

To: Chair and Members of the Administration, Finance and Human Resources Committee

From: Andrea Brossault, Asset Management Programme Manager

Date: Tuesday, June 15, 2021

Subject: Asset Management Plan Status Update

Background:

In March 2021, the Asset Management Team provided an update on Asset Management activities and on the upcoming deadline to have an Asset Management Plan in place by July 1, 2021.

Since that time, the Ontario government has amended the deadlines under Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure. The amendment pushes all remaining deadlines out by one full year.

The following table provides a description of the requirements and outlines the updated timelines for compliance with the regulation:

Date	Requirement	Status	Description	
July 1, 2019	Strategic Asset	COMPLETE	The policy identifies municipal goals the asset	
	Management Policy		management plan supports, how the budget is	
			informed, asset management planning principles,	
			considerations for climate change, and a commitment to	
			provide opportunities for stakeholder input.	
July 1, 2022	Asset Management	IN PROGRESS	The plan must address current levels of service and the	
	Plan (Core Assets)		associated costs of maintaining that service for roads,	
			bridges, culverts and storm water assets.	
July 1, 2024	Asset Management	IN PROGRESS	The plan must address current levels of service and the	
	Plan (All municipal		associated costs of maintaining that service for all	
	asset)		municipal assets.	
July 1, 2025	Proposed Levels of	NOT STARTED	Builds on the 2023 requirement by including a discussion	
	Service		of proposed levels of service, what activities will be	
			required to meet proposed levels of service, and a	
			strategy to fund those activities	

While the regulation no longer requires the first plan to be completed by July 1, 2021, the County has committed to moving forward with producing a draft of the Asset Management Plan for Core assets within the original timeline. The decision to move forward at this time was to facilitate the following:

- Provide updated Information to inform financial indicators as part of the reserve fund study
- Provide tools and information for upcoming budget cycles, including the 2022 budget
- Utilize the new asset management software (CityWide) to consolidate and centralize all available asset data in one asset registry database
- Link asset data to available studies, reports and systems including Geographic Information Systems (GIS)
- Provide asset mapping and geographic analysis functionality

Current Status:

In order to complete the asset management plan, the following data and information has been loaded into CityWide for core assets:

- Inventory
- Condition
- Replacement value
- Lifecycle costs
- Levels of service
- Risk criteria

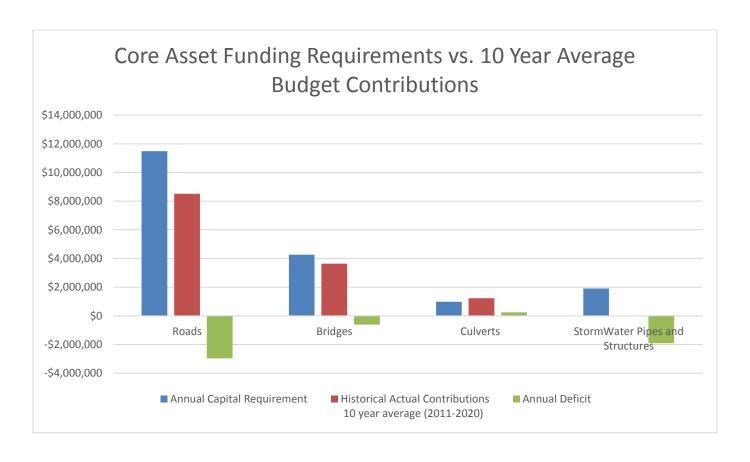
The following activities have been completed and confirmed for core assets (roads, bridges, culverts and storm water data) by departmental staff in engineering:

- Confirmation of detailed inventory data
- Update of current replacement costs. This includes a reallocation of a portion of the costs associated with the road base to the underground storm water network
- Developed draft funding models for core assets
- Developed current levels of service framework and metrics
- Developed risk management framework and metrics
- Identified asset lifecycle activities and initial costs
- Linked asset data to geographic locations for mapping and visualization
- Identified and documented initial data modeling assumptions
- Additional resource was hired to assist with data review and confirmation
- Assessed the data quality and level of confidence of available data

The following draft information is available. The annual capital requirement is representative of the contribution amount required to keep the network in its current condition. In order to make improvements to the road network and move the condition from Fair to Good, over time, the annual contributions will need to increase.

