

Universal Parcel Identifier: Proof of Concept for ParcelMap BC



Customer Consultation Session
October 25th, 2023

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bc Land
Title & Survey

Today's Session – Before we begin...

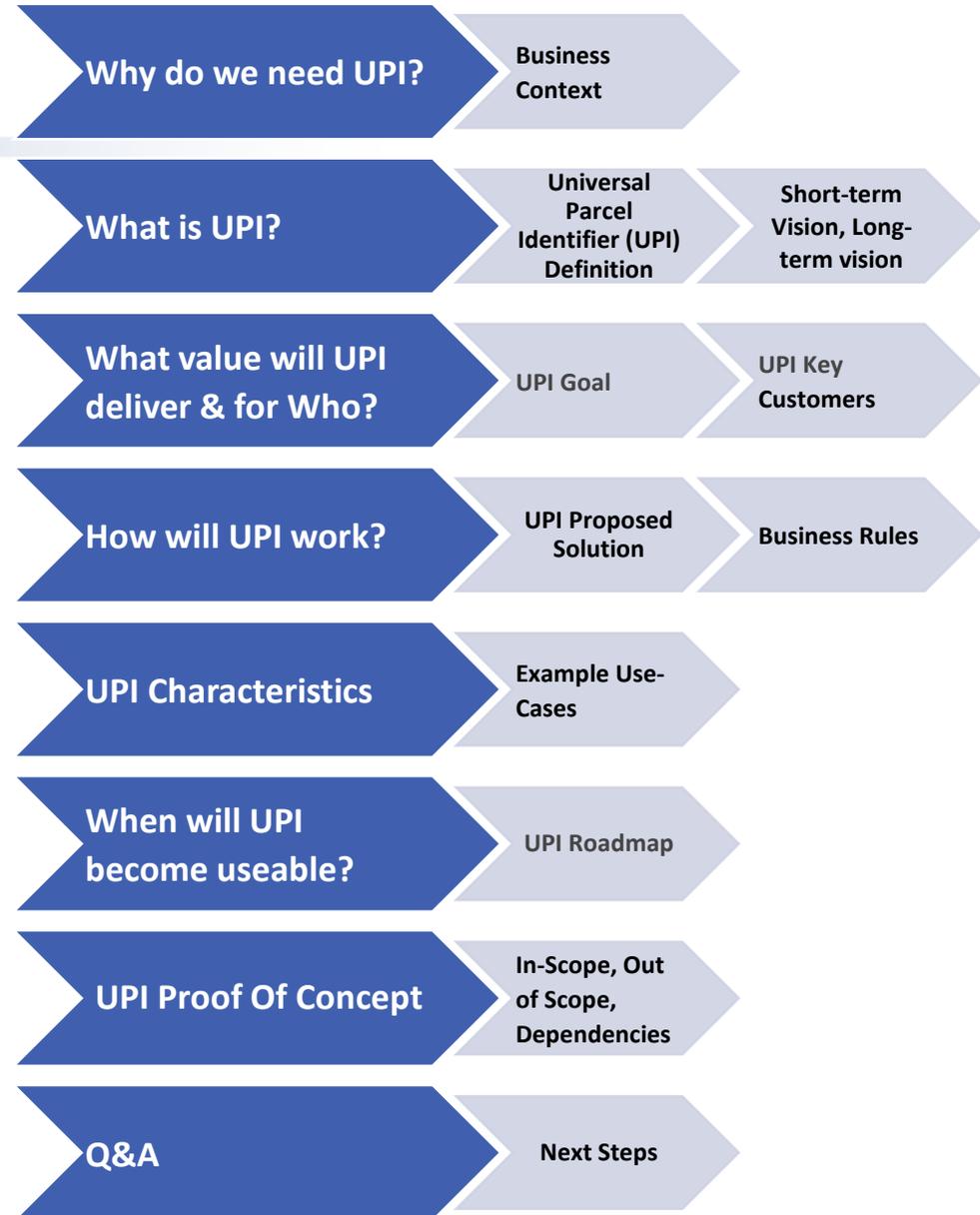
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- **Disclaimer: This meeting is being recorded**
 - **Interaction is desired:**
 - TEAMS chat will be monitored
 - Use TEAMS "Raise Hand" feature
 - **Please introduce yourself and what organization you are representing when interacting**

