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DEVELOPMENT SERVICES CONSTRUCTION INSPECTIONS

FEBRUARY 12, 2013

MAYOR AND CITY COUNCIL

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The City of
OKLAHOMA CITY
Office of the City Auditor

Executive Summary

Audit Report 12-06

February 12, 2013

The Mayor and City Council:

The Office of the City Auditor has completed an audit of controls in place to ensure the timely completion of construction inspections conducted by the Development Services Department – Development Center Division from July 2010 through March 2012.

- Based on the results of our audit, we believe that the Development Center's construction inspection response time performance lags peer cities and established procedures are not adequate to ensure the timely completion of inspections.

The Development Center's workloads and resources reasonably compare with peer city averages; however, Development Center inspectors have more square miles to cover than inspectors in peer cities. While we were unable to determine the impact differences in geographic area have on response times, it is difficult to consider this an overriding factor when other peer cities also have large per inspector areas with response time performances that are exceedingly better.

As discussed in Recommendation 1, the Development Center response time performance target should be assessed and incrementally brought more in line with peer cities following implementation of improvement measures recommended below:

- Operations in peer cities generally mirror those in the Development Center. Visit selected peer cities to understand the factors influencing their more successful response time performance. Recommendation 2.

- One significant operational difference noted was that some peer cities perform combined inspections, whereby inspectors inspect work performed in all trades rather than inspectors specializing in a specific trade. Pursue implementing combination inspections. Recommendation 3.

- Revise policy and modify scheduling process to reduce inspector office time, thereby increasing time available for performing inspections by one hour per day for each inspector. Recommendation 4.

- Establish expectations for the number of inspections to be completed daily, assign inspector workloads accordingly, and monitor the degree to which inspectors complete assignments. Use GPS technology in these monitoring efforts. Recommendations 5 – 7.

- Contact customers prior to arrival for inspection, meet regularly with contractor community to share information, and use process for waiving re-inspection fees to reduce rejections and inspection inconsistencies. Recommendations 8 – 10.

- Correct LFR reporting inaccuracies and tighten system security to enhance accuracy and reliability of performance reporting. Recommendations 12 and 13.

- Create routine management reports to aid management in monitoring performance, alert management of changing trends and aid in decision making. Recommendation 15.

The content and emphasis of items in this report have been discussed in detail with appropriate representatives from management. These discussions were held to assure a complete understanding of the recommendations and observations arising from our audit. Management's responses are attached to this report in their entirety.

Jim Williamson
City Auditor

Lori Rice
Audit Manager

DEVELOPMENT SERVICES DEPARTMENT
DEVELOPMENT CENTER DIVISION
CONSTRUCTION INSPECTIONS

AUDIT OBJECTIVE, BACKGROUND, SCOPE AND METHODOLOGY

The objective of this audit was to evaluate the adequacy and effectiveness of controls in place to ensure the timely completion of construction inspections completed from July 2010 through March 2012.

The Development Center Division (Development Center) is responsible for providing plan review, permit, **inspection** and licensing services to the development community and the public so they can develop and build code-compliant commercial and residential structures in a timely manner[1]. Inspections of all permitted construction activity are required to ensure safety and code compliance. Performing construction inspections in a timely manner is a customer service concern, as the development community strives to minimize construction delays and their associated costs. A key Leading for Results (LFR) measure is in place to monitor inspection timeliness (i.e., response times): complete 70% of inspections within two work days of request.

While the Development Center performs other inspections (e.g., elevator, zoning, fence, sign etc.), this review considered only private, construction-related inspections: building, electrical, mechanical and plumbing. Construction-related inspections comprise 94% of all inspections performed by the Development Center.

Procedures performed during this audit included assessing the accuracy of reported response times; evaluating productive time, productivity standards, inspection scheduling methodologies and staffing levels; examining the reliability and usefulness of current performance reporting; interviewing department managers regarding processes in place to ensure timely inspections; reviewing management's process for obtaining and assessing customer feedback; performing surveys of peer cities and their local trade agencies to obtain data for comparison and confirmation; and polling OKC trade agencies regarding Development Center performance.

Inspection response time performance, and related information, for the 12 months ended September 2012 are periodically shown in this report to highlight current performance. Data for April through September 2012 is outside of the period under review and has not been audited.

We conducted this 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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[1] As taken from Development Services Department's Strategic Business Plan.

The following recommendations provide suggestions for improving the timeliness of construction-related inspections and the relevant reporting of such. These recommendations may apply to all inspection types performed by the Development Center, in which case management should implement the recommendations for those inspections as well. Each recommendation included in this report is immediately followed by a *management response*, and they are included in their entirety as Attachment C to this report.

RESULTS OF WORK PERFORMED

The Development Center's construction inspection response time performance lags peer cities, and established procedures are not adequate to ensure the timely completion of inspections.

