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## 2023 CAPITAL BUDGET BRIEFING NOTE

### State of Good Repair (SOGR) Backlog

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#### Issue/Background:

This briefing note presents the State of Good Repair (SOGR) Backlog for Tax and Rate Supported City Programs and Agencies, and the impact investments in the 2023–2032 Capital Budget and Plan will have on the City's SOGR Backlog.

The City has an expansive asset inventory and its infrastructure is aging. The City's capital program is driven largely by the cost of maintaining these physical assets in a state of good repair. Managing the accumulated SOGR backlog is a key capital strategic objective and priority for the City in order to ensure that current assets are able to support the delivery of City services and meet service outcomes.

When capital funding for planned SOGR capital works is less than the annual SOGR need, the unfunded balance is added to the accumulated SOGR backlog. Conversely, should the capital funding in SOGR exceed the planned SOGR need, the excess is applied against the accumulated SOGR backlog, effectively reducing the balance.

In the absence of comparable benchmarks, the City has established its own state of good repair performance measure; "*backlog as a percentage of total asset value (replacement value)*" that is applied across its portfolio of assets. The benefits of gathering accurate asset data is that it:

- provides a true picture of what the accumulated SOGR backlog is;
- identifies areas of growing need and attention to the City's asset condition; and
- shows the impact of City SOGR planned funding on the City's accumulated SOGR backlog for the capital planning period.

This metric provides the City with year over year comparisons and trends that assist City Council in determining how best to apply scarce resources in making strategic investments to reduce the City's SOGR Backlog by Program/Agency and/or by asset type. By employing this practice, the City can measure its progress in achieving SOGR objectives and conversely, can determine where additional investments are required. Details of the SOGR Backlog trend and percentage of total asset value for each Program and Agency can be found in their respective Budget Notes.

In addition to the SOGR backlog metric, the City employs practices that require comprehensive asset value condition assessments by asset type; the use of decision

support tools to rank and prioritize reinvestment needs and debt funding scenario analysis, all of which form part of the City's regular capital planning process. These actions taken together improve asset lifecycle management, more accurately identify the SOGR needs in the City's portfolio, and reflect the City's strategic commitment to address the infrastructure deficit in a holistic fashion.

The City owns an inventory of physical assets valued at \$168.4 billion as shown in Table 1 below:

**Table 1: City's Physical Infrastructure**

<b>Tax &amp; Rate Supported Programs</b>		<b>Estimated Asset Value</b>
<b>Water &amp; Wastewater Infrastructure</b>	<ul style="list-style-type: none"> <li>- 4 water filtration &amp; 4 wastewater treatment plants</li> <li>- 11 reservoirs, 4 elevated water storage tanks</li> <li>- 7 storm storage and detention tanks</li> <li>- 110 pumping stations</li> <li>- 10,500+ km for sanitary, combined and storm sewers</li> <li>- 6,100+ km of distribution and transmission watermains</li> </ul>	<b>\$87.3 Billion</b>
<b>Transportation Infrastructure</b>	<ul style="list-style-type: none"> <li>- 5,760 km of roads</li> <li>- 900 bridges/culverts and 7,400 km of sidewalks</li> <li>- 2,479 traffic control signals and 489 pedestrian crossovers</li> <li>- 776 centreline km of bikeway network</li> </ul>	<b>\$28.7 Billion</b>
<b>Public Transit System</b>	<ul style="list-style-type: none"> <li>- More than 150 bus routes, 10 streetcar routes, 3 subway lines and 1 rapid transit line</li> <li>- Fleet of 2,051 buses, 204 streetcars, 150 trains and 264 Wheel-Trans buses</li> </ul>	<b>\$23.2 Billion</b>
<b>Buildings, Facilities &amp; Fleet</b>	<ul style="list-style-type: none"> <li>- 478 City-owned facilities covering more than 12.0 million sq. ft.</li> <li>- 8,000 fleet assets and a network of fuel sites and electric vehicle charging points</li> </ul>	<b>\$11.4 Billion</b>
<b>TCHC</b>	<ul style="list-style-type: none"> <li>- 58,500 public housing units (full responsibility)</li> </ul>	<b>\$11.9 Billion</b>
<b>Parkland &amp; Other Land</b>	<ul style="list-style-type: none"> <li>- 8,000 hectares of parkland</li> </ul>	<b>\$5.9 Billion</b>
<b>Estimated Asset Value</b>		<b>\$168.4 Billion</b>

As City Programs and Agencies continue to mature its asset management best practices, SOGR backlog funding pressures tend to rise as better information is received about the condition of City infrastructure.

