

Implementing Web Mapping at BC Assessment

Presented by:

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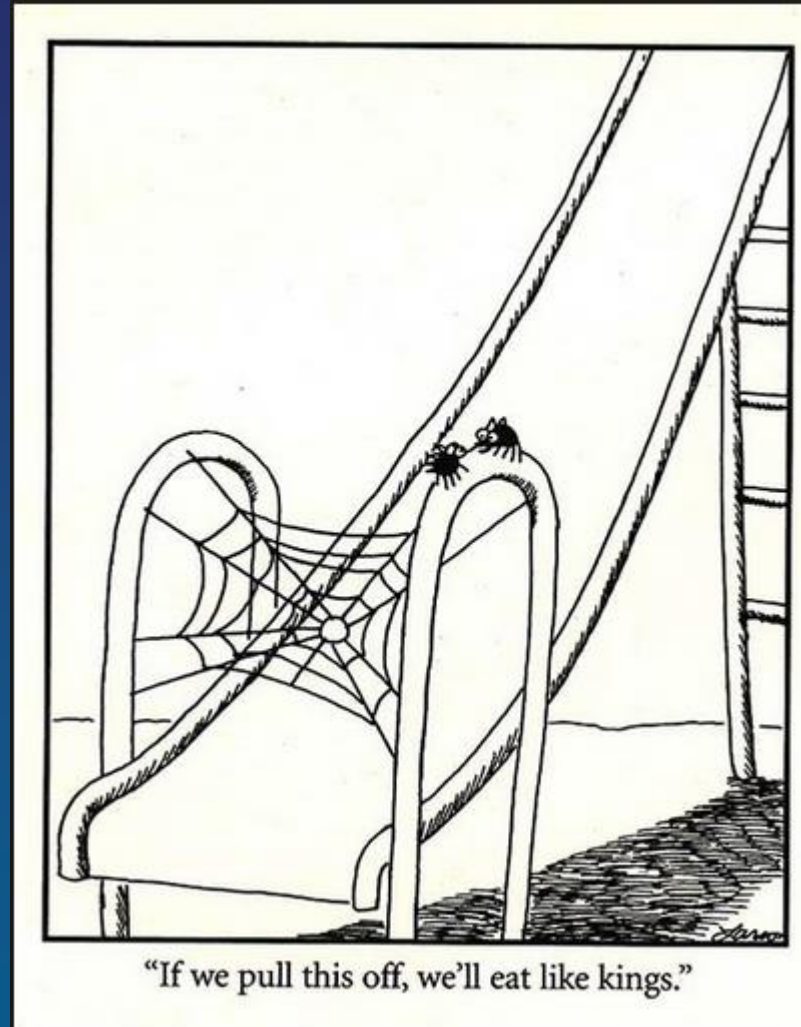


Organization Overview

- BC Assessment (Crown Corporation)
- Property Assessment
- Head Office – Victoria
 - 15 area offices throughout BC
- 700 Employees
- Esri users since 2000



If at first you don't succeed...



How did we do it? (...try, try again)



The Business Case

- Minor Taxing Services
- Spatial Comparison
- Data cleansing
- Custom interface
- Custom functionality



Ex. Fire Protection, Sewer, Street Lighting, etc.

“map viewer”

(just ArcMap + extensions)

C.A.M.A.

