



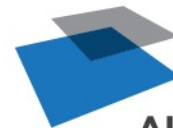
2021 Stakeholder Session



**ALBERTA DATA
PARTNERSHIPS**

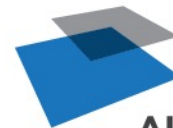
Sustainable spatial data
for responsible development.

PURPOSE



ALBERTA DATA
PARTNERSHIPS

AGENDA



**ALBERTA DATA
PARTNERSHIPS**

9:00 – 9:10

Welcome and Introduction

David Muddle

Erik Holmlund

9:10 – 9:50

**Alberta Data Partnerships
Background and
Business Update
City of Edmonton Mapping**

Erik Holmlund

9:50 – 10:00

Q&A

10:00 – 10:30

Altalis Update

Jim Chorel

Leah Lilley

10:30 – 10:45

Q&A

10:45 – 11:30

**Enhanced Titles Mapping
RITL Update**

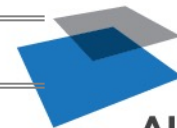
Erik Holmlund

11:30 – 11:45

Q&A

11:45 – 11:50

Closing Remarks



**ALBERTA DATA
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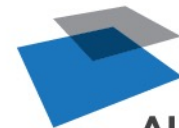
HISTORY OF THE ORGANIZATION



**ALBERTA DATA
PARTNERSHIPS**

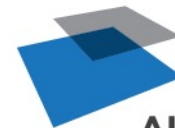
**Early
to mid
1990s**

- In the late 80s and early 90s, the GoA compiled provincial coverage of cadastral data and a 1:20K series of topographic maps
- Cadastral updates cost over \$200 per plan
- Need to move to electronic process
- 6,000 plans per year projected to go to 10,000
- GoA decided to get out of the map updating business



1997

- Mapping assigned to Spatial Data Warehouse
 - Ownership of data remained with GoA
 - Governing Documents signed
- Original Board Members:
 - GOA
 - Alberta Power
 - Canadian Western Natural Gas Company
 - Northwestern Utilities
 - AGT
 - Transalta Utilities



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1997

-

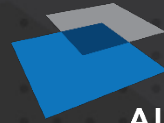
1999

- SDW created business plan and RFI was released
 - Altalis won RFI and began negotiations to become ADP JV partner
 - Joint Venture Agreement is signed and Altalis becomes the initial private sector partner of SDW

altalis



**ALBERTA DATA
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ALBERTA DATA
PARTNERSHIPS

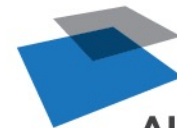


Mapping Data Agreement (MDA)

- Between GoA & ADP
- Grants ADP distribution rights of base data
- ADP is committed to maintain it
- Effective September 1997 (renewed in 2018)

Joint Venture Agreement (JVA)

- Between ADP & Altalis
- Contractual Joint Venture
- Makes Altalis the day to day operator
- Revenue sharing which funds ADP

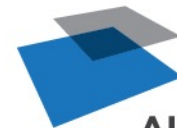


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2000

ADP Stakeholder Forum Identifies Priorities

- Titles Mapping
- Municipal membership in SDW
- Transfer of Base Features Data Set
- Topographical updating
- Integration of Crown Land Dispositions



ALBERTA DATA
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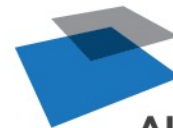
2001

MDLA expanded to include Titles Mapping

- AUMA and AAMDC join the SDW Board



Partners in Advocacy & Business



**ALBERTA DATA
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2005

- Entered Agreement to map Crown Land Dispositions on Nov. 1 - DIDs
 - No government funding required to map historical dispositions – included in fee
- CAPP and AFPA joined SDW Board



CANADIAN ASSOCIATION
OF PETROLEUM PRODUCERS



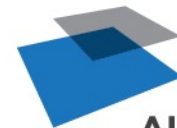
ALBERTA DATA
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2010
-
2012

- Alberta One Call, ACR joined SDW Board



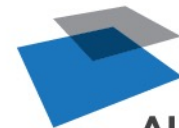
- DIDs+ released in October 2012
 - Enhanced product that includes DIDs and 40 other attributes including Owner name



ALBERTA DATA
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2013
-
2014

- Full-time Executive Director hired
- AER joined SDW Board 
- SDW rebranded as Alberta Data Partnerships
- Long term Mapping Data Agreement is signed with the GoA
 - Open Data distribution

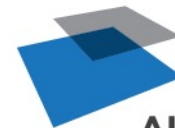


**ALBERTA DATA
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2016

- Two new partnerships
 - Disposition Mapping and Maintenance
 - MNC Ltd. was successful
 - Public Lands Survey Plan Distribution
 - Abacus Datagraphics was successful
 - Badgr was released in December 2016



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2017

- Released Alberta Data Partnerships Open Data Policy
- Open Data Areas Alberta project was initiated
 - Three projects funded
- RITL Benchmark Report

