MUNICIPAL DISTRICT OF GREENVIEW NO. 16

COMMITTEE OF THE WHOLE MEETING AGENDA

Tuesday May 19, 2020 | 9:00 AM | Electronic Meeting

#1	CALL TO ORDER			
#2	ADOPTION OF AGENDA			
#3	MINUTES		3.1 Committee of the Whole Meeting minutes held April 20, 2020.	2
			3.2 Business Arising from the Minutes	
#4	DELEGATION	9:15 am	4.1 Accurate Assessment Group Ltd. – 2020 Annual Assessment Presentation	5
		9:45 am	4.2 Assessment Services Branch, Linear Property Assessment Unit – 2020 Linear Assessment Presentation	41
		10:15 am	4.3 Nitehawk Year-Round Adventure Park – Reallocation of Funds	77
		10:30 am	4.4 Greenview Fiber Optic Internet Connectivity Strategy	93
		10:45 am	4.5 Upper Smoky Caribou Task Force Presentation	160
#5	NEW BUSINESS		5.1 2020 Community Spring Grant Request	198
			5.2 MD of Greenview Library Board	203
			5.3 Greenview Logo Soft Rebrand	210
			5.4 Action List	213
#6	CLOSED SESSION			
#7	ADJOURNMENT			

Minutes of a
COMMITTEE OF THE WHOLE MEETING
MUNICIPAL DISTRICT OF GREENVIEW NO. 16
Electronic Meeting
on Monday, April 20, 2020

 # 1:
CALL TO ORDER

Chair Tyler Olsen called the meeting to order at 9:01 a.m.

PRESENT

Ward 5	Reeve Dale Smith
Division 9	Deputy Reeve Tyler Olsen
Ward 1	Councillor Winston Delorme
Ward 2	Councillor Dale Gervais
Ward 3	Councillor Les Urness
Ward 4	Councillor Shawn Acton
Ward 6	Councillor Tom Burton
Ward 7	Councillor Roxie Rutt
Ward 8	Councillor Bill Smith
Division 9	Councillor Duane Didow

ATTENDING

Chief Administrative Officer	Denise Thompson
Assistant Chief Administrative Officer	Stacey Wabick
General Manager, Infrastructure & Planning	Roger Autio
General Manager, Community Services	Gerry Murphy
Chief Financial Officer	Aleks Nelson
Manager of Marketing & Communications	Stacey Sevilla
Recording Secretary	Lianne Kruger

ABSENT

#2:
AGENDA

MOTION: 20.04.30. Moved by: COUNCILLOR SHAWN ACTON
That the Monday April 20, 2020 Committee of the Whole agenda be adopted as presented.

CARRIED

#3.1
COMMITTEE OF THE WHOLE MINUTES

MOTION: 20.04.31. Moved by: COUNCILLOR WINSTON DELORME
That the Minutes of the Committee of the Whole meeting held on Tuesday, February 18, 2020 be adopted as presented.

CARRIED

#3.2
BUSINESS ARISING

3.2 BUSINESS ARISING FROM MINUTES:

#4
DELEGATIONS

4.0 DELEGATIONS

4.1 GRIFFITHS TRAIL REVITALIZATION PROJECT

GRIFFITHS TRAIL REVITALIZATION PROJECT

MOTION: 20.04.32. Moved by: COUNCILLOR TOM BURTON
That Committee of the Whole accept the presentation from the Griffiths Trail Revitalization Project for information, as presented.

CARRIED

4.2 SINISTER SPORTS – CANADIAN DEATH RACE

SINISTER SPORTS

MOTION: 20.04.33. Moved by: COUNCILLOR DUANE DIDOW
That Committee of the Whole accept the update from Sinister Sports – Canadian Death Race for information, as presented.

CARRIED

4.3 GRANDE CACHE RECREATION AND TRAILS STRATEGIC MASTERPLAN

GRANDE CACHE RECREATION & TRAILS STRATEGIC MASTERPLAN

MOTION: 20.04.34. Moved by: COUNCILLOR WINSTON DELORME
That Committee of the Whole accept the Grande Cache Recreation & Trails Strategic Master Plan for information only at this time.

CARRIED

4.4 ISL ENGINEERING AND LAND SERVICES

ISL ENGINEERING LAND SERVICES

MOTION: 20.04.35. Moved by: COUNCILLOR DALE GERVAIS
That Committee of the Whole accept the presentation from ISL Engineering and Land Services to review the Draft Sturgeon Lake Area Structure Plan for information, as presented.

CARRIED

Chair Tyler Olsen recessed the meeting at 10:44 a.m.
Chair Tyler Olsen reconvened the meeting at 10:55 a.m.

#5
NEW BUSINESS

5.0 NEW BUSINESS

5.2 PROBLEM WILDLIFE OFFICER POSITION

PROBLEM WILDLIFE OFFICER POSITION

MOTION: 20.04.36. Moved by: REEVE DALE SMITH
That Committee of the Whole accept the presentation from Administration regarding the essential duties and responsibilities of the Problem Wildlife Officer position for information, as presented.

CARRIED

5.1 PLANNING AND DEVELOPMENT 2019 YEAR END REPORT

2019 YEAR END REPORT – PLANNING & DEVELOPMENT

MOTION: 20.04.37. Moved by: COUNCILLOR ROXIE RUTT
That Committee of the Whole accept the Planning and Development 2019 Year End Report for information, as presented.

CARRIED

5.3 ACTION LIST

ACTION LIST

MOTION: 20.04.38. Moved by: COUNCILLOR DALE GERVAIS
That Committee of the Whole accept the Action List for information as presented.

CARRIED

#6 CLOSED SESSION

6.0 CLOSED SESSION

There was no Closed Session presented.

#7 ADJOURNMENT

7.0 ADJOURNMENT

MOTION: 20.04.39. Moved by: COUNCILLOR DALE GERVAIS
That this Committee of the Whole meeting adjourn at 11:37 a.m.

CARRIED

_____ _____

CHIEF ADMINISTRATIVE OFFICER CHAIR

SUBJECT:	**Accurate Assessment Group Ltd. – 2020 Annual Assessment Presentation**				
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION			
MEETING DATE:	May 19, 2020	CAO:	DT	MANAGER:	
DEPARTMENT:	CORPORATE SERVICES	GM:	AN	PRESENTER:	MJ
STRATEGIC PLAN:					

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Council accept the Accurate Assessment Group's annual Greenview Property Assessment report for information

BACKGROUND/PROPOSAL:

Accurate Assessment Group is contracted by Greenview to provide assessment services on all properties within Greenview.

Accurate Assessment Group representatives will be in attendance to elaborate on Greenview's Property Assessment report.

Council members may wish to prepare questions in relation to the attached presentation to ensure clarity for Council.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the report as information is to keep Council informed about the changes in Greenview's property assessment from one year to the next. Another benefit of the recommended action is that Council will have an opportunity to dialogue with the Accurate Assessment Group regarding the changes in assessment

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to not accept the recommended motion for information.

FINANCIAL IMPLICATION:

Direct Costs:

Ongoing / Future Costs:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow up actions to the recommended motion.

ATTACHMENT(S):

- Accurate Assessment Group Ltd. – PowerPoint Presentation

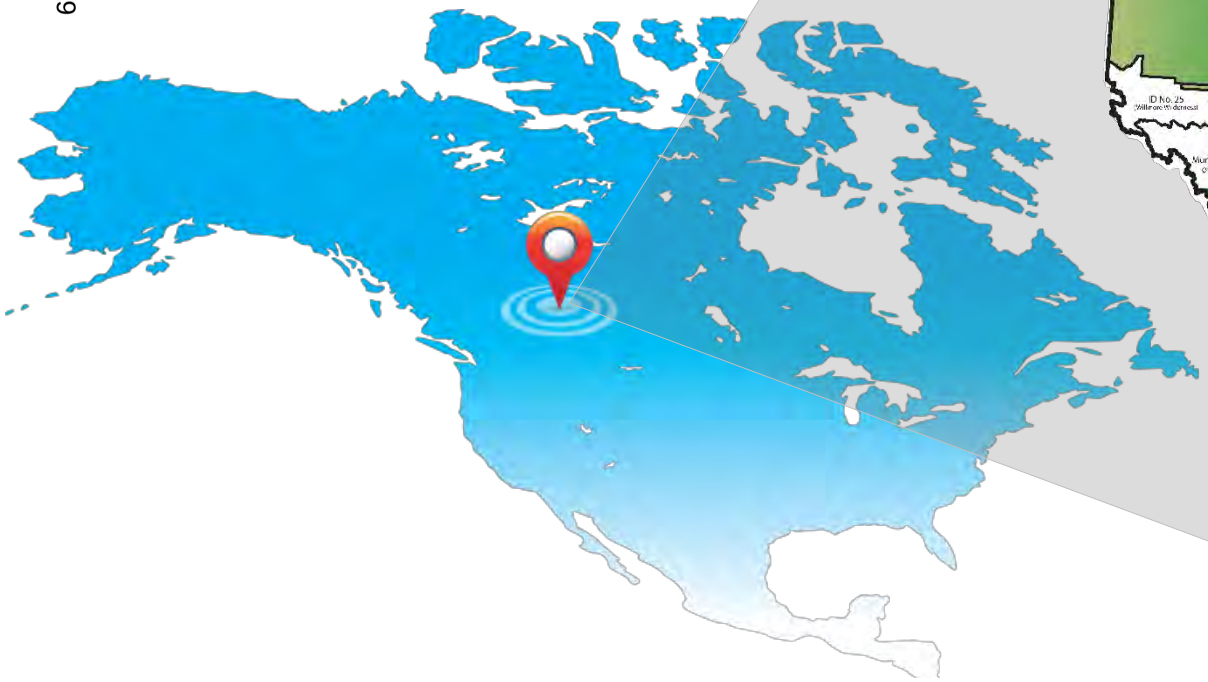

MUNICIPAL DISTRICT OF GREENVIEW No. 16

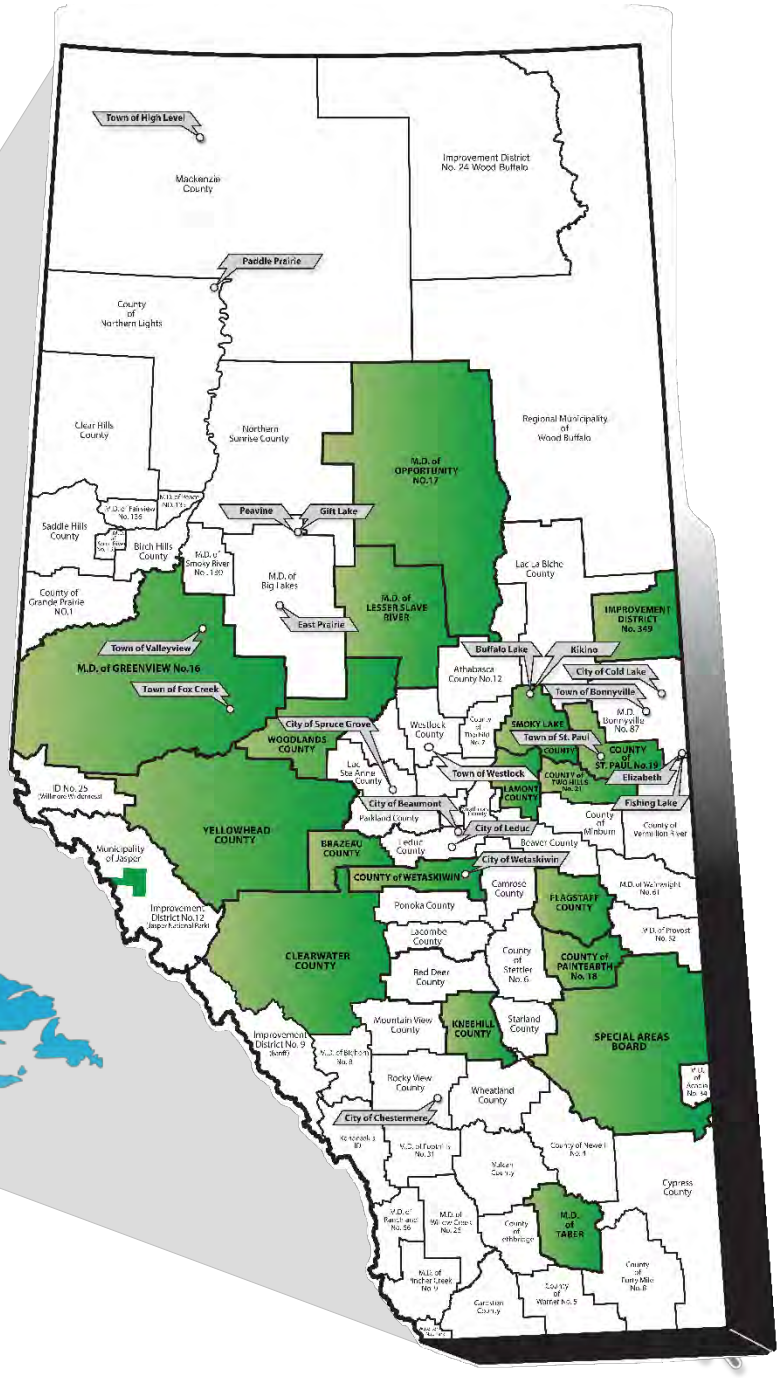
Agenda

- Accurate Assessment Group Ltd.
- Highlights of the Municipality's Assessment

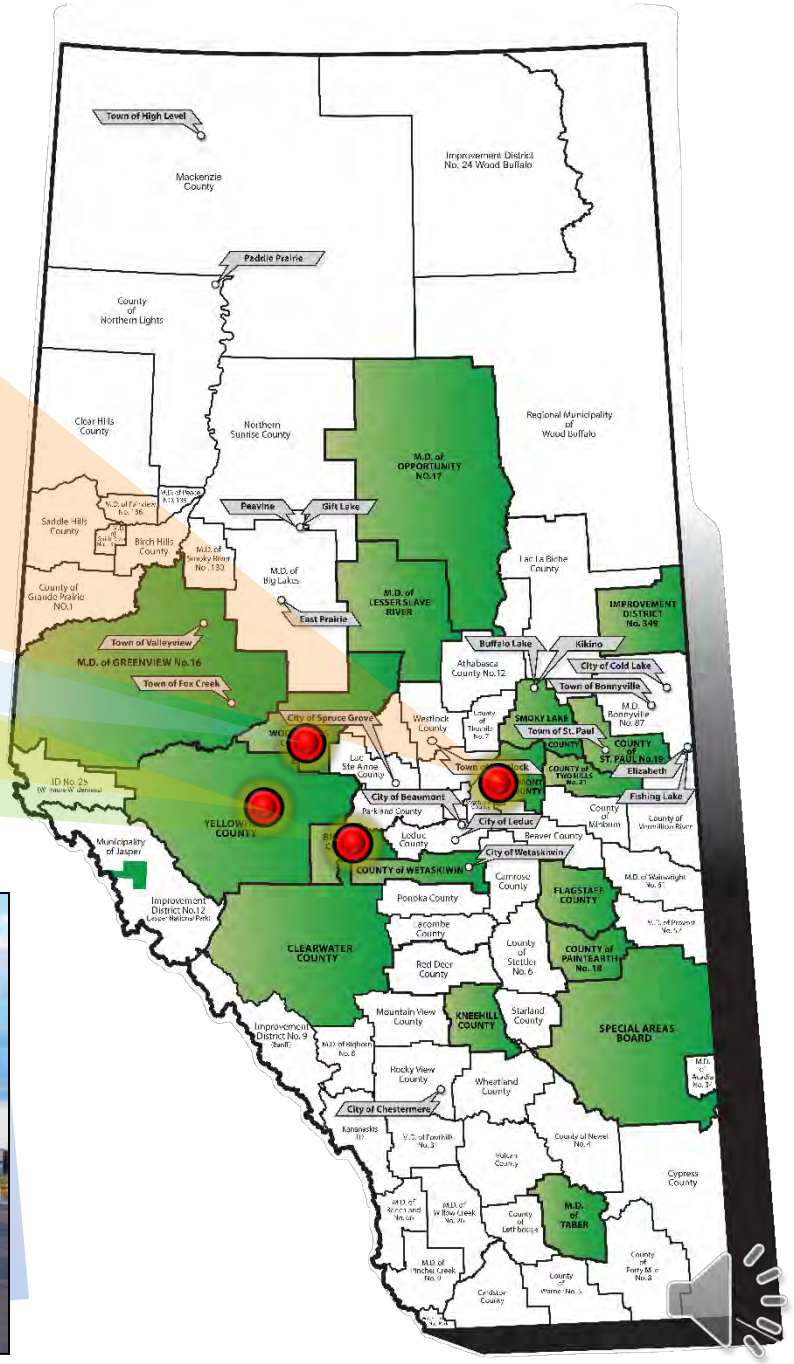
ACCURATE ASSESSMENT GROUP LTD.

FOUNDED IN 1997



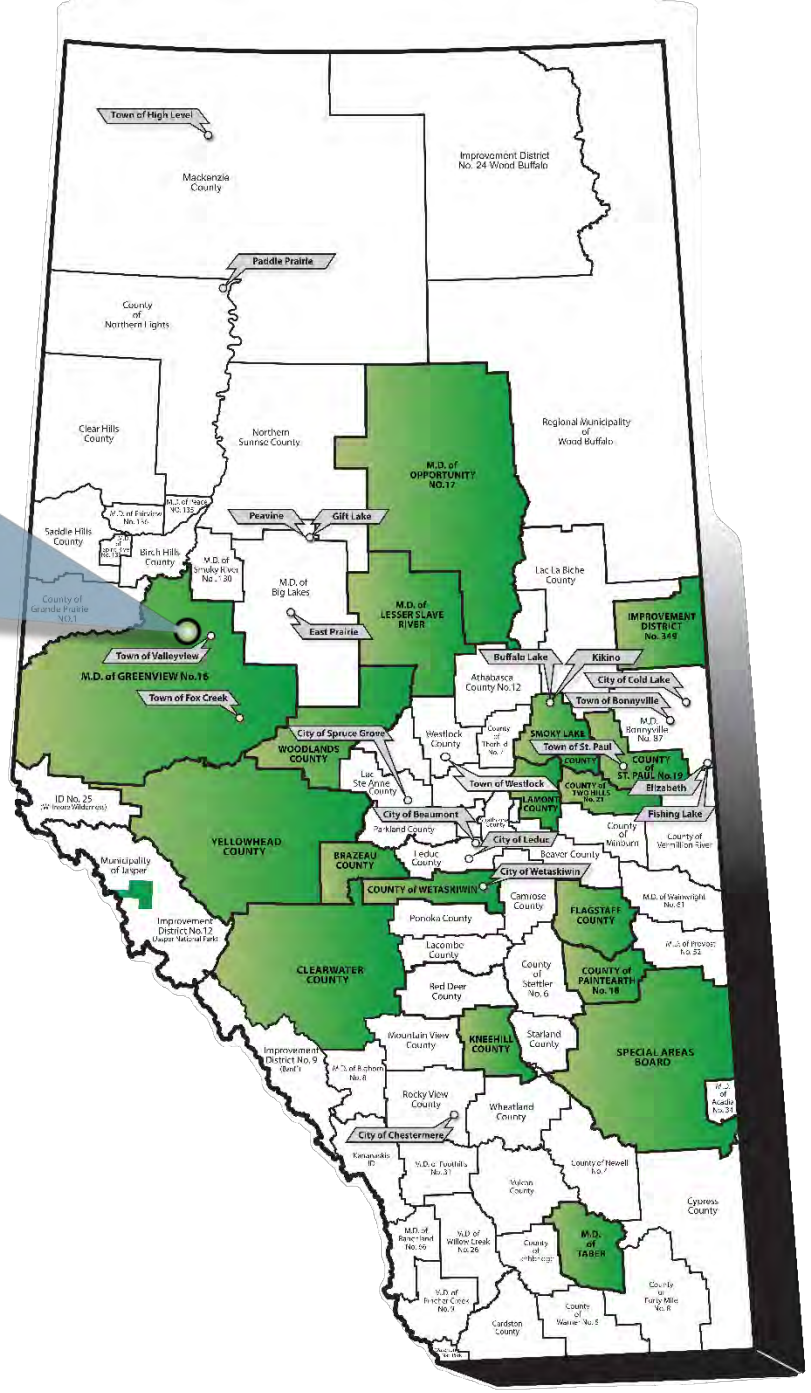


Where We are Located



AAG's Client Partners

- ✓ **20 Rural Municipalities**
- ✓ **6 Cities**
- ✓ **6 Towns**
- ✓ **8 Metis Settlements**



Trusted Advisors

At AAG, our purpose is to continuously seek improvement and earn the role of Trusted Advisor.

TEAM DEPTH

Specializing in all aspects of Municipal Property Assessment

300+ Years of Combined Experience

COMMUNICATION

We connect with Rate Payers successfully

We communicate with Council, CAO's and Administration

DATA INTEGRITY

Our technology drives best practices for assessment operations

Leaders in quality control through technology and experience

Residential

Non-Residential

Farmland

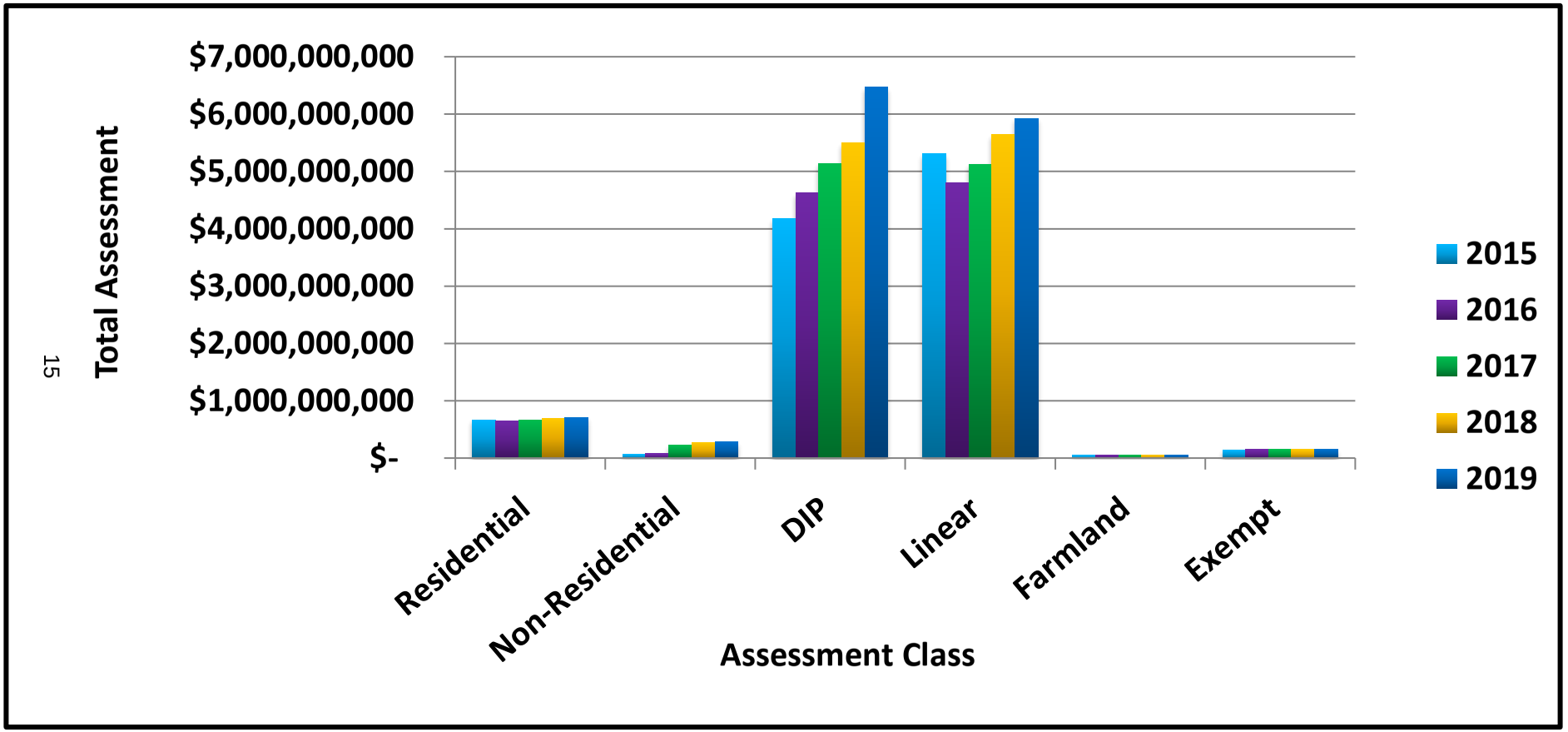
Troy Birtles, AMAA	Assessment Manager
Kris Meadows, AMAA	Residential Assessor
Sean Cosens, Bsc. Ag	Farmland Assessment Specialist
Bob Daudelin, AMAA	Assessment Specialist
Alison Reid, AMAA	Senior Assessor
Josh McMillan	Residential Assessor
Jesse Nelson	Residential Assessor
Cory Allen	Residential Assessor

** 19 Assessment Staff in total **

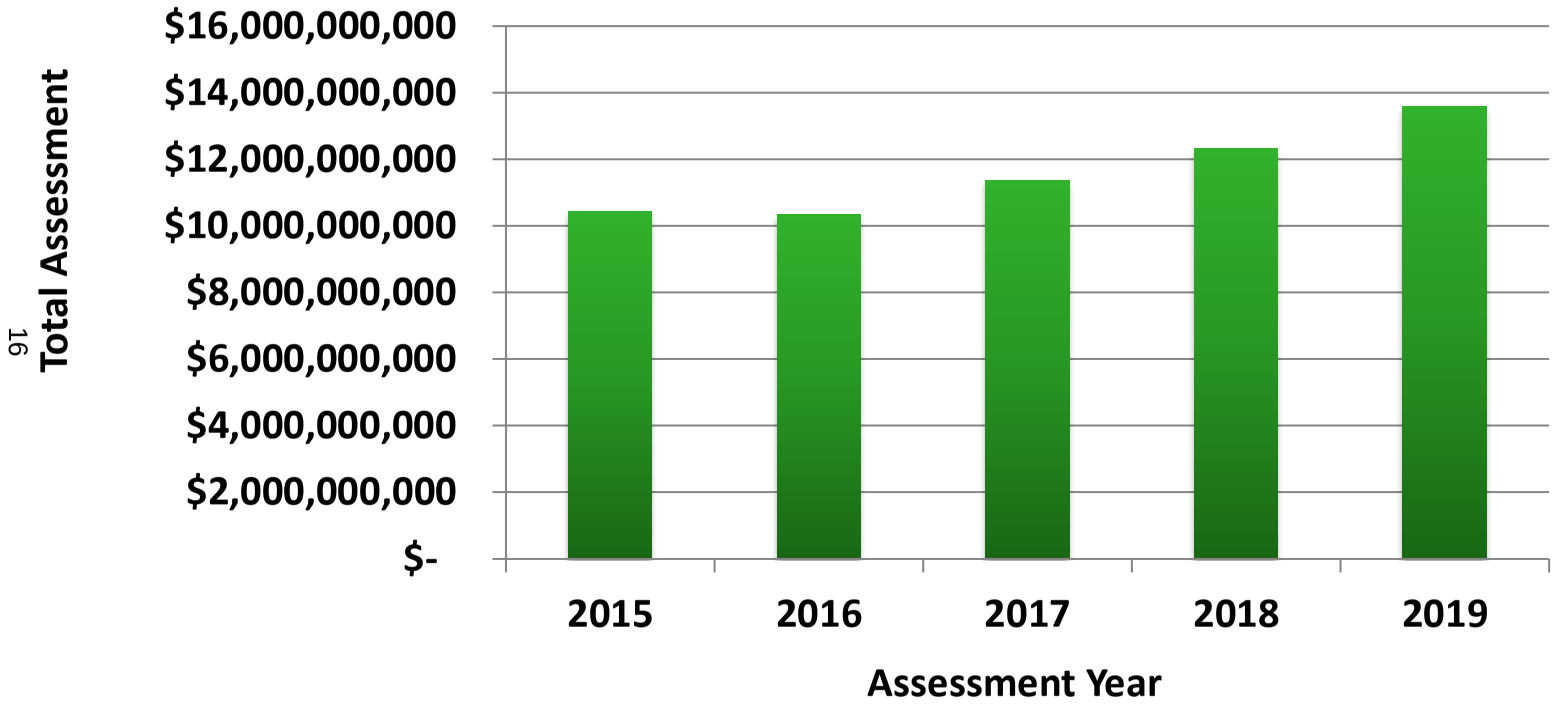
2018 Compared to 2019 Assessment

	2018	2019	Difference	
	Totals	Totals	$	%
Residential	$695,359,610	$712,026,150	**$16,666,540**	**102%**
Non-Residential	$276,629,640	$278,184,300	**$1,554,660**	**101%**
Designated Industrial Property (DIP)	$5,493,731,460	$6,469,573,760	**$975,842,300**	**118%**
Linear	$5,647,673,180	$5,921,399,900	**$273,726,720**	**105%**
Farmland	$57,625,920	$57,604,780	**($21,140)**	**100%**
Exempt	$154,537,390	$158,972,860	**$4,435,470**	**103%**
Grand Total:	$12,325,557,200	$13,597,761,750	**$1,272,204,550**	**110%**

Assessment Class History Comparison



Assessment Total History Compare



Taxable Assessment Change Compare by %

Range	Properties	%
-25% to -100%	467	3.1%
-10% to -25%	228	1.5%
-1% to -10%	**4,498**	**29.9%**
No Change	**6,822**	**45.3%**
1% to 10%	**2,053**	**13.6%**
10% to 25%	258	1.7%
25% to 100%	174	1.2%
Over 100%	123	0.8%
New Roll #'s	337	2.2%
Inactive Roll #'s	98	0.7%
Total Properties	15,058	100%

89%

Taxable Assessment Change Compare by $

Range	Properties	%
Over - $1,000,000	51	0.3%
-$100,000 to -$999,999	399	2.6%
-$25,000 to -$99,999	390	2.6%
-$10,000 to -$24,999	**646**	**4.3%**
-$1,000 to -$9,999	**3,170**	**21.1%**
-$999 to $999	**7,272**	**48.3%**
$1,000 to $9,999	**1,615**	**10.7%**
$10,000 to $24,999	**456**	**3.0%**
$25,000 to $99,999	333	2.2%
$100,000 to $999,999	188	1.2%
Over $1,000,000	103	0.7%
New Roll #'s	337	2.2%
Inactive Roll #'s	98	0.7%
Total Properties	15,058	100%

87%

New Roll #'s & Permit Comparison

New Roll #'s Summary					
	2015	**2016**	**2017**	**2018**	**2019**
Residential/Non-Res	157	104	110	117	105

Development Permit					
	2015	**2016**	**2017**	**2018**	**2019**
Development Permits	377	368	379	354	346

Overview

(NOT including Industrial or Linear)

Residential (Rural)	
Valleyview	2.2% Increase (1.3% Growth, 0.9% Inflation)
DeBolt	2.2% Increase (Primarily Growth)
Grovedale	5.0% Increase (1% Growth, 4% Inflation)

Overview

(NOT including Industrial or Linear)

Residential (Hamlets & Lake Subdivisions)	
Little Smoky	3.0% Decrease (Combination of Negative Growth and Inflation)
DeBolt	2.2% Increase (Primarily Positive Inflation)
Ridge Valley	3.8% Decrease (Primarily Negative Inflation)
Grande Cache	0.9% Increase (Assessed by Powers and Assoc in 2019, AAG in 2020)
Grovedale	1.2% Decrease (Primarily Negative Inflation)
Landry Heights	1.8% Increase (2.8% Growth, -1.0% Inflation_
The Narrows	2.5% Increase (5.0% Growth, -2.5% Inflation)
Sandy Bay	15.4% Decrease (Combination of Negative Growth and Inflation)

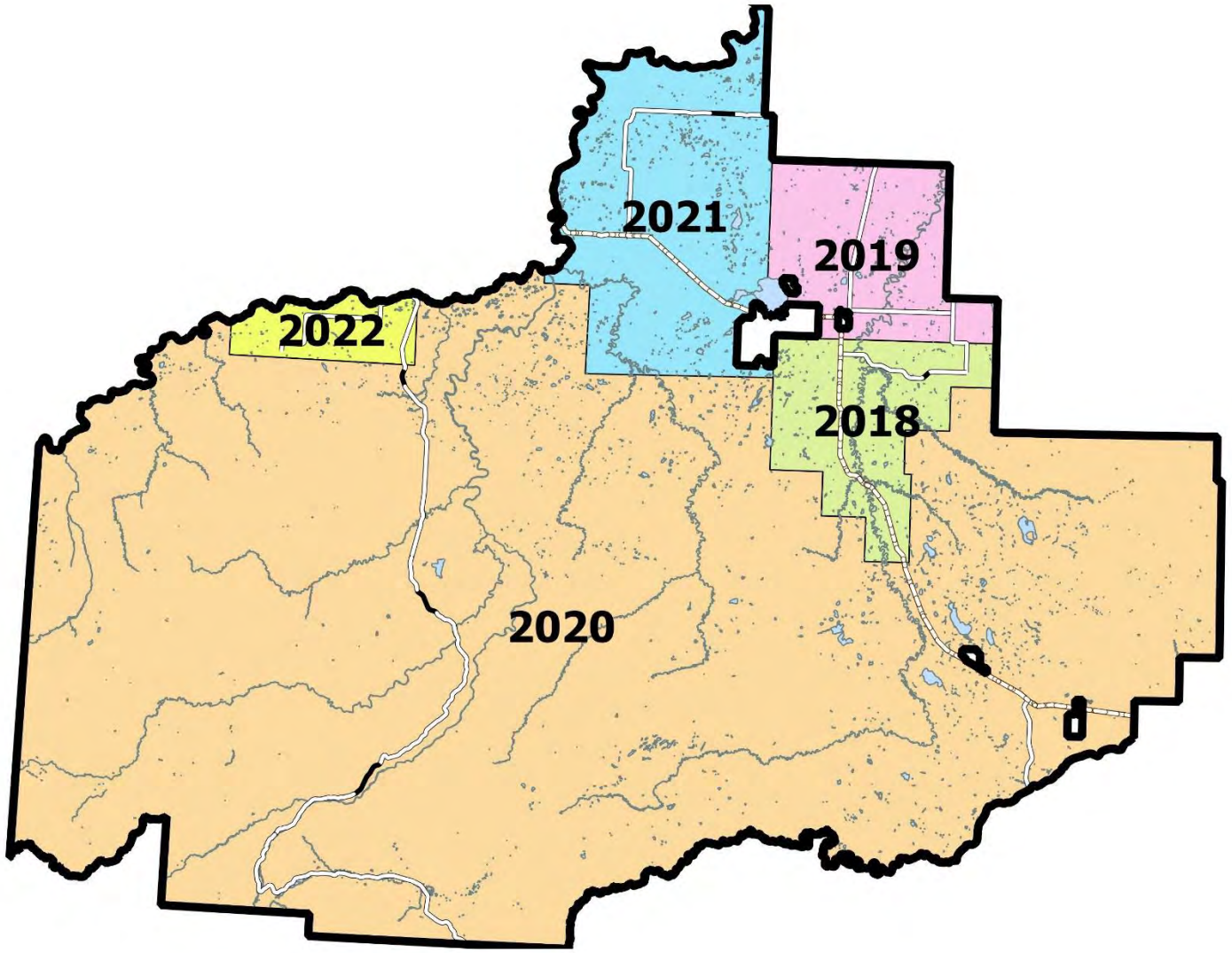
Overview

(NOT including Industrial or Linear)

New Residential Growth Assessment			
	2017	**2018**	**2019**
New Construction	$13.7M (2.1%)	$9.8M (1.5%)	$11.2M (1.6%)

Residential Inflation			
	2017	**2018**	**2019**
Market Change	$18.7M (2.9%)	$14.4M (2.1%)	$5.5M (0.8%)

Residential / Non-Residential Re-inspection Cycle



Moving Forward – Residential / Non-Residential

Open House to Inform Rate Payers, I will be in the Greenview office periodically (Provided the COVID-19 crisis allows for it)

2019 Assessment Cycle was to be concentrated on the Valleyview North area. COVID-19 has forced us to do an office related review. Because of this, we will do a full review of dispositions with SRD data, inspecting at a later date where required.

Minor increases are a result of a strong market (as compared to the rest of the Province). COVID-19 and OPEC issues will likely effect things moving forward but have no effect on the current assessment. We will continue to monitor into 2020.