Survey of Peer Cities

To evaluate the Development Center's inspection response time performance against peer cities, a survey was conducted. Nine of twelve cities polled responded with like program information: Austin, El Paso, Kansas City, Nashville, Tucson, Tulsa, Wichita, Norman and Edmond. The cities selected were based on the City's pre-determined list of "peers". Norman and Edmond were included as a result of their proximity and significance in the metro area.

Survey participants were asked to supply data on response time performance and the factors impacting that performance for their most current, completed 12-month period. Data obtained included total number of inspections completed; staffing breakdown (i.e., inspectors, field supervisors, administrative supervisors); rejection rates; square miles in corporate area; and actual and target response time performance. Follow-up occurred as needed to gain clarification.

Most peer cities surveyed measure their performance through the percentage completed within one work day (vs. two work days). The Development Center's performance below reflects the percentage of inspections completed within one work day of request (Exhibit 1). The average peer city completed 97% of inspections within one work day of request. By contrast, the Development Center completed only 58% within one work day for the 12-month period ended September 2012. Response time performance does not reasonably compare with peer cities.

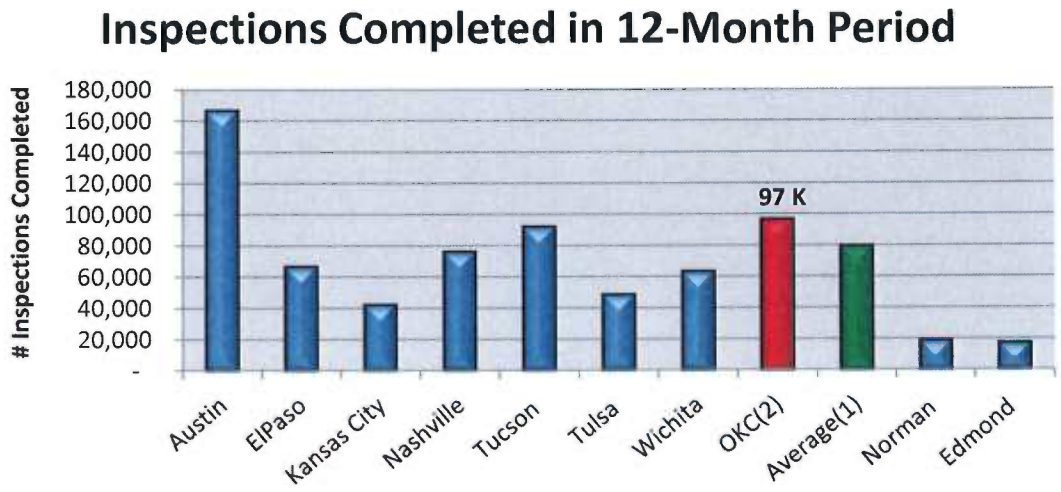
Exhibit 1: Inspection Response Time Performance, Compared to Peer Cities

(1) Average does not include OKC.
(2) 12-month period through September 2012.
(3) Norman and Edmond figures represent inspections completed within 2 days, which is the performance measure they use. See Exhibit 8 for OKC comparable figures.
Source: Peer City Survey; Accela data used for OKC

Workload and Staffing

The Development Center completes more inspections in a 12-month period than the average peer city (Exhibit 2), but also has more than average inspection staff devoted to the task (Exhibit 3). The ratio of inspections completed to staff indicates the size of the workload for inspection staff. Comparisons of average peer city data to that of the Development Center indicate workloads reasonably compare with the peer city average (Exhibit 4).

Exhibit 2: Number of Inspections Completed, Compared to Peer Cities



(1) Average does not include OKC, Norman or Edmond.
(2) 12-month period through September 2012.

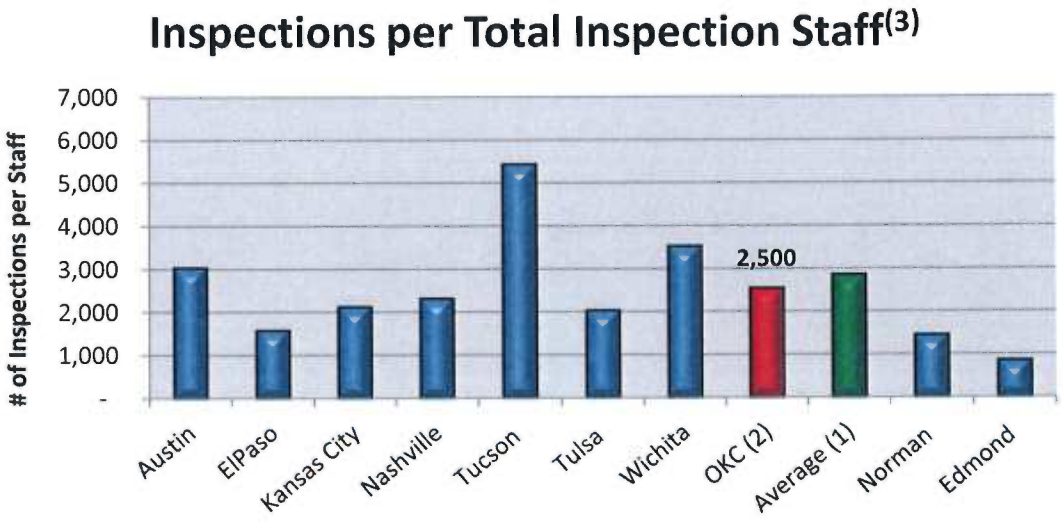
Source: Peer City Survey; Accela data used for OKC

