

City of Edmonton Office of the City Auditor

Part 2
City Productivity and Performance
Audit:

Productivity and Performance Measure Analysis

November 5, 2020



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Report Purpose

This report provides the results of our review on productivity and performance of selected services for the City of Edmonton as requested by Council.

This report contains two main sections:

- 1. Summary Analysis of Productivity and Performance Measure Results
- 2. Individual Service Profiles

Objectives

This report addresses three objectives of the City Productivity and Performance Audit.

- 1. To determine if the City of Edmonton services are measuring and monitoring their productivity or performance.
- 2. To determine if the City of Edmonton services have improved their productivity or performance.
- 3. To determine if the City of Edmonton services are monitoring their productivity or performance in comparison or in context with external organizations (i.e. benchmarking).

A fourth objective of this audit originally identified in the project Terms of Reference was to conduct a management and staffing analysis. This objective was addressed in Part 1: City Productivity and Performance: Management Staffing Analysis report presented at the September 18, 2020 Audit Committee meeting.

Scope

This review does not include service areas governed outside the Administration such as Edmonton Police Services or Edmonton Public Library or Agencies.

The period under review was from 2015 to 2019.

Statement of Professional Practice

This project was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

Executive Summary

Objectives

This audit had three objectives:

- 1. To determine if City of Edmonton services are measuring and monitoring their productivity or performance.
- 2. To determine if City of Edmonton services have improved their productivity or performance.
- 3. To determine if City of Edmonton services are monitoring their productivity or performance in comparison or in context with external organizations (i.e. benchmarking).

Conclusion

Summary of Measure Changes over Time



City services are being measured and monitored for performance however productivity itself is not a priority measurement for most services. There is also a limited use and reporting of benchmarking being undertaken by the City. This means that decision makers may miss out on opportunities to explore operational differences and improve performance.

We summarized results based on whether trending either improved or declined by at least 10%. Of the 52 productivity and performance measures we reviewed, 18 demonstrated a positive change to productivity or performance. 11 showed a negative change in productivity or performance, and 23 showed no significant change (i.e. trends were within 10%). These results should be considered in context with service standards and client satisfaction.

There is a reluctance in service areas to benchmark their performance to external organizations. We did observe operational level benchmarking is conducted within a few services but overall limited activity exists. Differences in practices is most often indicated as the reason. The lack of benchmarking limits the information available to decision makers to understand the City of Edmonton's practices and performance in context of how other cities or organizations are performing and potential opportunities for improvement.

Recommendation

We recommended that the Administration explore best-practices to implement a corporate process for incorporating benchmark measures into the Enterprise Performance Management (EPM) framework for the City's services and transformational actions. This includes development of clear guidelines for when and how benchmarking is used. Results will be reported to members of ELT and Council on a regular-basis (e.g., annually). Relevant benchmarks for services and other methodologies used to inform EPM targets should be clearly documented and available to members of ELT and council to provide context for interpreting results to inform decision-making.

Methodology

Sample selection

Our selected scope included the review of 27 of the 73 City services. The criteria used to select the sample set of 27 services included program budget, number of employees, and the impact the services have on citizens.

From the 27 selected services we created 30 profiles which describe the services and measures. These 30 profiles include 52 productivity and performance measures.

This sample set represents approximately 75% of all the City of Edmonton full time equivalent (FTE) positions.

Time period

The period under review was from 2015 to 2019. In some cases five years of data was not available due to organizational changes within the City.

Measure selection

Working with the Administration, we strived to present productivity measures where possible. In many cases the information was not available for productivity measures so instead, cost efficiency or effectiveness measures were presented. Also, several performance measures were presented in many of the profiles in order to provide a better representation of a service's performance.

Data validation

We reviewed all provided data; however, we did not validate all of the submitted data. We relied on the data providers to ensure the data was accurate and reliable.

Inflation

None of the measures presented in the report have been normalized to account for inflation.

Assessment criteria

Using 10% as a base for variance over the period of review (typically 5 years) we categorized the performance results.

Contextual information

Key employees that were knowledgeable about each of the selected services assisted in the identification of meaningful measures. They then provided data to calculate those measures and provided additional information or context to explain the results.

Productivity and Performance Measurement

Current Measurement

Through the Enterprise Performance Measurement program, the City has developed numerous performance measures for City services. The measures are useful to define effectiveness and efficiency of service results, however limited efforts have yet been made to identify productivity measures. The majority of productivity and performance measures presented within this report were developed collaboratively by the OCA and service area support teams during this audit.

Limited Benchmarking

Members of Council made a specific request to include benchmarking as part of this audit. However, we were only able to include benchmarks for eleven of the measures included in this report. The included benchmarks were sourced from both general and service specific services:

- Municipal Benchmark Network of Canada (performance measures covering a variety of municipal services)
- An independent third-party research firm providing comparisons on IT performance
- Canadian Urban Transit Association (CUTA)
- Data provided from benchmark partners within Edmonton
- Data provided directly from other municipalities

Although the City of Edmonton is a member of the World Council of City Data (WCCD), the metrics provided through the WCCD tend to focus on higher-level strategic goals and outcomes as opposed to the operational-level of analysis we have undertaken.

Some business areas are benchmarking services at an operational-level. However, these efforts are only occurring sporadically in the City and results are not being reported corporate-wide. Of the 52 measures identified in this report, City staff presented 7 benchmark examples that were comparable. Working with MBNCanada benchmarks data we identified another 4 potential benchmarks. The primary reason provided by Administration services for the inability to benchmark their service measures was that it was not possible to conduct a true "apples-to-apples" comparison.

Benchmarking comparisons should be similar to have value; however, expecting exact comparisons is not reasonable. The limited use of benchmarking of City of Edmonton services is a risk for the City that results in decision makers lacking critical information to gauge service performance. Additionally, choosing not to benchmark at all means that decision makers in the City operation miss out on an opportunity to explore operational differences and improve performance. Without this information, decision makers cannot make informed decisions about such things as service levels or alternative ways to deliver services.

Recommendation

Improve benchmarking

Recommendation

We recommend that the Administration explore best-practices to implement a corporate process for incorporating benchmark measures into the Enterprise Performance Management (EPM) framework for the City's services and transformational actions. This includes development of clear guidelines for when and how benchmarking is used. Results will be reported to members of ELT and Council on a regular-basis (e.g., annually). Relevant benchmarks for services and other methodologies used to inform EPM targets should be clearly documented and available to members of ELT and council to provide context for interpreting results to inform decision-making.



Responsible Party The City Manager



Accepted by Management

Management Response:

Administration accepts this recommendation and will conduct a pilot project to explore best-practices to identify and include productivity benchmark measures into the Enterprise Performance Management (EPM) framework and its reports. Key milestones and dates are as follows:

	Milestone	Date
1	Identify Services to Pilot	2021 - Q1
2	Engage with Service Areas to Introduce Benchmark Measures	2021 - Q2
3	Assess Industry Landscape for Potential Benchmarking Sources	2021 - Q3
4	Develop Program Level Corporate Performance Report	2021 - Q3
5	Assess Effectiveness of Productivity Benchmarking Pilot	2021 - Q4

Measures

This report includes 52 measures of productivity or performance contained within 30 individual profiles for 27 City of Edmonton services.

Depending on the measure, results can show:



A positive upward trend



A positive downward trend



A negative upward trend



A negative downward trend



No significant change

"Positive" and "negative" trend assessments are determined from a productivity or performance perspective. A positive trend indicates an improvement in productivity or performance, and a negative trend indicates a decline. Depending on the definition of each selected measure, positive and negative trends can be either upward or downward.

"No significant change" represents a change of less than 10% (either upward or downward) over the review period. No significant change indicates that the result is neither positive nor negative.

It is important to consider:

- Each profile must be reviewed with consideration to the performance measure(s) selected.
- Productivity and performance results must be considered in context of whether program outcomes are being achieved for the services reported on.

Service	Measure	Result	Page
Bylaw and Provincial Act Enforcement: Community Standards Peace Officers	Complaints per Community Standards Peace Officer	(12
Bylaw and Provincial Act Enforcement: Municipal Bylaw Enforcement	Complaints per Municipal Enforcement Officer	$\overline{\bigcirc}$	13
Bylaw and Provincial Act Enforcement: Transit Peace Officers	Offenses per Transit Peace Officer	Θ	14
Community and Neighbourhood Capacity Building	Community Leagues per Neighbourhood Recreation Coordinator	lack	15
Corporate Accounting and Poporting	Accounts Receivable Transactions per Accounts Receivable Employee	Θ	13
Corporate Accounting and Reporting	Invoices Paid per Accounts Payable Employee	$\overline{-}$	16

Service	Measure	Result		
	Caller Satisfaction	Θ		
Customer Access	Handle Time per Call (in seconds)	$\bigcirc \uparrow$	18	
	Contacts per FTE	(
Davidsoment Conject Land Applications	Land Development Applications per Development Services FTE	lack		
Development Service: Land Applications	Land Development Bylaws Brought to Public Hearing per Development Services FTE	lack	19	
Development Service :Subdivision Applications	Subdivision Applications Conditionally Approved for Registration per FTE	Θ	20	
	Average Attendees per Session	lack		
Employee Development and Training	Percent of Workforce that Attended at Least One Session	lack	21	
	Operating Cost per FTE	lacksquare		
Facility Management and Maintenance	Custodial Cost per Sq Foot	lack		
Facility Management and Maintenance	Maintenance Cost per Sq Foot	lack	22	
Fire Prevention Inspection, Enforcement and	Inspections, Licenses, and Permits per Fire Prevention Officer	Θ	24	
Investigation	Investigations per Investigator FTE	lack		
	Percent of Fires Contained to Room of Origin	Θ		
Fire Rescue: Fire Suppression	Percentage Full First Alarm Assignments within 11 Minutes	$\overline{\bigcirc}$	25	
	Events per Firefighter	(
Float Management and Maintenance Municipal	Municipal Fleet Personnel Cost per Vehicle	Θ	27	
Fleet Management and Maintenance: Municipal	Municipal Fleet Vehicles per Fleet FTE	Θ		

