Working for Municipalities

Municipal DataWorks

Defining the Standard for Asset Management

Asset Management, PSAB and GIS

April 18, 2007 – URISA B.C.

Joe Tiernay, Executive Director, OGRA

Steve Desrocher, ASI Technologies Inc.

A Member Service of Ontario Good Roads Association

Visit www.ogra.org/mdw

Working for Municipalities

OGRA Background

- OGRA represents infrastructure interests of Ontario municipalities
- Established 1894
- Primary link is to the Ministry of Transportation
- Board is both technical staff and political representatives
- Training, Advocacy and Member Services

Working for Municipalities

MDW and OGRA

- Initiated by OGRA – a couple of years ago
- An advocacy tool
- Basic AM tools for members
- Standards based repository
- Embraces private sector participation – over 30 companies engaged to date

Working for Municipalities

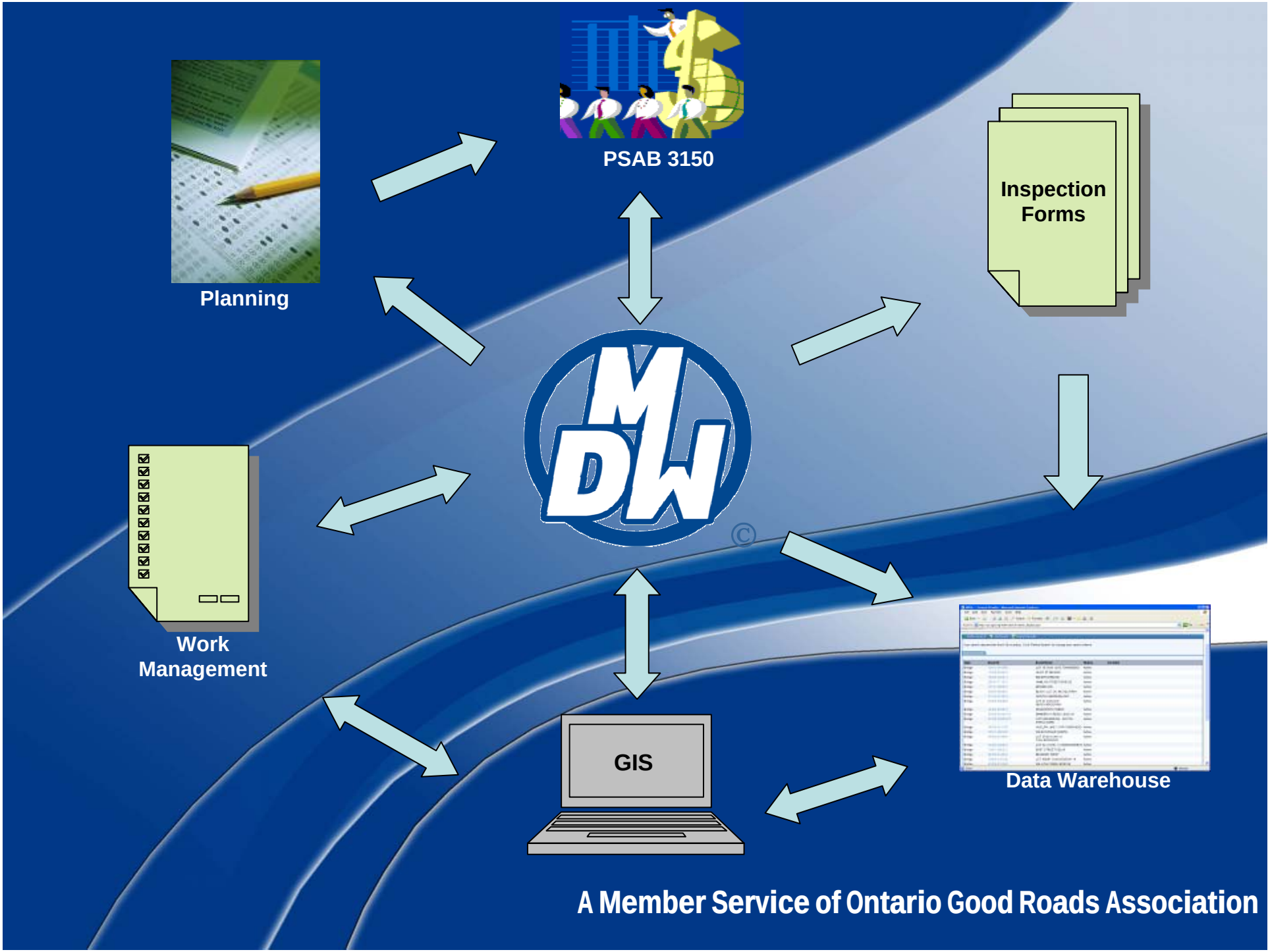
AM and MDW Background

- Asset management is a very broad subject
- "Series of repeatable processes"
- Data is a key requirement!
- Standardized approach to data collection and management
- The solution to our asset management needs is…it begins with data