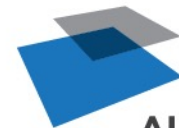


ALBERTA DATA
PARTNERSHIPS

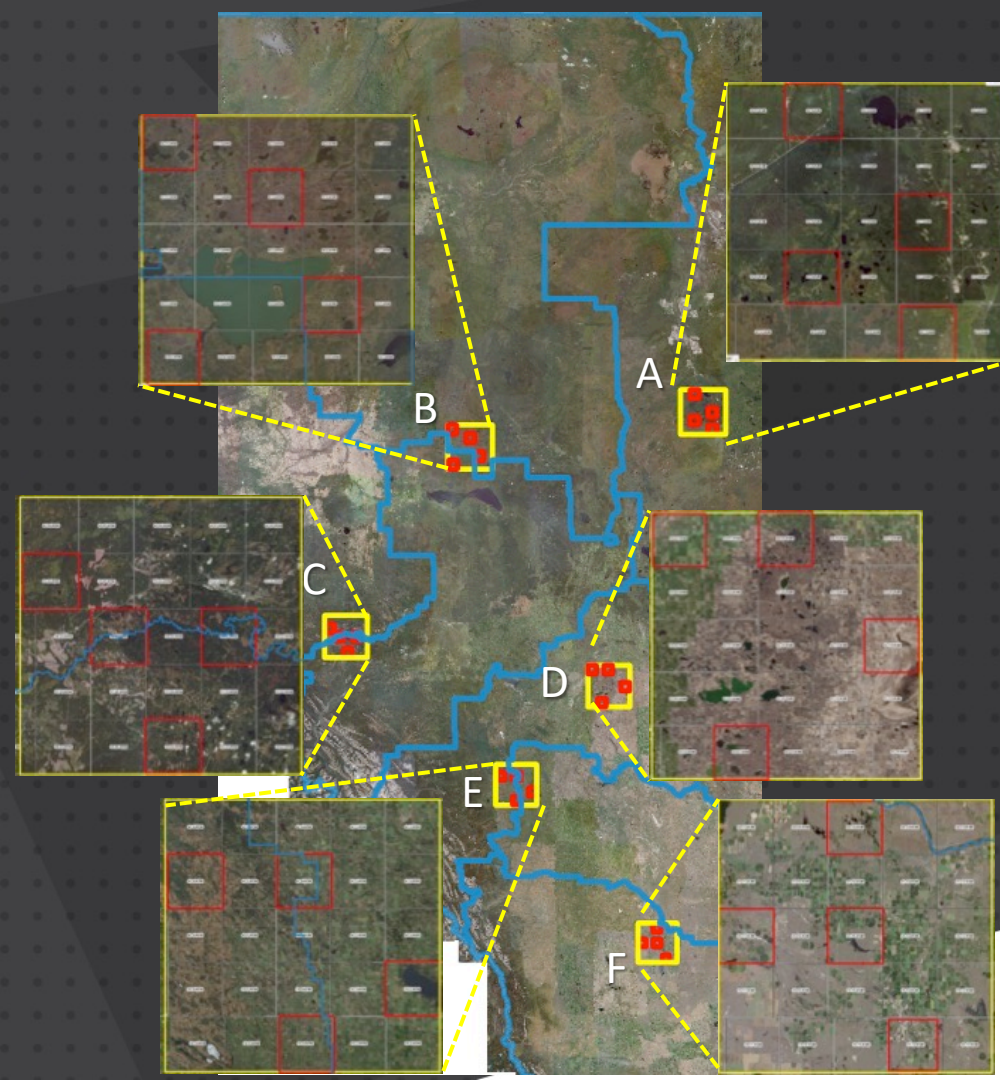
Open Data Areas Alberta – Locations

Open Data Areas Size

- Yellow: 25 Townships (~2500 km²)
- Red: 1 Township (~100 km²)



**ALBERTA DATA
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2018

- MDA Extended to 2023
- Enhanced Titles Mapping Survey Completed
- Two further ODAA projects funded
- RITL Discovery Report



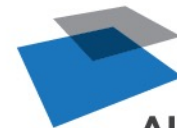
ALBERTA DATA
PARTNERSHIPS

2019

-

2020

- SPOC Modernization
- Enhanced Titles Mapping Pilot Project
- Governing documents updated
- 2020 - 2024 Strategic Plan Finalized



ALBERTA DATA
PARTNERSHIPS

Values and Guiding Principles

Partnership

ADP is a connector and facilitator between the makers and users of data. Everything ADP does is based on the principle of collaboration and mutual interest of the parties.

ADP is always seeking to develop new partnerships with the makers and users of geospatial data.

Competitive

ADP recognizes that high-quality, timely, and accessible geospatial data is a source of competitive advantage for the province.

ADP reinvests revenue from the joint venture and licensing arrangements in such a way that it can continue to innovate while maintaining accessibility.



