



AGENDA

AUDIT COMMITTEE

September 9, 2021, 1:00 PM

ENGINEERING TRADITIONS

Members

Councillor E. Woolley, Chair
Councillor J. Farkas, Vice-Chair
Councillor D. Colley-Urquhart
Councillor J. Davison
Citizen Representative L. Caltagirone
Citizen Representative K. Kim
Citizen Representative M. Lambert
Mayor N. Nenshi, Ex-Officio

SPECIAL NOTES:

*Public are encouraged to follow Council and Committee meetings using the live stream
www.calgary.ca/watchlive
Members may be participating remotely.*

1. CALL TO ORDER
2. OPENING REMARKS
3. CONFIRMATION OF AGENDA
4. CONFIRMATION OF MINUTES
 - 4.1. Minutes of the Regular Meeting of the Audit Committee, 2021 July 22
5. CONSENT AGENDA
 - 5.1. DEFERRALS AND PROCEDURAL REQUESTS
None
 - 5.2. BRIEFINGS
None

6. POSTPONED REPORTS
(including related/supplemental reports)

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

7.1. Organization Realignment Update (Verbal), AC2021-1332

7.2. 2021 Municipal Election Audit, AC2021-1277

7.3. PeopleSoft Financials and Supply Chain Management Continuous Auditing, AC2021-1251

8. ITEMS DIRECTLY TO COMMITTEE

8.1. REFERRED REPORTS
None

8.2. NOTICE(S) OF MOTION
None

9. URGENT BUSINESS

10. CONFIDENTIAL ITEMS

10.1. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

10.1.1. Shareholder Alignment Review of Wholly-Owned Subsidiaries, AC2021-1354
Held confidential pursuant to Section 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*.

Review By: 2022 September 09

10.1.2. Audit Forum (Verbal), AC2021-1229
Held confidential pursuant to Sections 24 (Advice from officials), and 25 (Disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*.

10.1.3. External Auditor – Provision of Additional Services, AC2021-1311
Held confidential pursuant to Sections 16 (Disclosure harmful to business interests of a third party) and 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*.

Review By: 2022 September 09

10.1.4. External Auditor (Verbal), AC2021-1230
Held confidential pursuant to Sections 23 (Local public body confidences) and 24 (Advice from officials), and 25 (Disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*.

- 10.1.5. City Auditor (Verbal), AC2021-1231
Held confidential pursuant to Sections 19 (Confidential evaluations) and 24
(Advice from officials) of the *Freedom of Information and Protection of Privacy*
Act.

10.2. URGENT BUSINESS

11. ADJOURNMENT



**MINUTES
AUDIT COMMITTEE**

**July 22, 2021, 9:30 AM
ENGINEERING TRADITIONS**

PRESENT: Councillor E. Woolley, Chair
Councillor J. Farkas, Vice-Chair
Councillor D. Colley-Urquhart (Remote Participation)
Councillor J. Davison (Remote Participation)
Citizen Representative L. Caltagirone (Remote Participation)
Citizen Representative K. Kim (Remote Participation)
Citizen Representative M. Lambert (Remote Participation)

ALSO PRESENT: Chief Financial Officer C. Male (Remote Participation)
A/City Auditor L. Ormsby
External Auditor T. Nakka (Remote Participation)
Executive Advisor C. Smillie
Legislative Coordinator M. A. Cario
Legislative Advisor D. Williams

1. CALL TO ORDER

Councillor Woolley called the Meeting to order at 9:36 a.m.

2. OPENING REMARKS

Councillor Woolley provided opening remarks.

ROLL CALL

Citizen Representative Caltagirone, Citizen Representative Kim, Citizen Representative Lambert, Councillor Colley-Urquhart, Councillor Davison, Councillor Farkas, and Councillor Woolley

3. CONFIRMATION OF AGENDA

Moved by Councillor Farkas

That the Agenda for the 2021 July 22 Regular Meeting of the Audit Committee be confirmed.

MOTION CARRIED

4. CONFIRMATION OF MINUTES

4.1 Minutes of the Regular Meeting of the Audit Committee, 2021 June 24

Moved by Councillor Farkas

That the Minutes of the 2021 June 24 Regular Meeting of the Audit Committee be confirmed.

MOTION CARRIED

5. CONSENT AGENDA

5.1 DEFERRALS AND PROCEDURAL REQUESTS

None

5.2 BRIEFINGS

None

6. POSTPONED REPORTS

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

7.1 Principal Corporate Risk Update - (Verbal), AC2021-1030

A presentation entitled "Principal Corporate Risk Update-(Verbal)", dated 2021 July 22 was distributed with respect to Report AC2021-1030.

Moved by Citizen Representative Caltagirone

That with respect to Verbal Report AC2021-1030, the following be approved:

That the Audit Committee receive this presentation for information and the Corporate Record pursuant to Bylaw 32M2020, Schedule A, Section 5.

For: (X): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Councillor Davison, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

7.2 Integrated Risk Management Mid-Year Update (Including Information Technology), AC2021-1029

A presentation entitled "Integrated Risk Management Mid-Year Update (Including IT)", dated 2021 July 22 was distributed with respect to Report AC2021-1029.

Moved by Citizen Representative Caltagirone

That with respect to Report AC2021-1029, the following be approved:

That Audit Committee recommends that Council:

1. Receive Report AC2021-1029 and the presentation for information and discussion pursuant to Audit Committee Bylaw 33M2020, Section 5 (c); and
2. Keep Attachment 4 confidential pursuant to Sections 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*; to be reviewed by 2026 July.

For: (7): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Councillor Davison, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

7.3 Calgary Police Commission 2020 Report, AC2021-1049

Councillor Woolley left the Chair at 10:41 a.m. and Vice Chair Farkas assumed the Chair.

Councillor Woolley resumed the Chair at 10:43 a.m. and Councillor Farkas returned to his seat in Committee.

Moved by Citizen Representative Lambert

That with respect to Report AC2021-1049, the following be approved:

That Audit Committee receive this report and presentation for the Corporate Record.

For: (7): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Councillor Davison, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

7.4 External Auditor Management Letter for Off-Site Levy Balances Audit, AC2021-1062

A letter from BILD and NAIOP Calgary, dated 2021 July 21 was distributed with respect to Report AC2021-1062.

Councillor Davison left the meeting at 11:41 a.m. remotely.

Moved by Citizen Representative Lambert

That with respect to Report AC2021-1062, the following be approved:

That Audit Committee recommends that Council receives this Report and Attachment for the Corporate Record.

For: (6): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

7.5 External Auditor 2021 Audit Service Plan, AC2021-1048

Moved by Citizen Representative Kim

That with respect to Report AC2021-1048, the following be approved:

That the Audit Committee:

1. Reviews and approves the Deloitte 2021 Audit Service Plan (Attachment); and
2. Recommends that Council receive this Report and the Attachment for the Corporate Record.

