CITY OF
Burlington

SUBJECT: Streamline Development Approval Fund

TO: Community Planning, Regulation & Mobility Cttee.

FROM: Community Planning Department

Report Number: PL-02-23

Wards Affected: All

File Numbers: 155-03-01

Date to Committee: January 10, 2023

Date to Council: January 24, 2023

Recommendation:

Receive and file community planning department report PL-02-23 which summarizes the methodology and outcomes of the Streamline Development Approval Fund project.

PURPOSE:

Vision to Focus Alignment:

- Increase economic prosperity and community responsive city growth
- Deliver customer centric services with a focus on efficiency and technology transformation

Background and Discussion:

In January 2022, as part of the Provincial Housing Summit with big city mayors and regional chairs, Premier Doug Ford announced the launch of the $45 million Streamline Development Approval Fund (SDAF) Initiative. Ontario's 39 largest municipalities each received an allocation from the province to help modernize, streamline, and accelerate processes for managing and approving housing applications. The City of Burlington's allocation was up to $1 million in funding with the understanding that SDAF projects must be completed by February 28, 2023.

Related Projects

Through the Audit and Accountability funding, the Province approved funding for two other related City initiatives.

1) Enterprise Web Architecture & Modernization Review
2) Land Management Database Platform Review

The Enterprise Web Architecture and Modernization Review is delivering recommendations for a high level architecture to align online customer service delivery across City services and systems. The Land Management Database Platform Review (LMDPR) is delivering a comprehensive workplan to bring information technology related cost savings and efficiencies to the Development Approval services, Permitting services, Licensing services, other application services and the management of the platform services. There is a significant online customer service delivery component to the workplan for all Audit and Accountability funded projects.

The Streamline Development Approval Initiative Fund (SDAF) project is a one-time project delivering specific improvements to the low-density residential development approval service (i.e. Pre-building permit process). The LMDPR workplan takes into account the learnings from the SDAF project.

All three initiatives share the objective of finding efficiencies and cost savings in the provision of City services. Each includes delivering services which include a customer online experience and enabling technologies. The recommendations of each report will be considered together in order to align future work and to ensure effective planning and utilization of resources and technology.

Strategy/process

Staff from community planning, building, finance, forestry, engineering, and corporate strategy worked together in gathering information to identify and assess the potential options for projects that could be funded through the SDAF. This was summarized in Report CS-04-22.

The following list of work was proposed to be completed with the SDAF funding:

- Optimize the Consolidated Pre-building Permit (PBP) process.
- Review the timing and calculation of development charges during development review.
- Update the pre-consultation process related to applications for Zoning By-law Amendment and Site Plan Approval.
- Support and sustain continuous improvement through LEAN training of staff.

- Broaden scope of Housing Strategy and respond to staff direction from Council related to a proposed strategic lands strategy for the acquisition and community use of current and potential surplus school sites. Note - this work was completed separately, and the outcomes are found in Report Number PL-53-22.

It is important to note that the project scope included a purposeful focus on not only identifying potential improvements to process, but on implementing these solutions so that at the end of the project staff are operating in their envisioned future state. This was designed to ensure that impacts for improvement were realized and implemented in a timely fashion.

To complete the SDAF work, the City hired Lean Agility for training and to serve as a resource throughout the project. Several staff came together to perform various key roles and responsibilities. A sponsorship team from Planning, Building and ITS Departments was created to provide overall project oversight. Day to day project management was handled by Planning and the City's Corporate Strategy Team. Staff from a number of service areas such as Finance, ITS, Customer Service, Engineering, Forestry, Zoning, Building and Government Relations performed key supporting roles as a stakeholder group. It is noted that members of the development industry were consulted, interviewed, and participated in this project.

The business objectives of the SDAF work are as follows:
- Support faster PBP approvals within the City.
- Improve staff capacity and process efficiency to focus on strategic work and reduce operational challenges.
- Respond to Vision to Focus strategic priorities by increasing housing options and enabling responsive growth management.
- Staff development in the areas of process improvement and product design.
- Create a culture of continuous improvement in the corporation that will increase the sophistication of the organization's business practices.

The SDAF work benefited from a team of motivated and engaged staff with a common desire to seek improvements to various business processes. The first step in the SDAF initiative was for team members to be trained in the "Lean" methodology, agile design thinking, and customer centric design. 29 staff received this training to help the team identify and focus on solutions to the root causes of problems and not the symptoms. Moreover, it enabled them to try new ways of doing things by keeping an open mind to change while embracing experimentation (i.e. Plan-Do-Check-Adjust) and always considering the needs of the customer.

The lean methodology used to complete the SDAF work consisted of the following phases: Define; Measure; Analyze; Improve; and Control. This methodology, coupled with the previously mentioned training, provided the psychological safety for staff to take risks, learn, and pivot quickly for success. The application of this lean approach is observed throughout Appendix A.

