



ASSET MANAGEMENT BC

Utilizing Digital Data Collection To Improve Reporting & Management Of Assets In Indigenous Communities

Case Study: 23 Indigenous Communities in Manitoba

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SERDC
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DILLON
CONSULTING

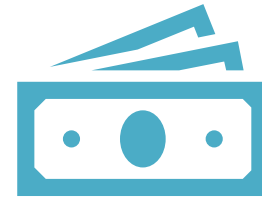
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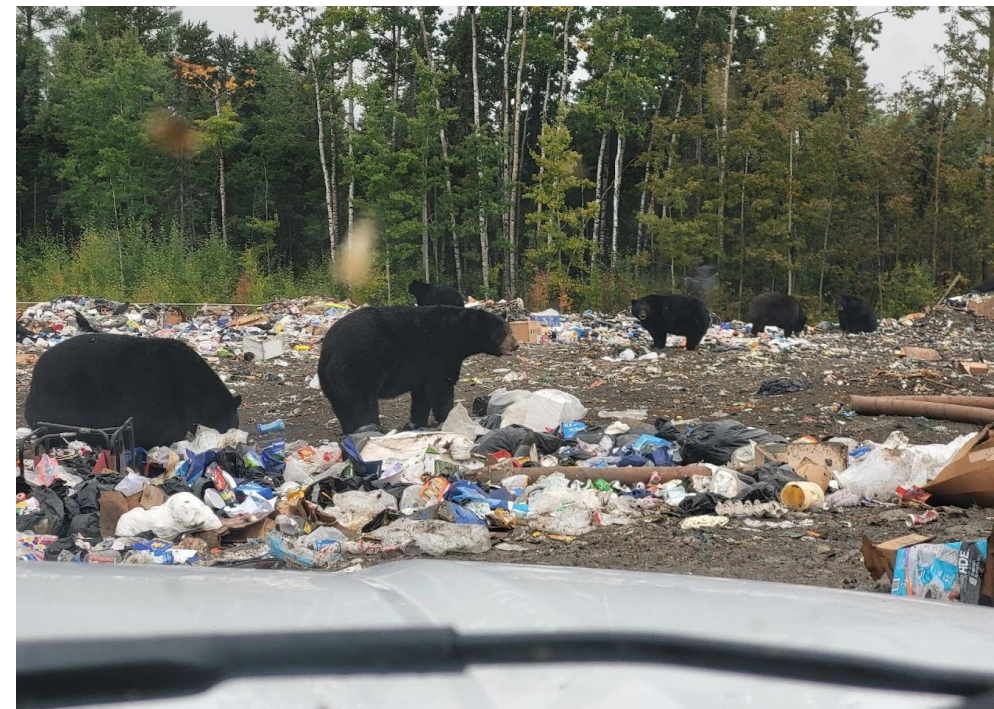
- 1. Value to Communities**
- 2. Manitoba E-ACRS 2023**
- 3. E-ACRS as an Asset Management Tool**
- 4. Digital Data Collection**
- 5. Challenges and Lessons Learned**



1. Value to Communities

- First step in asset management
- Understand what you have
- Guide conversations with Chief and Council
- Demonstrates the value of asset management
- Allows for collaboration with others





2. Case Study:

Manitoba E-ACRS 2023

- **E-ACRS: Extended Asset Condition Reporting System**
- National Program
- Indigenous Services Canada (ISC)
- 1990 – 2022 & 2022 – Now
- Every 3 years

