

TORONTO PUBLIC HEALTH APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

Toronto Public Health is recommending a 2020-2029 Capital Budget and Plan of \$29.835 million including a 2020 Capital Budget of \$2.676 million. The 2021-2029 Capital Plan and Forecast is \$27.159 million. The 10-Year Capital Budget and Plan request will provide funding for twenty-two Information Technology projects.

Toronto Public Health 2020-2029 Capital Budget and Plan Project Details

The objective of the twenty-two projects, where some projects have more than one phase, included in the 2020-2029 Capital Budget and Plan is to enable TPH staff to deliver excellent and seamless service to residents in need in an innovative and integrated manner. These projects are summarized in the following four initiatives in support of TPH IT Strategic Goals:

Improve Decision-making Support

Information technology has a key role in supporting TPH's objectives of service excellence and accountability. Toronto Public Health plans to accomplish this by improving access to quality information in business systems and data warehouses, and by strengthening analytical capabilities through the use of various analytical tools.

- *Datamart Data Warehouse - Phase 3* - 2018 to 2020 (\$0.831million) - Building on the accomplishments of phase 2, this project will support further improvements in reporting, analytics, performance measurement, and decision making across additional data sources within TPH programs; and will align with corporate standards by migrating the TPH Business Intelligence (BI) environment to the corporate environment. This project will enhance TPH operations by allowing stakeholders to better monitor performance and analyze trends to adjust programs and meet mandatory provincial reporting requirements in a timely manner.
- *Geographic Information Enablement* - 2024 to 2025 (\$0.455 million) - This project will enhance the capacity to display location based information geographically (on maps) including reading ward profiles, health surveillance query information, heat maps (e.g. identifying who is vaccinated in an area), and create a secure Geographic Information System (GIS) for managing and protecting data with sensitive personal health information. Enhanced GIS capability within TPH, including health statistics related to wards and neighbourhoods, will provide valuable inputs into decision making for service provisioning.

TORONTO PUBLIC HEALTH

APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

- *Common Geographical Interface (CGI)* - 2024 to 2025 (\$0.594 million) - This project will develop a scalable system component that will facilitate the integration of mapping information from various TPH applications. This system component could be leveraged by other Divisions requiring similar functionality.
- *Healthy Smart Cities* – 2021 to 2024, and 2029 (\$3.006 million) - These projects will develop a strategy and multi-year plan to participate in Smart City initiatives and leverage opportunities made available through mobility, cloud, big data, and the Internet of Things with the initial focus on improving TPH's ability to perform predictive analytics which will ultimately help solve City challenges in improving the health and well-being of the City's population.

Improve Workforce Capabilities

In support of TPH's commitment to excellence by ensuring continuous improvement in organizational performance and service delivery, workforce capabilities for TPH staff will be enhanced through the use of technological tools that will improve knowledge sharing with stakeholders and team based productivity; scheduling and deployment of resources; and enabling staff to effectively deliver services from alternate work locations.

- *Community Collaboration - Seed & Implementation* - 2020 to 2023 (\$1.965 million) - These projects will document business requirements and implement community collaboration solutions that provide secure two-way communication with the public, partner agencies, and businesses in order to improve information sharing.
- *Mobile Enablement* - 2024 to 2026 (\$1.141 million) - This project will deploy mobile functionality to public health professionals to access and enter client and service data while in the community. The preliminary users are the needle exchange, sexually transmitted infections, and Communicable Disease liaison programs; and the Dental and Oral Health programs. This project will also provide mobile applications for use by the public to provide information pertaining to pre and post-natal support, health alerts, and agencies providing public health services.

Improve Business Processes

TPH will improve business processes through simplification and redesign of processes and system integration.

- *Electronic Medical Records - Phase 3 & 4* - 2018 to 2020 (\$4.368 million) - This project will replace a system that has reached its end of life with a new client information system to provide a comprehensive electronic record of patients' health-related information for those seen in sexual health and methadone clinics creating efficiencies in business processes and improved client care.

