Unpacking Temporal Changes in ParcelMap BC

Organized by:

ParcelMap BC Adoption Working Group

March 2nd, 2022

Part of the ICI Society's
Virtual Café series

Agenda

Introductions & Background (10 min) *Brian Greening (LTSA)*	10:00 am
• **Using ParcelMap BC Change Products** (35 min) *Taylor McInnes and Irshad Jamal (LTSA)* • Summary of ParcelMap BC Data Products & Uses • Real-World Changes • Visualizing Fabric History in the ParcelMap BC Search Service • Spatial Improvements in ParcelMap BC • Change Vectors • Data Alignment Workflow Package (DAWp) • Spatial Improvement App (SIA) & Map Layers • Cadastral Ties Submission for Spatial Improvements • Additional Resources	10:10 am
Close Out, Questions & Discussion (15 min)	10:45 am

Welcome & Opening Remarks

Workshop

A ParcelMap BC Adoption Working Group resource, presented as part of the ICI Society Virtual Café series

Introductions

Brian Greening Director, ParcelMap BC Products, LTSA	**Steve Mark** Director, Operations, ICI Society
Bryan Sawers Manager, ParcelMap BC Operations, LTSA	**Taylor McInnes** Product Owner, GeoSpatial Services Product Team LTSA **Irshad Jamal** Parcel Fabric Technician, LTSA

Welcome & Opening Remarks

Background

The ParcelMap BC Adoption Working Group:

AWG Participants recommended an info session to explore temporal change in ParcelMap BC to help address issues raised to the group.

ParcelMap BC Data Products

Summary of ParcelMap BC Data Products & Uses

Parcel Fabric Extract is AOI based and includes all entities:

- Parcel Polygons
- Parcel Points
- Parcel Lines
- Shared Geometry Table ("Building Strata Lots")
- Common Ownership Table ("Shared Interest Parcels")
- PID <-> JUROL Table
- Plans Table
- Control Points

Province-wide Parcel Snapshot is a province-wide subset

ParcelMap BC Data Products

Summary of ParcelMap BC Data Products & Uses

Temporal Products:

- Fabric Spatial Improvements (aka "Change Vectors")
- Real-World Changes (aka Parcel "Adds, Edits & Deletes")

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Real World Changes

Nature of Change

- A-Add
  - New Parcel Added to the Fabric
    - Lot A & B
- D-Delete
  - Parcels made Historic or Deleted from the Fabric
    - Lot 4 is going Inactive and Historic

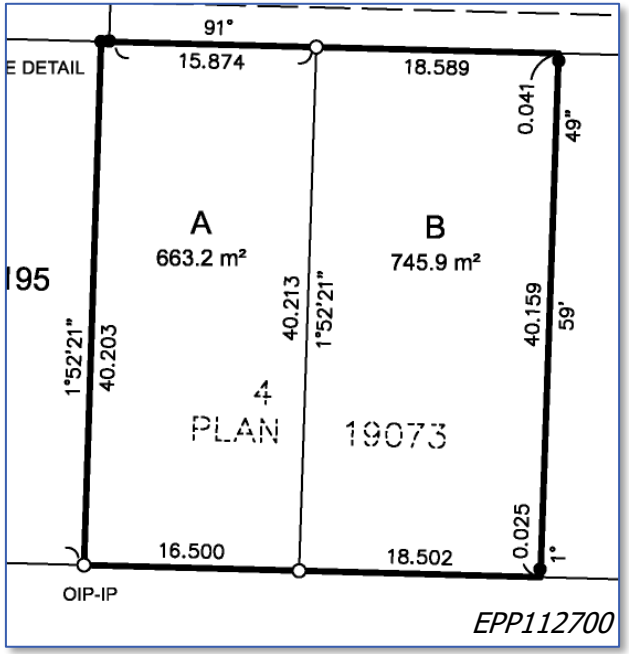
Parcel_Polygon_RealWorldChanges

NatureOfChange	Name	PlanNumber	PIN	PID	Designation1
A	031629776	EPP112700	<Null>	31629776	Lot A
A	031629784	EPP112700	<Null>	31629784	Lot B
D	008136483	KAP19073	<Null>	8136483	Lot 4