Exhibit 3: Number of Inspection Staff, Compared to Peer Cities

(1) Average does not include OKC, Norman or Edmond.
(2) 12 month period through September 2012.
(3) Inspection Staff includes all positions responsible for completing inspections: OKC includes inspectors, inspector II's, chief inspectors, and inspection services supervisor.

Source: Peer City Survey; Department Budget data used for OKC

Exhibit 4: Inspection Workload, Compared to Peer Cities



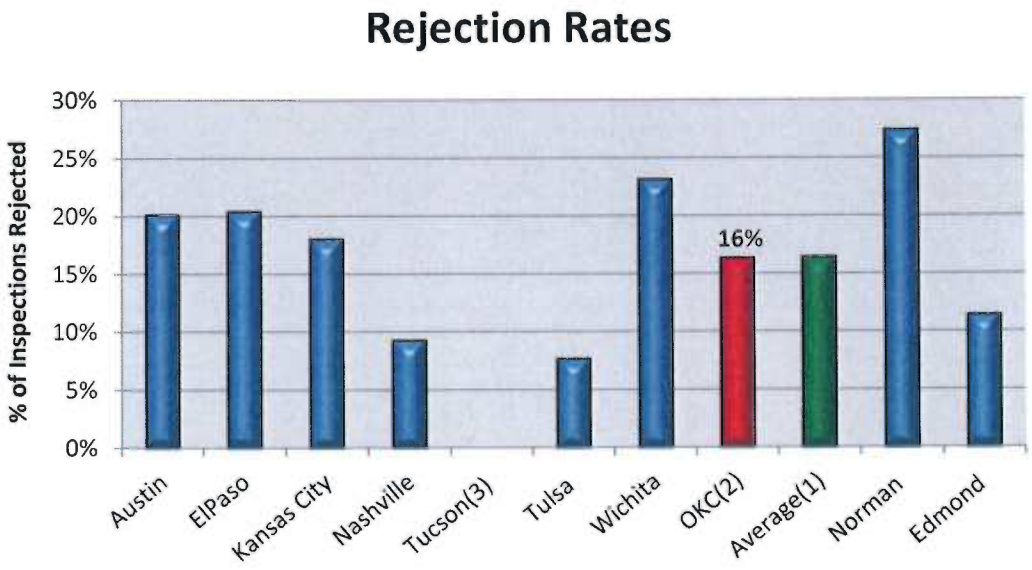
(1) Average does not include OKC, Norman or Edmond.
(2) 12 month period through September 2012.
(3) Inspection Staff includes all positions responsible for completing inspections: OKC includes inspectors, inspector II's, chief inspectors, and inspection services supervisor.

Source: Peer City Survey; Accela & Department Budget data used for OKC .

Rejections

Failed inspections (i.e., "rejected") will result in a second trip for a re-inspection, thus increasing volumes and potentially having a negative impact on overall response times. Examining the differences between peer city rejection rates and that of the Development Center shows very little difference. Rejection rates for the Development Center reasonably compare with the peer city average (Exhibit 5).

Exhibit 5: Rejection Rates, Compared to Peer Cities



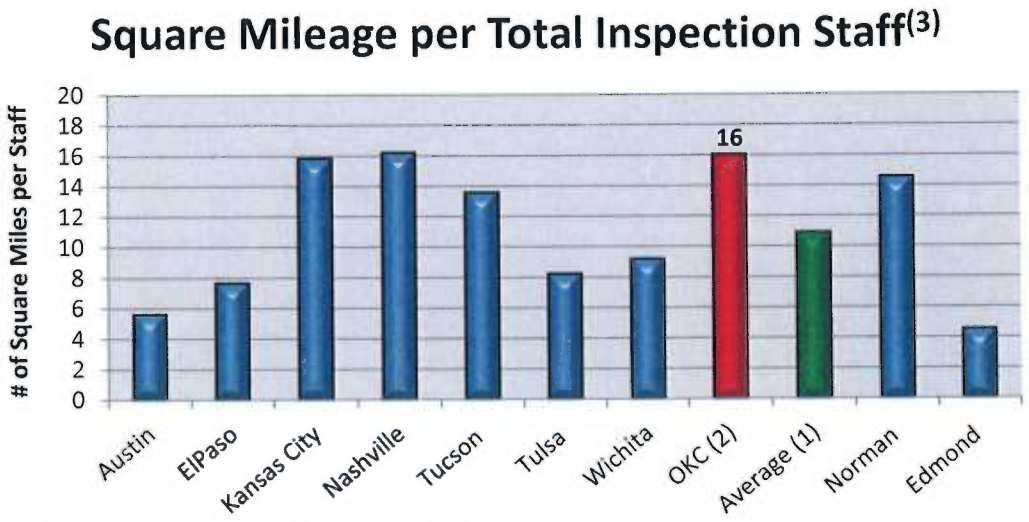
(1) Average does not include OKC, Norman or Edmond.
(2) 12 month period through September 2012.
(3) Tucson did not supply rejection rates.