**ALBERTA DATA
PARTNERSHIPS**

Values and Guiding Principles

Accessibility

ADP aims to make geospatial data available to the greatest number of users at a reasonable and sustainable cost.

ADP pursues partnerships to meet its core objectives of developing broader, more comprehensive, and integrated geospatial data at a reasonable cost.

Sustainable

Sustainability is core to the work that ADP does, from the projects that ADP undertakes to the initiatives that are pursued that require monetary investment.

ADP invests in the long-term sustainability of programs so that the operating model isn't subject to changes in the political climate.



**ALBERTA DATA
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Values and Guiding Principles

Quality

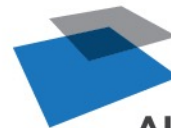
ADP works with providers to maintain the integrity of the data sets and ensure that the products and services are reliable, and usable by clients.

ADP ensures that products and services are demand driven and delivered on current platforms and with current technology.

Value

ADP provides information that everyone can rely on to make timely, informed decisions. We can argue how we interpret the information to make policy and a business decision, but there is no dispute about the completeness, accuracy, or currency of the information—it is fact.

ADP's data is complete and reliable.



**ALBERTA DATA
PARTNERSHIPS**



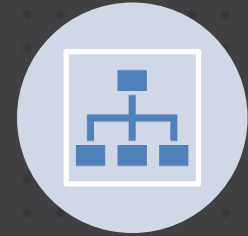
PRIORITY #1: ENSURE
ADP CONTINUES TO BE
ECONOMICALLY
SUSTAINABLE.



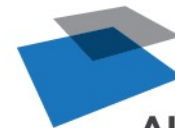
PRIORITY #2: INCUBATE
AND DEVELOP A
FUNNEL OF INNOVATIVE
OFFERINGS



PRIORITY #3: BUILD
NEW RELATIONSHIPS TO
MAXIMIZE UNTAPPED
OPPORTUNITIES



PRIORITY #4: ENSURE
THE ADP BOARD MEETS
THE NEEDS OF THE
ORGANIZATION.



**ALBERTA DATA
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2021 ADP Board Members



2021

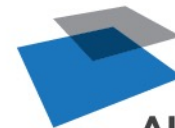
- RITL Pilot Project Completed
- Enhanced Titles Mapping Pilot Completed and Distribution kicks off
- City of Edmonton Mapping added



**ALBERTA DATA
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City of Edmonton Mapping

- In 2020, discussions began with CoE for Cadastral and Titles Mapping maintenance and distribution
- In 2021
 - ADP, GoA, CoE Agreements finalized
 - Communication Plan Developed and Executed
 - Data converted and maintenance kicked off
- November 1 – Altalis began distribution



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**What
we're
working on
and
thinking
about**

Utility data

City of Calgary

Crown vs Private

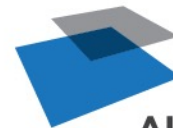
Surveyed vs Unsurveyed

What Else???



**ALBERTA DATA
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QUESTIONS?



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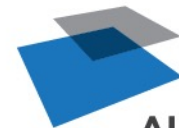
REGISTERED INTERESTS ON TITLED LAND (RITL)



**ALBERTA DATA
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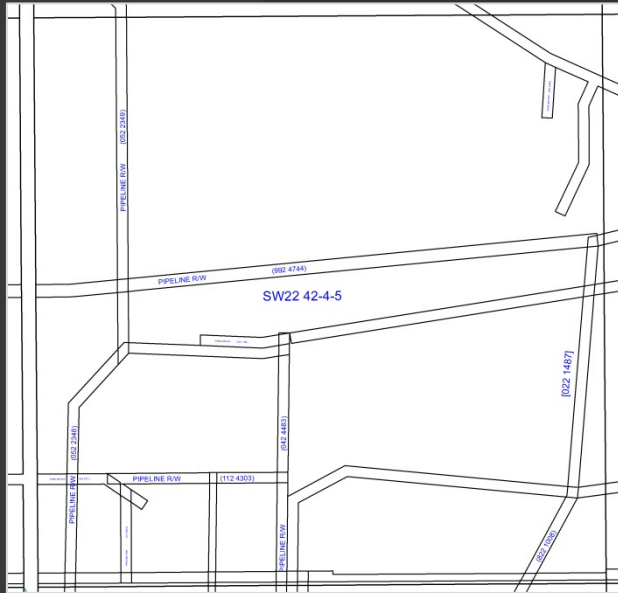
The Issue

- The Cadastral Mapping and Title Mapping datasets depict the boundaries (parcel/lots/roads/extent of ownership) as shown and described on plans of surveys and certificates of titles registered at Land Titles respectively.
- DIDs (Digital Integrated Dispositions) mapping depicts the boundaries of surface activities (well-sites, pipelines, leases etc.) on Crown Land.
- There is currently no spatial record of surface activities (interests) on private lands unless they are shown on registered plans of survey.

