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Cover photo by Denver Auditor’s Office staff.
June 18, 2020

AUDITOR’S LETTER

The objective of our audit of the safety and security of city facilities was to determine the overall effectiveness of the City and County of Denver’s safety and security practices. I am pleased to present the results of this audit.

The audit revealed the city has not sufficiently prioritized city facility safety and security and that existing initiatives are not adequate. Additionally, the audit found the city is not always receiving security services in alignment with the city's contract or leading security practices. Because of their sensitive nature, some of the details for the weaknesses we identified were reported confidentially to the city agencies involved.

By implementing recommendations for developing a citywide strategic plan, updating city regulations, and implementing stronger policies and contract monitoring, the city will be better equipped to ensure the safety and security of city facilities and its employees and the public.

This performance audit is authorized pursuant to the City and County of Denver Charter, Article V, Part 2, Section 1, “General Powers and Duties of Auditor.” We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We extend our appreciation to the personnel in the Mayor's Office, the Department of General Services, the Department of Finance, the Office of Emergency Management and Homeland Security, the Department of Public Safety, and the Office of Human Resources who assisted and cooperated with us during the audit — especially considering each agency's involvement with the COVID-19 crisis. For any questions, please feel free to contact me at 720-913-5000.

Denver Auditor’s Office

Timothy M. O’Brien, CPA
Auditor
Safety and Security of City Facilities
June 2020

Objective
The audit had three objectives:

1. To determine whether the city has clearly defined roles and responsibilities related to safety and security;

2. To examine whether the city has effective practices to ensure the safety and security of city facilities and its employees and the public; and

3. To determine whether HSS Inc. is providing safety and security services in compliance with the city's contract and in alignment with leading practices.

Background
The responsibility for ensuring city facility safety and security for employees and the public lies with multiple city agencies, including the Department of General Services and the Department of Finance, as well as with contracted security services.

Existing practices are driven by different city executive orders and policies, some of which are outdated. Additionally, while some city agencies have emphasized a need for better facility safety and security practices, many initiatives are in reaction to a specific incident and are not supported by a risk, or needs, assessment.

REPORT HIGHLIGHTS

Highlights from Audit
In our first citywide audit of city facility safety and security, we identified an overall lack of citywide strategic planning around the safety and security of city facilities.

The City and County of Denver Has Not Sufficiently Prioritized the Safety and Security of City Facilities
- The city lacks clearly defined roles and responsibilities for ensuring sufficient safety and security.
- The city's lack of prioritization of safety and security has resulted in a fragmented approach.

Existing Safety and Security Initiatives for City Facilities Are Not Adequate
- The city lacks a formal approach to performing and evaluating vulnerability assessments.
- The city is not adequately educating employees on evacuation and drill procedures.
- The city's policies and procedures for access and badging and for its employee notification system do not align with leading practices.

The City Is Not Always Receiving Security Services in Alignment with Contractual Requirements or Leading Security Practices
- The Department of General Services' contract administration practices are insufficient to ensure effective oversight of the city's contracted security services.
- Requirements in the city's security services contract do not always clearly define performance measures.

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Existing Safety and Security Initiatives for City Facilities Are Not Adequate

- The City Lacks a Formal Approach to Performing and Evaluating Vulnerability Assessments
- The City Is Not Adequately Educating Employees on Evacuation and Drill Procedures
- The City's Policies and Procedures for Access and Badging Are Insufficient and Do Not Align with Leading Practices
- The City's Policies and Procedures for Its Employee Notification System Do Not Align with Leading Practices

### FINDING 3

The City Is Not Always Receiving Security Services in Alignment with Contractual Requirements or Leading Security Practices

- The Department of General Services' Contract Administration Practices Are Insufficient to Ensure Effective Oversight of the City's Security Services
- The City's Security Services Contract Requirements Do Not Always Clearly Define How to Measure Performance

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## OBJECTIVE, SCOPE, AND METHODOLOGY
The City and County of Denver’s elected officials and its more than 16,000 employees are housed in many facilities spread throughout the city. Some of these facilities are owned by the city, while others are leased.

Additionally, the general public needs to access city facilities for a variety of reasons — such as paying parking tickets, licensing a pet, reporting for jury duty, attending court hearings and other public hearings, or receiving social services.

The responsibility for ensuring safety and security for elected officials, employees, and the public in city facilities is decentralized and divided across several agencies. At a minimum, this responsibility lies with:

- The Department of General Services
- The Department of Finance’s Cash, Risk, and Capital Funding Division
- The Department of Public Safety
- The Office of Emergency Management and Homeland Security
- HSS Inc.

**FIGURE 1.** Citywide Safety and Security Organizational Structure

*Source: Auditors’ review of documentation and interviews.*
General Services maintains city facilities, oversees citywide contracts, and manages the Denver Security Office. General Services is not, however, responsible for security at all city facilities or locations where employees work, such as fire and police stations. The mayor’s budget says the security office manages and oversees the security of all city-owned assets and ensures city employees and residents of Denver can conduct business in a safe environment.1

Additionally, the office routinely monitors and coordinates with the city's primary security contractor, HSS Inc., and collaborates with the Denver Sheriff Department and the Denver Police Department as needed. According to management, the security office primarily acts in a supporting role during emergencies.

Finally, General Services, through its Badging Office, is responsible for issuing employee and contractor badges for some agencies and facilities within the city, in accordance with Executive Order No. 6.2 Some agencies, like the Denver Police Department, are not under the Badging Office’s purview.

The Department of Finance's Cash, Risk, and Capital Funding Division, which includes the Risk Management Office, is responsible for overseeing the city’s self-funded workers' compensation insurance program and managing the city’s risk and exposure to loss related to the activities of agencies and employees. The Risk Management Office, as required by Executive Order No. 65, includes a workplace safety unit to develop and implement citywide safety policies.3

As outlined in the mayor’s budget, the Department of Public Safety delivers a spectrum of public safety services, such as those related to physical and mental health.4 Within the department are the Denver Police, Denver Sheriff, and Denver Fire departments. The sheriff department is involved in providing security at some city facilities such as the City and County Building and the Lindsay-Flanigan Courthouse, and the police may be contacted and become involved in specific security incidents at city buildings. The fire department partners with the Risk Management Office in developing guides and training for emergency procedures.

The mayor’s budget also says the city’s Office of Emergency Management and Homeland Security has a mission to lead Denver’s "emergency management efforts to cultivate safe, prepared, and resilient communities."5

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5 Ibid.
The office provides emergency management services during disasters and emergencies to not just employees but also residents and businesses in the city in accordance with Executive Order No. 85. Further, the office provides services through all phases of emergency management, including preparation, prevention, and recovery, and it manages the city’s Emergency Operations Center. At times, the office may be required to coordinate with other state and regional partners in response to disasters or emergencies.

HSS Inc. provides both unarmed and armed security personnel services to the city, as outlined in the scope of work in its contract with the City and County of Denver. Among their many duties, HSS security personnel are responsible for screening individuals entering public buildings, guarding city property against destruction and vandalism, and reporting violations of fire safety regulations. The city’s contract with HSS has been in place since at least 2005. It was renewed in 2018 with an expiration of Dec. 31, 2019, but it was extended through the end of 2020.

In August 2019, city leadership said the city was accepting bids, including from HSS Inc., to be the city’s security contractor and ensure the city receives the highest-quality security services.

The City and County of Denver has had executive orders related to safety and security dating back to at least 1958, with another on identification cards as early as 1974. While we focused on the city’s safety and security efforts and posture since January 2017, we did review some city initiatives in place since 2003 when Executive Order 6 on facility security measures and identification cards was last updated. Another executive order — Executive Order No. 65 on safety and health — was revised in 2008. This executive order was established to provide a “safe and healthful work environment for City employees and because of the statutory requirement to provide workers’ compensation benefits.” Executive Order 65 also establishes citywide responsibility for creating safety standards, such as a standard last revised in 2016 related to emergency response.

In 2011, a third executive order on the city’s emergency management program and mission — Executive Order No. 85 — was also updated. The purpose of this executive order is to “define the mission, organizational structure, and responsibilities of the Office of Emergency Management.”

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Additionally, it established the city’s policy for “disaster prevention, preparedness, mitigation, response, and recovery ... for all departments and agencies in the City and County of Denver.”

**Workplace Safety Surveys** – The city’s Risk Management Office distributed workplace safety surveys to employees in 2014 and again in 2017. Management indicated the intent was to gauge things like whether employees felt they had the appropriate safety equipment to do their jobs, and employees could submit comments. The 2017 survey was distributed in part because Risk Management officials said they received “numerous requests” for assistance in addressing both verbal and physical threats and assaults while employees were on the job.

**The DenverReady Program** – As a result of the 2014 employee workplace safety survey and two separate incidents (a tornado and a car fire) also in 2014, Risk Management worked with the Office of Emergency Management and the Department of General Services to develop the DenverReady program in 2015.

In May 2019, Risk Management created a strategic plan for the program that included its mission to “ensure the safety of employees both on and off the job by providing emergency preparedness training and resources.” The DenverReady initiatives we reviewed as part of this audit include:

- Emergency preparedness guides
- Emergency coordinator training
- “Surviving an Active Shooter” training
- Standard response protocols

Between 2015 and 2017, Risk Management worked with the Denver Fire Department, General Services' Facilities Management Division, and other agencies to develop building-specific emergency preparedness guides. These guides were issued in 2017. The guides contain general building information and procedures for various emergencies and evacuations. Additionally, the fire department provides a guide template for facilities managers to use. According to the DenverReady strategic plan, the guides will be updated in 2020 to include new Denver-specific and citywide standard response protocols.

Meanwhile, Risk Management and General Services modified the existing floor warden program in 2015 to form the current emergency coordinator program. According to the DenverReady strategic plan, this program's development is ongoing. The intent of the program is to train city employees, through a coordinator, on how to respond during a drill or evacuation. Risk Management, General Services, and the Denver Fire Department provide training annually for coordinators.

In 2016, Risk Management worked with the Denver Police Department and the Office of Human Resources, among others, to develop and implement an
employee training on how to survive an active shooter situation. In 2017, this training became required of all city employees. An updated version— including a Los Angeles County Sheriff’s Department video — was implemented in January 2020. Risk Management said this change was part of a training “refresh,” with the new video being more impactful.

Finally, in 2019, the city contracted with the I Love U Guys Foundation to purchase customized standard response protocols for $50,000. One of the main objectives was to ensure consistent communication in an emergency. The protocols are not meant to replace any other city program or guidance, such as what is communicated in the active shooter training videos, but they are meant to be an enhancement.

**Denver Security Office** – Following a change in department leadership in 2017, General Services created the Denver Security Office. The office has five employees, and General Services hired a chief security officer in 2018. The department subsequently created a security operations center within the security office to help manage security response in the city and its facilities. General Services management said that neither the Denver Security Office nor General Services is responsible for security at all facilities or locations where city employees work.

General Services and the Denver Security Office created a list of priorities in 2019 to improve governance of security throughout the city. According to management, phase one was initiated on July 1, 2019, and it had an “expected completion date of quarter one of 2020.” The three phases of the list are estimated to take three years to complete.

Overall, the list includes high-level initiatives related to improving procedures for building access and badges, developing a draft security policy manual, implementing citywide training on the standard response protocols, planning vulnerability assessments, updating Executive Order 6 related to city security and identification cards, and transitioning the city to a new mass notification system. The Denver Security Office has also expressed a desire to issue new, redesigned badges to all city employees and to potentially require all individuals entering city facilities, including employees, to be screened.

In reaction to a series of incidents, General Services and the Denver Security Office completed two vulnerability assessments in October 2019 — either
by performing the assessment internally or through a third-party contract. The security office intended to conduct two other assessments in 2019.

**Mass Communications** – In June 2019, the city contracted with Everbridge to transition the city’s mass employee notification system from the then-existing one, Send Word Now. The city uses the notification system to alert employees of delayed starts, city closures, and emergencies — such as the presence of an active shooter.

Unlike Send Word Now, Everbridge allows the city to distribute mass communications to not only city employees but also the general public. Additionally, Everbridge can sync with at least one of the city’s badging systems, allowing notifications to be sent to employees who have accessed a specific facility with their badge. General Services conducted citywide tests of the Everbridge notification system in January 2020.