Computer Assisted Mass Appraisal

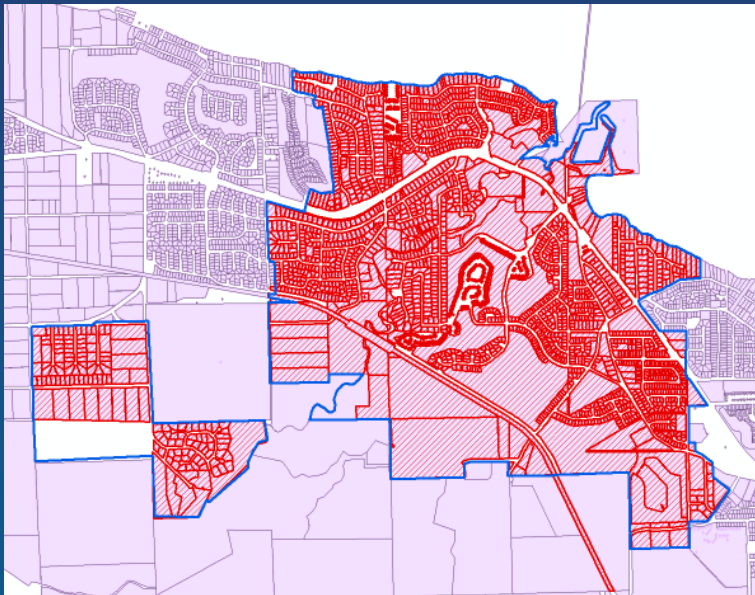
“Minor Taxing Audit Tool”

“map viewer”

(just ArcMap + extensions)

C.A.M.A.

Computer Assisted Mass Appraisal

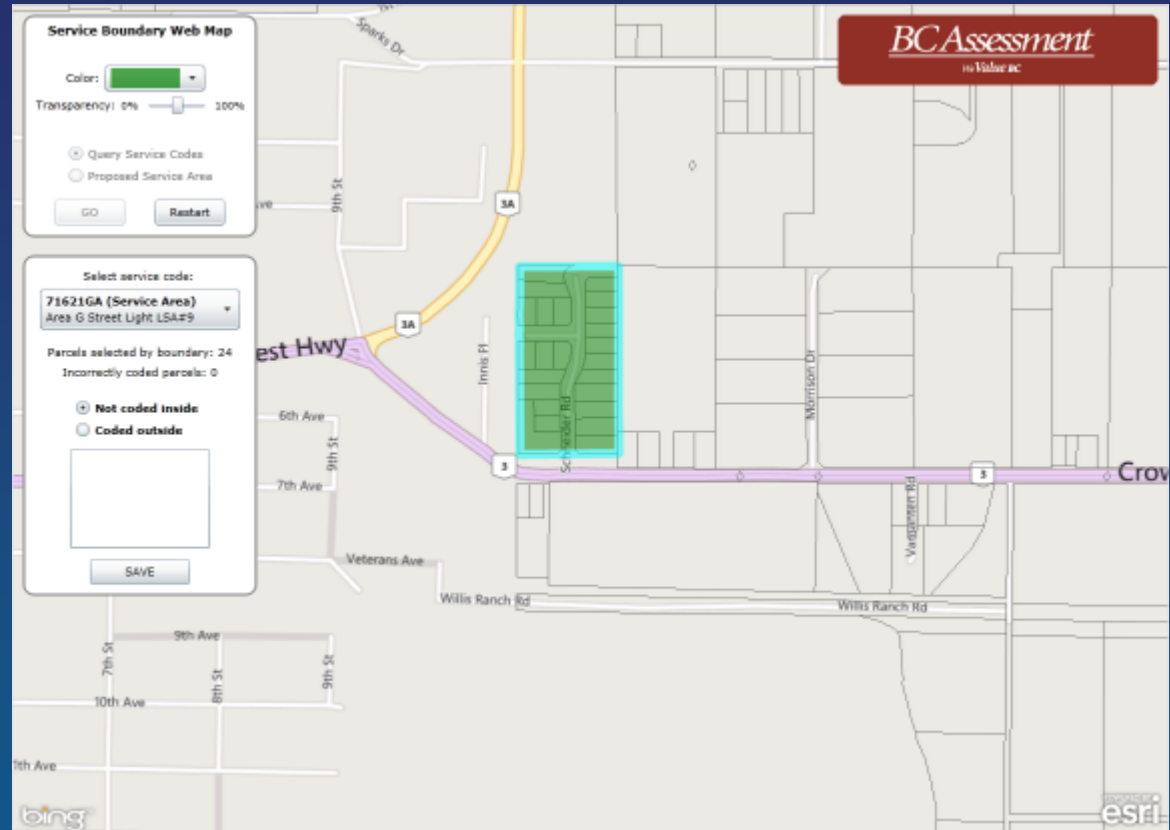
A screenshot of the C.A.M.A. software interface. The window title is "PSPV: Property". The interface includes a menu bar, a toolbar, and several data fields for property information. A table lists components of the property, and there are sections for "Improvement Characteristics" and "Exceptions".