Industrial Assessment Team

Ray Fortin, AMAA	Industrial Assessment Specialist
Sean Barrett, AMAA	Industrial Manager
Kent Smith, AMAA	Industrial Assessor
Chad Nelson, AMAA	Industrial Assessor
Steve Sawatsky, AMAA	Industrial Assessor
Chris Smith, AMAA	Industrial Assessor
Ally Dittrick, AMAA	Industrial Assessor
Harry Schmidt, AMAA	Specialty Assessment Services

Designated Industrial Property

Designated Industrial property includes:

- **Properties regulated by the Alberta Energy Regulator, Canadian Energy Regulator, Alberta Utilities Commission.**
- **Linear property (wells, pipeline, railways, telecommunications and electric power systems) assessed by the province. Note that railway became linear on January 1, 2018.**
- **Property designated as a "major plant" by the 2019 Alberta Machinery and Equipment Minister's Guidelines regulation; for example, large refineries, upgraders, pulp and paper mills.**
- **Land and improvements associated with property regulated by the Alberta Energy Regulator, Alberta Utilities Commission or Canadian Energy Regulator and major plants.**

Designated Industrial Property

2019 DIP Assessment:

- **AAG has spent a considerable amount of time during the 2019 DI property assessment creating new processes and procedures in order to adhere to DIP requirements and legislative MGA changes.**

- **In your municipality AAG has identified 7,201 Designated Industrial Properties**

    - **Including 23 properties designated as a "Major Plant"**

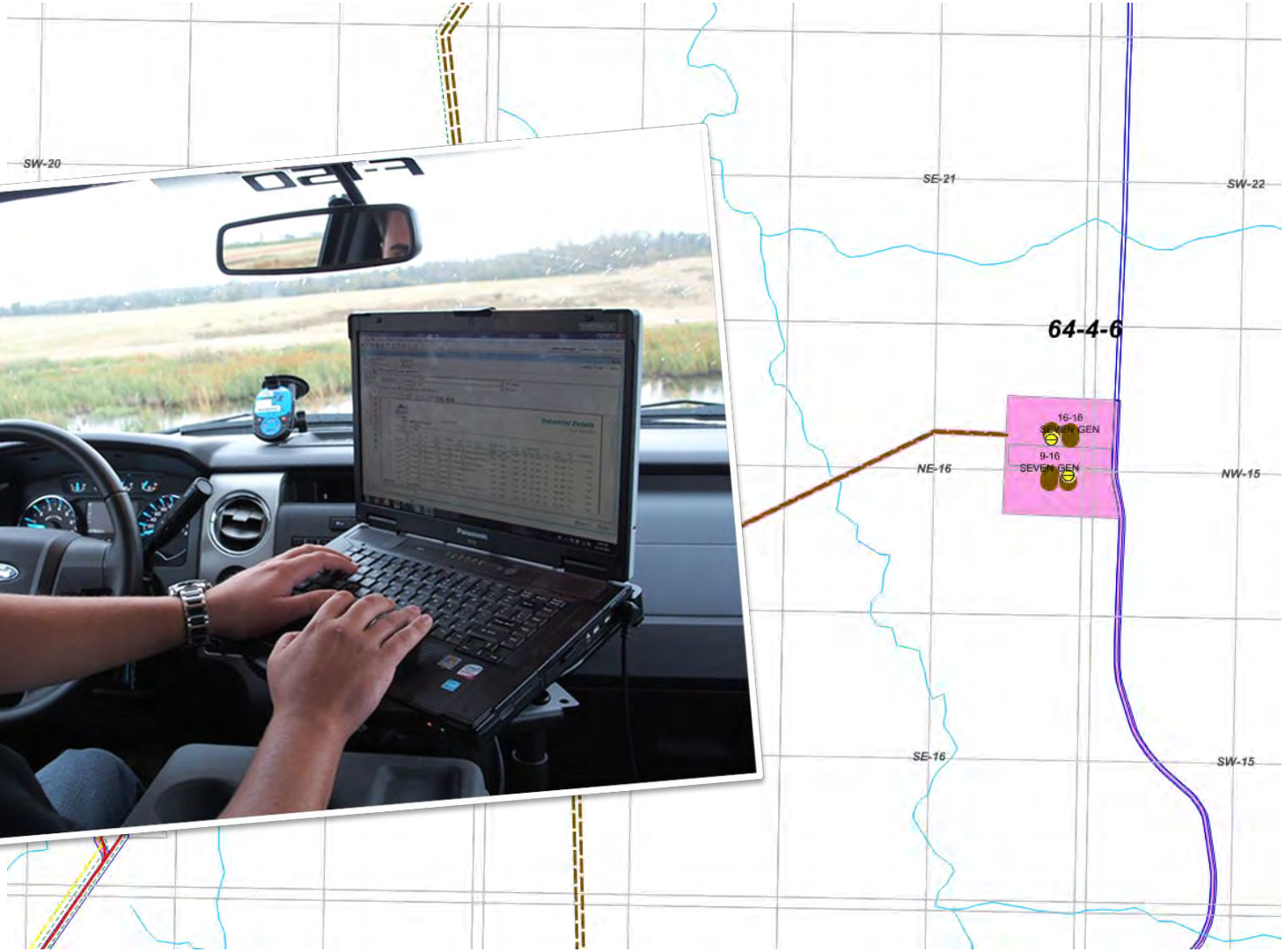
Inspections:

- **Within this municipality, AAG has completed 2,000+ field inspections.**

- **Additionally, in 2019 AAG has completed over 11,500 field inspections within 15 Hybrid municipalities.**

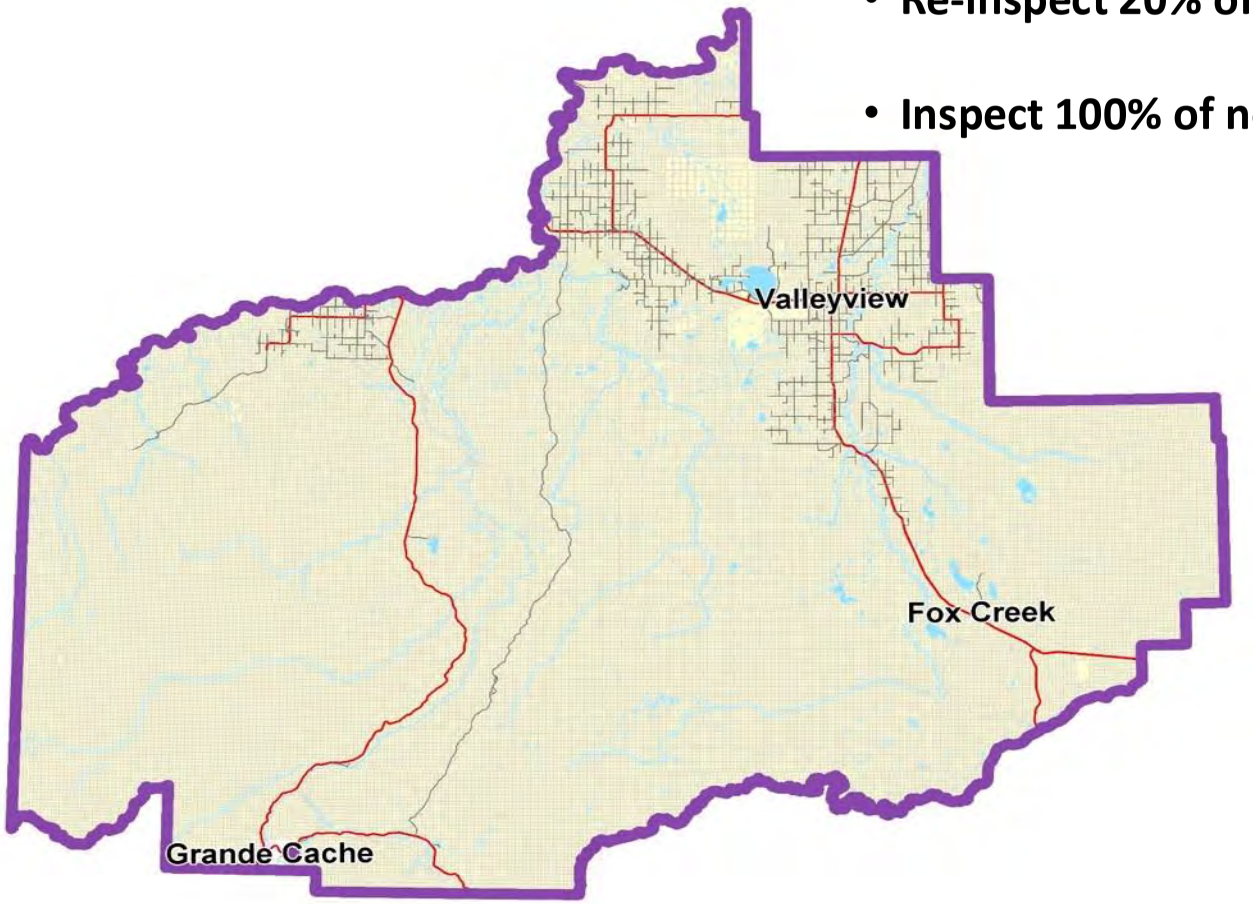
In The Field

Geographic Information System for DIP

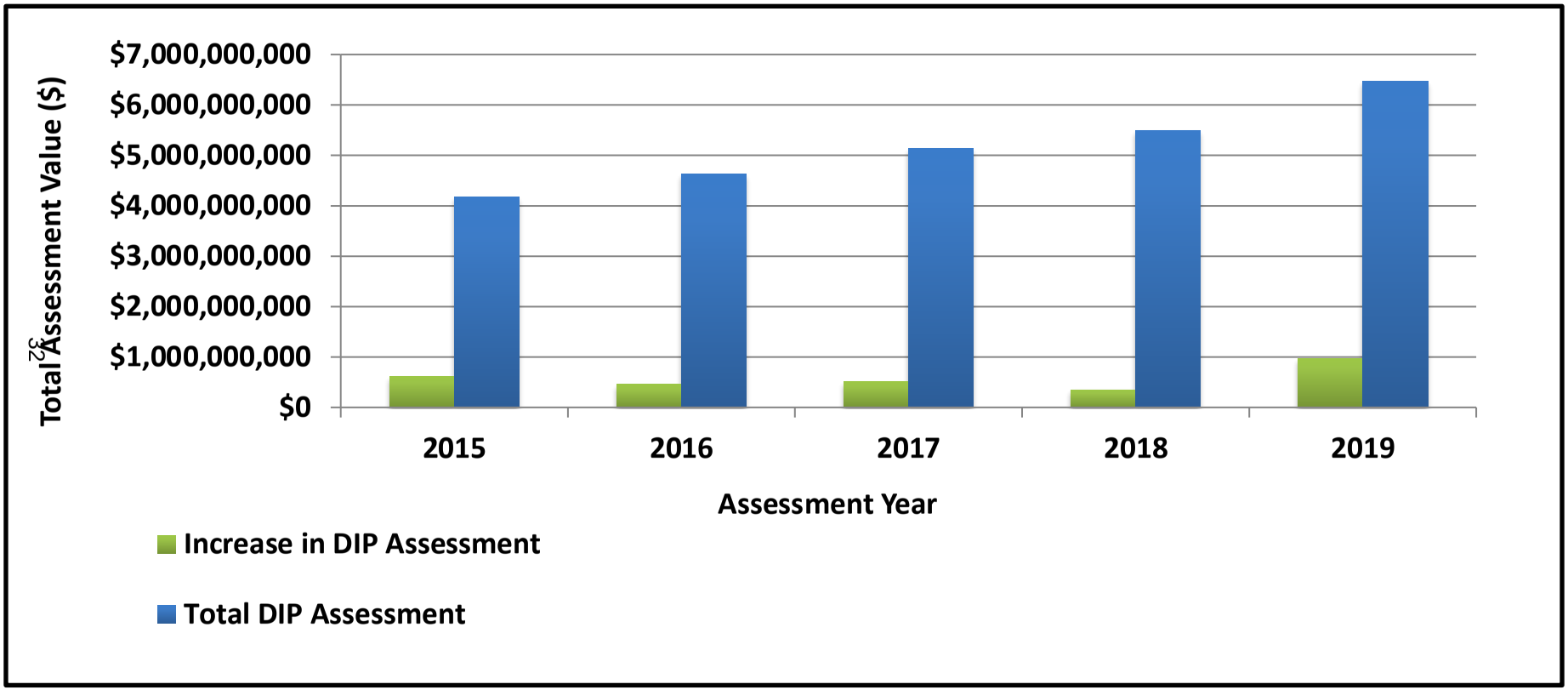


DIP Re-Inspection Cycle

- Re-inspect 20% of all existing DIP parcels
- Inspect 100% of new Well sites and Facilities

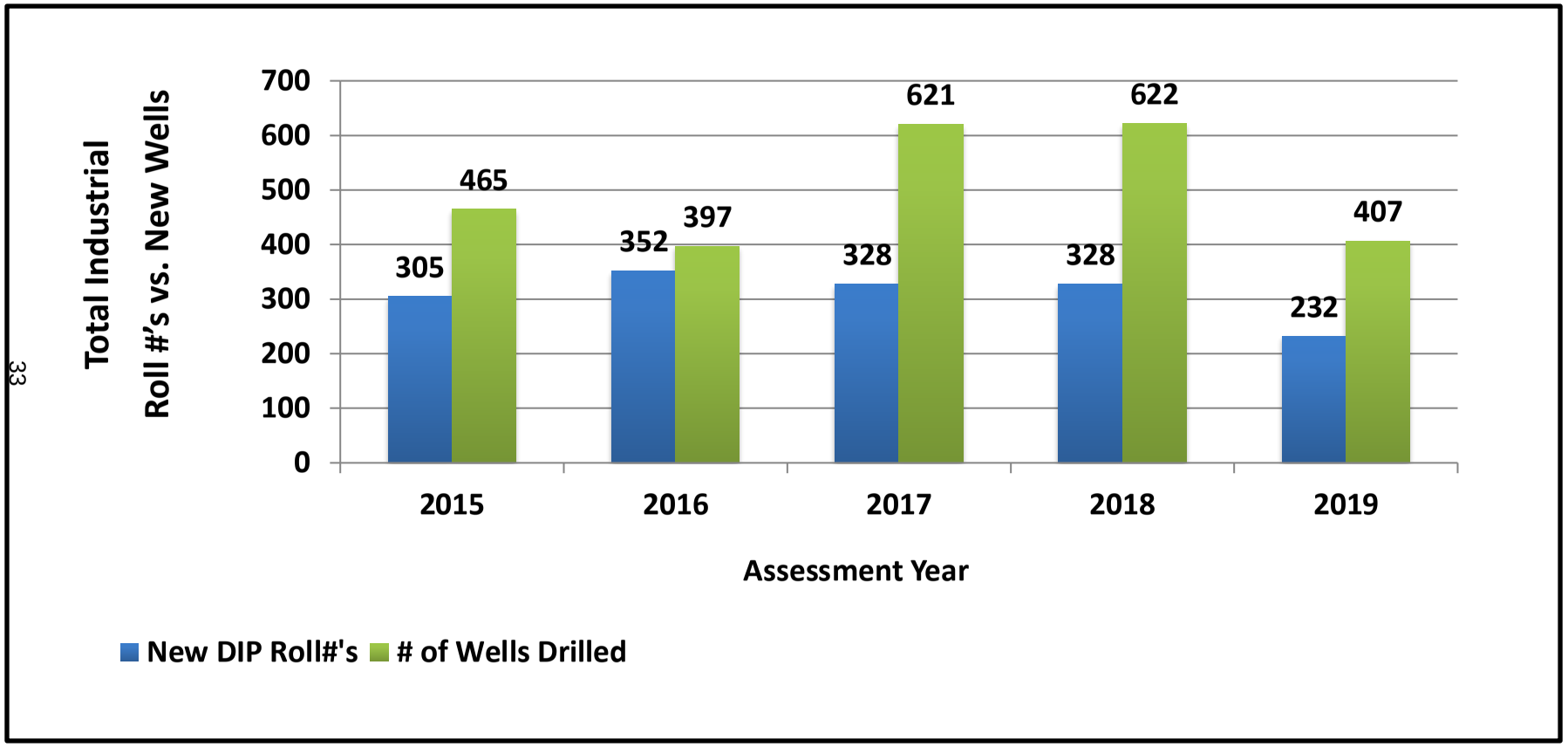


Historical DIP Assessment Comparison

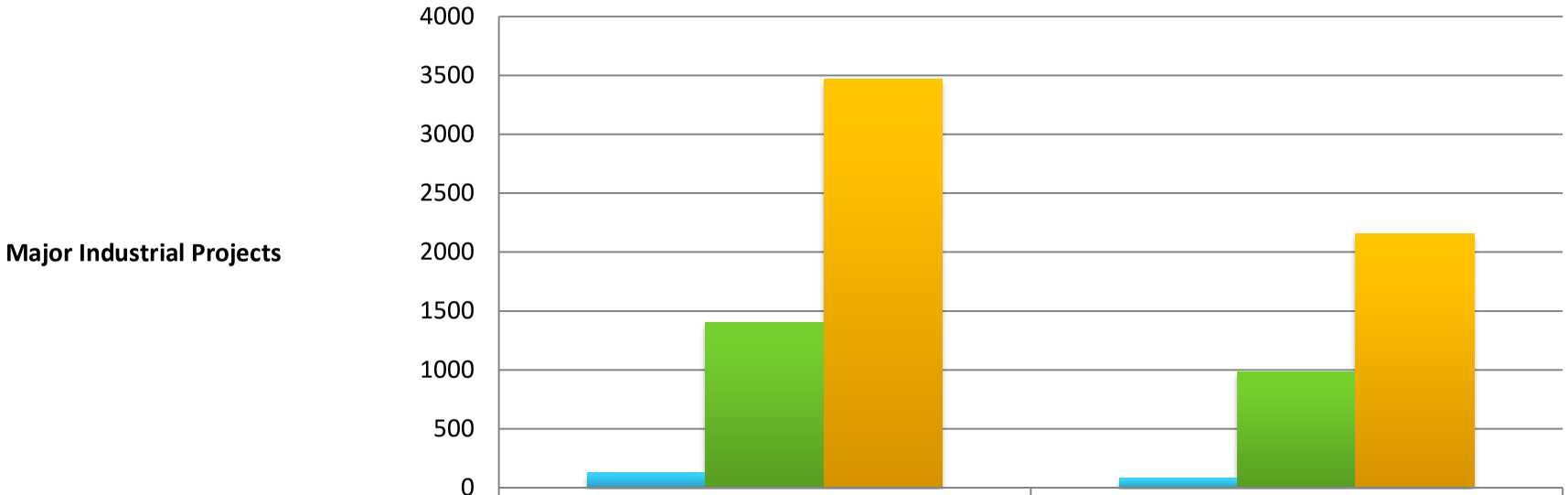


*Please Note – The above totals exclude Linear Assessment

New DIP Roll #’s vs. New Wells Drilled



AAG Major Industrial Projects



	Total Projects-All AAG Municipalities	MD of Greenview
Major Industrial Projects	129	80
Total Approximate Assessment (Million$)	1,400	980
Total Capital Costs (Million$)	3,465	2,158

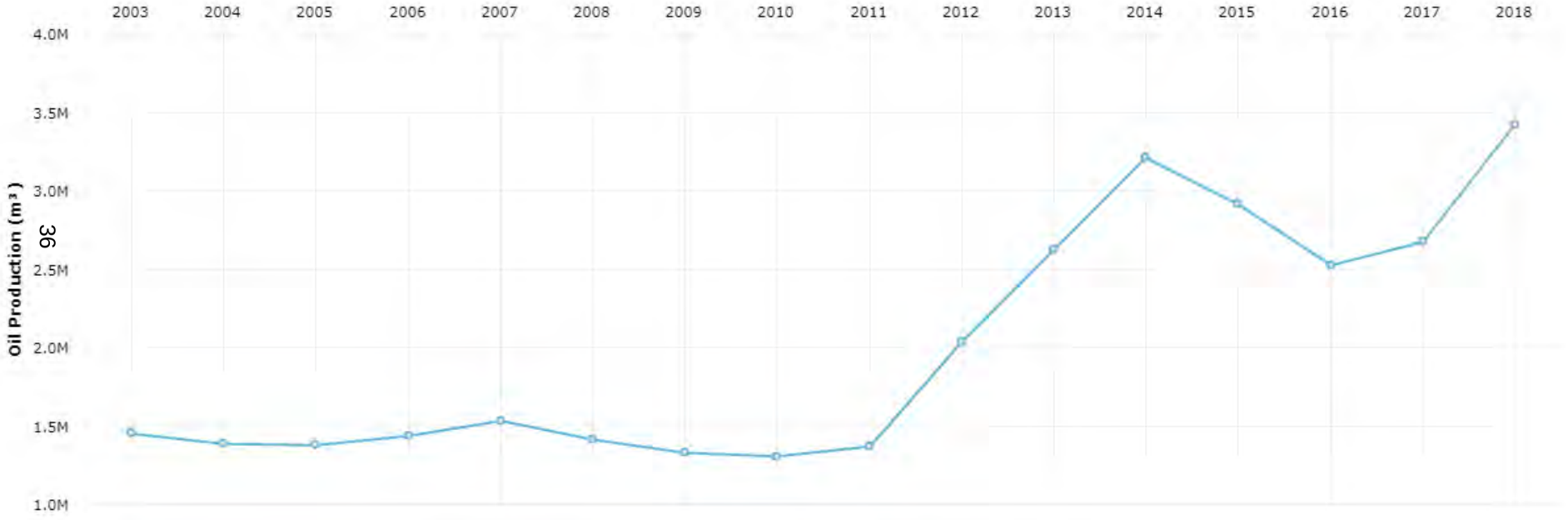
Note: 2019 Industrial Assessment included **80** major capital projects.
Approximately $980 Million new Assessment for 2020 taxation.

Historical Natural Gas Production

The MD of Greenview produced 35.7 billion m³ of natural gas in 2018, first in the province. Natural gas production in Greenview increased 11.3% year-over-year, and increased 67.0% in the last five years.

Source: Alberta Energy Regulator (Information available up to Year 2018)

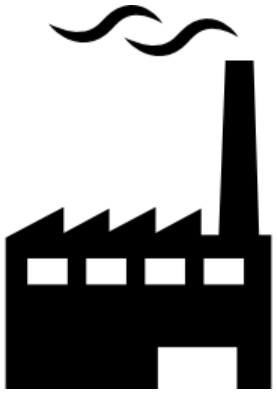
Historical Oil Production



The MD of Greenview produced 3.4 million m³ of oil in 2018, the 6th highest in the province. Oil production in Greenview greatly increased 28.1% year-over-year, and increased 30.4% in the last five years.

Source: Alberta Energy Regulator (Information available up to Year 2018)

Industrial Major Projects

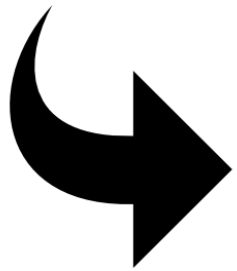


2020+ Assessment – Major Projects

- ARC Resources Ltd – Ante Creek South Gas Plant
- Keyera Energy Ltd – Gold Creek Compressor Station Phase II
- Keyera Energy Ltd – Elmworth Compressor Station
- Keyera Energy Ltd – Wapiti Gas Plant Phase II
- CSV Midstream Solutions – Karr Plant Expansion and Stabilization Project
- Pembina Gas Services – Duvernay Complex (Phase II Gas Plant & Stabilization, Phase III)
- SemCAMS Midstream ULC – Patterson Creek Phase III
- SemCAMS Midstream ULC – Smoke Lake Gas Plant
- SemCAMS Midstream ULC – Karr Oil Battery
- Shell Canada – Gold Creek Gas Plant
- Tervita – Kakwa Disposal Facility

Total $ capital spending of the above major projects is estimated at approximately $1.25 Billion

Designated Industrial Property Moving Forward



2020 DIP Assessment –

- **Currently, there are ongoing stakeholder consultations for DIP regulated assessments for M&E, Wells and Pipelines. These are anticipated to be implemented in the 2020 assessment for 2021 taxation.**
- **Possible changes to DI properties will be necessary to adhere to the new regulations and ministers guidelines.**
- **It is currently unknown with regard to the required time and resources and potentially the assessment impacts to the municipalities DIP assessment moving forward.**

AAG has previously been involved in the technical review of machinery and equipment. RMA currently represents rural municipalities at the model review process. Any changes or impacts are expected to be announced by Municipal Affairs later this summer.

QUESTIONS?


Thank you!

SUBJECT:	**Assessment Services Branch, Linear Property Assessment Unit – 2020 Linear Assessment Presentation**				
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION			
MEETING DATE:	May 19, 2020	CAO:	DT	MANAGER:	
DEPARTMENT:	CORPORATE SERVICES	GM:	AN	PRESENTER:	MJ
STRATEGIC PLAN:					

RELEVANT LEGISLATION:
Provincial (cite) –N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:
MOTION: That Council accept the Assessment Services Branch, Linear Property Assessment Unit's presentation for information.

BACKGROUND/PROPOSAL:
The Linear Assessment Unit is responsible for preparing and providing the Assessment of all Linear Properties within Greenview and the Province.

The Linear Assessment Unit representatives will be in attendance to elaborate on Greenview's Linear Assessment.

Council members may wish to prepare questions in relation to the attached presentation to ensure clarity for Council

BENEFITS OF THE RECOMMENDED ACTION:
1. The benefit of the recommended motion is to keep Council informed about the changes in Greenview's linear property assessment from one year to the next. As well as giving Council an opportunity to discuss Greenview's linear assessment with the Assessment Services Branch, Linear Property Assessment Unit in person.

DISADVANTAGES OF THE RECOMMENDED ACTION:
1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:
Alternative #1: Council has the alternative to not accept the recommended motion for information.

FINANCIAL IMPLICATION:

Direct Costs:

Ongoing / Future Costs:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow up actions to the recommended motion.

ATTACHMENT(S):

- Assessment Services Branch, Linear Property Assessment Unit - Presentation

Designated Industrial Property Assessment

2020 Tax Year Municipal District of Greenview

Office of the Provincial Assessor

May 19, 2020

Presenters

- David Imrie, AMAA – Manager, Linear Property
  David.Imrie@gov.ab.ca
  780-427-1688

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- Mike Minard, AMAA – A/Manager, Major Plants
  Michael.Minard@gov.ab.ca
  780-643-6381

Agenda

Overview of 2020 tax year

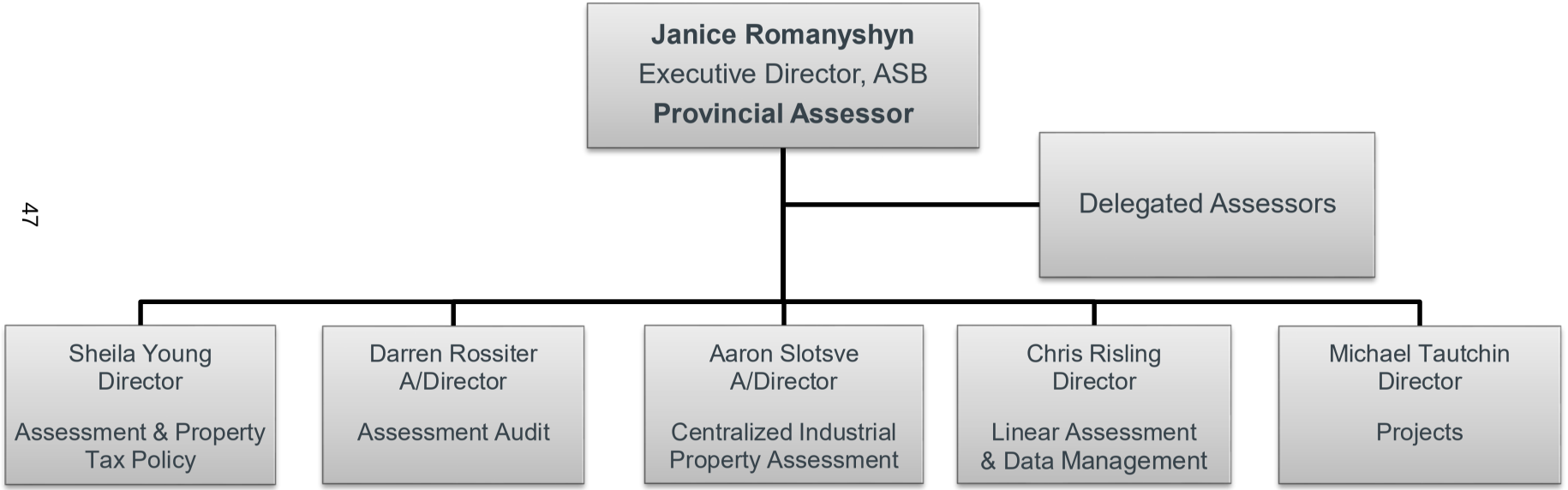
Property types & data

Resources

Questions

Who we are

- We are your designated industrial (DI) property assessment team, working on behalf of the Provincial Assessor
- Our staff possess diverse skills ranging from assessment, engineering, geo-spatial, data analytics, project management, quality assurance and advanced computer administrative capabilities
- We prepare and defend the DI property provincial assessment roll which allows municipalities to tax these properties


Janice Romanyshyn
Executive Director, ASB
Provincial Assessor
Delegated Assessors
Sheila Young
Director
Assessment & Property Tax Policy
Darren Rossiter
A/Director
Assessment Audit
Aaron Slotsve
A/Director
Centralized Industrial Property Assessment
Chris Risling
Director
Linear Assessment & Data Management
Michael Tautchin
Director
Projects

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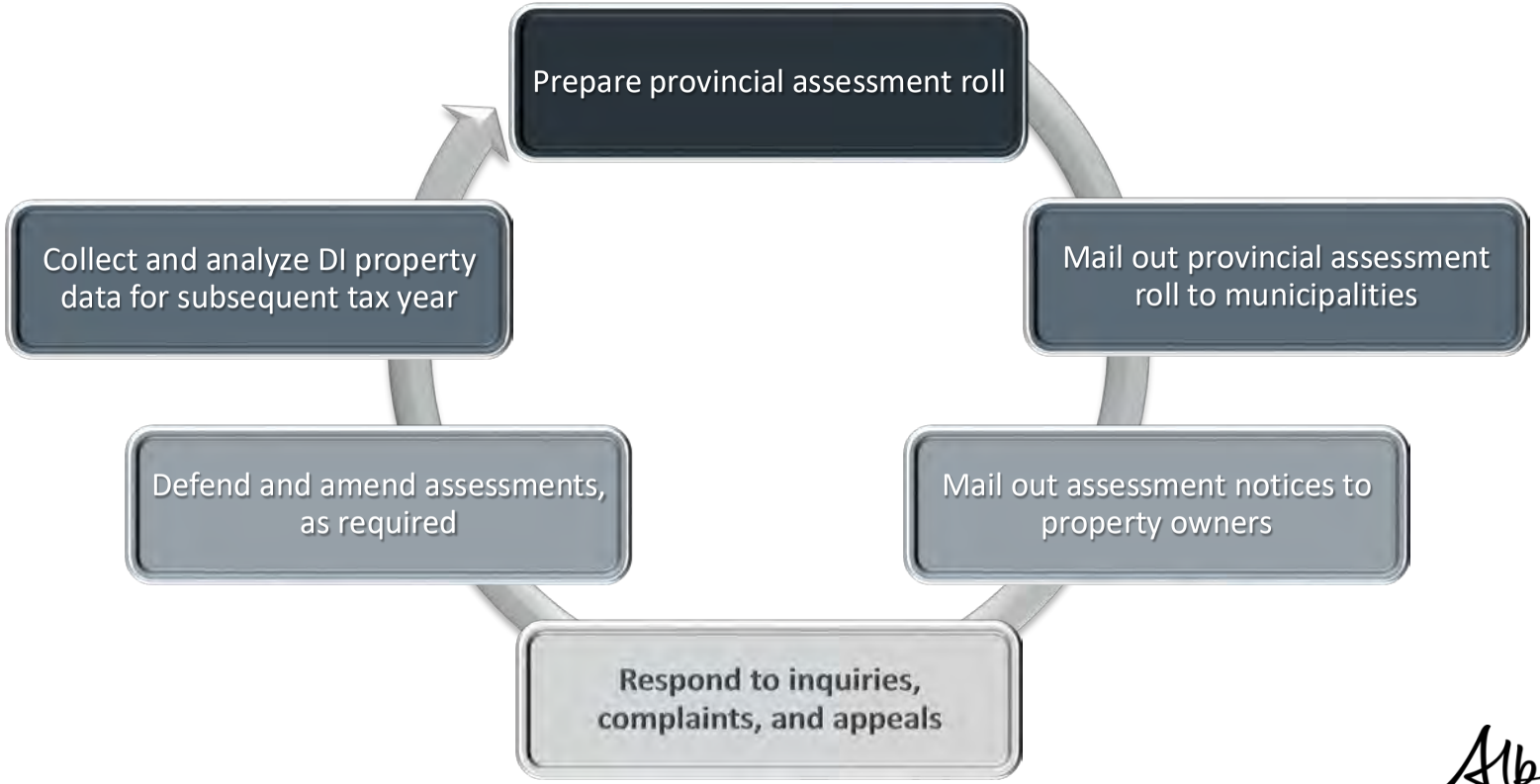
- **Centralized Industrial Property Assessment**: Aaron Slotsve, Acting Director
  - Major Plants: Michael Minard, Acting Manager
  - Industrial Sites: Tally Quaschnick, Acting Manager
- **Linear Assessment Data Management**: Chris Risling, Director
  - Linear Assessment: David Imrie, Manager
  - Data Management: Chetan Adhikari, Acting Manager
- **Finance and Administration**: Ken Anderson, Manager
- **Projects**: Michael Tautchin, Director

Annual Operational Cycle



Other Responsibilities

Stakeholders

- Ensure stakeholders have access to information
- Work with municipalities, industry, property owners, Alberta Energy Regulator, Alberta Utilities Commission
- Engage and inform on our operational processes, project updates, and other issues

Reports

- Provincial Assessment Roll
- Address Update Report
- Municipal Well Drilling Activity Report

DI Property Requisition

- Recommendation to Minister to set the requisition rate
- Webinars on DI property requisition tax
- DIRC
  Requisition collection and cancellation

Regulation Updates

- Work with our policy unit to update Minister's guidelines annually
- Review and assess operational policy as required
- Developing efficiencies and technology to support our operational process

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Alberta

Municipal Government Act (MGA)

Our responsibilities and areas of work are identified in the *MGA* under:

- Part 9 – Assessment of Property
- Part 10 – Taxation
- Part 12 – Municipal Government Board

The details of assessments are outlined in several regulations, for example – the Minister's Guidelines

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Minister’s Guidelines

- The Minister’s Guidelines are regulations that provide detailed processes, rates, and formulas that must be used in regulated property assessment
  - farm land
  - linear
  - machinery & equipment
  - railway
- The guidelines are reviewed annually to account for factors to be applied (AYM), and allowable depreciations

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Alberta

Timelines

DI Property Assessment Timeline

Linear Property Assessment Notices	
Date Sent	Jan 31, 2020
Notice of Assessment	Feb 8, 2020
MGB Complaint Date	July 1, 2020

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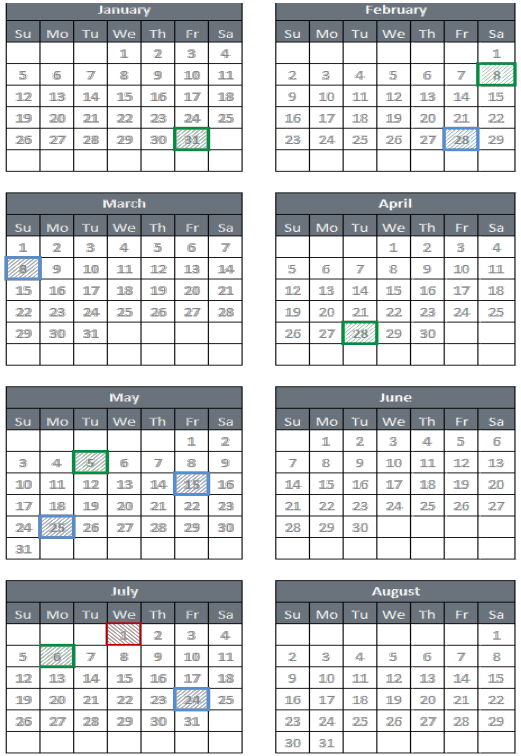
Linear Property Amended Notices (Tentative)	
Date Sent	April 28, 2020
Notice of Assessment	May 5, 2020
MGB Complaint Date	July 6, 2020

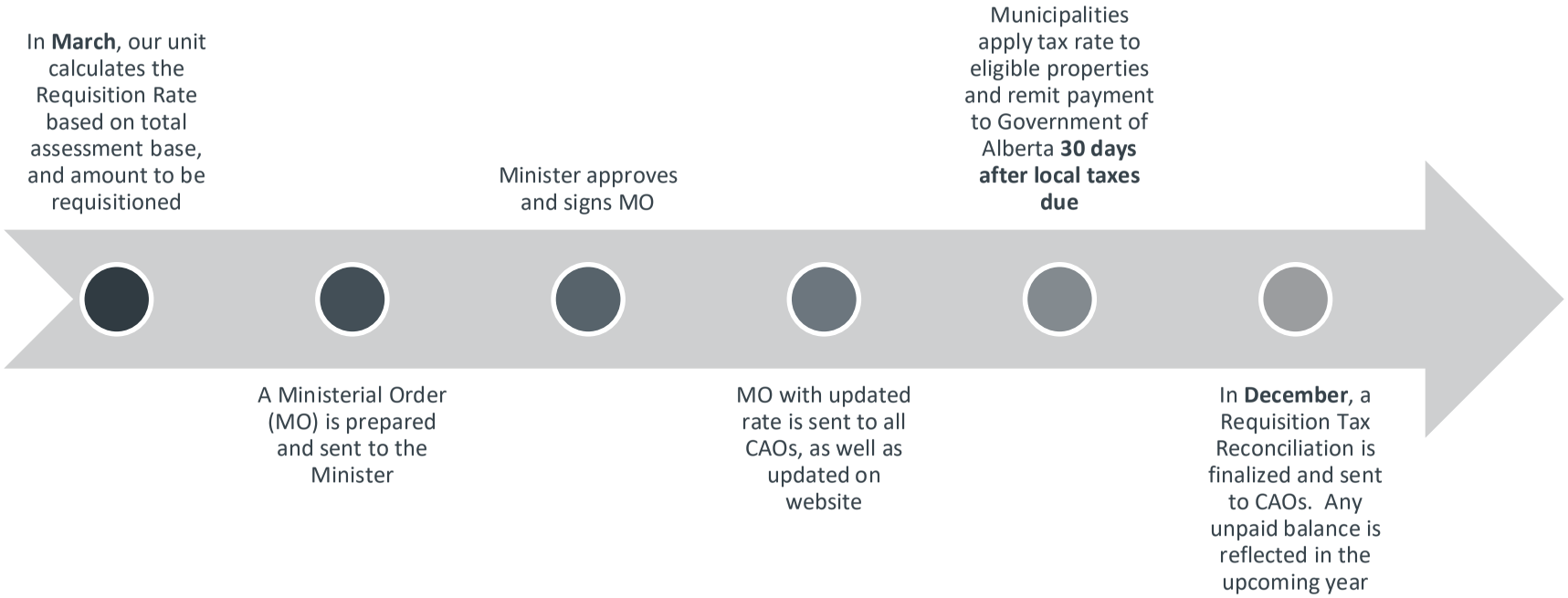


Industrial Property Assessment Notices	
Date Sent	Feb 28, 2020
Notice of Assessment	March 8, 2020
MGB Complaint Date	July 1, 2020

Industrial Property Amended Notices (Tentative)	
Date Sent	May 15, 2020
Notice of Assessment	May 25, 2020
MGB Complaint Date	July 24, 2020

Alberta

DI Property Requisition Timeline



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Overview of 2020 Tax Year

MD of Greenview

Alberta 2020 Tax Year
DI Property Assessment Change Summary ($ in billions)

Property Type	2019 Tax Year	2020 Tax Year	$ Difference	% Difference
Residential	0.002	0.002	0.00004	1.79
Farm Land	0.004	0.004	-0.00005	-1.47
Buildings, Structures & Land	15.00	14.89	-0.11	-0.74
Machinery & Equipment	84.26	85.03	0.77	0.91
DI Non-Linear Total	**99.27**	**99.93**	**0.66**	**0.66%**
Cable Distribution	0.39	0.41	0.02	5.05
Railway	0.75	0.79	0.04	5.47
Telecommunication	1.79	1.74	-0.05	-3.00
Electric Power Generation	7.01	6.79	-0.22	-3.13
Electric Power Systems	8.78	9.14	0.36	4.14
Wells	26.03	24.76	-1.27	-4.87
Pipeline	28.43	27.69	-0.74	-2.59
DI Linear Total	**73.18**	**71.32**	**-1.85**	**-2.53%**
DI Total Assessment	**$172.44**	**$171.25**	**-$1.20**	**-0.01%**

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Alberta

MD of Greenview 2020 Tax Year
DI Property Assessment Change Summary ($ in billions)

Property Type	2019 Tax Year	2020 Tax Year	$ Difference	% Difference
Machinery & Equipment	4.80	5.71	0.91	18.9%
Wells	3.16	3.33	0.17	5.3%
Pipelines	2.20	2.32	0.12	5.3%
Buildings, Structures & Land	0.69	0.76	0.07	9.8%
Electric Power Systems	0.18	0.17	-0.0005	-0.3%
Electric Power Generation	0.08	0.08	-0.003	-4.1%
Railway	0.01	0.01	0.0002	1.5%
Telecommunication	0.01	0.01	-0.001	-4.7%
Residential	0.0001	0.0001	-0.000004	-4.2%
Farm Land	0.00002	0.00002	-0.000002	-9.7%
Cable Distribution	0.0002	0.000001	-0.0002	-99.7%
Total	**$11.14**	**$12.39**	**$1.25**	**11.2%**

Alberta

2020 Tax Year Amendment Summary (To Date)

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.9 million reducing the overall assessment to $12.39 billion

- An assessment amendment was made to the DI roll for industrial property (non-linear). The roll and notices were sent May 15, 2020 with the last day to submit a complaint July 24, 2020
- The net provincial impact of the amended assessment was an increase of $5.5 million
- In the MD of Greenview, the Buildings, Structures & Land assessment increased by $0.66 million and the Machinery & Equipment increased by $1.3 million increasing the overall assessment to $12.39 billion

Alberta

2020 Tax Year Complaint Summary (To Date)

MAG: 014/20

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MD of Greenview Impact:	CNRL Assessment	Reduction Requested	Requested Assessment
2019 Tax Year	$171,618,650	50%	$85,809,330

Alberta

Property Types & Data Sources Overview

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Data Sources

- Monthly datasets are received from the Alberta Energy Regulator (AER) including attribute and ownership information
- Data also sourced from Alberta Utilities Commission (AUC), Canada Energy Regulator (CER)* on wells, pipelines and facilities
- The Linear Assessment Data Management Unit uses Geographical Information System (GIS) to determine the residing municipality
- Other data is received from property owners through Requests for Information (RFI)
- Permits, licenses from other government departments and municipalities
- Inspection cycle to maintain quality of datasets

*previously the National Energy Board (NEB)

Linear Property

- Pipelines/Gas Distribution
- Wells
- Telecommunications & Cable
- Electric Power Systems
- Electric Power Generation
- Railway

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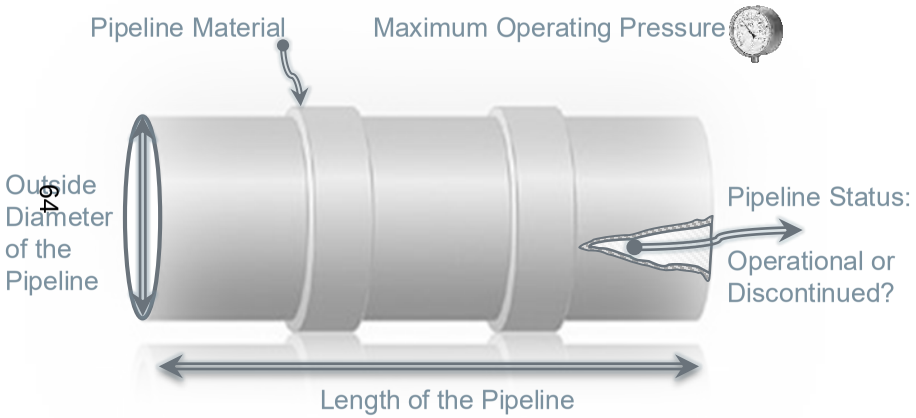
Industrial Property

- Facilities regulated by AER, AUC and CER (excluding linear) such as well sites, gas plants, compressor stations, and SAGD
- Properties determined to be on the Major Plants list in the Machinery and Equipment Minister's Guidelines. These may include properties such as saw mills, steel plants, and refineries

Alberta

Pipelines

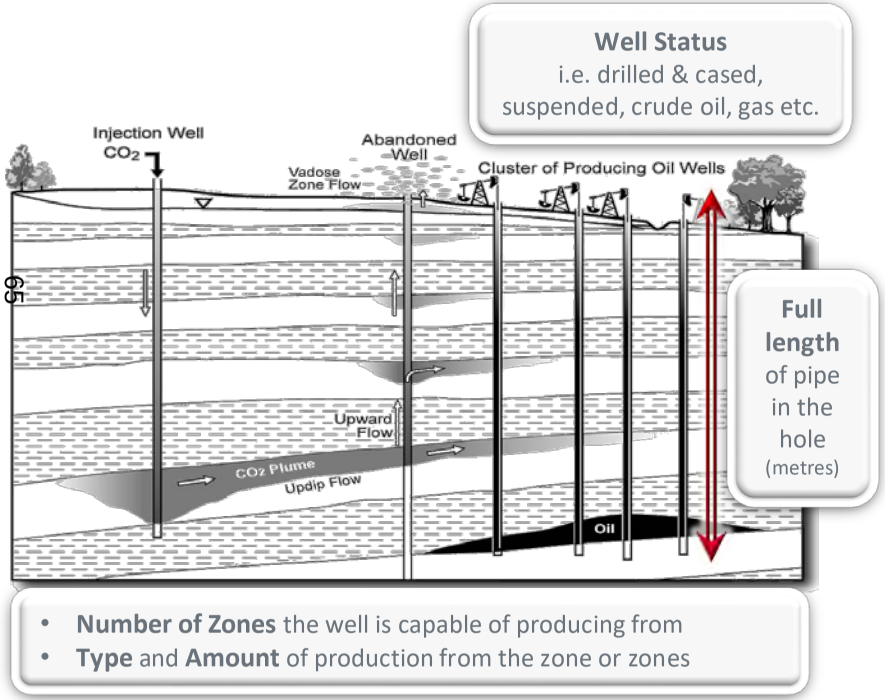


In the MD of Greenview

- Pipeline saw a 5.3% increase ($115.8 million) for an assessed value of $2.3 billion
- There is approximately 32,000 kms of assessed pipeline this year
- The outside pipe diameter ranges from 1.0 inches to 42 inches
- Approximately 80% of the pipelines carry natural gas and natural gas by products
- The company with the most pipelines in the county is CNRL at approximately 6,000 kilometres

Alberta

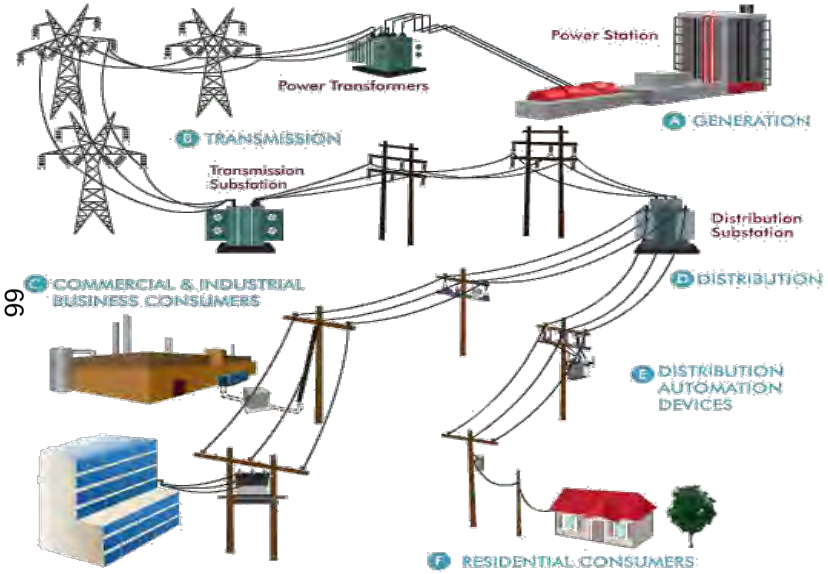
Wells



In the MD of Greenview

- Wells had an 5.3% increase ($166.3 million) for a total well assessment of $3.3 billion
- The highest taxable well assessment on a well in the county is $1,037,400
- The deepest assessed well is 7,843 metres

Electric Power Generation and Systems



Electric Power Generation (EPG) and Electric Power Systems (ELE) information is reported by the company.

We request all project costs and project descriptions.

