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FIRE DEPARTMENT
NON-CONSTRUCTION
FIRE SAFETY INSPECTIONS

MARCH 1, 2022

MAYOR AND CITY COUNCIL

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March 1, 2022

The Mayor and City Council:

The Office of the City Auditor has completed an audit to evaluate controls ensuring the effectiveness and efficiency of the non-construction fire safety inspection program.

Based on the results of our audit, we believe that established controls were not adequate to ensure the effectiveness and efficiency of the non-construction fire safety inspection program, as carried out during the audit period of January 1, 2019, through February 29, 2020. Recommendations made to improve controls are included in this report and summarized as follows:

- Ensure fire safety inspections are scheduled for all high-risk locations by working with the Information Technology Department to prevent Accela server interruptions; monitoring to ensure inspections are scheduled within Accela; and developing procedures to ensure high-risk locations are identified when performing other inspection types. See Recommendations 1 and 2.

- Establish productivity goals, assign equitable workloads, and create routine monitoring reports to ensure inspectors are performing as expected. See Recommendations 3 through 5.

- Negotiate with the union to eliminate firearm requirements for Fire Prevention inspectors, which would increase productive time by removing the need for CLEET training and reduce potential liability for the City. See Recommendation 6.

- Formalize inspection priorities and timeliness targets and monitor aged open inspections to ensure inspections are performed timely. See Recommendation 7.

- Revise LFR performance measure to "% of identified high-risk commercial businesses inspected <u>as scheduled</u>" to communicate inspection timeliness more meaningfully. See Recommendation 9.

- Following implementation of the recommendations in this report, establish fair yet motivating inspection completion targets. See Recommendation 10.

- Measure and monitor performance for inspection types comprising a significant portion of inspection demand. See Recommendation 11.

- Develop data governance procedures, system edits, and monitoring reports; and clean up duplicative, confusing permit statuses to improve data integrity and performance reporting reliability. See Recommendations 12 through 14.

The content and emphasis of items included in this report have been discussed with appropriate management representatives to assure a complete understanding of the observations arising from our audit. Management responses are attached to this report in their entirety.

Matt Weller
Interim City Auditor

Lori Rice
Audit Manager

FIRE DEPARTMENT
FIRE PREVENTION SERVICES DIVISION
NON-CONSTRUCTION FIRE SAFETY INSPECTIONS

AUDIT OBJECTIVE, BACKGROUND, SCOPE AND METHODOLOGY

The objective of this audit was to evaluate controls ensuring the effectiveness and efficiency of the non-construction fire safety inspection program, for the period of January 1, 2019, through February 29, 2020.

The Fire Prevention Services Division (Fire Prevention) within the Fire Department is responsible for providing community risk reduction education, code compliance and investigative services to the residents, business community and visitors of Oklahoma City so they can benefit from the reduced risk of loss from fire and other hazards. Fire code compliance is enforced through a construction inspections program, and through routine fire safety inspections for commercial businesses deemed high-risk (i.e., non-construction inspections program). Construction inspections were not included in the scope of this audit.

Commercial business location types are identified as high-risk by Fire Prevention based on factors such as occupancy type, occupant load, ability of occupants to assist themselves in an emergency, availability of life safety systems and level of risk for loss of life. If a commercial business falls within a high-risk location type, a permit[1] is created for that business in Accela to ensure routinely scheduled fire safety inspections are performed. Accela is the software platform used by Fire Prevention as the system of record for permitting and inspection activity. Exhibit 1 shows that as of February 29, 2020, there were 4,144 active permits for routine fire safety inspections. Most of these permits are inspected annually, with multi-family units being inspected

Exhibit 1: High-Risk Commercial Businesses by Type

Rank in Volumes	Location Types	# of Active Permits	Inspection Frequency
1	Restaurants	748	Annual
2	Multi-Family Units (Apartments)	673	Biennial
3	Public Assembly/Taverns/Lounges	554	Annual
4	Daycares/Daycamps	376	Annual
5	Clinics	347	Annual
6	Welding Operations	262	Annual
7	Schools	238	Annual
8	Marijuana Operations	199	Annual
9	Hotel/Motels	169	Annual
10	High Rises	141	Annual
	All others*	437	Annual
		4,144	

*Includes Hospitals, Nursing Homes, Compressed Gas Operations, Hazardous Material Operations, among others.

Source: Accela fire permit data

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[1] A "Permit", in this case, is not indicative of permission granted by the City resulting from an external parties' application, but rather a term used within Accela explaining how a location is set-up within the system.

biennially. We did not evaluate Fire Prevention's practice of assessing location types for a high-risk determination and inspection frequency assignments.

The group of 12 inspectors responsible for performing routine fire safety inspections on high-risk locations also conduct inspections for one-time permit events (i.e., firework shows, open burning, special events, etc.) and for fire code complaints. Of the 3,687 non-construction fire code inspections completed for the 12-month period ended February 29,2020, 52% were inspections performed for the 4,144 high-risk locations in Exhibit 1.

Exhibit 2: 3,687 Non-Construction Inspections Completed in 12-Month Period by Type

Source: Accela completed inspections data
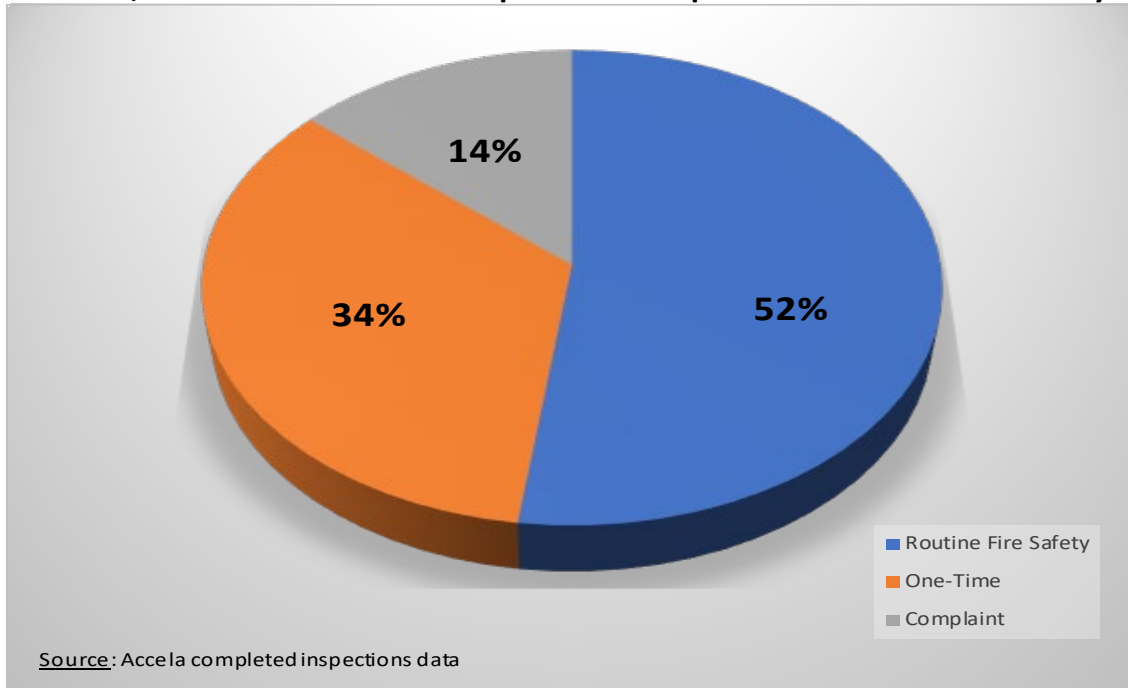
Procedures performed during this audit included a survey of peer cities; interviews with relevant personnel in Fire Prevention and the Information Technology Department (IT); reviews of related City Ordinances, State Statutes and Department policies; analysis of Accela and Kronos data related to output, staffing, productivity, prioritization, and timeliness; and assessment of performance monitoring and management oversight.

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). GAGAS requires that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our audit findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The following section of this report includes recommendations intended to provide constructive suggestions for improving current controls ensuring the effectiveness and efficiency of the non-construction fire safety inspection program. Included in the body of this report are

management responses to each recommendation. Management responses are also attached to this report in their entirety at Attachment A.

<div style="text-align:center; background:black; color:white;">RESULTS OF WORK PERFORMED</div>

Established controls are not adequate to ensure the effectiveness and efficiency of the non-construction fire safety inspection program.

Completeness of Fire Code Compliance Non-Construction Inspections

A survey of 10 peer cities[2] was conducted to obtain benchmark data, with useful responses primarily relating to inspection output, targets, and inspector productivity. Six cities responded, with two of those responses being excluded due to irregular data. The benchmark data obtained was used for comparison purposes during this audit.

Survey data shows peer cities are completing, on average, 2.2 times[3] more fire code compliance inspections[4] annually than Fire Prevention (Exhibit 3).

