beyond subject to statutory plans, policies, and regulations in effect at the time of proposed conversion.

In terms of future urban expansion within the Holden Fringe Area, 42.2 gross ha has been previously set aside for Holden's future residential growth.









Village of Ryley / Beaver County Population and Land Analysis

Population Histories and Projections

Appendix A contains the historical population growth analysis and initially recommended population projections for the Village of Ryley and the County. Federal and municipal census results are presented in Appendix A for the Village and go back as far in history as possible, while the same currently go back 50 years for the County. Percentage changes and average annual growth rates are calculated between each federal census, and again between each municipal census. Changes between federal and municipal censuses are not calculated as it is recognized that methodologies and collection success rates can vary between Statistics Canada and municipalities. Due to a lack of historical population count data customized to the IDP study area, a method for projecting future population growth within the IDP plan area of the County surrounding the Village is not possible at this time.

The second table in Appendix A analyzes historical growth over selected timeframes. In recognition of modest historical population growth among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County. Time periods are in fiveyear intervals up to 50 years for analysis of the federal census population counts for the Village and County. Similar analysis of the historical municipal census counts is not undertaken as no recent censuses have been conducted and the frequency in which they are conducted vary. Percentage changes, average annual growth rates, and average people per year are provided for each interval.

Appendix A presents the outcomes of the recommended low, medium, and high population projection scenarios for the Village of Ryley and Beaver County over 50 years both annually and in five-year intervals. A base year of 2016 and two horizon years of 2048 (30 years) and 2068 (50 years) are used. The base year population estimate is informed by each municipality's 2016 recent federal census population count.

Table 4 below summarizes ISL's recommendations for low, medium, and high population growth scenario projections for both the Village and the County at 5-year intervals. The low, medium, and high scenarios for both the County and the Village are based on 0.3%, 0.5%, and 0.7% average annual growth rates.

Table 4: Village of Ryley / Beaver County Population Estimates

		Beaver County Village of Ryley					
Year	Year	Low	Medium	High	Low	Medium	High
i eai	Count	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%
2016 †	-2	5,905	5,905	5,905	483	483	483
2017	-1	5,923	5,935	5,946	484	485	486
2018	0	5,940	5,964	5,988	486	488	490
2023	5	6,030	6,115	6,200	493	500	507
2028	10	6,121	6,269	6,421	501	513	525
2033	15	6,213	6,428	6,648	508	526	544
2038	20	6,307	6,590	6,884	516	539	563
2043	25	6,402	6,756	7,129	524	553	583
2048	30	6,499	6,927	7,382	532	567	604
2053	35	6,597	7,102	7,644	540	581	625
2058	40	6,697	7,281	7,915	548	596	647
2063	45	6,798	7,465	8,196	556	611	670
2068	50	6,900	7,653	8,487	564	626	694









5.1.1 Land Supply Status

An analysis of land supply enables an understanding of remaining land supply within a particular area. Once combined with future growth projections, the results of the land supply analysis can either confirm sufficient lands are available to accommodate future growth, or determine if there is a deficit in land supply to accommodate future growth. A typical land supply analysis aggregates lands into two overarching land use categories.

Absorbed land supply is defined as lands zoned under the land use bylaw (LUB) and subdivided for development. Absorbed land supply is typically unavailable to accommodate future growth except for through infill, intensification, and redevelopment.

Unabsorbed land supply (or available land supply) is defined as lands not yet zoned and/or subdivided for its ultimate intended development. Future land uses within unabsorbed land supplies are typically based on LUB districting, approved area structure plan (ASP) land use designations, and future land uses identified in applicable municipal development plans (MDPs), IDPs, etc.

The approach to the land supply analysis for the Village of Ryley / Beaver County project largely adheres to the above definitions. In short, the preliminary allocation of land use categories drew from registered parcel designations (e.g. ER, MR, PUL, etc.), LUB districting, and ASP land use designations where available. Where ambiguities or peculiarities were observed in the use of lands, the directions from the above were audited through reviewing parcel ownership information (e.g. publicly-owned vs. privately-owned), aerial photography, tools such as Google Street View where coverage is available, and professional judgement. This auditing process resulted in some evidence-based overrides to preliminary land use category assignments. Future consultation with Village and County staff may introduce some additional overrides.

See Maps 4.3 and 4.4 for graphical depictions of the land supply statuses in the Village of Ryley and the rural fringe beyond the Village within the IDP study area respectively. Appendix B includes associated land supply status tables for both the Village and the rural fringe.

5.2 Land Requirement Projections

The following is a summary of the work in progress on the land requirements projections for the Village of Ryley / Beaver County IDP project. The preliminary proposed land requirements assumptions are summarized below, followed by the resulting preliminary land requirements projections by core land use – residential, commercial, and industrial (institutional is embedded within residential) – for the Village and County under the low, medium, and high scenarios.

5.2.1 Land Requirements Assumptions

In addition to the population changes projected by scenario for the Village and County, the following assumptions have been utilized for the calculation of preliminary 50-year land requirements.

- Infill/intensification/redevelopment allowance: 5% of future population growth will occur within its
 previously absorbed residential land supply
- Overhead land uses:
 - a. Residential: 35% of gross developable land requirements will be provided as overhead land uses including open space (e.g. parks), public utilities (e.g. storm ponds), and circulation (e.g. roadways)
 - b. Non-residential (i.e. institutional, commercial, and industrial): 30% of gross developable land requirements will be provided as overhead land uses

- Market allowance (this is a contingency factor to enable fair market competition among multiple developers to achieve an affordable land development market, and to acknowledge that some owners of greenfield lands may never be motivated to turn their lands over for urban development): additional 30% land requirements on top of gross land requirements⁶
- Core land use relationships to residential:
 - a. The current relationship of absorbed institutional lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - b. The current relationship of absorbed commercial lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - c. The current relationship of absorbed industrial lands to absorbed residential lands will be constant throughout the 50-year growth horizon

5.2.2 Village of Ryley Land Requirements for Preliminary Scenarios

Table 5 presents the total unabsorbed land supply in the Village of Ryley by core land use (residential, institutional, commercial, and industrial) for comparison with the estimated land requirements for the same core land uses at 10-year and 25-year intervals by population growth scenario. Values in **bold** indicate where the land requirements for that land use exceed the unabsorbed land supply.

Table 5: Village of Ryley Land Requirements at Various Intervals

Land Complet/Daminamant	Area (gross developable hectares)				
Land Supply/Requirement	Residential ⁷	Commercial	Industrial		
In-Boundary Unabsorbed Land Supply	19.3	7.6	30.1		
Low	Scenario				
10-Year Land Requirements	2.4	0.3	6.6		
20-Year Land Requirements	4.5	0.5	12.4		
25-Year Land Requirements	5.6	0.6	15.3		
30-Year Land Requirements	6.7	0.8	18.3		
40-Year Land Requirements	9.0	1.0	24.3		
50-Year Land Requirements	11.3	1.3	30.6		
Mediu	m Scenario				
10-Year Land Requirements	4.1	0.5	11.2		
20-Year Land Requirements	7.7	0.9	21.0		
25-Year Land Requirements	9.6	1.1	26.2		
30-Year Land Requirements	11.6	1.3	31.4		

⁶ For some similar small towns in Alberta, the market allowance assumption is much higher. For example, prior to the Town of Bon Accord's recent annexation, it had nearly two full quarter sections of gross developable lands designated for future residential development, but the owners of these lands were not motivated to develop. Therefore, Bon Accord effectively had a 100% residential market allowance and had to annex additional lands in 2018 to accommodate future residential growth.



⁷ Residential includes all associated institutional land requirements.



Land Supply/Dequirement	Area (gross	Area (gross developable hectares)				
Land Supply/Requirement	Residential ⁷	Commercial	Industrial			
40-Year Land Requirements	15.6	1.8	42.3			
50-Year Land Requirements	19.8	2.3	53.7			
l de la companya de	High Scenario					
10-Year Land Requirements	5.8	0.7	15.8			
20-Year Land Requirements	11.1	1.3	30.1			
25-Year Land Requirements	13.8	1.6	37.6			
30-Year Land Requirements	16.7	1.9	45.4			
40-Year Land Requirements	22.7	2.6	61.8			
50-Year Land Requirements	29.2	3.3	79.3			

Table 6 below and the following observations summarize of the beyond boundary 50-year estimated land requirements by core land use for the Village of Ryley by the three population growth scenarios.

Table 6: Ryley 50-Year Land Requirements Beyond Boundary

Growth Scenario	Land Requirements Beyond Boundary ⁸ (gross developable hectares)					
Ocemano	Industrial	Total ¹⁰				
Low	-8.1	-6.4	0.5	0.5		
Medium	0.4	-5.4	23.6	24.0		
High	9.9	-4.3	49.2	59.1		

- Low Scenario 0.3% average annual growth rate (AAGR)
 - a. No residential land requirements beyond boundary (8.1 gross ha surplus before removing undevelopable lands such as wetlands, pipeline corridors, oil/gas wells and their setbacks, contaminated lands, etc.)
 - b. No commercial land requirements beyond boundary (6.4 gross ha surplus before removing undevelopable lands)
 - c. At least 0.5 gross ha of industrial land required (could increase after adding in undevelopable lands)
- Medium Scenario 0.5% AAGR
 - a. At least 0.4 gross ha of residential land required (could increase after adding in undevelopable lands)
 - b. No commercial land requirements beyond boundary (5.4 gross ha surplus before removing undevelopable lands)
 - c. At least 23.6 gross ha of industrial land required (could increase after adding in undevelopable lands)
- High Scenario 0.7% AAGR

⁸ Negative values denote a surplus of lands in boundary remains after 50 years.

⁹ Residential includes all associated institutional land requirements.

¹⁰ Totals exclude land requirements where there are negative values.







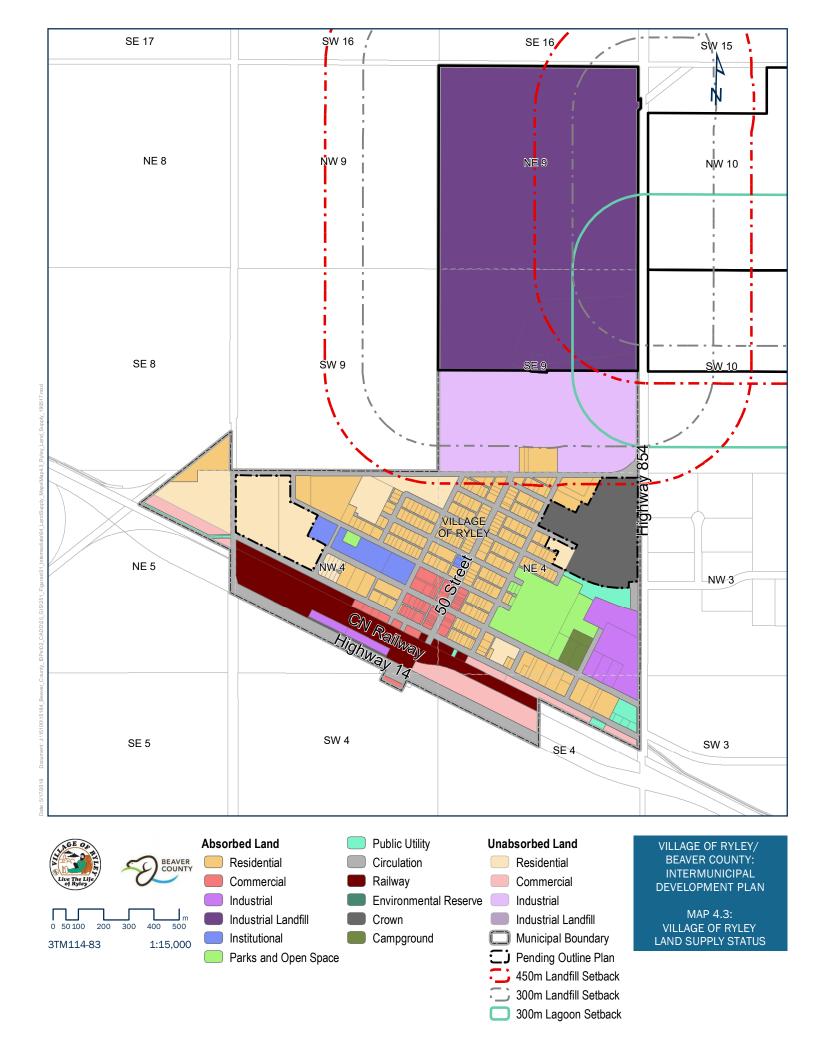
- a. At least 9.9 gross ha of residential land required (could increase after adding in undevelopable lands)
- b. No commercial land requirements beyond boundary (4.3 gross ha surplus before removing undevelopable lands)
- c. At least 49.2 gross ha of industrial land required (could increase after adding in undevelopable lands)

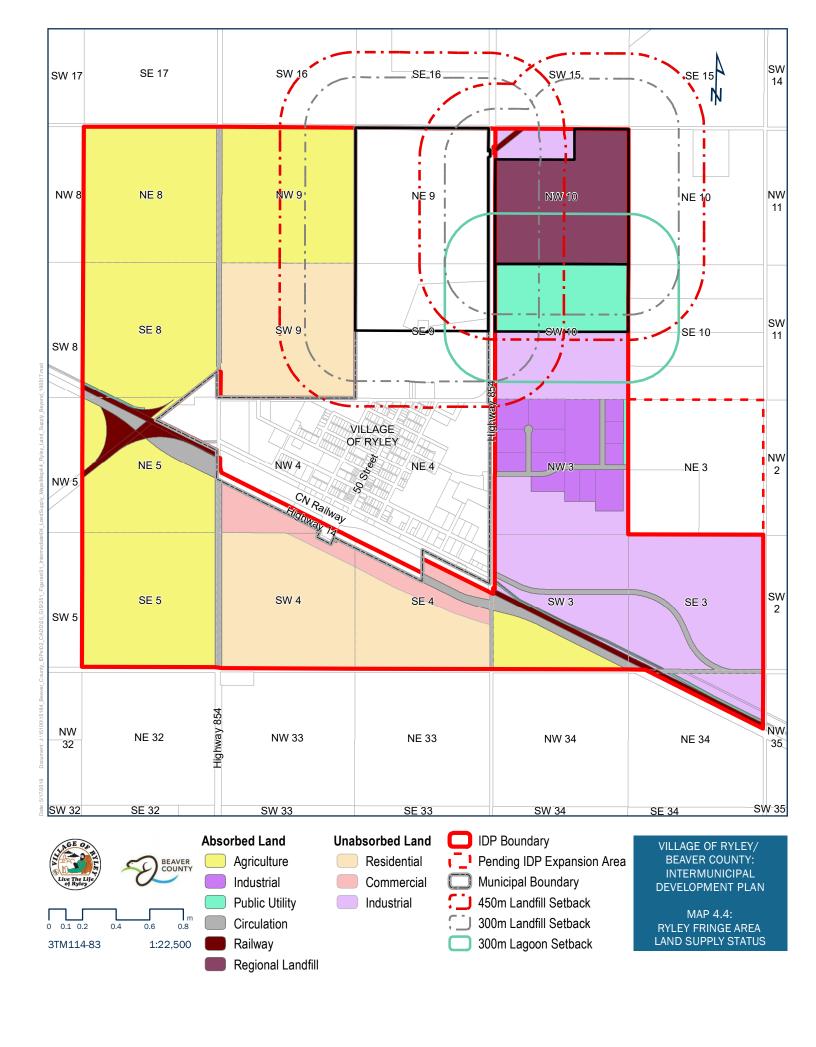
5.2.3 Rural Fringe Land Requirements

The land supply status within the Ryley Fringe Area table in Appendix B indicates the rural fringe has 166.5 gross ha of unabsorbed rural industrial land supply, which would increase by approximately 64 ha if the remaining quarter section within the Equity Industrial ASP was to be brought into the IDP boundary. While the Ryley Fringe Area has no unabsorbed rural residential and commercial land supplies whatsoever, it is conceivable however that sufficient agricultural lands within the IDP study area can and will be converted to accommodate such rural growth pressures over the next 50 years and beyond subject to statutory plans, policies, and regulations in effect at the time of proposed conversion.

