



City of Edmonton
Office of the City Auditor

Part 1
City Productivity and
Performance Audit:
Management Staffing Analysis

September 1, 2020



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Report Purpose

This Management Staffing Analysis is intended to provide information and analysis about the City of Edmonton workforce, organizational structure, supervision and management.

This analysis fulfills one of the objectives of the City Productivity and Performance Audit. This report does not include the benchmarking and productivity components of the audit.

Methodology & Definitions

Personnel Counts

All personnel counts in this report are based on full-time equivalent positions (FTE) not headcount.

An FTE is based on the hours and associated costs that one full-time employee would work in a year, or a combination of positions that provide the same number of hours.

Active headcount reflects an individual employed by the City of Edmonton, regardless of their employment status (e.g. permanent, temporary, provisional, casual) that is not on an approved leave, at a specific point in time.

Example:



The average City of Edmonton FTE between 2017 and 2020 is 11,271, while the average headcount during that time is 11,902 - approximately 6% higher.

Budgeted Costs

All FTE and cost amounts identified are budgeted amounts, not actuals.

Vacant Positions

Positions that were budgeted, but were vacant are included in this report.

Data Point-In-Time

All analysis and information for the 2020 year reflects the workforce at the end of January. It does not reflect any temporary lay-offs or any other changes that may have occurred since that time.

Seasonal Workforce

The data reflects the workforce at a point-in-time at the end of January for each year. As a result the seasonal workforce is not included in the data.

Middle Management

The numbers we provide in this report related to 'middle management' will not match information previously provided to Council.

This report uses a different definition of 'middle management' than has been used in previous reporting by Administration. With the exception of senior management, we include any employee who supervises another supervisor as 'middle management'.

Data Reliability

There are multiple systems and applications within Employee Services and Financial and Corporate Services that capture FTE and position information. There is no regular automated or manual process to reconcile FTE information between the systems. As a result, position or FTE changes to Departments and Branches may not be properly reflected in all systems. This issue is expected to be addressed with the implementation of the Enterprise Commons Program.

In this report, we are relying on the FTE and position data provided by Employee Services and the budgeted cost information from Financial and Corporate Services. The budgeted cost information provided for specific positions and groups - such as supervisors - may be low due to approximately 5% of the organization's personnel budget each year that is not allocated to individual positions in the data.

Statement of Professional Practice

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

Report Highlights

Conclusion

The increase in supervisory positions since 2017 has increased costs and increased the hierarchy in the organization.

1. Workforce Growth

Since 2017, the workforce has increased by 232 FTE. Budgeted personnel costs have increased by approximately \$63 million due to wage increases and new FTE.

2. Changes to Classification Categories

Branch Manager, Director, Manager, Professional, and Union classification categories increased in FTE.

3. Staff to Supervision Ratios

In this analysis, a supervisor is any position that has at least one employee reporting to it- regardless of classification, job title, or position in the organization hierarchy. Using this definition, there are more supervisors per employee in 2020 than there were in 2017.

4. Supervision Span of Control

There has been a shift in the organization to supervising smaller groups of employees. This is the result of adding more supervisors.

5. Cost of Supervisors

The cost of supervisors per organization FTE has increased by approximately \$3,400 since 2017. This is primarily the result of adding more supervisors and increases in compensation for union supervisors and non-union supervisors not at the top of their salary range.

6. Middle Management & Front-Line Supervisors

The increased number of supervisors is reflected in both 'middle management' and front-line supervisor positions. Middle management¹ increased by 22% and front-line supervisor positions increased by 19%.

Recommendation & Potential Cost Savings

We recommend Administration review supervisor responsibilities in the organization in order to reduce costs and layers of supervision.

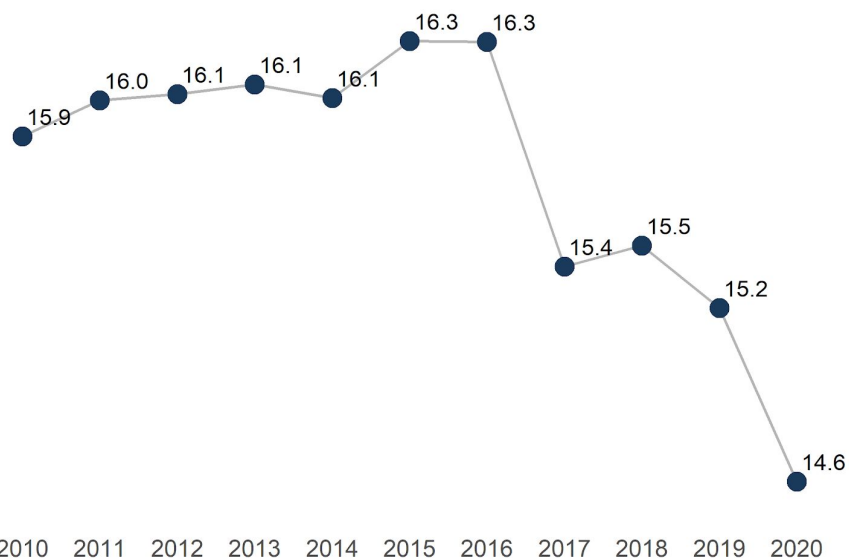
¹ Middle Management includes all managers and supervisors in the organization except the City Manager, Deputy City Managers and Branch Managers that supervise; and Front-line supervisors

Population and City Organization Growth

Comparing the growth of the population of the City of Edmonton to the growth in City workforce*.

Since 2010, the population of the City of Edmonton has grown at a faster rate than the City of Edmonton workforce.

City of Edmonton FTE per Thousand City of Edmonton Residents



*Includes Boards & Commissions, Offices of the Mayor and Councillors, Edmonton Police Service, Edmonton Public Library, and Office of the City Auditor

Analysis:

From 2010 to 2014, the City of Edmonton workforce grew consistently with the population of the City of Edmonton.

In 2015 and 2016, the number of workforce FTE peaked, then sharply declined between 2016 and 2017 as a result of organizational restructuring.

Since 2016, the growth of the City of Edmonton population has outpaced the growth of organization FTE and the number of FTE per 1000 City of Edmonton residents has declined.

Additional Information:

The primary way that new FTE are added is through Council approval of Service Packages during the budget process.

Service packages add FTE and cost for new priorities - such as enhanced security on Transit - as well as to address operating impacts of capital - such as when new fire stations or recreation centres open.