Source: Peer City Survey; Accela data used for OKC.

Inspection Area

The size of the geographic location in which inspections are being performed can impact the number of inspections completed daily as drive time competes with time spent on inspections, possibly having an adverse effect on response times. Oklahoma City's large geographic area results in Development Center staff covering more area when performing inspections than staff in peer cities (Exhibit 6). However, Kansas City, Tucson and Nashville follow closely behind.

Exhibit 6: Square Mileage per Inspection Staff, Compared to Peer Cities



(1) Average does not include OKC, Norman or Edmond.
(2) 12 month period through September 2012.
(3) Inspection Staff includes all positions responsible for completing inspections: OKC includes inspectors, inspector II's, chief inspectors, and inspection services supervisor.
Source: Peer City Survey; OKC Website & Department Budget data used for OKC.

Performance Targets

Setting targets for performance establish the foundation upon which objectives are acted upon. The Development Center's target response time performance, while similar to Norman and Edmond because they also target a two-day completion, does not reasonably compare to peer cities (Exhibit 7).

Exhibit 7: Target Inspection Response Times, Compared to Peer Cities

Austin	El Paso	Kansas City	Nashville	Tucson	Tulsa	Wichita	OKC	Norman	Edmond
95%/1	100%/1	95%/1	100%/1	100%/1	97%/1	98.5%/1	70%/2	99%/2	100%/2

Example: Austin targets the completion of 95% of all inspections within 1 day of request.

Source: Peer City Survey and OKC LFR

Conclusion from Survey

The Development Center's workloads and rejection rates reasonably compare with peer city averages, yet their target and actual inspection response time performance significantly lags behind. Oklahoma City inspectors have more square mileage to cover than inspectors in peer cities. While we were unable to determine the impact differences in geographic area have on response times, it is difficult to consider this an overriding factor in performance when Kansas

City, Tucson and Nashville also have large areas with inspection response time performances that are exceedingly better.

Recommendation 1

Development Center management should assess the reasonability of their response time performance target in comparison to peer cities. Incremental changes to bring the target more in line with peer cities can be made over a period of time, following the implementation of improvement measures recommended below.

Management Response 1

Agree with recommendation. Management is committed to providing the most efficient and effective customer service possible. Response time performance targets will be reviewed in comparison to peer cities. Audit recommendations will be implemented as discussed below.

Operations in Surveyed Cities

While operations in surveyed cities generally mirrored those in the Development Center, we did note one significant operational difference during our audit. Inspectors in five of the seven peer cities perform inspections for all trades (combined inspections). Inspectors in some cities were capable of performing combined inspections for both residential and commercial work and some cities limited this capability to residential projects. Inspector certifications in combined residential and combined residential/commercial are offered by national code organizations recognized by the State.

Development Center inspectors specialize in one trade for both residential and commercial projects. Borrowing staff from one trade section to assist in another during intervals of disproportionate workloads and/or performance does occur, but is very limited given current State requirements for inspectors to have trade specific experience.

It is likely that there are several variations in how operations are carried out that contribute to more successful performance by peer cities and we did not determine that combination inspections is the primary factor for their success; however, inspectors with combined inspection capabilities would allow for flexibility in scheduling and reduce drive time as inspectors cover smaller geographical areas.

Recommendation 2

Management should seek to understand the factors influencing more successful response time performance in peer cities. This can be done by visiting some of these cities and learning about their operations, including inspection scheduling methodologies, productivity standards, staffing levels, drive time efficiencies, and management efforts in place to ensure timely performance. Performance improvement ideas generated from this effort should be implemented.

Management Response 2

Agree with modification. By December 31, 2013, management will visit or consult with several peer cities with more successful response time performance to understand factors that contribute to those response times. Performance improvement ideas generated from these efforts will be implemented as resources are available. Since we will be studying the practices of peer cities, other recommendations will follow in a similar timeframe.

Recommendation 3

Consider implementing combination inspections, at least for residential inspections, to enhance scheduling flexibility, reduce drive times and improve response times. Residential inspections account for 75% of all inspections performed by the Development Center. If combination inspections are desired, modifying applicable State Statutes to allow such inspections should be proposed for the City's legislative agenda.

Management Response 3

Agree with recommendation. By September 1, 2013, management will examine the possible impacts of implementing combination inspections. If combination inspections are desired, management will propose language to modify the applicable State Statutes to allow such inspections as part of the City's 2014 legislative agenda.