Service	Measure	Result		
Floot Management and Maintenance: Transit	Transit Fleet Personnel Cost per Vehicle	Θ	28	
Fleet Management and Maintenance: Transit	Transit Fleet Vehicles per Fleet FTE	Θ		
Human Resources Management: Payroll	Direct Deposits per Payroll FTE	(29	
Information Technology Hardware Infrastructure	Information Technology Spend per FTE	(
Information Technology Hardware Infrastructure	Percent of Information Technology FTE to City FTE	lacksquare	30	
Infractructura Dalii anu	Project Cost per Project Management FTE	$\bigcirc \hspace{-1em} \uparrow$		
Infrastructure Delivery	Project Management Costs as Percentage of Total Project Costs	lacksquare	32	
Land Use Planning: Development Permits	Development Permits per FTE	Θ	33	
Park and Open Space Access	Cost per Hectare	(34	
Park and Open Space Access	Hectares per 1,000 Labour Hours	lacktriangle		
Property Assessment	Percent of Roll Stability at Year End	$\overline{\ominus}$	35	
Property Assessment	Properties per Assessor	(33	
Purchasing	Operating Cost per \$1,000 of Purchases	•	36	
Recreation and Cultural Programming	Program Fill Rate	$\overline{\ominus}$	37	
Recreation Facility Access	Facilities Attendance per Facilities Staff	$\overline{\ominus}$	20	
Recreation racinty Access	Facility and Attractions Customer Satisfaction	Θ	38	
	Cost per Pothole			
Road Service	Cost per Lane KM of Snow Removal	(39	
	Cost per Lane KM of Spring Sweeping	(

Service	Measure	Result		
Safety Code Permission and Inspection	Safety Code Inspections Carried Out by the City per FTE	$lack \psi$	40	
Tax Collection	Tax Collection Rate by Deadline	$\overline{\bigcirc}$	41	
Tax Collection	Properties per Taxation Employee	(
	Operating Cost per Revenue Vehicle Hour	$\overline{\bigcirc}$		
Transit	Operating Cost per Ride	lack	42	
	Rides per Transit FTE	$\overline{\bigcirc}$		
Warehousing and Inventory Management	Warehouse Transactions per Warehouse Employee	$\overline{\bigcirc}$	44	
Waste Collection	Operating Cost per Tonnage of Collected Waste	1	45	
Workplace Health and Safety	Workforce Health and Safety Operating Costs per City FTE	Θ	47	

Service Profiles

This section of the report contains individual profiles of each of the selected services.

Profiles

Profiles were developed for each of the selected services to provide a high level overview of their productivity or performance.

Some of the services that were more complex or diverse may have multiple profiles and multiple measures. In total there are 30 profiles created which contain 52 productivity and performance measures.

Each profile contains the following information:

- 1. Title and short service description.
- 2. Summary observation on productivity or performance.
- 3. Graph of productivity or performance measure. Many of the profiles include multiple graphs to add additional context on performance.
- 4. Analysis of productivity or performance observed. In many cases, this information was provided by the service area to explain the context of the measure and the results.
- 5. Additional Information which provides more context on the service, changes in performance, or additional metrics.
- 6. Benchmarking comparison when available or provided by the service area.

The profiles are presented alphabetically by service name.

Bylaw and Provincial Act Enforcement: Community Standards Peace Officers

Community Standards Peace Officers encourage the safe use and enjoyment of public and private property and parkland. Peace officers are not police officers. Transit Peace Officers are shown in a separate profile.



The number of complaints handled per officer declined significantly from 2015 to 2016 and remained fairly consistent since 2016. This suggests a negative downward decrease in productivity.

Complaints per Community Standards Peace Officer



^{*}Complaints do not include the work performed by the Commercial Vehicle Inspection or Vehicle for Hire teams.

Analysis:

An increase of 15 officers in 2016 decreased the average number of complaints per officer that year. Between 2016 and 2019, approximately 8 additional officers were added as the number of complaints trended upwards.

The increase in complaints specifically for 'homeless encampments', 'infill', and 'barking' as well as staff not being hired to keep up with volumes during peak seasons has resulted in the decline in response and resolution times for some years. For instance, the Animal Control unit is no longer hiring seasonal temporary staff who would help respond to barking complaints that rise in the summer months.

Although productivity has declined since 2015, response and resolution times have generally improved since 2016 with the additional Peace Officers.

Additional Information:

Five key complaint areas include dogs barking, homeless encampments, infill issues, sightline obstructions.

The response time is how long it takes to respond to the complaint. The resolution time is how long it takes to resolve the complaint.



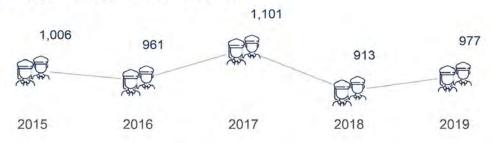
Bylaw and Provincial Act Enforcement: Municipal Bylaw Enforcement

Municipal Bylaw Enforcement Officers provide effective enforcement of Edmonton bylaws including the Community Standards Bylaw, Zoning Bylaw, Business Licensing Bylaw, and Public Places Bylaw. These bylaws regulate property standards in Edmonton and ensure businesses are complying with licensing provisions.



The number of complaints per Municipal Bylaw Enforcement Officer has varied each year as a result of changes to staffing and the number of complaints received. Overall, productivity from 2015 through 2019 has remained relatively consistent.

Complaints per Municipal Enforcement Officer



Analysis:

The number of complaints received related to municipal bylaw enforcement fluctuated each year between 2015 and 2018, but averaged 39,700 complaints yearly. In 2019, 36,158 complaints were filed. The number of Municipal Bylaw Enforcement Officers also ranged between 37 and 42 depending on the year.

The resolution times for weed complaints in 2018 and 2019 is a result of workforce reduction (from 9 to 6 Municipal Bylaw Enforcement Officer I) and increased travel due to expanded patrol areas from annexation.

Response and resolution times are often weather dependent for Snow/Ice on 'Sidewalk' complaints. During freeze thaw cycles, ice can remain on the walk for weeks and the file cannot be closed.

Additionally for Snow/Ice on 'Sidewalk' complaints, extended periods of snowfall could lead to 311 complaint lines being flooded for a period of time. When the 311 lines are restored, an influx of complaints being registered at once can result which affects response time.

Additional Information:

Three of the most common complaints received by Municipal Bylaw Enforcement are related to nuisance properties, snow/ice, and weeds. The response times indicate the average number of days it takes a Municipal Bylaw Enforcement Officer to respond to the complaint. The resolution time indicates the average number of days it takes to resolve the complaint.

Nuisance Property	2019 2018 2017 2016	Responding (days) 4.0 2.4 3.2 4.6	S EQUIT COME	Resolution Time (days) 32.0 25.1 20.8 23.4	
Nuii	2015	■ 2.9		21.8	
Snow	2019 2018 2017 2016 2015	 2.6 1.9 2.5 2.4 2.2 		■ 16.0 ■ 11.6 ■ 10.4 ■ 11.2 ■ 14.2	
Weeds	2019 2018 2017 2016 2015	2.5 2.5 2.5 4.6		37.5 36.3 14.3 16.0 16.2	

Bylaw and Provincial Act Enforcement:

Transit Peace Officers

Transit Peace Officers actively promote order, disorder prevention and voluntary compliance with social norms surrounding acceptable transit use.



The number of offenses per Transit Peace Officer was declining until 2019 at which time it increased. Overall, productivity from 2015 through 2019 has remained relatively consistent.

Offenses per Transit Peace Officer



Analysis:

After a steady decline in the volume of offenses from 2015 to 2018, transit-related offenses increased in 2019.

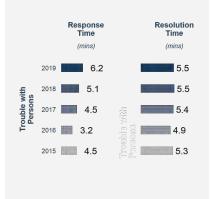
The primary driver for this increase in activity in 2019 is due to the Transit Safety Initiative project with the Edmonton Police Service. This initiative resulted in extra staff shifts and focus on proactive tasks which increased the amount of offenses significantly for the area.

Transit Peace Officers joined the Community Standards Peace Officers in 2018. Beginning in August 2019, Transit Peace Officers shifted from having 6 teams to 8 teams.

Additional Information:

Edmonton Transit Peace Officers indicate that they strive to enhance the safety and security of customers, employees and the general public by:

- Providing ETS patrons with general assistance and exceptional customer service.
- Responding to security-related incidents, emergencies and intrusion alarms.
- Enforcing municipal bylaws and Provincial Statutes.
- Conducting mobile and foot patrols on ETS property and facilities.



Community and Neighbourhood Capacity Building

Community and Neighbourhood Capacity Building is a public service provided to community groups offering organizational development expertise to build capacity to pursue community development opportunities.



Since 2015, the number of Community Leagues supported by each Neighbourhood Resource Coordinator has increased. This positive upward trend suggests increased productivity.

