City of Sarnia Service Delivery Efficiency Review

Final Report

November 28, 2019

SARNIA
ONTARIO•CANADA

City of Sarnia

Service Delivery

Efficiency Review

Final Report

Contents

1. Project Overview

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1.1 Project Mission & Success

Project Mission

- To conduct a Service Delivery Efficiency Review of eight in-scope service areas (specific areas of focus for discussion on following slides).

Project Success

- A clear understanding of the City of Sarnia's current delivery of services and opportunities for operational efficiencies, including cost savings, labour savings/capacity, technological improvements, and streamlining of processes.
- Actionable recommendations for efficient, effective, and sustainable delivery of municipal services.
- Buy-in among City stakeholders that recommendations are aligned to the community needs and will reduce operational costs and improve service delivery.

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1.2 Project Scope

In Scope

- Discovery interviews to clarify scope and requirements
- Data and document review
- Development of evaluation framework
- Individual interviews with CAOs, Directors, and other key stakeholders
- Current state summary
- Presentation of preliminary current state findings to SMT
- Final report and recommendation
- Presentation of final report and recommendations to City Council

Out of Scope

- Review of services beyond the 21 areas in scope for the review
- Implementation of recommendations
- Broader change management

1.2 Project Scope

The Service Delivery Efficiency Review project originally included the review of 21 services across 8 of the City's departments including:

- Engineering, Public Works, and Transit
- Finance
- Other Corporate Functions
- Clerks
- Legal
- Community Development Services and Standards (CDSS)
- Parks and Recreation
- Fire Rescue

Following discovery interviews and consultations with stakeholders in the various departments, Optimus SBR modified the scope of the review where appropriate in conjunction with the City of Sarnia Project Sponsor. This ensured that the scope was tailored appropriately to those services and processes deemed important.

The changes to the original scope, including justification for those changes, were submitted to the Project Sponsor in the Scope Clarification Summary submitted on October 10th and was subsequently validated.

The revised scope of the review included 21 areas if focus for the 8 departments, listed on the subsequent slides.

The scope for each is outlined at the beginning of each relevant section in the report.

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1.2 Project Scope

Revised Scope Sections		
Department/Service Area	**Areas of Focus**	
1. Engineering, Public Works and Transit	1.1	Maintenance Management System
	1.2	Fleet Management
	1.3	Solid Waste Management Diversion
	1.4	Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers
	1.5	Care-A-Van Booking Procedure
2. Finance	2.1	Procurement to Payment
	2.2	Payroll Process
	2.3	Customer Service
	2.4	Energy Efficiency Reporting/Tracking
	2.5	Capital Asset Management
3. Other Corporate Functions	3.1	Project Management
	3.2	Staffing Levels vs. Workload
4. Clerks	4.1	Knowledge Management Systems
	4.2	Agenda Development

1.2 Project Scope

Revised Scope Sections		
Department	**Section**	**Work Stream**
5. Legal	5.1	Tax Sale Document Issuance
	5.2	Property Management/ Technology
6. Community Development Services and Standards (CDSS)	6.1	CityView Analysis
7. Parks and Recreation	7.1	Resource Allocation
	7.2	Grass Cutting Efficiency
8. Fire Rescue Services	8.1	Technology
	8.2	Management Structure and Staffing Level

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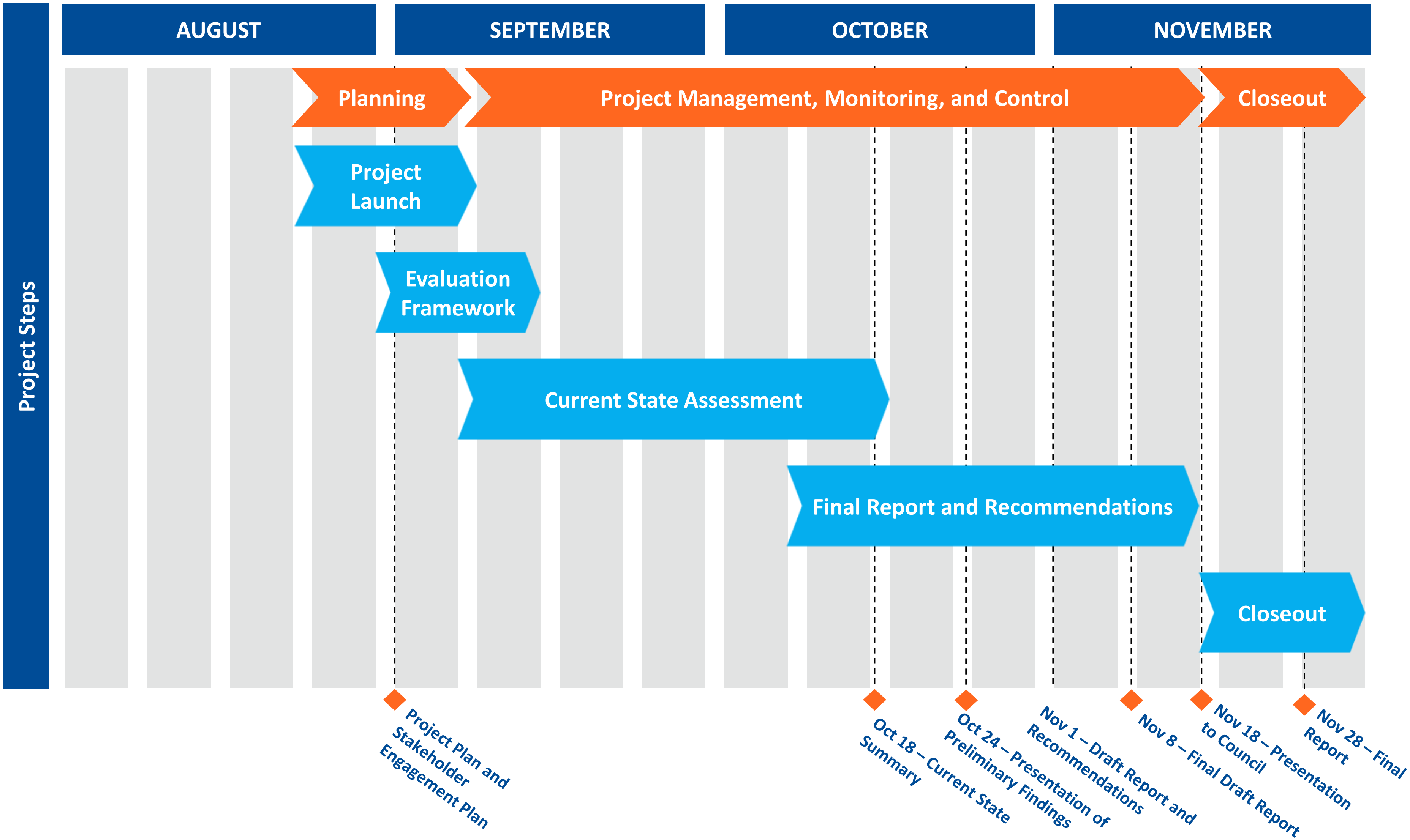
1.3 Project Approach

1. Project Launch and Discovery	2. Evaluation Framework and Stakeholder Engagement	3. Current State Assessment of Service Profiles	4. Report and Recommendations	5. Closeout and Knowledge Transfer
○ Set-up and Planning ○ Kickoff Meeting ○ Discovery	○ Development of Evaluation Framework ○ Stakeholder Engagement Planning	○ Data and Document Review ○ Stakeholder Interviews ○ Focus Groups ○ Survey Development and Execution ○ Assessment of Service Profiles ○ Current State Summary ○ Presentation of Preliminary Findings	○ Recommendation Development ○ Draft Report and Recommendations ○ Final Report and Recommendations ○ Final Presentation	○ Project Closeout and Knowledge Transfer
Deliverables				
○ Project Plan	○ Stakeholder Engagement Plan	○ Current State Summary ○ Presentation of Prelim. Findings	○ Final Report and Recommendations ○ Final Presentation	○ Knowledge Transfer

1.4 Project Key Deliverables

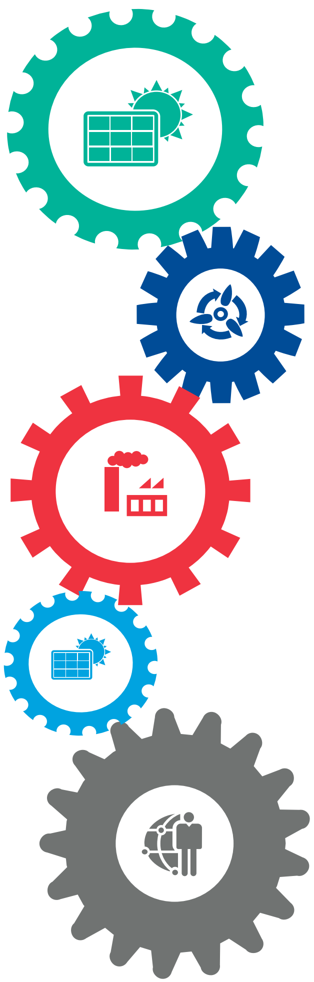
DELIVERABLE	DESCRIPTION
Project Plan	This document will sets key dates for deliverables and milestones, while also detailing accountabilities of both Optimus SBR and City of Sarnia project resources.
Stakeholder Engagement Plan	A plan for the proposed approach and methodologies for stakeholder engagement activities to ensure they are effective and produce meaningful outcomes.
Current State Summary	A summary of the findings from the data and document review, stakeholder engagement activities, focus groups and online survey. It will include key themes and findings from the Current State Assessment, with a focus on identifying any challenges and areas of opportunity for the City of Sarnia.
Presentation of Preliminary Findings	A presentation of the preliminary findings from the Current State Assessment to the City of Sarnia's SMT team.
Final Report and Recommendations	A comprehensive document that consolidates all project outputs and is expected to include: Approach and methodologies used throughout the engagement; results of the Current State Assessment including existing strengths, challenges, and opportunities for operational efficiencies, particularly related to cost savings, labour savings/capacity, technological improvements, and streamlining of processes; recommendations; the rationale behind the recommendations; financial implications; and a high-level implementation plan.
Final Presentation	A presentation of key sections of the Final Report and Recommendations to the City's Council.

1.5 Project Timeline



2. Organization-Wide Findings and Recommendations

2.1. Context



While the population of Sarnia has had limited growth over the past 15 years, expectations to deliver and enhance services to residents continue to increase. At the same time, resources are limited:

- With a decrease in staffing levels over the past 10 years, staff has becoming increasingly stretched across the board.
- Asset maintenance activity and costs have also decreased over time in response to fiscal pressures.
- With limited investment in infrastructure and technology, existing processes and technologies are becoming inadequate to meet current requirements and workload.

This review funded through the provincial government's Audit & Accountability Fund (A&AF) focuses on how to improve **service delivery effectiveness and efficiency** – in other words, how to do things better. This review is therefore:

- Consistent with the City Council's motion to initiate a "Red Tape reduction assessment project"; and
- Not a "line-by-line" review of costs or primarily focused on cost reduction (the other type of review that could be undertaken through the A&AF process).

The review looked at 21 independent areas of focus across the organization. Given a variety of common themes across many of these areas of focus, we have framed our findings and recommendations in terms of 5 organization-wide dimensions:

- Asset and Property Management;
- Process and KPIs;
- Technology;
- Resource Allocation; and,
- Project Management.

2.1. Context

Given the pressures from above and the focus of this review, these five dimensions provide a lens for thinking about how the City can improve its understanding of organizational performance, build systems and processes, and address the other strategic priorities and challenges with which Council and staff are charged.

Asset/Property Management

Pressures on maintenance and the absence of integrated systems has led to assets and properties that are inadequately maintained, not maximizing their value or that of staff time, and are, in many cases, deemed "failing assets".

Process/KPIs

Processes and workflows are largely undocumented, with a corresponding lack of KPIs, which makes it difficult to understand organizational performance locally in a department of across the organization. Efficiencies are in turn difficult to identify in the absence of data.

Technology

While the City has an interest in and has procured technology solutions over time, they are accumulating in the absence of a centralized structure, while feedback from departments has been that they are sometimes inadequate or difficult to use.

Resource Allocation

In the absence of clear processes and KPIs (and technology to track them), departments do not have the data required to properly assess resource levels and allocations; unclear roles and responsibilities also result.

Project Management

The City will soon be embarking on some large-scale infrastructure projects, and staff are acutely aware of limitations in their project management structures, skillsets and capabilities as they look forward to these larger projects.

2.1. Context

While much of this review focuses on challenges and areas for improvement (by design through the terms of reference for the review), it is important to note the following strengths of the staff with whom we interacted over the course of the review.

Knowledgeable and Dedicated Staff	○ Staff are dedicated to providing services to residents and strive to deliver quality programs and services. ○ Where resources are limited or systems limit the degree of automation possible, staff work to find solutions and workarounds to serve citizens.
Strategic Intent	○ There is a clear emphasis on ensuring strategic and long-term planning for the City in order to achieve economic and social sustainability. ○ This review and discussions with staff demonstrated a concern for focusing resources on what the City can do best and for the long term.
Commitment to Change	○ There is a strong alignment within the leadership team on organization-wide challenges and clear commitment to make changes. ○ A management team with several new (i.e., tenure under one year) members is bringing a fresh perspective while collaborating with and drawing on the organizational memory of existing staff to challenge the status quo.
Inter-Departmental Collaboration	○ The management team acknowledges the need for collaboration and its importance to successful operations of all kinds. ○ Real strides have been made to increase collaboration across departments.

2.1. Context

Recommendations for the 5 organization-wide dimensions are summarized below (focus area-specific recommendations are not included here for implementation purposes). These recommendations are consistent with achieving the City's plan for savings of 1% through automation.

Asset/Property Management	1.1 Develop Maintenance KPIs and Targets. 1.2 Formalize Preventative Maintenance Schedules. 1.3 Invest in Capital and Improvement Planning for all City Assets. 1.4 Create a Centralized Asset and Property Management Department. 1.5 Refresh the Property Management Department structure.
Process/KPIs	1.6 Develop Key Performance Indicators (KPIs) and Collect Relevant Data. 1.7 Document Processes. 1.8 Establish Benchmarks. 1.9 Create and Document Policy.
Technology	1.10 Establish an IT Steering Committee. 1.11 Standardize IT Training. 1.12 Implement the ArcGIS enterprise system across the organization. 1.13 Set up a Centralized IT Governance. 1.14 Develop a Cloud Readiness Strategy.
Resource Allocation	1.15 Conduct a Skills Assessment and Staffing Workload Distribution Review. 1.16 Establish a Utility Pool for Immediate Contracting Needs.
Project Management	1.17 Establish a Project Prioritization Criteria and Plan. 1.18 Conduct Project Management Training. 1.19 Implement a Tool for Talent Tracking. 1.20 Implement a Project Management Office (PMO). 1.21 Develop a PMO Toolbox of Methodologies and Best Practices.

Asset/Property Management

2.2. Current State Challenges

2.3 Leading & Contemporary Practices

2.4 Recommendations

2.2. Current State Challenges

Asset/ Property Management

Why Asset and Property Management are Important

Improving the asset and property management practices currently in place is critical to:

- Ensuring that assets are maximizing the quality of infrastructure and effectiveness and efficiency of services;
- Focusing labour where it can be most productive given high functioning assets;
- Positioning the City to increase its return on investments made; and
- Bolstering the accuracy of year-end reporting for better reporting and future planning.

Current State Challenges

Currently, there is no centralized approach to asset or property management.

With respect to the asset management system, for example:

- Public Works uses a CMMS, Caretegraph, to track assets for Transit, Fleet, Engineering and Waste Water. Water and Sewer Services assets are tracked through a separate system, HIRMS.
- Both these systems lack integration and HIRMS has an outdated coding system which results in the fracturing of data, increasing the likelihood of inaccurate information.
- While Public Works manages all Fleet, the equipment is distributed across various departments as needed and those departments are required to manage and source the maintenance on an as needed basis.

With respect to property management, there is no centralized or consistent approach to how the City keeps track of its 49 properties. While the Legal Department is ultimately in charge of overseeing property management, the various departments are responsible for the maintenance and administrative oversight of those properties that fall under their respective departments. This decentralized approach results in difficulty keeping up with preventative maintenance and capital improvement as there is ultimately no oversight of the City's properties as a whole.

2.2. Current State Challenges

Asset/ Property Management

Because there is no coordinated oversight, reporting suffers. For example, the City's Tangible Capital Asset (TCA) inventory is maintained in an Excel spreadsheet by select members of the accounting department who make judgement calls on the status and categorization of those assets for their year-end reporting based on Council Reports and word of mouth information. This decentralized approach across both asset and property management means there is significant question about the accuracy of the reports on which the City relies to budget and plan to meet its strategic needs.

Furthermore, investment assets such as Harbour, Marina, Airport and Business Parks are not centrally governed, resulting in missed financial opportunity for the City.

Implications

- With no unified tracking system, significant manual work is required to get up-to-date information, which is still subject to human error in its production.
- Difficulty keeping up with maintenance schedules and the risk of incurring unnecessary costs (e.g., repair costs that would be covered under warranty if maintenance schedules were adhered to).
- Difficulty understanding and keeping up with capital development projects.
- Poor interdepartmental communication regarding maintenance and development of assets and properties.
- Presence of failing, unproductive, or low-value assets as noted earlier in the Context section.
- Potentially inaccurate information for maintenance, financial and other record-keeping purposes that is relied upon for reporting, budgeting, and strategic planning purposes.

Areas of Focus Impacted

Areas of focus where we learned of asset and property management challenges or that were impacted directly by asset and property management challenges included:

3.5.2 Legal: Property Management;
3.2.5 Finance: Capital Asset Management; and
3.7.2 Parks and Recreation: Grass Cutting (specifically equipment maintenance).

2.3. Leading & Contemporary Practices

Asset/ Property Management

Leading practices in municipal Asset and Property Management include:

#1 Choosing an appropriate Asset/Property Management Software System based on the City's service needs and internal capabilities.

- Numerous asset management programs in the today's marketplace provide adequate functionalities to managing the City's asset inventory. Some municipalities choose a program that most closely meets the need of the City at present and in the foreseeable future; without excessive packages for longer term use that may or may not be needed.
- Staff skill level and resource availability are taken into consideration when determining the type of program, as some labour intensive systems require sufficient resources to setup, administer, manipulate and trouble shoot.
- When making a decision about keeping or upgrading a property management system, the analysis is a balance between the desired outcome and the time/efforts put in to delivery the outcome.

#2 Maximizing key property management information usage.

- Broader property management information is centrally hosted in the Property Management database and shared across all departments. Including:
  - Properties (facilities and lands);
  - Equipment assets (vehicles and public work equipment); and
  - Material assets (forest and fields).
- Effective processes for the usage of the data are practiced to manage end to end asset and property management processes, including "tombstone" data entry, planning information, and maintenance and measurement of asset performance.
- Leveraging data, the property managers' work schedules are prioritized base on criticality and the maintenance schedule.
- Asset condition evaluations are scheduled and recorded properly for respective asset categories

#3 Well established breakdown maintenance tracking.

- Maintenance tracking and corresponding improves asset performance and guards against out of warranty repairs and other costs

#4 Spinoff the management of investment properties to not-for-profit organizations

- Some municipalities, such as Muskoka and Niagara have not-for-profit organizations run their airports. This model provides flexibility to maximize the investment value of these assets
- This requires the revaluation of current lease agreement in place

2.4. Recommendations

Asset / Property Management

Short-term

1.1 Develop Maintenance KPIs and Targets

- Define clear metrics and KPIs for preventative maintenance based on leading practices
- Once relevant systems are in place, track the breakdown and maintenance of all City assets (in addition to the WalterFedy reports used for City properties and facilities).
- Document equipment break downs and work orders for maintenance to improve overall asset management, and improve the database within the CMMS application.

1.2 Formalize Preventative Maintenance Schedules

- Ensure maintenance schedules for all properties are embedded into the current CMMS to ensure appropriate preventative maintenance work is being scheduled and conducted on a timely basis.

Long-term

1.3 Invest in Capital and Improvement Planning for all City Assets

- Develop a capital investment and improvement plan for all of the City's assets, including properties and facilities in order to improve management of the City's budget and enable better planning practices.
- Perform a systematic evaluation of all projects and required investments to maximize the allocation of resources.

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2.4. Recommendations

Asset / Property Management

Long-term (continued)

1.4 Create a Centralized Asset and Property Management Governance Committee to:

- Govern Property Revenue Optimization – this includes Harbour, Marina, Airport and Business Parks; set the fiscal role of all properties, operating model, subsidy amount and revenue/cost parameters;
- Explore an outsourcing model of the investment assets to not-for-profit organizations to maximize the value and revenue of these assets.
- This could also include undeveloped land owned by the City and related strategy.
- Oversee property maintenance of all properties and facilities across various department.
- Reinforce the legal departments role in managing all contracts for all properties
- Ensure that one team oversees and manages capital improvement planning for all facilities to ensure that properties are serviced and maintained efficiently and in a standardized fashion.

1.5 Refresh the Property Management Department structure.

- Move the Property Management department from reporting into the Legal Department to reporting into Corporate Services Department for a broader oversight of facilities.
- The City should also explore the possibility of consolidating property management and maintenance (including grass cutting, etc.) resources from other departments into the centralized Asset and Property Management Department.

Process/KPIs

2.2. Current State Challenges
2.3 Leading & Contemporary Practices
2.4 Recommendations

2.2. Current State Challenges

Process/KPIs

Why Clear Processes and Key Performance Indicators (KPIs) are Important

- Provide consistency, effectiveness, and efficiency to all corporate and citizen-facing processes.
- Establish clear measures and targets against which to monitor, benchmark, and improve organization-wide performance.
- Streamline workflows and reduce red tape, waste, and duplication of effort in all processes.
- Permit better planning and strategic improvement with clear measures of success.

Current State Challenges

In some areas there is red tape and multiple layers of oversight and process which hinder efficiency.

With respect to the **Procurement to Payment** process**,** for example:

- Four sign-offs are required for employee expenses and purchase requisitions are currently required for purchases greater than $5,000. With such a low limit, the approver, who receives an email to approve the request, needs to constantly respond in a timely fashion, which sometimes takes only an hour, but can often take up to several days.

Similarly for **Agenda Development**:

- The reports for Council are reviewed and approved by the CAO, with inputs from Directors. When edits are required, the reports are once again emailed back and forth between the responsible parties even though iCompass, the software used for agenda development, could be utilized to make these edits in real-time, reducing the time spent emailing back and forth.

There is a general inability to target or measure service levels due to a lack of accurate and complete data. For example:

- With respect to **Grass Cutting**, employees attempt to provide a “gold” level of service for residents with respect to the maintenance of green space without the development and measurement of KPIs that document what a “gold” level of service looks like and how that level of service can be achieved.

2.2. Current State Challenges

Process/KPIs

KPIs require consistent data collection.

- KPIs will enable the City to better understand where the challenges are in providing this service at a high level of quality.
- To have effective KPIs, more complete and accurate data will be necessary.

Implications:

- Lack of clear goals and roles and responsibilities, duplication of effort, inefficient procedures and inefficient tracking which leads to an increased risk of error or incomplete information.
- Departments and the organization as a whole have difficulty understanding performance, where there are opportunities to improve it, and whether such efforts have been successful once undertaken.

Areas of Focus Impacted

Areas of focus where we learned of process/KPI challenges or that were impacted directly by process/KPI challenges included:

3.2.1 Finance: Procurement to Payment;

3.2.5 Finance: Capital Asset management;

3.2.4 Energy Efficient Reporting/Tracking, Customer Services, Payroll Process;

4.4.2 Clerks: Agenda Development; and

3.7.2 Parks and Recreation: Grass Cutting Efficiency.

2.3. Leading & Contemporary Practices

Process/KPIs

Leading practices in municipal Process and KPI Management include:

#1 Procurement KPIs focused on internal PO issuances and the quality of services and goods. Examples are:

- Time to prepare PO (public sector POs tend to take longer to produce than private sector ones);
- Administrative cost of preparation of PO and invoice;
- Pre-bid estimate to actual bid accepted;
- Number of bidders on each PO/contract;
- Timeliness of receipt of goods or services;
- Quality of goods or services;
- Utilization of alternatives to normal procurement and related performance (e.g. vendor of record, bulk purchases, standby/on-call services, cross-department combined purchases, etc.);
- Transparency and fairness measure: the number of single source and invitational bids sought each year (excessive or non-critical use of them should be flagged); and
- Measure of the use of local suppliers and/or smaller suppliers and/or some other subset of suppliers to ensure more robust outreach to the these classes when bids are being sought out.

#2 Contractor/Supplier Management KPIs focus on risk control and quality assurance.

- KPIs for compliance to contract and laws (including health & safety and local public interest).
- Quality of work KPIs and reports completed and reviewed on all material suppliers of goods and services.

3 Asset & Property Management KPIs detail the condition and the need for Repair & Maintenance (R&M), as well the efficiency of R&M work conducted.

- Cost of R&M compared to asset current value and replacement value.
- Cost of individual R&M job compared to estimated cost of that job.
- Amount of time equipment or facility was out of service and for what reasons.
- Issues dealing with safety or compliance with policy or law.
- Inventory turnover.
- Efficiency of R&M work.
- Preventative maintenance compared to reactive maintenance.
- Client satisfaction.

2.3. Leading & Contemporary Practices

Process/KPIs

#4 Customer Service KPIs metrics that measure speed and quality of the service are used in some municipalities

- Service by Phone:
  - Call / Caller access %
  - Abandoned call %
  - Average speed to answer
  - Answer accuracy
  - Client satisfaction level
- Agent management/effectiveness:
  - Agent capacity
  - Agent adherence
- Effectiveness:
  - First call resolution
  - Accurate referral
- Use of technology:
  - Call avoidance
  - Calls answered by IVR successfully
  - Knowledge base usage

5 Fire Rescue KPIs to measure speed and quality of the fire service

- Communication Time (% within 90 seconds)
- Turnaround time (% within 90 seconds)
- Travel Time (% within 240 seconds)
- Total Response time (% within 240 seconds)
- Fires Contained (% contained in the room of origin)
- Fire Losses (Loss in $)

2.4. Recommendations

Process/KPIs

Short-term

1.6 Develop Key Performance Indicators (KPIs) and Collect the Required Data

- Define and develop appropriate KPIs for each department aligned with their budgetary constraints and unique strategic objectives.
- The City can leverage these metrics to regularly evaluate its staffing, capital improvements, and budgetary needs.

1.7 Document Processes

- Determine, define, and document processes as appropriate across different departments of the City of Sarnia.
- Process documentation tools like process maps, and SIPOC (suppliers, inputs, process, outputs, and customers) can be used to drive operational consistency.
- Documented processes will facilitate training, allow for improvement opportunity identification, identify controls, define staff responsibilities, and showcase process flaws where applicable.

1.8 Establish Benchmarks

- Establish appropriate benchmarks in various key municipal services in order to better track performance against peer municipalities. Prioritize which areas would benefit the most from benchmarking as a staring point.

Long-term

1.9 Create and Document Policy

- Scan the City department's current policies and identify gaps.
- Design and develop missing policies across different departments. Policies are required to establish guidelines, and City best practices for acceptable behaviour from residents and City visitors.

Technology

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2.2. Current State Challenges

Technology

Why Technology is Important

- The right systems minimize the amount of manual data entry by employees which reduces the level of human error as a result and therefore improves effectiveness.
- Technology improves knowledge sharing and transparency both within departments and across the organization.
- In automating time consuming processes, technology can reduce employee workload and ensure they are spending their time as effectively as possible.

Current State Challenges

The City currently has 13 separate software applications leveraged across its 8 departments (refer to Appendix A). Having fragmented systems leads to fragmented data, reporting, and information which can make decision making difficult. These 13 systems are either not integrated or do not properly communicate with the City's ArcGIS Enterprise and financial reporting systems.

Where **Maintenance Management Systems** are concerned:

- Cartegraph, the CMMS system currently used for Transit, Fleet, Engineering and Waste Water has limited communication for asset tracking with HIRMS, used separately for Water and Sewage Services. This results in an inability to manage and maintain the assets appropriately.

When it comes to **Customer Service**:

- In the absence of a technology solution, approximately 75% of requests must be transferred to other departments after a customer calls in with a request or complaint; even where the majority of the inquiries must be directed to others, there is no ability to track numbers of calls, referrals, response times, or resolution times. This leads to frustrating interactions for citizens and decreased satisfaction with City services.
- from residents and City visitors.

2.2. Current State Challenges

Technology

Concerning **CityView**:

- The CityView system is outdated and lacks system upgrades. There is no integration with the corporate ArcGIS system which makes it difficult to effectively adopt useful CityView features that users across the corporation could benefit from, and limits the efficiencies the City could be gaining.
- A lack of ArcGIS enterprise implementation across the corporation poses the risk of duplication of effort and additional manual data entry due to a lack of real-time data. This limits information sharing across divisions and hinders the ability to most efficiently deliver services within the CDSS department.
- A lack of integration between the City's financial system and CityView leads to incomplete, inconsistent, and potentially error-prone data and information for the City's major financial functions, including budgeting and planning.

With regards to **Knowledge Management Systems**,

- A lack of an inventory list hinders staff's ability to locate and access files efficiently.
- Resources to scan and digitize paper artifacts are lacking and files are either unavailable or difficult to find and access
- The current knowledge and records management system does not allow for collaboration and version control when document edits are required.
- Without a comprehensive policy management process results in outdated policies, lack of quality assurance, structure, and consistency across the City's various departments.

With regards to **Fire Rescue Services technologies**,

- An absence of interface, linkage, and communication between different Fire Rescue Services platforms challenges inter- and intra-departmental communication.
- Partial utilization of various technology systems leads to an overall inability to achieve maximum return on technology investment.
- Reporting needs are often met through extensive manual data processing, which may still yield incomplete data or information.

2.2. Current State Challenges

Technology

Implications

- Inefficient data tracking, duplication of effort, and manual data entry leads to an increased risk of error, incomplete information, and misaligned data.
- Inefficient communication between the City's various departments leads to duplication of effort, unclear messaging, lost revenue, and inefficient use of staff time and resources.
- Inefficiencies in budget spending on multiple technology solutions when a single platform can be leveraged.

Areas of Focus Impacted

Areas of focus where we learned of technology challenges or that were impacted directly by technology challenges included:

3.1.1 Engineering, Public Works and Transit: Maintenance Management System;
3.2.3 Finance: Customer Service;
3.4.1 Clerks: Knowledge Management Systems;
3.5.2 Legal: Property Management / Technology;
3.6.1 Community Development Services and Standards (CDSS): CityView Analysis; and
3.8.1 Fire Rescue Services: Technology.

2.3. Leading & Contemporary Practices

Technology

Leading practices identified in municipal Technology Management:

#1 Use of IT Steering Committee for Technology Decision Making:

- IT steering committees (ITSC) bring together IT and the business. ITSCs are adopted to promote teamwork between the IT teams and direct business teams, in order to support growth and implement change that aligns with the overall mission of the organization.
- The primary goal of the ITSC is to provide strategic direction.
- An ITSC is typically comprised of employees in positions of authority within the organization, as they're tasked with both the ability and authority to make strategic decisions. These members can include departmental heads as well as executives.
- In contrast to project teams, members of a steering committee typically are not involved in performing the work. Instead, they have a significant stake in the work being completed timely, on budget, and within the agreed methods.

#2 Use of Change Advisory Boards (CABs) for Change Management:

- When implementing large scale changes a leading practice is to use a CAB; the ultimate goal of the CAB is to ensure quality releases.
- All changes in production are brought through the CAB for review.
- The CAB team is ideally made up of a diverse group of business leaders throughout the City with goals that may include:
  - Requiring that all architectural standards are met;
  - Assessing risks and consequences of requested changes;
  - Communicating regarding upcoming changes throughout the organization;
  - Ensuring changes are understood; and
  - Offering suggestions to reduce overall organizational risk.

2.3. Leading & Contemporary Practices

Technology

#3 IT Skills Assessment:

- All City departments, roles, and business levels are supported by IT.
- Undergoing a skillset assessment is an important tool to determine what IT professional skills and generic skillsets are required to work at a certain level of responsibility within a municipality.
- IT is central to effective and efficient delivery of City services – especially when IT is designed to bring about digital transformation or business transformation. These innovation and digital transformations are a challenge for most organizations; a disruptive attitude offers many rewards and competitive advantages, but it is the synonymy of risks and unintended consequences.
- A good IT skills assessment can combine behavioral skills, professional skills, experience and knowledge to make it methodological and practical.

#4 Cloud Readiness Assessment:

A Cloud Readiness Assessment analyzes the following areas within the City's IT infrastructure and provides a current state posture with a roadmap.

- Application/Workloads
  - Current loads and needs are measured to determine cloud requirements.
  - All applications/workloads checked for corporate security compliance requirements.
  - Checks performed to ensure current environment can release data to future cloud service without loss or corruption.
  - Timeframes confirmed to determine migration schedule (order of applications/workloads)
  - Migration impact on business operations assessed.
  - Application/Workload business leads consulted (migration strategy approved).

2.3. Leading & Contemporary Practices

Technology

#4 Cloud Readiness Assessment, *continued*:

- Compute
  - Server/Compute infrastructure documented and reviewed
  - Compute analysis performed to determine current utilization trends
- Connectivity
  - Network architecture documented and reviewed
  - Analysis performed to determine current bandwidth requirements
- Storage
  - Storage architecture documented and reviewed
  - Analysis of storage performed to determine current capacity utilization
  - Unstructured data analysis performed to identify “stale” data (1+ years old)
  - Storage tiering utilized as

2.4. Recommendations

Technology

Short-term

1.10 Establish an IT Steering Committee.

- Establish an IT Steering Committee that will be well versed in the various department's IT challenges, and will be informative of each of the department's needs to assure that the IT investments made generate value, and integrate for maximum efficiency.

1.11 Standardize IT Training.

- Develop training programs and educational guides for City of Sarnia staff who leverage various City platforms across different departments to ensure systems are used to their highest potential.

1.12 Implement the ArcGIS enterprise system across the organization.

- Enhance the current integration of ArcGIS with the City's software platforms to improve the overall use and efficiency of the City's software platforms.
- To enhance the GIS system, the City's IT Steering Committee will need to perform an assessment of the system's current capabilities and develop an implementation plan that outlines proper system upgrades and training protocols.

2.4. Recommendations

Technology

Long-term

1.13 Set up a Centralized IT Governance Committee.

- Set up an IT governance structure and committee to oversee key IT decision making, operations and to develop and standardize training.
- Proper IT governance will enable the high-level oversight necessary to eliminate decision making done at the departmental level for point IT solutions and begin to enable cross departmental linkages across platforms used within different departments.

1.14 Develop a Cloud Readiness Strategy.

- Explore the possibility of the transition to a cloud based IT model to ensure readiness and alignment with technological advancements and improvements that will enable the City of Sarnia to leverage best in class IT solutions. If openness to a new system is determined, develop a Cloud Readiness Strategy.
- Adopt an IT skills assessment framework to support the growing technology demands of the business. In parallel the City should embrace and prepare for the migration of workloads to the cloud.

Resource Allocation

2.2. Current State Challenges

Resource Allocation

Why Resource Allocation is Important

Proper resource allocation and role clarification enable organizations to:

- Prioritize the work and deliver service level stands to residents;
- Maximize human resource capabilities and plan for long-term strategic initiatives; and
- Provide work/life balance to employees.

Current State Challenges:

- Insufficient data tracking the number of projects and hours makes it challenging to assess if work is prioritized properly and if resources are utilized efficiently.
- The absence of performance KPIs and service levels standards limits the capability to get a clear picture of the size and impact of the perceived staff shortage across the organization.
- Roles and responsibilities overlapping across various departments is leading to duplication of work and insufficient usage of resource time.
- In the absence of more integrated systems, it is difficult to assess what the “right” amount of work is when significant manual work is required to carry out day-to-day and periodic processes.

In short, there is no hard data to gauge whether the City is adequately resourced as a whole or within and across departments. Challenges driven by other efficiency enablers make it difficult to assess whether more staff are needed generally or whether better systems would increase the efficiency of resources. At the same time, it is clear that roles and responsibilities do overlap in specific areas, suggesting efficiencies could be gained simply by clarifying roles.

With respect to **Property Management**, it is currently under Legal Department. While it operates independently to certain degree, it is a suboptimal use of resources time at times with regards to using legal experts in the property management function. Work overlaps and duplications are also observed between Engineering, Public Works and Transit and the Parks and Recreation department.

2.2. Current State Challenges

Resource Allocation

For example, Parks and Recreation maintains the parks including grass and concrete and Public Works work maintain other concrete surface. Curb cutting is divided across two different departments, depending on the location. On the equipment maintenance front, some are maintained by each department while some are maintained by the Engineering department alone.

Challenged with stretched resources, departments are reactively shifting and reallocating resources *ad hoc* rather than planning and responding proactively.

Implications:

- The organization and departments have difficulty finding the most productive roles for people in the absence of good data and information
- Duplication of work exists across departments causing inefficiencies.
- Reactive efforts to shift and share resources at department's own discretion.
- Quality of service suffers as a result of strain on resources and lack of focused skills or subject matter expertise.
- Inability to provide a holistic view to the City the actual resources required short term and long term.
- Extensive work required to properly plan for long term strategic initiatives.

Areas of Focus Impacted

Areas of focus where we learned of resource allocation challenges or that were impacted directly by resource allocation challenges included:

3.1.3 Engineering, Public Works and Transit: Solid Waste Diversion
3.3.2 Other Corporate Functions (and Overall): Staffing Level vs. Workload;
3.7.1 Parks & Recreation: Resource Allocation;
3.7.2 Parks & Recreation: Grass Cutting; and
3.8.2 Fire Rescue Services: Management Staffing.

2.3. Leading & Contemporary Practices

Resource Allocation

Leading practices in municipal Resource Allocation Management include:

#1 Consolidation of Corporate Services under one department.

- Many municipalities consolidate of most corporate services under one department, under a Director of Corporate Services. This department encompasses functions that provides services largely to the remainder of the organization, such as Finance, Human Resource.

#2 Legal Services reporting directly to CAO.

- While legal services are also a corporate service, it is not uncommon to have a legal department report to the head of the organization for a variety of reasons, and it is recommended that the Legal Department continue to report to the CAO.

#3 Combined role for Disability Management and Health & Safety.

- The Human Resources Department of this size combines the roles of Disability Management Specialist and Health & Safety Officer into one position with cross training in other roles to back-up in the event of absence.

#4 Different Models for Parks and Recreation functions.

- Parks and Recreation functions can by nature be mixed. Some municipalities' Parks and Recreation department focuses on programming only, while some others also manage horticulture/trees, running the arena/recreation centres and doing property management for the facilities and grounds in the parks and arenas/rec centres (with the grounds work including grass cutting).
- As with property management, grass cutting and other maintenance functions (part of grounds keeping in a broader sense) is commonly consolidated under a corporate-wide property management department due to the potential economies of scale that can be generated.
- Where activities require more specialized skillsets (e.g., horticulture), they often stay with Parks and Recreation; where they are more general, they are often included in a centralized property management function

2.4. Recommendations

Resource Allocation

Short-term

1.15 Conduct a Skills Assessment and Staffing Workload Distribution Review.

- Once KPIs are developed and adequate data can be gathered for workload and staffing conduct a skills assessment and review of staffing workload distribution to determine the appropriate resourcing needs in relation to the number of tasks and responsibilities relevant to the skills and expertise required for each department.

1.16 Establish a Utility Pool for Immediate Contracting Needs.

- Determine the most frequently utilized contractors across the various departments to determine an appropriate "Utility Pool."
- Establish a contract with the Utility Pool contractors such that their services are readily accessible in order reduce sourcing costs and ensure availability of third party suppliers when required.

Project Management

2.2. Current State Challenges
2.3 Leading & Contemporary Practices
2.4 Recommendations

2.2. Current State Challenges

Project Management

Why Project Management is Important:

- Defines clear focus and objectives for the projects.
- Ensures strategic alignment across departments.
- Ensures proper planning, timeline, accountabilities, and progress tracking.
- Provides internal controls for quality, budget, and risks.