- AC-Attribute Change
  - Change in Legal Description, Owner Type, Municipality

Parcel_Polygon_RealWorldChanges

NatureOfChange	AffectedFields	OwnerType	Name
AC	ownertype	Mixed Ownership	010914528



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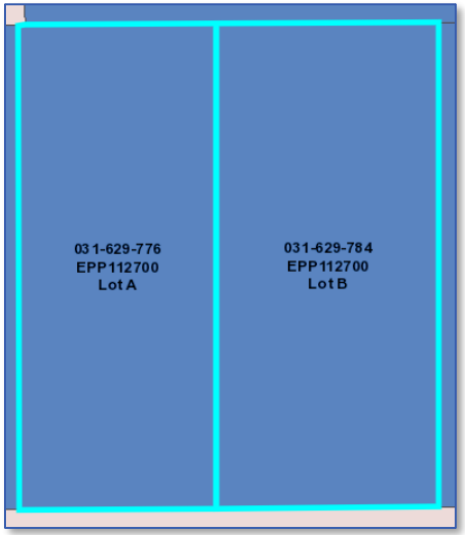
EPP112700 Update Results

Active Parcels Layer

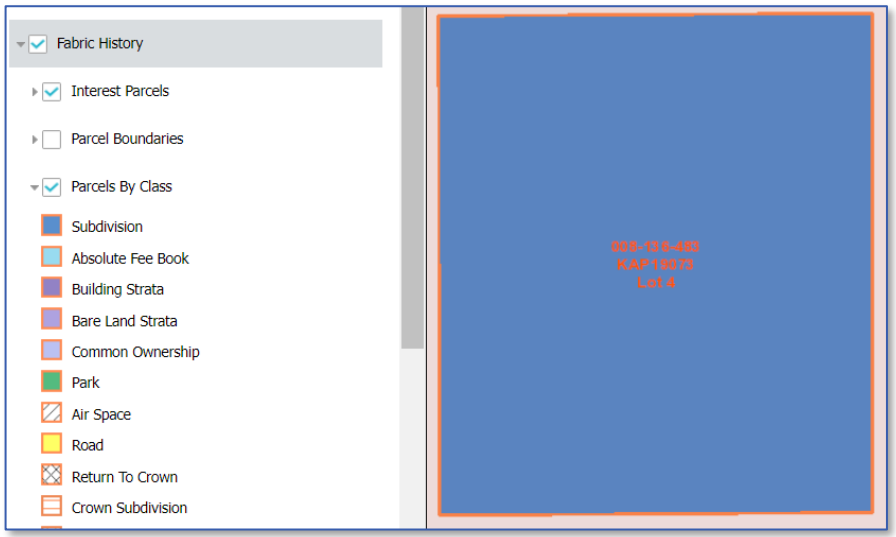
Pre EPP112700

Active Parcels Layer



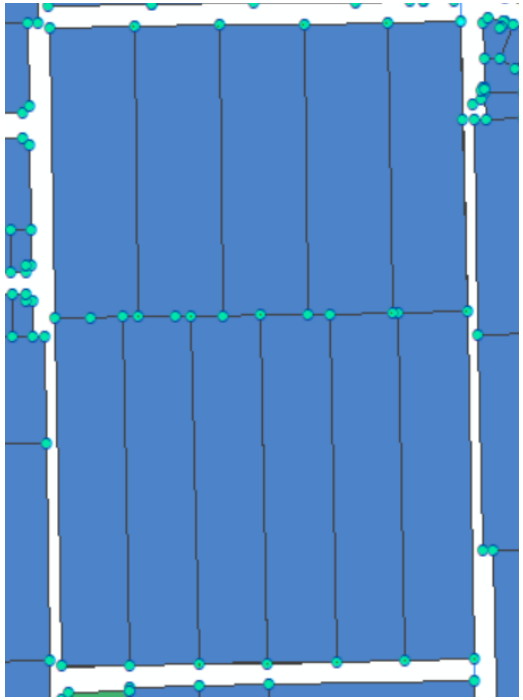
After EPP112700 subdivides Lot 4 into Lots A & B