The first phase of this project was for the team to create a project charter with defined goals, timelines, and strategic objectives that outlined the steps and building block activities for the project. This defined the scope and conditions for success of the SDAF project.

Once the project was clearly defined, the team proceeded to explore multiple perspectives and completed value stream process mapping for the PBP process, the development charges process, and the pre-consultation process. This exercise included data collection on how long each step of the process takes to complete as well as how long the process takes overall. Details regarding the value stream mapping exercise are found on slides 30-33 in Appendix A. Upon completion of mapping out the various business processes in their current state, it was quickly identified that the PBP process had a significant amount of inefficiencies "waste" whereas the Pre-consultation and Development Charge processes did not. The Pre-consultation and Development Charge processes required minimal process re-mapping and were able to proceed quickly to experimentation (to be discussed later in this report) and leveraging technology for implementation. The majority of the SDAF effort was focused on improving the PBP process.

For clarity, the PBP process is the consolidation of the Zoning By-law Review, the Grading and Drainage By-law review, and the Private Tree By-law review for all development that does not require site plan approval (i.e. decks, sheds, accessory structures, additions to detached dwellings, and new detached dwellings).

An environmental scan of three cities (Oakville, Markham, and Brampton) was conducted to compare Burlington's PBP process to theirs. Similar challenges were observed:
- Poor quality of submissions by applicants.
- Too many review/resubmission cycles.
- Unsustainable applicant expectations.

Lessons learned from the environmental scan include:
- Process improvement is critical.
- Reducing the PBP process from 4 review cycles to 2 review cycles is achievable.

- Change management strategies for staff and applicants are necessary for successful process updates.
- Staff need to change their approach from acting as the "enforcer" of the process to the "enabler" of the process. This includes increased collaboration with applicants.

Interviews with members of the development industry were conducted to capture the "Voice of Customer" as it relates to the PBP process. Comments received include:

- Appreciate that all submissions and resubmissions go through one staff contact. This ensures all reviewers (zoning, engineering, forestry) are reviewing same information.
- It would be helpful to have a clear understanding of the status of a file for each review. This would ensure we don't have to bother PBP staff for separate status updates.
- Quicker reviews/turnaround time in PBP and building permit would result in less illegal construction within the city.
- Delays in review and issuance of applicable law approvals cause customers to ask for early permit submissions (before applicable law) and customers are extremely frustrated when they get to building permit application stage.
- Three different service areas with staff experiencing varying workloads and lack of resources causes delays in final approvals and customer/client response.
- The timeframe between the original Development Charge calculation and the time which they are payable is so long that fees are indexed multiple times.

Through the value stream mapping of the current PBP process, staff captured data points for the key steps in the process. The critical metrics were as follows:

- Elapsed Time (ET) which is the duration of time from when a process step begins to it being completed.
- Processing Time (PT) which is the actual staff time spent on a completing the work associated with a process step.
- % Complete and Accurate (%C&A) which is the percentage of time that submitted materials are complete and accurate enabling staff to review and process without requiring further information or corrections.
- Failure Demand which is the number of errors in the process at a given step requiring rework to correct.

The collected data points for the PBP process identified the following:

- The total ET for the entire PBP process was on average a minimum of 123 days.

- The total PT for the entire PBP process was on average a minimum of 6 days.
- Low % C&A from applicant submissions led to significant failure demand throughout the PBP process and contributed to increased ET.
  - 95% of PBP applications received are initially deemed incomplete or missing information.
  - 4 submission cycles are typical during overall PBP process adding ET to achieve 100% complete and accurate application for approval.
  - 50% of ET is attributed to delays from an applicant revising submission materials.

The perspectives (Voice of Customer) and data points of the PBP process were analyzed by the team to identify the root causes of problems. This analysis confirmed various "wastes" and "failure demand" present in the PBP process and provided a better understanding on how backlogs in the process develop leading to increased ET. The problems identified through the analysis were compiled into an inter-relationship chart for weighting of top issues. This chart can be found on slide 43 of Appendix A. An inter-relationship chart identifies which issues are the cause of further issues later in a process. The chart is used to identify which issues create the most waste in the process, and efforts for improvement are focused on these key issues, as they present the most opportunity for improvement overall. The main root cause issues identified through the analysis were:

- Lack of process visibility
- Ineffective application form.
- Technology (AMANDA) not being utilized effectively.
- Complex requirements and By-laws.
- No continuous improvement routines.

Upon completion of the analysis and identification of the top issues within the PBP process, the team considered solutions to the top root causes identified. This informed a series of experiments to explore various process improvements and the creation of a new future state process map. Many of the experiments were completed and implemented with immediate positive impacts while others are still ongoing.