Today's Session – Audience & Project Team

Organization:	Attendee:
BC Assessment	Tom O'Brien Mark Harris
Browne Johnson Land Surveyors	Mark Mason
Bowen Island Municipality (by Chartwell Resource Group)	Simon Casley
City of Burnaby	Herman Louie Ruby Wong Jared Sawatzky Elsie Prevette
City of Duncan	Chris Desautels
City of Kelowna	Cheryl Trent
City of Nanaimo	Mark Willoughby
City of Port Alberni	Cara Foden
City of Victoria	Gary Braun
Capital Regional District (CRD)	Max Christensen
Municipality of North Cowichan	Rowena Tansley Doug Merrick
Polaris Land Surveying	Brent Taylor
Resort Municipality of Whistler (RMOW)	Vanessa Pocock
Thompson-Nicola Regional District	Mike Scarff Nicole Jung
Township of Langley	Derik Woo

Project Team:	
Brian Greening	Product Portfolio Manager: Property Solutions
Taylor McInnes	Manager, Geodata Services
Irshad Jamal	Parcel Fabric Technician
Jag Singh	Product Owner
Titilayo Ademiluyi	Project Manager

Today's Session – Agenda



Parcel Details	Parcel Info & Misc Notes
Parcel Identifier (PID)	010-561-935
Parcel Identification Number (PIN)	-
Parcel Type	Subdivision
Legal Description	LOT 1 SECTION 19 TOWNSHIP 26 OSOYOOS DIVISION YALE DISTRICT PLAN 4303
Plan Number	KAP4303
Jurisdiction and Roll Number	214034750
Regional District	Regional District of Central Okanagan
Municipality	Kelowna, City of
Parcel Status	Active

010-561-935
KAP4303
Lot 1

Universal Parcel Identifier (UPI) – Business Context

LTSA continues to advocate for the interests of peer organizations and address issues related to the adoption of ParcelMap BC

Business Context

How do we track primary keys that relate property to other systems?

Key Question

No unique identifier for parcels without a PIN or PID exists (ie: Road, Common Property, etc)

Key Issue

Universal Parcel Identifier (UPI) – Overview

*UPI is a managed service that provides a unique business ID for **ALL** represented parcels in ParcelMap BC, including roads, park dedications, common property and other interests*

Proposed Short-term vision

Initial offering will be as an enhancement for ParcelMap BC as a key identifier for linking 3rd party managed property information

Proposed Long-term vision

UPI will be the identifier used to link other data products such as Proposed Parcels & 3D Parcels

UPI – Why are we looking at this?