In terms of future urban expansion within the Ryley Fringe Area, 157.7 gross ha has been previously set aside for Ryley's future residential growth, along with 23.4 gross ha for future commercial growth.













Town of Tofield / Beaver County Population and Land Analysis

6.1 Population Histories and Projections

Appendix A contains the historical population growth analysis and initially recommended population projections for the Town of Tofield and the County. Federal and municipal census results are presented in Appendix A for the Town and go back as far in history as possible, while the same currently go back 50 years for the County. Percentage changes and average annual growth rates are calculated between each federal census, and again between each municipal census. Changes between federal and municipal censuses are not calculated as it is recognized that methodologies and collection success rates can vary between Statistics Canada and municipalities. Due to a lack of historical population count data customized to the IDP study area, a method for projecting future population growth within the IDP plan area of the County surrounding the Town is not possible at this time.

The second table in Appendix A analyzes historical growth over selected timeframes. Time periods are in five-year intervals up to 50 years for analysis of the federal census population counts for the Town and County. Similar analysis of the historical municipal census counts is not undertaken as no recent censuses have been conducted and the frequency in which they are conducted vary. Percentage changes, average annual growth rates, and average people per year are provided for each interval.

Appendix A presents the outcomes of the recommended low, medium, and high population projection scenarios for the Town of Tofield and Beaver County over 50 years both annually and in five-year intervals. A base year of 2016 and two horizon years of 2048 (30 years) and 2068 (50 years) are used. The base year population estimate is informed by each municipality's 2016 recent federal census population count.

Table 7 below summarizes ISL's recommendations for low, medium, and high population growth scenario projections for the Town and the County at 5-year intervals. The low, medium, and high scenarios for the County are based on 0.3%, 0.5%, and 0.7% average annual growth rates while the low, medium, and high scenarios for Tofield are based on 1.0%, 1.4%, and 1.8% average annual growth rates.

Table 7: Town of Tofield / Beaver County Population Estimates

		Beaver County				Town of Tofield	t
Year	Year	Low	Medium	High	Low	Medium	High
Tear	Count	0.3%	0.5%	0.7%	1.0%	1.4%	1.8%
2016 †	-2	5,905	5,905	5,905	2,081	2,081	2,081
2017	-1	5,923	5,935	5,946	2,102	2,110	2,118
2018	0	5,940	5,964	5,988	2,123	2,140	2,157
2023	5	6,030	6,115	6,200	2,231	2,294	2,358
2028	10	6,121	6,269	6,421	2,345	2,459	2,578
2033	15	6,213	6,428	6,648	2,465	2,636	2,818
2038	20	6,307	6,590	6,884	2,590	2,826	3,081
2043	25	6,402	6,756	7,129	2,722	3,029	3,369
2048	30	6,499	6,927	7,382	2,861	3,247	3,683
2053	35	6,597	7,102	7,644	3,007	3,481	4,027
2058	40	6,697	7,281	7,915	3,161	3,731	4,402
2063	45	6,798	7,465	8,196	3,322	4,000	4,813
2068	50	6,900	7,653	8,487	3,491	4,288	5,262

[†] The 2016 federal census population of 2,081 for the Town of Tofield, the starting point for its projections, is suspected to be an undercount.





6.1.1 Land Supply Status

An analysis of land supply enables an understanding of remaining land supply within a particular area. Once combined with future growth projections, the results of the land supply analysis can either confirm sufficient lands are available to accommodate future growth, or determine if there is a deficit in land supply to accommodate future growth. A typical land supply analysis aggregates lands into two overarching land use categories.

Absorbed land supply is defined as lands zoned under the land use bylaw (LUB) and subdivided for development. Absorbed land supply is typically unavailable to accommodate future growth except for through infill, intensification, and redevelopment.

Unabsorbed land supply (or available land supply) is defined as lands not yet zoned and/or subdivided for its ultimate intended development. Future land uses within unabsorbed land supplies are typically based on LUB districting, approved area structure plan (ASP) land use designations, and future land uses identified in applicable municipal development plans (MDPs), IDPs, etc.

The approach to the land supply analysis for the Town of Tofield / Beaver County project largely adheres to the above definitions. In short, the preliminary allocation of land use categories drew from registered parcel designations (e.g. ER, MR, PUL, etc.), LUB districting, and ASP land use designations where available. Where ambiguities or peculiarities were observed in the use of lands, the directions from the above were audited through reviewing parcel ownership information (e.g. publicly-owned vs. privately-owned), aerial photography, tools such as Google Street View where coverage is available, and professional judgement. This auditing process resulted in some evidence-based overrides to preliminary land use category assignments. Future consultation with Town and County staff may introduce some additional overrides.

See Maps 4.5 and 4.6 for graphical depictions of the land supply statuses in the Town of Tofield and the rural fringe beyond the Town within the IDP study area respectively. Appendix B includes associated land supply status tables for both the Town and the rural fringe.

6.2 **Land Requirement Projections**

The following is a summary of the work in progress on the land requirements projections for the Town of Tofield / Beaver County IDP project. The preliminary proposed land requirements assumptions are summarized below, followed by the resulting preliminary land requirements projections by core land use residential, commercial, and industrial (institutional is embedded within residential) - for the Town and County under the low, medium, and high scenarios.

6.2.1 Land Requirements Assumptions

In addition to the population changes projected by scenario for the Town and County, the following assumptions have been utilized for the calculation of preliminary 50-year land requirements.

- Infill/intensification/redevelopment allowance: 5% of future population growth will occur within its previously absorbed residential land supply
- Overhead land uses:
 - a. Residential: 35% of gross developable land requirements will be provided as overhead land uses including open space (e.g. parks), public utilities (e.g. storm ponds), and circulation (e.g. roadways)
 - b. Non-residential (i.e. institutional, commercial, and industrial): 30% of gross developable land requirements will be provided as overhead land uses





- Market allowance (this is a contingency factor to enable fair market competition among multiple developers to achieve an affordable land development market, and to acknowledge that some owners of greenfield lands may never be motivated to turn their lands over for urban development): additional 30% land requirements on top of gross land requirements¹¹
- · Core land use relationships to residential:
 - a. The current relationship of absorbed institutional lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - b. The current relationship of absorbed commercial lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - c. The current relationship of absorbed industrial lands to absorbed residential lands will be constant throughout the 50-year growth horizon

6.2.2 Town of Tofield Land Requirements for Preliminary Scenarios

Table 8 presents the total unabsorbed land supply in the Town of Tofield by core land use (residential, institutional, commercial, and industrial) for comparison with the estimated land requirements for the same core land uses at 10-year and 25-year intervals by population growth scenario. Values in bold indicate where the land requirements for that land use exceed the unabsorbed land supply.

Table 8: Town of Tofield Land Requirements at Various Intervals

Lond Comple/Demoissance	Area (gross developable hectares)				
Land Supply/Requirement	Residential ¹²	Commercial	Industrial		
In-Boundary Unabsorbed Land Supply	316.4	20.8	162.0		
Low Scenario					
10-Year Land Requirements	20.7	4.1	11.2		
20-Year Land Requirements	39.9	8.0	21.6		
25-Year Land Requirements	50.2	10.0	27.2		
30-Year Land Requirements	61.1	12.2	33.1		
40-Year Land Requirements	84.5	16.9	45.8		
50-Year Land Requirements	110.4	22.0	59.9		
Medium Scenario					
10-Year Land Requirements	29.6	5.9	16.0		
20-Year Land Requirements	58.3	11.6	31.6		
25-Year Land Requirements	74.2	14.8	40.2		
30-Year Land Requirements	91.3	18.2	49.5		

¹¹ For some similar small towns in Alberta, the market allowance assumption is much higher. For example, prior to the Town of Bon Accord's recent annexation, it had nearly two full quarter sections of gross developable lands designated for future residential development, but the owners of these lands were not motivated to develop. Therefore, Bon Accord effectively had a 100% residential market allowance and had to annex additional lands in 2018 to accommodate future residential growth.

¹² Residential includes all associated institutional land requirements.



Land Sumby/Baguiyamant	Area (gross	Area (gross developable hectares)			
Land Supply/Requirement	Residential ¹²	Commercial	rcial Industrial		
40-Year Land Requirements	129.2	25.8	70.0		
50-Year Land Requirements	172.8	34.5	93.7		
High Scenario					
10-Year Land Requirements	38.9	7.8	21.1		
20-Year Land Requirements	78.3	15.6	42.4		
25-Year Land Requirements	100.8	20.1	54.6		
30-Year Land Requirements	125.4	25.0	68.0		
40-Year Land Requirements	181.8	36.2	98.5		
50-Year Land Requirements	249.1	49.7	135.0		

Table 9 below and the following observations summarize of the beyond boundary 50-year estimated land requirements by core land use for the Town of Tofield by the three population growth scenarios.

Table 9: Tofield 50-Year Land Requirements Beyond Boundary

Growth Scenario	Land Requirements Beyond Boundary ¹³ (gross developable hectares)			
	Residential ¹⁴	Commercial	Industrial	Total ¹⁵
Low	-206.0	1.2	-102.1	1.2
Medium	-143.6	13.6	-68.3	13.6
High	-67.4	28.8	-27.0	28.8

- Low Scenario 1.0% average annual growth rate (AAGR)
 - a. No residential land requirements beyond boundary (67.4 gross ha surplus before removing undevelopable lands such as wetlands, pipeline corridors, oil/gas wells and their setbacks, contaminated lands, etc.)
 - b. At least 1.2 gross ha of commercial land required (could increase after adding in undevelopable
 - c. No industrial land requirements beyond boundary (102.1 gross ha surplus before removing undevelopable lands)
- Medium Scenario 1.4% AAGR
 - a. No residential land requirements beyond boundary (143.6 gross ha surplus before removing undevelopable lands)
 - b. At least 13.6 gross ha of commercial land required (could increase after adding in undevelopable
 - c. No industrial land requirements beyond boundary (68.3 gross ha surplus before removing undevelopable lands)



¹³ Negative values denote a surplus of lands in boundary remains after 50 years.

¹⁴ Residential includes all associated institutional land requirements.

¹⁵ Totals exclude land requirements where there are negative values.