Council approved 88 Service Packages between 2017 and 2020 through the budget process including:

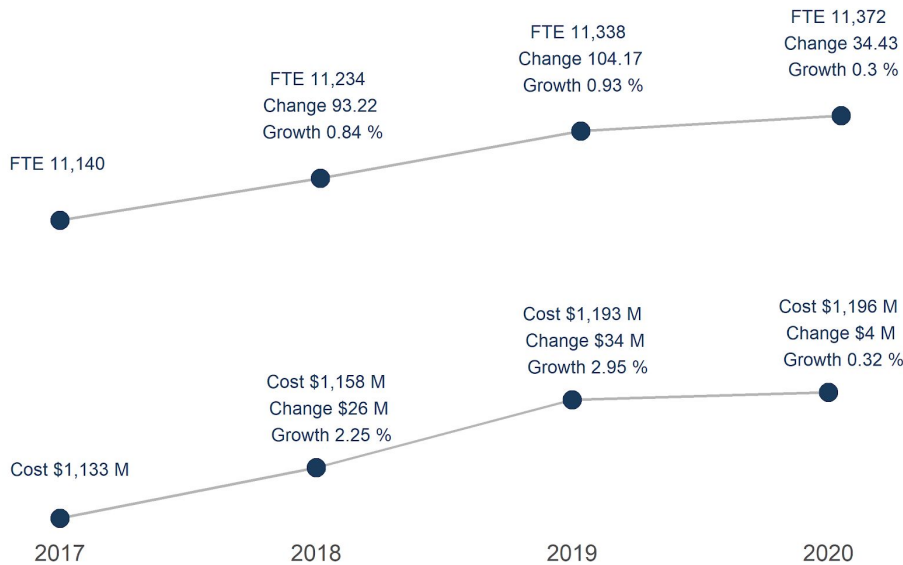
- Fleet & Facility Services
Operating Impacts of Capital
- Transit Security
- Development Services
Customer Services
- Community & Recreation
Facilities Operating Impacts of Capital
- Fire Rescue Services Operating
Impacts of Capital
- Edmonton Transit Heritage
Valley Park & Ride
- Parks & Roads Services
Operating Impacts of Capital

1. Workforce Growth

Workforce growth refers to the increase in full-time equivalent positions in Departments² and the associated personnel budget at the City of Edmonton over a given period of time.

Between 2017 and 2020, 232 full-time equivalent positions (FTE) were added to the City's workforce in Departments. Budgeted personnel costs have increased by approximately \$63 million - \$19 million of which was due to this new growth.

Year over Year FTE and Personnel Cost Change for City of Edmonton



Analysis:

Between 2017 and 2020, 232 FTE were added to the workforce. Approximately \$19 million of the \$63 million increase to budgeted personnel costs is the result of adding new FTE. The primary way these were added was through the approval of service packages in the budget approval process.

Overall, the workforce has grown by 2% and the cost of the workforce has grown by 5.6%. The higher rate of cost growth is primarily due to three factors:

1. A shift to higher-cost positions,
2. Negotiated wage increases for unionized employees who comprise 86% to 88% of the workforce, and
3. Increases for employees who were not at the top of their salary range.

Management, out-of-scope, and professional positions have not had increases to salary ranges since 2016.

Additional Information:

Four year budget cycles outline the operating and capital priorities and projects, service level adjustments and approximate corresponding tax levy changes for each of the four years. Twice per year (spring and fall) the administration presents Supplementary Operating and Capital Budget Adjustments to council. FTE changes that have a corresponding tax levy increase are outlined in service packages and an overall tax change is approved by council. They do not approve individual FTE increases; only a corresponding tax levy increase. FTE can be added to the organization upon approval of the City Manager if funding is available.

Of the total increase of \$63 million, \$19 million is due to the increase of 232 FTE. The remaining \$44 million in personnel cost increases were the result of implementing the salary and benefit increases negotiated through the bargaining process and ratified by City Council.

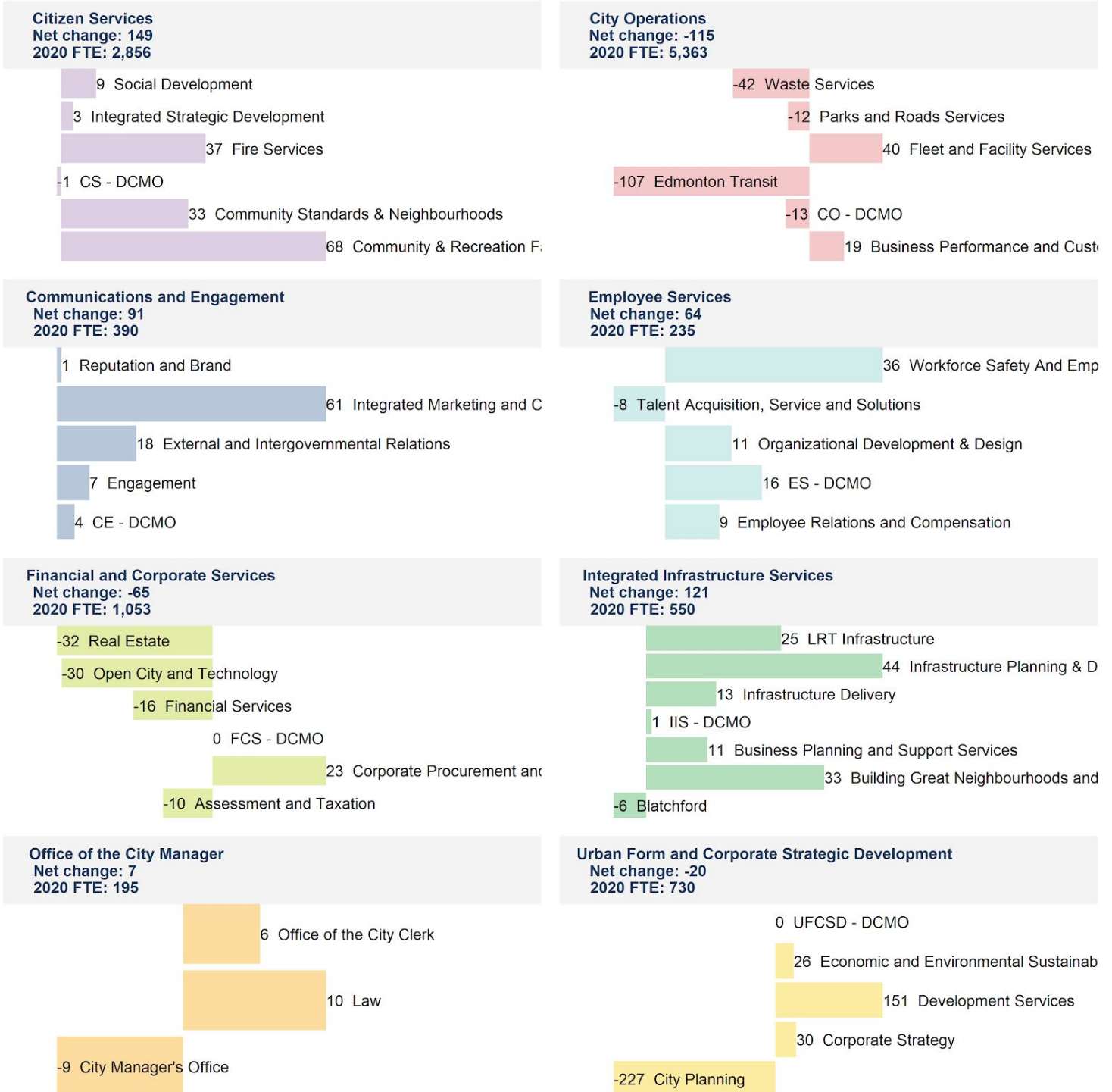
Vacancies:

