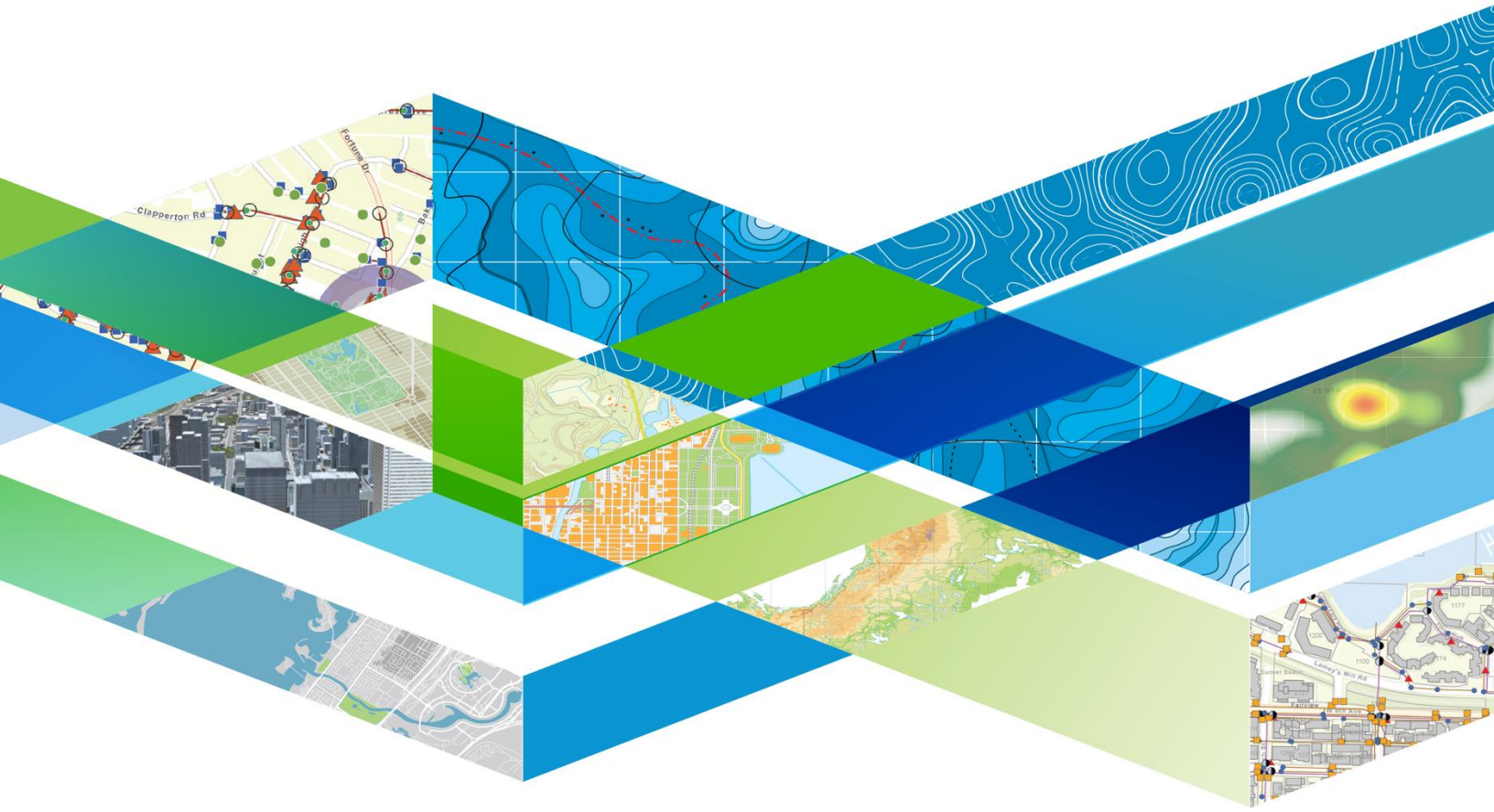
New Tecumseth
Alliston · Beeton · Tottenham