Exhibit 3: Completed Fire Code Compliance Inspections in 12-Month Period

Source: Peer city survey and Accela completed inspections data

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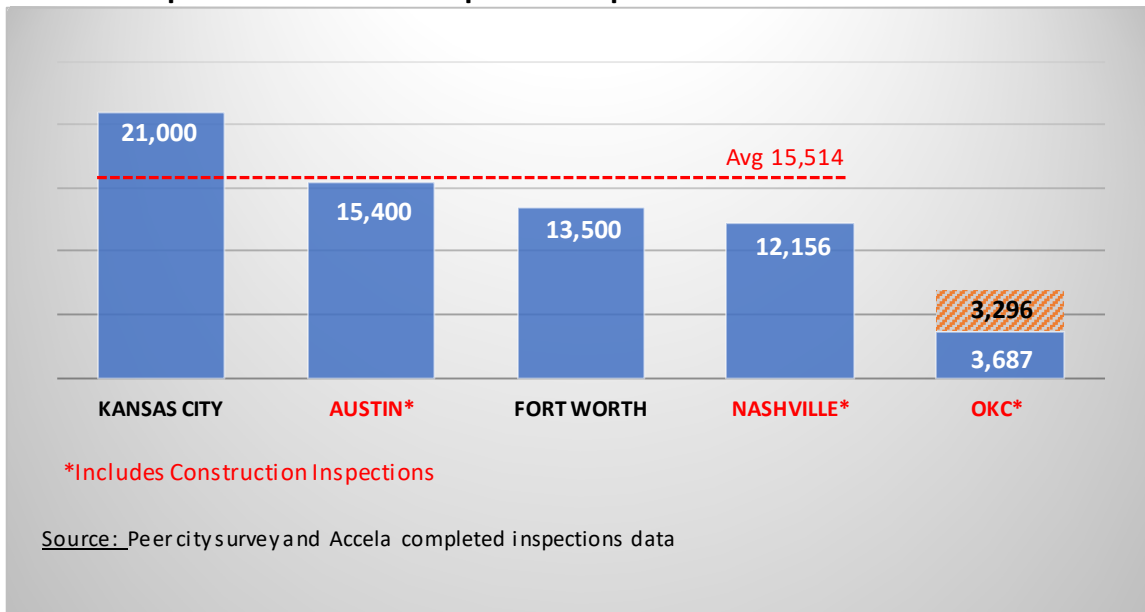
[2] Peer cities surveyed included Austin, El Paso, Fort Worth, Kansas City, Nashville, Omaha, St. Louis, Tucson, Tulsa & Wichita.

[3] The four-peer city average of fire code compliance inspections completed in a 12-month period was 15,514, compared to Fire Prevention's total completed inspections of 6,983 (3,296 construction and 3,687 non-construction).

[4] Two peer cities could not separate their construction from non-construction inspections, thus Fire Prevention's numbers shown in Exhibit 3 reflect both.

Further assessment of peer city and Fire Prevention data yielded that inspection demand[5] is higher in peer cities than in Fire Prevention. Inspection demand can be affected by the completeness of Fire Prevention's list of high-risk locations, and of the scheduled inspections for those locations.

Having a complete list of high-risk locations provides some assurance that routine fire safety inspections are targeted for all Oklahoma City locations with the highest risk of loss from fire and other hazards. While we did not assess the completeness of Fire Prevention's list of high-risk locations, we did assess the controls they have in place to ensure their list is complete. Fire Prevention routinely works towards completing their list of high-risk locations through two different efforts:

➢ Recent implementation of a routine process using The Compliance Engine (TCE) by Brycer[6], which assists in finding high-risk locations not yet identified.
➢ As inspections are performed on new construction and license applications[7], locations meeting the high-risk definition are identified for future routine inspections.

Averaging 64 monthly high-risk location additions since the implementation of TCE, versus the 33 monthly average prior to implementation, Fire Prevention is clearly realizing benefits from this new process, as shown in Exhibit 4. Once a high-risk location is identified, a permit is set-up within Accela, and routine fire-safety inspections are systematically scheduled in accordance with their location type (shown in Exhibit 1).

Exhibit 4: High-Risk Commercial Business Additions

The Compliance Engine Implementation

Source: Accela permit additions data

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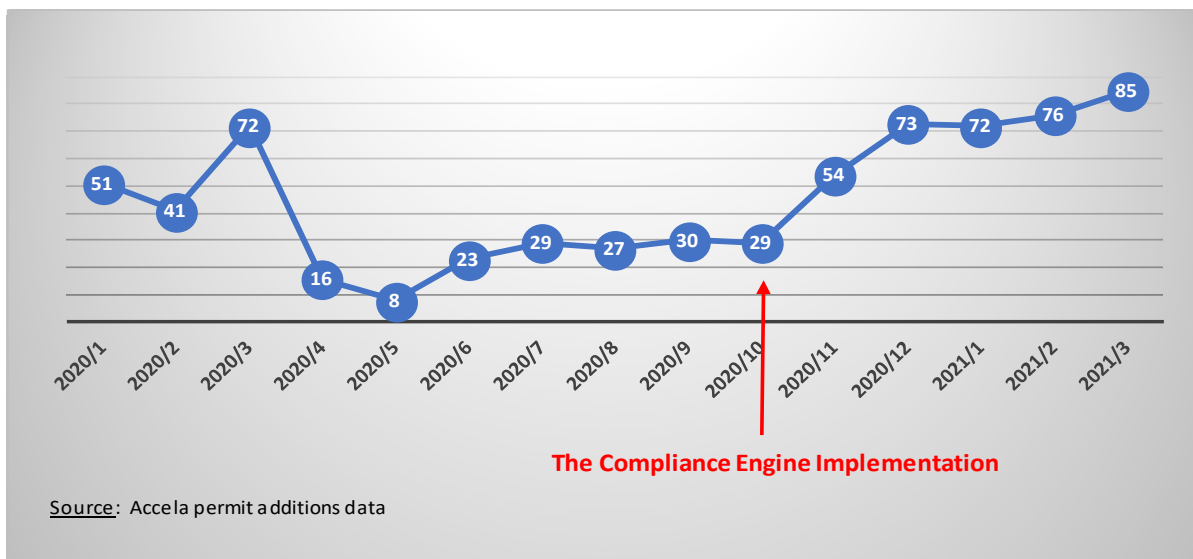
[5] Inspection Demand is the number of inspections due to be performed for a respective period.
[6] TCE by Brycer is an internet-based tool for fire prevention bureaus to track inspections and testing of fire safety systems in commercial businesses, as performed by third party contractors.
[7] Inspections on new construction (e.g., a restaurant being built) or on license applications (e.g., application for a liquor license) are performed by construction inspectors.
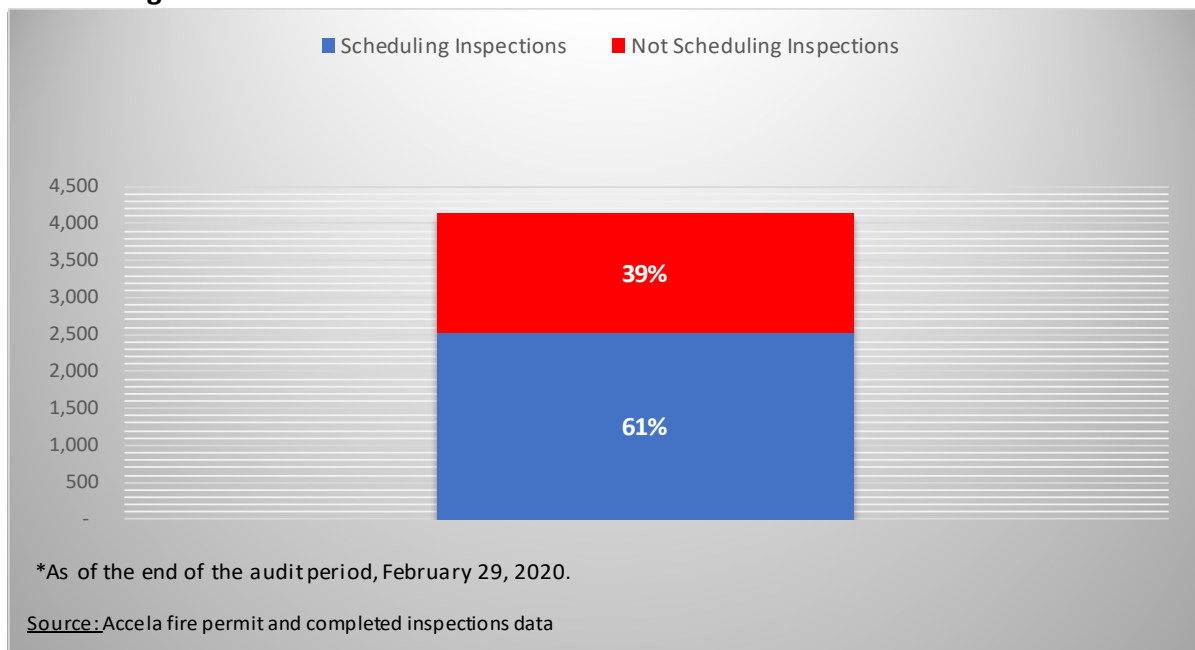
Comment 1

Of the 4,144 active high-risk commercial businesses identified by management, routine fire safety inspections are not being scheduled for 39% (1,615) of them, as shown in Exhibit 5. Upon completion of an inspection for a high-risk location, an Accela process will run automatically to schedule the subsequent inspection according to the assigned frequencies shown in Exhibit 1. Two different errors can occur during the process: 1> the inspector selects the wrong 'button' when entering the inspection results in Accela, and 2> a server interruption occurs; both of which will prevent the subsequent inspection from being scheduled for the respective high-risk location.