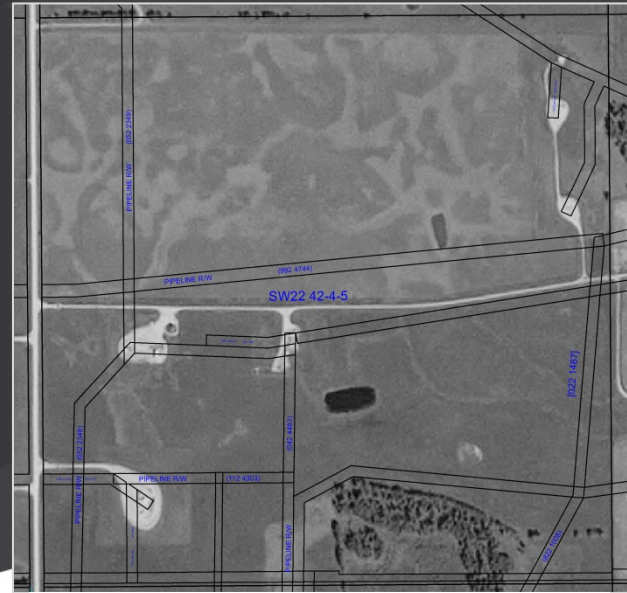


RITL Visualized

- Landscape changes beyond survey plans can be seen in the ground scars



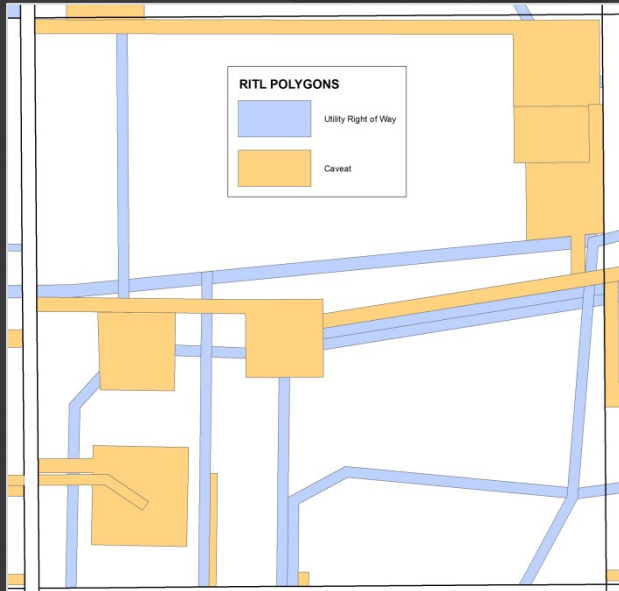
Cadastral Data



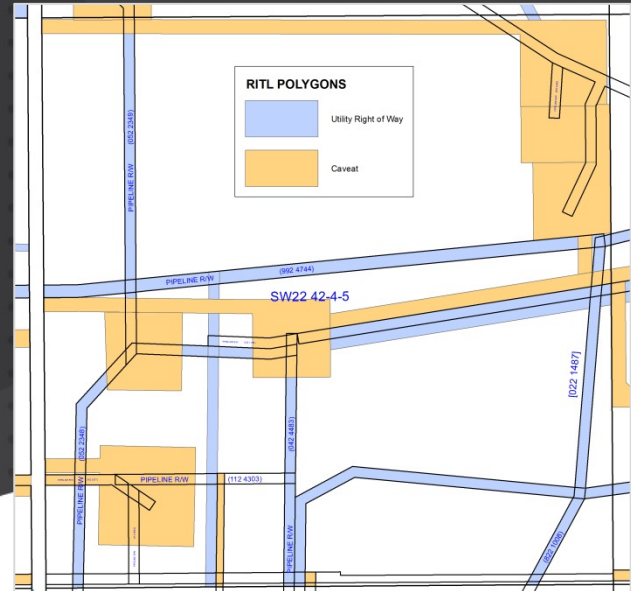
Cadastral Data and Imagery

RITL Visualized

- RITL in conjunction with other datasets provides a more comprehensive view of the overall landscape.



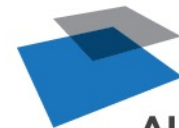
RITL Mapping



Cadastral and RITL Mapping

Step 1 - The Benchmark Project

- In 2017, ADP completed a benchmark project which proved the viability of the mapping initiative.
- This benchmark project developed a baseline mapping representation to enable further engagement.
 - **The scope of this project was to map the Interests on the back of title that had a spatial representation.**
- Project findings were used to engage in discussions with Government, Municipalities, AER and industry stakeholders



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Benchmark Project Conclusion

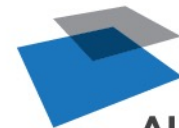
- This project has confirmed that data sources and mapping methods are available to support a successful provincial scale RITL mapping program.
- The process of mapping 1,357 registered interests on titled land (RITL) provided insight into considerations for a province wide dataset.



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Step 2 - The Discovery Report

- Commissioned in order to provide a more comprehensive understanding of the current processes related to registered interests on titled land (RITL)
- Findings were used to support engagement in future conversations and next steps.