As shown in Figure 2 on the following page, the city’s focus on safety and security since 2003 has involved several key initiatives but also notable gaps in time when no action was taken.
FIGURE 2. Timeline of Safety and Security Initiatives since 2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Initiative</th>
<th>Primary agencies responsible</th>
<th>DEPT. OF GENERAL SERVICES</th>
<th>DEPT. OF FINANCE: RISK MANAGEMENT</th>
<th>DEPT. OF EMERGENCY MANAGEMENT</th>
<th>OFFICE OF HUMAN RESOURCES</th>
<th>DENVER FIRE DEPARTMENT</th>
<th>DENVER POLICE DEPARTMENT</th>
<th>MAYOR'S OFFICE</th>
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</thead>
<tbody>
<tr>
<td>2003</td>
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<tr>
<td>2005</td>
<td>Executive Order 6, on security and identification cards, updated</td>
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<td></td>
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<tr>
<td>2006</td>
<td>Executive Order 65, on the city's operational safety and health program,</td>
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<tr>
<td>2007</td>
<td>Executive Order 85, related to the city's emergency management program,</td>
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<tr>
<td>2008</td>
<td>Workplace safety survey conducted</td>
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<tr>
<td>2009</td>
<td>DenverReady program created</td>
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<tr>
<td>2010</td>
<td>Emergency response coordinator program modified</td>
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<tr>
<td>2011</td>
<td>First emergency response coordinators trained</td>
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<tr>
<td>2012</td>
<td>Risk Management starts producing building-specific emergency procedures</td>
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<tr>
<td>2013</td>
<td>&quot;Surviving an Active Shooter&quot; training made available</td>
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<td>2014</td>
<td>Second workplace safety survey conducted</td>
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<tr>
<td>2015</td>
<td>Emergency procedures guides released</td>
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<tr>
<td>2016</td>
<td>Denver Security Office and chief security officer position created</td>
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<td></td>
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<tr>
<td>2017</td>
<td>DenverReady program strategic plan developed</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Denver Security Office creates list of safety and security priorities</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2019</td>
<td>City purchases standard response protocols from the I Love U Guys Foundation</td>
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<tr>
<td>2020</td>
<td>Three vulnerability assessments conducted</td>
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Source: Auditors' compilation of initiatives based on documentation reviewed and interviews.

Note: The figure depicts the time frames for a selection of safety and security initiatives since 2003, as well as the agencies primarily responsible for implementation.
FINDING 1

The City and County of Denver Has Not Sufficiently Prioritized the Safety and Security of City Facilities

The city does not have a citywide strategic plan for ensuring the safety and security of city facilities.

For example, the 2019 budget does not outline a citywide strategic plan or strategies related to the safety and security of city facilities. Additionally, the 2017 and 2018 budgets included some community-related strategies such as those to “enhance crime prevention” and some initiatives such as implementing an employee wellness program. Generally speaking, however, the annual budgets do not outline citywide strategic plans for addressing facility safety and security.

While some city agencies involved in city facility safety and security — including the Office of Emergency Management and Homeland Security and the Department of General Services — have agency-specific strategies outlined in the budget, they do not address safety and security of all city facilities, or they reference outdated practices.

For example, Emergency Management mentions in the budget it is implementing a strategic plan aligned with Executive Order No. 85, which outlines the agency’s structure and responsibilities. However, Emergency Management officials said some of Executive Order 85 — such as the section related to reporting National Incident Management System training data to the federal government — is out of date and no longer required as of at least five years ago.

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Similarly, some city agencies have either agency-specific strategic plans or informal priorities around safety and security that are not included in the budget. For instance, and as referenced in the background section, the Department of Finance's DenverReady strategic plan outlines safety and security strategies exclusive to fulfilling its mission of providing emergency preparedness training and resources. This includes developing emergency preparedness guides and various safety trainings and implementing the I Love U Guys Foundation's standard response protocols. These protocols are intended to provide guidance to city employees and occupants of city buildings about what to do in an emergency.

Additionally, the Denver Security Office — within General Services — has a list of priorities to accomplish in three phases over three years that includes developing and implementing a new badge policy, transitioning to a new mass notification system, and implementing citywide employee training for the standard response protocols. However, none of these priorities or strategies have definitive timelines for completion.

Without a documented citywide strategic plan, city agencies have adopted a fragmented approach to city facility safety and security with inconsistent communication between relevant city agencies. This has led to confusion among city agencies over whose responsibility it is to respond to specific incidents at city facilities.

Roles and Responsibilities Are Not Clearly Defined to Ensure Sufficient Safety and Security of City Facilities

Auditors found a lack of clearly defined roles and responsibilities for ensuring the safety and security of city facilities. Specifically, the city’s governing documents, such as the Denver Charter and executive orders, are often either unclear as to the specific roles and responsibilities given to an agency or they are outdated. A summary of our analysis is listed below.

- Department of General Services – Facility security is not a role explicitly given to General Services or the Denver Security Office by the charter or executive orders, and in practice, the security office does not provide security oversight for all city facilities.

13 The DenverReady program is designed to ensure employee safety through emergency preparedness training and resources.

14 City and County of Denver Charter § 2.9.3.b-e, § 2.6.4, § 2.6.5, § 2.6.6, and § 2.10.2.
Additionally, Executive Order No. 6 governing employee badging responsibilities does not detail current city practices. For instance, it does not reflect that all full-time city employees receive badges allowing them to bypass security screening, and it gives the responsibility to issue badges to the “Director of Public Office Buildings” — a position eliminated since 2007 — rather than the General Services Badging Office or other current city agency.\textsuperscript{15}

Finally, General Services is not responsible for employee badging at all city buildings. Other city agencies use up to nine different systems to create access badges for their employees.

- **Department of Finance** – Oversight of the emergency response coordinator program is unclear within executive orders or the charter, as the Risk Management Office (within the Finance Department) shares responsibilities for the program with General Services.

While Risk Management’s responsibilities for the program include conducting training for emergency coordinators, Risk Management officials said the program is under General Services’ purview. General Services maintains lists of emergency coordinators and schedules coordinator trainings.

Executive Order No. 65 and associated safety standards do not clearly define who is responsible for this program. They require only that all agency heads appoint emergency coordinators to complete the duties assigned in facility emergency procedures guides — while Risk Management, with other city agencies, is responsible for creating templates for those emergency procedures guides.\textsuperscript{16}

- **Office of Emergency Management and Homeland Security** – Sections of Executive Order 85, which defines the responsibilities of the Office of Emergency Management, are either unclear or outdated.\textsuperscript{17} According to Emergency Management officials, reporting National Incident Management System training data to the federal government is no longer required, but the executive order has not been updated since 2011 and still maintains this requirement.

Additionally, even though Executive Order 85 states the director of Emergency Management is responsible for ensuring the implementation and training of the National Incident Management System citywide, Emergency Management officials said they do not have authority to enforce compliance over public safety agencies like the police, sheriff, and fire departments. Moreover, Emergency Management...
Management officials did not know who ensures public safety agencies follow the National Incident Management System.

- **Denver Human Services** – Denver Human Services’ security responsibilities are not clearly defined in the city charter or existing executive orders. The agency has its own separate department that manages security operations at Denver Human Services facilities. Additionally, Denver Human Services' security department also issues badges for Human Services staff.

While Executive Order 6 provides an exception for agencies with “unique badge or credential requirements” to issue their own employee badges, it does not list Denver Human Services as one of these exceptions.\(^{18}\)

**The City’s Lack of Prioritization Has Resulted in a Fragmented Approach to Safety and Security of City Facilities**

The lack of a citywide strategic plan and the lack of clearly defined roles and responsibilities are the result of the city and the mayor not sufficiently prioritizing city facility safety and security in the past.

For instance, General Services and Department of Finance leadership have only recently placed an emphasis on improving safety and security of city facilities by creating the Denver Security Office in 2018, identifying the need to update Executive Order 6 in the security office’s 2020 priorities, and developing the DenverReady program in 2014 and its corresponding strategic plan five years later, in 2019.

The lack of citywide strategic planning has meant a fragmented approach to city facility safety and security with unclear and inconsistent communication among relevant city agencies. According to General Services officials, there is often confusion and challenges in determining the appropriate response during incidents within city facilities, including which agencies should be involved in the response.

During the audit, we identified some examples of these communication challenges among city agencies, including:

- Contracted security guards did not communicate safety and security incidents to the Denver Security Office in a timely manner.
- The Denver Security Office was working on a safety initiative involving the purchase of equipment and learned midway through the project the equipment was purchased previously and was being held in storage rather than being used.
- The Denver Security Office visited a facility to perform a vulnerability

assessments following a security incident; however, upon arriving, they learned an assessment had already been conducted by the Denver Police Department.

- A communication plan within Risk Management's emergency procedures guide differed from the Denver Sheriff Department's emergency response manual for the same building in terms of who should be contacted in the event of a particular incident.

- The Denver Security Office alerted contracted security guards of a security incident at a city building without consulting the Denver Sheriff Department, which was required by security guard procedures.

In addition, this lack of clearly defined roles and responsibilities could result in the city's facility safety and security initiatives being ineffective. These specific safety and security practices and the issues we identified during our audit are discussed in further detail in Finding 2.

Guidance from the U.S. Office of Management and Budget and the Government Finance Officers Association say a strategic plan is necessary to align organizational resources and provide strategic foresight to encourage communication and avoid a “silo effect” in problem-solving. A strategic plan establishes long-term objectives and goals and actions necessary to realize those goals and describes how to deal with any identified challenges and risks to an organization. More specifically, a strategic plan should include a definition of the organization's mission and approaches to monitor progress in addressing challenges and opportunities related to that mission.

Further, according to the Office of Management and Budget, a strategic plan should provide context for decisions made, consider risks, and ensure the management of risk is “aligned with the organization's mission, objectives, and priorities.” Progress in meeting the plan's goals should be measurable and objective-based, and the plan should include a timeline for periodic review to meet those performance measures.

Additionally, leading practices from the federal government and from security professionals establish the need for clear roles and responsibilities. According to U.S. Government Accountability Office standards, leadership should “establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.”

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This involves leadership:

- Developing overall responsibilities to achieve objectives and address related risks;
- Assigning responsibilities to discrete units so the organization can operate in an efficient and effective manner;
- Establishing reporting lines;
- Assigning responsibility and delegating authority to key roles throughout the organization; and
- Determining the level of authority each key role needs to fulfill its responsibilities.

Security experts similarly emphasize the need to understand the organization’s mission, core values, and operating environment. ASIS International, an organization of security professionals, states security officials should have a comprehensive understanding of the organization's mission and vision, core values, operating environment, and stakeholders.22

Understanding the organization's mission and vision enables security professionals to identify risks that can impede the organization's goals. This can be done by considering its operating structure, key staff and leadership, regulations and legal requirements, and long-term strategic goals and objectives. In addition, understanding stakeholders means understanding their needs and risks. Stakeholders include people responsible for defining the organization's strategy, owners of security assets, and people who contribute knowledge or support to the organization.

RECOMMENDATION 1.1

**Develop Strategic Plan** – The Mayor’s Office should develop a strategic plan for ensuring safety and security of city facilities. This strategic plan should define the city's mission, long-term goals, and approaches to monitor progress in addressing challenges and opportunities related to its mission as well as provide context for decisions made and consider risks. Progress should be measurable and objective-based. Additionally, the plan should include a timeline for periodic review based on leading practices.

**Agency Response: Agree, Implementation Date – Jan. 14, 2021**

RECOMMENDATION 1.2

Define Roles and Responsibilities – The Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security, at minimum, to define specific roles and responsibilities related to city facility safety and security.


RECOMMENDATION 1.3

Update Executive Orders – After implementing Recommendation 1.2, the Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security to update executive orders 6, 65, and 85 — or to create a new executive order — to include defined roles and responsibilities and designated authority to those charged with city facility safety and security and to align with current and leading practices.

Agency Response: Agree, Implementation Date – May 14, 2021
FINDING 2
Existing Safety and Security Initiatives for City Facilities Are Not Adequate

As discussed, the city cannot ensure its safety and security initiatives for city facilities are effective because the city lacks clearly defined roles and responsibilities and a citywide strategic plan. While individual city agencies have started several initiatives to improve safety and security of city facilities — such as creating the Denver Security Office in 2018 to address identified security concerns and implementing new safety trainings under the DenverReady program — auditors identified problems in several of these actions.

Specifically, the city does not have:

- A formal approach to perform facility vulnerability assessments;
- A program to adequately train employees on evacuation and drill procedures;
- Effective policies and procedures for access and badging; and
- Effective policies and procedures to ensure all city employees and vendors are notified of incidents.

Our audit found the city does not have a structured approach for completing consistent and effective vulnerability, or threat, assessments for city facilities. Although multiple city agencies have conducted standalone, or siloed, assessments, the completed assessments do not align with leading practices.

Additionally, because the city lacks a structured approach for completing citywide assessments, we found city agencies’ implementation of existing security efforts and their identification of priorities appear to be in reaction to specific incidents instead of prompted through a proactive approach for identifying and prioritizing risks.

As noted in the background section, the Department of General Services maintains city facilities and manages the Denver Security Office, which oversees overall security of city assets to ensure residents and employees can conduct business in a safe environment. The mayor’s 2019 budget states General Services is supposed to provide facility safety and security
solutions by continuously assessing, identifying, and developing proactive preventative measures.\textsuperscript{23}

In terms of safety, the roles and responsibilities of the Denver Security Office are like those assigned to the U.S. Department of Homeland Security. At the federal level, Homeland Security protects employees and individuals who visit and work in government facilities. Homeland Security’s Interagency Security Committee created guidance that provides an integrated, single source of security countermeasures for all federal facilities.\textsuperscript{24} The guidance describes the need to perform vulnerability assessments for several reasons, including to determine each facility’s unique risk environment, to prioritize implementation of countermeasures to provide a desired level of protection, and to identify physical security performance metrics and a measurement cycle.

**Assessment Process and Template** – Although one strategy of the Denver Security Office is to continuously assess, identify, and develop proactive preventative measures, the security office’s formal vulnerability assessment template does not specify a procedure for completing assessments. It also does not describe the intent of assessments, does not describe key considerations to evaluate each facility’s unique risk environment, and does not describe how to prioritize implementation efforts.