October 2020

Modernization Report

Findings and Recommendations

BYLAW | BUILDING | ENGINEERING | PLANNING



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Executive Summary

As part of the Ontario Municipal Modernization Program, a service delivery and modernization review was conducted by Esri Canada for the Town of New Tecumseth's Bylaw, Building, Engineering, and Planning departments. The review analyzed the various application processes administered by the departments and was completed to:

- *Provide insight into challenges and business inefficiencies related to service delivery and customer service quality;*
- *Provide recommendations related to technology enablement to drive business efficiencies through continuous improvement and phased modernization of service delivery* for

Key Findings

The summary of key challenges and findings that are driving business inefficiencies and hindering customer service quality are:

- **Lack of Self-service Options for Customers**- Paper and Portable Document Format (PDF)-based application forms and request letters are contributing to incomplete applications and increased timelines in processing applications. It is a common occurrence during the pre-screening and review stage of applications as customers do not have a data-controlled and requirements-based online submissions method to ensure data and submission quality is met at the *first* time of submission. Requests for additional information from customers and deeming applications incomplete/deficient increase customer frustration and administrative burden on staff.
- **Limited Public Transparency** – Lack of transparency on the real-time processing status of applications and bylaw complaints leads to an increase in:
    - inquiries from customers and the public leading to communication gaps;
    - informal administrative correspondence, and;
    - inconvenience for customers.
- **Absence of Process Automation** – the processes that are currently in place to manage the workflows for the various application and bylaw complaints in the four departments are largely paper-based and manual which leads to
    - very limited automation of cumbersome tasks for process-related prompts and notifications to customers;
    - Increase in processing times, and;
    - limited access to readily available data for analysis and review.
- **Ease of Payment Handling for Customers** – Financial transactions are largely transacted at the centralized customer service counter of the Town rather than the application-specific department counter at the time of application submission. This separation in points-of-contact requires customers to physically travel from one location (application-specific department) to another (customer service) for activities related to the sample application submission which leads to inconvenience for the customer. Furthermore, customers do not have an option for online payments and electronic tracking of transactions for applications that have a staged/phased fee component to application processing.
- **De-centralized Data and Time-intensive Reporting** – Each department uses its unique method of data collection, application processing, and correspondence. This causes case information that could be made available for efficient interdepartmental collaboration to instead live in multiple repositories such as paper-based folders, excel sheets, and network drives. This leads to inefficient searching, reporting, and limits quick access to

information to support decision making for the Town and its stakeholders.

- **Limited Mobility for Field Work** - Mobile tools for conducting inspections and investigations are not available for staff to provide faster inspection results. Conducting fieldwork requires technology-based mobile tools to have case information readily available on-site. Field officers need the ability to conduct work in the field without having to go back to the office to complete paperwork to reduce delays, streamline workload, and update case data on-site.

Key Recommendations

The summary of key recommendations to promote improved business efficiencies and citizen-centric service delivery and quality are:

- Adopt a self-service model in allowing customers/public to submit and pay for applications online to improve customer service quality. **Online Self-service Submission Management** will enhance the transparency of application review processes while improving the quality of application submissions and ease in scheduling inspections.
- Implement a modern **Workflow & Case Management System** to model efficient processes supporting business operations and to allow for efficient interdepartmental collaboration in delivering services.
- Provide technology-enabled tools for fieldwork and increase **Officer Mobility** to conduct inspection and site-visits with case information in-hand and provide faster inspection results and reports.
- **Automate processes** related to interdepartmental and town-to-citizen correspondence (i.e. notifications, notices, letters, and orders) to provide timely communication to customers.
- Utilize a **Centralized Electronic Case Data repository** for interdepartmental access, efficient searching, standardization, or ad-hoc reporting while ensuring a high level of data quality.

Mandate

As part of the Municipal Modernization Program, the Government of Ontario has provided funding for Ontario's small and rural municipalities that have limited capacity to plan, modernize and improve the way they provide services to their communities. This funding was allocated based on the number of households in a municipality and whether the municipality is urban or rural to ensure investments were targeted to where they are needed most. The funding is to help reduce future municipal costs and improve program and service delivery.