Community Leagues per Neighbourhood Recreation Coordinator



*Neighbourhood Resource Coordinators positions were created in 2018. Previously, the role of this position was performed by Community Recreation Coordinators.

Analysis:

Neighbourhood Resource Coordinators are a key resource providing this service, in addition to other branch staff. This measure gauges the workload of Neighbourhood Resource Coordinators and shows how many Community Leagues each Coordinator supports. In 2018, the number of Coordinators was reduced from 37 to 28 staff (a 24 percent reduction).

The service is provided by the Community Standards and Neighbourhoods branch and Social Development branch of Citizen Services. Neighbourhood Resource Coordinators are assigned to every neighbourhood in the city and partner with Edmontonians, community leagues, schools, institutions, not-for-profit organizations and local businesses to help them to leverage networks, navigate City processes, and access resources. Some of the goals and outcomes of this section and its services are:

- To build local networks and inspire and support citizens and groups to identify and act collectively on shared aspirations and challenges.
- Local citizens are the experts on their community, and when assisted by resources including Neighbourhood Resource Coordinators, they can mobilize their collective knowledge, skills, and passions and can create the kind of neighbourhood they want to live in.
- Staff work together with communities to advance social inclusion, deepen sense of community, create neighbourly relationships, animate public spaces, develop parkland and amenities, build local leadership, and strengthen neighbourhood-level capacity to collaborate on what matters to them.

Additional Information:

This service falls under the City's Community Development Program.

Subservices include:

- 1) Diversity Advisory
- 2) Community Group Capacity Building
- 3) Community
 Environmental Planning
 and Advice
- 4) Volunteer engagement service

Community Standards and Neighbourhoods has not regularly measured Community Leagues', partners' and groups" satisfaction with this service. However, a Sense of Community Index survey has been implemented in 2020.

Corporate Accounting and Reporting

Accounts payable and accounts receivable services are managed within the Financial Management program. These internal services are performed to provide financial transaction record keeping and processing.



The number of accounts receivable transactions per accounts receivable employee and the number of invoices per accounts payable employee show a slight increase 2015 to 2019, however, represents no significant change.

Accounts Receivable Transactions per Accounts Receivable Employee



Invoices Paid per Accounts Payable Employee



Analysis:

Since 2015, the transactions per accounts receivable staff member has increased by 6.8%. Although declining since 2016, the number of invoices processed per accounts payable staff member has increased overall by 6.6%.

Processing of Accounts Receivables can be influenced by many factors such as changing economic conditions (e.g., effects of recessions, bankruptcies and receiverships), weather conditions (e.g., damages to City property resulting from fires, floods, snow and ice, and bylaw infractions).

Changes to the approach in processing Accounts Payables occurred during 2015 to 2019. In 2015 to mid-2017, processes were still very much manual. By mid-2017 a new system was implemented and significant changes occurred. In 2018, limitations in the new system were identified as stabilization efforts continued.

Additional Information:

Corporate Accounts Payable and Receivable are part of the Treasury Management Section in the Financial Services Branch.

As part of the financial and management reporting cycle, these services enable useful decision-making.

Corporate Accounts
Receivable is a centralized
billing and collection service
for all goods and/or services
provided by Operating
Departments (excluding EPL,
EPS & Assessment and
Taxation). This includes cash
receipt management,
revenue recognition and
reconciliation.

Services are performed striving for accuracy and timeliness. Financial transactions are managed to ensure that they and their related processes comply with internal policy and external regulations.





Corporate Accounting and Reporting



The City of Edmonton's performance and productivity is favourable when compared to three benchmarking measures available for this service.

Percentage of Receivables Written Off (2018)

0.10% 0.04% City of Benchmark

Percentage of Receivables Written Off

In 2018, the percentage of receivables written off by the City at 0.04% was lower than the median value of 0.10% reported in the MBNCanada Performance Measurement Report.

Number of Days to Collect Receivables (2018)



Number of Days to Collect Receivables

In 2018, it took the City 27 days on average to collect a receivable which is 17 days fewer than the MBN median identified in the 2018 MBNCanada Performance Measurement Report.

Average Number of Invoices Paid per Accounts Payable Employee per Year (2016-2018)



Invoices paid per Accounts Payable Employee

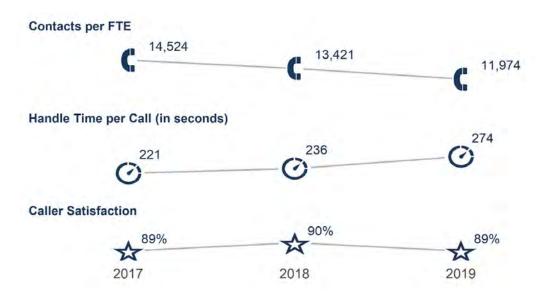
Between 2016 and 2018, the City paid an average of 34% more invoices per accounts payable FTE than the median identified in the 2018 MBNCanada Performance Measurement Report.

Customer Access

This service includes the Edmonton Service Centre front counter in-person services, the 311 Contact Centre including the call centre and online app, and Digital Services, which is the custodian of the edmonton.ca website. The included measures reflect the performance of the 311 Contact Centre.



Since 2017, with a decline in contacts per FTE, and an increase in handle time per call, productivity appears to have decreased. However, satisfaction with the service has remained consistently high, even with increasing complexity in the types of contacts received.



Analysis:

Since 2017, the number of contacts per FTE for Customer Access has declined by 18%, and the time it takes to complete a call has increased by 24%.

311 has experienced a noticeable shift in the type of inquiries received. Accessing information using digital channels has increased by 89% since 2017. While information inquiries, such as checking what time the bus arrives or the hours of operation for recreational facilities have been on a downward trend, they also require significantly less effort.

The current mix of inquiries to 311 includes a higher proportion of requests for service requiring more effort with a higher level of interaction, resulting in increased handle times. Examples include snow and ice concerns, pothole reports, and streetlight issues. Other factors contributing to the increased effort include the introduction of new processes, greater empowerment of the frontline 311 staff and the addition of bylaw services.

The increase in effort to handle the more complex interactions has been offset by the positive downward trend in the basic information inquiries resulting in the same staffing levels required to manage the overall volumes.

Since 2012, satisfaction with 311 has remained consistently above 85% and trended upward.

Additional Information:

311 provides citizens with a single point of contact for City of Edmonton information, programs, and services.

311 agents offer personalized services for citizens including program registrations, transit trip planning, and inspection bookings.

In 2019, 96% of Edmontonians said 311 is a convenient way to obtain the information or seek the service they require. This result is consistent with previous years.

In 2020, 311 hours were reduced from 24 to 12 hours, seven days a week as part of the Program and Service Review recommendations.

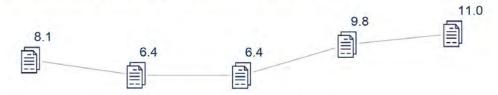
Development Service: Land Development Applications and Bylaws

Development Services review area and neighbourhood structure plans, outline plans, rezoning and road closures given City of Edmonton policies, bylaws, urban planning analysis and community engagement. Files are advanced to City Council Public Hearing for decision.

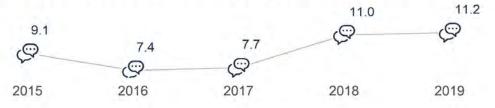


The number of land development applications per FTE and the number of land development bylaws brought to public hearing have both increased indicating an increase in productivity.

Land Development Applications per Development Services FTE



Land Development Bylaws Brought to Public Hearing per Development Services FTE



^{*}Drainage and Transportation engineers that review files and provide input, as well as Administrative and student staff members are not included in the number of FTEs.

Analysis:

The number of land development applications per Development Services FTE has increased by 36% since 2015. The number of land development bylaws brought to public hearing per Development Services FTE has increased by 23% since 2015.

Over the last two to three years, staff levels have decreased while workloads have stayed the same or increased, thus influencing results. In this operational environment, the complexity of file types vary which affects the number of files an FTE can accommodate (e.g. an infill tower proposal versus a less complex greenfield rezoning).

Rezoning process improvements took place in 2019. The service delivery effectiveness and productivity will be assessed and improvements are intended to be realized in 2021.

Additional Information:

Planning Coordination is a team of land use planners, transportation engineers, drainage engineers, environmental planners, bylaw officers and clerks. They ensure land development proposals conform to approved plans, provincial legislation, Council policies, guidelines and directives, meets standards for safety and public health, and is compatible with existing infrastructure systems.

The primary function of the section is to review Land Development Applications and provide recommendations to Council on proposed development. Applications consist of:

- New Area Structure Plans& Neighbourhood Plans
- Plan Amendments
- Rezonings (including Direct Control Districts)
- Road Closures

Development Service: Subdivision Applications

Subdivision is the process of dividing a property into two or more legal lots. City staff review applications to ensure the parcels created are suitable for their intended use including environmental considerations, are serviceable, have access to a road or a lawful means of access, and conform with all statutory plans and the Edmonton Zoning Bylaw.



The number of subdivision applications and subdivision lots conditionally approved for registration per FTE increased from 2015 to 2018, however declined significantly in 2019 resulting in no significant change in productivity from 2015 to 2019.

Subdivision Applications Conditionally Approved for Registration per FTE



^{*}Administrative and student staff members are not included in the number of FTEs.

Analysis:

The number of subdivision applications conditionally approved for registration per FTE has increased by 2%.