In 2017, 9%, or 850 budgeted FTE were vacant. In 2020, this increased to 11% or 1,006 vacant budgeted FTE. Because vacant FTE were budgeted, they have been included in the report analyses. This FTE includes both permanent and temporary positions.

² Excludes Boards & Commissions, Offices of the Mayor and Councillors, Edmonton Police Service, Edmonton Public Library, and Office of the City Auditor

1a. FTE Change by Department

Between 2017 and 2020, additions and reductions to the workforce occurred throughout the City. The majority of branches added FTE, while some reduced or transferred FTE.



2. Changes to Classification Categories

There are eight classification categories in the City. These classification categories correspond to authority, compensation, responsibility and other aspects of each position.

**FTE were added for most classification categories.
The largest percentage increase was to FTE classified as Managers.**

FTE Changes to Classification Categories

Classification Category	2017	2020	Change	% Change
City Manager	1	1	0	0%
Deputy City Manager	7	7	0	0%
Branch Manager	35	39	↑ 4	11%
Director	130	131	↑ 1	1%
Manager	303	373	↑ 70	23%
Professional	744	847	↑ 103	14%
Out of Scope*	165	106	↓ -59	-36%
Union	9,755	9,868	↑ 114	1%

*Out of Scope positions hold a union classification but meet one of the exclusionary criteria to make them out of scope of the union.

Analysis:

The job expectations for each classification category is different and so is the expected cost. As a result, an FTE in one classification category does not cost the same as an FTE in another classification category. For example, it is more expensive to add a Branch Manager than a Director.

Because of the cost differences between the classification categories, between 2017 and 2020, the increase of FTE in Branch Managers, Directors, Managers, and Professionals had a greater impact on overall organization personnel costs than the addition of Union FTE and any reductions resulting from the decrease in Out of Scope FTE.

In 2019, the Administration approved and began implementation of the Organizational Design Framework. This framework provides guidance to support consistency of classification categories within the organization hierarchy and structure.

Additional Information:

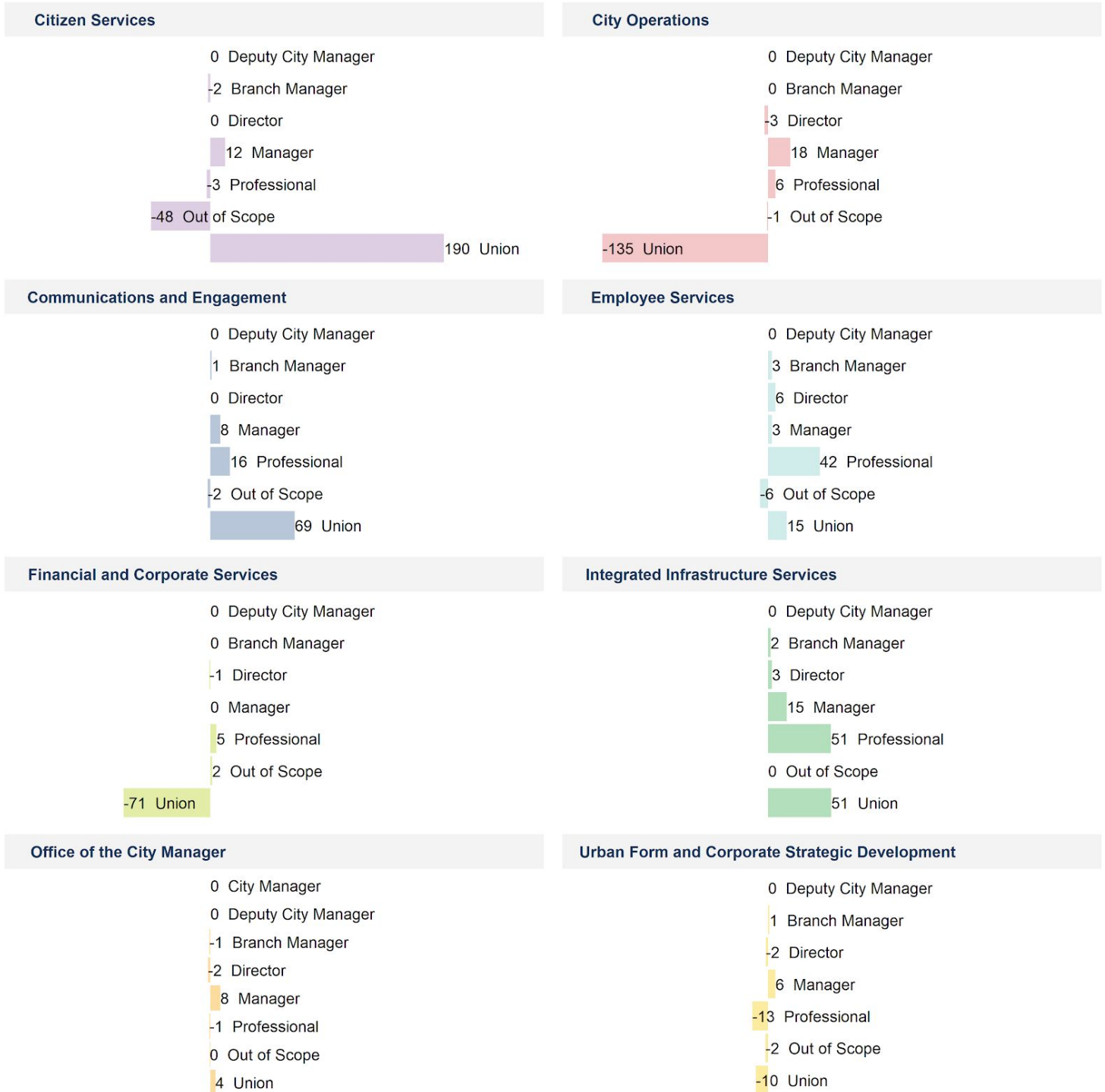
In 2020, there was:

- 1 Branch Manager,
 - 6 Directors, and
 - 29 Managers
- that did not supervise any staff.