Current State Challenges

The absence of official PMO/PM functions and related PM methodology leads to inconsistent project delivery, inability to measure success, challenges for having a holistic view of projects throughout the departments and the inability to manage risks and interdependencies.

In general, the PM role is loosely defined and PMs (though not designated as such) operate independently of large structure. No criteria currently exist for selecting PMs for projects across various departments. They enter those roles either voluntarily or are assigned to manage the project as a subject matter expert. As such, no written PM selection criteria exist and the skillsets vary by individual.

More generally, the health of projects in flight and completed is not measured and tracked in terms of timeline, budget, and alignment perspective. Consequently, resources cannot be reallocated to the highest priority City projects, or projects suspended or cancelled if they are not performing.

The Engineering department is currently working on an organization-wide strategy to implement standardized project management monitoring.

2.2. Current State Challenges

Project Management

Implications:

- A shortage of qualified Project Managers across the organization to lead projects.
- Inconsistency in delivery of projects.
- Inability to institute internal controls, risking project scope, timelines, budgets, and overall success.
- Potential risks on delivery and control of large capital infrastructure investment projects in the pipeline (in Public Works).

Areas of Focus Impacted

While specific areas of focus were not necessarily impacted directly, departments across the organization appeared directly or indirectly impacted.

2.3. Leading & Contemporary Practices

Project Management

Leading practices in municipal Project Management include:

#1 Project managers in place for infrastructure, property, and public work related projects.

- PMO offices are often seen in Facility Management Divisions, providing responsibilities for the planning, delivery, and support of the Capital Plan, including:
  - Building condition assessments;
  - Energy audits;
  - Accessibility audits and stakeholder input;
  - Contract management;
  - Environmental support; and
  - Administration to ensure the division's buildings are kept in good repair on an ongoing basis.

#2 PMO roles extended to strategic planning and portfolio management.

- With the enormous financial investment that public sector organizations have in projects, PMOs today are seen as a viable strategy to improve project success rates, and to prevent or reduce cost overruns and schedule delays.
- Enterprise PMOs in the public sector have provided the effective infrastructure for delivering efficient project implementation with formal standard project management processes.
- As a PMO matures, it is expected or driven to become a strategic project office and be involved with strategic roles, such as strategic planning and portfolio management.
- The Enterprise Portfolio Management Office (EPMO) is often created as an extension of the PMO.

3 Information Technology (IT) can play an important role in the context of project management.

- Internal and external IT capabilities supporting PMO functions enhance can enhance project performance by improving gating and assessment of projects, making monitoring easier, and providing aggregated views to organizations of their projects in flight.

2.4. Recommendations

Project Management

Short-term

1.17 Establish Project Prioritization Criteria and a Project Prioritization Plan

- Establish a set of project prioritization criteria and a short and long term plan for projects to be undertaken by the City's different teams.

1.18 Conduct Project Management Training

- Provide Project Management training to assigned project managers, and ensure that staff are supported to ensure projects are delivered in an effective and efficient manner abiding by best practices set out by the PMO.

1.19 Implement a Tool for Talent Tracking

- Explore the possibility of leveraging a talent tracking tool (such as HR software like BambooHR). A talent tracking tool will help the City's PMO in staffing its projects with required skillsets, and trained Project Managers ensuring seamless execution and effective service delivery.

Long-term

1.20 Implement a Project Management Office (PMO)

- Establish a PMO structure to support the City's large infrastructure projects with governance, project and portfolio management best practices, mentoring and project manager support, standardization of tools, templates, and processes, and consolidated reporting and organizational intelligence.

1.21 Develop a PMO Toolbox of Methodologies and Best Practices

- Develop a PMO toolbox of best practices, templates, KPIs, and methodologies that can be leveraged across different City projects and team members.

3. Detailed Review of Focus Areas

3.1. Engineering, Public Works and Transit

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3.1.1 Maintenance Management Systems

Item	Description
Review Scope	○ Provide a general summary of perceived gaps and general requirements for a Computerized Maintenance Management System (CMMS) with input from select city Cartegraph users and IT staff. ○ Provide advice on related IT governance, change management, training and project management considerations. ○ **OUT OF SCOPE:** Formal user requirements, process mapping or vendor procurement services.
Applicable Evaluation Criteria	See table below

Time	Resources	Level of Services
☑	☑	☑
Process	**Technology**	**Cost**
☑	☑	☐

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3.1.1 Maintenance Management Systems

Current State Findings

- Past reviews in 2005 and 2018 have highlighted challenges related to the maintenance of an asset inventory and ability to keep an up-to-date view of the various infrastructure systems being maintained within the Public Works portfolio.

- Ensuring a strong asset management system is critical for the City. First, it provides the City the opportunity to proactively maintain its assets. This ensures that important maintenance dates or warranty periods are not missed. Second, keeping an asset management system is required to qualify for grants. Third, capital asset management is now governed by Ontario Regulation 588/17, which states that every municipality must have a strategic asset management policy in place.

System Limitations and Requirements

- The current CMMS system, Cartegraph, was first adopted approximately in 2007 and has been implemented in various departments within the City, including Transit, Fleet, Engineering and Waste Water. However, it was never implemented for Water, Sewer, and Roads as the system was said to not be map-based.

- In our discussions with Fleet, Public Works, and IT, they stated that Cartegraph is slow, not user friendly, and that it requires a lot of customization. Additionally, these departments expressed that they would like to have the ability in Cartegraph to integrate with other systems (e.g., Petro System tracks fuel for Fleet Services, GIS/HIRMS systems for Environmental Services). Other key needs include:
  - **Fleet**: Ability to have a real-time or recent view of the use of vehicles and ability to have regular reports that allow Fleet Services to prioritize maintenance requirements with features than can provide alerts when vehicles require maintenance.
  - **Environmental and other Water, Sewer, Roads**: Would like to have a map based system that shows historical records, and a holistic product that does everything.
  - **Environmental**: Real-time/cloud functionality to support mobile search/inputs to the system.
  - **Environmental**: The ability to add searchable notes fields for locate services.
  - **Environmental and Fleet**: The ability to identify a program/timeframe for various maintenance activities.
  - **All**: The ability for the solution to be maintained and supported by IT staff within Public Works.
  - **All**: The ability to run regular reports and common *ad hoc* reports without the assistance of IT staff.

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3.1.1 Maintenance Management Systems

Current State Findings

While the list on the previous slide captures a variety of perceived system limitations and end user requirements, it is important to note these do not include the views of all sections of the various departments that also use the system and who were not interviewed in the current state phase of this review.

- In 2016 the Water Finance Research Foundation conducted a comparative review of Municipal Maintenance and Infrastructure Asset Management Systems. The review ranked Cartegraph second in terms of Value Score amongst its main competitors. The research report notes that the system supports key desired features such as GIS/map layers. However, some of the persons interviewed did not see the implementation of Cartegraph as successful – this may indicate issues with the City of Sarnia's specific implementation and/or ongoing usage of the software rather than issues with the software package itself.
- Another system, HIRMS, is used to support Water and Sewer services. Issues with HIRMS include it not being integrated with other systems and it having an outdated coding language. The most recent review of the department suggests that the use of these two software programs (Cartegraph and HIRMS) results in a "fracturing of data and the potential for errors". In addition it was noted that individual spreadsheets, paper-based records or simply employee memory are other tools used on a day-to-day basis to manage maintenance needs.
- There does not appear to be a standing IT Governance framework in place at the City to oversee and approve business cases for system upgrades or replacement that takes a corporate view of existing IT assets and to ensure system inter-operability.
- Problems highlighted with the initial Cartegraph implementation suggest that lack of dedicated project management, systems integration support, detailed process mapping to support user requirements, and change management support could have been contributors to perceptions that Cartegraph has been unsuccessfully implemented in the City.
- Interviews indicated that the City currently has an IT Software Analyst looking at a number of different systems including City Works, Geocortex and various other custom systems as a replacement for the current systems. However, no replacement has been found to date. As such, a sub-committee has been tasked with identifying upgrade or replacement options for a CMMS system.
- It was noted in the response to the review in December 2018 there is a plan to establish a committee to look into upgrade/replacement options for Cartegraph in the Fall 2019, but this committee has yet to be established.

3.1.1 Maintenance Management Systems

Key Challenges

Time	Inefficient use of time when interacting with the system. A lot of time is spent pulling customized reports to retrieve simple data.
Resources	Dedicated IT staff who were focal points of the system implementation were transferred to other areas. As such, there is a lack of support for system related IT issues. Also, there are backlogs inputting data to the system that need addressing.
Level of Services	The system performs slowly and does not adequately meet the needs of the City in terms of flagging when assets require maintenance. As such, these assets may miss critical preventative maintenance dates, limiting the level of service provided.
Process	Processes have not been documented since Cartegraph was first implemented in 2007. Having well documented processes is critical for system upgrades or replacements and also support new employees, training as well as operational consistency and efficiency. Additionally, there does not appears to be a clear IT Governance process in place.

3.1.1 Maintenance Management Systems

Key Challenges

Technology	○ Cartegraph might not currently be used to its fullest potential. Certain features such as GIS functionality do not appear to be fully implemented. ○ Cartegraph is not cloud-based nor seen as mobile friendly for field-based staff. ○ Obtaining simple data from the system requires custom reports to be created resulting in significant manual effort to obtain critical information to support maintenance activities. ○ Cartegraph does provide helpful automated reports, such as alerting managers about when assets requires maintenance or (fleet) when warranties are about to expire. This creates risks to key assets and results in a "reactive" approach. ○ HIRMS, the system used by Water and Sewer, is an unsupported legacy system. As such, any bugs must be solved by the City's internal IT team.

3.1.1 Maintenance Management Systems

Analysis

- In our discussions with Fleet, Public Works and IT, they stated that Cartegraph is slow, not user friendly and that it requires a lot of customization. The departments also named a number of high level user requirements they would like to see in a new CMMS which are summarized in the chart below.

Department	High Level User Requirements
Fleet	○ Ability to have a real-time or recent view of the use of vehicles. ○ Ability to have regular reports that allow Fleet Services to prioritize maintenance requirements with features than can provide alerts when vehicles require maintenance.
Environmental	○ The ability to add searchable notes fields for locate services.
Environmental and other Water, Sewer, Roads	○ A map based system that shows historical records. ○ A holistic product that does everything.
Environmental and Fleet	○ The ability to identify a program/timeframe for various maintenance activities.
All	○ The ability to integrate with other systems (e.g., Petro System tracks fuel for Fleet Services, GIS/HIRMS systems for Environmental Services). ○ The ability for the solution to be maintained and supported by IT staff within Public Works. ○ The ability to run regular reports and common ad hoc reports without the assistance of IT staff. ○ Real-time/ cloud functionality to support mobile search/ inputs to the system.

3.1.1 Maintenance Management Systems

Recommendations

1. **Review System Capabilities** – Review all features and capabilities that are available in the current maintenance management system, Cartegraph to ensure that the tool is being used to its fullest potential. Features identified that are not currently being used should be leveraged to increase the effectiveness of the tool.
2. **Create an IT Steering Committee –** *Technology recommendation 1.10 is applicable here.* Specific to maintenance management systems, the IT Steering Committee should initiate a review of:
   a. *System Integration* – Identify all systems that need to communicate with the CMMS and ensure integration is feasible.
   b. *Department Access* – Identify all departments requiring access or information from the CMMS and ensure the new system can provide the required features.

Benefits

- Effective utilization of CMMS
- Effective IT Governance
- Improved efficiency of maintenance management
- All the available system features are utilized to their fullest potential.
- The City`s IT needs across various departments are well defined

Key Success Factors

1. Steering Committee members need to have the right level of expertise to evaluate system features.
2. Communication with impacted individuals and execution are carefully timed and tactfully delivered.

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3.1.2 Fleet Management

Item	Description
Review Scope	• Gain the input of Fleet Services to support the identification of gaps in the CMMS. • Research personal use vehicle policies in other Ontario municipalities to reduce the demand for fleet vehicles where appropriate. • Research and review options for managing short-term vehicle supply needs for summer months.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☐	☑	☑
Process	**Technology**	**Cost**
☑	☑	☑

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3.1.2 Fleet Management

Current State Findings

- Early briefings for this review indicated there is a view that the City has been working to reduce a perceived over-compliment of car and light duty pick-up vehicles, in order to meet its requirements in the most cost-effective manner. However, in the summer months, the City sees a spike in demand for such vehicles over a four month period when temporary college students are employed to support a range of Public Works services.

- **Finding Efficiencies** – Over the past two years, various efforts have been made in order to strengthen the efficiency of Fleet Management in the city. These efforts have included:
  - increasing the number of budget codes from one to five;
  - identifying and rotating/repurposing vehicles found to have lower usage; and
  - instituting requirements to make accident reports mandatory for all vehicles requiring repairs.

  Another future opportunity to find fleet management efficiencies was to reduce the number of accidents to the fleet. As some departments have a higher frequency of damage to vehicles, there may be an opportunity to influence behaviours and promote due diligence at the department level by directly charging repair costs to those departments creating repair needs.

- **System Limitations and Requirements –** The current CMMS system, Cartegraph, was first adopted approximately in 2007/2008 to support Fleet Management services. There have been concerns that this system is not sufficiently meeting the needs of the City. Specific concerns with Cartegraph include:
  - a lack of integration with other systems;
  - the degree of effort required to obtain critical information, requiring IT support to run custom reports; and
  - vehicles missing critical maintenance dates.

  Specific features that the Fleet Management Team would like to see in Cartegraph include:
  - the ability to integrate with other systems;
  - the ability to have a real-time or recent view of the use of vehicles; and
  - The ability to have regular reports that allow Fleet Services to prioritize maintenance requirements with features than can provide alerts when vehicles require maintenance.

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3.1.2 Fleet Management

Current State Findings

- **Addressing Short-Term Vehicle Supply Needs –** The Fleet Management Team had previously explored the possibility of leasing vehicles during the summer to aid in the temporary vehicle shortfall. However, due to various factors such as:
  - potential damage and associated damage costs to the vehicles (i.e. paint stains, collisions);
  - vehicle requirements (i.e. safety lighting); and
  - cost considerations,

  this was found not to be a feasible option.
- The Fleet Management team believes that a potential solution to the issue of summer vehicle shortfalls is the creation and adoption of a policy that supports City staff using their own vehicles for certain activities.
- At present, it is unknown what impact this may have on the availability of fleet vehicles over the summer months but lessons from other jurisdictions may assist with assessing the impact of such a policy.
- This potential solution requires the determination of the crossover point where the reimbursement rate for personal vehicle use becomes uncompetitive with the cost of a municipal vehicle.
- Another potential solution to the summer shortfall of vehicles is to investigate if jobs that do not require larger vehicles such as pickups can be re-assigned smaller vehicles such as cars. This would free up the larger vehicles for jobs that truly require them.

3.1.2 Fleet Management

Key Challenges

Resources	During the four summer months there is a vehicle shortage due to temporary summer student employees. However, the remaining eight months of the year there may be a relative over compliment of vehicles. This may be addressed through a personal vehicle use policy.
Level of Services	Cartegraph does not automatically alert the user that a vehicle requires maintenance or when warranties are about to expire. This often leads to vehicles missing important maintenance dates, potentially removing them from service.
Process	Vehicle mileage and hours are only updated in the system when vehicles are brought in for service rather than updated on a regular basis. This often leads to vehicles missing mileage milestones such as oil changes or other maintenance.
Technology	The Fleet Management system, Cartegraph, does not integrate with other systems. This creates issues when trying to track fuel consumption against mileage as two different systems must be used.
Cost	Each department contributes proportionately to the Fleet Management budget regardless of how much vehicle damage is caused by each department.

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3.1.2 Fleet Management

Analysis

- A scan of vehicle related policies revealed three major types:
    1. Use of Fleet Vehicles Policy;
    2. Use of Personal Vehicles Policy; and
    3. Combined Fleet and Personal Vehicles Policy.

1. Fleet Vehicles Policy

- The objectives of Fleet Vehicles policies are two-fold:
    1. To provide effective and efficient fleet services that are responsive to diverse city needs; and
    2. To conserve vehicle value and equipment investment.

- The purpose of Fleet Vehicles policies is to clearly outline the responsibilities of all employees in the use and safe-guarding of City vehicles and equipment including:
    1. How vehicles are assigned;
    2. Who can drive a City vehicle; and
    3. Responsibilities and obligations of employees driving City vehicles.

2. Personal Vehicles Policy

- The objective of Personal Vehicles policies is to establish regulations and guidelines surrounding the use of personal vehicles for business purposes.

- The purpose of Personal Vehicles policies is to clearly outline the responsibilities of employees in the use and safe-guarding of personal vehicles when performing work duties.

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3.1.2 Fleet Management

Analysis

- Personal Vehicle policies are typically carefully worded to address legitimate legal risks/mitigations required to cover any city risks arising from misuse of personal vehicles while on city business. For example:
  - Use of vehicle must be on personal insurance policy, not on city's commercial auto policy;
  - Consideration of adding a Standard Non-Owned Auto Policy to the city's Commercial General Liability policy to cover risks of third party claims where primary personal insurance limits are inadequate;
  - Requirements for city employees while using personal vehicle for city business such as:
    - personal vehicles are to be maintained in safe, roadworthy conditions;
    - the employee must notify their auto insurer that their vehicle is used for business purposes; and
    - the employee must carry a minimum of $1,000,000 (preferably $2,000,000) Auto Liability Insurance.
  - Notification of the City in the event of an accident; and
  - Requirement on drivers to attest (or prove) no changes to their driver record.

3. Combined Fleet and Personal Vehicles Policy

- The objectives and purpose of a Combined Fleet and Personal Vehicle Policy are a combination of the objectives and purpose of both Fleet Vehicle Policies and Personal Vehicle Policies.

- These policies outline specifically how fleet vehicles are to be assigned and what criteria must be present for an employee to use a personal vehicle for business purposes.

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3.1.2 Fleet Management

Analysis

- Fleet Vehicles and Personal Vehicle policies help alleviate a number of common challenges faced by the Fleet Department:

Challenge	Policy Opportunity
Ownership of vehicle maintenance goals in program areas	Roles and responsibilities for Division leaders includes: ○ Monitoring eligibility of drivers ○ Discipline for misuse of vehicles ○ Ensuring 48 hr accident reports
Employee responsibility for vehicle maintenance/safety	Roles and responsibilities for employees includes: ○ Follow HTA rules, CVOR regulations and city bylaws ○ Maintain full licence and eligibility ○ Basic care (snow, ice removal) ○ Duties to support tracking (mileage log, fuel log/card requirements)
Assigning correct size vehicles to the job at hand	Roles and responsibilities for Division leaders includes: ○ Identifying vehicle requirements for the job at hand ○ Assigning appropriate sized vehicles
Vehicle Lifespan	Roles and responsibilities for Division leaders includes: ○ Performing routine maintenance of vehicles ○ Monitoring the usage and rotation of vehicles to maximize vehicle life
Training	Roles and responsibilities for Division leaders includes: ○ Providing employees with appropriate training in regards to the safe use of vehicles where required ○ Advising employees of appropriate contacts in the event of an emergency

3.1.2 Fleet Management

Recommendations

1. **Address Summer Vehicle Demand** – The increased demand for vehicles during summer months may be addressed by:
    - Implementing a personal vehicle use policy to encourage staff to use their own vehicles where appropriate.
    - Assigning the appropriate vehicle to the job at hand (i.e. If a letter is being delivered, assign a car, not a pickup) to ensure larger vehicles are available when they are required.
    - Leasing cars rather than trucks during summer months to temporarily increase the size of the fleet. Compared to trucks, cars are less expensive to lease and due to the nature of work they are typically engaged in, they are less likely to be damaged than trucks.
    - Keeping old vehicles as long as they are in safe working condition to use in the summer.

Benefits

- Increased efficiency of the Fleet
- Increased flexibility
- Reduced uncertainty regarding vehicle availability
- Sufficient vehicles in the fleet to address increased demand during summer months

Key Success Factors

1. An open and collaborative approach to developing an action plan and policies that support the increased demand for vehicles in summer months.

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3.1.3 Solid Waste Management Diversion

Item	Description
Review Scope	○ Provide a general summary of perceived gaps and general Review of the 2010 City of Sarnia Waste Management strategy, performance objectives and resource constraints/gaps. ○ Benchmark the City of Sarnia's Waste Management strategy and practices against other Medium Urban comparators, including key best practices identified through a review of published strategies and guidance from the Continuous Improvement Fund (CIF). ○ Develop improvement opportunities and recommendations which take into consideration the City's current staffing model and budget. ○ **OUT OF SCOPE:** Review of Emterra and Marcotte contracts given that the City recently signed new agreements.
Applicable Evaluation Criteria	see table below

Time	Resources	Level of Services
☐	☑	☐
Process	**Technology**	**Cost**
☐	☐	☑

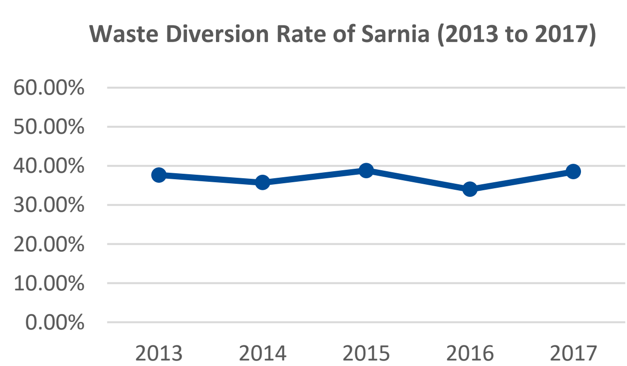
3.1.3 Solid Waste Management Diversion

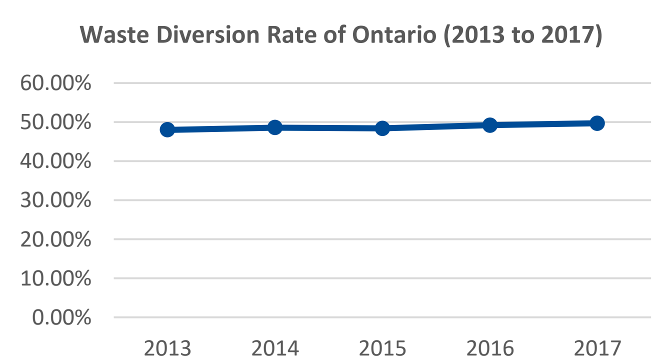
Current State Findings

- The City of Sarnia is located in Southwestern Ontario on the south shore of Lake Huron. It is home to approximately 71,594 residents, and spans an area of 164.6 km², with a reported 26,649 single family households, and 8,362 multi-family households. According to the *2017 Resource Productivity and Recovery Authority (RPRA) Residential Waste Diversion Rates by Municipal Program*, the City of Sarnia falls within the municipal grouping called Medium Urban which also includes:

Medium Urban						
City of Barrie	City of Guelph	City of Sault Ste. Marie	City of Sarnia	Thunder Bay	City of Brantford	City of Peterborough

- Among municipalities in this Medium Urban cluster, the City of Sarnia's 2017 waste diversion rate was 38.5%, which falls slightly below the 43.1% average for this municipal cluster.
- Waste diversion rates can fluctuate by a 3-5 percentage points per year. Where the Ontario residential waste diversion rate has increased steadily but only incrementally from 2013-2017, the City of Sarnia's waste diversion rate has been consistently below average and noisier, peaking at 38.8% in 2015.





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3.1.3 Solid Waste Management Diversion

Current State Findings

- In 2010, the Continuous Improvement Fund (CIF) provided support for the City's Waste Recycling Strategy to:
  - Increase partner municipalities' blue box diversion rate up to the Ontario average as specified by Waste Diversion Ontario (WDO, the predecessor of RPRA);
  - Maximize capture rates of blue box materials through existing and future waste diversion programs;
  - Improve the cost effectiveness of recycling in our communities; and
  - Increase waste diversion in the local Industrial, Commercial, and Institutional (ICI) sector.

- The priority initiatives recommended through the 2010 Strategy that the City of Sarnia undertook with four other partner municipalities (including Village of Point Edward, St. Clair Township, Town of Petrolia, and Enniskillen Township) include:
  - Inter-municipal committee – leverage existing group of solid waste management representatives that collaborate on solid waste issues. Formalize group as a municipal joint committee.
  - Bag Limits: lower current number of garbage bags that can be set out at curbside for collection.
  - Promotion and Education: Enhance the Partner Municipalities' existing solid waste communications program, beginning with the preparation of a communication strategy.
  - Training of key staff.
  - Generally accepted principles for effective procurement and contract management.
  - ICI Business Outreach Program – to encourage and assist businesses to reduce the amount of waste they generate and increase in the amount they divert.
  - Multi-Municipal Collection and processing of recyclables.
  - Optimization of Collection Operations.

- Provincial regulations drive the action that municipalities such as Sarnia undertake to support waste diversion. Many of the above initiatives from the 2010 strategy would require the issuance of an RFP for the design and implementation of specific solutions. While it appears that no budget to implement activities has been available, another reason for the lack of recommendation implementation is the lack of responses to consulting tenders (e.g. The RFP for Waste Diversion, Recycling and Waste Management Strategy that the City issued in 2012 but did not receive a single bid).

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3.1.3 Solid Waste Management Diversion

Current State Findings

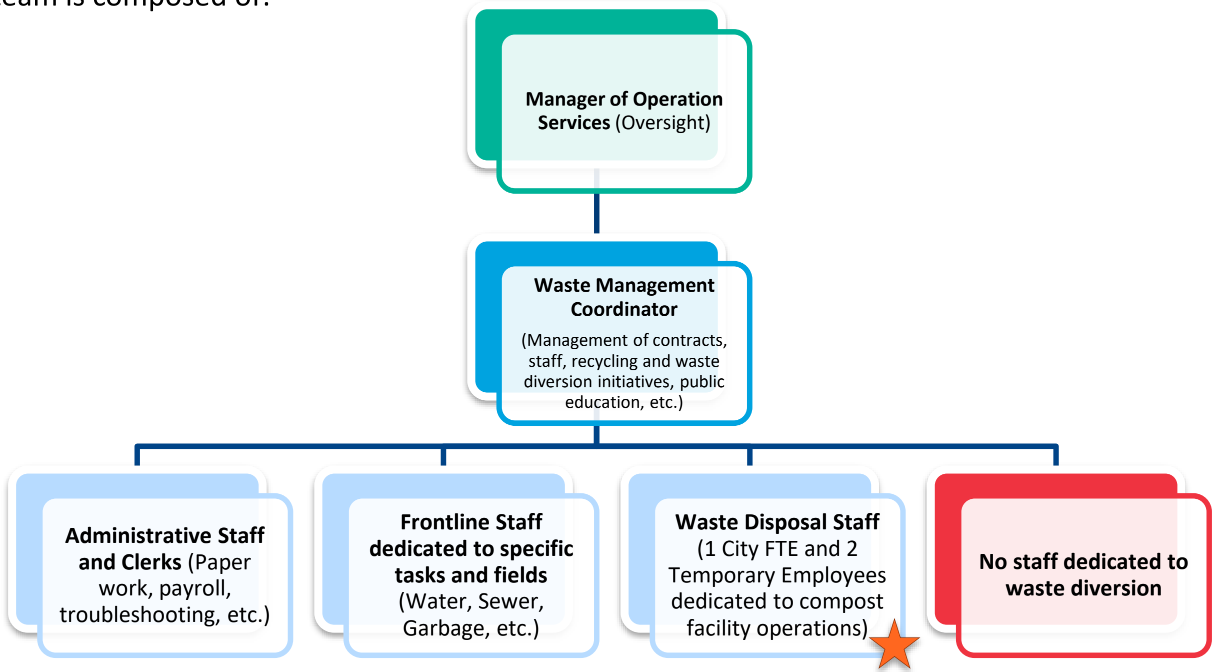
- Based on data collected via documentation review and stakeholder engagement interviews, the City of Sarnia has been mostly status quo since 2010 in its approach solid waste management and diversion. The City does not currently have any formal waste diversion targets, no Organic Food Waste Diversion initiatives, or any specific programs under consideration or implementation to improve waste diversion to date beyond:
  - Applications and tools that help promote waste reduction and effective separation of recyclable waste from landfill (like **Recyclable Coach**, **Waste Wizard**, and **MyWaste App**);
  - Social media outreach; and
  - Information delivered by students to multi-residential properties.

- The above mentioned tools and information campaigns to raise awareness among homeowners and businesses that are currently in place have limited investments ($10K for student outreach, $30K for advertising and $9K for materials), and no plans are currently in place to develop a new Waste Diversion Strategy unless mandated by provincial objectives. It has also been noted that residents of the City are not well informed on appropriate waste disposal practices, and overall resistance to waste reduction and recycling initiatives is common (e.g. media backlash, an increased number of complaints, and resistance to the transition to paper bag yard waste collection). Resource capacity is also limited. In fact, our observations indicate that the Waste Management Team of the City of Sarnia has a limited number of staff all of whom have scarce availability to:
  - Support and manage the City's solid waste management initiatives;
  - Bring City of Sarnia's CIF financed Waste Recycling 2010 Strategy recommendations to life since 2010;
  - Enforce recycling by-laws;
  - Engage in proactive measures to educate the public;
  - Issue requests for proposals for further improvement work; and
  - Keep up with provincial waste diversion objectives.

3.1.3 Solid Waste Management Diversion

Current State Findings

- The current team is composed of:



**The Waste Management Coordinator is the sole resource fully dedicated to Waste Diversion initiatives. Minor support is received from Waste Disposal staff.*

- Other than the Waste Management Coordinator, the only dedicated staff to support Solid Waste Management are one full time City employee (FTE) and two Temporary Employees at a waste disposal site. Absences due to illness or vacation can have a significant impact on operations at this site. Temporary employees are often unavailable to substitute for absent coworkers, there is no pool of cross-trained temporary or FTE employees to reach out to, and often, the Waste Management Coordinator has to step in to ensure the waste disposal site continues daily operations. Furthermore, recycling by-law enforcement is becoming an issue due to lack of resources to take on some of the Waste Management Coordinator duties.

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3.1.3 Solid Waste Management Diversion

Current State Findings

- For support, the Waste Management and Diversion Team of the City of Sarnia currently relies on the Environmental Committee for communication with the Council and recommendations' provision. Past consulting service providers have also expressed interest to help, but due to budgetary restrictions were unable to.

- In the approved 2019 Budget highlights, two areas related to garbage, recycling and composting were noted:
  - $529,674 for Recycling & Compostable – an increase of 0.74% was attributed to a new contract in July 2019 for education/revenue reduction; and
  - $75,870 for Garbage – an increase of 0.11% that was attributed to a new contract as of July 2019.

- The above budget highlights are directly related to third-party contracts for waste collection and disposal: Emterra Environmental ($7.7 million for a 4 year contract for the collection of Blue Box recyclables) and Marcotte Disposal ($7.9 million for a 4 year contract for the collection of garbage, yard waste, large items, compost and brush). These rising costs have been flagged as concerns due to their direct impact on municipal tax increases. The market is limited when it comes to service providers, and Emterra and Marcotte were consistently the only bidders on Sarnia's waste collection needs. This raises concerns that it is difficult to contain these costs due to a lack of competition that is seen as an inevitable result of Sarnia's unique and isolated geography which limits the competitive marketplace when receiving tenders for these services.

- The detailed 2019 Budget shows that the approved budget for Waste Management – Collection (cost centre 3800) is $1,188,570 which reflects forecast total expenses of $1,215,050, offset slightly by forecast revenue of $26,480.

- The Budget also shows the approved budget for Garbage Recycling (cost centre 3880 – which actually covers the City's recycling, yard waste, and compost site) is $1,633,199 which reflects forecast total expenses of $2,916,444 offset by forecast revenues of $1,283,245.

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3.1.3 Solid Waste Management Diversion

Key Challenges

Resources	There is a lack of resources within the Waste Management and Diversion Team of the City of Sarnia. In addition to an overall inability to prove exact resource needs due to the absence of KPIs, lack of productivity measures and data records, and City wide technology inefficiencies. The acting Waste Management Coordinator's duties are significant with no additional support, resulting in insufficient time and resources to undertake best practice initiatives. Other resources are focused on specialized tasks, and do not contribute to public awareness campaigns, by-law enforcement, educational initiatives, and overall recommendations' implementation management.
Cost	The cost to implement past strategic objectives and any future objectives that can impact waste diversion targets is beyond the department's budget. As well, the City must pay increasingly higher prices for the services of waste collection and disposal contracts – which have a direct impact on resident taxation rates and limit potential budget opportunities to implement new programs to tackle provincial waste diversion objectives.

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3.1.3 Solid Waste Management Diversion

Benchmarking

- Solid waste management diversion remains a complex issue for the City of Sarnia. Our observations indicate that improvements have first and foremost been hindered by:
  - An overall lack of clear objectives and set targets;
  - A lack of public education, support of City initiatives, and awareness of recycling and waste disposal practices;
  - Public resistance to City's solid waste management diversion initiatives;
  - Lack of budgetary investments; and
  - A lack of resources to undertake new initiatives.

- To provide actionable recommendations based on solid waste management best practices to the City of Sarnia, our team identified comparator municipalities from the Medium Urban Municipal Grouping, and benchmarked City of Sarnia's solid waste management diversion practices with comparator municipalities. Comparator municipalities examined include the City of Sault Ste. Marie, City of Brantford, City of Barrie, City of Peterborough, and City of Guelph whose population is closest to the City of Sarnia, and waste diversion rate is as indicated in the table:

Medium Urban Municipality	Reported Population	Waste Diversion Rate
City of Sarnia	77,429	38.5%
City of Sault Ste. Marie	73,413	30.4%
City of Brantford	98,314	33.8%
City of Barrie	147,000	52.1%
City of Peterborough	81,496	55.4%
City of Guelph	131,000	57.7%

- Given that the City of Barrie, the City of Peterborough, and the City of Guelph's Waste Diversion rates were higher than the waste diversion rate of the City of Sarnia, and higher than the overall municipal Medium Urban group average of 43.1%, the City of Barrie, City of Peterborough, and the City of Guelph's waste diversion practices were reviewed to identify best practices that the City of Sarnia could implement.

3.1.3 Solid Waste Management Diversion

Benchmarking

Below is a summary of each City's current states, and solid waste management best practices derived from online research and publically available documentation:

Municipality	Current State Initiatives and Best Practices
City of Barrie	○ The City of Barrie issues fines for illegal dumping ranging from $150 to $5,000. ○ The City has 2 teams that are responsible for illegal dumping cleanup between the months of May and November, costing the City ~$100,000. ○ The City defines littering on its City Website and provides a contact number to report offenders.
City of Peterborough	○ The County of Peterborough abides by Stewardship Ontario, and CIF best practices in Promotion and Education (P&E) efforts. The City of Peterborough is comprehensive in its outreach, and messaging. Participation increases in P&E campaigns resulted from the utilization of higher quality P&E materials. ○ Peterborough delivers a waste reduction calendar to each household, a cottage education package is distributed through cottage associations, and a direct mail Campground Information Sheet is distributed to campground facilities to educate them about recycling. ○ The County credits two of its policies: *mandatory recycling*, and an *enforced landfill ban on recyclable materials* for increasing its waste diversion rate. ○ Where curbside recycling is not available, Peterborough provides two drop-off depots at their landfill and transfer stations (in addition to the depot at the Materials Recycling Facility). ○ The City of Peterborough engages students and families in practical action to reduce waste and consumption issues through programs like Planet Protector Academy that was launched across 220 elementary schools of the City.
City of Guelph	○ The City of Guelph uses the Waste Wizard application / online tool (like the City of Sarnia), to aid public with garbage sorting. ○ It has dedicated staff for waste by-law enforcement as part of its Waste Management Division complement, rather than through Municipal Law Enforcement operations. ○ The City of Guelph issues fines for illegal dumping. ○ It also urges residents to report illegal dumping and littering offenders through its webpage. ○ There is a comprehensive and informative webpage on its City Website addressing Garbage and Recycling. ○ Launched a Crime Stoppers Campaign to put an end to illegal dumping. Crime Stoppers originally only partnered with provincial and local police services to help solve crimes, but now is also partnering with local by-law enforcement officers. The program focuses on spreading dumping awareness and urges residents to come forward and share information with Crime Stoppers Guelph Wellington. The campaign was promoted on social media, and posters and postcards were distributed to county and city outlets.

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3.1.3 Solid Waste Management Diversion

Benchmarking

- Given current state findings in the City's solid waste management diversion practice, and the fact that the 2010 City of Sarnia Waste Recycling Strategy's recommendations are yet to be implemented, together with the Waste Management Team of the City, we prioritized the 2010 Strategy recommendations to help the City define its target and develop its waste management diversion objectives. Recommendations were ranked by priority level as outlined below:

Priority	Recommendation from the 2010 Waste Management Strategy
1	Training of Key staff.
2	Promotion and Education: Enhance the Partner Municipalities' existing solid waste communications program, beginning with the preparation of a communication strategy.
3	Generally accepted principles for effective procurement and contract management.
4	Assess tools and methods to maximize diversion.
5	Optimization of Collection Operations.

- Responsible waste management requires careful planning, investment, and ongoing management, and monitoring. Like other municipalities, the City of Sarnia may experience growth in population, and changes in economic activity impacting its solid waste management requirements. As a result, for optimal operations, waste management policies, by-laws, and programs need to account for the community's changing needs, and available financial and human resources. Waste management planning, with meaningful community engagement, is important to the City's success in improving its practices and meeting the challenge of changes. From its planning, the City recognizes its current waste management situation, sets priorities and targets for improvement to achieve, identifies and evaluates options, develops and implements a waste management plan, and sets applicable timelines that will enable progress tracking. A good waste management plan will help guide the City's decisions and financial planning, and will help focus initiatives on identified priorities reducing risk and future liabilities.

3.1.3 Solid Waste Management Diversion

Benchmarking

- Although the City's priority focus appears to be on promotion and education, the Waste Management Team should not omit the importance of the two guiding principles that should guide communities with limited budgets and the high cost per capita of maintaining infrastructure in their effort to manage waste in an environmentally responsible manner:
  - Embracing a risk-based approach by prioritizing infrastructure, operational activities, and waste types to reduce the risks to human health and the environment.
  - Committing to continuous improvement to the waste management system over time.

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3.1.3 Solid Waste Management Diversion

Benchmarking

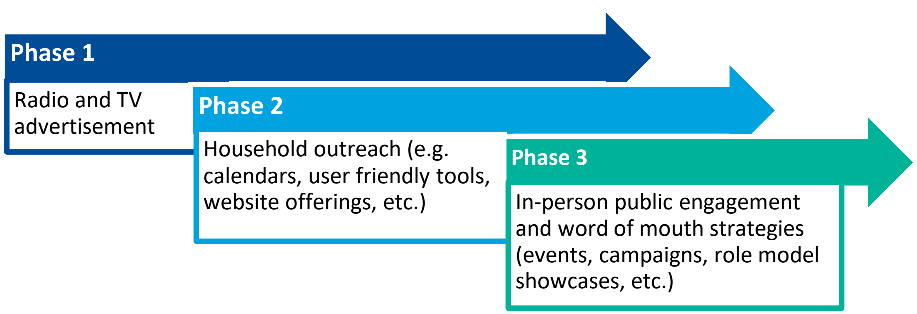
Public Education:

- Because the public appears to be resistant to change and the City's waste management initiatives, and an overall lack of public awareness of recycling and waste disposal practices, the City should focus its efforts on public education and promotion of best practices.
- General best practices for promotion and education include defined audiences, defined messages, and media, planned deployment with frequent communication, and monitoring of results. Guidance from the Continuous Improvement Fund (CIF) was also sought. It has been identified that CIF offers resources to assist municipalities in developing and implementing public promotion and education (P&E) plans, and have delivered two sessions of the P&E training course: *6 Steps to More Effective P&E Campaigns* with hands on, practical advice for municipal staff. CIF also offers resources through its "P&E Shop" that offer tools for smaller communities to develop waste management communications plans, and provide communications materials templates as well as practical guidance to update and implement P&E plans for small programs that can be tailored to each specific municipality. In 2013, the City of Sarnia partnered with CIF to launch a project to implement best practices in its municipal multi-residential recycling program. As part of this initiative the City developed new P&E material. Municipal staff including summer student staff distributed print materials (e.g. resident flyers, posters, signs, and container labels) to residents. including large signage for each of its residential buildings. The sign installation agreement however defaulted during the project, and the City has yet to complete its sign installation work.
- Other P&E best practices derived from various reports and online resources include:
  - Organizing targeted educational campaigns for the community (on composting, recycling, waste disposal, etc.);
  - Holding waste disposal community events, household visits for waste pickup, in-person education opportunities; and,
  - Identifying effective waste messaging and guidance within best practice communities, and sharing successfully tested templates via an online website and print distribution where applicable.