In this service's operating environment, FTEs spend time with developers to analyze, communicate and negotiate the conditions of subdivision applications. Applicants often submit change requests to existing subdivision applications as they revise their product mix to meet a quickly changing economic environment. This results in re-work on previously-approved files.

The 2019 economic slowdown had an impact on this area's productivity. However, it has adjusted by reducing hiring, maintaining vacancies and continuing to incorporate process improvement work from 2019.

Changing the way subdivision services are provided and to improve customer service was a focus in 2019. The team worked with City staff and city-building partners (industry, citizens, service providers, etc.) to find and implement solutions to the challenges experienced. The initiative included improvements to processes, technology and service delivery.

Additional Information

Subdivision is a two-part process: conditional approval and endorsement. Separate applications and fees are required for each part.

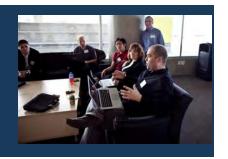
Conditional approval is the process of determining what conditions will need to be met to subdivide lots. The endorsement process confirms that these conditions have been met.

There have been a number of re-organizations over the five-year period, refocusing how services are delivered. One such change saw the integration of transportation and drainage staff in 2017.

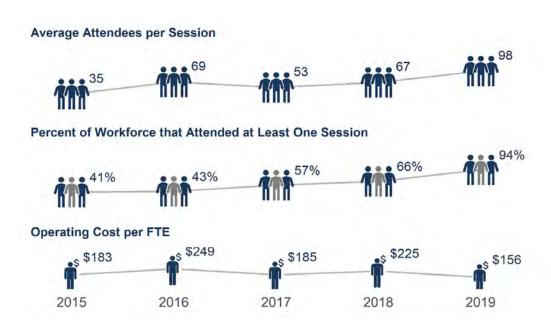
The Development Service was subject to a process improvement project that was completed in late 2019.
According to the Urban Form and Corporate Strategic Development department, approximately a third of FTEs were assisting with the completion of this project.

Employee Development and Training

This service provides learning opportunities focused on enhancing the skills, competencies and knowledge of employees within the City of Edmonton to ensure the City has a skilled, engaged, and flexible workforce that is positioned to deliver services to clients.



The average number of attendees per session and the percent of the workforce that attended at least one session have increased, while the operating cost per organization FTE has decreased. This suggests a positive change in both productivity and cost efficiency.



*Operating Cost is the workforce costs associated with the Learning Centre plus materials and external contracting. City of Edmonton FTEs include Boards and Commissions, Edmonton Police Service and Edmonton Public Library.

Analysis:

Since 2015, Employee Development and Training has shifted towards offering fewer unique course options and fewer sessions. At the same time, attendance in the sessions being offered has increased by 181%, and the number of employees who have attended at least one session has increased by 129%.

The City's School of Business - now known as the Learning Centre - was established in 2015. Since then, an increased use of online learning options has contributed to the increase in the average number of attendees per session and decrease in operating cost per FTE.

The Learning Centre also provides training, facilitation and consulting for specific client groups on request in addition to the corporate offerings, which are not included in the measure results. Corporately, mandatory course training increased with more intentional communication and leadership support (contributing to the increase in the percent of workforce that attended at least one session).

Additional Information:

This service is an integral part of the Employee Experience and the Integrated Workforce Strategy.

The Average Attendees per Session results include both participants of online and in-person sessions. This higher proportion of online sessions influences the results of this measure.

Online Training Participants



2015 2016 2017 2018 2019

The completion rate for the corporately identified mandatory courses increased from 44% in January 2018 to 70% in December 2019.

Facility Management and Maintenance

Facility Maintenance Services provides ongoing preventative, predictive, corrective, demand, breakdown, replacement and minor renovation services to internal and external clients, and supports engineering, special projects, and capital requests. They also provide custodial services for city owned and leased facilities including special events consisting of emergency flood and restoration, interior pest management, graffiti, construction and demand cleanup.



Facility maintenance and custodial costs both have increased from 2015/2016 to 2019 indicating a negative upward trend on cost efficiency.

Maintenance Cost per Square Foot



Analysis:

Since 2016, the maintenance costs per square foot for City facilities has increased approximately 13%. From 2015 to 2019, custodial costs per square foot in Chancery Hall and Century Place have increased approximately 13% as well, which has been impacted by the increase to provincial minimum wage levels.

Factors to be considered for costs incurred:

- New technology in new/rehab projects increase maintenance and training costs
- Upper level management changes have integrated better oversight and distribution of staffing
- Specialized tasks are being handled by specialty contractors
- Achieving appropriate balance of staff to contractor in custodial
- Having multi-skilled staff technicians to keep subcontractor costs lower
- Custodial specifications and scopes are increasing
- Both custodial and maintenance continue to maintain a good relationship with subcontractors so they respond to issues quickly and perform quality work

Additional Information:

In 2019, Facility Maintenance Services contracted out 49% of the work. 51% was completed in-house. The business only includes subcontractor work if in-house staff cannot perform work due to resources, equipment or training.

Competitive bidding and new contract management processes have minimized "scope creep" and cost overruns.

Occupancy levels are increasing causing the level of cleaning to also increase overall.

Facility Maintenance Services has indicated it is constantly evaluating its core business, and that transformation project initiatives have allowed them to evolve in industry best practices.





Facility Management and Maintenance



The City of Edmonton's performance is favourable when compared to the benchmarking measure available for this service.

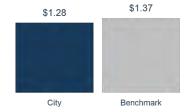
Average Custodial Costs per Square Foot

The average custodial costs per square foot in Chancery Hall and Century Place are approximately 7% lower than the average of comparable buildings* in Edmonton.

Approximately 65% of all custodial services are contracted out and 35% is completed with City staff.

*Comparable buildings include: Edmonton Tower, EPCOR Tower, Commerce Place, and Manulife Place

Average Custodial Cost per Square Foot (2016-2019)



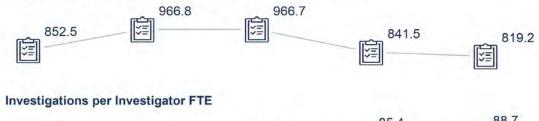
Fire Prevention Inspection, Enforcement and Investigation

Fire prevention and enforcement involves delivering inspection and education services to reduce the probability and consequences of emergency events in a timely, thorough, professional, and fair manner. Fire investigation is a public service to conduct investigations of all reported fires and explosions under the authority of the Alberta Safety Codes Act. Findings from investigations are reported on in order to enhance information for future fire prevention.



The average number of fire inspections, licenses, and permits issued by Fire Prevention Officers shows no significant change while the number of investigations per Investigator shows a positive upward trend suggesting increased productivity.

Inspections, Licenses, and Permits per Fire Prevention Officer





Analysis:

The fluctuating volume of inspections, licenses, and permits is due to a number of factors including staffing availability, increased inspection complexity, and a declining business economy.

The Safety Codes Council introduced a new safety codes officer designation during 2019 which required training for all Fire Prevention Officers. The course was one week in duration and 46 staff members participated.

Although there were a consistent number of 41 Fire Prevention Officer FTEs each year, high turnover of Fire Prevention staff during 2018 and 2019 resulted in an increased number of days that positions were vacant.

Complexity of fire inspections that include large special events, and unscheduled development plan and construction site reviews has increased, resulting in the average completion time of an inspection becoming longer in duration.

The economy retracted in 2019, so overall business license requests to Fire Rescue Services declined by approximately 10%. This resulted in a lower demand for license approval services and the required inspections to complete them.

Additional Information:

Fire prevention and enforcement is provided to property owners and occupants to ensure that commercial and building occupants comply with the Alberta Fire Code and have appropriate safety messaging.

Fire investigations are required to determine the cause, origin and circumstances of every fire in which a person dies or suffers injury that requires medical attention, or in which property is damaged or destroyed.

Through the Quality
Management Plan, Fire
Prevention Officers conduct
inspections to ensure
buildings are in compliance
with the National Fire Code,
reference standards and
bylaws.

Fire Prevention Inspections and Enforcement provides *Fire Safety Education Service* - a complementary public service offering education and awareness on fire safety risk management with the objective of reducing fire events.

Fire Rescue: Fire Suppression

This area provides a 24-hour fire rescue response that is timely, well-equipped, well-trained, and professional. It is a public service provided to affected citizens of fire, medical, rescue and hazardous materials emergency incidents, property owners, and insurance companies.



The average number of events per firefighter shows a positive upward trend indicating increased productivity. There is no significant change to the percent of fires contained to the room of origin. The percent of full first alarm assignments (i.e. the initial response to a fire event with a minimum of 16 firefighters) on scene within 11 minutes shows no significant change.

Overall this suggests increased productivity.

Percent of Fires Contained to Room of Origin | Percentage Full First Alarm Assignments within 11 Minutes | 90% | 90% | 90% | 88% | 88% | 2015 | 2016 | 2017 | 2018 | 2019

Analysis:

The number of events per firefighter has increased because the number of events has increased by 33% since 2015 while the number of firefighters has increased 8.5%.

There is a target to have firefighters contain fires to the room of origin 75% of the time. The target was achieved for 2019. The target for the percentage of Full First Alarm Assignments within 11 minutes is 90%.

Events have increased as a result of a trend seeing increases to the number of medical calls and alarm calls. In 2019, medical events comprised 67.2% of total emergency event call volume while alarm events comprised 16.2% of the total. Contributing factors to the increase in events could be population growth and an aging demographic.

