

	<b>Benefits</b>
<b>Business Services</b>	
Stormwater Cost Allocation Model	<ul style="list-style-type: none"> <li>• Reduced total staff effort by 70% (from 150 to 45 hours per year)</li> <li>• Established a pre-determined allocation model eliminating the need to have multiple meetings each year between Finance and CMS.</li> <li>• Using a template email for the business units to provide updates to Finance for approval and allocation for the budget cycle.</li> </ul>
Journal Voucher SAP Park and Post Citywide Rollout Project	<ul style="list-style-type: none"> <li>• Reduce staff effort in JV checking and posting by 58% (from 523 to 220 hour per year)</li> <li>• All divisions are enabled (with training and tools) to post JV without any dollar ceiling and responsible to check their own JV's, eliminating the need to forward the JV to Finance for processing and checking</li> </ul>
Contract Execution	<ul style="list-style-type: none"> <li>• Reduced annual staff touch time by 36 hours.</li> <li>• Eliminated over 1320 sheets of paper by reducing contract copies from 3 to 1.</li> <li>• Included checklist in bid documents leading to reduced errors (30%) on vendor submittals. Established single repository for executed contracts (eContracts).</li> </ul>
Revenue Returned Mail	<ul style="list-style-type: none"> <li>• Reduced turnaround time to update customer accounts by 92% from 6 months to 2 weeks.</li> <li>• Reduced total number of returned mail by 71.5%</li> <li>• Reduced staff effort by 88% (from 190.6 to 23.1 hours per year) as a result of the reduction in error rate (e.g. volume of return mail) and process cycle-time.</li> </ul>
Strategic Communications Service Intake Process and Implementation	<ul style="list-style-type: none"> <li>• Centralized the intake of service requests freed 1750 staff hours.</li> <li>• Simplified Work Item templates and increased visibility of work items across teams.</li> <li>• Designed Reports &amp; Dashboards for better visibility of work requests and task assignment</li> </ul>
Digital Asset Management	<ul style="list-style-type: none"> <li>• Created a standardized process for the collection and formatting of digital visual assets.</li> <li>• Reduced touch time to search and deliver appropriate digital visual assets to the customer by 60%, achieved by reducing the digital visual asset repositories from 5 to 1, establishing file naming convention and adding metadata to digital files. Customer lead time was also reduced by 29.4 minutes per request or 20% on average.</li> </ul>
<b>City Manager's Office</b>	
Insurance Renewal Data Collection	<ul style="list-style-type: none"> <li>• Reduced the response lead time by 75% by using confirmation of last renewal application template and completing each insurance applications as they came in (i.e. eliminated batching).</li> </ul>

Summary of 2020 Completed Lean Process Improvements

<b>Benefits</b>	
	<ul style="list-style-type: none"> <li>Reduced the amount of time required for the business units</li> <li>The faster turn around time increased the City's insurance applications out in the market 2 weeks longer, giving more review time for insurers.</li> </ul>
Legal Services Digital Sharepoint Filing Project	<ul style="list-style-type: none"> <li>Standardized Legal division's SharePoint site structure to improve efficiency and reduce the time and effort expended searching for libraries and files (by 70%).</li> <li>Storage was reduced 10-15% after consolidation and de-duplication.</li> </ul>
Legal Services Intranet Website Redesign	<ul style="list-style-type: none"> <li>The Legal Services intranet page was converted into a service oriented site for Legal Services' client groups from other City Divisions. The new site provides easier access (66% less time searching) for the client groups to the information and direction needed to meet their service needs.</li> </ul>
<b>Culture</b>	
5S Mississauga Celebration Square Admin Space	<ul style="list-style-type: none"> <li>Freed up usable shelf space by over 50% (28 sq.ft.), improving workflow for staff and creating a less hazardous work area</li> <li>All staff have visual cues to assist with managing the storage room; Control and disposal of the consumable inventory leading to less superfluous inventory of purchases that were made for event-specific use.</li> <li>Reduced time to turn over programming material by 80% (from 15 to 3 minutes) by point-of-use storage.</li> </ul>
Culture Program Digital File Organization	<ul style="list-style-type: none"> <li>Reduced files by 57% and folders by 42%,</li> <li>Deleted close to 18,000 duplicate, old or unnecessary files;</li> <li>Created shared hierarchy to avoid duplication in future;</li> <li>Reduced effort to access and utilize Culture Programs files by about 67%</li> </ul>
Culture Programs Storage Room Reorganization at Community Centre sites	<ul style="list-style-type: none"> <li>Reduced P/T Art Instructor's search time by 62% (from 26 to 10 sec/item) with a total effort saving of 410 hours/year..</li> <li>Reduced storage space needs by 15% .</li> </ul>
<b>Facilities and Property Management</b>	
Rent Collection Process	<ul style="list-style-type: none"> <li>Reduced turnaround time to collection invoiced rent by 39% (from 23 to 14 days)</li> <li>Reduced staff effort by 56% (from 96 to 42 hours per year)</li> </ul>
<b>Fire Services</b>	
Personal Protective Equipment Cleaning Process	<ul style="list-style-type: none"> <li>Reduced total PPE cleaning lead time by 44% (from 136 to 76 hours, or 5.6 to 3.1 days).</li> <li>Signs and designated area reduced wait time for pickup and delivery of PPE from 4 days (96 hrs) to 1.5 days (36 hrs) on average. 100% of crews surveyed were satisfied with the process improvements</li> </ul>