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Discovery Report Findings

- Overwhelming sentiment within the GoA, Municipalities, AER and industry that RITL mapping is a welcomed and much needed dataset that would fill a gap in Alberta's existing spatial mapping.
- Clearly understood that a RITL mapping equivalent product does not currently exist; nor is a mapping program of this nature taking place amongst the stakeholders throughout Alberta.



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Strategic Fit for ADP Stakeholders

- Reduce duplication of data to increase efficiency and reduce cost,
- More effective communication between organizations and departments that results from access to the same data sets,
- Lower cost for data to stakeholders as compared to compiling it for themselves,
- Access to common data sets will improve engagement with other stakeholders, and
- Access to comprehensive, timely and accurate data at an affordable price.



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Support of RITL ✓

"Very interested"

- Alberta Energy Regulator
(AER)

*"Supports better purchasing
decisions"*

- Alberta Infrastructure

*"Would definitely become an
end user of the data"*

- Alberta Municipal Affairs

"Allows leases to be visualized"

- AltaLink

*"Definitely use [RITL data] to
gather information"*

- ATCO Electric

*"The ability to identify
crossings would be a benefit"*

- Plains Midstream Canada

*"Would use RITL data for initial
planning"*

- Repsol Canada

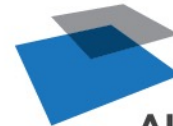
"Greatly beneficial"

*"Would support the Surface
Land team"*

- Suncor Energy

Discovery Conclusion

- Quick and reliable access to spatial mapping enables faster and more informed decision making.
- RITL mapping would complete the view of interests on the provincial landscape in a comprehensive and accessible way for all stakeholders.



**ALBERTA DATA
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Total Titles province-wide

1,196,730

Mapped

10,842 (count includes those parcels with and without RITL interests)