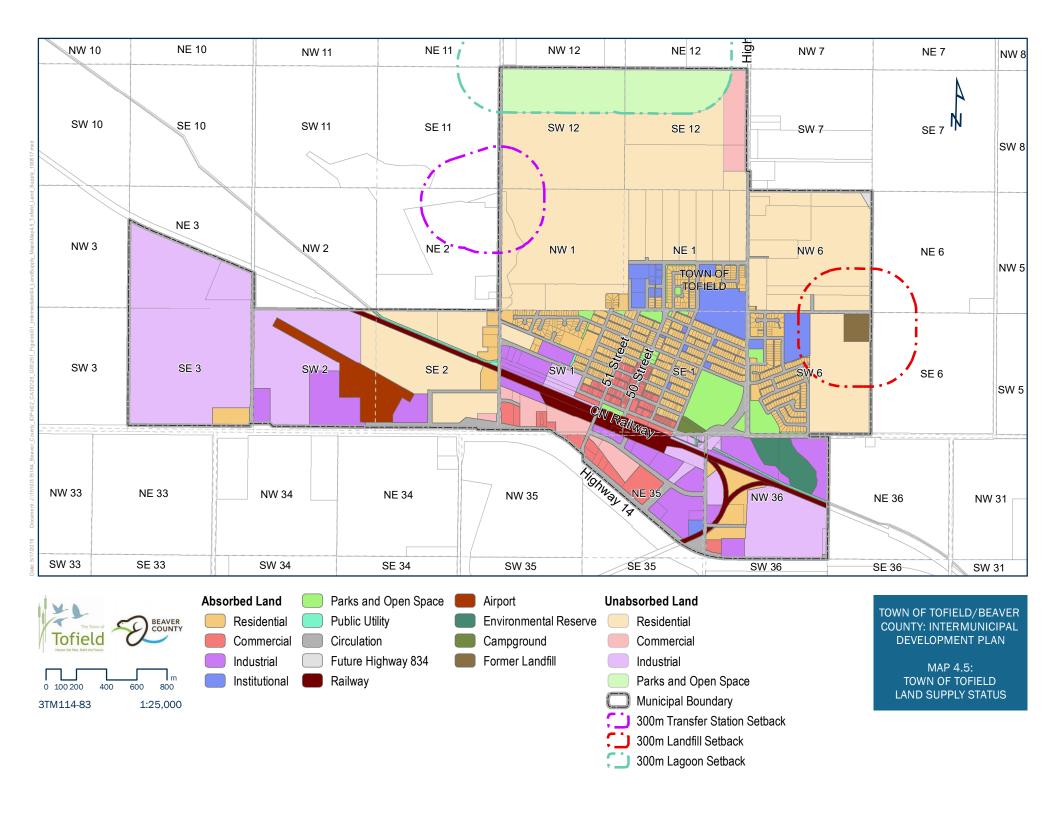


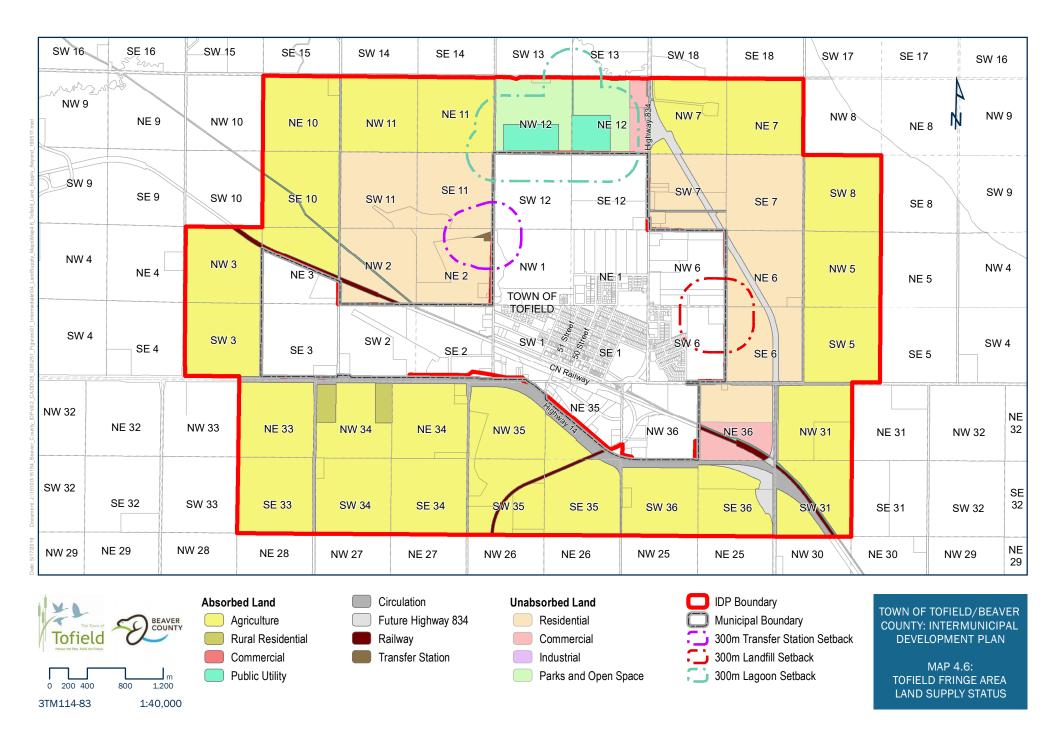
- High Scenario 1.8% AAGR
 - a. No residential land requirements beyond boundary (67.4 gross ha surplus before removing undevelopable lands)
 - b. At least 28.8 gross ha of commercial land required (could increase after adding in undevelopable lands)
 - c. No industrial land requirements beyond boundary (27.0 gross ha surplus before removing undevelopable lands)

6.2.3 Rural Fringe Land Requirements

The land supply status within the Tofield Fringe Area table in Appendix B indicates the rural fringe has no unabsorbed rural residential, commercial and industrial land supplies whatsoever. It is conceivable however that sufficient agricultural lands within the IDP study area can and will be converted to accommodate rural growth pressures over the next 50 years and beyond subject to statutory plans, policies, and regulations in effect at the time of proposed conversion.

In terms of future urban expansion within the Tofield Fringe Area, 526.7 gross ha has been previously set aside for Tofield's future residential growth, along with 40.6 gross ha for future commercial growth.









Town of Viking / Beaver County Population and Land Analysis

Population Histories and Projections

Appendix A contains the historical population growth analysis and initially recommended population projections for the Town of Viking and the County. Federal and municipal census results are presented in Appendix A for the Town and go back as far in history as possible, while the same currently go back 50 years for the County. Percentage changes and average annual growth rates are calculated between each federal census, and again between each municipal census. Changes between federal and municipal censuses are not calculated as it is recognized that methodologies and collection success rates can vary between Statistics Canada and municipalities. Due to a lack of historical population count data customized to the IDP study area, a method for projecting future population growth within the IDP plan area of the County surrounding the Town is not possible at this time.

The second table in Appendix A analyzes historical growth over selected timeframes. In recognition of emerging modest population growth in recent years among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County. Time periods are in five-year intervals up to 50 years for analysis of the federal census population counts for the Town and County, Similar analysis of the historical municipal census counts is not conducted as no recent censuses have been undertaken and the frequency in which they are conducted vary. Percentage changes, average annual growth rates, and average people per year are provided for each interval.

Appendix A presents the outcomes of the recommended low, medium, and high population projection scenarios for the Town of Viking and Beaver County over 50 years both annually and in five-year intervals. A base year of 2016 and two horizon years of 2048 (30 years) and 2068 (50 years) are used. The base year population estimate is informed by each municipality's 2016 recent federal census population count.

Table 10 below summarizes ISL's recommendations for low, medium, and high population growth scenario projections for the Town and the County at 5-year intervals. The low, medium, and high scenarios for both the County and the Town are based on 0.3%, 0.5%, and 0.7% average annual growth rates.

Table 10: Town of Viking / Beaver County Population Estimates

		Beaver County		Town of Viking			
Year	Year Count	Low 0.3%	Medium 0.5%	High 0.7%	Low 0.3%	Medium 0.5%	High 0.7%
2016	-2	5,905	5,905	5,905	1,083	1,083	1,083
2017	-1	5,923	5,935	5,946	1,086	1,088	1,091
2018	0	5,940	5,964	5,988	1,090	1,094	1,098
2023	5	6,030	6,115	6,200	1,106	1,121	1,137
2028	10	6,121	6,269	6,421	1,123	1,150	1,178
2033	15	6,213	6,428	6,648	1,140	1,179	1,219
2038	20	6,307	6,590	6,884	1,157	1,209	1,263
2043	25	6,402	6,756	7,129	1,174	1,239	1,307
2048	30	6,499	6,927	7,382	1,192	1,270	1,354
2053	35	6,597	7,102	7,644	1,210	1,302	1,402
2058	40	6,697	7,281	7,915	1,228	1,335	1,452
2063	45	6,798	7,465	8,196	1,247	1,369	1,503
2068	50	6,900	7,653	8,487	1,266	1,404	1,557







7.1.1 Land Supply Status

An analysis of land supply enables an understanding of remaining land supply within a particular area. Once combined with future growth projections, the results of the land supply analysis can either confirm sufficient lands are available to accommodate future growth, or determine if there is a deficit in land supply to accommodate future growth. A typical land supply analysis aggregates lands into two overarching land use categories.

Absorbed land supply is defined as lands zoned under the land use bylaw (LUB) and subdivided for development. Absorbed land supply is typically unavailable to accommodate future growth except for through infill, intensification, and redevelopment.

Unabsorbed land supply (or available land supply) is defined as lands not yet zoned and/or subdivided for its ultimate intended development. Future land uses within unabsorbed land supplies are typically based on LUB districting, approved area structure plan (ASP) land use designations, and future land uses identified in applicable municipal development plans (MDPs), IDPs, etc.

The approach to the land supply analysis for the Town of Viking / Beaver County project largely adheres to the above definitions. In short, the preliminary allocation of land use categories drew from registered parcel designations (e.g. ER, MR, PUL, etc.), LUB districting, and ASP land use designations where available. Where ambiguities or peculiarities were observed in the use of lands, the directions from the above were audited through reviewing parcel ownership information (e.g. publicly-owned vs. privately-owned), aerial photography, tools such as Google Street View where coverage is available, and professional judgement. This auditing process resulted in some evidence-based overrides to preliminary land use category assignments. Future consultation with Town and County staff may introduce some additional overrides.

See Maps 4.7 and 4.8 for graphical depictions of the land supply statuses in the Town of Viking and the rural fringe beyond the Town within the IDP study area respectively. Appendix B includes associated land supply status tables for both the Town and the rural fringe.

7.2 Land Requirement Projections

The following is a summary of the work in progress on the land requirements projections for the Town of Viking / Beaver County IDP project. The preliminary proposed land requirements assumptions are summarized below, followed by the resulting preliminary land requirements projections by core land use – residential, commercial, and industrial (institutional is embedded within residential) – for the Town and County under the low, medium, and high scenarios.

7.2.1 Land Requirements Assumptions

In addition to the population changes projected by scenario for the Town and County, the following assumptions have been utilized for the calculation of preliminary 50-year land requirements.

- Infill/intensification/redevelopment allowance: 5% of future population growth will occur within its
 previously absorbed residential land supply
- · Overhead land uses:
 - a. Residential: 35% of gross developable land requirements will be provided as overhead land uses including open space (e.g. parks), public utilities (e.g. storm ponds), and circulation (e.g. roadways)
 - b. Non-residential (i.e. institutional, commercial, and industrial): 30% of gross developable land requirements will be provided as overhead land uses

islengineering.com May 2019 | Page 43



- Market allowance (this is a contingency factor to enable fair market competition among multiple developers to achieve an affordable land development market, and to acknowledge that some owners of greenfield lands may never be motivated to turn their lands over for urban development): additional 20% land requirements on top of gross land requirements¹⁶
- Core land use relationships to residential:
 - a. The current relationship of absorbed institutional lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - b. The current relationship of absorbed commercial lands to absorbed residential lands will be constant throughout the 50-year growth horizon
 - c. The current relationship of absorbed industrial lands to absorbed residential lands will be constant throughout the 50-year growth horizon

7.2.2 Town of Viking Land Requirements for Preliminary Scenarios

Table 11 presents the total unabsorbed land supply in the Town of Viking by core land use (residential, institutional, commercial, and industrial) for comparison with the estimated land requirements for the same core land uses at 10-year and 25-year intervals by population growth scenario. Values in bold indicate where the land requirements for that land use exceed the unabsorbed land supply.

Table 11: Town of Viking Land Requirements at Various Intervals

Land Complet Demoissance	Area (gross	developable h	ectares)
Land Supply/Requirement	Residential ¹⁷	Commercial	Industrial
In-Boundary Unabsorbed Land Supply	8.2	10.9	93.8
Low	Scenario		
10-Year Land Requirements	2.6	1.0	0.9
20-Year Land Requirements	5.6	2.2	2.0
25-Year Land Requirements	7.1	2.8	2.5
30-Year Land Requirements	8.7	3.4	3.1
40-Year Land Requirements	11.8	4.6	4.2
50-Year Land Requirements	15.1	5.8	5.3
Mediur	n Scenario		
10-Year Land Requirements	4.4	1.7	1.5
20-Year Land Requirements	9.5	3.7	3.4
25-Year Land Requirements	12.2	4.7	4.3
30-Year Land Requirements	14.9	5.8	5.3
40-Year Land Requirements	20.5	7.9	7.2

¹⁶ For some similar small towns in Alberta, the market allowance assumption is much higher. For example, prior to the Town of Bon Accord's recent annexation, it had nearly two full quarter sections of gross developable lands designated for future residential development, but the owners of these lands were not motivated to develop. Therefore, Bon Accord effectively had a 100% residential market allowance and had to annex additional lands in 2018 to accommodate future residential growth.

Page 44



¹⁷ Residential includes all associated institutional land requirements.



Land Supply/Baguirament	Area (gross developable hectares)							
Land Supply/Requirement	Residential ¹⁷	Commercial	Industrial					
50-Year Land Requirements	26.5	10.2	9.3					
High Scenario								
10-Year Land Requirements	6.2	2.4	2.2					
20-Year Land Requirements	13.5	5.2	4.8					
25-Year Land Requirements	17.4	6.7	6.2					
30-Year Land Requirements	21.4	8.3	7.6					
40-Year Land Requirements	29.9	11.6	10.6					
50-Year Land Requirements	38.9	15.1	13.8					

Table 12 below and the following observations summarize of the beyond boundary 50-year estimated land requirements by core land use for the Town of Viking by the three population growth scenarios.

Table 12: Viking 50-Year Land Requirements Beyond Boundary

Growth Scenario	Land Requirements Beyond Boundary ¹⁸ (gross developable hectares)									
Ocemano	Residential ¹⁹ Commercial		Industrial	Total ²⁰						
Low	6.9	-5.1	-88.5	6.9						
Medium	18.3	-0.7	-84.5	18.3						
High	30.8	4.2	-80.1	34.9						

- Low Scenario 0.3% average annual growth rate (AAGR)
 - a. At least 6.9 gross ha of residential land required (could increase after adding in undevelopable lands such as wetlands, pipeline corridors, oil/gas wells and their setbacks, contaminated lands, etc.)
 - b. No commercial land requirements beyond boundary (5.7 gross ha surplus before removing undevelopable lands)
 - c. No industrial land requirements beyond boundary (88.5 gross ha surplus before removing undevelopable lands)
- Medium Scenario 0.5% AAGR
 - a. At least 18.3 gross ha of residential land required (could increase after adding in undevelopable lands)
 - b. No commercial land requirements beyond boundary, though the land supply is effective depleted at the 50-year mark (0.7 gross ha surplus before removing undevelopable lands)
 - c. No industrial land requirements beyond boundary (84.5 gross ha surplus before removing undevelopable lands)

islengineering.com May 2019 | Page 45

¹⁸ Negative values denote a surplus of lands in boundary remains after 50 years.

¹⁹ Residential includes all associated institutional land requirements.

²⁰ Totals exclude land requirements where there are negative values.