There are many elements that impact emergency event travel times including road conditions, traffic volume, and construction projects. The percent of full first alarm assignments may have decreased slightly as a result of geographic locations of fire events occurring in areas difficult to assemble a minimum of 16 firefighters within 11 minutes. Fire suppression response deployment is based on a city-wide and station-based model.

Additional Information:

Full first alarm assignment consists of three components:

- 1. Emergency Communications Time
- 2. Fire Station Turnout Time
- 3. Fire Crew Travel Time

Alternate terminology for a full first alarm assignment is an "effective response force". This language is being used more frequently within the fire services industry.







The City of Edmonton's performance is favourable when compared to two benchmarking measures provided for this service.

First Full Alarm Assignments within 11 minutes

Full first alarm assignments within 11 minutes (Calgary* actual 2019): 79% Full first alarm assignments within 11 minutes (Calgary* actual 2018): 75%

* Calgary's full first alarm assignment is defined as an 'assembly of 12 firefighters on scene at high-risk fire suppression incidents within 11 minutes'.

First Full Alarm Assignments within 11 minutes (2019)



Fires Contained to Room of Origin

Fires Contained to Room of Origin (Calgary actual 2019): 71.4% Fires Contained to Room of Origin (Calgary actual 2018): 68.5%



City of Calgary

Fires Contained to Room of Origin

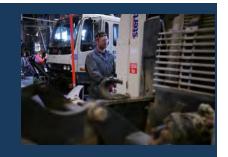
City of

(2019)

Emergency Event Response Time and Fires Contained to Room of Origin targets are based on the industry standard, National Fire Protection Association (NFPA) 1710.

Fleet Management and Maintenance: Municipal

Municipal Fleet Maintenance provides ongoing scheduled, planned and unplanned maintenance, accident repairs and field services to internal clients (e.g., Parks and Roads Services, EPS, Fire) and external clients (EPCOR and Alberta Health Services). They also provide commissioning, fabrication, welding services and support special projects, engineering and capital requests.



Since 2015, municipal fleet personnel costs per vehicle and municipal fleet vehicles per municipal fleet FTE show no significant change.



^{*}Personnel cost does not include vendor costs which contribute to the overall maintenance costs incurred. Personnel cost also includes work performed by front line staff on other activities besides vehicle repair, as well as costs of supervision, and the planning and control office.

Analysis:

Since 2015, the municipal fleet personnel cost per vehicle has increased by approximately 9%. The ratio of heavy-duty vehicles over the years is said to have increased, which has resulted in a higher cost per unit due to their complexity. Wage increases resulting from collective agreements are also a significant factor influencing results.

Since 2015, the number of municipal fleet vehicles per municipal fleet FTE has fluctuated, resulting in an overall increase of just under 2%. Higher levels of in-sourced versus out-sourced staff has been required which affects the results of this measure.

Additional Information:

In addition to wages, overall repair and maintenance costs are influenced by these factors:

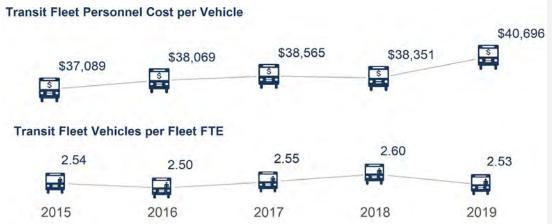
- Asset Utilization (the frequency of inspections required)
- Asset mix (which influences level of FTEs required)
- Duty Cycle (which influences level of running repairs and breakdowns)
- Economic and Climatic Conditions

Fleet Management and Maintenance: Transit

Transit Fleet Maintenance provides ongoing scheduled, planned and unplanned maintenance, accident repairs, fuelling, cleaning and disinfecting of all ETS buses. They complete mechanical and autobody mid-life refurbishments of conventional buses, and ongoing scheduled, planned and unplanned maintenance, accident repairs, fuelling, cleaning and disinfecting of the buses from the municipalities of Spruce Grove, Beaumont, and accident repairs to the buses from Strathcona County.



Since 2015, transit fleet personnel costs per vehicle and transit fleet vehicles per transit fleet FTE show no significant change.



^{*}Personnel cost does not include vendor costs which contribute to the overall maintenance costs incurred. Personnel cost also includes work performed by front line staff on other activities besides vehicle repair, as well as the costs of management, supervision, and administrative staff.

Analysis:

Since 2015, the transit fleet personnel cost per vehicle has increased by approximately 10%, while the number of transit fleet vehicles per transit fleet FTE has not significantly changed during this same period.

Wage increases resulting from the collective agreements and adjustments to the ratio of Cleaners versus Service staff (although total numbers have remained the same) have played a role in influencing the results of the first measure. As was the hiring of additional mechanics to align the bus-to-mechanic ratio to the industry average.

Additional Information:

In addition to wages, overall repair and maintenance costs are influenced by these factors:

- Asset Utilization (the frequency of inspections required)
- Asset mix (which influences level of FTEs required)
- Duty Cycle (which influences level of running repairs and breakdowns)
- Economic and Climatic Conditions

As the City replaces older buses with new ones having complex equipment and technology, higher maintenance requirements will occur.

Human Resources Management: Payroll

Payroll services are part of the Human Resources Management area. The Employee Service Centre team is responsible for the legislative compliance and administration of all pay, pension, benefits, employee transactions, and records for over 18,000 employees, retirees, Council and Board members.



Since 2015, The average number of direct deposits processed per payroll FTE shows a positive upward trend indicating increased productivity.

Direct Deposits per Payroll FTE



*Direct deposits include all payroll direct deposits for all staff, pension deposits, and all Board member compensation deposits. The minimal amount of cheques prepared are also included. Payroll FTEs include everyone who has direct responsibility in the process.

Analysis:

The number of direct deposit transactions processed per payroll FTE has increased by 15% since 2015.

Efficiencies gained through the active identification, implementation and monitoring of improvements and automation has been a factor in this increase. This has resulted in streamlined processes, and in some cases, a complete overhaul. Examples include:

- Implemented Taleo onboarding integration with PeopleSoft (software used to manage payroll-related information) in 2015 and continued updates to the related programs and processes.
- Transition from Excel timesheets to direct entry and approval at source within time entry systems.

Increased communication with internal and external stakeholders has led to improved workflow and understanding positively impacting the outputs of work. Examples include:

- The creation of the Google Currents Time Entry Community which is used to advise of payroll-related deadlines and share information and updates.
 Leveraging other existing Google Currents Communities for similar purposes.
- An Increased presence on the City's internal intranet, 'OneCity' with detailed information on the various Employee Service Centre-related processes and tools (e.g., an interactive pay advice & T4, earning code descriptions, and a vacation calculator).

Additional Information:

The primary goals of payroll services are to ensure that all employees are paid accurately and on time with the correct withholdings and deductions, to remit withholdings and deductions, and to complete federal legislated reporting within required deadlines.

There are multiple pay schedules for different groups within the organization (e.g. bi-weekly for employees and Council and monthly for retirees and Board members).

The collective agreements, City administrative directives, terms and conditions and pension plans for the various employee groups (in scope, out of scope and management), add increased complexity to already highly legislated services.

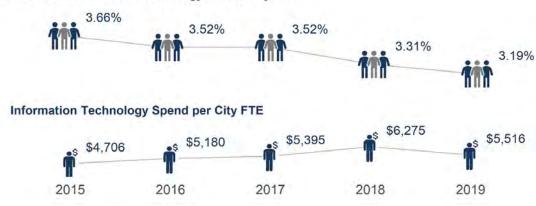
Information Technology Hardware Infrastructure

The Open City and Technology branch provides the services for the information technology needs of the City. This includes the licensing, purchasing, installation, and ongoing support for all hardware and software computing needs.



There is a decreased percentage of Open City and Technology staff compared to City staff as well as the increased investment in IT per City FTE. The increased amount of IT infrastructure and City FTEs supported by less IT staff suggests increased productivity.

Percent of Information Technology FTE to City FTE



^{*}Only includes IT costs managed by the Open City and Technology branch. Does not include the technology costs or staff for Boards and Commissions, EPS, or EPL.

Analysis:

Between 2015 and 2019, the number of FTEs in the Open City and Technology branch has declined and the overall percentage of branch staff relative to total FTE at the City has also declined. This suggests increased productivity under increased demand for technology solutions from both internal clients and citizens.

The amount of spending on technology that is managed by the Open City and Technology branch per City FTE has increased from 2015 to 2018 but declined in 2019. At the 2018 Supplementary Capital Budget Adjustment, three corporate projects (eProcurement, Open City Data Hub, and Meeting Management Technology Integration) amounted to an increase of almost \$4.5 million to the operating budget, accounting for the increase in spending per FTE seen that year.

Despite efforts to govern IT investment at the City through a centralized process, other departments and branches outside of the Open City and Technology branch assume information technology functions. This can include having dedicated FTEs building technology solutions (independent of the City's digital architecture and corporate priorities), to side-of-the-desk maintenance of department and branch applications. As such, the results of the measures do not provide a complete picture of the City of Edmonton's Information Technology Hardware Infrastructure.

Additional Information:

The Open City and Technology branch includes:

- Corporate Information Security Office
- Technology Planning & Business Engagement
- Technology Project Management Office
- Technology
 Transformation

The Open City and Technology branch is responsible for the Business Technology Strategy and the Digital Action Plan. These two documents provide the roadmaps to ensure the City is on the forefront of the technologies and information necessary to be both more livable and a global leading destination for talent and investment.



Information Technology Hardware Infrastructure



The results of the measures were compared against the information available from an independent third-party IT research organization. The City of Edmonton's performance is favourable when compared to two benchmarking measures provided for this service.

