



Corporate Environment, Health and Safety (EHS) Performance Report

September 15, 2017

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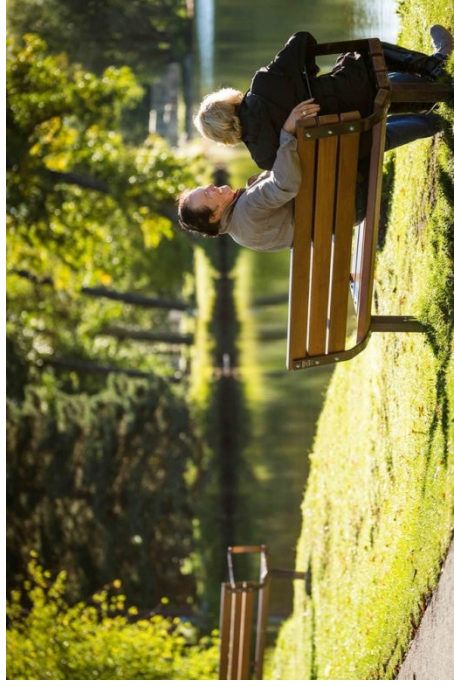
1 Overview

The City of Calgary is committed to its corporate responsibilities related to environmental stewardship and a safe and healthy work environment. To demonstrate accountability for these responsibilities, The City reports semi-annually on environmental, health and safety performance.

The City's Action Plan for 2015 – 2018 has three priority areas which drive actions and outcomes related to corporate environmental and safety management: a well-run city, a health and green city, and a city of inspiring neighbourhoods. The City's Code of Conduct includes The City of Calgary's Environmental Policy and The City's Occupational Health & Safety Policy. These policies establish a set of commitments outlining The City's intentions to manage environmental and safety risks, fulfil compliance obligations, and continually improve performance.

The City's environmental and occupational health and safety management systems support The City in fulfilling its policy commitments. Through the processes established within the systems, environmental and safety considerations are integrated into The City's day-to-day activities as well as longer term strategic plans.

In keeping with corporate direction, the results-based accountability (RBA) approach has been increasingly incorporated into corporate environmental and safety management. Using this approach encourages collaboration and evidence-based decision-making to improve performance and manage risks. The RBA approach also supports environmental and safety reporting by providing a framework to demonstrate how The Corporation's performance contributes to higher level results and Council Priorities.



2 Occupational Health and Safety Management

The City's Occupational, Health and Safety (OHS) Policy reinforces The City's commitment to provide a safe and healthy work environment for its employees. As a Corporation, we are individually responsible and collectively accountable for workplace safety, and all employees are responsible for working safely and complying with legislative requirements.

The City's OHS Management System establishes the standards, processes and programs to manage health and safety risks and continually improve safety performance. Within the OHS management system, the Corporate Safety Strategy is being implemented to strengthen the shared values and attitudes that are required for strong safety performance. The strategy focuses on five result areas: safety culture; leadership; governance; programs and services; and evaluation and measurement.

The OHS management system is externally audited to the provincial standard set by the Partnerships in Injury Reduction (PIR) program every three years. The City achieved a passing score on its audit in 2016 and was awarded a Certificate of Recognition (COR). The City's 2017 action plan for addressing audit recommendations was approved by the certifying partner in March 2017. At the end of the year, The City is required to provide evidence to demonstrate that the action plan was carried out.

The 2016 Corporate EHS Annual Report (UCS2017-0269) communicated The City's total recordable injury frequency (TRIF) and lost time claims frequency (LTCF) for 2016. Due to higher injury frequencies in the first half of 2017, The City's TRIF and LTCF for 2017 are currently higher than in 2016 and are not on track to meet Action Plan targets. Higher injury frequencies can have cascading effects such as reduced productivity and increased Worker's Compensation Board premiums.



Total Recordable Injury Frequency (TRIF)

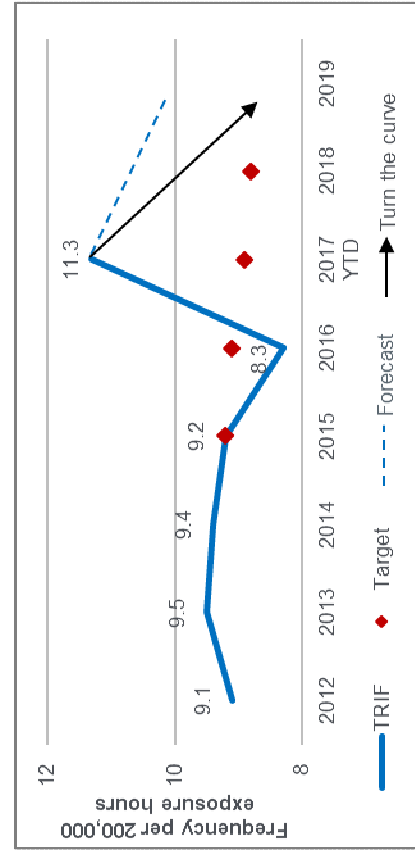


Figure 1. Corporation-wide Total Recordable Injury Frequency.

Recordable injuries and illnesses include those that result in medical treatment being sought (medical aid incidents) and those that result in lost time (lost time incidents). Fatalities are also recordable. TRIF is the number of recordable injuries normalized over a standard rate of 200,000 exposure hours (i.e. hours worked).

The Corporation's TRIF increased from 8.3 at the end of 2016 to 11.8 at the end of Q1 2017. The City's TRIF for Q2 2017 was 10.7, bringing the year-to-date TRIF to 11.3, which is above the Action Plan target of 8.9 (W.PM16) for 2017. Figure 1 shows The Corporation's TRIF over time.

Lost Time Claim Frequency (LTCF)

Whereas TRIF accounts for injuries and illnesses that result in medical treatment being sought (medical aid incidents) and those that result in the employee losing time from work (lost time incidents), LTCF accounts only for injuries and illnesses that result in lost time. Similar to the TRIF calculation, the LTCF is the number of lost time claims normalized over a standard rate of 200,000 exposure hours.

The Corporation's LTCF increased from 3.9 at the end of 2016 to 6.0 at the end of Q1 2017. The City's LTCF for Q2 2017 was 3.7, bringing the year-to-date LTCF to 5.0, which exceeds the Action Plan target of 3.5 (W.PM19) for 2017. Figure 2 shows The Corporation's LTCF over time.

Story behind the baselines

The corporate-wide online safety reporting system is improving The City ability to better understand its safety performance through improved our data analysis capabilities, allowing trends and areas for improvement to be identified in a timelier manner. In Q1 2017, approximately 25% of medical aid injuries and lost time claims were related to winter weather and surface conditions. Due to the change in season, the number of weather-related incidents decreased substantially in Q2 2017. Conversely, the change in season saw an increase in the hiring of season staff, which is a contributing factor for the increase in injuries in certain business units in Q2 2017. Research shows that new workers such as seasonal staff are at a higher risk of injury as they are typically performing unfamiliar tasks and may not fully understand their safety responsibilities.