For: (6): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

7.6 City Auditor's Office 2nd Quarter 2021 Report, AC2021-1100

Moved by Councillor Farkas

That with respect to Report AC2021-1100, the following be approved:

That the Audit Committee:

1. Receive this report for the Corporate Record; and
2. Recommend that Council receive this report for the Corporate Record.

For: (6): Councillor Woolley, Councillor Farkas, Councillor Colley-Urquhart, Citizen Representative Caltagirone, Citizen Representative Kim, and Citizen Representative Lambert

MOTION CARRIED

By General Consent, pursuant to Section 6(1) of Procedure Bylaw 35M2017, Committee suspended Section 78(1)(a) of the Procedure Bylaw in order to change the lunch recess to 30 minutes.

Committee recessed at 12:15 p.m. and reconvened at 12:45 p.m. with Councillor Woolley in the Chair.

ROLL CALL

Citizen Representative Caltagirone, Citizen Representative Kim, Citizen Representative Lambert, Councillor Farkas, and Councillor Woolley

Absent for Roll Call Councillor Colley-Urquhart and Councillor Davison

7.7 Industrial Control Systems Security Audit, AC2021-1099

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1099:

Clerks: MA Cario and D. Williams. Advice: C. Male, D. Morgan, L. Ormsby, E. Otte, T. Scherpenisse, V. Tran, A. Cohen, K. Colbran, B. Labrenz, and C. Smillie. External: T. Nakka, H. Gill, I. Cvitanusic and E. Vervoort and D. Mulay.

Moved by Citizen Representative Caltagirone

That with respect to Report AC2021-1099, the following be approved:

That the Audit Committee:

1. Receive this report for the Corporate Record;
2. Recommend that Council receive this report for the Corporate Record; and
3. Recommend that Attachment 1 to Report AC2021-1099 remain confidential pursuant to Sections 20 (Disclosure harmful to law enforcement) of the *Freedom of Information and Protection of Privacy Act* to be reviewed by July 22, 2036.

MOTION CARRIED

8. ITEMS DIRECTLY TO COMMITTEE

8.1 REFERRED REPORTS

None

8.2 NOTICE(S) OF MOTION

None

9. URGENT BUSINESS

None

10. CONFIDENTIAL ITEMS

Moved by Councillor Davison

That pursuant to Sections 16 (Disclosure harmful to business interests of a third party), 17 (Disclosure harmful to personal privacy), 19 (Confidential evaluations), 20 (Disclosure harmful to law enforcement), 23 (Local public body confidences), 24 (Advice from officials), 25 (Disclosure harmful to economic and other interests of a public body) and 27 (Privileged Information) of the *Freedom of Information and Protection of Privacy*

Act, Committee moved into Closed Meeting at 12:58 p.m., in the Engineering Committee Boardroom, to discuss confidential matters with respect to the following Items:

- 7.7 Industrial Control Systems Security Audit, AC2021-1099
- 10.1.1 Shareholder Alignment Review of Wholly-Owned Subsidiaries, AC2021-1061
- 10.1.2 Audit Forum (Verbal), AC2021-1044
- 10.1.3 External Auditor (Verbal), AC2021-1045
- 10.1.4 City Auditor (Verbal), AC2021-1046
- 10.1.5 External Auditor 2020 – 2021 Performance Assessment, AC2021-1047

And further, that following be invited to attend the Closed Meeting, Harman Gill, Trevor Nakka, Daksha Mulay, Erica Vervoort and Ivana Cvitanusic, External Auditors (Deloitte LLP); and

Karun Gautam, Max Yusipenko, Lance Mortlock, Hindul Bhardwaj, Ernst & Young.

MOTION CARRIED

Committee reconvened in public meeting at 2:35 p.m. with Councillor Woolley in the Chair.

10.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

10.1.1 Shareholder Alignment Review of Wholly-Owned Subsidiaries, AC2021-1061

A confidential presentation was distributed with respect to Report AC2021-1061.

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1061:

Clerks: MA Cario and D. Williams. Advice: C. Male, L. Tochor, L. Kerr, A. Brown, D. Jakal, L. Ormsby, and C. Smillie. External: T. Nakka, H. Gill, I. Cvitanusic, E. Vervoort, D. Mulay, K. Gautam, M. Yusipenko, L. Mortlock and H. Bhardwaj.

Moved by Councillor Davison

That with respect to Report AC202-1061, the following be approved:

That Audit Committee approve the Working Group Recommendations:

1. Request the external consultant, Ernst & Young, engage with the wholly-owned subsidiaries no later than 2021 September 1 to receive their response and feedback;
2. Refer this Report to Administration to work with the external consultant and to return to the 2021 September 9 Audit Committee meeting with the development of a plan for Council's consideration in

moving forward on the external consultant's recommendations together with any further recommendations;

3. Disband the Working Group for the Shareholder Alignment Review of Wholly-Owned Subsidiaries and that they be thanked for their contributions and oversight; and
4. Keep the Report, Attachment 2, and Closed Meeting discussions confidential pursuant to Section 24 (Advice from Officials) of the *Freedom of Information and Protection of Privacy Act*, until Council rises and reports on this matter at the 2021 September 13 Combined Meeting.

MOTION CARRIED

10.1.2 Audit Forum (Verbal), AC2021-1044

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1044:

Clerks: MA Cario and D. Williams. Advice: C. Male, L. Ormsby, L. Tochor, D. Hamilton and C. Smillie. External: T. Nakka, H. Gill, I. Cvitanusic, E. Vervoort and D. Mulay.

Moved by Citizen Representative Caltagirone

That with respect to report AC2021-1044, the following be approved:

That the Audit Committee direct that the Closed Meeting discussions remain confidential pursuant to Section 17 (Disclosure harmful to personal privacy), 24 (Advice from Officials) and 25 (Disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*.

MOTION CARRIED

10.1.3 External Auditor (Verbal), AC2021-1045

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1045:

Clerks: MA Cario and D. Williams. Advice: C. Male, L. Tochor, and C. Smillie. External: T. Nakka, H. Gill, I. Cvitanusic and E. Vervoort.

Moved by Councillor Farkas

That with respect Verbal Report AC2021-1045, the following be approved:

That the Audit Committee direct that the Closed Meeting discussions remain confidential pursuant to Sections 23 (Local public body confidences) and 24 (Advice from officials), and 25 (Disclosure harmful to

economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*.

MOTION CARRIED

10.1.4 City Auditor (Verbal), AC2021-1046

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1046:

Clerks: MA Cario and D. Williams. Advice: L. Ormsby, A. Bleau and C. Smillie.

Moved by Councillor Farkas

That with respect Verbal Report AC2021-1046, the following be approved:

That the Audit Committee direct that the Closed Meeting discussions remain confidential pursuant to Section 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*.