Total distinct Registered Interests that are RITL types province-wide

1,360,817

Mapped

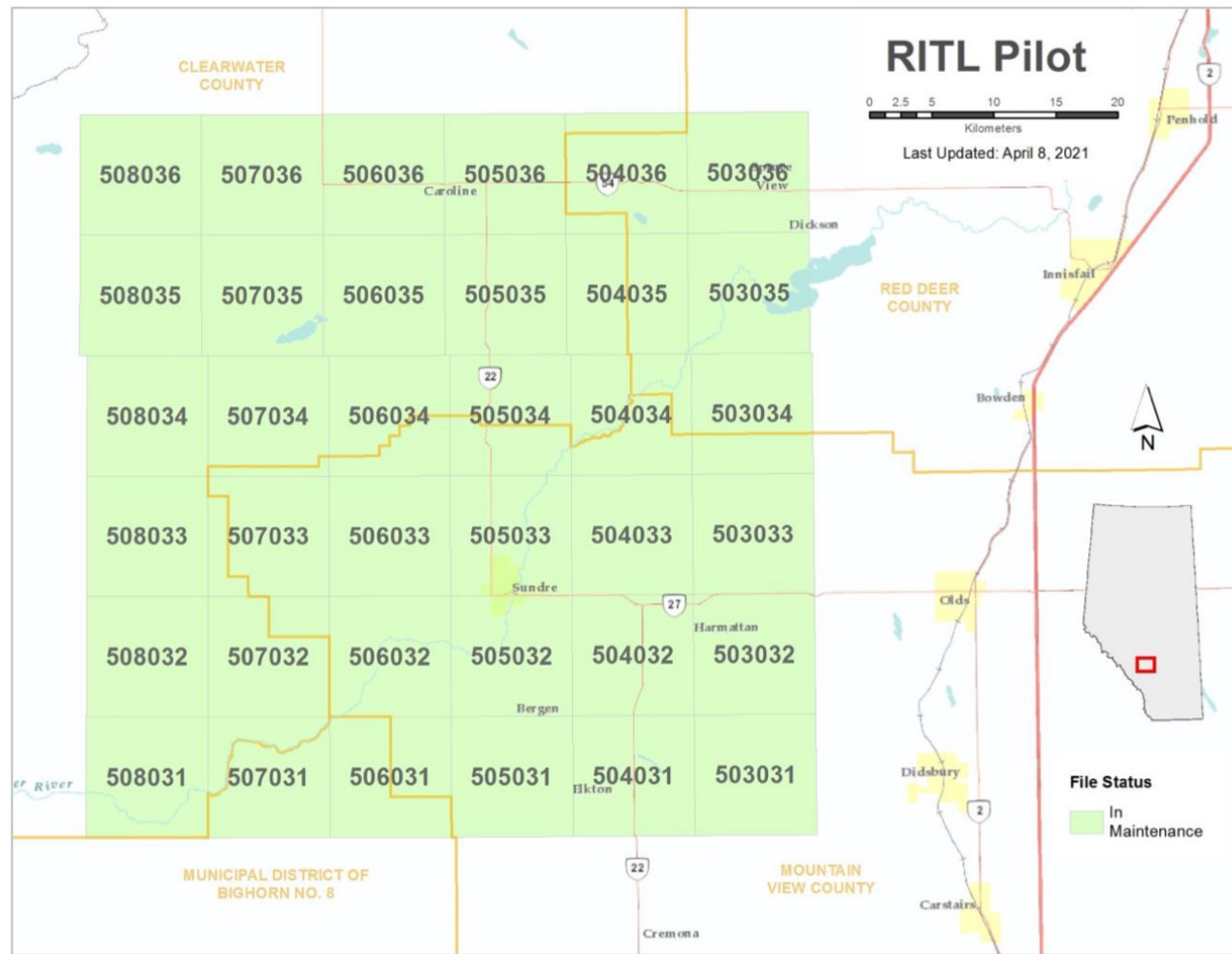
19,983

Total distinct Registered Interests that are CAVE or UTRW types province-wide

1,196,577

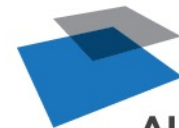
Mapped

18,516



Lessons Learned

- Mapping each title and associated interests individually in time/cost prohibitive
 - Recommendation: Map interests (i.e., well-site, pipeline, etc.) rather Title-based approach
- Many Interests are not mappable
 - Recommendation: Focus on Caveats and Utility Rights of Way in initial phase



Lessons Learned

- Acquiring Titles and associated documents were very time consuming (i.e., a few documents only available via fax, no bulk downloads)

Recommendation: Work with LTO to automate



**ALBERTA DATA
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Lessons Learned

- Mapping all Interests from scratch is time/cost prohibitive
 - Recommendation: Engage with Land Surveying community to determine how to leverage existing data



Lessons Learned

- Data must be available in a timely manner for maintenance
 - Recommendation: Work with AER to determine a method to access data as part of the OneStop regulatory process



RITL Pilot Project Follow Up

Based on the conclusions and recommendations, two follow up projects have been approved

1. Determine private sector data availability
2. Evaluate technical viability of AER OneStop integration



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Private Sector Data Evaluation

- Private sector companies and contractors have created RITL data for projects
- Evaluate the coverage, availability, cost to acquire and integrate and privacy issues for using existing private sector data to build a RITL dataset



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Technical Evaluation of AER OneStop Integration

- AER OneStop requires companies to provide a GIS file for any Oil and Gas development
- Opportunity to use that data, similar to Public Lands for DIDs, needs to be evaluated at a technical level



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Enhanced Titles Mapping



**ALBERTA DATA
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ADP/Altalis distributes two distinct versions of the database along with the spatial extents of the titles

A Basic Database

- Contains a limited amount of data such as the LINC number, parcel creation date, TAG date and the location down to the quarter section

The Municipal Database

- Complete front of title information including owner name, address and short/long legal
- Distribution of this DB is restricted to Alberta Municipalities

Industry requires the additional information from the Municipal Database to provide services to their customers and stakeholders.

**Land
Access**



**Emergency
Response
Planning**

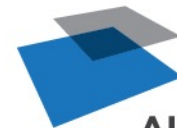
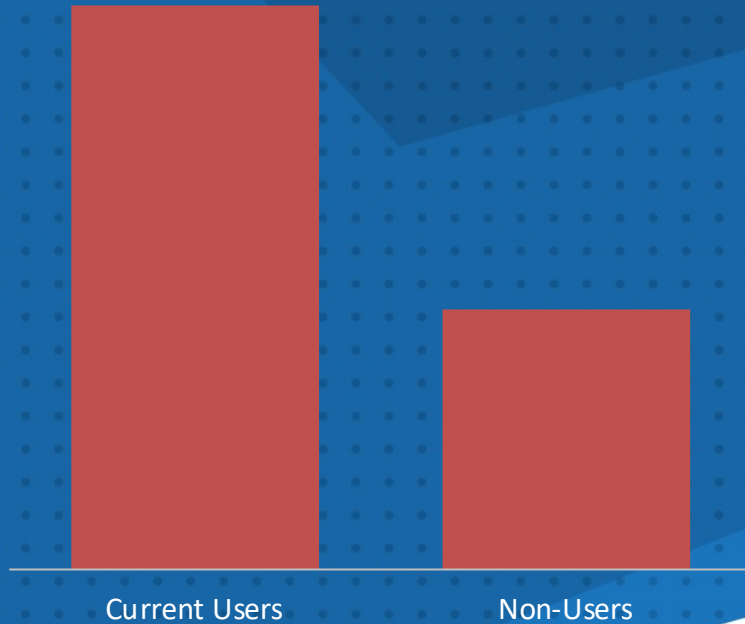
**Land Owner
Consultation**