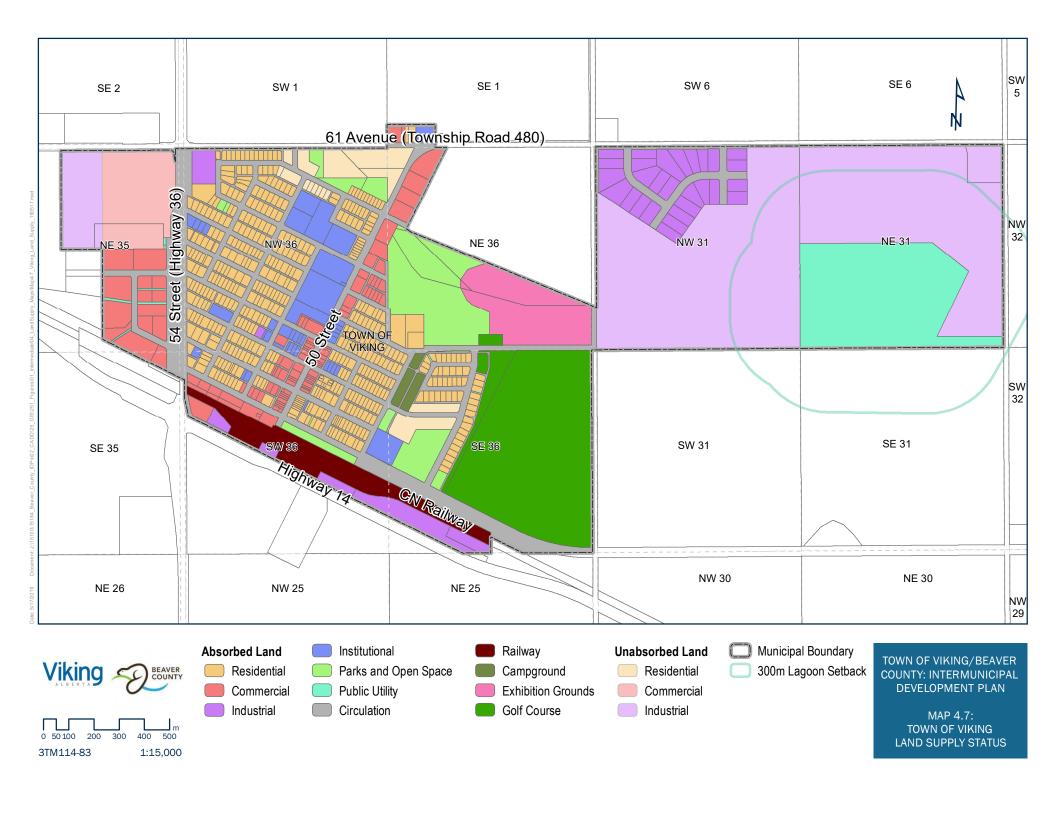
- High Scenario 0.7% AAGR
 - a. At least 30.8 gross ha of residential land required (could increase after adding in undevelopable
 - b. At least 4.2 gross ha of commercial land required (could increase after adding in undevelopable lands)
 - c. No industrial land requirements beyond boundary (80.1 gross ha surplus before removing undevelopable lands)

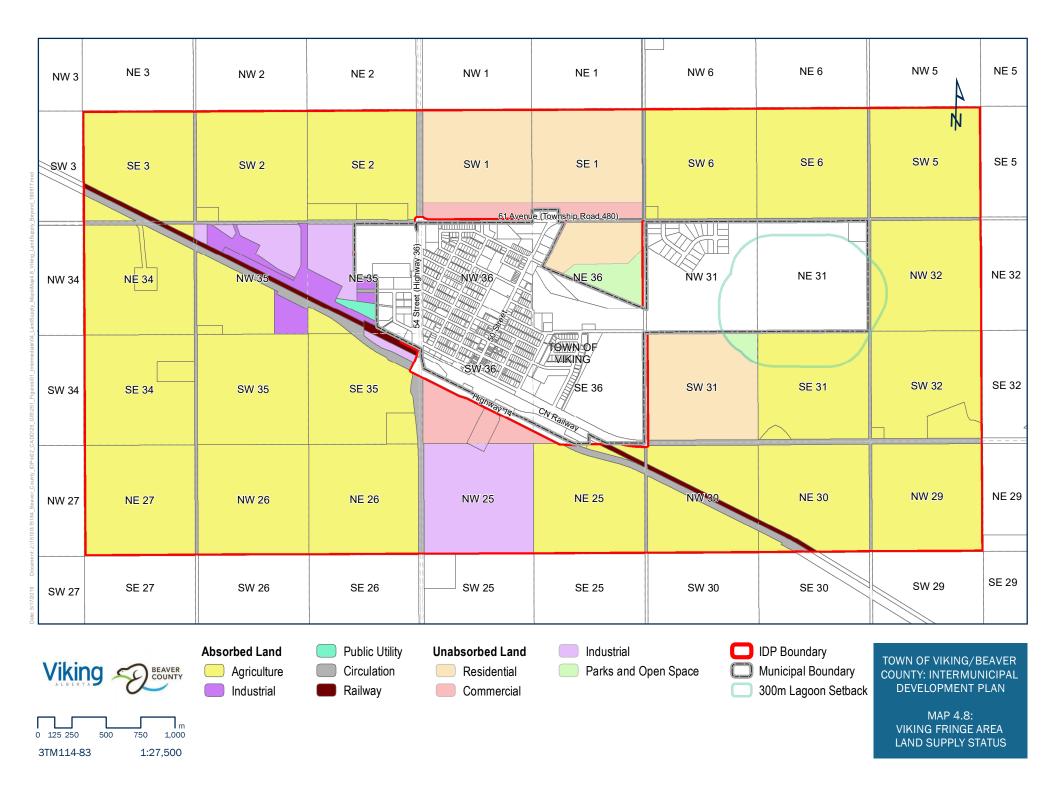
7.2.3 Rural Fringe Land Requirements

The land supply status within the Viking Fringe Area table in Appendix B indicates the rural fringe has 30.80 gross ha of unabsorbed rural industrial land supply and no unabsorbed rural residential and commercial land supplies whatsoever. It is conceivable however that sufficient agricultural lands within the IDP study area can and will be converted to accommodate rural growth pressures over the next 50 years and beyond subject to statutory plans, policies, and regulations in effect at the time of proposed conversion.

In terms of future urban expansion within the Viking Fringe Area, 188.3 gross ha has been previously set aside for Viking's future residential growth. Another 42.5 gross ha has been set aside for the Town's future commercial growth, along with 64.1 gross ha for future industrial growth,







Development Plan Updates





Direction for Updated Intermunicipal Development Plans

8.1 Village of Holden / Beaver County

8.1.1 Summary Key Considerations

IDP Policy and Mapping Update

- As detailed in Section 3.1.1, update the IDP policy framework with a focus on key policy areas, including but not limited to: Policy C.2 Urban Fringe Area; Policy D.1 Referral Area; Policy E.1 County Development Area; Section G. Land Use Policies; Section L. Plan Administration; Policy M.1 Annexation; and Section N. Dispute Resolution.
- Confirm and update IDP Map 1 Plan Area Boundaries and IDP Map 2 Future Land Use Concept.

Population Projections

- In the absence of positive historical population growth in Holden among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of a 0.5% AAGR, and a high scenario of 0.7% AAGR. See Appendix A for detailed projections.
- In consultation with the IMC, the low population growth scenario is recommended for both municipalities in the IDP update.

Estimated Land Supply Requirements

- Within its current boundaries, Holden's projected growth and land needs for residential, commercial
 and industrial are met within the 20-year time period (2038) under the low, medium, and high
 growth scenarios.
- Land requirements for commercial and industrial do not exceed Holden's unabsorbed land supply in the 50-year horizon under the low, medium, and high scenarios.
- Under the high scenario, residential land requirements begin to exceed the unabsorbed supply in the 40 to 50 year period, requiring 1.4 to 5.4 hectares.
- Growth directions and future land use concepts for the IDP area will be revisited if necessary in consultation with the IMC. See Appendix B for detailed land supply analysis.

Highway 14 Corridor Plan

- Holden is identified as an urban growth node located adjacent and north of Highway 14.
- The Village offers sanitary services, while water service is provided by the Highway 14 Regional Water Services Commission.
- Lands south of Holden are identified as a County Development Area and suggested to be developed for agricultural and compatible light industrial purposes.
- The lands north of Holden have been identified for urban expansion as well as a County
 Development Area. It is proposed that SW 23 and NW 23 be developed for residential and
 recreational purposes.
- It is proposed that the lands adjacent to the sewage lagoon be developed for recreational purposes (golf course or other recreational use).
- ISL to confirm with IMC if the proposed growth directions in the Highway Corridor Plan are still relevant.

islengineering.com May 2019 | Page 47



8.2 Village of Ryley / Beaver County

8.2.1 Summary Key Considerations

IDP Policy and Mapping Update

- As detailed in Section 3.2.1, update the IDP policy framework with a focus on key policy areas, including but not limited to: Policy C.2 Urban Fringe Area; Policy D.1 Referral Area; Policy E.1 County Development Area: Section G. Land Use Policies: Section L. Plan Administration: Policy M.1 Annexation; and Section N. Dispute Resolution.
- Confirm and update IDP Map 1 Plan Area Boundaries and IDP Map 2 Future Land Use Concept, including expansion of the IDP area to include the balance of the Equity Industrial Park Area Structure Plan and three additional quarters to the north of Ryley, as a Referral Area due to Ryley's most recent annexation.

Population Projections

- In the absence of positive historical population growth among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County - a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of a 0.5% AAGR, and a high scenario of 0.7% AAGR. See Appendix A for detailed projections.
- In consultation with the IMC, the high population growth scenario is recommended for Ryley and the medium scenario recommended for Beaver County in the IDP update.

Estimated Land Supply Requirements

- Within its current boundaries, Ryley's projected growth and land needs for residential and commercial are met within the 20-year time period (2038) under the low, medium, and high growth scenarios.
- Land requirements for commercial do not exceed Ryley's unabsorbed land supply in the 50-year horizon under the low, medium, and high scenarios.
- Under the medium scenario, residential land requirements begin to exceed the unabsorbed supply in the 50-year period, requiring 0.4 hectares.
- Under the high scenario, residential land requirements begin to exceed the unabsorbed supply in the 40 to 50 year period, requiring 3.4 to 9.9 hectares.
- Under the low scenario, industrial land requirements begin to exceed the unabsorbed supply in the 50-year period, requiring 0.5 hectares.
- Under the medium scenario, industrial land requirements begin to exceed the unabsorbed supply in the 30-year period, requiring 1.4 hectares.
- Ryley's land needs for industrial are effectively depleted under the high growth scenario by 2038 the 20-year horizon of the IDP update. Growth directions and future land use concepts for the IDP area can be revisited if necessary in consultation with the IMC. See Appendix B for detailed land supply analysis.

Highway 14 Corridor Plan

- Ryley's identified as an urban growth node located adjacent and north of Highway 14.
- The Village offers sanitary services, while water service is provided by the Highway 14 Regional Water Services Commission.
- Land located south of Ryley have been identified as a potential area for urban residential expansion in the Fringe Area and could provide for the long-term growth of the Village.
- Additional Urban Expansion Areas include west of Highway 854 and north of Ryley (annexed in 2016) and a quarter section to the northwest of the Village. It is proposed that the lands west and









south of Ryley in the County be developed for residential purposes (with commercial adjacent to Highway 14), while the lands north of Ryley be developed for industrial purposes (Clean Harbors expansion).

 ISL to confirm with IMC if the proposed growth directions in the Highway Corridor Plan are still relevant.

8.3 Town of Tofield / Beaver County

8.3.1 Summary Key Considerations

IDP Policy and Mapping Update

- As detailed in Section 3.3.1, update the IDP policy framework with a focus on key policy areas, including but not limited to: Policy C.2 Short-Term Annexation Area; Policy D.2 Urban Fringe Area; Policy E.1 Referral Area; Policy F.1 County Development Area; Section H. Land Use Policies; Section M. Plan Administration; Policy N.1 Annexation; and Section O. Dispute Resolution.
- Confirm and update IDP Map 1 Plan Area Boundaries and IDP Map 2 Future Land Use Concept.
- Consider the potential for highway commercial on either side of the Highway 834 bypass and
 potential for industrial to the east of the bypass in the future once constructed to leverage the
 highway's role as a high load corridor.

Population Projections

- Based on observing historical population growth in the Town of Tofield among the various time periods over the past 50 years, ISL recommends a low scenario of a 1.0% average annual growth rate (AAGR), a medium scenario of 1.4% AAGR, and a high scenario of 1.8% AAGR. See Appendix A for detailed projections.
- In consultation with the IMC, the medium population growth scenario is recommended for both municipalities in the IDP update.

Estimated Land Supply Requirements

- Within its current boundaries, Tofield's projected growth and land needs for residential, commercial
 and industrial are met within the 20-year time period (2038) under the low, medium, and high
 growth scenarios.
- Land requirements for residential and industrial do not exceed Tofield's unabsorbed land supply in the 50-year horizon under the low, medium, and high scenarios.
- Under the low scenario, commercial land requirements begin to exceed the unabsorbed supply in the 50-year period, requiring 1.2 hectares.
- Under the medium scenario, commercial land requirements begin to exceed the unabsorbed supply in the 40 to 50 year period, requiring 5 to 13.6 hectares.
- Under the high scenario, commercial land requirements begin to exceed the unabsorbed supply in the 30 to 50 year period, requiring 4.2 to 28.8 hectares.
- Growth directions and future land use concepts for the IDP area can be revisited if necessary in
 consultation with the IMC. Due to the forthcoming realignment of Highway 834, revisiting the
 ultimate future land use east of the realignment should be considered, potentially re-designation
 back to agriculture or industrial to leverage Highway 834's role as a High Load Corridor. See
 Appendix B for detailed land supply analysis.

islengineering.com May 2019 | Page 49





Highway 14 Corridor Plan

- Tofield is identified as an urban growth node located adjacent and north of Highway 14. Highway 834 has been designated a High Load Corridor by Alberta Transportation. The department is planning to realign Highway 834 to east of Tofield.
- Lands located at the west access to Tofield were identified as an opportunity for industrial expansion (since annexed in 2010).
- Lands located south of Tofield have been identified as a County Development Area and suggested to be developed for a mix of uses including recreational residential, residential, with some minor commercial and industrial activities.
- Lands located east of Tofield and adjacent to the proposed realignment of Highway 834 have been identified for future annexation for commercial and residential purposes, and a location for future urban expansion.
- ISL to confirm with IMC if the proposed growth directions in the Highway Corridor Plan are still relevant, particularly along the Highway 834 realignment.

8.4 Town of Viking / Beaver County

8.4.1 Summary Key Considerations

IDP Policy and Mapping Update

- As detailed in Section 3.4.1, update the IDP policy framework with a focus on key policy areas, including but not limited to: Policy C.2 Short-Term Annexation Area; Policy D.2 Urban Fringe Area; Policy E.1 Referral Area; Policy F.1 Joint Development Area; Policy G.1 County Development Area; Section I. Land Use Policies; Section N. Plan Administration; Policy O.1 Annexation; and Section P. Dispute Resolution.
- Confirm and update IDP Map 1 Plan Area Boundaries and IDP Map 2 Future Land Use Concept, and confirm the land uses applied to Viking's recent annexation area as four different sources provide conflicting directions as either all commercial, all industrial, or a mix of both. If all of it is confirmed as industrial, the Town's future commercial land requirements will be impacted.

Population Projections

- In the absence of positive historical population growth among the various time periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of 0.5% AAGR, and a high scenario of 0.7% AAGR. See Appendix A for detailed projections.
- In consultation with the IMC, the high population growth scenario is recommended for Viking and the low scenario recommended for Beaver County in the IDP update.

Estimated Land Supply Requirements

- Within its current boundaries, Viking's projected growth and land needs for residential, commercial and industrial are met within the 20-year time period (2038) under the low scenario, but residential requirements exceed the unabsorbed land supply in the medium to high scenario, which may trigger a need for future annexation within the next 20 years.
- Land requirements for industrial do not exceed the unabsorbed land supply in the 50-year horizon under the low, medium, and high scenarios.
- Under the high scenario, commercial land requirements begin to exceed the unabsorbed supply in the 40 to 50 year period, requiring 0.7 to 4.2 hectares.
- Under the low scenario, residential land requirements begin to exceed the unabsorbed supply in the 30 to 50 year period, requiring 0.5 to 6.9 hectares.







Beaver County Intermunicipal Development Plan Updates

FINAL



- Under the medium scenario, residential land requirements begin to exceed the unabsorbed supply in the 20 to 50 year period, requiring 1.3 to 18.3 hectares.
- Under the high scenario, residential land requirements begin to exceed the unabsorbed supply in the 20 to 50 year period, requiring 5.3 to 30.8 hectares.
- Growth directions and future land use concepts for the IDP area can be revisited if necessary in consultation with the IMC. See Appendix B for detailed land supply analysis.