MOTION CARRIED

10.1.5 External Auditor 2020 – 2021 Performance Assessment, AC2021-1047

People in attendance during the Closed Meeting discussions with respect to Report AC2021-1047:

Clerks: MA Cario and D. Williams. Advice: C. Male and C. Smillie.

Moved by Citizen Representative Kim

That with respect to Report AC202-1047, the following be approved:

That Audit Committee:

1. Approve the Administration Recommendations; and
2. Direct that this Report, Recommendations and Closed Meeting discussions remain confidential pursuant to Sections 16 (Disclosure harmful to business interests of a third party) 19 (Confidential evaluations) and 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act* to be reviewed by 2036 July 22.

MOTION CARRIED

10.2 URGENT BUSINESS

None

11. ADJOURNMENT

Moved by Councillor Farkas

That this meeting adjourn at 2:40 p.m.

MOTION CARRIED

The following items have been forwarded on to the 2021 September 13 Combined Meeting of Council:

CONSENT

Integrated Risk Management Mid-Year Update (Including Information Technology), AC2021-1029

External Auditor Management Letter for Off-Site Levy Balances Audit, AC2021-1062

External Auditor 2021 Audit Service Plan, AC2021-1048

City Auditor's Office 2nd Quarter 2021 Report, AC2021-1100

Industrial Control Systems Security Audit, AC2021-1099

The next Regular Meeting of the Audit Committee is scheduled to be held on 2021 September 09 at 1:00 p.m.

CONFIRMED BY COMMITTEE ON

CHAIR

ACTING CITY CLERK

**City Auditor's Office Report to
Audit Committee
2021 September 01**

**ISC: Unrestricted
AC2021-1277
Page 1 of 1**

2021 Municipal Election Audit

RECOMMENDATIONS:

That the Audit Committee:

1. Receive this report for the Corporate Record; and
2. Recommend that Council receive this report for the Corporate Record.

HIGHLIGHTS

- Bylaw 30M2004 (as amended) established the position of City Auditor and the powers, duties and functions of the position. In accordance with Bylaw 30M2004 (as amended), the City Auditor reports the outcome of all audits to the Audit Committee (including Administration's response and corrective actions to be taken in regard to specific recommendations). The City Auditor is accountable to Council and subject to the oversight of Audit Committee under Bylaw 33M2020.
- What does this mean to Calgarians? The City Auditor's Office provides independent and objective audit assurance services to add value to The City of Calgary and enhance public trust.
- Why does it matter? Mitigation of risks and associated effective planning supports the delivery of a safe and effective General Election for voters and other stakeholders.
- Strategic alignment: Citizen Priority – A Well Run City.

ATTACHMENTS

1. 2021 Municipal Election Audit – AC2021-1277 ATT 1
2. 2021 Municipal Election Audit Presentation Slide – AC2021-1277 ATT 2

DEPARTMENT CIRCULATION

Name	Title, Department or Business Unit	Approve/Consult/Inform
Liz Ormsby	Acting City Auditor	Approve
David Duckworth	City Manager	Inform
Carla Male	Chief Financial Officer	Inform
Jill Floen	City Solicitor	Inform
Katarzyna Martin	City Clerk/Returning Officer	Inform
Andrew Brouwer	Deputy City Clerk, Elections Calgary	Inform



Calgary

City Auditor's Office

2021 Municipal Election Audit
September 1, 2021

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Table of Contents

Executive Summary	5
1.0 Background	7
2.0 Audit Objective, Scope and Approach	9
2.1 Audit Objective	9
2.2 Audit Scope	9
2.3 Audit Approach	10
3.0 Results.....	10
3.1 Ballot Supply and Allocation	11
3.2 Vote Station Facilities and Processes.....	11
3.3 Recruitment, Staffing and Training Plans	13
3.3.1 Recruitment and Staffing.....	14
3.3.2 Training	14
3.4 Election Communication.....	15
3.4.1 Communication Strategy	15
3.4.2 Communication Effectiveness.....	16
3.5 Tabulator Plan and End of Night Procedures	16

The City Auditor's Office conducted this audit in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

Executive Summary

General Elections, commonly known as Municipal Elections, in Calgary are complex events held every four years, allowing electors to vote for Mayor, Councillor, and Public and Separate School Board Trustee candidates. General Elections are governed by the Local Authorities Elections Act and administered by Elections Calgary, a division of the City Clerk's office within the City Manager's Office and led by the Returning Officer. Elections Calgary is responsible for independently and impartially administering General Elections and by-elections, vote of the electors, Senate elections, and verifying petitions¹.

The last General Election was held on October 16, 2017. The public expressed concerns about their election day experience, including long line ups at voting stations and delayed reporting of election day results. The City Auditor's Office completed a review of 2017 election processes² and raised four recommendations to minimize significant contributing factors and improve voter experience during the 2021 General Election. We completed a follow-up audit in 2020³ and concluded the design of planned 2021 election processes was effective, and all management action plans to address recommendations were implemented.

Significant changes have occurred since the 2017 General Election and the follow-up audit. Elections Calgary initiated changes to ward boundaries and processes to improve voting efficiency and voter experience, such as downloadable voter registration forms (Form 13RSE), and increased number of vote stations and advance voting hours. Environmentally, the COVID-19 pandemic is a challenge that may impact voters' and election workers' health and safety. In addition, City and Provincial questions added to the ballot have increased ballot length.

Based on an assessment of changes and associated risks, we determined there was value in completing an operational audit of Elections Calgary's readiness to deliver a safe and effective 2021 General Election. The intent of the audit was to focus on plans and procedures implemented to respond to significant changes and not to duplicate work performed in previous audits.

The objective of this audit was to assess Elections Calgary's plans and processes in key areas impacted by environmental and process changes in 2020 and 2021 to ensure the following risks were mitigated:

- Ballot supply shortage;
- Inadequate voting station accessibility and space;
- Voters not informed of changes to voting process;
- Staffing shortages;
- Staff not adequately trained on new processes;
- Delayed reporting of election results due to tabulator failure; and,
- Inadequate end of day set-up.

We concluded Elections Calgary has refined processes and planned effectively to administer the 2021 General Election and mitigate risks due to significant changes. We reviewed plans regarding

¹ <https://www.calgary.ca/election/about-us/default.html>

² 2017 Municipal Election Review AC2018-0852

³ 2017 Municipal Election Follow-up AC2020-0196

ballot supply, voting station selection, recruitment, staffing and training, communication, tabulator testing, and end of night procedures, and determined Elections Calgary incorporated significant changes in planning, such as ward boundaries, longer ballots, and COVID-19.

Elections Calgary made data-driven decisions using historical data and Geographic Information Systems technology to calculate 100% ballot supply and allocation to voting subdivisions, and staffing levels required at voting stations. We identified improvements to data integrity controls that will strengthen calculations and plans to ensure effective ballot distribution and adequate voting station staffing.