Fabric History Layer

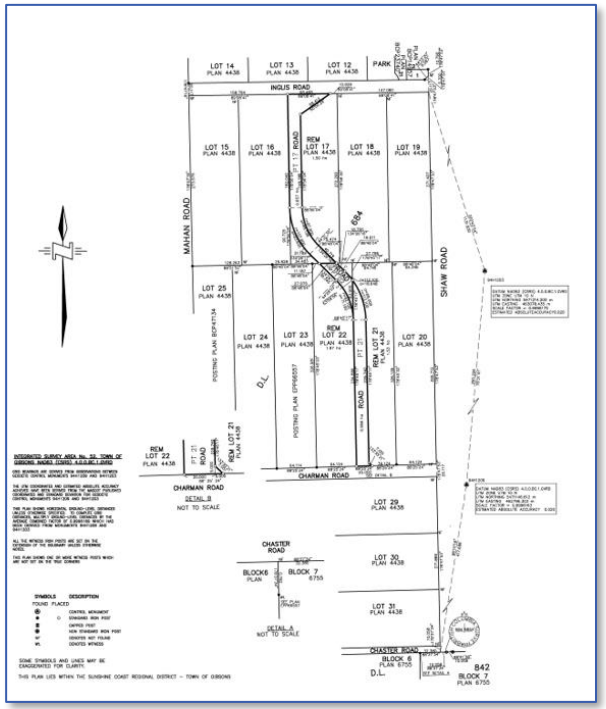


PMSS Parcel History: Historic representation of lot 4. Show on Parcel History in PMSS and in Download Products as a Nature of Change D

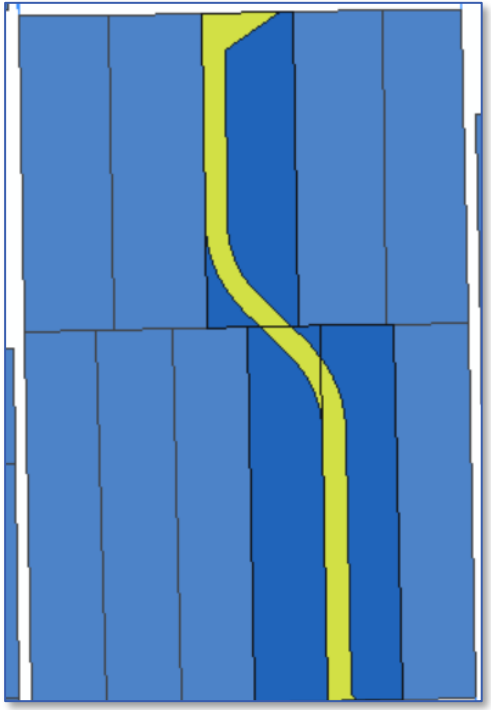
EPP108539 Working Fabric – Under the Hood Process