The Town of New Tecumseth received approval and funding from the Province to retain an independent third-party reviewer to conduct a service delivery and modernization review of the Town of New Tecumseth's application processes for Bylaw, Building, Engineering and Planning departments. Esri Canada was retained as the third-party reviewer.

Objectives

The objectives of the initiative were focused on achieving the goal of meeting resident, developer and other stakeholders (internal and external) needs to promote improved corporate customer service and citizen-centric service delivery. With this goal as the directive, the objectives were to:

1. *complete a review that prioritizes the importance of timelines and established service level standards being met to improve customer service quality by the Town of New Tecumseth's Bylaw, Building, Engineering, and Planning departments;*
2. *make recommendations to ensure that the Town of New Tecumseth's projects, applications, permits, inspections, and bylaw*

enforcement processes are contained in a centralized location for inter-departmental connectedness and promote transparency to the customer.

Scope of Work

To achieve the objectives of the modernization review, the following milestones were scoped:

1. *conduct AS-IS (current state) process reviews for all scoped departments;*
2. *design TO-BE (future state) processes for all scoped departments;*
3. *document Business Requirements Document to support the future implementation of improvements and recommendations, and;*
4. *develop a Modernization Report to compile all findings and recommendations.*

Background

Town of New Tecumseth

With a growing population of over 34,000 residents as of 2016, the Town of New Tecumseth is located in Simcoe County. The Town is located near the 400 Highway with larger metropolitan centers nearby such as the Greater Toronto Area, Hamilton, and Kitchener Waterloo. The Town is comprised of three urban centers: Alliston, Beeton, and Tottenham each with their rural surroundings producing prosperous farming and manufacturing industries. As the community continues to grow, the need for modernized and efficient citizen-centric service delivery becomes more prominent. According to the Town of New Tecumseth's Economic Development and Strategic Plan (May 2017) prepared by McSweeney, two key economic development issues were identified related to the modernization review:

1. Better response time to business and development inquiries.
2. Stronger communication from local government.

The services administered by the four departments (Bylaw, Building, Engineering, Planning) are a collaborative process between customers, staff, and the public. Due to the transactional nature of the services, inefficiencies can lead to consequences in increasing resource workload, extending timelines, increasing costs for the city and customers, and frustration for applicants, staff, and the public. The Town is committed to improving service delivery and identified the following departments for the modernization review.

Bylaw Department

The Bylaw Department is responsible for the processing, management, and administration of Bylaw complaints, enforcement of municipal Bylaws, Inspections/Investigations, and Licenses. The major roles in the department include:

- Supervisor, responsible for the overall department work and initiatives
- Municipal Law Enforcement Officers, responsible for investigating bylaw complaints, conducting inspections, and processing issuances of notices.
- Coordinator, responsible for performing the coordination of Bylaw complaints and processing license applications.

Building Department

The Building Department is responsible for the intake, review, issuance, and inspections related to building permits of various types including, new, alteration, additions, and demolitions. This department, in collaboration with other internal and external organizations, reviews the customer-submitted plans and confirms that they follow zoning requirements, other applicable law, and the Ontario Building Code. The major roles in the department include:

- Chief Building Officer, responsible for performing the final review and deciding on the issuance or refusal of permits.
- Deputy Chief Building Official / Senior Inspector, responsible for performing the multi-staged inspections upon the issuance of a permit and during construction phases.
- Plans Examiner, responsible for the comprehensive review of plans per application and providing a decision commendation to the Chief Building Officer.
- Permit Coordinator, responsible for performing the pre-screening of applications and coordinating processing and correspondence between internal staff and customers.

Engineering Department

The Engineering Department is comprised of two divisions, Development and Capital Projects.

The Development division is responsible for processing, management, and administration of Development Agreements such as Site Plan Control, Subdivision Agreements, and Site Plan Control Exemptions.

The Capital Projects division is responsible for infrastructure projects that will improve the Town's performance in municipal, energy, transportation, waste, wastewater, and/or water.

