ASSET MANAGEMENT IN SASKATCHEWAN

SUMA CONVENTION
JANUARY 30, 2012
OUTLINE

- Asset management background
- NAMS pilot projects
- Lessons learned
ASSET MANAGEMENT BACKGROUND
WHY ASSET MANAGEMENT

Asset Management provides the information that supports good decision making
- Full costs of providing existing services
- Full costs of proposed infrastructure
Understanding costs of existing services
- Operational costs ($/yr)
- Full life cycle infrastructure costs ($/yr)

Understanding importance of service to customers
- When compared to the cost of providing...
Understanding costs of proposed services / new assets
- Operational costs ($/yr)
- Full life cycle infrastructure costs ($/yr)
- Long term affordability
- Importance of service to customers
ASSET MANAGEMENT IN SASKATCHEWAN
CURRENT WORK

- NAMS Pilot projects 1 and 2
  - 10 communities participated to date
NAMS PILOTS
PILOT FUNDING

- Municipal Rural Infrastructure Fund (MRIF)
- Participating Municipalities

Town of Shellbrook
WHAT IS NAMS

- A municipally driven approach to asset management and long term financial planning

- A program of training and support using a suite of tools and templates
  - based on excel and word
WHAT IS NAMS?

- NAMS = National Asset Management Strategy
- Developed by the IPWEA (Institute of Public Works Engineering Australia)
  - NAMS.PLUS
    - full fledged asset management
  - NAMS LITE
    - asset management for small, rural and remote communities
    - developed for communities with limited resources and/or capacity
- Based on requirements outlined in the International Infrastructure Management Manual
WHY THE NAMS PILOT?
WHY THE NAMS PILOT?

- Leveraging TCA information
  - MUST leverage existing information
    - Significant effort went into creating PS3150 Asset Registers

- Building asset management capacity

- Building education to forward asset management

- Did not want to reinvent the wheel
  - Many places around the world are more advanced with AM
  - Wanted to leverage the years of effort put into developing systems around the world
WHY THE NAMS PILOT?

- Recognized that many municipalities face capacity issues
  - Exploring alternatives for tools for small municipalities
  - NAMS has a version that was created for municipalities with limited capacity and resources
THE NAMS PROCESS

- Characteristics of the overall NAMS process
  - Municipal driven
  - Keep it simple!
  - Use information readily available and improve with time (TCA)
  - Support throughout the development
    - Nicole, Steve, etc.
  - Review with participating municipalities
THE PROCESS

The key elements of asset management are:

- Levels of service
- Future demand
- Life cycle management
- Asset management practices
- Monitoring
- Asset management improvement plan
PILOT TRAINING

- 3 day training workshop
- The underlying principles of AM were covered
- Tips for using the templates and tools provided
- A ‘crash course’ in AM
- Completion of first draft Asset Management Plan
ASSET MANAGEMENT TRAINING
REVIEW OF THE PILOT
RESULTS OF THE PILOT

- Municipalities have completed multiple drafts of their first AM plans
- Many municipalities have already moved onto completing this work for other asset classes
REVIEW OF THE PILOT

- Overall comments
  - Asset Management Pilot
    - Changed how municipalities thought about managing infrastructure
    - Brought to light issues that had not previously been considered (i.e., Risk management)
SAMPLE RESULTS
Humboldt - Fig3 Asset Condition Profile (Water and Sewer Network)
Work that is outstanding and needs to be done
New and Upgraded Assets
Humboldt - Projected Operating and Capital Expenditure (Water and Sewer Network)

- Disposals
- Capital Upgrade
- Capital Renewal
- Maintenance
- Operations
- Budgeted Expenditure

Asset Values ($'000)

Year

- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
The value of assets covered by this asset management plan is:

- Current Replacement Cost $33 million
- Depreciable Amount $33 million
- Depreciated Replacement Cost $17 million
- Annual Depreciation Expense $374,000
Projected 10 year cost to provide sample services are $36 million or $3.6 million per year.