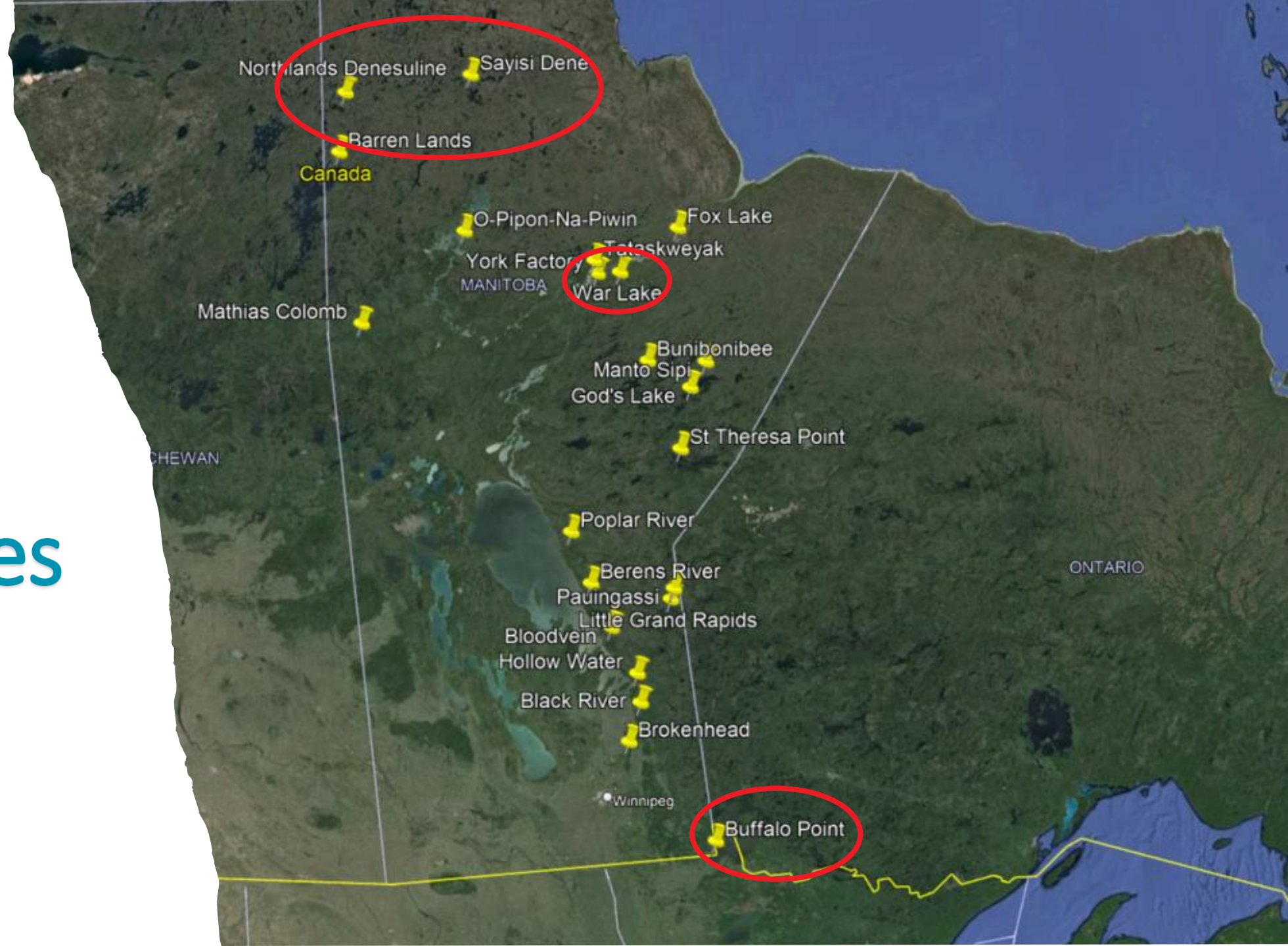
The Project:

- First E-ACRS in the Province
- 23 Communities
- Scheduling Constraints
- Diverse team of inspectors
- Unique Communities, Unique Assets, Unique Challenges

Communities:

- Barren Lands
- Berens River
- Black River
- Bloodvein
- Brokenhead
- Buffalo Point
- Bunibonibee
- Fox Lake
- God's Lake
- Hollow Water
- Little Grand Rapids
- Manto Sipi
- Mathias
- Colomb
- Northlands
- O-Pipon-Na-Piwin
- Pauingassi
- Poplar River
- Sayisi Dene
- Shamattawa
- St. Theresa Point
- Tataskweyak
- War Lake
- York Factory