Working Fabric – pre EPP108539



Plan: EPP108539



Working Fabric – After EPP108539 integration

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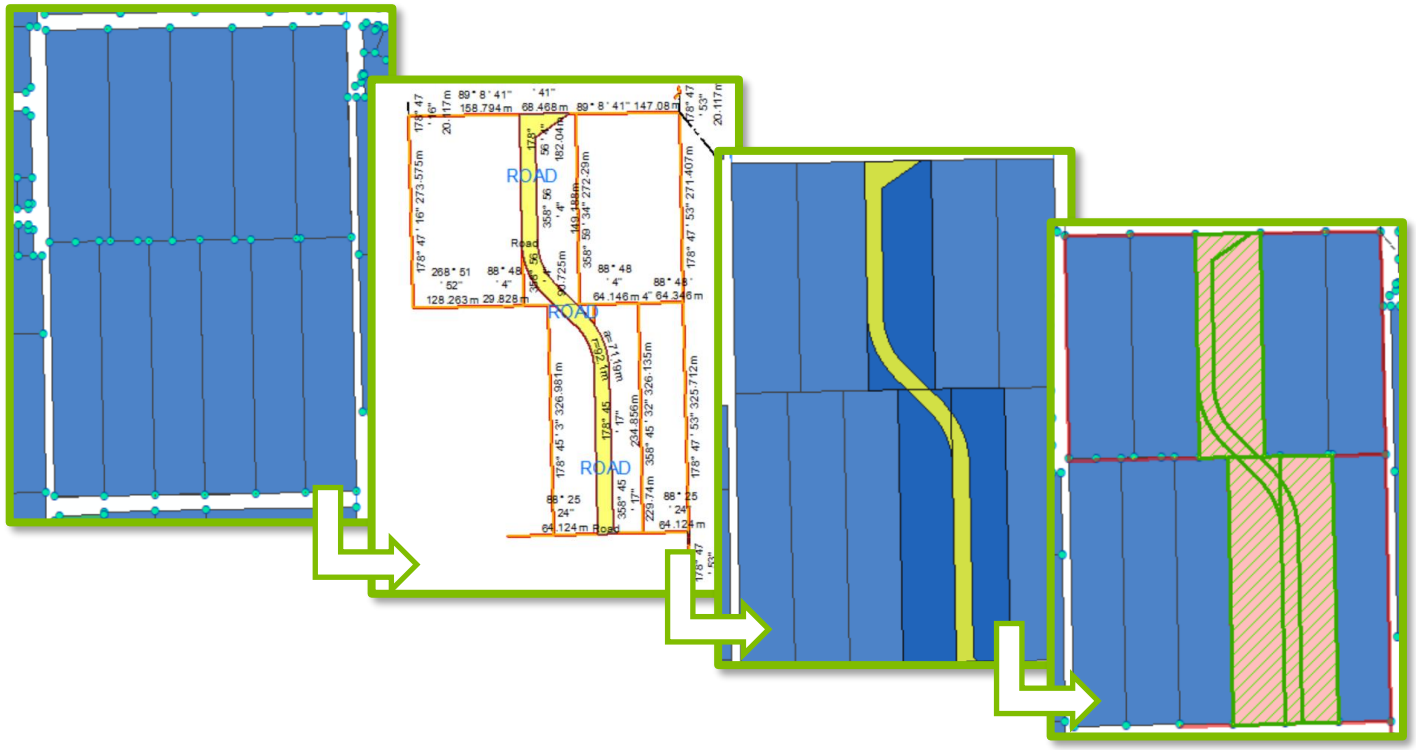
EPP108539 Results



Parcel_Polygon_RealWorldChanges
NatureOfChange
A-Add
D-Delete
AC-Attribute Change

Parcel_Polygon_RealWorldChanges

NatureOfChange	Name
A	Road
A	Road
A	Road
A	011557443
D	011557443
A	011557419
D	011557419
A	011293748
D	011293748

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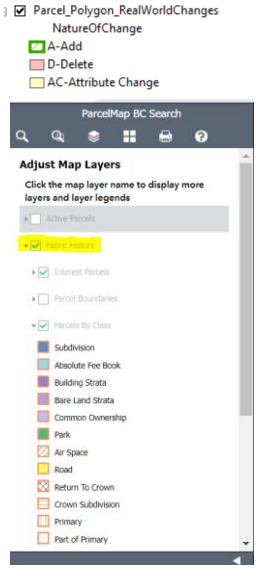
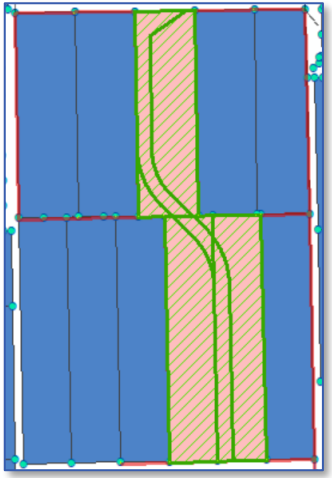
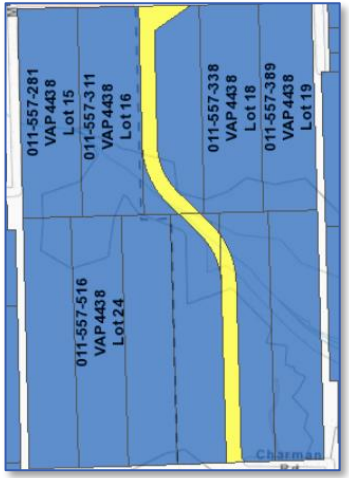
Results