If a subsequent inspection fails to be scheduled, it will not show up on the inspector's list of inspections to complete. This may result in unmitigated fire safety risk in the community, as ongoing fire safety inspections for identified high-risk locations fail to occur.

Exhibit 5: High-Risk Commercial Businesses in Active Statuses*

*As of the end of the audit period, February 29, 2020.

Source: Accela fire permit and completed inspections data

Recommendation 1a

Work with IT to prevent the Accela server interruptions that are ultimately resulting in subsequent inspections not being scheduled. Also, a routine monitoring report should be developed to identify those occurrences of an inspection not being scheduled as expected. Actions should be taken to ensure these inspections are scheduled within Accela. Finally, inspectors should be reminded periodically about what system buttons should be selected when completing an inspection.

Department Response 1a

Agree with the recommendation. Accela IT has stated they are working on a periodical update that should address the issue. By December 1, 2021, a report will be requested from Accela IT to monitor any inspection finalized. The goal is to have this report completed and vetted by June 30, 2022. Also, inspectors will be reminded during weekly meetings to complete an inspection by selecting the "save" instead of "update."

Recommendation 1b

Examine the 1,615 high-risk permits that are no longer scheduling inspections to determine their status and need for ongoing inspections, and update Accela accordingly.

Department Response 1b

Agree with the recommendation. Currently, a report has been pulled from Accela to capture all the permits that are no longer scheduling. Our office assistants and inspectors are working this list daily to update the permit statuses. We are closing out what does not need to be scheduled and scheduling what needs to be routinely inspected.

Comment 2

Routine fire safety inspections are not being scheduled for all high-risk locations found through inspections of new construction and license applications. Fire Prevention has a practice calling for the creation of an Accela permit to ensure future routine fire safety inspections when identifying a high-risk location during the completion of construction or license related inspections. Of the 1,123 locations that had fire inspections performed for either new construction or license applications during the audit period, we identified 517 of those as meeting the high-risk definition. Of those, only 198 (38%) had high-risk permits subsequently created.

Missing the opportunity to identify a high-risk location requiring future fire safety inspections could potentially result in unmitigated fire safety risk in the community.

Recommendation 2a

Formally document procedures that should be followed by inspectors to:

- ➢ Identify those locations that will need future fire safety inspections, while performing inspections on new construction and license applications; and
- ➢ The actions that should be taken to set them up with an Accela permit to ensure on-going inspections.

Educate all staff on this standard operating procedure.

Department Response 2a

Agree with the recommendation. By December 1, 2021, Accela IT will implement a requirement for new construction (NCO) inspectors to select from a "drop down" of high-risk occupancy type options when completing their inspections. Once the selection is made and the inspection is closed out, it will automatically create a routine inspection for the high-risk occupancy. If the inspection is already in the system, it will not create a duplicate. We will formally document these procedures in our "smart book" and discuss during team meetings.

Recommendation 2b

Set-up Accela permits and schedule routine inspections, accordingly, for the 319 high-risk locations that were missed in the audit period.
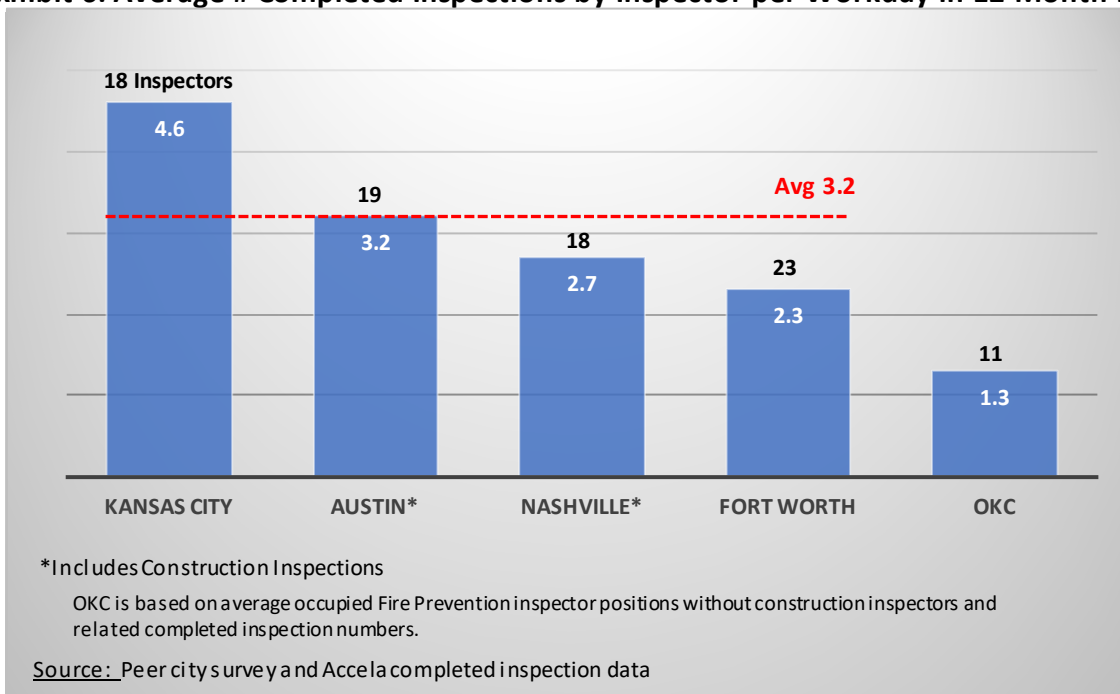
Department Response 2b

Agree with the recommendation. Currently, those 319 high-risk locations have been identified and scheduled accordingly.

Inspector Productivity

Survey data shows peer city inspectors are more productive than Fire Prevention inspectors (Exhibit 6).

Exhibit 6: Average # Completed Inspections by Inspector per Workday in 12-Month Period

*Includes Construction Inspections

OKC is based on average occupied Fire Prevention inspector positions without construction inspectors and related completed inspection numbers.

Source: Peer city survey and Accela completed inspection data

Completeness of Fire Prevention's list of high-risk locations and the scheduling of those inspections, as discussed in the previous section of this report, affects the number of inspections being performed, and thus can have an impact on productivity. Also impacting productivity is the performance of individual inspectors, which includes available time to perform inspections, assigned workloads and expectations for the number of inspections to complete.

Work hours for the 12 inspector positions devoted to non-construction inspections are prescribed by union contract. They work four 9-hour days per week, plus an additional 4-hour flex period, for a total of 40 weekly work hours. The union contract also specifies fire inspectors as Certified Peace Officers with the need to carry a firearm, thus requiring CLEET[8] training. CLEET training for new inspectors is extensive at 586 hours (about three months). Generally, inspections are not performed by the inspector until after firearm qualification. An additional 25 hours per year of continuing education is required for all inspectors.

Some location types require specific expertise to ensure an adequate and timely inspection, while others do not. To ensure that expertise is available as needed, inspection assignments are as follows:

- ➢ 1 inspector performing Special Event inspections
- ➢ 1 inspector performing Hotel/Motel inspections
- ➢ 1 inspector performing High-Rise inspections
- ➢ 3 inspectors performing Apartment inspections
- ➢ 6 inspectors (i.e., "District Inspectors") performing all other inspections, based on assigned geographic areas

These inspection assignments occur automatically through Accela, as programmed.

