Agenda

• Background
• Calgary Base Mapping Legacy
• The Core Mapping Project
• Parcel Editor
The City of Calgary

- Calgary, eh?
The City of Calgary

• Facts
  • Population: 1,100,000
  • Area: 850 sq km (330 sq mi)
Calgary Base Mapping Legacy

• Award winning innovator in the provision of base mapping services for over 30 years
• Highly customized home grown MicroStation / Oracle environment
• Features:
  • Multiple stages of plans
  • Legal and ownership parcels
  • Advanced positional accuracy
Calgary Base Mapping Legacy

- Multiple stages of plans
  - Tentative
  - Approved Tentative
  - Registered
Calgary Base Mapping Legacy

- Legal and ownership parcels

Registered Legal Survey Polygons

Registered Ownership Parcels
Calgary Base Mapping Legacy

- Positional accuracy
Project - Rationale

- Rationale for change
  - Provide richer and more persistent data source for corporate GIS community
  - Reduce technology sustainment effort through use of IT and vendor supported tools
  - Improve existing business processes
The Core Mapping Project

• Mission:
  • To design and implement a new base mapping management system developed on the Corporation's GIS technology platform to unlock the potential of City information for better business decisions.

• Challenges:
  • Need to support legacy CADD user base
  • Change management
  • Find a vendor supported solution that facilitates leveraging the existing data source and mapping standards
  ➢ Parcel Editor
Project Lifecycle
Parcel Editor - Refinements

- Gaps identified in 9.3 Parcel Editor product
  - Differences in City / ESRI versioning strategy for PE
  - Donut Polygons not adjusting
  - Gaps / Slivers introduced after importing source dgn data
  - Adjustment failure on unclosed parcels
  - Adjustment introducing non-coincident line work
  - Part connector distance and bearings incorrect
  - Remainder parcel tool needing enhancement
  - Fabric load tool needing improvements
Parcel Editor - Refinements

• Iterative collaboration between ESRI Redlands development team, ESRI Canada, and City of Calgary
• Solution landed in 10.0 Parcel Editor
• Refinement process drove project timelines
  • Beta / sandbox testing environment
Parcel Editor - Benefits

• ESRI supported
• More rigorous adjustment process
  • Stored survey observations
  • Post adjustment analysis results
  • Able to adjust multiple plans together
• Feature Adjustment
• Side benefits
  • Revisited legacy process
  • Less subjective business process
Parcel Editor – Bottom Line

- Vendor supported solution
- Provides legacy functionality
- Supports enhanced adjustment capability
Thank You