

oldest bus pads. Shelters are and owned and maintained by the supplier for the duration of the contract. Signs are installed, replaced and relocated by Town staff as required. No current condition information exists at this time.

6. Replacement Cost Valuations

Assets have been inventoried in compliance with Public Sector Accounting Board (PSAB) 3150 which provides for a statement of assets owned, a simple lifecycle assessment, historic costs, and an annual depreciation value that complies with regulatory reporting requirements and provides a basic forecast for asset replacement.

However, PSAB 3150 is not an asset management plan and has a number of shortfalls that hinder its usefulness for sustainable asset management. These include:

- historic cost valuation which does not account for inflated replacement costs,
- asset condition factors, and
- changes in materials and technology which influences asset life and performance.

The asset list developed for PSAB 3150, along with the Town's GIS database, does provide an accurate foundation of what is owned and is a valuable source of information for the development and support of the Asset Management Plan.

Table 6.1 summarizes the estimated replacement values and identifies the main source of information. The values contained in the table do not include an adjustment for inflation.

6.1. Road System

Program funding recommendations are a function of the dimensional information, surface type, roadside environment, and functional class of the individual asset. Recommended funding for the road funding should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

Budgetary recommendations in this report do not include items related to development and growth. The Town should consider those items as additional to the recommendations in this report. Generally, that type of improvement or expansion to the system would be funded from a different source, such as Development Charges.

The estimated replacement value for the road system was **\$145.6 million** (2012\$). The estimate was based on the Asset Replacement Plan – Public Works, 2012 values and included gravel, rural and urban roads only.

6.2. Structures – Bridges and Culverts (> 3 meter span)

Program funding recommendations are a function of the dimensional information, construction materials and structure type. Recommended funding for the structures inventory should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

If the typical design life for a bridge or structure constructed prior to 2000 is 50 years, then 2% of the replacement cost should be the annual contribution to the capital reserve, to ensure that it can be reconstructed in that time frame.

The replacement value of the structures (bridges and major culverts) inventory was estimated at **\$30.0 million** based on historic costs in the Town's PSAB records. Future updates to this Plan will include more accurate replacement values based on an up-to-date bridge inspection report.

Budgetary recommendations in this report do not include items related to development and growth. The Town should consider those items as additional to the recommendations in this report. Generally, that type of improvement or expansion to the system would be funded from a different source, such as Development Charges.

6.3. Structures – Road Crossing Culverts (< 3 meter span)

Program funding recommendations are a function of the dimensional information, construction materials and structure type. Recommended funding for the road crossing culverts inventory should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the road crossing culverts was estimated at **\$3.02 million** (2012\$) as identified in the Culvert Inventory & Assessment, 2012. The estimate from the Asset Replacement Plan – Public Works, 2012 was unavailable since the road crossing culverts were included with stormwater linear assets.

6.4. Water Linear

Program funding recommendations are a function of the dimensional information, pipe material and pipe diameter. Recommended funding for the water linear assets should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the water linear asset group was **\$34.7 million** (2012\$) based on the values included in the Asset Replacement Plan - Water, 2012.

Budgetary recommendations in this report do not include items related to development and growth. The Town should consider those items as additional to the recommendations in this report. Generally, that type of improvement or expansion to the system would be funded from a different source, such as Development Charges.

6.5. Wastewater Linear

Program funding recommendations are a function of the dimensional information, pipe material and pipe diameter. Recommended funding for the wastewater linear assets should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the wastewater linear asset group was **\$24.4 million** (2012\$) based on the values included in the Asset Replacement Plan - Water, 2012.

Budgetary recommendations in this report do not include items related to development and growth. The Town should consider those items as additional to the recommendations in this report. Generally, that type of improvement or expansion to the system would be funded from a different source, such as Development Charges.

6.6. Stormwater Linear

Program funding recommendations are a function of the dimensional information, pipe material and pipe diameter. Recommended funding for the stormwater linear assets should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the stormwater linear asset group was **\$36.9 million** (2012\$) based on the values included in the Asset Replacement Plan - Water, 2012.

Budgetary recommendations in this report do not include items related to development and growth. The Town should consider those items as additional to the recommendations in this report. Generally, that type of improvement or expansion to the system would be funded from a different source, such as Development Charges.

6.7. Stormwater Management Facilities

Program funding recommendations are a function of the dimensional information, functional type and design capacity. Recommended funding for the stormwater management (SWM) facilities should include sufficient funding for maintenance, to ensure the SWM facility continues to meet storm discharge water quality and quantity objectives as well as maintain storm pond design capacity.

The estimated replacement value of the SWM facilities is nominal since the land or easement containing the SWM facilities were transferred to the Town under the subdivision development agreements. Assessment value could be utilized but since the pond will not need to be replaced, only cleaned and maintained, this would be unnecessary.

6.8. Fleet

Program funding recommendations are a function of the type and functional class of the vehicle. Recommended funding for the fleet assets should include sufficient capital expenditures that would allow the replacement of fleet as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the fleet asset group was **\$2.34 million** based on historic costs in the Town's PSAB records. This amount includes fleet assets in the 'A' category; pickup and light-duty trucks, general purpose tractors, as identified in the Town's PSAB records. This does not include many of the larger, specialized fleet assets such as fire trucks and hydro excavating (Vactor) trucks. Future updates will include all fleet and related equipment assets.

6.9. Facilities

Program funding recommendations are a function of the individual components, functional type and use. Recommended funding for the facility assets should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the facility asset group was **\$142.8 million** based on historic costs in the Town’s PSAB records. Future updates will further refine the facility component asset groups as well as separate facilities from equipment (i.e. well, pump station, etc.).

6.10. Parks

Program funding recommendations are a function of the dimensional information, functional type and land improvements. Recommended funding for the park assets should include sufficient capital expenditures that would allow the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the park asset group was **\$5.4 million** (2012\$) as identified in the Asset Replacement Plan – Leisure, 2012.

6.11. Transit

Program funding recommendations are a function of the asset type, material and function of the vehicle. Recommended funding for the transit assets should include sufficient capital expenditures that would allow the replacement of vehicles and bus pads as the end of design life is approached, in addition to sufficient funding for maintenance, to ensure that full life expectancy may be realized.

The estimated replacement value of the facility asset group was **\$582,840** based on historic costs in the Town’s PSAB records.

Table 6.1: Summary of Replacement Values & Annual Contribution Amounts

	Estimated Replacement Value	Estimated Annual Contribution
Roads*	\$ 145,600,000	\$ 3,360,000
Structures**	\$ 30,000,000	\$ 557,000
Road Crossing Culverts***	\$ 3,024,800	\$ 121,000
Water Linear*	\$ 34,700,000	\$ 430,000
Wastewater Linear*	\$ 24,400,000	\$ 490,000
Stormwater Linear*	\$ 36,900,000	\$ 737,000
SWM Facilities****	N/A	N/A
Fleet**	\$ 2,340,000	\$ 235,000
Facilities**	\$ 142,800,000	\$ 4,800,000
Parks*	\$ 5,400,000	\$ 300,000
Transit**	\$ 582,840	\$ 75,200
Total	\$ 425,747,640	\$ 11,105,200

* based on Asset Replacement Plan (GHD) 2012 data

** based on current Town PSAB data

*** Road Needs Study – Culvert Inventory & Assessment, 2012

**** pending completion of Comprehensive Storm Water Master Plan (late 2016)