The time required to complete an inspection varies among the location types, given their specificity and size. Management asserts apartment inspections are the most difficult and can take two or more hours to complete, while a basic restaurant inspection may take no more than 30 minutes. Management expectations for the number of inspections an inspector should complete in a day varies with the type of locations that are being inspected: Special Event and District Inspectors should complete between four and five inspections per day, Hotel/Motel and High-Rise inspectors should complete at least two, and Apartment inspectors should complete at least one.
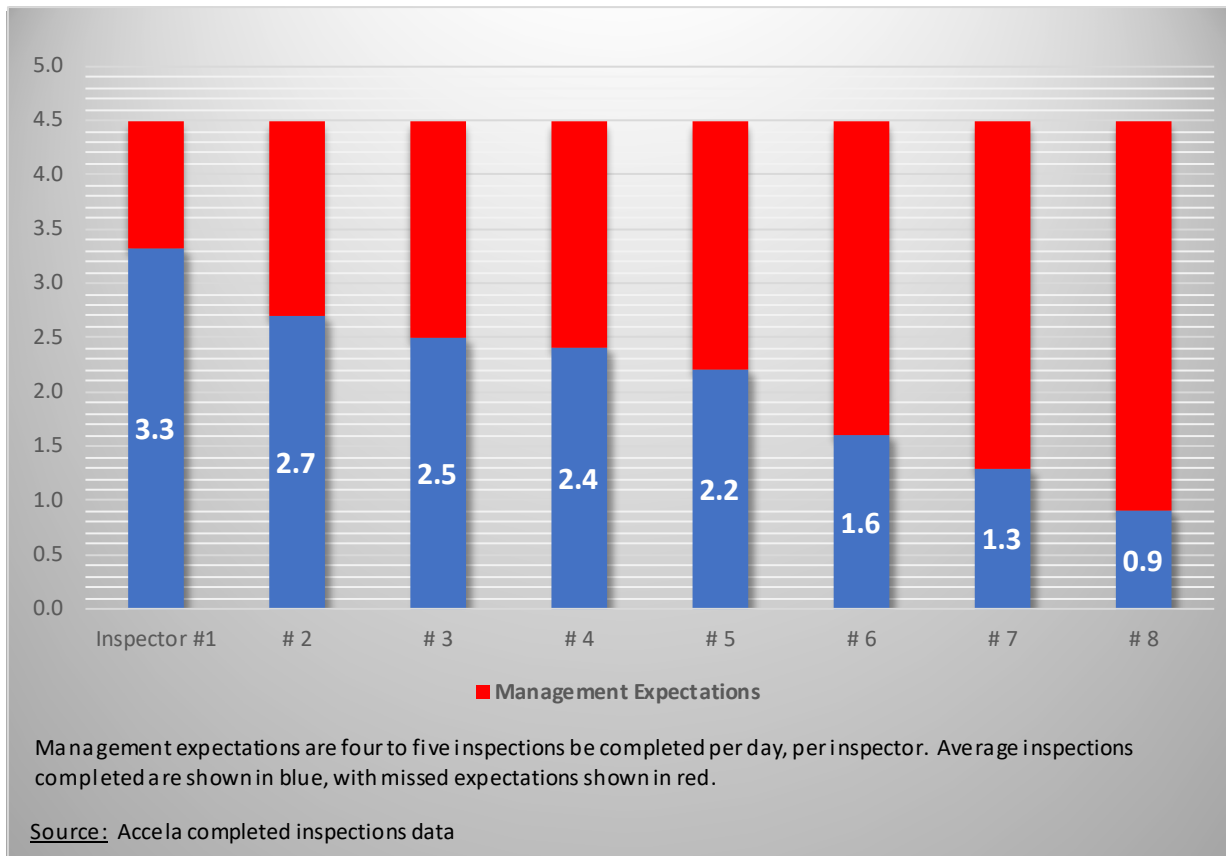
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[8] The CLEET acronym represents the "Council on Law Enforcement Education and Training", and they provide firearm training services to public safety communities within Oklahoma.

Comment 3

Not all inspectors are completing the number of inspections per day that is expected of them. Exhibit 7 shows that none[9] of the special event and district inspectors performing inspections in the audit period completed the four to five inspections expected of them. Attachment B shows similar results with three of five high-rise, hotel/motel and apartment inspectors not meeting productivity expectations.

Exhibit 7: Special Event and District Inspector Productivity

Management expectations are four to five inspections be completed per day, per inspector. Average inspections completed are shown in blue, with missed expectations shown in red.

Source: Accela completed inspections data

Productivity goals have not been formally established or communicated to the inspectors, resulting in an increased risk of reduced productivity, and aged, open inspections.

Recommendation 3

Productivity goals should be formally established and communicated to inspectors, so they know what is expected of them.

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[9] There are six district and one special event inspector positions, but turnover during the audit period resulted in a total of eight individuals that served as either district or special event inspectors.

Department Response 3

Agree with the recommendation. Our productivity goal will be based on annual inspections, and fire complaints (request for service report) that are required for that month and how many of them are completed by the established expiration date. We will formally document these procedures in our "smart book" and discuss during team meetings.

Comment 4

Disparate productivity exists among the inspectors, with one special event and district inspector's completion rate averaging 3.3 inspections per day and another averaging .9 per day (as shown in Exhibit 7). Disparate productivity can also be seen in Attachment B for high-rise, hotel/motel, and apartment inspectors. Through discussion with management and IT, it was learned that inspection assignments had only recently been reviewed and updated in April 2021, with no prior review/update in recent memory. Workload levels among the inspectors were not a consideration when updating their assignments.

Different productivity levels among inspectors can result when inspectors are not assigned an equitable workload. This results in an increased risk of reduced productivity, as some inspectors are not assigned enough inspections, and can ultimately result in aged, open inspections.

Recommendation 4

Management should routinely monitor inspection assignments to ensure an equitable workload among inspectors. Updates to Accela inspection assignment programming should occur accordingly.

Department Response 4

Agree with the recommendation. We will use the monthly request for service report to monitor the number of inspections being done by each inspector. This will allow us to utilize our resources to make sure work is being evenly distributed. Annually we will observe the data to see if re-aligning districts should occur to ensure equitable workloads.
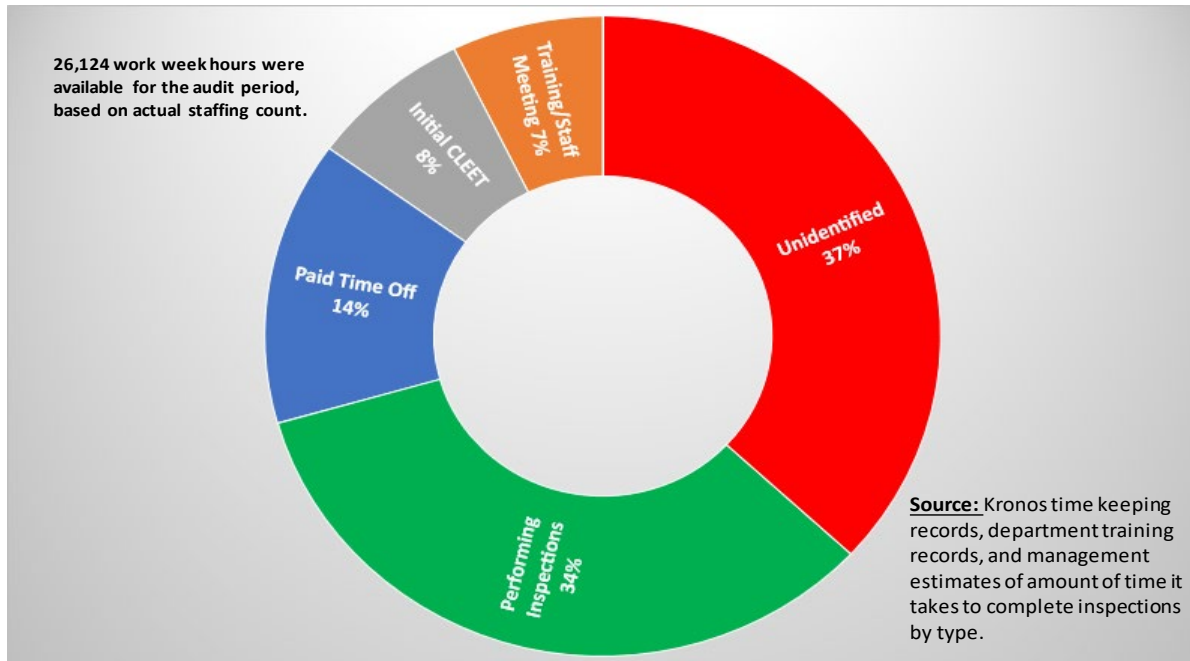

Comment 5

Thirty seven percent of non-construction inspector's work hours for the audit period could not be identified as productive (see Exhibit 8). Using management estimates of the time it takes to complete an inspection based on location type[10], as applied to inspections completed

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[10] Management provided an estimate of the time it takes to complete an inspection for each location type, including the time it takes to complete related paperwork and drive between inspections.

during the audit period, only 34% of total work hours could be identified as being related to performing inspections, with 14% related to paid time off, 8% to initial CLEET training and 7% to ongoing training and staff meetings.

Exhibit 8: How Work Hours Are Being Spent

26,124 work week hours were available for the audit period, based on actual staffing count.

Source: Kronos time keeping records, department training records, and management estimates of amount of time it takes to complete inspections by type.

More than one third (37%) of total work hours for the audit period could not be tied to any specific activity, suggesting this time is not productively spent. Management does not monitor inspector productivity. Fire Prevention has an increased risk of not being as productive as it could be, resulting in aged, open inspections.

Recommendation 5

Management should create a routine report monitoring inspector productivity to ensure they are performing the number of inspections expected of them.

Department Response 5

Agree with the recommendation. By June 30, 2022, there will be weekly and monthly reports created by Accela IT to give data on inspections completed by each individual inspector. We will also work with our Business Intelligence Specialist to create a dashboard that will display productivity levels of all code compliance officers on a "real time" basis. These reports will be used to monitor inspector productivity.

Comment 6

Fire Prevention inspectors carrying firearms reduces productive hours and exposes the City to unnecessary risk. As previously discussed, the union contract specifies Fire Prevention inspectors as Certified Peace Officers with the need to carry a firearm. Four new inspectors either began or completed initial CLEET training during the audit period, spending a total of 2,030 hours working toward qualifying to carry a firearm. Time spent on this training activity reduces the time available to perform inspections.

