South Huron Asset Management Program

"Spending the right amount of money, on the right assets, at the right time"

Current Asset Management Plan

- Identifies all asset classes with condition data mainly for roads and bridges
- Most detail on core assets: Roads, Water, Sewer and Storm

Advantage: Framework/starting point for future strategic asset management

Disadvantage: Without additional condition data we cannot precisely model

Asset Management Goals

- Condition data, updated in intervals
- Strategic financing strategy including lifecycle costing
- Detail and strategy for ALL asset classes

Advantage: Precise modelling improves objectivity in budgeting and efficient use of financial resources

Disadvantage: Costly to implement initially but will result in savings over time

Proactive AMP Approach

- Lifecycle activities, theoretically, reduces annual requirement and helps address capital infrastructure backlog
- Current approach will result in an increasing backlog of infrastructure projects

Asset Category	Infrastructure Backlog ($)	Annual Requirement ($)	2017 Budgeted Spending
Roads	$35M	$2.193M	$1.164M

Note: this annual requirement would take 20 years to reach full funding and is only for the roads network

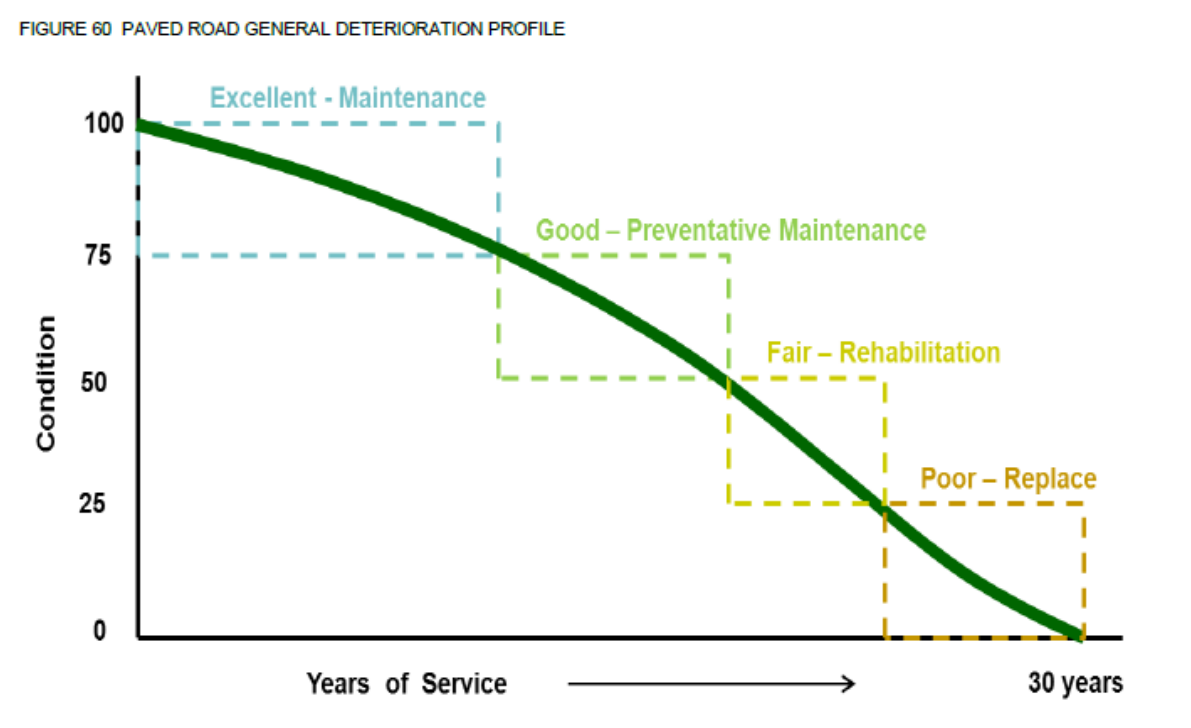
Benefits for the Municipality of South Huron