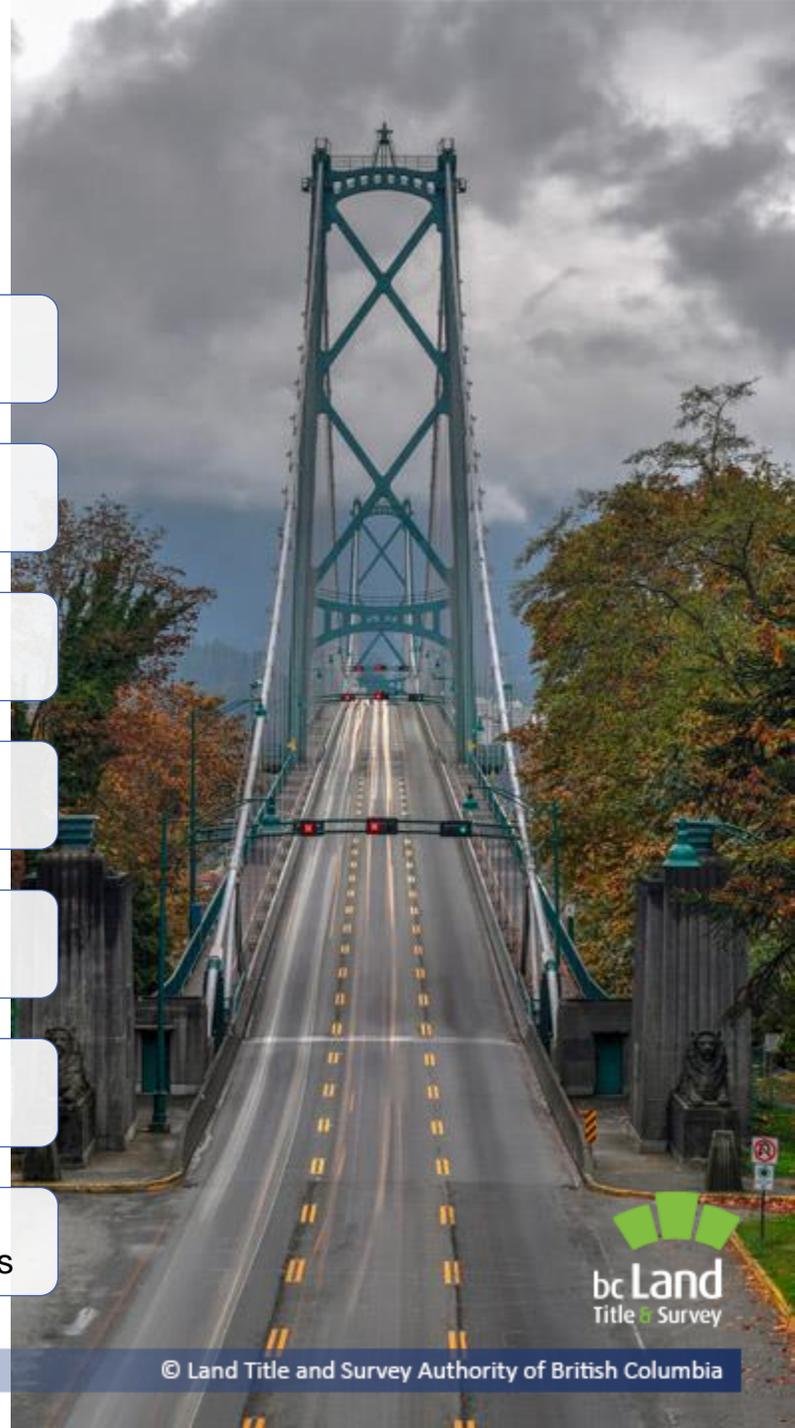
Goal: With UPI, we can connect the parcel lifecycle to support relationships in property and land-related business workflows, facilitating common identification across customer segments, unlocking customer value.

Key Customers of UPI include: Local Governments, Utilities, other large interest holders (Infrastructure & Transportation)

Stakeholder Group:	Benefit Hypothesis:
Province of BC: BC Data Services FREDA (Finance Reporting and Enhanced Data Analysis)	<ul style="list-style-type: none"> Characteristic that supports best practices for services registry of authoritative data Helping to uniquely identify property across business domains
BC Assessment	<ul style="list-style-type: none"> Efficiency in taxable operations
Local Governments	<ul style="list-style-type: none"> Provide a common unique primary key for linking with local government land records systems
Land Surveyors	<ul style="list-style-type: none"> Download product and lead-in to proposed parcels
Large Interest Holders (ex. Utilities & other infrastructure)	<ul style="list-style-type: none"> Helping relate extent of interests to asset and property rights holdings

UPI – Proposed Solution

- Every parcel record in ParcelMap BC will have a UPI at-start (even “fabric history”)
- All new surveyed entities will receive a UPI
- New UPI trigger: Generated when the polygon is created
 - i.e. All newly defined bounded areas (survey or description) forming a closed parcel gets a new UPI
- Child Parcels will retain their Parent UPI lineage
- Remainder parcels get a new UPI. This includes consolidation of defined bounded areas (lineage tracking)
- Immediate unique UPI generated when triggered
- 8-Digit Integer, starting at 10000000
 - NOTE: **NOT** in consecutive order, each UPI is generated randomly with no relationship to other UPIs