In the MD of Greenview

- Electric power systems had a 0.3% decrease ($0.5 million) for a total assessment of $169.7 million
- Over 980 km of electric transmission lines with an assessed value of $82 million
- 13 electric power substations with an assessed value of approximately $64.5 million
- 4 Electric power generation facilities had a 4.1% decrease ($3.4 million) for a total assessment of $79.7 million

Telecommunications

Telecommunications (TEL) information is self reported by the company. Our Request For Information includes:

- Number and types of switches
- Length of the copper wire
- Length of fibre optic cable
- Number of drops (customers) and
- POP (Point of Presence) sites
- Number and location of receiving towers
- Cellular equipment

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In the MD of Greenview

- Telecommunication saw a 4.7% decrease ($0.6 million) for a total assessment of $12.2 million
- There is about 1,500 km of copper wire and about 573 km of fibre optic cable for an assessed value of $5.8 million
- There are 35 towers and 6 cellular sites

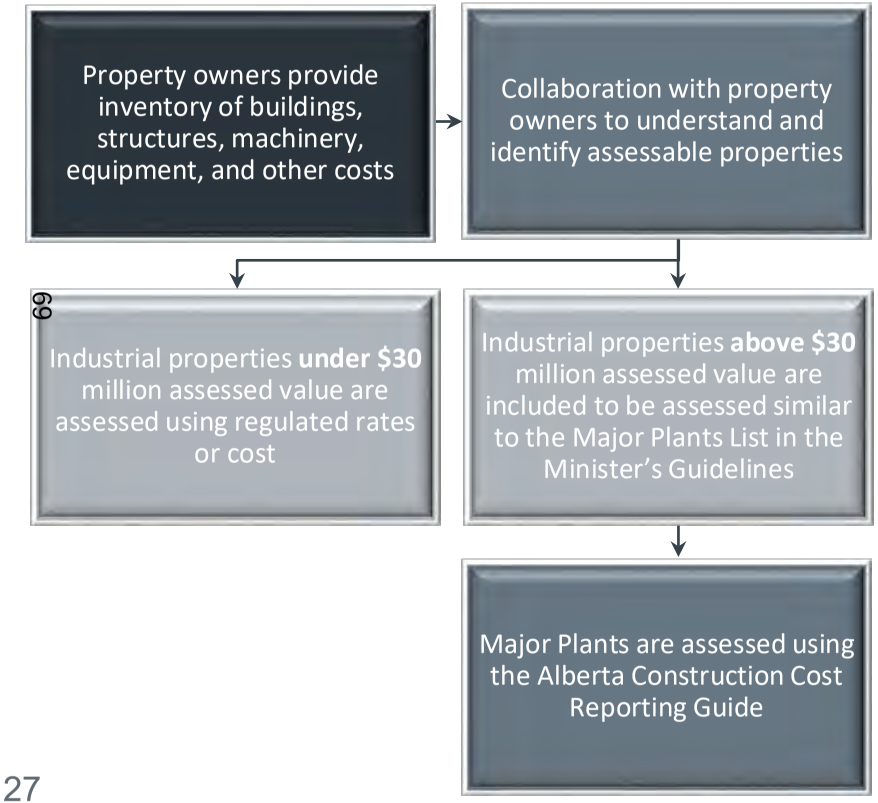
Railway

- The assessment for railway is determined using the Railway Assessment Minister's Guide lines which is rate based.
- Components in the assessment are grading, ballasts or improvements located on an extra right-of-way for sidings, spur tracks, wyes, station grounds, marshalling or maintenance yards.
- Railway properties located within a railway right-of-way utilizes a tabled annual traffic factor in its assessment calculation.

In the MD of Greenview

- The railway assessment increased 1.5% ($0.2 million) for at total assessment of $12.7 million
- There are 303 km of railway assessed within a right-of-way and 26 km outside the right of way

Industrial Properties



MD of Greenview

- Troy Birtles of the Accurate Assessment Group Ltd. is the delegated assessor

- Total industrial property assessment:
  (excludes linear property assessments)

2019 Tax Year	$ 5.5	billion
2020 Tax Year	$ 6.5	billion
Change 17.7%	$ 0.97	billion

- Non-Residential – Buildings, Structures & Land - increased 9.8% ($67.6 million) for a total assessment of $756 million

- Machinery and Equipment increased 18.9% ($906.2 million) for a total assessment of $5.7 billion

n the MD of Greenview

- There was a $1,870 decrease (9.7%) in DI farm land for a total assessment of $17,310

- There was a $3,700 decrease (4.2%) in DI residential for a total assessment of $85,020

Resources

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Canada Post's Epost Connect

- Thank you for subscribing to Epost Connect
- Assessment rolls and other communication can be received electronically by signing up for Canada Post's Epost Connect
- If you have questions, please contact Maureen Maddock by email at maureen.maddock@gov.ab.ca or by calling 780-644-7824

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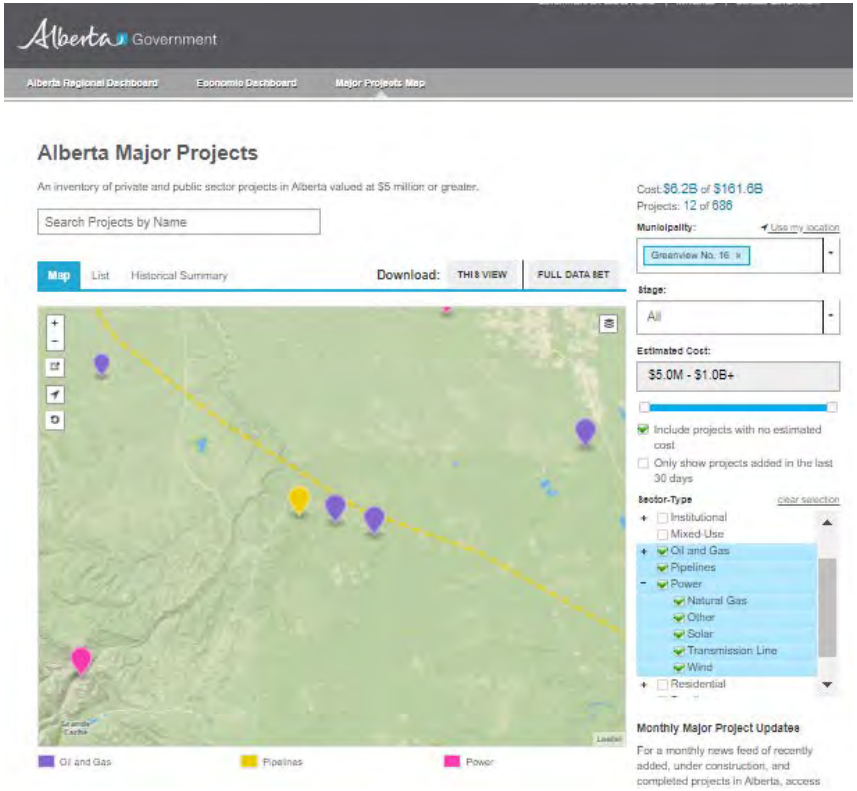
Alberta Major Projects Dashboard



Interactive dashboard that lists private and public sector projects in Alberta valued at $5 million or greater

https://majorprojects.alberta.ca

Well Drilling Activity Report

- Well drilling activity reports are provided to municipalities when a well drilling completion date is recorded at the AER
- These reports support the Well Drilling Equipment Tax Regulation
- The activity report includes a total calculation as prescribed by the Regulation
- The municipality requires a bylaw in place to collect this tax

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Alberta

Contact us

- David Imrie, AMAA – Manager, Linear Property
  David.Imrie@gov.ab.ca
  780-427-1688

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- Mike Minard, AMAA – A/Manager, Major Plants
  Michael.Minard@gov.ab.ca
  780-643-6381

- Assessment Service Branch Contact List is on the website
  Link

Alberta

Questions?

SUBJECT:	**Nitehawk Year-Round Adventure Park – Reallocation of Funds**			
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION		
MEETING DATE:	May 19, 2020	CAO:	DT	MANAGER:
DEPARTMENT:	COMMUNITY SERVICES	GM:	GM	PRESENTER:
STRATEGIC PLAN:	Quality of Life			

RELEVANT LEGISLATION:
Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:
MOTION: That Committee of the Whole accept the presentation from Nitehawk Year-Round Adventure Park for information, as presented.

BACKGROUND/PROPOSAL:
Nitehawk Year-Round Adventure Park received an operating/capital grant in the amount of $275,000.00 for the 2020 calendar year. Their original request was $100,000.00 for operating and $226,500.00 capital for a total of $326,500.00. Upon budget deliberations, Council reduced Nitehawk's grant for the 2020 calendar year to $275,000.00.

Nitehawk is requesting to reallocate a portion of the capital funding to operation expenditures. The reason is due to the unprecedented situation that COVID-19 has presented, and the early closure of the ski area operations on March 17, 2020 as mandated by the Province of Alberta and the Alberta Lift Authority. This situation resulted in a $210,000.00 loss in budgeted revenues for the month of March alone, which included approximately $60,000.00 in School Group Revenue.

Nitehawk has worked with their Board of Finance Committee to build three operational scenarios that outline a best case, worst case, and most likely revenue and expense model for the next 4 (four) months. Nitehawk stated that they would be applying for the Federal Government's 75% Emergency Wage Subsidy when the application opened on April 27th. Nitehawk has already taken advantage of the Provincial WCB Premium deferral, have reduced staffing, and have also reached out to many of the monthly expense suppliers to reduce the ongoing expenses as much as possible. The operational scenarios have taken into account the Provincial and Federal Government subsidy programs and the significant employee layoffs that have been done, however, $131,000.00 in outstanding payables remains owed to their suppliers.

The Nitehawk Acting General Manager and Nitehawk Board of Directors President will be in attendance to provide additional information and answer questions with regards to the request to reallocate funds.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the recommended action is that Council will have a clearer understanding why Nitehawk is requesting to redirect some of their capital grant to operational expenditures.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended action.

ALTERNATIVES CONSIDERED:

Alternative #1: Council has the alternative to not accept the recommended action.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will bring forth the recommendation to Council in accordance with the decision that results from the Committee of the Whole.

ATTACHMENT(S):

- Nitehawk – Reallocation Request Presentation

NITEHAWK

YEAR-ROUND ADVENTURE PARK

Request to Council for reallocation of already received Capital Funds to Operating; due to COVID-19 forced closure of Winter Operations on Tuesday March 17, 2020.

	Nov 1, '19 - Apr 15, 20	Nov 1, '18 - Apr 15, 19	$ Change	% Change
Ordinary Income/Expense				
Income				
Interest Income	1,392.91	75.60	1,317.31	1,742.47%
14000 · Lessons	104,853.86	107,797.89	-2,944.03	-2.73%
14010 · Rentals	77,760.10	69,717.88	8,042.22	11.54%
14020 · Food and beverage	254,043.46	375,399.36	-121,355.90	-32.33%
14040 · Sign Sales/Advertising	16,000.00	7,200.00	8,800.00	122.22%
14050 · Group Lessons	179,252.20	183,864.05	-4,611.85	-2.51%
14060 · Day passes	323,205.97	327,675.28	-4,469.31	-1.36%
14070 · Operating Grants	66,033.32	82,858.33	-16,825.01	-20.31%
14090 · Season passes	141,454.22	135,204.43	6,249.79	4.62%
14100 · RV Park.	131,932.15	206,301.73	-74,369.58	-36.05%
14300 · Events and Registration	52,171.37	54,556.69	-2,385.32	-4.37%
14400 · Fundraising income - operating	138,384.03	119,199.78	19,184.25	16.09%
14700 · Donations/Sponsorships	25,046.69	38,872.74	-13,826.05	-35.57%
14800 · Merchandise Sales	9,300.23	5,965.22	3,335.01	55.91%
4225 · Cash over/short	-490.02	0.00	-490.02	-100.0%
Total Income	1,520,340.49	1,714,688.98	-194,348.49	-11.33%
Gross Profit	1,520,340.49	1,714,688.98	-194,348.49	-11.33%
Expense				
Reconciliation Discrepancies	-3,643.54	0.00	-3,643.54	-100.0%
15001 · Advertising and Promotion	40,611.13	58,191.88	-17,580.75	-30.21%
15003 · Subcontract	16,820.80	15,534.33	1,286.47	8.28%
15040 · Insurance expense	29,494.36	22,308.67	7,185.69	32.21%
15045 · Interest and bank charges	35,963.66	28,398.79	7,564.87	26.64%
15060 · Travel	4,385.35	4,133.02	252.33	6.11%
15075 · Office	21,069.68	32,396.12	-11,326.44	-34.96%
15080 · Fuel and oil	52,151.50	89,381.49	-37,229.99	-41.65%
15085 · Rental	16,028.59	23,885.79	-7,857.20	-32.9%
15100 · Utilities	138,120.18	133,196.75	4,923.43	3.7%
15170 · Training	651.02	6,087.17	-5,436.15	-89.31%
15200 · Repairs and maintenance	68,647.98	78,598.71	-9,950.73	-12.66%
15300 · Materials and supplies	25,535.72	46,103.15	-20,567.43	-44.61%
15400 · Food & beverage	108,226.32	186,461.58	-78,235.26	-41.96%
15450 · Fundraising expenses -Operating	92,967.11	109,714.45	-16,747.34	-15.26%
15475 · Equipment purchased for rentals	0.00	2,700.82	-2,700.82	-100.0%
15800 · Wages Expense	572,819.24	742,775.79	-169,956.55	-22.88%
15810 · Management Wage Expense	75,987.55	93,708.47	-17,720.92	-18.91%
15850 · Other expenses	5,559.10	0.00	5,559.10	100.0%
5800 · Wage Expense	4,291.38	0.00	4,291.38	100.0%
Total Expense	1,305,687.13	1,673,576.98	-367,889.85	-21.98%
Net Ordinary Income	214,653.36	41,112.00	173,541.36	422.12%

2019/20 Winter Season at a glance...

A Few Steps taken to reduce our Expenses during the 2019-20 Winter Season…

- Closure of Restaurant for Lunches & Tuesday Evenings.
- Duty Manager Shifts covered by Salaried Employees.
- Elimination of 1 Shift Supervisor Position per day for outdoor Operations.
- Food & Beverage Supply Expense reduced (32% reduction in Revenue, but 42% reduction in Expense).
- Employee Benefit Premiums reduced from previous year, by switching suppliers.
- Diesel Fuel Costs reduced due to new Snowmaking Gun Upgrades (less air required).
- Removed Wednesday & Saturday Nights for skiing (Financial return wasn't there in 2019/20).
- Snowcat Operating Efficiencies, due to more experienced operators.
  (Translated to less Hours than last year, which saw savings in Fuel & Wages).
- Minimum Wage was reduced from $15/hr to $13.50/hr.
- Scheduling changes, using experience & data from our ticketing software, to adjust and fine tune shift start times.
- Cross Training between departments to improve operational efficiencies.

	Mar 20	Budget
Ordinary Income/Expense		
Income		
Interest Income	649	
14000 · Lessons	3,036	18,000
14010 · Rentals	7,265	16,900
14020 · Food and beverage	35,935	84,200
14040 · Sign Sales/Advertising	-	-
14050 · Group Lessons	37,025	70,000
14060 · Day passes	22,989	62,500
14070 · Operating Grants	16,508	16,500
14090 · Season passes	(405)	-
14100 · RV Park.	19,791	30,000
14300 · Events and Registration	2,032	4,500
14400 · Fundraising income - operating	-	
14700 · Donations/Sponsorships	495	2,500
14800 · Merchandise Sales	180	1,500
Wage Subsidy	2,739	
Reconciliation discrepancies		
4225 · Cash over/short	89	
Total Income	148,329	306,600
Gross Profit	148,329	306,600
Expense		
15001 · Advertising and Promotion	5,002	8,000
15003 · Subcontract	3,573	1,000
15040 · Insurance expense	15,263	7,000
15045 · Interest and bank charges	4,986	3,000
15060 · Travel	1,290	-
15075 · Office	3,050	5,500
15080 · Fuel and oil	2,986	10,000
15085 · Rental	2,060	3,000
15100 · Utilities	18,998	20,000
15170 · Training	(1,497)	400
15200 · Repairs and maintenance	3,936	6,000
15300 · Materials and supplies	3,575	3,500
15400 · Food & beverage	8,586	41,400
15450 · Fundraising expenses -Operating	169	
15475 · Equipment purchased for rentals	-	-
15800 · Wages Expense	92,678	155,000
15810 · Management Wage Expense	11,999	18,000
15850 · Other expenses	824	-
5800 · Wage Expense	-	
Total Expense	177,477	281,800
Net Ordinary Income	(29,148)	24,800

The Month of March at a glance...

Steps we took to reduce our operating costs due to COVID-19 Closure (March 17, 2020) …

- Issued ROE's and Seasonal Layoff to approximately 60 Employees.
- Issued ROE's and Temporary Layoff to approx. 20 Year-Round Employees.
- Only kept 6 staff to keep our RV Park Operations and Municipal Capital Projects moving forward.
- Contacted Suppliers that provide us with monthly services, to inquire about suspending service. Many responded positively and were willing to work with us.
- Returned all unopened beverage inventory to our suppliers.
- Sold approximately $7000.00 in Food Inventory to staff & other Community Partners.

Federal & Provincial Government Subsidy Programs we have or are applying for.

- **Temporary Wage Subsidy (TWS)**
  - 10% reduction of Source Deductions paid (will be subtracted from CEWS)
- **Canada Emergency Wage Subsidy (CEWS)**

  - Up to 75% of Employee Wages for 12 weeks (to maximum of $847/week/employee)
- **Canada Emergency Business Account (CEBA)**

  - $40,000 Business Loan 75% to be repaid by December 31, 2022
- **Provinicial WCB premium payment deferral**

  - AB Gov't to cover 50% of the 2020 premium when it is due in 2021

	Scenario 1: Best Case - RV Park @ 70% capacity, Bike Park & Bear Paw open June, July & August and Summer Slide open July and August only				
	May	June	July	August	TOTAL
Ordinary Income/Expense					
Income					
Interest Income	189	189	189	189	756
Wage Subsidy	29,016	18,947	-	-	47,963
Total 14000 · Lessons	-	791	62	-	852
Total 14010 · Rentals	-	3,379	2,918	2,413	8,710
Total 14020 · Food and beverage	-	4,896	3,491	3,481	11,869
Total 14050 · Group Lessons	-	-	19,677	17,246	36,923
Total 14060 · Day passes	-	23,874	27,274	21,282	72,430
14070 · Operating Grants					
14090 · Season passes	-	1,599	-	-	1,599
Total 14100 · RV Park.	58,175	54,904	67,717	56,903	237,699
Total 14300 · Events and Registration	-	-	-	-	-
14400 · Fundraising income - operating	-	-	-	-	-
14700 · Donations/Sponsorships	495	495	495	495	1,979
Total 14800 · Merchandise Sales	-	511	657	315	1,483
Total Income	87,875	109,585	122,481	102,324	422,265
Gross Profit	87,875	109,585	122,481	102,324	422,265
Expense					
Total 15001 · Advertising and Promotion	1,488	2,432	2,881	5,844	12,646
15040 · Insurance expense					
15045 · Interest and bank charges					
Total 15045 · Interest and bank charges	1,923	2,445	2,530	2,895	9,793
15060 · Travel	264	264	264	264	1,056
Total 15075 · Office	1,155	1,378	12,784	1,615	16,932
Total 15080 · Fuel and oil	-	44	44	44	131
Total 15085 · Rental	1,068	1,388	1,565	1,290	5,312
Total 15100 · Utilities	15,150	16,102	16,102	16,102	63,456
Total 15200 · Repairs and maintenance	3,471	4,934	5,794	4,709	18,907
Total 15300 · Materials and supplies	1,670	4,323	6,909	4,603	17,505
Total 15400 · Food & beverage	-	245	175	174	593
15475 · Equipment purchased for rentals	-	-	-	-	-
Total 15800 · Wages Expense	15,934	41,525	51,418	50,427	159,304
15810 · Management Wage Expense	11,999	11,999	11,999	11,999	47,997
Termination Pay	-	-	15,497	-	15,497
Total 15850 · Other expenses	-	-	-	-	-
Total Expense	54,122	87,079	127,962	99,967	369,130
Net Ordinary Income	33,753	22,505	(5,481)	2,357	53,134

BEST CASE SCENARIO

	Scenario 2: Most Likely - RV Park @ 70% capacity, Bear Paw and Bike Park & summer Camps open July and August only with a 30% reduction in revenue and no summer slide				
	May	June	July	August	TOTAL
Ordinary Income/Expense					
Income					
Interest Income	189	189	189	189	756
Wage Subsidy	29,016	18,947	-	-	47,963
Total 14000 · Lessons	-	-	979	-	979
Total 14010 · Rentals	-	-	2,043	1,689	3,732
Total 14020 · Food and beverage	-	-	2,028	1,687	3,715
Total 14050 · Group Lessons	-	-	13,667	12,072	25,740
Total 14060 · Day passes	-	-	14,958	12,460	27,418
14070 · Operating Grants					
14090 · Season passes	-	-	-	-	-
Total 14100 · RV Park.	58,175	42,762	63,314	51,261	215,513
Total 14300 · Events and Registration	-	-	-	-	-
14400 · Fundraising income - operating	-	-	-	-	-
14700 · Donations/Sponsorships	495	495	495	495	1,979
Total 14800 · Merchandise Sales	-	-	460	220	681
Total Income	87,875	62,393	98,133	80,074	328,475
Gross Profit	87,875	62,393	98,133	80,074	328,475
Expense					
Total 15001 · Advertising and Promotion	1,488	1,180	2,600	5,194	10,463
15040 · Insurance expense					
15045 · Interest and bank charges					
Total 15045 · Interest and bank charges	1,923	2,000	2,327	2,673	8,923
15060 · Travel	264	264	264	264	1,056
Total 15075 · Office	1,155	1,009	12,823	1,593	16,579
Total 15080 · Fuel and oil	-	-	44	44	88
Total 15085 · Rental	1,068	1,068	1,685	1,290	5,112
Total 15100 · Utilities	15,150	15,150	16,102	16,102	62,504
Total 15200 · Repairs and maintenance	3,471	2,907	5,086	4,055	15,518
Total 15300 · Materials and supplies	1,670	1,185	6,048	1,101	10,004
Total 15400 · Food & beverage	-	-	101	84	186
15475 · Equipment purchased for rentals	-	-	-	-	-
Total 15800 · Wages Expense	15,934	18,484	44,987	43,165	122,571
15810 · Management Wage Expense	11,999	11,999	11,999	11,999	47,997
Termination Pay	-	-	15,497	-	15,497
Total 15850 · Other expenses	-	-	-	-	-
Total Expense	54,122	55,247	119,563	87,566	316,497
Net Ordinary Income	33,753	7,146	(21,430)	(7,491)	11,978

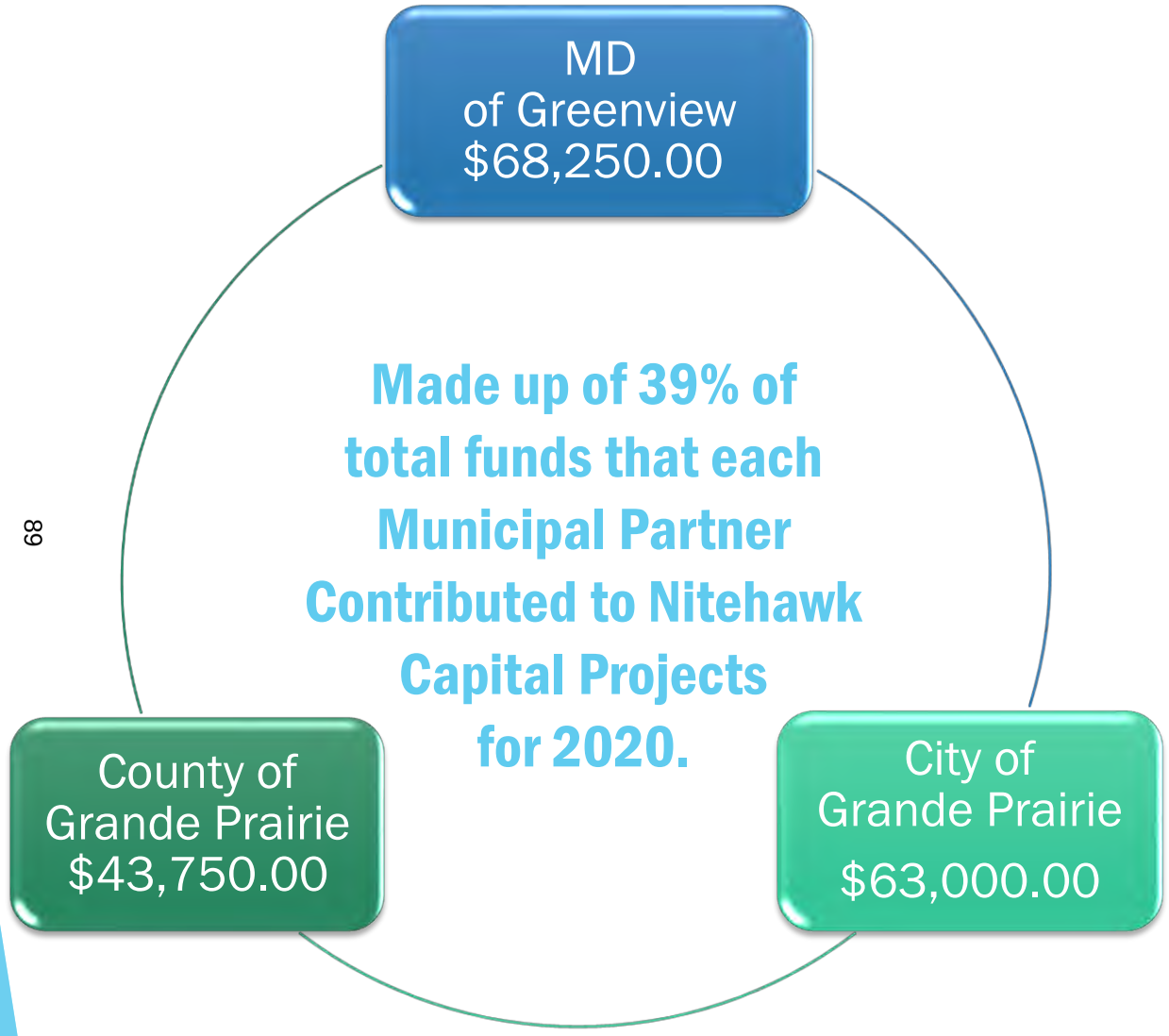
MOST LIKELY SCENARIO

	Scenario 3: Worst Case - All revenue Generating Services Closed				
	May	June	July	August	TOTAL
Ordinary Income/Expense					
Income					
Interest Income	189	189	189	189	756
Wage Subsidy	29,016	18,947	-	-	47,963
Total 14000 · Lessons	-	-	-	-	-
Total 14010 · Rentals	-	-	-	-	-
Total 14020 · Food and beverage	-	-	-	-	-
Total 14050 · Group Lessons	-	-	-	-	-
Total 14060 · Day passes	-	-	-	-	-
14070 · Operating Grants					
14090 · Season passes	-	-	-	-	-
Total 14100 · RV Park.	-	-	-	-	-
Total 14300 · Events and Registration	-	-	-	-	-
14400 · Fundraising income - operating	-	-	-	-	-
14700 · Donations/Sponsorships	495	495	495	495	1,979
Total 14800 · Merchandise Sales	-	-	-	-	-
Total Income	29,700	19,631	684	684	50,698
Gross Profit	29,700	19,631	684	684	50,698
Expense					
Total 15001 · Advertising and Promotion	325	325	325	325	1,300
15040 · Insurance expense					
15045 · Interest and bank charges					
Total 15045 · Interest and bank charges	1,516	1,701	1,568	1,879	6,664
15060 · Travel	264	264	264	264	1,056
Total 15075 · Office	1,096	966	12,247	1,447	15,757
Total 15080 · Fuel and oil	-	-	-	-	-
Total 15085 · Rental	1,068	1,068	1,365	1,090	4,592
Total 15100 · Utilities	15,150	15,150	14,967	14,967	60,234
Total 15200 · Repairs and maintenance	1,493	1,453	1,377	1,377	5,699
Total 15300 · Materials and supplies	564	373	13	13	963
Total 15400 · Food & beverage	-	-	-	-	-
15475 · Equipment purchased for rentals	-	-	-	-	-
Total 15800 · Wages Expense	15,934	18,484	18,484	18,484	71,386
15810 · Management Wage Expense	11,999	11,999	11,999	11,999	47,997
Termination Pay	-	-	15,497	-	15,497
Total 15850 · Other expenses	-	-	-	-	-
Total Expense	49,410	51,783	78,107	51,845	231,145
Net Ordinary Income	(19,710)	(32,152)	(77,423)	(51,162)	(180,447)

WORST CASE SCENARIO

Our Ask to Council…

- Nitehawk's Board of Directors and Management would like to request Council to approve a reallocation of Capital Funding, that Nitehawk has already received from our Municipal Partners, to be used for Operating to assist Nitehawk with it's immediate Financial Liabilities.



Total Ask for reallocation up to $175,000.

How will this help…

- These funds will be used immediately to assist with our financial liabilities to our Suppliers & Community Partners, which currently are at approximately $134,000.00.

Thank you for your time and consideration.

Questions?


NITEHAWK
YEAR-ROUND ADVENTURE PARK
LIFE
GONITEHAWK.COM

SUBJECT:	**Greenview Fiber Optic Internet Connectivity Strategy**				
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION			
MEETING DATE:	May 19, 2020	CAO:	DT	MANAGER:	KK
DEPARTMENT:	ECONOMIC DEVELOPMENT	GM:	GM	PRESENTER:	KK
STRATEGIC PLAN:	Level of Service				

RELEVANT LEGISLATION:
Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:
MOTION: That Council accept the presentation from Canadian Fiber Optic / Valo Networks on the Greenview Fiber Optic Internet Connectivity Strategy for information as presented.

BACKGROUND/PROPOSAL:
In February 2020, Greenview awarded Canadian Fiber Optics a contract to complete a strategic review of options for a future Greenview fiber optic network. For Greenview to remain competitive with residential and business connectivity a need for a network strategy to be established in Greenview that supports the residents, farming operations, business and industry. The development of a fiber optic network will provide Greenview ratepayers with a major economic advantage over other rural jurisdictions in Canada. Additionally, the network will act as an economic incentive for business attraction within Greenview.
Canadian Fiber Optic will present its findings for information.

BENEFITS OF THE RECOMMENDED ACTION:
1. Greenview Council will have current information that can assist in guiding strategic decisions on the key piece of community infrastructure.

DISADVANTAGES OF THE RECOMMENDED ACTION:
1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:
Alternative #1:
Council has the alternative to take no action however; Administration does not recommend this action because the consultation project is complete.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow up actions to the recommended motion.

ATTACHMENT(S):

- Canadian Fiber Optics presentation

Municipal District of Greenview No. 16
Fiber Optics Internet Connectivity Strategy

May 13, 2020

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Table of Figures

1 Executive Summary

Canadian Fiber Optics Corporation (CFOC) and Valo Networks Ltd. (Valo) and are pleased to present this Fiber Optics Internet Connectivity Strategy to the MD of Greenview (Greenview). At CFOC and Valo, we are passionate in our belief that fiber optic networks are critical infrastructure that enable economic development, diversity and a higher quality of life for the entire community. The objective of this strategy is to provide Greenview with an overview of current and emerging broadband technologies and a roadmap for providing this critical internet connectivity to the majority of Greenview's ratepayers.

1.1 Observations and Findings

In the last three years, a significant market shift has taken place as local governments – county, municipality and municipal districts – have concluded that the incumbents such as Telus and Shaw are not going to invest in fiber in their regional and rural communities to the scope or in the timeframe that these communities need to survive and thrive. Internet access is no longer a "nice-to-have" residential amenity, but it is a critical service that is essential to every level of government and all businesses whether they be an owner-operated start-up in someone's basement or a multinational conglomerate. Furthermore, internet access is equally critical to the residents of all communities. It is how they now receive government services including healthcare, work from home; educate their children and access the myriad of social media and streaming media and sports sites for their leisure time.

The fact that Greenview has undertaken this Fiber Optics Internet Connectivity Strategy is an important first step in ensuring that the MD has the fiber and connectivity infrastructure that it is going to need in to support continued growth and prosperity. A summary of our findings and observations from the strategy work completed is as follows:

- In the MD of Greenview, the availability of high-quality internet varies significantly across the District. The vast majority of residents and businesses have either a Telus DSL (twisted pair copper) or a wireless internet service that is not meeting their needs. Those locations where even these services are not available use a low-bandwidth satellite service.
- The Canadian Radio-television and Telecommunications Commission's (CRTC) has defined the universal service objective for fixed internet access to be at least 50 megabits per second (Mbps) download and 10 Mbps upload with an option of unlimited data.
- In the strategy below we provide an approach to building internet connectivity for all of Greenview. This approach involves building fiber backbone, fiber-to-the-premise (FTTP) and next-generation wireless broadband operated on a wholesale basis.
- In Section 3 below we highlight some key future technologies that have a role to play in the provision of internet services, how those technologies may be rolled out in Greenview and the Smart Community applications and services that are enabled by more extensive broad infrastructure.

- Given new internet connectivity infrastructure is required in the region we provide an overview of key business models and partnership/governance models that could be used by the MD of Greenview to facilitate and potentially invest in connectivity infrastructure in the municipal district.

1.2 Strategy Overview and Recommended Approach

We recommend the MD of Greenview facilitate the creation of fiber optic internet connectivity infrastructure in the municipal district to ensure the continued growth and prosperity of the MD, its residents and businesses. High-speed internet access is a critical service to all sectors of the market – residential, commercial, industrial and government. The provision of this critical service can no longer be left to the purview of the incumbent telco and cable companies. The MD of Greenview must ensure that connectivity infrastructure is built to ensure that long-term access and availability of critical internet services. Public Capital, including some level of financial support from the MD of Greenview are necessary for the majority of Greenview's ratepayers to have access to high speed reliable internet.

Our budgetary estimate to solve the fiber optic connectivity issue in the MD of Greenview is $14 -$15 million dollars. We estimate that half the capital could be obtained from a combination of provincial and federal grants and private sector investment. The MD would have to finance approximately half this capital over 2-3 years. The breakdown estimates for each fiber segment and hamlet can be found in Section 2 below.

This connectivity budget would build a fiber backbone through the MD of Greenview, fiber-to-the-premise in the hamlets and an advanced wholesale wireless solution elsewhere in the MD. In Section 4 below, we introduce a three-layered fiber ecosystem model that if implemented would fully leverage the municipal district's efforts and investment in connectivity infrastructure and provide a governance and ownership model for the infrastructure.

We recognize the challenging economic environment created by the COVID-19 pandemic may limit capital availability for infrastructure investment in the short-term. However, we believe the COVID crisis only emphasizes the need for modern connectivity infrastructure for all communities not just metropolitan centers. It is very likely that the provincial and federal governments will create new stimulus and broadband infrastructure grant programs as a result of the current crisis. The MD of Greenview should work to create "shovel-ready" projects to take advantage of these programs. In order to leverage these stimulus and grant programs, the MD of Greenview should be prepared to deploy $2-3 million in capital within the next 18 months.

We are not proposing that the MD go into the internet business. There are private sector solutions and providers that are willing to work in partnership with Greenview to put the MD's infrastructure to use on a professional and competitive basis. This partnership can create a fiber optic ecosystem within Greenview that meet both public policy and private sector needs.

2 Strategy and Recommended Approach

In economic terms, a "market failure" is a state of disequilibrium in which the quantity supplied of a good or service does not equal the quantity demanded by the market. This is exactly the state that rural and regional markets throughout Canada are experiencing with high-speed broadband internet. The demand for high-quality internet services simply is not being met by the market. In the MD of Greenview, this market failure means the vast majority of residents do not have access to the CRTC's universal broadband standard of 50 Mbps download and 10 Mbps upload. The following strategy is proposed to remedy this market failure.

2.1 Strategy

Our recommendation is that the MD of Greenview facilitate and invest in connectivity infrastructure that will contribute to correcting this market failure. Fiber optic networks are essential infrastructure no different from roads, water, sewer and power. This essential infrastructure cannot be left to incumbents like Telus and Shaw to address. The quality of life for Greenview residents and the competitiveness and efficiency of its businesses depend on this infrastructure. Therefore, the MD of Greenview Council should undertake a program to incent and invest in connectivity infrastructure throughout the municipal district.

The investment in fiber should consist of both backhaul segments and Fiber-to-the-Premise (FTTP) communities. The backhaul segments ensure that there is adequate fiber available throughout the major corridors in the MD not just for today's needs, but far into the future. Building FTTP communities will create serviced and desirable communities within the MD. The MD of Greenview can contribute to the capital cost of these networks along with other grant funding and private capital.

In order to fully leverage the municipal district's efforts and investment in connectivity infrastructure, we recommend that it implements some form of the three-layered fiber ecosystem model presented in Section 4 below. Creating fiber infrastructure and then making this infrastructure available to the market through a single wholesale ISP is the most efficient way to build the economies of scale on the infrastructure that will create commercial viability and long-term benefit for the community.

In addition to fiber optic infrastructure, there is value in the MD building or contributing to the creation of wireless infrastructure. Especially if such wireless infrastructure is next-generation and made available on an open access basis.

2.2 Modelling Network Build Out

The network infrastructure "build out" should be planned in a phased approach and built in "segments" or in sections. One segment in Phase 1 could be backhaul fiber connecting Greenview communities down Highway 43. Another segment could be FTTP builds in communities like Grovedale and Ridge Valley. We have created "Level 1" designs for these segments. A "Level 1" design identifies the major characteristics of a proposed build such as

premise count, distances and construction method in order to come to a budgetary development cost. This budgetary cost is used for planning purposes, but it must be refined and confirmed through formal design and permitting process. Below we present various infrastructure builds that could be part of a 2020 build program or they could be included as part of a multi-year infrastructure plan. We present these possible builds grouped by:

- Backhaul Infrastructure Builds;
- Fiber-to-the-Premise Builds; and,
- Wireless Infrastructure Builds.

2.3 Connectivity Infrastructure Build Summary

In practice, there are many different approaches to building the necessary connectivity infrastructure for Greenview. The exact combination of backhaul, FTTP and next-generation wireless infrastructure that is utilized in Greenview will depend upon market demand, current infrastructure and funding availability.

The various approaches presented below are presented based on the review completed as part of this strategy and the best information we have available to date.

Segment	Budgetary Cost
Fiber-to-the-Premise (FTTP)	
DeBolt	$332,535
Grovedale	$660,426
Grovedale Rural	$510,029
Grande Cache	$4,252,837
Landry Heights	$291,410
Little Smokey	$243,580
Ridge Valley	$119,031
FTTP Sub-Total	**$6,409,848**
Backbone Segments	
Highway 43 – Bezanson to Fox Creek	$5,208,000
New Fish Creek	$1,488,000
Sunset House	$899,000
Crooked Creek	$108,500
Backbone Sub-Total	**$7,703,500**
Total Fiber Infrastructure	**$14,113,348**
Wholesale Next-Generation Wireless Infrastructure (High-speed connectivity to Co-ops, Enterprises and Rural Residents)	**$600,000 - $1,500,000**

2.4 Possible Fiber-to-the-Premise Builds

Fiber to the premise is the ultimate solution to deliver high-speed internet to a home or business. The existing “twisted pair” copper telephone lines are not capable of delivering the bandwidth that consumers currently demand. Copper coaxial cable television cables have a higher capacity than telephone cables but still don’t compare to fiber. Installing fiber cables to a building solves the internet access issue for the life of the building. Building fiber connectivity to a building adds considerable value to the building and neighborhood – similar to connecting it to a community water or power grid.

It is clear that the incumbent telephone carrier is not going to retroactively install fiber in Greenview’s hamlets and communities in a timeframe that these communities require to thrive - if they ever install it at all. The capability of fiber optic technologies together with the market reality creates the need for the MD of Greenview to facilitate and invest in creating fiber connectivity infrastructure in the MD. We have creating high-level estimates of what it would take to build FTTP in Greenview’s hamlets and communities.

2.4.1 Grovedale

Building FTTP in Grovedale would be completely in-line with and supportive of the Grovedale Area Structure Plan created by the MD. An investment of fiber in a community makes it more attractive to individuals, couples and families in the region. The close proximity of Grovedale to Grande Prairie makes it a very attractive commuting community if people had access to the ultra-highspeed that home buyers are demanding.

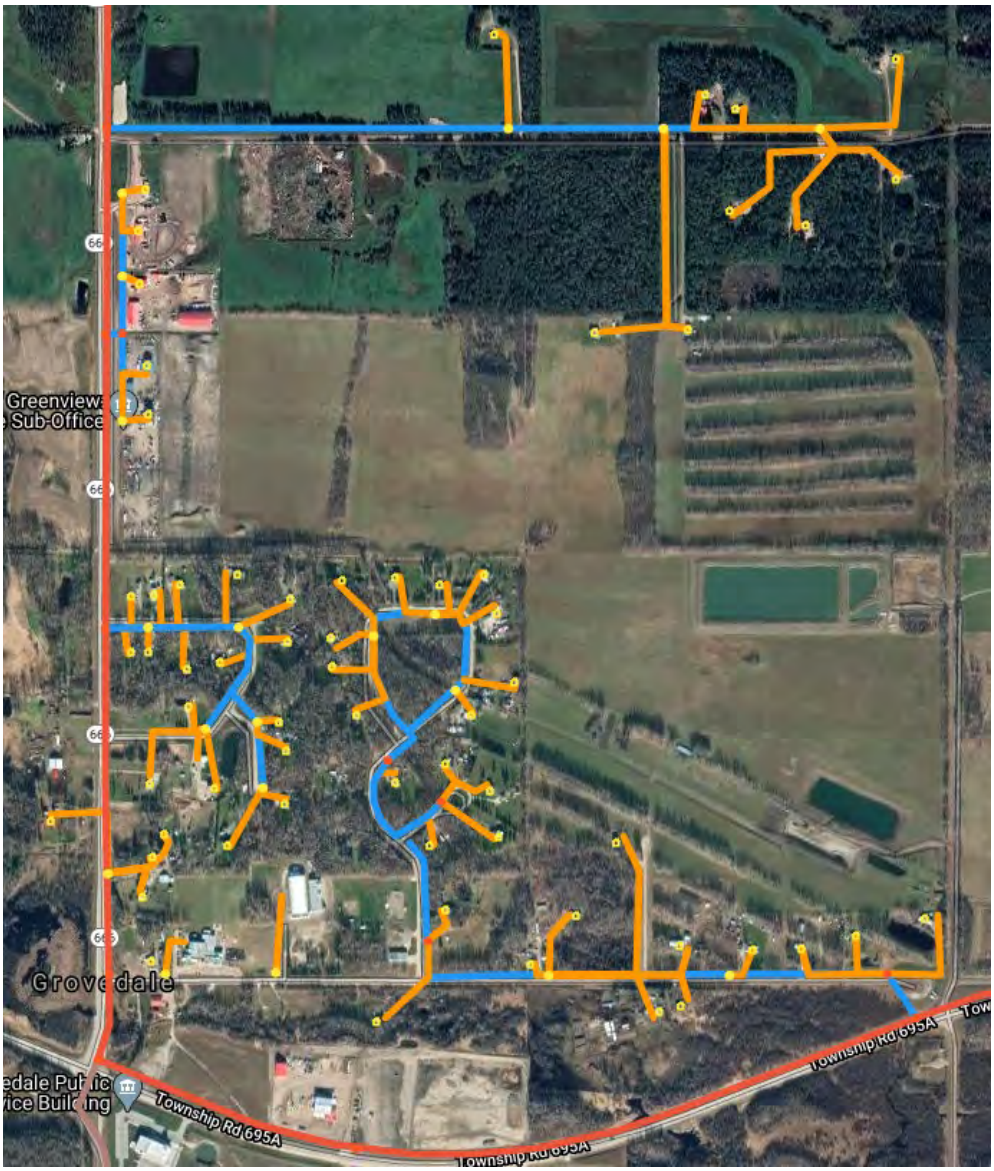


Figure 1 - Proposed Grovedale FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if Grovedale was selected as a pilot segment.