Working for Municipalities

Minister's Comments

- **In her speech in plenary session at the Combined Conference in February 2007, Minister Cansfield said this about Municipal DataWorks:**
- **"*The Municipal DataWorks database is a fantastic asset management tool that helps municipalities plan for future infrastructure needs" and … "this ministry recently committed additional funding to enhance the existing road and bridge database and to create a new transit asset inventory in Municipal DataWorks*."**


PSAB 3150
Planning
Inspection Forms
MDW
Work Management
GIS
Data Warehouse
A Member Service of Ontario Good Roads Association

Working for Municipalities

MDW©

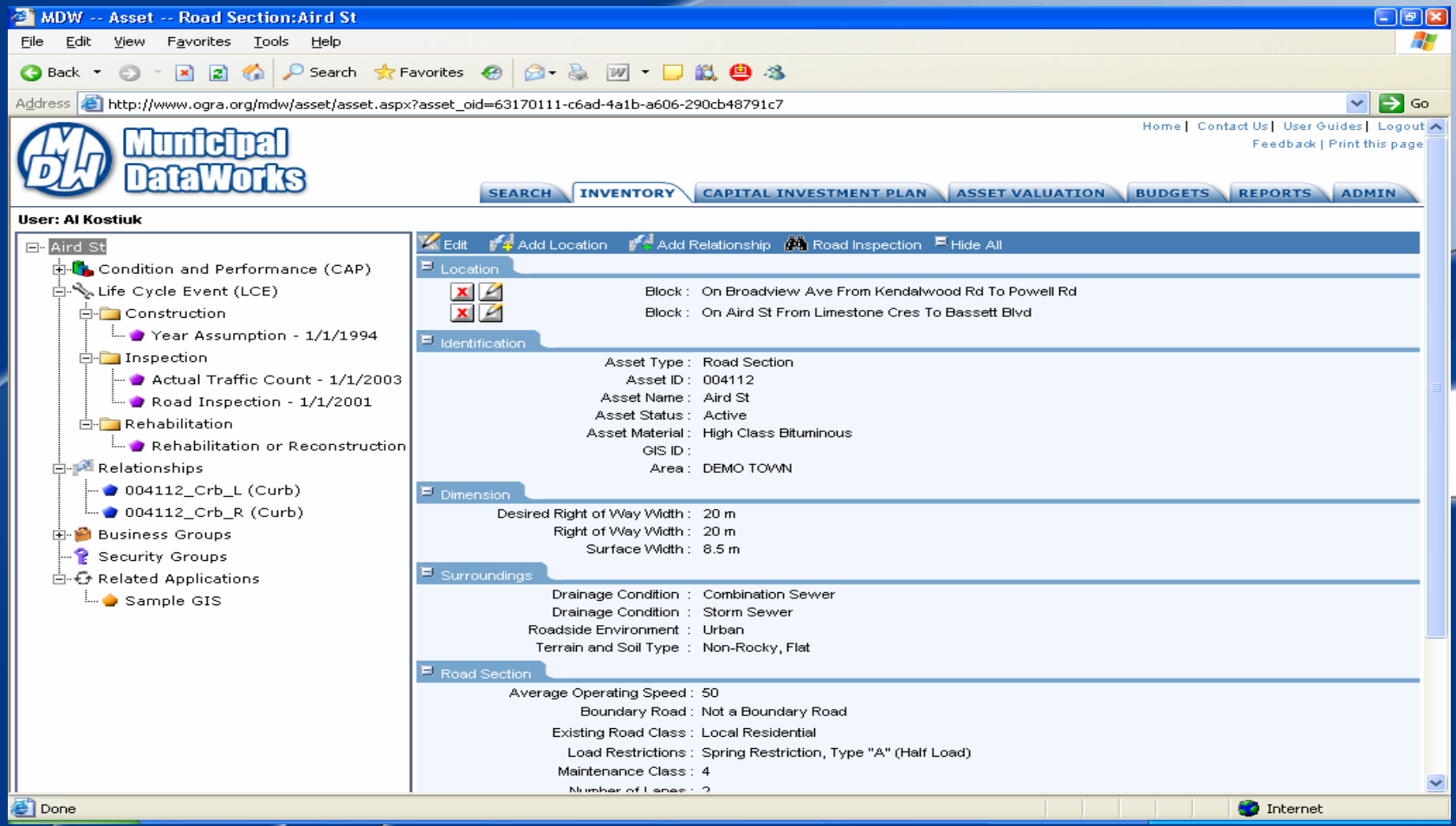
=

Data Silos

A Member Service of Ontario Good Roads Association

MDW Interface

Working for Municipalities



A Member Service of Ontario Good Roads Association

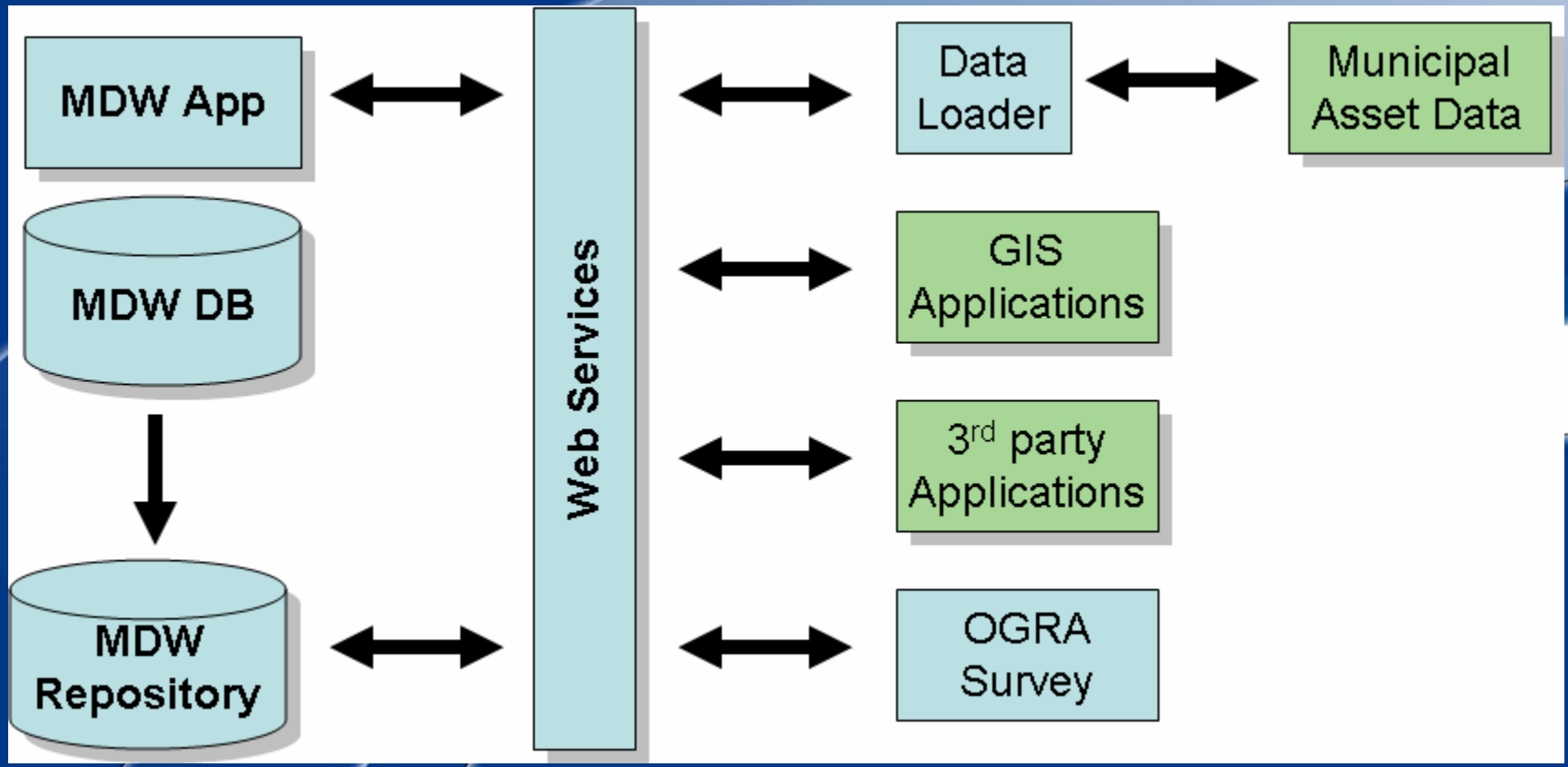
Working for Municipalities

NRC Research

- **"Developing industry-wide standard integrated data models for infrastructure systems is another critical area for future research. The data models supported by existing software are mostly proprietary, which impedes the ability of the software systems to interoperate and share asset data"**
- **Source: NRCC-45610, January 2006**

Working for Municipalities

MDW Schematic



Working for Municipalities

Current Modules

- Asset Data Repository (roads, bridges, water and sewer, transit, buildings etc.)
- Asset condition
- Asset Valuation (PSAB 3150)
- Web Services (data in and data out)
- Capital Investment Plan (CIP)
- Data conversion tools

Working for Municipalities

Future Modules & Enhancements

- Capital Investment Plan (Phase II)
- Business Intelligence Tools
- New Asset Types (based on demand)
- Expanded Web Services
  - Continued expansion of these services
- More Third Party Integration (Software)

Working for Municipalities

Spatial Tools (GIS)

- A critical area for the MDW service!
- No need to re-invent the wheel
- Short term goal – use web services to offer up integration with GIS software
  - Autodesk
  - ESRI
  - Mapfusion
  - Google Maps
- Next step – spatially enable MDW

