



ParcelMap BC Adoption Transition Project Management Guide

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1 Introduction

The [adoption of ParcelMap BC](#) is a milestone, where ParcelMap BC is used by and recognized as the authoritative mapped / graphical cadastral parcel representation in BC, spatially and for accompanying attribution, by an organization.

This *Parcel Map BC Adoption Transition Project Management Guide* has been developed to assist organisations in planning and executing their organisation's transition from their current state of using or maintaining cadastral mapping to the adoption of ParcelMap BC.

The Transition Project Management Guide contains the following key sections:

1. *High-Level Transition Work Breakdown Structure*: A high-level Work Breakdown Structure that identifies and describes key task areas to be considered when developing a detailed Transition Plan for ParcelMap BC adoption, during both the Project Planning and Project Execution phases.
2. *Guiding Principles / Recommended Approach*: A set of guiding principles and recommendations that should be considered when developing a detailed Transition Plan for ParcelMap BC adoption.
3. *Transition Project Plan Resources*: Recommended roles and responsibilities when identifying resources to support the execution of the detailed Transition Plan.

This Guide is an accompanying resource complimenting a broader scope of [resources](#) available supporting the adoption of ParcelMap BC.

2 High-Level Transition Work Breakdown Structure

A Transition Plan for ParcelMap BC adoption includes a number of discrete task areas that are essential for successful transition. Some task areas (e.g., various specific business system integrations) may or may not be required, depending on the technical architecture of each Adopter organisation. As such, the Work Breakdown Structure (WBS) presented in this document should be considered a “superset” of tasks and activities that should be considered when developing a detailed Transition Plan.

The WBS presented here has been partitioned into two discrete Phases:

1. *Phase 1: Project Planning* – Tasks related to conducting a current situation assessment, obtaining approval to proceed, and planning of detailed *Phase 2: Project Execution* activities.
2. *Phase 2: Project Execution* – Tasks related to the execution of the detailed Transition Plan.

This partitioning is intended to recognise the fact that a situation assessment, detailed project planning activities, and obtaining the necessary related approvals and sponsorship may occur well in advance of Project Execution in a large Adopter organisation. This is due to multiple factors, including the cadence of program planning and budget approval cycles (typically annually), and often the requirement to consult with multiple organisational stakeholders and navigate multiple budget-related processes before receiving final approval and sponsorship to proceed.

As such, Adopter organisations are encouraged to pursue Phase 1 activities in a manner aligned with their internal IT/GIS program planning, approvals, and budget cycle. Phase 2 activities can then be pursued subsequently, as resourcing and other program dependencies permit.

2.1.1 Phase 1: Project Planning

Phase 1 of the high-level Transition Plan is focussed on *project planning* activities related to obtaining the necessary approvals and sponsorship, and positioning the organisation to successfully initiate, execute and complete the key task areas in *Phase 2: Project Execution*.

Table 1 below provides a typical range of WBS activities associated with Phase 1 of a Transition Plan for a large organisation adopting ParcelMap BC. Where applicable, Phase 1 task areas should be conducted in coordination with the organisation’s Project Management Office (PMO) and any related internal PMO standards should be observed in the execution of these task areas.

Table 1 – Phase 1 WBS “superset” for a typical ParcelMap BC Transition Plan.

ID	Task Area / Name	Description (Scope)	Notes
Phase 1: Project Planning		Tasks related conducting a current situation assessment, obtaining approval to proceed and planning detailed project activities.	
1.0	Current Situation Assessment	Perform a Situation Assessment of the “Current State” and identify high level gaps related to ParcelMap BC adoption.	The intent of this exercise is to better understand the current state at the organisation and identify and quantify relevant areas of scope within the Transition Plan required to achieve ParcelMap BC adoption.
1.1	Current Situation Assessment – Parcel Fundamentals	Documentation of high-level “Parcel Fundamentals” that characterise the approach to parcel fabric data management at the organisation.	Relevant Transition Planning Resources: - Transition Planning Situation Assessment Template
1.2	Current Situation Assessment – Primary Cadastre Schema Comparison	Mapping of current parcel fabric schema to ParcelMap BC and schema-related (spatial and attribute) adoption criteria. - Identification of significant schema gaps that must be addressed during transition.	Relevant Transition Planning Resources: - Transition Planning Situation Assessment Template - XRAY
1.3	Current Situation Assessment – Primary Cadastre Geometric Comparison	Comparison of current parcel fabric feature geometry to ParcelMap BC to identify areas of significant misalignment and assess approach/effort to address such gaps.	Relevant Transition Planning Resources: - Transition Planning Situation Assessment Template - Data Alignment Workflow Package (DAWp)