Alternatively, Homeland Security’s guidance outlines several key considerations used to determine a facility’s unique risk environment including the importance of a facility’s mission or of an agency’s mission within a facility, a facility’s attractiveness as a target, the facility’s size, and the level of threat to tenant agencies. The guidance also provides a list of 33 undesirable events, such as arson or an active shooter, used to ensure assessments consider several varieties of methods and capabilities that may influence each facility’s unique threat environment.\textsuperscript{25}

Auditors reviewed a vulnerability assessment of one city facility completed by the Denver Security Office in 2019. Although the assessment provides clear descriptions of unique facility challenges, no list of standardized considerations or undesirable events is provided. Conducting vulnerability assessments without developing a robust template, or conducting assessments without clear or consistent procedures, may allow significant risks to be overlooked. This could result in employee or public safety being compromised or reduced.

In addition to the Denver Security Office assessment, auditors also reviewed two other assessments completed in 2019 — one conducted by a third-party


contractor and another completed by the Denver Police Department. All three assessments, including the security office effort, were prompted by specific security incidents rather than driven by a holistic risk management process.

The contractor’s assessment produced a comprehensive report that includes sections describing security measures, specific site-protection recommendations tailored to each evaluated facility, and a cost estimate for implementing remaining recommendations. The assessment also includes facility-specific key considerations in alignment with Homeland Security guidance that are used to prioritize risks and determine an implementation strategy. Alternatively, the Denver Police Department’s assessment evaluated specific exterior features, and the recommendations addressed specific staff concerns without considering the facility’s overall risk environment.

Both the federal government and private security professionals emphasize the importance of identifying risks through an established assessment methodology to inform implementation of risk management measures. Risk management strategies are used to create a level of protection to mitigate potential impacts of vulnerabilities and threats, and “risk acceptance” is a management decision to not take action that would affect a particular risk. Security decision-makers must sometimes accept risks as they consider competing requirements, standards, priorities, budget limitations, political climates, and mission requirements. In situations where a facility’s existing level of protection does not properly mitigate risks, federal guidance suggests using vulnerability assessments to achieve a desired level of protection by identifying countermeasures that address specific undesirable events.

Although both the Denver Security Office assessment and the Denver Police Department assessment pose recommendations to address specific risks, neither includes a discussion of implementation strategies and neither determines whether the recommendations are achievable or cost-effective.

Alternatively, the contractor assessment has recommendations to clearly prioritize risks to help the city determine an implementation strategy. Using assessments to clearly prioritize risks and determine an implementation strategy would ensure the city uses resources effectively by immediately addressing the most severe vulnerabilities.

**Assessment Frequency** – According to Homeland Security guidance, each facility’s unique risk environment should be evaluated as soon as possible in newly owned and leased facilities and at least every five years thereafter depending on the risk environment; however, Denver Security Office staff

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27 Ibid. § 5.1.10.
28 Ibid. § 5.1.4.
completed only a single assessment in 2019.\footnote{Ibid. § 4.1.}

Further, the security office’s template does not specify a timeline for completing additional citywide facility vulnerability assessments even though the Department of General Services said completing assessments is a top priority of the Denver Security Office.

When auditors asked security office staff in November for a timeline of planned future assessments, they said two additional facility assessments were planned for 2019 and that the timeline for completing the two assessments was dependent upon the preferences of Department of Finance leadership. Neither additional assessment was completed in 2019.

Neglecting to conduct citywide facility vulnerability assessments in a timely manner leaves the city uninformed of the continuously shifting threat environment, which may result in bad actors exploiting unaddressed vulnerabilities.

**Learning from Assessments** – The city has begun implementing policy changes sometimes without performing assessments or documenting rationale to determine and support whether the changes are necessary, including increasing armed guard presence at some city facilities, moving toward requiring all individuals — including employees — to be screened when entering city facilities, and requiring all employees to complete active shooter training without a mayoral mandate or documentation to support the need.

General Services management said that, although performing vulnerability assessments is a priority of the Denver Security Office, assessments are not being conducted because of budget limitations and because of the possibility assessments will inform them of “what they already know.” Assessments have also not been conducted at Denver Human Services’ facilities because of “mayoral or management concerns and to avoid putting up barriers, such as metal detectors, for citizens to access services” — even though results from a 2017 workplace safety survey revealed almost half of Denver Human Services employees who responded felt safety and security was “inadequate.”

Finally, General Services has not used assessments to develop its procedures for sending mass notifications to employees. The U.S. Department of Homeland Security recommends using assessments to ensure the core message remains consistent while addressing each agency’s unique questions and concerns.\footnote{U.S. Department of Homeland Security, “Crisis Communications Plan” (2020), accessed Jan. 10, 2020, https://www.ready.gov/business/implementation/crisis.} Inconsistent notification messages may add an unnecessary burden as agencies work to coordinate a response to emergency incidents, and inconsistency may cause confusion among employees during emergency situations.
RECOMMENDATION 2.1

Prioritize and Plan Vulnerability Assessments – The Department of General Services should prioritize the completion of citywide facility vulnerability assessments either through a contract or by developing an assessment in line with leading practices, such as the Interagency Security Committee standards. As part of this prioritization, General Services should develop a timeline for completing all city facility assessments, including assessments of leased facilities that house city employees.


RECOMMENDATION 2.2

Document Implementation Rationale – The Department of General Services and other affected agencies should document rationale for deciding whether to implement safety or security initiatives based on a formal vulnerability, or needs, assessment.


The City Is Not Adequately Educating Employees on Evacuation and Drill Procedures

Overall, auditors found the city is not adequately training and educating employees on evacuation and drill procedures. Specifically, the Department of General Services and the Department of Finance are not effectively implementing the emergency response team program to train employees on how to react safely during an incident or emergency within a city facility.

Also, the Denver Fire Department is not properly training city employees on evacuation drills and safety practices, and it does not track data related to fire evacuation drills.

Overall, the City Lacks Documented Policies and Procedures, as well as Consistency across Existing Processes, for Implementing the Emergency Response Team Program

Emergency Coordinator Training – The intent of the emergency response team program is to train employees, through a coordinator, on how to respond during an emergency drill or evacuation, so employees understand how to respond safely during an actual emergency in a city facility. Surveys of city employees conducted by the Department of Finance’s Risk Management Office in 2017 revealed nearly half of city employees at the time did not believe they had received adequate safety training, and a similar survey conducted in 2014 showed about a quarter of surveyed employees said they received no safety training at all.
Guidance from the U.S. Government Accountability Office says entities must establish expectations of competence for key roles, including training.\footnote{U.S. Government Accountability Office, GAO-14-704G, “Standards for Internal Control in the Federal Government” (2014) para. 4.02, accessed Jan. 10, 2020, https://www.gao.gov/assets/670/665712.pdf.} We found Risk Management and General Services conduct emergency coordinator training annually; however, management said attendance is not required and they believed there were no formal requirements for agencies to maintain an emergency response team or coordinator.

Further, Risk Management and General Services are not ensuring individuals receiving the training are disseminating information to their agencies, leading to a breakdown in the “train the trainer” model currently in place. Without adequate training, city employees may not know what to do in an emergency at a city facility and could jeopardize the personal safety and security of themselves and others.

**Documentation of Policies and Procedures** – We also found the city has no formally documented procedures for implementing the emergency response team program. While Risk Management and General Services have informal processes related to tracking and retaining attendance records and maintaining general emergency coordinator information for each agency, they have not documented these processes. This has resulted in processes that differ across agencies as well as inconsistencies in information sharing. For example, personnel responsible for one city building keep only the most recent forms containing emergency coordinator information for each agency, while personnel at another city building retain all records dating back to 2014.

Federal guidance states an entity must develop and maintain documentation of an internal control system.\footnote{Ibid., para. 3.09.}\footnote{Ibid., para. OV1.04.}\footnote{Ibid., para. 10.02.}\footnote{Ibid., para. 3.06.} GAO defines an “internal control system” as “a continuous built-in component of operations, effected by people, that provides reasonable assurance … that an entity's objectives will be achieved.”\footnote{Ibid., para. 3.06.} This guidance also states an entity should design policies and procedures to achieve its objectives.

Finally, although General Services personnel reach out to agencies for updated emergency coordinator information each quarter, Finance personnel reach out “periodically” and generally rely on agencies to provide the changes to emergency coordinator contact information. Federal guidance states management must delegate authority to key roles within the organization.

Risk Management and General Services personnel were unsure of which agency was responsible for maintaining records of coordinators’ training.
The majority of those responsible for implementing the program were unaware of their authority and felt they did not receive leadership support.

This lack of policies and procedures and this lack of consistency in the emergency response team program occurred because of unclear and decentralized oversight of the program. The program is housed under General Services; however, Risk Management personnel are the ones primarily implementing it. Specific Risk Management personnel initially became involved because of their previous experience conducting safety drills. Federal guidelines state entities must design control activities such as policies and procedures to achieve their objectives and to address risks.36

One of the city’s emergency response safety standards — referenced in Executive Order No. 65 — states all city agency heads shall appoint an emergency coordinator, agency supervisors shall verify their agency’s emergency coordinator has been appropriately trained, and supervisors shall ensure all employees receive initial and continued training.37 The majority of Risk Management personnel and all General Services personnel currently implementing the emergency response team program were unaware of their authority through Executive Order 65 and this safety standard to ensure the implementation of the program. Further, some of these personnel said they did not receive the support they needed from those in leadership positions to properly implement the program.

Therefore, the emergency response team program is not being fully implemented at city facilities, and training is not being enforced for city employees.

The Denver Fire Department Is Not Compliant with International and Denver Fire Codes Governing Evacuations and Drills

The Denver Fire Department is not reviewing emergency procedures guides for city facilities, providing adequate training around evacuations and drills, certifying the city employees responsible for evacuation and drill training, or tracking data related to fire drills. We also found the Denver Fire Department is not in compliance with both international and Denver fire codes that require the department to complete these

36 Ibid., para. 10.02.
As such, city employees may not be sufficiently practicing and training on the best actions to take in the event an actual emergency.

**Emergency Procedures Guides** – The Risk Management Office creates emergency procedures guides for each facility based on a template provided by the Denver Fire Department; however, these guides are not being reviewed and approved by the fire department.

The fire department provides a template to city agencies to help ensure practices are consistent across the city and that all necessary information is included in the guide. But information contained in one city building’s emergency procedures guide regarding where to keep the list of employees who require assistance during evacuations did not match where the template said to maintain the list. Fire department personnel brought auditors to the fire command center in the same city building, which is where they determined the list of employees requiring assistance should have been, and it was not there. General Services personnel identified a separate location in the same building for where this list should be kept, which matched neither the template nor the specific building’s guide.

Without this list being readily available, fire department officials may needlessly put themselves at risk attempting to locate individuals requiring assistance during an emergency and may not be able to provide timely help to individuals remaining in the building because they require assistance. Additionally, individuals requiring assistance could harm themselves or others if they attempt to evacuate but are physically unable to do so.

Fire department personnel said it is not possible to review every emergency procedures guide even though this review is required by fire code. Specifically, the Denver fire code states the fire department must review and approve each city facility’s emergency procedures guide. The International Fire Code also states fire safety plans, emergency procedures, and training programs must be approved by the fire code official.

Executive Order 65’s safety standard further requires all city agencies to implement and maintain emergency response plans and emergency procedures guides. It states the Risk Management Office shall work with the fire department to create the template for the guides. Agencies may submit their guides for the fire department to review, but because each building has different systems, the standardized template may need to be changed to fit each building’s needs.

Fire department personnel also said there is no requirement for facilities to use the template they provide, but there must be a developed plan for their building on file. As mentioned, federal guidance states organizations must

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39 Ibid.
develop and maintain documentation of their internal control system.\textsuperscript{41}

**Employee Training and Trainer Certification** – Facilities managers and personnel responsible for facility maintenance, fire safety emergency procedures, evacuation plans and drills, employee training, and the emergency response team are not being trained or certified by the fire department for evacuations and drills as required by the Denver fire code.\textsuperscript{42}

The code specifies such personnel shall complete a Denver Fire Department training course and shall have a current certification by the fire department.\textsuperscript{43} Also, the International Fire Code says employees shall receive training on fire safety and evacuation plans and training in their duties as a part of new employee orientation, that this training shall also occur at least annually thereafter, and that records of their training shall be maintained.\textsuperscript{44} Further, federal guidance states organizations should establish expectations on competence for key roles, including training.\textsuperscript{45}

Fire department personnel were unaware of the certification requirement for facility managers and confirmed the Denver Fire Department did not have such a program.

Meanwhile, the city does not have training on evacuation and drill procedures for all city employees to take when they are hired or annually thereafter, but fire department personnel said they have been working with Risk Management personnel on creating an evacuation training. The Denver and international fire codes require employees to be trained on fire safety and evacuations.\textsuperscript{46}

As mentioned previously, the city also does not have a process to ensure emergency response coordinators are disseminating evacuation and drill information to city employees. Because of the lack of a certification program to ensure responsible personnel are implementing both employee trainings and the emergency response team, employees are not being trained as they should be to help ensure they stay safe and avoid danger during an emergency.

**Data Tracking** – We also found the Denver Fire Department is not tracking data related to fire evacuation drills. After the fire department conducts


\textsuperscript{43} Ibid. § 403.13.


an evacuation drill in a city building, fire department personnel provide the facilities managers with a letter reporting issues they identified during the drill. However, when auditors asked for evidence of these letters, fire department personnel could not provide examples and suggested we contact the city’s facilities manager for the letters.