Item	Benefit
Grant Funding	• Funding allocation calculated based on value of total assets • OCIF, AMO, CWWF all require proof of project priority as part of AMP
Lifecycle Activity	• Spending the right amount of money at the right time of the asset lifecycle on the right maintenance activities to maximize useful life and condition • Results in less annual requirement and improved infrastructure
Increased Objectivity in Budgeting	• Condition and data analysis will support decisions made in the capital budgeting process and better forecasting is possible

More Benefits

- Reduced emergency spending
- Potential for increased grant funding (calculations)
- Sustainable funding sources
- Lifecycle activities (condition data)
- Remove subjectivity from the capital budgeting process
- Ability to forecast long-term capital needs, stabilizing the financial burden

Lifecycle Activities



- Maintenance ($) – basic
- Preventative Maintenance ($$) – crack sealing
- Rehabilitation ($$$) – mill/pave
- Replace ($$$$$) – reconstruction

Lifecycle Activities Continued

- Extend the life of the asset
- Investing smaller amounts of money in maintenance to delay end of life replacement (most costly)
- Deterioration Curve – more accurate asset deterioration than linear curves
  - Impacts the annual requirement for the asset
- Roads Examples:
  - Crack sealing, manhole repairs, small pipe repairs, etc.

South Huron Roads – Current AMP

TABLE 21 ASSET CONDITION AND RELATED WORK ACTIVITY - PAVED ROADS

Condition	Condition Range	Work Activity
Excellent condition (Maintenance only phase)	100-76	• maintenance only
Good Condition (Preventative maintenance phase)	75 - 51	• crack sealing • emulsions
Fair Condition (Rehabilitation phase)	50 -26	• resurface - mill & pave • resurface - asphalt overlay • single & double surface treatment (for rural roads)
Poor Condition (Reconstruction phase)	25 - 1	• reconstruct - pulverize and pave • reconstruct - full surface and base reconstruction
Critical Condition (Reconstruction phase)	0	• critical includes assets beyond their useful lives which make up the backlog. they require the same interventions as the "poor" category above.

- Identified in current AMP
- Further detail required to implement full lifecycle costing
- Staff and resources required