- This has been reflected in the 2023 beginning SOGR backlog balance that is estimated at \$9.525 billion, an increase of \$81.0 million compared to the \$9.444 billion SOGR backlog that was expected at the end of 2022 based on prior year estimates.

In addition, the Core Infrastructure Asset Management Plan was introduced and approved by Council in 2021 to integrate planning, finance, engineering and operations

to realize value from assets, reduce risks and provide expected levels of service to the community in a socially, environmentally and economically sustainable manner.

- Furthermore, the next phase of asset management planning is underway and the Asset Management Plan for all infrastructure assets, in addition to core infrastructure, will be completed for Council's consideration prior to the provincial timeline of July 1, 2024.

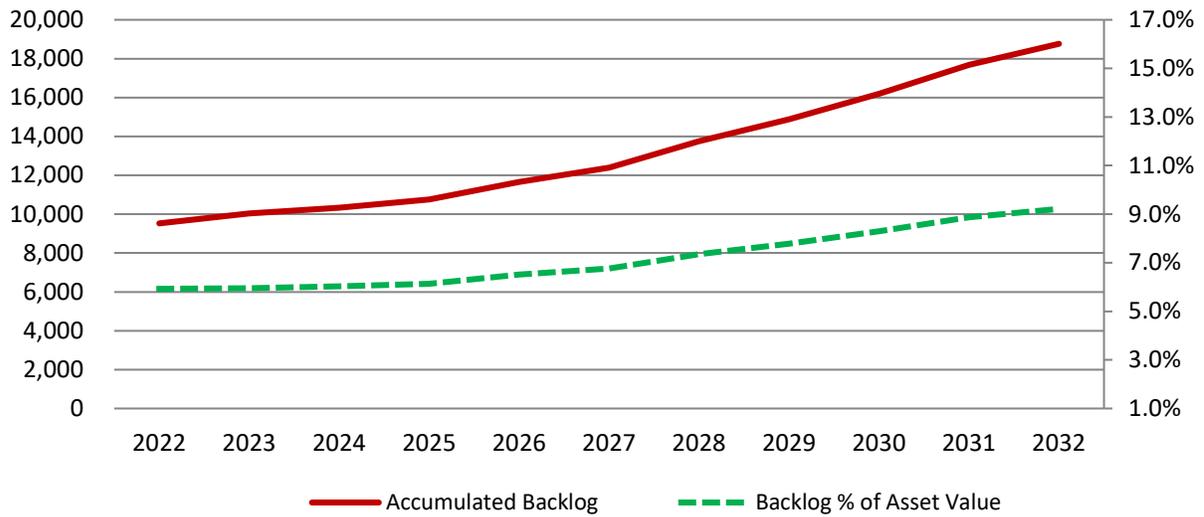
## Key Points:

### Total City SOGR Backlog (Tax & Rate)

- The 2023–2032 Tax and Rate Capital Budget & Plan allocates \$24.7 billion or 48.9% of total recommended funding to capital works which maintain City infrastructure in a state of good repair, specifically:
  - An increase investment in SOGR of \$1.2 billion or 5.1% compared to last year's 10 year plan of \$23.5 billion.
  - An increase investment in SOGR of \$8.1 billion or 49.0% compared to the 10 year plan from 2014 – 2023 of \$16.6 billion. This increase has resulted in added investments in:
    - ✓ Transit – nearly doubling the overall investment in the TTC Base Capital Plan supported through the introduction of the City Building Fund;
    - ✓ TCHC Building repairs – An additional \$1.6 billion in city funding over the next 10 years to continue to bring the TCHC building portfolio into a state of good repair by 2026;
    - ✓ Continued growth in our SOGR investments in water and waste water infrastructure; and
    - ✓ More than doubling investments in City Fleet renewal.
- Despite the above noted increases in SOGR funding, the total accumulated SOGR backlog estimate is expected to increase from \$9.5 billion at the end of 2022 to \$18.8 billion by the end of 2032 and respectively the backlog as a percentage of asset value will increase from 5.9% to 9.2%.
- The estimated SOGR backlog by the tenth year of the Capital Plan, that had already been expected to grow due to aging infrastructure and assets, has seen an increase of \$2.0 billion compared to last year's projections due in large part to:
  - Paused capital projects due to COVID-19 funding shortfalls;
  - Supply chain issues and cost escalations;
  - Specialized labour shortages; and
  - Increased cost of borrowing.
- While the SOGR backlog is estimated to grow to \$18.8 billion by the end of 2032, investments in SOGR will be further prioritized, with a focus on:

- Leveraging the City Building Fund extension to mitigate growing pressure in Transit and Housing;
- Continue to enhance asset management planning for all City infrastructure; and
- Conduct a review of remaining SOGR challenges and return with a strategy and opportunities to address for the 2024 budget process, with a focus on the areas projected to see the greatest growth (Transit, Transportation, Recreation and City building).

