

Infrastructure Asset Management Alberta June 11, 2014

Dallas Smith, P.Eng

Dallas.smith@calgary.ca
Team Leader - Project & Asset Management Information Services





Agenda



- ➤ Background
- > Decisions
- > Current State
- ➤ Data Automation
- > Encouraging improvement
- > Planning for the future



Background Issues identified by AM Network



- ➤ Gap between budget and Infrastructure work to be done
- Administration not aware of implications of budget decisions (related to capital projects)
- ➤ No way to forecast Infrastructure needs across silos
- No source for corporate reporting
- Life Cycle Cost Analysis program created



Decisions Selecting a System



2007 - 2008:

- > RFP, Shortlist of 3 systems, More analysis
- Pilot of Riva DS with sample data from Roads, Corporate Properties & Buildings, Fire, Transit and Infrastructure Services

2009:

Approvals: AMN, Asset Management Advisory Committee (Directors), IT Committee, IT Success Management, Administrative Leadership Team (GMs), Supply Management, Provincial MSI grant



Decisions Simple Architecture



Business Intelligence
Strategic Decision Support
Long—Range Lifecycle Cost Analysis
Capital Planning
Infrastructure Performance Reporting (ISR)
Condition Assessment Forecasting

= Corecasting

Phase 2: 2009–2011 13 LCA

Phase 3&4: 2010-13: Ent Arch & Integration

Strategic Asset Management (RIVA)

Spatial Location Info Mapping Address Global Positioning Survey GIS
Locational

(ESRI, Microstation, ACAD)

Asset Registry
(Data Warehouse)

Financial & Resource Management (Peoplesoft, Cap Budget System) Cap and Ops Budget
General Ledger
Time & Labour
Project Accounting
Tangible Capital Asset
Accounting

CMMS Operational Asset Management M4/M5 MP2 → Hansen SPL (Datastream) Equip & Lineal & Lineal & Vehicles: Point Assets Point Assets Facilities: (Fleet, Transit) (Water, (Roads) (Corp Prop. Parks) Reci



Maintenance Management
Work Management
Inventory Management
Project Management
Customer Response



New Challenge



➤ PSAB mandate to report book value of Tangible Capital Assets



Decisions for TCA



- "Medium level" of integration between TCA and Asset Management
- > TCA should be automated
 - ➤ In early 2010 this was created as a separate project
 - ➤ Asset Registry was required. Riva EI was the successful candidate.
 - ➤ In 2012 this was merged with the LCCA automation program. Prior to that they worked together



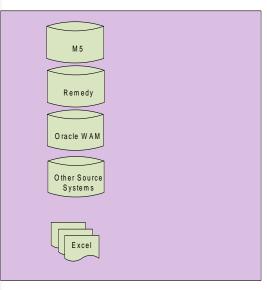
Current State (Before Automation)



- 1. Assets are purchased and recorded in GL
- 2. Assets are recorded in AM systems
- 3. Staff identify changes in AM systems and match to GL
- 4. An Excel spreadsheet is created with TCA transactions and submitted for finance to approve
 - No easy way to reconcile AM systems and our PeopleSoft system
- Very time consuming process

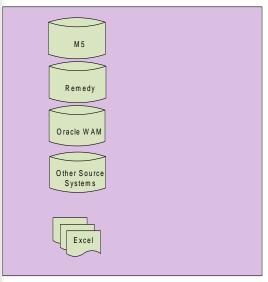








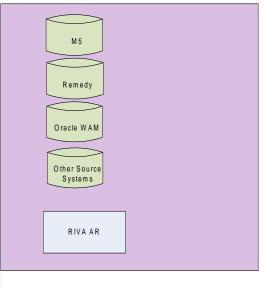




Corporate Asset Registry (RIVA EI)