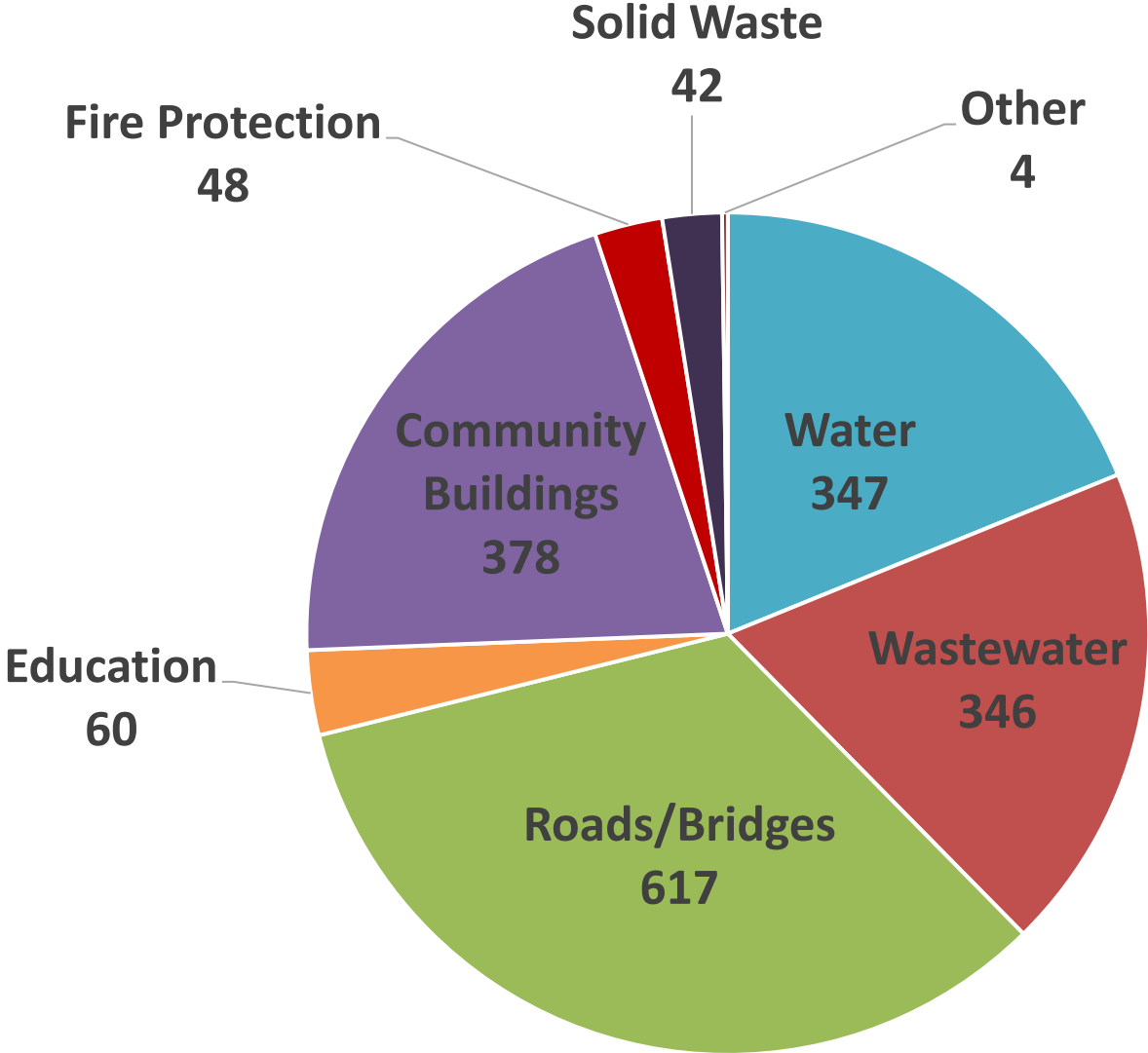
Unique Challenges

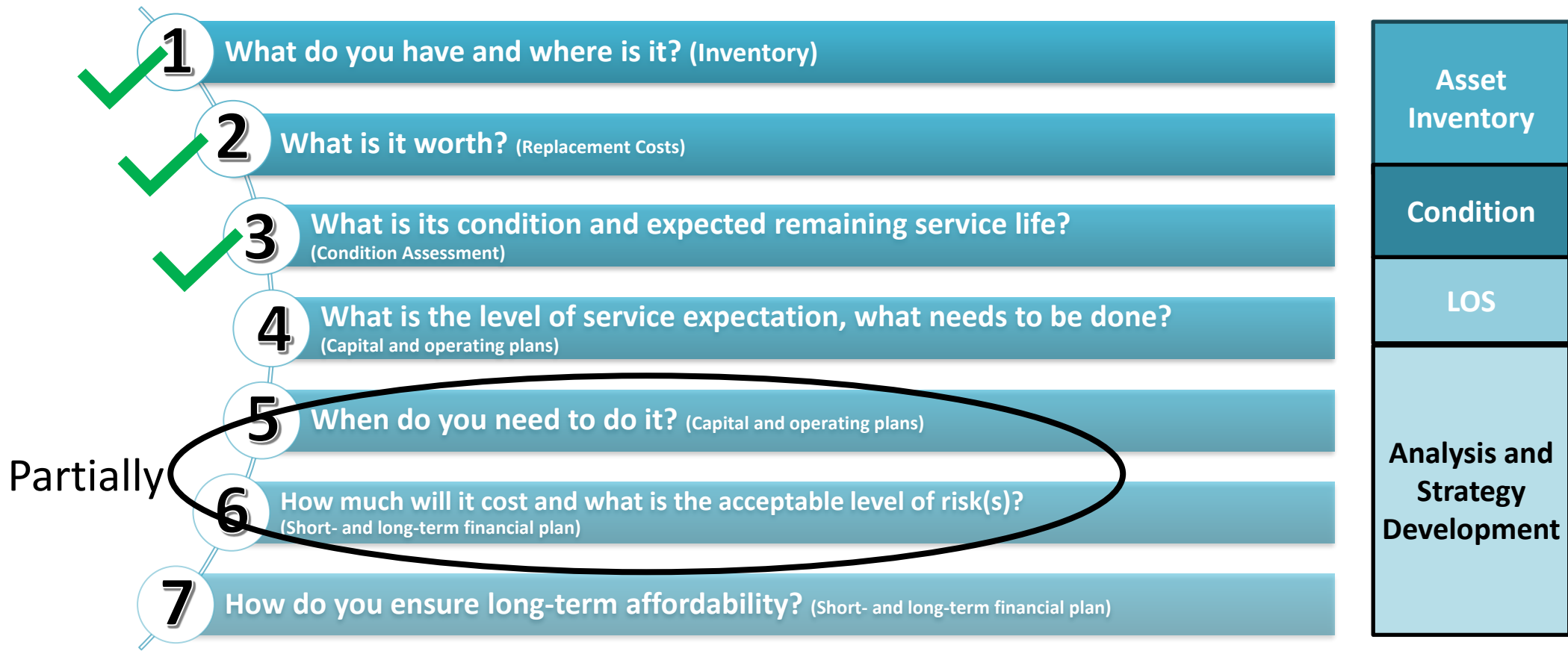


How many assets?

- 1842 Assets (Roads, Facilities, WWWW, Vehicles... etc.)
- 3578 Existing Deficiencies
- 2800 New Deficiencies
- Thousands of data points
- 6 weeks of intensive field condition assessments

