Service Business Plan

Service Name	Geographic Information and Mapping	**Service Type**	Internal
Service Owner Name	Ann Evans	**Budget Year**	2019
Service Owner Title	Coordinator of Geomatics		

Service Description

An internal service to provide orthoimagery services, land records management, 3-D visualization, title searching and topographic mapping.

Current State

Customers & Their Expectations	This service is delivered to: City staff, Council, external agencies and the general public. Geographic Information and Mapping Service customers expect: • Efficient access to data and map production services • Timely response to issues and requests • Convenient project support • Complete, accurate and consistent data delivered cost-effectively • Knowledgeable staff
Existing Service Delivery	This service is responsible for: • Creating, acquiring, maintaining, coordinating and distributing geospatial data • Providing project coordination and support services to enhance business processes • Researching potential investments in geospatial data and technology • Developing new map applications and integration tools to enhance business processes at the City • Providing customer support for property-related enquiries • Providing mapping and support services for the Emergency Operations Committee • Capital Works web content management, including online mapping services • Managing Capital Works-related documents, including plans and reports • Custom map production and plotting services for City staff and the public • Creating awareness and promoting the use of technology
Existing Customer Engagement Tools / Methods	In-person meetings with staff; website feedback; by phone (via dedicated line); email; surveys; open data portal; internal work shops and events; training sessions
Is this Service Provincially Legislated?	No N/A
For this Service are there Approved Service Standards?	No N/A

Sub-Services	
Property/Land Information Service	Provides and maintains property record data in corporate systems. Reviews municipal addressing and ownership information. Contracts and/or carries out data collection assignments. Provides Engineering-related records management support.
Data Management Service	Develops and maintains data as an asset. Creates and/or licenses, maintains, documents and shares a variety of data. Supports core applications and performs spatial analysis for better business and strategic decisions. Provides data support and technical expertise during implementation of technology.
Map Production Service	Creates, presents and publishes graphics, charts or maps to meet specific customer requirements. Provides equipment support and print materials.

Recent Continuous Improvement Initiatives

In 2018 the service implemented quality assurance and data integrity scripting tools to analyze and report on data in our GIS system. These tools helped us to identify and correct errors/omissions helping to mitigate risk due to these errors.

In 2018 the service implemented tools to maintain road closure information in our corporate GIS system. Utilizing our cloud GIS service, this information was then shared with the Waze application allowing live updates of our road closures (construction, events etc) to be shared with drivers who use the Waze application.

In 2018, through the use of the Enterprise Advantage program, a mobile mapping solution was implemented to support Fire services in their trucks. The mapping solution replaced paper map books (used solely for backup now) and provides relevant, up to date GIS data to give Fire services locational intelligence in their trucks.

In 2018, the service implemented many new mapping applications for the public and staff enhancing the quality of the Navigate Burlington GIS landing page. Some of these enhancements included Leaf Collection, Road Closure and Election support.

In 2017, the service implemented an enhanced landing page for both open data and mapping applications providing easy access to information and tools for citizens and staff.

In 2017, the service participated in the implementation of an ESRI Enterprise License agreement, providing unlimited access to core ESRI software while providing both immediate and long-term cost savings.

In 2017, the service participated in the implementation of an Enterprise Advantage program. Utilizing this program, a GIS Architectural review was performed providing valuable technical advice which will be utilized during the upcoming upgrade to both software and hardware for the City's GIS system.

In 2017, the service acquired high resolution digital aerial imagery to help update location-based data and to use for visualization purposes. The result was more up-to-date data and better base information for displaying maps to the staff and public.

In 2017, the service created a 3D model of the downtown which has been used as a communication and engagement tool to visualize new developments.

Emerging Opportunities and Anticipated Risks	
Emerging Opportunities	The internal and public services are increasingly aware that tools exist to visualize, analyze and enrich the data they own. Using these tools will help achieve efficiencies, communicate information, engage citizens and generally support more informed decisions. There are opportunities to build upon our existing geospatial datasets by developing new internal applications and coordination of data acquisition/data collection projects. The role of the Geographic Information and Mapping service can be expanded beyond traditional uses within Capital Works, City Building and Roads, Parks and Forestry. The service can be used to support a variety of government functions and provide the opportunity to minimize costs and maximize benefits for the City's investments.
Anticipated Risks	Resource usage will increase with the growing number of corporate systems, applications and datasets. Data integrity and reliability poses a risk due to the increasing volume of data being managed. The data supports a wide range of business applications, which are used to make important business and strategic decisions. Customers have come to expect near real-time access to data, which will require new systems and processes. The Information Technology Service will be depended on to provide the support necessary to use new innovative technologies and assist with process improvements.