Building Type	Building ID	Fied Bldg	Manual Class	% Dev	Roof Cover	Roof Cover2	Floor Home Elec	Pool & Beam	Heat	1st Flr A/C	Upper Flr A/C	Area	% Area	1st Floor	2nd
Man Bldg	101100	W	0001	10	Asphalt				Elec						962

Type	Code	Width	Area	Number	Quality	Component
Plumbing	Hall Bath			1	Average	
Plumbing	Full Bath			1	Average	
Yard Improvements	Driveway/Paved		500		Average	
Porch And Deck	Enclosed		106		Average	000
Porch And Deck	Balcony		234		Average	001

The Web Application

- The Service Boundary Web Map
- Esri Developer
- Focused application



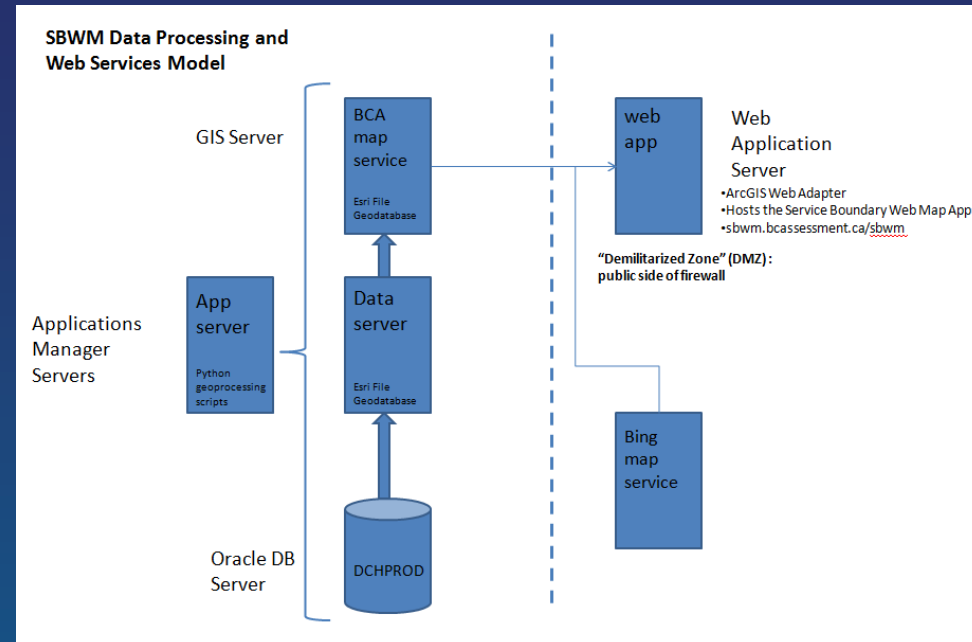
Infrastructure

- Priorities
- Data Center Move
- Budgets
- Capacity Planning Tool
- GIS server architecture



Migration

- Web Map Services
- ArcGIS Web Adaptor
- Python Scripts
- Application Manager Jobs
- Web app migration



Priorities...

eValueBC or Service Boundary Web Map?