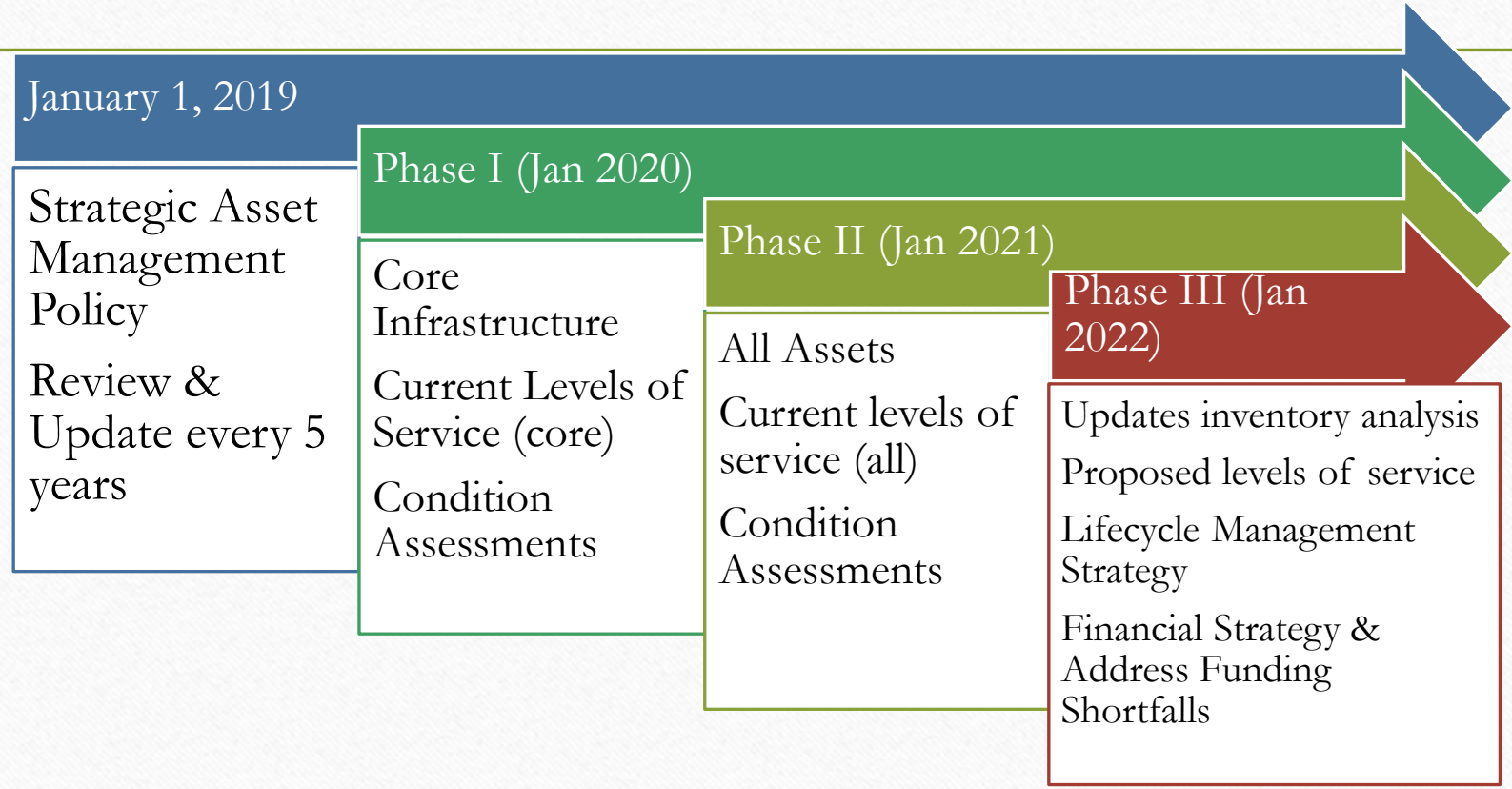
Asset Management Example

- Rural, amalgamated municipality like South Huron (~347 km paved)
- They added lifecycle activities to extend the end of life replacement for Roads
- Impact on the annual requirement:
  - Run asset to end of life $10,400,000 per year
  - Lifecycle Activities + End of life replacement $4,460,000 (43%)

Asset Management example
Lifecycle Strategy – Roads

Road Network Strategies						
	Annual	Current	Current Infra	Percent	Tax Increase Recom	
	Requirement	Funding	Deficit	Funded	Annual % Incr	# of Years
Just end of Life replacement	10,400,000	1,564,000	8,836,000	15%	9.2%	20
Lifecycle events and end of life replacement	4,460,000	1,564,000	2,896,000	35%	2.8%	20

Proposed Legislation



Proposed Legislation Highlights

- Asset Management Policy
- Levels of Service – current vs proposed (target)
- Lifecycle Management Strategy
  - Planning maintenance events at optimal stages of asset lives to extend the life of the asset
- Financing Strategy
  - Must be aligned with levels of service
  - Includes lifecycle costs, dedicated revenues to capital financing, capital reserve contributions and debt servicing payments

Proposed Legislation Continued

- Draft legislation comments ended July 24, 2017
- Final legislation expected late October 2017
- Implementation January 2018
- Plan reporting and updating annually
- Plan and policy updates through Municipal Council every 5 years

** *These are the most current plans of the legislative body and are subject to change during approval process*

Staff Approach

- Established an Asset Management Working Group – July 2017
- Monthly progress meetings
- Assess the needs and resources to meet the proposed legislation
- Timelines will be established to meet proposed legislation

Challenges

- Funding
- Gaps in asset data (inventory, condition, levels of service)
- Resources necessary for gathering data and specialized expertise for condition assessments
- Resources necessary to analyze and refine desired levels of service
- Commitment to non-legislated periodic condition analysis
- Future grant funding dependent upon the quality of information in AMP

Funding Sources

- Council commitment to investment in Asset Management going forward
- Resources necessary for the Asset Management Program will be proposed in the 2018 budget
- FCM Asset Management Grant
  - Assistance available for collection and analysis of data/policy development/training
  - Maximum $50,000 with completion required in 11 months from receipt