Service Objectives	Target Completion
Enhance and improve the internal use of GIS by providing a GIS Portal for staff as a one-stop shop for all of their GIS applications and tools. In conjunction with the portal implementation, conduct a best practices review of the Burlington GIS Centre looking to take advantage of improved web technology.	Mar 2019
Formalize a 3D visualization strategy to support service areas involved in community development. Models will be used as a communication and engagement tool to visualize new developments downtown and in other growth areas. Includes the development of a submission protocol and standards for future model growth.	Sep 2019
Implement a field asset data collection and inspection program to support the Asset Management service. Access to technology and real-time data in the field will improve efficiencies and the accuracy and reliability of data.	Apr 2019
Further develop the quality assurance plan to ensure data integrity and manage risk due to errors. Make use of FME server to automate scripts currently used for data integrity checks. Areas to review include accuracy in both position and attribute, age of data and errors caused through processing of data.	Jun 2019
Continue to develop an awareness in City services of the opportunities to power the services through locational intelligence offered by maps and applications. Leverage GIS in corporate projects such as CRM, MMS and BI.	Dec 2019

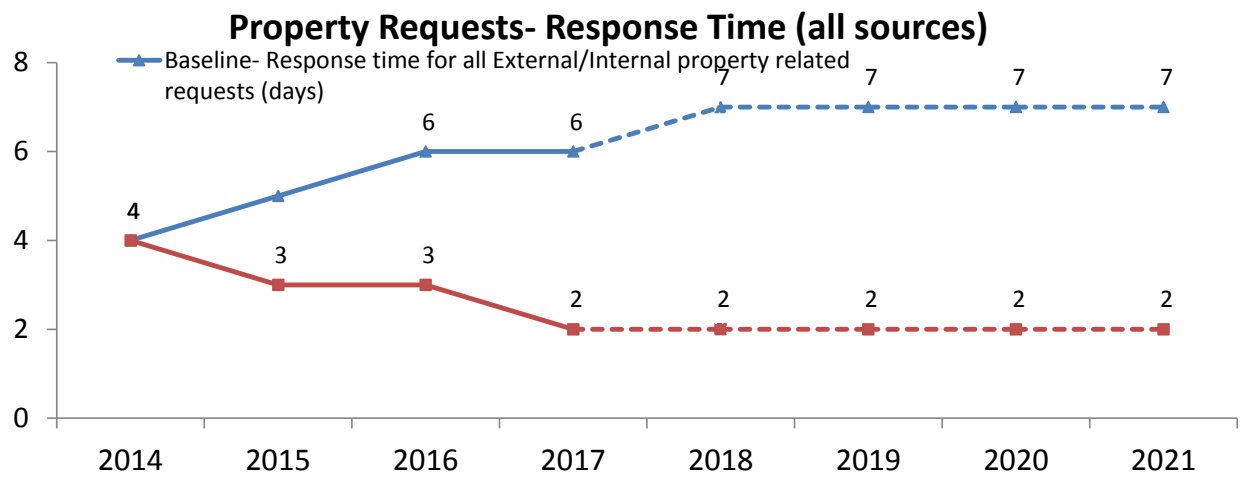
MEASURING SUCCESS

How much did we do?