Beyond these seasonal influences, the top immediate and underlying causes identified for recordable injuries in both Q1 and Q2 were 'failure to identify the hazard or risk' and 'lack of knowledge or awareness', respectively.

Actions / Next Steps

With these causes in mind, corporate-level efforts in 2017 have been focusing on specific elements of the occupational health and safety management system including hazard identification and safety communication. Another area of focus has been improving incident investigations to increase understanding of The City's incidents and inform the development of further actions to turn the curve on safety performance. The following pages use the results-based accountability (RBA) approach to communicate The City's performance, accomplishments and planned actions on these elements. The City is also working to manage the psychological wellness of the workforce. For example, work is under way to improve proactive reporting of psychological hazards and incidents, and to better understand and document the cognitive and psychological demands of certain jobs at The City.

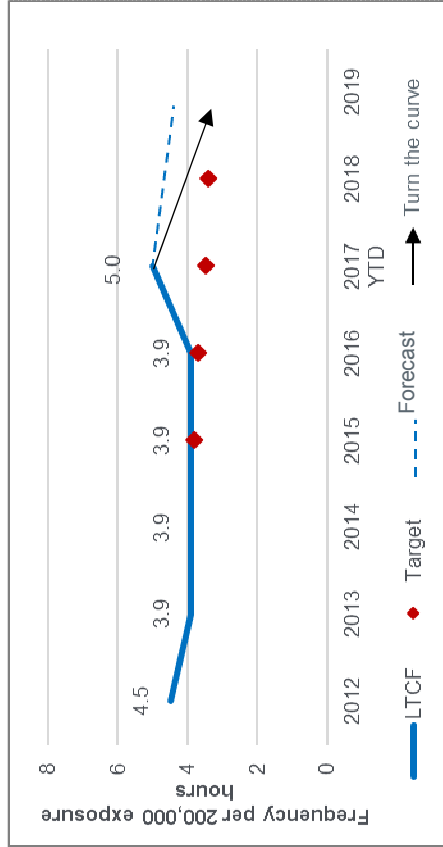


Figure 2. Corporation-wide Lost Time Claim Frequency

Hazard Identification

Hazard identification is critical to preventing occupational injuries and illnesses. As part of The City's Occupational Health and Safety (OHS) Management System, work-related hazards can be identified through formal position-based and field-level hazard assessments, workplace inspections, and informal site and task observations. Effective hazard identification contributes to a safe and healthy work environment and Council's priority of "a well-run city".

Customers

Direct: City employees

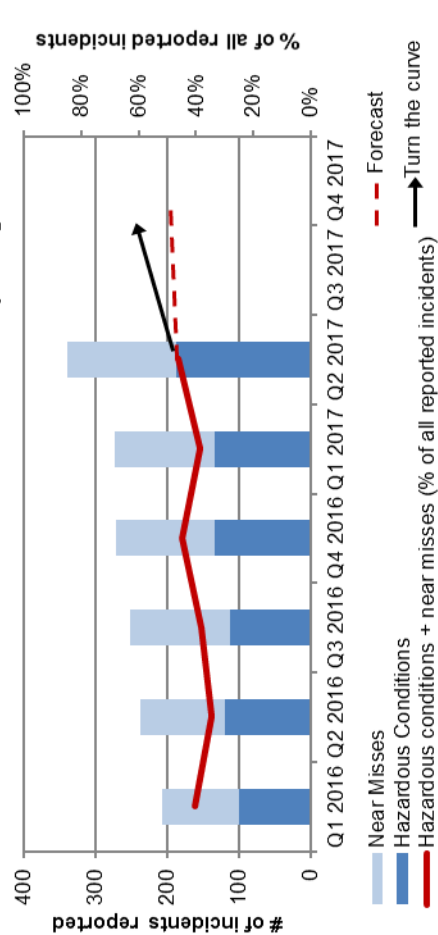
Indirect: City business units, Corporation

Key Partners

Internal: Customer Service & Communications, Human Resources, Corporate Security, Fleet Services, Corporate Analytics & Innovation, Information Technology
External: Alberta Municipal Health and Safety Association (AMHSA)

How are we doing?

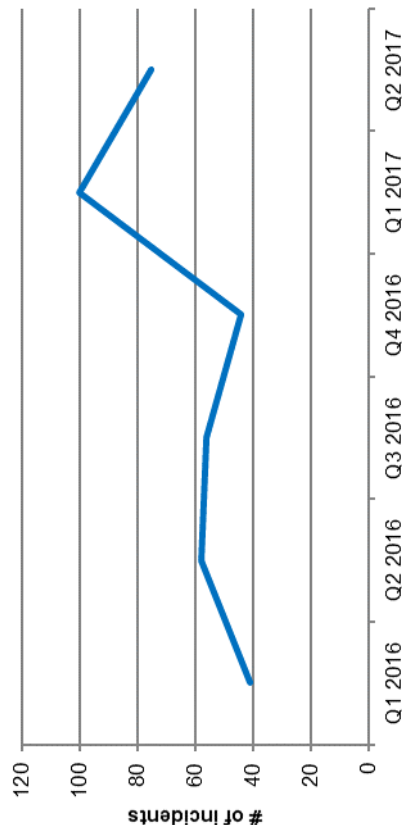
Hazardous Condition and Near Miss Reporting



Story behind the baseline

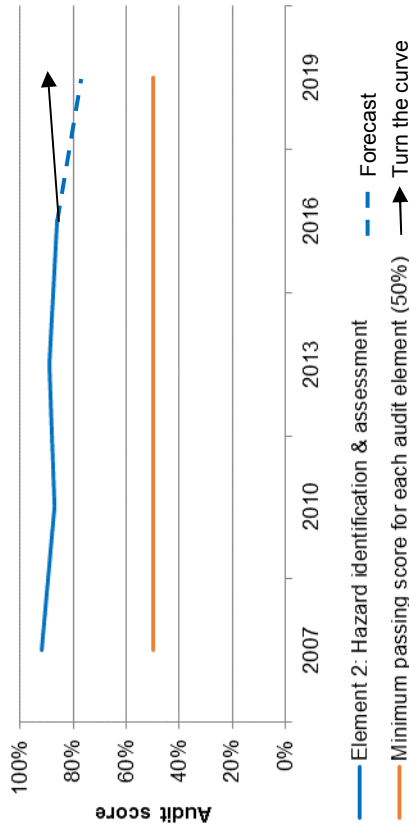
- The quarterly number of hazardous conditions and near misses reported in The City's online safety reporting system has increased with growing adoption of online reporting.
- Taking a proactive approach to safety includes identifying and correcting hazardous conditions and near misses before they result in injuries or illnesses. Based on research, at least 90% of the incidents reported through The City's online safety reporting system should be hazardous conditions or near-misses, which can then be proactively controlled.