ID	Task Area / Name	Description (Scope)	Notes
1.4	Current Situation Assessment – Data Dependencies	<p>Documentation of current parcel fabric maintenance workflows.</p> <p>Documentation of geospatial data sets that are derived / offset from the parcel fabric and related processes/workflows.</p> <p>Documentation of interfaces/integrations between parcel fabric data and other business systems.</p> <p>Documentation of other potentially affected systems, users and interfaces (e.g. Open Data).</p>	<p>Relevant Transition Planning Resources:</p> <ul style="list-style-type: none"> - Transition Planning Situation Assessment Template
1.5	Current Situation Assessment – Program Dependencies	Documentation of organisational program dependencies that may influence the timing and approach to ParcelMap BC adoption.	<p>Relevant Transition Planning Resources:</p> <ul style="list-style-type: none"> - Transition Planning Situation Assessment Template
2.0	Approvals	Obtain necessary internal approvals / sponsorship	
2.1	Business Case / Charter / Risk Assessment / Approvals	<p>Includes:</p> <ul style="list-style-type: none"> - Development of Business Case (if required) and/or Project Charter. - Organisational risk assessment and mitigation plan (if required). - Organisation/HR considerations: "Who" and "what" will change to achieve the Future State. Execution of changes to be addressed as part of Change Management Plan. - Related presentation(s) to senior management / executive. 	<p>This task area will be particularly important to larger organisations with a relatively sophisticated Project Management Office and/or project approvals process.</p> <p>Smaller adopter organisations may have relatively few requirements associated with this task area.</p> <p>Relevant Transition Planning Resources:</p> <ul style="list-style-type: none"> - ParcelMap BC Transition Planning Executive Summary Template (MS Power Point)
3.0	Project Planning	Project-related Planning and Administration	
3.1	Detailed Transition Plan	Elaborate this High-Level Transition Plan Work Breakdown Structure to a detailed project plan.	Based on the findings in the Situation Assessment, develop a detailed “workable”

ID	Task Area / Name	Description (Scope)	Notes
			<p>project plan for Transition to ParcelMap BC, including necessary Task Area and detailed tasks, schedule, milestones, and resources.</p> <p>This WBS may be used as an initial template for creation of the detailed Transition Plan.</p> <p>Relevant Transition Planning Resources:</p> <ul style="list-style-type: none"> - Transition Project Management Guide (this document)
3.2	Change Management Plan	<p>Develop a Change Management Plan for ParcelMap BC transition that may include the following key focus areas:</p> <ul style="list-style-type: none"> - Training plan associated with transition to ParcelMap BC - likely focussed on PMBC Product Technical Specs and interfaces w/LTSA. - Changes to workflows associated with ParcelMap BC intake and parcel layer "staging" for downstream consumption. - "When" and "how" any changes to HR Future State (roles, responsibilities) will occur. - Touch points / alignment with the Communications Plan specifically related to the changes above. 	<p>This Change Management Plan should serve as a primary input to the "Communications Plan" below.</p> <p>A formal Change Management Plan may not be required in smaller organisations.</p>
3.3	Communications Plan	<p>Develop a Communications Plan for transition to ParcelMap BC, targeted primarily at internal stakeholders and focussed on the relevant areas of change described in the Change Management Plan.</p>	<p>A formal Communications Plan may not be required in smaller organisations.</p>

2.1.2 Phase 2: Project Execution

Phase 2 of the high-level Transition Plan is focussed on *project execution* activities related to initiating, executing, and completing the necessary key task areas to achieve adoption.

Table 2 below provides a typical range of WBS activities associated with Phase 2 of a Transition Plan for adopting ParcelMap BC. Phase 2 task areas should be subject to Project Management oversight (Task Area 3.0) in coordination with the organisation’s Project Management Office (PMO), and related standards, as applicable.