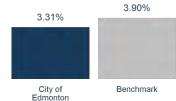
Percent of Information Technology Staff to Total Employees

The City of Edmonton at 3.31% is below the 2018 benchmark survey level of 3.90%.

*Does not include the IT staff of commissions such as EPS and EPL, or boards.

to City FTE (2018)

Percent of Information Technology FTE

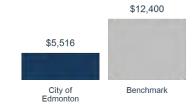


Information Technology Total Spending Per FTE

In 2019, the City of Edmonton spent \$5,516 CADin IT spending per FTE which is significantly below the benchmark survey value of \$12,400 CAD per FTE according to the IT industry study. This suggests that the City of Edmonton is significantly under invested in technology relative to other organizations.

*Does not include decentralized IT-related spending by commissions or boards, or within other City Departments.

Information Technology Total Spending per FTE (2019)



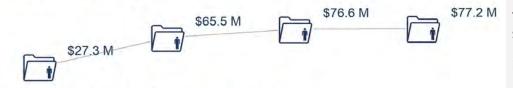
Infrastructure Delivery

Infrastructure Delivery oversees the construction of significant City of Edmonton infrastructure including open spaces, facilities, transportation, and neighbourhood renewal.



The average project cost per FTE has increased while the project management costs as a percentage of the total project costs has decreased. Both of these positive trends suggest increased productivity.

Project Cost per Project Management FTE



Project Management Costs as Percentage of Total Project Costs



Analysis:

2017 marked the first full year of operations for the Integrated Infrastructure Services Department. Project costs managed per project manager have increased by 18 percent from 2017 to 2019 while the project management costs as a percentage of total project costs have decreased by 12 percent which suggests increased productivity. This is due to a number of factors.

The adoption of the Project Development and Delivery Model introduces a level of project rigour and accountability for results. It has a downstream effect on the productivity of the infrastructure service overall by allowing for better planning and delivery of projects from the initiation of the project to the final delivery of the asset.

The associated support for the Project Development and Delivery Model is provided through the IIS Project Management Centre of Excellence, which supports good project management practice by standardizing, measuring and supporting project manager performance.

Restructuring of project management teams allows for delivery to be as effective and efficient as possible, thereby effecting a positive change in productivity to the service overall since roughly 2018. The growth of the infrastructure program translates into more projects that project managers take responsibility for. The growth of the infrastructure program is noted in the City's capital budget documents.

The measures are a product of the number of projects or the average size of projects; several external influences should be factored. Over time, the change in the size and number of projects that are managed by Infrastructure Delivery will impact the results and trends.

Following the Council Initiative on Public Engagement, Infrastructure Delivery continues to implement and enhance effective and efficient public engagement for the Department.

Additional Information:

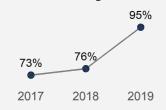
The average amount of capital spend per month or `Burn Rate` is an indicator of infrastructure delivery rate.

Burn Rate



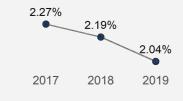
The percent of projects completed on-time and on-budget is an indicator of the effectiveness of project management.

On Time & On Budget



Operating cost as a percentage of actual capital spend is an indicator of cost efficiency in the delivery of infrastructure.

Operating Cost % of Capital Spend



Land Use Planning: Development Permits

Development Permits are public services offered to property owners and developers providing review and decisions in accordance with Zoning Bylaw regulations and applicable planning and land use legislation.



The number of development permits per FTE has not significantly changed since 2015.

Development Permits per FTE



*Work captured as part of the measure does not include other work performed by the team including encroachment, SDAB, compliance certificates or Home Improvement Permits (HIPs). Administrative and student staff members are not included in the number of FTEs.

Analysis:

The number of development permits per FTE has increased approximately 3% since 2015. There was a noticeable decrease in both major and minor development permits in 2019. FTEs have also declined during this time, but at a slower rate.

The volume of complex infill applications increased significantly, reducing the volume of approved applications. It is noted that during 2016-2018, productivity improved. However, the 2019 economic slowdown had an impact on productivity. The team has adjusted by holding vacant positions.

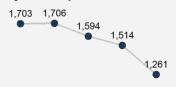
New home infill applications have increased from 83 in 2016 to 496 in 2019. The work for these applications are generally more labour intensive than those for greenfield because of consideration for the mature neighbourhood overlay, technical review, neighbour consultation, and related inquiries. There has been a decrease in greenfield applications in recent years.

The use of overtime will positively influence results as the same number of FTEs will produce a greater volume of output. Prior to 2019, overtime was one of the tools used to deal with high volume periods to ensure that the team was meeting its targets on low density residential permits. The additional hours are not reflected in these statistics. In 2019, as part of the cost reduction work to address the drop in revenues, the use of overtime was stopped. Other tools, such as permit revisions, process streamlining, re-allocation of staff to higher volume areas, and creation of Job Aids were used to help address the backlog.

Additional Information:

Major development applications include Commercial, Industrial and Apartment Buildings.

Major Development Permits



2015 2016 2017 2018 2019

In late 2018, 22 Commercial use classes no longer required development permits. However, they still require zoning clearance, which involves the same amount of review work to ensure it complies with Zoning Bylaw regulations.

Minor development applications include Single Detached, Semi-Detached, Duplex and Row Housing. In June 2017, four-unit Row Houses went from Major development permit to Minor.

Minor Development Permits



2015 2016 2017 2018 2019

Park and Open Space Access

Park and Open Space Access ensures that infrastructure assets, parks, boulevards, and trees remain accessible, attractive, and safe.



The annual cost per hectare of maintained and natural parkland has increased since 2015, while the number of hectares maintained per labour hour has decreased. This suggests decreased cost efficiency and decreased productivity.

Cost per Hectare



^{*}Maintenance of hard infrastructure in parks and open spaces such as benches and playground equipment has not been included as part of the measures, as well as work by Open Space Education and Outreach.

Analysis:

Since 2016, cost efficiency has slightly declined with cost per hectare increasing by 4%. Hectares maintained per 1,000 labour hours also increased slightly by 4% from 2016.

Rainfall and the length of the season are factors that impact the amount of parkland serviced. In 2015, Edmonton was well below the 30-year summer average for rainfall with just 75 percent of normal rainfall totals. The average rainfall from May to October from 2016 to 2019 is 319 mm whereas in 2015 Edmonton received only 190 mm. This impacts the productivity measures since direct labour hours and annual operations cost have a strong positive correlation with the amount of rainfall.

The Naturalization program to convert mowed turf to naturalized inventory ramped up in June 2016, which assisted keeping increased costs and labour hours to a minimum. Labour costs also increased by 3% in 2015, 2% in 2016, 1% in 2017 and 3% in 2018.

Additional Information:

Operational Area Includes:

- Natural Areas
 Operations
- 2. Parks and Open Space Management
- 3. Urban Forest Management
- 4. Sportsfield Management

Cost per hectare maintained and hectares per labour hour are mutually interrelated as labour is the major factor in total costs incurred.

In 2015, the City implemented a restriction on herbicide use. To compensate for its decreased use, the City increased mowing, improved turf quality by aerating, over-seeding, fertilizing, irrigating, dethatching, and increased manual weed control in shrub and flower beds. This in turn increased the cost of operations.

The amount of rain occurring influences the operating costs for maintenance.



Property Assessment

This service ensures that properties in the City are assessed in accordance with provincial taxation standards. Staff provide accurate, timely assessment notices, communicate with rate payers and respond to inquiries, address outstanding issues with rate payers, and participate in the Assessment Review Board process.



The number of properties per assessor has increased 22% since 2015. This suggests increased productivity. Percent of roll stability at year end has remained relatively consistent.



Analysis:

Since 2015, the property assessment service has managed the assessments of more properties in the City of Edmonton using fewer assessors. Roll stability is a measure of effectiveness that addresses the accuracy of assessments and the service has consistently achieved 99 percent.

The Assessment and Taxation branch has indicated that these results are due to ongoing programs focused on the review and maintenance of accurate property information. As well, stronger results have been achieved through a commitment to continuous improvement designed to identify and implement enhancements to customer service, workforce planning, and process efficiencies.

Additional Information:

Staff prepare annual market value assessments for all properties. Also includes amended and supplementary assessments.

Approximately two-thirds of the taxable assessment base is from residential properties and one-third from non-residential properties. The resulting tax distribution is approximately evenly split between the two classes. Farmland accounts for a relatively small amount of both assessments and taxes.

In 2019, the Branch managed assessments for just under 400,000 properties in the City of Edmonton.

Customer inquiries are responded to within 3 business days or less more than 98% of the time on average.

Purchasing

An internal service offering supply chain management for the purchase of goods and services (not including real property). The measure chosen reflects the operations of the Procurement and Contract Management sections of the Corporate Procurement and Supply Services branch.



The operating cost of the procurement service per \$1,000 in purchases has decreased since 2015. This suggests increased productivity.

Operating Cost per \$1,000 of Purchases



Analysis:

This measure reflects the operating cost to provide centralized purchasing services. It only includes the costs attributed to the Procurement and Contract Management sections of the Corporate Procurement and Supply Services branch. Results are affected by fluctuations in the annual amount of operating purchases made and the awarding and completion of large capital projects such as the lines of the LRT.

Total operating and capital purchases for the City have fluctuated greatly from year to year, ranging from \$595.3 million to \$1.8 billion. The operating cost to provide this service has increased from approximately \$4.3 million in 2015 to \$7.2 million in 2019 largely due to reorganizations within Corporate Procurement and Supply Services including the creation of the Contract Management section in 2018.

