



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

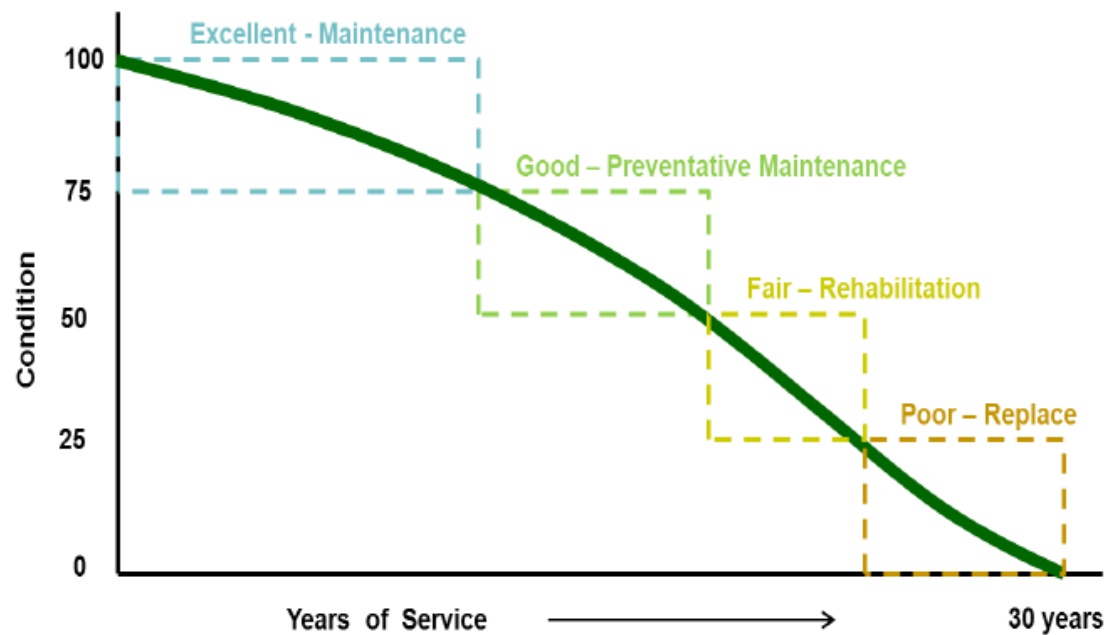
Item	Benefit
Grant Funding	<ul style="list-style-type: none">• Funding allocation calculated based on value of total assets• OCIF, AMO, CWWF all require proof of project priority as part of AMP
Lifecycle Activity	<ul style="list-style-type: none">• Spending the right amount of money at the right time 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	<ul style="list-style-type: none">• 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

FIGURE 60 PAVED ROAD GENERAL DETERIORATION PROFILE



- 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	<ul style="list-style-type: none"> • maintenance only
Good Condition (Preventative maintenance phase)	75 - 51	<ul style="list-style-type: none"> • crack sealing • emulsions
Fair Condition (Rehabilitation phase)	50 -26	<ul style="list-style-type: none"> • resurface - mill & pave • resurface - asphalt overlay • single & double surface treatment (for rural roads)
Poor Condition (Reconstruction phase)	25 - 1	<ul style="list-style-type: none"> • reconstruct - pulverize and pave • reconstruct - full surface and base reconstruction
Critical Condition (Reconstruction phase)	0	<ul style="list-style-type: none"> • 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

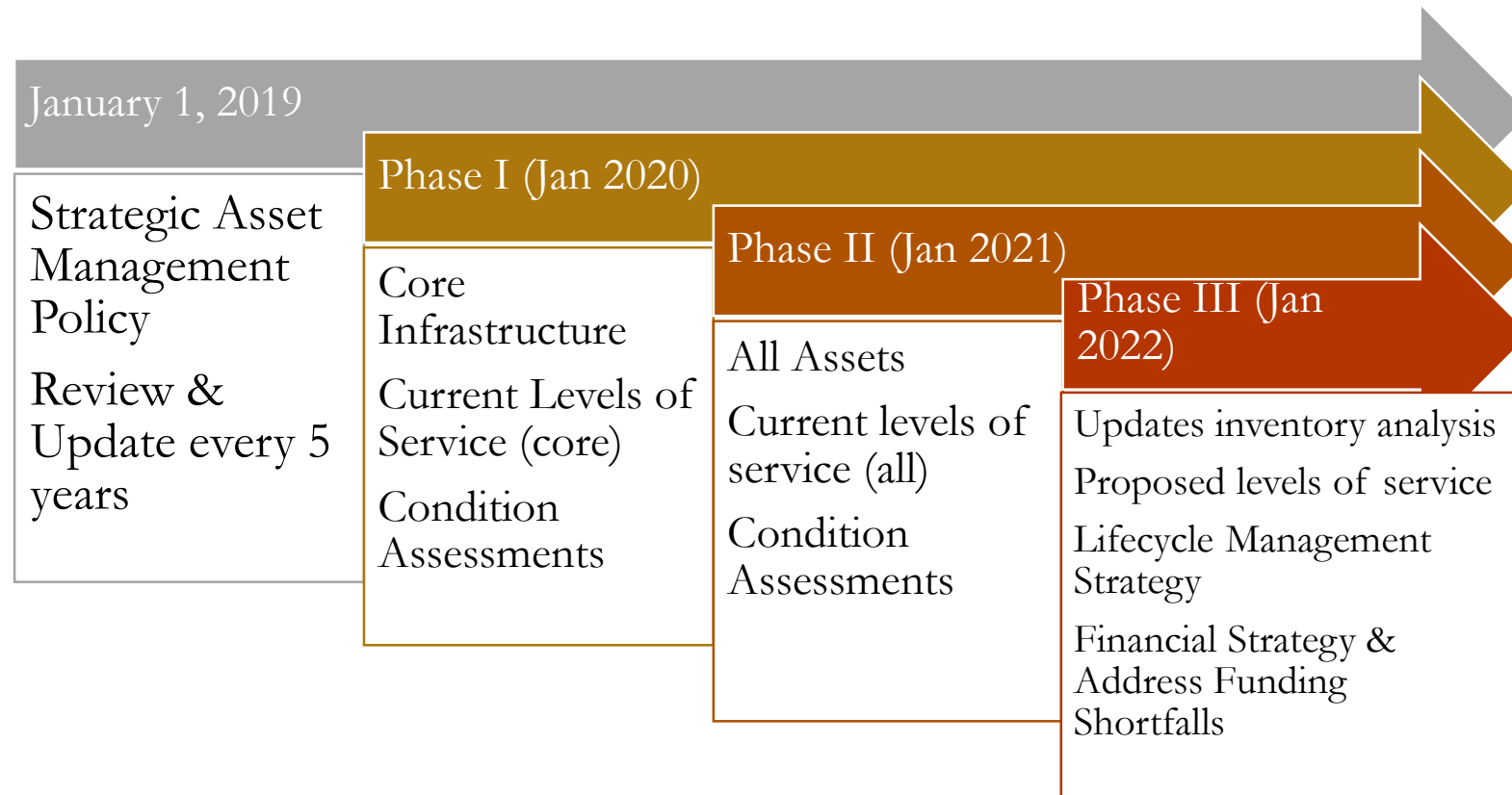
- Rural, amalgamated municipality like South Huron (~347 km paved)
- They added lifecycle activities to extend the end of life replacement for Roads
- Impact on the annual requirement:
 - Run asset to end of life \$10,400,000 per year
 - Lifecycle Activities + End of life replacement \$4,460,000 (43%)

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