**Chart 1: 10 Year Capital SOGR Backlog – Tax and Rate Supported Programs**



Tax & Rate Supported (\$M)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total Asset Value	160,725	168,440	171,624	175,466	179,130	183,030	187,098	191,196	195,122	199,270	203,612
Accumulated Backlog	9,525	10,032	10,337	10,761	11,658	12,389	13,748	14,879	16,193	17,686	18,764
Backlog % of Asset Value	5.9%	6.0%	6.0%	6.1%	6.5%	6.8%	7.3%	7.8%	8.3%	8.9%	9.2%

### Tax and Rate Supported Program

- As summarized in table 2 below, the accumulated balance for Tax Supported Programs will increase by \$10.506 billion by 2032, which will be offset by \$1.267 billion decrease in the Rate Supported Programs, consequently, the overall accumulated backlog balance is expected to increase by \$9.239 billion over the 10 year period.
- Rate Supported Programs includes Toronto Water and Toronto Parking Authority both of which will have their SOGR backlog nearly eliminated in the 10 year period.

**Table 2: SOGR Backlog by Program – Summary**

<b>SOGR Backlog (\$M)</b>	<b>2023 (beg. bal.)</b>	<b>2023 (1 Year)</b>	<b>2027 (5 Year)</b>	<b>2032 (10 Year)</b>	<b>2022-2032 Change</b>	
Tax Supported Programs	7,740	8,113	11,415	18,246	10,506	▲
Rate Supported Programs	1,785	1,920	975	518	(1,267)	▼
<b>Total SOGR Backlog (Tax &amp; Rate)</b>	<b>9,525</b>	<b>10,032</b>	<b>12,389</b>	<b>18,764</b>	<b>9,239</b>	<b>▲</b>
Total Asset Value	160,725	168,440	183,030	203,612	42,887	
SOGR as % Asset Value	5.9%	6.0%	6.8%	9.2%		

- The 2023–2032 Tax Supported Capital Budget and Plan will invest \$16.6 billion or 49.5% of the total \$33.6 billion planned capital investments, while Rate Supported Capital Budget and Plan will spend \$8.1 billion or 47.7% of the total \$17.0 billion in SOGR projects to maintain assets in a state of good repair for the next 10 years.

**Table 3: SOGR Backlog by Program – Summary**

SOGR Backlog (\$M)	2023 (beg. bal.)	2023 (1 Year)	2027 (5 Year)	2032 (10 Year)	2022-2032 Change	
Toronto Transit Commission	0	92	2,646	6,285	6,285	▲
Transportation Services	1,816	2,147	3,725	7,013	5,197	▲
Corporate Real Estate Management	911	927	1,157	1,282	371	▲
Parks, Forestry & Recreation	773	805	1,089	1,179	406	▲
Exhibition Place	53	55	74	157	104	▲
Technology Services	0	0	16	49	49	▲
Other	944	930	792	740	(204)	▼
<b>Total City Backlog (excl. Gardiner &amp; Toronto Water)</b>	<b>4,496</b>	<b>4,957</b>	<b>9,499</b>	<b>16,705</b>	<b>12,208</b>	<b>▲</b>
F.G.Gardiner Expressway Rehabilitation	1,888	1,828	748	80	(1,807)	▼
Toronto Water	1,592	1,748	879	492	(1,100)	▼
Toronto Housing Corporation	1,549	1,500	1,264	1,487	(62)	▼
<b>Total SOGR Backlog (Tax &amp; Rate)</b>	<b>9,525</b>	<b>10,032</b>	<b>12,389</b>	<b>18,764</b>	<b>9,239</b>	<b>▲</b>
Total Asset Value	160,725	168,440	183,030	203,612	42,887	
SOGR as % Asset Value	5.9%	6.0%	6.8%	9.2%		

- Table 3 above details the main contributors to the City's accumulated SOGR backlog, noting six key program areas contributing to the expected SOGR backlog increase:
  - Namely, Toronto Transit Commission, Transportation Services, Corporate Real Estate Management (CREM), Parks, Forestry and Recreation, Exhibition Place and Technology Services;
  - These six programs make up \$3.553 billion or 37.3% of the \$9.525 billion accumulated SOGR backlog balance at the end of 2022 and \$15.964 billion or 85.1% of the \$18.764 billion backlog expected by 2032.
- Of these six programs, Toronto Transit Commission will be the largest contributor to the City's SOGR Backlog increase, projected to rise by \$6.285 billion in the 10 year period.
  - When excluding the backlog associated with unfunded fleet procurement and overhaul investments, the SOGR Backlog would be significantly reduced to \$2.645 billion or 7.5% of asset value by the end of 2032, noting that unfunded vehicle needs make up 58% of this backlog.

