2021 Roads and Structures Detailed AM Plan – Continuous Improvement Activities                Appendix 2

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|---|---|---|---|---|---|---|---|---|
| **Roads and Structures - Core Assets** | | | | | | | | |
| **Task No.** | **Work Plan Task** | **Asset Class** | **Estimated Timing** | **Priority (High/ Medium /Low)** | **Target Benefits** | **Required Resources** | **Status (Complete/Ongoing Not started)** |
| SOI-01 | Update condition assessment and OSIM Inspection information | Roads/Structures | 2021-2022 | High | The pavement condition survey and OSIM inspection will inform the 2024 AMP for the Roads Service Area | External | **Complete:** Structures: 2021 OSIM inspections are complete. **Ongoing:** Roads: 2021 condition data has been collected and will be loaded to the system in 2022. |
| SOI-02 | Review replacement cost models and develop a sustainable framework for periodically updating and reporting on replacement cost figures | Roads/Structures | 2021-2022 | Medium | Replacement costs contained within CityWide, the City's Tangible Capital Asset System, are based on historical costs. Replacement and renewal costs change over time and may be significantly understated | Internal/ External | **Not started**: Currently using TCA values to estimate replacement cost. |
| RIS-01 | Develop a Risk Assessment Framework for roads and structures | Roads/Structures | 2021-2022 | Medium | A risk framework will enable the Roads Service Area to better prioritize funding availability across asset classes | External | **Complete:** Interim funding prioritization model has been implemented. **Not started**: The development of a formalized risk assessment tool. |

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| | | | | Priority (High/ Medium /Low) | | | Status (Complete/Ongoing Not started) |
|---|---|---|---|---|---|---|---|
| Task No. | Work Plan Task | Asset Class | Estimated Timing | | Target Benefits | Required Resources | |
| | | | | **Roads and Structures - Core Assets** | | | |
| LOS-01 | Review condition information and develop level of service targets for the management of roads and structures | Roads/Structures | 2022-2024 | High | In addition to being required to meet *O. Reg. 588/17*, level of service targets enable the service area to track progress against established targets | Internal | **Ongoing:** Technical LOS have been established subject to periodic review. Roads: Best Practices in industry LOS is 72 PQI network condition Structures: Target LOS is average of 80 BCI Additional Community LOS still to be defined. |
| DAT-01 | Expand Use of Infor to track Capital Delivery Contracts against Roadway Assets | Roads/Structures | 2022-2024 | Roads: Medium Structures: Low | Better asset lifecycle costing and improve processing time for Tangible Capital Asset Reporting | Internal | **Not started** |
| DMGT-01 | Complete Climate Change Vulnerability Assessment and implement action plan | Roads/Structures | 2021-2023 | High: | The Climate Change Vulnerability Assessment will guide investments in roads and structures to protect against the impact of climate change | Internal/ External | **Ongoing:** CMS working on a City wide RFP to conduct a Climate Change Vulnerability Assessment for all existing municipal assets. |

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| **Roads and Structures - Core Assets** | | | | | | | |
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| LMGT-01 | Utilize the lifecycle information within RPMS and BTMS to explore and develop enhanced repair and preservation approaches and strategies | Roads/Structures | 2021-2024 | High | Enhanced and expanded inspection, preservation, repair and renewal strategies can extend the life of both road and structure assets and improve overall performance of assets | Internal | **Ongoing** |
| IGC-01 | Work with Corporate Finance to formalize performance targets and sustainable funding for roads and structures | Roads/Structures | 2021-2024 | High | *O. Reg. 588/17* requires the establishment of Service Level Targets by 2025 | Internal | **Ongoing** |
| CIM-01 | Update the Maturity Assessment and Continuous Improvement Plan and report back to Leadership Team | Roads/Structures | 2021-2023 | High | Providing Leadership Team and Council with regular updates on the progress made towards asset management planning will ensure that we continue to mature in our asset management practices | Internal | **Complete** Updated Maturity Assessment in Q1 2022 **Ongoing** Annual AM Plan progress update is underway |

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| colspan="8" | **Enhanced Roads Service Area Asset Management Plan – Non-core Assets** |
| **Task No.** | **Work Plan Task** | **Asset Class** | **Timing** | **Priority (High/ Medium /Low)** | **Target Benefits** | **Required Resources** | **Status (Complete/Ongoing Not started)** |
| CORP-01 | Assess the resources required to deliver a comprehensive Asset Management Plan for the Roads Service Area and prepare a business case | Traffic Signal System, Street Lighting, Sidewalks, Trails/Cycling Facilities, Street Signs, Noise Walls, Retaining Walls, Municipal Fleet and Equipment and Municipal Parking Infrastructure | 2021-2023 | High | *O. Reg. 588/17* requires asset management plans for non-core assets by July 1, 2024 The establishment of management plans for these assets will allow the Service Area to find efficiencies in planning and coordination activities | Internal | **Ongoing:** BR 8565 AM Program identified several resources for the Roads Service Area. The need for additional resources may be brought forward by certain Business Units. |
| SOI-02 | Develop the asset hierarchy and data model for the assets within the Roads Service Area | Same as above | 2021-2022 | High | The asset hierarchy is required to establish the relationships between the individual asset types and the service they provide | Internal | **Ongoing:** Asset hierarchy for non-core assets within Roads Service Area underway **Not started:** Data model still to be developed |
| SOI-03 | Catalogue all high priority asset types within the City's GIS environment | Same as above | 2021-2023 | High | Developing the catalogue, inventory and data model will enable the service area to better manage the data | Internal | **Ongoing:** Lidar RFNP closed, proposals are being evaluated and vendor to be selected shortly |