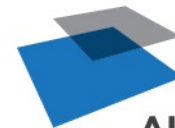
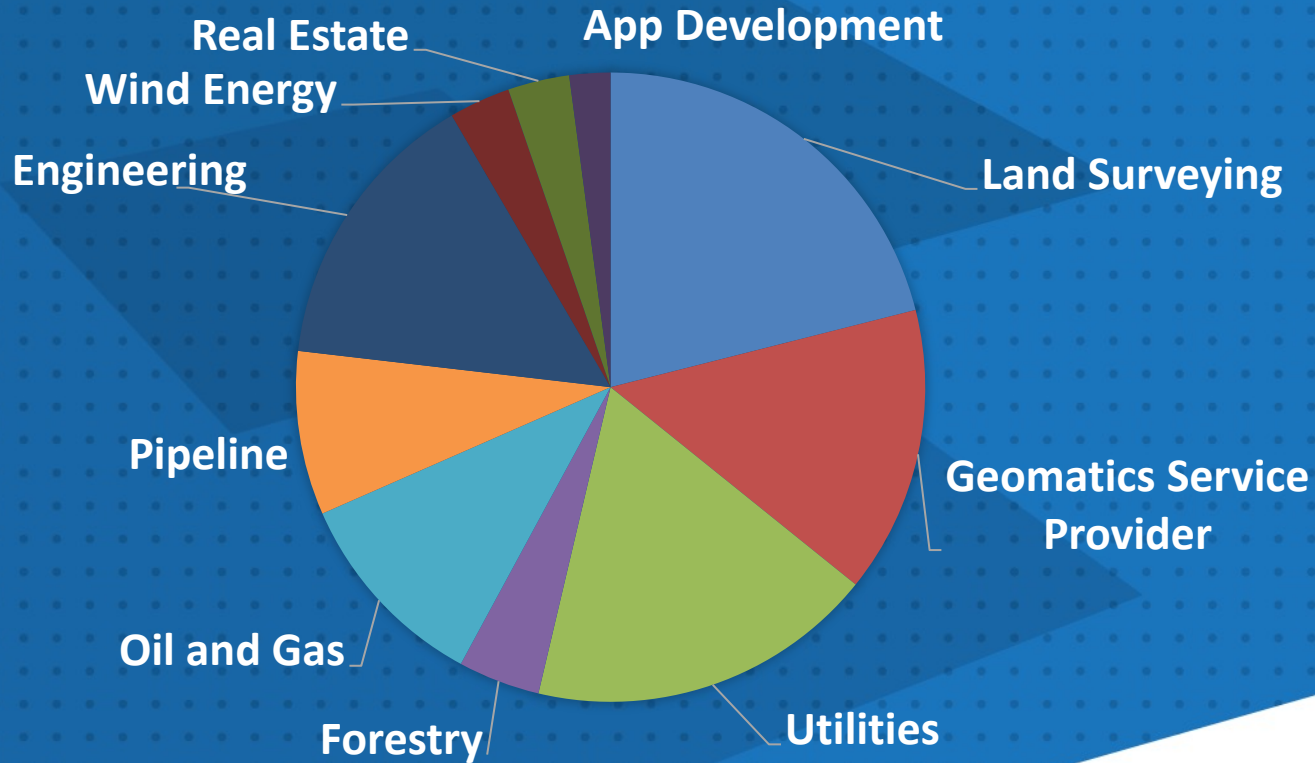
**Regulatory
Requirements**

ADP conducted an industry survey in April 2017 with 230 stakeholders and Altalis customers

- 52% responded to the survey

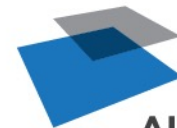
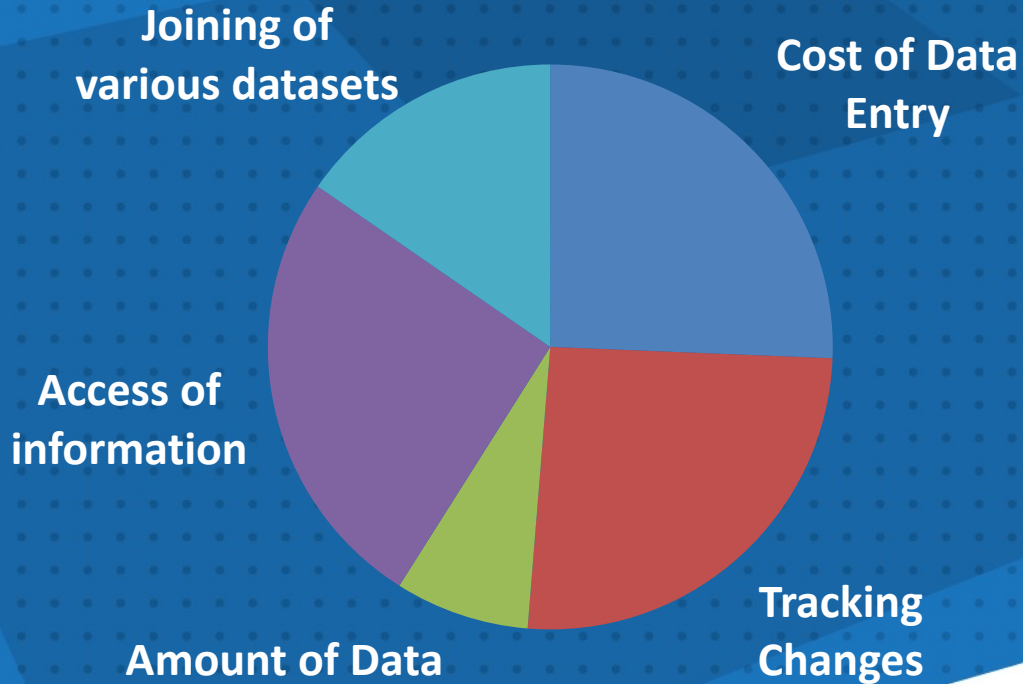