	<b>Benefits</b>
<b>Information Technology</b>	
TXM Tax Manager SharePoint Site - Digital 5S	<ul style="list-style-type: none"> <li>By applying the 5S tools in a digital environment and standardizing the structure of saving documentation, reduced staff effort in searching for unknown documents by 68%.</li> </ul>
SharePoint Site Requests	<ul style="list-style-type: none"> <li>Single form created a simpler, faster and more streamlined process where there was a 72% reduction in the site creation lead time (waiting for approvers). Remove the need for the outdated 990 form for granting initial owner access. Created and defined a OLA of 3 business days for site creation and disclose this message to staff and management.</li> </ul>
<b>Land Development Services</b>	
Technical Support for ePlans	<ul style="list-style-type: none"> <li>Reduced the customer's wait time by 50% and increased First Call Resolutions by 24% for ePlan inquiries.</li> <li>Over 2,400 inquiries per year are now addressed that were previously transferred, resulting in better customer service, increased staff morale, and clearer staff expectations.</li> </ul>
PBCSC Counter Sign In	<ul style="list-style-type: none"> <li>decrease in staff effort (99%) while maintaining the customer service levels by digitizing a largely manual process utilizing an existing software (SharePoint) and automating statistical requirements and data gathering.</li> </ul>
Existing Land Use Mobile Data Collection	<ul style="list-style-type: none"> <li>Staff used existing technology (ArcGIS ModelBuilder) to digitize a previously manual process, saving staff effort (50%), which is the equivalent of 140 hours/year for reviewing/updating maps.</li> </ul>
Vacant Lands ArcGIS Model	<ul style="list-style-type: none"> <li>Staff used existing technology (ArcGIS ModelBuilder) to automate vacant land data generation and basic analysis as well as develop a reusable Vacant lands Model, decreasing staff effort (45%) and process lead time by 2 weeks.</li> </ul>
Census Hub Data Presentation	<ul style="list-style-type: none"> <li>Reduced report lead times by 25% and staff effort by 56%)in compiling the Census Hub Data presentation.</li> <li>Moved the census data into the ESRI environment allowing automated dashboard updates, quicker analysis time, and the eliminations of physical census packages.</li> </ul>
P&B Project Portfolio	<ul style="list-style-type: none"> <li>Allowed staff to centralize and automate several steps, reducing rework (30%) and staff effort (77%).</li> <li>This freed-up capacity allowed the team to decrease backlog (75%) and the overall process lead time (76%).</li> </ul>
Condominium Application Review	<ul style="list-style-type: none"> <li>Reduced both lead time and staff effort of the condominium application review process by 80% by leveraging existing software (MAX).</li> <li>Created a new Application Guide that aligns with updated templates, forms, and checklists means a more transparent process for customers as well.</li> </ul>