Table 2 – Phase 2 WBS “superset” for a typical ParcelMap BC Transition Plan.

ID	Task Area / Name	Description	Notes
Phase 2: Project Execution		Tasks related to the execution of the Transition Plan.	
4.0	Project Management	Project Management associated with execution of the Transition Plan.	
4.1	Ongoing Project Management	Ongoing Project Management throughout the remaining duration of the project.	Project Management effort will typically be determined by internal PMO standards and the size of the project team required to execute the Transition.
5.0	Local Parcel Data / ParcelMap BC Realignment	Achieve Realignment between LG parcel fabric data and ParcelMap BC	
5.1	Geometric Data Analysis / Confirm Adoption Path	Determine, via collaboration with LTSA and the use of available LTSA-provided Alignment Resources, where there are significant deviations in geometry due to non-plan adjustments or other factors. Confirm the Adoption Path most suitable for the organisation.	Applies primarily to organisations with “self maintained” parcel fabrics. Relevant Transition Planning Resources: - Data Alignment Workflow Package (DAWp)
5.2	Horizontal Data Integration Analysis: Parcel Fabric and Business System Integrations	Develop/confirm the approach to support required ParcelMap BC attribution while supporting other required parcel attribution (e.g. business data / foreign keys).	Key focus area(s) typically include: - Ensuring required ParcelMap BC attribution is supported by the “future state” schema. - Ensuring that existing integrations with other business systems continue to be supported by the “future state” schema.
5.3	Vertical Data Integration Analysis: Parcel Fabric	Develop/confirm the approach to supporting geospatially integrated or derived parcel-based data.	Key focus area(s) typically include:

			<ul style="list-style-type: none"> - Ensuring that required parcel-based data features (e.g. easements, air space, RoWs, strata, historical parcels) will continue to be supported in the “future state”. Many organisations will continue to maintain some features not currently included in the ParcelMap BC specifications internally post-adoption.
5.4	Vertical Data Integration Analysis: Geospatial Dataset Derivations	Develop/confirm the approach to supporting existing Geospatial Dataset Derivations (e.g. administrative/policy areas, other parcel-based geospatial feature aggregations).	<p>Key focus area(s) typically include:</p> <ul style="list-style-type: none"> - Ensuring that processes to create and maintain layers derived from parcel-based data features will continue to be supported in the “future state”. - May represent an opportunity to automate current workflows used to create and maintain such data sets.
5.5	Local Parcel Data / ParcelMap BC Processing	Engage in a collaborative effort with LTSA to realign geometric features of local parcel fabric with ParcelMap BC as required.	<p>Applies primarily to organisations who chose to “realign” their current parcel geometry with ParcelMap BC.</p> <p>Relevant Transition Planning Resources:</p> <ul style="list-style-type: none"> - Data Alignment Workflow Package (DAWp)
5.6	Implement Horizontal Data Integration Updates	Implement any changes to supporting required ParcelMap BC attribution while supporting other required parcel attribution (e.g. business data / foreign keys).	<p>Key focus areas for this task area include:</p> <ul style="list-style-type: none"> - Confirming that the “future state” schema includes all required ParcelMap BC attribution.

			<ul style="list-style-type: none"> - Confirming that existing integrations/interfaces with other business systems continue to be supported by the “future state” schema.
5.7	Implement Vertical Integration Updates	Implement any changes to the approach to supporting vertically integrated parcel-based data (e.g. easements, air space, RoWs, strata, historical parcels).	The effort associated with this task area will be a function of the complexity of the organisation’s parcel feature schema (i.e. number of distinct layers maintained) and alignment with the ParcelMap BC spatial schema. Organizations are encouraged to adopt ParcelMap BC’s model for features such as strata and air space where practical.
5.8	Implement Geospatial Dataset Derivations Updates	Implement any changes to the approach to supporting Geospatial Dataset Derivations (e.g. administrative/policy areas, other parcel-based geospatial feature aggregations).	The effort associated with this task area will be a function of the number of derived geospatial datasets that are regularly maintained. Organisations are encouraged to explore opportunities to automate these processes using tools such as FME.
6.0	Parcel Fabric / Land Records Update Process	Update processes / workflows associated with parcel fabric and land records updates	
6.1	ParcelMap BC Land Parcel Intake Process(es)	Develop and implement new intake process to accept ParcelMap BC data from LTSA and update parcel layer(s).	This task area should consider both the initial implementation of ParcelMap BC and intake of regular updates thereafter.
6.2	BC Assessment Land Record Intake Process(es)	Confirm and implement the approach for accepting BCA Data Advice (if applicable) in parallel with accepting ParcelMap BC updates.	For many organisations, this aspect of the “current state” will not change; however, confirming ongoing compatibility of the incumbent approach for BCA Land Records Intake with the “future state” ParcelMap BC Land Parcel Intake Process(es) above should be confirmed.
7.0	Land Records System Integrations	Update integrations with land records systems (if required)	
7.1	Taxation / Assessment System	Confirm and implement any required process(es) to maintain integrations to taxation / assessment systems.	Related to “5.6 Implement Horizontal Data Integration Updates” above. If Task Area