3.1.3 Solid Waste Management Diversion

Benchmarking

- Developing targeted waste outreach and education materials. Materials that contribute to the success of a recycling program employ a mix of media over a defined period of time and vary according to audience, available budget, and resources. Media categories include:
  - Print (calendars, brochures, etc.);
  - Broadcast (radio announcements, TV advertisement, etc.);
  - Electronic (City website, emails, etc.);
  - Outreach (in-school education, special events, etc.); and,
  - Icons and Incentives (community mascots, magnets, etc.).
- Offering education and training programs targeted for personnel by fostering team building and good communication
- Engaging neighbours in P&E activities:
  - Multi-municipal P&E enables participating communities to have a common list of target materials and similar collection programs and policies in neighbouring jurisdictions. Multi-municipal mass media program campaigns can further reinforce consistent promotion of such messages as residents relocate between neighbouring jurisdictions.
- Combining media and tactics into a multi-phased approach that benefits from mass media's impact on building awareness, and community outreach that engages residents and contributes to public skill-building. *Where budgets are limited, it is suggested to focus on, and increase Phase 2 activities in frequency.*



3.1.3 Solid Waste Management Diversion

Benchmarking

By-law Enforcement:

- In addition to the public lack of awareness of and education on recycling and waste disposal practices, our observations indicate that the City of Sarnia's community is often non-compliant with recycling and waste disposal rules and guidelines. Complaints are on the rise. Furthermore, illegal dumping and littering offences are also on the rise, but the problem is not being appropriately addressed.

- To tackle this compliance challenge, the City of Sarnia built into its *Garbage and Waste By-Law Number 62 of 2006* a set of penalties that will ensue if any person or corporation contravenes the By-Law (e.g. a fine of no more than $10,000 for persons and $50,000 for corporations for a first conviction, and a fine of no more than $25,000 for persons and $100,000 for corporation for any subsequent convictions). The City of Sarnia however does not have a By-law for Littering and Dumping, no special waste by-law enforcement programs, activities or dedicated staff to the cause, and a lack of online information that could educate the community, and encourage the public to report offenders.

- A scan of other municipalities and best practices for litter and illegal waste management was conducted to review recommended approaches for solid waste, dumping and littering by-law enforcement and public education. Best practices indicate that, if implemented correctly, appropriate by-law enforcement may reduce community complaints. Recommended best practices, and examples of successful approaches can be summarized as follows:

Allocate dedicated staff for waste by-law enforcement – Various municipalities like the City of Guelph, City of Hamilton, City of Ottawa, Region of Peel, Niagara Region, and Durham Region have dedicated staff for waste by-law enforcement as part of their Waste Management Division complement, rather than through Municipal Law Enforcement operations. According to these municipalities, integrating solid waste by-law enforcement with waste management operations of the City is an effective method to support compliance with municipal waste program requirements in a timely manner.

By-Law specific to littering and dumping – Municipalities like the City of Guelph and the City of Toronto have a by-law that specifically addresses illegal littering and dumping. By-laws ensure consistency in challenge handling approaches, and communicate City rules to law enforcement officers and residents alike. Having detailed by-laws and policies helps the City address littering and dumping disputes and conflict.

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3.1.3 Solid Waste Management Diversion

Benchmarking

City website information – Comparator Medium Urban Municipalities like the City of Guelph, and the City of Barrie, and the larger City of Toronto bring their resident's attention to the illegal littering and dumping issue by populating their City website with clear information on littering definition, its impacts, and contact information to report offenders to the Law Enforcement Services.

Reporting tool for illegal dumping – The Region of Niagara developed an online reporting tool for illegal dumping because the public reportedly wanted an online tool, and were confused about how and when to report illegal littering. This tool collects information on the location site, materials dumped, and contact information, and its implementation resulted in an increase in notices served, quicker law enforcement staff response time, reduction in repeat offenders, and an overall increase in reports received.

Zero tolerance approach to enforce illegal waste – Imposing a one container limit for curbside single-family household garbage collection increased the number of complaints the City of Hamilton received, as such the City piloted an 18 month zero tolerance approach to enforce illegal waste that amended its approach to fines per the following:

- Yard maintenance by-law amended to a minimum $500 fine for illegal waste;
- Solid waste bylaw amended to include $125 fine for using a City receptacle for household waste; and,
- Unpaid fines are added to property taxes.

This approach resulted in diminished illegal waste dumping hotspots, and an increased number of charges and fines collected, but no reduction in complaints received.

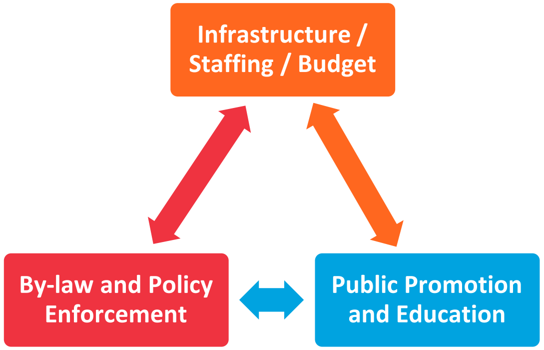
Litter and Illegal Waste Management Strategy – The Township of Langley, British Colombia, recently approved a Litter and Illegal Waste Management Strategy developed with input from the public and based on three fundamental pillars: infrastructure, education, and enforcement. As part of this strategy a reporting tool was developed for the public to report any illegal dumping activities, and the #idiot campaign was launched to bring attention to the program. Illegal dump sites were tagged with the #idiot campaign signs, the Township has made several breaks in the enforcement approach to the #idiot campaign, and tickets were issued to offending businesses after investigation concluded illegal dumping of garbage.

Programs to reduce abandoned neighbourhood waste and raise customer awareness – The City of Surrey of British Colombia piloted several programs to reduce abandoned neighbourhood waste and raise customer awareness. Pilots included providing education to households in illegal dumping hotspots, allowing households to receive collection for additional quantities, allowing households to dispose of additional materials not currently accepted such as tires, electronics, and small appliances, and Pop Up Junk Drop Off events. All efforts resulted in an initial decrease in the number of occurrences of illegal dumping.

- Above proposed enforcement and public education solutions should be examined by the City of Sarnia, and the following three pillar solution should be explored:

3.1.3 Solid Waste Management Diversion

Benchmarking



Funding Opportunities:

- Recognizing the City of Sarnia's high-priced contracts with third parties for waste and recyclables' collection and disposal, and budgetary limitations for waste management diversion programs, funding sources and opportunities were researched and reviewed. To support and implement its solid waste management diversion initiatives, the City can seek funding from the likes of the following resources:
    - Continuous Improvement Fund (CIF);
    - Green Municipal Fund – Federation of Canadian Municipalities (grants and loans);
    - Industry Canada – Financing Website (including Infrastructure Canada); and,
    - The City can also rely on economies of scale, and consider engaging groups like Crime Stoppers for its public education needs (as a free resource).

Staffing Allocation:

- It appears that Sarnia's Solid Waste Management Team is understaffed with only a Waste Management Coordinator responsible for all of the City's waste management operations. Understaffing is however not backed by productivity data measures, and will require quantitative data to determine staff shortages, and quantify exact staffing needs. Other roles under the Operation Services will have to be closely reviewed and monitored for collaboration opportunities on waste management and diversion tasks. Without appropriate staffing, the City will not be able to implement suggested best practices.

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3.1.3 Solid Waste Management Diversion

Recommendations

1. **Set Targets and Clear Objectives** – Set targets and clear objectives based on the prioritized list of recommendations from the 2010 City's Waste Recycling Strategy to drive solid waste management diversion initiatives forward and hold the waste management team accountable for tasks to be implemented.
2. **Develop a New Waste Management Strategy and Plan** – Engage CIF to fund the City of Sarnia's new Waste Management Strategy that will set clear objectives for the City's current solid waste management needs and goals. Developing a new waste management strategy will formalize target and objective setting. If the focus is solely on public education, develop a Public Engagement and Education Plan.

Benefits

- Team accountability
- Clear and well defined objectives and targets
- Updated Waste Management Strategy and Plan

Key Success Factors

1. Buy-in and engagement from leadership and key staff who will be responsible for operationalizing the strategic plan.
2. A recognition of what realistic goals and processes can be set given limited resources in this area.

3.1.3 Solid Waste Management Diversion

Recommendations

3. **Focus on Public Education** – Focus on public education, and awareness initiatives, enhance the City of Sarnia's existing solid waste communications program, beginning with the preparation of a communication strategy. Refer to public education best practices outlined in the Benchmarking / Analysis section for further recommendations to implement.

4. **Develop policies and By-Laws** – Develop policies and by-laws that impose fines on public waste disposal offenders (e.g. By-Law for Littering and Dumping/ Solid Waste Management By-Law). Explore the possibility to transfer one general Municipal Law Enforcement Officer to the Public Works Department and the Waste Management Team to provide enhanced enforcement of current and future waste disposal by-laws, and address illegal dumping activities on public property. Refer to by-law enforcement best practices outlined in the Benchmarking / Analysis section for further recommendations to implement.

Benefits

- Informed and educated public
- Support of and decreased resistance to new waste management initiatives
- Compliance with waste management best practices
- Reduced complaints from the community

Key Success Factors

1. Regular review and updates to waste disposal By-laws as required.
2. Lead by example to ensure the residents of Sarnia adhere to waste disposal and recycling best practices.
3. Structured and comprehensive training materials.

3.1.3 Solid Waste Management Diversion

Recommendations	Benefits
5. **Implement Productivity Measures** – *Process/KPIs recommendations 1.6 and 1.7 are applicable here.* Specific to solid waste management diversion, develop and implement a set of measures that track waste management team staff productivity, and track data over a period of 6 to 12 months to identify inefficiencies. This data will help determine staff shortages, and quantify staffing needs. Other roles within the Operation Services group will have to be reviewed for possibilities to collaborate on waste management diversion priorities and initiatives. 6. **Implement a Resource Re-Allocation Process** – *Resource Allocation recommendation 1.16 is applicable here*. Specifically, build a pool of employees with a skillset in waste management who can be leveraged to lead and implement various waste management initiatives, and act as substitutes to unplanned employee absences across waste disposal sites, and waste management worksites.	○ Adequate staffing ○ Resource availability ○ Optimal operations

Key Success Factors

1. Structured methodology and tools for process management and improvement.
2. Individuals selected for key leadership positions must have the right skillset, experience and culture fit.

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Item	Description
Review Scope	○ Review the current costs of supporting sale of bins/carts to industrial and commercial customers using client-provided data and estimates. ○ Review and consider options related to bin/cart sales to industrial and commercial customers.
Applicable Evaluation Criteria	See table below

Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☐	☐	☑

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3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Current State Findings

- As part of its effort to encourage recycling and promote the Blue Box Program, the City of Sarnia's Public Works and the Customer Service office undertook an initiative to sell recycling bins for a wholesale unit cost of $7 per **Blue Box**, and $80 per large **wheel cart**. Recycling bins and wheel carts are sold to both industrial and commercial customers.

- Our observations indicated that the City generates relatively low revenue from the sale of carts at wholesale cost to industrial and commercial customers. The City of Sarnia 2019 Approved Budget's yearly forecasts for the sale of recycling bins, and wheel carts (including the 2019 sales forecast to industrial, commercial and residential customers) was reported to generate $1,000. It appears that over the past 5 years, the recovered budget from the sale of wheel carts and recycling bins to Industrial, Commercial, and Residential customers steadily ranged from $900 to $2,700. It was also noted that true costs to support sales are not reflected in the current wholesale rate. These additional costs to support bin and cart sales include:
  - Cost of storage space;
  - Bin assembly;
  - Purchase scheduling;
  - Commute to the storage facility at the Public Works site for transaction processing;
  - Purchase information gathering; and,
  - Invoice issuance.

- It is believed that outsourcing sales of recycling bins and carts to private sector retailers (e.g. Home Depot, Costco, Canadian Tire, etc.) will allow limited resources to focus on other important daily tasks and responsibilities.

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Current State Findings

Wheel Carts:

- The City of Sarnia makes use of 360 litre (95 gallon) rollout, two-wheel carts (with an open grip and a bar for the recycling truck to grab on to and lift) for collection of recyclables. Previously, the City's recycling collection contractor, Emterra Environmental was responsible for the sale of wheel carts for $115 a unit. The responsibility since then transitioned to the City of Sarnia's Public Works and City Hall offices.

- It was reported that wheel carts:
  - Require a large storage area (despite the City's already limited storage space, and a high storage cost (*true cost value of which is unknown due to its absence from the budget document*); and
  - Take up significant time from Public Works' staff daily workload. It has been estimated that the time required to support the sale of one wheel cart transaction requires approximately 1 hour of the administrative clerk's time.

Recycling Bins (Blue Boxes):

- Industrial and Commercial Users of the City of Sarnia collect their recyclables in 121 litre (32 gallon) recycling bins, and 83 litre (22 gallon) blue boxes, both are currently sold at a $7 per unit. The City's recycling guidelines indicate that there is no limit to the number of recycling compostable containers that the customers can have. The City of Sarnia's Public Works and City Hall are currently responsible for the sale of the City's recycling bins.

- Like wheel carts, recycling bins also occupy significant storage space at the storage building of the Public Works site, and although one sales transaction only takes up to 10 minutes of staff time, the task is time consuming and disruptive to staff's work especially when multiple sales transactions take place during a given day.

- In addition to its Industrial and Commercial sales, the City also supplies its residents with recycling bins. And although not a priority, there may also be opportunities to reconsider the City's role in supporting residential recycling bins as a future consideration.

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Current State Findings

Preliminary Data Analysis:

- Recycling bin and wheel cart cost and revenue data was provided at stakeholder interview discussions. Other data was estimated based on online research, and confirmed by stakeholders.

- Based on responses to outreach questions, interview data, and verified online research, the following information was reported for industrial and commercial sales of wheel carts and recycling bins, and is to be used for further analysis:
  - **Wheel carts:**
    - 1 hour for transaction processing.
    - Sold to industrial and commercial customers for $80/unit.
    - Based on staff's best guess, ~20 wheel carts are sold per year generating a revenue of $1,600 ($80 × 20 = $1,600).
    - The cost of a wheel cart per unit is $80.
    - 150 units were sold in 2019 (January to September).
      - Given above information, the current 2019 revenue should equal $12,000 ($80 × 150 = $12,000).
  - **Recycling bins:**
    - 10 minutes for transaction processing.
    - Sold to industrial and commercial customer for $7/ unit.
    - Staff confirmed that ~100 recycling bins are sold on a yearly basis generating a revenue of $700 ($7×100 = $700).
    - 1,400 units were sold in 2019 (January to September).
      - Given above information, the current 2019 revenue should equal $9,800 ($7 × 1,400 = $9,800).

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Current State Findings

- **Storage:** 93 square metres of storage space.
  - Wheel carts occupy 1/3 of the storage space, and recycling bins occupy 1/10 of the storage space.
  - The storage space is a City owned facility at Public Works, and there is no data indicating whether there is a rent cost associated. We confirmed this data with stakeholders, and the City's budget documents.
- **Additional costs based on estimates from online research:**
  - Administrative Clerk's hourly rate: $34/hour.

Plastic Bag Ban in Recycling and Yard Disposal Impacts:

- The *Plastic Bag Reduction Act* came into effect on July 1, 2019. Since then, all yard waste set out for collection must be contained in paper bags rather than plastic bags given that compost and recycling sorting facilities are no longer capable of processing plastic. The ban resulted in a large pushback from the local community, and a significant surge in wheel cart and recycling bin purchases from industrial and commercial customers.

- It has been reported that approximately 1,400 blue boxes, and 150 wheel carts were sold from January to September 2019. Numbers are still on the rise, and the 2019 revenue is anticipated to rise above **$21,800** – a rather unusual phenomenon in comparison to the **yearly projections** of $700 for the yearly recycling bins' sales, and $1,600 for yearly wheel cart's sales (as estimated from data provided at stakeholder interviews).

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Key Challenges

Time	Inefficient clerical (Payroll Administrator) time utilization when processing recycling bins and wheel cart purchases, specifics of which include: issuing invoices, transporting bins to City Hall, and storing/ placing bins and wheel carts in an allocated storage facility, in addition to their regular work responsibilities.
Resources	Inefficient workload breakdown and overall lack of resources to address Public Works' more pressing needs, challenges, and opportunities than the sales of recycling bins and wheel carts to industrial and commercial clients.
Cost	*(Pending further analysis)* Likely inability to justify the cost and expenses incurred versus revenue generated from Public Work's recycling bin, and wheel cart sales practice.

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Analysis

- Recycling bin and wheel carts' sale to industrial and commercial customers of the City of Sarnia and neighbouring communities appears to be a burden to the Waste Management Team of Public Works, especially considering the surge of sales in the first half of the 2019. A follow up stakeholder engagement indicated that almost no Recycling/ Blue bins are sold to the Industrial and Commercial Customers. As such, 32 gallon recycling bins were omitted from further analysis on the cost-benefit of outsourcing the sale of recycling bins and wheel carts to Industrial and Commercial Clients.
- Waste Management Team of Public Works' sales cost and revenue were calculated and yielded the following results:

Wheel Carts Cost vs. Revenue Analysis

Transaction Duration	1 hr
Clerk's Hourly Rate	\$34.00/ hr
Total Storage Area	93 m^2
Storage Occupancy	1/3
Wheel Cart Storage Area	31 m^2
Wheel Cart Storage Cost	N/A / Unavailable (City-Owned Property)
Cost of Wheel Cart per Unit	\$80.00
Revenue per Unit	\$80.00
Number of Units Sold per Year	20
Forecasted Yearly Revenue	\$1,600.00
Number of Units Sold in 2019	150
2019 Revenue	\$12,000.00

Cost Per Unit Sold	Revenue Per Unit Sold
Cost = Cart + Labour + Storage Cost = **\$80 + \$34** + Storage (implicit cost)	Revenue per unit = **\$80.00**

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Analysis

- Marking up the price of wheel carts to offset labour and storage cost will require the cost per unit to rise to $114.00 + Storage rent cost (if any). Storage costs are undefined (bins are stored on City property, so there is no obvious out-of-pocket cost to storage that will change significantly if bins are no longer stored).
- Public Works has poor controls over cash transactions. Public Works does not currently have cashiers or sales associates and required equipment to handle cash transactions, as the sales of wheel carts and recycling bins is their only type of sales transaction. Therefore, the sales process is unusually time consuming and manual. Furthermore, sales records are not maintained in the Public Works department, and the Number of Units sold (both forecasted for every year, and actual for 2019) was estimated by staff. If Public Works is to continue handling cash transactions, they need to be tracked appropriately and reported in more detail in City budget documentation. If cash transactions are not tracked, this could create risks of unaccounted for inventory or money.
- For comparison purposes, third party retailer stores were researched online, and prices for 95 gallon wheel carts were summarized in below table:

	Canadian Tire	Home Depot	Costco
Price of 95 Gallon Wheel Cart	From $109.99	Not Sold	Not Sold

3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Analysis

- Given the data on the previous slide from the Public Works' 95 gallon wheel cart sales and third party retailer's proposed price per unit, the City of Sarnia should sell the remainder of its wheel carts inventory that are currently stored in the Public Works storage unit, and leave the market of wheel cart sales to Canadian Tire or similar retailers. It is also recommended that remaining wheel carts are sold to Industrial and Commercial Customers through the City Hall's Customer Service division, given that this division has better cash handling resources and processes. The rationale behind leaving the market of wheel cart sales to third party retailers is as follows:
  - The price per wheel cart, whether it is sold by the City (at a break even price) or Canadian Tire, is approximately the same (~$4 difference);
  - Residents are likely to choose the lower price for their wheel cart purchase (Canadian Tire will carry the lower price of $109.99, if the City of Sarnia will choose to sell its carts for a break even price of $114);
  - By selling wheel carts at the current price of $80, the City of Sarnia is not recovering costs;
  - Unlike residential customers, industrial and commercial users will be much less sensitive to small price differences – the main advantage of Sarnia's efforts to date is likely inventory availability rather than cost, but that can likely easily shift to retailers once the existing large supply of inventory is exhausted.

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3.1.4 Sale of Recycling Bins and Wheel Carts to Industrial and Commercial Customers

Recommendations

1. **Leave the Market of Wheel Cart Sales** – Leave wheel cart sales market to a third party retailer to reduce the cost of labor and storage that the City incurs, and allow the Administrative Clerk to focus on his/ her daily tasks. This being said, the City of Sarnia should sell the remainder of its wheel cart inventory to Industrial and Commercial Customers prior to leaving the market. Remaining sales should be conducted from the City Hall's Customer Service Division.

Benefits

- Efficient recycling bin and wheel cart sales' operations
- Reduced cost
- Increased benefits
- Optimized Public Works operations

Key Success Factors

1. Communicate with industrial and commercial stakeholders and retailers periodically to ensure there is no significant shortage of wheel cart supply.

3.1.5 Care-A-Van Booking Procedure

Item	Description
Review Scope	○ Conduct a scan of medium sized urban municipalities as well as other larger municipalities to identify good practice policies to strengthen compliance with cancellations and no-shows. ○ Provide recommendations on potential approaches that balance a flexible and compassionate approach for regular users of specialty transit services with escalating consequences for persons who show a systematic cancellation/no-show behaviors that impact service availability/capacity.
Applicable Evaluation Criteria	see table below

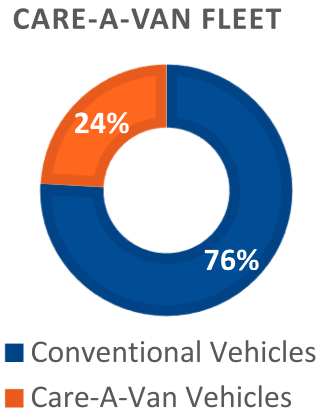
Time	Resources	Level of Services
☑	☑	☑
Process	**Technology**	**Cost**
☐	☐	☑

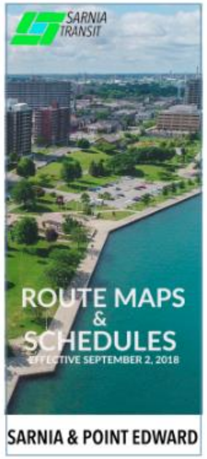
3.1.5 Care-A-Van Booking Procedure

Current State Findings

An Introduction to Care-A-Van:

- Care-A-Van provides safe, reliable, and accessible door to door transportation using lift equipped vehicles for persons with disabilities in the City of Sarnia and Point Edward areas. The City of Sarnia currently operates and maintains **seven (7)** Care-A-Van vehicles, and the service is eligible to both residents of and visitors to the City of Sarnia based on a defined set of specifications:
  - ***Both residents and visitors***' eligibility is determined on a case by case basis rather than a specific health condition. Service users have to be unable to use the conventional fixed-route transit due to physical disability as per the integrated regulations of the *Accessibility for Ontarians with Disabilities Act (AODA)* (examples of which may include: cognitive disabilities, physical disabilities that hinder one's ability to board conventional transportation, etc.). ***Emergency and compassionate ground services*** do not require an application, and are also available when required.
  - ***Residents*** have to submit an application and obtain approval from the City of Sarnia (between 10 and 14 days upon application submission) to be officially registered for the Care-A-Van service (on a permanent or temporary basis).
  - ***Visitors*** have to provide proof of registration upon booking and be registered to use a similar para-transit system in their City.





3.1.5 Care-A-Van Booking Procedure

Current State Findings

Current Care-A-Van Booking Procedure:

Booking Procedure: Eligible resident/visitor call Care-A-Van Dispatcher at 519-336-3789 (between 8 AM and 3 PM) with required booking information (Name, Phone Registration, Pick Up and Destination Address, Arrival and Return Times). If the dispatcher is unavailable, a voicemail can be left and the customer will receive a call back. Service users are requested to be ready 15 minutes prior to the vehicle arrival. Note that if the user is late, the driver will wait for 5 minutes.

Appointment types and booking timelines: (1) medical appointments can be booked up to 30 days in advance; (2) other appointments can be booked up to 7 days in advance; (3) standing arrangements for recurring bookings (e.g. work, school, etc.) are possible; (4) same day bookings can be accommodated (based on capacity).

Cancellation practices: Notification of cancellations must be received by 9 AM (the day of the trip). Customers who fail to inform Care-A-Van of the cancellation by 9 AM and "no-shows" will be charged a regular ride fare of $3 upon next service use. The fee will be collected by the Care-A-van vehicle driver. Further bookings will not be allowed if the fee is unpaid. Recurring offenders with a permanent booking will lose their permanent booking privilege.

Pain Point

It was brought to our attention that the City of Sarnia is not sufficiently enforcing rules related to last minute cancellations and no-shows for booked transportation. Such cancellations and no-shows affect the capacity and availability of services to other potential Care-A-Van users.

Current Solutions and undertakings:

- City of Sarnia and Care-A-Van staff acknowledge the issue of late cancellations, and "no-shows" can impact the quality of Care-A-Van service delivery and resulting capacity denial.
- Our team was advised that a review of the late cancellation/"no-show" issue was initiated in January 2019. The project is currently underway, and a policy to better enforce existing rules to reduce Care-A-Van capacity denial numbers created by the previous lack of policy enforcement is under development.

3.1.5 Care-A-Van Booking Procedure

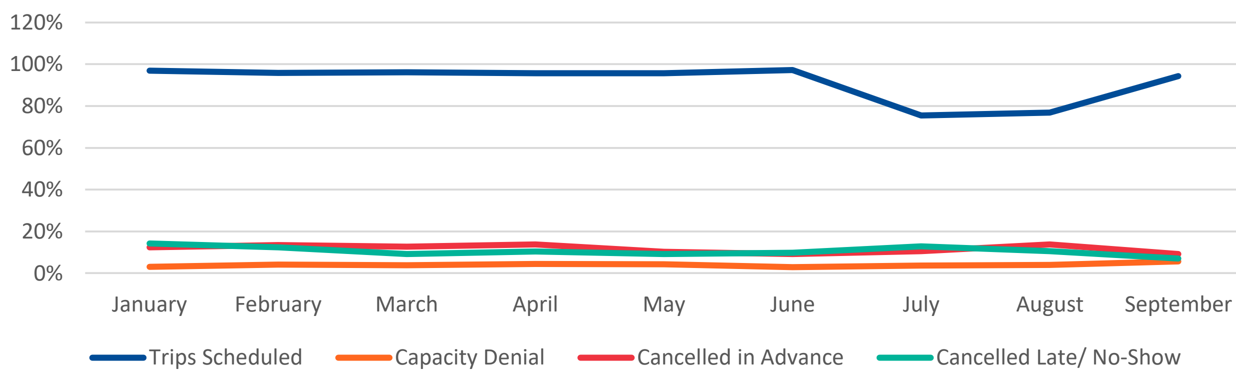
Current State Findings

- Novus and TripSmart data has been collected. The table below summarizes these review findings:

2019 Care-A-Van Service Booking Operating Statistics (in %)

	January	February	March	April	May	June	July	August	September
Trips Scheduled	96.97%	95.86%	96.19%	95.63%	95.71%	97.16%	75.44%	76.81%	94.32%
Capacity Denial	3.03%	4.14%	3.81%	4.37%	4.29%	2.84%	3.68%	3.90%	5.68%
Total Cancelled/No-Shows	26.64%	25.79%	21.87%	24.21%	19.31%	18.96%	23.38%	24.33%	16.28%
Cancelled in Advance	12.42%	13.47%	12.71%	13.74%	10.21%	9.13%	10.48%	13.78%	9.24%
Cancelled Late/No-Show	14.21%	12.32%	9.16%	10.47%	9.10%	9.83%	12.90%	10.55%	7.05%

Trend Line of the Care-A-Van Service Booking Operating Statistics from January to September 2019

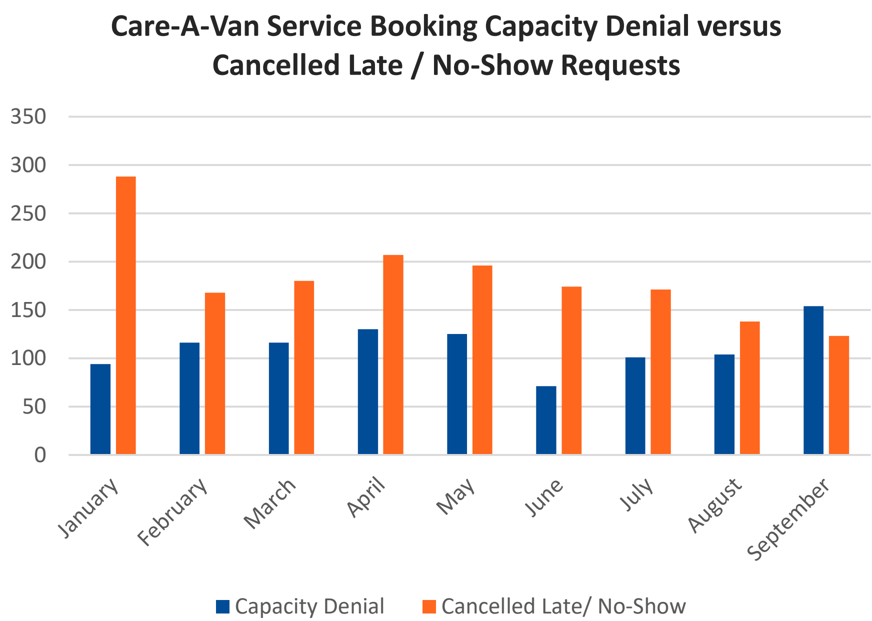


- On September 17, 2019, a new and approved by Council, policy of charging the regular fare of $3 per trip for any “no-shows” and late cancellations rolled out.
- Additional data will have to be collected to test the effectiveness of change, but informal feedback indicates that a decrease in the number of late cancellations was noted.

3.1.5 Care-A-Van Booking Procedure

Current State Findings

- To show the implication of late cancellation/"no-show" offences on specialty transit service capacity denial, data from the late cancellation/ "no-show" review initiated in January 2019 was used. Capacity denial reflects the total number of trips requested that Care-A-Van was unable to accommodate.
- Cancelled Late/No-Show instances include the number of recorded cancellations at the door, the number of trips cancelled late, and the number of no shows. The table below shows that between the months January and August 2019, capacity denial is consistently lower than the number of last minute cancellations/"no-shows". This suggests that if these were reduced or eliminated Care-A-Van could have accommodated partially or in full requested trips and thus eliminated capacity denial.



Note: In practice, scheduling/pickup location constraints would dictate how much denied service could be provided.

2019 Care-A-Van Service Booking Capacity Denial versus Cancelled Late/ No-Show									
	January	February	March	April	May	June	July	August	September
Capacity Denial	94	116	116	130	125	71	101	104	154
Cancelled Late/No-Show	288	168	180	207	196	174	171	138	123

3.1.5 Care-A-Van Booking Procedure

Current State Findings

- In addition to the implementation of the new policy in September 2019, Care-A-Van management is currently investigating and implementing solutions to deter undesired cancellation and "no-show" behaviours that range from:

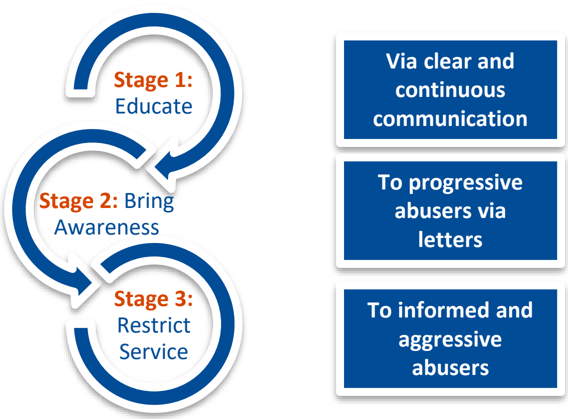
1 - A review of data to identify individuals with repeated patterns of cancellations and no-shows

2 - The issuance of notices to persons identified above advising of stricter enforcement of existing rules

3 - Closer monitoring of monthly data to identify trends and impacts of recent interventions

4 - Updating of the City's policies to balance the need for flexible application of rules for persons who are generally compliant while addressing incidences of more systematic non-compliance.

- We have been informed that a new policy is currently under development, and is expected to reflect a **three (3) staged approach** to compliance with late cancellation/ "no-show" requirements as depicted in the graphic:



- Although considered, no benchmarking was conducted to review best practices, and compare Sarnia's Care-A-Van booking cancellation/"no-show" policies with other specialty transit systems. However, circulating a questionnaire to leading agencies, and transit systems of neighbouring municipalities was considered for the purpose of gaining a better understanding of other specialty transit systems, their challenges, and solutions.

- To add tangible value, and given that great effort is currently underway to investigate Care-A-Van's late cancellation and "no-show" issue and its impact on the service's capacity denial, Optimus SBR has focused this review on identifying good practice policies that Care-A-Van can tailor and leverage to enforce rules that deal with late-cancellation and "no-show" penalties.

3.1.5 Care-A-Van Booking Procedure

Key Challenges

Time	○ **Inefficient driver time utilization when waiting for a “no-show” or late customer.** ○ **Inefficient utilization of dispatcher time when processing last-minute cancellations.**
Resources	○ Insufficient fleet and drivers to accommodate trips that have been denied services due to capacity limitations.
Level of Services	○ Increased number of late cancellations and “no-shows.” ○ High capacity denial due to short notice cancellations and “no-shows” that don’t allow Care-A-Van services to deliver on the needs of all of its service requesters.
Cost	○ Service cost incurred despite the inability to provide services to other Care-A-Van users when a “no-show” or late cancellation occurs.

3.1.5 Care-A-Van Booking Procedure

Benchmarking

- A jurisdictional scan of medium urban and specialty transit best practice trends among municipalities was conducted to identify good practice policies to strengthen compliance with comparable Care-A-Van program cancellation rules, and penalties that ensue from last-minute cancellation and "no-show". Identified policies may also help Care-A-Van design and develop approaches that strengthen cancellation rule related enforcement via a balance of flexible, compassionate, yet stringent policies that will cater to different offender profiles, and their unique situations. Findings on select three (3) policies and specialty transit programs are summarized below:

1. Wheel-Trans Service of the City of Toronto

- Like Care-A-Van, City of Toronto's Wheel-Trans service offers safe, reliable, and accessible transportation for customers with disabilities. Wheel-Trans services over 42,000 registered customers, comprises a fleet of accessible buses, contracted accessible taxi minivans, and sedan taxis, and provides over 4 million door-to-door yearly trips.
- To tackle its late cancellations and "no-show" challenges, Wheel-Trans developed a comprehensive set of policies that govern the *Life Happens* Points program specifically designed to address cancellation violations. The program is summarized below:

Criteria	Policy Specificities
Cancellation Allowance	Each Wheel-Trans Customer receives a total of 8 Life Happens points per month (unused points are not carried over, and not accrued). • *Each Late Cancellation (LC) results in the loss of 1 point (Only 1 point is lost if more than one LC occurs in one day).* • *Each No-Show (NS) or Cancellation at the Door (CAD) results in the loss of 2 points (regardless of whether the customer has multiple combined occurrences in one day).* ***Note:*** *If LC, NS, or CAD occurs, all booked trips with the same ID are automatically cancelled.*
Notice Deadline	A 4 hour cancellation notice prior to scheduled pick up time is expected.

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3.1.5 Care-A-Van Booking Procedure

Benchmarking

Criteria	Policy Specificities
Criteria for Violation	A violation happens when a customer uses more than 8 Life Happens Points in a month. A set of actions is triggered each time a customer has a violation within a 12 month period: • ***First month with a violation*** – Advisory letter is sent to customer as reminder of the policy. • ***Second month with a violation*** – Customer receives a 7 day suspension of Wheel-Trans service. • ***Third month with a violation*** – Customer receives a 14 day suspension of Wheel-Trans service. • ***Fourth month with a violation*** – Customer receives a 30 day suspension of Wheel-Trans service. • ***Fifth (or more) month with a violation*** – Customer receives a 60 day suspension of Wheel-Trans service.
Record Reset Criteria	Acquired upon a consecutive 6 month period with no violations (next subsequent violations are treated as a first).
Exceptions during Suspension Periods	Customers whose Wheel-Trans service is suspended under the Policy, may be approved for medical trips at the discretion of Toronto Transit Commission (TTC)/ Wheel-Trans service.
Additional Measures for Recurring Offenders	Customers who acquired a 30 (and more) day suspension in a 12 month period, may be required to complete a travel management plan with a supervisor.
Other Exceptions and Considerations	LC, NS, and CAD occurrences will be exempted if: • The Wheel-Trans vehicle is delayed by more than 20 minutes, or delayed by weather (snow/ ice); • An unplanned road closure, or unplanned building closure is blocking the customer and vehicle meeting point; • The customer is experiencing an unplanned medical emergency; or • The Wheel-Trans vehicle made an error. ***Note:*** *To dispute their Life Happens points, customers can contact Wheel-Trans services via phone or e-mail.*
Policy	Late Cancellation/ No Show Policy: https://www.ttc.ca/WheelTrans/Customer_Polices.jsp

- The Wheel-Trans Late Cancellation/ No Show policy has a clear outline, and sufficient detail to address different situations that can lead a customer to violate the cancellation rule. As such the 8 Point *Life Happens* Program may provide lessons to inform the City of Sarnia's Care-A-Van late cancellation/ no show policy under development. Prior to implementation, implications such as resource availability to track no-shows, and issue notices should be considered.

3.1.5 Care-A-Van Booking Procedure

Benchmarking

2. Brantford Lift Service of the City of Brantford and the County of Brant

- Brantford Lift Service is the City of Brantford's accessible transit system that caters to the needs of its residents and visitors with disabilities. Both the City of Brantford and the City of Sarnia fall under the Medium Urban Municipal Group based on reported population numbers. Although, the City of Brantford is about half the size of the City of Sarnia, Brantford runs an accessible transit system with late cancellation and no-show policies which can serve as a reference when developing Care-A-Van's own late cancellation and no-show policy.
- To deal with its late cancellations and "no-shows", Brantford Lift Service utilizes a two-stage approach consisting of the (1) Administration of No-Shows; and, (2) Suspension from Service, details of which are outlined below:

Criteria	Policy Specificities
Administration of No-Shows	• ***First Notice – Warning*** – **3 recorded no-shows** - an advisory letter is issued. • ***Second Notice – Warning*** – **4 and more recorded no-shows** – an advisory letter notifying the offender that further record of no-show will effect a review by the County of Brantford for service suspension consideration. ***Note:*** *in both instances, the customer is invited to respond to the notice.*
Suspension from Service	Suspension of the customer registration is a 4 stage process: ***Note:*** the *customer may appeal the suspension within 10 days of notice receipt.*
Website	Subsidized Transportation Program Guidelines 2013: https://www.karlencommunications.com/adobe/45441042320131057275O3DraftRFP-April2013McCallComments.pdf

- The policy outlined appears to have an unclear evaluation criteria (e.g. no details about the number of no-shows/ late cancellations that would trigger each specific type of suspension). The document that the policy was derived from for the purpose of this research is also full of commentaries from a Brantford Lift Service user that can be of use to the City of Sarnia's Care-A-Van, and should be taken into consideration when developing its late cancellation/ "no-shows" policy.