Incidents with 'failure to identify hazard' identified as an immediate cause



Story behind the baseline

- Of the incidents for which an immediate cause(s) was recorded in the online safety reporting system, 'failure to identify hazard' was one of the top immediate causes of reported incidents between Q1 2016 and Q2 2017.
- The increase in incidents with 'failure to identify hazard' identified as an immediate cause in Q1 2017 was partially due to an increase in the overall number of reported incidents. The higher numbers of incidents in Q1 and Q2 2017 may also be indicative of challenges related to the quality and/or communication of position-based and field-level hazard assessments. Other factors such as distraction and multi-tasking can also reduce an employee's awareness of hazards.
- Based on the available data, a forecast has not been developed at this time. The desired outcome is to reduce the number of incidents caused by a failure to identify hazards.

Certificate of Recognition (COR) Audit Score  Legend: - Element 2: Hazard identification & assessment - Minimum passing score for each audit element (50%) - Forecast - Turn the curve	Story behind the baseline - The City's OHS Management System is externally audited against the provincial standard set by the Partnerships in Injury Reduction (PIR) every three years. In order to maintain its Certificate of Recognition (COR), The City must achieve no less than 50% on any one of the eight audit elements and an overall score of at least 80%. - With respect to hazard identification and assessment (COR Audit Element 2), the audit conducted in 2016 indicated that employees are kept informed of significant hazards and understand their responsibility to report hazardous conditions. The audit also identified opportunities to implement The City's Hazard Identification, Awareness and Control Standard and Procedure more consistently. - PIR recently updated the COR audit tool, which will be mandatory for The City's next external audit in 2019. The updated audit tool applies more weight to hazard identification and assessment; adds new requirements such as scoring health hazards separately from safety hazards and conducting site-specific hazard assessments; and now includes temporary worksites.
Accomplishments - Created safety reporting notepads for employees that may not have regular access to the online safety reporting system. - Rolled-out online reporting of workplace inspections. The online module can be used to record hazards identified during inspections, assign responsibilities and timelines for actions required to control the hazards, and track completion of assigned actions. - Implemented corporate-level Workplace Hazardous Materials Information System (WHMIS) training materials, incorporating recent legislative changes. WHMIS training teaches employees to identify and understand the dangers of hazardous products. The new corporate-level approach improves training consistency and efficiency. - Provided training to Safety Advisors on the new COR audit expectations, allowing them to support business units in understanding and meeting the new requirements. Actions / Next steps - To improve the quality and communication of hazard assessments: - Digitize and centralize position-based hazard assessments within the online safety reporting system to improve access for employees and supervisors. - Update the Hazard Identification, Assessment and Control Standard to include guidance on both position-based and field-level hazard assessments. - Initiate development of a safety leadership program to empower leaders with the knowledge, guidance, and tools to identify, investigate, and communicate safety hazards. - To encourage and enable hazardous condition and near-miss reporting: - Implement a mobile application for the online safety reporting system to increase hazard reporting from the field. - Roll out online safety reporting dashboards to improve internal communication and visibility on safety performance, including hazardous condition and near-miss reporting.	

Safety Communication

As part of its responsibility to provide a safe and healthy work environment for its employees, The City communicates information about safety expectations, hazards and learnings. Safety communication supports hazard awareness and reinforces positive safety practices and behaviours. Effective safety communication contributes to Council's priority of "a well-run City" by supporting The City in delivering its services in a safe and productive manner.

Customers

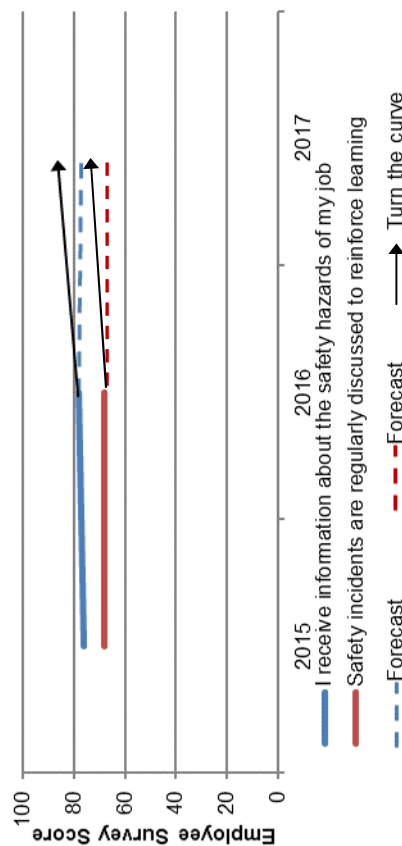
Direct: City employees, City supervisors
Indirect: City business units

Key Partners

Internal: Customer Service & Communications, Human Resources, Corporate Security, Fleet Services, Corporate Analytics & Innovation, Information Technology, Law

How are we doing?

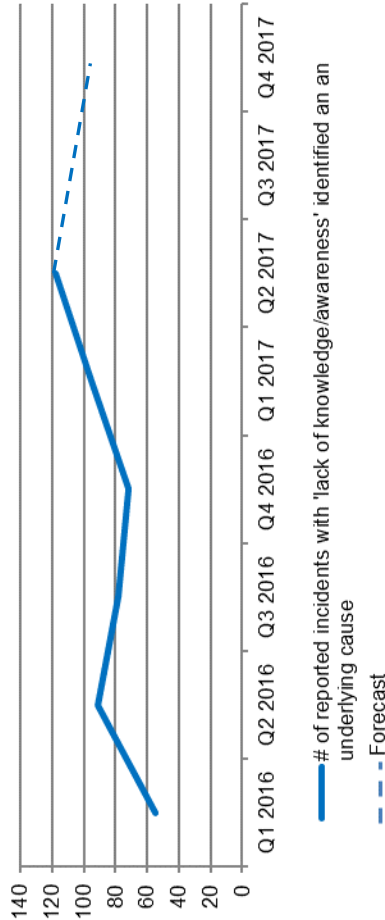
Employee perceptions regarding safety communication



Story behind the baseline

- In 2016, corporate scores were 68 for "safety incidents are regularly discussed to reinforce learning" and 78 for "I receive information about the safety hazards of my job". Results for these two questions were relatively consistent, generally showing no change or a slight improvement between 2015 and 2016. Survey scores for the two questions shown on these graphs are reflective of The City's performance on safety communication.
- The survey report indicates that scores in this range are considered 'moderately positive'; however they also indicate an opportunity to improve safety communication.