Elections Calgary conducted comprehensive facility inspections and assessed accessibility, technology, and COVID-19 requirements. We identified an opportunity to improve voting processes by re-forecasting demand closer to Election Day for voting options where a voter does not wish to enter the voting station, given the risk that conditions and restrictions related to COVID-19 could change.

Elections Calgary responded promptly to our recommendations for improvement by implementing suggestions as they were identified, and refining processes and plans.

1.0 Background

The City of Calgary's (The City's) General Elections are held every four years, allowing electors to vote for Mayor, Councillor, and School Board Trustee candidates. The election process is governed by the Alberta Local Authorities Elections Act, the Calgary Election Regulation and ten bylaws, and administered by The City's Returning Officer (City Clerk)⁴. The next General Election will be held on October 18, 2021.

The last General Election was held on October 16, 2017. The public expressed concerns about their election day experience, including long lineups at voting stations and delayed reporting of election day results. The City responded to these concerns, confirming the accuracy of election results and compliance with legislation, as well as committing to improve election processes. As part of election process improvement, the City Clerk requested that the City Auditor's Office undertake a root cause analysis review, resulting in the 2017 Municipal Election Review report (AC2018-0852) issued on July 17, 2018. We raised four recommendations to minimize the identified contributing factors and improve the voter experience during the next election focused on mitigating the following four risks:

1. Ballot supply shortage;
2. Inadequate voting station facility accessibility and space;
3. Inadequate voting station processes and staffing; and,
4. Delayed reporting results.

In preparation for the 2021 General Election, Elections Calgary, a division of the City Clerk's Office, addressed the City Auditor's Office recommendations and incorporated these and the learnings from the 2026 Olympic Bid Plebiscite⁵ in the 2021 Election Day process design, including a decentralized model to distribute supplies to voting stations, voting station facility criteria, an election worker recruitment strategy, and use of tabulators to automate the ballot count.

The City Auditor's Office conducted the 2017 Municipal Election Follow-up Audit (AC2020-0196) and closed all four recommendations. We determined the design of planned election processes effectively mitigated the risks to voter experience and confirmed operating approach effectiveness based on key improvements implemented for the 2026 Olympic Bid Plebiscite including:

- 100% ready-available initial ballot supply based on the estimated number of electors;
- Adoption of federal election voting station accessibility criteria;
- Elimination of "superstations" serving over 7,100 electors;
- Adequate staffing of voting stations; and
- Simplified results reporting process utilizing tabulators.

⁴ The City Clerk is appointed by Council to perform the duties of The City's Returning Officer which include establishing voting stations and appointing and assigning staff to each voting station.

⁵ The 2026 Olympic Bid Plebiscite was held on November 13, 2018. The City Auditor's Office conducted a Plebiscite Readiness Review (AC2018-1247) at the request of the City Clerk to validate readiness and support greater transparency on actions taken by Elections Calgary to improve voter experience.

Significant changes and events, locally and globally, have occurred since the 2017 General Election and the 2017 Municipal Election Follow-up Audit. Some changes were initiated by The City such as ward boundary changes, and changes introduced to improve voting efficiency and voter experience such as downloadable voter registration forms (Form 13RSE), increased number of vote stations (Advance Vote and Election Day) and additional advance voting hours.

Ballots will be longer due to the large number of candidates, Council-directed question on fluoridation in the municipal water system, provincial referendum questions regarding The City's fiscal relationship with the province and daylight savings time, and a Senate election. The COVID-19 pandemic has also introduced new challenges for the 2021 General Election, including health and safety concerns for voters and election workers. Elections Calgary has been preparing and planning for the 2021 General Election and considering the impact of these changes on voter safety and experience.

Based on our assessment, we determined there was value in moving forward with the operational audit assessing readiness to deliver the 2021 General Election that was included in the City Auditor's Office 2021 Annual Audit Plan.

2.0 Audit Objective, Scope and Approach

2.1 Audit Objective

The objective of this audit was to assess Elections Calgary's readiness to deliver a safe and effective 2021 General Election. Specifically, we assessed Elections Calgary's plans and processes in key areas impacted by environmental and process changes in 2020 and 2021 to ensure the following risks were mitigated:

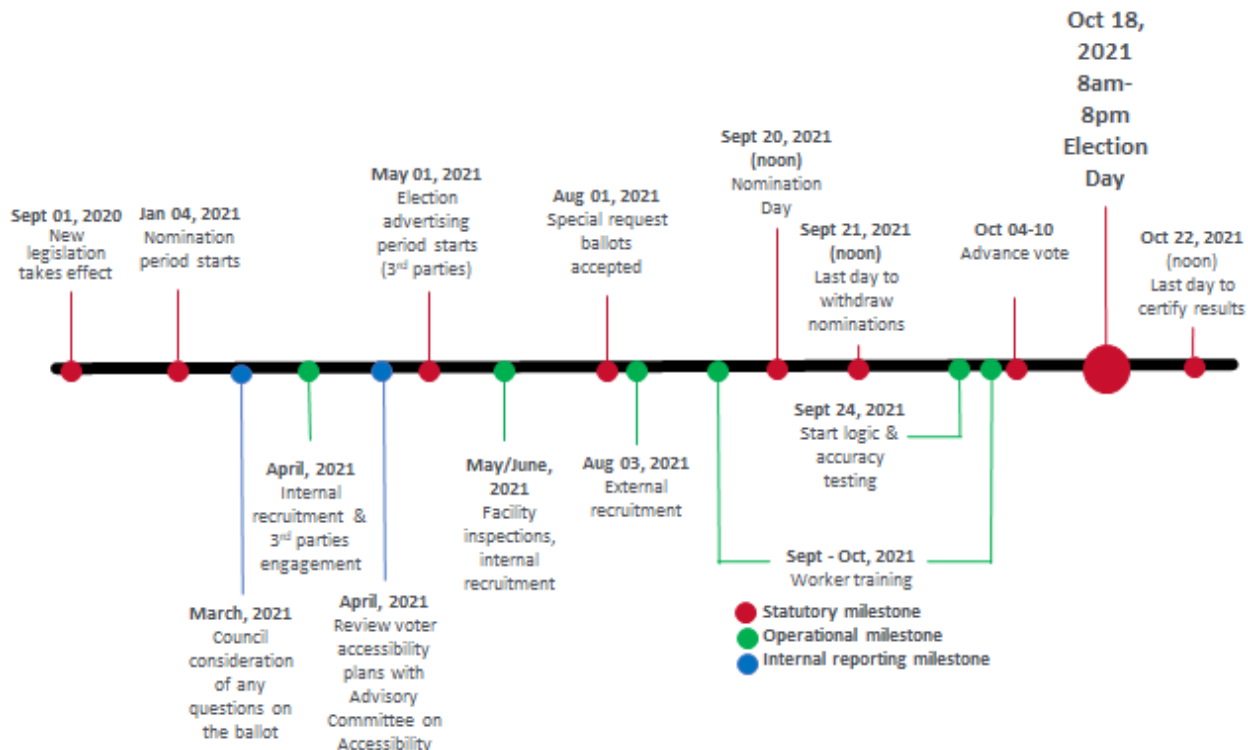
- Ballot supply shortage;
- Inadequate voting station accessibility and space;
- Voters are not informed of changes to voting process;
- Staffing shortages;
- Staff are not adequately trained on new processes;
- Delayed reporting of election results due to tabulator failure; and,
- Inadequate end of day set-up.