3.1.5 Care-A-Van Booking Procedure

Benchmarking

Despite its shortcomings, and identified lack of policy protocol that addresses emergency and special consideration cases, the City of Brantford's Brantford Lift Service late cancellation/ no-show policy appears to be simple, functional, and effective at deterring its residents from late cancellations, and no-shows.

- This jurisdictional scan highlights the components of a simple late cancellation / no show policy and sheds light on details (e.g. exceptions, compassionate grounds/ emergency protocol, etc.) that Care-A-Van should consider when developing its late cancellation/ no-show rule enforcing policy.

3. Winnipeg Transit Plus of the City of Winnipeg

- Winnipeg Transit Plus services the transportation needs of people who are unable to regularly use the City's fixed route transit system due to a physical disability as outlined by established criteria. Although the City of Winnipeg is about three (3) times larger, with a population almost eight (8) times bigger than the City of Sarnia's, Like Care-A-Van, Winnipeg Transit Plus, the specialty transit of Winnipeg, was challenged to address its no show/ late cancellation occurrences.
- According to the January 2019 *Investigation Report on City of Winnipeg's Handi-Transit Service* (rebranded to Winnipeg Transit Plus in 2019), in 2016 the service had 7,700 no show passengers, and 5,359 trip requests that the service was unable to accommodate the same year.
- To address this challenge, a well defined policy on no-show/ late cancellation enforcement was issued.

Criteria	Policy Specificities
Approach to No-Show and Late Cancellation Rule Enforcement	Mail notices, penalties, and service suspension are possible when no-show or late cancellation occurrences take place: ○ **Mail Notice Issuance –** occurs whenever a customer is reported as no-show (including late cancellation). ○ **Monetary Penalty Issuance –** can be broken down as follows: • 1st No-Show – No charge; • 2nd No-Show – The equivalent of one fare; • 3rd No-Show – The equivalent of two fares; • 4th No-Show – The equivalent of three fares; and • 5th and Further No-Shows – $15.00

3.1.5 Care-A-Van Booking Procedure

Benchmarking

Continued

Criteria	Policy Specificities
Approach to No-Show and Late Cancellation Rule Enforcement	○ **Service Suspension** – results when the amount owed by the client reaches or exceeds $30.00. Additionally, restrictions, fines, and/or other penalties may be imposed if client no-show offences persist.
Charge Collection	No-show penalties and fines are collected every 6 months.
No-Show Criteria	○ Passengers who cancel the trip within 30 minutes of the trip. ○ Passenger is not waiting at the pick-up point, is not ready to leave at the pick-up time (whether by own or caregiver's fault), or does not have the driveway shoveled at the residence in winter. ○ Passenger refuses the ride, or holds more parcels than what can be held on lap.

- Winnipeg Transit Plus is another example of an accessible transit system with a stringent, yet well defined late cancellation/ "no-show" policy. In addition to a well established policy, Winnipeg has a Policy Advisory Committee mandated to review and provide input/ advice on matters related to service policies and accessibility issues associated with providing service on public transit for persons with disabilities. Furthermore, Winnipeg Transit Plus is looking forward to launch an innovative iRide Scheduling Software/ Application that will help riders and specialty vehicles connect in real time for better service delivery. Care-A-Van of the City of Sarnia can leverage many of Winnipeg solutions all while being mindful of implications like technology investment cost, resource availability for notice issuance and penalty collection.

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3.1.5 Care-A-Van Booking Procedure

Benchmarking

- As indicated in the Current State section, Care-A-Van introduced a new policy of charging the regular fare of $3 per trip for any "no-shows" and late cancellations of booked Care-A-Van services. The effectiveness of this program remains unclear but is being monitored with further data collection. However, initial data indicates that the policy's impact on reducing service abusers or increase in capacity may have merit but is too early to draw clear conclusions. Based on discussion with staff, the City of Sarnia's Care-A-Van non-compliant users can be subdivided into two (2) categories:
    - Abusers with accessibility and medical issues (e.g. abusers with memory issues, missed trips due to unpredictably longer medical visits, etc.); and,
    - True abusers whose last minute trip cancellation or "no-show" have no compassionate grounds.
- To appropriately incentivize Care-A-Van's true service abusers, the City should consider reinforcing its current policy with a defined and progressively escalating enforcement program like that of the Wheel-Trans' Life Happens Point Program, and Winnipeg's Transit Plus monetary penalty and service suspension approach.
- Care-A-Van's staff should add to its current "no-show" and late cancellation data by tracking high-risk users with a track record of serial non compliance and their "No-show" or late cancellation reasons (if known). This list will help staff to identify true abusers of the system and draw appropriate conclusions from provided reasons determining whether the non-compliance is related to grounds for compassion or not.
- Like Wheel-Trans' policy, Care-A-Van's policy may also include a section outlining a list of exceptions and considerations that will separate between systematic offenders, and those whose offence should be judged under special considerations.
- To counter the increased number of Care-A-Van service users who do not comply with cancellation/no-show rules, the City should explore the possibility of setting its specialty transit service up on the iRide Scheduling Software/ Application that will hopefully allow for better late cancellation and "no-show" management across the City.

3.1.5 Care-A-Van Booking Procedure

Recommendations

1. **Monitor effectiveness of new $3 charge –** Monitor new policy given that, while it may be effective initially, it creates process issues (e.g., collecting, tracking payment) and may deter users, particularly for people (e.g., elderly, disabled) who might have difficulty paying it easily online, by phone or getting cash to pay it. This may not be the best course of action if the core issue is a small number of people being responsible for most of the no-shows.
2. **Implement new progressively escalating policy for last-minute cancellation and "no-shows"** – Develop a progressively escalating policy leveraging policy examples and programs outlined in the benchmarking/analysis section of the report. The policy should strengthen compliance with Care-A-Van cancellation rules via a balance of flexible, compassionate, yet stringent clauses that will ensure only true "offenders" are punished.
3. **Collect Data on Offenders** – Collect data to build a repository of Care-A-Van's late cancellations and "no-shows" along with reasons for missing the scheduled trip. Data collection will help future policy decisions.

Benefits

- Reduction of "no-shows"
- Reduction of last minute cancellations
- Save driver's time
- Improved compliance
- Balanced, flexible, and compassionate rule enforcement approach
- Reduction in capacity denial numbers

Key Success Factors

1. Structured methodology and metrics for data collection.
2. Communication for public buy-in and adherence to the late cancellation and "no-show" policy.

3.2. Finance

3.2.1 Procurement to Payment
3.2.2 Payroll Process
3.2.3 Customer Service
3.2.4 Energy Efficiency Reporting/Tracking
3.2.5 Capital Asset Management

3.2.1 Procurement to Payment

Item	Description
Review Scope	Document the challenges in the current process of Procurement to Payment and the software's functionality as well as provide recommendations for what needs to change.
Applicable Evaluation Criteria	see below

Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☑	☑	☐

3.2.1 Procurement to Payment

Current State Findings

- The Procurement to Payment (P2P) process is a multi-step process involving a number of parties, depending on the value of the goods and services being procured. The City has been working towards improving this process and to date has accomplished the following:
  - Gained a better understanding of each party's roles and responsibilities in the P2P process; and,
  - Proposed changes to the P2P process to Council, including proposing to increase purchase limit values requiring authorization in order to increase efficiencies. This would reduce the number of purchases requiring Council approval, reducing red tape and increasing efficiency.
- At present, purchase requisitions are required for purchases of greater than $5,000, and four sign-offs are required for employee expenses. Requisitions are entered into the Vadim Purchasing Module (VPM). VPM is the system used by the City to track Purchase Orders (PO).
  - When a requisition is submitted, the approver receives an email alert. The approver is then responsible for reviewing and approving the requisition digitally in the VPM.
  - Approvals are typically completed within an hour, but can often take up to a few days if the approvers don't respond to the email alerts .
- The VPM generally meets the needs of the City and has been successful in speeding up the requisition process. However, the module is currently **nine system upgrades behind**, despite the City having an internal policy that it remains no more than one upgrade behind.
  - Another shortfall of the module is **it does not track approvals,** often causing Finance to have to spend time following up with approvers. If approvals are not received in time, it can negatively impact relationships with vendors as they may not be paid in a timely fashion and other services may not be performed on time as a result.

3.2.1 Procurement to Payment

Current State Findings

- Each PO is assigned a unique PO Reference Number. When referencing PO Reference Numbers, It is critical to ensure that the correct PO Reference Number is used to ensure accurate figures in the General Ledger (G/L).
- As PO Reference Numbers can change, it is important to cross reference with the live list on the intranet to ensure the correct number is used. PO's that are subject to increases in amount (i.e. through a change in scope) are assigned a new Reference Number rather than retaining the original number with an extension. This increases the difficulty of cross-referencing and leads to confusion for reconciliation.
- P2P reconciliation processes occur at the end of the year. The goals of reconciliation are to clear the capital accounts, as well as to identify commitments that are underspent. The Underspent commitments are rolled over into the next year. This limits the opportunity to reassign available funds during the year.
- The Finance team also noted that despite their best efforts to communicate any process changes to City employees, not everyone receives the message. For example, most employees were not aware that per diem amounts had increased.
- The City lacks trained project managers. As such, projects are led by inexperienced staff who may not be aware of the Procurement to Payment processes. This results in a lack of understanding regarding their role and responsibility for the appropriate management of project budget and the associated P2P processes.

3.2.1 Procurement to Payment

Key Challenges

Time	○ Purchase Order reference numbers are not static and can often change. As a result, payments are often applied to the wrong PO reference number. This results in significant time lost rectifying the error.
Resources	○ The City lacks trained project managers. As such, projects are led by inexperienced staff who may not be aware of the P2P processes. This results in a lack of clear accountability regarding ownership over the project side of the P2P process for project managers.
Process	○ At present there are a large number of sign-offs required for Purchase Orders and four sign-offs are required for employee expenses. This creates a bottleneck in the process. New approval limits have been proposed to Council. ○ There is poor communication between City departments with respect to the P2P process. As such, when new policies or procedures are announced, few employees are aware, resulting in inconsistent practices. ○ Lack of formal documentation around procurement processes and roles and responsibilities including contract and supplier management processes. ○ Risk of non-compliance to procurement policy due to the lack of formalized governance and policy infrastructure that is clearly documented, understood, and communicated.
Technology	○ The Purchasing software is nine updates behind. As such, the City does not have access to the latest features of the software. This creates additional challenges when seeking tech help from the software provider. ○ The system does not track approvals, causing Finance to have to spend time following up with approvers to pay vendors in a timely manner. ○ Limited technology enablement contributing to process inefficiencies.

3.2.1 Procurement to Payment

Recommendations

1. **Develop a Communication Plan** – Develop a communication plan to ensure changes to policies are effectively communicated to all City staff. Once Council approves changes to the Procurement Policy, use the opportunity to implement the communication plan. An email containing a high level summary of changes and an attached policy should be distributed to all relevant employees.
2. **Ensure any new System can Track Approvals** – *Technology recommendation 1.10 is applicable here.* Specifically, collaborate with the IT Steering Committee to ensure that if a new system is sourced, that the system can track approvals such that the Procurement Team can efficiently provide payment to vendors in a timely manner.
3. **Document how to identify the PO Reference Number and the Approval Process** – *Process/KPIs recommendation 1.7 is applicable here.* Specific to Procurement to Payment, clearly document and communicate how to identify and utilize the correct PO Reference Number and how the approval process should work.

Benefits

- Increased accountability
- Improved communication between departments
- Reduction in duplication of work effort
- Reduction in manual work
- Clear understanding of roles and responsibilities

Key Success Factors

1. Regular review and updates to communication plan as required.
2. Clear communication of process updates that may affect staff.

3.2.2 Payroll Processes

Item	Description
Review Scope	Document the challenges in the current payroll process and provide recommendations for the necessary changes.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☐	☐	☐
Process	**Technology**	**Cost**
☑	☑	☐

3.2.2 Payroll Processes

Current State Findings

- The City of Sarnia's Payroll Department primarily uses two systems:
  - info:HR – HR Administration Software; and
  - iCity – Payroll System.
- At present, extensive manual manipulation is required to integrate both systems as they do not have the same fields for data. Unless the systems are upgraded, there is no potential to integrate the two systems.
- Timesheets are a largely manual process.
  - Employees hand write the hours that they work. They then physically hand them off to their supervisors, who approve them in writing and hand them off to their respective Payroll Clerks. The Payroll Clerks manually enter the times into the system. When entering times into the system, Payroll Clerks are also responsible for manually updating pay codes to adjust certain pay rates for specific employees (e.g., On-call Fire Department Employees). Once Payroll Clerks have run and verified their payroll entries, they send transaction summaries to Main Payroll which are later used to balance payroll.
- There is no proactive quality assurance process in place to identify errors. Due to time constraints, the Payroll Department must trust that the times entered by the Payroll Clerks is correct.
  - There are, however, reactive measures in place when the information entered in to the system by the Payroll Clerks does not match the transaction summaries.
- The majority of City of Sarnia employees receive electronic paystubs, with the exception of the Police Department and summer students who receive paper paystubs. This is due to the fact that the Police Department uses a separate email server and that summer students do not have an "@sarnia.ca" email.

3.2.2 Payroll Processes

Current State Findings

- The Payroll Department identified a number of shortfalls of iCity, including:
  - Software Pay Clerks must closely monitor pay rates as they do not update automatically. Pay rates may change when an employee works overtime, is on call, or if an employee retires.
  - When pay rates are changed, all historical paystubs are changed to reflect the change in rate. Therefore, all pay stubs must be saved and archived in order to reflect the correct pay rates on the pay stubs.
  - Once Payroll Clerks enter and submit payroll rates in the system, they cannot be retroactively adjusted.
  - The system is old and is nine updates behind.
  - The system does not track banked OT, vacations or sick days.
  - The payroll system lacks an appropriate scheduling feature that accommodates the City's five unions the City. This results in extensive manual effort to track items such as Vacation days and sick days.
  - The payroll system lacks effective dates. As such, when a new employee is added to the system mid pay cycle, the system believes that they have worked the entire pay cycle. Payroll must therefore manually correct this, thus resulting in lost time.

3.2.2 Payroll Processes

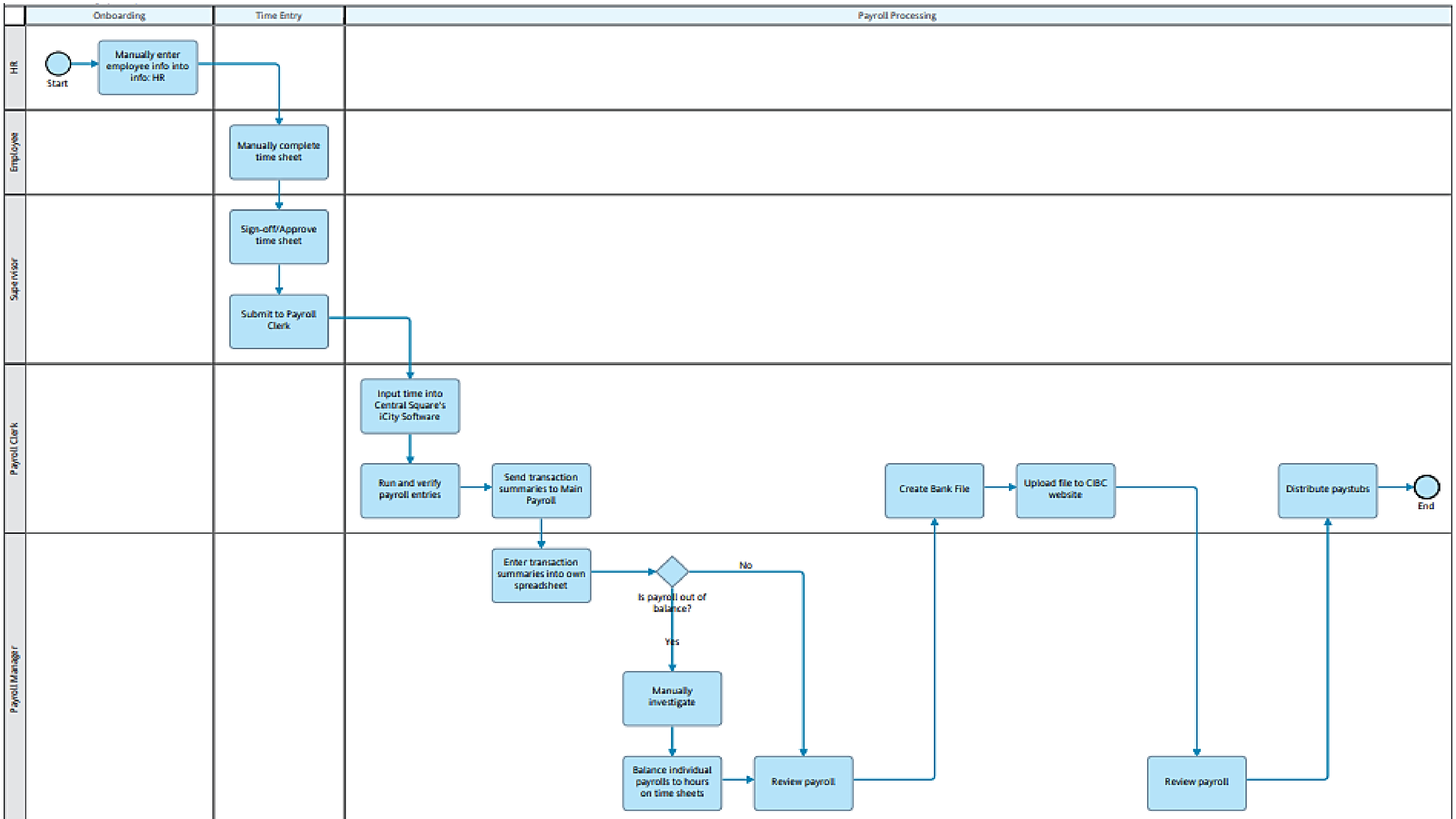
Key Challenges

Process	○ There is no quality assurance process in place to ensure that Payroll Clerks have accurately entered hours and pay rates. ○ The Police Department and summer students receive paper paystubs while the rest of the City receives electronic paystubs.
Technology	○ The payroll system does not automatically update employee pay rates. Rather, Payroll Clerks must manually update them. This presents risk of employees being paid at incorrect rates. ○ When a pay rate is changed, the change is applied historically as well including on old pay stubs. This causes the Payroll Department to have to archive all paystubs in order to keep a proper audit trail. ○ The payroll system is currently nine updates behind, despite having an internal policy to only ever be at most one update behind. ○ The payroll system lacks an appropriate scheduling feature that accommodates the City's five unions the City. This results in extensive manual effort to track items such as Vacation days and sick days. ○ There is extensive manual manipulation required to integrate information between both info:HR and iCity as they do not have the same fields. ○ The payroll system lacks effective dates. As such, when a new employee is added to the system mid pay cycle, the system believes that they have worked the entire pay cycle. Payroll must therefore manually correct this, thus resulting in lost time.

3.2.2 Payroll Processes

Payroll Process Map

- The following process map illustrates the Payroll Process at a high level. The map was constructed using documents provided to Optimus SBR and subsequently updated to incorporate feedback from stakeholder interviews.



3.2.2 Payroll Processes

Recommendations

1. **Document a Quality Assurance Process** – *Process/KPIs recommendation 1.7 is applicable here.* Specific to payroll, document, implement, and communicate to all relevant staff a quality assurance process to ensure that the values entered into the payroll system by the Payroll Clerks have been accurately entered.
2. **Keep the Payroll System Up to Date** – *Technology recommendation 1.11 is applicable here.* Specifically, ensure that the payroll system remains up to date as outlined in internal policy.

Benefits

- Increased accuracy of data
- Operational efficiency
- Risk mitigation
- Reduced errors in payroll
- Increased efficiency
- Access to all the latest system features

Key Success Factors

1. Buy-in and engagement from leadership and key staff who will be responsible for operationalizing the quality assurance process.
2. Assign specific actions to leaders and review progress regularly to ensure accountability.

3.2.3 Customer Service

Item	Description
Review Scope	Document the current customer service challenges and develop high-level recommendations for how the City might make improvements and leverage technology in order to better track complaints and improve efficiency.
Applicable Evaluation Criteria	See table below

Time	Resources	Level of Services
☐	☐	☑
Process	**Technology**	**Cost**
☑	☑	☐

3.2.3 Customer Service

Current State Findings

- City staff serve the ~73,000 citizens of Sarnia and over 26,000 properties. City staff provide a wide range of services – everything from tax payment plans and parking tickets to dog tags. Services may be provided in person, over the phone, online, via email or post mail and/ or fax.
- The Customer Service Department is typically the first point of contact for citizens. If the Customer Service Department does not have the necessary information to complete the request, the request is forwarded to the appropriate department.
- At present, the Customer Service Department does not have a centralized tool to track historical customer information or requests. Therefore, the exact number of people served per location is unknown. However, locations with the highest number of people served include the first three floors of City Hall as well as the Strangway Adult Recreation Centre.
- Service request volumes vary throughout the year, with certain times being busier than others such as after snow storms or during tax due dates.
    - To proactively reduce volumes during these times, the City employs various methods such as sending mass emails containing important tax information to citizens ahead of tax due dates or using social media to communicate road closures.
    - However, the City does not track metrics to determine whether they are meeting the SLA times to reply to customers.
- At present, Customer Service employees receive standard customer service training, new employee training, and AODA training at on-boarding. Customer Service Leads receive additional annual customer service training such as de-escalation.

3.2.3 Customer Service

Current State Findings

- Customer Service staff use various systems to respond to customer inquiries. However, they do not have enough knowledge or access to other department's information. Therefore approximately 75% of requests must be transferred to other departments.
- Currently, the Customer Service Department does not have access or visibility as to where a case is once its transferred to another department.
  - This could potentially change in the near future as the Transit Department is piloting a new tool, AccessE11. AccessE11 is a web-based tool which tracks customers' cases or inquiries end-to-end. The pilot is scheduled to commence in January and run for six months. If successful, AccessE11 may prove to be an effective solution to the Customer Service's Department lack of visibility to customers' cases once they are transferred to another department.

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3.2.3 Customer Service

Key Challenges

Level of Services	○ The Customer Service Department does not have access to all the information or systems required to answer all customer inquiries. This causes the Team to have to transfer many calls to other departments.
Process	○ The Customer Service Department deals with requests on a first come first serve basis. Currently, urgent requests are not prioritized. ○ When Customer Service transfers a call to another departments and the other department does not answer the call, it bounces back to Customer Service, thus creating frustrated customers. ○ The City does not track how many calls/requests are transferred to other departments.
Technology	○ The Customer Service Department does not have historical customer information nor does it have an effective method to track customer requests once they have been transferred to other departments.

3.2.3 Customer Service

Recommendations

1. **Track Customer Requests** – *Technology recommendation 1.10 is applicable here.* Specific to customer service, implement a tracking system for customer requests to ensure that the customer receives a resolution within the agreed upon time.
2. **Reduce the Number of Transferred Calls** – Reduce the number of calls that need to be transferred to other departments by:
   a. Providing customer service representatives with access to other departments` systems to enable them to access the information required to provide a solution to the customer's request.
   b. Reviewing existing authority levels by customer service representatives to ensure that whoever the customer contacts is able to help them. Many organizations give their customer-facing employees with the ability to solve problems below a certain threshold. For example, reviewing if escalations and or approvals can be moved down a level to stream line the process.

Benefits

- Increased first call resolution
- Streamlined process
- Increased customer satisfaction
- Strengthened customer relations
- Reduced amount of calls requiring transfer to another department
- Ability to track customer requests

Key Success Factors

1. Communication with impacted individuals and execution are carefully timed and tactfully delivered.

3.2.4 Energy Efficiency Reporting/Tracking

Item	Description
Review Scope	Confirm and support the work done to more efficiently execute this process and determine how to best share energy efficiency data across departments in order to fully utilize the capabilities of the Energy Star Portfolio Manager tool.
Applicable Evaluation Criteria	see below

Applicable Evaluation Criteria

Time	Resources	Level of Services
☐	☑	☐
Process	**Technology**	**Cost**
☑	☑	☐

3.2.4 Energy Efficiency Reporting/Tracking

Current State Findings

- The City of Sarnia is responsible for submitting two reports on energy usage to the Ministry of Energy, Northern Development and Mines (ENDM):
  - Ontario Energy Water (OEW) Report – required for all buildings over 50,000 square feet or larger.
  - Broader Public Sector (BPS) Report – required for all buildings.
- Energy data is obtained from three sources:
  - **Bluewater Power** – Bluewater Power provides all billing data in two emails each month (The first on the 16th of the month and the second on the 1st of the following month). This data includes all electrical data and water usage data for locations with water meters.
  - **Union Gas/ Enbridge** – Monthly bills are downloaded from the Union Gas/Enbridge website. This data includes gas consumption by building.
  - **Hydro One** – Waste water pump data is downloaded from the Hydro One website.
- The data from the three sources is uploaded to a template and then to the online tool Energy Star Portfolio Manager (ESPM). ESPM is a tool that helps measure and track energy and water consumption and greenhouse gas emissions. The tool automatically creates the OEW Report and provides an Excel sheet which is used to complete the BPS Report. The Excel sheet provides natural gas usage in kJ, which must be manually converted to cubic metres (m^3). The data from the Excel sheet is then used to create the BPS Report, which is submitted to the Ministry via an online portal.
- At present, the energy data is solely being used for reporting to the Ministry. It is not being shared internally with building operators.
- Reporting to the Ministry was previously done by Bluewater Power. However, due to cuts in funding this task has been offloaded to the City. When the City first took over the reporting, the process took two weeks to complete. However, certain improvements have been made to the process, primarily the implementation of the ESPM tool and the reporting can now be completed in approximately 20 minutes.

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3.2.4 Energy Efficiency Reporting/Tracking

Key Challenges

Resources	○ The department lacks project managers and/or energy Subject Matter Experts (SME). This limits the projects/ tasks that can be undertaken by the department as there is limited knowledge in regards to the finer details of energy.
Process	○ Two reports containing similar information are required to be submitted to the Ministry of Energy, Northern Development and Mines (ENDM). This creates additional workload when one report could be used to capture all the required information. ○ There is a large amount of manual work involved in the process of energy efficient reporting/ tracking including downloading reports, converting units and submitting information to the Ministry. ○ There is a lack of process in regards to formalizing educating and communicating energy consumption metrics with building operators and departments.
Technology	○ Energy Star Portfolio Manager has the ability to measure and track energy and water consumption, as well as greenhouse gas emissions. However currently, the City is not utilizing the greenhouse gas emissions feature. This limits the full potential of the tool.

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3.2.4 Energy Efficiency Reporting/Tracking

Recommendations

1. **Measure and Track Greenhouse Gas Emissions** – Leverage Energy Star Portfolio Manager to measure and track greenhouse gas emissions.
2. **Increase Energy Awareness** – Leverage the energy data in Energy Star Portfolio Manager to educate building operators about the importance of reducing energy usage. This data could also be used to:
   - Set goals in regards to reducing energy usage; and
   - Train employees.
3. **Develop KPIs** – *Process/KPIs recommendation 1.6 is applicable here.* Specific to energy efficiency reporting/ tracking, develop KPIs regarding energy usage.

Benefits

- Reduced carbon footprint
- Improved energy awareness
- Increased accountability
- Energy Star Portfolio Manager is utilized to its fullest potential.
- Increased awareness amongst building operators in regards to energy usage.

Key Success Factors

1. Structured methodology and tools for tracking emissions.
2. Clearly articulate why reducing energy usage is important to get buy-in from stakeholders.

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3.2.5 Capital Asset Management

Item	Description
Review Scope	To document the challenges in the current process for tangible asset management tracking and analysis and to recommend opportunities to improve efficiency.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☑	☑	☑
Process	**Technology**	**Cost**
☑	☑	☐

3.2.5 Capital Asset Management

Current State Findings

- There is no centralized asset management governance or centralized focus on asset revenue maximization with corresponding KPIs and targets (for related discussion, see 3.5.2 Property Management/Technology)
- The City's Tangible Capital Asset (TCA) Inventory is maintained in an Excel Spreadsheet. The Accounting Department is responsible for using an extraction from General Ledger (G/L) data to enter data into the TCA Inventory document . The TCA Inventory document is password protected and only a select few individuals within the Accounting Department have access to it.
  - Therefore there are no concerns about version control.
  - However, as asset data is not coming directly from the departments owning the assets, the information may not be accurate. Additionally, the document does not provide audit trails.
- The year-end TCA process takes up to three months, from January to March. The process contains a lot of manual and laborious work.
- As part of the process, all data in the capital project accounts is downloaded. The resultant download is a spreadsheet with thousands of lines of data that must be categorized line by line as either capital or expense. Each line categorized as capital must then be further identified by its classification for both Financial Statement and Ontario financial reporting purposes.
- To help streamline the year end process, the Accounting Department has requested a new TCA module. The module request is currently pending approval from Council to be included in the 2020 Budget.
- The new module is expected to:
  - Be the repository for all assets;
  - Automatically perform amortization calculations; and,
  - Deal with disposals of assets as well as export journal entries into the G/L for fixed assets.

3.2.5 Capital Asset Management

Current State Findings

- The Accounting Department has no formal process regarding disposals of assets. Rather, the Accounting Department makes a judgement call at the end of the year as to whether capital project activity during the year may have caused assets to be disposed.
- Since information about disposals of assets is not directly communicated to Accounting, Accounting must rely on informal communication channels such as Council Reports or word of mouth to discover about asset disposals.
- Then, using the TCA Inventory, the Accounting Department identifies which specific asset was likely to have been disposed and updates the data accordingly.
- A similar approach is used in regards to acquisition of assets. At the year, the Accounting Department makes a determination regarding what assets were created or acquired based on the projects that had been undertaken throughout the year.
- Then, amortization periods are assigned to each asset, depending on the asset type. There is a formal Accounting Policy which outlines standard amortization periods for each asset class.

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3.2.5 Capital Asset Management

Key Challenges

Time	The year-end procedures contain a lot of manual work and can take up to three months to complete. This includes having to manually comb through thousands of lines of data to identify each line as capital or expense.
Level of Services	At present, the Tangible Capital Asset Inventory is maintained solely by an Excel Spreadsheet. This inventory is maintained by Accounting with limited information from the departments that actually have the assets. Therefore, this information may not be completely accurate. Additionally, the spreadsheet does not provide audit trails.
Process	There is no formal process for acquisitions or disposals of City assets. This causes the Accounting Department to have to make judgement calls on which assets may or may not have been acquired or disposed of throughout the year.
Technology	The asset management systems used by Engineering and Public Works is not of use to the Accounting Department. Therefore, Accounting does not have an accurate picture of the City’s assets. Rather they rely on their own judgement calls.

3.2.5 Capital Asset Management

Recommendations

1. **Implement Governance Structure for Capital Asset Management -** *Asset Management recommendation 1.4 is applicable here.* Establish a consolidated capital asset governance steering committee to regularly evaluate and strategize ways to increase value of investment assets and large City owned properties and land
2. **Centralize Asset Tracking** – *Asset Management recommendation 1.4 is applicable here.* Specifically, communicate with other departments to accurately record the acquisition and/ or disposal of all assets rather than relying on the Accounting Department to make estimations.
3. **Identify technology solution** – *Technology recommendation 1.10 is applicable here.* Specific to Capital Asset Management, collaborate with the IT Steering Committee to ensure that if a new system is sourced, that the system can provide accurate and usable asset data for the Accounting Department. The new system should also be able to reduce the manual workload of the year end procedures and be able to capture the Tangible Capital Asset Inventory accurately and efficiently.

Benefits

- Increased accuracy of Tangible Capital Asset Inventory
- Reduced reliance on off-line Tangible Capital Asset Inventory Excel document.
- Increased efficiency in year end procedures
- Improved communication between departments
- Reduced manual workload of year-end processes.

Key Success Factors

1. TCAs are appropriately documented, valued and amortized based on real data, not the Accounting Department’s best guess.

3.3. Other Corporate Functions

3.3.1 Project Management

3.3.2 Staffing Levels vs. Workload

3.3.1 Project Management

Item	Description
Review Scope	○ Assess the City of Sarnia's current project management structure. ○ Recommend a structure and processes for effective project management in a municipal environment. ○ Recommend how to standardize selection, training and incentives for project managers.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☐	☑	☑
Process	**Technology**	**Cost**
☑	☐	☐

3.3.1 Project Management

Current State Findings

- In our initial conversations with members of the Senior Management Team (SMT), it was determined that the main pain points and areas of improvement for the City of Sarnia include the following:
  - Eliminating or reducing the effects of silos tend across departments;
  - Leveraging technology appropriately;
  - Better allocating resources; and,
  - Strengthening internal controls.

- For the purpose of this service review, we are focusing on two of the five points. First, we are looking at the project management structure across the organization to understand how internal controls are put in place and how that currently affects project outcomes; second, we are examining staffing levels versus workload, which centers on understanding if resources are sufficient and correctly allocated to support the short-term and long-term strategic goals of the City.

3.3.1 Project Management

Current State Findings

- No criteria currently exist for selecting PMs for projects across various departments; PMs enter those roles either voluntarily or are assigned based on capacity or expertise by someone within that division.
- There is no written PM selection criteria or experience/ skillsets requirements to become a PM or be assigned as PM.
- PMs are not compensated competitively for the additional responsibility, hence not considered a desired position.
- No designated PM roles leads to low accountability resulting in reduced likelihood of project success; collaboration and team cohesiveness is diminished as a result.
- No tracking or measure of key performance indicators tied to project work makes it difficult to determine if PMs better support those initiatives and if that support leads to improved project outcomes.
- While PMs are currently assigned to these roles, there is no standardized PM methodology meaning that PM are not managing their projects in a similar way.
- The department is currently working on an organization-wide strategy to implement standardized project management monitoring and tracking as well as the implementation of a PMO function.
  - No current documentation on planning process but challenges due to lack of PMs has been documented and the benefits for having a centralized PMO function is the pipeline.

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3.3.1 Project Management

Key Challenges

Process	○ Lack of a systematic approach for assigning PMs which leads to inconsistency in project delivery and project outcomes. ○ It is difficult to understand the benefit of having PMs and how those PMs are producing results without KPI metrics and mechanisms.
Resources	○ No clear division of roles and responsibilities across and within various departments leading to duplication of work. ○ No PMO function leads to challenges for having a holistic view of projects throughout the departments and the ability to manage risks and interdependencies. ○ As current PMs are assigned to business leads, it is not an attractive role as it is considered extra work without additional pay. ○ There is a lack of accountability for those in PM roles as these individuals are not incentivized to take on a heavier workload and level of responsibility leading to less successful project outcomes.
Level of Services	○ Quality of work is suffering due to understaffed departments and heavy work load that continues to scale up YOY. ○ It's currently challenging to assess if work is prioritized properly and if strategic initiatives are being executed on according to the City's strategic plan and yearly budget.

3.3.1 Project Management

Recommendations

Project Management Office recommendations 1.17-1.21 are applicable here.

1. **Establish Project Prioritization Criteria and Plan** – Establish project prioritization criteria and plan for projects to be undertaken by the City.
2. **Establish Project Management Training** – Establish project management training for assigned project managers.
3. **Implement a Tool for Talent Tracking** – Explore the possibility of leveraging a talent tracking tool.
4. **Implement a Project Management Office (PMO)** – Implement a PMO to support the City of Sarnia's PMO with governance, project and portfolio management best practices, mentoring and project manager support, standardization of tools, templates, and processes, and consolidated reporting and organizational intelligence.
5. **Develop a PMO Toolbox** – Develop a PMO Toolbox of Methodologies and Best Practices that can be leveraged across different City projects.

Benefits

- Improved efficiency in delivering services
- Projects stay on schedule
- Costs and resources are kept to budget
- Increased effectiveness in delivering services

Key Success Factors

1. Structured methodology and tools for project management and improvement.
2. Assign specific actions to leaders and review progress regularly to ensure accountability.

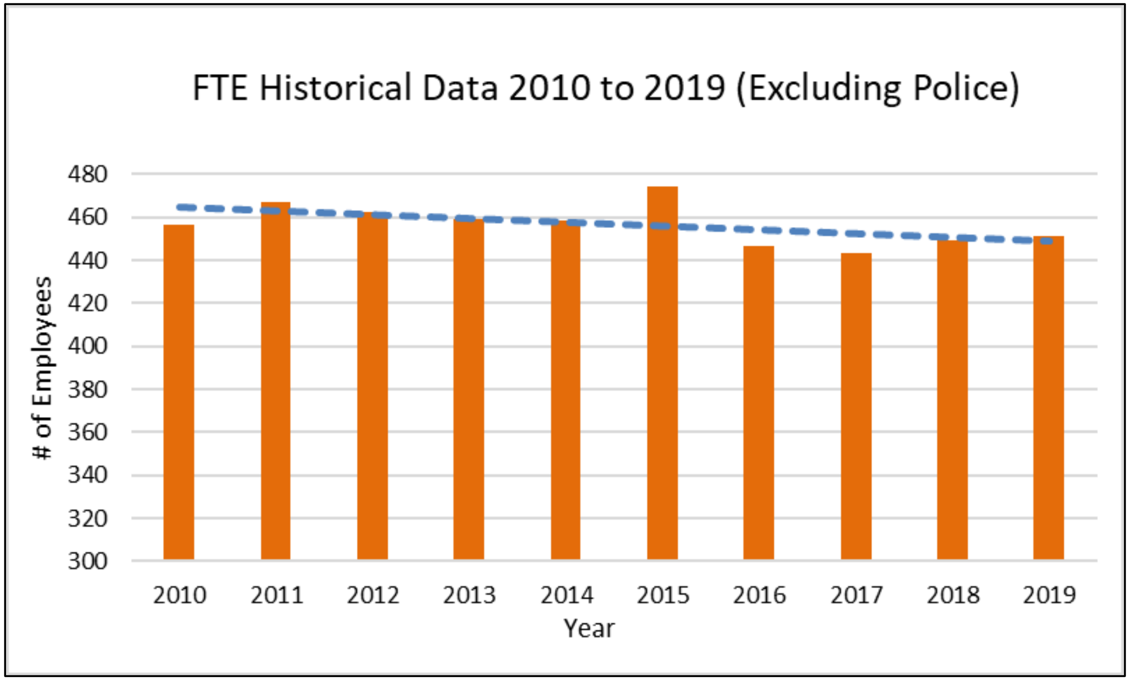
3.3.2 Service Levels vs. Workload

Item	Description
Review Scope	○ Review the required work and available resources as well as the investigated opportunities for improvement across departments. ○ Outline the challenges experienced within various departments due to a lack of adequate resources. ○ Identify opportunities for role re-allocations across departments including exploring options related to outsourcing/contracting out. ○ Describe the benefits of technology use for improving efficiency and reducing manual work.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☐	☑	☑
Process	**Technology**	**Cost**
☐	☑	☐

3.3.2 Staffing Levels vs. Workload

Current State Findings



- The overall FT and PT staffing levels at the City of Sarnia have remained relatively constant over the past 10 years with a slight decrease in staff of 2.3% on average over the past 5 years.
- While the City has increased its level of resources over the past 2 years (2018 and 2019), namely in CDSS and Fire Services, overall the staffing level has for the most part remained the same.
- The greatest impact in terms of staff reduction has been seen in the General Admin, Engineering and Parks and Recreation departments.