The fire department has no documentation of past fire drill results. According to fire department personnel, they do not have a process to retain past letters, as they use a template to create the letters and then save over the template each time. However, the International Fire Code states records shall be maintained of the required emergency evacuation drills. Federal guidance also states organizations must design control activities to monitor performance measures and indicators, they must evaluate and document the results of ongoing monitoring to identify internal control issues, and they also must review policies, procedures, and related control activities for continued relevance and effectiveness in achieving the entity’s objectives.

Additionally, when auditors compared the 2018 and 2019 letters produced from fire drills at one city building, they found recurring problems such as employees carrying prohibited items into stairwells and “buddies” of those in need of assistance not knowing what to do in a medical emergency. The 2019 drill results included additional issues such as the building’s audible and visual signals not functioning properly, interior doors being left open when they should be closed, and some individuals needing “encouragement” to leave the building.

Without an effective emergency response team program, the city cannot ensure employees are appropriately trained on evacuation and emergency procedures for city facilities. Employees who do not follow correct evacuation procedures may cause harm to themselves or others and subsequently cause the city to have a workers’ compensation claim for bodily injury during an evacuation, something that has already occurred.

Those responsible for implementing the emergency response team program are not ensuring each agency has an emergency response coordinator, which in turn means there is not an individual responsible for disseminating key information to employees related to evacuation and emergency procedures. Further, those responsible for implementing the emergency response team are not ensuring coordinators attend the annual training — resulting in both the coordinators and employees possibly being unaware of emergency procedures, putting themselves and others in danger.

Lastly, because the Denver Fire Department does not retain or track data on evacuation drills, fire department personnel cannot identify persistent or
new issues during these drills for each facility or provide guidance to inform future training needs.

**RECOMMENDATION 2.3**

Amend Executive Order No. 65 – In conjunction with Recommendation 1.3, the Department of General Services and the Department of Finance should work with the Mayor’s Office to amend Executive Order No. 65 to clarify that additional procedures or related safety standards exist apart from the executive order itself. The Department of Finance’s Risk Management Office should communicate to those responsible for implementing and adhering to the executive order that these additional safety standards and procedures exist.

*Agency Response: Agree, Implementation Date – Aug. 12, 2021*

**RECOMMENDATION 2.4**

Document Roles and Responsibilities for Emergency Response Team – In conjunction with Recommendation 1.2, the Department of General Services and the Department of Finance should work with the Mayor’s Office to identify an agency responsible for implementing the emergency response team, and they should develop and document specific roles and responsibilities for those responsible for implementation.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

**RECOMMENDATION 2.5**

Implement Policies and Procedures for Emergency Response Team – Following the implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should then develop and implement policies and procedures on how to do that, including tracking the existence of emergency coordinators for each agency and verifying training attendance. These policies and procedures should include noncity buildings that house city employees (i.e., leased spaces).

*Agency Response: Agree, Implementation Date – April 14, 2021*
RECOMMENDATION 2.6

**Implement Certification Program** – The Denver Fire Department should develop and implement a certification program for those charged with evacuation and emergency training.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

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RECOMMENDATION 2.7

**Ensure Certification** – Following the implementation of Recommendation 2.6, the Denver Fire Department should ensure those responsible for evacuation and emergency training are certified as required by the Building and Fire Code for the City and County of Denver.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

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RECOMMENDATION 2.8

**Review and Approve Emergency Procedures Guides** – The Denver Fire Department should review and approve building emergency procedures guides as required by the International Fire Code to ensure contents are consistent with the code and with department expectations. The fire department should retain documentation of this review and approval process.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

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RECOMMENDATION 2.9

**Track Fire Drill Data** – The Denver Fire Department should track data and results related to fire drills to identify trends and inform future training needs.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*
RECOMMENDATION 2.10

Develop Employee Evacuation and Emergency Procedures Training – Following implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should work with the Office of Human Resources and the Denver Fire Department to develop citywide employee training related to evacuation and emergency procedures. The training should communicate information consistent with emergency procedures guides and the city’s new standard response protocols. Additionally, as required by the International Fire Code, this training should be required upon employment and annually thereafter. Documentation of this training requirement should be included either in an executive order or through Career Services Rules.

Agency Response: Agree, Implementation Date – Aug. 12, 2021

The City’s Policies and Procedures for Access and Badging Are Insufficient and Do Not Align with Leading Practices

Overall, auditors found the city lacks policies and procedures that reflect the roles and responsibilities for access and badging described in federal guidance, and what limited access and badging policies the city has do not align with leading practices. Specifically:

- Executive Order No. 6 does not clearly differentiate or assign roles and responsibilities for identity, credential, and access management — which are explained in Figure 3 below;

FIGURE 3. Overview of Identity, Credential, and Access Management

<table>
<thead>
<tr>
<th>WHAT IS IT?</th>
<th>HOW IS IT MANAGED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDENTITY</td>
<td>Agency roles, responsibilities, and policies to create, use, and safeguard identity information</td>
</tr>
<tr>
<td>CREDENTIAL (BADGE)</td>
<td>Agency roles, responsibilities, and policies for sponsorship, enrollment, production, issuance, and life cycle maintenance</td>
</tr>
<tr>
<td>ACCESS</td>
<td>Agency roles, responsibilities, and policies for granting and revoking permissions — which are stored on badges — to physical and network resources</td>
</tr>
</tbody>
</table>

Source: Federal Chief Information Officers Council’s identity, credential, and access management guidance.

Note: This table helps outline some basic differences between the function of identity, credential, and access management programs.
• The city’s existing badging processes — including how badges are issued to vendors — do not align with federal guidance; and

• The city does not have appropriate monitoring to ensure individuals who are no longer employed with the city are not continuing to access city facilities.

**Identity, Credential, and Access Management Roles** – Executive Order 6 allows General Services to provide “exempt security” badges to employees, which allow cardholders and their belongings to bypass security screening when entering city facilities.⁴⁹

Only Denver International Airport and the Department of Public Safety are exempt from Executive Order 6; however, we learned Denver Human Services also maintains a separate access and badging system.

Staff in General Services’ Badging Office perform many badge-related duties including issuing badges, granting and revoking access permissions to badges, generating reports to perform limited monitoring, and handling payments for replacement badges.

The Federal Chief Information Officers Council says governments operate in a shifting environment of complex cyber and physical security threats.⁵⁰ To help address this, a U.S. Department of Homeland Security presidential directive requires a governmentwide standard for secure and reliable forms of identification to limit inconsistent, inefficient, and costly agency approaches to facility and network security.⁵¹

According to federal guidance, effective practices for identity management, credential management, and access management are crucial for governments to address security needs. The Chief Information Officers Council and the Federal Enterprise Architecture developed a roadmap that includes courses of action, planning considerations, and technical solutions to outline a common federal framework and provide implementation guidance for segmented processes for identity, credential, and access management.⁵²

Although identity, credential, and access management are deeply interrelated, the Federal Chief Information Officers Council recommends each should operate as three separate programs. The city’s Executive Order 6

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does not, however, clearly differentiate or assign separate roles for identity, credential, and access management. The lack of clearly defined roles and responsibilities leaves it to the two staff members in General Services’ Badging Office to execute all identity, credential, and access functions for most city agencies. Because Executive Order 6 lacks specific guidance on implementing a badging program, one member of the Badging Office staff created the first access and badging procedures upon joining the office in February 2019.

Executive Order 6 also delegates authority of citywide badge and identification programs to the “Director of Public Office Buildings” — a position that is no longer active — and to the Department of General Services. However, federal guidance recommends positions like Denver’s chief information officer in the city’s Technology Services agency should have primary authority over these programs to ensure they suit each agency’s technology needs.\(^53\)

**Credential Management** – According to the National Institute of Standards and Technology, a laboratory and nonregulatory federal agency within the U.S. Department of Commerce: Several considerations help provide assurance a badge is secure, including requiring badges to be issued through a reliable process for verifying an individual’s identity and requiring badges to be issued only by providers whose reliability has been established by an official accreditation process.\(^54\)

The National Institute of Standards and Technology also outlines several key processes to help ensure someone’s identity is verified before they receive a badge — such as requiring a trusted agency representative to be responsible for issuing new badges — and that the people issuing the badges are reliable.\(^55\) But the city’s Executive Order 6 does not specify any associated issuance roles or processes and instead assigns general authority of distributing badges to the “Director of Public Office Buildings” and to the Department of General Services.

The city has separate badge issuance processes for internal and external applicants. The city’s process for issuing badges to internal applicants (i.e., new employees) generally aligns with the federal guidance, because the process uses a trusted relationship between General Services’ staff and agency representatives to verify an applicant’s identity and determine access permissions. Additionally, the badge is tied to that specific person, and the badge is issued by a trusted member of General Services’ staff.\(^56\)

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\(^{53}\) Ibid. § 6.1.2.2.


\(^{55}\) Ibid. § 2.6.

Alternatively, contracted guards — not General Services’ staff — provide badges to vendors making deliveries. According to General Services personnel, the guard issues a temporary badge in exchange for a vendor’s ID card, which is consistent with federal guidance. However, the guard may provide a badge with greater access than the vendor requires. Federal guidance suggests agencies should identify appropriate boundaries for the types and levels of permissions that can be changed by a badge issuer, such as a guard. The city’s lack of these boundaries for guards who issue vendor badges erodes confidence that the city issues external badges securely and reliably.

We also found that, in addition to badges issued by security guards, several agencies also retained many generic badges for no explicit purpose. Decentralized issuance of generic badges means the city cannot effectively track movement or badge use of noncity employees.

Although this audit’s scope limited our review only to the system and processes used by General Services, we found the city uses nine separate access and badging systems managed by different agencies and procedures. For example, even though the purpose for this was unclear to General Services, Denver Human Services maintains its own access and badging system, which has caused a problem with a duplicate badge. In one instance, Denver Security Office staff discovered a newly issued Denver Human Services’ badge possessed the same unique identifier as a General Services’ expired contractor badge. By duplicating the unique identifier, the city accidentally leveraged a vulnerability in its system the same way a bad actor might.

**Access Management** – According to federal guidance, access permissions are pieces of information contained on a badge that individuals use to navigate an agency’s physical and network resources. According to a prominent badge manufacturer, two things happen when a cardholder presents a badge to access resources: 1) Their identity is verified through authentication, and 2) a decision to allow or deny access is made based on the badge’s specific access permissions.

According to the National Institute of Standards and Technology, access permissions are provided through two general methods: identity-based

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and role- or attribute-based. Providing permissions on a person-to-person basis is an identity-based method (i.e., a specific person can access these resources). Deciding someone’s ability to access resources through role- or attribute-based permissions instead looks to someone’s nonidentity characteristics, such as their agency and their job within an agency (i.e., anyone working for a particular agency performing a particular job can access these resources).

The city’s Badging Office staff use an identity-based method to manually grant and revoke access permissions to each person based on information provided by their agency representative. When more than one person is afforded the same permissions, Badging Office staff manually highlight multiple people from a long list of cardholders to make changes. The software does not perform automated checks, such as to indicate whether someone from a different workgroup was selected — meaning the person changing access permissions is not made aware of errors that may occur from the manual process, including whether someone was selected accidentally.

As of Dec. 5, 2019, 102 individuals across many city agencies were able to modify access permissions in the city’s badging system. This large number of individuals able to change permissions, coupled with the manual process used to grant permissions, resulted in many cardholders receiving unnecessary permissions for their job function.

Further, Denver Security Office staff realized many individuals were granted historic access permissions that allowed movement within an entire facility — instead of movement limited to specific floors or sections of a facility. The Denver Security Office said this was done simply to reduce the volume of requests for permission changes. However, the city’s lack of policies and procedures specifying who is authorized to make permission changes means General Services cannot ensure cardholders are afforded correct permissions to navigate the city’s facilities.

**Identity Management** — The city’s identity management process cannot ensure individuals are prohibited from accessing city facilities after their employment ends. Leading practices suggest agencies should generate regular monitoring reports to rapidly detect and resolve inappropriate

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access permissions and patterns of unauthorized access attempts.  

Badging Office staff use a termination report and an expiration report, and they can provide agencies with customized reports upon request as part of their monitoring duties. The termination report, provided to Badging Office staff by the Office of Human Resources, includes a list for the previous week of employees who no longer work for the city. Badging Office staff use the termination report as a reference to manually remove each included person’s access permissions. The expiration report, generated by Badging Office staff, contains a list of all credentials with upcoming expiration dates. Badging Office staff use the expiration report to notify agency representatives of credentials about to expire, so the agency representative can decide whether a credential’s expiration date should be extended.

There is no link between the city’s employee information system of record, Workday, and General Services’ access and badging system of record, CCURE — which means monitoring occurs manually. Although the purpose and use of the city’s monitoring reports align with leading practices, their associated manual processes do not. Federal guidance notes these reports and their processes should be automated to ensure permissions are removed quickly and to eliminate any opportunity for human error.

Auditors tested a sample of individuals whose badges were disabled after their employment ended with the city and found several instances of individuals who used their badge post-employment to access city facilities. The city’s use of a manual process to remove access permissions means the city cannot ensure individuals are not accessing city facilities after their employment ends.

**Badge Infrastructure** – The city’s outdated badge infrastructure prevents the city from verifying a cardholder’s identity through multifactor authentication as recommended by the National Institute of Standards and Technology. The city’s process for an employee to use their badge to access a facility leverages both a computer and a security guard, as follows:

A. The cardholder presents their badge to the electronic reader, which communicates with the access control system, CCURE. The control panel illuminates either a green (permitted) or red (denied) light depending on the access permission.