UPI – Business Rules

- Spatial improvements do not change/create a new UPI

- (Re)Posting does not change/create a new UPI

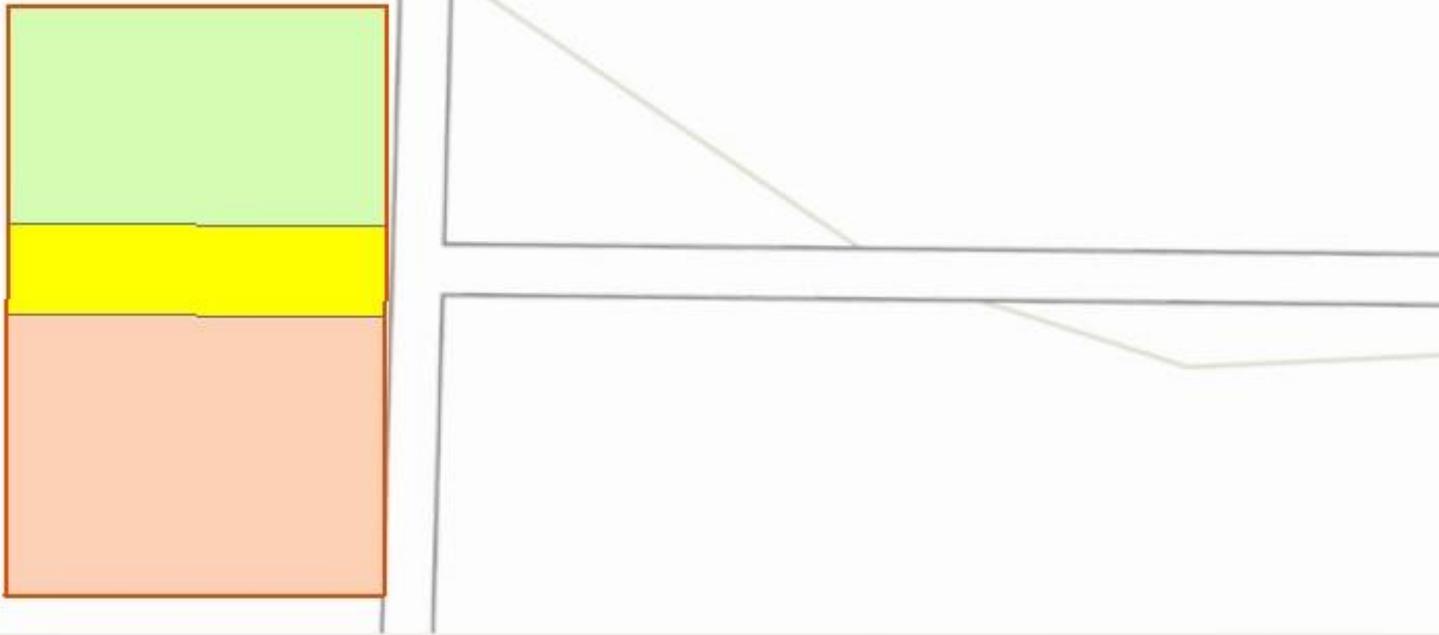
- Other business identifiers (PID, PIN, JUROL) are maintained as “business” links and do not directly affect UPI

- UPI should be available for consumers but we are **NOT** expecting it to be published on legal documents, such as Titles in the near-term