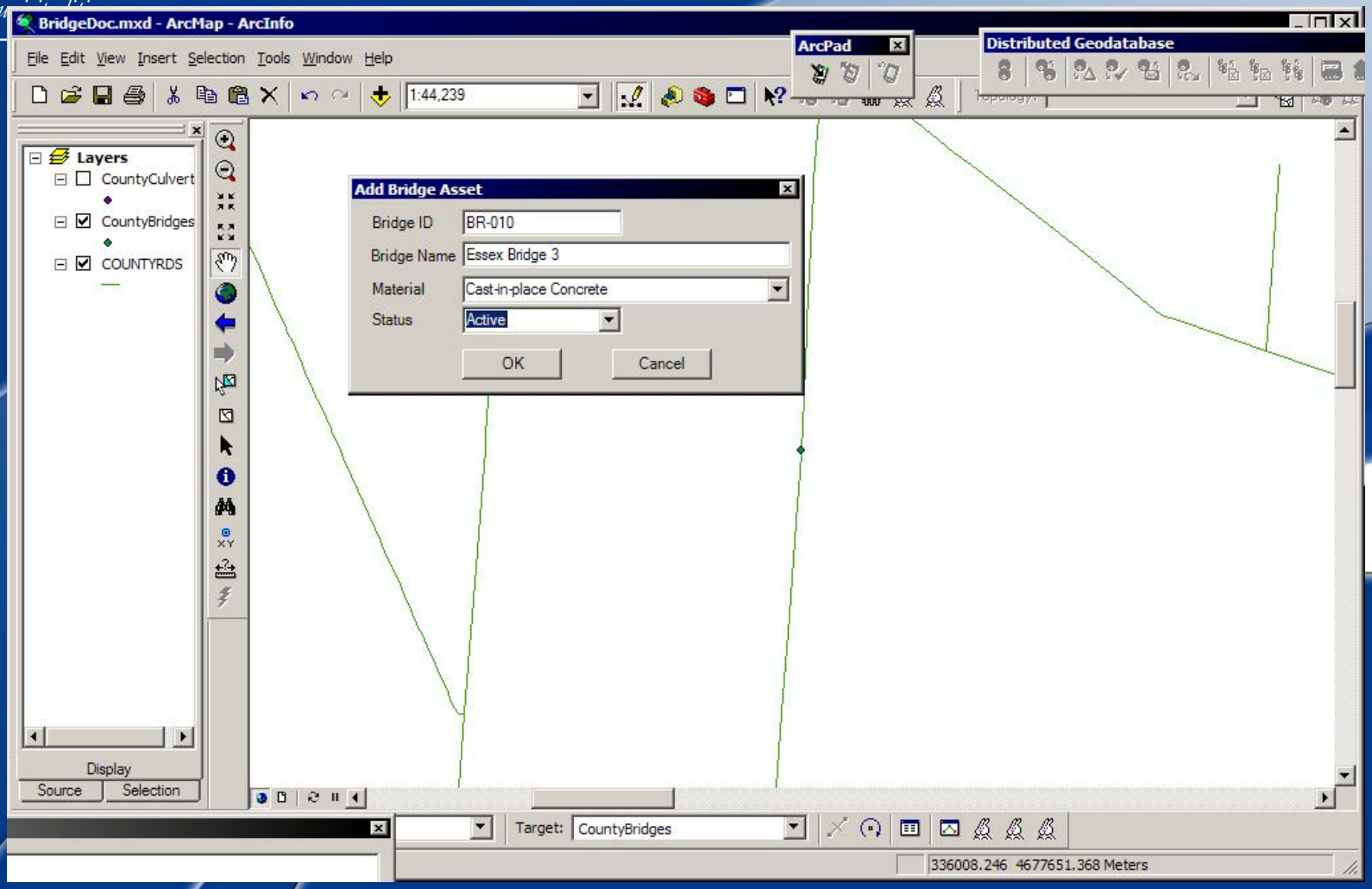
Working for Municipalities

How MDW "Connects"

- MDW uses "web services" to interact with third-party applications (software)
- Consultants can use web services to access existing data or upload new data
- Software providers can "consume" MDW as part of their solution
- MDW puts maximum leverage in the hands of the municipal infrastructure owners