Highway 14 Corridor Plan

- Viking is identified as an urban growth node located adjacent and north of Highway 14.
- The County and Town are cooperatively planning for development within the Viking/Beaver Business Park. The proposed land use within this node is light industrial business.
- Urban Expansion Areas north and east include lands north of 61 Avenue (Township Road 480) and
 east of Highway 36, which are proposed to be utilized for both commercial and residential
 purposes, while a quarter section east of Viking adjacent to Highway 619 is proposed to be utilized
 for residential purposes.
- Lands south of Viking and east of Highway 36 have been identified as an Urban Expansion Area for highway commercial and industrial purposes.
- Lands further south of Viking may have potential for rural residential expansion.
- ISL to confirm with IMC if the proposed growth directions in the Highway Corridor Plan are still relevant.

islengineering.com May 2019 | Page 51

APPENDIX A

Beaver County Intermunicipal Development Plan Updates

Historical Population Growth Analysis and Projections

Beaver County Population History

		Feder	al Census			Municipal Census			
Year	Original Population	Adjusted Population†	Percentage Change	Avg. Annual Growth Rate	Population	Percentage Change	Avg. Annual Growth Rate		
1901	392								
1911	4,817								
1921	7,627								
1931	8,819								
1941	8,912								
1951	7,202								
1956	6,883								
1961	6,476								
1966	6,009								
1971	5,238								
1976	4,946	4,922			4,865	_	_		
1979					4,950	1.7%	0.6%		
1981	5,347	5,350	_	_					
1986	5,400	5,399	1.0%	0.2%					
1991	5,430		0.6%	0.1%					
1996	5,659		4.2%	0.8%					
2001	5,644		-0.3%	-0.1%					
2006	5,676		0.6%	0.1%					
2009					5,630	13.7%	0.4%		
2011	5,689		0.2%	0.0%					
2016	5,905		3.8%	0.7%					

[†] Adjusted due to municipal boundary changes.

Sources: Statistics Canada (1901-2016) & Alberta Municipal Affairs (1956-2017)

Beaver County's Historical Growth Over Selected Time Periods from Federal Census

Time Period	% Change	Avg. Annual	Avg. People	Time Period	% Change	Avg. Annual	Avg. People
(years)	Over Period	Growth Rate	per Year	(years)	Over Period	Growth Rate	per Year
50 (1966-2016)	-1.7%	0.0%	-2	25 (1991-2016)	8.7%	0.3%	19
45 (1971-2016)	12.7%	0.3%	15	20 (1996-2016)	4.3%	0.2%	12
40 (1976-2016)	20.0%	0.5%	25	15 (2001-2016)	4.6%	0.3%	17
35 (1981-2016)	10.4%	0.3%	16	10 (2006-2016)	4.0%	0.4%	23
30 (1986-2016)	109.4%	0.3%	17	5 (2011-2016)	3.8%	0.7%	43

ISL recommends a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of a 0.5% AAGR, and a high scenario of a 0.7% AAGR based on the AAGRs ranging from 0.0% and 0.7% presented above.

Village of Holden Population History

		Feder	al Census			Municipal Cens	us
Year	Original	Adjusted	Percentage	Avg. Annual	Daniel attack	Percentage	Avg. Annual
	Population	Population†	Change	Growth Rate	Population	Change	Growth Rate
1911	111						
1916	140		_	_			
1921	192		37.1%	6.5%			
1926	214		11.5%	2.2%			
1931	230		7.5%	1.5%			
1936	273		18.7%	3.5%			
1941	361		32.2%	5.7%			
1946	382		5.8%	1.1%			
1951	504		31.9%	5.7%			
1956	544		7.9%	1.5%			
1960					557	_	
1961	556		2.2%	0.4%	546	-2.0%	-2.0%
1964					532	-2.6%	-0.9%
1966	503		-9.5%	-2.0%			
1971	448		-10.9%	-2.3%			
1976	393	408	-12.3%	-2.6%	388	-27.1%	-2.6%
1981	430		9.4%	1.8%			
1986	411		-4.4%	-0.9%			
1991	411		0.0%	0.0%			
1996	397		-3.4%	-0.7%			
2001	374		-5.8%	-1.2%			
2006	398		6.4%	1.3%			
2010					396	2.1%	0.1%
2011	381		-4.3%	-0.9%			
2016	350		-8.1%	-1.7%			

[†] Adjusted due to municipal boundary changes.

Sources: Statistics Canada (1916-2016) & Alberta Municipal Affairs (1960-2017)

Holden's Historical Growth Over Selected Time Periods from Federal Census

Time Period	% Change	Avg. Annual	Avg. People	Time Period	% Change	Avg. Annual	Avg. People	
(years)	Over Period	Growth Rate	rowth Rate per Year		Over Period	Growth Rate	per Year	
50 (1966-2016)	-30.4%	-0.7%	-3	25 (1991-2016)	-14.8%	-0.6%	-2	
45 (1971-2016)	-21.9%	-0.5%	-2	20 (1996-2016)	-11.8%	-0.6%	-2	
40 (1976-2016)	-14.2%	-0.4%	-1	15 (2001-2016)	-6.4%	-0.4%	-2	
35 (1981-2016)	-18.6%	-0.6%	-2	10 (2006-2016)	-12.1%	-1.3%	-5	
30 (1986-2016)	-14.8%	-0.5%	-2	5 (2011-2016)	-8.1%	-1.7%	-6	

In the absence of positive historical population growth among the various periods over the past 50 years, ISL recommends applying the same percentage scenarios applied to Beaver County – a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of a 0.5% AAGR, and a high scenario of 0.7% AAGR.

Village of Ryley Population History

		Feder	al Census			Municipal Cens	us
Year	Original	Adjusted	Percentage	Avg. Annual	Danulation	Percentage	Avg. Annual
	Population	Population†	Change	Growth Rate	Population	Change	Growth Rate
1911	110						
1916	142		_	_			
1921	242		70.4%	11.3%			
1926	220		-9.1%	-1.9%			
1931	236		7.3%	1.4%			
1936	268		13.6%	2.6%			
1941	323		20.5%	3.8%			
1946	338		4.6%	0.9%			
1951	406		20.1%	3.7%			
1956	495		21.9%	4.0%			
1960					505	_	
1961	469		-5.3%	-1.1%	495	-2.0%	-2.0%
1962					469	-5.3%	-5.3%
1963					506	7.9%	7.9%
1964					469	-7.3%	-7.3%
1965					506	7.9%	7.9%
1966	438		-6.6%	-1.4%			
1968					469	-7.3%	-2.5%
1971	428		-2.3%	-0.5%			
1976	432		0.9%	0.2%	429	-8.5%	-1.1%
1977					469	9.3%	9.3%
1978					525	11.9%	11.9%
1979					551	5.0%	5.0%
1981	483	488	11.8%	2.3%			
1982					520	-5.6%	-1.9%
1983					544	4.6%	4.6%
1986	500		3.5%	0.7%			
1991	432		-13.6%	-2.9%			
1996	465		7.6%	1.5%			
2001	437		-6.0%	-1.2%	ĺ		
2006	458		4.8%	0.9%			
2011	497		8.5%	1.6%			
2016	483		-2.8%	-0.6%			

[†] Adjusted due to municipal boundary changes.

Sources: Statistics Canada (1916-2016) & Alberta Municipal Affairs (1960-2017)

Ryley's Historical Growth Over Selected Time Periods from Federal Census

Time Period	% Change	Avg. Annual	Avg. People	Time Period	% Change	Avg. Annual	Avg. People
(years)	Over Period	Growth Rate	per Year	(years)	Over Period	Growth Rate	per Year
50 (1966-2016)	10.3%	0.2%	1	25 (1991-2016)	11.8%	0.4%	2
45 (1971-2016)	12.9%	0.3%	1	20 (1996-2016)	3.9%	0.2%	1
40 (1976-2016)	11.8%	0.3%	1	15 (2001-2016)	10.5%	0.7%	3
35 (1981-2016)	-1.0%	0.0%	0	10 (2006-2016)	5.5%	0.5%	3
30 (1986-2016)	-3.4%	-0.1%	-1	5 (2011-2016)	-2.8%	-0.6%	-3

ISL recommends a low scenario of a 0.3% average annual growth rate (AAGR), a medium scenario of a 0.5% AAGR, and a high scenario of 0.7% AAGR based on the AAGRs ranging from -0.6% to 0.7% presented above, and to align with the recommended scenarios for Beaver County.

Town of Tofield Population History

		Feder	al Census			Municipal Cens	us		Dwellings I Censuses)	Number of Dwelling
Year	Original Population	Adjusted Population†	Percentage Change	Avg. Annual Growth Rate	Population	Percentage Change	Avg. Annual Growth Rate	Total	Occupied by Usual Residents	Units (Municipal Affairs)
1911	586									
1916	455		_	_						
1921	500		9.9%	1.9%						
1926	506		1.2%	0.2%						
1931	497		-1.8%	-0.4%						
1936	544		9.5%	1.8%						
1941	551		1.3%	0.3%						
1946	608		10.3%	2.0%						
1951	692		13.8%	2.6%						
1956	800		15.6%	2.9%						
1960					837	_				
1961	905		13.1%	2.5%	871	4.1%	4.1%			
1962					907	4.1%	4.1%			
1963					905	-0.2%	-0.2%			
1964					997	10.2%	10.2%			
1965					1,009	1.2%	1.2%			
1966	952		5.2%	1.0%	ĺ					
1970					1,035	2.6%	0.5%			
1971	924		-2.9%	-0.6%						
1972					1,078	4.2%	2.1%			
1976	1,120		21.2%	3.9%	1,101	2.1%	0.5%			
1978					1,369	24.3%	11.5%			
1980					1,440	5.2%	2.6%			
1981	1,504		34.3%	6.1%						
1982					1,560	8.3%	4.1%			
1986	1,483	1,484	-1.4%	-0.3%						
1989					1,542	-1.2%	-0.2%			
1991	1,620		9.2%	1.8%				595		
1994					1,660	7.7%	1.5%			
1996	1,726		6.5%	1.3%			İ	650		
2001	1,818		5.3%	1.0%				713	695	
2006	1,876		3.2%	0.6%			İ	756	722	
2011	2,182		16.3%	3.1%			İ	878	844	
2013										1,056
2014										1,056
2015										1,056
2016 ‡	2,081		-4.6%	-0.9%			İ	864	814	1,058

[†] Adjusted due to municipal boundary changes.

Population sources: Statistics Canada (1916-2016) & Alberta Municipal Affairs (1960-2017 Population Lists)
Dwelling sources: Statistics Canada (1991-2016) & Alberta Municipal Affairs (2018 Town of Tofield Municipal Profile)

Statistics Canada counted 878 total private dwellings in 2011 yet only counted 864 in 2016, 14 less than counted in 2016. Based on the amount of dwelling starts recorded by the Town between 2011 and 2016 (), it is likely that Statistics Canada missed counting dwellings in the 2016 census, thus undercounting Tofield's population in 2016.

Tofield's Historical Growth Over Selected Time Periods from Federal Census

Time Period	% Change	Avg. Annual	Avg. People	Time Period	% Change	Avg. Annual	Avg. People
(years)	Over Period	Growth Rate	per Year	(years)	Over Period	Growth Rate	per Year
50 (1966-2016)	118.6%	1.6%	23	25 (1991-2016)	28.5%	1.0%	18
45 (1971-2016)	125.2%	1.8%	26	20 (1996-2016)	20.6%	0.9%	18
40 (1976-2016)	85.8%	1.6%	24	15 (2001-2016)	14.5%	0.9%	18
35 (1981-2016)	38.4%	0.9%	16	10 (2006-2016)	10.9%	1.0%	21
30 (1986-2016)	40.2%	1.1%	20	5 (2011-2016)	-4.6%	-0.9%	-20

ISL recommends a low scenario of a 1.0% average annual growth rate (AAGR) and a high scenario of a 1.8% AAGR based on the AAGRs ranging from -0.9% (suspected as incorrect) and 1.8% presented above. A medium scenario of a 1.4% AAGR is recommended low and high scenarios.

[‡] The 2016 federal census population is suspected of being an undercount due to the observations from the Town of Tofield's dwelling history presented below.

Town of Viking Population History

		Feder	al Census			Municipal Cens	us
Year	Original	Adjusted	Percentage	Avg. Annual	Bern Janten	Percentage	Avg. Annual
	Population	Population†	Change	Growth Rate	Population	Change	Growth Rate
1911	153						
1916	227		_	_			
1921	357		57.3%	9.5%			
1926	447		25.2%	4.6%			
1931	492		10.1%	1.9%			
1936	480		-2.4%	-0.5%			
1941	491		2.3%	0.5%			
1946	526		7.1%	1.4%			
1951	683		29.8%	5.4%			
1956	897		31.3%	5.6%			
1960					1,019	_	
1961	1,043		16.3%	3.1%	1,014	-0.5%	-0.5%
1962					1,052	3.7%	3.7%
1963					1,092	3.8%	3.8%
1964					1,114	2.0%	2.0%
1965					1,122	0.7%	0.7%
1966	1,146		9.9%	1.9%	1,128	0.5%	0.5%
1967					1,160	2.8%	2.8%
1968					1,206	4.0%	4.0%
1969					1,225	1.6%	1.6%
1970					1,193	-2.6%	-2.6%
1971	1,178		2.8%	0.6%	1,203	0.8%	0.8%
1972					1,198	-0.4%	-0.4%
1973					1,207	0.8%	0.8%
1974					1,195	-1.0%	-1.0%
1975					1,214	1.6%	1.6%
1976	1,217	1,226	3.3%	0.7%	1,196	-1.5%	-1.5%
1978					1,200	0.3%	0.2%
1979					1,227	2.3%	2.3%
1981	1,232		1.2%	0.2%			
1982					1,238	0.9%	0.3%
1986	1,160	_	-5.8%	-1.2%			
1991	1,109		-4.4%	-0.9%			
1996	1,081		-2.5%	-0.5%			
2001	1,052	_	-2.7%	-0.5%			
2006	1,085		3.1%	0.6%			
2011	1,041		-4.1%	-0.8%			
2016	1,083		4.0%	0.8%			

[†] Adjusted due to municipal boundary changes.

