

MMCDA

Master Municipal Construction Documents Association

Asset Management Data Repository Project

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MASTER MUNICIPAL
CONSTRUCTION DOCUMENTS
ASSOCIATION



AGENDA

1. MMCD Municipal CAD Standards Projects
2. MMCD AMDR Project Phases
 - Research
 - Development
 - Community Support
3. Work Completed
4. Next Steps
5. MMCD AMDR cloudDVD



MMCD – Municipal CAD Standards Project

1. Guidelines for definition of infrastructure data created in AutoCAD and AutoCAD Civil 3D
2. AutoCAD Standards
3. AutoCAD Civil 3D Standards
4. Survey Data Reduction
5. Sanitary, Storm and Watermain Pipe Network Design
6. Construction Drawing Standards
7. Updates Coming Soon
8. Post Construction Submissions



Next Steps...

1. **Define, develop** and **support** an non-proprietary Asset Management Data Repository – **AMDR** – suitable for BC local governments, **free** of charge
2. **AMDR** - standardized **open source** format for the **creation, management** and **exchange** of infrastructure data between local, provincial and federal governments, utility companies, engineering consultants and construction companies





What is an AMDR?

A modular data structure **template** for local government asset management, which is:

- **Easy to adopt** by existing GIS environments in local government
- Friendly to financial data from **PS 3150** and related public infrastructure accounting initiatives
- Capable of **relating** infrastructure granularity, age, description, condition, performance and risk
- Helpful on choosing **data specifications** (data spectra, reliability, and consistency)
- **Consistent with International Standards** , including the IAM Manual (Australia); and
- **Free** to all potential users in British Columbia, including local government, engineering consultants and software vendors



AMDR – An Open Standard



**Standards are like a
parachute, they work
best when they're open!**





What is an Open Standard?

A document, established by **consensus** and **approved** and **supported** by an **official organization**, that provides **rules and guidelines**, aimed at the achievement of optimum interoperability.

Balance of Interest



All stakeholders have an equal voice



Benefits

1. Access to **continuous improvements** via open system standards
2. **Risk reduction** regarding constraints or flaws in proprietary systems
3. System development **cost reduction**
4. **Maintenance reduction** of single solutions
5. **Improved mobility** (and **skill transfer**) among specialist staff



Benefits (continued)

6. **Data exchange** between contractors, consultants and municipalities
7. **Data exchange** between municipalities and public utilities
8. **Data exchange** between local, provincial and federal governments
9. Potential for **aggregating data** by region and province
10. Possibility **economies of scale in training**





AMDR Project Deliverables

- **Data format definition** for recording and transferring data
- List of **features** and **engineering attributes**, including **condition assessment** data, **performance** data, **risk management** data and **demand management** data
- **Data collection standards** for purpose of asset management and accounting procedures
- Respond to **risk assessments** by local government assets using BC Emergency Planning templates
- **Standardized reports** for aggregating data at municipal, provincial and federal level



Data in AMDR?

- name of asset
- physical description
- date of acquisition (purchase, creation, donation, forfeiture)
- location
- person/position responsible for custody and maintenance of asset
- due date for replacement
- expected useful life
 - o original life
 - o remaining life
 - o date asset life last reviewed
 - o any evidence of impairment
- historic cost or initial valuation if historical cost is not known
- amortization method, rate and amount
- book value
- date of disposal



Work Plan

- Phase 1 – **Review** Existing Asset Management Repositories
- Phase 2 – **Develop** Asset Management Data Repository
- Phase 3 – **Community Support**

Phase 1 – Review Existing AMDR's



1. PS 3150 Asset Management Requirements
2. BC Municipality AM Data Integration
3. Review International Asset Management Initiatives
 - Australia (IPWEA)
 - New Zealand (Ingenium)
 - IMMM 2006 (International Infrastructure Management Manual)
4. BC Utility Companies
 - BC Hydro
 - Telus
 - Shaw Cable
 - Fortis BC
5. Vendor Solutions for Asset Management Repositories
6. Literature Search for Asset Management Repository Guidelines
7. Formulate Asset Management Repository Strategy



Phase 2 – Develop AMDR



AMDR

1. Develop Data Storage Taxonomy
 - Feature classification (features and attributes)
 - Data Structure (open format)
2. Data Reliability Standards
 - How data is collected
 - When the data was collected
 - Who collected the data
3. Specifications for Data Acquisition
 - Existing data stores
 - Active data collection
 - Guidelines for data acquisition (feature specific)
4. Data Repository Guidelines to Support Decision Making



Phase 2 – Develop AMDR (con't)



5. Report Formats to Support Decision Making
 - Standard reports
 - Inventories
 - Condition assessments
6. Review and Evaluate Data Capture Technologies
 - Hardware and software solutions
 - Financial data capture
7. Present Draft Findings



Phase 3 – Community Support



1. Develop Workshop and Webinar Schedule

- Email
- CivicInfo BC
- URISA / MISA / GITA

2. Project Website

- MMCD AMDR cloudDVD (formerly vBooks)

