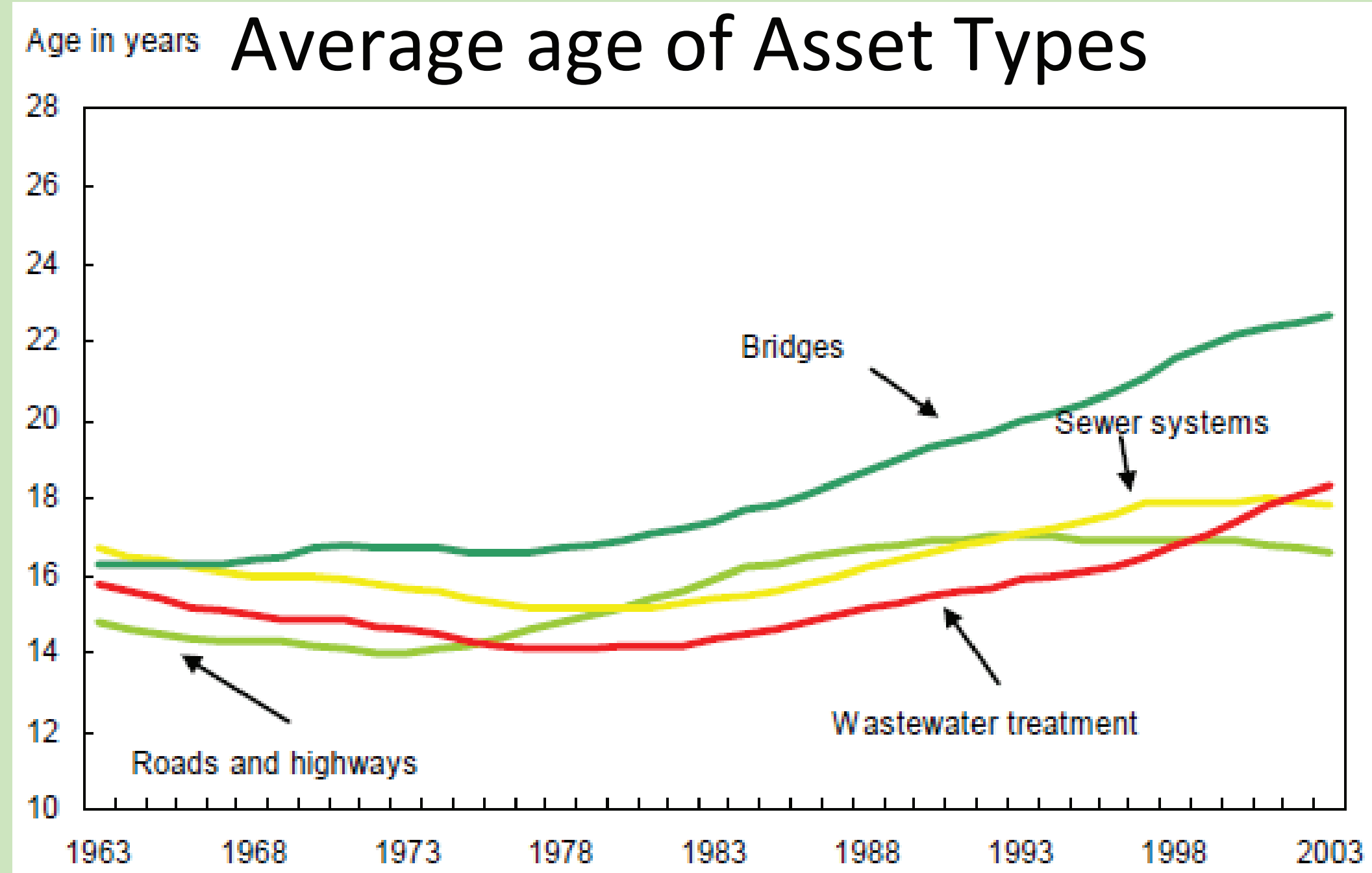
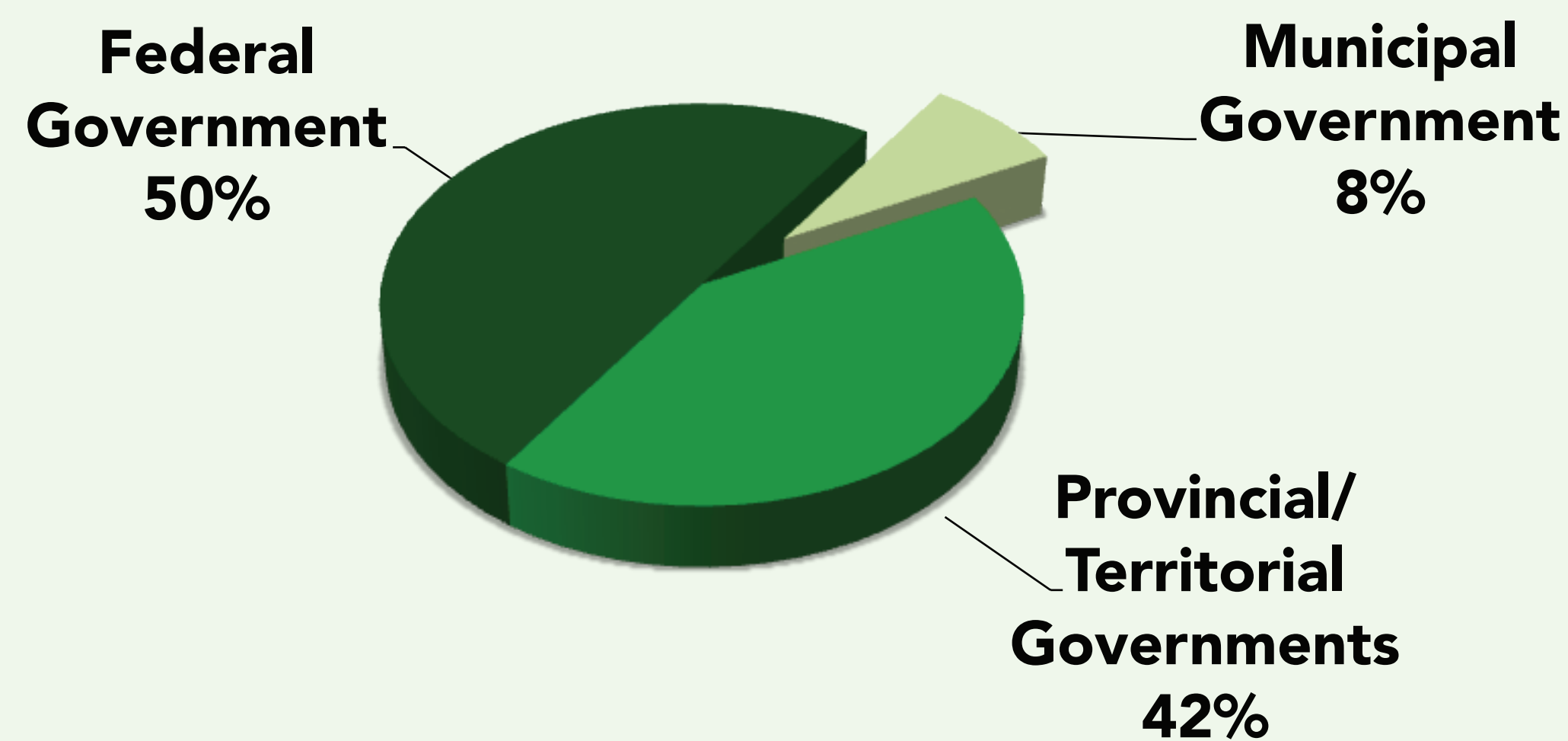