Performance Management

Productive Time

The Development Center has 33 positions routinely performing inspections (see Attachment B for organizational chart). Typical work hours are Monday through Friday from 8:00 am to 5:00 pm. Inspectors are provided cell phones for communication while in the field, but policy requires all inspectors spend 1.5 hours per day in the office answering and returning job related phone calls and e-mails; 8:00 – 9:00 am in the morning, and 4:30 – 5:00 pm in the afternoon. Management has stated that it is the 30 minutes of office time at the end of the day that is the most important for communicating with customers. The remaining time, 6.5 hours per day, is spent in the field performing inspections. Inspectors are required to notify supervisors of sick leave by 8:15 am.

Customers submit requests for inspections via telephone, fax, and the more recently available on-line submission option. Requests received prior to 7:00 am each morning are placed on the list of inspections to be assigned to inspectors for that day. Requests received after 7:00 am are not assigned until the following day. At approximately 7:30 am every morning requests received via telephone or fax are retrieved by Customer Service Representatives and keyed into the Accela system, which is used for construction inspection tracking. On-line requests are automatically placed into Accela. Inspection requests are retrieved and assigned to inspectors by the supervisor of each trade section.

Development Center policy requires inspectors to spend 1.5 hours per day in the office answering and returning job related phone calls and e-mails resulting in about 18.75% of total budgeted hours, or six budgeted FTE's per year, that are not used performing construction inspections. This has a direct impact on inspection response time performance. Reducing office time by one hour and using it to perform inspections is the equivalent of adding four budgeted FTE's performing inspections, which could reduce response times.

Recommendation 4

Revise Development Center policy to reduce office time to 30 minutes at the end of each day, increasing time spent on inspections by one hour per day. This change will require that inspection requests are processed earlier in the day to ensure completion by the time inspection assignments occur, supervisor schedules are modified to ensure assignments occur prior to the arrival of inspectors in the morning, and revisions to policy are made to ensure that inspectors notify the supervisors of requested sick leave at an earlier designated time.

Management Response 4

Agree with modification. By December 31, 2013, management will revise policy to remove required office time. However, inspectors may need to spend time in the office to address various needs or concerns.

Scheduling/Productivity/Priorities

It is during the 8:00 – 9:00 am office hour that supervisors work on assigning inspections to inspectors based on trade, priority and geographic location. Daily, each inspector is provided a list of inspections and is expected to complete an indefinite amount. Productivity standards are verbally stated by management and vary among trade sections (i.e., "as many as they can", "between 10 and 15", etc.). No evidence of review and/or encouraging productivity could be found. Inspection assignments may contain more inspections than can be done in a day's time, thus not serving as a reasonable expectation of productivity for the given day or a guide upon which to monitor individual performance.

Development Center policy states that aged inspection requests and certain, specific priorities are to be worked first. While the Accela system will automatically sort inspection assignment lists based on the age of the inspection, the large number of inspections appearing on the list allow for inconsistencies in inspector judgment when identifying priorities. However, inspectors are urged to maintain contact with management throughout the day in an effort to keep them apprised of instances where inspection re-assignments may be needed when priorities can't be met.

Inspectors are furnished a city vehicle to make their daily rounds in completing inspections and a laptop to record inspection activity as it occurs. GPS technology is available to assist in monitoring inspector activity as needed, but it is fitted to the laptop (vs. vehicle) which makes it easy to manipulate and the data is unreliable due to system issues.

Recommendation 5

Each day, every inspector should be provided a workable list identifying inspections reasonably expected to be completed in a day's time and prioritized to complete priority inspections and meet targeted response time performance.

Management Response 5

Agree with recommendation. By December 31, 2013, every inspector shall be provided a prioritized workable list of inspections to be completed in a day's time.

Recommendation 6

Create a policy establishing expectations regarding the approximate number of inspections to be completed daily. This policy should stress the importance of working prioritized inspections first and should highlight the necessity of on-going communication between inspectors and management throughout the day to ensure re-assignments occur as needed for the purpose of completing daily assignments. It should also require that management monitor inspectors' completion of assigned lists, at least on a test basis.

Management Response 6

Agree with recommendation. By December 31, 2013, after reviewing peer city inspection practices, reasonable productivity standards will be developed/implemented.

Recommendation 7

GPS technology should be fitted to vehicles reducing the risk of manipulation of the unit, and it should produce reliable data reflective of all inspector activity. This data should be used in conjunction with daily monitoring of inspectors' completion of assignments.

Management Response 7

Agree with recommendation. By August 1, 2013, GPS technology that reduces the risk of manipulation of the unit will be installed on all inspector vehicles.

Rejections

Upon completion of an inspection, the inspector will assign a result based on their interpretation of code. Results reflect the construction's compliance with code and can range from passed to failed (i.e., "rejected"), with some minor variations in between. An inspection will also be rejected if the inspector arrives at the location and can't gain access to perform the inspection. During the 12 months ended March 2012, approximately 2,500 or 2.5% of all inspections were rejected as a result of "no access".