- While SOGR backlog is expected to increase for TTC and the other five programs noted above, dedicated SOGR investments are expected to reduce the accumulated SOGR backlog balance for certain programs, specifically:
  - Transportations Services as it relates to the F.G. Gardiner Expressway Rehabilitation (FGG) project;
  - Continued and increased investments towards Toronto Community Housing to address building repair requirements; and
  - Other significant reductions are expected for other Programs/Agencies such as Toronto Water, Toronto Parking Authority, Children Services, Economic, Development and Culture, Fleet Services, and Toronto Region Conservation Authority (TRCA).

### **Issues and Strategies**

The City has implemented a series of capital investment strategies to help address the continued pressure from its accumulated SOGR backlog. This is evidenced by the near elimination of SOGR backlog in Toronto Water and FGG project, and other key areas such as TCHC, Toronto Parking Authority, TRCA, Children Services and the considerable increase in SOGR funding for Transit made possible by the City Building Fund. However, the backlog in other key program areas continues to grow.

Factors contributing to the increase in accumulated SOGR backlog for the City includes:

- The City of Toronto, along with other cities globally, is currently experiencing a high inflationary environment. The inflationary pressure is causing a series of cost escalations across City's projects, such as increasing in costs of labour and materials. As a result, City is undertaking tremendous effort to suppress the growing SOGR backlog by increasing its SOGR investment, and working closely with other levels of government to address the budget shortfall;
- City is continuing to receive updated asset values and condition assessments from asset inspections that more precisely account for SOGR needs. Also, as the City continue to mature its asset management best practices and better information is received about the condition of the infrastructure, SOGR needs are expected to continue to rise; and
- Global supply chain issues and shortages in specialized labour are impacting the readiness to proceed of capital projects; and overall capital spending capacity, which results in the deferral of planned SOGR projects. As such, the capital funding to address SOGR backlog may be spread over a longer period of time.

The City will continue to advance capital infrastructure investments and explore sustainable long term financing strategies to address on-going SOGR needs and establish a balance between SOGR and growth/service improvement capital funding priorities, to maintain the City's current \$168.4 billion of assets in a state of good repair

as well as improve and add assets to meet service demand and growth of the City. As previously noted, these strategies will include:

- Leveraging the City Building Fund extension to mitigate growing pressure in Transit and Housing;
- Continue to enhance asset management planning for all City infrastructure; and
- Conduct a review of remaining SOGR challenges and return with a strategy and opportunities to address for the 2024 budget process, with a focus on the areas projected to see the greatest SOGR backlog growth.