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3.3.2 Staffing Levels vs. Workload

Current State Findings

- Every quarter the various departments are prompted by Council to reduce staffing levels yet the organization has seen the continual addition of duties and programs putting a strain on staff.
- Staff is currently able to keep up with the quantity of work but the quality of work suffers as a result since often the work is rushed and internal controls are not in place.
- Training for both new and existing employees was not seen as a likely opportunity to improve the quality of work as the majority of work is manual or routine in nature.
- Role re-assignments and role clarification is needed across departments to ensure there is no further duplication of effort and that relevant skills and expertise is leveraged for the right areas. For example, Property Management is currently under Legal and Grass Cutting is a shared responsibility between Parks and Recreation and Public Works.
- Currently reactive versus proactive culture and way of dealing with things (i.e.. once it's broken, fix it) exists throughout the organization which results in wasted time and effort.
- While understaffing exists, it has been identified that there are various ways to alleviate the workload such as technology improvements for better integrated systems.
- Although technology presents an opportunity to reduce time spent on manual work/data entry significantly, currently, IT is spending too much time tending to several different systems. The organization needs one unified technology solution across departments.

3.3.2 Staffing Levels vs. Workload

Key Challenges

Levels of Services	○ The workload for various departments continues to increase, causing difficulty producing quality work, backlogs, and strain on employees. ○ With a lack of data tracking the number of projects and hours worked, it's challenging to assess if work is prioritized properly and if strategic initiatives are planned properly.
Resources	○ No clear division of roles and responsibilities across and within various departments leading to duplication of work. ○ No significant increase in staff over time has increased workload for staff.
Technology	○ No current organization-wide technology solution or fully utilized and integrated technology systems for individual department use resulting in strain on available resources.

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3.3.2 Staffing Levels vs. Workload

Recommendations

1. **Conduct a Skills Assessment and Staffing Workload Distribution Review-** *Resource Allocation recommendation 1.15 is applicable here.*
   - Once KPIs are developed and adequate data can be gathered for workload and staffing, conduct a skills assessment and review of staffing workload distribution to determine the appropriate resourcing needs for each department.
2. **Consider an organizational restructuring for select roles and responsibilities to create more cohesive departments that cluster skills and expertise**
   - Specifically, we recommend that certain responsibilities such as grass cutting, currently shared by Parks and Recreation, Public Works, and Property Management, be consolidated under one department, with resources to then be shared across multiple departments.

Benefits

- Increased efficiency with same staff levels
- Heightened employee morale
- Better ability to leverage skills and expertise

Key Success Factors

1. Reliable data about resource utilization.
2. Structured assessment that takes into account not just volume of work but type of tasks.

3.4. Clerks

3.4.1 Knowledge Management Systems
3.4.2 Agenda Development

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3.4.1 Knowledge Management Systems

Item	Description
Review Scope	○ Identify opportunities for improvement for electronic document and knowledge management systems. ○ Review the consultant's report on process and gap identification to identify any additional opportunities for efficiency.
Applicable Evaluation Criteria	(see table below)

Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☑	☑	☐

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3.4.1 Knowledge Management Systems

Current State Findings

- The City of Sarnia has a large compliment of paper records. The records consist of by-law records & inactive records and are stored in a records centre with designated high capacity shelving. The records are managed using The Ontario Municipal Records Management System (TOMRMS).
- Records which have fulfilled their total retention requirement according to the Records Retention By-Law are destroyed. The destruction of records process typically occurs annually and takes approximately one to two days to complete.
- The City is currently in the process of digitization and as such recently hired a consultant to perform a comprehensive analysis of the current recordkeeping practices and electronic records management capabilities. The report outlined the following deficiencies:

Identified Deficiency	Details
TOMRMS	City of Sarnia’s file plan is not implemented throughout the organization;
Records Management Policies	Requires revision to align with industry standards;
Records Management Training Sessions and Materials	Absence of records management training sessions across all Division(s) has contributed to the lack of consistent recordkeeping practices;
Records Retrieval	A significant amount of effort is expended on a regular basis to find records to support effective decision-making or respond to privacy requests in a timely manner;
Records Management Compliance	Records have not been disposed of in a timely manner or in accordance with defined retention periods; and
Network Drives	Millions of files are stored on network drives, include multiple versions, and are not shared across Departments.

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3.4.1 Knowledge Management Systems

Current State Findings

- Within the last six months, the City destroyed several hundred boxes of HR and inactive paper records which were filed without a destruction date in response to this analysis.
- The process of going digital is complicated by lack of buy-in across the City from change resistant employees. Another complication of going digital is the number of paper files which need to be scanned and digitized as the number exceeds staff capacity.
- Electronic records are stored in shared folders to broader access. While this works well for storage of electronic files, it does not work well for collaboration and version control. Additionally, unlike paper records, which have a clear inventory of all records and where to find them, electronic records do not have an inventory list. This can make certain electronic files difficult to find.
- Currently there are no processes for policies in terms of when to update a policy, who needs to review and finalize each policy, where to store it, and who should have access to it. This has created a silo effect as each department utilizes a different approach.

3.4.1 Knowledge Management Systems

Key Challenges

Time	There is a clear inventory of paper records which lists exactly where to find each record. However, this does not exist for electronic records which can make retrieving specific electronic records time consuming.
Resources	Efforts are underway to convert paper records to electronic records. However, the number of files which need to be scanned exceed staff capacity.
Process	There is often strong pushback to efforts to go more electronic. As such, getting buy-in from City employees on the new process is challenging. Currently there are no processes for policies in terms of when to update a policy, who needs to review and finalize each policy, where to store it and who should have access to it.
Technology	While there are shared folders for storage of files, a web based collaborative platform is needed for collaboration or version control, to enable a better knowledge management.

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3.4.1 Knowledge Management Systems

Recommendations

1. **Implement a Centralized Knowledge Management System** – *Technology recommendation 1.10 is applicable here.*
   - Specifically to Knowledge Management Systems, implement a centralized knowledge management repository to improve the quality of decision making
   - Ensuring that accurate, reliable, and trustworthy information is available to the organization.
   - The repository should be accessible to all parties who need to obtain information.

Benefits

- Increased efficiency
- Improved decision making
- Improved document collaboration
- Reduced duplication of work effort

Key Success Factors

1. Buy-in and engagement from leadership and key staff who will be responsible for sourcing and implementing a knowledge management system.

3.4.2 Agenda Development

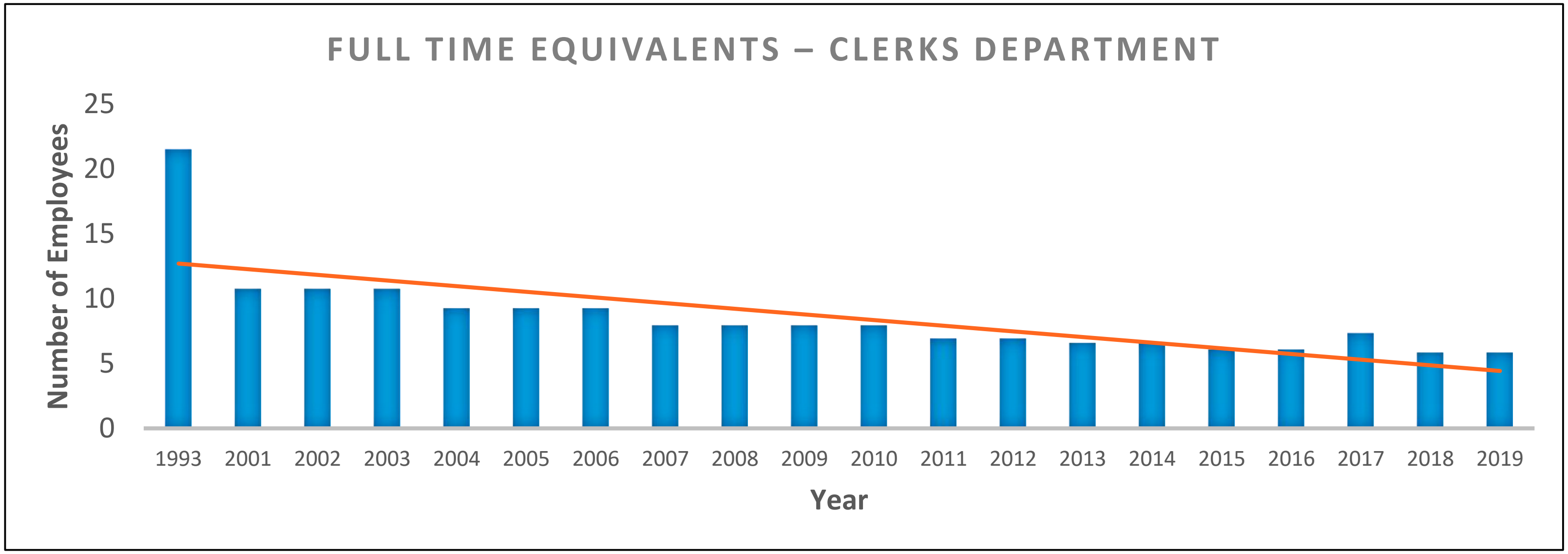
Item	Description
Review Scope	Identify improvement opportunities in the agenda development process.
Applicable Evaluation Criteria	(see table below)

Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☐	☑	☑

3.4.2 Agenda Development

Current State Findings

- The City of Sarnia's Council meets once every three weeks. Each meeting requires an extensive agenda, often ranging from 40-50 items. The Clerks Department is responsible for preparing each agenda, which requires a lot of time and effort. However, the size of the Clerks Department has been greatly reduced. In 1993, the Clerks Department consisted of 21.5 full time equivalents and at present there are only 5.83 full time equivalents.



- The Agenda Development process is a three week cycle consisting of three distinct steps; Report Preparation, Report Review & Approval and Agenda Development & Distribution. Typically each step takes one week to complete. However in reality, the steps often overlap when one step takes longer than scheduled. Agendas are developed using the online software, iCompass. iCompass allows members of the public to view both archived and current agendas.

3.4.2 Agenda Development

Current State Findings

- Week 1 (W1) – Report Preparation
  - The Friday prior to W1, the Clerks Team receives a list of reports which are to be included in the upcoming the agenda from the Councillors. The list is uploaded to the Shared Folder by EOD Monday of W1.
  - Department staff are responsible for preparing and submitting the reports to the Clerks Team. Often multiple people must work on the same report at the same time. They collaborate by sharing files via email and because of this, there may be times when individuals may not be working on the latest version of the document.
- Week 2 (W2) – Report Review & Approval
  - Reports are due to the Clerks Team by EOD Monday of W2. However, this is a soft deadline and therefore, the reports are often not submitted on time. Reports may be received as late as 6:00PM Thursday, when the agenda is being prepared for distribution.
  - The Clerks Team is responsible for tracking that all reports have been received and for following up on reports not yet received. Follow-ups are typically done via email.
  - The reports are reviewed and approved by the CAO, with inputs from Directors. When edits are required, the reports are once again emailed back and forth between the responsible parties. When the reports are complete, they are uploaded to iCompass.
  - The agenda software, iCompass has a tracking module which in the past was used by the Clerks Department However, this practice was stopped as this made the Councillors feel that they were being micromanaged.
  - The tracking feature was adopted by the CAO to track customer complaints. However, this feature is not ideal for such tasks as the user can see all action tracking, some of which contain sensitive or confidential information. Therefore, the Clerks Department does not believe that iCompass's tracking feature should be used for this purpose by the other departments.

3.4.2 Agenda Development

Current State Findings

- Week 3 (W3) – Agenda Development & Distribution
  - Agendas are typically developed Tuesday to Thursday of W3.
  - Each Councillor has the choice to receive either a paper or electronic copy of the agenda.
  - At present, seven Councillors are subscribed to paper copies and two are subscribed to electronic copies.
  - The average length of an agenda is approximately 350 pages, but can be as long as 1200 pages.
  - On average, 25 paper copies of the agenda are printed for distribution. Due to the high volume of paper being printed, printing the agenda is a time consuming process.
  - Agendas are hand delivered Thursday evening of W3 to the Councillors, the media as well as certain members of the public in either electronic or paper format.

3.4.2 Agenda Development

Key Challenges

Time	○ Each report review and approval is done and circulated through email on offline version. This often results in multiple versions of the same report being used. This requires extra time for the Clerks team to reconcile and ensure the updates on the latest version. ○ Due to competing priorities, reports are often not submitted to the Clerks Team by the established deadline (i.e. Monday of Week 2). This puts additional pressure on the Clerks Team to review the reports in time to have them included in the agenda.
Resources	○ The Clerks Department used to be a large department, consisting of 21.5 full time equivalents but has now been reduced to 5.83 full time equivalents. This often requires Clerks employees to work overtime, specifically on Thursdays when agendas are developed and distributed.
Technology	○ Shared folders are used to store files but there is no platform for real time collaboration and version control. This is much desired by the staff to improve quality and efficiency. ○ Despite the tracking functionality of iCompass and it's potential to be leveraged across department, the usage is contained within a small group of people due to the confidentiality nature of the content.
Cost	○ Typically, 25 paper copies are printed for each meeting. This results in a large amount of paper and printing cost as agendas are on average 350 pages in length and can take hours to print and distribute.

3.4.2 Agenda Development

Recommendations

1. **Prioritize Agenda Items** – Prioritize agenda items based on urgency. Identify each agenda item as one of the following:
   a. Urgent item that must be discussed
   b. Important but not urgent item that should be discussed.
   c. Not critical item that would be nice to discuss.
2. **Implement a Late Policy** – Implement a late policy that states that when a report is submitted late, the item will be moved to the next meeting. Trial with low priority items to begin changing culture among staff.
3. **Project the Agenda** – Project the agenda during Council meetings on a large screen at the front of the room for all meeting members to easily follow along with throughout the meeting. Projecting the agenda may reduce the number of paper copies of agendas that are required, resulting in a more efficient use of resources such as Clerks' time and paper.

Benefits

- Increased meeting efficiency
- Increased accountability
- Increased clarity
- Urgent agenda items are discussed at the beginning of meetings to ensure sufficient time is devoted to the agenda item
- Timely reports

Key Success Factors

1. Buy-in to the importance of prioritization for effective Council meetings.
2. Commitment from senior staff in enforcing deadlines.

3.5. Legal

3.5.1 Tax Sale Document Issuance

Item	Description
Review Scope	○ Document the City of Sarnia's current Tax document issuance process, and complete a high level analysis of the internal cost, revenue (if any), volumes, and time required to issue tax documentation. ○ Contact up to three (3) third party tax document issuing firms to obtain tax document Issuance cost quotes (depending on firms' responsiveness) including Real Tax and Tax Team. ○ Provide the Legal Department of the City of Sarnia with a recommendation on the cost-benefit of Tax Sale Document Issuance outsourcing versus continuing to do this in-house.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☐	☑	☑
Process	**Technology**	**Cost**
☑	☐	☑

3.5.1 Tax Sale Document Issuance

Current State Findings

- Like other municipalities, the City of Sarnia engages in municipal tax sales. Within the City of Sarnia, tax sales are an internal process, and the Legal Department is currently responsible for tax sale processing and document issuance. By definition, a tax sale is the sale of one or more properties by a municipality to recover unpaid property taxes on the property put up for sale. By the time a property is eligible for tax sale, the property taxes are in at least their fourth year of arrears. The majority of tax sales in Ontario are conducted by public tender, although public auction is also a possibility.

- Within the City of Sarnia, municipal tax sales are governed and enforced by the *By-Law #5 of 2013* (A By-Law as to a Scale of Costs pursuant to the Municipal Act 2001) that sets fees for municipal tax sales. The total processing revenue charges per file (without additional disbursements or complexities) are currently $2,350, and a typical procedure comprises 15 steps. Steps are sequential – if a mistake is identified at any step, the process has to be restarted. Steps to be followed and their associated revenue charged have been outlined in the table below:

STEP	CHARGE
1) Prepare tax sale list, computer printout, staff review.	$ 75
2) Undertake sub-search to determine owner, encumbrances, legal, Sheriff, etc.	$ 125
3) a)Circulate Farm Debt Notices to determine if a stay is required (sent by registered mail to owner and faxed to Farm Debt Mediation Services). 3) b)Send notice of Intention to enforce a Security to owner.	$ 100
4) a)Prepare Tax arrears certificate (15 days after expiry in Step 3). 4) b)Register Tax arrears and update sub-search. 4) c)Obtain sheriff's certificate to determine if any execution against the owner exists.	$ 150

3.5.1 Tax Sale Document Issuance

Current State Findings

STEP	REVENUE
5) a) Prepare 1st notice of registration of Tax Arrears Certificate. 5) b) Send First Notice and Copy of Registered Tax Arrears Certificate to Owners, encumbrances, execution creditors, and/ or tenants by registered mail within 60 days of registration in Step 4b. 5) c) Prepare Statutory Declaration (not registered).	$ 150
6) a) Prepare final notice 280 days after registration in step 4b. 6) b) Send final notice to owners and any interested parties by registered mail within 30 days after expiry of 280 days in Step 6a. 6) c) Prepare statutory declaration (not registered).	$ 150
7) Prepare an Extension Agreement.	$ 200
8) Advertise in Ontario Gazette once, The Observer (4 times as legislated), and wherever else is deemed advantageous.	$ 200
9) Prepare the information package for potential purchasers.	$ 25
10) Prepare and mail the Final Notice of Re-advertisement.	$ 150
11) Prepare and register Tax Arrears Cancellation Certificate.	$ 150
12) Conduct Tax Sale.	$ 200
13) Prepare and register Tax Deed or Notice of Vesting.	$ 225
14) a) Arrange for payment into court of surplus monies. 14) b) Prepare and register Statutory Declaration.	$ 225
15) Preparation of application for payment out of court of surplus monies.	$ 225
TOTAL	**$ 2,350**

- The current Legal Department of the City of Sarnia comprises 3.5 FTE. One member of the legal personnel is responsible for tax sales within the department, and approximately 45-50% of their time in a year is dedicated to tax sale document issuance preparation.

3.5.1 Tax Sale Document Issuance

Current State Findings

- Data collected on City of Sarnia's tax sales processing was summarized in the table below:

Tax Sales Specifications					
FTE/ PTE Requirements	**Resource Time Allocation**	**Resource Time Cost/ Year**	**Systems**	**Document Volume/ Year**	**Implied Estimated Average Resource Cost/Document**
1 FTE	40-50% *(other 50% to 60% spent on clerical work)*	$40,000 *(50% of $80,000 salary)*	• Teraview *(requirement)* • iCity *(restriction)*	25 files/year	~$1,600/file

- To access accounts for tax arrear confirmation, iCity will have to be leveraged. This may pose a restriction or additional work around if the service is outsourced to a third party. Additional dependencies include the City of Sarnia's Finance Department, confirmation of which is required when dealing with taxes owed for more than 2 years, and if tax arrears are paid.

- The process of tax sales issuance is a highly standardized and structured process, hence the efficiency would be driven by delivery cost and service level. Tax sales, if outsourced within the City of Sarnia will fully decommission the internal fifteen (15) step tax sale process of the municipality.

3.5.1 Tax Sale Document Issuance

Key Challenges

Resources	○ The City of Sarnia's tax sale document issuance demand accounts for 45-50% of one FTE's time, which is suboptimal in terms of focus and efficiency, with the other 50-55% of their time to clerical tasks. ○ The time of the legal staff could be better spent on higher priority work, such as increasing support to finance for collection efforts and handling more litigation matters in-house rather than outsourcing more routine matters to external law firms at significant costs.
Level of Services	○ The City of Sarnia's tax sale document issuance process is prone to error given that the process occupies only up to 50% of the City's Law Clerk time, and documents are issued only 2-3 times a year, therefore increasing the chance of human error due to long intervals between tax sale processing periods.
Process	○ The City of Sarnia's tax sale document issuance process is likely less optimal (e.g. requires longer processing time) than that of third party tax sale providers who specialize in tax sales and go through the process on a daily basis.
Cost	○ It is believed that private service providers specializing in Tax Sales Issuance could offer the service for a more cost efficient price.

3.5.1 Tax Sale Document Issuance

Analysis

- A comparative analysis was conducted to further explore outsourcing possibilities of tax sale document issuance practice to third party service providers. Five tax sale service providers were contacted: Realtax, The Tax Team, Ryan LLC, BDO Canada, and Stratos Solutions Inc. Realtax and The Tax Team provided quotes for the tax sale document issuance service. Ryan LLC, BDO Canada, and Stratos Solutions Inc. informed us that they specialize in different facets of the Tax Sale process. The analysis therefore focuses on Realtax and The Tax Team comparisons to City of Sarnia's internal tax sale document issuance.

	Internal Legal Department	Real Tax	Tax Team	
Cost/File	$2,350	$3,360	$3,920	
Annual cost for 25 files	$58,750	$84,000	$98,000	Fully recoverable – see note below*
Labour Cost	$40,000	$0	$0	
Total Cost	98,750	$84,000	$98,000	
Cost Saving		$14,750	$750	

- There is a cost saving of between $750 - $14,750 annually if the process is outsourced
- *Typically the cost of tax document issuance is fully recovered through the sale of the property. Only in rare cases will costs not be fully recovered. Therefore, the cost of the tax issuance is not a determining factor in outsourcing, given that cost savings are relatively small.
- The real opportunity is the ½ FTE legal staff time spent on highly standard and commoditized tasks, given the opportunity cost of their not being deployed to support higher priority work, such as supporting Finance or litigation work that is being outsourced currently at a higher cost; some of these activities may also generate more revenue.

3.5.1 Tax Sale Document Issuance

Analysis – Detailed Cost Mapping and Breakdown

Internal Legal Department Steps	Fees	Matching Real Tax Steps	Fees	Matching Tax Team Steps	Fees
1) Prepare tax sale list, computer printout, staff review	$ 75	Engage professional services.	$ 400	Set-up of individual database	$ 200
2) Undertake sub-search to determine owner, encumbrances, legal, Sheriff, etc.	$ 125	**Optional:** Realtax can do a sub-search if needed at a fee of $90 which includes a copy of the deed and mortgages. Executions would be an additional cost of $20 per name.	$ 110	This step is covered with: • Order Title Search and Prepare Tax Arrears Certificate • Register Tax Arrears Certificate • Execution Search (per Name) • Copy of execution (per Writ) • Corporate search (per search)	$ -
3) a)Circulate Farm Debt Notices to determine if a stay is required (sent by registered mail to owner and faxed to Farm Debt Mediation Services)	$ 100	Engage professional services * Fee has been accounted for in step 1	$ -	Prepare and mail Farm Debt Notice	$ 40
3) b)Send notice of Intention to enforce a Security to owner				Prepare and mail Bankruptcy Notice	$ 40
4) a)Prepare Tax arrears certificate (15 days after expiry in Step 3) 4) b)Register Tax arrears and update sub-search 4) c)Obtain sheriff's certificate to determine if any execution against the owner exists	$ 150	Tax registration – Part 1	$ 385	Order Title Search and Prepare Tax Arrears Certificate	$ 450
				Register Tax Arrears Certificate	$ 175
				Execution Search (per Name)	$ 25
				Copy of execution (per Writ)	$ 15
				Corporate search (per search)	$ 75
5) a) Prepare 1st notice of registration of Tax Arrears Certificate	$ 150	Tax registration – Part 2	$ 185	Prepare First Notices	$ 150
5) b) Send First Notice and Copy of Registered Tax Arrears Certificate to Owners, encumbrances, execution creditors, and/ or tenants by registered mail within 60 days of registration in Step 4b				Mail First Notices (per Notice)	$ 25
5) c) Prepare Statutory Declaration (not registered)				Statutory Declaration re: First Notice	$ 50

3.5.1 Tax Sale Document Issuance

Analysis – Detailed Cost Mapping and Breakdown

Internal Legal Department Steps	Fees	Matching Real Tax Steps	Fees	Matching Tax Team Steps	Fees
6) a) Prepare final notice 280 days after registration in step 4b	$ 150	Tax registration – Part 3 Final Notices	$ 185	Prepare Final Notices	$ 200
6) b) Send final notice to owners and any interested parties by registered mail within 30 days after expiry of 280 days in Step 6a				Mail Final Notices (per notice)	$ 25
6) c) Prepare statutory declaration (not registered)				Statutory Declaration re: Final Notice	$ 50
7) Prepare an Extension Agreement	$ 200	Tax Sale (including the submission of an ad to Ontario Gazette, and an ad that can be submitted by the City of Sarnia to Sarnia's local paper).	$ 875	Prepare an Extension Agreement (performed at no charge)	$ -
8) Advertise in Ontario Gazette once, The Observer (4 times as legislated), and wherever else is deemed advantageous	$ 200			Prepare Tax Sale documents (includes Ad, Tender/ Auction documents & Tender Packages) Note: Tax Sale re-advertisement (Form 10) (for Tax Sale previously conducted by the Tax Team is only $300 instead of $600)	$ 600
9) Prepare the information package for potential purchasers	$ 25				
10) Prepare and mail the Final Notice of Re-advertisement	$ 150	Update of title search and execution Fee per notice ($20).	$ 195	Mail Form 10 "Final Notice of Re-advertisement" (per Notice)	$ 25
11) Prepare and register Tax Arrears Cancellation Certificate	$ 150	Prepare registered Tax arrears certificate (at no cost).	$ -	Cancellation Certificate	$ 175
12) Conduct Tax Sale	$ 200	Attend first tax sale depending on availability.	$ -	Links to steps 8, 9 and 10	$ -

3.5.1 Tax Sale Document Issuance

Analysis – Detailed Cost Mapping and Breakdown

Internal Legal Department Steps	Fees	Matching Real Tax Steps	Fees	Matching Tax Team Steps	Fees
13) Prepare and register Tax Deed or Notice of Vesting	$ 225	Send Tax Deed or Notice of Vesting to Ministry.	$ 50	Notice of Vesting (Registration Fee waived – Charge only for additional documentation now required)	$ 75
				Tax Deed (Registration Fee waived – Charge only for additional documentation now required)	$ 150
				Execution Search now required upon registration of Tax Deed or Notice of Vesting (per Name)	$ 25
14) a) Arrange for payment into court of surplus monies	$ 225	Payment out of Court	$ 975	Prepare Payment Into Court documents (requisition, form 5 & additional documentation now required)	$ 175
				Mail Form 5 “Statement of Facts” (per Name)	$ 25
14) b) Prepare and register Statutory Declaration				Optional step: Register Statutory Declaration	$ 175
15) Preparation of application for payment out of court of surplus monies	$ 225			Preparation of application for payment out of court of surplus monies *(only applicable to properties registered before January 1, 2018. The step is no longer applicable to any property registered after January 1, 2018).*	$ 975
Total Fees/File	**$ 2,350**		**$ 3,360**		**$ 3,920**

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3.5.1 Tax Sale Document Issuance

Analysis

Realtax Overview:

Company Overview	○ Realtax has been providing tax services to various municipal clients across Ontario since 1996. Realtax provides services from the beginning of the tax registration process, all the way through the tax sale, and beyond: the Company tracks the date when payment out of court can be applied for, and if the client wishes, they will obtain payments out of court on their behalf. ○ To date, the company has conducted more than 30,000 tax registrations and 3,000 tax sales. ○ More than 200 municipalities are using Realtax (e.g. Township of Terrace Bay, City of Vaughan, Municipality of Hastings highlands, Town of Atikokan, etc.). ○ Realtax team expertise comprises the team of highly experienced title searchers, law clerks, tax sale consultants, complemented with 16 years of mapping and title searching with MPAC, and 12 years of extensive knowledge of Teranet, Teraview and land registration policies and procedures. ○ Realtax offers its clients the possibility to feature their tax sale in OntarioTaxSales.ca website's Featured Properties web page allowing potential buyers to obtain detailed information about the properties for sale, downloadable tender packages, information about tax sales, and answers to their questions.
Average Cost per File	**Average cost per file:** $3,360 *(This number reflects a close matching of Realtax Fee Schedule to Sarnia's 15-Step Schedule of Revenue for Tax Sale Document Issuance. The optional advertising on OntarioTaxSales.ca is $475)* **Note 1:** *Discounts and special pricing are available for clients with a high yearly file volume.* **Note 2:** *Using Realtax does not require a contract, and no ongoing commitment is required.* **Note 3:** *Realtax does not charge for phone calls, emails, or faxes.*
Time Requirements	The Realtax team indicated it recognizes the importance of performing tax sale document issuance procedures in time, and guarantees timely service delivery, if the client is committed to efficient and timely communication, and document provision as required throughout the tax sale process.
Additional Details	Please refer to the Realtax Folder for additional information about Realtax, and fee breakdown per Realtax schedules and process breakdown.

3.5.1 Tax Sale Document Issuance

Analysis

The Tax Team Overview:

Company Overview	○ The Tax Team provides services to municipalities all across Ontario with the simplest, most efficient and cost-effective means of executing tax registrations and tax sales. The Tax Team's capabilities span all procedures required in tax registration, tax sale and payments into court. ○ To date, the company has administered more than 10,000 tax registrations and 1,500 tax sales. ○ The company proudly services various Ontario municipalities including: Belleville, Brant, Fort Erie, Hanover, Kingston, Muskoka Lakes, Orangeville, Oshawa, Owen Sound, Pickering, Stratford, Tecumseh, Whitby and Woolwich.
Average Cost per File	**Average cost per file:** $3920 *(This number is true when matching Realtax Fee Schedule to Sarnia's Schedule of Revenue for Tax Sale Document Issuance)* **Note 1:** *The Tax Team does not offer discounts as its fee structure is based on "cost per service". The company does not invoice upfront for a variety of services that in numerous situations are never required – they charge only for services that are necessary and only when they are about to immediately perform them. In every case, this reduces the amounts that are added onto tax accounts should the tax arrears be paid before any procedure is started. This approach was reported to have saved clients money.* **Note 2:** *The Tax Team indicates that the costs associated with each individual file depend on many factors (e.g. Teraview property identification numbers, interested parties, corporate searches, etc.) and may vary accordingly.*
Time Requirements	The Tax Team indicates that a typical tax sale process takes approximately 15 months. That said, The Tax Team recognizes the importance of performing tax sales document issuance within legislated timelines in order to protect both the municipality and the taxpayer, and guarantees its ability to complete the process in a timely fashion keeping its clients informed of all actions.
Additional Details	Please refer to The Tax Team Folder for additional information about Realtax, and fee breakdown per Realtax schedules and process breakdown.

3.5.1 Tax Sale Document Issuance

Recommendations

1. **Explore Tax Sale Document Issuance Practice Outsourcing** – Explore the possibility of outsourcing the tax sale document issuance process to Realtax to make the tax sale document issuance process more efficient, improve deliverable quality, and save staff time for other priorities that will better address the department's needs.
2. **Revise Legal Clerk's Responsibilities as Required** – *Resource Allocation recommendation 1.15 is applicable here.* Specific to tax sale document issuance, revise legal clerk's responsibilities and re-allocate them to support other priorities in the event that the City outsources its tax sale document issuance practice.

Benefits

- Promoted operations efficiency
- Access to skilled expertise
- In-house efficiency
- Improved focus on core activities
- Long term cost advantages

Key Success Factors

1. Legal Clerk training on additional responsibilities.
2. Quick response time to third party tax sale service provider's requests.

3.5.2 Property Management/Technology

Item	Description
Review Scope	○ Document and summarize the current state of the City of Sarnia property management including its challenges, and technology needs. ○ Identify opportunities for a centralized property management governance function for the City. ○ Provide recommendations and considerations for improvement of the property maintenance tracking system and direction for next steps.
Applicable Evaluation Criteria	See criteria table below

Time	Resources	Level of Services
☐	☑	☐
Process	**Technology**	**Cost**
☑	☑	☐

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3.5.2 Property Management/Technology

Current State Findings

- Municipalities are the stewards of the infrastructure they own, and the City of Sarnia is no exception. As a whole, the City currently owns and operates 49 properties of various sizes, sustainability, complexity, and usage. These assets are essential for the City of Sarnia departments to deliver the service and programs to community residents.
- The City does not currently employ a holistic property governance and a centralized property management approach. Under a centralized property governance structure, one team only oversees and manages capital improvement planning projects for all of the City facilities ensuring all properties are serviced efficiently and maintained on a regular basis.
- The City of Sarnia's 49 properties' (grouped under a certain definition) do not employ a centralized governance structure, and are managed by different departments of the City.
    - 8 City properties are under the property management overseen by the Legal Department, while the remaining 41 properties do not have an assigned property manager.
    - Depending on 3rd party agreements, capital improvement projects, maintenance work, and preventative checkups are under the responsibility of the property manager for the 8 City properties.
    - Maintenance and administrative responsibilities of the remaining 41 properties are under the oversight of various departments.
- The Purchasing Department undertakes a coordinated approach to procurement services
- Although the Legal Department is responsible for all contracts pertaining to both property management governed, and non-property management governed properties, due to the lack of a centralized governance structure, the department doesn't always have visibility to all of the contracts in place
- Asset management requires a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them. It also involves setting strategic priorities to optimize decision making about when and how to proceed with investments. Recurring themes during the stakeholder engagement interviews were that:

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3.5.2 Property Management/Technology

Current State Findings

- Asset management requires a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them. It also involves setting strategic priorities to optimize decision making about when and how to proceed with investments. Recurring themes during the stakeholder engagement interviews were that:

Many departments overseeing property maintenance across the municipality lack expertise in property management and maintenance. For example, when required to service a specific facility in emergency, high cost third party providers are chosen through tenders to do the work. Meanwhile the Property Management under the Legal Departments' oversight often has internal resources or knowledge of cost efficient providers that other departments could leverage for the work.

Many department heads responsible for property maintenance oversight across the City, also juggle an array of other responsibilities in addition to their property oversight duties, and thus have difficulty keeping up with preventative maintenance and capital improvement responsibilities, leading to facilities being serviced only when absolutely needed.

An overall lack of effective communication, transparency, resource sharing, and best practice idea exchange was also noted as an overarching issue in the City's current property management governance model, which, together with previously mentioned factors, leads to significant inefficiencies in property servicing work delivered across the City.

- The Property Management team of the City of Sarnia is managed by the Property Manager operating from the City Hall, under the oversight of the Legal Department's Director of Legal and Property Services. Only 8 City properties are currently under the oversight of a Property Manager. Some of these properties are also operated by 3rd Party Agreements. A summary table of all Sarnia properties is provided below:

PROPERTY	OPERATED BY
City Hall	Property Manager
Sarnia Library	Property Manager
Brights Grove Library	Property Manager
Mall Road Library	Property Manager

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3.5.2 Property Management/Technology

Current State Findings

PROPERTY	OPERATED BY
Lawrence House	Property Manager
Lochiel Kiwanis Centre	Property Manager (under 3rd Party Agreement)
Harbour	Property Manager (under 3rd Party Agreement)
Ferry Dock Hill	Property Manager (under 3rd Party Agreement)

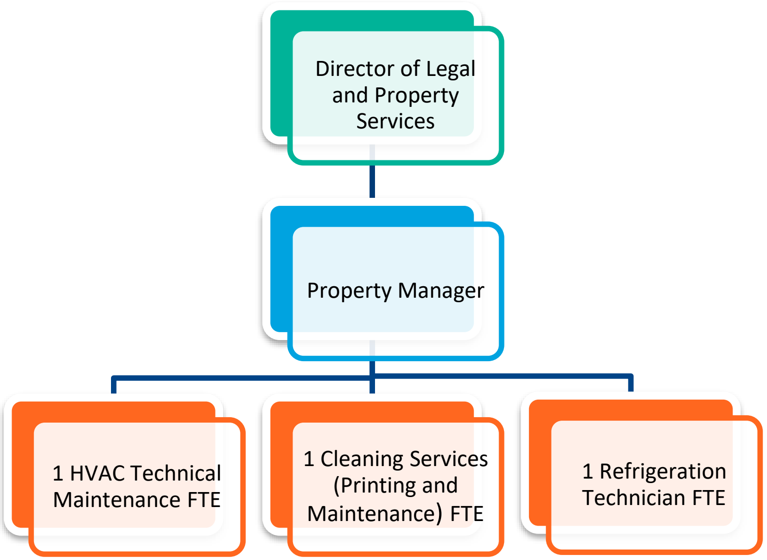
- Revenue generating properties under the oversight of various departments of the City of Sarnia range from land rental ($5,000) to revenue brought by arenas ($2,608,785). The City's revenue generating properties have been grouped, and revenues were summarized in the table below:

PROPERTY	REVENUE
Docks	$ 132,500
Harbour	$ 336,500
Marina	$ 90,000
Parks	$ 48,800
Sports Fields	$ 180,000
Arenas	$ 2,608,785
Strangway Community Centre	$ 21,800
Land Rental	$ 5,000
TOTAL	**$ 3,423,385**

3.5.2 Property Management/Technology

Current State Findings

- The current Property Management team consists of:



- Because of their expertise in the field, some property management/oversight staff perform maintenance work internally, while some work is outsourced to external service providers. As various departments are in charge of their own properties, contractor service providers are chosen at random and the City does not have a set list of contractors that's shared between departments.

- Many facilities were left without appropriate maintenance for over 20 years. As of today, many need appropriate capital improvement planning, and maintenance work. Furthermore facility condition reports should be conducted.

- There is a lack of supportive technology, especially a maintenance management tracking system that could be used by maintenance staff in the field (to acknowledge requests, and mark off tasks when completed) to make their work more time efficient was also recognized as a big challenge by stakeholders. Stakeholders across multiple departments of the municipality reported that the different modules (e.g. Property Information module) of CityView, the City's current "want-to-be-one-stop" software for all of its municipal file management needs, unfortunately does not offer an effective functionality for maintenance management.

- The property management team is currently looking into adopting web based new solutions for property maintenance management. Access E11 is being assessed for functionality and appropriateness. The goal is to pilot the software for property maintenance and extend the application to other departments in the future.

3.5.2 Property Management/Technology

Key Challenges

Resources	○ There is an insufficient use of internal resources' expertise. For example, many departments are unaware that the City of Sarnia's Property Management team has a expertise in HVAC, refrigeration, etc. that can be leveraged when emergency maintenance incidents take place. ○ There is also a lack of a centralized property management approach, and inefficient distribution of property management responsibilities across departments. ○ It appears that departments like Parks and Recreation are understaffed and thus are having difficulties balancing their responsibilities with property oversight duties. ○ Shortage of time leads to a lack of preventative work spent on property maintenance, raising the cost of maintenance emergencies.
Process	○ Lack of governance of the City's properties as a whole leading to potential opportunity of missed revenue generation for the City; it also results in facilities relying on informal channels, and overall inefficiencies in maintenance work provision between various departments involved in property oversight (e.g. costly third party help is sought when internal resources can be leveraged, extensive manual work, significant inaccuracies in reporting, etc.).
Technology	○ Current software and technology solutions have a lack of functionality to support maintenance tracking hindering effective communication within the City's property management and maintenance staff.

3.5.2 Property Management/Technology

Benchmarking

Centralized Property Management Governance:

- A centralized property governance typically governs three categories: revenue optimization, property maintenance, and property management technology systems.
- For revenue optimization, the centralized governance sets the revenue roles of the property, principles of revenue and cost structure, and revenue generating parameters. It also provides oversight on the long term capital investments on the property required to delivery the revenue
- A consolidated or centralized property maintenance governance usually results in far more efficient planning, monitoring, staff allocation, rationalization of maintenance/ routine repairs and capital repairs, efficient use of space, staff allocation, emergency response and asset reporting.
- Centralized Property management would typically include facility and grounds management and can act as either its own funded cost centre on behalf of all municipal departments or could operate on a cost recovery basis using charge-backs to municipal departments *(the latter often tending to generate greater efficiencies but is far less appreciated by the departments being charged)*.
- Property management is often split in municipalities between the facilities used to support municipal departments and those that support municipal services such as sewer and water, and also roads. This is not usually a problem since the latter two are known to be technical in operations, and do not overlap significantly with the former in staff skills.
- Many parks and recreation departments across municipalities handle the property upkeep for their grounds, this is a common activity for the inward-facing property management operations, and could therefore be combined with the centralize property management operations.
- The key benefit of consolidation or centralized governance is that it can substantially increase flexibility and back-up capabilities, while reducing duplication of costs for equipment across departments (e.g. mowers). On the other hand, each department that loses its formerly in-house property oversight power and service capabilities, is not generally pleased to have to now compete with other departments for the services under a centralized property management model.