TORONTO PUBLIC HEALTH

APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

- *Correspondence and Communication Tracking* - Seed & Implementation - 2020 to 2022 - (\$0.681 million) - These projects will implement an automated workflow and document management solution for tracking correspondence and communications received by the Medical Officer of Health. The proposed system will reduce manual processes, and improve timelines to produce reports and respond to queries.
- *Socio-Demographic Data Collection and Reporting* - 2025 to 2027 (\$1.848 million) - This project will implement an automated mechanism to collect socio-demographic data across TPH programs and integrate with service data residing in various systems in order to better understand client needs and improve decision making around service delivery.
- *Call Centre Revitalization* - 2026 to 2027 (\$0.814 million) - Currently each centre operates independently with their own set of processes and tools. Most of these call centres offer phone support only, restricting the options available to the public to interact with TPH. This project will improve the overall customer service experience at the 14 public health call centres by implementing standard tools commonly used by call centres including call recording, e-chat and knowledge base.
- *Customer Relationship Case Management* - 2026 to 2028 (\$1.458 million) - This project will implement an integrated client relationship solution to manage client information and interactions across all TPH programs from a central location. The solution will provide authorized staff with anywhere, any-time access to full client records leading to improved service levels and an enhanced customer experience.

Improve IT Services

As a strategic enabler in the delivery of TPH services, it is critical that information technology services, systems and applications are maintained and continually improved. This will be accomplished by improving workforce skills, abilities, and client relationship management; stakeholder communication; the management of risk; information technology processes and service delivery; and information technology for continued optimal use.

- *Inspection Management - Implementation* - 2020 to 2023 (\$5.287 million) – This project will replace current inspection systems leveraging corporate customer relationship management systems and common infrastructure components to reduce ongoing technical infrastructure and resource costs and improve efficiency and effectiveness of inspection, investigation, and enforcement service delivery.

TORONTO PUBLIC HEALTH

APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

- *Early Abilities Information System – Implementation* - 2021 to 2023 (\$2.654 million) - This project will replace the outdated case management system (known as DANIC) used by the Early Abilities program in order to continue to facilitate the sharing of information with partner agencies and reduction of duplication.
- *Community Health Information System* - 2017 to 2021 (\$1.191 million) - This project will implement enhancements to the Toronto Community Health Information System (TCHIS) resulting in improvements in application workflows, reduction in system errors, and compliance with legislative requirements including Personal Health Information Protection Act (PHIPA).
- *Reporting Environment Enhancement* - 2028 to 2029 (\$0.616 million) - This project will replace the obsolete reporting environment and introduce a reporting framework which will rationalize various reporting applications which use varied technologies and tools and require extensive resources to maintain.

Improve Access to Government services

Modernize the customer experience through providing the ability for industries and business partners to securely manage their chemical use and release information held by the City reducing processing time and effort; enabling the public to subscribe to alerts and notifications; and access health information to improve learning.

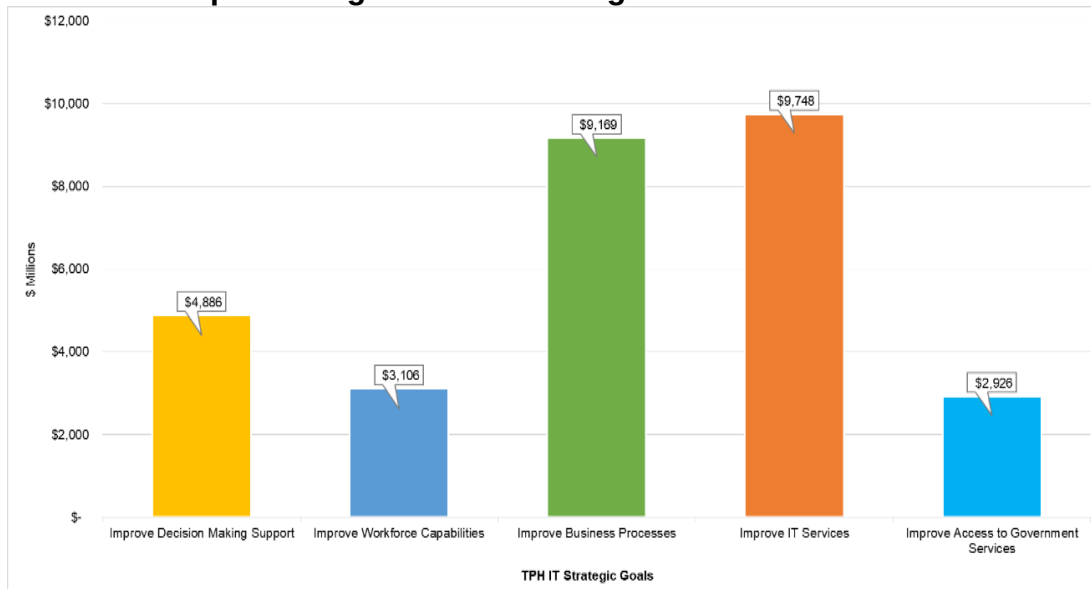
- *Public eLearning* - 2025 to 2026 (\$0.975 million) - Leveraging corporate and proven available solutions, this project will implement a system to enhance the ability to create, deliver and manage public health eLearning for Toronto citizens. System components will include registration, content design and development, payment handling and reporting.
- *Public Notifications & Advisories* - 2027 to 2028 (\$0.831 million) - Using a current standard technical framework for web based information systems, this project will enhance DineSafe, SwimSafe, and BodySafe websites so that they can be accessed via mobile devices and enable the public to automatically receive information alerts e.g. Beaches Water Quality, Heat and Cold Alerts.
- *Chemical Tracking Information System (ChemTRAC)* - 2021 to 2024 (\$1.120 million) - This project will upgrade technology and technical frameworks to corporate standards utilized by five ChemTRAC integrated applications and implement functionality to provide the ability for industries/business partners to log in securely into the system for submitting chemical use and release information to reduce processing time and improve customer satisfaction.