Carrying firearms does not appear to be necessary for Fire Prevention inspectors to complete their work. Code inspectors in other City departments do not carry firearms and fire code inspectors in all four peer cities responding to our survey do not carry firearms.

In addition to these operational inefficiencies, Fire Prevention inspectors carrying firearms creates an unnecessary potential liability for the City.

Recommendation 6

Management should negotiate with the union to eliminate firearm requirements for Fire Prevention inspectors.[11]

Department Response 6

Disagree with recommendation. CLEET certification, proper training, ballistic protection, and firearms provides Fire Code Compliance officers the safety and afforded protection, as certified peace officers, to enforce the International Fire Code. Violations of the IFC obligates the inspectors to handle many law enforcement situations that sometimes require our personnel to deal with dangerous violators. For example, during afterhours count outs at nightclubs, annual fireworks taskforce, working with OCPD in VICE operations at illegal places of business, and cross working with our investigations section which deals with potential arsonists.

The areas we go into are not always going to be safe. There are times our code compliance officers do not feel comfortable with their safety. Many of our staff work alone 99% of the time and have been in situations they would be severely outnumbered if negative circumstances escalated.

In Fire Prevention Services, we will enhance our training and preparation by June 30, 2022. First, we will update our de-escalation procedures. Also, our policies will make it procedural for all Fire Code Compliance Officers and Investigators to have mandatory annual de-escalation training that will be instructed by certified de-escalation instructors from our Fire Prevention office. Annual training will also incorporate the OCPD Reality Based Training for de-escalation utilizing scenarios that are more specific to Fire Prevention Services.

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[11] This recommendation relating to Fire Prevention construction inspectors was included in the report on our audit of Fire Construction Inspections dated September 15, 2015.

Inspection Prioritization and Timeliness Targets

Targets are established by management based on inspection type and are important for ensuring scheduled inspections are timely at addressing potential fire safety risks in the community. Fire Prevention strives to complete routine fire safety inspections on high-risk locations by the date it is scheduled for[12], one-time permit inspections within two workdays of the scheduled date and fire code complaint inspections within 30 calendar days of the complaint date.

The severity of a fire code complaint[13] will factor into how that respective inspection should be prioritized with all other open inspections on any given inspector's list of inspections to complete. Inspectors must prioritize among inspection types to ensure inspections are timely and open inspections do not unreasonably age.

Comment 7

Inspection prioritization and timeliness targets are not formalized, and management does not monitor aged, open inspections to ensure they are being addressed. Inspections were not completed within timeliness targets during the audit period, and some open inspections were significantly aged (see Exhibit 9).

Exhibit 9: Timeliness Completion Rates by Inspection Type for Audit Period

	Inspection Type		
	Routine Fire Safety	**One-Time Permit**	**Fire Code Complaint**
Timeliness Target	By or on Scheduled Date	Within Two Work Days of Scheduled Date	Within 30 Calendar Days of Complaint
% Outside of Target	64%	39%	22%
Maximum Age Found	2,038 calendar days	577 work days	948 calendar days

Source: Discussions with management and auditor analysis of Accela data

We also identified newer inspections consistently performed (e.g., inspection completion date was 35 days before the date the inspection was scheduled for) prior to completing aged inspections. Inspection timeliness and prioritization targets are not formalized.

Untimely fire safety inspections increase potential fire safety risks in the community.

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[12] While targeting completion of routine fire safety inspections by the date they are scheduled for, management measures performance based on the percentage of identified high-risk commercial businesses inspected annually. See Performance Measuring/Reporting/Monitoring section below.

[13] Some complaints are more severe than others and would need to be addressed more quickly, such as locked emergency exit doors at a night club when approaching a weekend.

Recommendation 7a

Inspection prioritization and timeliness targets should be formally established and communicated to the inspectors, so they understand performance expectations.

Department Response 7a

Agree with the recommendation. By June 30, 2022, reports will be established that will highlight expired and about to expire inspections. This weekly report is going to allow inspectors to prioritize their inspections based upon what is about to expire. The expiration dates mirror the renewal date. By this method of prioritization, we hope to drastically improve not getting inspections completed by renewal date. Data of inspections completed on or before renewal date is currently documented through our LFR strategic business plan. We will formally document these procedures in our "smart book" and discuss during team meetings.

Recommendation 7b

A report should be created to routinely monitor open inspections aged beyond respective targets, and how inspections are being prioritized. Actions should be taken to ensure aged inspections are being addressed and inspections are being prioritized according to expectations.

Department Response 7b

Agree with the recommendation. By June 30, 2022, the same report that is mentioned in recommendation 5 and 7a will be used to find aged inspections. This weekly report is going to allow inspectors to prioritize their inspections based upon what is about to expire. The expiration date mirrors the renewal date. By this method of prioritization, we plan to drastically improve on not getting inspections completed by renewal date. Data of inspections completed on or before renewal date will also be a part of our LFR strategic business plan.
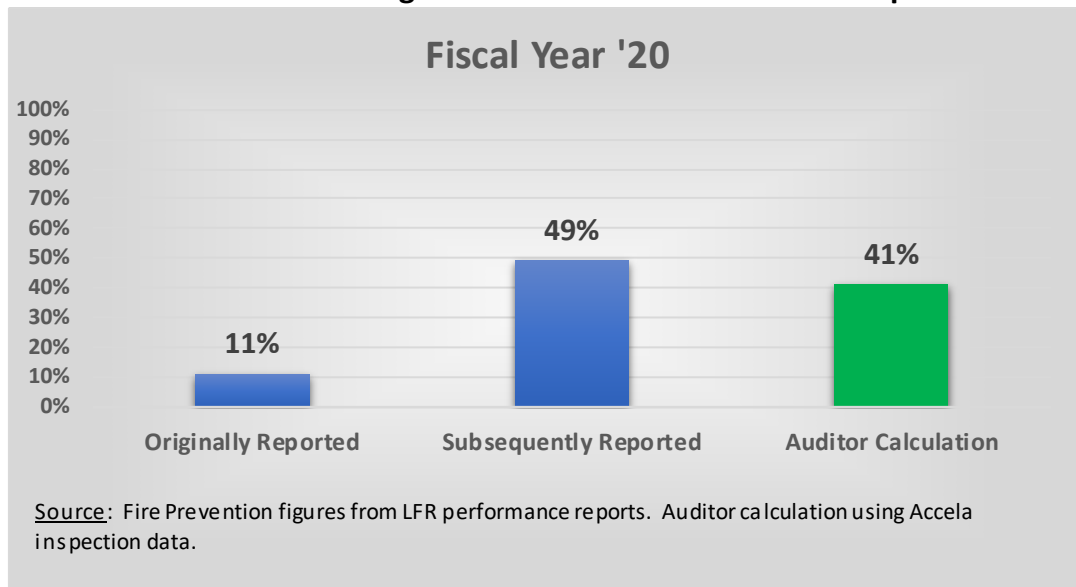
Performance Measuring/Reporting/Monitoring

Measuring performance of key Fire Prevention programs is crucial for ensuring objectives are met. Fire Prevention has two Leading for Results (LFR) measures that assist in monitoring and reporting performance for the routine fire safety inspection program: "# of identified high-risk commercial businesses", and the newly created "% of identified high-risk commercial businesses inspected annually". Performance measures do not exist for one-time permit and fire code complaint inspections.

Comment 8

Reported fiscal year '20 results for LFR measure "% of identified high-risk commercial businesses inspected annually" could not be confirmed. Originally reported by Fire Prevention as 11%, but subsequently revised to reflect 49%, we calculated that 41% of active high-risk locations were inspected within the fiscal period, as shown in Exhibit 10. Additionally, we found LFR measure "# of identified high-risk commercial businesses" reported incorrectly for fiscal '20 year-end at 3,224, with the correct number being 4,242.

Exhibit 10: % of Identified High-Risk Commercial Businesses Inspected Annually

Source: Fire Prevention figures from LFR performance reports. Auditor calculation using Accela inspection data.

Fire Prevention did not document how their reported results were obtained, and our attempt at recreating them was not successful. Therefore, specific causes of errors resulting in inaccurate results could not be determined. Inaccurately reported inspection demand and performance results may result in ill-informed management decisions.

Recommendation 8

Reported performance measures should be accurately calculated and supporting documentation should be retained.

Department Response 8

Agree with the recommendation. By June 30, 2022, the report will be modified to address this request. The report that we previously had in place was only a "as of today" report. The report will be set up to capture the data for any date range. By having it set up that way it ensures retention.

Comment 9

LFR measure "% of identified high-risk commercial businesses inspected annually" was not designed to meaningfully measure performance for routine fire safety inspections. Not all routine fire safety inspections for high-risk locations are scheduled to be performed "annually" (see Exhibit 1), yet the title of this measure suggests they are. Inspections for high-risk locations in Accela have a "Scheduled Date", which is the date it should be performed by to ensure public safety. Therefore, "Scheduled Date" is the essential point in time from which to measure performance for routine fire safety inspections.