The major roles in the department for both divisions include Director, Managers, Project Managers, and Construction Compliance Project Managers.

Planning Department

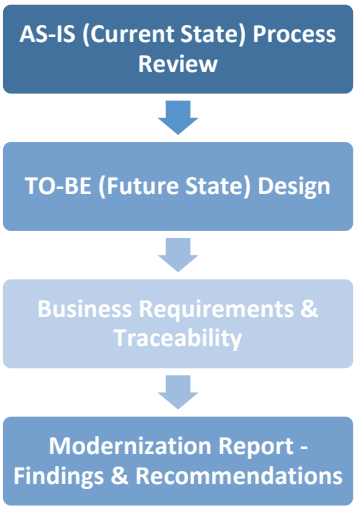
The Planning Department is comprised of two divisions, Development and Policy. Together, they ensure all development activities adhere to the Town's Official Plan and the Ontario Planning Act.

The Development division is responsible for the processing, management, and review of development applications such as (but not limited to) minor variances, zoning bylaw amendments, and official plan amendments.

The Policy division is mainly responsible for administering the Town's Community Improvement Plan (CIP) grants and loan applications, processing telecommunication infrastructure developments in support of Industry Canada, and performing forecasting, planning, and reporting.

Review Methodology

The modernization review was conducted over five months in the summer and fall of 2020 to fulfill all scoped milestones. The review relied exclusively on various operational and service-specific data collected from Subject Matter Experts representing the four departments from the Town of New Tecumseth in combination with Esri Canada's experience in implementing electronic solutions for the modernization of municipal services.



AS-IS (Current State) Process Review

Two-day AS-IS workshops were conducted for each department to discover the existing department landscape (roles, workload volume, and objectives) and business processes in delivering the various services (permits, applications, projects,

inspections, and enforcement activities) administered by the town.

The AS-IS Workshops were supplemented by Document Analysis which was performed on preliminary documentation provided by the Town. The documentation included: existing operating procedures, policies, sample inputs (application forms and inspection results forms), and sample outputs (reports, permits cards, notices, orders, letters, and memos).

Workflows were modelled to capture the current state of each major process with estimated minimum and maximum durations (metrics) for conducting tasks (based on subject matter expert historical knowledge) which served to identify the critical path for each process and highlight time-based efficiencies that could be gained. Bottlenecks, rework, and other time-delays where applicable were also highlighted in the workflow outputs. Pain-points expressed by customers (such as residents and developers) and internal staff were also captured as findings.

TO-BE (Future State) Process Design

Utilizing the findings and opportunities identified from the AS-IS workshops, Esri Canada, proactively developed TO-BE process designs from the perspective of technology-enabled service-delivery for all major processes per department. One-day workshops were conducted with each department to jointly review the TO-BE process designs with a focus on improving areas of inefficiencies identified in the As-Is process workshops.

The areas of efficiencies covered included searching and reporting (applications, properties, and applicants), time-spent with customers (including those at the counter), and administrative functions such as circulations, letter/notice drafting, and correspondence (interdepartmental and external).

The TO-BE process designs describe the sequential flow of streamlined work activities to enable time-based efficiencies, alleviate bottlenecks, eliminate occurrences of re-work, and automate inputs and outputs through the implementation of an electronic/digital solution.

Business Requirements Documents and Traceability Matrices

Business Requirements Documents and complementary Traceability Matrices were developed for each department to capture all business requirements that support the recommendations and efficiencies outlined in the TO-BE process designs.

For the Bylaw department, the business requirements detailed their ability to manage all bylaw complaints and licenses effectively in the office and out in the field with an emphasis on officer mobility. Requirements also detailed efficient ways to collaborate for interdepartmental input, providing improved customer service and more efficient use of resources (staff and staff time).

The business requirements related to the Building department detailed their ability to intake submissions online to manage Building Permits and supporting inspections for new developments, alterations, additions, and demolitions promptly while ensuring the Ontario Building Code stipulations and other bylaws are adhered to.