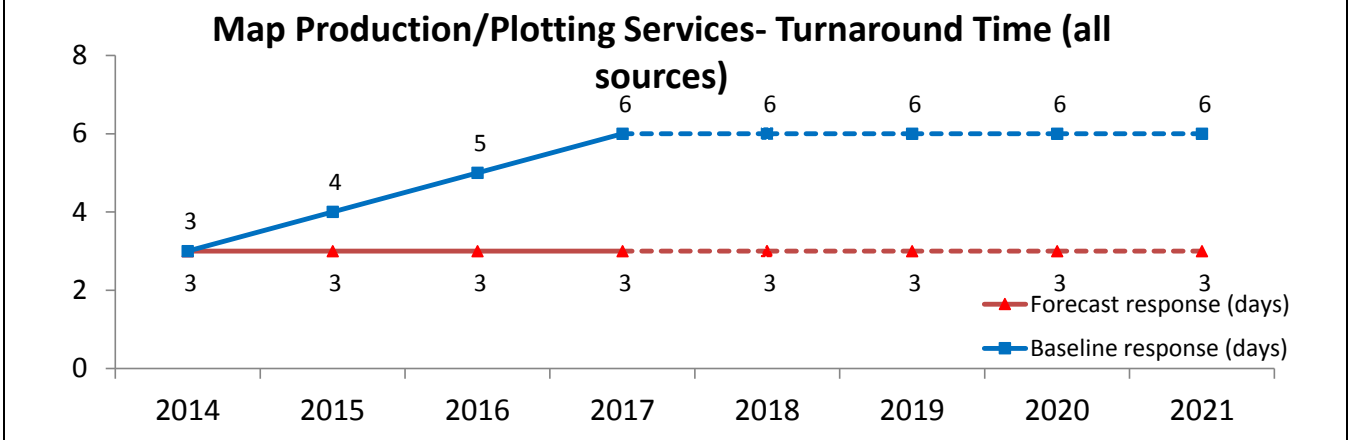
Performance Measurement	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Total number of Property-related Requests for Information	365	357	543	472	411	576	580	580
Total number of mapping/data requests processed	620	650	431	364	222	320	300	280
Number of Datasets Utilized	200	223	231	242	254	266	300	320

How well did we do it?

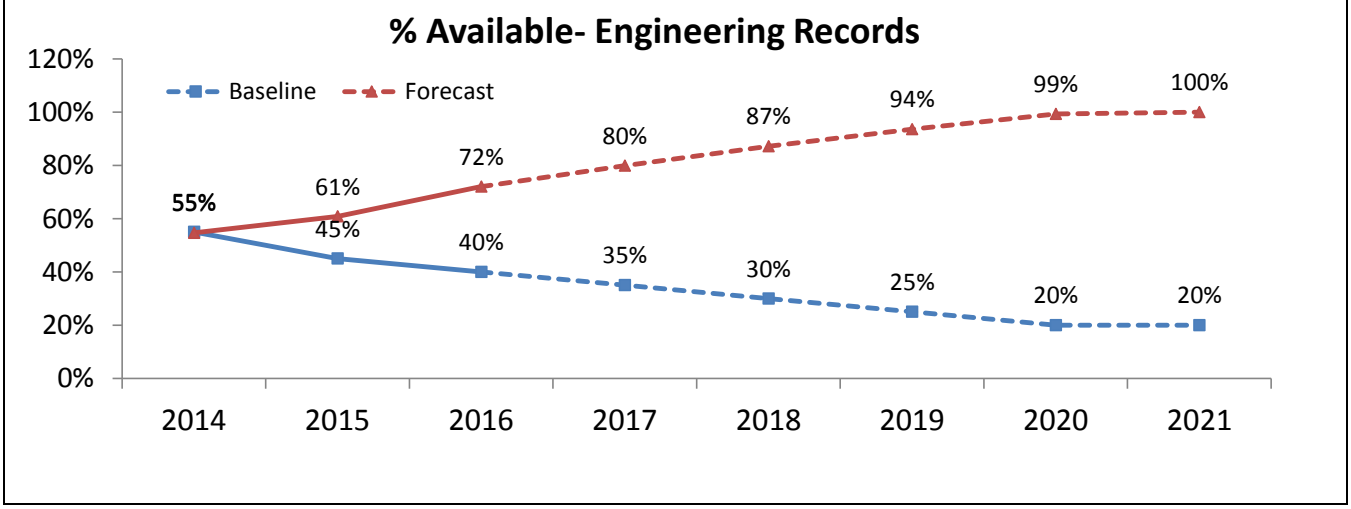
Performance Measurement	Property Requests- Response Time (all sources)
Story behind the data	Property requests relate to City and privately owned land. The source of these requests can be internal or external. Requests typcally fall into four categories: cadastral (surveys, plans, easements), addressing, deemed street width verification, or servicing. The amount of investigation required for each request varies. Requests are increasingly complex, and often rely on input from other service areas (Corporate Legal, Development Review) or external agencies (Teranet, etc). As a result, the response time is steadily increasing. Utilizing the ITS Service desk tool, the service is effectively handling and prioritizing any requests received improving response time and customer satisfaction.