Details of the experiments is offered on slides 53 to 60 in Appendix A and a summary of the experiments is as follows:

Experiment 1 – Circulation Elimination
Status - Completed

Circulations of applications to related staff for review is handled through the City's AMANDA platform. A quick win was immediately identified where staff were able to eliminate a step in the folder set up within AMANDA and better leverage the existing technology.

The realized gains in this experiment include a reduction in ET by 5-10 days and a reduction in PT by 15 mins per application. This means that submissions are circulated to reviewers much faster, preventing backlogs and long waiting periods. This simple process adjustment eliminated 2 file handoffs between staff and improved internal visibility of work.

Experiment 2 – Simplification of Site Engineering Review
Status - Completed

Site Engineering challenged themselves to consider the value added in their review of certain types of development in the PBP process. The intent was to see if there were opportunities to free up their limited staff capacity by not requiring their review for low-risk development applications. Site Engineering was able to eliminate their review for PBP applications dealing with second storey additions, front porch renovations, basement walkouts, pergolas and similar accessory structures with an open or slatted roof, and like for like replacements due to a damage repair.

The realized gains from this experiment eliminated the need for site engineering to review approximately 75 PBP applications per year. This experiment made available approximately 1500 hours of work capacity per year for Site Engineering to redeploy towards more high risk and strategic development applications.

Experiment 3 – Deficiency Form Improvement
Status - Completed

Deficiencies are a common occurrence in the PBP process. This experiment centralized the record management of the Deficiency document in AMANDA to make it easy to find and leveraged various technological automation features to reduce manual staff effort. It also improved the format of the document to create consistency across departments who participate in PBP.

The realized gains of this experiment include minimized interruptions for staff when looking for the Deficiency document as well as a more efficient method to manage this step in the PBP process. This experiment is a step forward in the City's digital transformation of Development Services.

Experiment 4 – Improved Application Form
Status - Completed

Failure demand in the PBP process was exceptionally high from the first day an application is received. In most cases, it was because the application form was not filled out correctly or the application was missing information. To improve the customer experience, the application form was revised to be less complex and more user friendly.

The realized gains of this experiment increased %CA from 50% to 80% in application form submissions. This reduction in failure demand improved the client and staff experience at the first day of the PBP process and resulted in less rejections for incomplete applications. This improvement to the application form has also saved staff effort in frequently asked customer inquiries. It is too soon to measure, but it is anticipated that this experiment will reduce ET.

Experiment 5 – Development Charge Process
Status – In Progress

Development Charges (DC) are required for various development applications and must be paid prior to issuance of a Building Permit. DC calculation is currently administered by Zoning staff during the PBP process instead of later during the Building Permit process. If there are delays in the Building Permit application, issuance, or if the proposed application requires revisions prior to issuance, the DC calculation provided during the prior PBP process may no longer be accurate and requires recalculation by Zoning. The intent of this experiment is to move the administration of DC calculation to the Building Permit process instead of during the PBP process and therefore eliminating the potential for unnecessary re-work by staff.

The realized gain of this experiment is that DC administration is done once by the right staff at the right time thus eliminating unnecessary back and forth handoffs and re-work between staff during the DC process. It is estimated that this will free up approximately 370 hours of Zoning staff capacity a year which can be re-deployed toward development applications subject to Bill 109. This experiment is ongoing as staff finalize the details to implement this updated process.

Experiment 6 – Pre-Screen
Status – Complete

The PBP process is the consolidation of reviews from Zoning, Site Engineering, and Forestry. Failure demand at the moment of application submission has been exceptionally high. Even after an applicant meets the quantitative requirements for their

submission, it is possible that there are numerous qualitative errors leading to a list of deficiencies. For example, an application may include the required site plan, but the plan may not include all the details required to inform decision making in the review phase of the process. In the current process, these deficiencies may not be discovered until several weeks after the PBP application has been received and reviewed by Zoning, Site Engineering, and Forestry staff. For obvious reasons, this frustrates owners and applicants and adds significant ET to the overall PBP process. The intent of this experiment is to establish a "pre-screen" internal meeting with staff to accelerate initial quantitative and qualitative feedback to applicants within a week of receiving the application with the objective of reducing resubmissions to a maximum of 2 cycles.