For the Engineering department, the business requirements detailed their ability to manage engineering workflow processes for both Capital and Development projects while ensuring timelines are met for all internal and external stakeholders.

The Planning department's business requirements detailed their needs in managing development applications, Community Improvement Plan applications, telecommunication infrastructure

applications through online submissions, and electronic application review processing.

All business requirements for each department were segmented into logical groupings to support a technology solution implementation; the groupings included:

- Application and/or Case Management
- Information Management
- Electronic Submission Management
- Client Account Management (External Users)
- User Management (Internal Users)
- Workload Management
- Supporting Documents Management
- Inspections / Site-visits Management
- Conditions Management
- Notifications & Outputs Management
- Geographic Information System (GIS)
- Reporting & Analytics (Including KPI's)
- Searching
- User Interface
- Financials
- Security and Auditing

Findings

This section describes the findings related to challenges and opportunities noticed from the modernization review.

Interdepartmental Wide

The following findings and challenges apply to all four departments (Bylaw, Building, Engineering, and Planning).

1. Lack of Self-Service Options for Customers

- No online portal services are available for customers to apply for services (applications and licenses) online.
- A significant number of incomplete applications are submitted by customers due to limited data controls in PDF forms and the inability to ensure required supporting documents are submitted. This increases customer frustration and workload downstream.
- Pre-screening to ensure all supporting documents are submitted and accurate is a time-consuming process that can have multiple review loops with the customer until all preliminary supporting documents and required information are received. This looped occurrence can lead to an increase in customer dissatisfaction and increased administrative effort.
- Not all applications have defined checklists provided to customers to ensure the required steps and documents are completed.

2. Limited Public Transparency

- Customers have limited access to an application processing status.
- A significant amount of time is spent providing status information within the various review stages of an application review process to inquiring applicants/customers and/or stakeholders.
- The interdepartmental staff do not have readily available access to see project and status information to promote interdepartmental wide sharing of information.
- No digitally transparent method to deliver GIS-centric information to the public regarding stages of the project and/or application to minimize public inquiries.

3. Absence of Process Automation

- Manual creation of outputs such as (but not limited to) notices, orders, memos, letters, public signs, purchase requisitions, and billing forms.

4. Ease of Payment Processing

- Payments for applications and licenses are not processed at the respective department counters and customers are required to travel to the customer service counter to process payments. This is an extra step

causing an inconvenience to customers and increases financial administrative workload.
- Paying for applications and licenses online is not currently an option.

5. Time-intensive Manual Reporting, Searching & Analytics

- Reporting efforts are manual and time consuming due to the need to aggregate information from various sources such as physical files and spreadsheets, disconnected technology systems.
- Information is stored in network drives and compiling pertinent information for specific reports is a manual and tedious process.
- Difficulty establishing and tracking service level standards and KPI's at micro (tasks) and macro (project) level.
- No automated method of tracking due dates, schedules, and service level standards.
- Difficulty in providing ad-hoc information requests to internal stakeholders.

6. Paper-based & Disconnected Technology Systems

- Most case information is currently tracked internally in physical historical work folders/files and spreadsheets and limited databases.
- Manual searching is conducted through folders to find the right information as needs arise.

7. Inefficient Field Work

- Lack of access to work history and case history information for Officers in the field.
- No mobile / field-use capability to access documentation digitally, conduct site visits, view existing conditions on-site, store notes, and pictures to related case files.
- No defined checklist for inspections and site-visits done by field staff/inspectors to support increased inspection-based data collection.

8. Lack of Workload & Resource Capacity Information

- Limited information is readily available for resource utilization decisions and forecasting allocation of workload. There is no simple way to quickly understand when a resource has reached capacity.

Department Specific

The following findings and challenges apply to the respective departments uniquely.

Bylaw

Limited Centralized Case & Activities Data

- No logging or tracking of inquiries in a centralized repository.
- Multiple resources for gathering additional information for research related to a given case.
- Significant time spent on research and preparation work before site-visits and responding to complaints.