Of the 36 FTE, 18 were vacant.

2a. Changes to Classification Categories by Department

Between 2017 and 2020, departments have increased and decreased FTE in various classification categories.

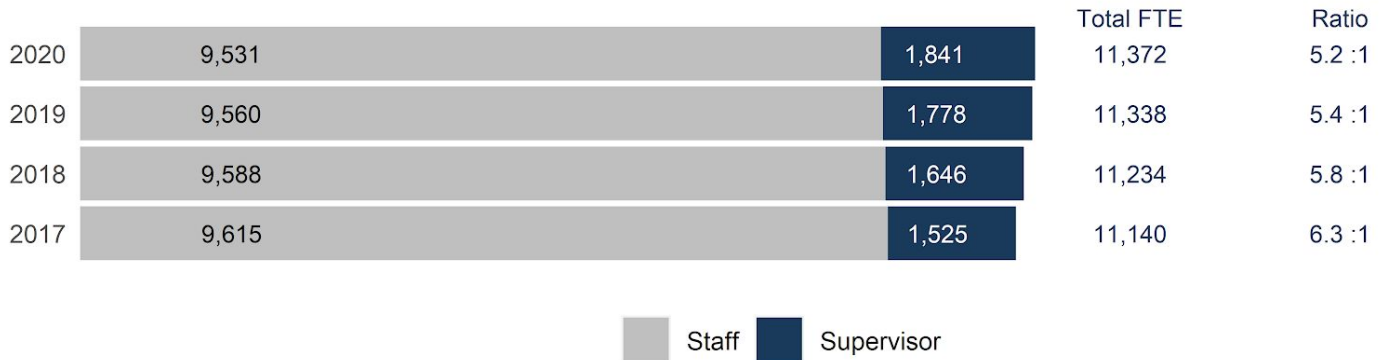


3. Staff to Supervisor Ratios

In this report 'supervisor' is defined as any position that has at least one employee reporting to it and includes all classifications if they meet this criterion.

The ratio of staff to supervisors has declined since 2017.

Ratio of Staff to Supervisors



Analysis:

It is important for the organization to have the right amount of supervisors. When there are too few supervisors, it can be difficult to properly manage staff and workload. This can negatively impact the quality of work. When there are too many supervisors, this can unnecessarily raise overall personnel costs and create bureaucracy for decision-making.

The City has added supervisors at a higher rate than staff. While non-supervisory staff declined by 1% between 2017 and 2020, supervisors increased by 21%.

In 2017, there were six non-supervising staff for every supervisor in the organization. By 2020, this had decreased to five non-supervising staff per supervisor.

The City's workforce fluctuates with the seasons. This can impact the seasonal staff to supervisor ratio.

Additional Information:

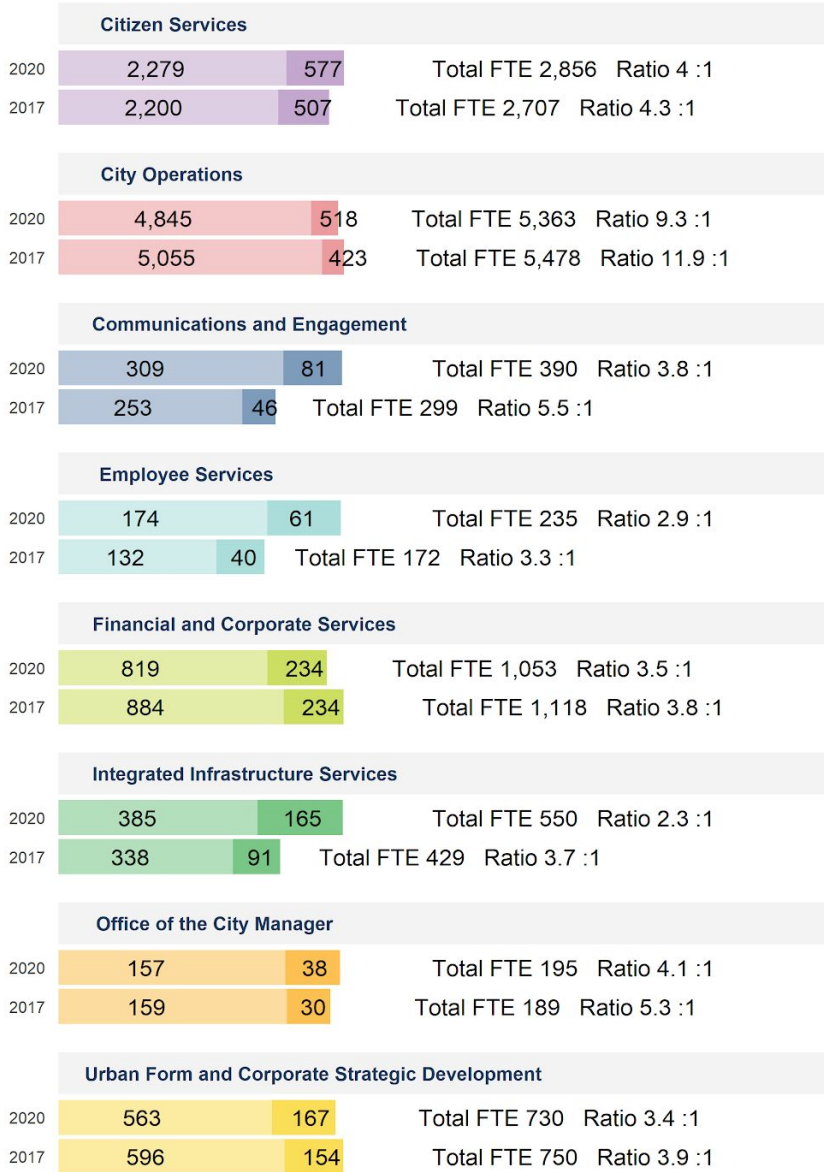
In this report, we consider a supervisor to be any employee who has at least one employee reporting to them within the organization structure. This allows us to provide a baseline analysis of organization hierarchy and reporting relationships.

However, there is considerable variation in supervisor responsibilities based on the type of work being done and the number of employees being supervised that is not reflected in our definition of a 'supervisor'.

Administration defines a 'supervisor' differently in their reporting to address supervisor responsibilities as opposed to structure and reporting relationships.