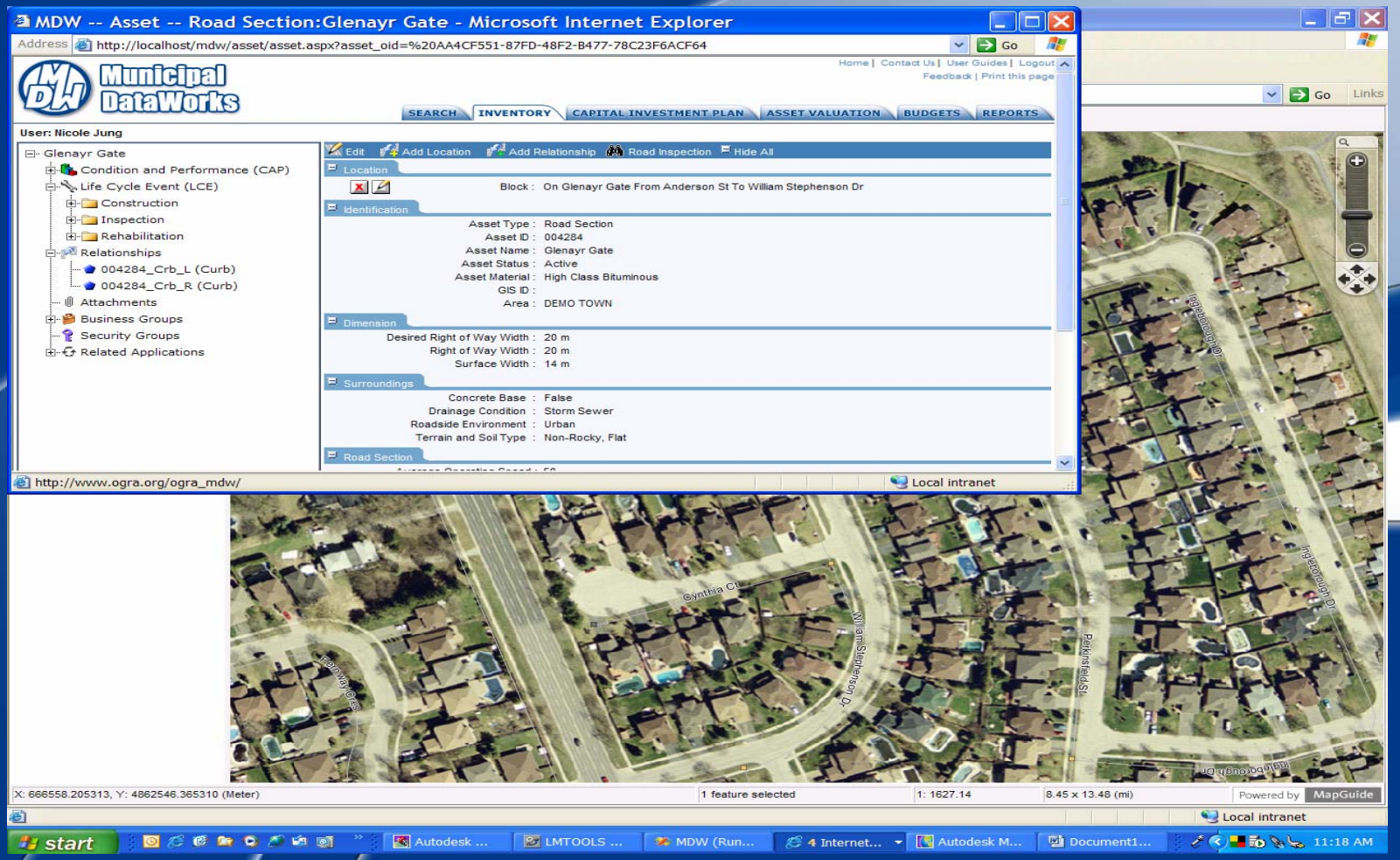
Example: ARC GIS and MDW

Working for Municipalities



Global CADD/MDW Integration

Working for Municipalities



A Member Service of Ontario Good Roads Association

Working for Municipalities

Integration