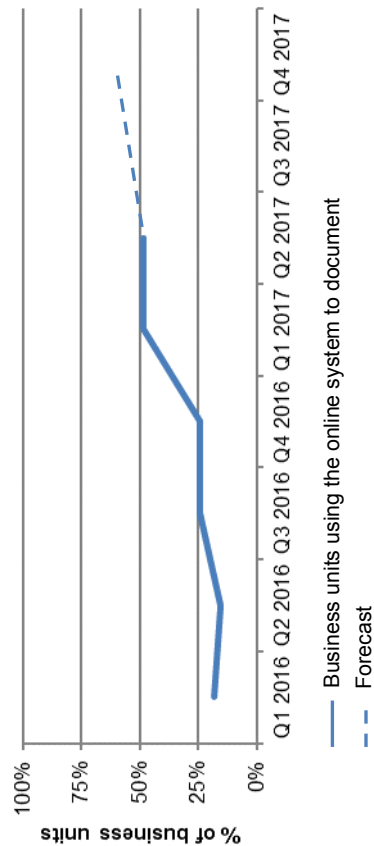
Incidents with 'lack of knowledge/awareness' identified as an underlying cause



Story behind the baseline

- Of the incidents for which at least one underlying cause was recorded in the online safety reporting system, 'lack of knowledge/awareness' was one of the top immediate causes of reported incidents between Q1 2016 and Q2 2017.
- Challenges related to employee knowledge/awareness may point to an opportunity to improve safety communication. While this data may also indicate a gap related to training, the 2016 Corporate Employee Survey results indicated that employees generally perceive they have the training to do their jobs safely (survey score of 86 points, one of the highest scores for the safety questions) and 'lack of skill/competence/qualifications' was only identified as an underlying cause in one per cent of reported incidents between Q1 2016 and Q2 2017.

% of business units documenting safety meetings in the online safety reporting system



Story behind the baseline

- Scheduled and unscheduled safety meetings are used by supervisors across The City to communicate with employees about safety. In 2016, The City implemented a module within the online safety reporting system to record safety meetings. The system can be used to record and track meeting dates, meeting minutes, attendee lists, and follow-up actions, and demonstrates The City's due diligence in communicating about safety with employees.
- By the end of Q2 2017, approximately 50% of business units were using the module each quarter, with approximately 55% of business units having used the system to record meetings at least once. Business units not using the system may be using other means to record meetings.

Accomplishments

- Developed and implemented a corporate template and process to improve communication of incident investigation results within and between business units. The first four safety learning communicated through myCity articles were visited more than 50% more times than the average myCity article.
- Completed a major update of the myCity/Safety website, making the website more user-friendly.
- Hosted *Spencer Speaks* events during North American Occupational Safety & Health (NAOSH) week to re-inspire The City's commitment to safety. The events, which shared the story of a severely injured worker, were attended or live-streamed by over 1,000 employees. Evaluation results indicated that 83 per cent of attendees felt more aware of the importance of workplace safety and 79 per cent felt motivated to discuss safety concerns and ideas.
- Continued maintaining and promoting Safety Topic resources available to supervisors. Online visits to the online Safety Topics Resource Library increased 55% from 2014 in 2016. The number of visits is on track to increase another 20% in 2017.

Actions / Next steps

- To continue improving safety communication with employees:
 - Collaborate with Human Resources to enhance safety content within the City of Calgary Orientation (COCO) to provide new employees with enhanced information on the safety resources available at The City.
 - Initiate the development of a safety leadership program to empower supervisors with the knowledge, guidance and tools they need to communicate effectively about safety.
- Implement online safety reporting dashboards to improve internal communication and visibility on safety performance.

Incident Investigation & Follow-up

It is important to complete incident investigations, implement corrective actions, and communicate learnings in a timely manner to prevent similar incidents from occurring in the future. Addressing incidents in a timely manner also demonstrates the importance of safety to employees, contributing to a stronger safety culture. Effective incident management, including investigations and corrective actions, contributes to Council's priority of "a well-run city" by supporting The City in delivering its services in a safe and productive manner.

Customers

Direct: City employees

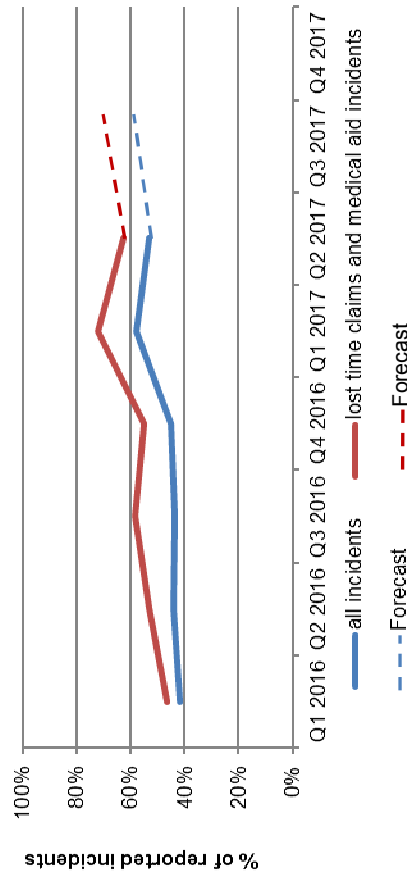
Indirect: City business units, Corporation

Key Partners

All City supervisors, Law

How are we doing?

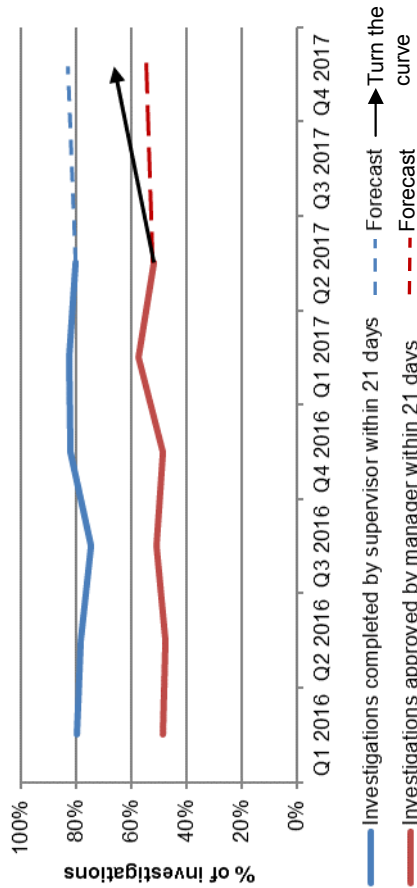
% of reported incidents with immediate and underlying causes recorded