3a. Department Staff to Supervisor Ratios

Departments are responsible for different types and complexity of work and have different supervisory requirements. These factors influence the different staff to supervisor ratios in each Department.



■ Staff ■ Supervisor

Key Changes:

Citizen Services has added 70 supervisors and 79 staff.

City Operations has added 95 supervisors and reduced by 210 staff.

Communications and Engagement has added 35 supervisors and 56 staff.

Employee Services has added 21 supervisors and 42 staff.

Financial and Corporate Services has added no supervisors and reduced by 65 staff.

Integrated Infrastructure Services has added 74 supervisors and 47 staff.

The Office of the City Manager has added 8 supervisors and reduced 2 staff.

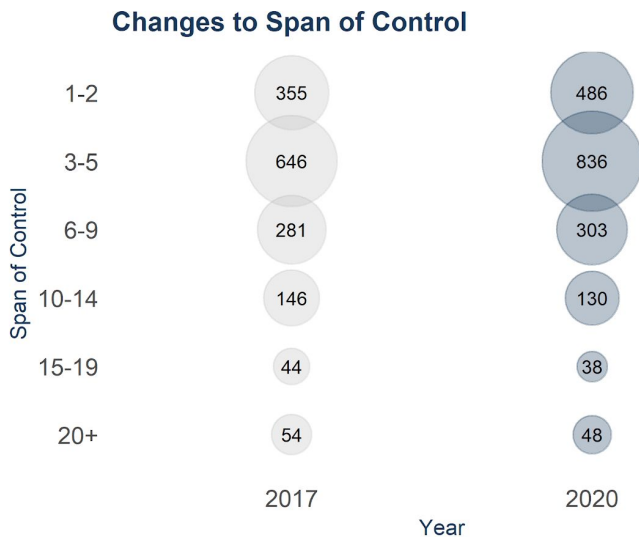
Urban Form and Corporate Strategic Services has added 13 supervisors and reduced 33 staff.

Note: Some departments have large seasonal workforces. In these instances a small FTE may actually represent a large number of employees who work for the City for a few months.

4. Supervision Span of Control

The span of control refers to the number of employees reporting to a supervisor. At the City this is also referred to as the “span of care”.

Between 2017 and 2020, there was a shift in the organization from supervising larger groups of employees to smaller ones.



Analysis:

The span of control depends on many factors including the type and complexity of the work being done as well as the size of the business unit. There is no universal ‘ideal’ span of control.

A natural result of increasing the number of supervisors per staff, is a decrease in the number of employees reporting to each supervisor.

Between 2017 and 2020, there was a shift towards supervising smaller groups of employees. There were fewer supervisors in charge of groups of 10 employees or more, and more supervisors in charge of groups of less than 10 employees.

There was particular growth in the number of supervisors who were in charge of five or fewer employees. Depending upon factors such as those identified in the City’s Span of Care calculator tool and the size of the business unit, there is an opportunity to optimize the supervision structure.

This analysis uses FTE - not headcount and does not include the seasonal workforce or the supervision of contractors. For areas with larger part-time or seasonal workforces or a large number of contractors, this may skew results to show smaller spans of control.

Additional Information:

Between 2017 and 2020, the number of supervisors in charge of 10 or more employees decreased by 11%.

In contrast, supervisors in charge of 3-5 employees increased 29% and supervisors in charge of 1 or 2 employees increased by 37%.

Because supervisors typically cost more than staff, this shift to more supervisors in charge of smaller groups of employees has budget implications.

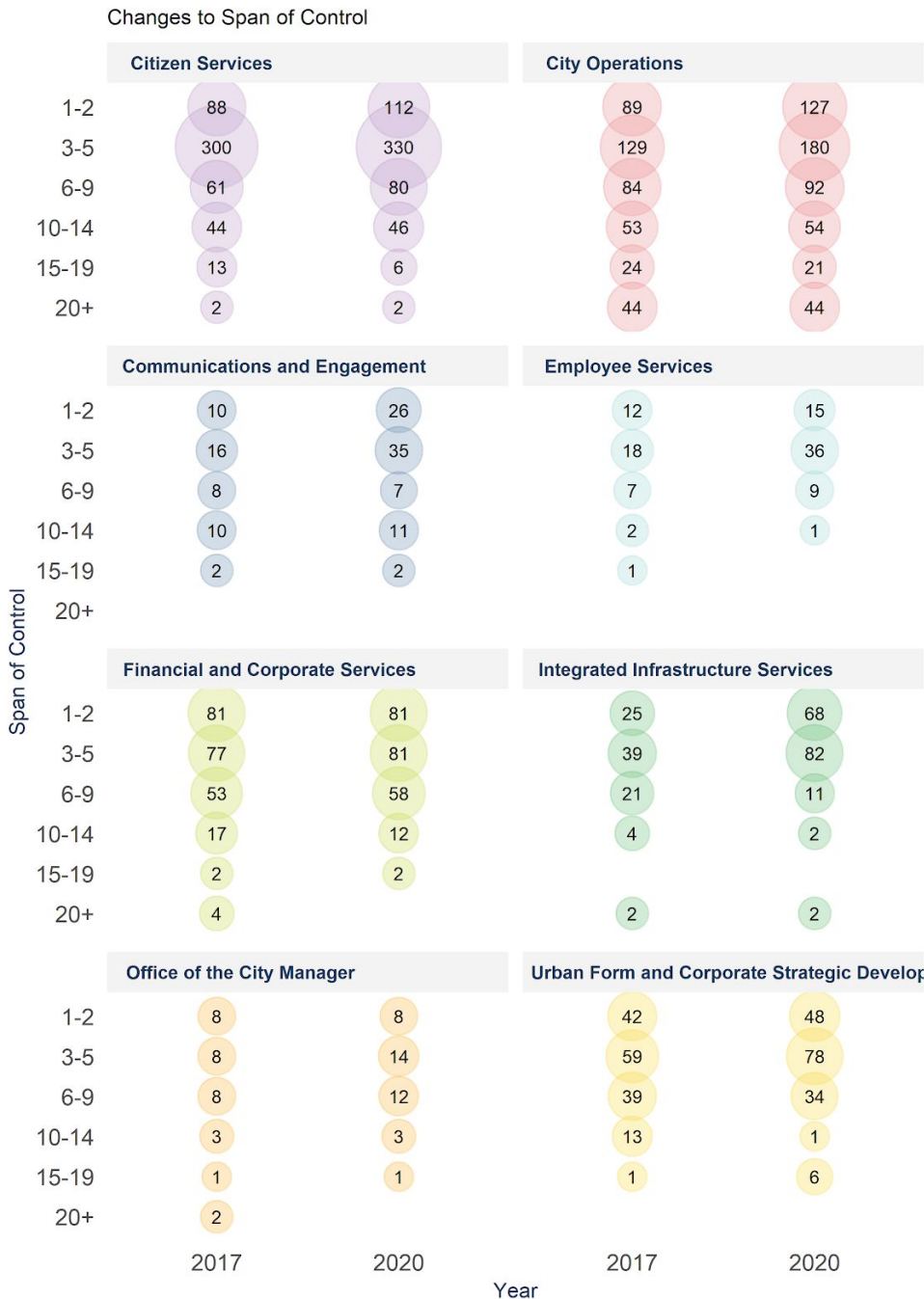
The Organizational Design Framework includes a Span of Care calculator tool. This tool provides guidance on determining an appropriate number of employees for a supervisor. It considers:

- The diversity of functions overseen
- The knowledge and specialization required
- Geographic location of employees overseen
- If there are structured guidelines or policies to guide the work
- The percentage of the positions dedicated to supervision
- If there are internal and external relationships to manage

Total team size is also a factor when determining an appropriate span of control.

4a. Department Span of Control

Most departments have seen a shift towards supervising smaller groups of employees.



Key Changes:

Citizen Services has shifted slightly towards supervising smaller groups.

City Operations has increased smaller supervised group sizes, but not consistently reduced large groups.

Communications and Engagement has increased small group supervision, but has not significantly changed larger groups.

Employee Services has shifted towards supervising smaller groups.

Financial and Corporate Services has shifted from larger groups to mid-sized groups. They have not added any additional groups of 1-2.

Integrated Infrastructure Services has shifted from mid-sized groups to smaller groups with a large increase in supervision groups of 1-2 employees.

The Office of the City Manager has removed supervised groups of over 20 FTE, and added more mid-sized groups.

Urban Form and Strategic Development has shifted to supervising smaller groups.

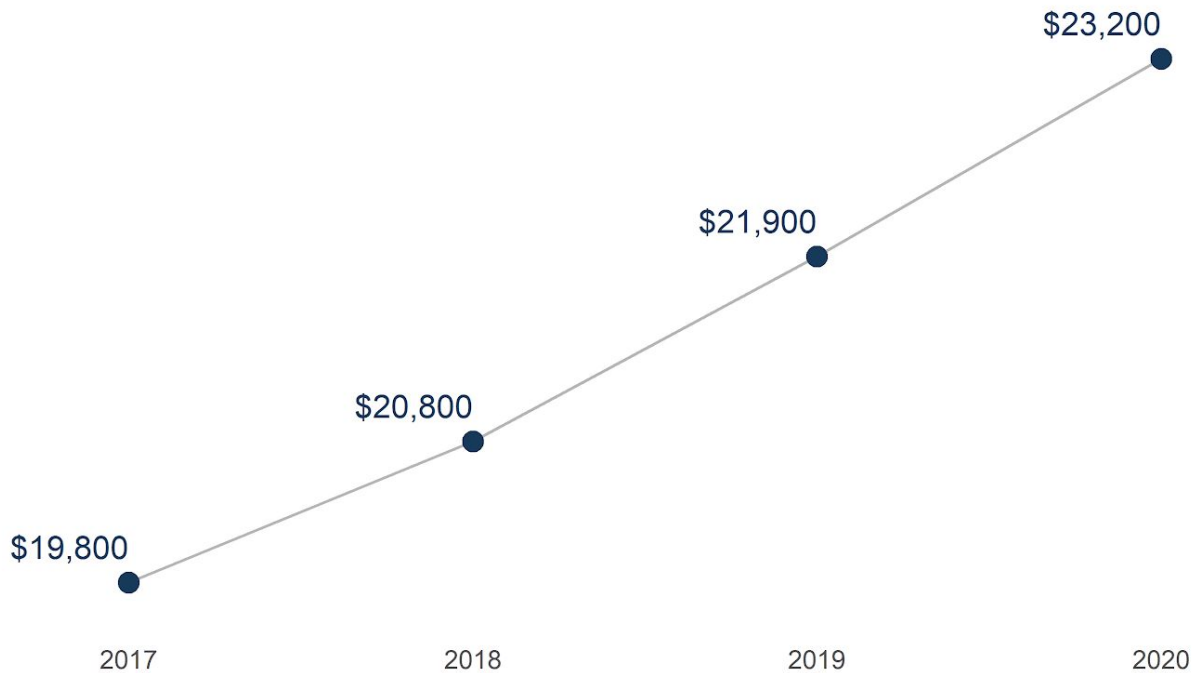
Note: Spans of control may be higher or lower depending on the time of year for departments with a large seasonal workforce.

5. Cost of Supervisors

The total budgeted cost of supervisors per organization FTE provides a cost perspective on changes to the number of organization supervisors and changes to supervisor compensation. Both of these factors influence this measure.

In 2017, the approximate cost of supervisors per organization FTE was \$19,800. By 2020, this had increased to \$23,200.

Cost of Supervisors per FTE



*Cost of supervisors = Budgeted cost of all employees who supervise / Organization FTE

Analysis:

This measure provides a valuable cost perspective by demonstrating the combined impact of adding more supervisor FTE and compensation increases for supervisors.

The increase to the cost of supervisors at the City between 2017 and 2020 is primarily due to an increase in the number of supervisors in higher compensated roles, and increases in compensation for union supervisors and non-union supervisors not at the top of their salary range.

The organization's shift to smaller spans of control is also reflected in the cost of supervisors per FTE. When the cost of a supervisor is not spread out over a large group of employees, the cost of supervisors per FTE increases.

5a. Department Cost of Supervisors per FTE

Identifying differences in the cost of supervisors per FTE between departments and organizational structures may help identify opportunities for efficiencies.



Key Changes:

Citizen Services cost of supervisors per FTE has increased 9%.

City Operations cost of supervisors per FTE has increased 18%.

Communications and Engagement cost of supervisors per FTE has increased 32%.

Employee Services cost of supervisors per FTE has increased 17%.

Financial and Corporate Services cost of supervisors per FTE has increased 6%.

Integrated Infrastructure Services cost of supervisors per FTE has increased 40%.

The Office of the City Manager cost of supervisors per FTE has increased 21%.

Urban Form and Corporate Strategic Services cost of supervisors per FTE has increased 11%.

6. Middle Management and Front-Line Supervision

In this report we have included all employees that supervise at least one other supervisor as “Middle Management” - with the exception of senior managers.

The overall increase in supervisors in the organization is reflected in an increase of 106 middle management positions and 197 front-line supervisor positions.