The audit assessed the design and operating effectiveness (where applicable) of key processes and controls implemented to respond to changes. The intent of the audit was to focus on plans and procedures implemented to respond to significant changes, and not to duplicate work performed in the 2017 Municipal Election Review Follow-up Audit.

2.2 Audit Scope

The City Auditor's Office assessed Elections Calgary's plans and processes, based on their timeline (Exhibit 1) to deliver a successful election on October 18, 2021. Due to the need to provide timely assessment of readiness and communication back to the City Clerk to support election preparation, the scope of the audit focused on available documentation (i.e. processes and procedures) provided to the City Auditor's Office between June 1 and June 30, 2021.

Exhibit 1:



Source: Elections Calgary, August 2021

2.3 Audit Approach

Our audit approach included interviews with Elections Calgary staff and key stakeholders, review of process flow documentation, plans and procedures, training and communication plans, and facility inspection information to assess the design effectiveness of planned election processes. We validated operating effectiveness of voting station facility inspections by reviewing facility checklists and procedures and testing a sample of inspections.

3.0 Results

We reviewed Elections Calgary's 2021 General Election plans and processes to supply sufficient ballots for all voters and ensure adequacy of voting stations, staffing and training, communication, tabulator testing, and end of night procedures. Overall, we concluded Elections Calgary refined processes and planned effectively to administer the 2021 General Election and mitigate risks due to significant changes. Elections Calgary incorporated significant changes such as ward boundaries, longer ballots and COVID-19 in planning, and developed a comprehensive communication strategy and training plan to ensure voters are informed on changes and staff are adequately trained.

In addition, Elections Calgary made data-driven decisions using historical data and Geographic Information Systems (GIS) technology to ensure 100% ballot supply and appropriate allocation to voting subdivisions, and adequate number of facilities and staff. We noted the same initial

population data source was used in separate spreadsheets to calculate ballot allocation and staffing levels at voter stations. However, due to formula errors and different assumptions, expected voter turnout and number of voters that could be processed daily were inconsistent between spreadsheets, which resulted in inaccurate projections. We provided Elections Calgary with data management improvements to ensure the accuracy of calculations and contribute to the success of overall election planning. Elections Calgary responded promptly and developed solutions to address data integrity.

Elections Calgary conducted comprehensive facility inspections and assessed accessibility, and technology and COVID-19 requirements. Based on our suggestion for improvement to support adjustments to staffing and supplies, if needed, Elections Calgary agreed to re-forecast demand closer to Election Day for voting options where a voter does not wish to enter the voting station, given the risk that conditions and restrictions related to COVID-19 could change. Elections Calgary also agreed to maintain information collected through facility inspections, including reasons for pass/fail decisions to leverage for use in future elections.

3.1 Ballot Supply and Allocation

In 2018, Elections Calgary implemented process improvements for the 2026 Olympic Bid Plebiscite to mitigate the risk to voter experience and access to vote by supplying 100% of ballots to voting stations based on estimated number of electors. In the 2021 General Election, Elections Calgary plans to provide 100% ballot supply to mitigate the risk of ballot supply shortage.

To calculate ballot supply and ballot allocation to subdivisions, Elections Calgary relied on elector population data provided by Elections Alberta⁶. Elections Calgary updated population numbers for growth and determined the population within new ward boundaries using GIS technology. They then created boundary lines within wards to establish subdivisions with a voter population target under 7,100. Additional analysis based on historical data was completed to forecast voter turnout during the Advance Vote and on Election Day.

We reviewed the design of the plan to determine ballot supply and ballot allocation to subdivisions and noted Elections Calgary incorporated ward boundary changes and population growth in forecasts and data analysis. We determined Elections Calgary's plan and documented methodology were effective to meet 100% ballot supply requirements and allocations to voting subdivisions.

We reviewed Elections Calgary's plans to acquire a sufficient supply of ballots, store the ballots in a secured facility, and distribute the ballots to the voting stations for the Advance Vote and Election Day, and noted the plans were designed effectively.

3.2 Vote Station Facilities and Processes

Elections Calgary implemented process improvements for the 2026 Olympic Bid Plebiscite by adopting federal election voting station accessibility criteria. Elections Calgary conducted comprehensive facility inspections in June 2021, which was a new process to support planning for the 2021 General Election. In the 2017 Municipal Follow-up Audit⁷, we assessed

⁶ Elections Alberta information is based on an enumeration completed in advance of the last Provincial Election on April 16, 2019.

⁷ AC2020-0196 2017 Municipal Election Follow-up Audit

whether the design of the process effectively mitigated the risk to voter experience. In this audit, we reviewed the operation of the inspection process, the Facility Inspection Guide (Checklist), data and results. We reviewed the Checklist and Elections Calgary's processes to ensure:

- Completeness, including accessibility;
- Checks to ensure facility technology was effective and reliable; and
- COVID-19 requirements were included (e.g. space to social distance).

Completeness

Elections Calgary used GIS technology to assist in identifying ideal locations for facilities that would accommodate voters by being centrally located within the wards and near transit, avoiding crossing major interchanges and construction sites, and serving a voter population under 7,100 per ward subdivision. We observed there were no ward subdivisions with more than 7,100 voters and all but four served a population of less than 6,500, which supports a positive voter experience by mitigating the risk associated with processing a large number of voters (e.g. long lineups).

Elections Calgary identified community-Advance Vote⁸ and Election Day facilities and followed up with site visits. As of June 28, 2021, Elections Calgary had conducted 238 site visits to potential voting station facilities. They anticipate using 33 community-Advance Vote and 186 Election Day stations compared to 24 and 170 stations respectively in 2017.

The Checklist is comprehensive and is based on the federal election criteria. Elections Calgary collected over 140 data points from each facility. The Checklist covers items such as parking, facility accessibility issues (i.e. stairs and ramps), nearby transit, Wi-Fi connection, and voting room size. The data is stored in a spreadsheet, however the resulting final decision or reason for the decision was not always clearly stated in the spreadsheet.

There is an opportunity for Elections Calgary to leverage the information collected and determine how it will be used for future elections and potentially avoid rework and duplication by including the reason for pass/fail decisions. Elections Calgary agreed with our assessment and plans to retain all relevant information collected and document the facility decisions.