While the Grovedale Area Structure Plan envisions a more densely populated "village center", the current residential development is more estate-like with longer distances from the road to the house. These longer "drops" are more expensive to build than more traditional metropolitan developments. Alternative middle mile and drop technologies such as 'pipe-in-

pipe' can be investigated. The cost estimate below are based on our best knowledge at the time of this strategy and assume traditional buried fiber drops to homes.

Grovedale Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
64	$660,426	+/-25%

Please note:

- The relatively high cost on a per premise basis is due to a large amount of middle mile fiber and long drops to each of the houses.
- This build would be done in such a manner as to create excess fiber capacity to expand the network as Grovedale is built out.
- The cost does not take into account possible grant funding.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.4.2 Ridge Valley

Building FTTP in Ridge Valley would provide a draw to a community located in the eastern part of the MD. Building FTTP in Ridge Valley would require that the middle mile backhaul connection through crooked creek would be constructed.

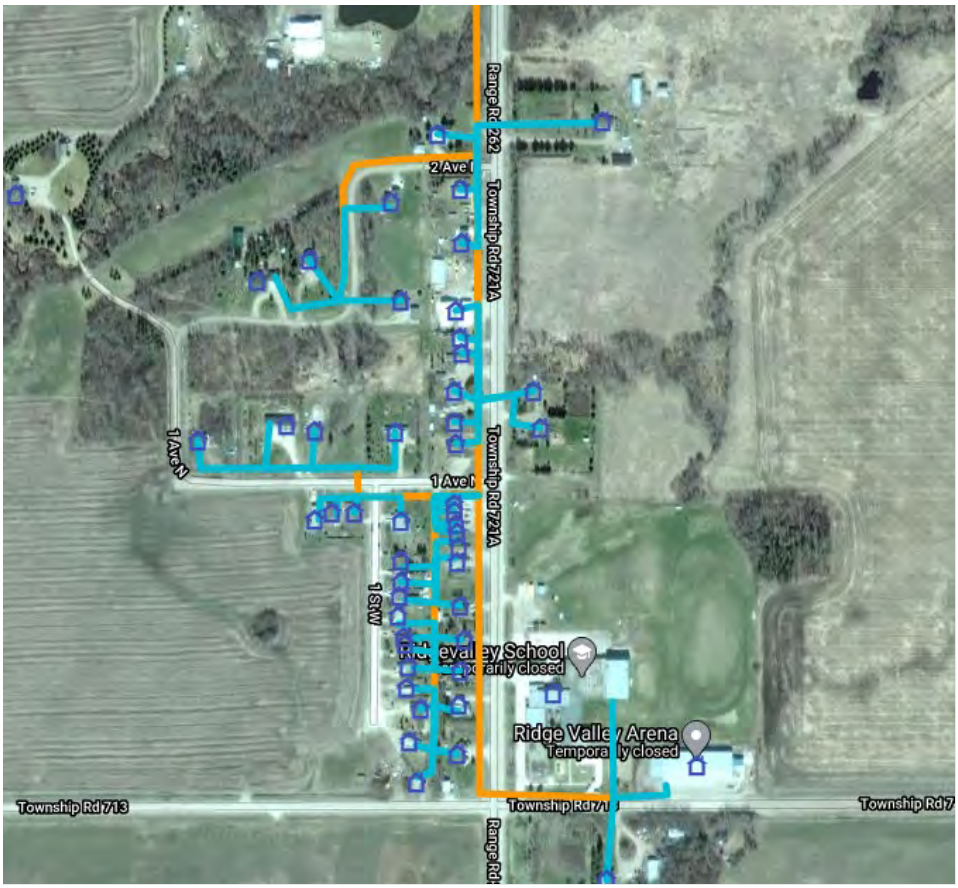


Figure 2 - Proposed Ridge Valley FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if Ridge Valley was selected as a pilot segment.

These cost elements are based on our best knowledge at the time of this proposal regarding the topology and ground conditions at the site. With the detailed fiber design, the exact fiber path, hand hold placement and drop path will be finalized.

Ridge Valley Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
50	$119,031	+/-25%

Please note:

- The cost does not take into account possible grant funding.
- To FTTP cost does not include the middle mile backbone through Crooked Creek.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.4.3 DeBolt

Building FTTP in DeBolt is a logical choice for the MD as the hamlet is located right next to the proposed backhaul network on Highway 43.

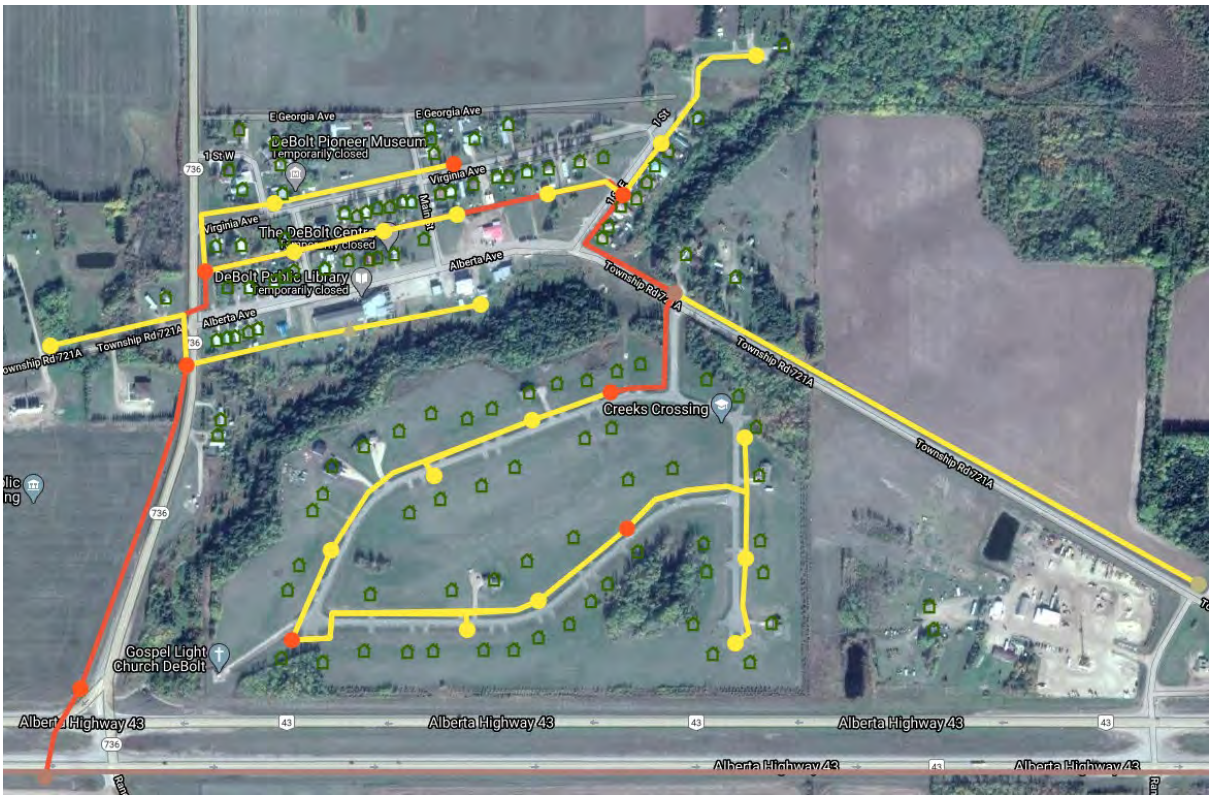


Figure 3 - Proposed DeBolt FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if DeBolt was selected as a pilot segment.

These cost elements are based on our best knowledge at the time of this proposal regarding the topology and ground conditions at the site. With the detailed fiber design, the exact fiber path, hand hold placement and drop path will be finalized.

DeBolt Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
118	$332,535	+/-25%

Please note:

- The cost does not take into account possible grant funding.

- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.4.4 Landry Heights

Landry Heights has similar characteristics to Grovedale. The community currently does not have access to broadband services that meet the CRTC's universal broadband access speeds. The community would be even more attractive with FTTP services.

Figure 4 - Proposed Landry Heights FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if Landry Heights was selected as a pilot segment.

These cost elements are based on our best knowledge at the time of this proposal regarding the topology and ground conditions at the site. With the detailed fiber design, the exact fiber path, hand hold placement and drop path will be finalized.

Landry Heights Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
49	$291,410	+/-25%

Please note:

- The cost does not take into account possible grant funding.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.4.5 Little Smokey

Little Smokey is currently a very small community with just 19 homes identified within the area. For this build we have included a middle mile connection north up to Township Road 670 where a wireless tower could be served or placed to provide high-speed services the farms, park and acreages in the area.

Figure 5 - Proposed Little Smokey FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if Little Smokey was selected as a pilot segment.

These cost elements are based on our best knowledge at the time of this proposal regarding the topology and ground conditions at the site. With the detailed fiber design, the exact fiber path, hand hold placement and drop path will be finalized.

Little Smokey Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
19	$243,580	+/-25%

Please note:

- The cost does not take into account possible grant funding.

- The budgetary cost includes 4 km of middle mile to Township Road 670 to serve wireless in the area. If that segment were removed or only that segment was built the budget would be half of estimated.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.4.6 Grovedale Rural

In addition to the Grovedale FTTP deployment, we have included a sample build for a more 'rural' part of the Grovedale community. This approach involves installing fiber down range roads and township roads and picking up the farms and acreages along the route. This build would be used as a pilot to what building fiber in more rural parts of Greenview could look like.

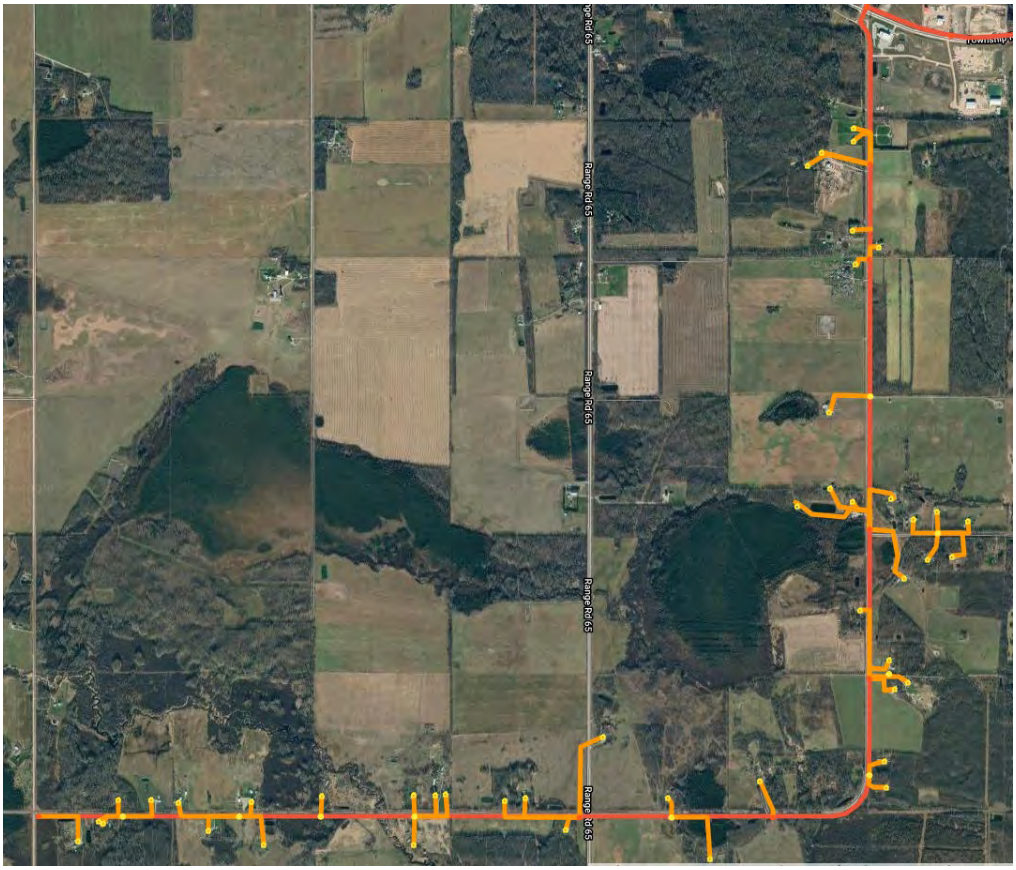


Figure 6 - Proposed Grovedale Rural Fiber Route

The image above is a high-level ("Level 1") depiction of the fiber path through the community including a representation of drops to individual premises. A detailed FTTP fiber design will be completed if this Grovedale Rural was selected as a pilot segment.

These cost elements are based on our best knowledge at the time of this proposal regarding the topology and ground conditions at the site. With the detailed fiber design, the exact fiber path, hand hold placement and drop path will be finalized.

Grovedale Rural Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
44	$510,029	+/-25%

Please note:

- The cost does not take into account possible grant funding.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.5 Possible Backhaul Infrastructure Builds

Fiber optic backhaul networks are a critical part of the internet connectivity infrastructure. The ultimate objective for a Greenview network would be to secure or build its own fiber back to the internet global gateway in Edmonton. With its own fiber backhaul infrastructure the MD would not be beholden to any single internet provider and would have a means to ensure competitively priced internet backhaul would be always available in the MD.

Second to securing backhaul to the global gateway, the purpose of 'middle mile' backhaul in Greenview is to distribute internet access from the various service provider 'points of presence' (PoPs) throughout the MD. Axia's Supernet has PoPs in Grande Cache, Grovedale, Valleyview, and Fox Creek in addition to sites in Grande Prairie and various communities around the County of Grande Prairie. Telus has PoPs in Grande Cache and Grande Prairie but the Grande Cache site is service constrained. The MD of Greenview's backhaul infrastructure would be used to deliver high-speed internet to the hamlets and wireless towers around the MD. All backhaul designs should provide capacity for future FTTP communities along the route and placement of wireless towers to support the farms and acreages around any FTTP community. This section outlines possible backhaul segments that would contribute to Greenview's connectivity infrastructure.

2.5.1 Highway 43 Backbone

Building a fiber backbone down Highway 43 provides many short and long-term benefits to Greenview. The backbone would be used to connect the hamlets and communities on the eastern side of the MD. This fiber backbone would enable FTTP builds in the hamlets of DeBolt, Ridge Valley and Little Smokey. The backbone would also support wireless infrastructure that could be built in addition to or in place of FTTP in the region.

This part of the province needs new fiber infrastructure. The primary existing fiber backbone through this part of the province is the Rohl Fiber Network which is 20 years old. The Rohl fiber is only 24 strands and is completely allocated between Grande Prairie and Edmonton. There would be the opportunity to commercialize this backhaul by leasing fiber to the market.

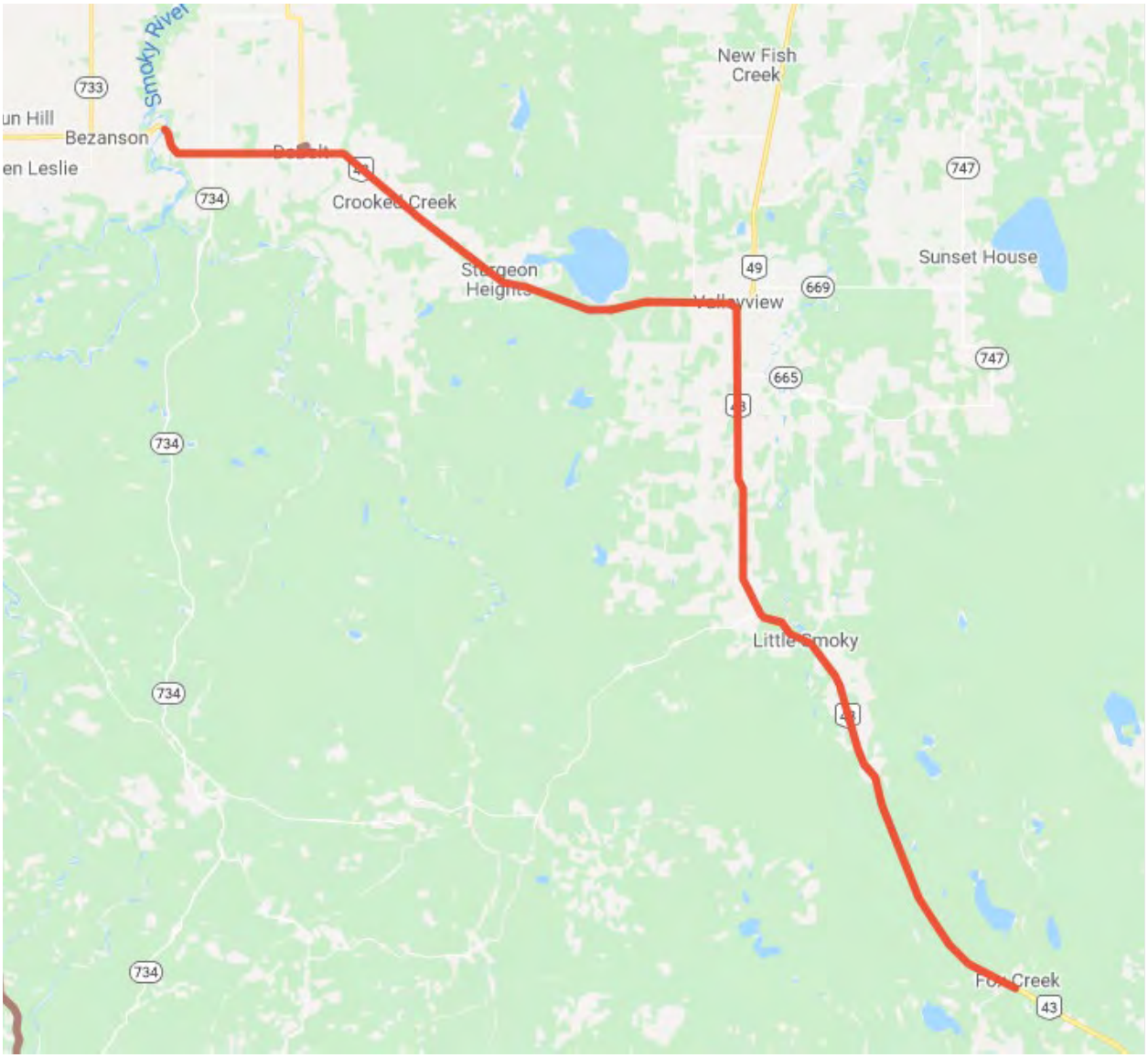


Figure 7 - Proposed Highway 43 Backhaul Route

The red line above denotes a possible fiber path. The final alignment and placements will be subject to a fiber design. It is also possible to build this backhaul in segments over the span of two or three years. For planning purposes this "Level 1" design has the following characteristics.

Length of Backhaul	Price per Meter	Backhaul Cost	Possible Cost Variance with Design
168,000 meters	$31.00	$5,208,000	+/-15%

Please note:

- The price per meter is an indicative market rate.
- This backhaul network could be broken down into segments and built over two years. For example, Bezanson to Valleyview would be approximately $2.4 million.
- The backhaul cost does not take into account possible grant funding or participation of private capital.
- This cost estimate assumes 96 strand fiber and all outside plant necessary to complete the build.

2.5.2 New Fish Creek and Sunset House

The fiber backbone build to New Fish Creek and Sunset House are good examples of backhaul segments that do not have the commercial viability to be built with solely private capital. However, these regions are important agriculture communities within Greenview.

The fiber backbone is drawn out for illustrative purposes, but it is likely that the ultimate solution would be some combination of fiber and high-capacity wholesale wireless services to serve these communities and the farms and acreages around them. The first choice should be to leverage any existing fiber or wireless infrastructure that may be in the area that is fit for use and commercially available. Failing existing infrastructure, new fiber and wireless infrastructure should be built.

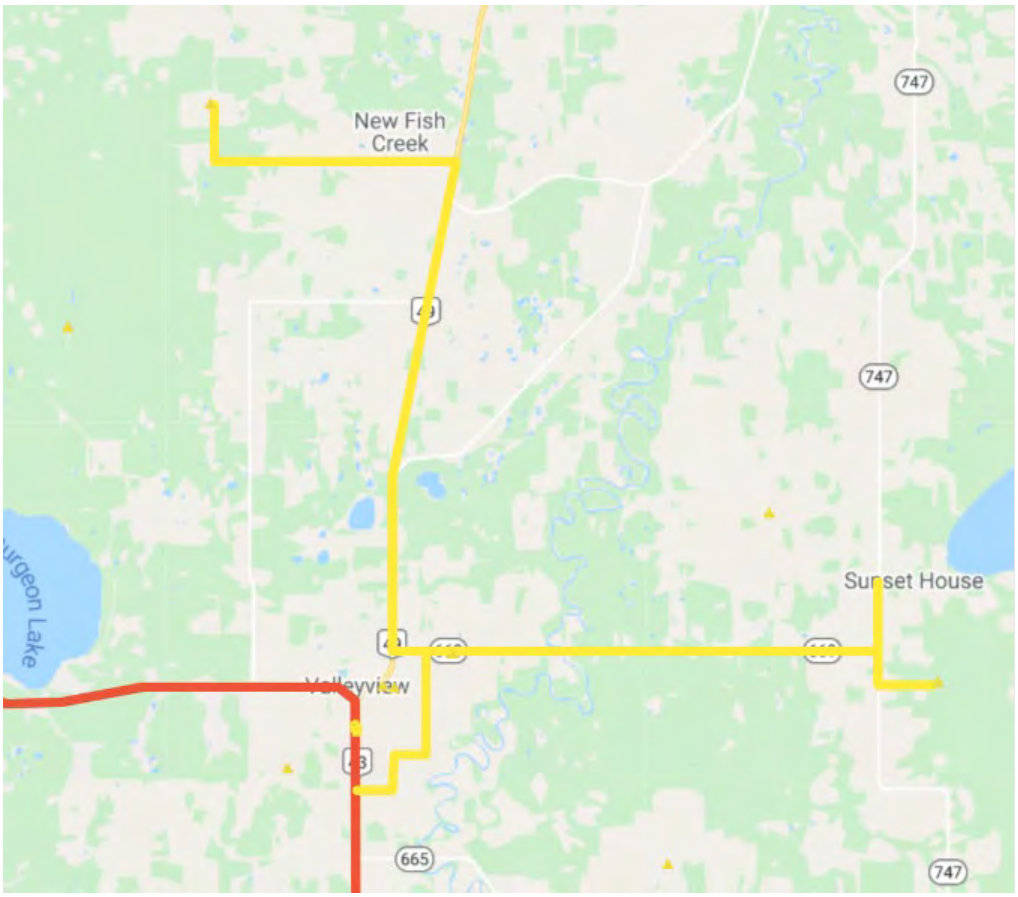


Figure 8 - Proposed Fiber Route to New Fish Creek and Sunset House

The yellow line above denotes a possible fiber path to each community. The final alignment and placements will be subject to a fiber design and any available infrastructure. If wholesale whitespace radio technology is considered, then it may be possible to build a single fiber connection to a tower and serve both communities. In this case, a formal wireless engineering study would be completed. If a long-term view is adopted and Greenview decides to build fiber to each community, it is possible to build this backhaul in segments over the span of two or three years. For planning purposes this "Level 1" design has the following characteristics.

Length of Backhaul	Price per Meter	Backhaul Cost	Possible Cost Variance with Design
New Fish Creek – 48,000 m	$31.00	$1,488,000	+/-15%
Sunset House – 29,000 m	$31.00	$899,000	+/-15%

Please note:

- The price per meter is an indicative market rate.

- This backhaul network could be broken down into segments and built over two or three years.
- The backhaul cost does not take into account possible grant funding.
- This cost estimate assumes 96 strand fiber and all outside plant necessary to complete the build.

2.5.3 Crooked Creek Middle Mile

Some of the Greenview hamlets will need 'middle mile' backhaul fiber built to connect them to the primary backhaul routes. If we assume there is a primary backhaul fiber line running down Highway 43, then a middle mile connection from that backhaul to the hamlet is required.

The Crooked Creek middle mile fiber build would be required if the MD was to undertake a FTTP build in Ridge Valley.

Figure 9 - Proposed Crooked Creek Middle Mile Route

The blue line above denotes a possible fiber path from the primary backhaul route to Ridge Valley. The final alignment and placements will be subject to a fiber design and permitting. For planning purposes this "Level 1" design has the following characteristics.

Length of Backhaul	Price per Meter	Backhaul Cost	Possible Cost Variance with Design
3,100 m	$35.00	$108,500	+/-15%

Please note:

- The price per meter is an indicative market rate.
- The higher per meter price is a factor of the relative short distance.
- The backhaul cost does not take into account possible grant funding.

- This cost estimate assumes 96 strand fiber and all outside plant necessary to complete the build.

2.6 Possible Wireless Infrastructure Builds

The topography of Greenview makes it challenging to implement radio solutions for the delivery of fixed wireless internet services. The valleys, mountains and forests make it very difficult to deliver the bandwidth that consumers and businesses now require. This challenging topography combined with very distributed and sparse populations mean that the mobile phone carriers have not invested in the infrastructure to cover much of the MD either.

We propose that the whitespace radio technology introduced in Section 3 below could be a solution to this challenge. This new whitespace spectrum offers a solution that provides significant bandwidth at distance if a line-of-site can be established. Connecting these new radio systems to fiber optic backhaul would enable them to offer internet and connectivity services at a far greater capacity than anything available in the market today. Using the fiber ecosystem market model, the wholesale ISP could offer these wireless services to RSPs to sell into the market.

2.6.1 Co-operatives and Enterprises

For the Co-operatives and Enterprises in the MD of Greenview, access to adequate communications and internet services has been an on-going issue. It is entirely feasible to build FTTP to the Co-ops and Enterprises similar to that contemplated for the hamlets in Greenview. As an alternative to this approach, we propose that a whitespace wireless solution could be evaluated for the Co-ops and Enterprises. In practice, FTTP and whitespace wireless could be substituted for each other in any of the hamlets, Co-ops or Enterprises. As a general guideline we would recommend FTTP where significant population growth could take place in the community over time.

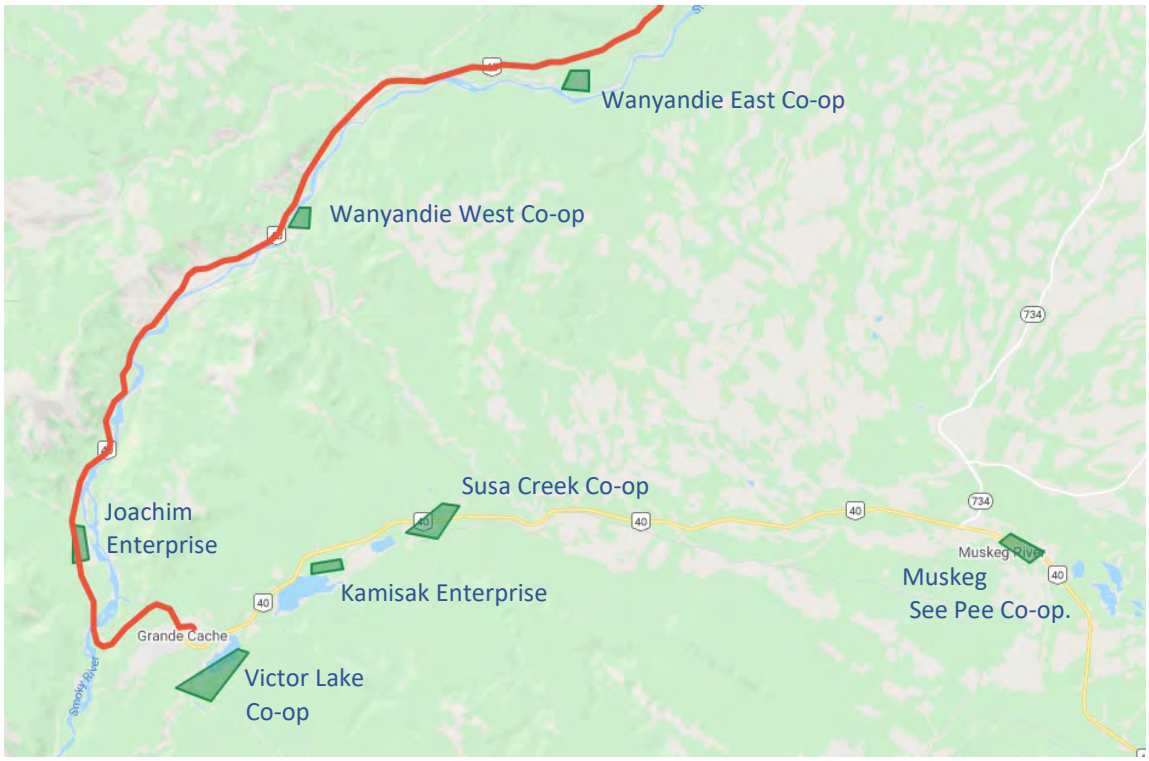


Figure 10 - Overview of Co-ops and Enterprises

The red line in the diagram above represents existing CFOC fiber. It is possible that more than one Co-op and/or Enterprise could be served from a single tower location.

A proper wireless engineering assessment would be the logical next step in determining the applicability of this solution. The budgetary costs for a whitespace wireless implementation are from $300K-$600K if a tower has to be constructed. This solution would cover up to 1,000 households in a 40 kilometer distance from the tower with a 100 Mbps Download and 100 Mbps Upload speed on a line of sight basis.

2.6.2 911 and Public Safety

It is important to note that the whitespace wireless technologies were specifically developed to replace traditional coaxial cable builds where such construction was just not feasible. Therefore, the service fully supports triple play services which include voice, video and internet. CRTC regulations require any Voice-over-Internet-Protocol (VoIP) implementation must facilitate local emergency 911 services. Therefore, the provision of these wholesale whitespace wireless services to the Co-ops and Enterprises is a way to provide these communities with critical 911 services.

Furthermore, with the overall communications infrastructure that this strategy contemplates, there exists the opportunity to make the infrastructure available to the Alberta First Responder Radio Communication System (AFRRCS) operated by the Alberta Government. The infrastructure may also be utilized by technologies or mobile carriers to provide for expanded mobility and public safety services.

2.7 Options for Grande Cache Infrastructure

With Grande Cache being the largest hamlet and population center in the MD of Greenview, coming up with an ultra-fast broadband solution for the hamlet will solve the internet access issue for over 60% of Greenview's ratepayers.

CFOC/Valo have completed a "Level 1" design for building Fiber-to-the-Premise (FTTP) in Grande Cache. A high-level fiber map may be found in the figure below. However, our initial investigations as part of this strategy have highlighted some factors that could make FTTP construction challenging and hence more expensive. Specifically, utility placement, and the historical records of such, are potentially problematic and incomplete. Furthermore, the make-up and consistency of the first six feet of topsoil throughout the hamlet may create a challenging build.

Prior to finalizing an infrastructure plan for Grande Cache we recommend further study of the conditions for FTTP construction. Such study could include building a pilot project in the commercial sector of town and a portion of residential sector to gain first hand experience with the ground conditions and other factors impacting the build.

In addition to an FTTP pilot within the hamlet a study of an alternative last mile connection technology such as whitespace wireless services could be undertaken for Grande Cache.

Figure 11 - Proposed Grande Cache FTTP Layout

The image above is a high-level ("Level 1") depiction of the fiber path through the Grande Cache. If the potential issue with utility placement turns out not to be a significant factor, and the alleyways can be utilized as a right-away for the middle mile fiber, then Grande Cache could be a very good candidate for FTTP.

With the potential build challenge mitigated, the relatively large number of premises within the hamlet allow for economies of scale when it comes to building the middle mile fiber and the drop connections. The estimated build cost per premise is the lowest of any of the Greenview hamlets at $2,453 per premise.

Grande Cache Number of Premises	Budgetary Cost of FTTP	Possible Cost Variance with Design
1,734	$4,252,837	+/-25%

Please note:

- The cost does not take into account possible grant funding and possible private sector contribution to the build.
- The build cost assumes drops to all premises. The cost may be reduced by building drops to initial subscribers and providing "drop-ready" stubs to other premises.

2.8 Municipal and Provincial Bylaws, Procedure and Guideline Compliance

When considering connectivity infrastructure construction within the MD we must take into account any local, provincial and federal regulations and guidelines. These considerations can be classified into two broad categories: environmental and building code.

2.8.1 Environmental Considerations

The vast size, the sparse population and the biodiversity that exists within the MD of Greenview is important to preserve and protect. Before building infrastructure, it is important to understand ecologically sensitive areas and areas with migration strategies and the seasonality of these migrations.

Proposed infrastructure outside a transportation corridor or hamlet would require engagement with Alberta Environment and Parks to ensure the MD's land and wildlife are protected and preserved, that construction and the resulting infrastructure leaves as minimal footprint as possible.

A Construction Environmental Management Plan (CEMP) is a common tool used to address environmental legislative requirements and regulations whether those be provincial or federal. Accommodation for caribou migration patterns is a good example of the type of consideration and mitigation that would be included in the CEMP.

The CEMP would be created as part of any project planning and then reviewed and updated during the project life cycle.

2.8.2 Building Codes and Bylaws

Given that all of the network construction contemplated in this strategy would take place within the MD of Greenview, it would be MD codes and bylaws that would be followed and included in construction plans.

Initial conversations with Greenview's General Manager of Infrastructure and Planning have identified build considerations in Grande Cache that would have to be addressed in any work to take place there. Furthermore, ATCO is planning a significant upgrade and modernization of the power infrastructure in Grande Cache that will take place within the next 24 months and continue over a several year period. This upgrade will impact any approach to connectivity infrastructure in the hamlet.

Upon first review, it appears depth requirements are functional and there is an openness to explore alternative construction methodologies like narrow trenching. Existing pole infrastructure is being analyzed as is the potential to build new pole infrastructure and the possible use of manhole infrastructure.

2.9 Tri-Municipal Industrial Partnership (TMIP)

The Tri-Municipal Industrial Partnership (TMIP) is moving through the Area Structure Plan (ASP) process. Ultra high-speed internet connectivity will be a critical service that is required by partners and tenants of the eco-industrial district. CFOC has invested in infrastructure that runs down Highway 40 through the center of the district. This fiber will be commercially available to provide services companies and users within the TMIP district. As the ASP is completed and development within the district is begun, we will investigate whether additional connectivity infrastructure is required and what parties should be responsible for providing such infrastructure.

2.10 Budgetary Build Costs and Approach

Valo/CFOC envision that any initial phase or pilot of an infrastructure build program, if approved, will be complete by the end of 2020. While grant funding would be pursued immediately upon initiation of a pilots or initial phase, given the lead time for the grant funding outlined in Section 4 below, those funds would not be available until 2021 build year at the earliest. Therefore, budget for the pilots would likely have to come from the MD of Greenview and potentially its private sector partners.

In concert with activities to produce grant money, Valo/CFOC would use our advanced design software to quickly iterate designs and give high level costing estimates that are typical in the industry. Over the past few years, there have been significant technological changes in bandwidth demand. Valo/CFOC's approach is to deliver a plan that would take all technology advances and options to produce a roadmap to build a "Hybrid" network of different technologies to meet or exceed 100 Mbps synchronous speeds throughout the MD of Greenview.

Future phases of the MD of Greenview plan could be managed through the concept of a Fiber Working Group (FWG). The FWG would consist of key municipal district and community stakeholders and would meet monthly. The FWG would be chaired by Greenview and managed by a dedicated resource.

2.10.1 Utilize the MD of Greenview's Assets and Infrastructure

In order to build a fiber network throughout Greenview that has the widest reach possible, while minimizing the capital cost necessary, it is necessary to utilize the MD of Greenview's assets and infrastructure wherever possible. Such assets and infrastructure include District land, buildings, rights-of-way, and towers.

2.10.2 Budgetary Costing

Fiber optic network construction costs, like any civil construction, are highly dependent upon the conditions of the terrain that you are building with, the time of year you are building and the level of development in the area you are building. Average build costs on a per unit basis will vary significantly depending upon the variables involved in building fiber optic cable. Some of the specific variables driving build costs include:

- build approach – direct buried, ducted fiber or aerial deployment;
- number of road, utility and pipeline crossings;
- size and openness of right-of-way;
- size of fiber and duct being installed, if applicable;
- if aerial, pole make-ready and pole rental costs;
- quality of materials in the outside plant (e.g. our handholds have Tier 22 lids which essentially means you can drive across them);
- Level of development in build area (i.e. urban development versus rural);
- level of remediation required;
- make-up/consistency of the ground that must be plowed/drilled into; and
- amount of plowing versus drilling.

Some of the factors above are interdependent and can compound each other. To provide some indication of build costs, the following per unit ranges are provided:

- Back haul (middle mile) fiber construction incorporating both plowing and drilling with average number of road and pipeline crossings in largely unfettered loose soil: $30 - $36 per meter (assuming a 96 strand fiber).
- Back haul (middle mile) fiber construction incorporating plowing and drilling with higher than average number of road and pipeline crossings in tougher soil or tight right-aways: $34 - $45 per meter (assuming a 96-strand strand fiber).
- For Level 1 designs, FTTP builds are often quote as cost per premise passed. This rate can range up to $3,000 per premise passed in communities with difficult build conditions.

- The drop pricing from the curb or small hand hold “flowerpot” can range from $400-$1,800 per home depending on how and when the drop is built.
- Construction cost elements:
    - The cost of pipeline crossings can range from $1,500 - $3,500 per pipeline depending on conditions, depth and crossing requirements.
    - The cost of plowing duct can range from $9 - $18 per meter depending upon ground condition and right-away size/access.
    - The cost of horizontal drilling backhaul can range from $30 - $50 per meter, again depending ground condition and access.
    - Drilling in highly urban settings can range from $50 - $250 per meter.

2.11 Context and Background for a Pilot

The Pilot concept was successfully used by Red Deer County (RDC) in 2019 and has resulted in RDC putting in place a multi-year infrastructure plan with associated funding. During the pilot phase the County with its partners worked on a governance model plus the planning, design and costing for a multi-year rollout of wireless and fiber infrastructure to connect all communities and business/population densities throughout RDC. We propose the MD of Greenview undertake a similar planning, design and budgeting effort as part of its phasing of infrastructure construction.

CFOC/Valo envision that up to 3-4 of these "pilot" segments could be completed as part of a Phase 1 scope in 2020 pending any necessary approval and procurement processes. These pilot segments would need to be undertaken with Greenview and possibly private sector funding since the lead time on the public sector grant programs mentioned in Section 4 is typically 12-18 months.

In parallel with the pilot(s), the MD of Greenview would evaluate and select a course of action with regards to further connectivity infrastructure and the implementation of a fiber ecosystem. Options would be:

- Develop plans, publish them and Search for Private Sector Partner(s);
- Build and operate a public network for use by commercial, government and residential entities;
- Create a hybrid connectivity company or PPP (Public-Private Partnership) for connectivity infrastructure;
- Do nothing - do not proceed past the pilot projects.

2.11.1 Lifecycle Costs

A comment about lifecycle in relation to owning and managing the network. In the Fiber Ecosystem model, the wholesale services fund the ongoing maintenance of the network, so there are no on-going operating expenses for the MD. The wholesale operator should have to obligation to fund and perform the maintenance on the fiber and wireless infrastructure.

2.11.2 The Cost of Delaying

The MD of Greenview, like most districts and counties in rural Canada, finds itself in a difficult situation with relation to Broadband development. If we look back at the development of broadband services and technology over the past 15 years, it's difficult to believe that anyone could have predicted the vast impact that the internet now has on people's daily lives. What does the next 10 years have in store for governments, businesses and the residents within these communities? Also, the rapid spread of the COVID-19 pandemic has placed an exclamation mark behind the need for broadband services in our communities.

With all that being stated, it is difficult to quantify the economic impact of not implementing a plan and building a road map for investment for Broadband into the future. A Taylorwarwick report done for SouthGrow Regional Development Initiative (Southern Alberta) in 2018 states

that for every 1 dollar invested in Broadband infrastructure results in a Cost Benefit (CB) ratio of 3.17 dollars in benefits[1]. For the reasons already stated it's not a stretch to believe that the CB ratio has increased since this report was created just 2 years ago.

2.12 Recommendation

We recommend the MD of Greenview facilitate the creation of and fund fiber optic internet connectivity infrastructure in the municipal district. High-speed internet access is a critical service to all sectors of the market – residential, commercial, industrial and government. The provision of this critical service can no longer be left to the purview of the incumbent telco and cable companies. The MD of Greenview must build its own infrastructure to ensure that long-term access and availability of this service is available to all residents and businesses. We are not proposing that the MD go into the internet business. As discussed in Section 4 below, there are private sector solutions and providers that are willing to work in partnership with Greenview to put the MD's infrastructure to use on a professional and competitive basis. This partnership can create a fiber optic ecosystem within Greenview that both meet both public policy and private sector needs.

To demonstrate the viability of the ecosystem approach, we recommend that the MD of Greenview identify and undertake a "Phase 1" scope of work that is a mix of fiber backbone build, fiber-to-the-premise (FTTP) and possibly next generation wireless local access services that can be operated on a wholesale basis.

The benefits of this approach include:

- Start to address the most underserved regions with infrastructure;
- Put the market structure in place to build ecosystem;
- Align stakeholders to support and or use new infrastructure;
- Create CRTC and other grant applications for future phases of rollouts; and,
- Create Shovel-Ready projects available for Provincial and Federal Stimulus Funding.