Story behind the baseline

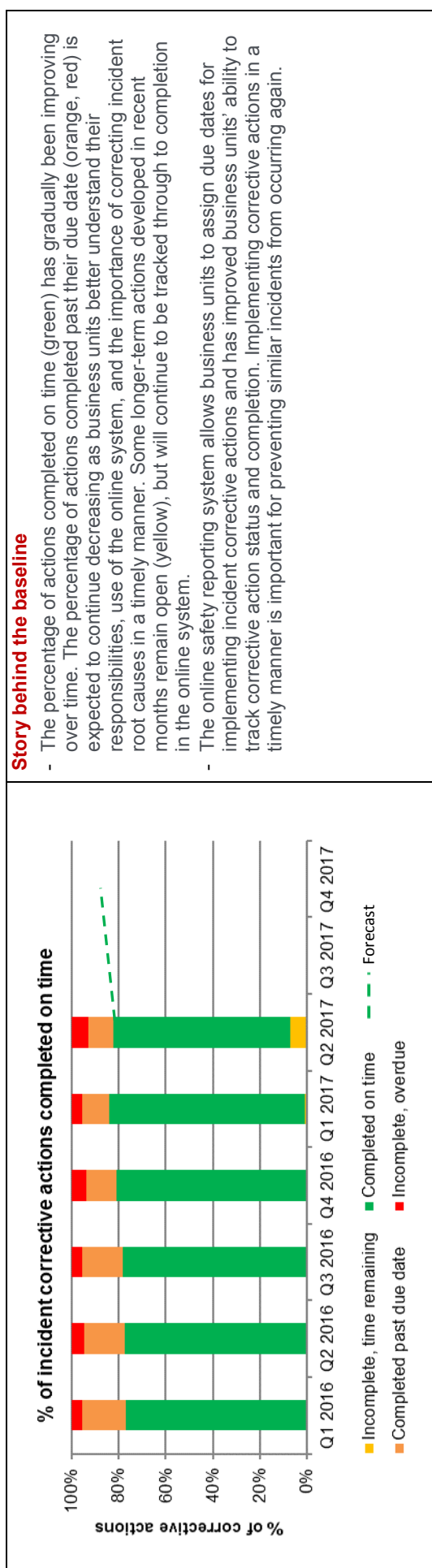
- Corporation-wide, the percentage of incident investigation reports identifying immediate and root (underlying) causes is gradually increasing for all types of incidents (shown in blue) as supervisors become more familiar with incident investigation procedures and the online safety reporting system. The data confirms that performance is also improving specifically for lost time claim and medical aid incidents investigations (shown in red).
- The City's Leaders' Guide for reporting and investigating safety incidents requires that immediate and underlying causes be identified for all incidents. The 2016 Certificate of Recognition (COR) audit identified an opportunity to improve the consistency and quality of root cause analyses. When an incident has resulted in an injury, a thorough investigation to identify and correct root causes is especially important.

% of investigations completed within 21 days



Story behind the baseline

- The expectation of Alberta Occupational Health and Safety (OHS) is that most incident investigations should be completed within three weeks (21 days), although investigations of serious incidents may take longer. Completing investigations in a timely manner demonstrates the importance of safety to employees.
- Approximately 80 per cent of investigations are completed by supervisors within 21 days. However, only about 50 per cent of investigations are being approved by managers within 21 days. The reasons for a delayed manager approval may include:
 - Additional time required for a Safety Advisor to work with a supervisor to improve the quality of an investigation report before submitting to the manager for approval.
 - A manager that does not have a full understanding of their responsibilities related to incident investigations, the importance of closing investigations in timely manner, and/or how to manage investigations in the online system.
 - Time management challenges affecting Safety Advisors and/or managers.



- ### Accomplishments

 - Improved adoption and understanding of the online safety reporting system (identified as an area of strength in the 2016 COR audit).
 - Developed and implemented a corporate template and process to improve communication of incident investigations.
- ### Actions / Next steps

 - To continue improving the quality of investigations, including the identification of immediate and underlying causes:
 - Establish corporate incident investigation support teams to assist business units in investigating serious incidents, particularly those that involve reporting to Alberta Occupational Health & Safety (OHS).
 - Update corporate incident investigation guidelines to provide improved guidance regarding the quality of incident investigations.
 - Initiate the development of a safety leadership program to empower supervisors with the knowledge, guidance and tools they need to conduct quality investigations.
 - To encourage timeliness in completing investigations and corrective actions, implement internal online safety reporting dashboards. Dashboards will improve visibility on business unit performance in these areas.

3 Corporate Environmental Management

The City of Calgary's Environmental Policy provides direction for City business units to work together to continually improve performance and fulfill environmental compliance obligations. The City has initiated implementation of a renewed corporation-wide environmental management system. Within the corporation-wide system, business units with higher environmental operating risks continue to maintain environmental management systems formally registered to ISO 14001, an international standard for environmental management.



The ISO 14001-registered business units undergo formal internal and external audits every year to assess conformance to the ISO 14001 standard, corporate environmental management standards, and the business unit's own management system requirements. Internal audits also assess compliance with environmental legislation.

Five internal and two external audits were conducted in the first half of 2017. Audited business units maintained their respective ISO 14001 registrations and no major management system non-conformities were identified. Four minor management system non-conformities and several opportunities for improvement were identified, particularly related to operational control (25 per cent of findings) and documentation (25 per cent of findings). The audits did not identify evidence of non-compliance. Business units respond to audit findings by implementing corrective actions, which are verified through a corporate process.

The City manages many different corporate environmental aspects including, but not limited to: climate change, air quality, waste, water, energy, biodiversity, fuels and contaminated land. In partnership with other business units, Environmental & Safety Management monitors corporate environmental performance related to these aspects. Environmental topics are considered for future reports based on what is pertinent from a corporate risk and/or performance perspective at the time of reporting. The following pages use the results-based accountability (RBA) approach to communicate The City's performance and improvement actions related to climate change adaptation, waste from City operations and City-owned public spaces, and managing contamination risks on City-owned land.

Climate Change Adaptation

Climate change adaptation is a risk management strategy to reduce the negative impacts of climate change that cannot be avoided. As part of the Climate Program, a Climate Change Adaptation Plan for Calgary is being developed as a collaborative effort across The Corporation. The plan is intended to increase The City's capacity to protect against and respond to climatic changes in a coordinated and timely manner by building climate resiliency into new and existing plans, policies and projects. It will include adaptive actions developed by business units for integration into 2019-2022 business planning. The plan will also guide The City's compliance with current and anticipated legislation, and position The City to take advantage of available funding opportunities for adaptation plans, projects and capital infrastructure.

The 100 Resilience Cities Program is providing oversight and guidance for The City's social, economic and environmental resilience initiatives, including climate change adaptation.

