# Financing Climate Solutions at the City of Toronto

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# The local costs of climate change

- Increase in length, frequency, and intensity of extreme weather
- Environmental, health, and social costs
- Financial costs:
  - Recovery from severe storms and floods in Canadian municipalities has cost up to $1 billion per event (Carvalho, 2018)
  - Fivefold increase in flood damage to homes and buildings predicted over next thirty years (CICC, 2020)
  - 8-14% increase in climate-related maintenance costs for public buildings by 2030 (FAO, 2021)

# Fiscal Framework

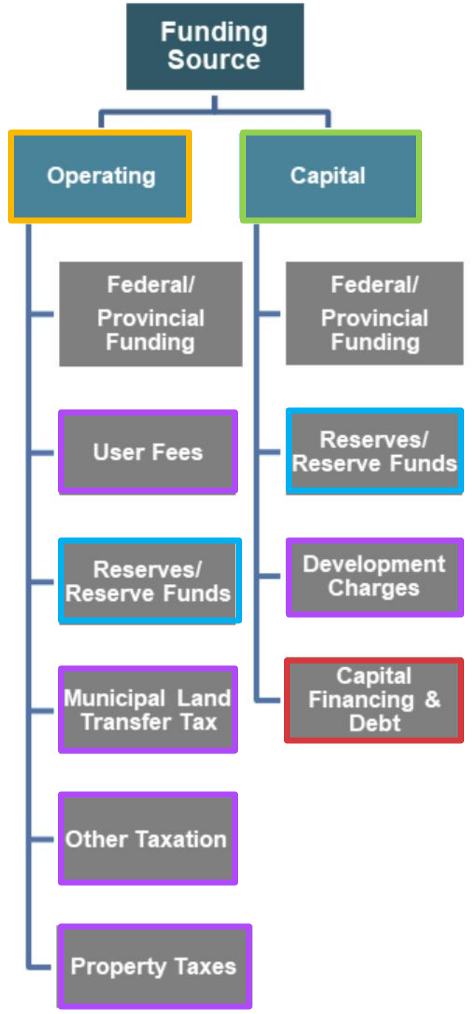
- City of Toronto Act (COTA) defines City's legal and financial authority, including authority to pass by-laws, issue debt, and collect revenue
  - Prohibited from levying income tax, wealth tax, general sales tax, gas tax
  - Authority to levy certain taxes not permitted for other municipalities, such as municipal land transfer tax
  - Authority to establish municipal corporations
  - Only permitted to issue long-term debt for capital financing
- Financial Management and Control By-Law (Municipal Code Ch. 71) guides all financial operations of the City
  - Proceeds from all sources of funding and finance are distributed to departments and agencies through the budgeting process, with approval from City Council

# City of Toronto Funding Sources

2025 Operating Budget: $18.8 billion

2025 Capital Budget: $5.2 billion

2025-2034 Capital Budget and Plan: $59.6 billion




Source: City of Toronto Budget Summary 2025

**Operating expenses**: ongoing costs of operations or of providing a service (e.g. staff salaries)

**Capital expenses**: spending on machinery, equipment, buildings and other goods that have a useful life of more than one year

**Own-source revenue:** funding the city collects without government or private investor contributions

- User fees and taxes (MLTT, property tax)
- Growth funding tools such as development charges
- Sale of assets and agency profits