However, we recognize the challenging economic environment created by the COVID-19 pandemic may limit capital availability for infrastructure investment in the short-term. However, we believe the COVID crisis also emphasizes the need for modern connectivity infrastructure for all communities not just metropolitan centers. It is very likely that the provincial and federal governments will create new stimulus and broadband infrastructure grant programs as a result of the current crisis. The MD of Greenview should work to create "shovel-ready" projects to take advantage of these programs. In order to leverage these stimulus and grant programs, the MD of Greenview should be prepared to deploy $2-3 million in capital within the next 18 months.

[1] https://8027113f-922d-49f1-8cab-0a74f30812a1.filesusr.com/ugd/a556b1_d4f116fe94904d519321a3d15ff22240.pdf

The logistics of putting a Phase 1 scope of work together can be used to create these shovel-ready projects and validate the assumption that grant and private sector capital can be leveraged.

Therefore, our recommendation is that two or three small FTTP builds be included in the first phase together with a backhaul segment and an engineering study for a whitespace wireless deployment. Our recommended combination of segments is as follows:

- FTTP build in Grovedale (Budgetary estimate: $660,426)
- FTTP build in DeBolt and/or a representative portion of Grande Cache (Budgetary estimate: $332,535 to $750,000)
- Whitespace Wireless Engineering study to cover Wanyandie East Co-op and Wanyandie West Co-op with high-speed wireless and VoIP/911 services (Budgetary estimate: $50,000)
- Backhaul build on a portion of the Highway 43 backhaul from Bezanson to Sturgeon Lake Cree Nation with a connection to Valleyview SuperNet PoP (Budgetary estimate: $2.4 million)

The total scope for this proposed Phase 1 would be $3.44 million to $3.86 million. This Phase 1 scope of work creates a significant amount of the fiber optics internet connectivity infrastructure that Greenview requires to realize its policy objectives.

2.12.1 Schedule

We believe that the connectivity infrastructure that we have described in this strategy is critical to both the quality of life for Greenview residents and the competitiveness of Greenview based businesses. As such, its construction should not be delayed past 2022. We know that all of the scope contained in this strategy can be constructed before the end of 2021. Therefore, it is a matter of priorities and what combination of Greenview funding, provincial and federal grant funding and private sector funding can be assembled to complete the connectivity infrastructure before 2022. A high-level gantt chart of a possible build out strategy may be found below.

ID	Task Name	Start
1	Strategy Review and Action Plan	Tue 5/19/20
2	Procurement and Contracting	Mon 6/1/20
3	**Phase 1**	**Wed 7/15/20**
4	FTTP Design and Permitting	Wed 7/15/20
5	FTTP Construction	Fri 7/31/20
6	Whitespace Wireless Engineering	Mon 8/3/20
7	Backhaul Design and Permitting	Wed 7/15/20
8	Backhaul Construction	Mon 8/31/20
9	**Phase 2**	**Mon 11/30/20**
10	Scope Definition & Funding	Mon 11/30/20
11	FTTP Design and Permitting	Mon 1/25/21
12	FTTP Construction	Mon 4/5/21
13	Wireless Engineering and Permitting	Mon 1/25/21
14	Wireless Construction	Mon 4/5/21
15	Backhaul Design and Permitting	Mon 1/25/21
16	Backhaul Construction	Mon 4/5/21

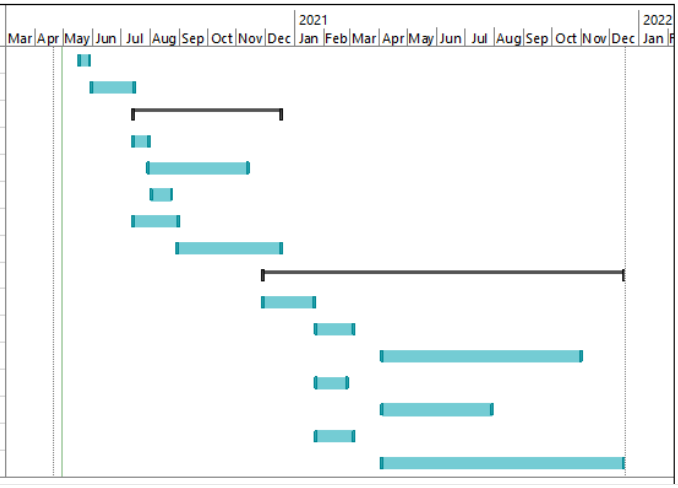


Figure 12 - Infrastructure Phases Gantt Chart

3 Technology Options

3.1 Current Technologies

The current technologies that are being used to distribute broadband services in the MD of Greenview can be divided into two broad groups:

- Wired (or wireline) technologies such as copper telephone lines (i.e. twisted pair), copper cable TV lines (i.e. coaxial cable) and fiber optic cables; and,
- Wireless technologies such as mobile telephones (i.e. LTE/4G), point-to-multipoint wireless radios, satellite and WiFi.

Both wireline and wireless technologies are being used throughout Greenview. However, each technology has its pros and cons and commercial dynamics.

3.1.1 Current technology analysis and comparison to needs analysis

Characteristic	Wired Networks	Wireless Networks
Construction	Wired networks involve either burying cable or hanging it from poles and it has to be constructed to each premise to be covered. Telephone (twist pair) networks are the most common wired network followed by cable TV (coaxial) and then fiber optic networks. However, copper cables (telephone and cable) are inferior technologies for delivering broadband services so any new network deployment should be done with fiber.	Construction of terrestrial wireless networks require radios distributed throughout the service area where those radios are attached to purpose-built towers or existing structures. The radios can be connected to each other wirelessly, but eventually the radios must be connected to a wired (typically fiber optic) network. Satellite based wireless networks uses satellites to bounce broadband signals from a ground station to a satellite receiver.
Build Cost	Wired networks are costly to construct because of the civil construction requirement to build long distances for backhaul network or the requirement to build through urban areas where minimizing disruption to roads, sidewalks and existing utilities is necessary along with the requisite remediation.	Terrestrial wireless networks can be less costly to build because of the fewer points of distribution. However, land acquisition and attaching the radio towers to a wired network is expensive and limits the coverage of wireless networks. Satellite wireless networks are extremely expensive to build.
Coverage	Coverage provided by a wired network only extends to those premises that are directly attached to the network.	LTE/4G – an antenna can cover 3-10 km^2 depending on frequency and placement. Point-to-multipoint – these antennas can cover hundreds of meters to 25 km but at that distance they must be line-of-sight between the tower and a receiver

		radio meaning there can be no trees or obstructions in the way. WiFi coverage is 150-300 feet. WiFi is not intended as a residential or business broadband delivery mechanism but instead it create a local wireless network within a home or facility. Satellite coverage areas can be extremely large depending on the number of satellites deployed the height of their orbits.
Service Cost	Wired broadband services are less expensive on a "per Mbps" basis that wireless solutions. A 1 Gbps residential service that retails for $100 per month results in a per Mbps cost of $0.10 / Mbps. A 100 Mbps cable TV broadband service costs 10X as much at $1.00 / Mbps. Wired broadband services generally provide a very high, or in some cases unlimited, cap to the amount of data that can be downloaded.	Wireless broadband services are either much more expensive per Mbps (i.e. the typical residential LTE service is $100 per month for 25 Mbps, or $4.00 per Mbps) or they are priced by the amount of data that can be downloaded (i.e. "data cap") rather than the speed of the service. For instance, a mobile phone company will offer a 2 GB package for $45 and once you exceed 2 GB of downloaded date your service either slows down considerably or you are charged a much higher rate per unit of downloaded data. Satellite broadband services are typically low bandwidth (i.e. 5-10 Mbps / 0.5 Mbps), low "data caps" and expensive (i.e. start at $100/mo)

Performance	Commercially available services (download/upload):
	
	• Telephone (twisted pair): Up to 25 Mbps / 3 Mbps
	• Cable (coaxial): Up to 600 Mbps / 15 Mbps
	• Fiber:
	  o Residential: Up to 1 Gbps / 1 Gbps
	  o Business: Up to 10 Gbps / 10 Gbps
	  o Enterprise: Up to 100 Gbps / 100 Gbps
		Commercially available services (download/upload):
		
		• LTE: Up to 25 Mbps / 3 Mbps
		• Point-to-Multipoint: Up to 300 Mbps / 150 Mbps depending on frequency and distance. Typically offered at LTE speeds.
		• WiFi: Up to 7 Gbps over very short distances (i.e. 10 m)

Reliability	Generally, very reliable. However, telephone and cable broadband services degrade rapidly with distance from the central office. Fiber most reliable over distance.	Unreliable based on number of users in the coverage area, distance from tower and local weather conditions and other obstructions

It is clear that the MD of Greenview needs both wired and wireless technologies as widely available throughout the MD as possible. Each technology has its specific applications and strengths. For "fixed" applications such as broadband to residences, businesses, government and industrial sites, a fiber optic wired solution provides the best performance, reliability and cost of service over the long term. Constructing copper networks (whether telephone or coaxial cable) is no longer a viable wired network solution because they do not offer a material construction cost savings (if any savings at all) and they are technically inferior to fiber optic cable.

Wireless broadband (including mobile phone services) is the only solution for broadband service delivery on the go or to sites where the civil construction costs for wired services are untenable. Currently, the technical performance of wireless services does not match wired services – although with the next generation of mobile technology this gap will be narrowed. Notwithstanding wireless broadband advances, the performance and service cost of wireless services will continue to be less attractive than wired services.

The two broadband technologies are symbiotic in that wireless broadband requires wired networks to connect their wireless antenna locations and wired networks require wireless networks to extend their reach where it is not cost affordable to build wired connections.

Each ward within the MD has those areas that are appropriate for the construction of fiber optic wired networks and parts of the ward where a wireless network solution makes the most sense. This MD of Greenview Fiber Optics Internet Connectivity Strategy considers the appropriate uses and relative merits of each broadband technology and makes its recommendations on this basis.

3.2 Future Technologies

The technologies that will be relevant to the MD of Greenview in near to mid-future (i.e. 2-10 years) include:

- **Delivery technologies** involve new ways to deliver broadband services to the premise. Future delivery technologies include mobile 5G networks and Low Earth Orbit satellite networks and White-space wireless networks.
- **Application/service technologies** are technologies that leverage high-speed broadband to deliver services to the end-user. Future application/service technologies especially relevant to Greenview include a group of technologies called "Smart City" technologies that are delivered or enabled by wired and wireless broadband networks.
- **Deployment Technologies** are technologies that utilize a new approach to deploying wired or wireless networks. Pipe-in-pipe is a deployment technology that uses defunct or operational pipe networks to deploy fiber optic cable.

For wired networks, fiber optic cable is the only relevant solution we see in the long term (i.e. 25^{+} years). All the wired network technologies in the research labs today are not looking to replace fiber optic cable, but rather they are researching how to transport more data down each fiber strand at less cost. For this reason, wired fiber optic networks are a long-term network infrastructure solution for the MD of Greenview.

Wireless networks have a few new technologies that are here or on the relatively near horizon – 5G wireless networks and Low Earth Orbit Satellite networks and Whitespace radio systems.

3.2.1 5G Wireless

5G or "fifth generation" refers to the next generation of mobile wireless standards and technologies that are just starting to be rolled out by the mobile phone companies. 5G will enable a fully connected and mobile society, and deliver unprecedented benefits to citizens, industry and government.

While current networks focus primarily on data transmission (i.e. throughput), 5G networks are being designed to not only provide faster transmission speeds but also to ensure more widespread coverage, to handle more connected devices and traffic types, and to support different use cases. 5G will connect infrastructure, vehicles, sensors, buildings, machinery, and people in a way that will change the way we work, play, and interact.

Some of the key benefits of the 5G standard are:

Superfast speeds

From a peak speed perspective – meaning under ideal conditions – 5G is expected to have a peak download speed of 20 Gbps. That is 20 times faster than the 4G peak download speed of 1 Gbps. To put that in context, at peak speed you could download a standard feature-length movie over a 5G network in less than a second, or 20 movies in the time it takes you to download one movie at peak 4G speed.

While peak download speed represents what could occur in ideal conditions, it is important to look at what kind of speed a user should reliably expect in average conditions. While speed can be affected by many factors, the 5G benchmark for reliable download speed per user is a minimum of 100 Mbps. While lower than 5G's peak download speed, it is still 10 times faster than the reliable download speed per user benchmark for 4G.

Ultra-low latency

Latency refers to the time it takes for data to get from one point to another over a network. Today's networks allow us to experience multimedia and connect with other people and machines wirelessly, but the performance of these interactions are at times affected by transmission delays.

The 5G benchmark for what is referred to as Ultra-Reliable Low-Latency Communications (URLLC) is a minimum of 1-millisecond; much lower than the 50-millisecond latency benchmark for 4G networks. URLLC will allow us to interact and connect in real time. This opens up a vast world of possibilities that did not exist prior to 5G. Examples include:

- Telemedicine, where doctors using connected robots will be able to remotely examine, test, diagnose, and even perform surgical procedures on a patient;
- Emergency response, such as firefighting robots that can be remotely operated to rescue individuals and put out fires without endangering the lives of human firefighters; and
- Connected cars, which will be able to receive critical data from sensors embedded in roadside infrastructure, buildings, and other cars, enabling drivers or autonomous car systems to take swift action to avoid danger.

URLLC will also greatly enhance the capabilities of augmented and virtual reality which will be able to match human interaction with these digital environments in real time. This will better enable Augmented Reality / Virtual Reality use for education and training purposes. When paired with other technologies that permit users to feel the actions of another – the so-called "Tactile Internet" – training professionals will be able to instruct and correct the actions of the trainee simultaneously.

Massive connectivity

The number of physical devices, or "things", connected to the internet (commonly referred to as the Internet of Things, or IoT) is growing exponentially. While estimates vary, the number of IoT devices – fixed and mobile – is expected to jump from tens of billions to hundreds of billions over the next decade. While not all connected devices require superfast speeds or ultra-low latency, the sheer number of connections will strain the capabilities of today's networks.

If you have attended a large gathering such as a concert or a sporting event, you may have found it was difficult to connect to the cellular network, or that service was not completely reliable. That is because today's networks are limited in the number of connections they can support within a defined area. For IoT to reach its full potential, the connection density of our wireless networks will have to increase dramatically.

5G networks will be designed to support large numbers of connected physical devices, even in confined spaces. The benchmark for connection density is 1 million devices per square kilometre, compared to around 2,000 devices per square kilometre for 4G.

Low power consumption

More efficient power consumption by connected devices, both when sending and receiving data and while in sleep mode, is another key component of the 5G specification. In meeting this specification, instead of requiring a wired power source, some wireless modems will be able to run on battery power for up to 10 years. This is particularly

important when deploying massive numbers of sensors and other physical devices as it reduces the costs of installation, maintenance, and replacement, and enables deployment in areas where wired power sources are not readily available.

While the above are but a few of the performance benchmarks for 5G networks, they illustrate the transformative nature of 5G.

Conclusions for the MD of Greenview

The widespread implementation of 5G wireless networks will provide a significant increase in the speed and quality of mobile broadband services available in the market. However, there are several factors that will influence when 5G services are delivered in Greenview and the effect they will have in the market:

- More Towers and Antenna Sites – The area covered by a typical 4G antenna is a 1-3 km radius around the tower. With 5G that "cell" size can shrink to 300-500 m. This means there will be many more antenna sites required for a full 5G rollout. This fact also means that Telcos will start the 5G deployment in large metropolitan centers. It took approximately 5-8 years for Telcos to rollout 4G out to rural and regional parts of Canada. It is very likely that it will take at least as long for the 5G rollout.
- Fiber Availability – in order for a 5G network to deliver the performance metrics described above it is an absolute requirement that each 5G antenna site is either connected to a fiber network or no more than "one hop" from a wireless network. If the MD of Greenview has invested in and facilitated the expansion of fiber throughout the municipal district, then that fiber could be available for the Telcos to use and thereby reduce the capital investment required by them to role 5G out in the municipal district. The net effect will be that 5G services will be available sooner than if there is no fiber network in the region.
- Wireless commercial model – When 5G does arrive it is very likely that it will be priced using the mobile telephone pricing model. That means the price per Mbps will be much higher than wired fiber optic networks and it is likely there will be data caps to the amount of data that can be downloaded. Therefore, it is very unlikely for mobile 5G networks to replace fixed fiber optic networks in the medium to long term future.

3.2.2 Low Earth Orbit Satellite

Low Earth Orbit (LEO) Satellites are satellites that are deployed no further than 2,000 km from the earth. Most of the satellite deployed today are LEO satellites. One of the attributes of LEO satellites is that they are only able to cover a portion of the earth's surface at any point in time. Therefore, it was conceived that a network of LEO satellites was necessary to provide complete coverage of the earth at any point in time. One of the first successful commercial satellite networks was the Iridium satellite phone network. The first Iridium satellite was launched in 1997. Today the Iridium network provides

complete coverage of the earth for low-bandwidth data and telephone calls with 82 satellites.

The latest incarnation of a LEO satellite network to provide global access to internet services is the Starlink satellite network by SpaceX. The attributes of the Starlink network is as follows:

Thousands of Satellites

The first iteration of Starlink plans to launch approximate 1,600 small (500 lb) satellites into orbit. The satellites will be connected to ground stations and to each other via laser links. The extremely large number of satellites will enable high speed bandwidth (i.e. greater than 600 Mbps) to any site on earth that is covered by the satellites. As of January 2020, there are over 300 "first generation" Starlink satellites in orbit. These test satellites do not have full functionality such as the satellite to satellite laser communication system.

No Handsets

The Starlink receivers will be about the size of a pizza box. This precludes the use of handsets to access Starlink internet. However, it may be practical to have one of these receivers attached to a home or building.

Uncertain Coverage Schedule

Starlink has published very little regarding the exact schedule of their deployment and what parts of Canada will be covered first. It is likely that the roll-out will take longer than expected. Some predict that Starlink's initial services will be backhaul services to a ground station in a region and the 'last mile' service will be provided by more traditional wired or wireless networks.

No Pricing

Starlink has stated that its plan is to offer 'affordable' broadband internet to rural and regional markets, but it has not set any expectation to what their internet service will cost.

Conclusions for the MD of Greenview

It may be tempting to believe that a LEO satellite network like Starlink will solve the dearth of internet services in rural and regional markets like the MD of Greenview. However, there are significant technological, market and regulatory risks to waiting for such a satellite network to launch commercial services. Some of the risks facing LEO satellite networks are:

- The technologies at the core of these networks all have to work exactly as planned in order to provide the speed and breadth of service that they were designed for. Phased array antennas and laser satellite-to-satellite communications are just a couple of those innovative technologies.

- It is estimated that Starlink will cost over $5 billion to deploy. It is possible that Starlink changes or scales back its plans before rollout. Alternatively, the network could run into financial difficulty or even go bankrupt.
- Starlink has filed for permission to launch a network of up to 42,000 satellites to meet future speed and capacity requirements. There is a significant controversy around the environmental impact of such a vast network. Furthermore, astronomers and astrophysicists are very concern about what the Starlink satellite network of thousands or tens-of-thousand of satellites will do to earth based observatories.

3.2.3 Whitespace Wireless Technology

Whitespace wireless technologies are a subset of wireless broadband technologies that utilize wireless spectrum that was previously used for broadcast television signals. With the advent of digital TV not as much spectrum is required for TV broadcasts. This reduction has created "white spaces" in the spectrum that can be utilized for other purposes. It turns out the characteristics of this part of the radio spectrum is especially suited for broadband applications.

They offer a unique integrated gigabit fixed wireless point to multipoint solution providing the technological edge to fixed and mobile operators who want to:

- Expand existing networks
- Take advantaged on pre-fiber first mover advantage
- Offer wireless triple play
- Offload mobile traffic
- Deploy high speed capacity backhaul.

With this additional radio spectrum operators can provide all the services that residential and SOHO users are looking for today – gigabit ultrafast broadband, 4k digital TV content, VOIP telephony, VOD, Telemetry and so on.

Suited for Backhaul and Last Mile

This Fixed Wireless system is a last mile solution that can also be used for back haul for other available technologies. It enables the operator to extend its service range or penetrate underserved and hard to reach markets. It provides a cost-effective alternative to FTTH, cable and fixed LTE deployments.

Integrates to Existing Standards

This is a bidirectional microwave wireless communication system. It supports several access platforms ranging from Docsis / EuroDocsis to LTE and 5G. The LTE, 5G or Docsis access platform is directly connected to the AIR base station which is communicating with the end user's equipment.

Application Assumptions and Budget

The assumption that the end goal for a tower deployment is to cover more than 95% of households in any area with a solution that far exceeds the Universal Broadband Objective of 50 Mbps download and 10 Mbps Upload.

The CAPEX investment depends on several factors, but this solution would be a combination of DOCSIS 3.1, 13 GHz frequency range, Harmonic CableOS for the headend and a standard cable modem end user equipment.

The combined price for all the base station equipment combined is approximately $315,000 for a 360-degree point to multipoint solution plus the cost of a tower which would be between $100,000 and $250,000 depending on the necessary height. This solution would cover up to 1,000 households in a 40 kilometer distance from the tower with a 100 Mbps Download and 100 Mbps Upload speed on a line of sight basis.

Current Deployments

Whitespace technology is being rolled out around the world as spectrum is being made available. This technology has been commercially deployed this technology in the following countries:

- Slovenia – Triple Play (Internet, IPTV and VoIP)
- Slovakia – Triple Play (Internet, IPTV and VoIP) for 30,000 subscribers
- Russia – IPTV and Internet for 6,000 subscribers
- Spain – IPTV and Internet for 10,000 subscribers
- Kazakhstan – Triple Play (Internet, IPTV and VoIP) for 4,000 subscribers
- Mauritius – Triple Play (Internet, IPTV and VoIP) for 15,000 subscribers
- Canada, Annapolis Valley, Nova Scotia– Internet and IPTV delivery.

Conclusions for the MD of Greenview

Whitespace radio broadband solutions are relatively new to North America and offer a significant performance improvement over existing wireless broadband solutions

Opportunities and benefits include:

- Last mile connection speeds for new Whitespace wireless deployments can be up to 500 Mbps symmetrical service (i.e. upload and download). This is a phenomenal improvement over existing fixed wireless broadband solutions.
- These whitespace wireless networks can be built by or in partnership with the MD of Greenview and incorporated into the connectivity infrastructure. In such a case the wireless services would be offered to the ISP market as a wholesale service.
- Whitespace wireless towers connected to fiber optic backbone networks creates the exact synergy necessary to maximize broadband coverage in the municipal district.

3.2.4 Smart City

Fiber is essential to support the development of Smart Cities. Defining a Smart City is not easy as it is broad in scope and requires forecasting the development of new technologies. Also, few of those involved in the various aspects of what makes up a Smart City have the same view of what it means from a holistic point of view.

Generally, a Smart City is one that uses information and communications technology to manage the entire municipality with the goal of making it more efficient, responsive, and environmentally sensitive, for the benefit of the people, the economy and the city itself. Following is a list of the services involved in a Smart City.

Communications

Communications is the central focus of smart cities - communications among city departments and organizations, within the city for residents and visitors and links to the outside world via data (Internet), voice (landline, cellular and VoIP) and video entertainment (IPTV and OTT). Proper communications infrastructure will require a city-wide high-speed fiber backbone with sufficiently fast connections to the worldwide Internet backbone so that neither capacity nor speed is an issue. The fiber backbone provides the connectivity for all options listed below as well as fiber for citywide ISP connections to businesses and residents.

Progressive cities like Santa Monica, CA have built their own city backbones that provides for city-wide communications for all City uses and provides fiber and or connectivity to other service providers and businesses in the city. The Santa Monica CityNet backbone, for example, also serves FiOS FTTH customers and Spectrum CATV networks. In addition, it connects many businesses, large and small, with up to 1 Gbps service.

In an urban area, Fiber to the Premise (FTTP) is expected, although some alternative services like future generations of wireless may provide adequate capacity (with sufficient fiber backhaul). Fiber backbones from urban centers to rural settings (Fiber to the Tower) may be used with wireless to connect users.

The fiber backbone provides connections for multiple wireless service providers, both cellular and WiFi, to ensure a competitive marketplace. With the advent of small cells, any utility pole, streetlight or traffic light can provide quality wireless services without the unsightly cell towers or sites that urban dwellers dislike, even though they want state of the art wireless communications. Fiber and backbone capacity is needed to provide DAS (distributed antenna systems) services to large buildings both private and public, college campuses and sports facilities.

Building a properly designed physical backbone also allows multiple Internet Service Providers to compete for business on both price and service level.

City Services

Information about the city and city services for the citizens should be online and accessible. All relevant services should be able to be done online rather than in person. The City of St. Albert is finding that many departments are either using or moving toward cloud-based applications and other applications requiring high-bandwidth to support their systems. These applications supported several programs and city services, such as registrations, municipal permitting, information sharing, security, remote/web-based meetings, and more.

Transportation and Traffic management

Smart traffic signals, video and radar monitoring of traffic and parking, the creation of vehicle-to-vehicle and vehicle-to-infrastructure communications environment will all facilitate autonomous traffic in the future. Public transportation can be fully managed online; payment can be made by riders wirelessly.

Autonomous vehicles will have numerous onboard sensors to process information while moving on the streets with regular cars. Engineers involved in developing cities of the future believe that having cars talk to each other and with numerous city services - smart traffic signals, traffic signs, information from video surveillance as to the location of other vehicles, pedestrians, bicyclists, etc. - will simplify the task of the vehicle itself and make its operations safer. Data required to process and share all of this information will be

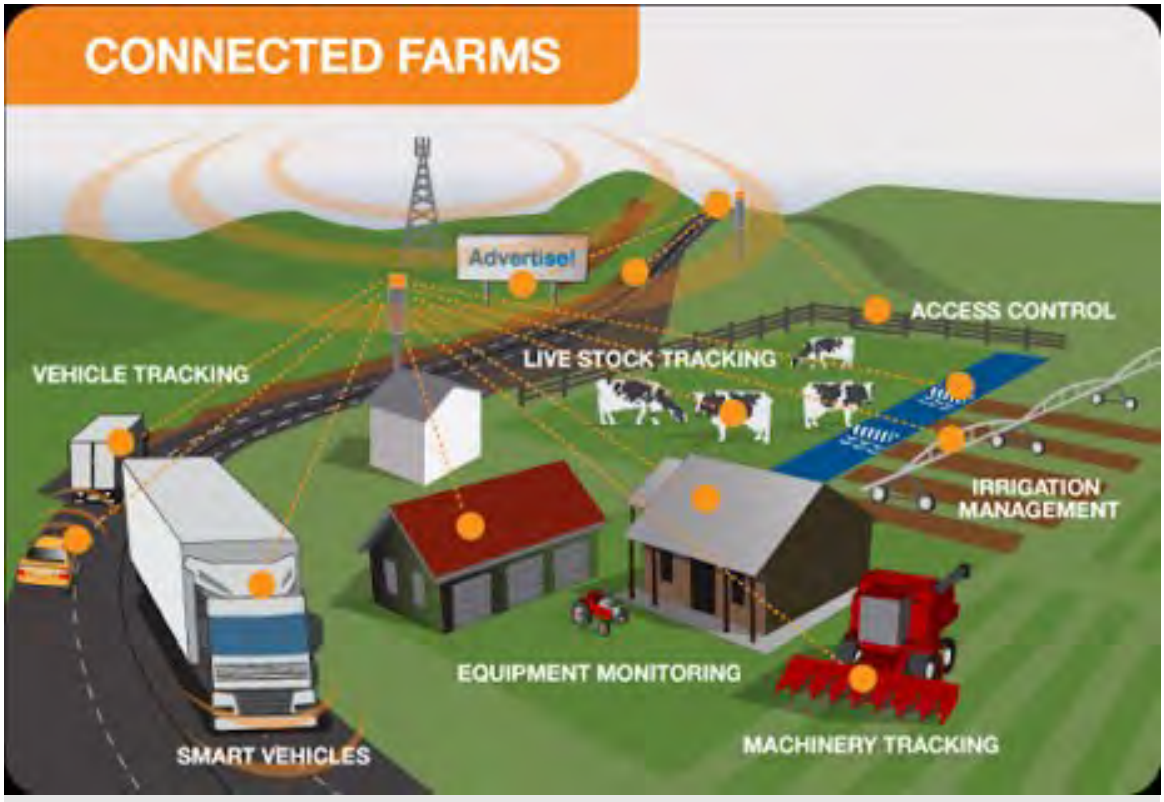
exponentially larger than anything we currently know. Comprehensive networks with fiber backhaul will be essential to successfully trial and manage these futuristic cities.

Public Safety Communications

Using communications to make the public safety divisions -fire, police, ambulance, etc. - more responsive and more responsible. This includes wireless communications on reserved frequencies and perhaps a dedicated WiFi network throughout the city.

Precision Farming / Agritech

Agritech is the use of innovative technologies in all forms of agriculture. The objective of Agritech is the improving yield, efficiency, and profitability. Agritech can be products, services or applications derived from agriculture that improve various processes. Some of the technologies and processes utilized in Agritech include: Drones; IoT-based sensor networks; Automated irrigation; Light and heat control; Intelligent software analysis for pest and disease prediction, soil management and other involved analytical tasks. All these applications require ubiquitous and reliable access to the internet.



Surveillance and Sensors

Traditionally video surveillance has been the focus of city-wide surveillance. These videos have been instrumental in preventing and solving crimes in many cities by identifying people. New types of sensors are being deployed, including gunshot sensors that can detect gunshots and locate the source using sophisticated audio techniques.

Now the usefulness of those cameras can be extended to tracking traffic for smart vehicles and helping control the movement of traffic. As semi- and fully autonomous vehicles begin using public streets, car-to-car and car-to-city communications are expected to be needed to facilitate this transition.

Education

Smart cities connect schools, libraries, and the citizens to share information and optimize the educational experience for all. Students learn to use the Internet in ways that facilitate their work in high-tech companies in the future.

Telehealth

Telehealth involves the use of telecommunications and virtual presence technologies to deliver health care outside of provincial health-care facilities. Telehealth enables the remote diagnosis, management and treatment of many types of ailments. Telehealth enables remote residents to receive care that would not be available to them otherwise due to logistical or cost barriers.

Public Services

Public Services enables monitoring and control of public utilities - electrical (generation and distribution as well as renewable), water, sewer, gas, etc. - to make them more efficient and economical. The electrical "smart grid" is becoming smarter, integrating alternative energy sources with traditional electrical generation and distribution. With cities that have many business and private solar system for example, integrating those sources and smoothing out the use of electricity is leading many to assume that local storage, batteries usually, can be used to store excess energy during the day for use at night. Managing these kinds of facilities requires sophisticated grid management, often down to the local level - called micro-grids.

Support for Business

The economy of a city depends on a healthy, expanding business base. This goes beyond just providing high speed Internet to businesses, it means offering high bandwidth services (up to 40 Gbps) to data-centric businesses and even data centers located in the city. Cities should have plans for tech incubators and services to support and facilitate new businesses locating there.

The Internet of Things (IoT)

IoT is an overused and little understood term that generally implies the interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data. A variety of ‘things’ that communicate over the internet, creating a communications environment that facilitates the development of logical connections for improving the quality and economics of services. It implies that Internet connections, wireless and landline, are everywhere and cheap enough to allow connecting all sorts of devices when we all know this is not currently the reality of most towns and cities.

Fiber as a Sensor

Fiber optic cables are suitable for a wide variety of applications that are capable of monitoring temperature, strain, acoustics and pressure. With cables suitable from 200C to 700C and pressures from ambient to 50,000psi, fiber optic cable cables can cover the most extreme of environments. Fiber can be installed in the roadbed to be used as a sensor to pick up traffic counts, speed measurement and headway measurement.

Fiber optic cables have been used for fire detection, vibration monitoring, industrial plant temperature sensing, hydrological studies of streams, lakes, reservoirs, rivers and canals, turbine temperature sensing, temperature and strain of curing concrete, temperature gradients in soil, pipeline leak and intrusion detection, cable strain monitoring, building intrusion detection, steam plant temperature and strain sensing and many more.

As driverless cars take to the roads, data generation expands exponentially — with that, comes the need for fiber infrastructure to support it. Autonomous vehicles will require widespread low-latency wireless connection to fiber networks and data centers, according to Data Center Frontier, and Intel estimates that autonomous cars could generate 4 terabytes of data per day. The rise of autonomous vehicles will demand more data centers and more robust fiber networks.

Smart Economy

The elements and technologies of a Smart City all contribute to an environment where both the citizens and local companies will find opportunities for developing new ideas that benefit from the Smart City services and facilitates entrepreneurship and operation of commercial entities.

Data Centers

A Smart City generates and uses data – enormous volumes of data - to become and stay smart. Doing so requires a significant sized data center with sufficient storage, computing power and communications to handle the quantities of data generated, analyzed and transmitted. Such a data center can be a city facility, or a cloud service hosted in the city. Data centers require big, fast Internet connections, usually with options for the data center operators to bring in their own backbone connections.

We include a data center as a required city service because Smart Cities are built on data. A large city could require a data center approaching the size of the mega-data centers being used by the large Internet companies or cloud service providers. Smaller cities need smaller data centers or cloud service providers. Provision for acquiring, analyzing, utilizing and storing such large amounts of data requires planning for facilities and the personnel to operate them as well as sufficient communications services to handle the massive amounts of data involved.

Partnerships

Smart cities require cooperation. Some of the services mentioned already exist in many cities but often are owned and operated by different entities. Duplicating resources is costly so sharing of resources, especially backbone fiber, is recommended, with appropriate compensation, whenever possible. For instance, a single streetlight can provide lighting, video and/or radar for surveillance and traffic management, WiFi for private and public use including vehicle communications, locations for small cell telecommunications, weather and pollution monitoring and other yet unforeseen services.

Conclusions for the MD of Greenview

The collection of Smart Cities technologies are the solutions that the MD of Greenview can put in place once it has access to a fiber network that is supported by next-generation radio solutions. While we acknowledge that the Fiber Optics Internet Connectivity Strategy is about creating this broadband infrastructure, we felt it important to include some key examples of what applications are enabled by this infrastructure.

3.2.5 Pipe in Pipe

Pipe-in-pipe is a deployment technology that uses defunct or operational pipe networks to deploy fiber optic cable. In principle, any pipe network can be used. Fiber has been deployed through unused water pipe, storm water pipes, gas pipes and active water distribution pipes.

Atlantis Hydrotec

Atlantis Hydrotec is a ‘pipe-in-a-pipe’ solution in which a special purpose, small-bore ‘Messenger Pipe’ is inserted into existing water pipelines or similar for the purposes of installing ultra-fast fiber optic communication cables.

Once the Atlantis Hydrotec solution has been installed, it is possible to install a fiber-optic communications cable within the special purpose 'Messenger Pipe' which is designed to fully isolate the cable from the water, meaning that the cable never comes into contact with the water.

Whilst Atlantis Hydrotec is designed specifically for water, it is perfectly suitable for use with other liquids, including distillates and gas.

This simple but effective solution overcomes the difficulties associated with more conventional FTTx delivery solutions: specifically, the problems relating to digging up roads and driveways to the building, costs of excavation and time to install the fiber.

- There are variants of Atlantis Hydrotec pressure fittings to suit all pipe sizes and pipe material
- The Atlantis Hydrotec pressure fittings interface with industry standard pipe saddles or flange fittings
- All 'wet-parts' are water industry approved and certified as safe to use within potable water networks by WRAS and NSF

- Fiber provides a fully future proofed solution with ultra-fast connectivity suitable for all Next Generation communications and SMART Water Network requirements.
- The infrastructure is already there - so why not us it? Water pipes already link Water Company asset, communities and businesses so they provide an ideal ready-made conduit for providing next-generation true fiber communications exactly where they are needed
- The Atlantis Hydrotec system is particularly appropriate for extra-urban and rural locations
- Installation is primarily trenchless, so it is rapid, cost-effective, and achieved with a bare minimum of civil works and associated disruption, plus it is a very green and eco-friendly technique.
- Uses are many and may include:
  - High capacity data links
  - True-fiber communication links for broadband access; particularly in hard to reach rural areas
  - Water company control, monitoring & telemetry
  - Evidential grade CCTV for enhanced asset protection and new generation homeland security measures
  - Distributed & real-time pipe internal condition monitoring and leak detection combined with asset perimeter and access road security.

Current Deployments

Atlantis Hydrotec pipe-in-pipe deployments have taken place in the following jurisdictions:

- Anacortes Washington – Leak detection monitoring, Intrusion detection and FTTP
- Muscat, Oman – Leak detection monitoring and FTTP network
- Milan, Italy - Leak detection
- Vic, Spain - Leak detection monitoring and FTTP network
- Priston, United Kingdom - Leak detection monitoring and FTTP network

Conclusions for the MD of Greenview

Pipe-in-pipe deployment technologies provide another means of building fiber optic infrastructure will minimum disruption to civil infrastructure and ideally at a lower cost of traditional buried or aerial deployments. Pipe-in-Pipe technologies also provide the added capability of leak detection in the networks in which they are deployed. Such leak detection is a valuable tool in managing and maintaining water networks. These pipe-in-pipe technologies are not applicable to many fiber network builds due to the nature of the water infrastructure and/or the topology of the network, but where requirements, capabilities and applicability line up they can be an effective deployment tool.

4 Business Models, Governance and Funding

In our experience, a regional broadband solution must involve parties from both the public and private sectors. Regional districts, urban municipalities (towns, villages), the network operator, network builder, possible retail service providers, and possible private investors are all parties that could be a part of a regional solution. In recognition of this, we have created a fiber ecosystem model that can incorporate any and all stakeholders. We have retained legal counsel specializing in public-private structures and the related infrastructure projects, including fiber optic infrastructure, that have been successfully completed. While this work is ongoing and the model continues to evolve, we present this approach and model below followed by possible sources of funding to implement the model.

4.1 Create a Fiber Ecosystem

Building an ultra high-speed internet connectivity network is only part of the work necessary to ensure that the MD of Greenview's businesses and residents have access to superior yet competitively priced internet and communication services. On top of the infrastructure it is critical to build a fiber ecosystem that will deliver the services that the market demands while providing as much choice and competition as possible. We believe the solution is to build the communication infrastructure, if desired share ownership with the MD, and then operate that infrastructure in a manner that enables competition and choice over time on the network. The connectivity infrastructure will likely integrate both fiber and wireless technologies. There are different options as to how to approach ownership of the infrastructure. In fact, it is common in modern telecommunication networks that they are an interconnection of various components each with potentially different owners. However, we believe that it is how a regional network is operated and governed that aligns it with the policy and market outcomes that Greenview is seeking. A high-level description of a possible the MD of Greenview ecosystem model is outlined below:

1. Dark Fiber and Wireless Connectivity Infrastructure – At the core of the regional network is the fiber and wireless infrastructure that provides connectivity throughout the municipal district, not just to its largest community. In rural and regional markets like the MD of Greenview, large geographic areas together with sparse population and business densities make it necessary to leverage both public and private capital to build this connectivity infrastructure. The MD of Greenview has a role to play through facilitation and direct investment in the connectivity infrastructure. The primary objective is to drive the fiber as far as possible into the municipal district to create a fiber backbone and then enable existing and net-new wireless infrastructure where fiber is not practical. Existing fiber infrastructure can be utilized where it is commercially available and leads to fulfilment of the MD of Greenview's objectives. An engagement with existing wireless providers to determine how Greenview's activities might support their wireless services to non-fiber-to-the-premise areas is also undertaken during this time.

2. Wholesale Internet Service Provider (ISP) – Once the connectivity infrastructure is in place, it should be operated in such a manner to provide the service provider market whole access to this essential infrastructure. The degree to which the infrastructure is operated on a open access basis and the timing of open access services is influenced by capital structuring and market start-up constraints. Nonetheless, large geographic areas together with sparse population and business densities mean that economies of scale have to be created to ensure services are offered throughout the municipal district. We propose those economies of scale are created by a single wholesale ISP operating the network. This single wholesale ISP installs electronics on the fiber (i.e. "lights" the fiber) and provides wholesale internet, bandwidth, IPTV and VOIP telephony services to Retail Service Providers (RSP). These RSPs will then own and manage the relationship with the end customers. Utilizing this approach effectively creates "open access" connectivity infrastructure in the MD of Greenview.

3. Retail Service Providers (RSP) – Part of the MD of Greenview's objectives for creating connectivity infrastructure include ensuring that critical internet services are available throughout Greenview and ideally having competitive services throughout the network. This proposed ecosystem model is designed to enable competitive RSP services. In order to encourage competitive services, the wholesale ISP must exclude itself from the RSP market. While the infrastructure is being built out it may be necessary to assign a 'preferred' RSP that has the obligation to provider services throughout the network and in exchange is granted an exclusivity for a short period of time. However, the clear policy direction is creating a market for competitive RSP services on Greenview connectivity infrastructure.

We believe the fundamental building blocks of the fiber ecosystem presented above provide a viable market structure for creating connectivity infrastructure within the MD of Greenview. Possible approaches to ownership and governance; stakeholder engagement and funding are explored below.

4.2 Ownership and Governance Models

The majority of the capital costs required for building and operating fiber connectivity infrastructure are the actual civil construction of the fiber and wireless infrastructure. For municipal districts like Greenview, the challenge is to ensure there is adequate infrastructure in place to serve residents and businesses throughout all the MD. Once capital for the connectivity infrastructure is in place it is possible for a private sector wholesale operator to build a viable business offering wholesale services on the infrastructure, creating a 'market' environment. As such we believe it is appropriate to engage a private sector partner to act as the wholesale ISP and provide wholesale services on the network. Therefore, we will restrict our exploration of different ownership and governance models to the connectivity infrastructure only.

There are several approaches to structuring the ownership and governance of the connectivity infrastructure which can be summarized as follows: The connectivity infrastructure could be built leveraging existing privately owned networks; a new proprietary network can be created that is purpose built to serve as the MD of Greenview's connectivity infrastructure; a strictly government owned network could be created or a hybrid 'public-private' partnership model can build out the network infrastructure. Each mode is explored in detail below.

4.2.1 Build on Existing Networks

The fiber ecosystem model proposed is intended to be flexible and adaptable to involve any existing networks and local service providers that may exist. The challenge with building upon existing networks is that to realize all the potential benefits of the ecosystem model a single wholesale operator must operate and offer services on the entire network. The single operator approach ensures consistency of service and price across the network. However, the owners of existing network segments typically operate them on a proprietary basis and are not incented to invite competitive services onto their infrastructure. Therefore, the only practical opportunity to leverage existing network infrastructure is when the network owner is willing to offer some or all of the capacity of their infrastructure to the wholesale ISP to operate and offer wholesale services upon.

In addition to the commercial challenges of using existing connectivity infrastructure, currently in the MD of Greenview there is no single existing fiber or wireless network that provides the desired coverage of the municipal district.

Therefore, while it is possible to assemble and build upon existing networks to create the connectivity infrastructure that the MD of Greenview requires to meet its policy mandate, there are some challenges with this approach. This approach would likely take the form of acquiring or leasing capacity on existing networks and aggregating that capacity into a corporate entity with the mandate to hold all of the necessary connectivity infrastructure to meet Greenview's needs. This special purpose entity would look like a proprietary or public-private partnership described below.