Change to Middle Management

	2017	2020	Change	% Change
Middle Management	483.8	589.4	↑ 105.6	21.8%

Change to Front-Line Supervisors

	2017	2020	Change	% Change
Front-Line Supervisors	1,044.7	1,241.7	↑ 197.0	18.9%

Analysis:

The term ‘middle management’ tends to be used by the public to negatively describe positions in an organization that do not provide front-line services. However, all large hierarchical organizations have these roles in order to distribute work and have a functional chain-of-command.

It is important to have a right-sized middle management. Inadequate or excessive middle management roles can limit the effectiveness and efficiency of the organization by delaying decisions or providing insufficient supervision of employees.

Because all organizations are structured differently, have different lines of business, and are different sizes, there is no consistent benchmark for the size of middle management.

From 2017 to 2020, middle management positions increased from 4% of the workforce to 5% of the workforce. Front-line supervisor positions increased from 9% of the workforce to 11%.

In 2020, 69% of front-line supervisors and 20% of middle managers were union employees.

Additional Information:

Middle Management includes all employees that supervise another supervisor except senior management including the City Manager, Deputy City Managers and Branch Managers that supervise.³

Front-Line Supervisors consist of employees who only supervise front-line staff.

If employees supervise both front-line staff and other supervisors, they are included as middle management.

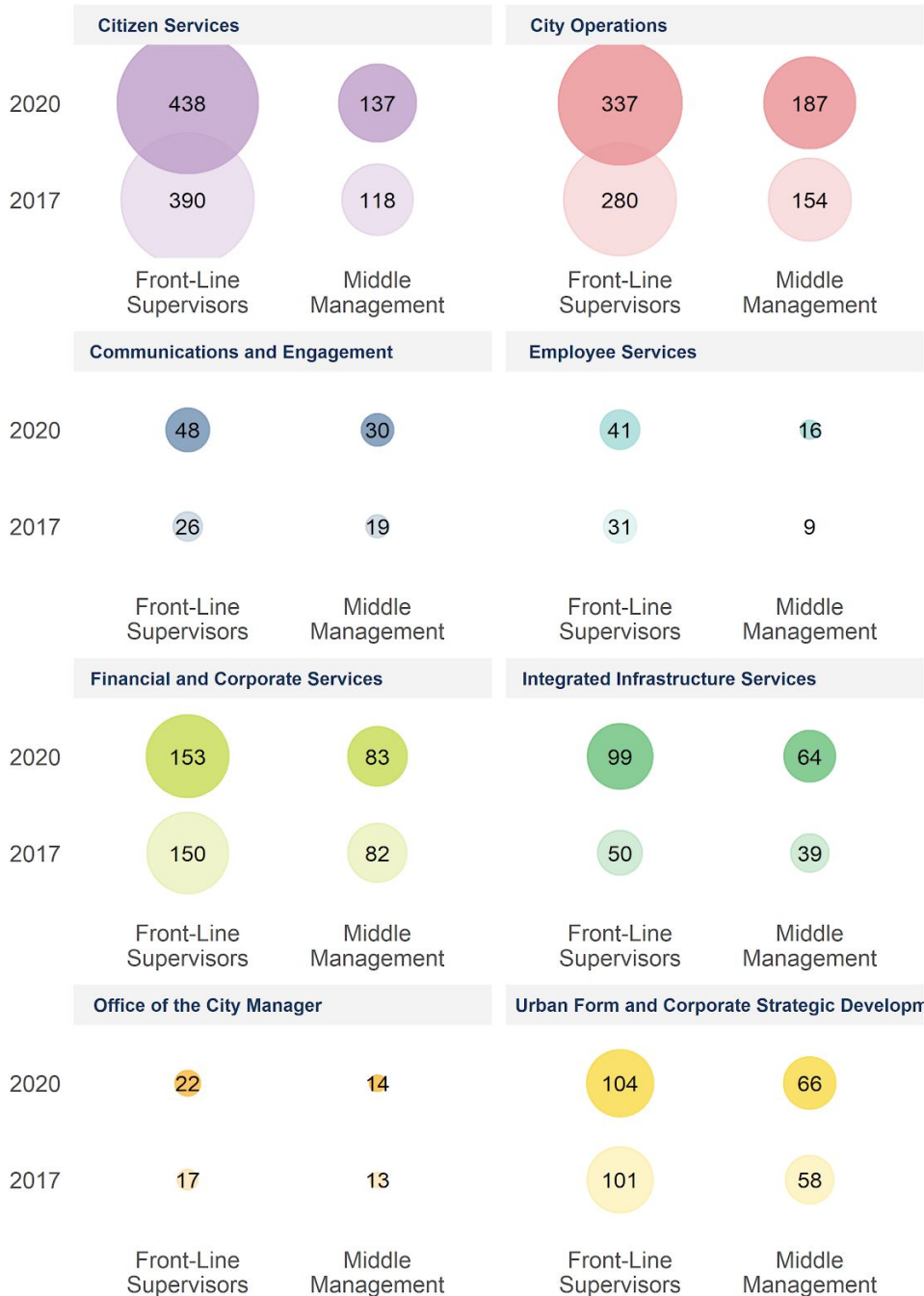
In this report we have defined ‘middle management’ to reflect a position within the organization structure. This allows us to provide a baseline analysis of organization hierarchy and reporting relationships. Our definition does not incorporate any job responsibilities.

Administration uses a different definition of ‘middle management’ to reflect management responsibilities rather than position within the organization structure.

³ In 2020, there were 36 employees classified as Branch Managers, Directors, and Managers that did not supervise any employees. They have been included in ‘middle management’.

6a. Department Middle Management and Front-Line Supervisors

Middle management and front-line supervisors increased in all departments.



Additional Information:

In 2020, **Citizen Services** middle management comprises 5% of their workforce. Front-line supervisors comprise 15% of their workforce.

In 2020, **City Operations** middle management comprises 3% of their workforce. Front-line supervisors comprise 6% of their workforce.

In 2020, **Communications and Engagement** middle management comprises 7% of their workforce. Front-line supervisors comprise 12% of their workforce.

In 2020, **Employee Services** middle management comprises 6% of their workforce. Front-line supervisors comprise 17% of their workforce.

In 2020, **Financial and Corporate Services** middle management comprises 8% of their workforce. Front-line supervisors comprise 15% of their workforce.

In 2020, **Integrated Infrastructure Services** middle management comprises 11% of their workforce. Front-line supervisors comprise 18% of their workforce.

In 2020, **The Office of the City Manager** middle management comprises 7% of their workforce. Front-line supervisors comprise 11% of their workforce.

In 2020, **Urban Form and Strategic Development** middle management comprise 9% of their workforce. Front-line supervisors comprise 14% of their workforce.