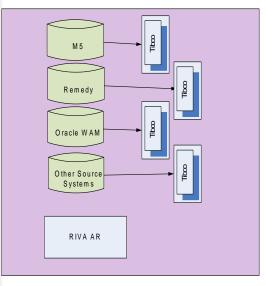


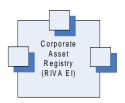


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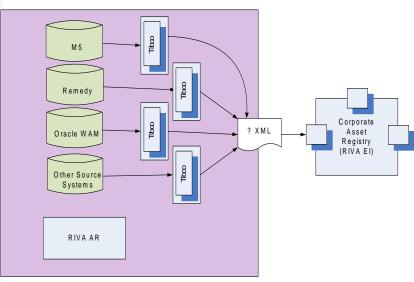






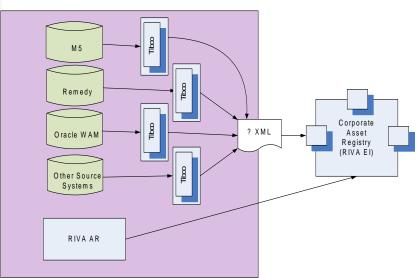






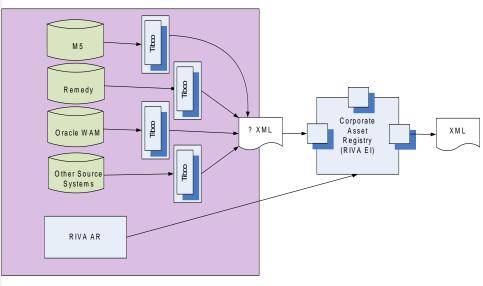






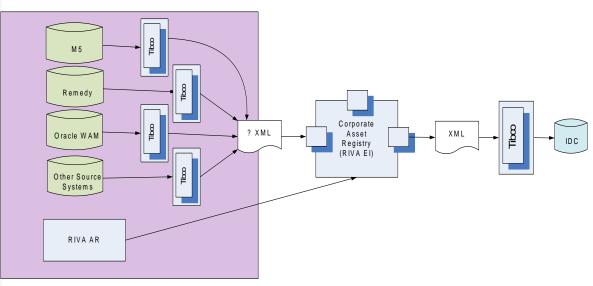






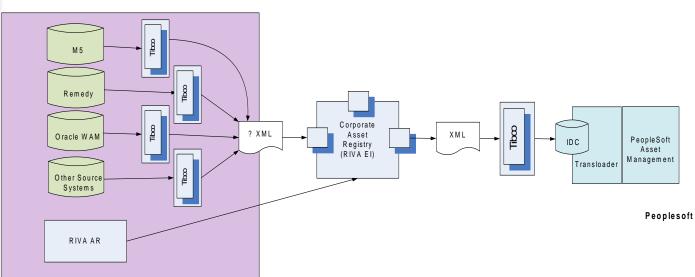