4.2.2 Proprietary Network

Under the proprietary network model an existing entity or a new special purpose entity could be assigned the rights and obligations to build, lease or assemble the necessary connectivity infrastructure to meet the MD of Greenview's connectivity mandate.

Assuming this proprietary network would be developed under the fiber ecosystem model that we propose, this proprietary network company would be responsible for assembling and making available the necessary connectivity infrastructure to the designated wholesale ISP. The wholesale ISP would then light the network and offer wholesale services to the retail service providers.

Under this model the assets of the network would be owned by the private sector shareholders or unit holders of the special purpose entity. As discussed elsewhere in this report, the rural and regional nature of the MD of Greenview means that public capital of some form (loans, grants etc.) will be required to build the network to the extent necessary to meet the MD of Greenview's connectivity mandate. The lack of population and/or commercial density throughout many parts of Greenview means that the MD cannot support purely privately funded investments in connectivity infrastructure in many areas within the municipal district. The necessary contributed public capital can be sourced from the federal, provincial, municipal district and municipal levels. Often local government funding will have specific requirements or approvals attached to it. There are current federal and provincial funding programs summarized in sections below.

The advantage of a proprietary network model is that it is simple governance model that allows for the deployment of both private and public capital without the governance challenges of publicly owned corporations or public-private partnerships. If the MD of Greenview was to pursue a proprietary network model for building out connectivity infrastructure in the municipal district, it would be necessary to secure some obligation of service level, scope and term from the designated network provider.

4.2.3 Government Network

The government network model in one where all the connectivity infrastructure is paid for and owned by the local government be that provincial, municipal district, community or municipal. It is likely that taking this approach in Alberta would require the connectivity infrastructure (i.e. fiber and perhaps wireless) to be classified as an essential infrastructure so that it could funded and administered appropriately.

The downside of a completely government funded network is that it does not leverage the private sector connectivity infrastructure that exists in the market already. Furthermore, this approach does not provide the ability to leverage a shared investment model for new infrastructure created specifically for the rollout of the government network.

Under our proposed fiber ecosystem model the government network would still be made available to the wholesale ISP for lighting, operation and the provision of wholesale services. The network could be made available to the wholesale ISP through a standard telecommunication contract called an Indefeasible Right of Use (IRU) that assigns the contract rights and obligations for some or all of a fiber cable. The term of an IRU can be defined as required right up to the functional life of the fiber asset.

4.2.4 Hybrid Network Company

The Hybrid network company is some combination of the other three network models. Hybrid networks can utilize a number of ownership models from a stand-alone corporation to some form of public-private partnership. Ownership and governance models for such hybrids could take the form of investing in an existing company, forming a Municipal Controlled

Corporation or establishing a society, cooperative or trust. Fundamentally, the hybrid approach enables both private and public capital to be utilized in the construction of the infrastructure. It also recognizes where there is public capital deployed by a local government, it is appropriate to provide some level of public governance and/or ownership.

Again, the hybrid approach applies to how the communication infrastructure is capitalized, deployed and governed. However, the business scope of the wholesale ISP is not included in the scope of the infrastructure company. That is not to say the wholesale ISP can not be a shareholder of the infrastructure company. The model only limits the wholesale ISP's activities at the retail service provider level. That is, the wholesale ISP is precluded from offering retail services to the market in order to promote competition at the retail level. However, there is no reason the wholesale ISP cannot be an owner of the infrastructure as well.

The chart below illustrates the primary attributes and roles within a hybrid network company.

	Regional District / Municipality	Private Sector Partner
Parties' Roles	Provide public policy mandate. Contribute capital to new builds.	Provide infrastructure expertise. Contribute capital to new builds.
Connectivity infrastructure	Facilitate rights-of-way and access	Contract construction. Operate and maintain.
Mandate	Ensure availability of infrastructure.	Create infrastructure to realize mandate. Create viable commercial entity.
Service Provision	User of infrastructure for public sector needs.	Provide connectivity infrastructure access to wholesale operator.
Commercial Proceeds	Provision to refresh infrastructure. Limited commercial proceeds.	Private capital returns allocated first.
Transfer of Ownership	MD of Greenview owns assets	Assets could be purchased at end of a determined time period

4.3 Addressing all Stakeholders

This proposed fiber ecosystem model with its dark fiber and connectivity infrastructure company recognizes that the Connectivity Strategy must address all stakeholders in the municipal district – not just the residents of the larger communities within the district. The strategy must address the smaller hamlets, farms and First Nations.

While the MD of Greenview is not directly responsible for providing service to every stakeholder in the District, it is important that the strategy recognize each stakeholder and identify how they may leverage Greenview's infrastructure for the benefit of all. Furthermore,

the economies of scale created by addressing all stakeholders in the District will only increase the value of a proposed the MD of Greenview fiber optic network.

In addition to these stakeholders within the District, future activities must ensure residents, businesses and government agencies have access to programs and services that are enabled by the MD of Greenview's fiber infrastructure. For example, the coverage for First Responders will be improved and allow them to expand their service by utilizing the fiber infrastructure that Greenview is contemplating.

If the MD of Greenview decides to proceed with creating a fiber ecosystem in the municipal district, one of the first activities will be to do a stakeholder mapping and engagement model. Organizations and entities such current ISPs, Telecoms, Cooperatives, Government entities, NGO's, K-12 and higher education, libraries, healthcare providers and the industry and business community are all stakeholders for the ecosystem. The stakeholder engagement and mapping model identifies the various MD of Greenview stakeholders and whether they are possibly contributors to, facilitators of, or users of the connectivity infrastructure.

4.4 Funding Opportunities and Options.

Regardless of the ownership and governance model that is used to structure the connectivity infrastructure company, there are a number of publicly available sources of financing.

Some of the funding agencies below provide grant funding that requires matched or prorated funding from the application. The Canadian Infrastructure Bank provides project loan financing at very attractive rates.

Regardless of the avenue of funding used, government bodies providing grant funding look favourably on regional solutions that address the digital divide that exists in rural areas of less density. The best way for the MD of Greenview, or its private sector partners, to secure grant or debt financing is for Greenview to have a well-defined connectivity infrastructure strategy and to have started funding its strategy. This will provide external funders with the confidence to support additional funding of the infrastructure.

4.4.1 CRTC Broadband Fund

The CRTC Broadband Fund (CBF) is a fund totalling $750 million over five years that has been established and administered by the CRTC. This money is allocated as $100 million in year 1, $125 million in year 2, $150 million in year 3, $175 million in year 4, and $200 million in year 5. As the first intake for applications opened in summer 2019 and closed October 2019, 2019 can be set as year 1, making 2023 year 5 of the CBF. The currently open second call deadline has been extended to June 1, 2020 due to the Covid-19 pandemic. While the next intake for the CRTC Broadband Fund is unknown, it is anticipated that three more calls will follow.

The CBF is targeted at helping close the digital divide that exists in the rural areas of Canada. These areas are grossly underserved (or not served at all) due to the economic unviability of a business venture into these areas. Private companies look for returns within 2 to 3 years of a project and this simply isn't feasible for a high-speed fiber project in sparsely populated

areas. Despite this, there has been research and analysis done that show making such an investment in broadband infrastructure will result in significant gains for the community, and ultimately Canada's economy.[2] The CBF is only available to inhabited areas where there is no access to internet connectivity of at least 50 Mbps download and 10 Mbps upload. This level of service has been titled as the CRTC's Universal Service Objective (USO). These areas can be seen as green hexagons on the CRTC's map.[3]

As part of an application, the CRTC Broadband Fund specifically inquires as to the community consultation and engagement activities that have taken place.

4.4.2 Canadian Infrastructure Bank

Another funding option that can be accessed is the Canada Infrastructure Bank (CIB). The CIB is a Crown corporation established in 2017. It has been allocated $35 billion over the span of 11 years (ending in fiscal 2027-28) to invest in infrastructure projects in Canada. The CIB will invest in projects as a means to help attract private-sector investments to those projects. Core areas for investment have been identified as: transit; trade and transport; green infrastructure; and broadband/connectivity. The CIB has a focus on "large, transformational projects that are in the public interest, linked to national strategic economic priorities, and developed and delivered in partnership with public sector sponsors and private and institutional investors."[4]

The CIB made its first investment in August 2018, a $1.283 billion investment into a transit project in the Greater Montreal area. The investment will be administered via four draws and the investment has an effective blended 15-year interest rate of 1.65%.

Moving forward, the CIB has set investment goals. For 2019-20, they hope to receive 100 project proposals with a total in excess of $20 billion, shortlist 9 of those and make at least 2 investments. By 2023-24, these numbers increase to 100 proposals received with a total in excess of $30 billion, shortlist 20 and make up to 5 investments.

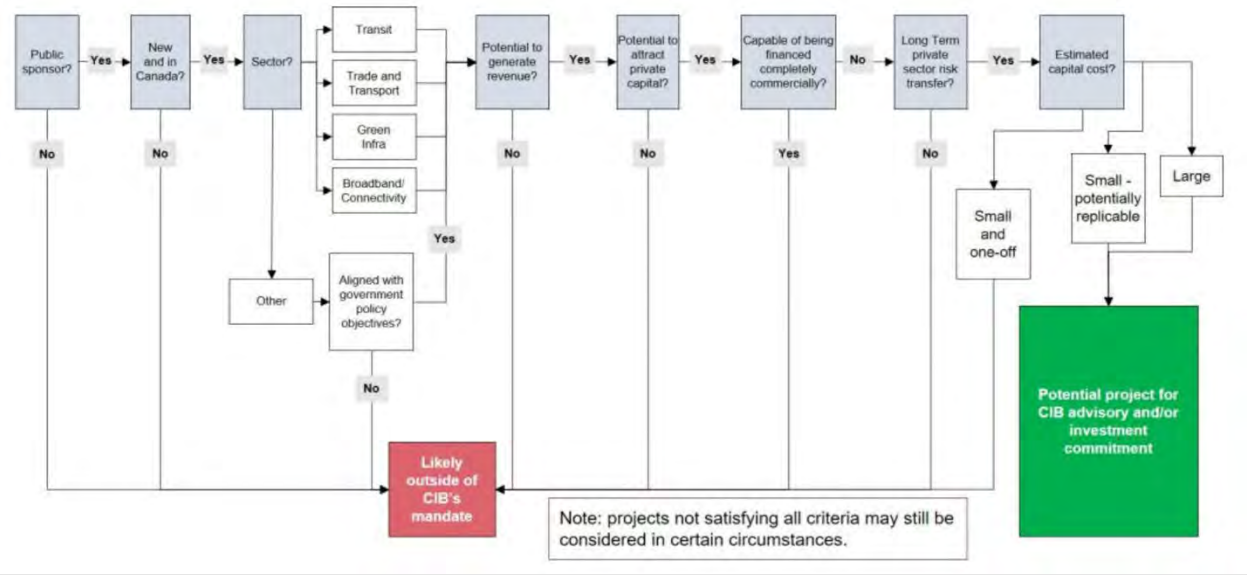
The CIB also provides business planning support and encourages organizations with projects to contact them early so that the project can be developed with a greater chance of receiving funding. The CIB's decision flowchart is below.[5]

[2] A Cost-Benefit Analysis of Alberta Rural Broadband Deployment. https://8027113f-922d-49f1-8cab-0a74f30812a1.filesusr.com/ugd/a556b1_d4f116fe94904d519321a3d15ff22240.pdf

[3] https://crtc.gc.ca/cartovista/fixedbroadbandandtransportye2018_en/index.html

[4] Canada Infrastructure Bank Summary Corporate Plan 2019-20 to 2023-24, page 1. https://cib-bic.ca/wp-content/uploads/2019/06/2019-06-05-%E2%80%93-CIB-Summary-CP-%E2%80%93-EN-Final.pdf

[5] From: https://cib-bic.ca/en/partner-with-us/investments/project-intake/



The CIB provides funding via various mechanisms (debt, equity, etc.) to infrastructure projects that fall within their mandated areas; as identified above, broadband infrastructure is one such area. The CIB operates to bridge the financial gap of infrastructure projects that are not economically feasible for the private sector. This is a well-known issue for rural broadband projects, making the CIB a very valuable and viable resource. A limitation of the CIB is that their threshold of investment is $20 million at a 50/50 contribution. Thus, a project totalling $40 million with minimum of $20 million from the project sponsor(s) but be achieved before accessing CIB funding becomes an option. Working with the municipal district as a whole may be a method of amassing a project of sufficient size to meet this threshold.

4.4.3 Universal Broadband Fund

The Federal Government has announced a new Universal Broadband Fund (UBF) as part of Budget 2019. Details on the program have yet to be finalized and are expected to be released sometime in 2020. The UBF will be part of $1.7 billion being invested by the federal government into broadband infrastructure; however, this amount also includes a top up for the Connect to Innovate program, support for low-Earth orbit satellite capacity and two new surveys to measure broadband usage. The UBF will have the same target as the CBF, that being meeting the 50/10 broadband speed objective across all of Canada.

4.4.4 Economic Stimulus Post-COVID-19 Pandemic

Both provincial and federal levels of government have announced stimulus packages that will be made available to stimulate economic activities once the Covid-19 pandemic has passed. Given the known priority on broadband connectivity through existing programs such as the CRTC Broadband Fund and the Universal Broadband Fund it is expected that additional Federal and likely Provincial stimulus funding will be allocated to broadband. Details on such stimulus packages are not yet known but can be monitored and applied for once available.

MD of Greenview No. 16

Fiber Optics Internet Connectivity
Strategy Overview Presentation

CANADIAN FIBER OPTICS

VALO NETWORKS

Strategy Scope

“The scope of this project will include the development of a study to identify options and outline a multi-year development strategy for the provision of a high-speed internet network to service the majority of Greenview ratepayers.

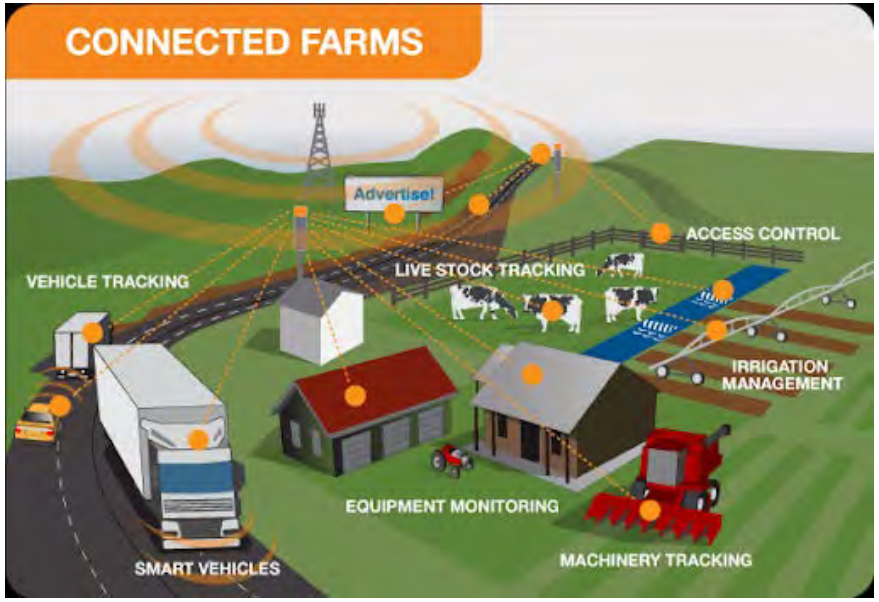
The final report will identify options with approximate costs associated with the installation of the recommended infrastructure and services to the hamlets of Greenview; while also including the development of high-speed options for rural / farm areas.”

Observations & Findings

- The Canadian Radio-television and Telecommunications Commission's (CRTC) has defined the universal service objective for fixed internet access to be at least 50 megabits per second (Mbps) download and 10 Mbps upload with an option of unlimited data.
- The majority of Hamlets and communities in Greenview do not have access to services that meet the CRTC universal service objective.
- Local governments – county, municipality and municipal districts – have concluded that the incumbents are not going to invest in fiber in their regional and rural communities to the scope or in the timeframe that these communities need to survive and thrive.

What is missing…

Precision Farming/Agritech



Rural Crime Prevention/Public Safety

- Property crime rates are 42% higher in rural areas versus urban areas.
- Security systems and HD Cameras require lots of bandwidth to be effective.
- Access to 911 is not universal in the MD of Greenview.

Aging in Place

- Medication management
- Video Chat
- Blood pressure/Blood sugar management
- Home Entertainment (Netflix, Spotify)
- Smart Home/Smart Speaker (Google Home, Amazon Alexa)
- Home Security

What is missing…Covid-19 Update

Telehealth

maple

babylon

HelloMD

Distance Learning/Work From Home

Google Meet, Google Hangouts, zoom, Microsoft Teams, Skype for Business, slack, Dropbox, Basecamp

Access to video-based health, school and work from home apps for non-essential workers in offices and all K-12 and college/university students is critical during the pandemic.

What is coming…

- **Smart Communities**
- **5G**
- **Autonomous Vehicles**

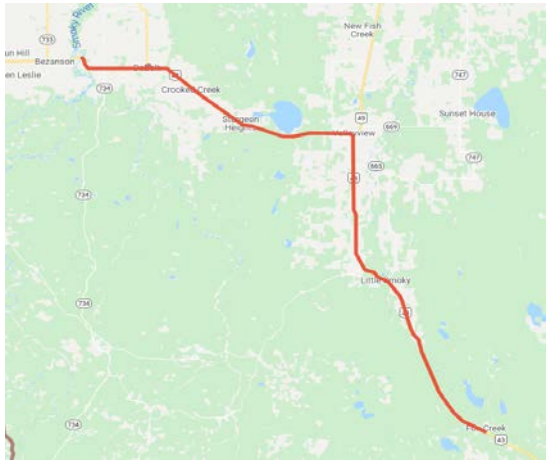
Fiber infrastructure is a requirement for 5G to be deployed anywhere. 5G is the basis that all of these “future” technologies is going to be built around.

Having community owned fiber infrastructure that is commercially available to carriers ensures that Greenview will get 5G before rural communities that don’t have fiber.

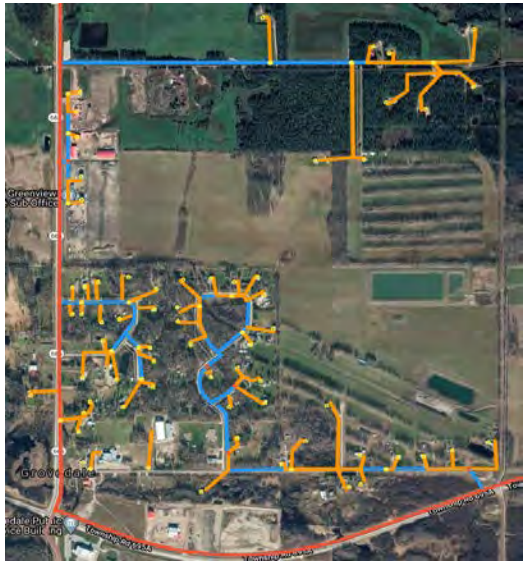
Recommendation

- We recommend the MD of Greenview facilitate the creation of fiber optic internet connectivity infrastructure in the municipal district to ensure the continued growth and prosperity of the MD, its residents and businesses.
- It will take $14 - $15 million to solve the connectivity infrastructure issue in Greenview
- Half the necessary capital can be obtained from a combination of provincial and federal grants and private sector investment.
- Half would have to be invested by Greenview over 2-3 years.
- It is very likely that the provincial and federal governments will create new stimulus and broadband infrastructure grant programs as a result of the current COVID-19 crisis.
- The MD of Greenview should work to create “shovel-ready” projects to take advantage of these programs.

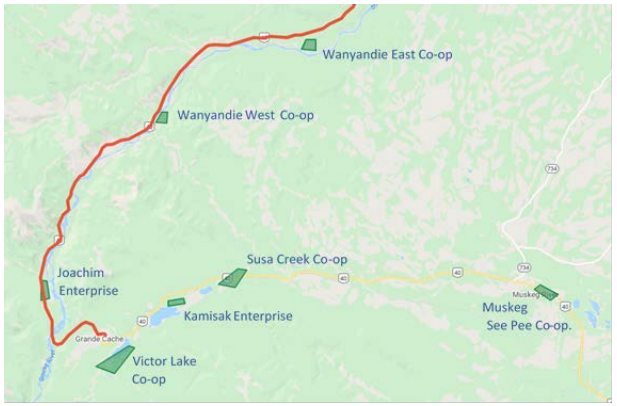
Proposed Infrastructure



Fiber Backhaul in the MD



Fiber-to-the-Premise in Hamlets



Next Generation Wholesale Wireless where fiber is not feasible

Three-Layer Broadband Business Model

Retail Service Providers

Active Network

Attract new or leverage existing Service Providers to operate on the fiber infrastructure

Single Wholesale ISP Operator – creates economies of scale and diversity

Dark Fiber Construction and operations/support

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Thank You!!

CANADIAN FIBER OPTICS

VALO NETWORKS

SUBJECT:	**Upper Smoky Caribou Task Force**		
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	May 19, 2020	CAO:	MANAGER:
DEPARTMENT:	CAO SERVICES	ACAO SW	PRESENTER:
STRATEGIC PLAN:	Level of Service		

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That Committee of the Whole accept the presentation from the Upper Smoky Caribou Task Force for information, as presented.

BACKGROUND/PROPOSAL:

See attachment B

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that Council will be up to date on the recommendations from the Upper Smoky Caribou Task Force.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

N/A

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow up actions to the recommended motion.

ATTACHMENT(S):

- Attachment B – Background
- Current State Information
- PowerPoint Presentation

Upper Smoky Task Force
Understanding Our Perspectives

Rural Municipalities of Alberta (RMA)

RMA Goal: Working Landscapes with Conservation Goals

1. **Who are your constituents/sector? Please describe who you are representing at this Task Force.** Please let us know who you do not represent if this would be helpful.

   The RMA is an advocate for Rural Municipalities of Alberta and in this role, we do not answer for individual counties and respect their sovereignty as elected local entities. The specific counties we represent in this Task Force include indirectly, while directly MD of Greenview and indirectly Grande Prairie No. 1 County Yellowhead and the Conceptually, representing all rural municipalities that may have indirect interests in the activities associated with the project area. Our sector sees this landscape as having multiple interests and every land use decision must balance preservation with prosperity.

2. **What do your Task Force colleagues need to know about your constituents'/sector's general priorities and/or priorities at this Task Force table?** List no more than four priorities in bullet form.

   Maintaining and growing the tax base to provide quality municipal services and infrastructure that includes long term capital funding.

   Providing a quality of life for our ratepayers that includes good jobs, good services, and a place to grow families and communities and achieving all of these in a manner that is predictable and sustainable to ensure that it is no longer based upon a boom/bust economy.

   We think regionally and do not see jurisdictional boundaries or levels of government as barriers. Instead, we work cooperatively and see land use decisions, environmental stewardship, and economic development at this scale and need to support and champion the good stewardship of resources and land use decisions.

   We are the closest form of government to Albertans and see our leadership and advocacy as essential to ensure that the rights of citizens to make a living, have peaceful enjoyment, and have a healthy environment that includes viable living populations of all plants and animals. Our leadership is driven by providing a balance of all activities and decisions on the land and ensuring that all development decisions are made in a transparent manner with the best information possible.

3. **What challenges specific to the sector you represent do you feel should be considered during the work of the Task Force? These challenges may also be relevant to other sectors.**

   Diversification of the economy is critical due to the historic reliance of the cyclical nature of resource-based industries. This diversification can be arrived upon by seeking better ways of doing things and striving for innovation. Additionally, opportunities related to other sources of income such as tourism, wildlife watching, hunting and fishing, and other recreational pursuits are important to the region.

This region is very connected to the environment and the bountiful resources that this land provides us, and it is critical that we maintain this environment as healthy and prosperous as possible for future generations.

4. **In addition to the information and information needs we discussed at previous meetings, is there anything else that would help you more effectively engage in Task Force dialogue and participatory consensus building of recommendations for sub-regional planning?** Consider other perspectives, data, processes, legislation, etc.

Disruptive impacts to the livelihoods of residents of our region is of great concern. By limiting the ability of people to make a living, to farm, and to extract resources, the livelihoods of our citizens can be negatively impacted. This disruption can also occur by impacts that may be attributed to climate change such as invasive species, floods, or catastrophic fires. As we have said; Our sector sees this landscape as having multiple interests and every land use decision must balance preservation with prosperity. Additionally, our sector wishes to ensure that we make intentional land use and management decisions to ensure sustainability and prosperity. The bounty that this land provides must be used, managed and protected for all. New ways of resource extraction, of species protection, and or land use decision making must be found to maintain this balance. The key issues of a depressed economy for both logging and oil and gas must be also reflective of the potential landscape changes that can occur from climate change. The region will undoubtedly be extremely different from today 20 or more years from today and we need to make decisions with that very real possibility today.

In order to caribou to survive along with resource extraction that is so important to our sector we must consider the following:

- Can we use cyclical resource extraction that can follow a cycle much like farming with a fallow cycle (caribou use), extraction, and mitigative repair (restoration: replanting and contouring)?
- Can we be sure of the population numbers, genetics, and ranges of caribou?
- For our communities to survive and thrive we need jobs, clean land-air-water, and the necessary services and infrastructure to ensure prosperity. What is the role of caribou protection in providing these jobs, clean land-air-water, and our necessary services and infrastructure?
- What tax replacement possibilities can occur if there is a sterilization of resources or a deferment of extraction?
- What is the role of predation and is there other management methods we can utilize to ensure a more balance predator/prey relationship?
- What are the roles of black bear populations and predation on caribou?
- Where is there potential climate refugia that caribou would survive in?
- What metrics can be used to ensure resilient communities can be found in regions “protected” for the sake of caribou populations?
- What steps have other provinces taken and do we need to take heroic efforts if others are failing or if the species is unsavable?
- Is the landscape considered “healthy”, has resource extraction been efficient and effective, and what is the role of restoration as a mechanism to increase available habitat?

Consensus Level - Upper Smoky Task Force Outcome Statements:

Below are the outcomes that you, the Upper Smoky Task Force team have drafted when considering positive social, environmental, and economic outcomes for the Upper Smoky Sub-Region. (Note: several statements have been slightly reworded for grammatical consistency). Individually and collectively, these outcomes support your vision for a desirable long-term future for the Sub-Region.

For each outcome:

Indicate your level of consensus for that statement using the drop down selection menu and include any notes or thoughts about the outcome, as well as the action required based on the consensus level you choose.

Please also complete the reflection question at the bottom of the worksheet.

Consensus scale:

Number	Consensus Level	Required Action
1	Full Support	No action required.
2	Acceptable	Explain your reservations
3	Support with reservations	Explain your reservations
4	I am not thrilled with it, but I can live with it and will not block it	Explain your reservations
5	Need more information or discussion	Identify what information or discussion you need about the item
6	Cannot support or accept it	Identify what changes you suggest the item needs

If you have questions, please reach out to Joe Prusak.

Please complete and return the worksheet by Wednesday, February 13, 2020 to Joe.Prusak@gov.ab.ca

Outcome	Consensus Level #	Notes (Including Actions: reservations, information, discussion, changes)
A. A region with an abundance and diversity of wildlife and habitats, where future generations can continue to enjoy our outdoor heritage and experiences while maintaining a vibrant economy.	Choose an item.	
B. Multiple industries work collaboratively to achieve improved outcomes for environment & industry (including mandatory implementation of ILM).	Choose an item.	
C. Municipalities and Indigenous communities with socio-economic opportunities that are strong, diverse, vibrant, resilient, & sustainable.	Choose an item.	
D. Meaningful engagement processes that allow all Albertans to be heard.	Choose an item.	
E. Industry certainty that results in investor confidence.	Choose an item.	
F. Landscapes that support various sustainable recreational opportunities & activities.	Choose an item.	
G. A healthy ecosystem that supports naturally self-sustaining populations (long term) of caribou & other species & that supports traditional/Indigenous uses and practices.	Choose an item.	
H. Recognition of Indigenous culture, self-governance, & stewardship of the land, & inclusion throughout the process of land, resource, & caribou range management.	Choose an item.	
I. The management plan has the authority to make periodic changes and is continually monitored and reviewed.	Choose an item.	
J. Existing & future industry, infrastructure & communities remain viable, sustainable, &	Choose an item.	

environmentally responsible & are provided opportunity to grow.		

When you consider these outcomes collectively, is your Upper Smoky Task Force team missing any positive social, environmental, and/or economic outcomes for the Sub-Region?

Upper Smoky Caribou Task Force (working landscape subcommittee) recommendations

Prepared for consideration by W Thorp FLMF Lead May 12, 2020

Preamble: Legal authority for caribou action or range planning rests with government. As such, the recommendations presented below should be considered proposed contributions towards proactive solutions for caribou conservation into the Government of Alberta's range and action planning processes for caribou ranges in the Upper Smoky region of Alberta.

An overarching principle in developing these recommendations is to maintain high degrees of both ecological integrity and socio-economic prosperity for the benefits of all Albertans and associated communities.

Further, the Upper Smoky Working Landscape sub-committee (USWLSc) affirms that no part of these recommendations, or the process to develop them, should be taken as relieving the government of Alberta of its obligation to consult with and accommodate indigenous communities traditional land rights within the Upper Smoky region of Alberta in the implementation of any eventual Government Caribou Action Plan.

The USWLSc recognizes that a solution to the caribou issue is going to require change from status quo for industry and government to meet both the socio and economic goals. Past caribou planning processes in Alberta have made recommendations much the same as those listed below however; a final recovery plan has never been endorsed which has hindered and delayed the realization of these advancements that we believe will make a difference in support of caribou recovery. Industry has the expertise and is well positioned to support the government through the proactive and timely employment of the following recommendations as an integrated package, with the understanding that each recommendation will not be effective on a stand-alone basis. The USWLSc also recognize that government led predator/prey population management and human use may be necessary intermittently while habitat management and industrial development/disturbance recommendations are being implemented and benefits realized.

Recommendations

1. **Use Best Available Science:** Development of and implementation of management strategies must be based on science. Key elements include:
    a. **Establish Zones:** Establish scientific criteria by which delineate zones (e.g. current caribou use, habitat intactness, industrial development plans, MPB Risk, etc.) within and outside caribou range areas to which management levers could be applied differentially among zones. Zones support the overall management approach is based on functional analysis of caribou habitat combined with socio-economic considerations.

b. **Adopt Adaptive management**: Forest landscapes (caribou habitat) are living ecosystems and are ever changing therefore; we must be able to adapt to the latest science, monitoring, and technological advances. Adaptive outcome based management must be adopted and practiced by all as opposed to rule based prescriptive management. (E.g. Design – implement – monitor- adjust- evaluate- assess – design (repeat)).
c. **Monitoring:** Sustained monitoring must be employed to determine:
    i. effectiveness of various strategies on socio-economic goals;
    ii. Implementation monitoring: did we do what we said we'd do?
    iii. Effectiveness monitoring: did what we do have the desired effect?
d. **Endorse Natural Range of Variation (NRV)** refers to the spectrum of natural conditions possible in ecosystem structure, composition, and function, when considering both temporal and spatial scales. Historical tendency was to restrict the range of ecosystem conditions by imposing rules based on average behavior which can create homogeneous landscapes that are less resilient to disturbance, and less likely to provide a sustainable supply of the historical array of ecosystem services. At the heart of an NRV strategy is the presumption it is possible and desirable to "move closer" or "remain closer" to natural disturbance patterns through forest harvesting activities that will contribute to effective management of risk overtime.

2. **Endorse a Working Landscape:** Given climate mediated risks, such as fire and MPB, the forests in the upper smoky caribou ranges require **active management** to ensure sustainability of values such as carbon sequestration, water management, soil, risk of loss, caribou, and biodiversity conservation. Development of measurable and achievable conservation and risk targets based on science (as above) need to be established by government and where applicable implemented by industry.

3. **Implement Mandatory ILM:** Integrated Land Management (ILM) has been proven to be effective in reducing the amount of industrial footprint required to meet economic goals however; it has never been fully implemented to fully realize the benefits. As part of the caribou recovery plan the USWLSc recommends that the government mandate ILM as a standard within the Upper Smoky and hold all accountable to meet goals at the planning, operational and reclamation/restoration phases of land-use to maintain or restore (in the case of woodland caribou) biodiversity values.

    a. Through collaboration the amount, distribution and duration of industrial footprint can be reduced relative to an uncoordinated (non-integrated) approach (e.g. shared corridors at the landscape level).
    b. Develop strategic access plans (within and between industries) - move to landscape level ILM.
    c. As part of ILM, collaborative examination of an ecosystem-based Natural Pattern approach to industrial footprint development and restoration.
    d. Accelerated restoration of industrial footprint in a coordinated/strategic fashion. Identify where and how to focus coordinated restoration to maximize caribou conservation while minimizing restoration cost.

e. Link ILM and coordinated restoration to the concept of land use zonation.
f. Accelerated restoration of industrial footprint in a coordinated/strategic fashion. Identify where and how to focus coordinated restoration to maximize caribou conservation while minimizing restoration cost.
g. Link ILM and coordinated restoration to the concept of land use zonation.

4. Employ simultaneous **cumulative effects solutions** (i.e., ones that consider management options in relation to the interaction between human 'land use', climate change, habitat, and predator/prey dynamics).

Upper Smoky Sub Region

Landscape overview

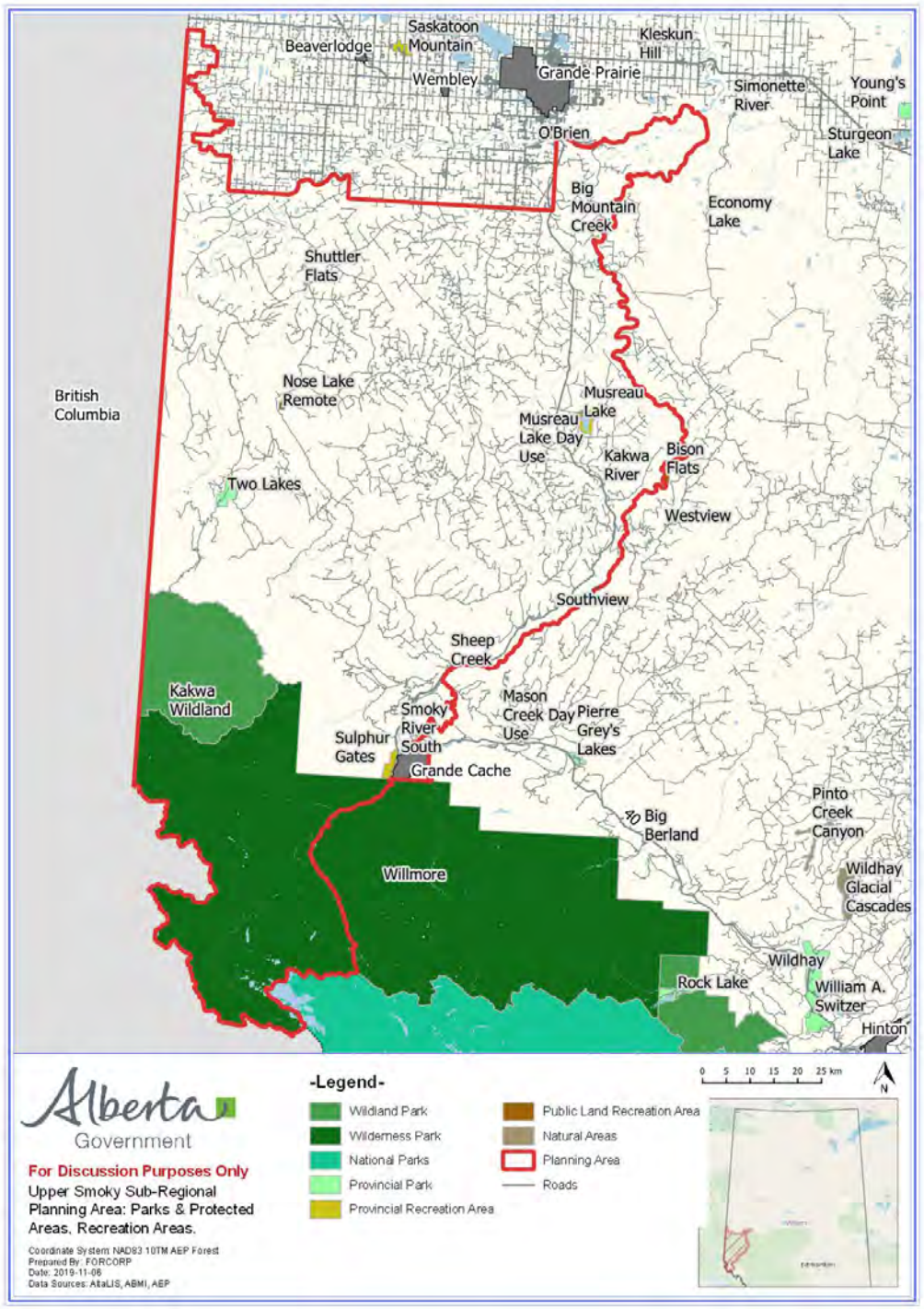
Municipalities

	Type	Area (ha) of Municipality	Area (ha) in Sub-Region	% in Sub-Region
County of Grande Prairie No. 1	Municipal District	615,428	54,003	9
M.D. of Greenview No. 16	Municipal District	3,352,978	1,060,978	32

For the purpose of Upper Smoky Sub-regional Task Force discussions - January 22/23, 2020

Parks and Recreation areas

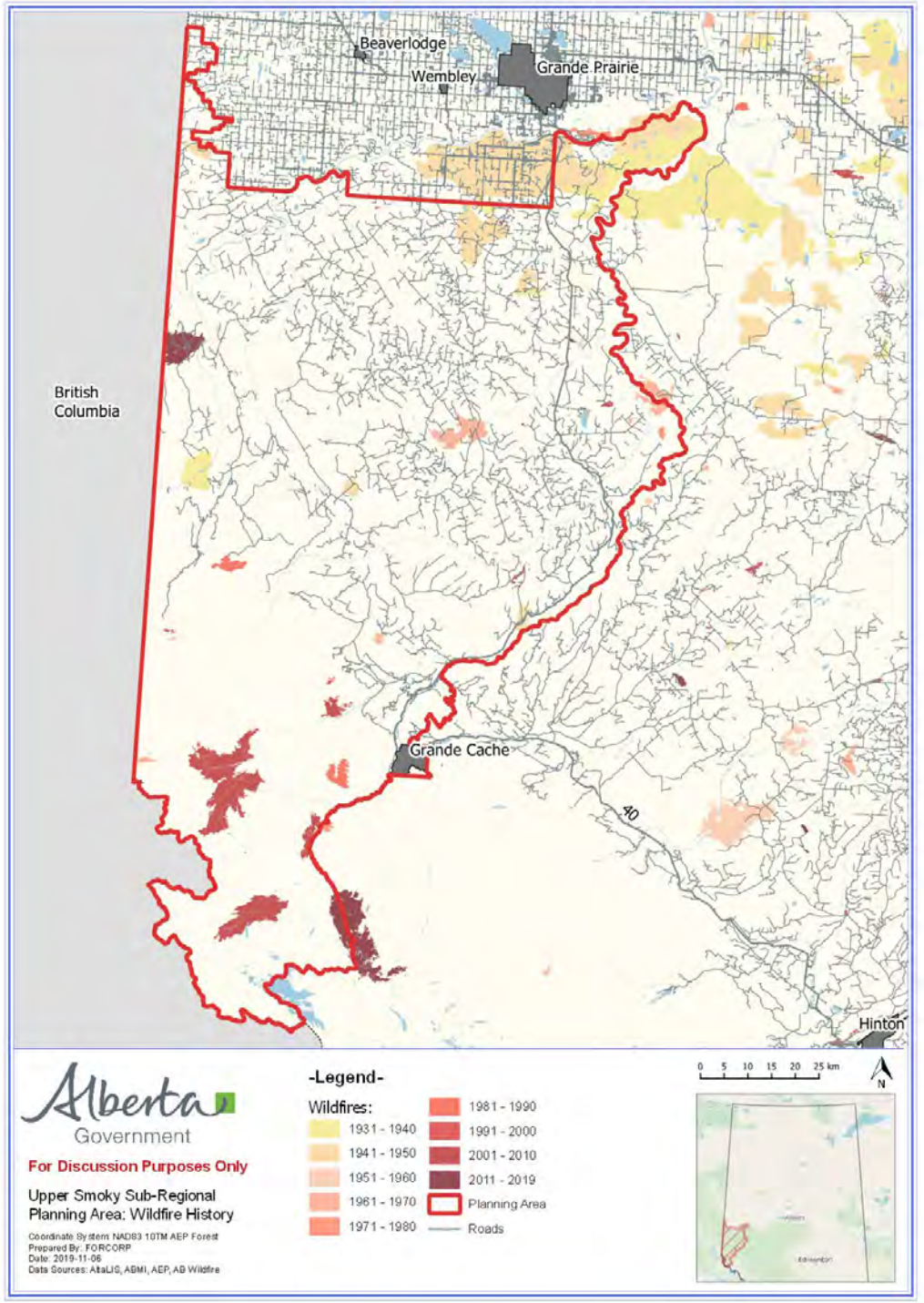
	Type	Park Area (ha)	% Park in Sub-region	% Sub-region in Park
Willmore	Wilderness Park	460,377	45	16
Kakwa Wildland	Wildland Park	65,686	100	5
Musreau Lake	Provincial Recreation Area	1,801	100	0
Two Lakes	Provincial Park	1,568	100	0
Sulphur Gates	Provincial Recreation Area	1,091	100	0
Nose Lake Remote	Public Land Recreation Area	272	100	0
Smoky River South	Provincial Recreation Area	91	100	0
Musreau Lake Day Use	Public Land Recreation Area	19	100	0
Shuttler Flats	Provincial Recreation Area	15	100	0
Big Mountain Creek	Provincial Recreation Area	13	100	0
Sheep Creek	Provincial Recreation Area	11	100	0
Kakwa River	Provincial Recreation Area	8	100	0
Southview	Provincial Recreation Area	5	100	0



For the purpose of Cold Lake Sub-regional Task Force discussions - January 7/8, 2020

Fire History

	Area (ha)	%
1931-1940	29,309	2.2
1941-1950	27,080	2.0
1951-1960	667	0.1
1961-1970	6,626	0.5
1971-1980	301	0.0
1981-1990	2,991	0.2
1991-2000	527	0.0
2001-2010	23,533	1.8
2011-2019	6,926	0.5