Rejected inspections generally result in a second trip to the location for a re-inspection, increasing the workload for the Development Center and potentially having a negative impact on productivity. A recently implemented policy requires inspectors to make contact with the customer prior to going out on an inspection in an effort to reduce the number of no access rejections (i.e., wasted trips). However, the policy is limited in that it only requires contact be made if the customer has requested contact prior to the inspection and contact information has been supplied.

Results from our survey of contractors/trade agencies indicated on-going inconsistencies among inspectors in their interpretations of code and perceptions of importance when rejecting inspections. Quality Control Meetings attended by supervisors and inspectors within respective trade sections are periodically held as a means of discussing and attempting to resolve issues resulting in inspection inconsistencies identified by the Development Center. Per Development Center practice, re-inspection fees can be waived if it is determined that an inspector error was made (e.g., inspector rejecting for something that should have been identified in a previous inspection). However, this practice is not widely communicated to customers and such instances are not reviewed to identify potential inconsistencies between inspectors. Additionally, no routine communication with the contractors is being made to identify inspection consistency issues.

Local trade agencies indicated during our survey a desire to work with the Development Center in exchanging information that would assist in educating both parties on issues that could be addressed to improve code compliance and inspection consistency, and in turn reduce rejections.

Recommendation 8

To reduce wasted inspection trips, current policy should be revised to ensure that communication with the customer/contractor is made prior to going out on **all** inspections. This will require additional effort to ensure that customer contact information is supplied with every inspection request.

Management Response 8

Agree with recommendation. By August 1, 2013, policy will be revised to require customer/contractor communication prior to all inspections.

Recommendation 9

Regular meetings with customers/contractors should be established to share ideas on issues resulting in rejections and learn about inspection inconsistencies. Information obtained from these efforts should be used to educate staff and contractors on how to avoid inspection inconsistencies and rejections, respectively.

Management Response 9

Agree with recommendation. By August 1, 2013, regular meetings with customers/contractors will be scheduled. Information gained from these meetings will be used to improve inspection consistency and reduce job-site rejections.

Recommendation 10

A written policy should be created regarding waiving re-inspection fees in the event of inspector error. A management report identifying occurrences where fees were waived should be developed and routinely used to help identify inspector errors and inconsistencies. Identified instances should be used in quality control efforts. To more completely identify when inspector errors have been made, customers/contractors should be made aware of the policy of waiving re-inspection fees.

Management Response 10

Agree with recommendation. By August 1, 2013, a policy will be created concerning waiving re-inspection fees resulting from inspector error. A management report of the errors will be used for quality control.

Inspector Qualifications

As of March 2012, the Development Center had 33 inspector positions assigned to trade sections based on their qualifications (see Attachment B for organizational chart). Required qualifications are based in Municipal Code, which are more stringent than those found in State Statutes. Three extended vacancies lasting nine months or more occurred during the audit period. One reason noted for the length of time of a vacancy was lack of a qualified candidate. Generally, vacancies can't be prevented, but the length of time a position stays open should be controlled. Inspector qualification requirements, while necessary to ensure qualified individuals fill those roles, should not be too strict as to limit the number of qualified applicants received for vacancies.

Recommendation 11

Consider modifying Municipal Code so that qualifications for inspector applicants follow State Statutes. Relaxing eligibility requirements will expand the pool of applicants qualified for an inspector position, possibly allowing for a reduction in the amount of time an inspector position stays vacant.

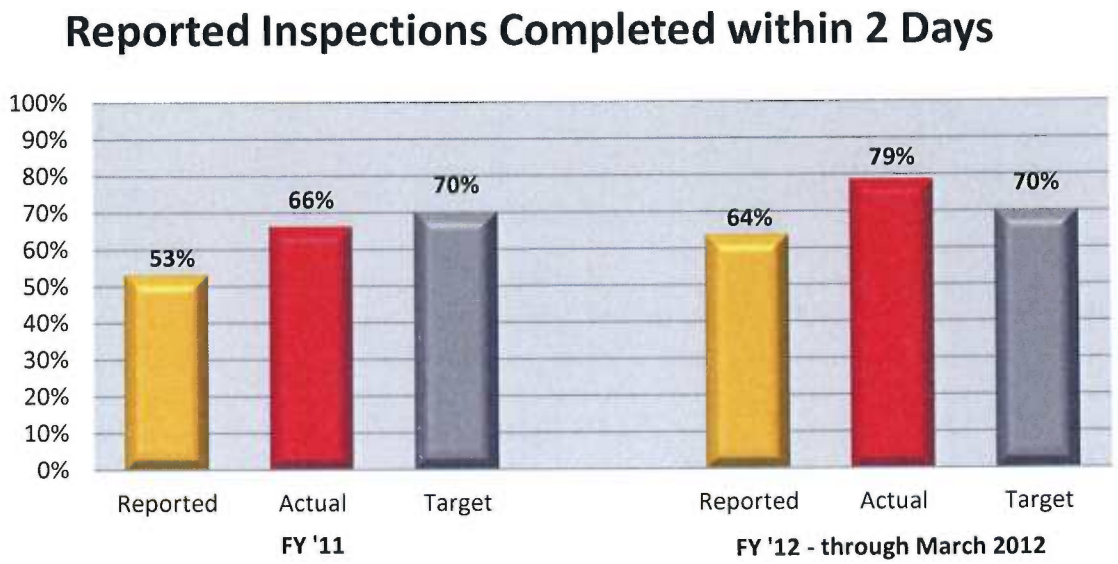
Management Response 11

Agree with recommendation. By August 1, 2013, consideration will be given to modifying Municipal Code provisions regarding inspection qualifications to mirror State Statutes.