Share

Create

Manage

GCS

Autodesk MapGuide Enterprise

AutoCAD MAP GIS

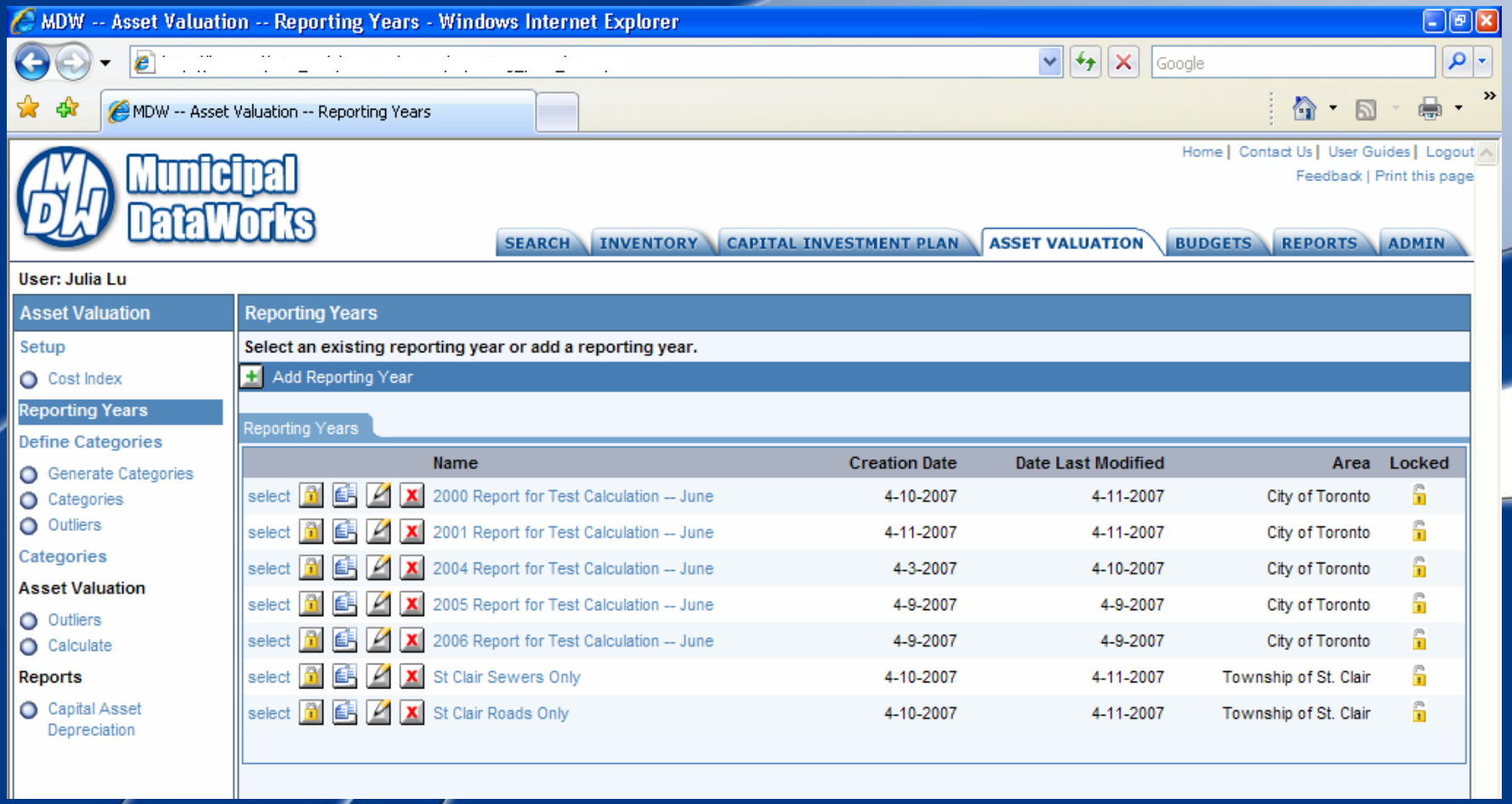
Centralized Data

Municipal DataWorks

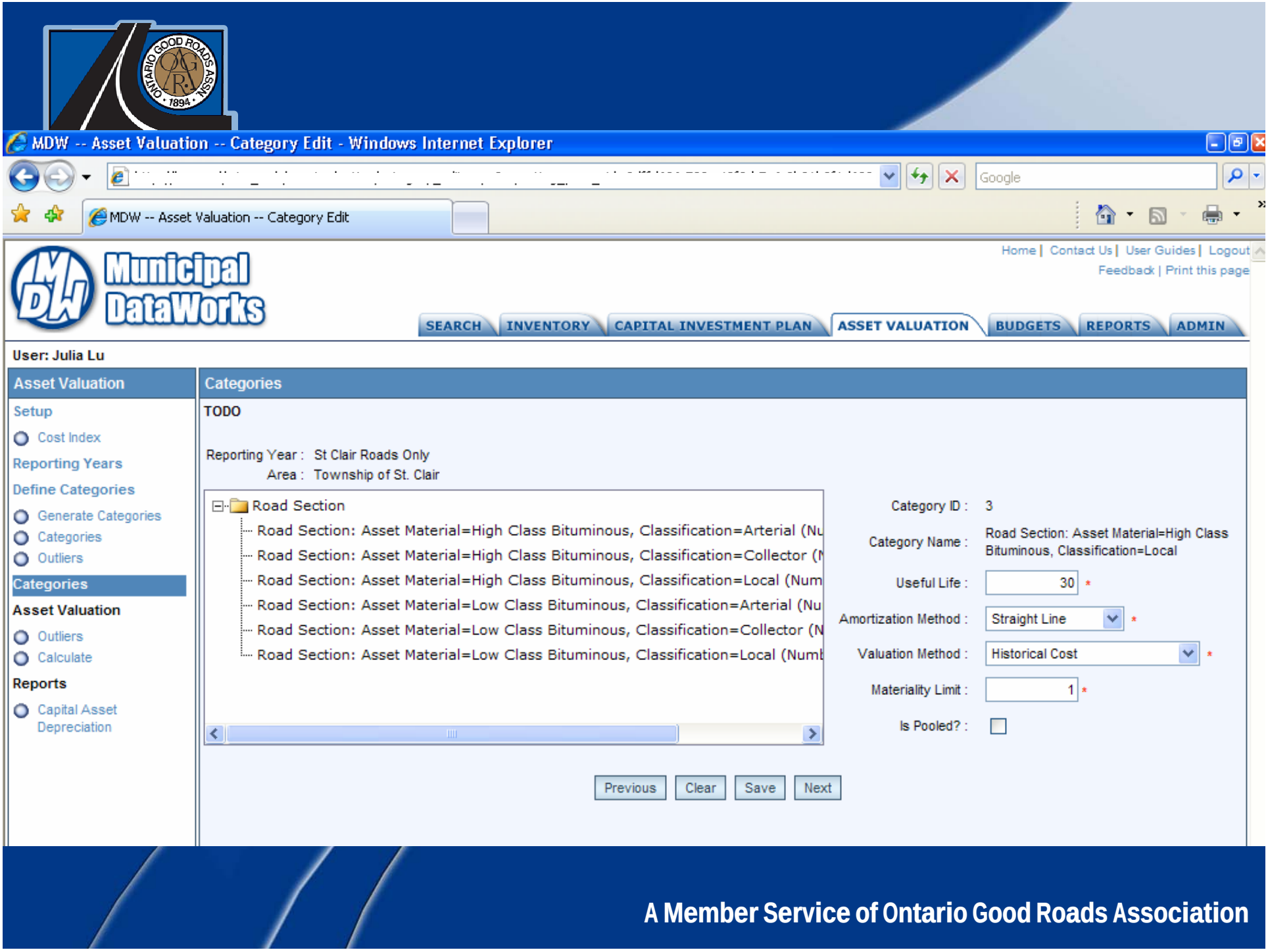
A Member Service of Ontario Good Roads Association