Sources: Statistics Canada (1916-2016) & Alberta Municipal Affairs (1960-2017)

Viking's Historical Growth Over Selected Time Periods from Federal Census

Time Period	% Change	Avg. Annual	Avg. People	Time Period	% Change	Avg. Annual	Avg. People
(years)	Over Period	Growth Rate	per Year	(years)	Over Period	Growth Rate	per Year
50 (1966-2016)	-5.5%	-0.1%	-1	25 (1991-2016)	-2.3%	-0.1%	-1
45 (1971-2016)	-8.1%	-0.2%	-2	20 (1996-2016)	0.2%	0.0%	0
40 (1976-2016)	-11.7%	-0.3%	-4	15 (2001-2016)	2.9%	0.2%	2
35 (1981-2016)	-12.1%	-0.4%	-4	10 (2006-2016)	-0.2%	0.0%	0
30 (1986-2016)	-6.6%	-0.2%	-3	5 (2011-2016)	4.0%	0.8%	8

ISL recommends a low scenario of a 0.3% average annual growth rate (AAGR) and a high scenario of a 0.7% AAGR based on the AAGRs ranging from -0.4% and 0.8% presented above, and to align with the recommended low and high scenarios for Beaver County. A medium scenario of a 0.5% AAGR is recommended as it represents a midpoint between the recommended low and high scenarios.