TORONTO PUBLIC HEALTH APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

The following chart provides a breakdown of 2020-2029 Capital Budget and Plan by TPH IT Strategic Goals.

2020-2029 Capital Budget-TPH IT Strategic Goals



TORONTO PUBLIC HEALTH APPENDIX A

2020-2029 CAPITAL BUDGET AND PLAN

The following chart outlines the annual cash flow for each project in the 2020-2029 Capital Budget and Plan.

(\$ Millions)	2020 Rec. Budget	2021 Plan	2022 Plan	2023 Plan	2024 Plan	Total 2020- 2024	2025 Plan	2026 Plan	2027 Plan	2028 Plan	2029 Plan	Total 2020- 2029
Improve Decision Making Support												
Datamart Data Warehouse-Phase 3	0.831					0.831						0.831
Geographic Information Enablement					0.190	0.190	0.265					0.455
Common Geographical Interface (CGI)					0.250	0.250	0.344					0.594
Healthy Smart Cities		0.472	0.395	0.671	0.866	2.404					0.602	3.006
Subtotal	0.831	0.472	0.395	0.671	1.306	3.675	0.609				0.602	4.886
Improve Workforce Capabilities												
Community Collaboration - Seed & Implementation	0.101	0.534	0.599	0.731		1.965						1.965
Mobile Enablement					0.394	0.394	0.378	0.369				1.141
Subtotal	0.101	0.534	0.599	0.731	0.394	2.359	0.378	0.369				3.106
Improve Business Processes												
Electronic Medical Records - Phase 3 & 4	0.273	0.598	1.434	1.826	0.237	4.368						4.368
Correspondence and Communication Tracking – Seed & Implementation	0.028	0.165	0.488			0.681						0.681
Socio-Demographic Data Collection and Reporting							0.348	0.721	0.779			1.848
Call Centre Revitalization								0.414	0.400			0.814
Customer Relationship Case Management								0.507	0.676	0.275		1.458
Subtotal	0.301	0.763	1.922	1.826	0.237	5.049	0.348	1.642	1.855	0.275		9.169
Improve IT Services												
Inspection Management Phase - Implementation	0.663	0.616	2.001	2.007		5.287						5.287
Early Abilities Information System - Phase 1 & Implementation		0.544	1.088	1.022		2.654						2.654
Community Health Information System	0.780	0.411				1.191						1.191
Reporting Environment Enhancement										0.267	0.349	0.616
Subtotal	1.443	1.571	3.089	3.029		9.132				0.267	0.349	9.748
Improve Access to Government Services												
Public eLearning							0.365	0.610				0.975
Public Notifications and Advisories									0.357	0.474		0.831
Chemical Tracking Information System (ChemTRAC)		0.344	0.140	0.332	0.304	1.120						1.120
Subtotal		0.344	0.140	0.332	0.304	1.120	0.365	0.610	0.357	0.474		2.926
Total	2.676	3.684	6.145	6.589	2.241	21.335	1.700	2.621	2.212	1.016	0.951	29.835