The operating cost of the procurement service per \$1,000 in purchases has fluctuated, but overall, has declined by approximately 41% since 2015.

In 2019, the City implemented Ariba, an electronic "procure to pay" solution, as part of the transformational work being undertaken by Corporate Procurement and Supply Services which began in 2018. Moving to Ariba has automated many processes in the procurement cycle creating efficiencies and allowing for improved oversight of procurement activities.

Additional Information:

As the tendering authority for the City of Edmonton,
Corporate Procurement and
Supply Services works to
ensure the City's purchases
are in alignment with various
trade agreements including
the New West Partnership
Trade Agreement,
Comprehensive Economic and
Trade Agreement and
Canadian Free Trade
Agreement.

Every purchase has intended and unintended economic, environmental and social impact. Sustainable procurement is about consciously considering those impacts and seeking to make intentional positive community contributions.

The City will integrate economic, quality, environmental and social value considerations into procurement processes for goods, services and construction projects to the extent permitted by the City's trade agreement obligations.

Recreation and Cultural Programming

Recreation and Cultural Programming provides recreation, cultural and leisure programming for program participants.



The program fill rate was steady from 2015 to 2018, then increased in 2019 suggesting improved citizen interest in the programs offered, however from 2015 to 2019 shows no significant change.

Program Fill Rate



Analysis:

The Program Fill Rate measures the percentage of total program spaces available compared to actual program spaces filled. In 2019, the Fill Rate increased by 9% over previous years indicating that the programs being offered are closer to capacity than they have been in the past.

The improved results for 2019 are particularly notable and may have been impacted by nine facilities that were temporarily closed for planned maintenance or renovations in that year. With less locations available to provide programming, more participants registered in the available programs at existing facilities in operation.

Additional Information:

This service falls under the City's Recreation and Cultural Programming Service.

Programs and Events aim to enrich quality of life and provide personal growth and development opportunities across all age groups through a wide range of programs, events and services.

Recreational and Sport Facility Access

Recreational and Sport Facility Access provides citizens recreational opportunities including recreation centres, indoor skating arenas, outdoor pools, and other attractions such as Edmonton Valley Zoo and Fort Edmonton Park.



The facilities attendance rate per facility staff has decreased by 8 percent since 2015 but overall shows no significant change. Customer satisfaction has been generally consistent with a slight decline in 2018.

Facilities Attendance per Facilities FTE

2016



2017

2018

2019

Analysis:

2015

Attendance at City recreation and sport facilities per Facility staff was relatively steady from 2015 to 2017 but experienced a slight decline in 2018. The attendance per facility staff saw a further drop in 2019 by 4.5 percent. The Community and Recreation Facilities branch explained this drop was caused largely in part by the temporary closures of nine facilities due to planned maintenance and renovations. The staff at these closed locations were reallocated to other facilities until the maintenance and renovations were completed.

Customer satisfaction is an overall measure of positive satisfaction with recreational facilities. The target is to have 90 percent of facility users be either "satisfied" or "strongly satisfied" with these facilities. Positive satisfaction with facilities remains high, but did show a slight decrease in 2018. A satisfaction survey was not conducted for 2019.

Additional Information:

This service falls under the City's Recreation and Culture Program.

The Community and Recreation Facilities branch enhances the liveability and vibrancy of the city by providing places and opportunities for all Edmontonians to gather, connect, recreate and celebrate.

Road Service

Road Services ensures that streets, roads and boulevards remain accessible, attractive and safe. Work includes repairs and maintenance to roads, signals and street lights, bridges, and auxiliary structures. Additionally, work includes spring sweeping, seasonal clean ups, and snow and ice road operations.



The average cost of filling a pothole has increased suggesting decreased productivity for this service.

The cost per lane kilometre for spring sweeping and snow removal have both decreased suggesting increased productivity for these services.



*Beginning in 2018, snow and Ice removal costs for roads and parks winter maintenance were combined.

Analysis:

The number of potholes filled decreased by 3.6% while the cost of filling those potholes increased by 11% from 2015 to 2019. The number of potholes varies significantly from year to year based on environmental factors that influence the available repair days. Significant precipitation also inhibits the use of hot mix asphalt, which is the most economical form of repair. The use of a non-oil cold mix was increased in 2019 that allows for more flexibility in application, but is also about 11.5 times more costly per tonne. Geographical expansion, including the annexation of Leduc in 2019, have increased the distance to travel to perform repairs using the same number of pothole repair trucks, which are old and costly to maintain.

The cost per lane kilometre of spring sweeping trends reduced by 10% from 2015 to 2019. The cost per lane kilometre for spring sweeping is influenced by weather. Years with higher snowfall preceding higher rain can result in more debris on the road and delay spring sweeping which increase costs.

The cost per lane kilometre of snow removal reduced by 21% from 2015 to 2019. Like spring sweeping, the cost per lane kilometre for snow removal is also influenced by weather. Years with heavier snowfall or early or late snowfall will increase the cost of snow removal.

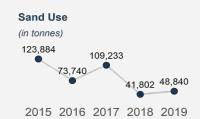
Additional Information:

Snow and Ice Road Operations maintains the condition of roadways under seasonal conditions. Contractors are also used to provide this service.

In 2019, the City of Edmonton added 140 kilometres of new lanes through annexation.

Over the period, 2015-2019 the City of Edmonton added 513 kilometres of new lanes as a result of development.

Spring sweeping costs are influenced by the Roadway Cleaning Policy. Sand usage has declined helping reduce sweeping costs.



Snow removal costs are influenced by the amount of snowfall and the Snow and Ice Control Policy.



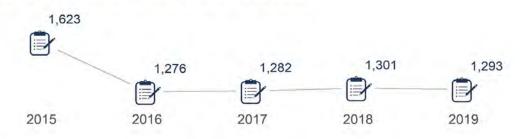
Safety Code Permission and Inspection

Safety code permission and inspection services are a public service provided to property owners, builders and developers to ensure compliance with the Provincial Safety Codes Act and associated codes and standards through plan examinations, permit issuance and inspections.



The number of inspections conducted by City employees shows a negative overall decrease since 2015, suggesting a decrease in productivity.

Safety Code Inspections Carried Out by the City per FTE



^{*}Administrative and student staff members are not included in the number of FTEs.

Analysis:

The average number of inspections conducted by City employees each year has decreased by approximately 20% since 2015. Since 2016, the team has held its productivity consistently at the same level.

The changes to building codes in 2015 and changes to electrical codes in 2016 had a major impact on the industry. As a result, a number of builders ensured that permit applications were completed before the new codes took effect, influencing the above-average results experienced.

In 2016, with the impact of new safety code changes being fully implemented and the economic slow down, there was a significant drop in the demand for residential building permits.

Process changes occurring in 2018 and 2019 have impacted how the number of inspections being performed are being recorded. Home Improvement Permits began in 2018. These are accounted for as a single inspection but can consist of multiple inspections. In 2019, row houses, duplexes and semi-detached homes began being accounted for as one inspection. In the past they accounted as four, two, and two inspections, respectively.

The use of overtime will positively influence results as the same number of FTEs will produce a greater volume of output. In 2015, the team used a peak of 5,200 hours of overtime to keep up with workloads and to meet targets. Overtime hours have fluctuated with the demand for inspections. 1,186 hours were required in 2016, and the 2017 hours increased to 3,398 hours as a result of a code change in late 2016. In 2018 the business area extended the regular work day of staff, going from 33.75 hours/week to 40 hours/week. This resulted in more stable overtime hours (approximately 2,500 hours annually) for 2018 and 2019.

Additional Information:

Permits are not complete until the work performed passes the required inspections. Safety Code Officers use inspections to ensure completed work complies to applicable safety standards.

This section often sees an increase to workload after changes to the Alberta Building Codes. Code changes occurred on:

- Nov 1, 2015
- Nov 1, 2016
- Dec 1, 2019

Codes are becoming more complex which requires a different approach to inspections and plans review.

In 2019 an Artificial Intelligence model to reduce the number of low risk residential inspections was implemented. Currently this has led to a reduction of 40% for these types of inspections.

Electronic applications were made available for all application types which affected workflows.

In 2019, electrical inspections were discontinued for new services as EPCOR and TIGI have assumed those types of inspections. Those inspections make up about 10% of the total yearly inspections (approximately 6,000/year).

Tax Collection

This service ensures that property taxes are levied and collected in accordance with provincial legislation and municipal bylaws to meet the City of Edmonton's budgetary requirements, and the provincial education tax requisition.



The number of properties per taxation employee has increased 26% since 2015. This suggests increased productivity. Tax collection rate by deadline shows no significant change.

Properties per Taxation Employee



Tax Collection Rate by Deadline



Analysis:

Since 2015, the number of properties in the City of Edmonton in relation to the number of taxation employees has increased. Additionally, the rate of tax collection by the June 30th deadline has remained consistently high.

The Assessment and Taxation Branch has indicated that the number of tax parcels has increased over the five year period without any increase in staff due to their ongoing commitment to continuous improvement, creating process efficiencies, and system enhancements.

Additional Information:

The Assessment and Taxation Branch must comply with provincial taxation standards.