LFR Measure

"Percentage of construction related inspections completed within two working days of request" is a key LFR measure used in evaluating results of Development Center operations (Exhibit 8).

Exhibit 8: LFR Measure, Percentage of Inspections Completed Within Two Days



Source: LFR reported data used for 'Reported' and 'Target'. Accela data used for calculation of 'Actual'.

Reported LFR results for the audit period were found to be incorrect. Most of the inaccuracy was caused by the following errors:

- Non-construction related inspections included in calculation
- Cancelled inspections included in calculation[2]
- Work day calculation beginning at data entry date vs. date of customer request
- Weekends and holidays treated as work days
- Multiple inspections performed in a single trip treated as a single inspection[3]
- Inconsistent field names between Accela data entry screen and database
- Customer request dates inaccurately entered into Accela

It was also found that dates important to response time calculations were open for revision by supervisors and managers. Within the data tested, alterations of these dates were not found, but the existing opportunity may compromise the integrity of the data being used to report performance.

[2] Inspections cancelled before inspectors arrive on-site are treated as timely completed inspections.

[3] More than one inspection can be performed in a single trip. Example: Three Plumbing inspections - Ground, Water and Sewer - performed in a single trip to one construction location will be treated as a single inspection in calculating the LFR measure. While combining such inspections into a single event for scheduling purposes is sound, doing so for inspection timeliness reporting misstates actual results.

Recommendation 12

LFR reporting inaccuracies should be corrected. Measurement should reflect a strategic focus of the entire customer experience, customer request date to inspection completion date. The risk of data entry errors can be reduced by further implementing the on-line option for submitting inspection requests. Reported LFR measures should accurately represent performance and should be used in managing response times.

Management Response 12

Agree with recommendation. By July 1, 2013, LFR reporting inaccuracies will be corrected dependent upon IT resource availability.

Recommendation 13

System security should be revised to prohibit the modification of critical dates entered into Accela.

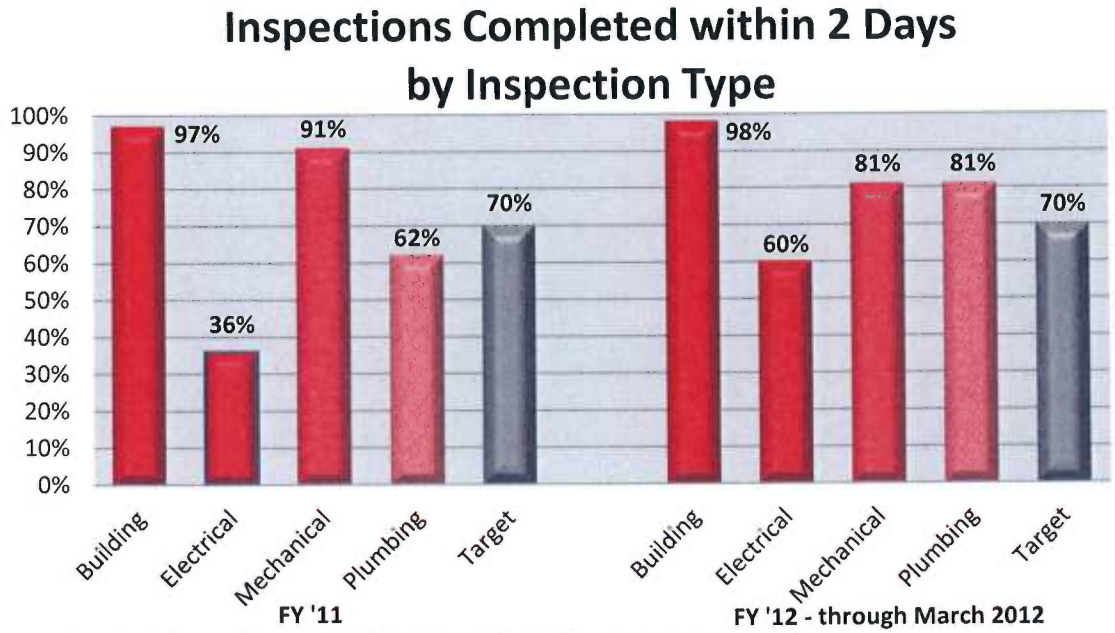
Management Response 13

Agree with recommendation. By August 1, 2013, system security will be revised to prohibit modification of critical dates entered into Accela dependent on IT resource availability.