Asset Categories



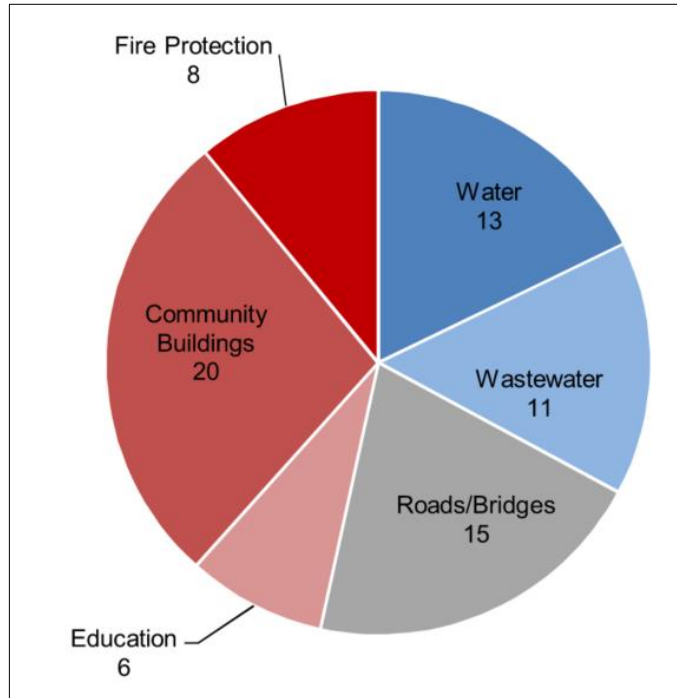


3. E-ACRS as an Asset Management Tool

- Asset List (Inventory List)
- Operations and Maintenance Assessment
- List of Needs, Tasks, and Projects
- 35-year Asset Replacement Chart (NEW)
- Individual Asset Inspection Reports (EXPANDED)



What do I have?