	Roads	Bridges	Culverts	Storm Water	Total			
Infrastructure Deficit Information:								
Historical Actual Contributions 10 year average (2011- 2020)	\$8,511,185	\$3,638,194	\$1,223,983	\$0	\$13,373,362			
Annual Capital Requirement	\$11,482,367	\$4,257,796	\$976,762	\$1,911,132	\$18,628,057			
Annual (Deficit) / Surplus	(\$2,971,182)	(\$619,602)	\$247,221	(\$1,911,132)	(\$5,254,695)			
Asset Inventory Data:								
Estimated Replacement Cost (2020)	\$213,672,750	\$240,586,687	\$32,807,469	\$140,976,893	\$628,043,799			
Average Condition (Dec 21, 2020)	Fair 63 of 100 PCI	Good 77 of 100 BCI	Fair 74 of 100 BCI	Good 74 of estimated useful life remaining	NA			

Data Notes: Annual Requirement Year: 2021, includes lifecycle events (roads and bridges)



The level of confidence in each of these results varies with the available data:

- Replacement values for some asset groups were calculated based on estimates from the Engineering team, while others were provided by external consultants.
- Assessed condition data is not currently available for the storm water network. The estimated age of the Storm water pipes are used to estimate condition.
- Lifecycle activities and associated costs were not fully defined for each of the asset classes. As a result, the annual requirement for some classes (e.g. roads) includes some lifecycle activities in addition to the replacement costs, while for others (e.g. storm water) are based solely on the replacement cost estimate.
- The 2021-2030 budget does not directly line up with the asset management plan. For example, while storm water assets are included in some of road and bridge projects, no specific budget line relates to this asset group. The gap between existing funding and the asset management needs assessment is therefore an estimate.

As the available data improves, and the long-term financial plan and asset management plan are further integrated, analyses relating to the state of County infrastructure and the investment gap will become more refined.

The following activities are ongoing and are expected to be complete for the first draft of the Asset Management Plan:

- Further review of modeling results and assumptions for core asset data
- Clearly outline and document all assumptions and calculations that support the data models
- Consolidate and compile detailed information at the summary level including charts, graphs and mapping components

County staff will continue to review and refine the draft plan over the summer with the intent to present the final version to council in the fall (September).

Challenges:

The AM Plan is a living document that requires regular review. The first asset management plan for core assets will use the best available data to provide the results. As updated data and information becomes available, it must be uploaded into the asset management system and incorporated into the modeling and analysis. Continued collaboration with departmental staff as asset owners is required. Ensuring accurate and repeatable data is a critical component, as it will form the baseline data for subsequent version of the AM Plan.

Linking the capital and operating budgets to lifecycle costs will require alignment with the current budget structure and existing terminology. Determining the funding gap requires clear alignment between the budget categories and the asset lifecycle activities defined in CityWide. This is expected to evolve over time as lifecycle activities are more clearly defined and departmental staff have access to the predictive modeling components of CityWide.

Next Steps:

County staff will proceed with the following activities:

- Continue to work collaboratively to support the data and information required for the asset management plan while following all COVID protocols and restrictions
- Provide departmental staff with the training and tools required to utilize the functionality of the new Asset Management software in order to comprehensively review and confirm the consolidated data moving forward.
- Complete a draft of the first asset management plan for core assets by July, 2021 using data available to date
- Continue to review and refine the draft plan over the summer with the intent to present the final version to council in September

Recommendation:

That the Asset Management Plan Status Update be received for information.

Respectfully submitted,

Cindua Brossault

Andrea Brossault

Asset Management Programme Manager