This experiment was conducted in two phases. Phase 1 focused on pre-screening applications to ensure those submitted were complete and included all required information and documents. The realized gains from this phase of the experiment were a reduction in ET from 41-108 days to 2-6 days and a reduction in PT from 18-24 hours to 1.25-2 hours of work. This means first contact with an applicant now occurs within 2-6 days, instead of applicants having to wait for up to 108 days. Phase 2 of this experiment focused on understanding the impact that the pre-screening phase will have on the review phase of the process. This part of the experiment seeks to understand if only quality applications are forwarded to the review phase, how many review cycles can be eliminated and how much time will be saved as a result. Implementation of this phase has just commenced but anticipated gains are a reduction in review cycles from 4 to 2 which would reduce overall ET by approximately 50% and reduce overall PT by approximately 30%. The ability to provide initial feedback quickly is a significant improvement to the overall client experience and allows applicants to revise and resubmit their materials in a timely manner. This experiment has been formally implemented and staff are monitoring to see if the pre-screen stage in the PBP process can lead to a reduction in resubmission cycles.

Experiment 7 – Make Process More Visible
Status – In Progress

Visibility of the PBP process is a challenge for internal staff due to ineffective technology configurations. The transparency of the application process is also a challenge for applicants who wish to have frequent updates resulting in numerous calls to staff for updates and inquiries. The intent of this experiment is to leverage technology (AMANDA platform) to improve internal management of the PBP process and enable it to connect to an online portal whereby applicants and owners can log in to view information related to their application including its status, staff comments/deficiencies, and other related activities.

The realized gains of this experiment will provide a self-serve option for applicants and reduce the capacity drain of frequent inquiries to staff. It is anticipated that this experiment will save approximately 60 hours of work a week total for the various staff connected to the PBP process. A new PBP folder in AMANDA and an online portal are currently in development for implementation for January 2023.

Experiment 8 – Updated Pre-consultation Process
Status – In Progress

Unrelated to the PBP process is the Pre-consultation process for Zoning By-law Amendments (ZBA) and Site Plan Applications (SPA). Through Bill 109, the Planning Act has been revised for the processing of ZBA and SPA. As a result of these legislative changes, pre-consultation will take on increased importance to resolve complex technical matters and lead to good planning outcomes. The initial analysis of the pre-consultation process was that it was quite "Lean" and simply requires minor updates to technology (AMANDA) and documentation templates to facilitate Bill 109.

The realized gains from this experiment are a more effective and consistent pre-consultation process with improved internal visibility and records management for staff. The pre-consultation folder in AMANDA and all associated document templates are currently being updated for implementation on January 1, 2023.

Financial Matters:

Up to $1 million in SDAF funding was announced for the City for the improvement of development application processes with parameters for its use. The project team has utilized these funds in a number of ways;

1. Consulting fees for a Lean Six Sigma review of the current PBP, Development Charge, and Pre-consultation processes, including yellow belt training for 29 staff on the project team, and the identification and implementation of solutions.

2. Consulting fees for the design and development of a tool that will bring visibility to the PBP process, allowing applicants to see the status of their application throughout the process. This included training for project team members on human centred design and agile project management.

3. Improvements to the AMANDA system to allow for better coordination of process tasks and flow between staff.

Total Financial Impact

Project funds have been applied to the development and experimentation of process and technology improvements with solutions expected to be formally implemented starting January 2023. Experiment measures and observations have provided staff with data to understand the anticipated impact of changes but realized impact has yet to be measured. Staff will continue to measure the impact of improvements as they are formally implemented to understand how they have contributed to project goals. It is important to note that for some time following the project anticipated gains from improvement will be realized in everyday operations and increase until they have reached their full potential in the future state.

Source of Funding

The funding has been approved by the Province of Ontario through the Streamline Development Application Fund.

Other Resource Impacts

Throughout the duration of the project, project team members participated in analysis of the process, design and development of solutions while also managing their regular work. To make room for staff to design and implement improvements, regular operational activities have been put on hold periodically. Staff have operated over capacity for some time now, just to meet the needs of regular operating activities. Any capacity savings resulting from process improvements will be studied to understand the impact to workload and operations. Continued efforts will be made to make room for staff to reduce overwhelming workloads and begin to make room for ongoing continuous improvement endeavors.

Climate Implications

Not Applicable

Engagement Matters:

A number of members from the local development industry participated in this process in various ways such as: customer centric training; interviews; and testing and feedback on experiments.

Conclusion:

The SDAF project has led to a number of positive organizational and process outcomes. Most important are the cultural changes in how we conduct our work. The concept of continuous improvement and integration of Lean principles has been embraced by staff. It has strengthened staff morale and empowered them to execute changes in business processes that improve overall efficiency, customer experience, and sustainability of workloads. It is anticipated that staff will proactively continue with new experiments and implement those that are successful. A report from Lean Agility is included as an appendix to this report that summarizes the methodology, outcomes, and recommendations for the SDAF project.

SDAF is the beginning of a cultural shift in Development Services. Lessons learned from this project will be adapted and scaled up to other more complex development processes so that we continue to maximize efficiency and staff capacity in our service delivery.

Respectfully submitted,

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Appendices:

A. Report from Lean Agility

Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.