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| Task No. | Work Plan Task | Asset Class | Timing | Priority (High/ Medium /Low) | Target Benefits | Required Resources | Status (Complete/Ongoing Not started) |
|---|---|---|---|---|---|---|---|
| | **Enhanced Roads Service Area Asset Management Plan – Non-core Assets** | | | | | | |
| SOI-04 | Review replacement cost models and develop a sustainable framework for periodically updating and reporting on replacement cost values | Same as above | 2021-2023 | Medium | Replacement costs contained within CityWide, the City's Tangible Capital Asset System are based on historical costs. Replacement and renewal costs change over time and may be significantly understated | Internal/ External | **Ongoing:** Some asset classes are contained within CityWide software used for Tangible Capital Asset reporting |
| SOI-05 | Develop condition assessment framework for all high priority assets identified | Same as above | 2021-2023 | High | Provides a consistent approach to collect information that will allow service groups to identify and prioritize infrastructure needs | Internal/ External | **Ongoing:** Some asset classes have condition assessment framework such as noise walls, retaining walls. |
| SOI-07 | Use of LiDAR for data collection of non-core assets in the right of way | Same as above plus all other assets within the right of way | 2021-2024 | High | Having accurate information about the location of each asset will be used to better plan inspection, renewal and replacement activities The activity will also serve to validate the accuracy of existing asset inventory information | External | **Ongoing:** Lidar RFP just closed and proposals are being evaluated. |

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| | | **Enhanced Roads Service Area Asset Management Plan – Non-core Assets** | | | | | |
| **Task No.** | **Work Plan Task** | **Asset Class** | **Timing** | **Priority (High/ Medium /Low)** | **Target Benefits** | **Required Resources** | **Status (Complete/Ongoing Not started)** |
| SOI-08 | Expanding use of Infor Contract Management and Infor Mobile Technology | Same as above | 2022-2024 | Medium | This activity facilitates the allocation of capital costs to the appropriate asset type and provides for better lifecycle costing and valuation<br><br>Will also reduce processing time for TCA reporting | Internal | **Ongoing:**<br><br>Infor Mobile collector tool has been implemented for several asset types. |
| RIS-01 | Develop a Risk Assessment Framework for all priority assets within the Roads Service Area | Same as above | 2021-2023 | Medium | A risk framework will enable the Roads Service Area to better prioritize funding availability across asset classes | Internal/ External | **Ongoing:**<br><br>Interim funding prioritization model has been implemented<br>**Not Started:**<br><br>The development of a formalized risk assessment framework has not been started |
| LOS-01 | Define the Customer and Technical Levels of Service | Same as above | 2021-2023 | Medium | Developing level of service and other metrics enable the City to better communicate asset performance and their impact on the services they provide | Internal | **Ongoing:**<br><br>Technical levels of service have been defined for some assets. Technical LOS for other assets still to be defined. Customer LOS have not been defined. |

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| **Enhanced Roads Service Area Asset Management Plan – Non-core Assets** | | | | | | | |
| **Task No.** | **Work Plan Task** | **Asset Class** | **Timing** | **Priority (High/ Medium /Low)** | **Target Benefits** | **Required Resources** | **Status (Complete/Ongoing Not started)** |
| LOS-02 | Define target level of service for all major asset categories | Same as above | 2024 | Medium | In addition to being required to meet *O. Reg. 588/17*, having levels of service established will enable the Service Area to track progress against targets | Internal | **Not started** |
| LMGT-01 | Document lifecycle management activities and strategies for each new asset type | Same as above | 2022-2023 | Medium | Lifecycle management activities and strategies are required in order to determine the appropriate investment decisions | External/ Internal | **Not started** |
| RIS-01 | Develop and implement an asset risk framework for a variety of asset types | Same as above | 2022-2024 | Medium | Provides weighting factors to enable the prioritization of capital projects against risk | External/ Internal | **Not started** |
| ASA-01 | Prepare asset needs analysis to determine long-term capital renewal, replacement and expansion programs for all new asset types | Same as above | 2022-2023 | Medium | Developing a needs analysis for all major asset types will ensure that the Roads service area is taking into consideration all lifecycle costs | External/ internal | **Not started** |
| LMGT-02 | Levering asset management data to drive business plans and budgets | Same as above | 2023-2024 | Medium | Aligns asset information that directly impacts budget decisions and planning | Internal | **Not started** |

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| **Task No.** | **Work Plan Task** | **Asset Class** | **Timing** | **Priority (High/ Medium /Low)** | **Target Benefits** | **Required Resources** | **Status (Complete/Ongoing Not started)** |
| IGC-01 | Work with Corporate Finance to formalize performance targets and sustainable funding scenarios for non-core assets | Same as above | 2021-2024 | Medium | *O. Reg. 588/17* requires Service Level Targets by 2025 | Internal | **Not started** |
| CIM-01 | Update the Maturity Assessment and Continuous Improvement Plan and report back to Leadership Team | Same as above | 2021-2023 | High | Providing Leadership Team and Council with regular updates on the progress made towards Asset Management Planning will ensure that we continue to mature in our asset management practices | Internal | **Ongoing** Non-core asset maturity assessments underway. To be completed by Q3 in 2022 |

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