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3.5.2 Property Management/Technology

Benchmarking

Consolidating Property Management Under Corporate Services Department:

- Given different departments' involvement in property management, and overlap between property oversight and maintenance functions, cities often consolidate property management functions under corporate services.
- Corporate services often represent inward-focused enterprise-wide services although some organizations also use them for outward-focused operations as well. For the purpose of this report, corporate services will be defined as largely the services that support other departments (with perhaps the property tax activity and customer service activity being the exceptions).
- The corporate services in a municipalities are generally are those that:
  - Serve most or all of the other departments of the organization;
  - Tend to fulfill needs that are fairly common across most or all departments (e.g. hiring staff, accounting, etc.);
  - Have a substantial requirement for certain specialized skills (e.g. accountant, IT specialist, etc.);
  - Represent definable cost centre(s); and
  - Regularly have access to best practices, systems, technology, etc. related to the field of corporate services.
- The City's corporate services that are presently under one department, currently titled "Finance, Information Technology Services and Customer Service", include accounting and budgeting, property tax, procurement, IT services and customer service. The two other types of internally-focused services that typically would be found in a corporate services department would be Human Resources (i.e., staffing) and Accommodation (i.e. administration and management of space (which would closely relate to the City of Sarnia's current Property Management stream under Legal, Risk Management, and Property)).
- Property management, when used as an internally-focused corporate service, is one of the service areas which can offer significant economies of scale when consolidated. Small property management operations can often find it difficult to keep full-time skilled trades staff busy or they have to contract out the work on an ad hoc basis. Repair and maintenance equipment is frequently duplicated and/or inefficiently used throughout the organization when it is purchased by a number of small internal property management operations of the organization.

3.5.2 Property Management/Technology

Benchmarking

- The ability to plan and execute repair and maintenance services, along with capital plans on a portfolio basis is not possible under a segmented property management operations.
- Stemming from leading practices in municipal property management, most property management functions report into the corporate services department since property management is a common function across all City operations.
- Property management is also usually consolidated (except perhaps sewer, water and roads due to the very specialized nature of their portfolios) into the corporate services property management operation.
- A property management operation could potentially report instead to the Engineering, Public Works & Transit Department, which does similar work in many respects. However, the public works activities are more outward-facing as opposed to the corporate service type property management activities which is largely inward-facing. Therefore the property management operation could also fit with in a corporate services=type setting.
- Although the a corporate services property management department might look after many of the City's facilities and related grounds (e.g. capital improvement planning, repairs, preventative maintenance, etc.), that responsibility would not be expected to extend to responsibility for operations/programs within those facilities or lands (e.g. running an arena).

3.5.2 Property Management/Technology

Benchmarking

- To further deepen this research, a jurisdictional scan of comparator municipalities with centralized property management services was conducted and summarized in the following table:

City of Thunder Bay	*Population*	○ 110,000
	Property Management Model	○ Managed by Realty Services. ○ Consolidated and centralized property management governance. ○ The Realty Services division manages the City of Thunder Bay property holdings. They acquire and develop property, handle sales and leases, and run public street and lane transactions.
Sault Ste. Marie	*Population*	○ 73,000
	Property Management Model	○ Managed by Public Works. ○ Consolidated property management under one department. ○ Public Works is responsible for the maintenance of municipal infrastructure of the City of Sault Ste. Marie that includes: • Parks; • Operations; • Traffic; and • Waste Management.
City of Waterloo	*Population*	○ 114,000
	Property Management Model	○ Managed by Community Services’ various divisions of the City of Waterloo. ○ Consolidated property management under one department. ○ Community services divisions include: • Community programming and outreach services; • Environment and parks; • Facility design and management services; • Fire rescue services; • Municipal enforcement services; and • Recreation services.

3.5.2 Property Management/Technology

Benchmarking

Town of Caledon	*Population*	○ 67,000
	Property Management Model	○ Managed by Finance and Infrastructure Services. ○ Consolidated property management under one department. ○ Finance and Infrastructure Services of the Town of Caledon comprise Finance, Purchasing and Risk Management, Transportation (Roads), Engineering and Major Projects, Energy and environment, and Facilities (Civic Properties). ○ Finance and Infrastructure Services also includes the Roads and Fleet Division, which ensures the Town's roads, sidewalks and streets are in good working order for all residents and commuters.

Maintenance Management System:

- Jurisdictional research indicates that for optimal property management operations, a computerized maintenance management system (CMMS) should be implemented.

- A wide variety of maintenance management software systems are available in the market. The majority are cloud based allowing for live communication. However, server based solutions that do not allow for live exchange of information unless maintenance staff carry a laptop or tablet with the system uploaded onto it, are also available. And while most CMMS software systems are applicable to a range of property management activities (e.g. maintenance & repair, tenant management, facility and equipment management, etc.).

- It is often better to find a program that will most closely meet the needs of the organization presently and in the foreseeable future and without an excessive package of built-in processes that will likely not be required and may make it potentially difficult and time consuming to set up and operate. The City should assess its IT administrator/analyst staffing volumes along with their current workloads to account for the set up, administration, manipulation and trouble-shooting needs of the system chosen.

3.5.2 Property Management/Technology

Benchmarking

- The considerations above should drive decision making, regardless of whether the end result is to keep or upgrade an existing system or procure an entirely new one. A CMMS system should track key data on property management activities that will combine:
  - **"Tombstone" data** (e.g. acquisition information, property description and model number, identification number(s), warranty information, disposal information, etc.);
  - **Planning information** (e.g. repair and maintenance schedule – both optimum and minimal that should be tied-in to required warranty repair and maintenance, planned repairs and refurbishment, anticipated life of asset, asset valuation data, etc.). Leading practices recommend:
    - Establishing at least a five (5) year repair and maintenance schedule forecast and a 20-30 year capital improvement plan that should be built in the CMMS.
  - **Actual performance** (e.g. what, when and by whom were repairs and maintenance done, exception reports, etc.). When establishing KPIs for this specific segment the following metrics should be considered:
    - Cost of repair and maintenance compared to asset current value and replacement value;
    - Cost of individual repair and maintenance job compared to estimated cost of that job;
    - Amount of time equipment or facility was out of service and for what reasons;
    - Issues dealing with safety or compliance with policy or law;
    - Inventory turnover;
    - Efficiency of repair and maintenance work;
    - Preventative maintenance compared to reactive maintenance; and,
    - Client satisfaction.
- Recognizing municipalities' challenges (e.g. limited resources, training, etc.), the Municipal Finance Officers' Association of Ontario developed various asset management resources in partnership with Asset Management Ontario for municipalities to use. Resources contain practical recommendations, and best practices for the development of asset management communities of practice.

3.5.2 Property Management/Technology

Benchmarking

- Maintenance Management System (CMMS) Selection and Practices. The following four (4) step process is recommended prior to CMMS implementation:
  1. Choose CMMS assets by prioritization.
  2. Decide what asset functions are to be included in the evaluation criteria for the CMMS and prioritize them (e.g. how to manage selected assets using the software).
     - Examples include: work orders, preventive maintenance, condition assessments, condition-based maintenance, tracking maintenance for work through other entities (e.g. outside contractors), work and resource scheduling, mobile application, reporting, maintenance cost history, etc.
  3. Identify initial integration opportunities/ requirements.
     - Example integration with other City technology systems (ArcGIS, incident management, etc.).
     - Ensure that integration needs are outlined in the RFP to be issued for CMMS search – bidders will then provide integration cost as part of their proposals.
     - System integration can also be put off to final stages of implementation as “future enhancements”, but the topic has to be discussed, and planned for prior to implementation.
  4. Analyze workflow to be incorporated into the CMMS.
     - Documenting workflow procedures is recommended for knowledge transfer and training purpose.
     - Workflow automation is also an important consideration that will drive efficiency. There are 2 kinds of workflow automation:
       - Using internal workflow built into the CMMS; or
       - Using integration with other systems.
- Similar KPIs, metrics, and considerations should be applied across the City of Sarnia’s asset management as a whole, and leveraged when establishing both the CMMS asset, and CMMS property / facility management modules.

3.5.2 Property Management/Technology

Recommendations

1. **Formalize Property Repair and Maintenance Schedules** – *Asset/ Property Management recommendation 1.2 is applicable here.* Specifically, ensure property repair and maintenance schedules for all City of Sarnia that are embedded in to the CMMS to ensure appropriate prevention work is being conducted on a timely basis.
2. **Develop a Capital Investment and Improvement Plan** – *Asset/ Property Management recommendation 1.3 is applicable here.* Specifically, develop a Capital Investment and Improvement Plan for all City facilities and properties.
3. **Centralize Asset & Property Management Governance** – *Asset/ Property Management recommendation 1.4 is applicable here.* Specifically, provide oversight on revenue optimization for the Marina, Harbour, Airport and Business Parks and explore an outsourcing model of the investment assets to not-for-profit organizations. Further, centralize all Asset & Property maintenance activities and the property legal contract management across all City properties and facilities under the asset and property management department.

Benefits

- Centralized operations
- Revenue optimization
- Efficiently maintained properties
- Capital improvements
- Shared resources
- Scheduled preventative maintenance

Key Success Factors

1. Clear roles and responsibilities for the centralized property management staff and management.
2. Individuals selected for the review must have the right skillset, experience, and culture fit.

3.5.2 Property Management/Technology

Recommendations

4. **Define Property Maintenance KPIs, Metrics, and Targets** – Define clear metrics and KPIs for planning information, and actual performance tracking that will be leveraged in the buildout of the CMMS.

5. **Optimize the Computerized Maintenance Management System** – *Technology recommendation 1.10 is applicable here.* Analyze current CMMS, along with potential upgrades to the system, and explore new ArcGIS enabled CMMS adoption options to identify the most cost efficient solution.
    - The analysis should include an assessment by a skilled expert in the current system to determine if it's being optimized throughout the organization.
    - Correct any issues.
    - Determine what investments in staff training and time are required so that it meets most or all of the organization's needs.
    - Ensure the system interconnects with other City platforms, and ArcGIS.

Benefits

- Robust maintenance management system
- Integrated asset maintenance management
- Reliable data
- Effective training
- Increased collaboration

Key Success Factors

1. Structured methodology and tools for KPI, metrics, and targets identification.
2. Subject matter expertise for maximizing CMMS systems.

3.6. Community Development Services and Standards (CDSS)

3.6.1 CityView Analysis

3.6.1 CityView Analysis

Item	Description
Review Scope	Assess the current use of CityView within the Building, Planning and By-Law divisions of CDSS to document challenges and recommend opportunities for greater utilization of the software.
Applicable Evaluation Criteria	

Time	Resources	Level of Services
☑	☐	☑
Process	**Technology**	**Cost**
☐	☑	☐

3.6.1 CityView Analysis

Current Findings

- CityView is a software solution developed in 1982 for municipal governments in North America designed for the purpose of land and records management as well as enforcement. CityView is used by local government building, licencing, inspections, public works, and various other departments to manage customer call volumes, track and shorten issuance times, increase self-service, increase inspector productivity, and reduce paper and manual processes.

- The City of Sarnia purchased and implemented CityView in 2012. **CityView is currently used only by the Planning, Building and By-law divisions of the Community Development Services and Standards (CDSS) department as these were the modules that were purchased; its use is therefore only reflective of a part of CDSS's operations as a whole.** While the software has the functionality to automate services across Fire, Public Works, Engineering, Administration, Finance, Parks and Recreation and Public Safety, this would require additional investment by the City. Currently, the ability to streamline documents and integrate data within CityView and with the ArcGIS enterprise system has remained a challenge, leading to low up-take, additional manual work-around and lower than expected use of the software.

- For the purpose of this review, we developed an understanding of the current utilization of CityView across the Planning, Building and By-law divisions of the CDSS department where CityView is currently used . Through discussions with key stakeholders in each of these divisions we found that the key challenges pertaining to the use and adoption of the CityView software in general are:
  - Since being implemented in 2012, there have been several upgrades to the software with minimal to no training for how to properly use these new features.
  - Several key City services including parking tickets and tracking and customer service complaints are not currently being tracked in CityView as staff are unable to enter information as necessary using the interface.
  - There is limited integration with the ArcGIS enterprise which is critical to maximizing the value and use of the CityView Public Portal and for utilizing various tracking functions related to planning and By-law enforcement.
  - CityView currently requires a server upgrade in order to share CDSS data with the corporation in real-time

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3.6.1 CityView Analysis

Current Findings

- CityView was procured and implemented by the department near the end of 2012. There have been continual investments in the software over the past several years which have improved the functionality of CityView but have not contributed to its uptake and use.
- The department has assessed the adoption of CityView across the Building, Planning and By-law divisions and found the following:
  - Building department: Partial adoption;
  - By-law department: Partial adoption; and,
  - Planning department: Partial adoption.
- It is estimated by the Building department that proper configuration and use of CityView would save employees up to 50% of the time spent completing these tasks otherwise.
- Parking tickets are the largest revenue source for By-law department but have the least automation/ functionality in CityView. Employees would prefer not to use CityView and are interested in a more innovative technology solution.

3.6.1 CityView Analysis

Current Findings

Planning

- Currently, City View is used to track all applications, feeds and documents, however the system is not configured properly to generate reports or notices. Workflows are not user-friendly or properly set-up in the software to use.
  - Workflows need to be aligned and reviewed before looking to automate with CityView.
- Although the planning department uses some functions on a daily basis, they currently don't use CityView for the compliance planning process because the software wasn't' configured properly to do so.
- CityView is a convenient place to store notes, these notes integrate with the building and by-law information making accessibility across the three divisions simple.
- The goal is to make the public safety portal available which would make processes more efficient and provide public the capability to electronically send mail back to the City.
- Integrating CityView with the payments system would prevent duplication of work for financial inputs.
- Integration with GIS would allow users to make minor edits from within the application and produce maps that demonstrate where the application is and what the application data type is.

Building

- While CityView is currently used for all dwelling types to document workflows, define service standards, define file structures, record retention structure and audit data, it is not currently utilized for additional administrative services including research inquiries, conditional permit agreements, monthly reporting, order issuance or residential complaints.
- The automation of all admin functions are currently functioning in CityView however there are many glitches in the coding which results in manual workarounds.
- While workflows are automated based on application types, overall performance is effected by glitches in reporting and document automation as many files cannot be synced with the software.

3.6.1 CityView Analysis

Current Findings

By-Law

- CityView is currently used to track all ticket information, financial information, investigations, notes, pictures, documents, orders and court proceedings once entered into the system.
  - This is currently working very well for case tracking, inspections, follow-up inspections, and correspondence.
  - Parking is not compatible with CityView, and details aren't easily recognized by the system leading to frustrating experience for employees entering information.
  - Staff would prefer an alternative that is more modern/innovative to CityView for parking services – the unit is looking for another software to meet the needs.
- Documents set-up in CityView currently all have similar names, need unique name/ID.
- Reports for auditing can be generated from data entered in CityView and tracking information is readily available.
- Animal control functionality/ Pet licencing is not currently available as a module in CityView, this is a major area of opportunity as currently the process is done manually by an officer.
  - The process is currently: Receive a call > Read the case > Classify > Generate report manually.
  - Staff have identified that animal control services including animal tag issuance.
  - Opportunity to evaluate the addition of the Animal Licensing module of CityView.
- Need to incorporate by-law codes in tracking functionality of CityView for easier classifications.

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3.6.1 CityView Analysis

Key Challenges

Level of Services	○ Varying adoption rates as a result of a lack of GIS integration and functionality within CityView across building, planning and by-law makes it difficult to standardize use and processes including file management.
Time	○ If properly used and configured correctly, it is estimated that CityView could save up to 50% of manual time and effort entering data and performing analysis. However, the efficiency is not achieved given many tasks are still incompatible with the software or require partial manual effort in combination with using the software.
Technology	○ Integration with GIS system is critical to expanding use of CityView for planning and integration with other departmental services. ○ Lack of compatibility with payment systems leads to duplication of work between CDSS and Finance department for inputting financial information. ○ Limitations in CityView's current functionality has resulted in lower than anticipated adoption rates for use of the software.

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3.6.1 CityView Analysis

Benchmarking

- Two main challenges hindering CityView usage, expansion, and full implementation were identified as follows:
    1. A need to upgrade and integrate CityView with the ArcGIS enterprise across the corporation.
    2. A need to integrate the financial system with CityView.

- Through research on the various CityView modules, other municipalities' experience with the platform, and a high-level benchmarking analysis of comparator municipalities, Optimus SBR found that the concerns and challenges faced by the City of Sarnia, including integration and limited capabilities of the software for its intended use, were similar across regions. Users complimented the system's mobile application, but claimed that the server based functionality of the system is hard to navigate, outdated, difficult to interconnect with several platforms, and offers average vendor services and implementation support. As such, many municipalities do not choose to rely solely on CityView for their municipal operational needs.

- At the same time, many larger municipalities are replacing older systems with CityView and plan to implement mobile capabilities for field inspectors to better leverage this technology. They also plan to implement online permitting and licencing services using the CityView public portal as well as an integrated digital model via Bluebeam technology. Smaller municipalities have had more challenges and tend to not realize the full capabilities of CityView. For these municipalities, training and knowledge of the software tend to be a common issue.

- Our research indicates that the following municipalities are users of CityView: Oshawa, Belleville, Kingston, Chatham and Kent, Welland, Grimsby as well as the towns of Canmore and Lincoln. As we understand that both larger and smaller municipalities continue to adopt and use CityView, we also see similar challenges experienced throughout. For the City of Sarnia to progress with their adoption and use of the software it will be necessary to invest in a server upgrade including full integration with the ArcGIS enterprise, to implement better training for employees to understand how to navigate and use CityView, and to consider moving to the cloud-based version of the software as this would evolve the capabilities of CityView and make the software more user-friendly, reducing the need for training.

3.6.1 CityView Analysis

Recommendations

1. **Assess CityView Functionality** – *Technology recommendation 1.10 is applicable here.* Specifically, review CityView functionality, and upgrades prior to initiating server upgrades and improvements.
2. **Develop an ArcGIS Integration Implementation Plan** – *Technology recommendation 1.12 is applicable here.* Specifically, develop an implementation plan for ArcGIS integration with CityView and other technologies leveraged by the City.

Benefits

- Integrated software platforms
- Integrated ArcGIS
- Seamless operations
- IT governance

Key Success Factors

1. Structured methodology and tools for KPIs, metrics, and current/ new system functionality targets identification.
2. Communication with impacted departments and staff, and execution are comprehensively delivered.
3. Fair and transparent City wide technology objectives, open and collaborative approach, and buy-in from leadership and staff.

3.7. Parks and Recreation

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3.7.1 Resource Allocation

Item	Description
Review Scope	To conduct an analysis of current staffing levels across the Parks and Recreation department to understand and document specific roles and responsibilities and to identify and assess options to reduce strain on current staff.
Applicable Evaluation Criteria	(see table below)

Time	Resources	Level of Services
☐	☑	☑
Process	**Technology**	**Cost**
☐	☐	☑

3.7.1 Resource Allocation

Current State Findings

- The Parks and Recreation department at the City of Sarnia are responsible for all recreation programming activities including aquatics, fitness programs and summer camps. They also host special events which they continue to scale up year over year. There is over 65 hours of weekly operation and programming at the Strangway Centre including aquatics, fitness and wellness, sports and recreation, mind and body, weekly activities, arts, crafts, music, languages, facts and cats, hobbies and interests, woodworking, support groups, services and daytrips.

- On top of the event offerings, the City offers the rooms at the Strangeway centre to over 15 community organizations weekly. The City also maintains 3 arenas with 12,000+ hours of ice rentals, 3000 hours of arena community hall use and 5500 hours of ice maintenance to provide safe and efficient ice surfaces.

- While there was an increase in the budget for staff in 2018, this was mainly due to increases in minimum wage as there have been no additional staff added over the past 2 years (2018 and 2019), with no proposed increase in staff for the year 2020.

- In our conversations with key stakeholders across the Parks and Recreation department, we found that with regard to staffing and resource allocation, the main challenges are:
  - The majority of staff are students or seasonal workers, resulting in a high level of turn-over. Having such a large proportion of seasonal summer staff also results in minimal staff during the winter.
  - There is minimal equipment available for the large greenspace and facilities to maintain.
  - Outsourcing, while beneficial to the department, needs better management to ensure quality service providers are hired and equipment leased. There is also a need for additional infrastructure (e.g., septic tanks) to be evaluated for outsourcing.

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3.7.1 Resource Allocation

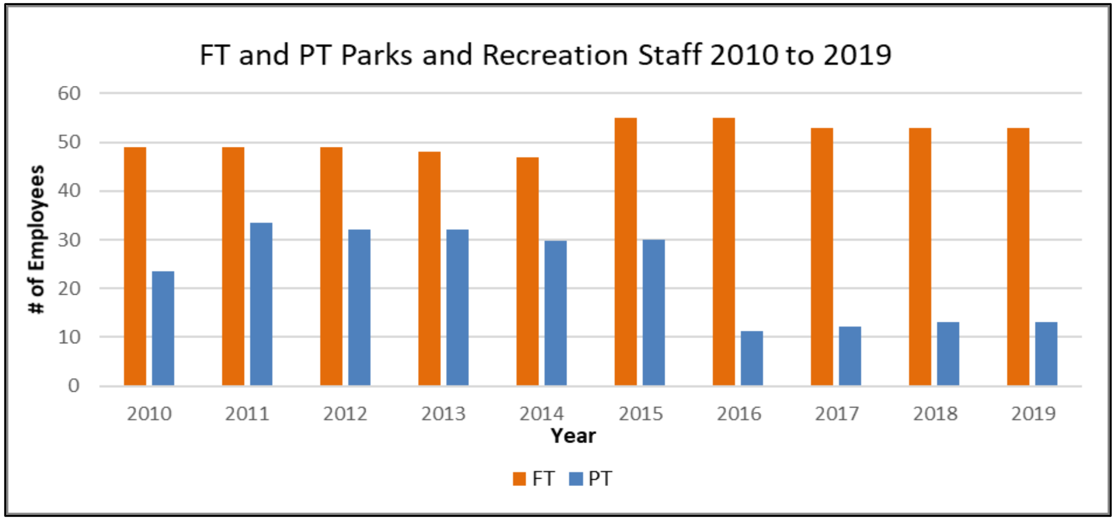
Current State Findings

- The department is currently working with Public Works to improve their roster of working equipment.
- Parks and Recreation is responsible for managing all current infrastructure within the park property; while much of the equipment is outsourced, it is difficult to track, maintain and determine outsourcing priorities.
- Staff in Forestry and staff that works at the sports fields that use similar equipment/vehicles will often be swapped between roles in order to satisfy demand dependent on the need at the time.
- The maintenance team not only works on maintenance projects for the department but also helps the grass cutting team with facilities and parks.
- Not simple to simply re-allocate staff across various functions as each member of the staff is already fully utilized; moving staff from one area to another to backfill is already how this department functions.
- The department currently shares staff across the various work streams to help balance the workload regardless of assigned roles, while this works, there is a unique skillset required for many of these positions.
- Large number of seasonal staff, especially for the sports fields, arenas and horticulture resulting in a reduction to only 58 staff during the winter months. While this has not necessarily been a major issue for the department, it creates challenges for planning and resource management as these decisions are largely ad hoc.
- No KPIs in place to measure the level of service across the department’s various services, the department currently prioritizes the level of service based on use of that particular arena or sports field.

3.7.1 Resource Allocation

Current State Findings

- Since the amalgamation with the township in 1992, Forestry is now responsible for up to 90,000 trees with no addition of staff over the past 2 years and a 22% reduction in staff from 2015 to 2016.
- The City of Sarnia currently has a net cost per capita of $7 for recreational programming, $14 less than the average municipality and earns approximately 30% revenue per dollar spent, approximately 12% more than comparable municipalities with a similar cost per capita.
- From the Work Orders Completed spreadsheet provided by the department for the number of work orders for the Sarnia Urban Forestry department over the past 4 years, we see that the number of sites visited has been reduced by 24% and the number of work orders complete has also decreased by 21%.



- The number of full-time staff for the Parks and Recreation department has remained relatively consistent over the past 10 years while the number of Part time staff was reduced by approximately 60% in 2016.
- The majority of staff across the Parks and Recreation department are seasonal employees or students.

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3.7.1 Resource Allocation

Current State Findings

- The City continues to host a greater number of events for the City utilizing their arenas and sports fields but have had to re-allocate resources from grass cutting and other areas as:
  1. A large component of the arena staff leaves in August/September.
  2. The department has seen no major change in staffing levels over the past 3 years.
- In the 2020 Directors Presentation, it's indicated that the City has proposed to add 0 new staff for the 2020 year and the budget was reduced in 2018 for all expenditures related to staffing, contracted/purchased services, insurance, utilities, facilities/grounds/parks, equipment and vehicles.
- With regards to outsourcing, the most frequently outsourced maintenance for the Parks and Recreation department is for a licenced electrician, plumber and HVAC person. As with all other departments, currently, these staff are contracted on an as-needed basis which results in higher than necessary costs to perform this work.
- A large investment in arena improvements, park infrastructure and sports and recreation facilities to be made in 2020 which coincides with the data received indicating that indoor soccer facilities are a top priority for the City.

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3.7.1 Resource Allocation

Key Challenges

Resources	○ Continual departmental growth and increased service offerings with an overall reduction in staff result in continued strain on staff. ○ High proportion of student and seasonal employees leads to difficulty keeping up with demand for services during winter seasons. ○ Outsourcing options for an electrician, licenced plumber and licenced HVAC technician to respond to repairs in plan for department but currently no tracking in place for lifecycle of equipment including age, # repairs, # times broke down. ○ Opportunity also exists to re-allocate these roles to Engineering or Public Works where these skillsets are better- suited. ○ Majority of staff are either seasonal or students which results in ambiguity surrounding employee turnover and staffing shortages in the winter months. ○ As the number of programs and events continue to increase, the level of equipment necessary is not scaling up, resulting in difficulty keeping up with maintenance schedules.
Cost	○ Large investment planned for arenas and sports fields without planned increase in staffing levels to keep up with maintenance/services at those venues.
Level of Services	○ There is no documented service standard and KPIs to track the level of services. ○ Difficult to standardize training and provide level of training necessary for all staff as skillsets are completely different across.

3.7.1 Resource Allocation

Recommendations

1. **Conduct a Skills Assessment and Staffing Workload Distribution Review –** *Resource allocation recommendation 1.15 is applicable here.* Specifically, Once KPIs are developed and adequate data can be gathered for workload and staffing conduct a skills assessment and review of staffing workload distribution to determine the appropriate resourcing needs in relation to the number of tasks and responsibilities relevant to the skills and expertise required for each department.

Benefits

- Improve efficiency with current staffing levels
- Better future planning
- Ability to leverage staff expertise and skillsets

Key Success Factors

1. Complete and accurate data related to grass cutting including volume of green space, equipment used to maintain those areas as well as employee allocations and hours either in Excel or a more sophisticated tracking software platform.

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3.7.2 Grass Cutting Efficiency

Item	Description
Review Scope	Make recommendations to the Parks and Recreation department as to how best to re-allocate resources across roles and across departments to balance the grass cutting requirements based on priority of grass area.
Applicable Evaluation Criteria	see table below

Time	Resources	Level of Services
☑	☑	☑
Process	**Technology**	**Cost**
☐	☐	☐

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3.7.2 Grass Cutting Efficiency

Current State Findings

- The Parks and Recreation department is responsible for the maintenance of nearly 1,200 acres of parkland, pathways, trails, City facilities, storm water management ponds and boulevards. This volume of green space is estimated to increase by approximately 10 acres by 2026. The maintenance and upkeep of these facilities is important for supporting the City's strategic initiative to promote a high quality of life and caring for all citizens by improving the quality of life assets and amenities.

- In addition to this, the Parks and Recreation department have outlined in its Master Plan for 2018 to 2033 that its vision is to achieve a balanced array of accessible and distributed parks, recreation and culture opportunities that align with the interests of all residents.

- To fulfil these pillars, the department must effectively prioritize and maintain the City's green space in a way that maximizes the use of available resources, including employees and equipment, while staying within the allocated budget for providing this service.

- In discussions with the Parks and Recreation department key stakeholders, we found that:
  - There is limited data available to analyze the efficiency of grass cutting for the green space managed by the department. While equipment and hours are tracked for some regions, there are areas that are either outdated in terms of the volumes listed or have not been documented.
  - There is currently no service standard or level of service measure for the green spaces maintained by the City. While the Parks and Recreation department does prioritize and aim for a high level of service, there is no data to assess whether this is happening.
  - While there is variability in the efficiency of grass cutting across the various locations looked after by the City, the department strategically prioritizes certain locations over others to improve customer satisfaction.

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3.7.2 Grass Cutting Efficiency

Current State Findings

- Currently, grass cutting equipment breaks down approximately once every three days; however, the department has more recently been able to leverage the Public Works department to obtain working equipment more readily.

- There is no tracking system that provides staff a reference for how old the current equipment is or how often that equipment has been out of service/repaired.

- Priority areas for grass cutting are set based on:
  1. Liability of not cutting that grass area (e.g., if a sports field will be used for children soccer tournament).
  2. Number of complaints as a result of not maintaining the grass cutting for that area on time.
  3. Popularity of that particular arena/park/sports field.
- There is currently 1 mower used for Blvd, 4 different mowers used for West Side and 5 mowers used for East Side.
- Although different equipment is utilized across different areas, mowers are distributed and shared across crews dependent on need and equipment break down.
- Generally, only FTE operate the 16’ mowers and a combination of FTE and seasonal employees drive the 10’ and 5’ mowers. Currently, there are 2 staff on the East and 2 staff on the West side who operate the 16’ mowers. The 2 FTE stationed at the waterfront have been reduced to 0 FTE in 2018.

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3.7.2 Grass Cutting Efficiency

Current State Findings

- Based on the Grass Cutting Time and Location spreadsheet provided, we found that it takes approximately 71 hours, 41 hours and 37 hours per crew to cut the Blvd, West and East locations respectively.
  - Although it seems the Blvd crew is less efficient than both the East and West crews, the Blvd has a crew of 2 employees, the West side has a crew of 6 employees and the East side has a crew of 9 employees therefore we see that there are both less employees and less equipment.
- Based on the Grass Cutting Time and Location spreadsheet provided, we see that it takes approximately 30 additional hours per 8 day cycle for the Blvd Crew to cut the required area or grass. Through conversations with the Parks and Recreation department, we found that this additional time spent is likely either due to:
  - Unforeseen circumstances including weather variability and equipment break downs; or
  - Low prioritization of Blvd compared to other locations. This is part of the department's strategy for increasing customer satisfaction by cutting grass for regions prone to receiving more complaints.
- Park space and grass area for cutting is mainly regional and is almost equally divided between Active and Passive use. Currently, staff prioritize grass cutting of these areas based on popularity and planned activities.

	Classification Official Plan (Ac)				
Park Space	**City Wide**	**Community**	**Neigborhood**	**Regional**	**Total**
Active	130	71	0	325	526
Beach	0	1	0	0	1
Passive	1	104	68	240	413
Total	**132**	**176**	**68**	**564**	**940**

3.7.2 Grass Cutting Efficiency

Key Challenges

Resources	○ Staff are more efficient in some areas than others for grass cutting. This efficiency is highly dependent on external circumstances such as weather conditions and equipment breakdown.
Level of Services	○ Currently, level of service measured as aiming for "gold" in terms of maintaining arenas and sports fields but no real KPIs or feedback system in place to determine if meeting service standards or customer/resident expectations.
Time	○ Despite the time needed to cut grass across Blvd, west and east are captured in a document, there is no tracking about the equipment breakdown and any other service interruption, hence the actual time cannot be determined.

3.7.2 Grass Cutting Efficiency

Analysis

Grass cutting, leaf clearing, waste removal, hard exterior surface cleaning and damage repair are common grounds keeping functions in many property management operations (with snow clearing an added function in Canada). Grass cutting tends to be the one activity in all of those that takes the most staff and time resources even though it is only a seasonal activity. However, there are certain best practices of large scale grass cutting that can assist in the control of cost and time. These include:

- Regular equipment maintenance is critical because the season is relatively short but grass may be needed to be mowed as much as weekly depending on the weather and grass type and the equipment inventory may be limited. The mower maintenance department should set the number of hours of use after which a mower/trimmer should come in for maintenance, and the supervisor of the mower operations should keep track of those hours of use and ensure the mower/trimmer is submitted for maintenance on time. And due to the need to keep equipment in use during the short season, the maintenance department needs the means and scheduling to turn around the mowers and weed trimmers quickly.
- While we understand that mowers and trimmers are currently inspected daily, access to maintenance in the event of damage, loose parts, trouble starting or safety hazards is not always as rapid as needed given other demands on the City's maintenance function.
- A well maintained mower or trimmer does not routinely break down during use. If such breakdowns are happening regularly to a mower/trimmer, then supervision should be closely reviewing the quality of the maintenance and the operation of the mower/trimmer to determine which area needs improvement.
- The larger the space to mow, the larger the mower size generally needed.
- Some staff (particularly inexperienced summer staff) using mowers and weed trimmers can easily take twice as long as need be to do the work due to inexperience and lack of supervision. Each distinct grounds area to be mowed and trimmed should have established time frames for the work, and the work should be monitored and supervision applied where required.

3.7.2 Grass Cutting Efficiency

Analysis

- Grounds with potential issues (e.g. unsafe slopes, holes, hidden obstructions like tree roots, rocks, etc.) should be documented and reviewed by anyone mowing those grounds before the work commences. Mower damage often occurs due to the mower running over such hazards or rolling over in sloped areas.
- New staff operating mowers (riding or push type) do not always know the most efficient pattern in which to mow the property. The more obstacles or irregularities, the greater the need for advice to the inexperienced operator, and it is better in such a case to document the preferred mowing pattern for future operators.
- Some staff (particularly inexperienced summer staff) using mowers and weed trimmers can easily take twice as long as more experienced staff to do the work due to inexperience and lack of supervision. Each distinct grounds area to be mowed and trimmed should have established time frames for the work, and the work should be monitored and supervision applied where required.
- To rationalize grass cutting, normal program uses (e.g. field use for ball game), highly visible key public areas (e.g. building housing Council chambers) and complaints should generally get highest priority. Areas of little use and/or visibility, even around regularly used facilities, should generally have lower priority (e.g., perhaps the grass in front of an arena is mowed regularly but much of it behind the arena may be a lower priority).
- Grounds with potential issues (e.g. unsafe slopes, holes, hidden obstructions like tree roots, rocks, etc.) should be documented and reviewed by anyone mowing those grounds before the work commences. Mower damage often occurs due to the mower running over such hazards or rolling over in sloped areas.

3.7.2 Grass Cutting Efficiency

Recommendations

1. **Focus on Prevention** – Ensure that the grass cutting function is well planned and supervised to avoid preventative issues in terms of hazardous conditions for employees mowing grass areas.
2. **Monitor Maintenance Plan Adherence** – Ensure that the maintenance plan for the equipment is followed rigorously during the mowing season and that equipment is inspected daily.
3. **Develop Grass Cutting KPIs** – *Process/KPIs recommendation 1.6 is applicable here.* Specific to grass cutting efficiency, develop grass cutting KPIs such as how long it should take to cut each field in order to maximize the efficiency of the operation.

Benefits

- Better tracking of performance
- Ability to share resources more effectively
- Greater customer satisfaction with the level of service

Key Success Factors

1. Complete and accurate data related to grass cutting including volume of green space, equipment used to maintain those areas as well as employee allocations and hours documented either in Excel or a more sophisticated tracking software platform.

3.8. Fire Rescue Services

3.8.1 Technology

	Description
Review Scope	○ Document the challenges and opportunities of the current technologies and systems in use for Sarnia Fire Rescue Services. ○ Validate Sarnia Fire Rescue Services' current technology and need for a one-stop shop data management software for fire related operations by looking at technology solutions implemented by other municipalities.

Applicable Evaluation Criteria

Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☐	☑	☑

3.8.1 Technology

Current State Findings

- For the need of its current operations and efficient service delivery, the Sarnia Fire Rescue Services' staff use multiple technology platforms that encompass:

TECHNOLOGY PLATFORM	OVERVIEW	FIRE SPECIFIC?
Fire Department Management (FDM)	The primary records management platform used by the Sarnia Fire Rescue Services' staff. This is the incident reporting system used by Captains and Platoon Chiefs to enter emergency incident information said incident reports are electronically sent to the Office of the Fire Marshal. Fire Inspectors also use the platform to enter fire safety inspection information on properties, noting contraventions of the Ontario Fire Code. **Drawback:** ○ System is not used to full capacity. Not all available modules have been purchased, and those that have been, are not fully utilized (Funding is needed to contract outside resources to program the system upgrades which are available, and training is required to put features into everyday use). ○ An excessive number of errors are being reported on a daily basis in both (1) property fire safety inspection documentation at fire code infractions data entry into the software; and, (2) response time data records of incident reports. Response time data errors result from API link glitches between the FDM Records Management System (RMS) and Police dispatch CAD and periodic incorrect data entry by dispatchers. ○ As a workaround to API link glitches, records are e-mailed to Fire Officers in PDF format, and then transcribed. Transcription errors in response time data records occur regularly. ○ Weekly reports generated from FDM RMS to track response times are not canned. As a workaround, Administrative staff are required to perform excessive file format changes, and manually change the "time" entry format of each data entry line.	Yes
Vadim/ iCity	The corporate accounting platform used by the Administrative Staff and Sarnia Fire Rescue Services' Management Team to access the General Ledger of accounts. The Fire Chief uses the system to approve purchase requisitions. PDF Invoices are not readily accessible to Administrative staff for payment verification, as staff must make a request of Finance.	No

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3.8.1 Technology

Current State Findings

TECHNOLOGY PLATFORM	OVERVIEW	FIRE SPECIFIC?
Info:HR	The platform is used by the Sarnia Fire Rescue Services to enter and track attendance, and to document Attendance Support Program meetings. **Drawback:** There is no connection between iCity and Info:HR platforms, and Platoon Chiefs use MS Excel, MS Word, and PDF documents to submit their daily attendance.	No
Adobe / Microsoft Office Suites	Alludes to the (1) MS Word and PDF documents that the Platoon Chiefs of the City use to submit daily attendance and assignments to Administrative staff; and, (2) MS Excel spreadsheets that the Fire Prevention and Training personnel use to submit individual weekly attendance. **Drawback:** Personnel's' overtime hours are captured when daily attendance is manually converted to an MS Excel Spreadsheet. The Spreadsheet is then manually entered into iCity for Payroll purposes.	No
Financial Managers Workbench (FMW)	A budget tracking system that Sarnia Fire Rescue Services use for multi-year operating and capital budget submissions, comparison of previous year's approvals and actuals, trend monitoring, assessment to highlight percentage budgetary increase/ decrease from prior year, forecast changes, and comment (including justifications) entry in applicable text line fields.	No
Server / Fire Intranet	Intranet internal to Sarnia Fire Rescue Services' staff used as a repository of documents, forms, etc. **Drawback:** The Server does not allow for version control; documents stored on the Server/ Fire Intranet are duplicates of what is or could be on Fire Rescue Services' Shared ("S") drive on the City of Sarnia's corporate server; and file search is difficult and time consuming because of a poor file structure.	Yes *(can migrate to City Intranet)*
City Website	The City website where Council meeting agendas and minutes are posted, and by-laws are uploaded for public view.	No
Target Solutions	A departmental learning management software that is used for training purposes. The software acts as a repository of training programs and resources (e.g. reading and training materials, etc.), and tracks theoretical and practical learning journeys of staff. **Benefit:** Staff reported that the system delivers on Fire Rescue Services' learning and training expectations.	Yes *(can be leveraged)*

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3.8.1 Technology

Current State Findings

TECHNOLOGY PLATFORM	OVERVIEW	FIRE SPECIFIC?
CityView	CityView software is used across various departments of the City of Sarnia including Sarnia Fire Rescue Services. Sarnia Fire Rescue Services use the system on a limited basis (e.g. building/ property information), but staff believe that the software has good cross-departmental options, and potential to host a repository of building information.	No
City of Sarnia Intranet	The City of Sarnia's shared folder system that stores and acts as repository for City policies, forms, cheque requisitions, Council meeting agendas and minutes, as well as report templates.	No

- Interviews with stakeholders and members of Sarnia Fire Rescue staff pointed to:
  - An absence of a one-stop-shop software solution for fire-related operations;
  - A lack of linkage between different platforms and technology systems both within Sarnia Fire Rescue Services and across various City of Sarnia departments *(e.g. lack of linkage between Fire and Building repositories)*;
  - The need for data extraction from multiple platforms and software when producing reports requiring manual and time intensive data entry due to the incompatibility of formats *(e.g. Budget data collection for 10 year capital planning, Injury records)*;
  - Outdated versions and inefficient modules *(e.g. iCity platform was reported to be 9 upgrades behind, Fire trucks are equipped with outdated technology)*;
  - An absence of Geographic Information System (GIS) functionality and data (maps, building plans, etc.);
  - An absence of "on-the-go" tracking technology capabilities;
  - Difficulty to accumulate required data, such as Unit Hour Utilization rate;

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3.8.1 Technology

Current State Findings

- Manual and time consuming data consolidation practices *(~20% of Administrative staff's weekly time is spent on information search, data compilation, and data organization and restructuring to meaningful format and folders)*;
- An increased number of preventable errors and system glitches *(e.g. errors have been reported to occur daily when fire code infractions are entered into the software for property fire safety inspection documentation. Errors also have been reported to occur daily in response time data of the incident reports due to glitches in the API link connection between the FDM RMS and Police Dispatch CAD, and periodic incorrect time data entry by dispatchers. When glitches occur, required information is e-mailed to Sarnia Fire Rescue Services' Officers who often add to transcription errors)*;
- An excessive number of poor quality reports derived from technology systems in use that require additional labour and manually manipulate data and formulas for re-formatting, data edits, and quality assurance *(e.g. on a weekly basis, reports generated from FDM RMS to track response times are not canned. As such, Administrative staff need to filter data, export records into CSV files, and manually change the "time" format in each cell from "0 Min. 0 Sec." to a standardized (00:00:00) format. When the 911 Dispatch Center auto-populates incident call information into FDM RMS for trucks returning to scene, data is lost and often blank leading to missing information in reports); and,*
- Internal Information Technology (IT) support is overburdened with day to day issues.