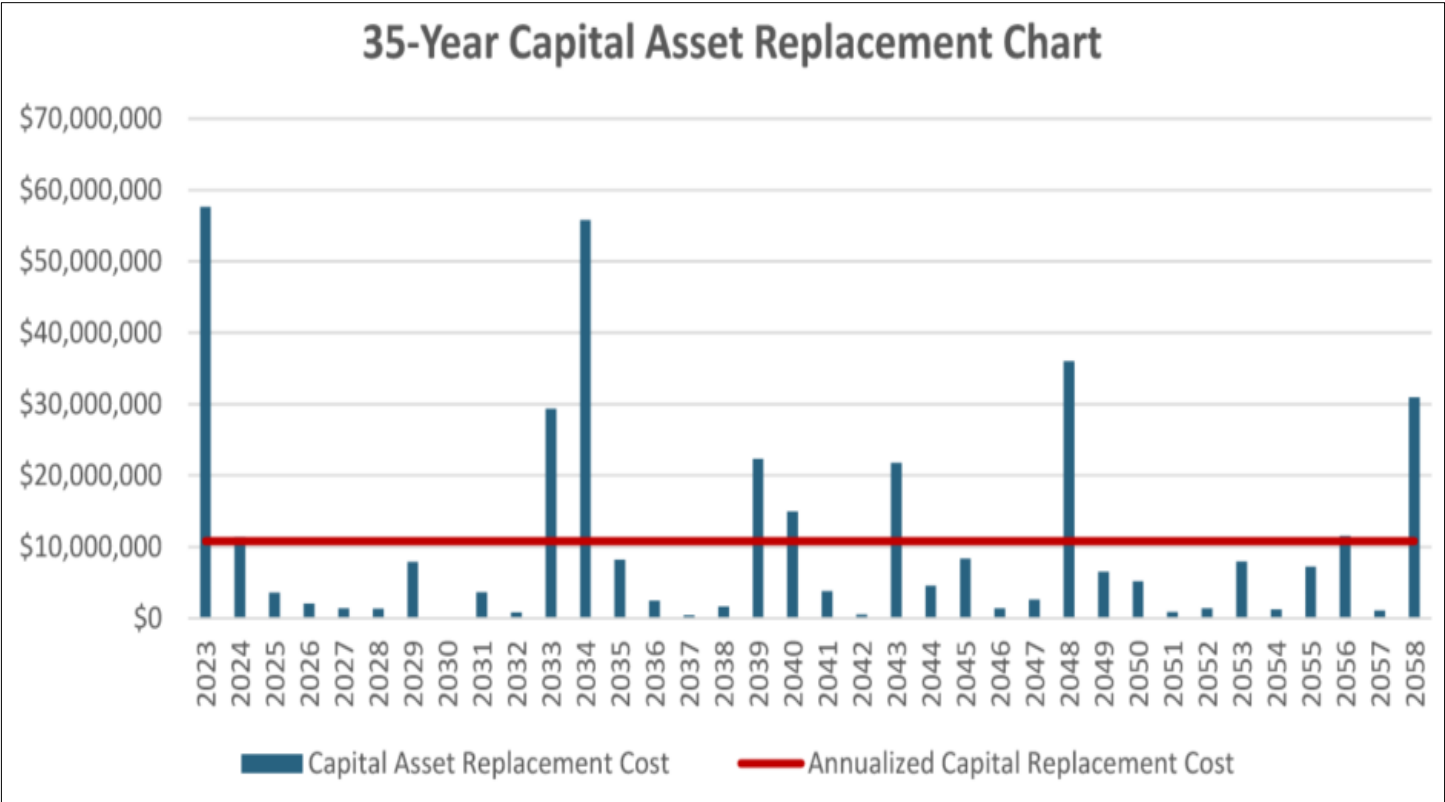


Asset Code	Asset Number	Asset Extension Number	Asset Name	General Condition Rating (GCR)	Estimated Remaining Life	Inspector's Remarks
A1A	088000	01	BAND OFFICE	6 - Fair	10	
A2C	089900	01	BAND STORAGE SHED	3 - Poor	10	
A2C	399000	01	SCHOOL SHED WEST	6 - Fair	11	
A2C	399000	02	SCHOOL SHED EAST	6 - Fair	13	
A3A	082820	01	NEW SCHOOL - FRONTIER	8 - Good	11	
A3B	084000	01	DAYCARE	6 - Fair	2	No comment
A3H	082000	01	FIRE HALL	3 - Poor	0	No comment
A5A	232000	01	WATER TRMT PLANT BLDG	5 - Fair	0	
A6A	273000	01	COMMUNITY HALL	8 - Good	0	No comment
A6A	275000	01	BUILDING #3	6 - Fair	8	No comment
A6A	275000	02	BUILDING #4	6 - Fair	8	No comment
B1B	401000	01	WATER MAIN	3 - Poor	0	
B1B	402000	01	WATER MAIN - HEATED	3 - Poor	0	Heat trace never been functional
B1B	403000	01	WATERMAIN UNHEATED	3 - Poor	16	
B1B	404400	01	WATERMAINS	7 - Good	45	
B1C	404000	01	WATER TRMT SYSTEM	7 - Good	16	
B1E	406000	01	RESERVOIR	7 - Good	30	
B1I	444500	01	LOW LIFT STATION	6 - Fair	16	Low lift station could not be identified on site
B2A	420000	01	GRAVITY SEWER LINE	5 - Fair	16	No deficiency
B2A	421000	01	SANITARY MAIN	5 - Fair	0	No deficiency
B2A	421000	02	GRAVITY SEWER	6 - Fair	30	No deficiency
B2A	422000	01	SANITARY MAINS	7 - Good	45	No deficiency
B2H	423000	01	LIFT STATION #4	4 - Fair	0	Always backed up
B2H	423100	01	LIFT STATION #3	4 - Fair	0	Always backed up
B2H	423200	01	LIFT STATION #2	4 - Fair	0	
B2H	423300	01	LIFT STATION #1	4 - Fair	0	