## Summary of 2020 Completed Lean Process Improvements

	<b>Benefits</b>
Newspaper Ads for Public Meetings	<ul style="list-style-type: none"> <li>Reduced the Newspaper Ads for Public Meetings process lead time by 28%, staff effort by 27% and rework by 46% while increasing the quality by 66%.</li> <li>Leveraged existing software to create new standard work helps sustainment.</li> </ul>
<b>Legislative Services</b>	
POA Interpreter Scheduling - Phase 2	<ul style="list-style-type: none"> <li>Reduced the time spent on interpreter scheduling by 69% (from 28 to 8.75 hours/week)</li> <li>Utilized a SharePoint list and increased cases booked per interpreter from 1.5 to 2.3. Since interpreters are paid at minimum for 3 hours, by increasing cases per interpreter booking led to cost saved on interpreters by 42%.</li> </ul>
<b>Parks, Forestry &amp; Environment</b>	
Asian Long Horned Beetle (ALHB) City Dump Site Closure	<ul style="list-style-type: none"> <li>Availability of dump site service increased by 67% (from 3 day/week to 5 days/week) by utilizing the City of Toronto quarantine site.</li> <li>Resulted in reduction of rental and contractor fees, net material removal costs and illegal dumping.</li> </ul>
Non-Legislative Public Notification Process	<ul style="list-style-type: none"> <li>Reduced annual touch time by 67% (from 145 to 48 hours).</li> <li>Reduce paper by 96% (from 5843 to 240 sheets)</li> </ul>
<b>Recreation</b>	
Allocated Facility/Park Bookings	<ul style="list-style-type: none"> <li>Improved customer experience as lead time reduced by 40% (from 10 to 6 months) by developing a singular booking intake &amp; allocation process.</li> <li>Reduced staff effort by a total of 90 hrs, by eliminating incomplete or incorrect information in the new event intake application.</li> <li>Process improvements from this Lean Event can be integrated into the other booking and allocation segments within the Recreation Division (arena, gym, pool &amp; meeting rooms) as well as other divisions like Culture, Library and the Clerk's office that have scheduling/booking functions.</li> </ul>
<b>Roads</b>	
T&W Share Point Clean Up	<ul style="list-style-type: none"> <li>Reduced staff touch time per year by 80% (from 102 to 20 sec per file-search) and freed of 592 hours per year.</li> <li>Reduced 25% inactive teamsites (2 out of 8) and 35 inactive non-used links.</li> <li>Increased employee satisfaction and engagement.</li> </ul>
Engineering Submissions: Subdivisions/Lifting of H Applications	<ul style="list-style-type: none"> <li>Reduced turnaround time for the Engineering Submission review reduced by 64% (from 515 to 186 days) with first-pass rate (without rework) improved from 45% to 100%.</li> <li>Reduced staff effort by 2,089 hours per year through consolidation of the 3 reviewing streams into one for HOZ applications.</li> </ul>

## Summary of 2020 Completed Lean Process Improvements

	<b>Benefits</b>
	<ul style="list-style-type: none"> <li>Improved collaboration between departments (T&amp;W, P&amp;B and CMS)</li> </ul>
Consolidating Director's & Commissioner's Office	<ul style="list-style-type: none"> <li>Freed up office floor space of 140 sq. ft. from Director's office consolidation and Commissioner's office renovation</li> </ul>
Capital Works - Road Occupancy Permits	<ul style="list-style-type: none"> <li>Reduced process lead time by 33% staff touch time by 50%.</li> <li>Decreased in staff frustration dealing with a process that had no value added for any customers.</li> </ul>
Signage and Markings in Capital Projects	<ul style="list-style-type: none"> <li>Lead time for obtaining utility clearances reduced by 75% (from 24 to 4-6 weeks per project), and reduced rework effort of 31.5 hrs/ year.</li> <li>Lead time for sign manufacture reduced by 2 weeks.</li> <li>Eliminated transportation to site for repeat utility investigations by 1 day. Eliminated duplication of utility locate submission by 0.5 days</li> </ul>
Traffic Signals Communications	<ul style="list-style-type: none"> <li>Decreased number of grievances from average 120 to 19.6/yr.</li> <li>Reduced staff's touch time in addressing grievances by 84% (from average 840 to 134.4 hours per year).</li> <li>Eliminated staff's efforts to develop and implement unplanned traffic signal timing plans. Improved notice delivery 24 hours prior to construction commencement from 60% to 100%.</li> <li>Staff is aware of all project details, scheduling and progress.</li> <li>Annualized touch time of staff (site inspections, development and implementation of traffic mitigation measures, follow up inspections, etc.) due to late construction notice reduced by 90% from 1368 to 134.4 hours.</li> </ul>
Multi Visit Parking Card Evaluation	<ul style="list-style-type: none"> <li>Assisted in the research phase as Municipal Parking begins to carry out the Parking Master Plan.</li> <li>Consideration of removing the MVC as Municipal Parking continues to evolve and move towards technology based solutions.</li> </ul>
Delegation of Authority – Routine Traffic Amendments	<ul style="list-style-type: none"> <li>Based on the number of corporate reports submitted in 2019, delegation of authority results in a reduction of approximately 50 corporate reports.</li> <li>With an estimated minimum of 6 hours staff time per report (total of 295 hours per year), and staff need to attend 20 fewer General Committee Meetings, saving staff time and mileage costs.</li> <li>Reduced paper usage of at least 1500 pages per year</li> </ul>
Fleet Preventative Contact List	<ul style="list-style-type: none"> <li>100% of MTO Inspections scheduled on time (no past due)</li> <li>Increased communication and created schedules for customer</li> </ul>
Malton 5S Workshop	<ul style="list-style-type: none"> <li>Freed up 85% more usable floor space (from 81 square feet to only 12 square feet), improved workflow for staff and creating a less hazardous work area.</li> </ul>