Facility Technology

The Checklist included a count of power outlets, and tests of power outlets and cell phone reception strength, download and upload speed. We reviewed a sample of 19⁹ completed Checklists, which included 4 failed, 14 approved, and 1 requiring a 2nd inspection. We confirmed Checklists included required technology data for approved facilities and 2nd inspections and results supported Elections Calgary's technology requirements for Advance Vote and Election Day facilities:

⁸ Elections Calgary also plans advance voting opportunities for post-secondary students, shelter clients and care home residents. Elections Calgary will share confirmed voting opportunities publicly in September.

⁹ The completed Facility Inspection Guide data was provided by Elections Calgary. We selected a judgmental, sample to ensure the sample included Advance Vote Stations, Election Day Stations, failed inspections, incomplete inspections, successful inspections (facility was approved) and all wards.

- All 15 passed power supply tests (inspectors were instructed to test outlets with a phone charger) and,
- All 15 test results for cellphone reception, download and upload speed were adequate.

COVID-19 Requirements

We reviewed the Checklist criteria to ensure COVID-19 safety concerns were incorporated and confirmed the Checklist included data collection points for: room capacity, room ventilation, separate entrances/exits, room square footage, and size of doorways (two-way flow). Elections Calgary staff reviewed the data and facility deficiencies and then made decisions on pass/fail, or mitigation plans and re-inspection. In the sample of 19 Checklists (same as above), we observed missing information that Elections Calgary followed up on and obtained through a 2nd inspection or a phone call.

Elections Calgary also conducted a separate analysis to calculate the minimum square footage for Election Day voting stations should social distancing be required. They identified how much space was required and how many people the space could safely accommodate. There were ten rooms, four of which were included in our sample, determined to be too small if social distancing is required. Elections Calgary accepted the facilities based on plans to re-allocate voters to another voting station for three stations, available ventilation (open windows) for two, and hygiene supplies on hand for the remaining five, which were only slightly too small. Elections Calgary's approach is reasonable given the small number of facilities impacted (10 out of 191 tested) and limited availability of potential voting stations within voting subdivisions.

If a voter does not want to enter the voting station, Elections Calgary has processes that will permit the voter to cast a ballot outside. Historically, very few voters select this option and Elections Calgary's plans are based on expected low demand for this option. We identified the risk that changing conditions and restrictions related to COVID-19 could impact demand for this option, and recommended Elections Calgary re-forecast expected demand closer to Election Day to support adjustments to staffing and supplies if needed. Elections Calgary has agreed to re-forecast and plans to reach out to Elections Canada for additional information on demand for this option.

We also confirmed Elections Calgary created procedures to address election worker and voter safety in vote stations (Elections Calgary Voting Station COVID-19 Guide). Instructions include use of masks, sanitizer, and reduced touch points. and social distancing plans for election workers in the vote station. For example, the tabulator clerk will process the ballots into the tabulator, reducing the risk of voters touching the equipment, and single use pencils will be offered to voters who have not brought their own pencils or ball point pens. Elections Calgary also developed plans to ensure adequate COVID-19 supplies at voting stations.

3.3 Recruitment, Staffing and Training Plans

Elections Calgary revised recruitment, training, and staffing plans since the 2017 General Election. We assessed the effectiveness of the plans to mitigate the risk of staff shortages and staff not being adequately trained on new processes for the 2021 General Election.

3.3.1 Recruitment and Staffing

Elections Calgary's hiring target to staff the election, including contingency staff, and voting station positions is over 3,600 workers. The recruitment plan we reviewed as of June 11, 2021 included the number of election positions, core competencies, an advertising plan, and timelines to recruit and review applications, and book training.

Elections Calgary is planning for a high voter turnout given there are several wards with incumbents for Councillor and there will be a new Mayor. Elections Calgary made changes to address high voter turnout forecasts including adding an additional Deputy Returning Officer (DRO) and Information Officer to each voting station. In addition, they will recruit contingency staff to allocate to voting stations experiencing high voter volumes to provide timely support rather than on-call positions used in previous elections.

On June 7, 2021, Elections Calgary began a recruitment campaign to fill Area Supervisor and Presiding Deputy Returning Officers (PDRO) positions with City Exempt employees. As of June 30, 2021, Elections Calgary had sufficient applications to fill all the Area Supervisor and PDRO positions. They plan to hire the other positions in August 2021.

At the time of our review, Elections Calgary was conducting analysis to determine the number of election workers to staff all positions at the voting stations. We reviewed the staffing data analysis spreadsheet and noted the population data was consistent with the spreadsheet used to analyze ballot supply under section 3.1 above. However, voter turnout projections and the expected number of voters that could be processed daily by each DRO were inconsistent between spreadsheets due to data manipulations and/or different assumptions, which impacted staffing requirements. We informed Elections Calgary of the discrepancies between the spreadsheets and recommended improvements. Elections Calgary responded promptly, and developed solutions to improve data integrity, including limiting access and implementing controls to prevent unauthorized changes and ensure master data consistency.

3.3.2 Training

We reviewed Elections Calgary's plans to train over 3,600 workers and concluded the design is comprehensive and effectively mitigates the risk staff are not trained on new procedures. The training plan outlines training content and suitability, roles and responsibilities, deliverables and learning objectives for online and in-person training for election staff.

Specifically, the following are included in the training plan:

- Cross-training for PDRO and Assistant PDRO positions to facilitate redeployment to any position;
- Increased number of training hours with an additional two hours for every role;
- Tracking of completion of online training;
- Observation and evaluation of learners during training followed by testing on training materials and final deliverables;
- Training locations throughout Calgary to improve access;

- Hands-on training to use technology in the vote stations (AutoMARK¹⁰, iPads and tabulators) for all positions responsible to operate technology; and, All learners will receive health and safety training, specific to COVID-19 and how to handle emergencies and difficult situations, (e.g. voters refusing to wear mask).

3.4 Election Communication

We assessed the comprehensiveness of Elections Calgary's communication strategy (the Strategy) as a control to mitigate the risk that voters are not informed of changes for the 2021 General Election. We observed the Strategy's design is comprehensive with respect to identifying risks and mitigations, being responsive to voters and identifying gaps in communication to reduce the risk that voters are not informed.

3.4.1 Communication Strategy

We confirmed the Strategy included key components such as goals and objectives. The Strategy goals include:

- Provide accurate and timely information to ensure eligible voters are:
 - Aware of processes in the 2021 General Election;
 - Informed about how they can participate; and
 - Aware of what they need to vote (i.e. eligibility, ID requirements).
- Provide accessible and inclusive communication in various languages; and
- Communicate using a variety of mediums including images, graphics and videos to make information more inclusive, accessible and relatable.

Elections Calgary has incorporated significant changes in the Strategy, including new ward boundaries, longer ballots, COVID-19, and voter registration processes (e.g. downloadable Form 13RSE). Elections Calgary plans to deliver a Voter Guide to every household in Calgary several weeks prior to the election. The Voter Guide will inform voters of the election process and direct voters to the Elections Calgary website to learn more about the election, the vote process and the candidates. In addition to the Voter Guide, a voter information post card will be distributed to each household to inform about voting opportunities and voter eligibility. Signage will also be placed in communities to create awareness and provide information.