Real World Change



PMSS Active Parcels



PMSS Historic Parcels

Parcel_Polygon_RealWorldChanges

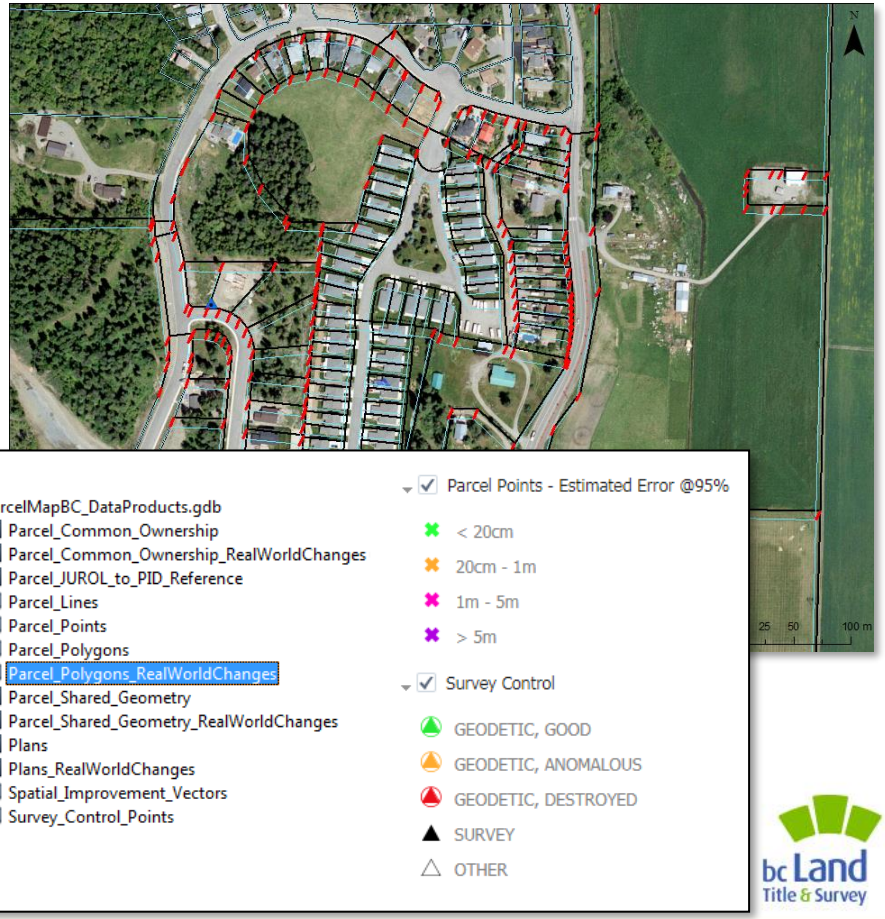
NatureOfChange	Name	PlanNumber	PIN	PID	LegalDescription	GlobalID	Designation
A	Road	EPP108539	<Null>	<Null>	<Null>	{2C651455-44D9-4595-AAC8-41CB890F99D8}	<Null>
A	Road	EPP108539	<Null>	<Null>	<Null>	{76880C50-3F86-4735-B516-36B58ACEBAC1}	<Null>
A	Road	EPP108539	<Null>	<Null>	<Null>	{26CC97AB-5350-4203-B500-2641C693C68E}	<Null>
A	011557443	VAP4438	<Null>	11557443	LOT 22 DISTRICT LOT 684 GROUP 1 NEW WESTMINSTER DISTRICT PLAN 4438 EXCEPT PLAN EPP108539	{062322C2-3228-49C1-973C-C715754E1A23}	REM Lot 22
D	011557443	VAP4438	<Null>	11557443	LOT 22 DISTRICT LOT 684 PLAN 4438	{04B45666-AF63-47A3-91A0-F5E0A975B916}	Lot 22
A	011557419	VAP4438	<Null>	11557419	LOT 21 DISTRICT LOT 684 GROUP 1 NEW WESTMINSTER DISTRICT PLAN 4438 EXCEPT PLAN EPP108539	{6EB494CE-C73F-4F02-B69E-3EF9B4C0E1D9}	REM Lot 21
D	011557419	VAP4438	<Null>	11557419	LOT 21 DISTRICT LOT 684 PLAN 4438	{196C56AA-7827-4114-8C39-1DEDD0B2238B}	Lot 21
A	011293748	VAP4438	<Null>	11293748	LOT 17 DISTRICT LOT 684 GROUP 1 NEW WESTMINSTER DISTRICT PLAN 4438 EXCEPT PLAN EPP108539	{C0153DE6-DAD4-4027-A1E4-84E410727B21}	REM Lot 17
D	011293748	VAP4438	<Null>	11293748	LOT 17 DISTRICT LOT 684 PLAN 4438	{547B7F21-E2EA-4AA5-B69E-FEEB550EADE3}	Lot 17