## Summary of 2020 Completed Lean Process Improvements

	<b>Benefits</b>
	<ul style="list-style-type: none"> <li>Improved the job set up workflow through the use of a tool inventory list so that mechanics and parts technicians know with certainty the tool needed per job and can locate it easily on the organized and labelled wall.</li> <li>Staff became more engaged throughout the process</li> </ul>
<b>Stormwater</b>	
GTAA pins tracking process (SW Charge)	<ul style="list-style-type: none"> <li>Reduced staff effort by 75% by changing how tracking/tagging of properties (pins) is done in Infor.</li> <li>Allowed team to track all GTAA pins by a simple search</li> <li>Defined business processes for initial tagging, updates, maintenance and expiration of GTAA pins systems.</li> </ul>
Storm ON1Call Review	<ul style="list-style-type: none"> <li>Conducted a 5S of the locates filing space.</li> <li>Improved filing system and storage area to reduce staff effort by 60% (from 5 to 2 minutes) when searching for files.</li> <li>Reduced inventory of unnecessary paper by 41% and reduced square footage by 60%.</li> <li>The team also switched to pre-labelled, smaller folders and eliminated the need to create new file labels. Smaller folders resulted in a safer work environment as they hold less files of paper compared to the older ones (2000 gr to 1000 gr).</li> </ul>
<b>Transit</b>	
MiWay Lost and Found	<ul style="list-style-type: none"> <li>Reassessed the process of lost and found items found on MiWay buses. Decrease of labour effort of 45%.</li> <li>50% reduction in travel to Malton results in labour cost avoidance, mileage on the vehicles and environmental emissions.</li> <li>40% reduction in administration effort by reducing the categories of inputted lost items.</li> <li>Freed storage space by 50% (from 14 to 7 storage bins) by changing the by-law to reduce the number of days items are stored from 14 days to 7 days</li> </ul>
MiWay Hiring Plan	<ul style="list-style-type: none"> <li>For the 100 new operators MiWay hires every year, 95% reduction in time spent reviewing initial applicants by introducing new screening questions and a minimum required score.</li> <li>Reduced time from posting to offer date by 53% (104 to 49 days), with 20% reduction in time spent at annual testing administration days by increasing session capacity from 3 in a day to 5 in a day.</li> </ul>
5S Specialized Tool Area - MiWay Maintenance	<ul style="list-style-type: none"> <li>The main tool room location at the Central Parkway Garage (CPY) for Transit Maintenance, holding a value of ~\$100,000 of tools. Removed obsolete items such as tools used for buses no longer in service that cannot be repurposed, organized and</li> </ul>

**Appendix 1**

**Summary of 2020 Completed Lean Process Improvements**

	<b>Benefits</b>
	labelled tools by job.
Revenue Fare Collection	<ul style="list-style-type: none"> <li>• Reviewed consolidation of contractor and staff performed activities related to fare collection</li> <li>• By reducing the opportunities to have other fare media through the elimination of tickets, the City is reducing our carbon footprint, improving our customer experience (customers do not need exact change).</li> </ul>
Bus Alternator Failures	<ul style="list-style-type: none"> <li>• By replacing the faulty oil-cooled alternators with air-cooled (new technology) units on New Flyer busses from 2006 to 2009, reduced alternator failure rate by more than 80%.</li> <li>• By reducing the volume of alternators needing repair, the project also resulted in reduced annual staff touch time.</li> </ul>