Performance Measurement	Map Production/Plotting Services- Turnaround Time (all sources)
Story behind the data	The service area receives several hundred unique requests each year for custom graphics, charts and maps. Requests that require detailed map production typically take multiple hours of dedicated time and effort. Plotting equipment and resources are essential to carry out this function, so equipment downtime can result in production delays. The number of mapping and plotting requests is expected to continue to increase however, the service is now providing, through improved GIS software, some tools (dashboards, online applications) that allow the user to self serve and alleviates some of the pressure on staff.

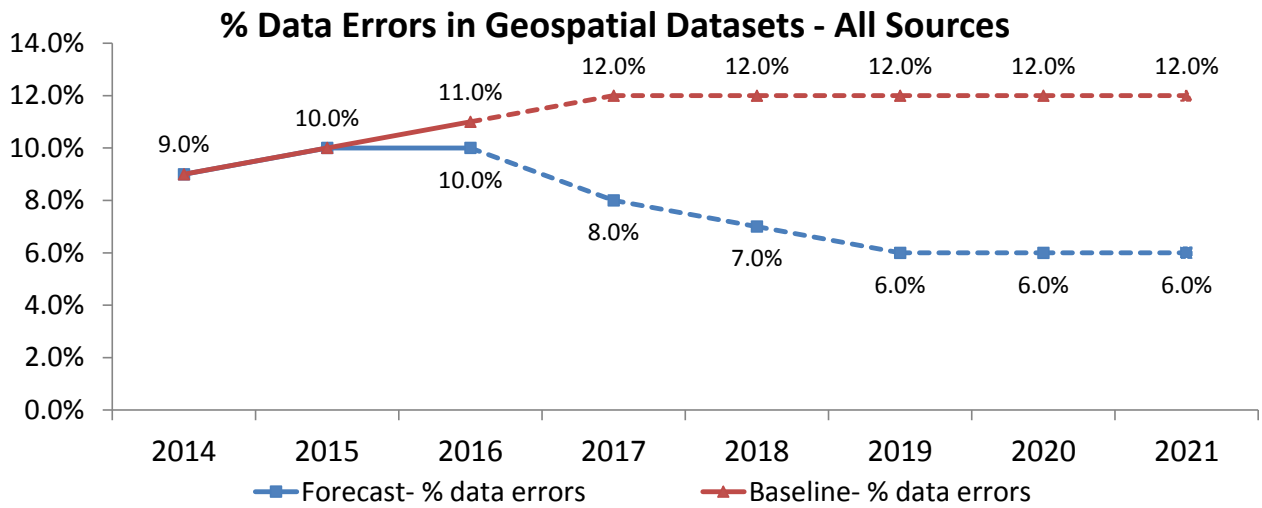


Performance Measurement	% Available- Engineering Records
Story behind the data	Engineering records consist of all plans, reports and documents that relate to capital works projects. The service uses a corporate system as the electronic records management tool for all documentation. Documents need to be up to date and accurate with as-constructed infomration, as they are relayed to the public, staff, external consultants, contractors and agencies. The availability of records is also seen as an essential function for Business Continuity Planning with Capital Works.



Is anyone better off?

Performance Measurement	Maximizing data integrity (% errors in Geospatial Datasets).
Story behind the data	Data is used to make important business and strategic decisions and therefore needs to be current and accurate. Errors are routinely identified through rigorous quality control checks. Errors identified by internal users have a low impact but errors identified by the public could potentially represent a more serious risk and could lead to change order, increased costs, delays or even potential risk to public safety.
Where do we want to go?	The goal is to build upon the existing quality control process to identify and correct data issues sooner. Quality control tasks will be further defined and documented. The service is employing the use of FME software to automate identification of errors and to also correct errors if possible.



Performance Measurement	Percentage of satisfied web mapping users (public access to Geographic Information System data).
Story behind the data	The City implemented innovative online mapping technology with the launch of Navigate Burlington, a one-stop place for all online mapping needs. This new mapping has been well received and continues to grow with the addition of new mapping applications, open data and story maps.
Where do we want to go?	The goal is to continue to add to and improve the City's online mapping experience by continuing to embrace the technlogy provided by our GIS vendor. Improving service delivery by implmenting online services that better meet the needs of our technology based customers.