Spatial Improvements in ParcelMap BC

Get Spatial Improvement Results:

Spatial Improvement Vectors:

- Used to describe improvements delivered in ParcelMap BC Parcels (polygons, lines & points)
- "From-To" line features tied to Parcel Points by ID included in ParcelMap BC Extracts
  - Describes how the points have moved!
- Temporal: Request your "from" date
- ICI Society Members: Request them in your GeoShare package
- ParcelMap Direct users: Say "Yes" to "fabricSpatialImprovements"



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Change Vectors

Parcel Movement

- Scalpel – Steak Knife – Chain Saw
- Join Videos: Join 1 - Join 2 = Scalpel
- Spatial Improvement = Steak Knife, some times Scalpel
- Geometry Replacement = Chain Saw

Change_Vector

OBJECTID *	SHAPE *	GlobalID	PointID	X1	X2	Y1	Y2	SHAPE_Length
873	Polyline Z	{465E6E6B-3E25-4CA8-850A-D5F79658FF97}	11989357	1180364.917084	1180359.505249	488889.78945	488891.655936	5.724853
79	Polyline Z	{6ED5A98D-CE57-4610-B376-6B27A50E4ACB}	11979261	1179867.519481	1179865.736669	489353.72079	489348.748751	5.281966
872	Polyline Z	{494556F6-D974-4C7E-B7B1-6E378D94F76E}	11989355	1180362.789864	1180358.337639	488910.836035	488912.820424	4.874416
80	Polyline Z	{EBB79B86-72AD-45B4-B807-305A7A99C715}	11979262	1179883.745864	1179881.843373	489133.927676	489129.508113	4.811651
81	Polyline Z	{70096704-8FF4-41C5-8C10-03AE81F5294E}	11979263	1179935.040371	1179933.10679	489135.803298	489131.682981	4.551539
874	Polyline Z	{3DC61DAD-4D51-4344-98D8-D5F597F7BE0A}	11989358	1180361.765388	1180357.95486	488920.966373	488919.761047	3.996706
52	Polyline Z	{D77A8C6F-F9CF-40EC-AD47-6139ACDBA80C}	11977557	1180027.994323	1180026.000995	489139.202017	489136.066389	3.715593

1 (0 out of 921 Selected)