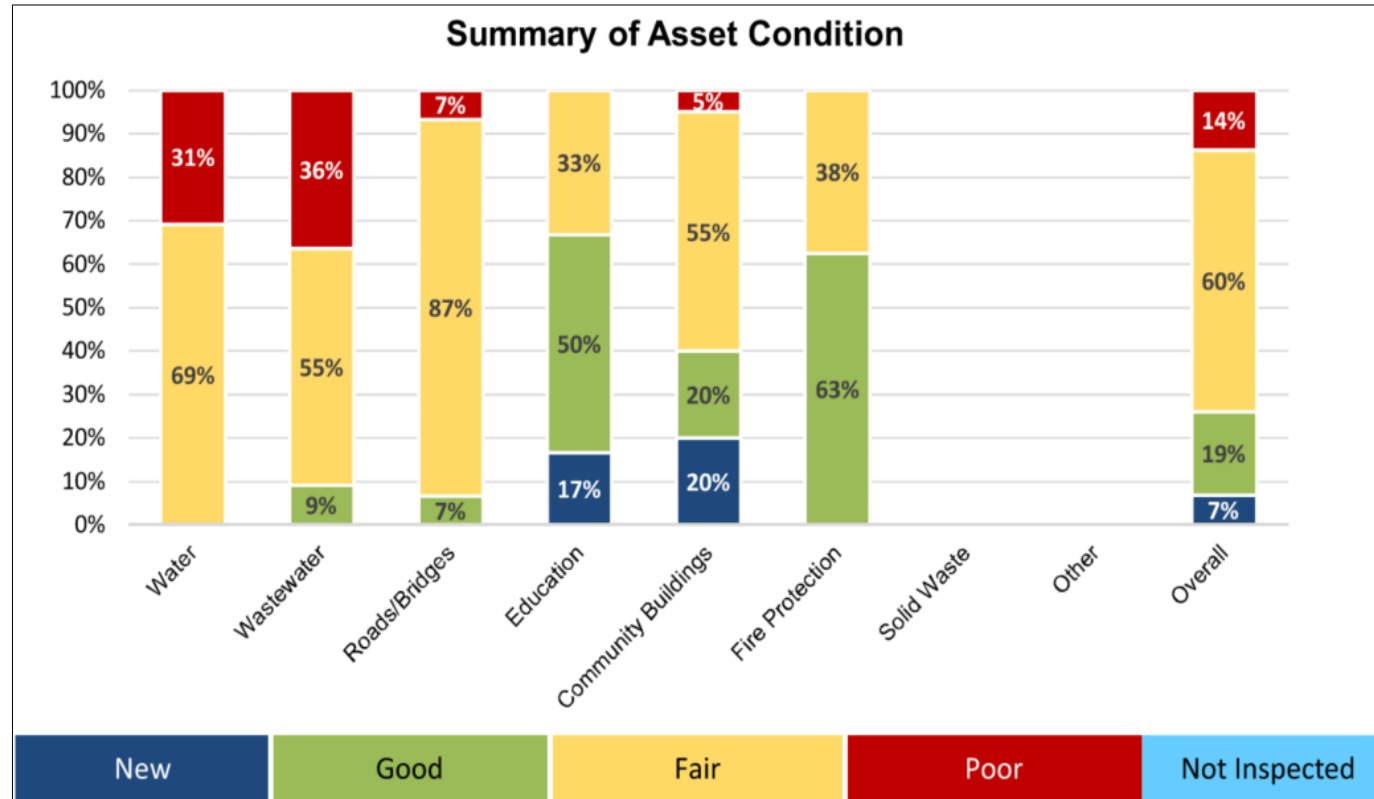
Where is it?



What is it worth?

