

9. Invest Responsibly

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9.1 Respect the Limits of Affordability

Action 9-1: Follow an affordable investment schedule

Affordability parameters. The City defines affordability from the point of view of current and future taxpayers. Not only will current taxpayers be responsible for the capital cost of new infrastructure, but ongoing operational, maintenance, and rehabilitation costs mean that future residents will be paying for transportation projects for many years to come. To contend that a plan is affordable is to demonstrate that there is adequate funding available from identified sources to deliver planned services and infrastructure investments—that is, a funding plan has been identified with reasonable assumptions which also respects established fiscal policies. Ultimately, the City must prioritize and allocate investment among many competing demands.

The consideration of affordability is a financial practice the City has followed since amalgamation through the establishment of Long Range Financial Plans at each term of Council. These have typically been limited to a ten-year horizon but major undertakings such as the Confederation Line, in conjunction with the high levels of investment needed to maintain the City's assets in a state of good repair, mean that the City's master plans require greater consideration of long-term financial issues.

In July 2011, Council was presented with a long-range transit plan that included operating and capital needs for the bus and light rail system to 2048. That plan established that the City could afford to develop and operate the transit system in line with the strategic directions established in the 2008 TMP, including the Confederation Line; this was revisited in December 2012 when the final Confederation Line report and recommendation was put before Council.

The affordability parameters and modelling efforts used in the analysis behind the long-range transit plan have been updated to guide the recommendations of this Plan, and a review of funding sources for roads, cycling, pedestrian facilities, and structures (which are funded through development charges and contributions to capital secured through the annual tax levy) has been conducted. These issues will be documented by the City Treasurer under separate cover.

Implementation costs. The importance of accounting for the lifecycle costs of new transportation infrastructure should not be understated. Protecting existing and future assets with sufficient operations, maintenance and renewal funds as part of the Long Range Financial Plan will ensure that the City can continue to provide essential infrastructure services to residents. As such, the implementation of any service changes proposed as part of this Plan should be considered as part of annual budget cycles.

Exhibit 9.1 summarizes the capital costs of implementing this Plan (with the Affordable RTTP and Road Networks). The total capital cost for all modes is approximately \$4 billion. In terms of operating costs, it is estimated that there would be an annual savings of approximately \$5 million per year by 2031 as a result of implementing the affordable transit network (this is the incremental cost for new infrastructure only). The net savings largely is a result of the implementation of LRT and the savings in bus costs. Conversely, the implementation of new road, cycling and pedestrian infrastructure will result in modest increases in operating costs.

Action 9-2: Consider additional investments if funds become available

Implementation of projects not included in the Affordable Networks. The assumptions behind projected funding levels will be monitored on a regular basis. For instance, a key assumption is that all major transit projects will be co-funded equally by all levels of government—so if anticipated funding agreements are delayed then major transit investments would need to be reconsidered. Similarly, the unanticipated availability of revenues beyond those reasonably assumed would allow additional investments to be considered.

Exhibit 9.1 Capital Costs of New Infrastructure and Services: Affordable RTTP and Road Networks, Pedestrian Facilities, Cycling Network, (\$2013 millions)

Type	Capital cost
LRT+ Vehicles + Maintenance and Storage Facility	2,360
BRT	317
O-Train + Vehicles + Maintenance and Storage Facility	118
Transit priority	200
Road Network plus Intersection Modification	864
Cycling *	70
Pedestrian *	66**
Total	\$3,995M

* Road project costs include the costs of integral cycling and pedestrian facilities.

** Includes major multi-use pathway structures

9.2 Affordable Life Cycle Costs

The estimated replacement value of the City's transportation infrastructure—including roads, bridges, walkways and rapid transit facilities—was about \$13 billion in 2012. These assets are continuously deteriorating, and will eventually require rehabilitation or replacement. With limited budgets and increasing demands on the transportation network, the City is challenged to manage its assets in a way that minimizes total life cycle costs and sustains expected levels of service.

In addition, the life cycle costing approach adopted for this plan includes the incremental costs of renewing and rehabilitating new transportation infrastructure, which are estimated to be between \$70 and \$90 million for the period to 2031. The full life cycle costs of new infrastructure have been incorporated into the City's financial model.