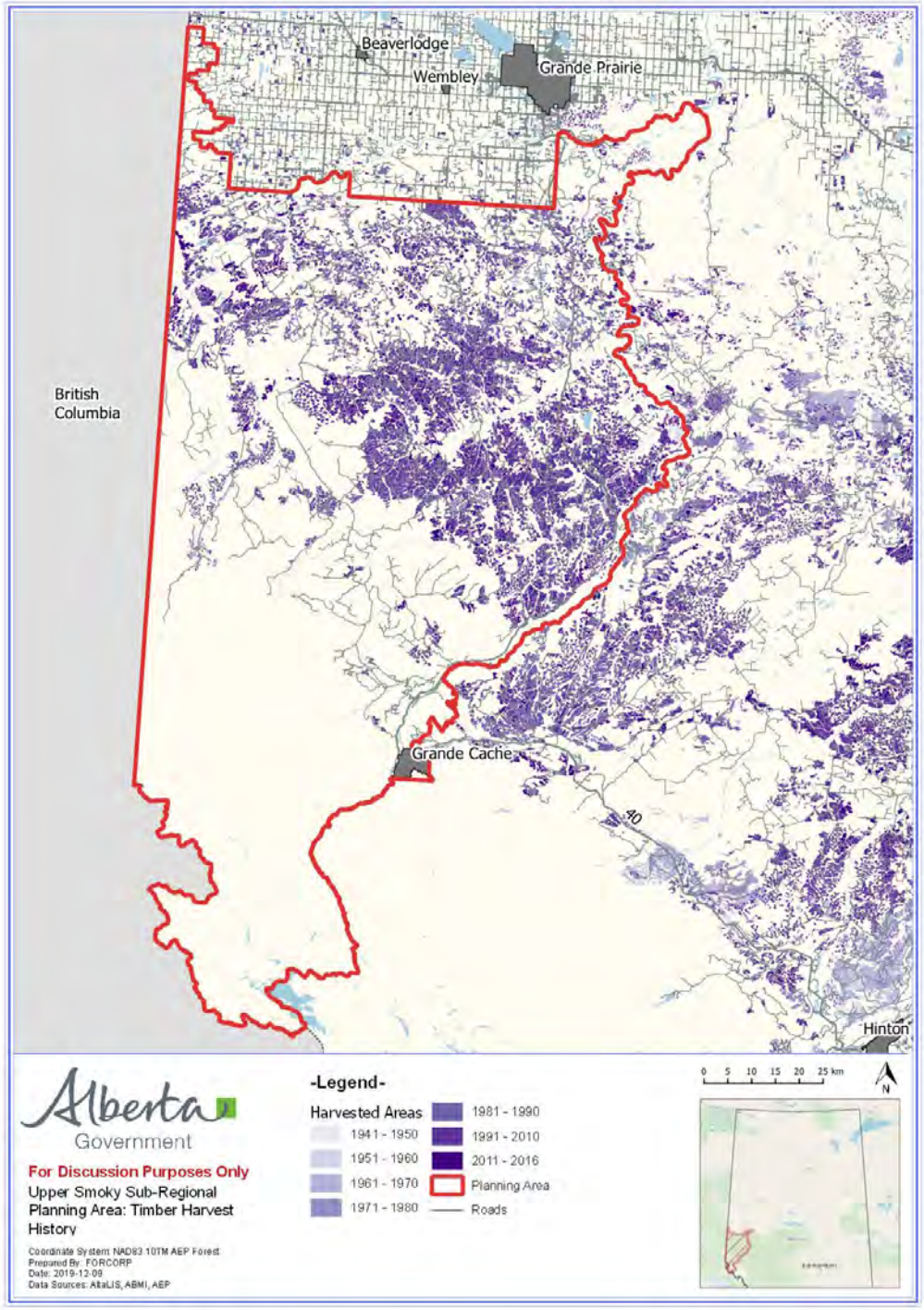


Forestry Tenure

	Area (ha)	%
Weyerhaeuser Company Limited (Grande Prairie)	906,680	69
Canadian Forest Products Ltd.	104	0

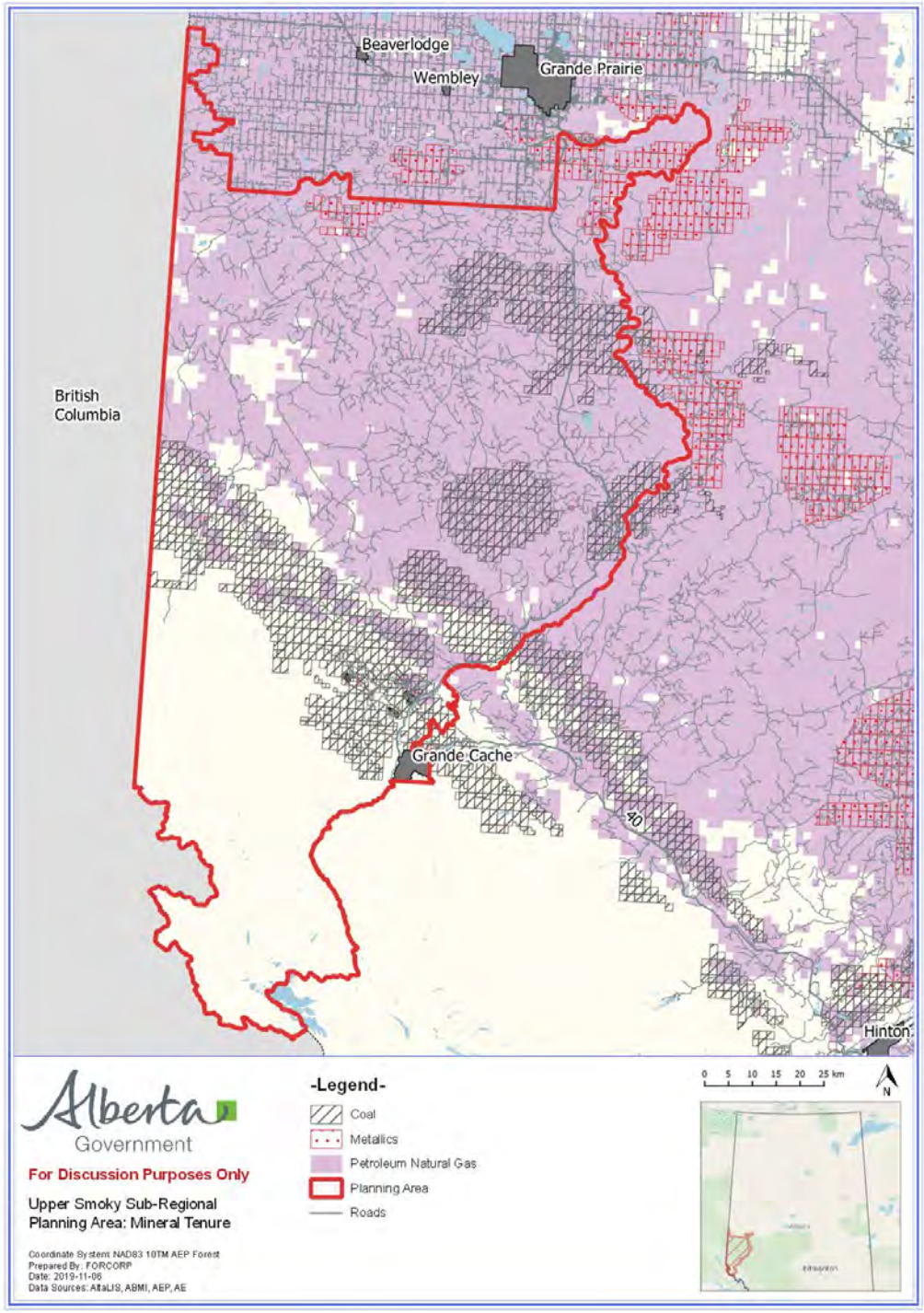
Forest Harvest History

Upper Smoky	Area (ha)	%
1931-1940	81	0.0
1941-1950	132	0.0
1951-1960	806	0.1
1961-1970	1,320	0.1
1971-1980	2,163	0.2
1981-1990	17,629	1.3
1991-2000	101,704	7.7
2001-2010	61,160	4.6
2011-2016	45,285	3.4



Energy Tenure

	Area (ha)	%
Petroleum Natural Gas	785,056	59
Coal	288,377	22
Metallics & Industrial Minerals	30,594	2

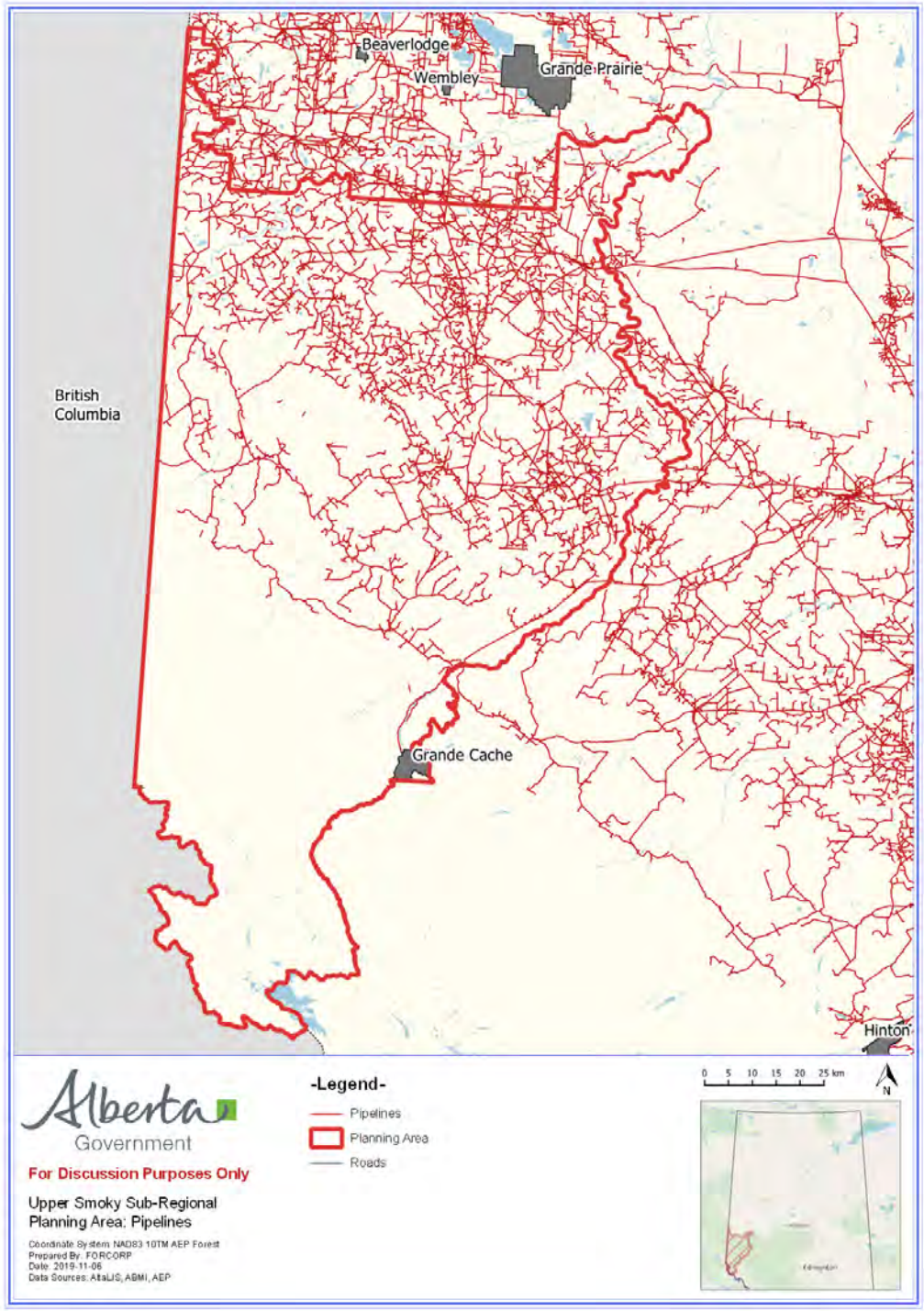


Well Status

	Issued	Amended	Re-Entered	Suspension	Abandoned	RecExempt	RecCertified
Upper Smoky	2,604	1,186	44	923	389	57	264

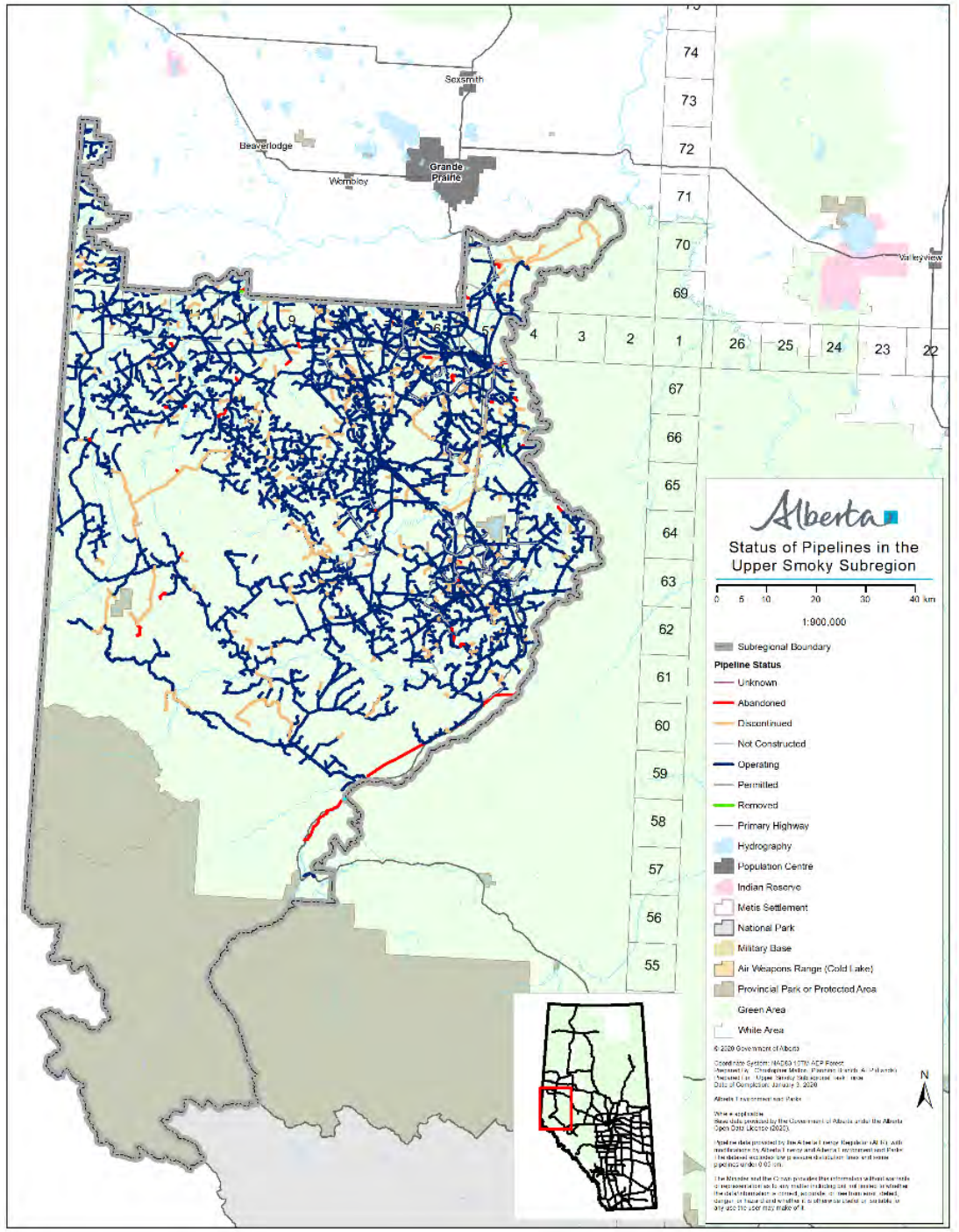
Pipelines (ROW)

	Length (km)	Density (km/km2)
Upper Smoky	5,413	0.410



Pipeline status (AER)

Status	Length (km)
Abandoned	140
Discontinued	1,136
Not Constructed	21
Operating	9,252
Permitted	680
Removed	1
Total	**11,229**

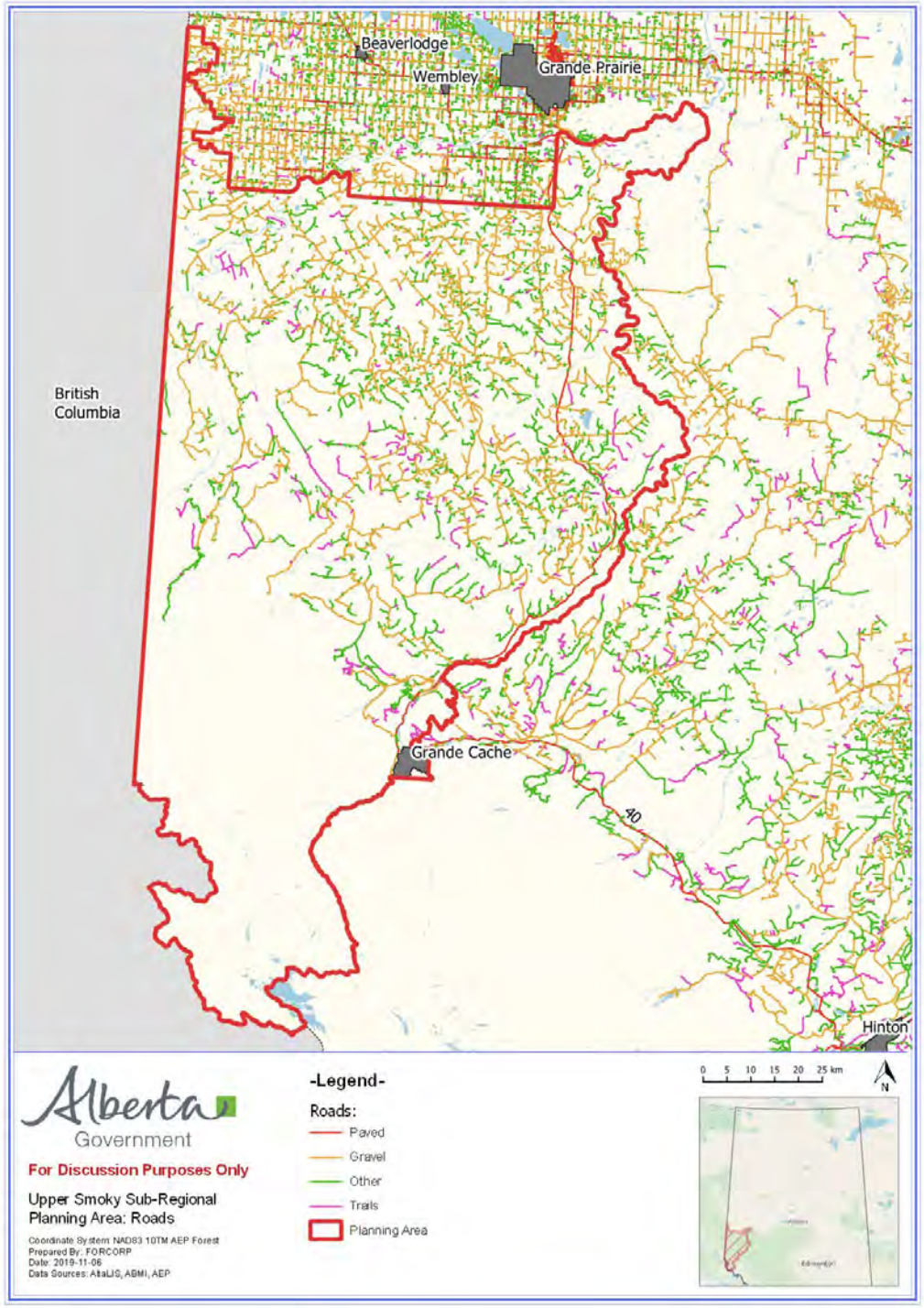


Comparison of Pipeline Data

- ABMI uses a combination of data sources including disposition and satellite imagery
- Often multiple pipelines in an opening
- Each pipeline within a shared opening may have a different status

Existing Access

ROAD TYPE	KM	DENSITY(Km/Km^2)
Road-Paved	207	0.016
Road-Gravel	2,934	0.222
Road-Other	2,243	0.170
Road-Trail	369	0.028
Total	5,752	0.435



Traplines

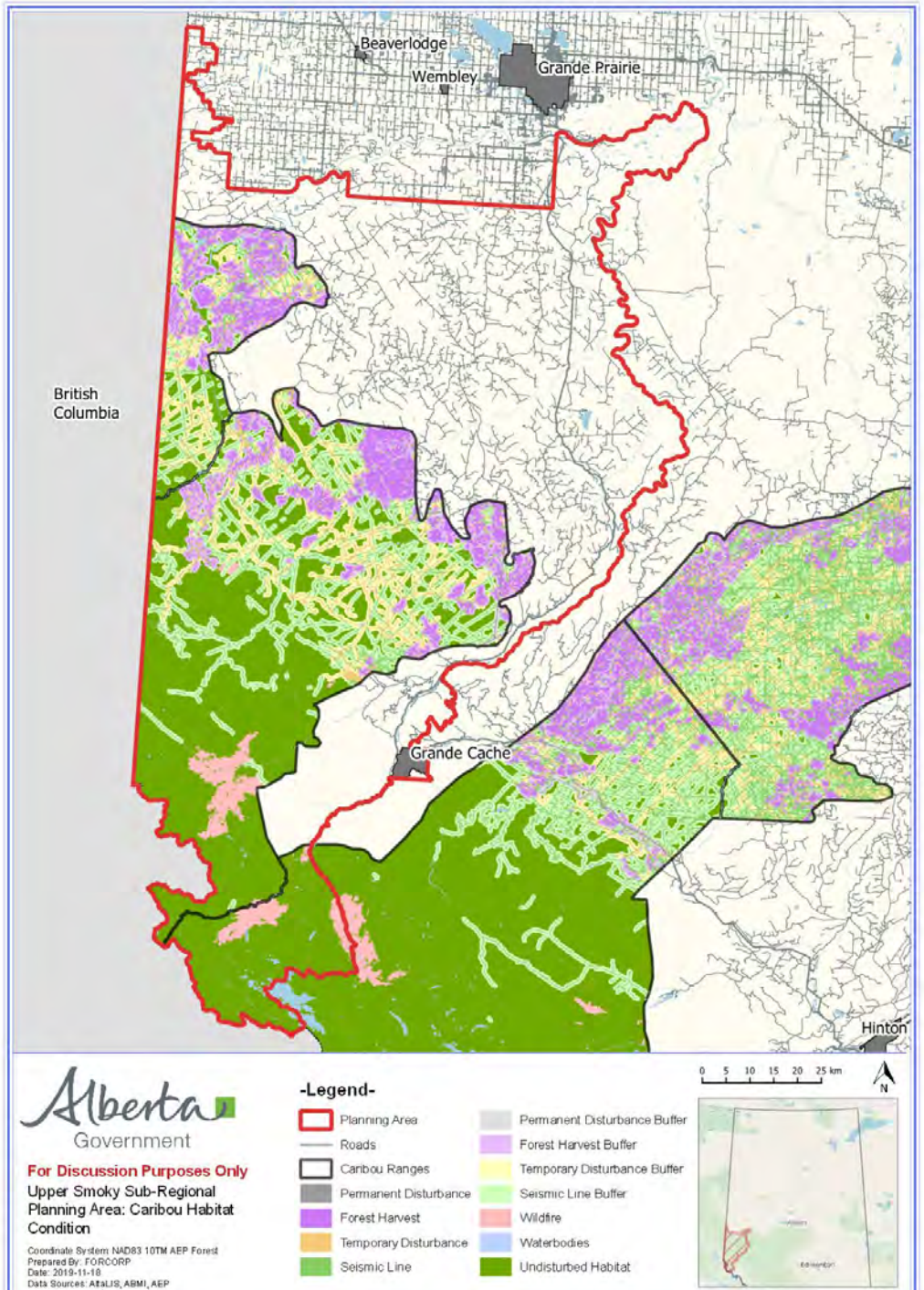

Beaverlodge
Wembley
Grande Prairie
Grande Cache
British Columbia
-Legend-
Registered Fur Management Areas
Planning Area
Roads
Alberta Government
For Discussion Purposes Only
Upper Smoky Sub-Regional Planning Area: Registered Fur Management Areas
Coordinate System: NAD83 10TM AEP Forest
Prepared By: FORCORP
Date: 2019-11-06
Data Sources: AltaLIS, ABMI, AEP
0 5 10 15 20 25 km
N

Caribou Ranges

Range	Type	Caribou Area (ha)	Caribou Area (ha) in Sub-Region	% Caribou Area in Sub-Region	% Sub-Region in Caribou Area
Redrock-Prairie Creek	Mountain	482,892	482,891	100	37
Narraway	Mountain	104,066	104,046	100	8
A La Peche	Mountain	661,499	77,596	12	6

Caribou Range Disturbance

		Anthropogenic Disturbance (incl. 500m buffer)						
		Total Wildfire Disturbance (%)	Seismic Line Disturbance (%)	Forest Harvest Disturbance (%)	Permanent Disturbance (%)	Temporary Disturbance (%)	Total Anthro Disturbance (%)	Total Undisturbed Habitat (%)
A La Peche	661,499	3	25	9	2	10	26	
Narraway	104,066	4	65	51	<1	55	85	
Redrock-Prairie Creek Summer	167,219	8	10	0	0	<1	10	82



Upper Smoky Task Force

MD of Greenview Update and Go Forward

RMA Director Paul McLauchlin

What has been done to date:

- November 4-5 Inaugural Meeting
- December 17-18 Meeting #1
- January 22-23 Meeting #2
- April 16-17 Meeting #3

Upcoming

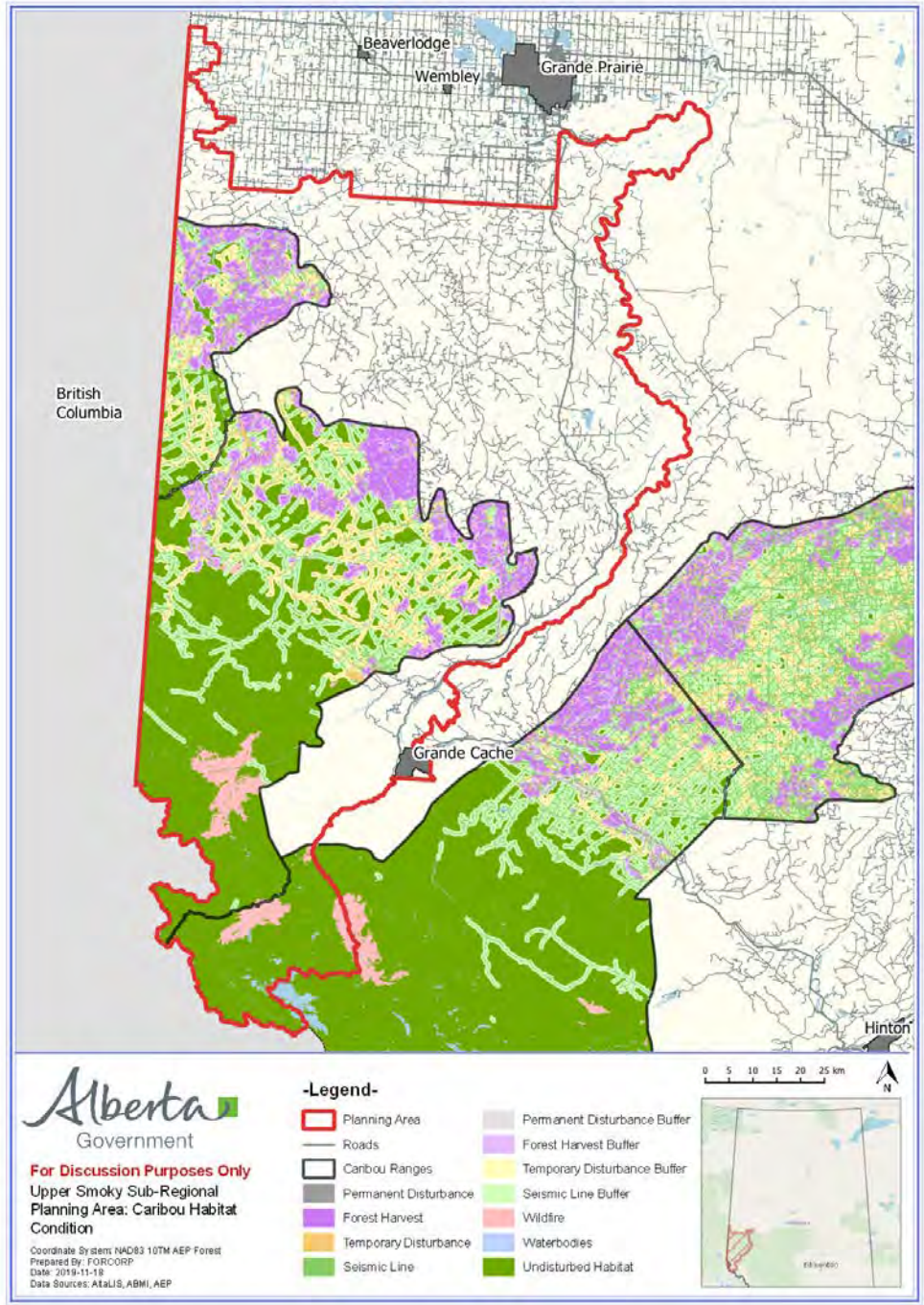
- May 21-22
- June 24 -25
- July 23-24
- August 19-21

The Situation

- MD of Greenview is 32% in Subregion
- Significant Fires: 1931-1940, 1941-1950, 2001-2010
- Weyerhaeuser has 69% of the Forest Tenure
- Busiest Forest Harvest is 1991-2000 at 101,704 hectares
- Energy has Natural Gas (59%) of the area and Coal (22%)
- There are 2604 wells in the area (389 abandoned)
- There are 5,413 km of pipeline ROWs (11,229 km of pipelines)

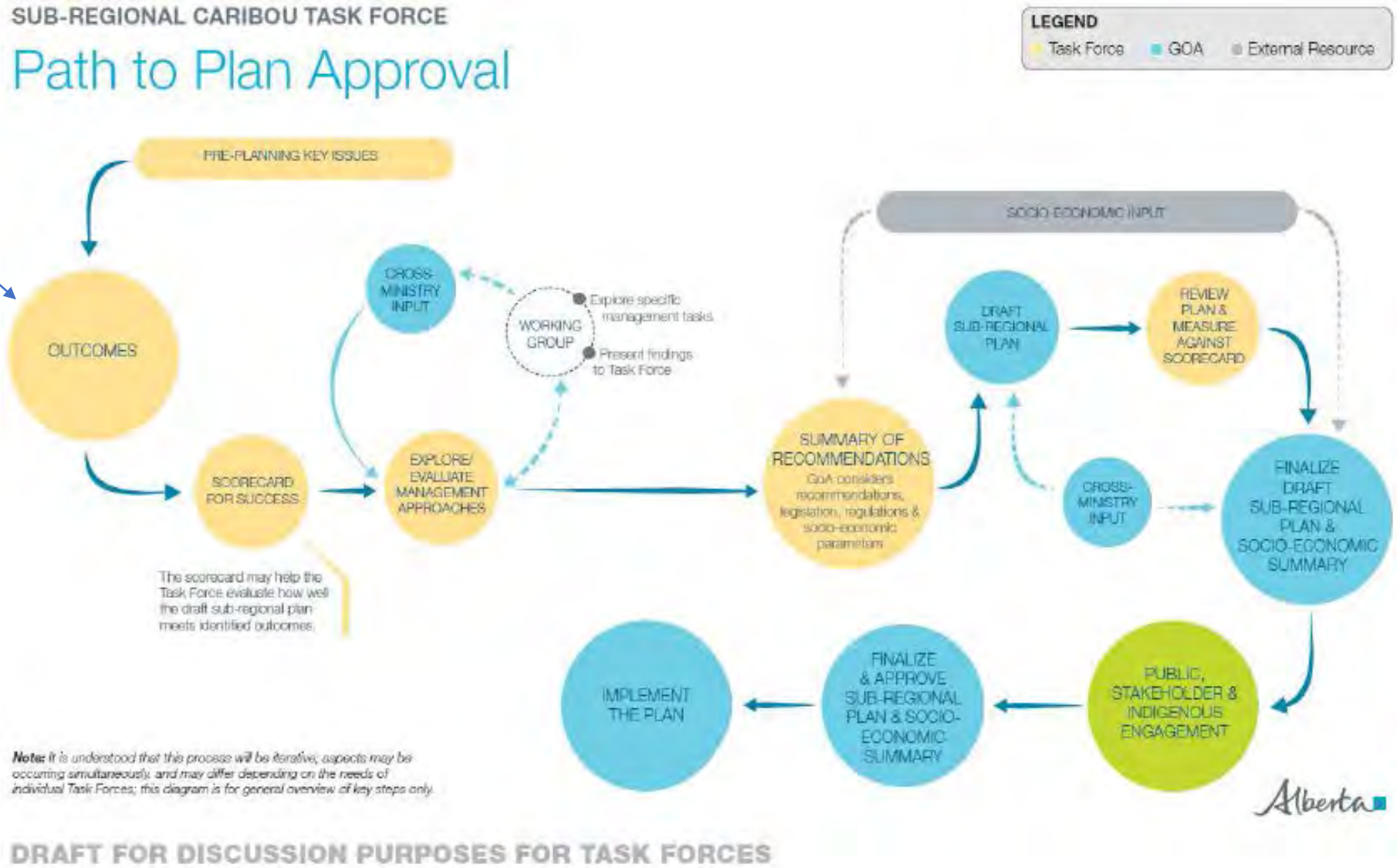
		Anthropogenic Disturbance (incl. 500m buffer)						
		Total Wildfire Disturbance (%)	Seismic Line Disturbance (%)	Forest Harvest Disturbance (%)	Permanent Disturbance (%)	Temporary Disturbance (%)	Total Anthro Disturbance (%)	Total Undisturbed Habitat (%)
A La Peche		661,499	3	25	9	2	10	26
Narraway		104,066	4	65	51	<1	55	85
Redrock-Prairie Creek Summer	167,219	8	10	0	0	<1	10	82

Caribou Range Disturbance


Beaverlodge
Wembley
Grande Prairie
British Columbia
Grande Cache
Hinton
Alberta Government
For Discussion Purposes Only
Upper Smoky Sub-Regional Planning Area: Caribou Habitat Condition
Coordinate System: NAD83 10TM AEP Forest
Prepared By: FORCORP
Date: 2019-11-18
Data Sources: AtaLIS, ABMI, AEP
-Legend-
Planning Area
Roads
Caribou Ranges
Permanent Disturbance
Forest Harvest
Temporary Disturbance
Seismic Line
Permanent Disturbance Buffer
Forest Harvest Buffer
Temporary Disturbance Buffer
Seismic Line Buffer
Wildfire
Waterbodies
Undisturbed Habitat
0 5 10 15 20 25 km
N

What has happened to date:

Today



Where are we today: Discussing Outcomes Consensus Levels

1. High level, aspirational statement of where we want to go/be in the future. – Meets objectives outlined in the Terms of Reference.
2. Build common understanding among Task Force members on key items and where rub points will be in future discussions.
3. Guides the development of recommendations and provides measure to test back against.
4. Initial opportunity for the group to reach consensus.

Number	Consensus Level	Required Action
1	Full Support	No action required.
2	Acceptable	Explain your reservations
3	Support with reservations	Explain your reservations
4	I am not thrilled with it, but I can live with it and will not block it	Explain your reservations
5	Need more information or discussion	Identify what information or discussion you need about the item
6	Cannot support or accept it	Identify what changes you suggest the item needs

Outcomes

- A region with an abundance and diversity of wildlife and habitats, where future generations can continue to enjoy our outdoor heritage and experiences while maintaining a vibrant economy.
- Multiple industries work collaboratively to achieve improved outcomes for environment & industry (including mandatory implementation of ILM).
- Municipalities and Indigenous communities with socio-economic opportunities that are strong, diverse, vibrant, resilient, & sustainable.

Outcomes

- Meaningful engagement processes that allow all Albertans to be heard.
- Industry certainty that results in investor confidence.
- Landscapes that support various sustainable recreational opportunities & activities.
- A healthy ecosystem that supports naturally self-sustaining populations (long term) of caribou & other species & that supports traditional/Indigenous uses and practices.

Outcomes

- A healthy ecosystem that supports naturally self-sustaining populations (long term) of caribou & other species & that supports traditional/Indigenous uses and practices.
- Recognition of Indigenous culture, self-governance, & stewardship of the land, & inclusion throughout the process of land, resource, & caribou range management.
- The management plan has the authority to make periodic changes and is continually monitored and reviewed.

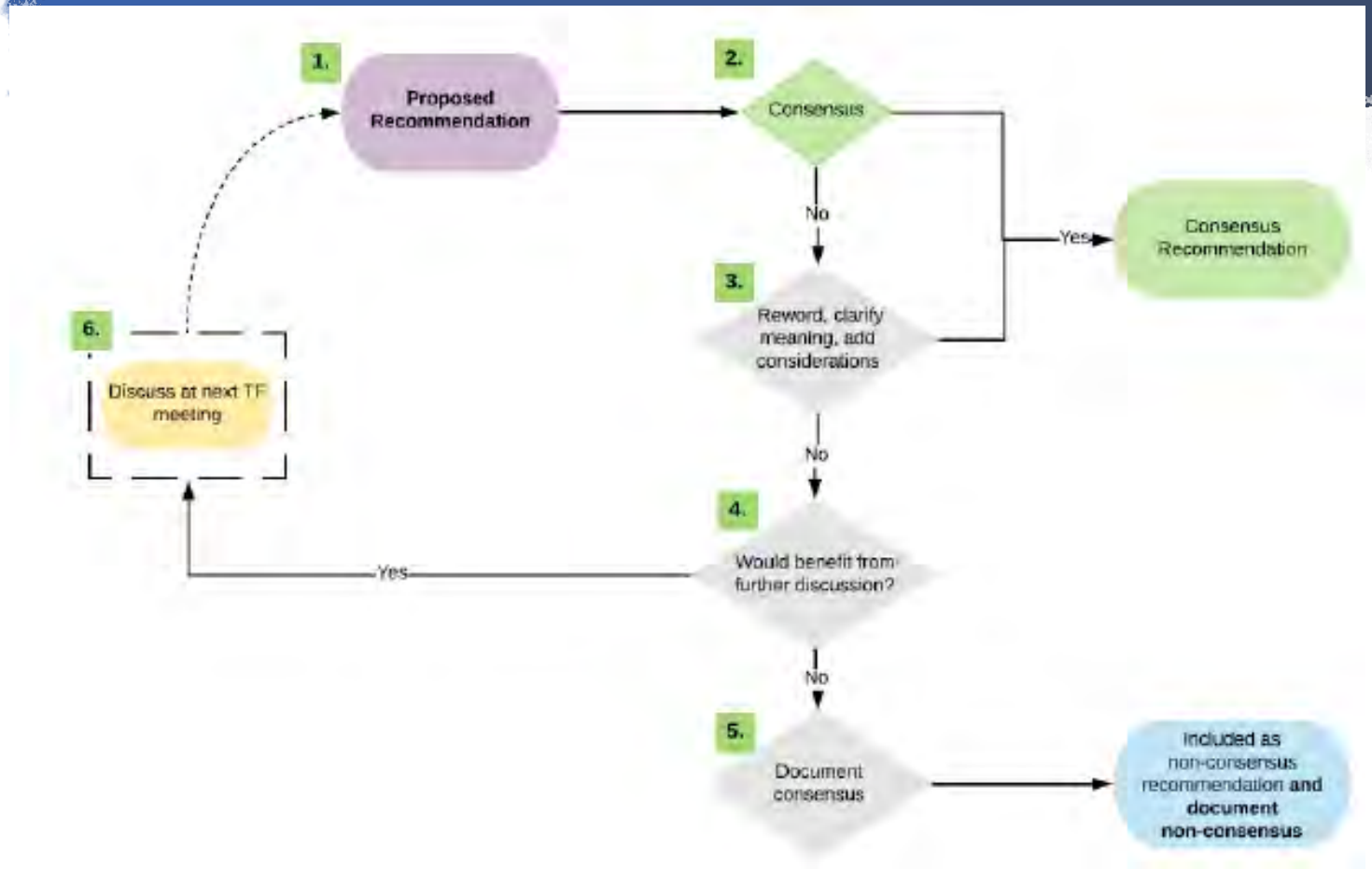
Outcomes

- Existing & future industry, infrastructure & communities remain viable, sustainable, & environmentally responsible & are provided opportunity to grow.

Other Ideas

- **When you consider these outcomes collectively, is your Upper Smoky Task Force team missing any positive social, environmental, and/or economic outcomes for the Sub-Region?**

Next Steps



- Outcomes
- Recommendations
- Socio-Economic Recommendations

To Do List

Industry discussion with Greenview (Forestry and O&G)

Working Landscape Subcommittee

AUMA, Forestry, Oil and Gas

Best Available Science

Communications Plan to work with Greenview (GP as well)

SUBJECT:	**2020 Community Spring Grant Requests**				
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION			
MEETING DATE:	May 19, 2020	CAO:	DT	MANAGER:	KK
DEPARTMENT:	COMMUNITY SERVICES	GM:	GM	PRESENTER:	LL
STRATEGIC PLAN:	Level of Service				

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – Policy 8002 – Community Grants

RECOMMENDED ACTION:

MOTION: That Committee of the Whole recommend to Council to disperse the 2020 Community Grants as presented.

BACKGROUND/PROPOSAL:

At the June 19, 2019 Regular Council Meeting, Council approved Policy 8002- Community Grants. Due to the volume of Grant requests this policy indicates that there are now two Grant request deadlines throughout the year, April 15th and October 15th.

The revised Community Services Miscellaneous Grants approved budget is $1,000,000.00, with a current balance remaining as of May 8, 2020 of $735,385.18. The 2020 Greenview community spring grant funding requests totals $170,000.00.

In an effort to aid Council in the grant review process, Administration is recommending that a decision framework be established. The following questions may be considered:

1) What types of groups or organizations should Greenview fund?
2) What is the criteria used when funding events?
3) Will Greenview fund charitable organizations?
4) Will Greenview fund groups competing with private industry?
5) Is there a degree of consistency and fairness?
6) Will funding positively impact the social/economic development of Greenview?

The grant requests have been summarized into a spreadsheet with Administration providing recommendations for Council's consideration.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Council accepting the recommended motion is that the Committee of the Whole will recommend that Council disperse the 2020 Community Spring Grants accordingly, as presented.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

There are no alternatives to the recommended motion.

FINANCIAL IMPLICATION:

Direct Costs: $170,000.00

Ongoing / Future Costs: N/A

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will present the approved 2020 spring grants as recommended by the Committee of the Whole to Council on May 25, 2020.