			5.x has been completed successfully this should be essentially a testing exercise with the relevant system(s) and their stakeholders.
7.2	Permitting System	Confirm and implement any required process(es) to maintain integrations to permitting system(s).	Related to “5.6 Implement Horizontal Data Integration Updates” above. If Task Area 5.x has been completed successfully this should be essentially a testing exercise with the relevant system(s) and their stakeholders.
8.0	Asset Management / Work Order System Integrations		
8.1	Asset Management System	Confirm and implement any required process(es) to maintain integrations to asset management system(s).	Related to “5.6 Implement Horizontal Data Integration Updates” above. If Task Area 5.x has been completed successfully this should be essentially a testing exercise with the relevant system(s) and their stakeholders.
8.2	Work Order System	Confirm and implement any required process(es) to maintain integrations to work order system(s).	Related to “5.6 Implement Horizontal Data Integration Updates” above. If Task Area 5.x has been completed successfully this should be essentially a testing exercise with the relevant system(s) and their stakeholders.
9.0	Other Integrations / Interfaces		
9.1	Open Data	Address any impacts to Open Data content currently being provided.	Typically associated with any changes required to data “scrubbing” / publishing routines associated with Open Data.
9.2	Others	Assess and address impacts to other downstream users or participants (e.g., Web based viewers/portals, data exchange with external participants)	A “catch all” to ensure that other processes, systems and stakeholders associated with parcel fabric data are considered as part of the Transition Plan.

Figure 1 below provides a diagram of the key Task Areas in each Phase of the high-level Transition Plan.