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What are your current challenges in manually adding and maintaining additional attributes?



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70%

of those who add additional attributes, specifically add “*Owner Name*”

82%

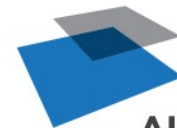
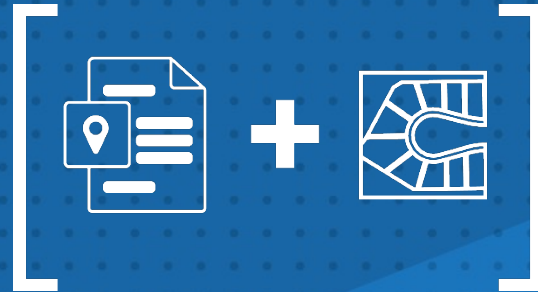
of respondents felt “*Owner Name*” would be the most valuable attribute to add



**ALBERTA DATA
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ETM Pilot Project

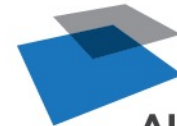
We asked industry what solution would be of most value to their business should ADP/Altalis be granted permission to distribute an **Enhanced Titles Mapping** product.



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The ETM Pilot

- ADP/Altalis conducted an industry pilot with the utility, pipeline and emergency response sectors
- 14 organizations took part
- Participants were provided the ETM Mapping dataset and an ETM Web Feature Service
- The six-month pilot ran from June 1, 2020 to November 30, 2020



The ETM Pilot

Participants worked with the data internally and provided feedback on its usefulness via three surveys

- Survey #1 - pre-pilot (May 2020)
- Survey #2 – mid-pilot (August 2020)
- Survey #3 – pilot conclusion (October 2020)



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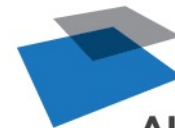
Pilot Projects Results

- ETM saves hours of data integration for project planning, landowner notification, regulatory filings, etc.
- Would not eliminate pulling Titles from SPINII
 - Title document required for certain activities (i.e. land transfer)
 - Many activities require back of title investigation
- Immediate access to ETM data is important for emergency response
- Central point for immediate access to current data is important
 - Reduces duplication of effort and cost



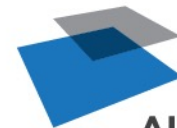
Pipeline and Utility Companies

- Greater focus on core business rather than consolidating Titles Mapping and Land Title information
 - Time instead spent on activities such as
 - responding to regulatory requirements
 - analyzing data
 - contacting land users



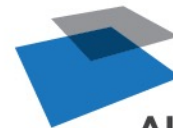
Pipeline and Utility Companies

- More efficient response to regulatory and audit requirements
 - Mapping is already compiled
- Project planning is more efficient
 - Ownership information is readily available
 - Land titles still need to be purchased for land transfer and other information requests



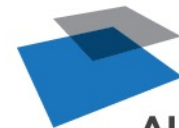
First Responders

- Everyone working from the same data
 - Current and immediately available owner information to all detachments and offices
- Focus on responding to a crisis
 - Time is of the essence for landowner notification during evacuations, for example.
- Insight into newly developed areas
 - Plans registered before addresses are assigned



The Public

- Confidence in the system
 - Government, first responders and industry have access to the same information during a crisis
 - Stakeholder engagement is more consistent and accurate
- Privacy protected
 - Name searches are not allowed



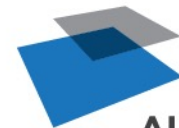
Municipalities

- Fewer requests for ownership information and focus on servicing their constituents
- Everyone working on the land has access to the same data



Government of Alberta

- Supports Service Alberta data access strategy
 - Greater access to Land Title data to support GoA goals and economic development
- Access to consistent data across all stakeholder groups
 - Could lead to fewer disputes related to landowner notification



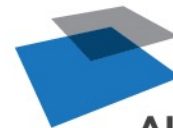
ETM Distribution

- ADP and Service Alberta (LTO) came to agreement for distribution of ETM to Pipeline and Utility Companies, and First Responders, as of November 1.



ALBERTA DATA
PARTNERSHIPS

QUESTIONS?



ALBERTA DATA
PARTNERSHIPS