○ Fire Rescue Service's staff state that the ideal technology future state will consist of a fulsome platform, at the minimum for Sarnia Fire Rescue Services' specific applications, that offers a one-stop-shop capability that operates in synergy with various corporate platforms via embedded links. One example is to combine the functionality of FDM with Target Solutions.

3.8.1 Technology

Key Challenges

Time	○ There is an inefficient use of resource time on mundane, manual data entry tasks, and data consolidation.
Resources	○ Lack of workforce training on currently used technology platforms, and poor leverage of technological capabilities. ○ Due to the lack of data accuracy and credibility, it is difficult to identify whether resources allocation is appropriate, resulting in hindered resource planning across the Fire Rescue Services.
Technology	○ Absence of interface/ link between different platforms. ○ Multiple technology systems are currently in use resulting in dissonance between inter and intra departmental communication. ○ Many current technology systems in use are outdated, error prone, and not optimal for the functions they are currently carrying out (e.g. continuous need for manual data entry, use of e-mail and paper copies to transfer data from system to system, etc.). ○ Lack of a one-stop-shop fire-related data analytics platform that can be leveraged for the use of Sarnia Fire Rescue Services.
Cost	○ Multiple technology systems are currently in use governed by multiple contract agreements that require different budgetary investments. ○ Inability to achieve maximum return on investment due to partial utilization of each software.

3.8.1 Technology

Benchmarking

- One of the foremost requirements that with budget implications is the need to keep current with technology and life cycle replacements of technology on a scheduled basis. The City of Sarnia's Fire Rescue Services technology challenge is similar to the City's overall technology challenges across various departments. For optimal operations, and best efficiency, Fire Rescue Services' software platforms should be:
  - Integrated with a Records/Data Management System that stores relevant and comprehensive property, building and facility information. This integration will:
    - Eliminate duplicate records;
    - Eliminate redundant work processes and manual data entry;
    - Improved efficiencies; and,
    - Increase current level of annual inspections.
  - Equipped with a cloud based Records/ Data Management System (explore the possibility to leverage CMMS) to allow for automatic data and inspection records' transfer that the Fire Prevention staff currently fill out upon return to the Fire Station.
  - Integrated with Geographic Information System (GIS) (ArcGIS) to enable smarter infrastructure view, holistic operations across different departments, and efficient fire department operations (e.g. building information modeling, etc.). GIS integration will facilitate risk assessment and management, and enable better communication of risk and safety concerns.
- For optimal technology solutions' buildout, quality statistical data and meaningful key performance indicators (KPIs) should be available.

3.8.1 Technology

Benchmarking

- There are several legislated requirements for the fire department for reporting statistical data. Appropriate and accurate data is the cornerstone of reporting and maintaining accountability, and modern technology should cater to this requirement.

- To improve reporting processes and statistical data collection, the following considerations should be accounted for:
  - Meaningful KPI development;
  - Setup and integration of a records/ data management program;
  - Overall fire specific software system updates across the department for optimal functionality; and,
  - Staff training and education to ensure that data entry is consistent (e.g. same approach is used, same definitions and criteria are implemented based on the required standards from the province.

- A high level jurisdictional scan of comparator municipalities did not yield specific technological recommendations, nor support of a “one-stop-shop” fire-related software platform approach for fire department operations. However, the need for integration, continuous innovation and technological upgrades were recurring themes.

- For comparison purposes, the following table represents a sample of technological solutions used by comparator municipality The City of Cambridge. It identifies sample anticipated technology needs of a typical Ontario municipal fire service. The table also identifies the current systems in place (or not, as the case may be) that are designed to meet that functional need:

3.8.1 Technology

Benchmarking

Function	Description	Systems in Use
Fire Marshal Reporting	The records management system for preparing and submitting required Ontario Fire Marshal incident reports.	CriSys
Fire Safety Plans	System (process and standard) for storing and managing Fire Safety Plan information for Fire Prevention and for sharing with crews – frequently as part of the CAD system.	Fire Safety Plans are currently uploaded in PDF format to AMANDA.
In-vehicle technology	0049n vehicle technology that connects crews to the CAD system. Typically, this involves a mobile device (laptop, Toughbook, tablet) connected via public data network (LTE / VPN) to the CAD system.	In-truck MDTs currently display Site Data files that contain floor plans, site forms and photographs of site.
AVL technology	AVL technology that tracks locations of vehicles for dispatch purposes and that supports automated routing of vehicles.	AVL TruFleet (separate from the corporate ESRI AVL solution). It is not integrated with the current CAD system and will be replaced by the I/Tracker.
Fire Pre- Plans	Used to identify high risk buildings, and also to provide information to command vehicles.	Current system is outdated and will be replaced with a web-based application that is to be determined.
Public Education	System for tracking education requests and performance statistics related to public education activity.	FDM

3.8.1 Technology

Benchmarking

Function	Description	Systems in Use
Fire Inspections & Investigations case management	System for case management and reporting for fire inspections, results, notices and documentation. Also includes Fire Investigations. Mobile capability allows inspectors to record inspections and process necessary paperwork on site.	Currently AMANDA is used for inspections and Investigations. No mobile inspection capability is currently implemented (although the capability is available in AMANDA). Previously FDM was used for inspection management, historical records are largely physical files and approximately 5% of these records are uploaded to FDM and AMANDA. The project to complete this upload has been put on hold due to budget restrictions. Fire Prevention Officers have to refer to three different locations to find an address. (Physical files, FDM and AMANDA).
Training Planning / Tracking	Ability to track training and certification requirements and completions of all staff.	Target Solutions LMS (Learning Management System) used to deliver and track training completions. FDM for documentation and tracking
Fleet Management	Maintenance management system to track fleet asset and planned and reactive maintenance work.	No system in use for fire fleet management. Daily vehicle inspections currently a manual process.
Equipment / Inventory Management	Inventory management system to track equipment, manage preventative maintenance, inventory and re-ordering (e.g. SCBA, uniforms).	Excel spreadsheets for equipment, FDM, CriSys Maximo: The fire inventory has been loaded, but the system is not currently used.

3.8.1 Technology

Benchmarking

Function	Description	Systems in Use
Staff Scheduling	System to manage staff and shift scheduling, to handle shift trades and to track time for payroll purposes.	TeleStaff Payroll data is manually entered into SAP (as well as TeleStaff). A module has been purchased to allow fire fighters to access their own data and request schedule changes (e.g. trades), but the module has not been implemented.
Emergency Management	System to manage / coordinate emergency responses.	Cameo Software Suite Incident Analysis Viewer – an ArcGIS Online viewer used for analyzing the impact of an incident in the event of an emergency situation.
GIS Analysis	System to analyze distributions, visualize performance and optimize service delivery.	Some use of GIS in Incident Analysis Viewer and Cameo, but more broadly, fire departments use a significant opportunity.
Reporting / BI	Ability to report and combine data from various Fire systems to build a common operating picture.	Individual systems have reporting systems, but it is currently difficult to combine information across systems.

3.8.1 Technology

Recommendations

1. **Explore Technology Integration Opportunities** – *Technology recommendation 1.10 is applicable here.* Specific to technology, explore the possibility of integrating Fire Rescue Services technology solutions amongst each other as well as with the City's GIS system, and Record Data Management System.
2. **Improve Statistical Data and Reporting Processes** – *Process/KPIs recommendation 1.9 is applicable here.* Specifically, improve statistical data with improved reporting processes through meaningful review and development of KPIs, training guidelines establishment, and process documentation.

Benefits

- Integrated and linked software platforms
- Integrated and robust GIS
- Maximum return on investment
- Innovative and optimal technology solutions
- Improved efficiencies
- Smarter infrastructure

Key Success Factors

1. Open and collaborative process to ensure seamless systemic integration and buy-in from leadership and staff.
2. Structured methodology and tools for reporting and statistical data analysis.

3.8.2 Management Structure and Staffing Levels

Item	Description
Review Scope	○ Review Sarnia Fire Rescue Services' current management staffing model. ○ Review similar sized comparator municipalities' Fire Department organizational structures for an overview of management and divisional chief staffing models and practices in the fire department. ○ Provide recommendations for how to optimize the existing staffing model using industry best practices in order to offset the impact of understaffed management.
Applicable Evaluation Criteria	Time: ☑ · Resources: ☑ · Level of Services: ☐ Process: ☑ · Technology: ☐ · Cost: ☐

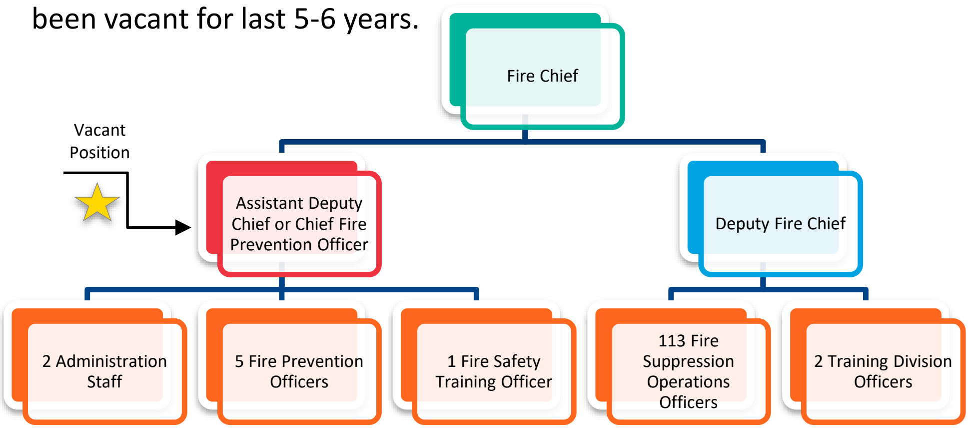
Time	Resources	Level of Services
☑	☑	☐
Process	**Technology**	**Cost**
☑	☐	☐

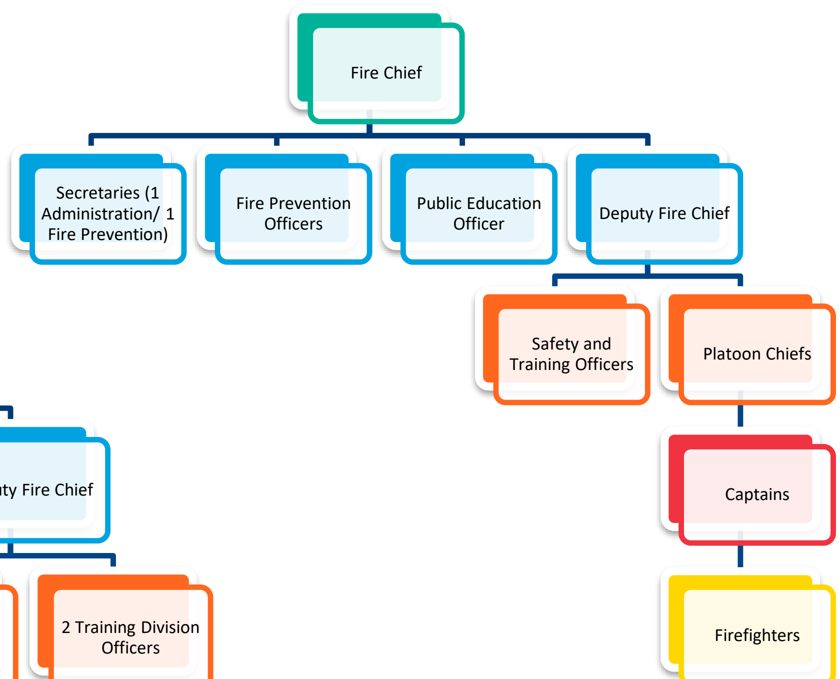
3.8.2 Management Structure and Staffing Levels

Current State Findings

- Sarnia Fire Rescue Services are dedicated to build a safe community for the residents and visitors of the city through direct involvement and actions that focus on providing the community with fire and life safety education, fire prevention programs, and fire fighting along with fire emergency response services. Sarnia's Fire Rescue Services has an annual budget of $20.5 million, operates 5 fire stations, and is comprised of 4 divisions (Administration, Prevention, Training, and Fire Suppression). 125 fire personnel are currently employed by the City of Sarnia. All personnel are unionized, except for the Fire Chief and Deputy Fire Chief.

- During interviews, it was indicated that Sarnia Fire Rescue Services' management team, although functional, is understaffed. To further build on this, Sarnia's Fire Rescue Services current organizational chart suggests that the management team could include a Deputy Chief, an Assistant Deputy Chief or Chief Fire Prevention Officer. The 2nd Deputy Chief has been vacant for last 5-6 years.





Expected Staffing Model *(Left Graphic)* vs. Current Staffing Model *(Right Graphic)*

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3.8.2 Management Structure and Staffing Levels

Current State Findings

- Acknowledging Sarnia Fire Rescue Services' resource constraints through the analysis and recommendations provided in the Fire Master Plan 2007, Council approved the addition of a second Deputy Fire Chief to the management team. However, the second Deputy Chief's position has been vacant the last 5 to 6 years.

- It was identified that management understaffing results in several shortcomings, examples of which encompass:

Increased Chief and Deputy Fire Chief's workloads (e.g. Fire Chief and Deputy Fire Chief are often pulled "into the weeds");

Limited to no Chief and Deputy Fire Chiefs' time to focus on strategic and creative thinking and planning tasks; and,

Time constraints on providing sufficient oversight.

- The above shortcomings are only few examples of strategic imperatives that the Fire Chief and Deputy Fire Chief are required to attend to, but are taken off plan daily by other high priority corporate initiatives, and urgent departmental issues (like labour relations, emergency incidents, etc.).

- With the current shortage of staff at the management level:
  - The Fire Chief of the City of Sarnia is responsible for direct oversight of the Fire Prevention and Public Education Division – a typical responsibility of a Chief Fire Prevention Officer (who would normally report to a Deputy Fire Chief). Sample tasks of this this role may take over 2 work days of the Fire Chief's time, and include:
    - Meeting attendance;
    - Research on business licencing, short-term accommodation, and rooming and boarding houses; and
    - By-law revisions and authorization.

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3.8.2 Management Structure and Staffing Levels

Current State Findings

- The Deputy Fire Chief of the City of Sarnia is responsible for direct oversight of the Training Division – a typical responsibility of a Chief Training Officer (who would report to a Deputy Fire Chief). Sample tasks of this role also may take up to more than 2 work days of the Deputy Fire Chief's work week, and include:
  - Daily interactions with Training officers to receive briefings and provide direction;
  - Weekly formal meetings to discuss training plans, emerging trends, training completion status, work flow and assignments; and,
  - Detailed mapping of each training program and individual training materials required.

- Staff and Sarnia Fire Rescue Services' past and present management team have been highly affected by the shortage of staff. A solution can be found in recruiting an additional Deputy Fire Chief, a Chief Training Officer, and/ or a Chief Fire Prevention Officer.

- Aside from significant impact on Sarnia Fire Rescue Services' Team, it is critical that Fire Rescue Services are properly staffed in order to effectively and efficiently serve residents. When comparing the City of Sarnia's population to fellow Lambton County municipalities (e.g. Township of St. Clair, Township of Warwick, City of Lambton Shores, etc.), Sarnia accounts for approximately 57% of the total Lambton County population of 126,638 (according to the 2016 Census Profile). Furthermore, the City of Sarnia's community profile indicates that the vulnerable populations of the City (children under 15 years of age, and seniors over 65 years of age) are also close to the Ontario averages. The City of Sarnia has an above provincial average number of seniors over the age of 65 (~5% above the Ontario average), and slightly below average population of children below 15 (~2% lower than the Ontario average) *(Please refer to data tables on the next page)*. Population trends allow Sarnia to tailor its fire prevention and education initiatives to the needs of its community. *Older and Wiser* is an example of such initiative delivered to the senior residents of Sarnia by the Fire Rescue Services for fire safety awareness and prevention of fatal incidents.

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3.8.2 Management Structure and Staffing Levels

Current State Findings

Lambton County Population (Total of 126,628) by Municipality		
Municipality	**Population**	**%**
City of Sarnia	71,594	57%
Township of St. Clair	14,086	11%
Municipality of Lambton Shores	10,631	8%
Town of Plympton-Wyoming	7,795	6%
Town of Petrolia	5,742	5%
Township of Warwick	3,692	3%
Township of Enniskillen	2,796	2%
Municipality of Brooke-Alvinston	2,411	2%
Village of Point Edward	2,037	2%
Township of Dawn-Euphemia	1,967	2%
Village of Oil Springs	648	1%

City of Sarnia Vulnerable Population Breakdown in Comparison to Ontario				
Population	**City of Sarnia**	**%**	**Ontario**	**%**
Total Population	71,594	100 %	13,448,494	100%
Children Under 15	10,640	14.86 %	2,207,970	16.42 %
Senior Over 65	15,530	21.69 %	2,251,655	16.74 %

- Above examples justify Sarnia Fire Rescue Services' need for an optimal management structure.

A shortage of staff at the management level affects public initiatives that the Fire Rescue Services undertake. Additionally, staff reported a considerable challenge to report, and implement strategic initiatives for Fire Rescue Services. For example, several agreements (e.g. Fire Protection Agreement with Aamjiwnaang First Nation) and by-laws (e.g. Establishing and Regulating By-Law) are dated, and/ or not practiced as they should be. Fire Rescue Services' staff believe that this negligence is a function of high workload within previous administrations, and the current understaffing challenge at the management level. For example, the 2019 Service Level Description document indicates that the number of service responses increased from 2646 in 2017 to 2836 in 2018 – an increase in workload required to support staffing requirements of the Fire Rescue Services. This strategic imperative directly affects the department's legal operations' framework that renders it a liability when there's a lack of maintenance.

3.8.2 Management Structure and Staffing Levels

Key Challenges

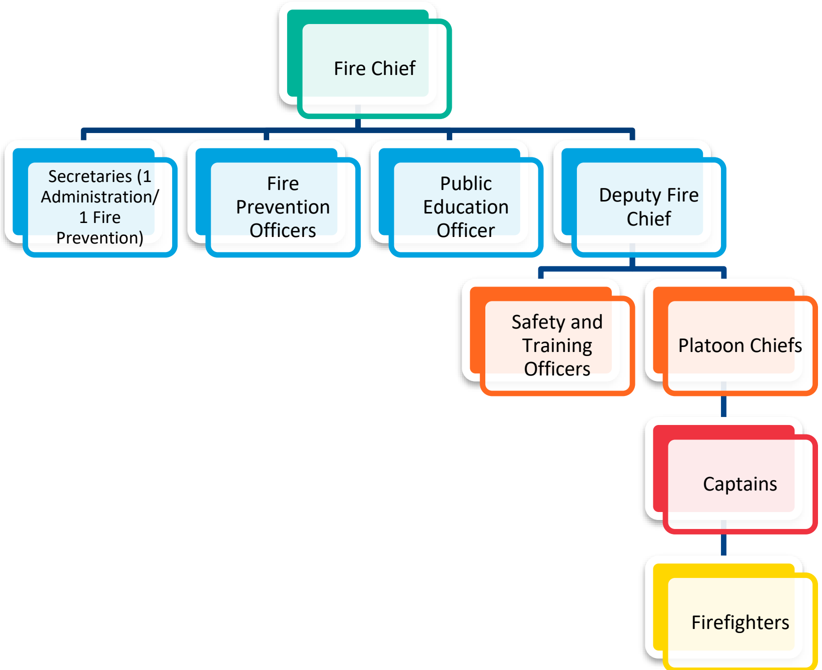
Time	○ Inefficient usage of Fire Chief and Deputy Fire Chief's time diverting their focus from their management priorities.
Resources	○ Sarnia Fire Rescue Services' Fire Chief and Deputy Fire Chief report that they are: • Often being pulled "into the weeds"; • Do not have sufficient time to focus on and engage in strategic and creative thinking and planning responsibilities; • Do not have sufficient time for oversight; and • Have to juggle an increased backlog and workload. ○ Sarnia Fire Rescue Services' Fire Chief and Deputy Fire Chief report having to complete work that is atypical for their roles in order to make up for the shortage of staff. ○ Sarnia's Fire Rescue Service's lack of executive management oversight time may lead to an increased risk of operational errors. ○ An overworked management team is more prone to decision making errors, and decreased efficiency. ○ 24/7 on-call rotation split between Chief and Deputy.

3.8.2 Management Structure and Staffing Levels

Benchmarking

- Reviewing similar sized comparator municipalities' fire rescue services with a similar number of fire stations as the City of Sarnia can shed light on Sarnia's situation.

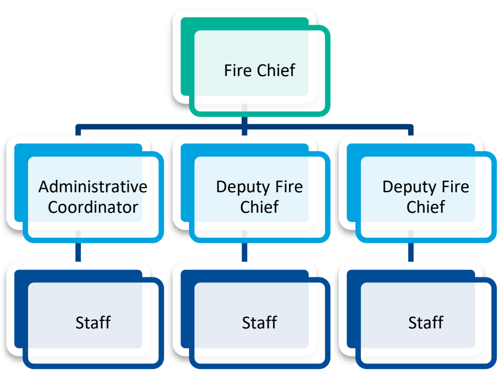
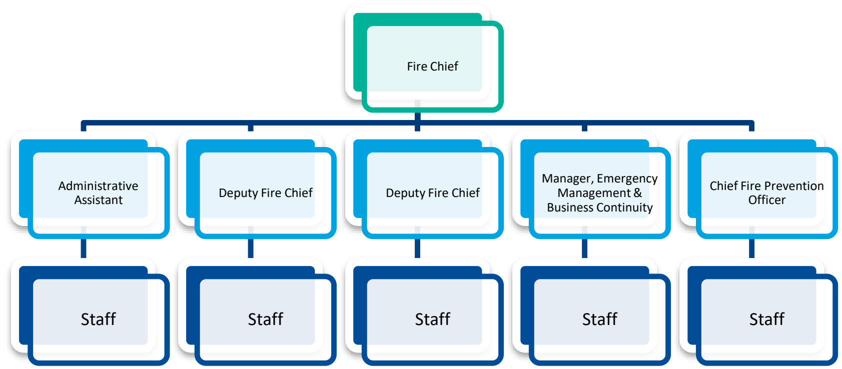
- Sarnia's Fire Rescue Services' current state management staffing structure is one in which a Fire Chief's work is supported by a single Deputy Fire Chief. Fire Prevention Officers, a Public Education Officer, an Administrative resource, and a Secretary also report directly to the Fire Chief. A Deputy Fire Chief, an Assistant Deputy Chief, or a Chief Fire Prevention Officer could potentially undertake the oversight of Fire Prevention Officers, Public Education Officer, and Administrative staff. The City also has five (5) fire stations covering an area of 164.6 km².



3.8.2 Management Structure and Staffing Levels

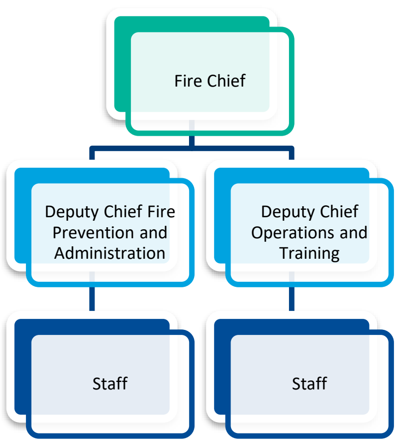
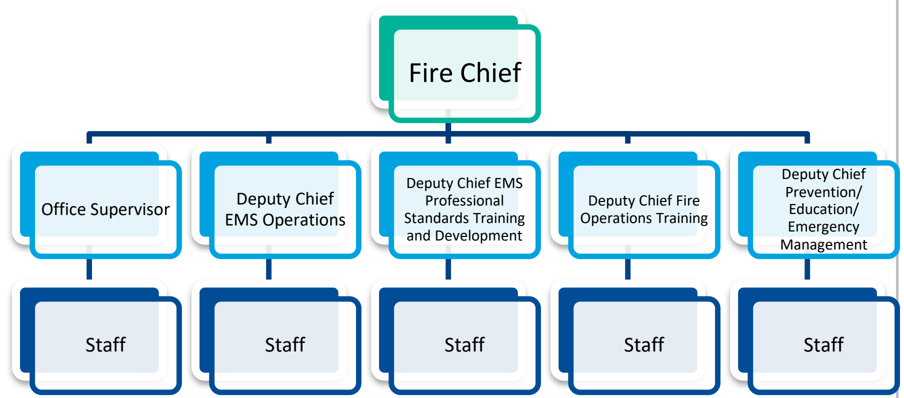
Benchmarking

- Various municipalities' fire department's management staffing models were selected and reviewed for this benchmarking analysis:

Criteria	City of Cambridge	City of Kitchener
Population	123,900	242,368
Area	113 km^2	136.9 km^2
Number of Fire Stations	6 fire stations	7 fire stations
Current Management Staffing Model		

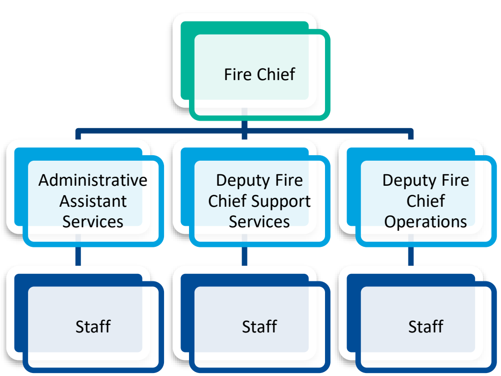
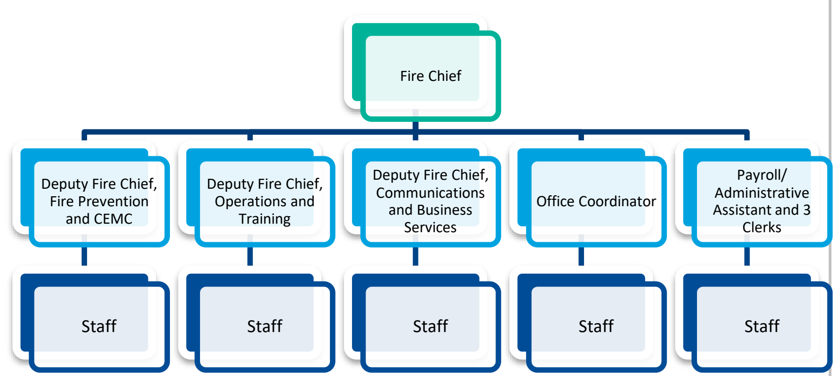
3.8.2 Management Structure and Staffing Levels

Benchmarking

Criteria	City of North Bay	City of Sault Ste. Marie
Population	51,553	73,000
Area	319.11 km²	715 km²
Number of Fire Stations	3 Fire Stations	4 Fire Stations
Current Management Staffing Model		

3.8.2 Management Structure and Staffing Levels

Benchmarking

Criteria	City of Windsor	City of Barrie
Population	217,188	153,356
Area	146.38 km^2	99.04 km^2
Number of Fire Stations	7 Fire Stations	5 Fire Stations (6^{th} in consideration)
Current Management Staffing Model		

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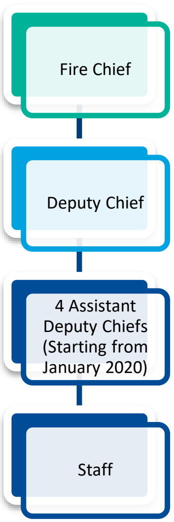
3.8.2 Management Structure and Staffing Levels

Benchmarking

Criteria	City of Fort Saskatchewan
Population	24,149
Area	48.12 km²
Number of Fire Stations	1 Fire Station
Current Management Staffing Model	○ Like the City of Sarnia, the City of Fort Saskatchewan is one of the three (3) Canadian petro-chemical hubs. ○ The Fire Department of the City of Fort Saskatchewan is currently restructuring to a 24 hour operations model, and is expecting the addition of four (4) Assistant Deputy Chiefs to join their management staff. 

- It is difficult to compare different municipalities' fire department staffing due to their differing needs, coverage areas, population, expected demographic growth, and number of fire stations. Based on this jurisdictional overview, however, comparator fire departments to the City of Sarnia Fire Rescue Services' management staffing model tend to have at least two (2) or more Deputy Fire Chiefs to support the department's Fire Chief in his duties. Sarnia's Fire Rescue Services must also take into account significant industrial risk responsibility given Sarnia's chemical industry.

3.8.2 Management Structure and Staffing Levels

Benchmarking

In Canada, this significant risk is specific to only two or three other Canadian municipalities that have such a large petro-chemical representation, one of which was found to be the City of Fort Saskatchewan in the province of Alberta. A brief conference call with the City of Fort Saskatchewan's Fire Department indicated that the municipality has one (1) Deputy Fire Chief, and is expecting an addition of four (4) Assistant Deputy Fire Chiefs while the population and the area coverage is approximately a third of the City of Sarnia's population and area, and fire rescue services' operations are ran from only one (1) Fire Station versus Sarnia's five (5) stations.

- The current Fire Chief of the City of Sarnia holds the responsibility for direct oversight of the Fire Prevention and Public Education Division – a typical responsibility of a Chief Fire Prevention Officer. Fire department staffing best practices evidence that the fire departments require a full-time fire chief and having the incumbent split time with other Deputy Fire Chief, Chief Fire Prevention Officer, or other municipal duties will jeopardize the department's service efficiency. To further reiterate our earlier point, given the size of Sarnia's Fire Rescue Services, and the City's community profile characterized by a growing senior population, Sarnia's Fire Rescue Services require a full-time leader who has time and resources to focus on oversight, innovative research, and planning.

- The need for a Deputy Fire Chief could be alleviated with the recruitment of a Chief Training Officer, or a Chief Fire Prevention Officer. The City of Sarnia's current senior population is on the rise, and the City remains an important hub for petro-chemical industries, both of which require special fire prevention and public education measures. Department resources and management staffing are not sufficient to dedicate a fire prevention inspector exclusively to this task, therefore, the City should consider the recruitment of additional resources.

3.8.2 Management Structure and Staffing Levels

Recommendations	Benefits
1. **Consider Recruiting for an Additional Position** – Consider the possibility of recruiting a Deputy Fire Chief, Chief Training Officer, and/or Chief Fire Prevention Officer to allow the Fire Chief to focus on his responsibilities as per fire department standards and best practices. 2. **Conduct a Staffing Needs Assessment** – *Resource allocation recommendation 1.15 is applicable here.* Specifically, conduct a workforce analysis to obtain data pertaining to the current Fire Rescue Services' management workload, and time spent on each task for a set period of time and identify constraints (e.g. technology, etc.).	○ Good governance ○ Fiscal sustainability ○ Commitment to serving the City of Sarnia residents ○ Fire prevention ○ Fire education and training

Key Success Factors

1. Staffing buy-in and support to provide required data for workforce analysis.
2. Responsibilities re-distribution to ensure alignment with the roles.
3. Fair and transparent recruitment process for Deputy Fire Chief, Chief Training Officer, and/or Chief Fire Prevention Officer positions.

4. Implementation Approach

4.1 Summary
4.2. Prioritization
4.3. Timelines
4.4. Guidelines

4.1 Summary of Future State Recommendations

Recommendations for the 5 organization-wide dimensions are summarized below (focus area-specific recommendations are not included here for implementation purposes). These recommendations are consistent with achieving the City's plan for savings of 1% through automation.

Asset/ Property Management	1.1 Develop Maintenance KPIs and Targets. 1.2 Formalize Preventative Maintenance Schedules. 1.3 Invest in Capital and Improvement Planning for all City Assets. 1.4 Create a Centralized Asset and Property Management Department. 1.5 Refresh the Property Management Department structure.
Process/KPIs	1.6 Develop Key Performance Indicators (KPIs) and Collect Relevant Data. 1.7 Document Processes. 1.8 Establish Benchmarks. 1.9 Create and Document Policy.
Technology	1.10 Establish an IT Steering Committee. 1.11 Standardize IT Training. 1.12 Implement the ArcGIS enterprise system across the organization. 1.13 Set up a Centralized IT Governance. 1.14 Develop a Cloud Readiness Strategy.
Resource Allocation	1.15 Conduct a Skills Assessment and Staffing Workload Distribution Review. 1.16 Establish a Utility Pool for Immediate Contracting Needs.
Project Management	1.17 Establish a Project Prioritization Criteria and Plan. 1.18 Conduct Project Management Training. 1.19 Implement a Tool for Talent Tracking. 1.20 Implement a Project Management Office (PMO). 1.21 Develop a PMO Toolbox of Methodologies and Best Practices.

4.2 Prioritization: Methodology

Prioritization of recommendations and implementation planning were based on a preliminary scoring incorporating criteria of Expected Benefits and Ease of Implementation. The methodology also facilitates determination of recommendations considered Quick Wins versus Longer-Term/ Strategic recommendations.