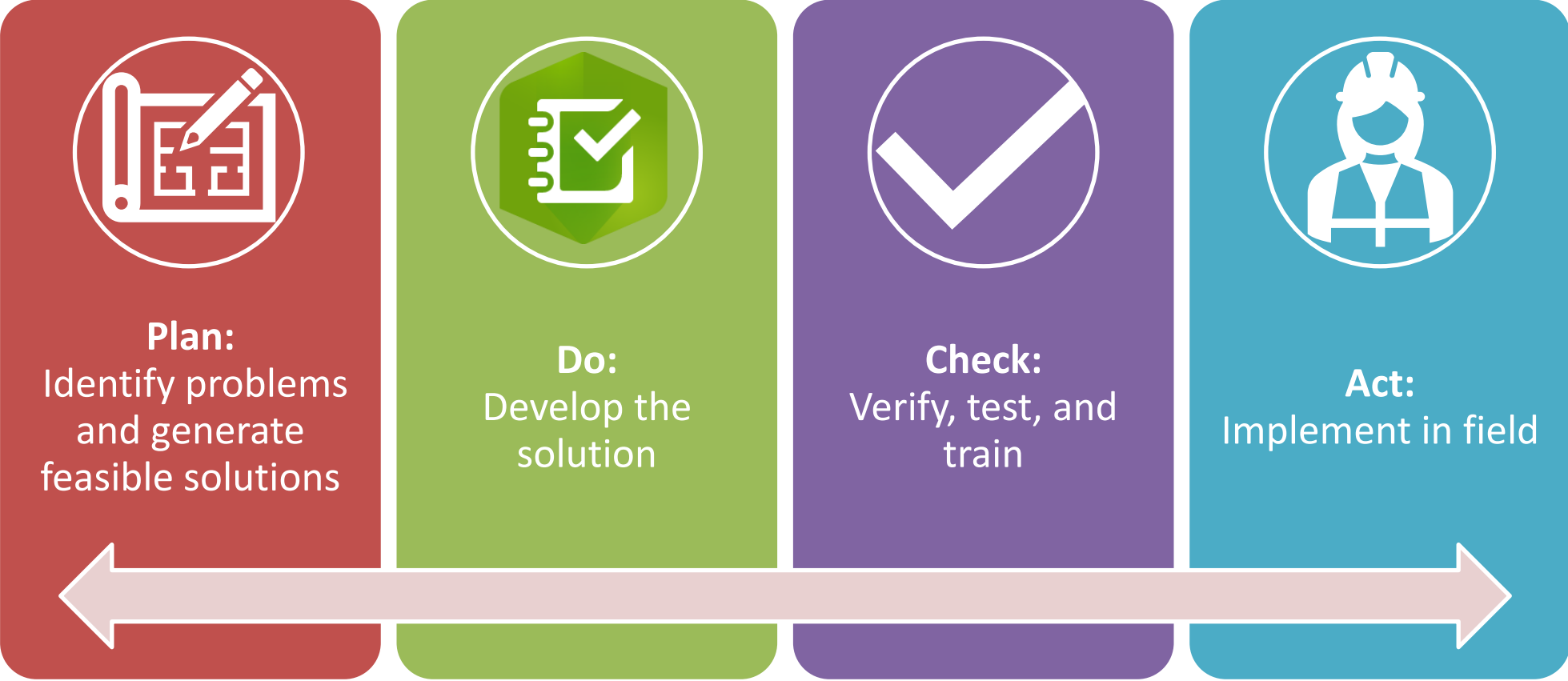


What is the condition?





4. Digital Data Collection



Condition Assessments Data Collection

BEFORE:

- Inconsistencies in:
 - Data collected
 - Ratings and Descriptions
- Prone to human error
- Extensive Reporting Effort

AFTER:

- Consistent language, formatting, and data
- “Guided inspections” allow for integrating new team members
- Minimal Reporting Effort
- Verification of Existing Data

2023 E-ACRS Inspection Form

Asset ID
3H-035880-01_Firehall Garage

Asset Code
A3H_Fire Station

Asset Number
035880

Asset Extension
01

Asset Name
Fire Station

Asset Class
Institutional

Asset Group
Public Access Building

Inspection Form
PAB

Facility Code

Manual
Drop-Down Menu
with Predictive
Text

Auto-Populated
Existing
Information

2023 E-ACRS Inspection Form

Year of Construction
2012

Estimated Remaining Life (Years)

Quantity
187.8

Quantity Unit
sq. m

GCR (1-10)
7 - Good

Longitude(Start)
-95.374641

Latitude(Start)
52.153991

Location
52°9'N 95°22'W

2023 E-ACRS Inspection Form

Existing Deficiencies

Existing Deficiency ID
ED01

Deficiency Component

1_Replace weather stripping
2_Repair exposed wiring
3_Replace exterior bulb
4_Replace downspout
5_Clear workroom

Component Code

Project Description

Project Remarks

Group



2023 E-ACRS Inspection Form

2_Repair exposed wiring

Component Code
A6.1c

Project Description
Repair exposed wiring

Project Remarks
No Comment

Group
1 - O&M

Category
1 - O&M/Minor Repairs

Type
5 - Conform to Code

Urgency
0 - Immediate





2023 E-ACRS Inspection Form

Repair exterior door opener

Project Description
Repair exterior door opener and motor

Project Remarks

Group
1 - O&M

Category
1 - O&M/Minor Repairs

Type
2 - Restoration of Utility

Urgency
1 - Current Fiscal Year + 1 year

Amount(\$)