AV Start-up

Working for Municipalities



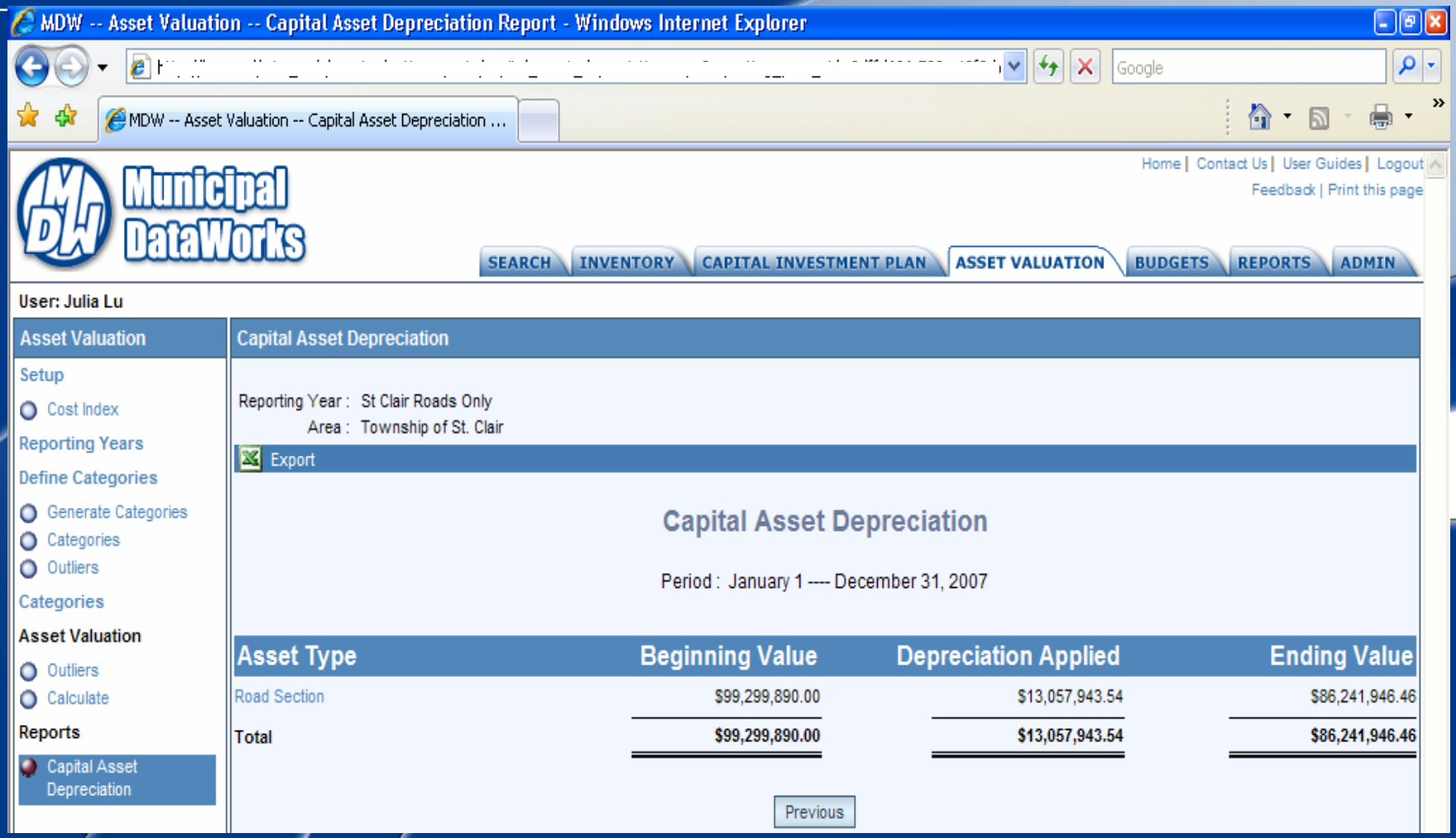
A Member Service of Ontario Good Roads Association