Current Funding Shortfall of $850,000 M/year

Organizations estimated available funding for the 10 years:
- $27.5 million or $2.75 million per year.
LESSONS LEARNED
KEY LESSONS LEARNED

- There is valuable information available from the TCA project, this can be leveraged for asset management planning.

- It is important that the organization as a whole is engaged, elected officials and staff need to see the value for the municipality to continue with asset management planning.

- It is beneficial for the first cut asset management plan to be based on existing information, this ensures that resources are optimized.
The quality and capacity for asset management is not controlled by the community size.

Once the plans have been completed it is obvious to participants that this information is necessary for good decision making.

Whatever method for asset management is undertaken it is important the municipality “owns” the information and can customize it for their own needs.
LESSONS LEARNED

- Municipalities who are using asset management planning in decision making advocate for the necessity of this type of information in making informed decisions.
Asset Management at the Elected Level

- Long Term Municipal Planning:
  - Ability to identify when assets need to be replaced.
  - Enhance municipal sustainability.
  - Improved capital allocation to high priority areas
  - Improved abilities to handle community growth
Asset Management at the Elected Level

Infrastructure communication:

- Increased infrastructure communication to local, regional, provincial, and federal stakeholders.

- Improved discussion at council level surrounding infrastructure needs.

- Transparency surrounding the community’s desired levels of service and resources required to provide it.
Infrastructure Investment:

- Assists in optimizing municipal investment for all sorts of assets.

- Better prepares municipalities to access future grant funding from senior level governments.

- Allows council and citizens to understand the magnitude of investment involved in municipal infrastructure.
TOWN OF MACKLIN
TOWN OF MACKLIN

- Water & Sewer System $11.6 million
- Buildings $10.4 million
  (without jointly owned buildings)
- Equipment $1.3 million
- Streets ???
TOWN OF MACKLIN

- The Water & Sewer Service
- The network comprises:
  - 10,000 meters of water & sewer mainline
  - Treated Water Storage of 600,000 gallons
  - Water Treatment Plant & supply wells
  - Lagoon system capable of treating 350,000 m³ of annual effluent
- Water Treatment Plant constructed in 2007
- Lagoon constructed in 2011
- These infrastructure assets have a replacement value of $11.6 million.
Macklin - Age Profile (Sewer)
TOWN OF MACKLIN

- Initially the plan showed:
  - The water & sewer system is in good shape for the next twenty years
  - Current rates were covering close to 100% of operating and renewal costs
  - $2.3 million of water and sewer lines would need replacement or renewal at the same time 2035 (20+ years from now)
  - Value of our system is continually expanding
Revised plan shows:

- Planned approach to line replacement and renewal
- Critical analysis allowed us to shorten expected life of problem areas
- Renewal program will begin in 2017 addressing problem areas
- Rates have been adjusted by 13.5% in 2011 (previously planned)
- Rates will be adjusted by a further 8.5% in 2012 to begin funding the system based on this asset plan
- We are currently providing a high quality system that has the capacity to address current and future initiatives with good planning
HOW HAS/WILL THE NAMS SYSTEM BEEN USED

- Critical analysis of our system
- Planned replacement or renewal of the system
- Articulate our expected level of service
- Analyse the true cost of expanding our assets
- Common language for Council, Administration and Staff

- Continuity
  - Less reactionary expenditures
  - Less budgetary fluctuation based on Council desires
  - Stability of direction in the event of Council or staff changes
ANTICIPATED CHALLENGES

- Aligning Community expectations with ability to fund
- Educating Staff & Council while keeping momentum
- Adopting a long term (20 year) financial plan that takes into account all asset categories & following it
- Infrastructure Grant Programs tend to be project specific and may not match our long term plan
- Completing a plan for all asset categories
  - may not be as easy to articulate or fund as they do not operate as separate utilities
  - Streets program has suffered due to funding being put into every other area
  - Can we afford it all?
WHAT ARE OUR CHALLENGES

- How do you entice people to continue planning forward?
- Maybe it is all about giving them some incentive?