Customers

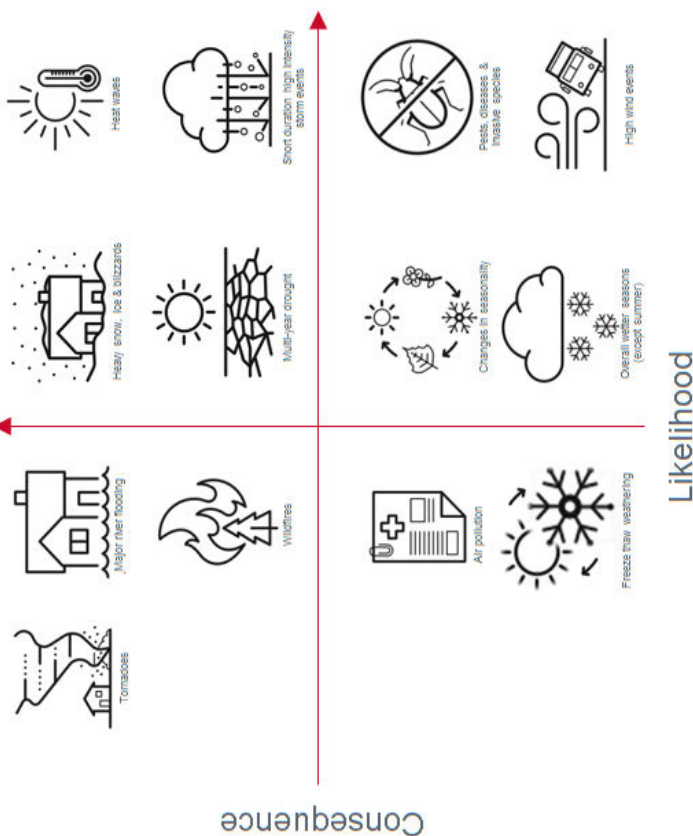
Direct: Citizens, Corporation
Indirect: Business units

Key Partners

All City business units, Sustainability Strategy, Resilience & Infrastructure Calgary

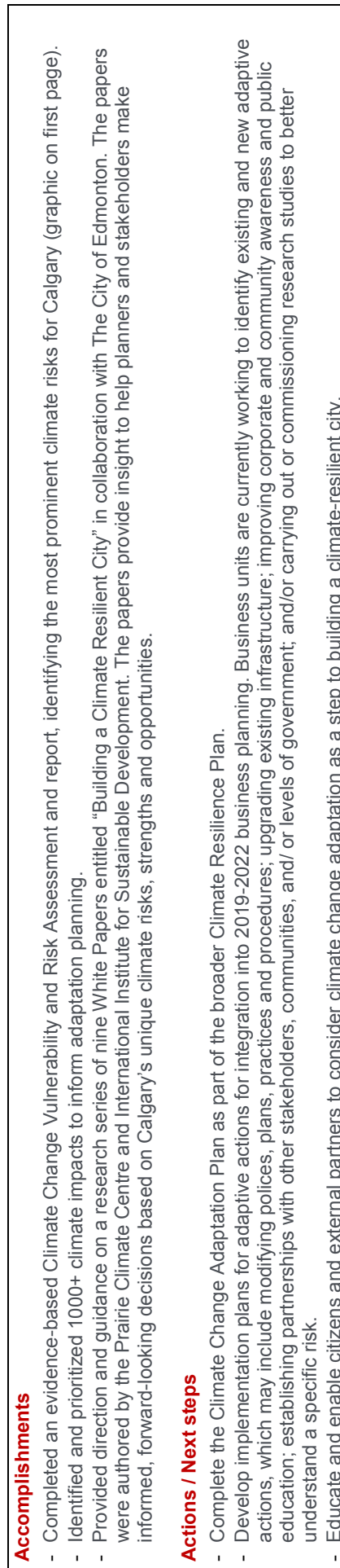
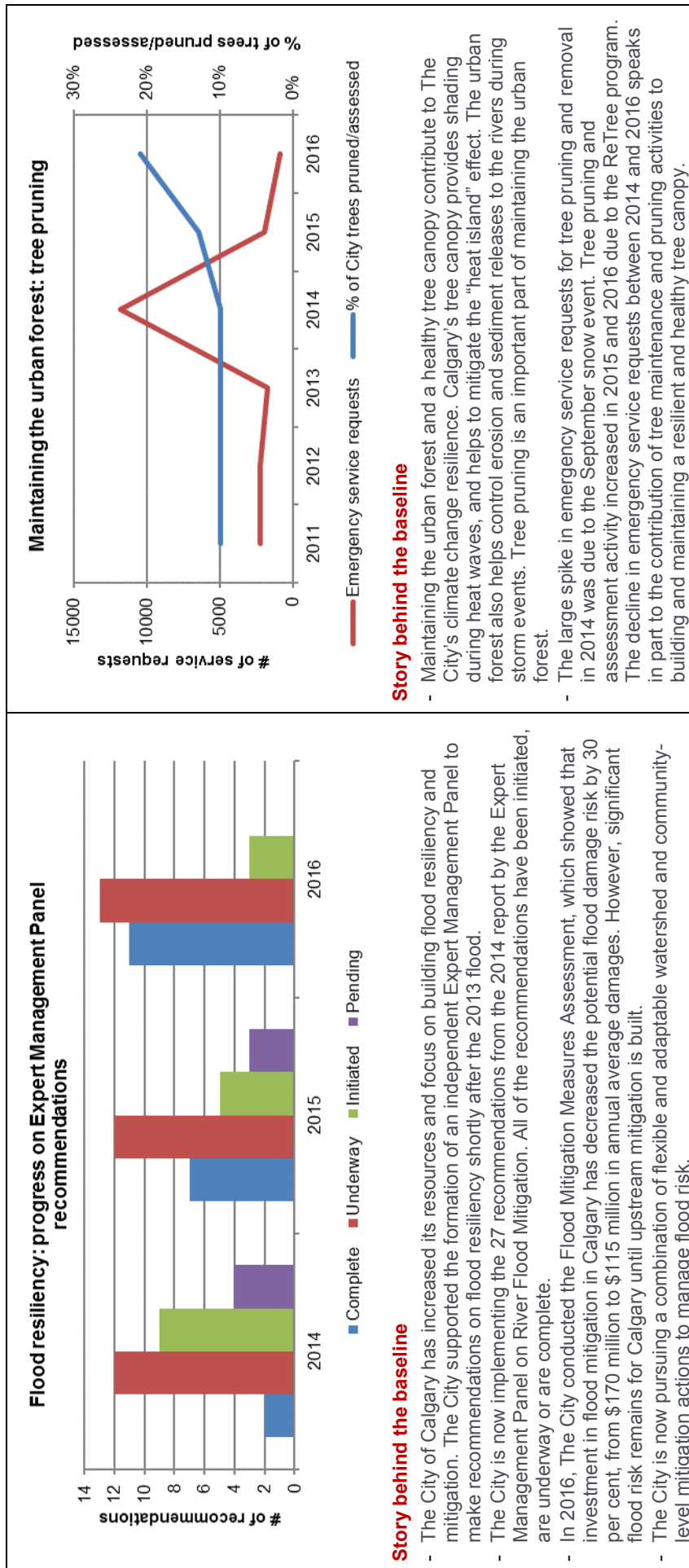
How are we doing?