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**Attachments:**

Appendix 1: Change in Accumulated SOGR Backlog 2023 to 2032 by Program

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Program Description (\$Millions)	2023					2023 - 2032				
	Accum. Backlog Beginning Balance	SOG Needs Added	SOG Backlog Addressed	Backlog Incr./ (Decr.)	Accum. Backlog Ending Balance	SOG Needs Added	SOG Backlog Addressed	Backlog Incr./ (Decr.)	Accum. Backlog 2031 Balance	
<b>Community and Social Services</b>										
Children's Services	3.0	2.1	2.7	(0.7)	2.4	18.8	21.0	(2.2)	0.8	▼
Economic Development and Culture	46.8	6.3	6.7	(0.4)	46.4	46.3	67.8	(21.5)	25.3	▼
Parks, Forestry & Recreation	772.9	102.3	69.9	32.4	805.3	1,143.4	737.0	406.5	1,179.4	▲
Seniors Services and Long-Term Care	10.1	13.8	18.2	(4.3)	5.8	140.1	83.9	56.2	66.3	▲
Shelter, Support & Housing Administration	10.2	12.1	4.9	7.3	17.4	69.9	69.9	0.0	10.2	-
Toronto Housing Corporation	1,549.5	195.8	245.0	(49.2)	1,500.3	1,693.1	1,755.5	(62.4)	1,487.1	▼
<b>Sub-Total Community and Social Services</b>	<b>2,392.5</b>	<b>332.4</b>	<b>347.4</b>	<b>(14.9)</b>	<b>2,377.6</b>	<b>3,111.6</b>	<b>2,735.1</b>	<b>376.5</b>	<b>2,769.1</b>	<b>▲</b>
<b>Infrastructure and Development Services</b>										
Transportation Services	3,703.4	547.4	276.0	271.4	3,974.8	7,092.4	3,703.0	3,389.5	7,092.8	▲
<b>Sub-Total Infrastructure and Development Serv.</b>	<b>3,703.4</b>	<b>547.4</b>	<b>276.0</b>	<b>271.4</b>	<b>3,974.8</b>	<b>7,092.4</b>	<b>3,703.0</b>	<b>3,389.5</b>	<b>7,092.8</b>	<b>▲</b>
<b>Corporate Services</b>										
Corporate Real Estate Management	911.0	100.9	85.1	15.8	926.8	935.7	564.9	370.8	1,281.8	▲
Fleet Services	28.7	121.6	94.6	27.0	55.7	712.7	716.2	(3.5)	25.2	▼
Technology Services	0.0	21.3	21.3	0.0	0.0	262.2	213.0	49.2	49.2	▲
<b>Sub-Total Corporate Services</b>	<b>939.7</b>	<b>243.8</b>	<b>201.0</b>	<b>42.8</b>	<b>982.5</b>	<b>1,910.5</b>	<b>1,494.1</b>	<b>416.4</b>	<b>1,356.1</b>	<b>▲</b>
<b>Total City Operations</b>	<b>7,035.6</b>	<b>1,123.7</b>	<b>824.4</b>	<b>299.3</b>	<b>7,334.8</b>	<b>12,114.6</b>	<b>7,932.1</b>	<b>4,182.4</b>	<b>11,218.0</b>	<b>▲</b>
<b>Agencies</b>										
Exhibition Place	52.9	24.1	22.1	2.0	54.9	263.6	160.0	103.6	156.5	▲
TO Live	238.8	0.0	5.5	(5.5)	233.3	0.0	64.0	(64.0)	174.9	▼
Toronto & Region Conservation Authority	161.5	17.1	22.5	(5.4)	156.2	135.6	198.9	(63.3)	98.2	▼
Toronto Public Library	175.9	14.8	20.3	(5.5)	170.4	277.8	239.3	38.5	214.4	▲
Toronto Zoo	75.7	21.2	26.4	(5.2)	70.5	159.4	136.2	23.2	98.9	▲
<b>Sub-Total Other City Programs</b>	<b>704.8</b>	<b>77.2</b>	<b>96.8</b>	<b>(19.6)</b>	<b>685.2</b>	<b>836.4</b>	<b>798.3</b>	<b>38.1</b>	<b>742.9</b>	<b>▲</b>
<b>Toronto Transit Commission</b>										
Toronto Transit Commission	0.0	1,012.7	920.2	92.5	92.5	13,005.5	6,720.4	6,285.0	6,285.0	▲
<b>Sub-Total Toronto Transit Commission</b>	<b>0.0</b>	<b>1,012.7</b>	<b>920.2</b>	<b>92.5</b>	<b>92.5</b>	<b>13,005.5</b>	<b>6,720.4</b>	<b>6,285.0</b>	<b>6,285.0</b>	<b>▲</b>
<b>Total - Tax Supported Programs</b>	<b>7,740.4</b>	<b>2,213.5</b>	<b>1,841.4</b>	<b>372.1</b>	<b>8,112.5</b>	<b>25,956.5</b>	<b>15,450.9</b>	<b>10,505.6</b>	<b>18,246.0</b>	<b>▲</b>
<b>Rate Supported Programs</b>										
Toronto Parking Authority	193.0	0.0	21.0	(21.0)	172.0	50.0	217.0	(167.0)	26.0	▼
Toronto Water	1,591.8	828.1	672.3	155.8	1,747.6	6,532.2	7,631.7	(1,099.5)	492.3	▼
<b>Sub-Total Rate Supported Programs</b>	<b>1,784.8</b>	<b>828.1</b>	<b>693.3</b>	<b>134.8</b>	<b>1,919.6</b>	<b>6,582.2</b>	<b>7,848.7</b>	<b>(1,266.6)</b>	<b>518.3</b>	<b>▼</b>
<b>Total - Rate and Tax Supported Programs</b>	<b>9,525.2</b>	<b>3,041.6</b>	<b>2,534.7</b>	<b>506.9</b>	<b>10,032.1</b>	<b>32,538.7</b>	<b>23,299.6</b>	<b>9,239.0</b>	<b>18,764.3</b>	<b>▲</b>

### Note:

- Funding to address the state of good repair backlog for City-owned facilities for Paramedic Services, Toronto Fire and Toronto Public Health is included in CREM's 10-Year Capital Plan as asset management capital funding was transferred to CREM in 2010.