A Member Service of Ontario Good Roads Association

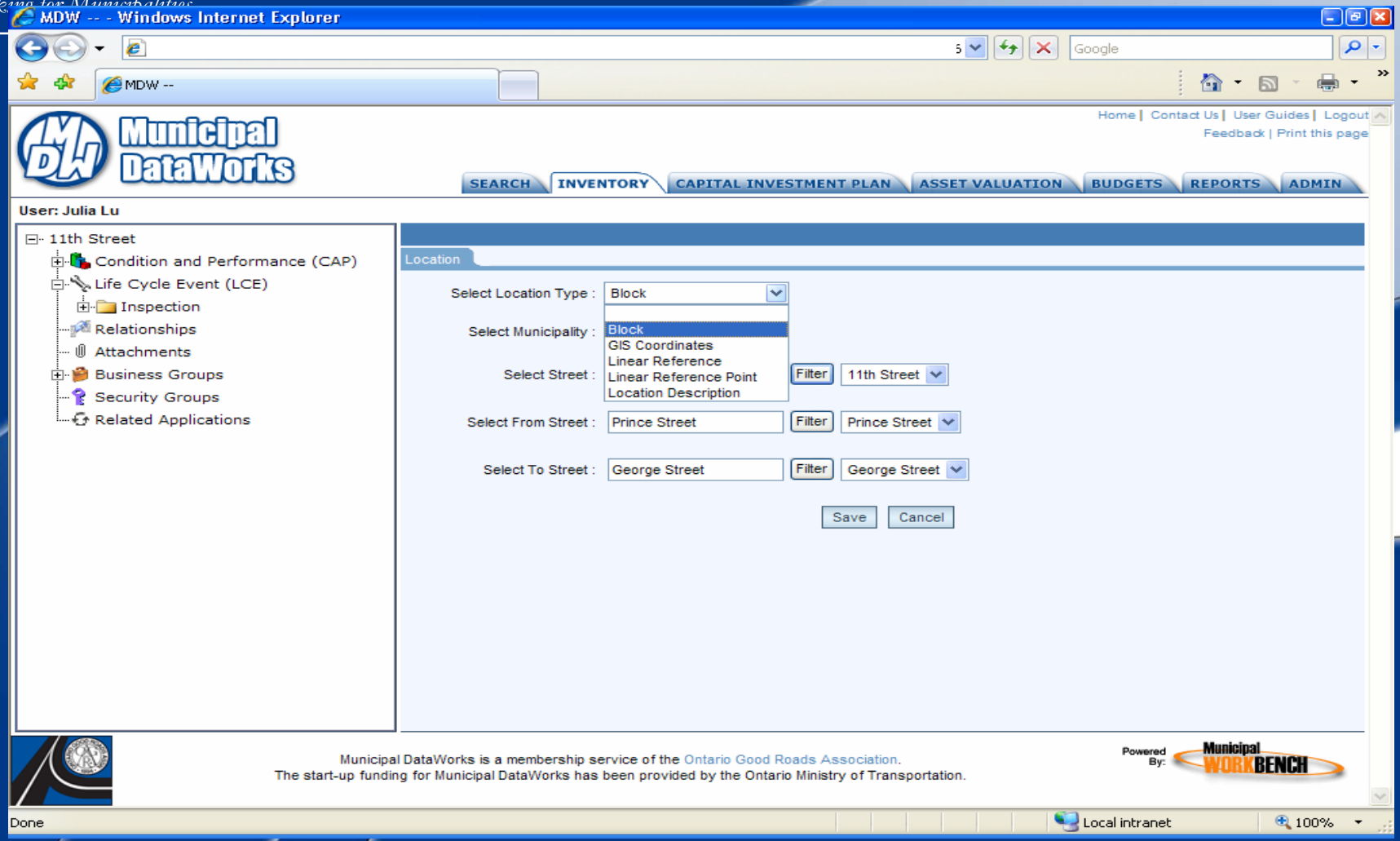
AV – Final Numbers

Working for Municipalities



MDW – Location Screen

Working for Municipalities



Working for Municipalities

Role of ASP's

- Provide software and services as always
- Advise on data requirements to complete certain objectives (PSAB 3150)
- Manage and maintain data as required
- Generate capital plans
- Provide integration with MDW where required
- For clarity, an ASP works for you the municipality….MDW is simply another tool for you and them

Working for Municipalities

Getting Involved!

- MDW is available to all Municipalities in Canada through OGRA and a variety of Authorized Service Providers
- Private sector organizations can join the MDW team
- Consultants are leveraging their services through the MDW program
- MDW is an innovative, cost effective, standards based tool

Working for Municipalities

Municipal DataWorks

Defining the Standard for Asset Management

Questions?

www.municipaldataworks.ca

joe@ogra.org

steve.desrocher@asitechinc.com

A Member Service of Ontario Good Roads Association