3. Conduct Workshops and Webinars

- Lower Mainland, Vancouver Island, BC Interior regions
- Video recorded and published in MMCD AMDR cloudDVD
- BC Asset Management Data Repository User Group



Phase 3 – Community Support (con't)



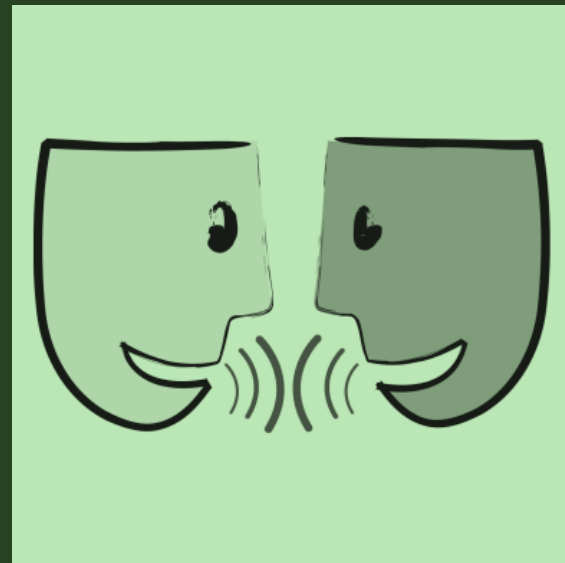
4. BC Association Endorsement Package
 - URISA / MISA / GITA
5. Demonstration and Endorsements
 - Public Works Association of British Columbia
 - Vendors - ESRI, Safe Software, Autodesk, Intergraph etc.
 - International industry organizations (IPWEA, Ingenium, APWA)
6. AMDR Manual
7. Final Report and Presentation





Communication

- Web meetings
- Regional workshops
- AMDR cloudDVD (formerly vBook)
- Survey Monkey
- Twitter / Facebook
- Working Groups





Phase 1 - Research

PSAB 3150

- Guide to **Accounting For** and **Reporting Tangible Capital Assets**
- Prepared by Public Sector Accounting Group of the Canadian Institute of Chartered Accountants (CICA)

Phase 1 - Research

PSAB 3150 Guide to Accounting For and Reporting Tangible Capital Assets

Chapter 6 - Asset Registers

1. Description and Purpose
2. Design and Development
3. Information Sources
4. Integration of Asset Registers with General Ledger
5. Validation of Asset Registers
6. Summary

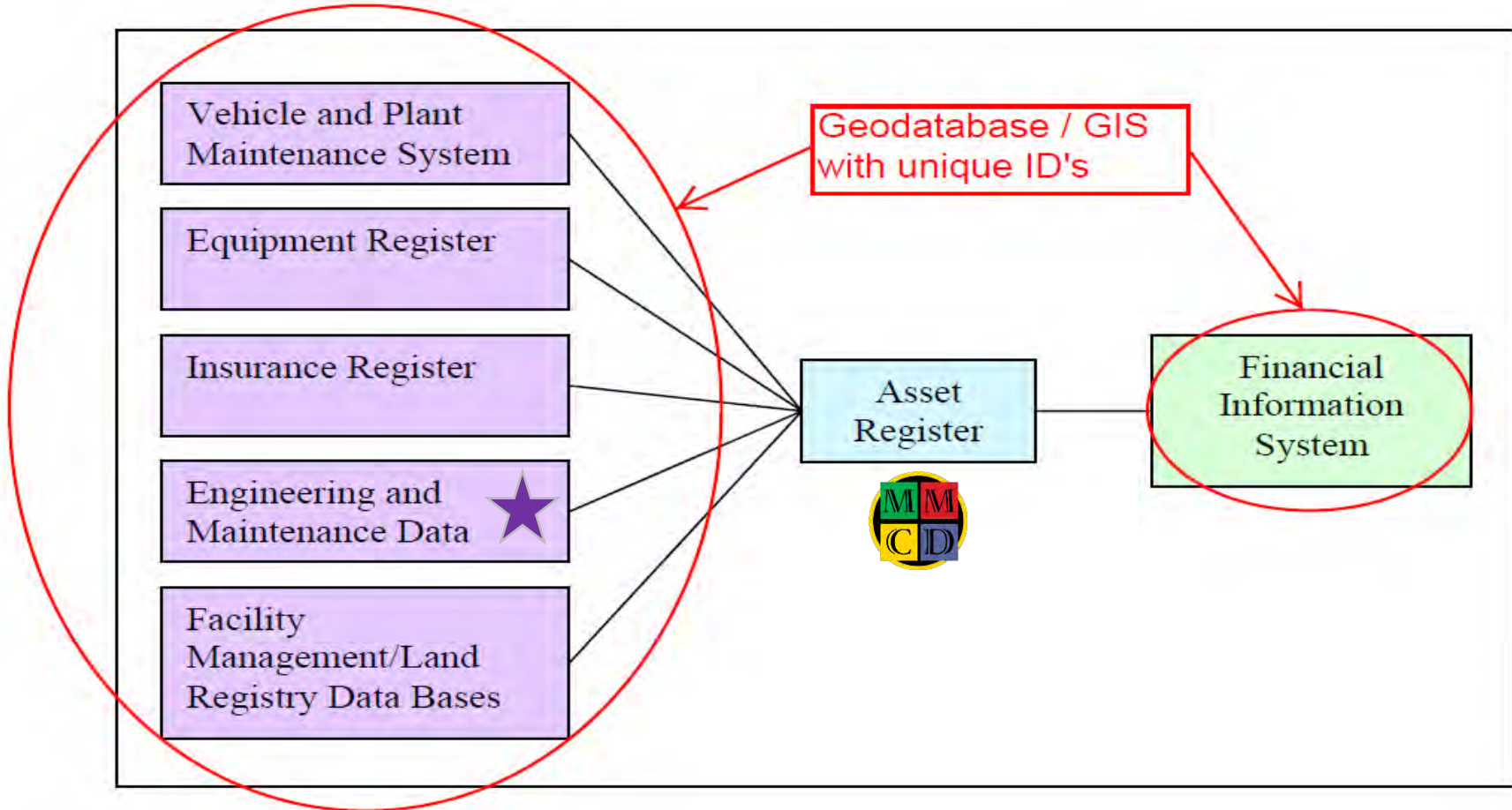
Guide to Accounting for and Reporting Tangible Capital Assets