B. After the cardholder scans the badge, they present it to a guard who verifies the picture on the badge matches the cardholder. If the scan returns a green light, and the picture matches the cardholder, the person is permitted to enter.

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62 Ibid. § 9.4 & 4.4.1.1.

When the computer checks the badge's access permissions, it verifies only a single factor (i.e., whether a badge has correct access permissions), because the computer cannot be sure who presented the badge. Requiring the cardholder to enter a pin or present a biometric — like a fingerprint — before allowing the computer to check the access permissions would help ensure the badge belongs to the cardholder. Similarly, although a security guard can verify whether the image printed on the badge matches the person presenting it, the guard cannot be sure the digital information stored on the badge really belongs to the person presenting it. Incorporating a biometric check would provide assurance to the guard that the badge belongs to the cardholder.

The city’s outdated badge infrastructure also limits “interoperability,” which means agencies can accept each other’s badges.

As noted, the Department of Public Safety manages its own access and badging system, because it is exempt from Executive Order 6. But the credentials issued to Public Safety personnel are not compatible with the electronic readers used by General Services’ badges and vice versa. This limitation means when Public Safety personnel respond to an emergency incident at a city facility, they cannot always gain entry to the facility with their own badges to begin resolving the emergency quickly. The lack of citywide badge interoperability limits emergency responders’ ability to resolve emergencies as quickly as possible, which could jeopardize the safety and security of city employees and the public.

In summary, the city’s policies and procedures do not reflect the roles and responsibilities for access and badging described in federal guidance, and the city’s limited access and badging policies also do not align with leading practices. Specifically, as part of operating an effective identity management system, federal guidance recommends synchronizing ownership of identity information to establish a trustworthy process for assigning attributes to digital identities and connecting digital identities to individuals. However, the city’s Executive Order 6 does not describe clear “identity management” roles and responsibilities. This has resulted in:

- The city using nine separate access and badging systems;
- General Services’ access and badging system not being connected to

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the city’s employee information system of record; and

• The city’s limited monitoring not being able to prevent former employees from accessing city facilities.

Further, federal guidance emphasizes fostering trust in using badges across an organization through uniformity of security and through integrity across the system.65 However, Executive Order 6 does not describe clear “credential management” roles or responsibilities. This has resulted in:

• The city providing vendor badges through guards who may allow greater access than a vendor requires;
• The city continuing to use outdated infrastructure that prevents identity verification through multifactor authentication; and
• The city continuing to lack interoperability.

Lastly, the lack of roles and responsibilities for “access management” in Executive Order 6 means the city cannot align with federal guidance — which recommends using an access management program to ensure all individuals across an organization are properly validated through authentication and ensuring accountability when individuals gain access to, and perform actions within, an agency’s resources. Instead, the city manually grants and revokes permissions manually for each person, more than 100 individuals were able to modify access permissions, and some historic permissions allowed cardholders greater access than required.

RECOMMENDATION 2.11

Centralize Identity, Credential, and Access Management – In conjunction with Recommendation 1.2, the Mayor’s Office should work with agencies implementing identity, credential, and access management systems to identify an agency or agencies responsible for citywide identity, credential, and access management. Responsibility for identity management, credential management, and access management should be given to an agency or agencies to satisfy the purpose of each program consistent with federal guidance.


65 Ibid. § 2.1.2.
RECOMMENDATION 2.12

Update Executive Order No. 6 – In conjunction with Recommendation 1.3 and following the implementation of Recommendation 2.11, the Mayor’s Office should work with responsible agencies to update Executive Order No. 6 to document roles and responsibilities and authority associated with identity, credential, and access management.

Agency Response: Agree, Implementation Date – May 14, 2021

RECOMMENDATION 2.13

Assess Existing Identity, Credential, and Access Management – In conjunction with Recommendation 2.1, the completion of citywide vulnerability assessments should include a review of existing identity, credential, and access management systems and processes to ensure they align with leading practices. Responsible city agencies should subsequently make changes based on identified vulnerabilities.


RECOMMENDATION 2.14

Develop Policies and Procedures for Identity, Credential, and Access Management – Following implementation of recommendations 2.11, 2.12, and 2.13, responsible agencies should develop and implement policies and procedures for identity, credential, and access management. The policies and procedures should include a periodic review of existing access and permissions to ensure individuals are afforded appropriate access and to ensure individuals no longer working for the city no longer have access or permissions.

Agency Response: Agree, Implementation Date – May 14, 2021

The City’s Policies and Procedures for Its Employee Notification System Do Not Align with Leading Practices

Several city agencies, including the Department of General Services and the Office of Emergency Management and Homeland Security, collaborated to create the Employee Notification System Governance Committee to detail guidelines and protocols for sending mass notifications to city employees using the city’s employee notification system, Everbridge. However, our audit found the committee’s policies and procedures for Everbridge do not align with leading practices for data quality and program evaluation.

At the beginning of 2020, the city transitioned from the use of Send Word Now to Everbridge as the city’s official employee notification system.
Everbridge can be used by multiple city agencies — primarily the Department of General Services — to alert city employees of safety and security incidents, from inclement weather notifications to security issues like a building lockdown because of an active shooter. To enable Everbridge to contact employees, contact information for all city employees is sent to Everbridge every night from Workday, the system city employees use to manage personal information including their contact information.

**Missing and Inaccurate Employee and Vendor Contact Information**

– We found employee and vendor contact information in Workday is often incorrect or nonexistent, especially for contractors, on-call employees, and volunteers.

General Services, in conjunction with the governance committee, sent three test notifications using Everbridge to city employees at the end of 2019 and the beginning of 2020 before officially implementing Everbridge as the city’s employee notification system. While the two tests conducted in January 2020 were sent to all city employees, the first Everbridge test in December 2019 was sent only to employees from General Services, Emergency Management, and the city’s Technology Services agency. As shown in Figure 4 on the next page, as many as 220 city employees and vendors were not reached by any means of contact — email, phone, or text message — during the three Everbridge tests.

During the December 2019 test, all 24 unreached employees were contractors and did not have any contact information in Workday.

During the Jan. 8, 2020, test of Everbridge, all 220 unreached individuals were contractors, vendors, on-call employees, or volunteers. We randomly sampled 35 of them and found 20 employees in that sample were not contacted because of missing contact information in Workday. Additionally, 11 of the 35 employees we sampled were unreached because Everbridge did not attempt to contact a phone number or email address in Workday. The remaining four were unreached because of errors in the employees’ contact information, such as having an invalid email address, or because of unverifiable errors that prevented Everbridge from contacting the employee, such as getting a busy signal from a phone number.
Governance committee members also said the 11 employees were unreacheder because of an error with Workday not sending over all employee contact information to Everbridge. Because of this error, the governance committee conducted a second Everbridge test on Jan. 22, 2020. Auditors reviewed the results of the city's Everbridge test for these 11 employees and found:

- One received the notification;
- Eight received an unsuccessful attempt to all available contact methods listed in Workday because of unverifiable errors;
- One did not receive a notification because they removed their contact information from Workday; and
- One did not receive an attempt to their one listed contact method in Workday, because the phone number listed was missing an area code.

Officials from the city's Technology Services agency said missing and incorrect contact information for contractors, vendors, on-call employees, and volunteers happens because of a separate onboarding process for these employees and vendors. This process previously did not require both their phone number and email address in Workday. However, governance committee members said this policy changed on Jan. 1, 2020, to now require both a phone number and an email address in Workday.

Leading practices stress the need for using quality information when communicating to employees and other stakeholders during an emergency.
Guidance from the U.S. Department of Homeland Security states the need to communicate with relevant stakeholders (in this case, city employees and vendors) in an emergency is immediate, and therefore, employees’ and vendors’ contact information should be immediately available with as much information for each contact as possible.\(^{66}\)

The U.S. Government Accountability Office affirms this need by saying leadership should get relevant information from reliable sources that is reasonably free from error.\(^{67}\) Additionally, an organization should use this reliable information to communicate throughout the entity to achieve its objectives.

**Lack of Outcome Evaluation** – Further, we found neither the Employee Notification System Governance Committee nor General Services has documented success measures or corresponding target goals to assess the success of the employee notification system.

While the governance committee’s notification policies do say it will measure success through “effective utilization” of Everbridge and biannual reviews, the policy does not define how to measure effective utilization nor does it define a goal for success. This lack of defined success measures was confirmed by members of the governance committee, who said success should be defined by individual agencies. Additionally, General Services and its Denver Security Office — as the city’s primary emergency notification senders — have not documented any success measures or established target goals for a successful notification.

Members of the Employee Notification System Governance Committee attributed the lack of defined success measures and target goals in the system’s policies and procedures to the newness of the Everbridge system and their focus on its implementation.

However, standards from the U.S. Government Accountability Office emphasize the need for evaluating the outcomes of a program to provide accountability and improve performance.\(^{68}\) Evaluations assess the outcomes of a program by comparing program data to preestablished target goals. The specific target goal used in this outcome assessment can be taken from professional standards, stakeholder expectations, or levels observed in previous uses of the program itself.

Because of this lack of program evaluation and the lack of quality employee contact information, General Services and other city agencies who use the employee notification system cannot ensure Everbridge is effectively


reaching all city employees and vendors — specifically contractors, on-call employees, and volunteers — in the event of an emergency.

**RECOMMENDATION 2.15**

**Define Outcomes and Target Goals** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should define its intended outcomes and target goals for assessing whether the employee notification system is effective and achieving its intended purpose.


**RECOMMENDATION 2.16**

**Develop Contact Information Policies and Procedures** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should work with the Office of Human Resources to develop and implement policies and procedures to ensure Workday contact information for all new city employees and vendors — including contractors, on-call employees, and volunteers — is as complete and accurate as possible.


**RECOMMENDATION 2.17**

**Ensure Accurate Contact Information** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should continue to work with the Office of Human Resources to ensure existing employees' and vendors' contact information — including those of contractors, on-call employees, and volunteers — is as complete and accurate as possible.

FINDING 3

The City Is Not Always Receiving Security Services in Alignment with Contractual Requirements or Leading Security Practices

As part of security operations, the city uses contracted security guards for certain safety- and security-related duties at city buildings — such as screening visitors with X-ray machines and metal detectors to prevent them from bringing dangerous items into buildings, patrolling both the interior and exterior of buildings to identify safety or security concerns, and assisting with emergency evacuations.

The city's Department of General Services has contracted with HSS Inc. — a security guard services company — since at least August 2005, with the current contract being effective from January 2016 through December 2020 and paying up to $22.3 million for HSS' services. Because of the critical role played by HSS security staff in ensuring the safety and security of city facilities, auditors evaluated whether HSS was providing safety and security services as required by its contract with the city, and auditors also sought to determine whether these services aligned with national leading practices for government buildings.

To evaluate HSS' delivery of services, we evaluated General Services’ and HSS’ processes and policies and procedures for portions of the contract related to security staff training, mandatory positions, and required duties. Additionally, we conducted multiple observations at five city buildings — with a focus on HSS security processes for controlling access to buildings and for screening visitors when they entered buildings — to compare HSS’ practices to contract requirements and to assess their alignment with national leading security practices.

In our assessment, we determined General Services' contract administration and monitoring practices were insufficient to ensure HSS' services were both in compliance with the city's contract and in alignment with national leading practices. Despite this, our audit did find HSS was compliant with the contract by providing mandatory staff and having required security training courses available to security staff. Additionally, we observed security staff were generally effective in some duties, such as using X-ray scanning procedures to identify visitors' prohibited items.

However, we observed HSS' security practices for other areas — such as metal detector screenings of visitors and responses to emergencies and incidents — were often inconsistent across city buildings, and the current expectations of both the city and HSS management were not always reflected in HSS' policies and procedures. We also found HSS' emergency
and incident response processes were not always aligned with leading practices used by the city, such as the National Incident Management System.

Our audit found the Department of General Services recently expanded its contract administration capabilities in mid-2019 and has since been conducting more intensive informal monitoring of the security services HSS Inc. provides. However, the department’s practices are not sufficient to ensure HSS is meeting contractual obligations and providing effective services to help meet the city’s safety and security needs.

“Contract administration” includes all activities — including contract monitoring — from when a contract is awarded and work or services begin under a set time frame until the work or services are completed and the contract ends. “Contract monitoring” involves observing and assessing contractors’ performance over time.69

The city’s Executive Order No. 8 details contract administration responsibilities for all city agencies that require policies be created and used for monitoring and documenting contract performance to ensure established terms and conditions are met.70 Additionally, the city’s contract with HSS requires the city and HSS to administer a contractor performance management program to document performance, including any problems related to services.

Leading practices identify a contract administration plan, or program, as critical for contract management and quality assurance to ensure all contract administration activities, including contract performance monitoring, are carried out effectively. Figure 5 on the following page includes several elements the National Association of State Procurement Officials recommends a contract administration plan include.71

Although General Services was required to monitor the performance of HSS’ services in accordance with both Executive Order 8 and the contract, department leadership acknowledged that before mid-2019, they were insufficiently monitoring HSS to ensure the company was compliant with key contract requirements. Department leaders also explained they previously had only one staff member responsible for contract administration and monitoring for the contracts General Services manages for a wide range of services for the city, one of which is security. Finally, both General Services leaders and security management staff confirmed the department did not

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have a formal, documented contractor performance management program as required.