Lack of Process Automation

- Manual assignment of work based on geographical zones.
- Difficulty tracking follow-up inspections to verify if contraventions have been fixed by property owners.
- Difficulty tracking court deadlines and follow-up visits.

Time-intensive Manual Reporting, Searching & Analytics

- Difficulty in running reports to produce information regarding officer workloads, type of complaints, time to process complaints, and geographic (zone-based) activity based on time-bound ranges.

Building

Limited Centralized Case & Activities Data

- Delays are caused by the excessive number of touchpoints between permit coordinator, admins, and internal department reviewers for hand-offs.

- Departmental reviews are done in parallel causing re-work due to updates provided by internal departments (i.e. planning)

Engineering

Limited Centralized Case & Activities Data

- Delays are caused by the excessive number of touch-points project managers, admins, and internal department reviewers for hand-offs.
- Lack of GIS-based work/case history and layer-based information makes querying and reviewing inefficient.
- Departmental reviews are done in parallel causing re-work due to updates provided by internal departments (i.e. planning)
- Managing physical drawings and uploading scanned copies is time-consuming.
- Rework involved in transposing consultant-provided updates to town-managed documentation (reports and dashboards).
- Need for the electronic tracking of claims processing.

Time-intensive Manual Reporting, Searching & Analytics

- Manual creation of dashboards for weekly/bi-weekly/monthly project status updates.
- Ability to reconcile/track with Finance to determine budgetary constraints as the project progresses.

Planning

Limited Centralized Case & Activities Data

- Delays are caused by the excessive number of touchpoints between Plans Reviewers, admins, and internal department reviewers for hand-offs.
- Lack of GIS-based work/case history and layer-based information makes querying and reviewing inefficient.
- Departmental reviews are done in parallel, causing re-work due to updates provided by internal departments (i.e. engineering).

Lack of Process Automation

- Public Notice Circulation to radius-based property owners is a manual and laborious task that consumes a significant amount of time.

Time-intensive Manual Reporting, Searching & Analytics

- Difficulty in completing reports for population forecasting utilizing data from various departmental data.

Recommendations

This section describes the recommendations for improving business efficiencies and reducing challenges identified as part of the modernization review.

Interdepartmental Wide

The following recommendations apply to all four departments (Bylaw, Building, Engineering, and Planning).

Automation

- Automate target due dates for review tasks and inspections.
- Automate the creation of follow-up tasks and associated target due dates of review tasks and/or inspections based on initial results.
- Utilize electronic signatures for approvals from management/supervisors.
- Automate generation of email notifications, notices, letters, and memos to inform internal and external stakeholders of case status changes, identification of deficiencies, outstanding items, additional fees, and charges.
- Automate the calculation of fees, deposits, development charges, credits, securities

(fixed and variable) based on the fee bylaw/schedule

Centralized Electronic Case Data

- Increase response time to inquiries by searching for and referencing similar inquiries responded to in the past by utilizing a centralized system to track all inquiries.
- Maintain linkages to related or 'parent' cases to allow for the reduction in searching, data collection, and data entry.
- Improve ad-hoc searching (case-specific and GIS) and reporting capabilities utilizing a centralized case data warehouse.
- Increase cross-departmental transparency of case information utilizing a centralized case management platform to perform multi-department reviews in sequence or parallel.

Flexible Case Management

- Adopt informed workload re-allocation via case/task re-assignment and automate task assignment based on the scenario, type of application, resource availability, and resource role/expertise.
- Utilize online payments and process payments at department-specific counters (for offline submissions) to reduce hand-offs and improve customer service quality.

Mobility

- Utilize mobile devices to conduct inspections, issue inspection results (via email or Bluetooth printing), record inspection notes, and store photos for evidence.
- Eliminate going back to the office to file/update inspection notes, case files, and upload photos.
- Provide on-the-field access to case history, applicant information, and related files.

Online Public Submission Portal

- Increase application submission quality and reduction in incomplete submissions by utilizing an online/electronic submission portal for application management and payment.
- Improve transparency of application review status to applicants to reduce administrative efforts in responding to application status inquiries.