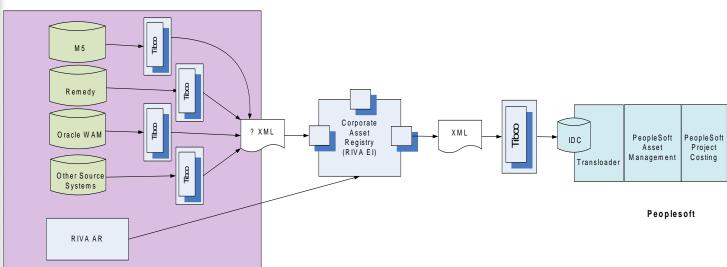




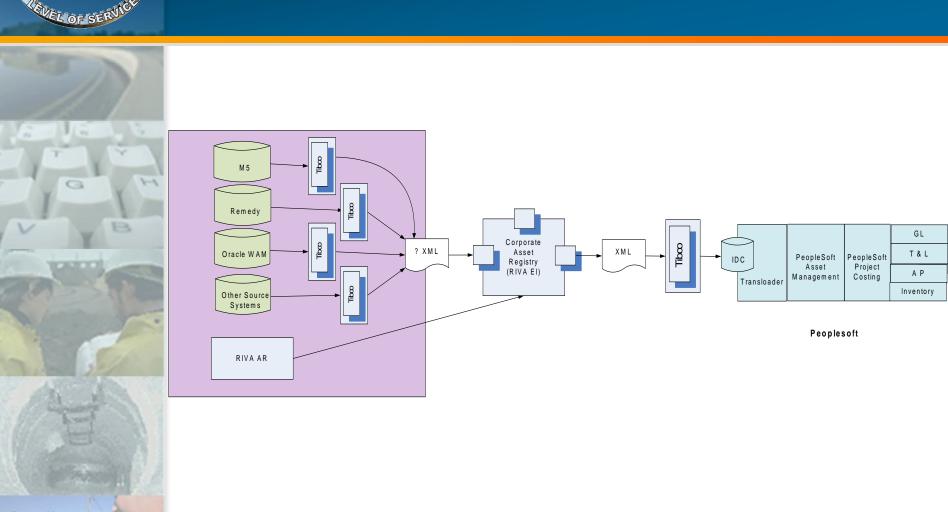




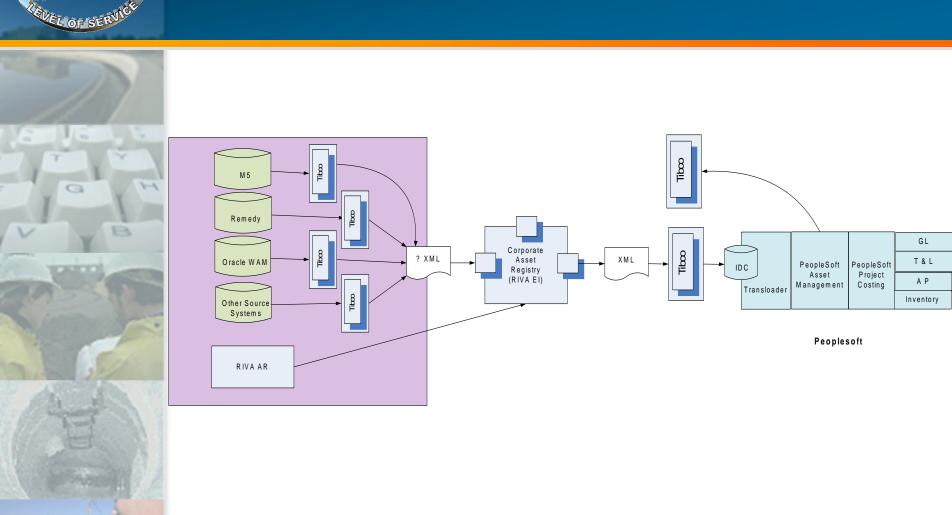














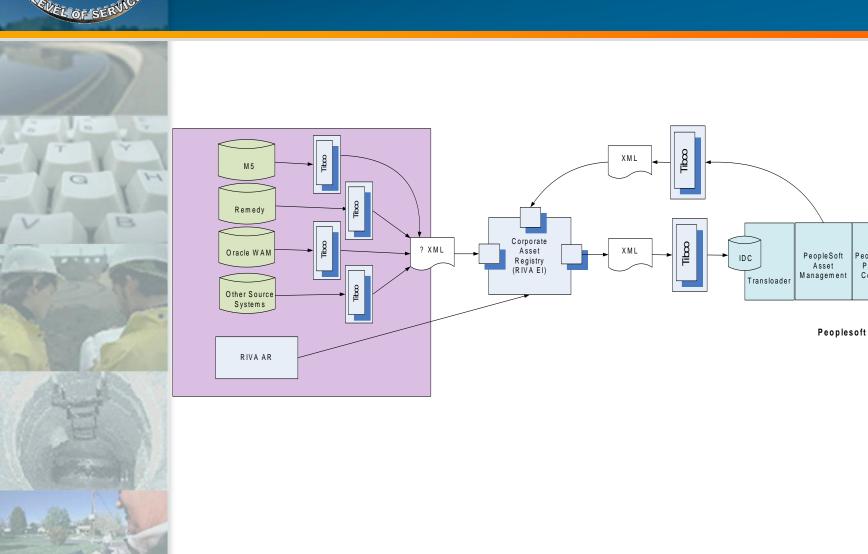
GL

T & L

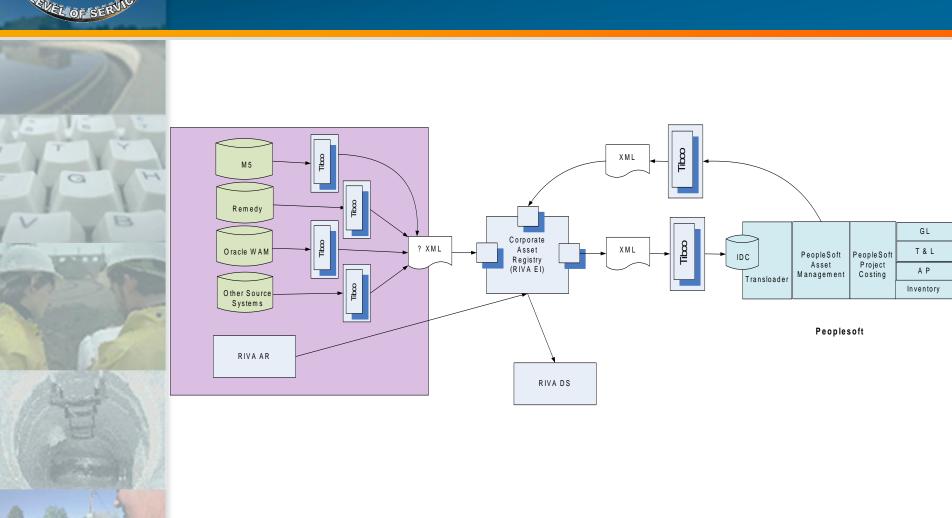
Inventory

PeopleSoft

Project Costing

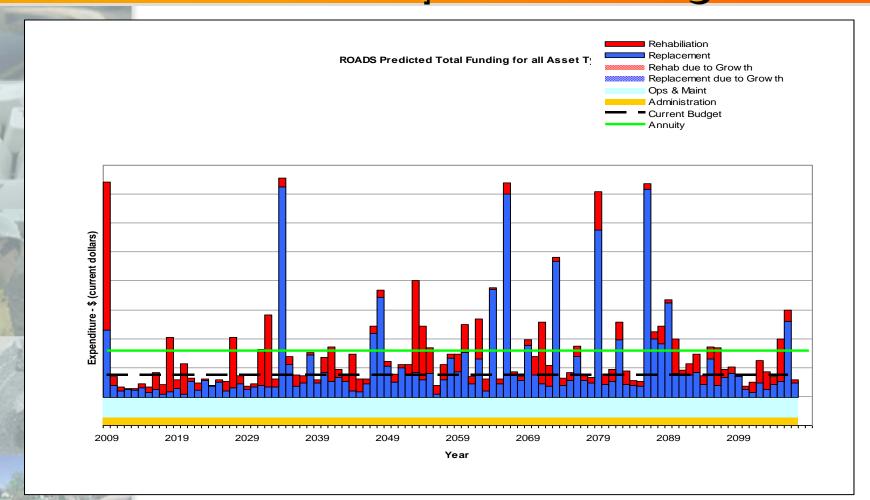






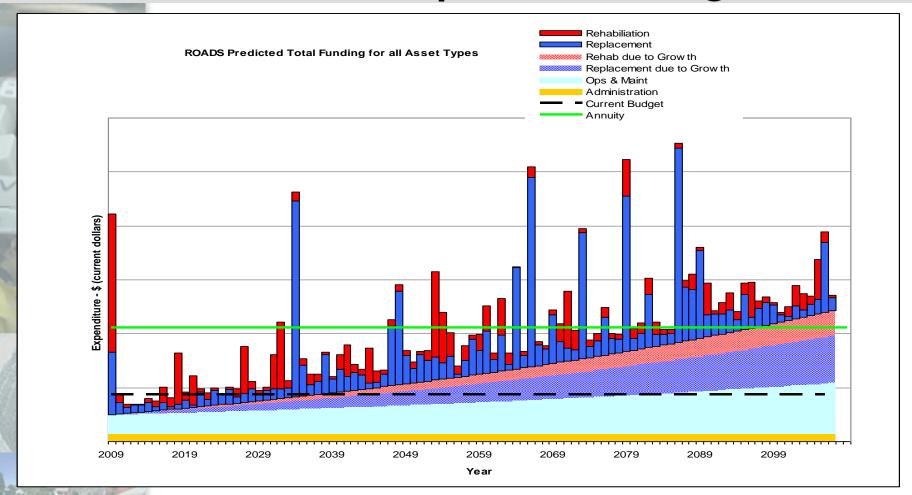