Without a detailed contract administration plan and monitoring methods that reflect leading practices, the city cannot ensure HSS Inc. delivers services in line with the conditions of the contract.

**RECOMMENDATION 3.1**

**Develop and Implement Contract Monitoring Program** – The Department of General Services should develop and implement a contract monitoring program and function to monitor the effectiveness of contracted security services. The program should reflect performance and contract monitoring guidelines established in Executive Order No. 8 and align with leading practices for performance and contract monitoring.

**Agency Response: Agree, Implementation Date – Oct. 16, 2020**
RECOMMENDATION 3.2

Assess and Update Post Orders – The Department of General Services’ Denver Security Office should coordinate with the city’s contracted security services to ensure all post orders outlining required duties for contracted security guards reflect the city’s current operational security expectations and align with leading practices.

Agency Response: Agree, Implementation Date – Oct. 16, 2020

In addition to the weaknesses with contract monitoring practices, our review of the city’s contract with HSS found that the scope of work — which outlines the security services expected to fulfill the contract — was not always clear in defining performance requirements or measures to aid the Department of General Services in effectively monitoring HSS’ performance.

According to the State of Colorado Procurement Manual, a contract scope of work is a roadmap of contract administration that helps to ensure satisfactory performance to meet the requirements of a contract as well as monitoring to evaluate progress and identify problems early to resolve them. Additionally, this guidance states specific, detailed performance standards or measures are one of the most important parts of contract monitoring.72

We found weaknesses with how the scope of work in the city’s contract with HSS was written in some areas that could impact General Services’ ability to monitor performance and ensure the city’s security expectations are met. For example, we noted a lack of specific, detailed standards or measures related to security guard training, security staffing, and reporting.

Security Guard Training – In our review of contract requirements related to security guard training, we found the contract did not clearly establish all training topics that should be provided to HSS security guards either before they are assigned or once they are assigned to a city building.

While the contract stated HSS security guards should receive 24 hours of training before being assigned to a city facility and that they should be provided a list with a range of training topics, it did not specify when training on each required topic should occur. Further, the contract did not identify how many hours of training guards should receive once assigned to a city building.

Our analysis of HSS’ training documentation found security guards were offered 32 hours of training before being assigned to a city building, which is consistent with the city’s expectation of required hours, and that the training topics offered to security guards were also generally in alignment with HSS’ internal processes for all clients. However, without clearly defined training requirements identifying when security guard training should happen and how much training security guards should receive once assigned to a city building, General Services may not be able to determine whether guards received sufficient training to perform their duties effectively to satisfy the city’s security needs.

As one example of a city contract with better-defined training performance measures in alignment with leading practices, the city’s contract for security services at Denver International Airport during the same time frame — also with HSS Inc. — identifies the specific training topics security guards should receive both before assignment at the airport and upon assignment to the airport. Additionally, this contract also establishes the specific number of training hours guards should receive upon assignment.

**Security Staffing** – Additionally, we noted the city’s contract requirements related to HSS security staffing were not well defined to help ensure the city’s ongoing adjustment or realignment of security guards to meet the city’s security needs was documented and fulfilled by HSS. While the contract identified mandatory positions, by type, that should be provided by HSS while delivering security services, the contract also allowed for additional personnel requirements to be added based on the needs of individual city agencies as long as 24 hours’ notice was provided. However, this additional contract requirement did not specify that personnel changes should be submitted in writing and include a rationale.

While the audit team’s analysis found HSS had filled the mandatory positions, by type, the number of HSS staff provided to meet the city’s security expectations has increased during the contract; however, these changes had often been made based upon verbal, informal requests from more than one city agency. Therefore, the ongoing staffing expectations of the city, including rationale for changes, may have not always been documented to aid General Services staff in continually monitoring HSS.

In addition to leading contract administration practices from the National Association of State Procurement Officials that recommend formal, written approval be required before a change, the city’s contract for HSS’ security services at the airport also provides an example of a well-defined contract requirement regarding changes made to expectations for the delivery of security services. Under this contract, changes to the services provided have to be consistent with the contract’s scope of work and any change lasting more than one week needs written notice of the requested change.

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Reporting – Finally, auditors’ review of reporting requirements identified in the contract found the requirements may not be written to help ensure General Services and other city agencies receive information in a timely manner to continually monitor the performance of HSS and evaluate the city's safety and security needs. While we noted certain reports were required to be submitted on a weekly basis — such as incident reports, weapons reports, and billing reports for services provided — other reporting requirements were not as well defined.

Several reporting requirements indicate HSS should be able to provide special reports upon request on topics such as personnel, staff training, and security needs, but these requirements do not describe what data or information these reports should include or their intended purposes. Further, General Services’ security staff identified the weekly requirement for incident reports was not sufficient to ensure information was available to them in a timely manner after an incident occurred. The city established expectations in December 2019 that these reports be submitted within one hour.

Without specific, detailed reporting requirements, HSS may not be collecting or submitting the information or data necessary to help General Services and other city agencies effectively monitor the services it provides. Performance measures in alignment with leading contract administration practices and other leading practices — such as those reporting requirements in the city's contract with HSS at the airport — will help ensure the city is receiving sufficient services to meet its safety and security expectations.

RECOMMENDATION 3.3

Develop Well-Defined Contract Performance Measures – The executive director of the Department of General Services should ensure any future city contract for security services includes well-defined performance measures that align with leading practices for performance monitoring in order to monitor the effectiveness of these services in accordance with Executive Order No. 8.

Agency Response: Agree, Implementation Date – Oct. 16, 2020
RECOMMENDATIONS

The agency narratives below are reprinted verbatim from the agency’s response letter, shown in the next section of this report.

1.1 **Develop Strategic Plan** – The Mayor’s Office should develop a strategic plan for ensuring safety and security of city facilities. This strategic plan should define the city's mission, long-term goals, and approaches to monitor progress in addressing challenges and opportunities related to its mission as well as provide context for decisions made and consider risks. Progress should be measurable and objective-based. Additionally, the plan should include a timeline for periodic review based on leading practices.

**Agency Response:** Agree, **Implementation Date** – Jan. 14, 2021

**Agency Narrative:** The Mayor’s Office agrees to develop a citywide strategic plan for facility safety and security. Based on the city’s COVID-19 response, within 210 days may be too aggressive since the city’s agencies required to participate in the planning process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

1.2 **Define Roles and Responsibilities** – The Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security, at minimum, to define specific roles and responsibilities related to city facility safety and security.

**Agency Response:** Agree, **Implementation Date** – Jan. 14, 2021

**Agency Narrative:** The Mayor’s Office agrees to convene city agencies carrying out the city’s facility safety and security functions to ensure there is clarity on the program’s roles and responsibilities. Based on the city’s COVID-19 response, 210 days may be too aggressive since the city’s agencies required to participate in the planning process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

1.3 **Update Executive Orders** – After implementing Recommendation 1.2, the Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security to update executive orders 6, 65, and 85 — or to create a new executive order — to include defined roles and responsibilities and designated authority to those charged with city facility safety and security and to align with current and leading practices.

**Agency Response:** Agree, **Implementation Date** – May 14, 2021
Agency Narrative: The Mayor’s Office will work with city agencies to initiate the city’s process to update executive orders 6, 65 and 85.

2.1 **Prioritize and Plan Vulnerability Assessments** – The Department of General Services should prioritize the completion of citywide facility vulnerability assessments either through a contract or by developing an assessment in line with leading practices, such as the Interagency Security Committee standards. As part of this prioritization, General Services should develop a timeline for completing all city facility assessments, including assessments of leased facilities that house city employees.


Agency Narrative: Within 210 days, the Department of General Services agrees to adopt applicable guidelines and standards for facility vulnerability assessments and develop a timeline for completion of these assessments in conjunction with other city agency partners. Based on the city's projected General Fund revenue gaps in 2020 and 2021 due to COVID-19, it is unlikely that assessment work can be conducted under a 3rd party contract, therefore, the department anticipates significant city staff resources, which are already limited, will be required to complete all assessments.

2.2 **Document Implementation Rationale** – The Department of General Services and other affected agencies should document rationale for deciding whether to implement safety or security initiatives based on a formal vulnerability, or needs, assessment.


Agency Narrative: The Department of General Services agrees to generalize and document its rationale for implementing safety and security initiatives. Using its years of security subject matter expertise and professional experience, the department has successfully collaborated with several agencies to implement quick wins to improve the city's security posture at little to no cost to the city and its taxpayers. The department will continue using this approach, in addition to formal assessments as funding is available, and ensure the rationale is documented appropriately.

2.3 **Amend Executive Order No. 65** – In conjunction with Recommendation 1.3, the Department of General Services and the Department of Finance should work with the Mayor's Office to amend Executive Order No. 65 to clarify that additional procedures or related safety standards exist apart from the executive order itself. The Department of Finance's Risk Management Office should communicate to those responsible for implementing and adhering to the executive order that these additional safety standards and procedures exist.

Agency Response: Agree, Implementation Date – Aug. 12, 2021

Agency Narrative: The Department of Finance’s Risk Management Office agrees to amend Executive Order No. 65 to clarify the existence of additional safety standards and policies. Such information will be communicated Citywide.
2.4 **Document Roles and Responsibilities for Emergency Response Team** – In conjunction with Recommendation 1.2, the Department of General Services and the Department of Finance should work with the Mayor’s Office to identify an agency responsible for implementing the emergency response team, and they should develop and document specific roles and responsibilities for those responsible for implementation.

**Agency Response: Agree, Implementation Date – Jan. 14, 2021**

Agency Narrative: The Department of Finance’s Risk Management Division will coordinate discussions with the Department of General Services and the Denver Fire Department to identify and document roles and responsibilities needed to successfully implement the DenverReady Emergency Coordinator Program. Based on the city’s COVID-19 response, this timeframe may be too aggressive since the city’s agencies required to participate in this process are responding to a national public health pandemic. Agencies will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

2.5 **Implement Policies and Procedures for Emergency Response Team** – Following the implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should then develop and implement policies and procedures on how to do that, including tracking the existence of emergency coordinators for each agency and verifying training attendance. These policies and procedures should include noncity buildings that house city employees (i.e., leased spaces).

**Agency Response: Agree, Implementation Date – April 14, 2021**

Agency Narrative: Upon completion of Recommendation 2.4, the Department of Finance’s Risk Management Division will coordinate discussions with the Department of General Services and the Denver Fire Department to identify and document roles and responsibilities needed to successfully train and manage the Emergency Response Teams within the DenverReady Emergency Coordinator Program. The Denver Fire Department is already in progress to create training videos for upload to Workday to track and monitor training and will incorporate these activities into the planning process. However, there are potential funding barriers based on the city’s projected General Fund shortfall in 2020 and 2021.

2.6 **Implement Certification Program** – The Denver Fire Department should develop and implement a certification program for those charged with evacuation and emergency training.

**Agency Response: Agree, Implementation Date – Jan. 14, 2021**

Agency Narrative: The Denver Fire Department will partner with the Department of Excise and Licenses that have an existing emergency response training program. The Denver Fire Department anticipates adding its specific training modules to the existing program for implementation.
2.7 **Ensure Certification** – Following the implementation of Recommendation 2.6, the Denver Fire Department should ensure those responsible for evacuation and emergency training are certified as required by the Building and Fire Code for the City and County of Denver.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

*Agency Narrative: The Denver Fire Department will work with agencies to designate individuals for certification training in each facility. Training will be provided through the training video mentioned previously in 2.5.*

2.8 **Review and Approve Emergency Procedures Guides** – The Denver Fire Department should review and approve building emergency procedures guides as required by the International Fire Code to ensure contents are consistent with the code and with department expectations. The fire department should retain documentation of this review and approval process.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

*Agency Narrative: The Denver Fire Department agrees to review and approve emergency procedures guides ensuring consistency with all applicable codes. A document storage location has been identified for record retention.*

2.9 **Track Fire Drill Data** – The Denver Fire Department should track data and results related to fire drills to identify trends and inform future training needs.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

*Agency Narrative: The Denver Fire Department agrees to track data and results of fire drills to inform future needs. A document storage location has been identified for record retention.*

2.10 **Develop Employee Evacuation and Emergency Procedures Training** – Following implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should work with the Office of Human Resources and the Denver Fire Department to develop citywide employee training related to evacuation and emergency procedures. The training should communicate information consistent with emergency procedures guides and the city's new standard response protocols. Additionally, as required by the International Fire Code, this training should be required upon employment and annually thereafter. Documentation of this training requirement should be included either in an executive order or through Career Services Rules.

*Agency Response: Agree, Implementation Date – Aug. 12, 2021*

*Agency Narrative: The Department of Finance’s Risk Management Division will continue to work with the Department of General Services, Denver Fire Department and the Office of Human Resources in finalizing the currently in-development new training guides and Workday Learning opportunities. Additionally, through a combined partnership, reliable tracking methods and International Fire*
Code, best practices-based scheduling will be developed and implemented. This is in addition to the annually required Emergency Coordinator instructor led training, traditionally led by the Denver Fire Department, with support from General Services and Risk Management. As the instructor led and on-line trainings are completed, a communications plan will be devised to ensure participation by all employees.