Communications for the 2021 General Election will be focused on a more digital approach to connect with audiences and address COVID-19 safety concerns. Elections Calgary plans an increase in online information sessions, greater use of social media tools and increased use of visuals in print and digital media. Elections Calgary's approach includes promotion of Advance Vote to enable social-distancing and minimize the number of people at the voting stations on Election Day. In addition, short information videos will be shared to social media to inform the voter on issues like how to fill out a ballot, what ballots are offered on Election Day, and what to expect.

Ongoing communication in the form of regularly scheduled meetings and daily interactions with the Deputy Returning Officer, provides the opportunity for the Communications Lead, Deputy Returning Officer and other leaders in Elections Calgary to address communication

¹⁰ AutoMARK machines are devices that allow a person with low-mobility, or persons with vision and hearing impairments to mark their own ballots without assistance.

concerns and identify new or emerging risks. This provides greater assurance that the Strategy is up-to-date and supports Elections Calgary's ability to pivot in response to current events and voter feedback.

Elections Calgary collects feedback from two main sources: comments submitted by the public through 3-1-1, and a user-experience survey on the Elections Calgary website. Elections Calgary's recent review of metrics and feedback from the user-experience survey found that users had difficulty obtaining information. The survey results showed several people could not find the candidate list. Elections Calgary responded with a design change to ensure the list was more prominent and located in more places. After the design change, that comment stopped appearing in the survey feedback.

3.4.2 Communication Effectiveness

We reviewed Elections Calgary's plans to measure the effectiveness of the Strategy:

- During our audit fieldwork, Elections Calgary reviewed digital metric reports of its website¹¹ traffic monthly. They plan to increase the frequency of review in the 6-8 weeks prior to the 2021 General Election.
- In September 2021¹², a survey will be conducted to rate the public's familiarity with when, where and how to vote. The results of the survey will be reviewed swiftly, in order to identify communication coverage gaps and adjust the Strategy if necessary.
- Assessment of the Strategy's effectiveness will include compilation and review of social media reports for tone and topics.

Elections Calgary plans to adjust the Strategy and allocate the communication budget as required, based on results and outcomes of the above.

3.5 Tabulator Plan and End of Night Procedures

We assessed the design effectiveness of the tabulator plan and End of Night Procedures (e.g. ballot return and voter station tear-down) to mitigate the risk of delayed reporting of election results due to tabulator failure and inadequate end of day set-up.

We reviewed tabulator procedure documentation and interviewed key employees from Warehousing and Information Technology. The plan to use tabulators is effectively designed to provide timely election results. In our review, we confirmed Elections Calgary's plans included:

- Acquiring sufficient tabulators to serve the 2021 General Election;
- Completing Logic and Accuracy testing of tabulators prior to use;
- Securely receiving, storing, deploying, and maintaining the tabulators with a documented chain of custody;
- Retrieving the tabulated data after the vote stations close, securely transmitting the data to Elections Calgary, and posting the results to Elections Calgary websites on Election Day in a timely manner; and

¹¹ <https://www.calgary.ca/election/information-for-voters/default.html>

¹² At the time of the audit fieldwork, specific details and dates were not available. Elections Calgary will use random sampling to select survey recipients.

- The day after Election Day, verifying election results to printed tabulator results.

We assessed the design of End of Night Procedures for adequacy to address COVID-19 requirements. As noted, above, Elections Calgary developed the Election Calgary Voting Station COVID-19 Guide, which includes election worker safety and will apply to ballot return and voting station tear down.

We would like to thank staff from Elections Calgary and leaders from the supporting Business Units: Customer Service & Communications, Information Technology, and Supply Management, for their assistance and support throughout this audit.



Calgary

City Auditor's Office

ISC: Unrestricted
AC2021-1277 ATT2

2021 Municipal Election Audit

Why we did this

- To assess Election Calgary's readiness to deliver a safe and effective 2021 General Election given significant environmental and process changes in 2020 and 2021.

What we concluded

- Elections Calgary has refined processes and planned effectively to administer the 2021 General Election and mitigate risks arising from significant changes.
- We reviewed plans regarding ballot supply, voting station selection, recruitment, staffing and training, communication, tabulator testing, and end of night procedures, and determined Elections Calgary incorporated significant changes in planning, such as ward boundaries, longer ballots and COVID-19.
- Elections Calgary has promptly addressed recommendations for improvement regarding data integrity controls and re-forecasting of demand for voting options.

Why it matters

- Risk mitigation and effective planning support the delivery of a safe and effective General Election for voters and other stakeholders.

PeopleSoft Financials and Supply Chain Management Continuous Auditing

RECOMMENDATIONS:

That the Audit Committee:

1. Receive this report for the Corporate Record; and
2. Recommend that Council receive this report for the Corporate Record.

HIGHLIGHTS

- Bylaw 30M2004 (as amended) established the position of City Auditor and the powers, duties and functions of the position. In accordance with Bylaw 30M2004 (as amended), the City Auditor reports the outcome of all audits to the Audit Committee (including Administration's response and corrective actions to be taken regarding specific recommendations). The City Auditor is accountable to Council and subject to the oversight of Audit Committee under Bylaw 33M2020.
- What does this mean to Calgarians? Continuous auditing results are a strong indicator that access controls with PeopleSoft Financials and Supply Chain Management (FSCM) are effective in mitigating risks of fraudulent or unauthorized transactions, inaccurate financial reporting, and system downtime.
- Why does it matter? Implementing continuous auditing is an efficient and cost-effective approach to monitor system access and associated risks in a timely manner.
- Strategic alignment: Citizen Priority – A Well Run City.

DISCUSSION

The City Auditor's Office has completed a continuous auditing project to monitor system access within PeopleSoft Financials and Supply Chain Management. PeopleSoft FSCM is the system used across The City for financial and procurement management. Finance and Supply business units are the data and process owners. Enterprise Support Services (IT ESS) is the IT group responsible for system support. System access is part of a series of controls that mitigate the risks of fraudulent or unauthorized transactions, inaccurate financial reporting, and system downtime. For example, Finance Accounts Payable (AP) also review voucher entry reports as a detective control.

Using PowerBI we created an interactive web-based dashboard, which automatically monitored for instances where system access appeared to exceed the requirements of a position. Our scope for detailed entitlements testing was AP and IT ESS privileged technical access. We presented Administration an initial dashboard on May 15th and refreshed it to capture their progress in addressing observations on August 12th. Attachment 1 is summarization of the initial dashboard and subsequent refresh.