Reporting Searching & Analytics

- Utilize periodic reconciliation reports for payments processed in-department.
- Develop department-specific Key Performance Indicators to track target metrics and measure performance.
- Adopt real-time dashboards to monitor project tasks/work and project summaries.

Department Specific

The following recommendations apply to the respective departments uniquely.

Bylaw

Automation

- Automate target due dates for follow-up inspections.
- Automate generation of email notifications, notices, letters to inform interested parties on complaint inspection results, and overall complaint processing outcomes.
- Automate the issuance of infraction notices, orders, and associated billing forms.
- Automate case assignment based on the address of complaint and zone-based enforcement resources.
- Automate case history retrieval for the generation of disclosure packages to streamline the sharing of information to external stakeholders.
- Utilize email-based notifications to inform interested parties on appeal hearing

results and overall complaint processing outcomes.
- Automate generation of licenses and notices for incomplete/refused applications.
- Automate generation of revocation letters and clerk memos.

Centralized Electronic Case Data

- Tracking of categories/types of Bylaw related inquiries that are received.
- Expediting response time to inquiries by searching for, and referencing, similar inquiries responded to in the past by utilizing a centralized system to track all inquiries.
- Eliminate or reduce paper files and excel based tracking of complaint case management/information.
- Maintain audit trail for case activity to support disclosure.
- Streamline processing of renewal applications by establishing linkages to related or 'parent' license cases to allow for the reduction in searching, data collection, and data.
- Integration of existing online complaint intake webform + email generator with the future system.

Flexible Case Management

- Adopt flexibility in workflow designs to modify workflows, add tasks, and modify target due dates to promote adaptability for complicated cases.
- Track complaints without property information.
- Process payments at department-specific counters (for offline submission) to reduce hand-offs and reduction in customer service quality.

Online Public Submission Portal

- Provide an online portal to residents for electronic submission and management of license applications (new or renewal) and payment of submissions.
- Provide an online portal to residents for electronic submission of Notice of Appeals and payment of submissions.

Building

Automation

- Automate the generation of orders.
- Automate the calculation of fees, minimum deposits, security deposits, and development charges.

Centralized Electronic Case Data

- Collect and track general building permit related inquiries that are received, such as details on the type of inquiries, frequencies, and source of inquiries. This information will identify high-volume categories of inquiries which can support the possible development of a communication strategy and town-wide marketing efforts to inform residents and stakeholders with proactive information to help reduce inquiries for identified high-volume categories.

Online Public Submission Portal

- Decrease administrative efforts in scheduling inspections by utilizing a self-serve inspection scheduling system on the online submission portal.

Engineering

Automation

- Adopt time blocks for inspections/site-visits and a self-service approach to scheduling inspections/site-visits.
- Implement radius-based mailing label generation to reduce administrative efforts in mailing (public notices).

Centralized Electronic Case Data

- Decrease response time to inquiries by searching for and referencing similar inquiries responded to in the past by utilizing a centralized system to track all cases, applicants, contractors, consultants, and GIS.
- Develop a formal electronic application form for Site Plan Control Exemption applications.

Online Public Submission Portal

- Increase application submission quality and reduction in incomplete submissions by utilizing an online/electronic submission portal for application management and payment of submissions and deposits.

Reporting Searching & Analytics

- Electronically track budgets, costs incurred, and costs remaining as the project progresses.

Planning

Automation

- Automate the calculation of fees (fixed and variable) based on the fee bylaws/schedules.
- Implement radius-based mailing label generation to reduce administrative efforts in mailing (public notices).

Centralized Electronic Case Data

- Increase response time to inquiries by searching for, and referencing, similar inquiries responded to in the past by utilizing a centralized system to track all inquiries and cases.
- Improve GIS-based information available for users to support the review and analysis of applications.

Mobility

- Utilize mobile devices to conduct site-visits, record inspection notes, and store photos related to the case and/or Site-visit.

Online Public Submission Portal

- Increase application submission quality and reduction in incomplete submissions by utilizing an online/electronic submission portal for application management and payment of submissions.