Through the adoption of the Comprehensive Asset Management Strategy in October 2012, Council confirmed the required investment levels to keep the City's assets in a state of good repair. In light of this, the funds required to maintain this state were the first priority in the determination of affordable funding envelopes for new infrastructure.

Action 9-3: Implement the City's Comprehensive Asset Management Strategy

About Comprehensive Asset Management. Comprehensive Asset Management (CAM) is the effective management of all tangible capital (physical) assets that the City uses, directly or indirectly, to deliver services to its customers. Key objectives of the City's CAM program include reducing life cycle costs while maintaining assets in a safe condition, improving service to customers, and delivering agreed-upon levels of service. The CAM program will enhance the justification of infrastructure investment decisions, demonstrate the long-term impact of short-term decisions, and link infrastructure decisions to service outcomes.

The Strategy. The City adopted a guiding CAM policy and an implementation-focused *CAM Strategy* in 2012. The CAM policy defines Council's expectations around the management of the City's physical assets, and is expected to remain relatively constant over time. The *CAM Strategy* articulates senior management's commitment to implementing the CAM policy including the necessary resources and timescales for implementation, and will evolve in response to internal and external changes or challenges faced by the City. This CAM approach allows the City to define:

- The inventory and value of the assets needed to support the delivery of services
- The asset condition and expected remaining service life
- The level of service expectations, costs, and what needs to be done to achieve those levels

- The interventions required on the assets, and when these are most appropriate to ensure assets remain safe for sustained the service
- The cost to acquire, operate, maintain and renew while maintaining an acceptable level of risk
- The appropriate investment levels to ensure long-term affordability

In the CAM program's 2012 *State of the Asset Report*, Ottawa's transit assets were assigned a replacement value of \$1.95 billion, and were rated as being in good to fair condition overall. Ottawa's roads, bridges, pathways and other transportation facilities were assigned a replacement value of \$11.1 billion, and were rated as being in fair condition overall.

Action 9-4: Recognize the impact of new infrastructure on maintenance activities

About maintenance activities. Infrastructure maintenance services reduce life cycle costs while they improve safety, sustain desired levels of service and protect the natural environment. The City delivers maintenance services—asphalt and concrete repairs, winter snow and ice control, and sweeping and litter control—to its paved or surface-treated roads, gravel roads, sidewalks and pathways, bridges and the Transitway. In doing so, it must consider public expectations, budget constraints and best practices in risk management. The City's maintenance service level standards, which define the extent and timing of related activities, are categorized into the following groups:

- *Public safety services and standards* – that impact the safety of pedestrians, cyclists and vehicles. The City's Maintenance Quality Standards are based on the provincial *Minimum Maintenance Standards for Municipal Highways*
- *Infrastructure preservation services and standards* – that reflect the City's need to protect capital assets, and that are financially justified by life cycle cost impacts
- *Quality of life services and standards* – that enhance the quality of life for Ottawa residents and visitors (such as street sweeping, and sidewalk maintenance), and offer some flexibility with regard to performance standards

New infrastructure decisions. The effectiveness and efficiency of maintenance can be helped or hindered by the design of infrastructure, from the structural underpinnings to functional elements like catch basins and decorative elements like public art or heritage-style lighting. Therefore, the City will plan and implement new infrastructure and infrastructure modifications, in a way that recognizes the implications for maintenance service level standards, practices and costs. For example, it will preserve an acceptable right of way (i.e. of sufficient clear width) for maintenance services, wherever possible, when enhancing rights of way with elements like street furniture, lighting, and planters.

9.3 Measure Transportation System Performance

The success of long-range plans depends on the ongoing monitoring of relevant conditions, actions and impacts. The City must remain aware of its progress toward key objectives so that it can add, modify or delete priorities as needed.

Action 9-5: Monitor and report on progress toward this Plan's objectives

Performance measurement framework. The City will develop a framework of performance indicators that reflects the goals and objectives of this Plan and its component strategies. That framework will provide the structure for regular reports on the City's progress.

Benchmarking against other municipalities. Through the Ontario Municipal Benchmarking Initiative, Ottawa will continue to work with 15 other municipalities to measure, compare and analyze performance in transit, road and parking services. Regular reports demonstrate the value that Ottawa residents receive for their tax dollars, and identify areas where improvements may be sought.