ATTACHMENT(S):

- 2020 Spring Grant Application Listing
- Grant Applications

MUNICIPAL DISTRICT OF GREENVIEW 16
2020 PROPOSED GRANT REQUESTS
COMMITTEE OF THE WHOLE MEETING - May 19, 2020

ORGANIZATION	OPERATING	CAPITAL	PURPOSE	PREVIOUS (TWO) GREENVIEW GRANTS	FINANCIAL REPORTING RECEIVED	ADMINISTRATIVE RECOMMENDATION
Grande Cache Animal Society	**$ 10,000.00**		Requested funds will be used to provide care and shelter to lost, abandoned and abused animals in the Grande Cache community, with the majority of the funds requested to be used for the spay/neuter program.	2018- $10,000 Operating Grant	Yes	Administration recommends approving the operating grant amount as there are currently no veterinary services within the Grande Cache Area.
Big Brothers Big Sisters	**$ 12,500.00**		Requested funds will be used for two new mentoring programs within Grande Cache and possible mentoring programs for the Penson school in Grovedale, as well as the Valleyview and Sturgeon Lake area schools.	N/A	Yes	Administation recommends supporting this funding because the programs will provide positive mentors for the youth within the Greenview communities.
Cranberry Rodeo Association	**$25,000.00**		Requested funds will be used for a fall event of either bull riding and/or team roping and/or a wagon event with $10,000.00 being used for property maintenance.	2019 - $25,000.00 operating grant-rodeo, chuck wagon & property maintenance. $59,515.60 capital grant -covered dance floor & band stand. 2018 - $10,000.00 rodeo and chuck wagon event. (Greenview is schedule to construct approach in 2020).	Yes	If Council decides to approved the operating grant of $25,000, Administration recommends Council consider moving this to an annual operating grant.

ORGANIZATION	OPERATING	CAPITAL	PURPOSE	PREVIOUS (TWO) GREENVIEW GRANTS	FINANCIAL REPORTING RECEIVED	ADMINISTRATIVE RECOMMENDATION
New Fish Creek Community Association		**$ 15,000.00**	Requested funds are to be used to upgrade the Amex Building (church) in New Fish Creek. These repairs would include replacing windows, doors and other repairs that may arise.	2020- $15,000.00 Annual Operating 2019 - $13,195.00 Capital Outdoor arena $15,000.00 Annual Operating 2018 - $11,000.00 Capital Men's Washroom Renovations $15,000.00 Annual Operating	Yes	Administration recommends approving the capital grant request. In past years Greenview has supported the upgrades of the New Fish Creek facilities.
Valleyview Chamber of Commerce	**$ 5,500.00**	**$ 2,000.00**	Requested operating funds are to be used for tourism promotional material, updating and map installation. The Requested capital funds are to be used for a destination marketing campaign to highlight the businesses and services along Valleyview's "Gasoline Alley".	N/A	Yes	Administration recommends approving the operating and capital grants requested. Providing updated mapping and promoting the Valleyview area is a benefit to Greenview tourism, residents and visitors as well as promoting the businesses and services in the area. In 2019 Greenview paid $850 to the Grande Prairie Chamber of Commerce as well as approximately $1100 in room rental fees.
Grande Cache Royal Canadian Legion		**$ 50,000.00**	Requested funds are to be used for renovations of the Royal Canadian Legion Building in Grande Cache. Upgrades would include new lighting, ceiling tiles and paint, upgrades to the bar and serving area, mechanical upgrades, designated office and storage space, improved recycling centre and an improved accessible entrance.	N/A	Yes	Administration recommends approving the capital grant request as it would positively impact the Grande Cache community. This request is similar to the Grande Prairie Legion 3 year capital grant request approved in 2019.
Grande Prairie Curling Centre		**$ 5,000.00**	Requested funds are to be used to replace the entire inventory of curling rocks for 8 sheets of ice (128 curling stones). The rocks are at the end of their life and would be replaced with regulation sized rocks allowing for higher level, revenue generating curling events. The ice scraper also requires replacing for improved ice maintenance.	N/A	Yes	Administration does not recommend funding this capital grant request as it would have minimal impact on the economic and social wellbeing of the Greenview community.

ORGANIZATION	OPERATING	CAPITAL	PURPOSE	PREVIOUS (TWO) GREENVIEW GRANTS	FINANCIAL REPORTING RECEIVED	ADMINISTRATIVE RECOMMENDATION
Grande Prairie Buckwild Association	**$ 10,000.00**	**$ 25,000.00**	Requested operating grant funds are to be used for hosting a two-day Pro Bull Riding event. Requested capital grant funds are to be used to purchase and manufacture rodeo production equipment to save on future rental fees and set up costs.	N/A	Yes	Administration does not recommend approving the operating and capital grant requests as it would have minimal impact on the economic and social wellbeing of the Greenview community and set a precedent for future rodeo requests outside of Greenview. Administration recommends Council consider a sponsorhsip up to $10,000 so a recurring request is not implied.
Smoky River Nordic Ski Club	**$ 10,000.00**		Requested operating grant funds are to be used for continued grooming and maintenance of trails at the Grande Cache golf course, Marv Moore campground and Pierre Grey Lakes.	N/A	Yes	Administration recommends approving the funding to provide the community and visitors with groomed and maintained winter trails for outdoor winter activities.
Total Operating:	**$ 73,000.00**					
Total Capital:		**$ 97,000.00**				
Total Grants - Operating and Capital:		**$ 170,000.00**				

202

e:

2020 Community Service Budget for Miscellaneous Grants is $1,000,000.00

SUBJECT:	**M.D of Greenview Library Board**		
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	May 19, 2020	CAO:	MANAGER:
DEPARTMENT:	CAO SERVICES	ACAO SW	PRESENTER: DL
STRATEGIC PLAN:	Level of Service		

RELEVANT LEGISLATION:
Provincial (cite) –N/A

Council Bylaw/Policy (cite) –N/A

RECOMMENDED ACTION:
MOTION: That Committee of the Whole accept the presentation on the M.D of Greenview Library Board proposed bylaw change as presented.

BACKGROUND/PROPOSAL:
The M.D. of Greenview Library Board Members were not re-appointed to their roles in 2020 as the Library Board has requested some revisions to the bylaw to ensure that there are staggered appointments of Library Board Members. This helps ensure the continuity of the library boards. The original bylaw established the number of appointees and gave them a 1-year term. In discussions with the Public Libraries Service Branch, they made a few recommendations:

1. Remove the provision of the terms of appointment from the bylaw. The Act covers the staggering of appointments. It will be up to Administration and the Library Board to track the appointments to ensure they are staggered.
2. Either:
    a. Appoint the Members to a staggered term in June that would stagger them in the following way:
        i. 2 Councillors appointed to October Organizational Meeting 2020
        ii. 3 Members appointed to October Organizational Meeting 2021
        iii. 2 Members appointed to October Organizational Meeting 2022.

    Or,
    b. Appoint members to a short term until the October Organizational Meeting and reset from there.

Appointments are required to be made at a regular interval, however, despite these appointments not conforming to that, it will allow us to reset and get back on track. With the Organizational Meeting typically

as the date where most appointments are made, it makes sense to target this date for the Library Board appointments as well.

In researching how municipalities stagger their appointments, many of them appoint the Councillor Representative annually at the organization meeting because these terms do not align with election cycles. Once the initial appointments are on a staggered cycle, the members at large are often appointed to 3 year terms.

In cases where the terms line up with election cycles, Councillors were sometimes given 2 year appointments.

Committee of the Whole (COTW) may also recommend that the provision stipulating the number of Members At Large may be revised as indicated in the Alternative #1 portion of this RFD.

BENEFITS OF THE RECOMMENDED ACTION:

1. Greenview will correct an oversight and may have staggered appointments for Library Board Members to ensure continuity.

DISADVANTAGES OF THE RECOMMENDED ACTION:

There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: COW may recommend that the provisions stating the number of Members at Large be revised to state that a maximum of 8 Members at Large may be appointed as the Act allows for a minimum of 5 Members and a maximum of 10, This would allow the board to proceed in cases where there are fewer candidates that currently stated in the bylaw, and allow for the appointment of more if there is enough interest.

Alternative #2: COTW may recommend any of the options herein, or may propose additional changes.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will bring a revised bylaw to Council for approval.

ATTACHMENT(S):

- Library Act Sections
- Current Library Board Bylaw

(l) "municipality" means municipality as defined in the *Municipal Government Act*;

(m) "public library" means a municipal library, library system or community library;

(n) "Public Library Rate" means the rate assessed and levied pursuant to section 11;

(o) "school authority" means a school division.

RSA 2000 cL-11 s1;2006 c5 s2;2012 cE-0.3 s275

Part 1
Municipal Libraries

Application

2 This Part applies to every municipal library board maintained in whole or in part by property taxes and

(a) established under this Part, or

(b) continued under this Part.

RSA 2000 cL-11 s2;2006 c5 s3

Municipal board

3(1) The council of a municipality may, by bylaw, establish a municipal library board.

(2) The council shall forward a copy of a bylaw made under subsection (1) to the Minister.

(3) Repealed 2006 c5 s4.

(4) On being established, the municipal library board is a corporation and shall be known as "The (name of municipality) Library Board".

(5) The boards of management of all public libraries to which Part 3 of the *Libraries Act*, RSA 1980 cL-12, applies are continued as municipal library boards under this Act.

RSA 2000 cL-11 s3;2006 c5 s4

Appointment

4(1) A municipal board shall consist of not fewer than 5 and not more than 10 members appointed by council.

(2) A person who is an employee of the municipal board is not eligible to be a member of that board.

(3) Not more than 2 members of council may be members of the municipal board.

(4) A member of the municipal board is eligible to be reappointed for only 2 additional consecutive terms of office, unless at least 2/3 of the whole council passes a resolution stating that the member may be reappointed as a member for more than 3 consecutive terms.

(5) Subject to subsection (6), appointments to the municipal board shall be for a term of up to 3 years.

(6) When appointments are made in respect of a first municipal board, council shall, as nearly as may be possible, appoint 1/3 of the members for a term of one year, 1/3 of the members for a term of 2 years and the remaining members for a term of 3 years.

(7) Notwithstanding this section, the term of office of a member continues until a member is appointed in that member's place.

1983 cL-12.1 s10;1998 c19 s5

Date of appointment

5(1) The appointments of the members of the municipal board shall be made on the date fixed by council.

(2) Any vacancy arising from any cause must be filled by council as soon as reasonably possible for council to do so.

1983 cL-12.1 s11

Validity of proceedings

6 No resolution, bylaw, proceeding or action of any kind of the municipal board may be held invalid or set aside for the reason that any person whose election to council has been judged invalid acted as a member of the board.

1983 cL-12.1 s12

Board duties

7 The municipal board, subject to any enactment that limits its authority, has full management and control of the municipal library and shall, in accordance with the regulations, organize, promote and maintain comprehensive and efficient library services in the municipality and may co-operate with other boards and libraries in the provision of those services.

1983 cL-12.1 s13

Budget

8(1) The municipal board shall before December 1 in each year prepare a budget and an estimate of the money required during the ensuing fiscal year to operate and manage the municipal library.

BYLAW NO. 18-805
of the Municipal District of Greenview No. 16

A Bylaw of the Municipal District of Greenview No. 16, in the Province of Alberta, to provide for the establishment of a Municipal Library Board.

Whereas, the Council of the M.D of Greenview deems it expedient to propose the establishment of a municipal library board.

Therefore, with the authority and under the provisions of the *Libraries Act*, the Council of the M.D of Greenview duly assembled, enacts as follows:

1. **Title**

   1.1 This Bylaw may be cited as the "Municipal Library Board Bylaw"

2. **Establishment and Membership**

   2.1 There shall be established a Municipal Library Board for the M.D of Greenview.

   2.2 The relationship between the M.D of Greenview Council and the Municipal Library Board shall be governed by the *Libraries Act* and any Amendments and Regulations pertaining thereto.

   2.3 The board will consist of two (2) Councillors, and five (5) Members at Large.

   2.4 A Trustee of the Grande Yellowhead Public School Division will serve in a liaison role as a non-voting Member of the Board.

3. **Term of Office**

   3.1 Each member of the Municipal Library Board shall be appointed at the pleasure of the Council for a term of one year, and may be re-appointed upon the expiry of the term at the pleasure of Council.

This Bylaw shall come into force and effect January 14, 2019.

Read a first time this 10th day of December, 2018.

Read a second time this 10th day of December, 2018.

Read a third time and passed this 14th day of January, 2019.

REEVE

CHIEF ADMINISTRATIVE OFFICER

SUBJECT:	**Greenview Logo Soft Rebrand**		
SUBMISSION TO:	COMMITTEE OF THE WHOLE	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	May 19, 2020	CAO:	MANAGER: SS
DEPARTMENT:	CAO SERVICES	ACAO SW	PRESENTER: SS
STRATEGIC PLAN:	Level of Service		

RELEVANT LEGISLATION:
Provincial (cite) –N/A

Council Bylaw/Policy (cite) –N/A

RECOMMENDED ACTION:
MOTION: That Council accept the Greenview Logo soft rebrand presentation for information, as presented.

BACKGROUND/PROPOSAL:
Administration recently created a simplified and updated version of the original MD of Greenview logo (crest) in-house. This was done to give the existing brand a slight update and reduction of colours used, bringing it in-line with existing branding colours being used by Economic Development and other elements currently being used for Greenview marketing, thus creating cohesive Greenview branding across the organization.

Administration took great care to keep important design elements of the existing Greenview logo, simplifying lines and reducing the number of colours used, as is brand development best practice.

Benefits of adopting the soft rebranded Greenview logo are:

- Brand cohesiveness for Greenview marketing collateral across all departments
- Reduction in number of colours will result in cost savings for decals placed on items such as vehicle/equipment, signage, IT equipment, and infrastructure items etc.
- Reduction in number of colours will result in cost savings for embroidery on promotional materials
- Simplified lines in updated crest will make reproduction easier for small-scale logo placement on promotional products, printed materials, uniforms etc.
- Adoption of updated colours give the Greenview crest updated energy and vitality

Administration will be bringing the Greenview Logo to the May 25, 2020 Regular Council meeting for Council's approval.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of Committee of the Whole accepting the logo update is to allow time for Council members to consider and potentially adopt the changes at an upcoming Council Meeting.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

N/A

FINANCIAL IMPLICATION:

N/A

STAFFING IMPLICATION:

There are no staffing implications for the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

N/A

ATTACHMENT(S):

- Greenview Soft Rebrand Logo sample document.

PROPOSED MD of Greenview logo update with use variations

PROPOSED Footer

Color Swatches

HEX #15bef0
RGB 21 190 240
CMYK 67 2 0 0
PANTONE 298 CP

HEX #00538b
RGB 0 83 139
CMYK 100 71 22 5
PANTONE 7462 C

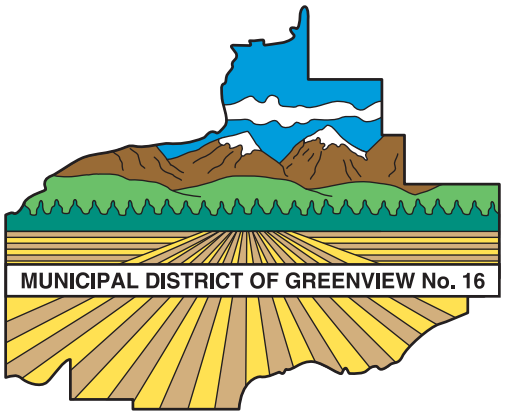
HEX #4c9c2e
RGB 76 156 46
CMYK 74 15 100 2
PANTONE 362 CP

HEX #96ca4f
RGB 150 202 79
CMYK 46 0 90 0
PANTONE 375 CP

HEX # 00953b
RGB 0 149 59
CMYK 99 12 100 2
PANTONE 355 C

HEX # 0085CA
RGB 000 133 202
CMYK 100 013 001 002
Pantone Process Blue

CURRENT MD of Greenview logo



Present logo colors

Present logo accent colors

NEW Brand Headline

Municipal District of
GREENVIEW

Gabriel Font
From Economic Development Branding page 19

OLD Brand Headline

Municipal District of
GREENVIEW

Calibri Font
Greenview Standards Guide

Date	**Chief Administrative Officer Action Log**	Responsible Party	NOTES/STATUS
20 05 11 RC Meeting			
May 11, 2020	MOTION: 20.05.263. Moved by: COUNCILLOR SHAWN ACTON That Council give third reading to Bylaw 20-843, the 2020 Tax Rate Bylaw. Councillor Didow requested a recorded vote For: Councillor Bill Smith, Councillor Dale Gervais, Councillor Les Urness, Councillor Shawn Acton, Reeve Dale Smith, Councillor Roxie Rutt, Councillor Tom Burton Opposed: Councillor Duane Didow, Councillor Winston Delorme, Deputy Reeve Tyler Olsen CARRIED		
May 11, 2020	MOTION: 20.05.265. Moved by: COUNCILLOR DALE GERVAIS That Council authorize Administration to terminate the current RCMP Enhanced Policing Contracts with Valleyview, Grande Prairie and Weyerhaeuser. CARRIED		
May 11, 2020	MOTION: 20.05.267. Moved by: COUNCILLOR BILL SMITH That Council direct Administration to enter into discussion with Weyerhaeuser regarding Greenview's Community Peace Officer Program. CARRIED		
May 11, 2020	MOTION: 20.05.268. Moved by: COUNCILLOR WINSTON DELORME That Council award the Forestry Trunk Road Paving project to Wapiti Gravel Suppliers in the amount of $6,855.965.04. CARRIED		
May 11, 2020	MOTION: 20.05.270. Moved by: COUNCILLOR DUANE DIDOW That Council approve grant funding in the amount of $13,500.00 for the Valleyview Health Centre Foundation to purchase a specialized bathtub for the Acute Care ward at the Valleyview Hospital, with funds to come from the 2020 Community Services Miscellaneous Grants contingent on that the remaining funding be acquired, to be expended in 2020. CARRIED	Com. Serv.	In progress.
May 11, 2020	MOTION: 20.05.271. Moved by: COUNCILLOR TOM BURTON That Council approve the reallocation of $10,281.49 from the 2019 grant funds awarded to the DeBolt Outdoor Recreation Society to the DeBolt and District Agriculture Society. CARRIED	Com. Serv.	In progress.
May 11, 2020	MOTION: 20.05.273. Moved by: COUNCILLOR ROXIE RUTT That Council direct Administration to waive the 2019 penalties on tax roll 178960 in the amount of $10.38, tax roll 36672 in the amount of $137.17 and tax roll 36673 in the amount of $3.76 due to a clerical error. CARRIED		

May 11, 2020	MOTION: 20.05.274. Moved by: COUNCILLOR WINSTON DELORME That Council authorize Administration to award the proposal for Aerial Photography Services 2020 to GeodesyGroup Inc. at a cost of $210,480.00, with funds to come from the Information Systems 2020 Operational Budget. CARRIED		
May 11, 2020	MOTION: 20.05.275. Moved by: COUNCILLOR DUANE DIDOW That Council approve Policy 1018 Expenditure and Disbursement as presented. CARRIED		
May 11, 2020	MOTION: 20.05.276. Moved by: COUNCILLOR SHAWN ACTON That Council approve Policy 1027 “Signing Authority” as presented. CARRIED		
May 11, 2020	MOTION: 20.05.277. Moved by: COUNCILLOR LES URNESS That Council approve approval Policy 1502 “Reserves” as amended. • Verify Gravel Pit Reclamation Reserve CARRIED		
May 11, 2020	MOTION: 20.05.278. Moved by: COUNCILLOR DUANE DIDOW That Council approve Policy 2010 “Substance Abuse” as amended: • The title be changed to “Substance Abuse Prevention” CARRIED		
May 11, 2020	MOTION: 20.05.279. Moved by: COUNCILLOR SHAWN ACTON That Council approve Policy 4006 “Vehicle Replacement” as amended: • Add “Emergency Services Equipment will be evaluated separately.” CARRIED		
May 11, 2020	MOTION: 20.05.280. Moved by: COUNCILLOR DALE GERVAIS That Council approve Policy 4020 “Snow Removal Rural Residential Driveways” as amended: • Remove Hamlet of Greenview and replace with Greenview Hamlets • Add Provision 11 “If a renter does not pay the required fee it will be charged back to the land owner.” CARRIED		
May 11, 2020	MOTION: 20.05.281. Moved by: COUNCILLOR TOM BURTON That Council cancel the Ratepayer BBQ’s until the Covid-19 Provincial Regulation CMOH Order 07-2020 has been lifted. CARRIED		
May 11, 2020	MOTION: 20.05.282. Moved by: COUNCILLOR DUANE DIDOW That Council give third reading to Bylaw 20-851 “Municipal Emergency management Bylaw”. CARRIED		
May 11, 2020	Councillor Shawn Acton has requested a notice of motion to the May 25, 2020 Regular Council Meeting to add the 8 mile road to the 2020 Budget.		

May 11, 2020	MOTION: 20.05.286. Moved by: COUNCILLOR ROXIE RUTT That Council approve the 2020-2022 Greenview Staff Agreement for information as amended. CARRIED		
May 11, 2020	MOTION: 20.05.287. Moved by: COUNCILLOR DUANE DIDOW That Council direct Administration to write a letter to MLA's Martin Long and Travis Toews and Honourable Ric McIver, Minister of Transportation regarding Highway 40 conditions. CARRIED		
20 04 27 RC Meeting			
April 27, 2020	MOTION: 20.04.243. Moved by: DEPUTY REEVE TYLER OLSEN That Council give third reading to Bylaw 20-847 "Well Drilling Equipment Tax Bylaw". CARRIED		Complete
April 27, 2020	MOTION: 20.04.244. Moved by: COUNCILLOR SHAWN ACTON That Council give third reading to Bylaw 20-849 "Tax Payment Plan". CARRIED		Complete
April 27, 2020	MOTION: 20.04.245. Moved by: COUNCILLOR ROXIE RUTT That Council passes the Operating Budget as presented showing Revenue of $143,896,706. and Expenses of $172,317,485. with $30,000,000. to be transferred from the Restricted Surplus. CARRIED	Corp. Serv.	Complete
April 27, 2020	MOTION: 20.04.246. Moved by: COUNCILLOR TOM BURTON That Council passes the Capital Budget as presented showing Expenditures of $81,126,615. with the entire amount to be funded from the Restricted Surplus. CARRIED	Corp. Serv.	Complete
April 27, 2020	MOTION: 20.04.249. Moved by: COUNCILLOR DALE GERVAIS That Council appoint: Dennis Haglund, Maureen Bly, Hazel Edwards, Jennifer Hammell, Terri Hoddinott, Brenda Jantz, Sue LePage, Cheylin Patenaude, Sage Eshelman, Madeleine Clough, Brendan Braes, Jenneka Olsen and Kelly Neufeld as Pest Inspectors for the Municipal District of Greenview No. 16 under Section 10 of the Agricultural Pests Act A-8 for the term of their employment. CARRIED		Complete
April 27, 2020	MOTION: 20.04.250. Moved by: COUNCILLOR TOM BURTON That Council appoint: Dennis Haglund, Maureen Bly, Hazel Edwards, Jennifer Hammell, Terri Hoddinott, Brenda Jantz, Sage Eshelman, Madeleine Clough and Kelly Neufeld as Weed Inspectors for the Municipal District of Greenview No. 16 under Section 7 of the Weed Control Act W-5.1 for the term of their employment. CARRIED		Complete

April 27, 2020	MOTION: 20.04.251. Moved by: DEPUTY REEVE TYLER OLSEN That Council provide a letter to the participating municipalities in the Tri-Municipal Industrial Partnership (TMIP); advising them that due to the current market conditions Greenview will re-evaluate the process being used for the development of the TMIP project. CARRIED		Complete
April 27, 2020	MOTION: 20.04.252. Moved by: COUNCILLOR SHAWN ACTON That Council approve grant funding in the amount of $27,000 for the Valleyview Health Centre Foundation to purchase a specialized bathtub for the Acute Care ward at the Valleyview Hospital, with funds to come from the 2020 Community Services Miscellaneous Grants. MOTION: 20.04.253. Moved by: COUNCILLOR TOM BURTON That Council refer motion 20.04.252., Valleyview Health Centre Foundation, to a future council meeting with a letter from AHS confirming their denial of a request for the specialized bathtub and additional information. CARRIED		Complete
April 27, 2020	MOTION: 20.04.254. Moved by: COUNCILLOR BILL SMITH That Council approve the Intermunicipal Collaboration Framework with Yellowhead County. CARRIED		Complete
April 27, 2020	MOTION: 20.04.255. Moved by: DEPUTY REEVE TYLER OLSEN That Greenview Council authorize administration to submit a proposal to the Province of Alberta to enter into a Career and Employment Contract with Alberta Works in Grande Cache. CARRIED		On Going
April 27, 2020	MOTION: 20.04.258. Moved by: COUNCILLOR DUANE DIDOW That Council approve the monthly per diem of $4,717.00 along with the regular monthly honorarium for the Reeve, retroactive to March 1, 2020 and continuing until restrictions are lifted on public meetings due to the Coronavirus Pandemic. CARRIED		Complete
20 04 14 RC Meeting			
April 14, 2020	MOTION: 20.04.210. Moved by: COUNCILLOR DALE GERVAIS That Council schedule a Public Hearing for Bylaw No. 20-841, to be held on May 25, 2020, at 9:15 a.m. for the re-designation of a 4.04-hectare ± area from Agricultural One (A-1) District to Country Residential One (CR-1) District within NW-34-72-22-W5. CARRIED	Planning & Dev	Complete

April 14, 2020	MOTION: 20.04.218. Moved by: COUNCILLOR TOM BURTON That Council give first reading to Bylaw 20-850 “Municipal Ward Boundaries and Council Composition” with amendments; • Add First Nations by name to Provision 4 • Black out First Nations Reserves • Amend boundaries of Ward 1 to include the portion of Ward 9 south of Victor Lake CARRIED	CAO Serv	Complete
April 14, 2020	MOTION: 20.04.219. Moved by: COUNCILLOR ROXIE RUTT That Council schedule a Public Hearing for Bylaw 20-850 “Municipal Ward Boundaries and Council Composition” to be held May 25, 2020 at 9:30 a.m. CARRIED	CAO Serv	Complete
April 14, 2020	MOTION: 20.04.220. Moved by: COUNCILLOR DALE GERVAIS That Council give first reading to Bylaw No. 20-851 “Municipal Emergency Management Bylaw” as amended; • Add Sturgeon Lake Cree Nation to Provision 9.2.6 • Add changes from Emergency Management Act amendments CARRIED	CAO Serv	Complete
April 14, 2020	MOTION: 20.04.221. Moved by: COUNCILLOR ROXIE RUTT That Council approve M2 Engineering to perform the Sturgeon Lake Water and Wastewater Servicing Feasibility Study for the amount of $57,598.99, with funds to come from Environmental Services 2020 Capital Budget. CARRIED	Environment	Complete
April 14, 2020	MOTION: 20.04.224. Moved by: COUNCILLOR ROXIE RUTT That Council direct Administration to seek additional information on the capital request in the amount of $1,267,423.21 from Evergreens Foundation. CARRIED	Community Services	Ongoing
April 14, 2020	MOTION: 20.04.225. Moved by: COUNCILLOR DUANE DIDOW That Council authorize Administration to forward the 2020 Operating Requisition to Evergreens Foundation in the amount of $795,189.47, with funds to come from the Community Services Budget. CARRIED	Comm Serv/Corp Serv	Complete
April 14, 2020	MOTION: 20.04.226. Moved by: COUNCILLOR SHAWN ACTON That Council authorize Administration to transfer $33,189.47 from Contingency Reserve to the Community Services Budget. CARRIED	Corp Serv	Complete
April 14, 2020	MOTION: 20.04.227. Moved by: COUNCILLOR SHAWN ACTON That Council authorize Administration to proceed with application for Greenview to become a member of the Regional Weed and Pest Appeal Board. CARRIED	Ag Serv	On Going

April 14, 2020	MOTION: 20.04.228. Moved by: COUNCILLOR DUANE DIDOW That Council approve the previously awarded $500.00 sponsorship to the Valleyview Cup Charity Tournament be given directly to Make-A-Wish Foundation following the cancellation of the tournament. CARRIED	Community Serv	Complete
April 14, 2020	MOTION: 20.04.232. Moved by: REEVE DALE SMITH That Council direct Administration to prepare the 2020 Tax Rate Bylaw to reflect a due date of September 30, 2020 for non-residential taxes and November 15, 2020 for residential taxes and to leave penalty rates the same as 2019. CARRIED	Corp Serv	Complete
April 14, 2020	MOTION: 20.04.237. Moved by: COUNCILLOR DALE GERVAIS That Council direct Administration to notify the landowner that Greenview is not interested in the purchase of Plan 882 2869, Lot 2 within SE 01-69-06-W6. CARRIED	Planning & Dev	Complete
20 03 23 RC Meeting			
March 23, 2020	MOTION: 20.03.184. Moved by: COUNCILLOR TYLER OLSEN That Council approve development permit application D20-078 for Industrial/Commercial Offices to operate in the Direct Control DC District located at Lot 11; Block 38; Plan 042 5089; 9811 Hoppe Avenue, Grande Cache, subject to the conditions listed in Appendix A. CARRIED	Planning & Dev	On going
March 23, 2020	MOTION: 20.03.185. Moved by: COUNCILLOR TOM BURTON That Council approve development permit application D20-077 for a recycling depot/bottle depot to operate in the Direct Control DC District located at Lot 11; Block 38; Plan 042 5089; 9811 Hoppe Avenue, Grande Cache, subject to the conditions listed in Appendix A. CARRIED	Planning & Dev	On going
March 23, 2020	MOTION: 20.03.189. Moved by: COUNCILLOR WINSTON DELORME That Council approve the request for two (2) GIS Technicians positions. CARRIED	P & D	Complete
20 03 09 RC Meeting			
March 9, 2020	MOTION: 20.02.134. Moved by: COUNCILLOR LES URNESS That Council remove former General Manager, Corporate Services, Rosemary Offrey from the list of authorized signing authorities on Greenview bank account held at Servus Credit Union and add Stacey Wabick, Assistant Chief Administrative Officer as signing authority. CARRIED	Corp. Serv.	Complete

March 9, 2020	MOTION: 20.03.164. Moved by: COUNCILLOR TOM BURTON That the current boundaries of Ward 1 remain the same in the Ward Boundary Bylaw and that one elected representative be elected from Ward 1. Councillor Gervais requested a recorded vote; For: Councillor Bill Smith, Councillor Tom Burton, Councillor Shawn Acton, Councillor Tyler Olsen, Councillor Winston Delorme, Councillor Les Urness Opposed: Reeve Dale Smith, Councillor Roxie Rutt, Councillor Dale Gervais, Deputy Reeve Duane Didow CARRIED	CAO Services	Complete
March 9, 2020	MOTION: 20.03.165. Moved by: COUNCILLOR TOM BURTON That the Ward Boundary Review reflect an 11 Member Council. Reeve Dale Smith requested a recorded vote For: Councillor Tom Burton, Councillor Dale Gervais, Councillor Bill Smith Councillor Les Urness, Reeve Dale Smith, Councillor Winston Delorme Opposed: Councillor Roxie Rutt, Deputy Reeve Duane Didow, Councillor Tyler Olsen, Councillor Shawn Acton. CARRIED	CAO Services	Complete
March 9, 2020	MOTION: 20.03.166. Moved by: COUNCILLOR DALE GERVAIS That Council direct Administration to bring forward a bylaw adding a second elected representative to Ward 8 (Grovedale) and leaving the remaining wards as is. Reeve Dale Smith requested a recorded vote For: Councillor Bill Smith, Councillor Tom Burton, Councillor Dale Gervais, Councillor Roxie Rutt, Reeve Dale Smith, Councillor Tyler Olsen, Councillor Winston Delorme, Deputy Reeve Duane Didow, Councillor Les Urness. Opposed: Councillor Shawn Acton CARRIED	CAO Services	Complete
20 02 24 RC Meeting			
February 24, 2020	MOTION: 20.02.123. Moved by: COUNCILLOR ROXIE RUTT That Council award the Greenview Website Redesign and Hosting project to Sitewyze Solutions with an upset limit of $14,467.00 with funds to come from the Communications Operations Budget. CARRIED	Communications	In Progress
February 24, 2020	MOTION: 20.02.133. Moved by: DEPUTY REEVE DUANE DIDOW That Council add Stacey Wabick, Assistant Chief Administrative Officer as signing authority to the approved list for Greenview bank accounts. CARRIED		Complete

February 24, 2020	MOTION: 20.02.135. Moved by: COUNCILLOR LES URNESS That Council remove former General Manager, Corporate Services, Rosemary Offrey from the list of authorized signing authorities on Greenview bank account held at Servus Credit Union and add Stacey Wabick, Assistant Chief Administrative Officer as signing authority. MOTION: 20.02.135. Moved by: COUNCILLOR WINSTON DELORME That Council table motion 20.02.134. Authorized Signing Authorities on Greenview Bank Accounts, until later in the meeting. CARRIED		Complete
February 24, 2020	MOTION: 20.02.136. Moved by: DEPUTY REEVE DUANE DIDOW That Council direct Administration to request a meeting with the Minister of Energy and Alberta Environment and Parks and Alberta Energy Regulator regarding timelines and proximities of work camps to their oil and gas facilities. CARRIED	CAO/I&P	On Going
20 02 19 SC Meeting			
February 19, 2020	MOTION: 20.02.112. Moved by: REEVE DALE SMITH That Council approve the expenditure of 50% of the project cost for the twinning of highway 40 for approximately 20 kilometres up to and including the intersection of Township Road 700, not exceeding 60 million dollars, with funds to come from the Road Infrastructure Reserves to be provided to the Government of Alberta for 30 million dollars in 2020 and 30 million dollars in 2021; and that any contributions from other funding contributors be deducted from the MD of Greenview's portion. CARRIED		Complete
20 02 18 COTW Meeting			
February 18, 2020	MOTION: 20.02.20. Moved by: COUNCILLOR DALE GERVAIS That Committee of the Whole recommend to Council to hold a Joint Council meeting with the Town of Fox Creek as soon as possible regarding annexation. CARRIED		In Progress Due to Covid
20 02 10 RC Meeting			
February 10, 2020	MOTION: 20.02.77. Moved by: COUNCILLOR DALE GERVAIS That Council schedule a Public Hearing for Bylaw No. 20-837, to be held on March 9, 2020, at 10:00 a.m. for the re-designation of a 0.92-hectare (2.28-acre) ± area from Agricultural One (A-1) District to Institutional (INS) District within NW-12-72-01-W6. CARRIED	I&P	Complete

February 10, 2020	MOTION: 20.02.79. Moved by: COUNCILLOR BILL SMITH That Council schedule a Public Hearing for Bylaw No. 20-838, to be held on March 9, 2020, at 10:00 a.m. for the re-designation of a 1.30-hectare (3.21-acre) ± area from Country Residential One (CR-1) District to Institutional (INS) District within NW-33-69-06-W6 (Plan 0324934 Block 1 Lot 1A). CARRIED	I&P	Complete
February 10, 2020	MOTION: 20.02.87. Moved by: COUNCILLOR ROXIE RUTT That Council approve the establishment of a Valleyview and District Medical Clinic Building Reserve Fund. CARRIED	Corp Serv	Complete
February 10, 2020	MOTION: 20.02.88. Moved by: COUNCILLOR DALE GERVAIS That Council approve the establishment of a Valleyview and District Medical Clinic Equipment Reserve Fund. CARRIED	Corp Serv	Complete
February 10, 2020	MOTION: 20.02.90. Moved by: COUNCILLOR WINSTON DELORME That Council approve the establishment of a Greenview Daycare Funding Reserve. CARRIED	Corp Serv	Complete
February 10, 2020	MOTION: 20.02.91. Moved by: COUNCILLOR DALE GERVAIS That Council authorize Administration to transfer $440,000.00 from the Grovedale Daycare Society Funding Reserve to the Greenview Daycare Funding Reserve. CARRIED	Corp Serv	Complete
February 10, 2020	MOTION: 20.02.95. Moved by: COUNCILLOR TOM BURTON That Council authorize Administration to source Greenview owned land for the purpose of the development of a daycare facility through a third party agreement while maintaining land ownership, within the boundaries of the Hamlet of Grovedale. CARRIED	Com. Serv.	Complete
20 01 27 RC Meeting			
January 27, 2020	MOTION: 20.01.48. Moved by: COUNCILLOR TOM BURTON That Council direct Administration to begin the process of acquiring a Water Utility License with Alberta Environment and Parks to service the Tri-Municipal Industrial Partnership district. CARRIED	Ec. Dev.	In progress
January 27, 2020	MOTION: 20.01.57. Moved by: COUNCILLOR DALE GERVAIS That Council direct administration to bring back an amendment to the Land Use Bylaw to allow RV Sani-Dumps in recreational district permitted use. CARRIED	I &P Env Serv/Leg Serv	On going.
20 01 20 COTW Meeting			

January 20, 2020	MOTION: 20.01.06. Moved by: COUNCILLOR LES URNESS That Committee of the Whole recommend that Council direct Administration to bring a report forward regarding the Ridgevalley Seniors Assistance Society grant to a future Council Meeting. CARRIED	Com Serv	Complete
January 20, 2020	MOTION: 20.01.08. Moved by: REEVE DALE SMITH That Committee of the Whole accept the presentation with the possible name change for the M.D. of Greenview No. 16 for information and recommend that Council direct Administration to bring a name change report to include additional cost information. CARRIED	CAO Serv	Complete
20 01 13 RC Meeting			
January 13, 2020	MOTION: 20.01.13. Moved by: COUNCILLOR DALE GERVAIS That Council direct Administration to enter into a Road Lease/License Agreement with Deep Valley Power Systems Ltd. on the west side of SW-22-68-22-W5. CARRIED	I & P	On going.
January 13, 2020	MOTION: 20.01.15. Moved by: COUNCILLOR WINSTON DELORME That Council set a ten percent contingency for the Grande Cache Recreation Services - Fitness with notification to Council. CARRIED	Corp Serv/Com Serv	In Progress
19 12 09 RC Meeting			
December 9, 2019	MOTION: 19.12.853. Moved by: DEPUTY REEVE DUANE DIDOW That Council moves Third and Final Reading of Bylaw 19-833 – 2020 Operating Line of Credit Borrowing Bylaw. CARRIED	Corp Serv	Complete
December 9, 2019	MOTION: 19.12.872. Moved by: COUNCILLOR BILL SMITH That Council approve revised Policy 1015 Conference Attendance as amended; • AAMDC to RMA • #8. Add "or by Council Motion • Travelling partner must be of legal age. Reeve Smith requested a recorded vote For Councillor Bill Smith, Councillor Tom Burton, Councillor Roxie Rutt, Reeve Dale Smith, Councillor Tyler Olsen, Councillor Les Urness, Councillor Winston Delorme, Deputy Reeve Duane Didow Opposed None CARRIED	CAO Services	Complete
December 9, 2019	Notice of Motion: That Administration bring back a recommendation on the roads within the Co-ops and Enterprises.	CAO/ I & P	In Progress
19 10 28 Org & RC Meeting			

October 28, 2019	MOTION: 19.10.777. Moved by: COUNCILLOR TOM BURTON That Council refer the appointment of two individuals to the Tri-Municipal Industrial Partnership Corporate Entity until a future council meeting. CARRIED	Ec. Dev.	Paused
October 28, 2019	MOTION: 19.10.795. Moved by: COUNCILLOR WINSTON DELORME That Council approve $145,000.00 for the replacement of the sewage plant Genset in Grande Cache, with funds to come from the Wastewater Reserve. CARRIED	Corp Serv/I&P	Budget side Complete
19 09 09 RC Meeting			
September 9, 2019	MOTION: 19.09.622. Moved by: COUNCILLOR BILL SMITH That Council direct Administration to continue the Road Closure process for the Sturgeon Heights Community Club on the south side of SE 25-70-25 W5 with the $1,500 application fee waived. CARRIED	I&P	In progress
September 9, 2019	MOTION: 19.09.623. Moved by: COUNCILLOR TOM BURTON That Council direct administration to allow a variance on portion SE 25-70-25 W5M for the purpose of fencing adjacent to Sturgeon Heights Cemetery. CARRIED	I&P	In progress
19 08 26 RC Meeting			
August 26, 2019	MOTION: 19.08.591. Moved by: COUNCILLOR DALE GERVAIS That Council direct Administration to investigate the feasibility and cost of upgrading the existing facility at NE 33 70 24 W5M. CARRIED	Com Serv	In Progress
August 26, 2019	MOTION: 19.08.592. Moved by: REEVE DALE SMITH That Council direct Administration to investigate the feasibility of all recreation potential on Greenview lands within the Narrows. CARRIED	Com Serv	In Progress
August 26, 2019	MOTION: 19.08.601. Moved by: COUNCILLOR TOM BURTON That Council direct Administration to investigate, with Alberta Transportation, the conditions of three digit provincial roads in Greenview and possible solutions. CARRIED	CAO/I & P	In Progress
19 06 10 RC Meeting			
June 10, 2019	MOTION: 19.06.445. Moved by: COUNCILLOR BILL SMITH That Council directs Administration to seek a panel to do a Council Compensation review prior to October 2021. CARRIED	CAO	In Progress
19 05 13 RC Meeting			

May 13, 2019	MOTION: 19.05.359. Moved by: COUNCILLOR BILL SMITH That Council direct Administration to acquire a lease at Shuttler Flats and to operate the site and work towards divestment of the site. CARRIED	Com. Serv.	Complete
	19 04 08 RC Meeting		
April 8, 2019	MOTION: 19.04.290. Moved by: COUNCILLOR BILL SMITH That Council defer motion 19.04.287. Grovedale Public Service Building Site Dugout until more detailed information can be brought forward on options 2 and 3. CARRIED	Community Service	Removed from Budget
	18 12 10 RC Meeting		
December 10, 2018	MOTION: 18.12.719. Moved by: REEVE DALE GERVAIS That Council as a whole engage a third party to conduct the annual Council Self-Appraisal to occur in early 2019. CARRIED	Council	
	18 10 09 RC Meeting		
224 Oct. 9, 2018	MOTION: 18.10.559. Moved by: COUNCILLOR BILL SMITH That Council direct Administration to pursue the purchase of public land in the Grovedale area for industrial development, once Alberta Environment and Parks has reviewed their application to purchase process. CARRIED MOTION: 18.10.560. Moved by: REEVE DALE GERVAIS That Council rescind motion 18.10.559., in regard to the Grovedale Public Land Purchase. CARRIED MOTION: 18.10.561. Moved by: COUNCILLOR BILL SMITH That Council direct Administration to pursue the purchase of public land, NE 35-68-6 W6M and the NW 36-68-6 W6M, in the Grovedale area for industrial development. CARRIED	I & P	In Progress- Application submitted to Public Lands through Bearisto. Anticipated completion date 2020+
	18 09 24 RC Meeting		
September 24, 2018	MOTION: 18.09.536. Moved by: COUNCILLOR ROXIE RUTT That Council direct Administration to complete the Intermunicipal Collaboration Frameworks with Yellowhead County, Woodlands County, and Birch Hills County Administratively. CARRIED	CAO Serv	Complete