Exhibit 11: % of Identified High-Risk Commercial Businesses Inspected As Scheduled

Source: Auditor calculations using Accela inspection data.
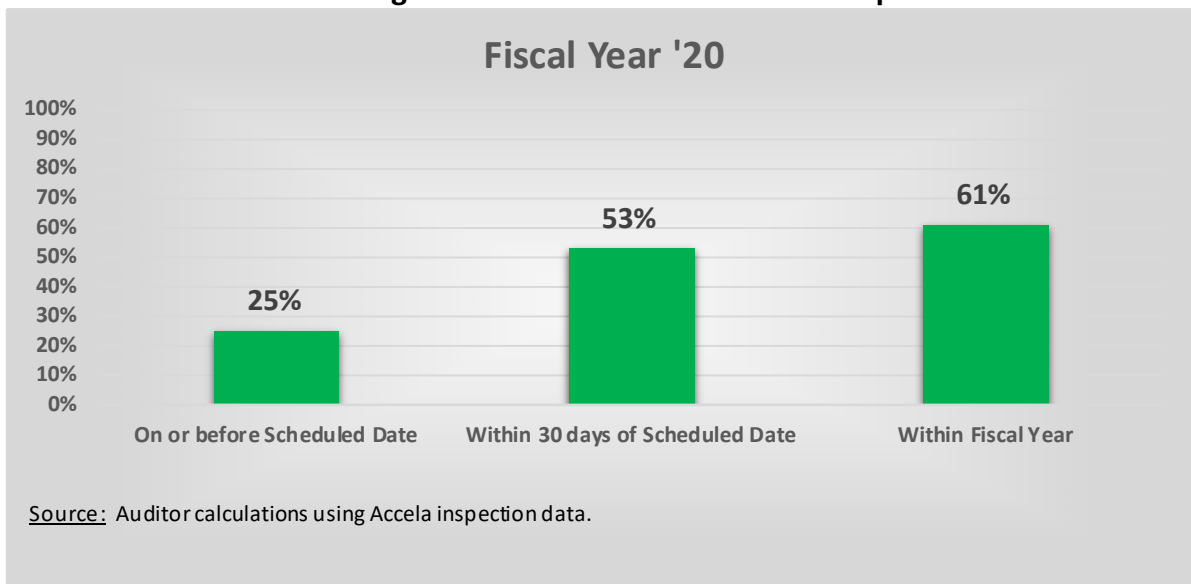
As shown in Exhibit 11, results when calculating the % of identified high-risk locations inspected <u>as scheduled</u> within fiscal year '20 vary based on how "as scheduled" is defined. For example, Fire Prevention completed 25% of routine fire safety inspections scheduled in fiscal year '20 by the date they were scheduled for, 53% within 30 days of their scheduled date and 61% by the end of the fiscal year.

Ensuring program performance is communicated in a meaningful way is crucial to adequate performance monitoring.

Recommendation 9

Revise LFR performance measure to "% of identified high-risk commercial businesses inspected <u>as scheduled</u>". Defining this measure in terms of inspections completed by or within 'X' number of days of scheduled date (rather than within a fiscal year) would best reflect inspection timeliness. This performance target should be defined based on management's assessment of how closely aligned routine fire safety inspections should be with their scheduled date.
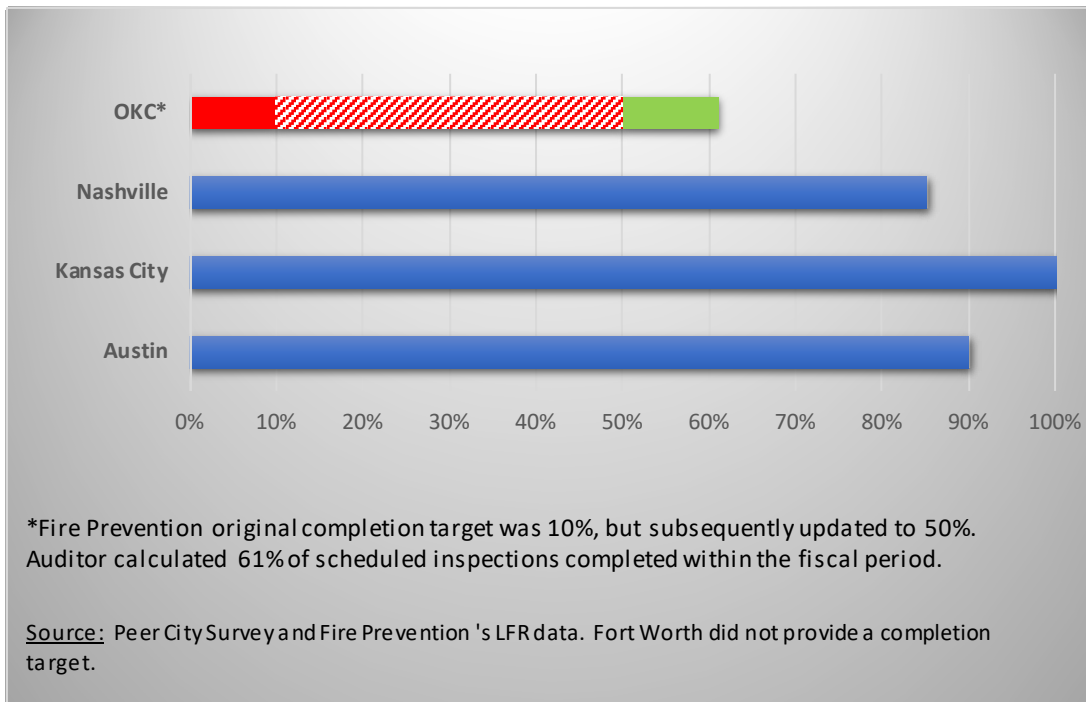
Department Response 9

Agree with the recommendation. In fiscal year 2023, Fire Code Compliance will update the LFR measure to include the percentage of "identified high-risk commercial businesses inspections completed by renewal date." We are currently measuring the number of inspections completed on or before renewal date.

Comment 10

Routine fire safety inspection completion target falls below actual performance and does not correspond with Peer City targets (see Exhibit 12). Originally reported as targeting 10% of high-risk commercial businesses to be inspected annually, Fire Prevention updated this target to 50% at the same time they updated their actual performance to 49% (see Comment 8 above). However, the new target falls below our calculated performance of 61%. Additionally, peer cities have substantially higher completion targets.

Exhibit 12: Annual Inspection Completion Targets for High-Risk Locations

*Fire Prevention original completion target was 10%, but subsequently updated to 50%. Auditor calculated 61% of scheduled inspections completed within the fiscal period.

Source: Peer City Survey and Fire Prevention 's LFR data. Fort Worth did not provide a completion target.

Performance targets provide the goals to work towards and measure progress against. When targets do not reflect the capability of Fire Prevention, optimal performance may not be achieved.

Recommendation 10

Following implementation of the recommendations in this report, inspection completion performance should be identified, and target completion rate modified to ensure a fair, yet motivating, goal is in place.

Department Response 10

Agree with the recommendation. By June 30, 2022, the LFR measure "identified high-risk commercial businesses inspections completed by renewal date" will begin with a target completed percentage of 50% in FY 21/22. Our goal is to increase our completion percentage rate annually based upon our productivity expectations.

Comment 11

Performance is not being measured and monitored for other inspection types. One-time permit and fire code complaints are a significant portion of the inspection demand at 30% and 11%, respectively, yet timeliness/completion performance is not being measured and monitored for these inspection types.

The risk of not meeting objectives increases when performance is not measured and monitored for vital program categories.

Recommendation 11

Management should create and monitor two separate performance measures for these inspection types and use them to assist in managing inspection completion performance. Examples: "% of one-time inspections completed by the scheduled date "and "% of complaint-based inspections completed within 'X' days of complaint".

Department Response 11

Agree with the recommendation. As mentioned in recommendation 7a, by June 30, 2022, a report will be established by Accela IT to highlight all expired and about to expire scheduled and non-scheduled inspections. This report will ensure initial inspections are being done on time. By June 30, 2022, we will work with Accela IT to create a report that will be ran monthly to ensure the initial complaint inspections are done within 3 business days of scheduled date. We will also work with our Business Intelligence Specialist to create a dashboard that will display productivity levels of all code compliance officers on a "real time" basis. Management will monitor the performance of these inspection types.

Data Governance

As the system of record for Fire Prevention's permitting and inspection activity, Accela is intended to provide management with the means of recording and storing work performed as usable data. That data is then used to measure, report on, and monitor the inspection program's performance. Integrity of inspection data is crucial for these functions and is the responsibility of Fire Prevention as stewards of their program's data.

Comment 12

Inaccurate permit and inspection data was found as follows:

  ➢ Management asserts that not all inspection activity is recorded. Inspectors may make more than one visit to a location to work with them on resolving a compliance concern, yet only record one inspection, thus understating work efforts. The magnitude of any unrecorded inspection activity for the audit period could not be quantified.
  ➢ We found 606 (15%) fire safety inspections completed in the audit period with completion dates entered as something other than the system recorded date. Rather than recording the inspection on the day of completion, the inspector may wait a few days, resulting in untimely posting of program data and increasing the risk of not recording the data at all.
  ➢ We found 589 potentially duplicate permit records and 178 duplicate inspection records for the audit period[14]. Duplicates result from 1> staff errors as they are not cautious to ensure a record does not already exist before entering permits and/or inspection requests, and 2> online inspection requests submitted by external parties more than once. Duplicate records may result in overstated work efforts.