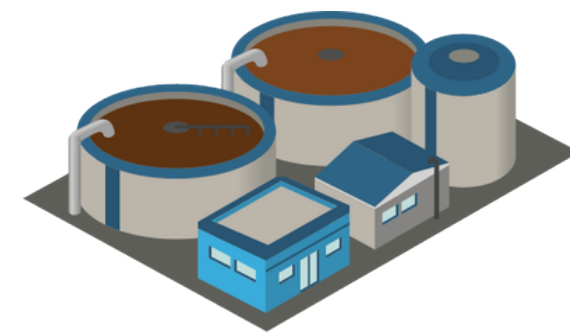
# ADDRESSING THE INFRASTRUCTURE GAP WITH NATURAL CAPITAL



## Municipal Government Share of all Tax Revenues



**Traditional Infrastructure:**  
The basic mechanical and/or engineered structures and equipment required to support society



**Natural Capital:** The land, water, atmosphere and resources of the planet



**Eco-services:** Flows of services provided by natural capital that allow life on Earth to prosper, e.g. water filtration, climate regulation, flood control, stormwater management, etc



**Green Infrastructure:**  
Infrastructure that is either entirely natural or incorporates a mix of engineered and natural components



While the growing infrastructure gap disproportionately affects municipalities, assessing and integrating services freely provided by nature represents an **economical solution.**

Summary of Value of Ecosystem Services by Benefit (2010)

Ecosystem Service	Total value/year (millions \$/yr)		Value per hectare (\$/ha)	
	Low	High	Low	High
Aesthetic and Recreational	\$22,612	\$44,181	\$18,854	\$282,747
Disturbance Regulation	\$1,970	\$5,032	\$2,941	\$296,886
Habitat Refugium and Nursery	\$60	\$773	\$5,083	\$62,633
Nutrient Cycling	\$130	\$348	\$17,249	\$47,833
Waste Treatment	\$291	\$1,052	\$1,351	\$115,089
Water Supply	\$2,656	\$7,008	\$3,932	\$44,887
Food Provisioning	\$1.95	\$1.95	\$1.58	\$1.58
Gas and Climate Regulation	Air Pollution	\$642	\$642	\$539
	Carbon Sequestration	\$52	\$55	\$122
	Carbon Storage	\$2,238	\$2,239	\$3,480
Total	\$30,653	\$61,331		