Calgary's Climate Risks



Story behind the baseline

- The City of Calgary is taking a collaborative approach an internationally-recognized framework to develop the Climate Change Adaptation Plan for Calgary. As part of the framework, The City has completed an evidence-based vulnerability and risk assessment.
- The vulnerability and risk assessment completed identified heat waves, multi-year droughts, winter storms, and short duration high intensity storms (typically in summer) as high-risk scenarios that are expected to become more likely in Calgary as the climate warms. These high-risk scenarios can lead to power outages, loss of the transportation corridor, and/or loss of services. Based on the results of the vulnerability and risk assessment, The City is currently working to develop the Adaptation Plan.



Managing contamination risks on City-owned land

The Corporation is committed to preventing, minimizing and managing contamination on City-owned land. The City maintains operational controls to prevent and mitigate contamination from potential sources on City sites. Reviews are conducted to identify contaminated sites and, where warranted, assessments are carried out to determine the extent and impact of the contamination. Management plans are developed and implemented for sites that pose an unacceptable risk to the environment and/or human health. Preventing, minimizing and managing contamination on City-owned land contribute to Council's priorities of "a well-run city" and "a healthy and green city".

Customers

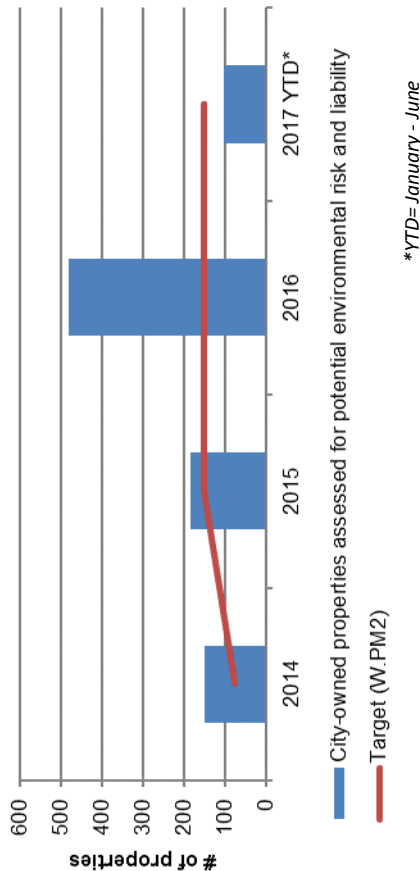
Direct: Corporation, citizens
Indirect: Business units

Key Partners

Internal: Law, Supply Management, Finance, and land-owning business units.
External: Alberta Environment and Parks (AEP)

How are we doing?

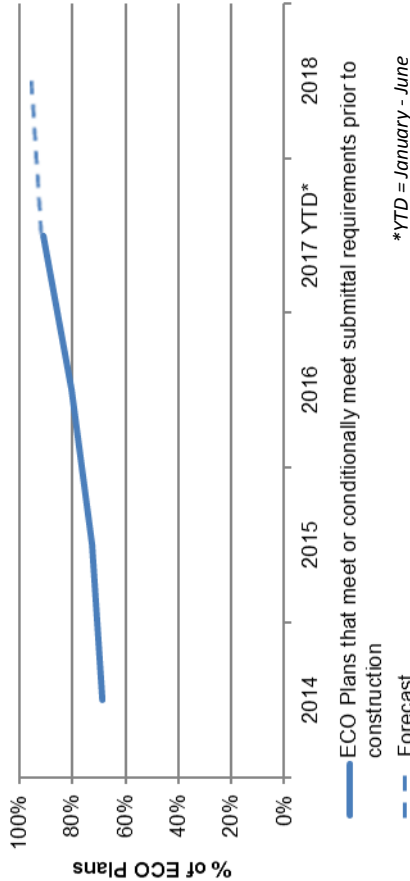
City-owned properties assessed for potential environmental risk & liability



Story behind the baseline

- The number of sites assessed for potential environmental risk and liability each year is dependent on the complexity of the sites assessed and the nature of environmental risks identified, if any. Other factors, such as the number of City land transactions and capital projects, also influence the number of sites assessed each year. The City has an Action Plan target to assess 150 sites per year. In 2016, 481 sites were assessed as many of the assessments were relatively small in scope.

ECO Plans that meet or conditionally meet submittal requirements prior to construction

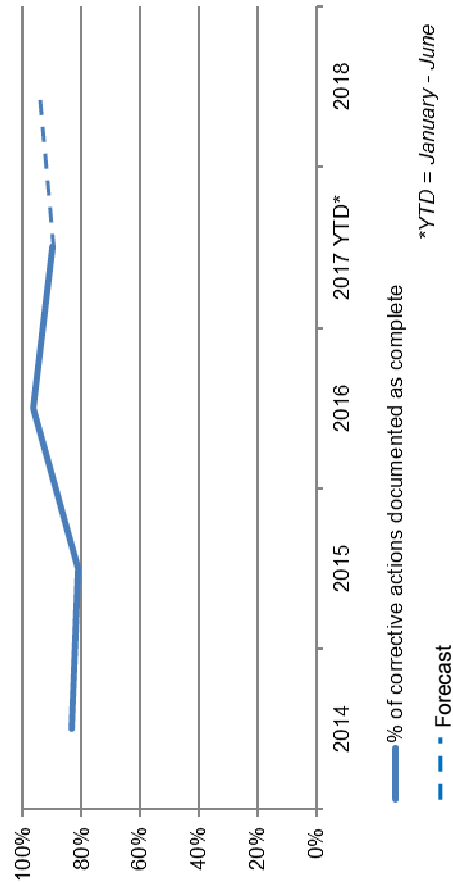


Story behind the baseline

- The City's Environmental Construction Operations (ECO) Plan Policy requires that ECO Plans meet submittal requirements before construction begins. The percentage of sites that have an ECO Plan in place prior to construction has been increasing steadily since 2014 and is trending in a positive direction.
- The Policy requires that ECO Plans be developed to prevent or minimize the environmental impacts of construction activities. The Policy applies to The City's capital construction projects that meet stated criteria. ECO Plans set out project-specific environmental protection and compliance requirements.
- An ECO Plan inspection program has been implemented to verify and monitor compliance with project-specific ECO Plans.

Story behind the baseline

Corrective actions from monthly fuel site inspections



- Maintaining and monitoring The City's fuel sites include annual fuel reconciliation, monthly site inspections, annual line integrity testing, and semi-annual dispenser calibrations. Continuous monitoring systems are also in place to monitor for potential leaks.
- The majority of deficiencies identified during monthly fuel site inspections are related to signage or spill kit materials that need to be replaced. Other deficiencies have included issues such as minor equipment leaks (e.g. fuel nozzle leaks), missing emergency plans, rainwater in containment sumps, and chipping/fading paint on fuel lines or tanks.
- Performance on implementing corrective actions is improving over time. Corrective actions for all types of deficiencies are typically implemented at the time of the monthly inspection. However, some deficiencies may require longer-term planning. For example, a number of inspections in 2015 identified fuel piping that needs to be re-painted to meet an industry standard. The painting has been planned to coincide with future sandblasting and painting of fuel tanks located at the same sites.