Inaccurate and/or incomplete data could result in unreliable performance reporting and monitoring.

Recommendation 12a

A Standard Operating Procedure (SOP) should be developed to cover data governance and should include:

  1. Ensuring each trip made has an inspection record accurately completed, to provide completeness of inspection data.
  2. Ensuring inspection records are resulted on the day they are completed, to provide accuracy and timeliness of inspection data.
  3. Ensuring diligence in the creation of new permits and inspection requests, to prevent duplications.

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[14] All duplicates found in audit period data were removed for our analyses and were not included in the data shown here.

Inspectors and administrative staff should be knowledgeable on this SOP and what is required of them to ensure accurate program data.

Department Response 12a

Agree with the recommendation. Our SOP's currently cover inspections being resulted in the field at the time of inspection for NCO inspections. We will extend that procedure to all inspections. We will also include in our "smart book" the guidelines for resulting all inspections that we do, particularly follow up inspections, to ensure credit is given for every trip made and provide completeness of inspection data. By June 30, 2022, Accela IT will program our system so that duplicate inspections cannot be entered.

Recommendation 12b

Work with IT to create Accela system edits to prevent duplicate permits and inspection requests from being entered. If this can't be done, a report should be created to identify and remove duplicate records.

Department Response 12b

Agree with the recommendation. By June 30, 2022, we will work with Accela IT to program our system so that duplicate inspections cannot be entered. We will also work with Accela IT and our Business Intelligence Specialist to capture all Accela data for building our own specialized reports.

Comment 13

Department staff, including administrators and inspectors, are deleting an average of 250 inspection records per year, or 7% of total completed inspection activity. Another 900 inspection records were deleted in the audit period by IT as a 'clean-up' of bad inspection data/duplications. Deletion activity is not monitored.

Administrative and inspection staff have Accela system access to both create and delete records. While some reasons for deleting records may be valid, allowing deletions by those individuals who can also create records is a segregation of duties concern, as deletions could allow manipulation of inspection data that may go undetected. This could ultimately result in unreliable performance reporting and monitoring.

Recommendation 13

Work with IT to ensure a proper segregation of duties in system capabilities. If this can't be done, a report should be created to routinely monitor deleted inspection records.

Department Response 13

Agree with the recommendation. Because of clerical staff having other responsibilities and duties beyond just entering information for Fire Code Compliance officers, it is imperative that the inspectors have credentials to enter permit data as well, however it has been stressed to all staff that we shall not delete any records. By June 30, 2022, Accela IT will create a report that we will run monthly to monitor deleted records and ensure that deleted items are not tainting inspection data. We will also work with Accela IT and our Business Intelligence Specialist to capture all Accela data for building our own specialized reports.

Comment 14

Current permit statuses do not readily identify active high-risk locations requiring routine fire safety inspections. When creating a permit for a high-risk location within Accela, a status is assigned that indicates it is an active permit requiring ongoing inspections. Currently, there are seventeen different permit statuses, with eight meaning "Active", six meaning "Inactive", and two meaning "Expired". There were also permits found with no status at all (i.e., "NULL" value).

Likely resulting from years of adding various permit status options and their meanings changing over time, having multiple permit statuses with similar meanings results in confusing data that cannot easily be used to identify high-risk locations requiring routine fire safety inspections.

Permit statuses should serve as a clear indicator of the status of the permit and the expectations for ongoing inspections.

Recommendation 14

Formally designate permit status meanings (i.e., Active, Inactive, Expired etc.), so they can be used to identify high-risk locations where routine fire safety inspections are expected. Consider reducing the number of statuses used to simplify record keeping and reduce the risk of confusion and misunderstanding.

Department Response 14

Agree with the recommendation. Having multiple statuses that mean the same thing creates confusion when interpreting data, and inconsistencies when entering data. By June 30, 2022, we will reduce inspection statuses to allow for more efficiency and heightened confidence for all data entry participants. We will also be working with Accela IT to re-write our entire data entry portal.

MEMORANDUM

The City of
OKLAHOMA CITY
Fire Department

TO: **Matt Weller, Interim City Auditor**

THROUGH: **Craig Freeman, City Manager**

FROM: **Richard Kelley, Fire Chief**

DATE: **February 15, 2022**

SUBJECT: **Fire Department, Fire Prevention-Code Compliance,**
                    Non- Construction Fire Safety Inspections

Following are management's responses to the status of recommendations outlined in the recent Fire Prevention Code Compliance, Non-Construction Fire Safety Inspections Audit.

Recommendation 1a

Work with IT to prevent the Accela server interruptions that are ultimately resulting in subsequent inspections not being scheduled. Also, a routine monitoring report should be developed to identify those occurrences of an inspection not being scheduled as inspected. Actions should be taken to ensure these inspections are scheduled within Accela. Finally, inspectors should be reminded periodically about what system buttons should be selected when completing an inspection.

> ***Department Response 1a***
> Agree with the recommendation. Accela IT has stated they are working on a periodical update that should address the issue. By December 1, 2021, a report will be requested from Accela IT to monitor any inspection finalized. The goal is to have this report completed and vetted by June 30th, 2022. Also, inspectors will be reminded during weekly meetings to complete an inspection by selecting the "save" instead of "update".

Recommendation 1b

Examine the 1,615 high-risk permits that are no longer scheduling inspections to determine their status and need for ongoing inspections, and update Accela accordingly.

> ***Department Response 1b***
> Agree with the recommendation. Currently a report has been pulled from Accela to capture all the permits that are no longer scheduling. Our office assistants and

inspectors are working this list daily to update the permit statuses. We are closing out what does not need to be scheduled and scheduling what needs to routinely be inspected.

Recommendation 2a

Formally document procedures that should be followed by inspectors to:

➢ Identify those locations that will need future fire safety inspections, while performing inspections on new construction and license applications; and

➢ The actions that should be taken to set them up with an Accela permit to ensure on-going inspections.

Educate all staff on this standard operating procedure.

Department Response 2a

Agree with the recommendation. By December 1, 2021, Accela IT will implement a requirement for NCO inspectors to select from a "drop down" of high-risk occupancy type options when completing their inspections. Once the selection is made and the inspection is closed out it will automatically create a routine inspection for the high-risk occupancy. If the inspection is already in the system, it will not create a duplicate. We will formally document these procedures in our "smart book" and discuss during team meetings.

Recommendation 2b

Set-up Accela permits and schedule routine inspections, accordingly, for the 319 high-risk locations that were missed in the audit period.

Department Response 2b

Agree with recommendation. Currently those 319 high-risk locations have been identified and scheduled accordingly.

Recommendation 3

Productivity goals should be formally established and communicated to inspectors, so they know what is expected of them.

Department Response 3

Agree with the recommendation. Our productivity goal will be based on annual inspections, and fire complaints (request for service report) that are required for that month and how many of them are completed by the established expiration date. We will formally document these procedures in our "smart book" and discuss during team meetings.

Recommendation 4

Management should routinely monitor inspection assignments to ensure an equitable workload among inspectors. Updates to Accela inspection assignment programming should occur accordingly.

Department Response 4

Agree with the recommendation. We will use the monthly request for service report to monitor the number of inspections being done by each inspector. This will allow us to utilize our resources to make sure work is being evenly distributed. Annually we will observe the data to see if re-aligning districts should occur to ensure equitable workload.

Recommendation 5

Management should create a routine report monitoring inspector productivity to ensure they are performing the number of inspections expected of them.

Department Response 5

Agree with the recommendation. By June 30, 2022, there will be weekly and monthly reports, created by Accela IT to give data on inspections completed by each individual inspector. We will also work with our Business Intelligence Specialist to create a dashboard that will display productivity levels of all code compliance officers on a "real time" basis. These reports will be used to monitor inspector productivity.

Recommendation 6

Management should negotiate with the union to eliminate firearm requirements for Fire Prevention inspectors.

Department Response 6

Disagree with the recommendation. CLEET certification, proper training, ballistic protection and firearms provides Fire Code Compliance officers the safety and afforded protection, as certified peace officers, to enforce the International Fire Code. Violations of the IFC obligates the inspectors, to handle many law enforcement situations that sometimes require our personnel to deal with dangerous violators. For example, during afterhours count outs at nightclubs, annual fireworks taskforce, working with OCPD in VICE operations at illegal places of business, and cross working with our investigations section which deals with potential arsonists.

The areas we go into are not always going to be safe. There are times our code compliance officers do not feel comfortable with their safety. Many of our staff work alone 99% of the time and have been in situations they would be severally outnumbered if negative circumstances escalated.

In Fire Prevention Services we will enhance our training and preparation by June 30, 2022. First, we will update our de-escalation procedures. Also, our policies will make it procedural for all Fire Code Compliance Officers, and Investigators to have mandatory annual de-escalation training that will be instructed by certified de-escalation instructors from our Fire Prevention office. Annual training will also incorporate the OCPD Reality Based Training for de-escalation utilizing scenarios that are more specific to Fire Prevention Services.