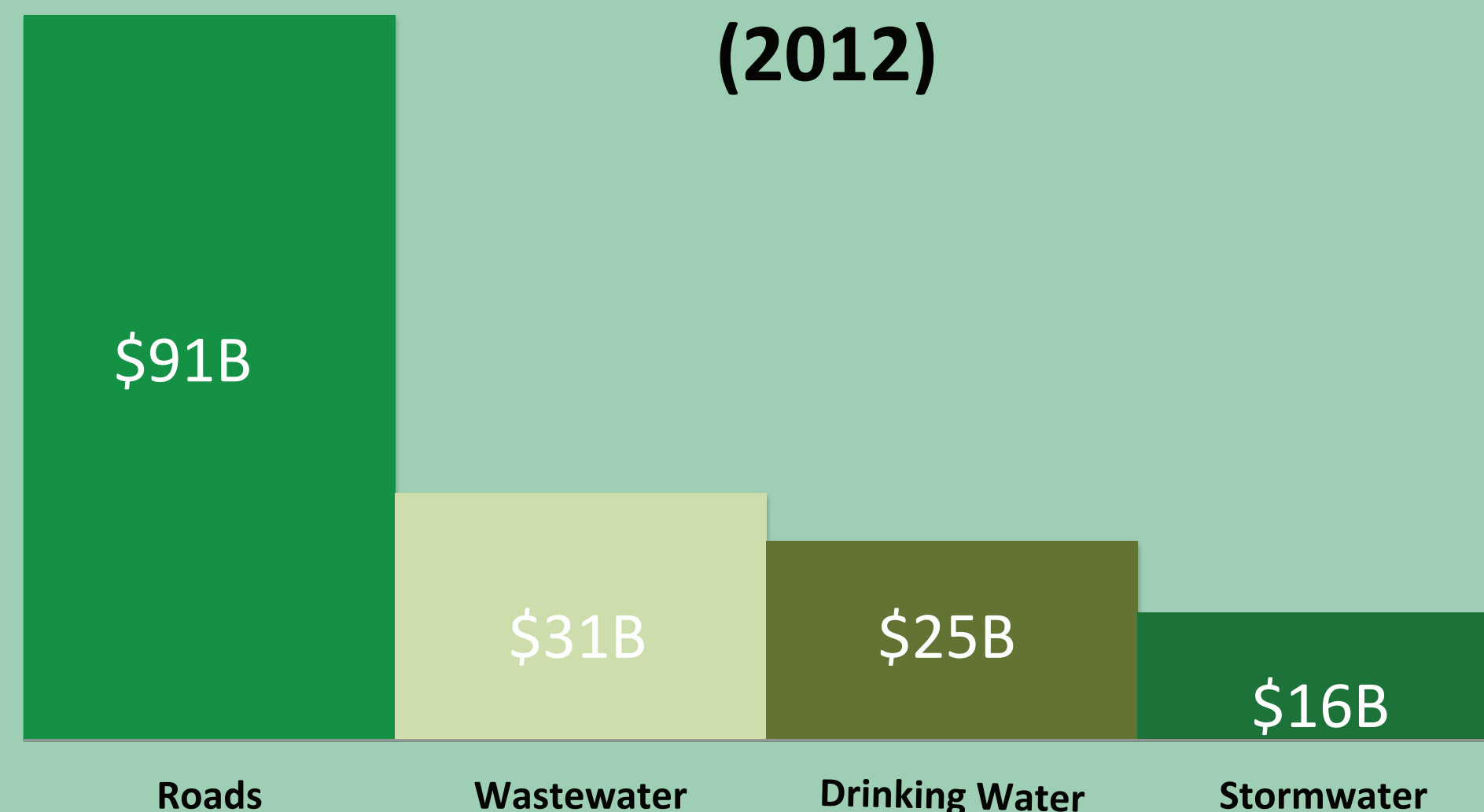
### Pre-PSAB 3150 accounting standard

- Tangible assets reported as a single year expense
- Only capital expense recorded

### Post-PSAB 3150 accounting standard

- Infrastructure recorded on financial statements as assets requiring annual amortization since construction/acquisition
- Municipalities must keep comprehensive inventory of all tangible assets, historic capital costs and their current condition
- Engage in lifecycle assessment and asset management planning

## Canada's \$172B Infrastructure Gap (2012)



Developing a standard methodology for the valuation of natural capital's eco-services is critical to helping local governments incorporate cost-effective green infrastructure into their asset management frameworks.