Accomplishments

- Assessed 142 sites identified as having a high risk of contamination, meeting the requirements of the Public Sector Accounting Board's *Liability for Contaminated Sites* accounting standard (PS 3260). A process has been established to identify and assess any new high-risk sites in a timely manner.
- Completed risk assessment work related to low-level chloroform concentrations in the subsurface urban environment, working collaboratively with provincial agencies and various consultants. Following this work, Alberta Environment and Parks (AEP) increased the allowable level of chloroform. Many City sites that may have previously required management or remediation due to low-level chloroform concentrations will no longer require such measures.
- Worked with AEP to develop a process for reusing soils lightly impacted by polycyclic aromatic hydrocarbons (PAHs) in the area they originated, rather than hauling the soils away for disposal. A recent application of this method resulted in cost savings to the Bonnybrook Wastewater Treatment Plant expansion of over \$1 million.
- Developed an electronic ECO Plan template and offered support to assist consultants and contractors in preparing ECO Plans that meet stated requirements. Due in part to these efforts, the percentage of plans meeting or conditionally meeting submittal requirements on the first submission increased from 17 per cent in 2016 to 56 per cent in the first half of 2017.
- Updated the Fuel Storage and Operations Policy to better define operating principles and clarify roles and responsibilities for fuel management, including responsibilities related to environmental compliance and protection.
- Improved the consistency and timeliness of entering reports into The City's Site Information Management System, a centralized database of environmental records for City sites. Timely access to records is important for preventing redundant work and for responding to Freedom of Information and Protection of Privacy (FOIP) requests.

Actions / Next steps

- Implement a site assessment project for City-owned fuel sites to assess the potential for contamination.

Waste diversion from City operations and City-owned public spaces

As one of largest organizations in Calgary's ICI sector, The City of Calgary is leading by example on waste diversion by implementing Industrial, Commercial and Institutional (ICI) Waste Diversion Strategy within its own operations and City-owned public spaces. Diverting The City's waste from landfill in a strategic and efficient manner contributes to Council's priorities of "a well-run city" and "a healthy and green city".

Customers

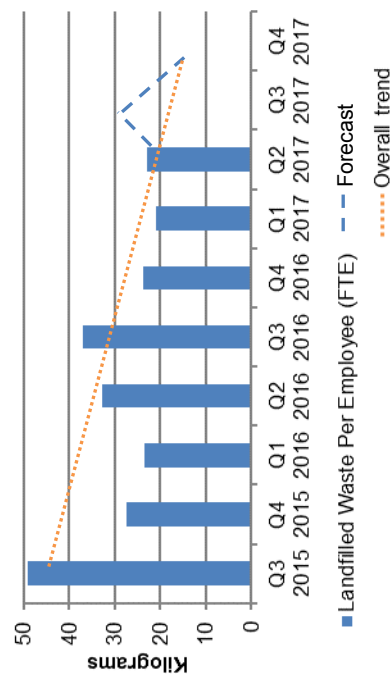
Direct: City employees, citizens
Indirect: Corporation

Key Partners

Internal: Facility Management, Calgary Parks, Calgary Transit, Calgary Recreation, Roads, Supply Management, Transportation Infrastructure, Urban Strategy
External: Good Earth Coffee

How are we doing?

**Landfilled waste from City offices and facilities
(per employee)**

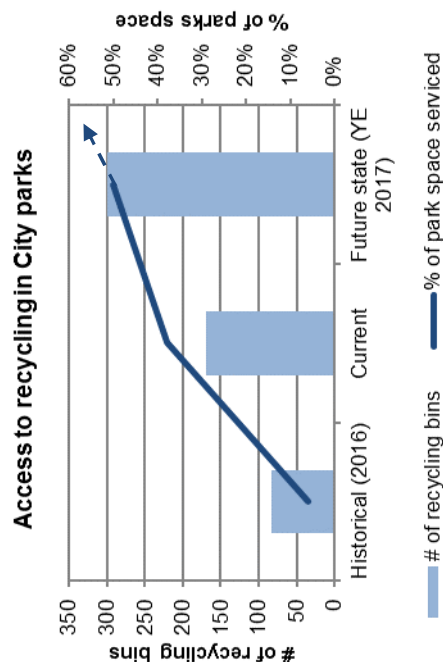


Story behind the baseline

- Overall, the amount of landfilled waste per employee is decreasing over time. Seasonal fluctuations within City operations and services affect the amount of waste generated, with more waste typically generated in Q2 and Q3 due to increased operational activity.
- Increasing employee access to recycling from 15 per cent in 2012 to over 98 per cent in 2016 contributed to the decrease in landfilled waste from City offices and facilities. Implementing coffee and soft drink cup recycling in October 2016 contributed to the decrease.
- The upcoming implementation of a corporation-wide food and yard waste program is expected to contribute to a further decrease in the amount of landfilled waste from City offices and facilities.

Story behind the baseline

- Providing access to recycling is an important step to diverting waste from landfill. Since 2016, The City has been strategically improving access to recycling in City-owned public spaces.
- In order to balance access with capital and operational costs, data such as park amenities and Transit ridership have been used to inform decisions regarding the placement of recycling bins. Where possible, pre-existing bins have been re-used and re-distributed as a cost saving measure.
- For example, Calgary Parks has installed new recycling bins in The City's highest priority parks, based on park amenities, size, and number of existing garbage bins, increasing the percentage of park space provided with access to recycling.



Accomplishments

- Initiated quarterly data reports to business units to support informed decision-making on waste diversion efforts.
- Developed *Corporate Standards for Waste Diversion in Public Spaces* to improve consistency in bin placement, colour and signage in public spaces. The standards are also being applied across City offices and facilities for even greater consistency for City employees.
- Partnered with Good Earth Coffee to provide a zero waste catering option for the City buildings in the downtown core. From mid-2016 to the end of Q2 2017, there were close to 100 zero waste catering events. These events saved approximately 3,400 disposable cups and plates, 900 pieces of plastic cutlery, and 350 disposable totes and trays.
- Implemented a new 311 service request to improve responsiveness to citizen and business unit concerns related to garbage, recycling, and food and yard waste bins in City offices, facilities and public spaces. The new service request will also allow The City to identify trends in reported concerns over time.

Actions / Next steps

- To continue reducing The Corporation's landfilled waste, implement food and yard waste diversion across City offices and facilities.
- To continue improving waste diversion in City-owned public spaces, collect and analyze public space waste assessment data. The data will inform decisions regarding potential which public spaces require food waste diversion, as well as next steps and future improvements for public space waste diversion.
- Identify efficiencies related to bin placement and servicing in public spaces using Geographic Information System (GIS) mapping.
- Monitor performance of the Corporate Waste Diversion Program by conducting waste assessments at select City offices and facilities in 2018.