Data Automation Benefits Capital Planning



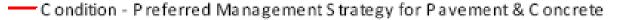


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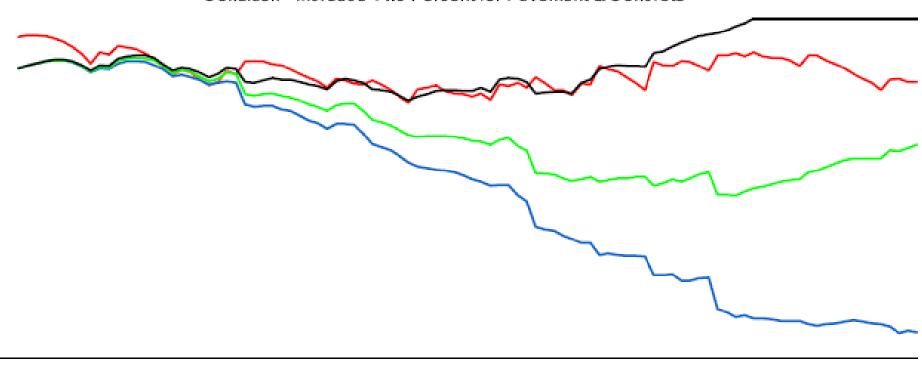




Data Automation Benefits Funding Forecasts



- C ondition C urrent Budget for Pavement & Concrete
- Condition Increase One Percent for Pavement & Concrete
- Condition Increase Two Percent for Pavement & Concrete





Data Automation Benefits



- Data reconciliation reports
- TCA Auditor recommended more integration and Administration stated that this is how we will be complying
- Project Auditors recommended that we enhance our project costing processes
- Corporate Reporting (e.g. Infrastructure Status Report)