Preliminary Population Projections for Partner Municipalities

Very Court 10		ĺ	Ве	eaver Coun	nty	Vil	lage of Hol	den	Vi	illage of Ry	ley	To	wn of Tofic	eld	To	wn of Viki	ng
Count 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3% 0.5% 0.7% 0.3%	W	Year	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
1018 0.5, 0.340 5.946 5.956 5.958 103 5.956 103 5.956 103 5.956 103 10	Year	Count	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%	1.0%	1.4%	1.8%	0.3%	0.5%	0.7%
2019 1 5,946 5,968 5,968 5,968 5,968 5,968 5,968 5,968 5,968 5,968 6,309 533 355 357 487 4809 493 2,144 2,170 2,199 1,10	2016 †	-2	5,905	5,905	5,905	350	350	350	483	483	483	2,081	2,081	2,081	1,083	1,083	1,083
2019	2017	-1	5,923	5,935	5,946	351	352	352	484	485	486	2,102	2,110	2,118	1,086	1,088	1,091
	2018	0	5,940	5,964	5,988	352	354	355	486	488	490	2,123	2,140	2,157	1,090	1,094	1,098
2021 3 5,994 6,054 6,115 355 359 362 490 495 500 2,187 2,221 2,275 1,099 1,110 1,121	2019	1	5,958	5,994	6,030	353	355	357	487	490	493	2,144	2,170	2,195	1,093	1,099	1,106
1922	2020	2	5,976	6,024	6,072	354	357	360	489	493	497	2,165	2,200	2,235	1,096	1,105	1,114
2023 S 6,030 6,115 6,200 357 362 368 493 500 507 2,231 2,294 2,358 1,106 1,121 1,137	2021	3	5,994	6,054	6,115	355	359	362	490	495	500	2,187	2,231	2,275	1,099	1,110	1,121
2026 6 6,048 6,148 6,244 388 364 370 495 503 511 2,253 2,326 2,400 1,109 1,127 1,145	2022	4	6,012	6,084	6,157	356	361	365	492	498	504	2,209	2,262	2,316	1,103	1,116	1,129
2025 7	2023	5	6,030	6,115	6,200	357	362	368	493	500	507	2,231	2,294	2,358	1,106	1,121	1,137
2026 8 6,088 6,207 6,332 361 388 375 498 508 518 2,299 2,391 2,487 1,116 1,138 1,161	2024	6	6,048	6,145	6,244	358	364	370	495	503	511	2,253	2,326	2,400	1,109	1,127	1,145
2027 9 6,103 6,238 6,376 362 370 378 499 510 522 2,322 2,425 2,532 1,119 1,144 1,169 2028 10 6,121 6,269 6,421 363 372 381 501 513 525 2,345 2,459 2,578 1,123 1,150 1,178 2029 11 6,139 6,301 6,466 364 373 383 502 515 529 2,588 2,493 2,624 1,126 1,156 1,186 2031 13 6,176 6,364 6,555 6,668 377 386 504 518 533 2,392 2,528 2,671 1,129 1,161 1,194 2031 13 6,176 6,364 6,555 6,668 377 389 505 521 536 2,416 2,464 2,719 1,133 1,167 1,202 2032 14 6,195 6,396 6,602 367 379 391 507 523 540 2,440 2,599 2,768 1,366 1,173 1,211 2033 15 6,213 6,428 6,648 368 381 394 508 526 544 2,465 2,648 2,818 1,140 1,179 1,211 2034 16 6,232 6,460 6,695 369 383 397 510 528 548 2,489 2,673 2,869 1,143 1,185 1,228 2035 17 6,251 6,492 6,742 370 385 400 511 531 551 2,514 2,710 2,921 1,146 1,191 1,236 2036 18 6,270 6,524 6,789 372 387 402 513 531 551 2,514 2,710 2,921 1,146 1,191 1,236 2038 20 6,307 6,590 6,884 374 391 408 516 539 563 2,590 2,488 3,081 1,175 1,209 1,258 2039 21 6,326 6,638 6,931 375 393 411 517 542 567 2,645 2,865 3,137 1,160 1,227 1,289 2040 22 6,345 6,656 6,981 376 393 411 517 542 567 2,646 2,946 3,311 1,160 1,227 1,289 2041 23 6,364 6,669 7,030 377 396 417 521 547 575 2,669 2,967 3,097 1,173 1,291 1,200 2043 25 6,402 6,766 7,129 378 389 400 514 519 544 571 2,642 2,905 3,193 1,164 1,221 1,280 2040 22 6,345 6,666 6,981 376 398 441 519 544 571 2,642 2,905 3,193 1,164 1,221 1,220 2041 23 6,566 6,689 7,030 377 396 417 521 547 575 2,669 2,9	2025	7	6,066	6,176	6,288	360	366	373	496	505	514	2,276	2,358	2,443	1,113	1,133	1,153
2028 10 6,121 6,269 6,421 633 372 381 501 513 525 2,345 2,459 2,578 1,123 1,150 1,178	2026	8	6,085	6,207	6,332	361	368	375	498	508	518	2,299	2,391	2,487	1,116	1,138	1,161
2029 11	2027	9	6,103	6,238	6,376	362	370	378	499	510	522	2,322	2,425	2,532	1,119	1,144	1,169
2031 13 6,158 6,332 6,511 365 375 386 504 518 533 2,392 2,528 2,671 1,129 1,161 1,194	2028	10	6,121	6,269	6,421	363	372	381	501	513	525	2,345	2,459	2,578	1,123	1,150	1,178
2031 13 6,176 6,364 6,556 366 377 389 505 521 536 2,416 2,564 2,719 1,133 1,167 1,202	2029	11	6,139	6,301	6,466	364	373	383	502	515	529	2,368	2,493	2,624	1,126	1,156	1,186
2032 14 6,195 6,396 6,602 367 379 391 507 523 540 2,440 2,599 2,768 1,136 1,173 1,211	2030	12	6,158	6,332	6,511	365	375	386	504	518	533	2,392	2,528	2,671	1,129	1,161	1,194
2033 15 6,213 6,428 6,648 368 381 394 508 526 544 2,465 2,636 2,618 1,140 1,179 1,219	2031	13	6,176	6,364	6,556	366	377	389	505	521	536	2,416	2,564	2,719	1,133	1,167	1,202
2034 16 6.232 6.460 6.695 369 383 397 510 528 548 2.489 2.673 2.869 1,143 1,185 1,228 2035 17 6.251 6.492 6.742 370 385 400 511 531 555 2.514 2.710 2.921 1,146 1,191 1,236 2036 18 6.270 6.524 6.789 372 387 402 513 534 555 2.539 2,748 2.973 1,150 1,197 1,245 2037 19 6.288 6.557 6.837 373 389 405 514 536 559 2.565 2,787 3,027 1,153 1,203 1,254 2038 20 6.307 6.590 6.884 374 391 408 516 539 563 2.590 2.826 3,081 1,157 1,209 1,263 2039 21 6.326 6.623 6.933 375 393 411 517 542 567 2,616 2.865 3,137 1,160 1,215 1,271 2040 22 6.345 6.666 6.981 376 395 414 519 544 571 2,642 2,905 3,193 1,164 1,221 1,280 2041 23 6.364 6.689 7,030 377 396 417 521 547 575 2,669 2,946 3,251 1,167 1,227 1,289 2042 24 6.383 6.723 7,079 378 398 420 522 550 579 2,665 2,987 3,309 1,171 1,233 1,298 2043 25 6.402 6.756 7,129 379 400 423 524 553 583 2,722 3,029 3,369 1,174 1,239 1,307 2044 26 6.422 6.790 7,179 381 402 425 525 555 587 2,673 3,071 3,491 1,181 1,252 1,326 2046 26 6.422 6.698 7,303 384 409 424 532 525 555 587 2,693 3,158 3,554 1,185 1,258 1,335 2047 29 6.480 6.892 7,333 384 409 434 530 564 600 2,833 3,202 3,389 1,174 1,233 1,326 2040 26 6.422 6.698 7,633 384 409 434 530 564 600 2,833 3,202 3,683 1192 1,270 1,356 2046 28 6.460 6.858 7,280 388 411 438 532 567 604 2,861 3,244 3,683 1192 1,270 1,356 2049 31 6.519 6.961 7,433 386 413 441 533 569 608 2,890 3,223 3,49 1,174 1,239 1,362 2052 34 6.577 7,066 7,591 399 419 450 538 578 617 2,948 3,385 3	2032	14	6,195	6,396	6,602	367	379	391	507	523	540	2,440	2,599	2,768	1,136	1,173	1,211
2035 17 6.251 6.492 6.742 370 385 400 511 531 551 2.514 2.710 2.921 1.146 1.191 1.236	2033	15	6,213	6,428	6,648	368	381	394	508	526	544	2,465	2,636	2,818	1,140	1,179	1,219
2036 18 6,270 6,524 6,789 372 387 402 513 534 555 2,539 2,748 2,973 1,150 1,197 1,245	2034	16	6,232	6,460	6,695	369	383	397	510	528	548	2,489	2,673	2,869	1,143	1,185	1,228
2037 19 6,288 6,557 6,837 373 389 405 514 536 559 2,565 2,787 3,027 1,153 1,203 1,254	2035	17	6,251	6,492	6,742	370	385	400	511	531	551	2,514	2,710	2,921	1,146	1,191	1,236
2038 20 6,307 6,590 6,884 374 391 408 516 539 563 2,590 2,826 3,081 1,157 1,209 1,263 2039 21 6,326 6,623 6,933 375 393 411 517 542 567 2,616 2,685 3,137 1,160 1,271 1,271 2040 22 6,345 6,656 6,981 376 395 414 519 544 571 2,642 2,996 3,251 1,167 1,227 1,289 2041 23 6,462 6,756 7,129 379 400 423 524 553 583 2,722 3,029 3,171 1,233 1,298 2044 26 6,422 6,756 7,129 339 400 425 525 555 587 2,752 3,099 1,174 1,233 1,298 2043 26 6,422 6,6422 6,730	2036	18	6,270	6,524	6,789	372	387	402	513	534	555	2,539	2,748	2,973	1,150	1,197	1,245
2039 21 6,326 6,623 6,933 375 393 411 517 542 567 2,616 2,865 3,137 1,160 1,215 1,271	2037	19	6,288	6,557	6,837	373	389	405	514	536	559	2,565	2,787	3,027	1,153	1,203	1,254
2040 22 6,345 6,656 6,981 376 395 414 519 544 571 2,642 2,905 3,193 1,164 1,221 1,280 2041 23 6,364 6,688 7,030 377 396 417 521 547 575 2,669 2,946 3,281 1,167 1,227 1,289 2042 24 6,383 6,722 7,079 378 398 420 522 550 579 2,987 3,309 1,171 1,233 1,298 2043 25 6,402 6,750 7,179 381 402 425 555 555 587 2,750 3,071 3,429 1,178 1,245 1,317 2045 27 6,441 6,824 7,229 382 404 428 527 558 591 2,777 3,114 3,491 1,181 1,252 1,325 2045 28 6,480 6,852	2038	20	6,307	6,590	6,884	374	391	408	516	539	563	2,590	2,826	3,081	1,157	1,209	1,263
2041 23 6,364 6,689 7,030 377 396 417 521 547 575 2,669 2,946 3,251 1,167 1,227 1,289 2042 24 6,383 6,723 7,079 378 398 420 522 550 579 2,695 2,987 3,309 1,171 1,233 1,298 2043 25 6,402 6,756 7,129 379 400 423 524 553 583 2,722 3,029 3,369 1,174 1,239 1,307 2045 27 6,441 6,824 7,229 382 404 428 527 558 591 2,777 3,114 3,491 1,181 1,252 1,326 2047 29 6,480 6,892 7,330 384 409 434 530 564 500 3,618 1,188 1,264 1,344 2048 31 6,519 6,961 7,433	2039	21	6,326	6,623	6,933	375	393	411	517	542	567	2,616	2,865	3,137	1,160	1,215	1,271
2042 24 6,383 6,723 7,079 378 398 420 522 550 579 2,695 2,987 3,309 1,171 1,233 1,298 2043 25 6,402 6,756 7,129 379 400 423 524 553 583 2,722 3,029 3,369 1,174 1,239 1,307 2044 26 6,422 6,790 7,179 381 402 425 525 555 587 2,750 3,071 3,429 1,178 1,245 1,317 2045 27 6,441 6,824 7,229 382 404 428 527 558 591 2,773 3,14 3,491 1,181 1,252 1,326 2046 28 6,460 6,882 7,330 384 409 434 530 561 595 2,805 3,158 3,554 1,185 1,268 1,334 2049 31 6,519	2040	22	6,345	6,656	6,981	376	395	414	519	544	571	2,642	2,905	3,193	1,164	1,221	1,280
2043 25 6,402 6,756 7,129 379 400 423 524 553 583 2,722 3,029 3,369 1,174 1,239 1,307 2044 26 6,422 6,790 7,179 381 402 425 525 555 587 2,750 3,071 3,429 1,178 1,245 1,317 2046 28 6,460 6,858 7,280 383 406 431 528 561 595 2,805 3,158 3,554 1,188 1,258 1,335 2047 29 6,480 6,892 7,330 384 409 434 530 564 600 2,833 3,202 3,618 1,188 1,264 1,344 2049 31 6,519 6,961 7,433 386 411 433 569 608 2,890 3,292 3,749 1,196 1,277 1,363 2051 33 6,519 6,961 <td>2041</td> <td>23</td> <td>6,364</td> <td>6,689</td> <td>7,030</td> <td>377</td> <td>396</td> <td>417</td> <td>521</td> <td>547</td> <td>575</td> <td>2,669</td> <td>2,946</td> <td>3,251</td> <td>1,167</td> <td>1,227</td> <td>1,289</td>	2041	23	6,364	6,689	7,030	377	396	417	521	547	575	2,669	2,946	3,251	1,167	1,227	1,289
2044 26 6,422 6,790 7,179 381 402 425 525 555 587 2,750 3,071 3,429 1,178 1,245 1,317 2045 27 6,441 6,824 7,229 382 404 428 527 558 591 2,777 3,114 3,491 1,181 1,252 1,326 2046 28 6,460 6,858 7,280 383 406 431 528 561 595 2,805 3,158 3,554 1,185 1,258 1,334 2047 29 6,480 6,892 7,330 384 409 434 530 564 600 2,833 3,202 3,618 1,185 1,258 1,334 2048 30 6,499 6,927 7,332 385 411 438 532 567 604 2,861 3,247 3,683 1,192 1,270 1,342 2050 32 6,538	2042	24	6,383	6,723	7,079	378	398	420	522	550	579	2,695	2,987	3,309	1,171	1,233	1,298
2045 27 6,441 6,824 7,229 382 404 428 527 558 591 2,777 3,114 3,491 1,181 1,252 1,326 2046 28 6,460 6,858 7,280 383 406 431 528 561 595 2,805 3,158 3,554 1,185 1,258 1,335 2047 29 6,480 6,892 7,332 384 409 434 530 567 604 2,861 3,247 3,681 1,188 1,264 1,344 2049 31 6,519 6,961 7,433 386 413 441 535 567 604 2,861 3,247 3,683 1,199 1,283 1,333 2050 32 6,538 6,961 7,486 388 415 444 535 572 612 2,919 3,339 3,817 1,199 1,283 1,392 1,392 1,202 1,202 1,3	2043	25	6,402	6,756	7,129	379	400	423	524	553	583	2,722	3,029	3,369	1,174	1,239	1,307
2046 28 6,460 6,858 7,280 383 406 431 528 561 595 2,805 3,158 3,554 1,185 1,258 1,335 2047 29 6,480 6,892 7,330 384 409 434 530 564 600 2,833 3,202 3,618 1,188 1,264 1,344 2048 30 6,499 6,927 7,382 385 411 438 532 567 604 2,861 3,247 3,683 1,192 1,270 1,354 2049 31 6,519 6,6961 7,433 386 413 441 533 569 608 2,890 3,292 3,749 1,196 1,277 1,354 2050 32 6,538 6,996 7,486 388 415 444 535 575 617 2,948 3,385 3,885 1,203 1,296 1,332 2052 34 6,577	2044	26	6,422	6,790	7,179	381	402	425	525	555	587	2,750	3,071	3,429	1,178	1,245	1,317
2047 29 6,480 6,892 7,330 384 409 434 530 564 600 2,833 3,202 3,618 1,188 1,264 1,344 2048 30 6,499 6,927 7,332 385 411 438 532 567 604 2,861 3,247 3,683 1,192 1,270 1,354 2049 31 6,519 6,961 7,486 388 413 441 533 569 608 2,890 3,292 3,749 1,196 1,277 1,363 2050 32 6,538 6,996 7,486 388 415 444 535 572 612 2,919 3,339 3,817 1,199 1,283 1,237 2051 33 6,558 7,031 7,538 389 417 447 536 575 617 2,948 3,385 1,206 1,296 1,392 2052 34 6,577 7,066	2045	27	6,441	6,824	7,229	382	404	428	527	558	591	2,777	3,114	3,491	1,181	1,252	1,326
2048 30 6,499 6,927 7,382 385 411 438 532 567 604 2,861 3,247 3,683 1,192 1,270 1,354 2049 31 6,519 6,961 7,433 386 413 441 533 569 608 2,890 3,292 3,749 1,196 1,277 1,363 2050 32 6,538 6,996 7,486 388 415 444 535 572 612 2,919 3,339 3,817 1,199 1,283 1,373 2051 33 6,558 7,031 7,538 389 417 447 536 575 617 2,948 3,385 3,885 1,206 1,296 1,392 2052 34 6,577 7,066 7,591 390 419 450 538 578 621 2,977 3,433 3,955 1,206 1,392 2053 35 6,597 7,102	2046	28	6,460	6,858	7,280	383	406	431	528	561	595	2,805	3,158	3,554	1,185	1,258	1,335
2049 31 6,519 6,961 7,433 386 413 441 533 569 608 2,890 3,292 3,749 1,196 1,277 1,363 2050 32 6,538 6,996 7,486 388 415 444 535 572 612 2,919 3,339 3,817 1,199 1,283 1,373 2051 33 6,558 7,031 7,538 389 417 447 536 575 617 2,948 3,385 1,203 1,290 1,382 2052 34 6,577 7,066 7,591 390 419 450 538 578 621 2,977 3,433 3,955 1,206 1,296 1,392 2053 35 6,657 7,102 7,644 391 421 453 540 581 625 3,007 3,481 4,027 1,210 1,302 1,402 2054 36 6,617 7,137	2047	29	6,480	6,892	7,330	384	409	434	530	564	600	2,833	3,202	3,618	1,188	1,264	1,344
2050 32 6,538 6,996 7,486 388 415 444 535 572 612 2,919 3,339 3,817 1,199 1,283 1,373 2051 33 6,558 7,031 7,538 389 417 447 536 575 617 2,948 3,385 1,203 1,290 1,382 2052 34 6,577 7,066 7,591 390 419 450 538 578 621 2,977 3,433 3,955 1,206 1,296 1,392 2053 35 6,597 7,102 7,644 391 421 453 540 581 625 3,007 3,481 4,027 1,210 1,302 1,402 2055 37 6,637 7,137 7,697 392 423 456 541 584 630 3,037 3,530 4,099 1,214 1,309 1,412 2055 37 6,637 7,209	2048	30	6,499	6,927	7,382	385	411	438	532	567	604	2,861	3,247	3,683	1,192	1,270	1,354
2051 33 6,558 7,031 7,538 389 417 447 536 575 617 2,948 3,385 3,885 1,203 1,290 1,382 2052 34 6,577 7,066 7,591 390 419 450 538 578 621 2,977 3,433 3,955 1,206 1,296 1,392 2053 35 6,597 7,102 7,644 391 421 453 540 581 625 3,007 3,481 4,027 1,210 1,302 1,402 2054 36 6,617 7,137 7,697 392 423 456 541 584 630 3,037 3,530 4,099 1,214 1,309 1,412 2055 37 6,637 7,173 7,751 393 425 459 543 587 634 3,068 3,579 4,173 1,217 1,316 1,422 2056 38 6,657	2049	31	6,519	6,961	7,433	386	413	441	533	569	608	2,890	3,292	3,749	1,196	1,277	1,363
2052 34 6,577 7,066 7,591 390 419 450 538 578 621 2,977 3,433 3,955 1,206 1,296 1,392 2053 35 6,597 7,102 7,644 391 421 453 540 581 625 3,007 3,481 4,027 1,210 1,302 1,402 2054 36 6,617 7,137 7,697 392 423 456 541 584 630 3,037 3,530 4,099 1,214 1,309 1,412 2055 37 6,637 7,173 7,751 393 425 459 543 587 634 3,068 3,579 4,173 1,217 1,316 1,422 2056 38 6,657 7,209 7,805 395 427 463 544 590 638 3,098 3,629 4,248 1,221 1,322 1,432 2057 39 6,677	2050	32	6,538	6,996	7,486	388	415	444	535	572	612	2,919	3,339	3,817	1,199	1,283	1,373
2053 35 6,597 7,102 7,644 391 421 453 540 581 625 3,007 3,481 4,027 1,210 1,302 1,402 2054 36 6,617 7,137 7,697 392 423 456 541 584 630 3,037 3,530 4,099 1,214 1,309 1,412 2055 37 6,637 7,173 7,751 393 425 459 543 587 634 3,068 3,579 4,173 1,217 1,316 1,422 2056 38 6,657 7,209 7,805 395 427 463 544 590 638 3,098 3,629 4,248 1,221 1,322 1,432 2057 39 6,677 7,245 7,860 396 429 466 546 593 643 3,129 3,680 4,324 1,225 1,329 1,442 2058 40 6,697	2051	33	6,558	7,031	7,538	389	417	447	536	575	617	2,948	3,385	3,885	1,203	1,290	1,382
2054 36 6,617 7,137 7,697 392 423 456 541 584 630 3,037 3,530 4,099 1,214 1,309 1,412 2055 37 6,637 7,173 7,751 393 425 459 543 587 634 3,068 3,579 4,173 1,217 1,316 1,422 2056 38 6,657 7,209 7,805 395 427 463 544 590 638 3,098 3,629 4,248 1,221 1,322 1,432 2057 39 6,677 7,245 7,860 396 429 466 546 593 643 3,129 3,680 4,324 1,225 1,329 1,442 2058 40 6,697 7,281 7,915 397 432 469 548 596 647 3,161 3,731 4,402 1,228 1,335 1,452 2059 41 6,717	2052	34	6,577	7,066	7,591	390	419	450	538	578	621	2,977	3,433	3,955	1,206	1,296	1,392
2055 37 6,637 7,173 7,751 393 425 459 543 587 634 3,068 3,579 4,173 1,217 1,316 1,422 2056 38 6,657 7,209 7,805 395 427 463 544 590 638 3,098 3,629 4,248 1,221 1,322 1,432 2057 39 6,677 7,245 7,860 396 429 466 546 593 643 3,129 3,680 4,324 1,225 1,329 1,442 2058 40 6,697 7,281 7,915 397 432 469 548 596 647 3,161 3,731 4,402 1,228 1,335 1,452 2059 41 6,717 7,317 7,971 398 434 472 549 599 652 3,192 3,784 4,482 1,232 1,342 1,462 2060 42 6,737	2053	35	6,597	7,102	7,644	391	421	453	540	581	625	3,007	3,481	4,027	1,210	1,302	1,402
2056 38 6,657 7,209 7,805 395 427 463 544 590 638 3,098 3,629 4,248 1,221 1,322 1,432 2057 39 6,677 7,245 7,860 396 429 466 546 593 643 3,129 3,680 4,324 1,225 1,329 1,442 2058 40 6,697 7,281 7,915 397 432 469 548 596 647 3,161 3,731 4,402 1,228 1,335 1,452 2059 41 6,717 7,317 7,971 398 434 472 549 599 652 3,192 3,784 4,482 1,232 1,342 1,462 2060 42 6,737 7,354 8,026 399 436 476 551 602 657 3,224 3,837 4,562 1,236 1,349 1,472 2061 43 6,757	2054	36	6,617	7,137	7,697		423	456	541			3,037	3,530	4,099	1,214		1,412
2057 39 6,677 7,245 7,860 396 429 466 546 593 643 3,129 3,680 4,324 1,225 1,329 1,442 2058 40 6,697 7,281 7,915 397 432 469 548 596 647 3,161 3,731 4,402 1,228 1,335 1,452 2059 41 6,717 7,317 7,971 398 434 472 549 599 652 3,192 3,784 4,482 1,232 1,342 1,462 2060 42 6,737 7,354 8,026 399 436 476 551 602 657 3,224 3,837 4,562 1,236 1,349 1,472 2061 43 6,757 7,391 8,083 401 438 479 553 605 661 3,256 3,890 4,644 1,239 1,356 1,482 2062 44 6,777	2055	37	6,637	7,173	7,751	393		459	543	587	634	3,068	3,579		1,217	1,316	1,422
2058 40 6,697 7,281 7,915 397 432 469 548 596 647 3,161 3,731 4,402 1,228 1,335 1,452 2059 41 6,717 7,317 7,971 398 434 472 549 599 652 3,192 3,784 4,482 1,232 1,342 1,462 2060 42 6,737 7,354 8,026 399 436 476 551 602 657 3,224 3,837 4,562 1,236 1,349 1,472 2061 43 6,757 7,391 8,083 401 438 479 553 605 661 3,256 3,890 4,644 1,239 1,356 1,482 2062 44 6,777 7,428 8,139 402 440 482 554 608 666 3,289 3,945 4,728 1,243 1,362 1,493 2063 45 6,798	2056	38	6,657	7,209	7,805	395	427	463	544	590	638		3,629	4,248	1,221	1,322	1,432
2059 41 6,717 7,317 7,971 398 434 472 549 599 652 3,192 3,784 4,482 1,232 1,342 1,462 2060 42 6,737 7,354 8,026 399 436 476 551 602 657 3,224 3,837 4,562 1,236 1,349 1,472 2061 43 6,757 7,391 8,083 401 438 479 553 605 661 3,256 3,890 4,644 1,239 1,356 1,482 2062 44 6,777 7,428 8,139 402 440 482 554 608 666 3,289 3,945 4,728 1,243 1,362 1,493 2063 45 6,798 7,465 8,196 403 442 486 556 611 670 3,322 4,000 4,813 1,247 1,369 1,503 2064 46 6,818	2057	39	6,677	7,245	7,860	396	429	466	546	593	643	3,129	3,680	4,324	1,225	1,329	1,442
2060 42 6,737 7,354 8,026 399 436 476 551 602 657 3,224 3,837 4,562 1,236 1,349 1,472 2061 43 6,757 7,391 8,083 401 438 479 553 605 661 3,256 3,890 4,644 1,239 1,356 1,482 2062 44 6,777 7,428 8,139 402 440 482 554 608 666 3,289 3,945 4,728 1,243 1,362 1,493 2063 45 6,798 7,465 8,196 403 442 486 556 611 670 3,322 4,000 4,813 1,247 1,369 1,503 2064 46 6,818 7,502 8,253 404 445 489 558 614 675 3,355 4,056 4,900 1,250 1,376 1,514 2065 47 6,839	2058	40	6,697	7,281	7,915	397	432	469	548	596	647	3,161	3,731	4,402	1,228	1,335	1,452
2061 43 6,757 7,391 8,083 401 438 479 553 605 661 3,256 3,890 4,644 1,239 1,356 1,482 2062 44 6,777 7,428 8,139 402 440 482 554 608 666 3,289 3,945 4,728 1,243 1,362 1,493 2063 45 6,798 7,465 8,196 403 442 486 556 611 670 3,322 4,000 4,813 1,247 1,369 1,503 2064 46 6,818 7,502 8,253 404 445 489 558 614 675 3,355 4,056 4,900 1,250 1,376 1,514 2065 47 6,839 7,540 8,311 405 447 493 559 617 680 3,389 4,113 4,988 1,254 1,383 1,524 2066 48 6,859	2059	41	6,717	7,317	7,971	398	434	472	549	599	652	3,192	3,784	4,482	1,232	1,342	1,462
2062 44 6,777 7,428 8,139 402 440 482 554 608 666 3,289 3,945 4,728 1,243 1,362 1,493 2063 45 6,798 7,465 8,196 403 442 486 556 611 670 3,322 4,000 4,813 1,247 1,369 1,503 2064 46 6,818 7,502 8,253 404 445 489 558 614 675 3,355 4,056 4,900 1,250 1,376 1,514 2065 47 6,839 7,540 8,311 405 447 493 559 617 680 3,389 4,113 4,988 1,254 1,383 1,524 2066 48 6,859 7,577 8,369 407 449 496 561 620 685 3,422 4,170 5,078 1,258 1,390 1,535 2067 49 6,880	2060	42	6,737	7,354	8,026	399	436	476	551	602	657	3,224	3,837	4,562	1,236	1,349	1,472
2063 45 6,798 7,465 8,196 403 442 486 556 611 670 3,322 4,000 4,813 1,247 1,369 1,503 2064 46 6,818 7,502 8,253 404 445 489 558 614 675 3,355 4,056 4,900 1,250 1,376 1,514 2065 47 6,839 7,540 8,311 405 447 493 559 617 680 3,389 4,113 4,988 1,254 1,383 1,524 2066 48 6,859 7,577 8,369 407 449 496 561 620 685 3,422 4,170 5,078 1,258 1,390 1,535 2067 49 6,880 7,615 8,428 408 451 500 563 623 689 3,457 4,229 5,169 1,262 1,397 1,546	2061	43	6,757	7,391	8,083	401	438	479	553	605	661	3,256	3,890	4,644	1,239	1,356	1,482
2064 46 6,818 7,502 8,253 404 445 489 558 614 675 3,355 4,056 4,900 1,250 1,376 1,514 2065 47 6,839 7,540 8,311 405 447 493 559 617 680 3,389 4,113 4,988 1,254 1,383 1,524 2066 48 6,859 7,577 8,369 407 449 496 561 620 685 3,422 4,170 5,078 1,258 1,390 1,535 2067 49 6,880 7,615 8,428 408 451 500 563 623 689 3,457 4,229 5,169 1,262 1,397 1,546	2062	44	6,777	7,428	8,139	402	440	482	554	608	666	3,289	3,945	4,728	1,243	1,362	1,493
2065 47 6,839 7,540 8,311 405 447 493 559 617 680 3,389 4,113 4,988 1,254 1,383 1,524 2066 48 6,859 7,577 8,369 407 449 496 561 620 685 3,422 4,170 5,078 1,258 1,390 1,535 2067 49 6,880 7,615 8,428 408 451 500 563 623 689 3,457 4,229 5,169 1,262 1,397 1,546	2063	45	6,798	7,465	8,196	403	442	486	556	611	670	3,322	4,000	4,813	1,247	1,369	1,503
2066 48 6,859 7,577 8,369 407 449 496 561 620 685 3,422 4,170 5,078 1,258 1,390 1,535 2067 49 6,880 7,615 8,428 408 451 500 563 623 689 3,457 4,229 5,169 1,262 1,397 1,546	2064	46	6,818	7,502	8,253	404	445	489	558	614	675	3,355	4,056	4,900	1,250	1,376	1,514
2067 49 6,880 7,615 8,428 408 451 500 563 623 689 3,457 4,229 5,169 1,262 1,397 1,546	2065	47	6,839	7,540	8,311	405	447	493	559	617	680	3,389	4,113	4,988	1,254	1,383	1,524
	2066	48	6,859	7,577	8,369	407	449	496	561	620	685	3,422	4,170	5,078	1,258	1,390	1,535
2068 50 6,900 7,653 8,487 409 454 503 564 626 694 3,491 4,288 5,262 1,266 1,404 1,557	2067	49	6,880	7,615	8,428	408	451	500	563	623	689	3,457	4,229	5,169	1,262	1,397	1,546
	2068	50	6,900	7,653	8,487	409	454	503	564	626	694	3,491	4,288	5,262	1,266	1,404	1,557