Pre-populated based on prior experience in ACRS inspections

Drop-down Menus to Guide Inspections



2023 E-ACRS Inspection Form

Asset ID

Asset Code

Asset Number

Asset Extension

Asset Name

**ICMS
 ARV
 Mapping**

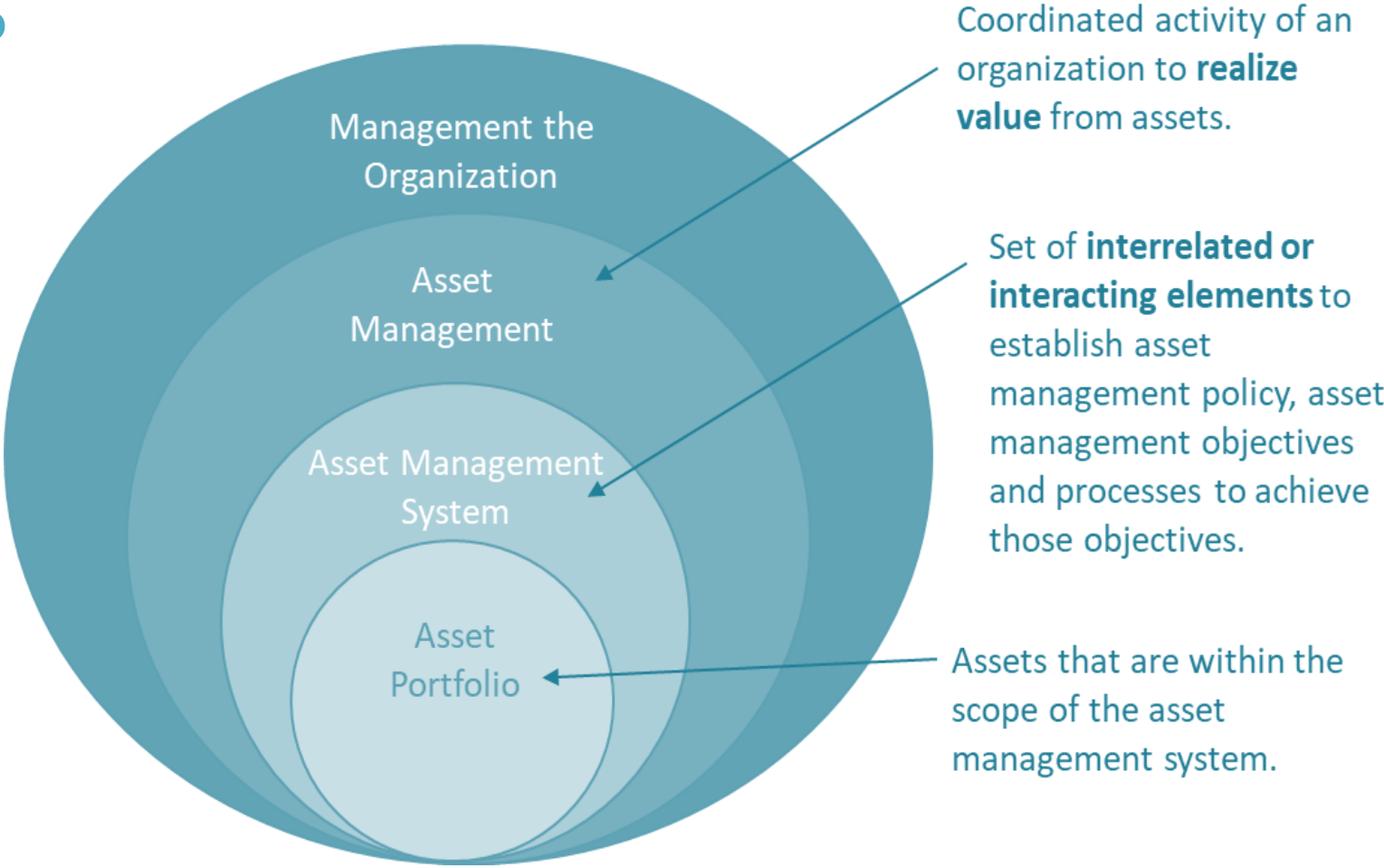
PUBLIC ACCESS BUILDINGS INSPECTION FORM
 (COMPLETE ONE FORM PER ASSET)

LIST OF BUILDING TYPES REQUIRING THE USE OF THIS FORM:
 Offices, Schools, Daycare Centres, Fire Stations, Student Residences, Teacherages, Community Recreation, Hall, Cultural Centres, Arenas, Gymsnasiums, Indoor Swimming Pools and Youth Health Facilities, Senior and Drop-in Centres.

Region Name	Town No	Band Name							
Manitoba	327	Pausingassal First Nation							
Site No.	Site Name	GIS Longitude	GIS Latitude						
06377									
Location Description									
JUNIOR KIND TO GRADE 9									
Asset Code	Asset No	Ext. No	Facility Code						
A3A	083000	01							
Asset Name		Inspected By							
Fire Station		Dryden Lanoway							
Asset Name: A3A08300001									
GENERAL CONDITION RATING (GCR)									
Date Inspected YYYYMMDD	Year of Construction	Estimated Remaining Life (Years)	Quantity (unit)	General Condition Rating (0-10)	General Condition Rating				
2023/09/11	2005	7	2,631 (sq. m)	5	0	1-3	4-6	7-9	10
					Closed	Poor	Fair	Good	New

5. Challenges and Lessons Learned

What's next?



Reference: ISO55000

Lessons Learned

Simplicity is key:

- Simple Survey
- Guided data entry
- Mandatory fields
- Access to existing data

Communication = Efficiency:

- Learn from the community
- Questionnaires
- Review & verification process
- Real-time progress



Data Centralization is your foundation:

- QA/QC
- Various outputs
- Repetitive calculations/analyses
- Consistency

Don't skip the training phase:

- Software training
- Defined rating systems
- What to look for
- Efficiency in the field

Questions?



SERDC

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#OurAssetsMatter

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