**Reserves**: Savings set aside to fund future expenses

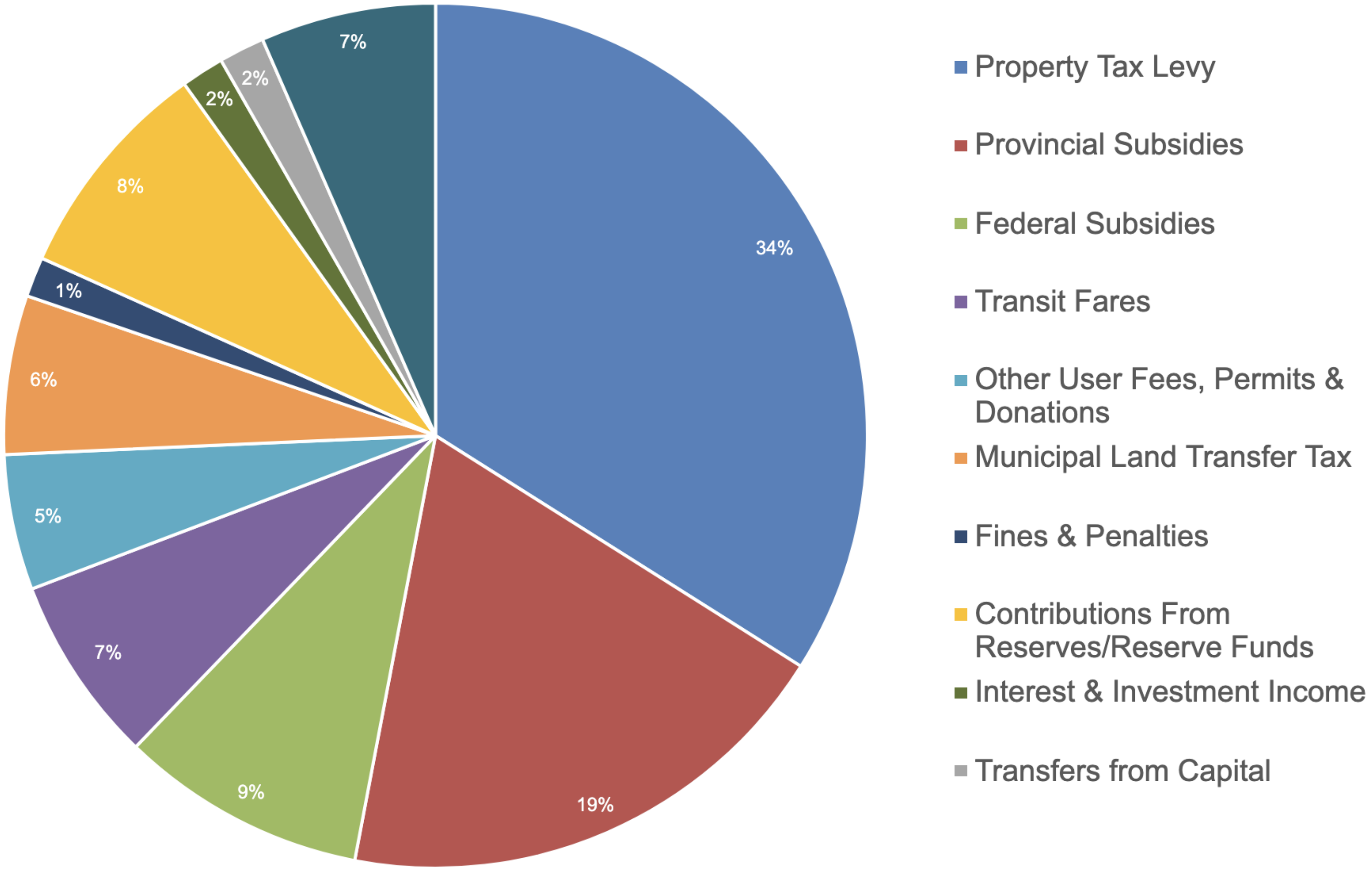
- E.g. State of Good Repair, Public Transit Funds
- Financial management of reserves dictated by Ch. 227 of Toronto Municipal Code

**Debt financing**: borrowing from private lenders

- Shorter-term borrowing from private financial institutions (less common)
- Issuing bonds with maturity over 10, 20, and 30 years (more common)
- Matches repayment term to useful life of capital projects
- More expensive than drawing on own-source revenue or intergovernmental transfers because interest must be paid to lenders