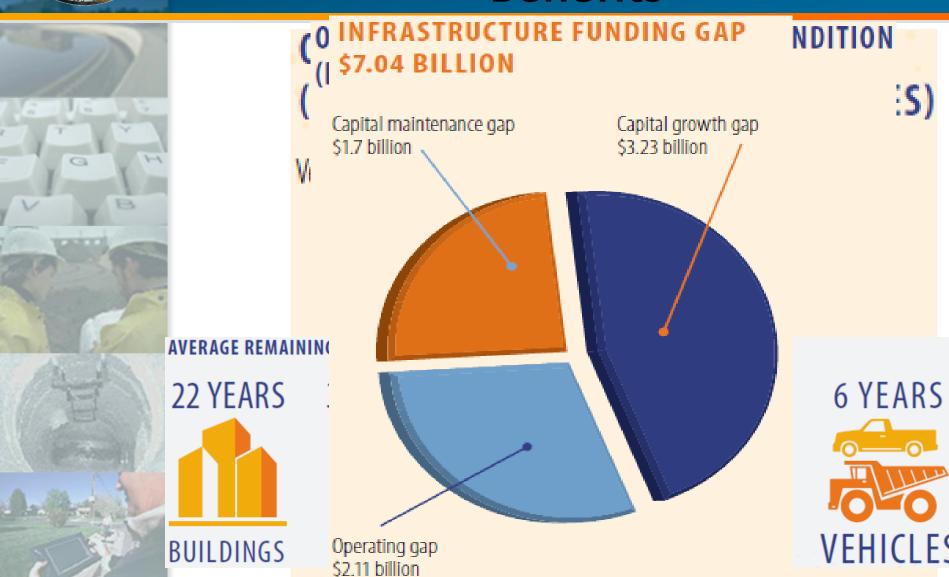
Data Automation Benefits



- ➤ The Infrastructure Status Report provides answers to five key questions:
- 1. What do we own?
- 2. What is it worth?
- 3. What condition is it in?
- 4. What is its remaining service life?
- 5. What is the infrastructure funding gap?



Data Automation Benefits





Encouraging Improvements State of Asset Management Report



strategy

- 1 Overall Strategic Planning
- 2 BU Targets & KPI's
- 3 People & Skills Master Plan
- 4 Technology Assets Plan
- 5 Business Process Mapping
- 6 Growth
- 7 Level of Service
- 8 AMP and Master Plans
- 9 Legal, Reg. & Stat. Regs

Assets

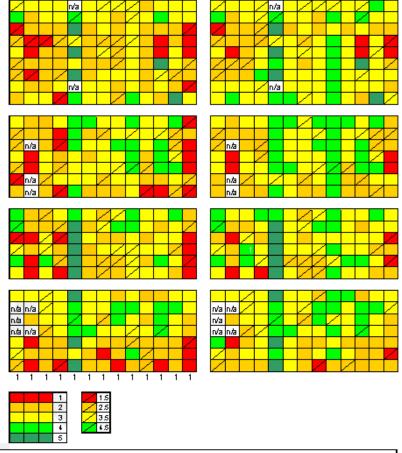
- 10 Asset Registry
- 11 Asset knowledge
- 12 Data Maintenance
- 13 Business applications
- 14 Tech. Systems Integ.
- 15 IIP Dev. & impl.
- 16 Risk Framework

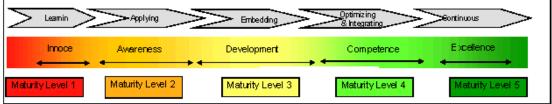
People Effectiveness

- 17 Asset Mgt Leadership & Gov.
- 18 Role & resp. Clarity
- 19 Learning and Development
- 20 Comms and Info sharing
- 21 Continuous imp. culture
- zi continuous mp. outture
- 22 Knowledge reten. & Succiplan