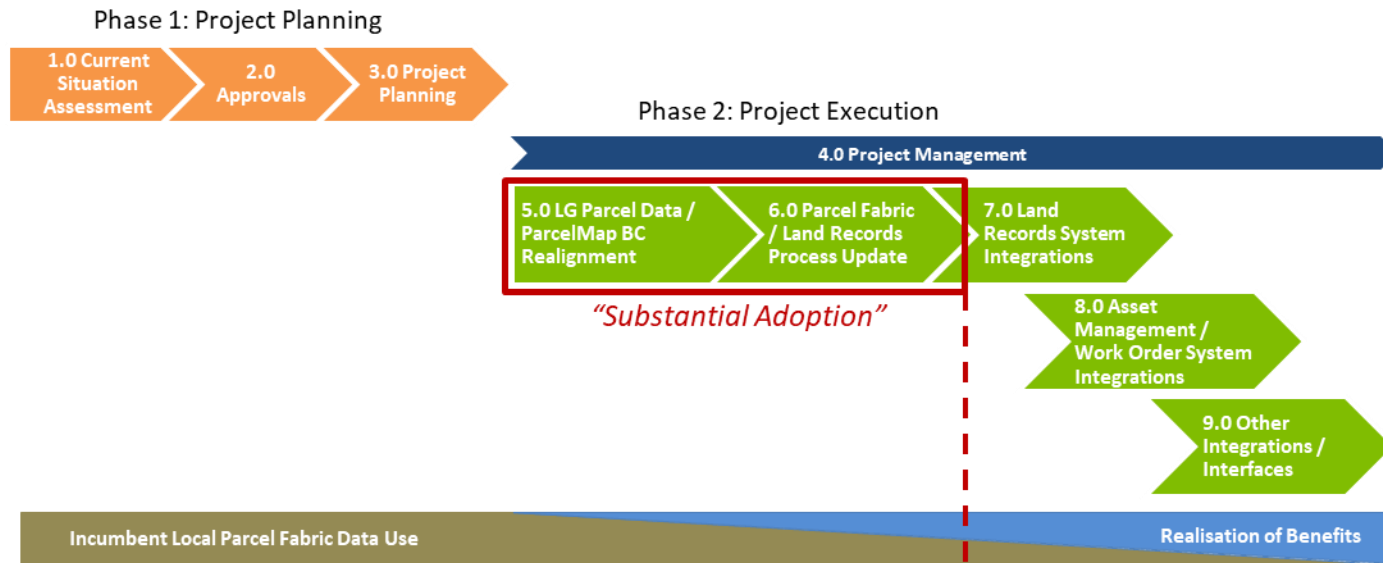


Figure 1 – Key Task Areas by Transition Plan Phase

“Substantial Adoption” is achieved when ParcelMap BC data supersedes the incumbent self-maintained parcel fabric data as the primary source for truth for the geometric and associated attribute representation of parcel features within the organisation.

3 Guiding Principles / Recommended Approach

The following guiding principles and recommendations for transition to ParcelMap BC have been developed based on input from focus groups within the Adopter community, including the experiences and “lessons learned” of organisations that have successfully adopted ParcelMap BC, as well as the efforts of the [Adoption Working Group](#) since its launch in mid-2018. These are considered applicable to most if not all large organisations undertaking the transition:

1. Identify and pursue opportunities to automate: Adopter organisations should actively look for opportunities to apply automation (e.g. scripts, routines that could be run with little or no manual intervention) to the workflows associated with parcel fabric data updates and quality assurance during the course of their transition. The benefits of increasing the level of automation include reduced demand on staff resources and more consistent workflow outputs.
2. Take an iterative process to address complexity and issues: Several iterations are typically required to achieve the desired level of quality in the outputs of the automated processes above. This is largely due to pre-existing data inconsistencies or other data anomalies that are typically exposed during the testing of automated routines. This principle also applies to application and integration complexity. The project approach and related project planning should anticipate that multiple iterations of certain project task areas will be required to achieve the desired outcomes. As such, a combined “waterfall” and “spiral” approach is recommended as the most effective strategy to execute the Transition Plan.
3. Engage internal knowledge workers to achieve success: Most large organisations have a dedicated team of resources to support their GIS technical environment and related business systems and integrations. Many Adopters are also reluctant to become dependent on external support to support ongoing operational parcel fabric updates from LTSA post adoption. Internal staff typically have a strong working knowledge of the internal technical environments related to parcel fabric and land records management and, more importantly, the associated data assets of the organisations. There are often legacy business system integrations and workflows that have been developed in house that are unique to a particular organisation which must be well understood as a precondition to effectively and efficiently executing the Transition Plan. Consequently, when considering resourcing for the Transition Plan, internal knowledge workers (or incumbent contractors with strong working knowledge of relevant systems and data) should contribute prominently to the task areas associated with analysis.

4 Transition Project Plan Resources

4.1 Project Resource Roles

The following resource roles are strongly recommended to support successful execution of the Transition Plan. It is recognised that not all organisations will have the capacity to assign dedicated resources to each specific role and, in many cases, multiple roles will be supported by a single resource.

Table 3 – Recommended Transition Plan resource roles.

Role	Responsibilities
Project Manager	Overall project oversight and direction of project team participants. Reports to project sponsor.
Project Lead	Overall project leadership on a day-to-day basis. Primary resource for technical project tasks.
Enterprise Architect	Ensures overall technical alignment of project design and execution activities with organisational standards and related business systems.
Business Analyst	Gathers business requirements and translates stakeholder input into technical specifications to guide design and implementation related tasks.
GIS Technician	Provides support to the project team in matters regarding GIS technology and workflows associated with parcel fabric maintenance.
GIS Data Analyst	Performs data-related analysis tasks (e.g. alteration of schemas, alignment with organisational data standards).
Developer / Tester	Development and testing of automated routines (e.g. FME/python scripts).
Subject Matter Experts	Provide guidance to project team on behalf of business area stakeholders regarding various workflows, processes and related requirements.