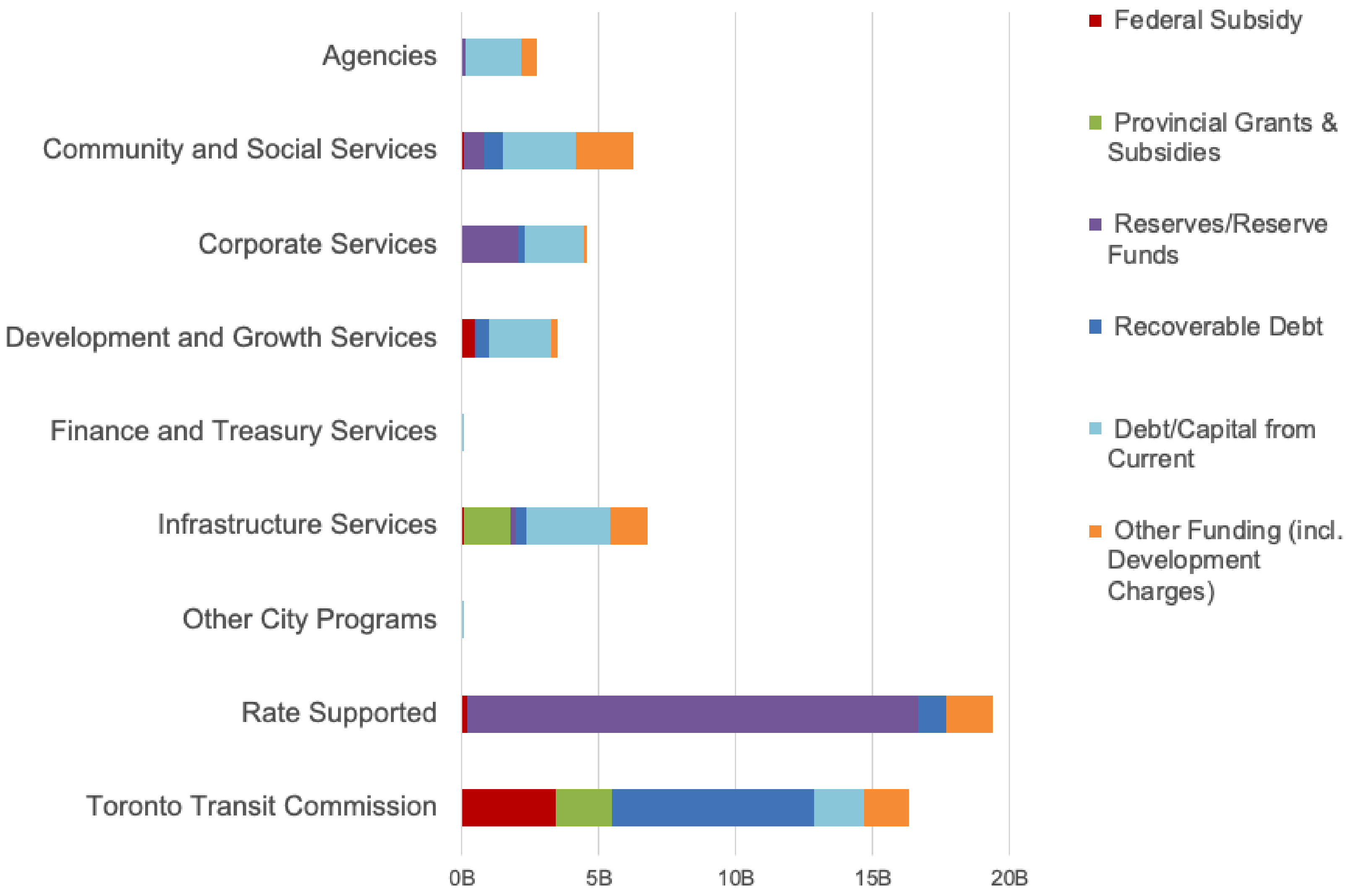
# Funding Sources for 2025 Operating Budget

Total 2025 Operating Budget: $18.8 billion



# Funding Sources for 2025-2034 Capital Budget and Plan, by Service Sector

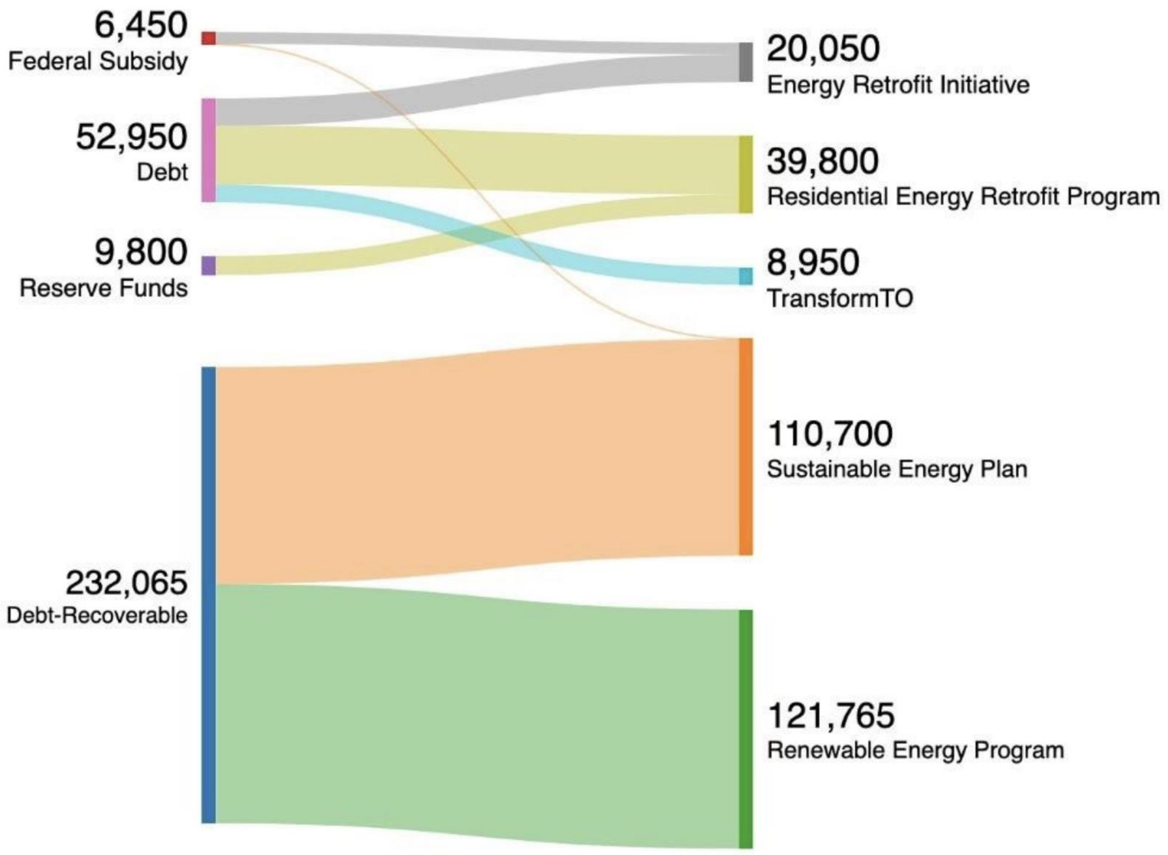
Total 2025-2034 Capital Budget and Plan: $59.6 billion