Conclusion

Conclusion

The City must reduce its costs in order to remain sustainable in the current economic environment.

Since 2017, the workforce has grown each year and supervisory FTE have grown disproportionately high compared to non-supervisory FTE. Reversing this growth by reducing supervisory FTE is an effective way to reduce costs for the organization.

Administration has developed the Organizational Design Framework including the Span of Care calculator tool that can inform and support decisions related to reductions of supervisory FTE. Work done by the Program and Service Review as well as various other projects related to organizational design that are underway can also inform decisions related to optimization of staffing.

We would like to thank the staff in Employee Services and Financial and Corporate Services for their assistance in this audit. Their knowledge of the data and the organization was very much appreciated.

Cost Saving Scenarios

Potential Cost Savings

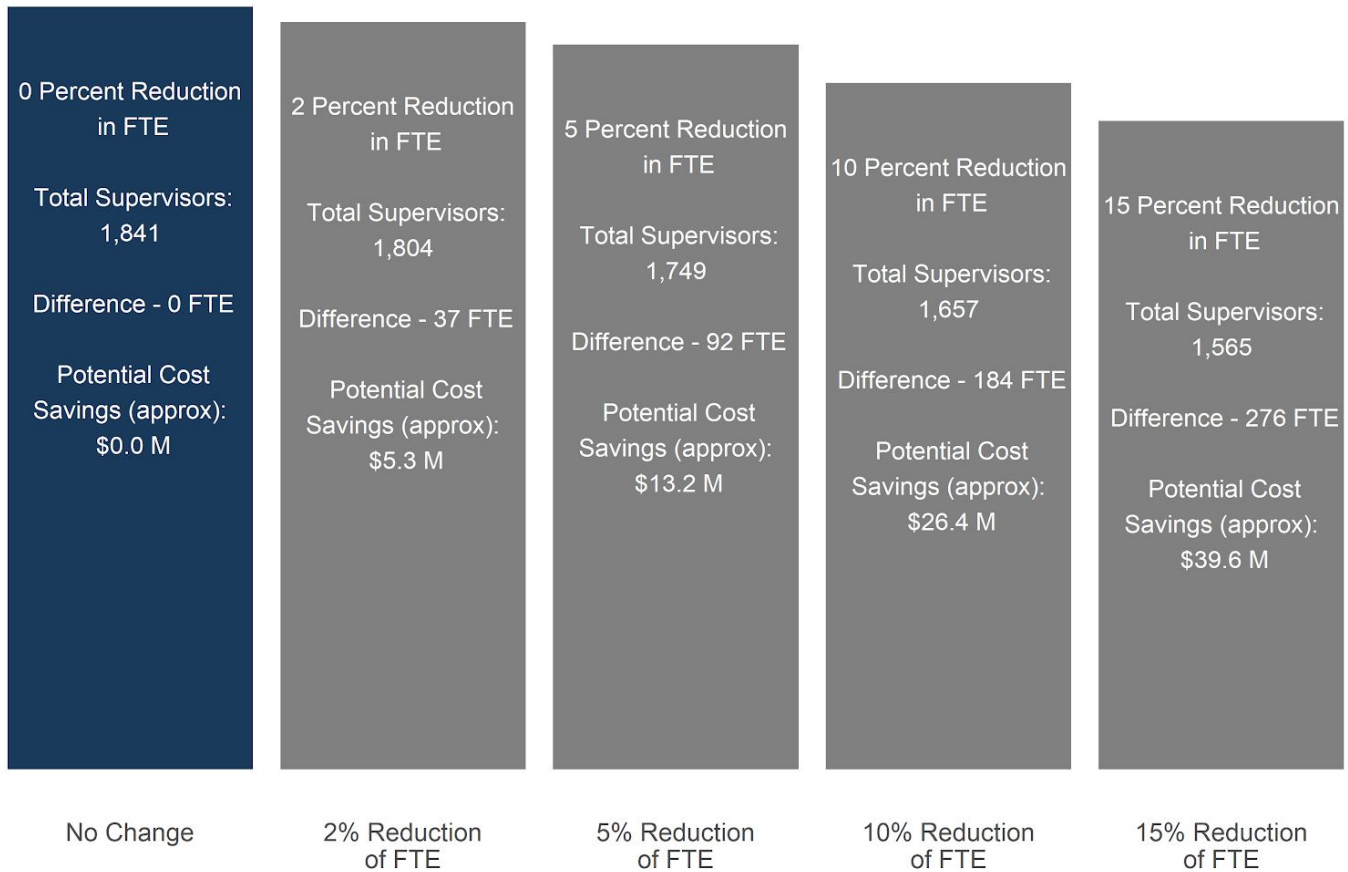
Reducing costs will be critical to ensuring the sustainability of the City of Edmonton organization.

The elimination of supervisor FTE would result in cost savings for the organization. By applying the tools and frameworks the City has already developed, the Administration can identify specific supervisory FTE with duties that can be reassigned or eliminated.

To estimate the potential scope of cost savings associated with supervisory FTE reductions, we have modeled reductions in supervisory FTE from 0% no change, up to to 15% reductions.

Reduction of Supervisor FTE

In 2020, there were 1,841 supervisor FTE in the organization with an approximate average budget of \$143,400 per supervisor FTE.



Recommendation

Recommendation

Review supervisor responsibilities

Recommendation

We recommend Administration review supervisor responsibilities in the organization in order to reduce costs and layers of supervision.



Responsible Party

Deputy City Manager, Employee Services



Accepted by Management

Management Response

The Organizational Design Framework outlines the number of layers allowed in the organization as a maximum of seven, from City Manager to front-line employee. Of those seven layers, a maximum of five should be management. Any variations from this must be approved by the City Manager. This will help to increase agility, better manage costs, improve the employee experience and clarify responsibilities.

Administration is exploring more effective and efficient solutions and technologies that will modernize the City's job classification system within the Modernizing the Workforce initiative. The desired outcome is to implement a comprehensive classification structure/hierarchy for all jobs within the City which will attract talent, provide flexibility and fluidity to respond and adapt to an ever changing workforce, and more clearly identify the appropriate salary and benefits of jobs.

As the City recovers from COVID-19, the City of Edmonton has also launched Reimagine the Future, which will require thoughtful consideration related to the programs and services Administration will be able to provide and the supportive workforce resources required.



Implementation Date

March 31, 2022

Implementation of the Organizational Design Framework was approved in November 2019 and has been utilized for any reorganizations that began since then. The Reimagine the Future work is underway and will continue into 2021. Administration is exploring a modern job classification system and, pending further approval, it is projected to be fully implemented in 2023.