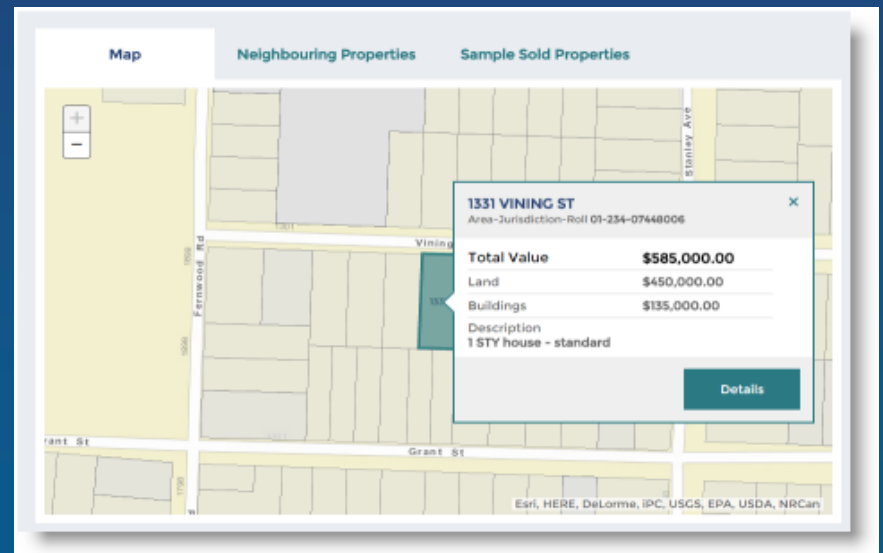
*e-value***BC**[™]
Compare Assessments Online

eValueBC Web Mapping

- Leverage existing infrastructure
- BCA developers →
- Map interface
- Property information
- Compare properties

Learned:

- JavaScript API
- Dojo



Map Cache Decision

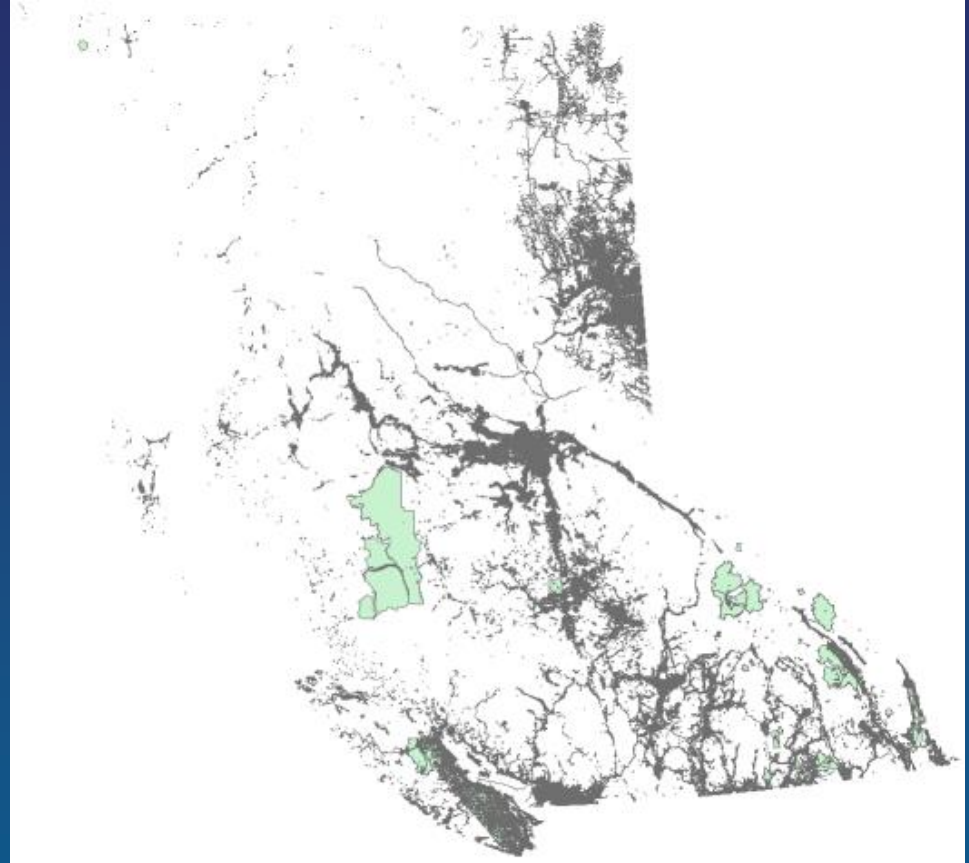
- Map Cache
- Assessment Fabric
- Provincial envelope