Recommendation Scoring Criteria

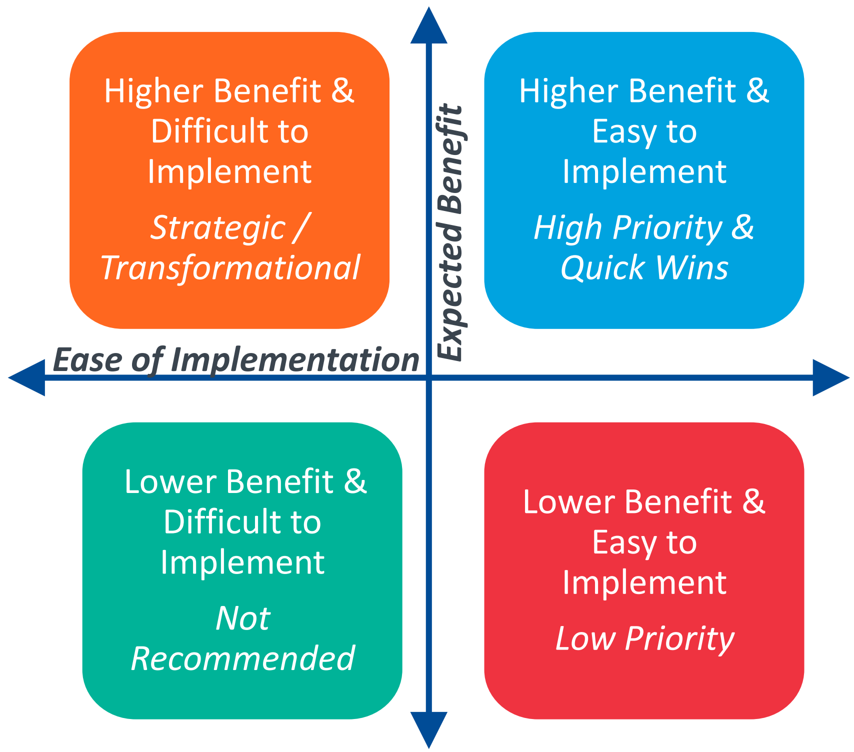
Prioritization Criteria

A. Expected Benefit

1. Risk Mitigation
2. Expected Individual/Vendor Impact
3. Operational Impact
4. Likelihood of Success / Adoption

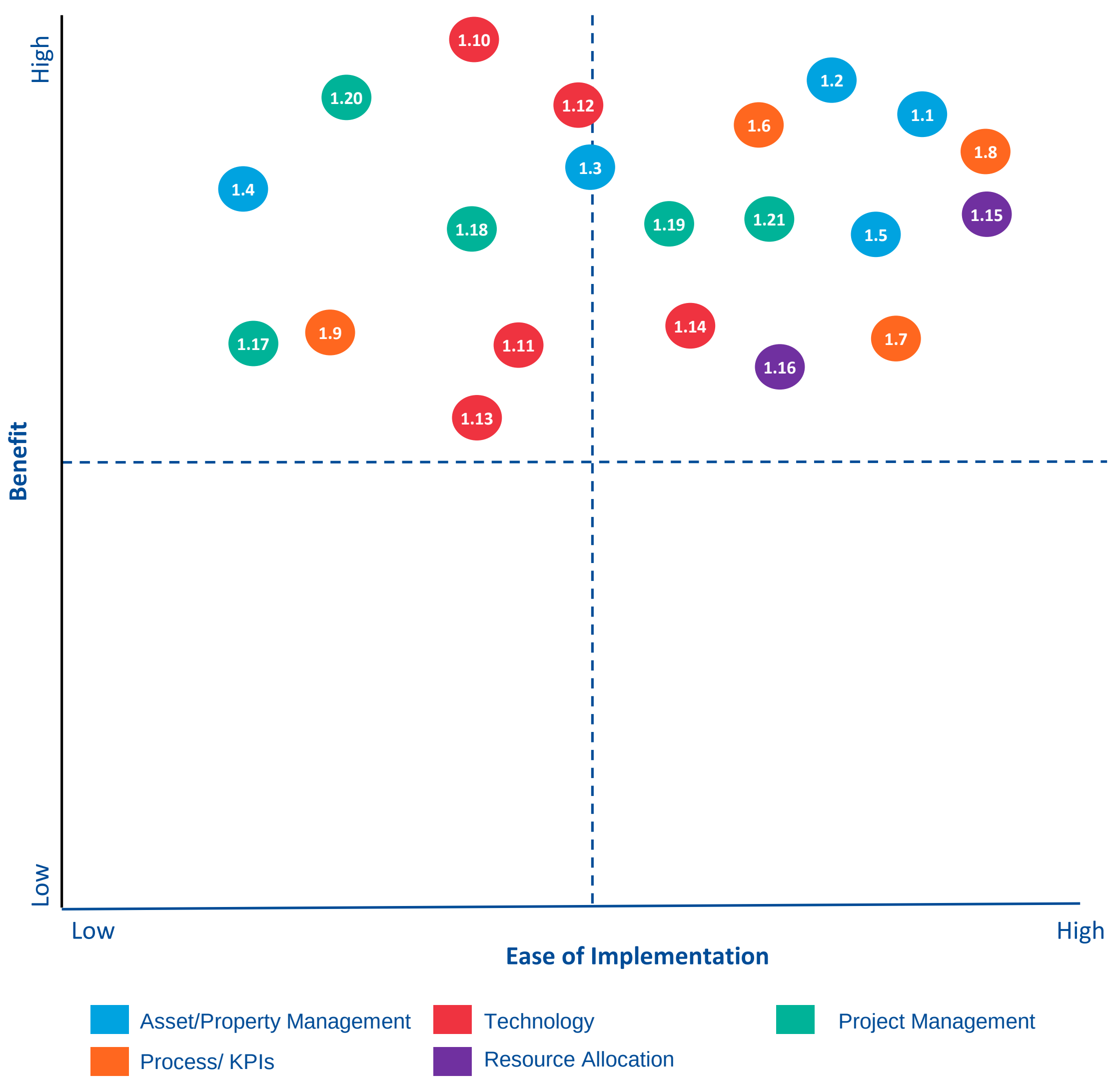
B. Ease of Implementation

4. Complexity
5. Directional Cost
6. Work Effort (Implementation)



4.2 Prioritization: Recommendations

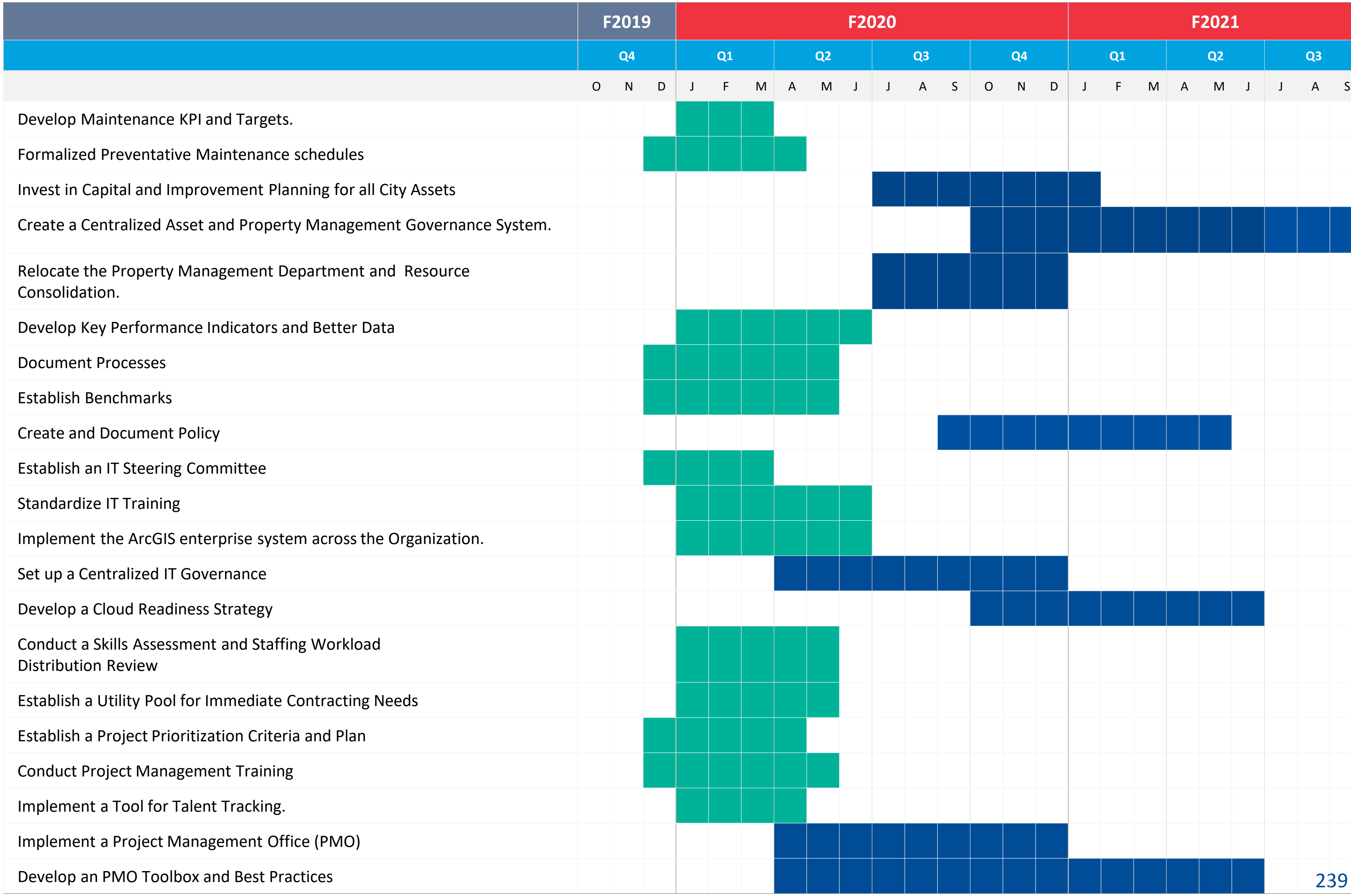
Given the strategic nature of these organization-wide recommendations, the benefits tend to be high across the board; ease of implementation, however, tends to vary.



Recommendations

- 1.1 Develop Maintenance KPI and Targets.
- 1.2 Formalized Preventative Maintenance Schedules.
- 1.3 Invest in Capital and Improvement Planning for all City Assets.
- 1.4 Create a Centralized Asset and Property Management Governance System.
- 1.5 Relocate the Property Management Department and Resource Consolidation.
- 1.6 Develop Key Performance Indicators (KPIs) and Better Data.
- 1.7 Document Processes.
- 1.8 Establish Benchmarks.
- 1.9 Create and Document Policy.
- 1.10 Establish an IT Steering Committee.
- 1.11 Standardize IT Training.
- 1.12 Implement the ArcGIS enterprise system across the Organization.
- 1.13 Set up a Centralized IT Governance.
- 1.14 Develop a Cloud Readiness Strategy.
- 1.15 Conduct a Skills Assessment and Staffing Workload Distribution Review.
- 1.16 Establish a Utility Pool for Immediate Contracting Needs.
- 1.17 Establish a Project Prioritization Criteria and Plan.
- 1.18 Conduct Project Management Training.
- 1.19 Implement a Tool for Talent Tracking.
- 1.20 Implement a Project Management Office (PMO).
- 1.21 Develop an PMO Toolbox of Methodologies and Best Practices.

4.3 Proposed Implementation Timeline



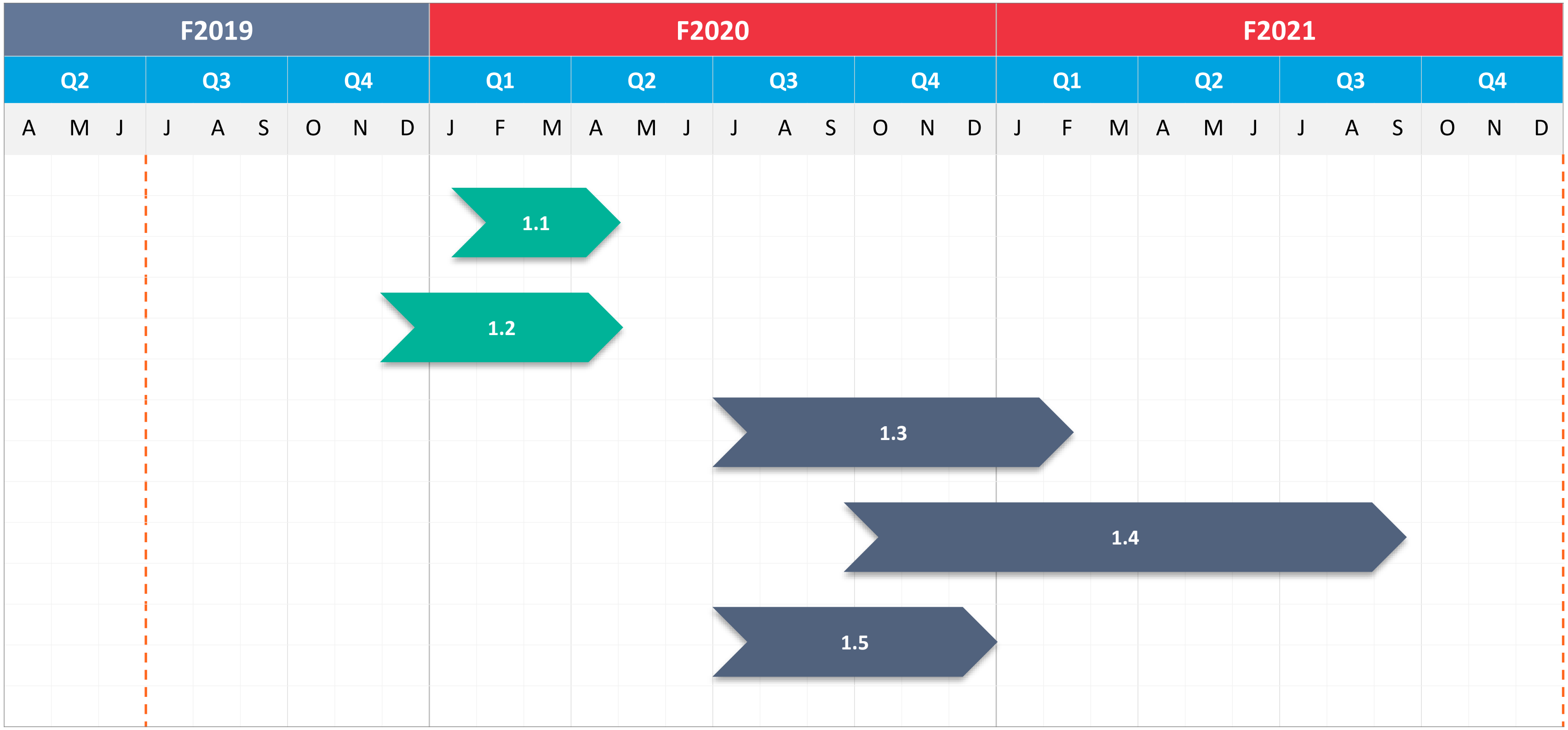
Implementation Timeline

4.3 Asset/Property Management

The chart below summarizes the proposed roadmap for implementing the future state recommendations. The legend below outlines the different timeframes for implementing the short-term and long-term solutions.

Short-term recommendations: Implementation of **quick wins (low-cost tactical initiatives)** are targeted to begin as soon as December 2019 and are to be completed by May 2019.

Long-term recommendations: Implementation of **long-term (medium to high-cost tactical initiatives)** are targeted to begin in July 2020 to be completed by September 2021.

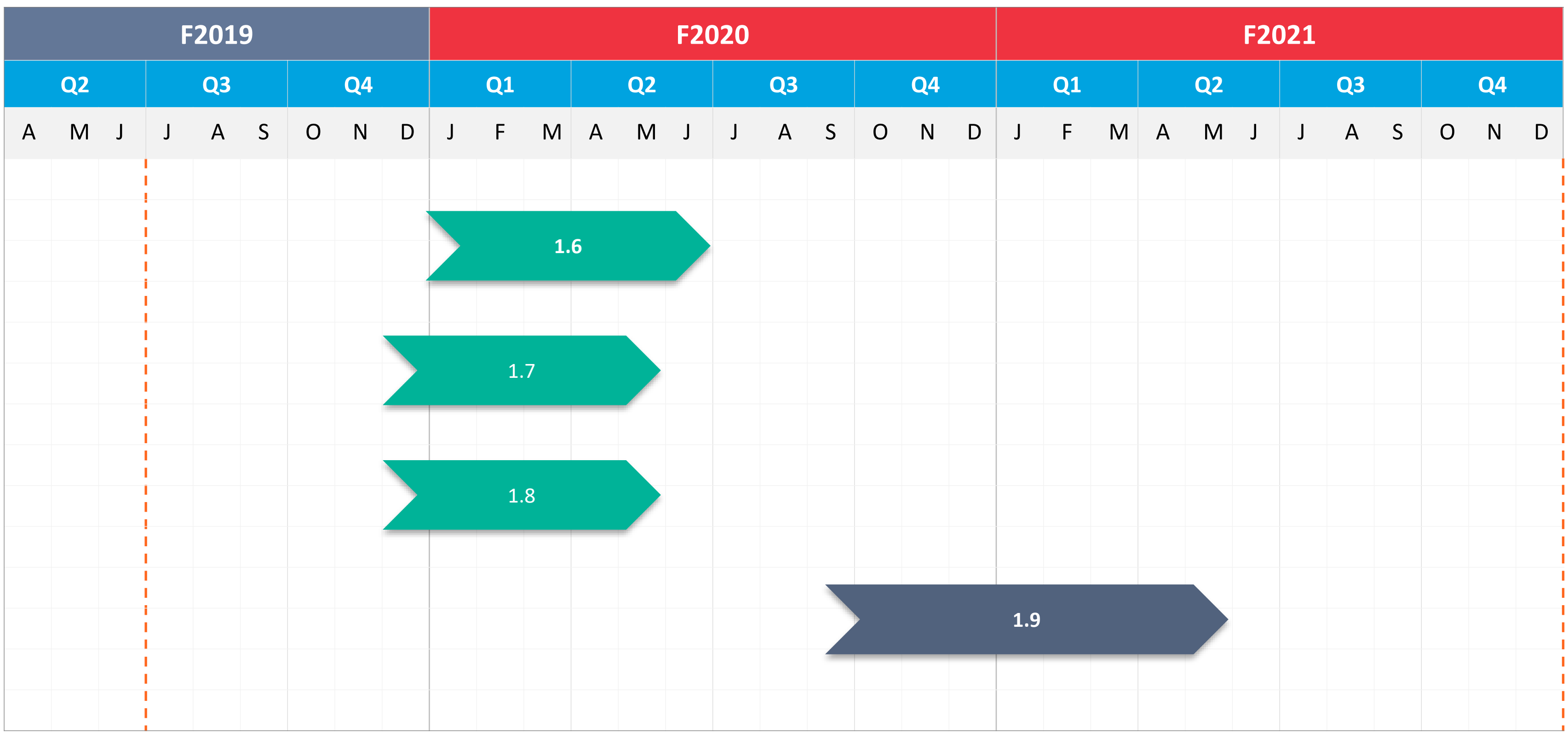


4.3 Process/KPIs

The chart below summarizes the proposed roadmap for implementing the future state recommendations. The legend below outlines the different timeframes for implementing the short-term and long-term solutions.

Short-term recommendations: Implementation of **quick wins (low-cost tactical initiatives)** are targeted to begin as soon as December 2019 and are to be completed by June 2020.

Long-term recommendations: Implementation of **long-term (medium to high-cost tactical initiatives)** are targeted to begin in September 2020 to be completed by May 2021.

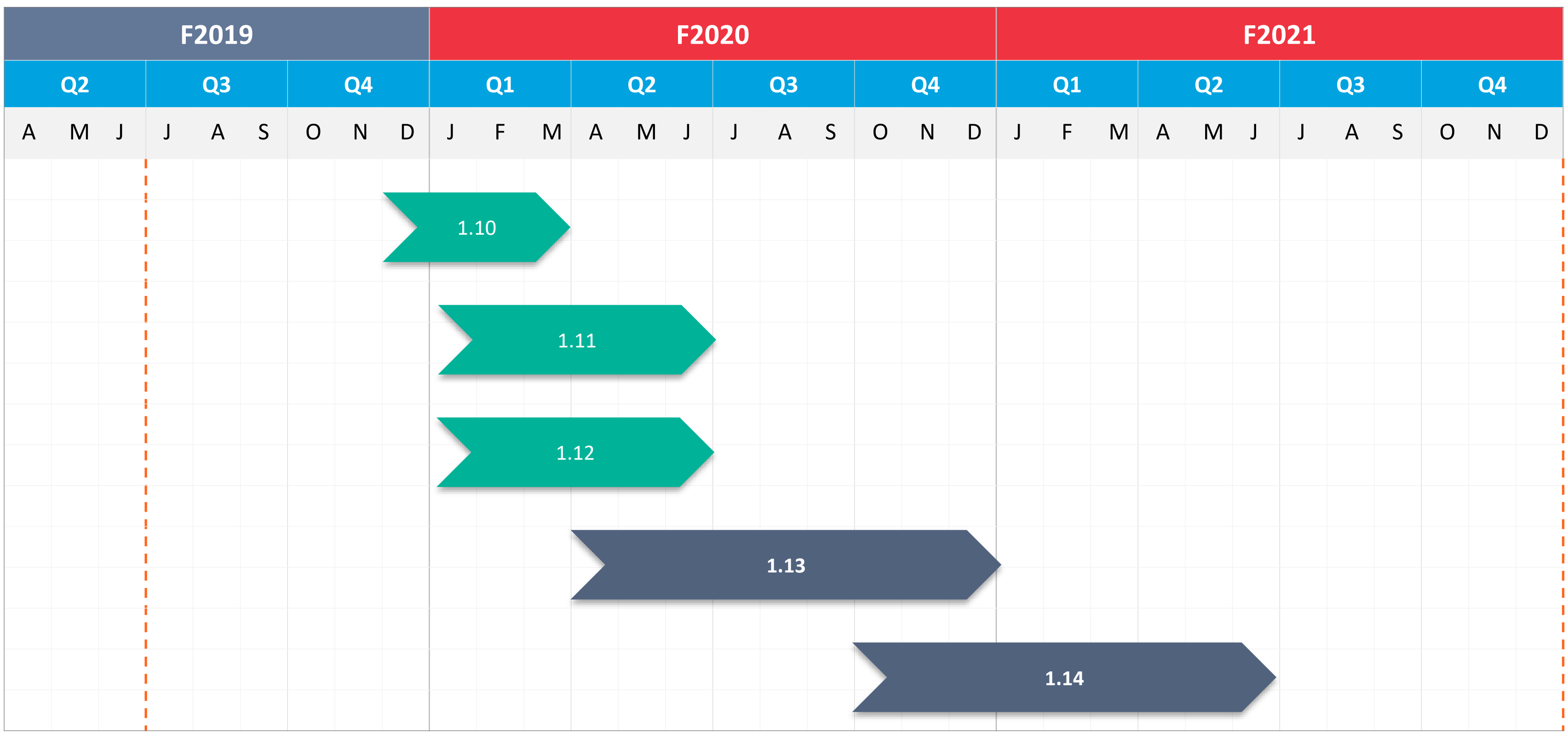


4.3 Technology

The chart below summarizes the proposed roadmap for implementing the future state recommendations. The legend below outlines the different timeframes for implementing the short-term and long-term solutions.

Short-term recommendations: Implementation of **quick wins (low-cost tactical initiatives)** are targeted to begin as soon as December 2019 and are to be completed by June 2020.

Long-term recommendations: Implementation of **long-term (medium to high-cost tactical initiatives)** are targeted to begin in April 2020 to be completed by June 2021.

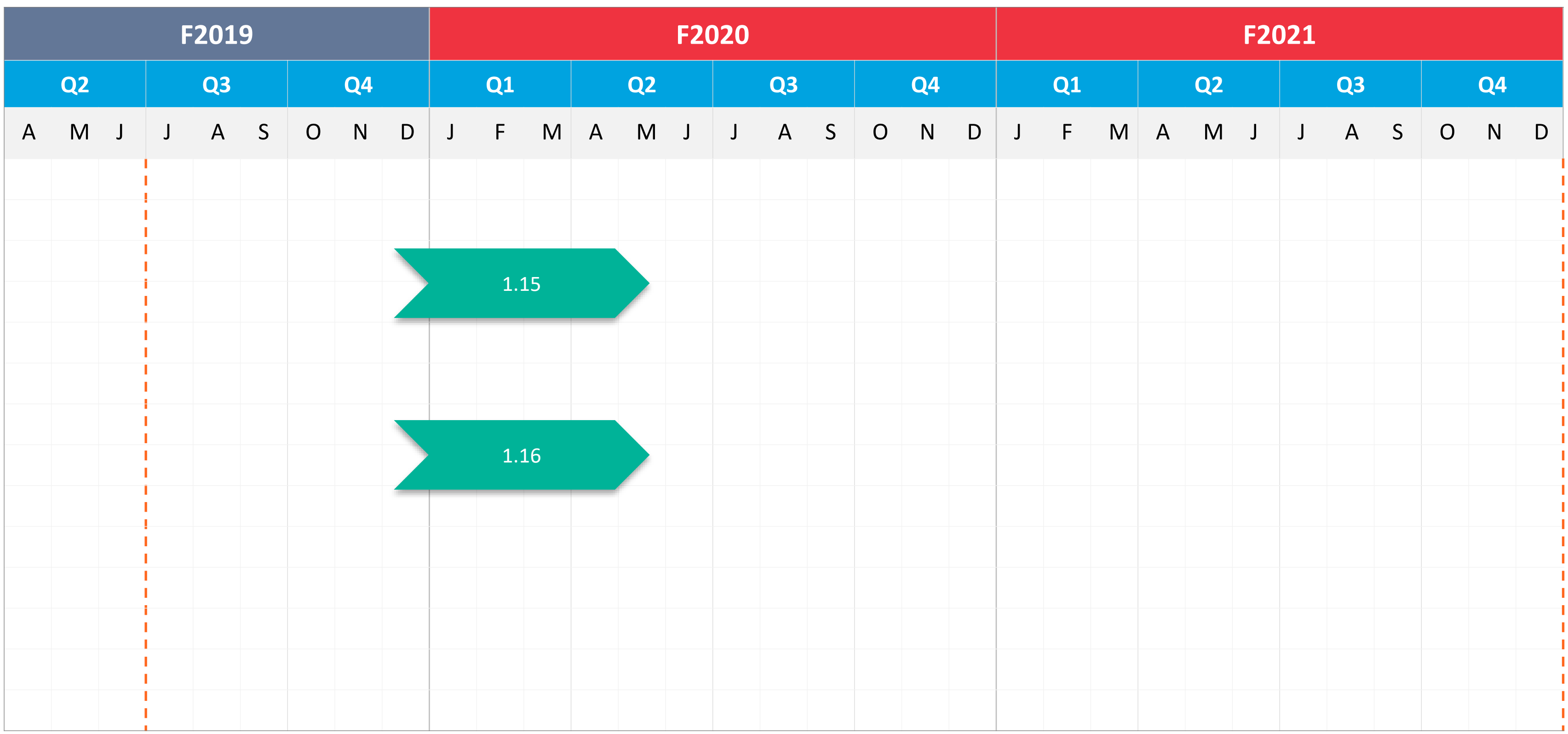


4.3 Resource Allocation

The chart below summarizes the proposed roadmap for implementing the future state recommendations. The legend below outlines the different timeframes for implementing the short-term and long-term solutions.

Short-term recommendations: Implementation of **quick wins (low-cost tactical initiatives)** are targeted to begin as soon as December 2019 and are to be completed by May 2020.

Long-term recommendations are not applicable to this section.

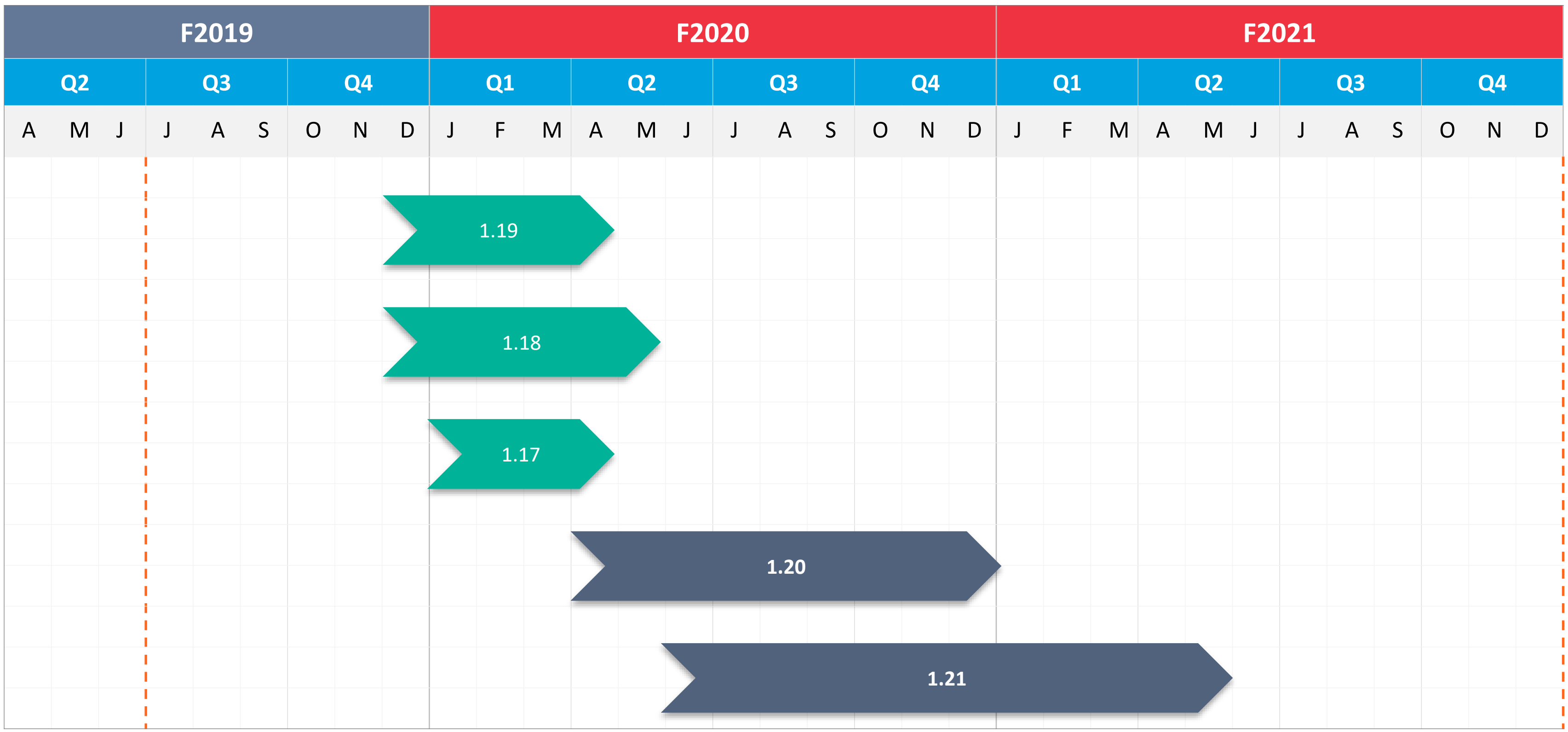


4.3 Project Management

The chart below summarizes the proposed roadmap for implementing the future state recommendations. The legend below outlines the different timeframes for implementing the short-term and long-term solutions.

Short-term recommendations: Implementation of **quick wins (low-cost tactical initiatives)** are targeted to begin as soon as December 2019 and are to be completed by May 2020.

Long-term recommendations: Implementation of **long-term (medium to high-cost tactical initiatives)** are targeted to begin in April 2020 to be completed by May 2021.



4.4 Implementing Change Guidelines

Implementation of the recommendations will need to be supported by a comprehensive change management plan. The following diagram outlines the overarching steps involved in the implementation of any organizational change.

Set up Change Management Team and Governance

The change management team for each department would be responsible for supporting and championing change for implementing the recommendations.

Consider an overall change lead/champion.

Get the right team in place

Create Change Management Action Plan

Develop a change management plan to go with the implementation plan that may include:

- Case for change (why);
- What's in it for staff (motivation);
- How/when to communicate and measure change;
- Specific tactics.

Include people in all considerations

Implement Change Management Action Plan

Carry out the components of the implementation plan including:

- the delivery of training; and
- piloting of new processes and systems.

Use a project management approach to implement change.

Integrate change management and project management

Monitor Change

Monitor, evaluate and report on the change to ensure that change is "sticking" and that results are being achieved.

Celebrate successes and adjust the approached based on identified gaps.

Measure, communicate, repeat

5. Appendix

5.1 Software Platforms by Department

5.2 Supplementary Information – PMOs

5.1 Software Platforms by Department

Technology

At present, the City uses 13 different software platforms across its various departments. The table below illustrates the landscape of the usage. It highlights the opportunity for consolidation, as well as the need for strong integration between applications and the linkage to the corporate GIS, in order to achieve efficiency .

Area	Cityview	Cartegraph	Petro	HIRMS	VPM	InfoHR	iCity	iCompass	Teraview	Access E11	FMW	FDM	Target Solutions
Public Works		✓	✓				✓				✓		
Engineering		✓					✓				✓		
Fleet		✓	✓				✓						
Transit		✓					✓			Pilot	✓		
Waste Water		✓					✓						
Water/ Sewer				✓			✓				✓		
Procurement					✓		✓				✓		
HR						✓	✓						
Payroll						✓	✓				✓		
Clerks							✓	✓					
Legal							✓		✓	Pilot			
CDSS	✓						✓				✓		
Fire	✓						✓				✓	✓	✓

5.2 Supplementary Information – PMOs

Project Management Office (PMO)

- PMOs are often seen as a mechanism for organizations to more effectively control and deliver strategic and tactical projects.

- Organizations today commonly find themselves in a position where they:
  - Have more information than they can effectively manage;
  - Are being asked to reduce, or significantly limit the growth of, staff (fewer people doing more work);
  - Are under increasing pressure to produce predictable results; and
  - Need to justify and demonstrate outcomes and results to diverse groups of stakeholders.

- In this environment, many organizations are searching for ways to:
  - Become more delivery focused;
  - Respond to changing market or stakeholder needs more rapidly; and
  - Accelerate the realization of benefits from the work they do.

- Over the past 10 years, many organizations have developed, or enhanced their PMO structures and functions to achieve more standardized and predictable project delivery.

- Despite being well promoted, there is often a lack of clarity regarding the definition and role of PMOs and EPMOs. Research indicates that organizations using “PMOs” are able deliver projects in a standardized and predictable fashion. Therefore, it is necessary to understand what is meant by the different types of PMOs.

5.2 Supplementary Information – PMOs

Project Management Office (PMO)

Type of PMO	Level of Operations	Responsibilities
Project Management Office	Project Level – typically set up for large projects.	Support project managers in collecting timesheets, collating status reports and financial data, tracking deliverables, coordinating issues and risks etc.
Program Management Office	Program Level – typically set up where there are several projects running under a program.	Support program managers, project managers and project teams in collating project related data from the project teams, ensure process adherence, collating project reports from project managers and creating reports for senior executives/project sponsors, identifying project dependencies and coordination between projects within the program.
Portfolio Management Office	Department/Business Unit Level – typically set up to provide leadership Department/Business Unit projects are alignment to overall enterprise business objectives.	Support leadership by facilitating business prioritization of projects.

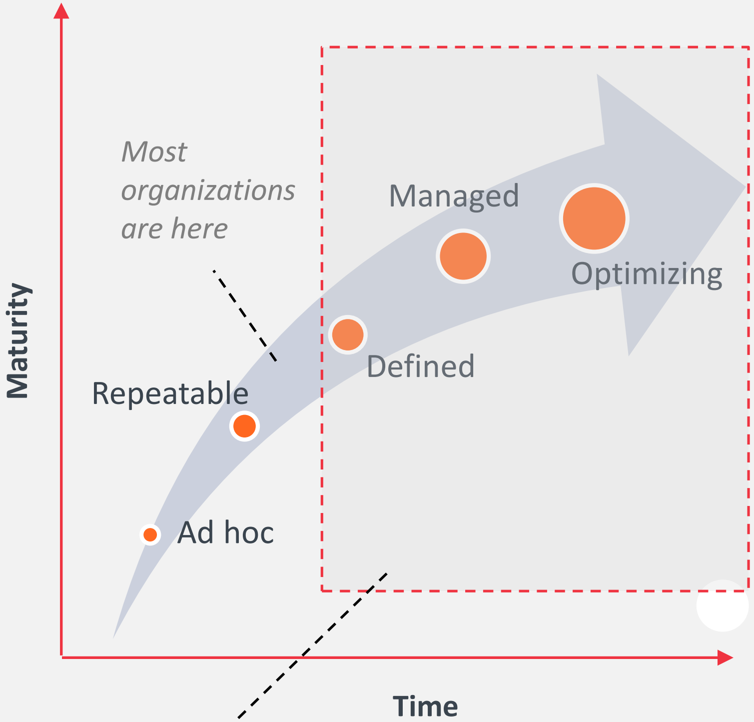
5.2 Supplementary Information – PMOs

Project Management Office (PMO)

- In its simplest form, a Project Management Office (PMO) is a function dedicated to improving the practice and results of project management in an organization. Organizations are continuously changing and PMOs need to be dynamic functions that evolve to meet the changing needs of an organization.

- **PMO Maturity Models** are used to depict how PMOs can grow to become strategic functions focused on continuous improvement. **Immature PMOs** focus on basic management processes and controls and do not support strategic objectives. **Mature PMOs** are clearly defined and directly aligned with organizational goals; they have adaptable methodologies and use quantitative feedback to improve and be at the leading edge of innovation. To increase maturity and enhance PMO effectiveness, the PMO function must be assessed holistically, including PM approach, methodology, strategy and tools.

PMO Maturity Model



Enhancing the Effectiveness of an established PMO moves it up the maturity curve.

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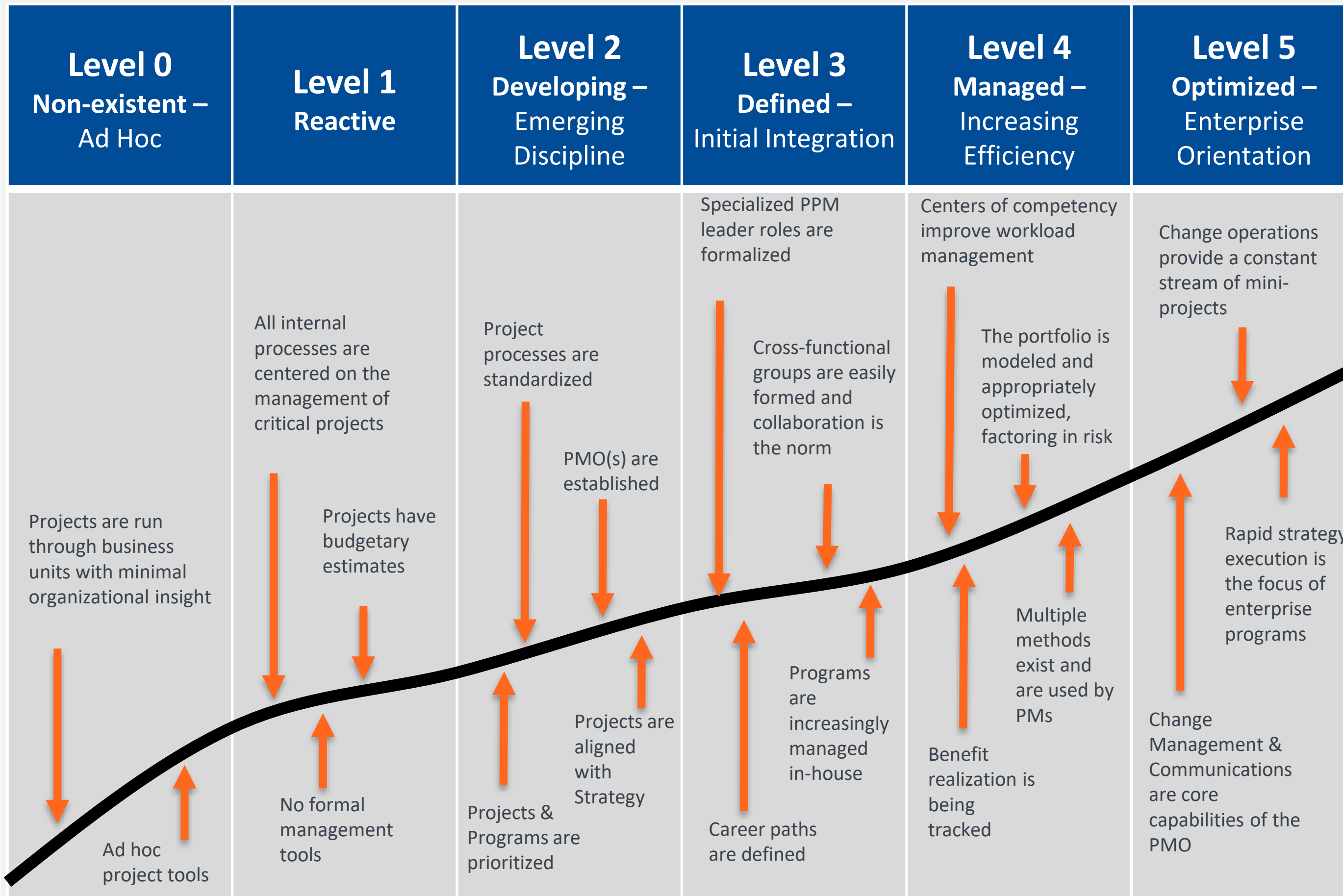
5.2 Supplementary Information – PMOs

Project Management Office (PMO)

The six levels in the PMO Maturity model are described in more detail below. Not every PMO follows this particular level progression and may have various elements of capability in different levels at the same time.



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5.2 Supplementary Information – PMOs

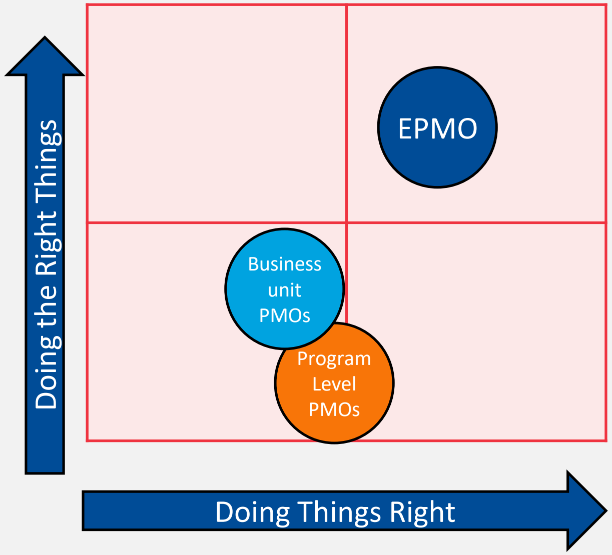
Project Management Office (PMO)

- Enterprise Project Management Offices (EPMOs) are used by organizations to overcome the challenges faced by PMOs by complementing the organization's existing PMO(s).

- EPMOs can play various roles in an organization, but at their most basic function, EPMOs operate at a strategic level with organizational executives to provide enterprise-wide support on:
  - Governance;
  - Project and Portfolio Management Best Practices;
  - Mentoring and Project Manager Support;
  - Standardization of tools, templates, and processes; and
  - Consolidated reporting and organizational intelligence.

- EPMOs do not eliminate the need for PMOs, rather successful EPMOs provide the strategic links and alignment between business objectives and project execution.

- Successful organizations tend to have PMOs operating at the tactical/operational level, ensuring that things are 'done the right way' while the EPMO supports the organization to 'do the right things', and in the process, support project teams and PMOs.



5.2 Supplementary Information – PMOs

Project Management Office (PMO)

- The focus of an EPMO will be strategic, but the operating approach of an EPMO will vary based on its maturity and the needs of the organization:

  - **The Reporting EPMO** – This style gathers data about major initiatives from multiple silos within the organization and detects actual (or potential) issues and mismatches of performance versus expectation. Most organizations start out with a “portfolio” of projects that is typically a little more than a list, and over time (if the EPMO is successful) that list grows and the Reporting EPMO transitions into something closer to the operational EPMO or the strategic EPMO.

  - **The Operational EPMO** – This style centralizes all business projects (including all IT application projects) into a single entity (often reporting to the CEO). This is more common in smaller organizations.

  - **The Strategic EPMO/Strategy Realization Office** – This style is focused on ensuring that the projects and programs that are undertaken in the organization measurably contribute to the realization of the enterprise strategy. They generally will demand improvements in the IT PMO portfolio and business case approaches.