Guidance for Local Governments and Local Government Entities that Apply the Public Sector Handbook

Chapter 6 Asset Registers

1.0 Description and Purpose

An asset register is a **complete** and **accurate list** of the **assets** a local government owns that is **regularly updated and validated**. It records the opening and closing balances of classes of tangible capital assets and is used to **support the figures reported in the financial statements**. The compilation of an asset register is one of the **major steps in the adoption of the full accrual basis of accounting**. It is a **critical part of an asset management information system** and will normally contain information beyond that required for financial reporting.



Phase 1 - Research



AMDR

BC Municipality Asset Management Data Integration Strategies



Phase 1 - Research



AMDR

International Asset Management Initiatives



Phase 1 - Research



BC Utility Company Asset Management Initiatives



Phase 1 - Research



Literature Search for AMDR Guidelines



Phase 1 - Research



**Develop
MMCD AMDR
Strategy**



Phase 1 - Research

MMCD AMDR Working Group



Phase 1 - Research

Condition Assessment

BCWWA – BC Water and Waste Association

BC MoT – Pavement Condition

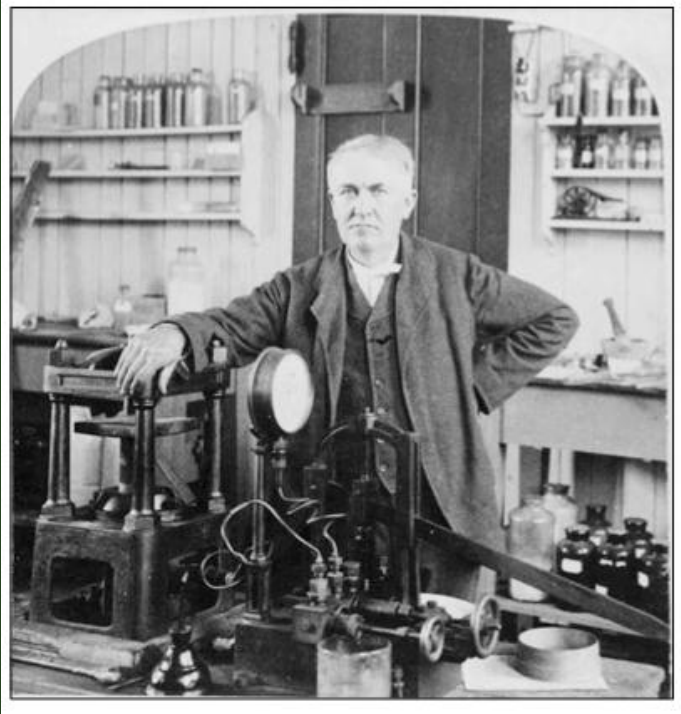
Infraguide – National Guide to Sustainable Infrastructure

CSA – Canadian Standards Association

Challenges



AMDR



I have not
failed, I've
just found
10,000
ways that
won't
work.

Thomas Edison

Challenges



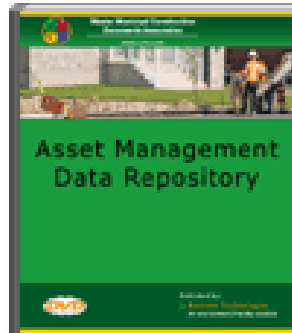
- Requires collaboration
- Requires consensus by many organizations
- Requires give and take
- MMCD AMDR Project is just the beginning!



MMCD AMDR cloudDVD



MMCD »



[MMCD Asset Management I](#)

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AMDR

Thank You!

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