2.11 Centralize Identity, Credential, and Access Management – In conjunction with Recommendation 1.2, the Mayor’s Office should work with agencies implementing identity, credential, and access management systems to identify an agency or agencies responsible for citywide identity, credential, and access management. Responsibility for identity management, credential management, and access management should be given to an agency or agencies to satisfy the purpose of each program consistent with federal guidance.


Agency Narrative: The Mayor’s Office agrees to clarify credentialing management authority for agencies based on the general and/or unique characteristics of the city’s agencies. Based on the city’s COVID-19 response, this timeframe may be too aggressive since the city’s agencies required to participate in this process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

2.12 Update Executive Order No. 6 – In conjunction with Recommendation 1.3 and following the implementation of Recommendation 2.11, the Mayor’s Office should work with responsible agencies to update Executive Order No. 6 to document roles and responsibilities and authority associated with identity, credential, and access management.

Agency Response: Agree, Implementation Date – May 14, 2021

Agency Narrative: The Mayor’s Office agrees to document access management authority of agencies.

2.13 Assess Existing Identity, Credential, and Access Management – In conjunction with Recommendation 2.1, the completion of citywide vulnerability assessments should include a review of existing identity, credential, and access management systems and processes to ensure they align with leading practices. Responsible city agencies should subsequently make changes based on identified vulnerabilities.


Agency Narrative: Same as with vulnerability assessments, based on the city’s projected General Fund revenue gaps in 2020 and 2021 due to COVID-19, changes to these major systems may result in substantial expense to the city. In addition, budget shortfalls will affect the city’s ability to complete citywide technology assessments through a contractor and will result in limited city staff resources being diverted to address in house.
2.14 **Develop Policies and Procedures for Identity, Credential, and Access Management** – Following implementation of recommendations 2.11, 2.12, and 2.13, responsible agencies should develop and implement policies and procedures for identity, credential, and access management. The policies and procedures should include a periodic review of existing access and permissions to ensure individuals are afforded appropriate access and to ensure individuals no longer working for the city no longer have access or permissions.

*Agency Response: Agree, Implementation Date – May 14, 2021*

*Agency Narrative: The city agrees and supports policy and procedure development and review of access periodically.*

2.15 **Define Outcomes and Target Goals** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should define its intended outcomes and target goals for assessing whether the employee notification system is effective and achieving its intended purpose.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

*Agency Narrative: The Department of General Services agrees that it is important to define and document effectiveness of the city employee notification system. As stated on multiple occasions through the audit, effectiveness and success will vary depending on the purpose of the notification, the variability of the settings used for the individual notification and the integrity of employee/contractor data in Workday which is dependent on the individual to accurately enter and update in Workday.*

2.16 **Develop Contact Information Policies and Procedures** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should work with the Office of Human Resources to develop and implement policies and procedures to ensure Workday contact information for all new city employees and vendors — including contractors, on-call employees, and volunteers — is as complete and accurate as possible.

*Agency Response: Agree, Implementation Date – Jan. 14, 2021*

*Agency Narrative: The Department of General Services agrees to work with the city’s Mass Notification Governance Committee and Office of Human Resources to discuss and implement all reasonable automated checks and balances of data and will continue to run a communication campaign to ask individual’s to regularly review and update contact information in Workday.*

2.17 **Ensure Accurate Contact Information** – The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should continue to work with the Office of Human Resources to ensure existing employees’ and vendors’ contact information — including those of contractors, on-call employees, and volunteers — is as complete and accurate as possible.

Agency Narrative: The Department of General Services agrees to work with the city's Mass Notification Governance Committee and Office of Human Resources to discuss and implement all reasonable automated checks and balances of data and will continue to run a communication campaign to ask individuals to regularly review and update contact information in Workday.

3.1 Develop and Implement Contract Monitoring Program – The Department of General Services should develop and implement a contract monitoring program and function to monitor the effectiveness of contracted security services. The program should reflect performance and contract monitoring guidelines established in Executive Order No. 8 and align with leading practices for performance and contract monitoring.

Agency Response: Agree, Implementation Date – Oct. 16, 2020

Agency Narrative: Improvements are in process with a new security contract being executed in 2020.

3.2 Assess and Update Post Orders – The Department of General Services' Denver Security Office should coordinate with the city's contracted security services to ensure all post orders outlining required duties for contracted security guards reflect the city's current operational security expectations and align with leading practices.

Agency Response: Agree, Implementation Date – Oct. 16, 2020

Agency Narrative: Improvements are in process with a new security contract being executed in 2020.

3.3 Develop Well-Defined Contract Performance Measures – The executive director of the Department of General Services should ensure any future city contract for security services includes well-defined performance measures that align with leading practices for performance monitoring in order to monitor the effectiveness of these services in accordance with Executive Order No. 8.

Agency Response: Agree, Implementation Date – Oct. 16, 2020

Agency Narrative: Improvements are in process with a new security contract being executed in 2020.
AGENCIES' RESPONSES TO AUDIT RECOMMENDATIONS

May 27, 2020

Auditor Timothy M. O’Brien, CPA
Office of the Auditor
City and County of Denver
201 West Colfax Avenue, Dept. 705
Denver, Colorado 80202

Dear Mr. O’Brien,

The Office of the Auditor has conducted a performance audit of Safety and Security of City Facilities.

This memorandum provides a written response for each reportable condition noted in the Auditor’s Report final draft that was sent to us on April 17th, 2020. This response complies with Section 20-276 (c) of the Denver Revised Municipal Code (D.R.M.C.).

AUDIT FINDING 1
The City and County of Denver Has Not Sufficiently Prioritized the Safety and Security of City Facilities

RECOMMENDATION 1.1
The Mayor’s Office should develop a strategic plan for ensuring safety and security of city facilities. This strategic plan should define the city’s mission, long-term goals, and approaches to monitor progress in addressing challenges and opportunities related to its mission as well as provide context for decisions made and consider risks. Progress should be measurable and objective-based. Additionally, the plan should include a timeline for periodic review based on leading practices.

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<tr>
<td>Agree</td>
<td>January 14, 2021</td>
<td>Evan Dreyer 720-865-9022</td>
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Narrative for Recommendation 1.1
The Mayor’s Office agrees to develop a citywide strategic plan for facility safety and security. Based on the city’s COVID-19 response, within 210 days may be too aggressive since the city’s agencies required to participate in the planning process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.
### RECOMMENDATION 1.2

The Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security, at minimum, to define specific roles and responsibilities related to city facility safety and security.

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**Narrative for Recommendation 1.2**

The Mayor’s Office agrees to convene city agencies carrying out the city’s facility safety and security functions to ensure there is clarity on the program’s roles and responsibilities. Based on the city’s COVID-19 response, 210 days may be too aggressive since the city’s agencies required to participate in the planning process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

### RECOMMENDATION 1.3

After implementing Recommendation 1.2, the Mayor’s Office should work with the Department of General Services, the Department of Finance, the Department of Public Safety, and the Office of Emergency Management and Homeland Security to update executive orders 6, 65, and 85 — or to create a new executive order — to include defined roles and responsibilities and designated authority to those charged with city facility safety and security and to align with current and leading practices.

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**Narrative for Recommendation 1.3**

The Mayor’s Office will work with city agencies to initiate the city’s process to update executive orders 6, 65 and 85.
AUDIT FINDING 2
Existing City Safety and Security Initiatives for City Facilities Are Not Adequate

RECOMMENDATION 2.1
The Department of General Services should prioritize the completion of citywide facility vulnerability assessments either through a contract or by developing an assessment in line with leading practices, such as the Interagency Security Committee standards. As part of this prioritization, General Services should develop a timeline for completing all city facility assessments, including assessments of leased facilities that house city employees.

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<td>Kami Johle 720-913-5723</td>
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Narrative for Recommendation 2.1
Within 210 days, the Department of General Services agrees to adopt applicable guidelines and standards for facility vulnerability assessments and develop a timeline for completion of these assessments in conjunction with other city agency partners. Based on the city’s projected General Fund revenue gaps in 2020 and 2021 due to COVID-19, it is unlikely that assessment work can be conducted under a 3rd party contract, therefore, the department anticipates significant city staff resources, which are already limited, will be required to complete all assessments.

RECOMMENDATION 2.2
The Department of General Services and other affected agencies should document rationale for deciding whether to implement safety or security initiatives based on a formal vulnerability, or needs, assessment.

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Narrative for Recommendation 2.2
The Department of General Services agrees to generalize and document its rationale for implementing safety and security initiatives. Using its years of security subject matter expertise and professional experience, the department has successfully collaborated with several agencies to implement quick wins to improve the city’s security posture at little to no cost to the city and its taxpayers. The department will continue using this approach, in addition to formal assessments as funding is available, and ensure the rationale is documented appropriately.
RECOMMENDATION 2.3
In conjunction with Recommendation 1.3, the Department of General Services and the Department of Finance should work with the Mayor’s Office to amend Executive Order No. 65 to clarify that additional procedures or related safety standards apart from the executive order itself. The Department of Finance’s Risk Management Office should communicate to those responsible for implementing and adhering to the executive order that these additional safety standards and procedures exist.

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<tr>
<td>Agree</td>
<td>August 12, 2021</td>
<td>Devron McMillin 720-913-3345</td>
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Narrative for Recommendation 2.3
The Department of Finance’s Risk Management Office agrees to amend Executive Order No. 65 to clarify the existence of additional safety standards and policies. Such information will be communicated Citywide.

RECOMMENDATION 2.4
In conjunction with Recommendation 1.2, the Department of General Services and the Department of Finance should work with the Mayor’s Office to identify an agency responsible for implementing the emergency response team, and they should develop and document specific roles and responsibilities for those responsible for implementation.

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Narrative for Recommendation 2.4
The Department of Finance’s Risk Management Division will coordinate discussions with the Department of General Services and the Denver Fire Department to identify and document roles and responsibilities needed to successfully implement the DenverReady Emergency Coordinator Program. Based on the city’s COVID-19 response, this timeframe may be too aggressive since the city’s agencies required to participate in this process are responding to a national public health pandemic. Agencies will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.
RECOMMENDATION 2.5
Following the implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should then develop and implement policies and procedures on how to do that, including tracking the existence of emergency coordinators for each agency and verifying training attendance. These policies and procedures should include noncity buildings that house city employees (i.e., leased spaces).

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<tr>
<td>Agree</td>
<td>April 14, 2021</td>
<td>Devron McMillin 720-913-3345</td>
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Narrative for Recommendation 2.5
Upon completion of Recommendation 2.4, the Department of Finance’s Risk Management Division will coordinate discussions with the Department of General Services and the Denver Fire Department to identify and document roles and responsibilities needed to successfully train and manage the Emergency Response Teams within the DenverReady Emergency Coordinator Program. The Denver Fire Department is already in progress to create training videos for upload to Workday to track and monitor training and will incorporate these activities into the planning process. However, there are potential funding barriers based on the city’s projected General Fund shortfall in 2020 and 2021.

RECOMMENDATION 2.6
The Denver Fire Department should develop and implement a certification program for those charged with evacuation and emergency training.

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<tr>
<td>Agree</td>
<td>January 14, 2021</td>
<td>Division Chief Manny Almaguer 720-913-3462</td>
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Narrative for Recommendation 2.6
The Denver Fire Department will partner with the Department of Excise and Licenses that have an existing emergency response training program. The Denver Fire Department anticipates adding its specific training modules to the existing program for implementation.
RECOMMENDATION 2.7
Following the implementation of Recommendation 2.6, the Denver Fire Department should ensure those responsible for evacuation and emergency training are certified as required by the Building and Fire Code for the City and County of Denver.

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Narrative for Recommendation 2.7
The Denver Fire Department will work with agencies to designate individuals for certification training in each facility. Training will be provided through the training video mentioned previously in 2.5.

RECOMMENDATION 2.8
The Denver Fire Department should review and approve building emergency procedures guides as required by the International Fire Code to ensure contents are consistent with the code and with department expectations. The fire department should retain documentation of this review and approval process.

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Narrative for Recommendation 2.8
The Denver Fire Department agrees to review and approve emergency procedures guides ensuring consistency with all applicable codes. A document storage location has been identified for record retention.
RECOMMENDATION 2.9
The Denver Fire Department should track data and results related to fire drills to identify trends and inform future training needs.

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Narrative for Recommendation 2.9
The Denver Fire Department agrees to track data and results of fire drills to inform future needs. A document storage location has been identified for record retention.

RECOMMENDATION 2.10
Following implementation of Recommendation 2.4, the agency responsible for implementing the emergency response team should work with the Office of Human Resources and the Denver Fire Department to develop citywide employee training related to evacuation and emergency procedures. The training should communicate information consistent with emergency procedures guides and the city’s new standard response protocols. Additionally, as required by the International Fire Code, this training should be required upon employment and annually thereafter. Documentation of this training requirement should be included either in an executive order or through Career Services Rules.

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Narrative for Recommendation 2.10
The Department of Finance’s Risk Management Division will continue to work with the Department of General Services, Denver Fire Department and the Office of Human Resources in finalizing the currently in-development new training guides and Workday Learning opportunities. Additionally, through a combined partnership, reliable tracking methods and International Fire Code, best practices-based scheduling will be developed and implemented. This is in addition to the annually required Emergency Coordinator instructor led training, traditionally led by the Denver Fire Department, with support from General Services and Risk Management. As the instructor led and on-line trainings are completed, a communications plan will be devised to ensure participation by all employees.
RECOMMENDATION 2.11
In conjunction with Recommendation 1.2, the Mayor’s Office should work with agencies implementing identity, credential, and access management systems to identify an agency or agencies responsible for citywide identity, credential, and access management. Responsibility for identity management, credential management, and access management should be given to an agency or agencies to satisfy the purpose of each program consistent with federal guidance.