[†] The 2016 federal census population of 2,081 for the Town of Tofield, the starting point for its projections, is suspected to be an undercount.

Preliminary Population Projections for Partner Municipalities, 5-Year Intervals from 2018

		В	eaver Coun	ty	Vill	age of Holo	len	Vi	llage of Ryl	еу	To	wn of Tofic	eld	To	own of Viki	ng
Year	Year	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Teal	Count	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%	0.3%	0.5%	0.7%	1.0%	1.4%	1.8%	0.3%	0.5%	0.7%
2016 †	-2	5,905	5,905	5,905	350	350	350	483	483	483	2,081	2,081	2,081	1,083	1,083	1,083
2017	-1	5,923	5,935	5,946	351	352	352	484	485	486	2,102	2,110	2,118	1,086	1,088	1,091
2018	0	5,940	5,964	5,988	352	354	355	486	488	490	2,123	2,140	2,157	1,090	1,094	1,098
2023	5	6,030	6,115	6,200	357	362	368	493	500	507	2,231	2,294	2,358	1,106	1,121	1,137
2028	10	6,121	6,269	6,421	363	372	381	501	513	525	2,345	2,459	2,578	1,123	1,150	1,178
2033	15	6,213	6,428	6,648	368	381	394	508	526	544	2,465	2,636	2,818	1,140	1,179	1,219
2038	20	6,307	6,590	6,884	374	391	408	516	539	563	2,590	2,826	3,081	1,157	1,209	1,263
2043	25	6,402	6,756	7,129	379	400	423	524	553	583	2,722	3,029	3,369	1,174	1,239	1,307
2048	30	6,499	6,927	7,382	385	411	438	532	567	604	2,861	3,247	3,683	1,192	1,270	1,354
2053	35	6,597	7,102	7,644	391	421	453	540	581	625	3,007	3,481	4,027	1,210	1,302	1,402
2058	40	6,697	7,281	7,915	397	432	469	548	596	647	3,161	3,731	4,402	1,228	1,335	1,452
2063	45	6,798	7,465	8,196	403	442	486	556	611	670	3,322	4,000	4,813	1,247	1,369	1,503
2068	50	6,900	7,653	8,487	409	454	503	564	626	694	3,491	4,288	5,262	1,266	1,404	1,557

[†] The 2016 federal census population of 2,081 for the Town of Tofield, the starting point for its projections, is suspected to be an undercount.

APPENDIX B

Beaver County Intermunicipal Development Plan Updates

Estimated Land Supply Requirements

Land Supply Status within Village of Holden

DRAFT (prepared May 17, 2019)

	Village of Holden			
	Area (ha)	Pct		
Gross Area	166.8			
Campground	0.7			
Cemetery	4.3	1		
Environmental Reserve	7.9	1		
Railway	16.2	1		
Total Undevelopable Lands	29.1	1		
Gross Developable Area	137.7	100.0%		
Residential	18.3	13.3%		
Commercial	4.6	3.4%		
Industrial	2.2	1.6%		
Institutional	4.8	3.5%		
Total Net Developable Area	29.9	21.7%		
Parks and Open Space	9.0	6.5%		
Public Utility	1.0	0.7%		
Circulation	30.4	22.1%		
Total Net Developable Overheads	40.4	29.3%		
Gross Absorbed Land Supply	70.3	51.1%		
Residential	12.7	9.2%		
Commercial	0.0	0.0%		
Industrial	54.6	39.7%		
Institutional	0.0	0.0%		
Gross Unabsorbed Land Supply	67.3	48.9%		

Land Supply Status within Holden Fringe Area (County Portion of IDP Study Area)

	Holden Rural Fringe			
	Area (ha)	Pct		
Gross Area	681.6	_		
Former Landfill	1.8	_		
Railway	5.5			
Total Undevelopable Lands*	7.3	1		
Gross Developable Area*	674.4	100.0%		
Agriculture*	508.2	75.4%		
Rural Residential	_	1		
Rural Commercial	2.7	0.4%		
Rural Industrial	_			
Total Net Developable Area*	510.9	75.8%		
Parks and Open Space	_	_		
Public Utility	15.8	2.3%		
Circulation	33.9	5.0%		
Total Net Developable Overheads	49.7	7.4%		
Gross Absorbed Land Supply*	560.6	83.1%		
Rural Residential*	22.0	3.3%		
Rural Commercial*	_	_		
Rural Industrial*	_	_		
Future Urban Residential*	42.2	6.3%		
Future Urban Commercial*	_	_		
Future Urban Industrial*	_	_		
Parks and Open Space*	49.6	7.3%		
Gross Unabsorbed Land Supply*	113.8	16.9%		

^{*} Areas associated with the above do not factor in potential environmental reserve within the subject lands to protect wetlands and watercourses.

Land Supply Status within Village of Ryley

DRAFT (prepared May 17, 2019)

	Village of Ryley			
	Area (ha)	Pct		
Gross Area	272.7	_		
Campground	1.2	1		
Crown	11.6			
Industrial Landfill	95.6	1		
Railway	13.2	_		
Total Undevelopable Lands	121.6	_		
Gross Developable Area	151.1	100.0%		
Residential	32.5	21.5%		
Commercial	4.3	2.9%		
Industrial	7.2	4.8%		
Institutional	3.8	2.5%		
Total Net Developable Area	47.8	31.6%		
Parks and Open Space	9.2	6.1%		
Public Utility	3.2	2.1%		
Circulation	33.9	22.4%		
Total Net Developable Overheads	46.2	30.6%		
Gross Absorbed Land Supply	94.0	62.2%		
Residential	19.3	12.8%		
Commercial	7.6	5.1%		
Industrial	30.1	19.9%		
Institutional	0.0	0.0%		
Gross Unabsorbed Land Supply	57.1	37.8%		

Land Supply Status within Ryley Fringe Area (County Portion of IDP Study Area)

	Ryley Rural Fringe			
	Area (ha)	Pct		
Gross Area	848.8	_		
Railway	14.9	1		
Regional Landfill	55.2	1		
Total Undevelopable Lands*	70.1	I		
Gross Developable Area*	778.7	100.0%		
Agriculture*	310.6	39.9%		
Rural Residential	_	_		
Rural Commercial	_	_		
Rural Industrial	38.5	4.9%		
Total Net Developable Area*	349.1	44.8%		
Parks and Open Space	_			
Public Utility	35.6	4.6%		
Circulation	46.4	6.0%		
Total Net Developable Overheads	82.0	10.5%		
Gross Absorbed Land Supply*	431.1	55.4%		
Rural Residential*	_	1		
Rural Commercial*	_	_		
Rural Industrial*	166.5	21.4%		
Urban Fringe Residential*	157.7	20.3%		
Urban Fringe Commercial*	23.4	3.0%		
Urban Fringe Industrial*		_		
Gross Unabsorbed Land Supply*	347.6	44.6%		

^{*} Areas associated with the above do not factor in potential environmental reserve within the subject lands to protect wetlands and watercourses.

Land Supply Status within Town of Tofield

	Town of Tofield			
	Area (ha)	Pct		
Gross Area	860.8	_		
Airport	14.9	_		
Campground	1.2	_		
Environmental Reserve	8.2	_		
Former Landfill	3.2	_		
Future Highway 834 Realignment	0.6	_		
Railway	21.2	_		
Total Undevelopable Lands	49.3	1		
Gross Developable Area	811.5	100.0%		
Residential	76.4	9.4%		
Commercial	20.0	2.5%		
Industrial	54.2	6.7%		
Institutional	21.3	2.6%		
Total Net Developable Area	171.9	21.2%		
Parks and Open Space	18.4	2.3%		
Public Utility	3.1	0.4%		
Circulation	75.5	9.3%		
Total Net Developable Overheads	97.0	12.0%		
Gross Absorbed Land Supply	268.9	33.1%		
Residential	316.4	39.0%		
Commercial	20.8	2.6%		
Industrial	162.0	20.0%		
Institutional	0.0	0.0%		
Parks and Open Space	43.4	5.3%		
Gross Unabsorbed Land Supply	542.6	66.9%		

Land Supply Status within Tofield Fringe Area (County Portion of IDP Study Area)

	Tofield Rural Fringe			
	Area (ha)	Pct		
Gross Area	2,358.3	1		
Future Highway 834	36.6	1		
Railway	19.8	1		
Transfer Station	1.1			
Total Undevelopable Lands*	57.4	I		
Gross Developable Area*	2,300.9	100.0%		
Agriculture*	1,505.3	65.4%		
Rural Residential	15.6	0.7%		
Rural Commercial	_			
Rural Industrial	_			
Total Net Developable Area*	1,520.9	66.1%		
Parks and Open Space	_			
Public Utility	40.8	1.8%		
Circulation	93.2	4.0%		
Total Net Developable Overheads	133.9	5.8%		
Gross Absorbed Land Supply*	1,654.8	71.9%		
Rural Residential*	_	_		
Rural Commercial*	_	_		
Rural Industrial*	_	_		
Urban Fringe Residential*	526.7	22.9%		
Urban Fringe Commercial*	40.6	1.8%		
Urban Fringe Industrial*	_	_		
Parks and Open Space*	78.7	3.4%		
Gross Unabsorbed Land Supply*	646.0	28.1%		

^{*} Areas associated with the above do not factor in potential environmental reserve within the subject lands to protect wetlands and watercourses.

Land Supply Status within Town of Viking

	Town o	f Viking
	Area (ha)	Pct
Gross Area	361.6	1
Campground	1.4	1
Exhibition Grounds	11.1	1
Golf Course	35.9	
Railway	9.6	1
Total Undevelopable Lands	58.0	1
Gross Developable Area	303.6	100.0%
Residential	41.5	13.7%
Commercial	21.0	6.9%
Industrial	19.1	6.3%
Institutional	12.3	4.1%
Total Net Developable Area	93.9	30.9%
Parks and Open Space	19.7	6.5%
Public Utility	26.5	8.7%
Circulation	50.5	16.7%
Total Net Developable Overheads	96.8	31.9%
Gross Absorbed Land Supply	190.7	62.8%
Residential	8.2	2.7%
Commercial	10.9	3.6%
Industrial	93.8	30.9%
Institutional	0.0	0.0%
Gross Unabsorbed Land Supply	112.9	37.2%

Land Supply Status within Viking Fringe Area (County Portion of IDP Study Area)

	Viking Ru	ral Fringe
	Area (ha)	Pct
Gross Area	1,752.5	-
Railway	15.0	1
Total Undevelopable Lands*	15.0	1
Gross Developable Area*	1,737.5	100.0%
Agriculture*	1,284.7	73.9%
Rural Residential	_	1
Rural Commercial	_	1
Rural Industrial	25.3	1
Total Net Developable Area*	1,310.0	75.4%
Parks and Open Space	_	1
Public Utility	3.3	0.2%
Circulation	82.7	4.8%
Total Net Developable Overheads	86.0	4.9%
Gross Absorbed Land Supply*	1,396.0	80.3%
Rural Residential*	_	-
Rural Commercial*	_	1
Rural Industrial*	30.8	1.8%
Urban Fringe Residential*	188.3	10.8%
Urban Fringe Commercial*	42.5	2.4%
Urban Fringe Industrial*	64.1	3.7%
Parks and Open Space*	15.7	0.9%
Gross Unabsorbed Land Supply*	341.5	19.7%

^{*} Areas associated with the above do not factor in potential environmental reserve within the subject lands to protect wetlands and watercourses.