Business Processes

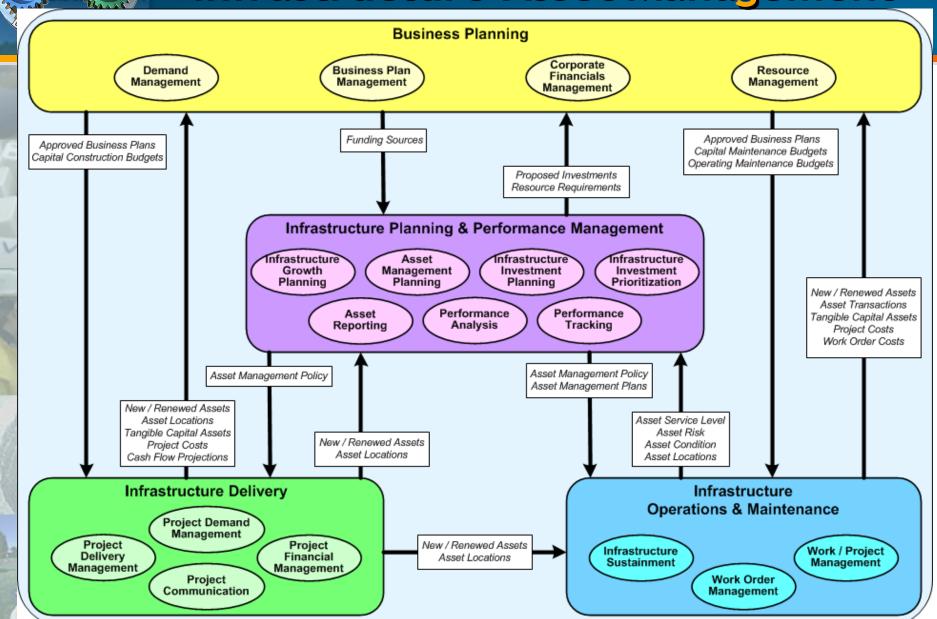
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- 24 Operations Management
- 25 Maintenance Management
- 26 Materials Management
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- 27 Financial
- 28 Asset Mgt
- 29 Audit & Review





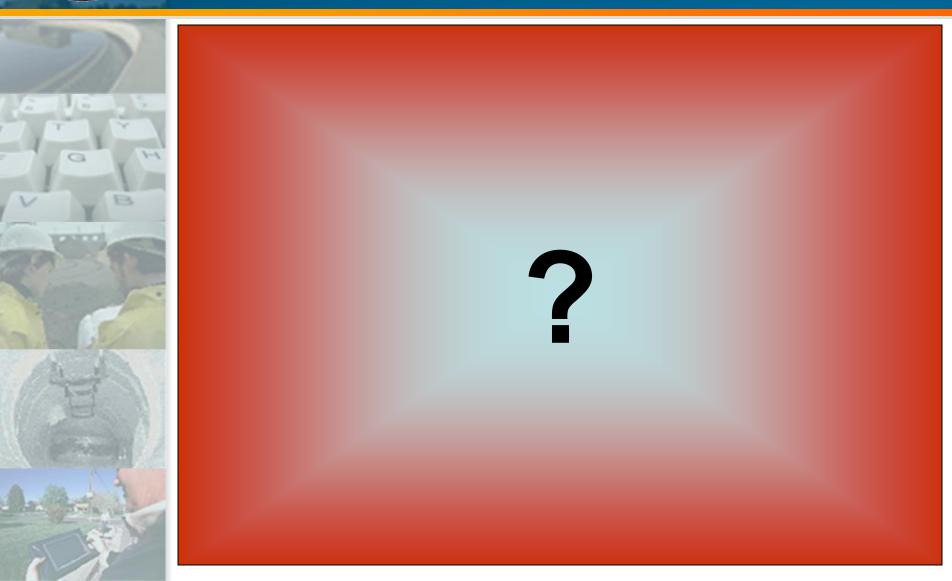


Planning for the Future Infrastructure Asset Management





Questions





Business Units



- CP&B
- Fire
- Fleet
- ✓ IT
- ✓ Parks
- Recreation
- ✓ Roads
- ✓ Transit
- W&R
- Water
- Corporate Rollup

- Animal & Bylaw Services
- Calgary Emergency Management Agency
- Community & Neighbourhood Services
- Public Safety Communications
- Customer Service & Communications
- Human Resources
- Infrastructure & Information Services
- Office of Land Servicing & Housing
- Assessment
- ✓ Development & Building Approvals
- Land Use Planning & Policy
- Transportation Infrastructure
- Transportation Planning
- Environmental & Safety Management
- Finance & Supply
- City Clerk's Office
- City Manager's Office
- Law Department