PeopleSoft Financials and Supply Chain Management Continuous Auditing

Our initial results showed Administration had implemented access controls that restricted access to much of higher risk AP and technical functionality, including consideration of segregation of duties. In the case of AP, a multi-layered approach was used that restricted access based upon both the page and invoice or voucher type. Our initial results identified instances where access exceeded the needs of a user's job role. We were pleased that Administration promptly took action to resolve these items, which are reflected in Attachment 1.

ATTACHMENT

1. PeopleSoft FSCM Access Scorecard Summary (May and August 2021) - AC2021-1251 ATT1
2. PeopleSoft FSCM Access Continuous Auditing Presentation Slide - AC2021-1251 ATT2

DEPARTMENT CIRCULATION

Name	Title, Department or Business Unit	Approve/Consult/Inform
Liz Ormsby	Acting City Auditor	Approve
David Duckworth	City Manager	Inform
Carla Male	CFO	Inform
Jan Bradley	Chief Information Technology Officer	Inform
Les Tochor	Director Finance/City Treasurer	Inform
Michael Perkins	Manager Tax, Receivables & AP	Inform
Greg Soderquist	Manager, IT	Inform

PeopleSoft FSCM Access Scorecard Summary (May and August 2021)

AC2021-1251
ATT1

Snapshot Dates

8/12/21 snapshot

5/16/21 snapshot

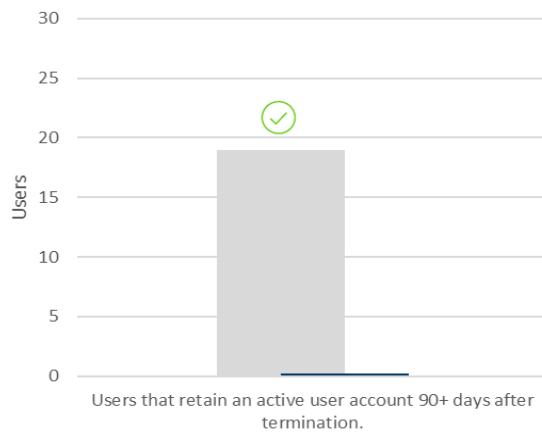
Overview

- Results of FSCM access testing as at 5/16 and 8/12.
- Scope of detailed entitlements testing was privileged technical access (including administrator accounts and system utilities) and Accounts Payable (AP).
- Testing approach compared user access to higher risk entitlements against rules defining jobs and teams that needed the access.
- Administration proactively remediated all observations where assigned access entitlements exceeded job requirements.
- Going forward an opportunity exists for Administration to improve access assignment consistency by reducing use of modelling for access provisioning.

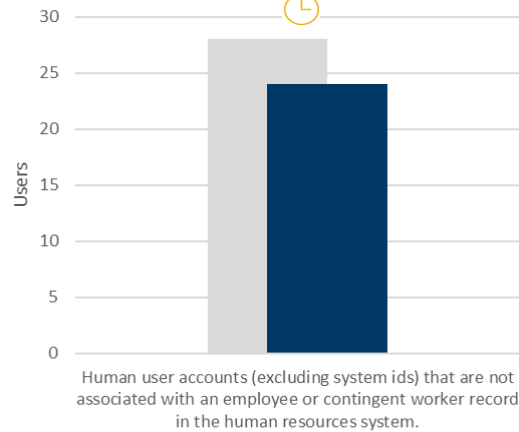
User Access Provisioning

4,480 FSCM User Accounts

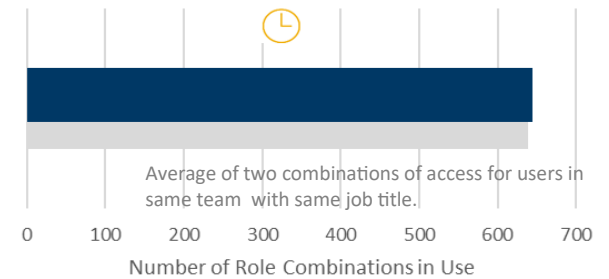
Terminated Employees with Enabled User Accounts



Non-System Accounts Without Employee ID



Role Combinations in Use
Indicator of security model complexity and access assignment consistency



Example role combination calculation. Three PeopleSoft users:
• User 1 has roles A&B, • User 2 has role C, • User 3 has roles B&A. Results in two role combinations.

Observation

Status



Observation addressed / no action was required.



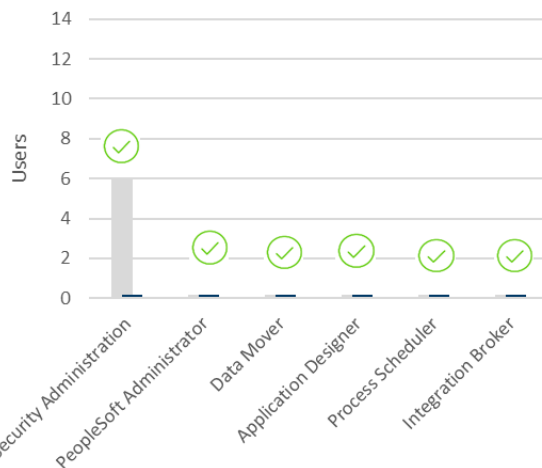
Lower risk opportunity for improvement. Not currently addressed.



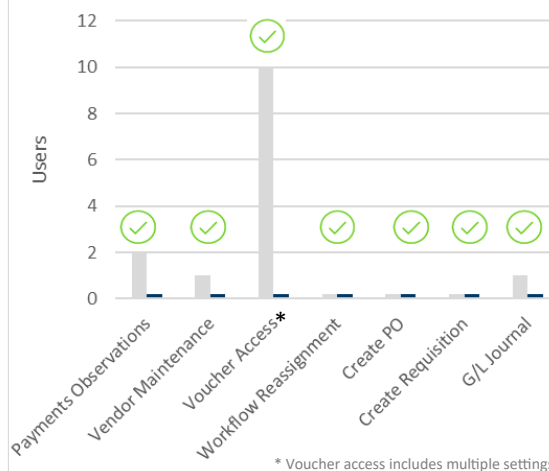
Higher risk observation. Not currently addressed.

Users With Access Entitlements Exceeding Job Requirements

Privileged Technical Access



Access within AP Team



* Voucher access includes multiple settings

Payables Access Outside AP





Calgary

City Auditor's Office

PeopleSoft Financials and Supply Chain Management Continuous Auditing

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AC2021-1251 ATT2

Why we did this

- PeopleSoft FSCM is the system used across The City for financial and procurement management.
- Continuous auditing is an efficient and cost-effective approach to monitor system access and associated risks in a timely manner.
- Data analysis of system access provides assurance to Audit Committee and Administration on control effectiveness via a visual scorecard.

What we concluded

- FSCM access controls are generally effective in mitigating risk associated with Accounts Payable and Technical Functionality.

Why it matters

- System access controls are part of a series of controls that mitigate the risks of fraudulent or unauthorized transactions, inaccurate financial reporting, and system downtime.