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Narrative for Recommendation 2.11
The Mayor’s Office agrees to clarify credentialing management authority for agencies based on the general and/or unique characteristics of the city’s agencies. Based on the city’s COVID-19 response, this timeframe may be too aggressive since the city’s agencies required to participate in this process are responding to a national public health pandemic. The Mayor’s Office will keep the Auditor’s Office apprised of the emergency nature of the COVID-19 response and revise target dates as appropriate.

RECOMMENDATION 2.12
In conjunction with Recommendation 1.3 and following the implementation of Recommendation 2.11, the Mayor’s Office should work with responsible agencies to update Executive Order No. 6 to document roles and responsibilities and authority associated with identity, credential, and access management.

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Narrative for Recommendation 2.12
The Mayor’s Office agrees to document access management authority of agencies.
RECOMMENDATION 2.13
In conjunction with Recommendation 2.1, the completion of citywide vulnerability assessments should include a review of existing identity, credential, and access management systems and processes to ensure they align with leading practices. Responsible city agencies should subsequently make changes based on identified vulnerabilities.

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Narrative for Recommendation 2.13
Same as with vulnerability assessments, based on the city’s projected General Fund revenue gaps in 2020 and 2021 due to COVID-19, changes to these major systems may result in substantial expense to the city. In addition, budget shortfalls will affect the city’s ability to complete citywide technology assessments through a contractor and will result in limited city staff resources being diverted to address in house.

RECOMMENDATION 2.14
Following implementation of recommendations 2.11, 2.12, and 2.13, responsible agencies should develop and implement policies and procedures for identity, credential, and access management. The policies and procedures should include a periodic review of existing access and permissions to ensure individuals are afforded appropriate access and to ensure individuals no longer working for the city no longer have access or permissions.

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Narrative for Recommendation 2.14
The city agrees and supports policy and procedure development and review of access periodically.
**RECOMMENDATION 2.15**
The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should define its intended outcomes and target goals for assessing whether the employee notification system is effective and achieving its intended purpose.

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**Narrative for Recommendation 2.15**
The Department of General Services agrees that it is important to define and document effectiveness of the city employee notification system. As stated on multiple occasions through the audit, effectiveness and success will vary depending on the purpose of the notification, the variability of the settings used for the individual notification and the integrity of employee/contractor data in Workday which is dependent on the individual to accurately enter and update in Workday.

**RECOMMENDATION 2.16**
The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should work with the Office of Human Resources to develop and implement policies and procedures to ensure Workday contact information for all new city vendors and employees — including contractors, on-call employees, and volunteers — is as complete and accurate as possible.

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**Narrative for Recommendation 2.16**
The Department of General Services agrees to work with the city’s Mass Notification Governance Committee and Office of Human Resources to discuss and implement all reasonable automated checks and balances of data and will continue to run a communication campaign to ask individual’s to regularly review and update contact information in Workday.
RECOMMENDATION 2.17
The Department of General Services, in conjunction with the Employee Notification System Governance Committee, should continue to work with the Office of Human Resources to ensure existing employees’ and vendors’ contact information — including those of contractors, on-call employees, and volunteers — is as complete and accurate as possible.

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Narrative for Recommendation 2.17
The Department of General Services agrees to work with the city’s Mass Notification Governance Committee and Office of Human Resources to discuss and implement all reasonable automated checks and balances of data and will continue to run a communication campaign to ask individual’s to regularly review and update contact information in Workday.

AUDIT FINDING 3
The City is Not Always Receiving Security Services in Alignment with Contractual Requirements or Leading Security Practices

RECOMMENDATION 3.1
The Department of General Services should develop and implement a contract monitoring program and function to monitor the effectiveness of contracted security services. The program should reflect performance and contract monitoring guidelines established in Executive Order No. 8 and align with leading practices for performance and contract monitoring.

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<td>Agree</td>
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Narrative for Recommendation 3.1
Improvements are in process with a new security contract being executed in 2020.
RECOMMENDATION 3.2
The Department of General Services’ Denver Security Office should coordinate with the city’s contracted security services to ensure all post orders outlining required duties for contracted security guards reflect the city’s current operational security expectations and align with leading practices.

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Narrative for Recommendation 3.2
Improvements are in process with a new security contract being executed in 2020.

RECOMMENDATION 3.3
The executive director of the Department of General Services should ensure any future city contract for security services includes well-defined performance measures that align with leading practices for performance monitoring in order to monitor the effectiveness of these services in accordance with Executive Order No. 8.

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<td>Agree</td>
<td>October 16, 2020</td>
<td>Brandon Gainey 720-913-5737</td>
</tr>
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</table>

Narrative for Recommendation 3.3
Improvements are in process with a new security contract being executed in 2020.

Please contact Kami Johle at 720-913-5723 with any questions.

Sincerely,

Brandon Gainey
Acting Executive Director
Department of General Services
cc: Valerie Walling, CPA, Deputy Auditor  
Dawn Wiseman, CRMA, Audit Director  
Kharis Eppstein, Audit Supervisor  
Brendon Hanlon, Chief Financial Officer, Department of Finance  
Ray Sibley, Director Risk Management, Department of Finance  
Devron McMillin, Risk Manager, Department of Finance  
Kami Johle, Director of Administration, General Services  
George Hunt, Chief Security Officer, General Services  
Murphy Robinson, Executive Director of Department of Safety  
Todd Bower, Chief, Denver Fire Department  
Manuel Almagure, Division Chief, Denver Fire Department  
Latonya Lacy, Director of Administration, Mayor’s Office  
Evan Dreyer, Deputy Chief of Staff, Mayor’s Office  
Armando Saldate, Performance Improvement Manager, Department of Safety  
Matthew Mueller, Executive Director, Office of Emergency Management
OBJECTIVE

The audit had three objectives:

1. To determine whether the city has clearly defined roles and responsibilities related to safety and security;
2. To examine whether the city has effective practices to ensure the safety and security of city facilities and its employees and the public; and
3. To analyze whether HSS Inc. is providing safety and security services in compliance with the city’s contract and in alignment with leading practices.

SCOPE

The audit examined physical safety and security as well as security services provided at city facilities to determine whether the safety of city employees and visitors is adequately addressed. We reviewed whether the city has clearly defined roles and responsibilities related to safety and security, analyzed the city’s safety and security practices to determine whether they are effective, and assessed whether the city’s contracted security agency complies with its contract and with leading practices.

We reviewed documentation to support current practices and internal controls, as well as data from between Jan. 1, 2018, through Oct. 31, 2019. Additionally, we reviewed some city initiatives that have been in place since 2003.

METHODOLOGY

We used several methodologies to gather and analyze information related to the audit objectives. These methodologies included but were not limited to:

• Interviewing the following individuals:
  ○ Personnel from the Mayor’s Office, the Department of General Services, the Department of Finance, the Office of Emergency Management and Homeland Security, the Office of Human Resources, the Department of Public Safety, the Technology Services agency, and Denver Human Services
  ○ Personnel from the Denver Sheriff Department and the Denver Fire Department
  ○ Personnel with HSS Inc.
  ○ The executive director of the I Love U Guys Foundation

• Reviewing the following criteria:
  ○ ASIS International’s “Enterprise Security Risk Management Guidelines” on identifying risks
○ The U.S. Government Accountability Office’s “Designing Evaluations” report
○ The “Agency Strategic Planning Section” of the U.S. Office of Management and Budget’s Circular No. A-11
○ The Government Finance Officers Association’s guidance on developing strategic plans
○ U.S. Department of Homeland Security’s “Crisis Communication Plan”
○ Federal “Identity, Credential, and Access Management Roadmap and Implementation Guidance” on identity, credential, and access management and centralization
○ National Institute of Standards and Technology guidance on access control, credential guidelines, and personal identity verification
○ The National Incident Management System and its associated Incident Command System
○ Hughes Identification Devices’ “Technology Solutions Brief” on reading credentials
○ The “State of Colorado Procurement Manual”
○ The International Fire Code
○ The Building and Fire Code for the City and County of Denver
○ The city’s Executive Order No. 6 – “Facilities Security and Identification Card Policy for Occupants and Users of City and County of Denver Facilities”
○ The city’s Executive Order No. 8 – “Contracts and Other Written Instruments of and for the City and County of Denver”
○ The city’s Executive Order No. 65 – “Operational Safety and Health Program”
○ The city’s emergency response standard 65.5.13, related to emergency response plans and procedures guides
○ The city’s Career Service Rules
○ The contract between the City and County of Denver and HSS Inc.
○ The contract between Denver International Airport and HSS Inc.
○ City facility emergency procedures guides
○ HSS Inc. post orders
○ Denver Sheriff Department post orders
The Department of General Services' policies and procedures related to badging and access and mass communication

- Reviewing and analyzing the following:
  - The structure of the city's roles and responsibilities for ensuring city facility safety and security compared with leading practices
  - Completed vulnerability assessments of city facilities compared with leading practices
  - The Denver Security Office's template for conducting vulnerability assessments
  - The I Love U Guys Foundation's standard response protocols compared with similar organizations’ protocols
  - The city's procurement of the I Love U Guys Foundation standard response protocols compared with the city's procurement process
  - General Services' and city badging policies and procedures compared with leading practices
  - General Services' reports for monitoring city badges and access
  - City executive orders to identify safety and security protocols, roles and responsibilities, and authority
  - The Denver Charter and city ordinances to identify safety and security roles and responsibilities and authority
  - The city's emergency and incident response protocols compared with leading practices
  - Incident reports compared with leading practices
  - Mass communication policies and procedures compared with leading practices
  - The mayor's budgets for 2017, 2018, and 2019 to identify citywide or agency-specific strategic plans related to safety and/or security
  - General Services' list of priorities
  - The city's DenverReady strategic plan
  - Existing and required employee training related to safety and/or security
  - The city's process for creating and amending executive orders and Career Services Rules
  - The city's process for requiring employee training
  - The city's trainings for surviving an active shooter
  - Results from two city employee surveys on workplace safety from 2014 and 2017
  - The city's process for tracking agencies' emergency response coordinators and attendance documentation for emergency response team training
  - Fire department drill critique letters for a city building for 2018 and 2019
  - Fire department emergency coordinator training presentation compared to the General Services and Department of Finance emergency coordinator training presentation
  - A city building emergency procedures guide compared to the emergency procedures guide
template provided by the Denver Fire Department
○ General Services' and Finance's processes for implementing the emergency response team
○ HSS Inc. contracts between both the City and County of Denver and Denver International Airport for comparison to each other and leading practices and to identify terms for compliance testing
○ A memorandum of understanding between General Services and the Denver Sheriff Department
○ HSS Inc. documentation supporting staffing and training
○ HSS Inc. post orders at five city buildings for comparison to each other and to leading practices. We selected those buildings with the highest daily numbers of visitors and employees accessing the buildings.
○ Denver Sheriff post orders at three city buildings for comparison to each other and to leading practices. We selected those buildings at which the Denver Sheriff Department had documented safety and security responsibilities.

• Observing the following:
  ○ 2019 annual emergency coordinator training
  ○ 2019 “Ethics in the Workplace” safety professionals training
  ○ 2020 “Standard Response Protocol Train the Trainer” training
  ○ HSS Inc. security guard practices at five city buildings related to employee identity confirmation, visitor screening, and emergency and incident response at a sample of city facilities and entrances to compare to responsibilities outlined in post orders and leading practices. We selected those buildings with the highest daily numbers of visitors and employees accessing the buildings.

• Performing sampling and testing against reviewed criteria for the following:
  ○ A random sample of 35 (15.9%) of 220 employees identified as not receiving a notification during the Jan. 8, 2020, Everbridge employee notification test. This sample was generated by assigning a random number to each of the 220 employees who did not receive a notification in Excel. The random numbers were then sorted from largest to smallest, and the first 35 were selected. Because all 220 employees were identified as exceptions, auditors chose 35 as a sufficient number to identify all causes for why an employee was not notified.
  ○ All 24 employees identified as not receiving a notification during the Dec. 11, 2019, Everbridge employee notification test to identify all causes for why an employee was not notified
  ○ High-risk employees — or employees whose badges were disabled after their employment ended with the city — to see whether any used their badge after their employment ended
Office of the Auditor

The **Auditor** of the City and County of Denver is independently elected by the citizens of Denver. He is responsible for examining and evaluating the operations of City agencies and contractors for the purpose of ensuring the proper and efficient use of City resources. He also provides other audit services and information to City Council, the Mayor, and the public to improve all aspects of Denver's government.

The **Audit Committee** is chaired by the Auditor and consists of seven members. The Audit Committee assists the Auditor in his oversight responsibilities regarding the integrity of the City's finances and operations, including the reliability of the City's financial statements. The Audit Committee is structured in a manner that ensures the independent oversight of City operations, thereby enhancing citizen confidence and avoiding any appearance of a conflict of interest.

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**Our Mission**

We deliver independent, transparent, and professional oversight in order to safeguard and improve the public's investment in the City of Denver. Our work is performed on behalf of everyone who cares about the City, including its residents, workers, and decision-makers.