Change_Vector

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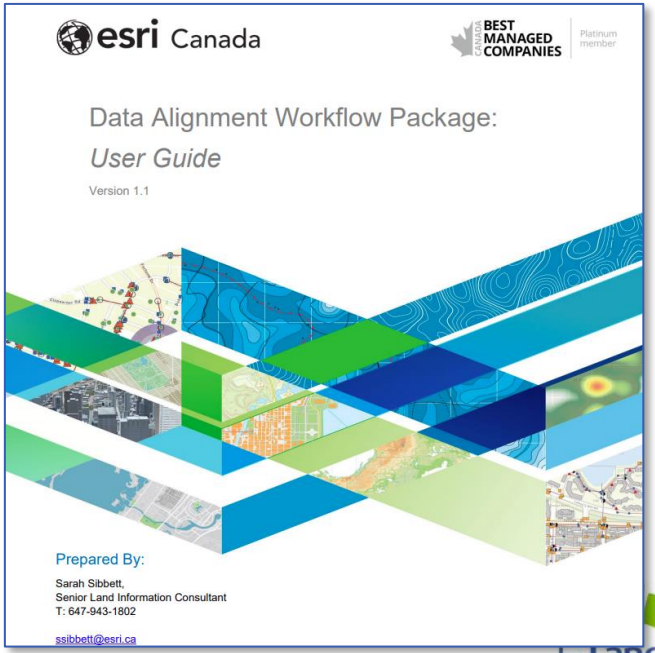
Data Alignment Workflow Package (DAWp)

ParcelMap BC DAWp – What is it?

Esri Canada's Installer: DataAlignmentWorkflowPackage

Package Components:

- AddIns
- LayerFiles
- License
- Scripts
- UserGuide
- DataAlignmentWorkflow



Key Workflows:
Initial Alignment (incl. optional Pre-Alignment)
Ongoing Alignment

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Data Alignment Workflow Package (DAWp)

What's New?

Version 1.1 Release note, September 2021

1. The ability to automate ongoing alignment

Two new tools were developed to support the process of automating ongoing alignment. These tools use the Rubbersheet Features geoprocessing framework to process one or more realignments in batch. This allows for the workflow to be scripted. The Realign All Features tool processes features in a single rubbersheet and the Realign Features by Zones runs one zone at a time. These tools are available in the new RealignFeatures toolbox:

Data Alignment Workflow Package (DAWp)

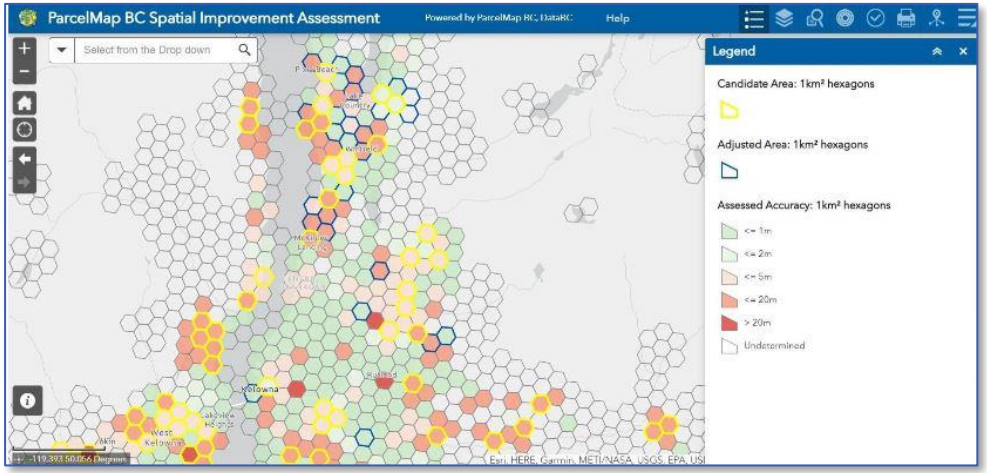
- The DAWp is available for ICI Society members via the portal
  (Requires ICI Society credentials)