# Environment, Climate and Forestry's 2025 Capital Budget ($000s)

Total 2025 ECF Capital Budget: $35.7 million

Total 2025 ECF Operating Budget: $24.8 million



# Questions?

# New Instruments

| Instrument | Definition | Funding Category | Instrument Category | Examples / Related Instruments |
|---|---|---|---|---|
| A. Catastrophe (CAT) Bond<br><br>B. Environmental Impact Bond (EIB) | A. Risk-transfer instruments where investors lose principal if a defined disaster occurs.<br><br>B. Bonds linking repayment to project performance. | Debt Financing | Bond | Green Debenture<br>Social Debenture<br>New York Metropolitan Transportation Authority CAT Bond<br>DC Water and Sewer Authority EIB |
| C. Renewable Energy Utility | C. A municipally owned service provider that generates and/or distributes energy from renewable sources, with revenues typically reinvested into operations or city budgets. | Own-Source Revenue | Direct Provision / Aggregation Model | Toronto Water<br>Toronto Hydro<br>Markham District Energy<br>Santa Barbara Clean Energy |
| D. Adaptation Fund | A dedicated pool of capital, often combining public and private funding sources, used to fund adaptation and resilience activities. | Blended Finance | Fund | Toronto Atmospheric Fund<br>FCM Green Municipal Fund<br>Greening Government Fund<br>London Green Finance Find |
| E. Green Bank | Financial institutions specialized in provision of financing for projects with environmental benefits. | Blended Finance | Financial Aggregator | Ontario Climate Change Solutions Deployment Corporation |
| F. Infrastructure Levy<br><br>G. Strategic Land Management | 1. Taxes or fees levied on landowners possessing land that has gained value due to public action.<br><br>2. Actively buying, developing, selling and leasing land to advance public needs and recoup value increments borne through public action. | Own-Source Revenue | Land Value Capture | Growth funding tools: Development Charges, Community Benefits Charge, Alternative Parkland Dedication Rate |

# Discussion: CAT Bonds

- **Definition**: Risk-transfer instrument like insurance where investors lose principal if a defined disaster occurs.
- **Case study**: New York Metropolitan Transportation Authority CAT Bond
- **Discussion questions**
  - What challenges might the City of Toronto encounter in trying to implement CAT bonds?
  - Do you think this instrument is well-suited to funding the City's most pressing climate priorities?

# Discussion: Renewable Energy Utility

- **Definition**: A municipally owned service provider that generates and/or distributes energy from renewable sources, with revenues typically reinvested into operations or city budgets.
- **Case study**: Santa Barbara Clean Energy
- **Discussion questions**
  - What challenges might the City of Toronto encounter in creating a renewable energy utility?
  - Do you think a renewable energy utility is well-suited to funding the City's most pressing climate priorities?

# Takeaways

- Current system:
  - Heavy reliance on property tax, intergovernmental transfers, and user fees to fund city operations and programs
  - Use of debt financing to fund capital across service sectors, but with legal limit
- Opportunities:
  - New debt financing structures
  - New approaches to aggregating funds, lowering input costs, and stimulating growth in green economy
- Challenges:
  - Risk that new instruments will not be administratively cost effective
  - Limitations on City's legal authority
  - Advantages of some instruments come with important tradeoffs, e.g. new land value capture tools and EIBs

# Thank you