UPI – Characteristics

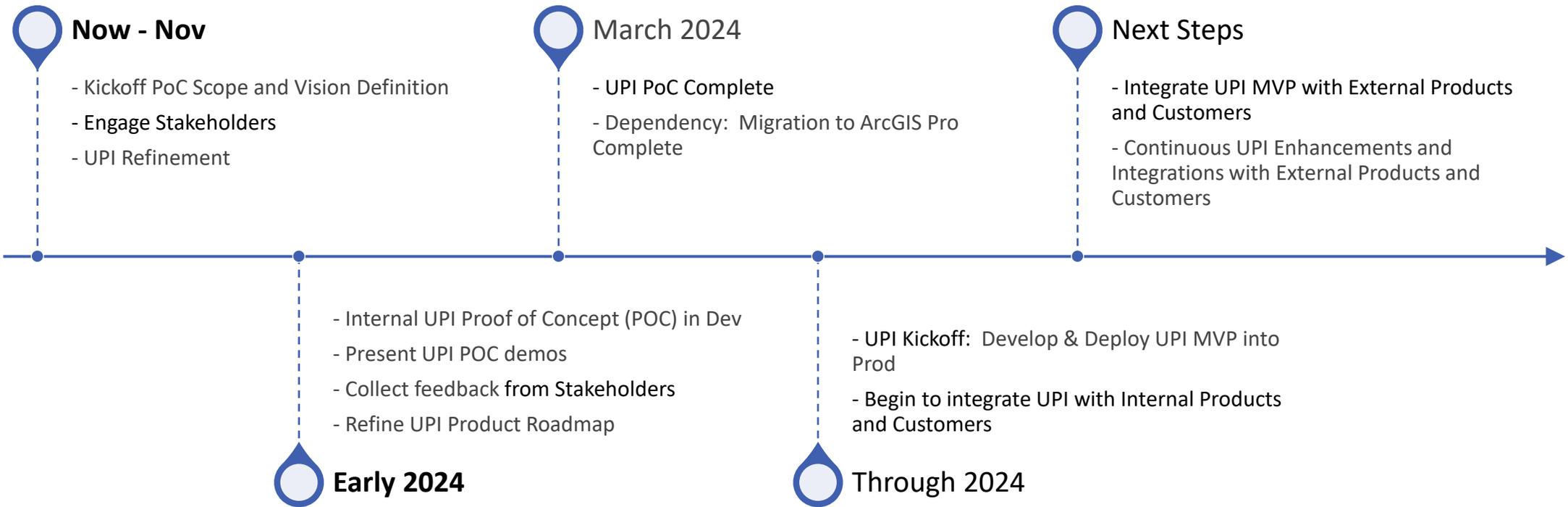
Characteristic	Definition
Unique	<ul style="list-style-type: none"> • 1:1 relationship between a parcel and its identification number. • A unique UPI does not have any relationship to other UPIs - (a unique "unintelligent" random number)
Permanent	<ul style="list-style-type: none"> • Should only change if the boundaries of the parcel on the ground changes or a new parcel is created <ul style="list-style-type: none"> • Note: Spatial improvements do not change/create a new UPI • Generated in an automated-fashion based on business rules and will remain read-only
Simple	<ul style="list-style-type: none"> • Easy to understand with as few digits as possible (compact, easy to use and easy to transcribe)
Easy to maintain	<ul style="list-style-type: none"> • Should efficiently accommodate changes (such as subdivision or consolidation of parcels)
Flexible	<ul style="list-style-type: none"> • Capable of serving a variety of uses
Timeliness	<ul style="list-style-type: none"> • Should be generated when the polygon is created
Inclusive	<ul style="list-style-type: none"> • Should be able to be associated with every piece of dirt OR air from any survey
Verifiable	<ul style="list-style-type: none"> • Should be able to keep track of what has been assigned in order to maintain uniqueness
Land Administration Domain Model (LADM) Compliant	<ul style="list-style-type: none"> • UPI aligns with the LADM

UPI – Example Use Cases



PID	PIN	JUROL	UPI	Parent_UPI	Legal Description
1150677	29092581	55900500010	123456789	<Null>	LOT A, DISTRICT LOT 89
1085243	<Null>	55900500xxx	981254769	123456789	Subdivision 1
<Null>	<Null>	<Null>	521347689	123456789	Road - as described on plan 1918
1150677	<Null>	55900500xxx	<Null>	123456789	Rem Lot A

UPI – Planned Roadmap



UPI – Proof of Concept (POC)

In Scope:

Develop the capability for generating and managing the UPI (“unique number as a service”) in Dev environment

Populate UPI within the ArcGIS Pro migrated data model

Propagating the UPI to ParcelMap BC (backfill and new going forward) in Dev environment

Out of Scope:

External (customer facing) services are out of scope. UPI will reside only in internal operations for the POC.

Production Environments

Dependencies:

Complete migration/upgrade of ParcelMap BC Data Model & related Maintenance from ArcMap to ArcMap Pro

UPI – Q&A

- TEAMS chat will be monitored
- Use TEAMS "Raise Hand" feature
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UPI – Next Steps

- Questions about UPI?
 - Point of contact: Jag Singh, Product Owner (Jag.Singh@landsure.ca)
- Provide additional feedback/input:
 - Participate in SurveyMonkey Survey (following this call)

Thank you



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