Reasons to cache

- Server load
- Performance

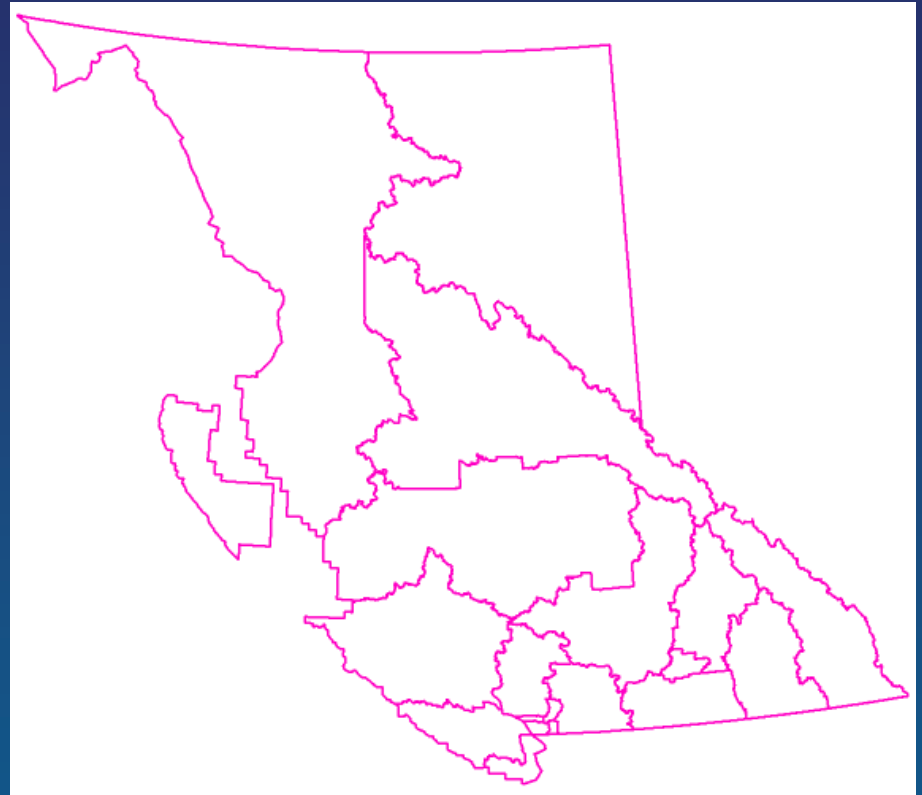
Map Cache Strategy

- Cache based on envelope of feature class
- A lot of white space!
- Many blank tiles
- Whole province cache = >500GB



Cache Areas of Interest

- Broke province into a series of regions based on area.
- Processed areas of interest using the Assessment Fabric itself
- Dissolve, buffer, generalize...



* For demonstration purposes only. Not the actual AOI regions we used ;)

Running the Cache

- Each region processed separately
- Run in sequence
- Cache combined using ArcGIS Server

Updating the data

- Repeatable
- Python scripted process
 - Rebuild areas of interest
 - Rebuild cache

A word from the Developer...

- ✓ JavaScript API
- ✓ Dojo
- ✓ Samples
- ✓ Documentation
- ✓ ArcGIS Web Adaptor
- ✓ Esri Support
- ✓ Map CSS



Image credit: omnifeed.com

eValueBC demo

www.bcassessment.ca

Service Boundary Web Map?

- SBWM got green light by the way – it's on our webpage under Local Governments.
- Demo if time permits

Lessons Learned

- Importance of project sponsorship
- Importance of getting infrastructure sorted out early in a project
- Understand other project's priorities
 - People resources
 - Technology resources
- Keep map apps simple for users
- Be prepared to lean on Esri Support 😊
- Cache strategies (time/space)

Q & A



THANK YOU

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