Major areas of responsibility include:

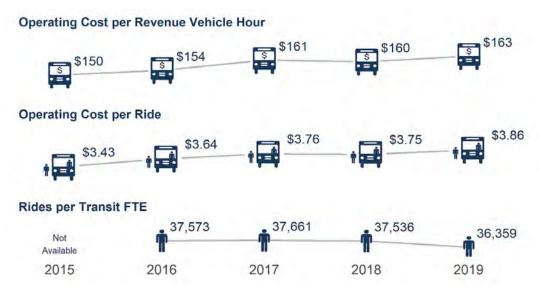
- Maintain accurate account information, including ownership records.
- Provide accurate and timely annual, amended and supplementary property tax notices.
- Manage the collection and administration of municipal and Provincial Education Property Tax.
- Collection, administration, of Local Improvement Taxes, 13 zones of Business Improvement Area taxes, and 3 zones of Community Revitalization Levies.
- Administer the monthly Tax Payment Program and other Council approved programs.
- Respond to inquiries related to taxation.

Transit

Edmonton Transit Service provides public transportation through conventional transit (bus, Light Rail Transit) and paratransit service.



The operating cost per revenue vehicle hour and Rides per transit FTE show no significant change since 2015. The operating cost per ride shows a negative upward trend since 2015.



Analysis:

Since 2016 the transit service has provided fewer rides per transit employee at a higher operating cost. Since 2015 Transit operating cost per ride has increased by 12.5% while rides per transit FTE has decreased by 3.2% since 2016.

Ridership demand is influenced by internal and external factors. Internal factors are things Edmonton Transit Service have more influence over such as the network design, hours of service, fare pricing and safety measures. External factors have a large influence on transit demand and operations and include gas prices, parking policies, economic conditions, employment levels, the extent of telecommuting, community safety and a pandemic.

Since 2016, ridership overall has been steady. With the anticipated bus network redesign implementation in 2021, continued safety and security enhancements and updated fare policy, Edmonton Transit Service anticipates ridership to grow.

Additional Information:

Edmonton Transit Service is a fully integrated public transit system that provides more than 87 million rides each year.

Transit plays an important role in city building and economic growth. Transit connects workers to jobs, reduces social isolation in the community and was deemed an essential service by the Government of Canada in 2020.





Transit



The City of Edmonton's performance is favourable when compared to the benchmarking measures provided for this service.

Cost per Revenue Hour (2018)

Cost per Ride (2018)

\$158.56 \$159.00 City of Benchmark

Cost per Revenue Hour

This is a measure of cost efficiency and shows the City's result was the same as the benchmark* for 2018.

Cost per Ride

This is a measure of cost effectiveness and shows that the City's result was 13 percent less than that of the benchmark* for 2018,

\$4.29

^{\$3.75}City of Benchmark Edmonton

^{*}A comparison of Canadian Urban Transit Association, 2018 Operating Data for Group 2 (Cities with 400,001 - 2,000,000 population including Calgary, Winnipeg, Ottawa, Hamilton, and Quebec City).

Warehousing and Inventory Management

This service is delivered to ensure that internal business partners are provided with the right parts and products, at the right quantity, quality, time, and place. It involves planning, purchasing, and delivering warehousing and inventory management services to assist achieving optimized inventory levels.



The number of transactions per warehouse employee has increased yearly between 2% to 5% since 2016 which suggest no significant change in productivity.

Warehouse Transactions per Warehouse Employee



Analysis:

Warehousing and Inventory Management services are provided internally for Municipal, Bus, and LRT operations. This measure shows the correlation between the warehousing staff and the amount of common operational transactions performed. Transactions can represent goods receipts, returns, provision to business areas, and inventory cycle counts.

Productivity has increased from 2016 to 2019 by 2.4 percent, but as much as 5 percent in some years. These gains can be attributed to initiatives undertaken such as workforce optimization to reallocate staff. Overall, the number of transactions has decreased over the period shown due to process improvements such as improved shipping configurations to decrease costs.

The Supply Chain Management team has been undertaking a Transformation project since 2017. It continues to seek additional optimization efforts incorporating new technologies such as SAP-ARIBA, SAP S/4 Hana (under the Enterprise Commons project) and initiatives such as the current Vendor Managed Inventory currently in progress.

Data to calculate this measure could only be used from 2016 onwards due to internal reorganizations which included clarifications to staffing descriptions and roles. Management has said that higher productivity gains should be experienced in 2020 and future years due to the various structural changes experienced from 2017 through 2020.

Additional Information:

This service is delivered by the Supply Chain Management section in Corporate Procurement and Supply Services.

It consists of warehousing/ stores operations, parts sourcing, management and distribution, customs, surplus disposal services and emergency logistics.

The supply chain management team has more than 20 key performance indicators to monitor and improve operational efficiencies within the section.

The supply chain management team provides services to a variety of business partners including ETS, EPS, Fire Services, Fleet and Facilities Maintenance (Transit & Municipal), Parks and Roads.

Waste Collection

Waste Services plays an integral role in the day-to-day lives of Edmontonians by collecting, processing and disposing of solid waste for residential and non-residential customers.



The operating cost per tonnage of waste has increased 19% since 2015 indicating a negative upward trend. This suggests decreased productivity.

Operating Cost per Tonnage of Collected Waste



^{*} Waste includes both garbage and recyclables collected.

Analysis:

The primary drivers for household unit cost increases are the geographic and population growth of the City despite relatively consistent levels of tonnage collected. There was an estimated increase in household units serviced by 22,000 between 2015 and 2019, with a corresponding increase in population of 64,000. Despite the consistent growth of the City, the tonnage of waste collected remained relatively the same, with 316,600 tonnes collected in 2015 compared to the 318,000 tonnes in 2019.

The steady amount of waste collected provides a positive indication towards waste reduction in Edmonton. With an increase in units serviced, the cost on a per unit basis (rather than a per tonne basis) only had a slight increase. For the combined cost/unit of all property classes, the cost is \$37/unit in 2015 compared to \$39/unit in 2019, or a 5% increase in cost over 5 years.

Additional Information:

Cost increases are due to a few key factors:

Curbside recycling contracts were tendered in 2018, resulting in contract cost increases of 5.5% per ton, amounting to an \$1.2 million cost increase.

An annual accounting adjustment commencing in 2017 resulted in a \$2 million cost transfer to the Collections cost centre related to the cost to dispose of waste at the Edmonton Waste Management Center.

With a new 25-Year Waste Strategy approved in 2019, the City will also be moving from hand collection (i.e. bags) to automated collections (i.e. bins).





Waste Collection



The City of Edmonton's performance is favourable when compared to the benchmarking measures provided for this service.

Average Total Cost for Garbage Collection by Tonne

The City's average total cost for garbage collection per tonne is similar to the median benchmark for 2016-2018 in the MBNCanada Performance Measurement Report.

For the reporting period 2015-2019, the City of Edmonton provided manual waste collections services (i.e. bag). Other municipalities in Canada typically provide automated curbside collection (i.e. cart). This fundamental difference in productivity and cost structure should be kept in mind when comparing the benchmarking results. Administration is actively looking for efficiencies that can be gained through technology improvements and innovation. With a new 25-Year Waste Strategy approved in 2019, the City will also be moving from hand collection (bags) to automated collection (bins) to improve overall diversion goals while reducing cost to ratepayers.

Average Total Cost for Garbage Collection per Tonne (2016-2018)



Workplace Health and Safety

This service manages, monitors and continuously improves the corporate safety, wellness and employee health management system. It establishes and communicates corporate-wide standards, processes, operational procedures and best practices; provides occupational safety, wellness and employee health services; establishes and monitors safety and employee health governance in the organization; and monitors and proactively acts on trends to lead the organization to improve workplace health and safety, maintain compliance to legislation and reduce risk and liability.



The average cost of the workforce health and safety program per City headcount shows a minimal increase since 2015 suggesting no significant change in cost-efficiency performance.





^{*} Headcount is the number of employees (bodies) in the organization.

Analysis:

The average cost of the workforce health and safety program per City headcount has increased by approximately 9% since 2015. There are two key explanations for the results:

- Enhancement of safety as a strategic priority
- An update of the service model from decentralized to centralized

In 2017, the City of Edmonton made the enhancement of safety and support for employee mental health a strategic priority and created the Workforce Safety and Employee Health branch. The branch grew in resources to support the strategic priority through reallocation of positions within the corporation. Since 2017, the branch's area of growth in terms of employees and programming included mental health and trauma support, greater sophistication of systems and technologies for project and system management, and occupational health and safety support for higher-risk operational areas.

In 2019, to further enhance and improve efficiency of service delivery, the organizational structure adjusted from a decentralized model to a centralized model. This involved the merger of OHS professionals to the Workforce Safety and Employee Health branch from the operational branches.

The City of Edmonton has experienced an improvement in near miss and unsafe work observation reporting compared to lost time incidents, successfully passed its external OHS audits, continuously achieved Certificate of Recognition, trained all supervisors in the Working Mind program, and proactively mitigated the workplace impacts of significant legislative changes including Bill 30 and legalization of cannabis. The City has also experienced improvement in absences and increases in accommodations related to illnesses and has enhanced programs to better support employees experiencing health challenges to prevent or reduce periods of disability.

Additional Information:

The Workplace Health and Safety service is provided as part of the City's Employee Experience and Safety Program.

The City of Edmonton is externally audited every 3 years under Alberta's Partnerships in Injury Prevention Program in order to maintain its Certificate of Recognition (COR).

The City's health and safety management system was successfully evaluated through an external COR Certification audit in 2019. It has also been successful in each previous audit.

The Occupational Health and Safety Committee guides the corporation's direction, strategies, and priorities toward achieving a healthy and safe work environment for all employees.