- Check out the Spatial Alignment Resources for related information

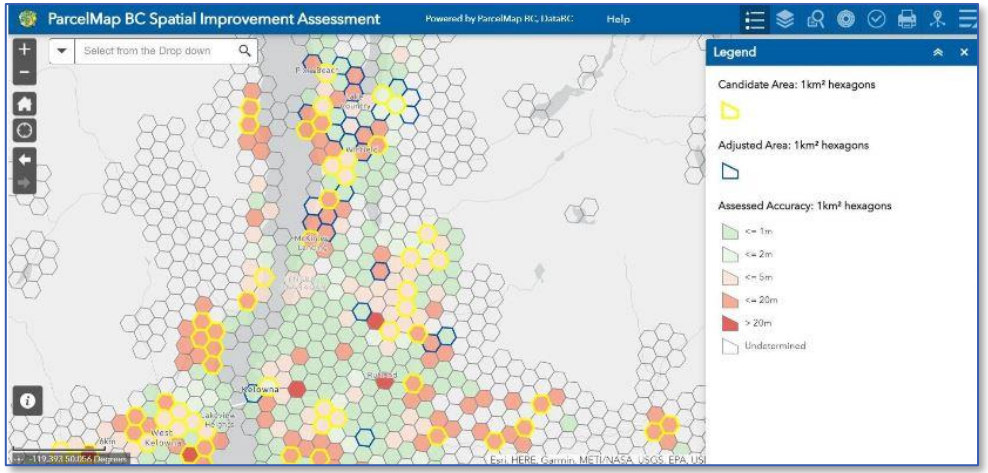
Spatial Improvement Assessment App & Map Layers

- Spatial Improvement Assessment app delivers a **visualization** of **the analysis** used by the ParcelMap BC Operations team **to plan and prioritize** spatial improvement work across the province.

- Help resources for using the App and accessing the WebMap & Layers



Spatial Improvement Assessment App & Map Layers



- Provides transparency and insight into spatial improvement planning.
- Provides a view into the assessed accuracy of the parcel fabric to broadly identify areas across the province with significant misalignment to control

- Highlights areas where the assessment indicates an area's readiness and, if appropriate, as a candidate for improvement – see the list of Targeted Spatial Improvement Areas.

Cadastral Ties Submission for Spatial Improvements

Cadastral Tie Submission Guidelines have been defined for organizations to submit cadastral ties captured outside legal survey plans to provide additional input to support spatial improvements.

- New candidate areas for adjustment can be created with additional Control.
- Standards / Guidelines and a Template (input data model) are available for those who want to participate.

Point_Id	UTM_N	UTM_E	Elevation	Monument_Type	Survey_Date	Monument_Comment	Plan	Positional_Accuracy	Survey_Method	UTM_Zone	Horizontal_Datum_Ver	CSF
ID	5553706.646	330453.995	395.512	IP	dd/mm/yyyy		KAP80402	0.051	GNSS or conventional ties to passive control points	NAD_1983_CSRS_UTM_Zone_11N	NAD83(CSRS) 4.0.0.BC.1	0.99989080
M	M	M	O	M	M	O	O	M	M	M	M	M

Cadastral Ties Submission for Spatial Improvements

Success!!

District of Summerland, **Thompson Nicola Regional District**, **Columbia Shuswap RD** as well as **several BC Land Surveyors** have participated in this program providing control ties which were integrated and used to spatially improve ParcelMap BC.

Additional Resources

1. ParcelMap BC Deep Dive Workshop (ICI Society Virtual Café)– February 24th, 2021

   - Presentation by ParcelMap BC Operations on Maintaining Currency & Quality of ParcelMap BC
   - Overview of the Spatial Improvement App
   - Overview of the Cadastral Ties Submission Guidelines
   - Demo of a Spatial Adjustment in ParcelMap BC

2. ParcelMap BC Spatial Alignment Workshop (ICI Society Virtual Café)– June 24th, 2021

   - Understanding ParcelMap BC Spatial Improvements
   - Overview of the Data alignment Workflow Package (DAWp)
   - Use cases for the DAWp as part of ParcelMap BC Transition Workflow
   - User experience with the DAWp – Township of Langley

Questions and Discussion

Thank You For Participating!

Recording & slide deck links will be sent out soon.

Learn more at:
https://ltsa.ca/parcelmapbc
https://help.ltsa.ca/parcelmap-bc

Have questions? Contact us parcelmapbc@ltsa.ca

ParcelMap BC Newsletter: Sign up here!