Recommendation 7a

Inspection prioritization and timeliness targets should be formally established and communicated to the inspectors, so they understand performance expectations.

> ***Department Response 7a***
>
> Agree with the recommendation. By June 30, 2022, Reports will be established that will highlight expired and about to expire inspections. This weekly report is going to allow inspectors to prioritize their inspections based upon what is about to expire. The expiration dates mirror the renewal date. By this method of prioritization, we hope to drastically improve not getting inspections completed by renewal date. Data of inspections completed on or before renewal date is currently documented through our LFR strategic business plan. We will formally document these procedures in our "smart book" and discuss during team meetings.

Recommendation 7b

A report should be created to routinely monitor open inspections aged beyond respective targets, and how inspections are being prioritized. Actions should be taken to ensure aged inspections are being addressed and inspections are being prioritized according to expectations.

> ***Department Response 7b***
>
> Agree with the recommendation. By June 30, 2022, the same report that is mentioned in recommendation 5 and 7a will be used to find aged inspections. This weekly report is going allow inspectors to prioritize their inspections based upon what is about to expire. The expiration dates mirror the renewal date. By this method of prioritization, we plan to drastically improve on not getting inspections completed by renewal date. Data of inspections completed on or before renewal date will also be a part of our LFR strategic business plan.

Recommendation 8

Reported performance measures should be accurately calculated and supporting documentation should be retained.

> ***Department Response 8***
>
> Agree with the recommendation. By June 30, 2022, the report will be modified to address this request. The report that we previously had in place was only a "as of today" report. The report will be set up to capture the data for any date range. By having it set up that way it ensures retention.

Recommendation 9

Revise LFR performance measure to "% of identified high-risk commercial businesses inspected as scheduled". Defining this measure in terms of inspections completed by or within 'X' number of days of scheduled date (rather than within a fiscal year) would best reflect inspection timeliness. This performance target should be defined based on management's assessment of how closely aligned routine fire safety inspections should be with their scheduled date.

Department Response 9
Agree with the recommendation. In fiscal year 2023, Fire Code Compliance will update the LFR measure to include the percentage of "identified high-risk commercial businesses inspections completed by renewal date". We are currently measuring the number of inspections completed on or before renewal date.

Recommendation 10
Following implementation of the recommendations in this report, inspection completion performance should be identified, and target completion rate modified to ensure a fair, yet motivating, goal is in place.

Department Response 10
Agree with the recommendation. By June 30, 2022, the LFR measure "identified high-risk commercial businesses inspections completed by renewal date" will began with a target completion percentage of 50% in FY 21/22. Our goal is to increase our completion percentage rate annually based upon productivity expectations.

Recommendation 11
Management should create and monitor two separate performance measures for these inspection types and use them to assist in managing inspection completion performance. Examples: "% of one-time inspections completed by the scheduled date "and "% of complaint-based inspections completed within 'X' days of complaint".

Department Response 11
Agree with the recommendation. As mentioned in recommendation 7a, By June 30, 2022, a report will be established by Accela IT to highlight all expired and about to expire scheduled and non-scheduled inspections. This report will ensure initial inspections are being done on time. By June 30, 2022, we will work with Accela IT to create a report that will be ran monthly to ensure the initial complaint inspections are done within 3 business days from scheduled date. We will also work with our Business Intelligence Specialist to create a dashboard that will display productivity levels of all code compliance officers on a "real time" basis. Management will monitor the performance of these inspection types.

Recommendation 12a
A Standard Operating Procedure (SOP) should be developed to cover data governance and should include:
1. Ensuring each trip made has an inspection record accurately completed, to provide completeness of inspection data.
2. Ensuring inspection records are resulted on the day they are completed, to provide accuracy and timeliness of inspection data.
3. Ensuring diligence in the creation of new permits and inspection requests, to prevent duplications.

Inspectors and administrative staff should be knowledgeable on this SOP and what is required of them to ensure accurate program data.

Department Response 12a

Agree with the recommendation. Our SOP's currently cover inspections being resulted in the field at the time of inspection for NCO inspections. We will extend that procedure to all inspections. We will also include in our "smart book" the guidelines for resulting all inspections that we do, particularly follow up inspections, to ensure credit is given for every trip made and provide completeness of inspection data. By June 30, 2022, Accela IT will program our system so that duplicate inspections cannot be entered.

Recommendation 12b

Work with IT to create Accela system edits to prevent duplicate permits and inspection requests from being entered. If this can't be done, a report should be created to identify and remove duplicate records.

Department Response 12b

Agree with the recommendation. By June 30, 2022, we will work with Accela IT to program our system so that duplicate inspections cannot be entered. We will also work with Accela IT and our Business Intelligence Specialist to capture all Accela data for building our own specialized reports.

Recommendation 13

Work with IT to ensure a proper segregation of duties in system capabilities. If this can't be done, a report should be created to routinely monitor deleted inspection records.

Department Response 13

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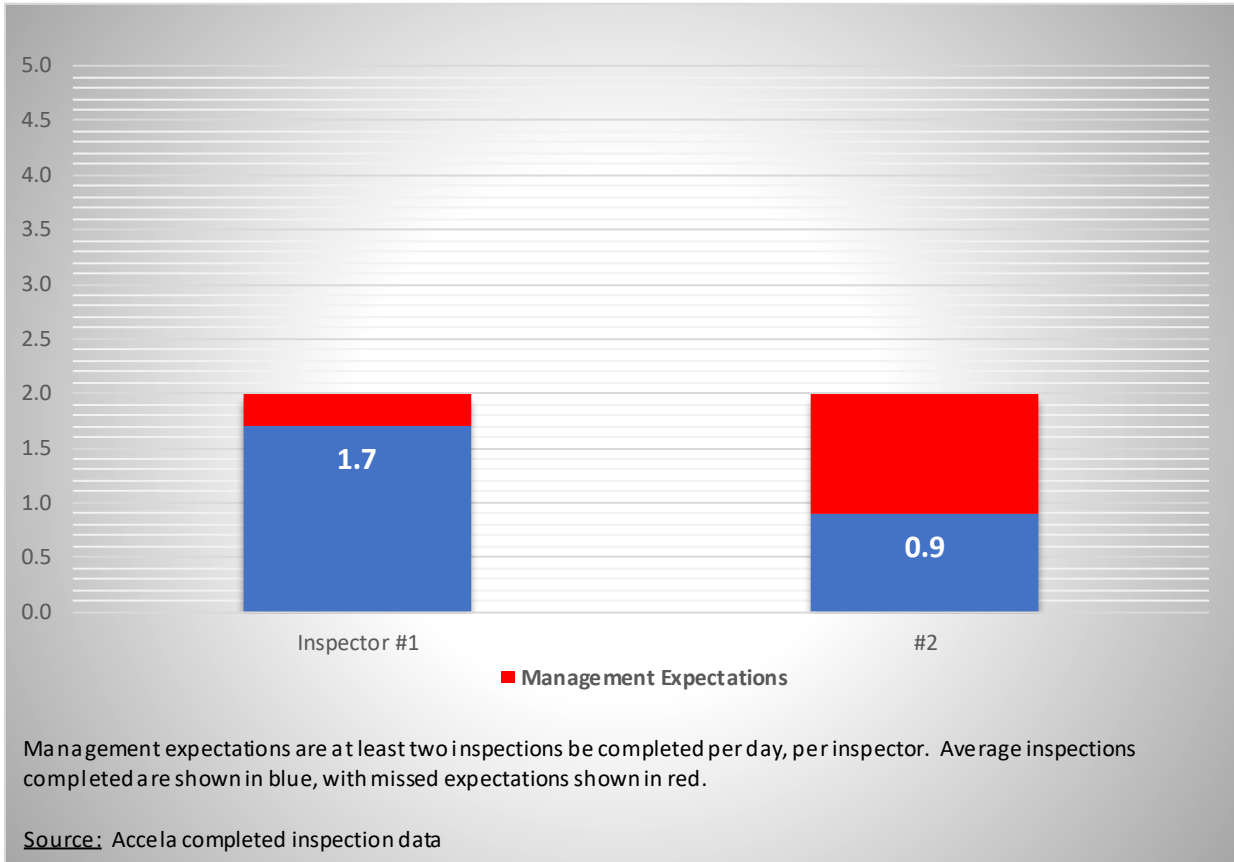
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Agree with the recommendation. Having multiple statuses that mean the same thing creates confusion when interpreting data, and inconsistencies when entering data. By June 30, 2022, we will reduce inspection statuses to allow for

more efficiency and heightened confidence for all data entry participants. We will also be working with Accela IT to re-write our entire data entry portal.

Exhibit B1: High-Rise and Hotel/Motel Inspector Productivity

Management expectations are at least two inspections be completed per day, per inspector. Average inspections completed are shown in blue, with missed expectations shown in red.

Source: Accela completed inspection data

Exhibit B2: Apartment Inspector Productivity

Management expectations are at least one inspection be completed per day, per inspector. Average inspections completed are shown in blue, with missed expectations shown in red.

Source: Accela completed inspection data