Performance Reporting for Management

The LFR report discussed in the previous section reflects response times for construction-related inspections as a whole. Such reports are not produced by inspection type. Without reporting by trade, problem areas may not be identified. For example, as depicted in Exhibit 8, aggregate response times are above target through March 2012. This report does not reflect the disparate performance among the inspection types (Exhibit 9) for the same period. Differences in performance by trade are even more dramatic in FY '11.

Exhibit 9: Inspection Response Time Performance, by Inspection Type



Source: Accela data used for calculation of actual performance by inspection type.

Department management and the City Manager are provided with a manually created weekly "days out" report depicting the age of open inspections for each trade section as of Monday of each week to inform City management of response time performance. While not materially misstated, this report was found to be incomplete by not fully listing all aged inspections. Incomplete reporting prevents management from exercising their own judgment regarding the importance of the data and presents the opportunity for reporting to be manipulated.

Aside from the monthly LFR measure report and the weekly days out report, there are no routine operational reports upon which management is able to monitor response time performance and the factors affecting it. Management oversight, for the purpose of ensuring reasonable response times, may not be effective without routine, organized and trended information regarding workloads, resources/efforts and operating results. Possible examples of such reports are included in Attachment A. Observations regarding activities that may have been worthy of management investigation and/or action are indicated on the example reports.

The Development Center produces a monthly report presenting productivity statistics (e.g., number of inspections completed, number completed within two days, number of inspections completed per day, rejection rate etc.) for each inspector, by trade. This report is a useful tool distributed to division management, but we found no evidence it is used to monitor inspector performance.

Recommendation 14

The current weekly days out report should be automatically created from Accela and reflect a complete depiction of the age of all outstanding inspections.

Management Response 14

Agree with recommendation. By August 1, 2013, weekly days out reports will be automatically created from Accela and reflect a complete view of all outstanding inspections dependent on IT resource availability.

Recommendation 15

Routine reports are needed to aid Development Center and department management in monitoring performance, alert management of changing trends and aid in decision making. Possible example reports are shown at Attachment A.

Management Response 15

Agree with recommendation. By August 1, 2013, additional management reports will be routinely provided to Department and Development Center management to assist with assessing performance and decision making.

Recommendation 16

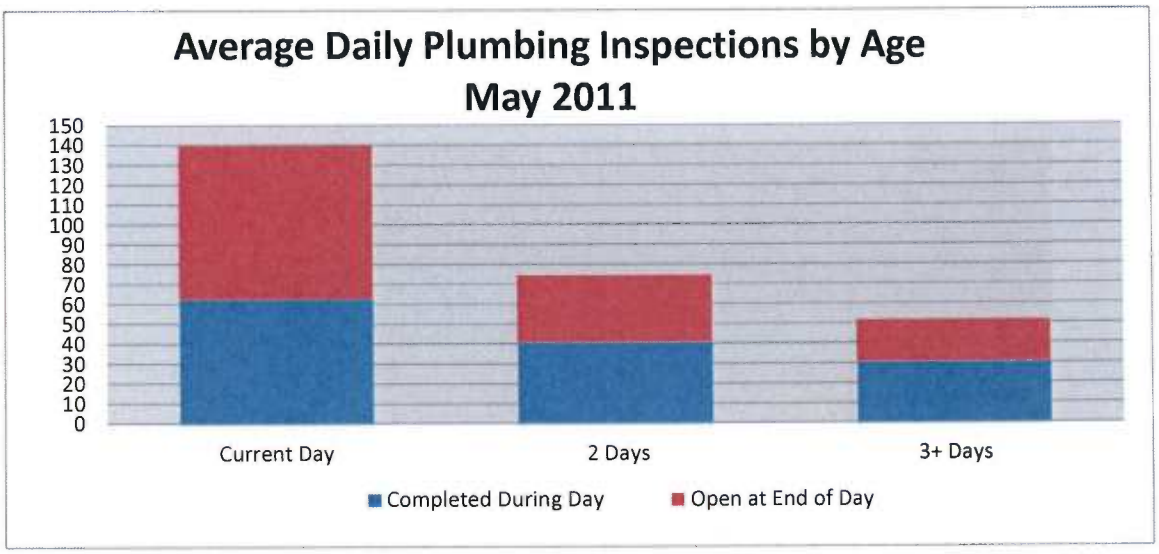
Continue distribution and encourage Development Center management use of the monthly report showing productivity statistics by inspector. This report should serve as a tool to monitor individual inspector performance.

Management Response 16

Agree with recommendation. By August 1, 2013, monthly reports showing productivity by inspector will be distributed to management and used to monitor performance.

ATTACHMENT A

Example Management Reports



Inspections	Age: Current Day	2 Days	3+ Days	Total
Open -start of day	140	75	52	267
Completed during day	63	41	31	135
Open - end of day	77	34	21	132

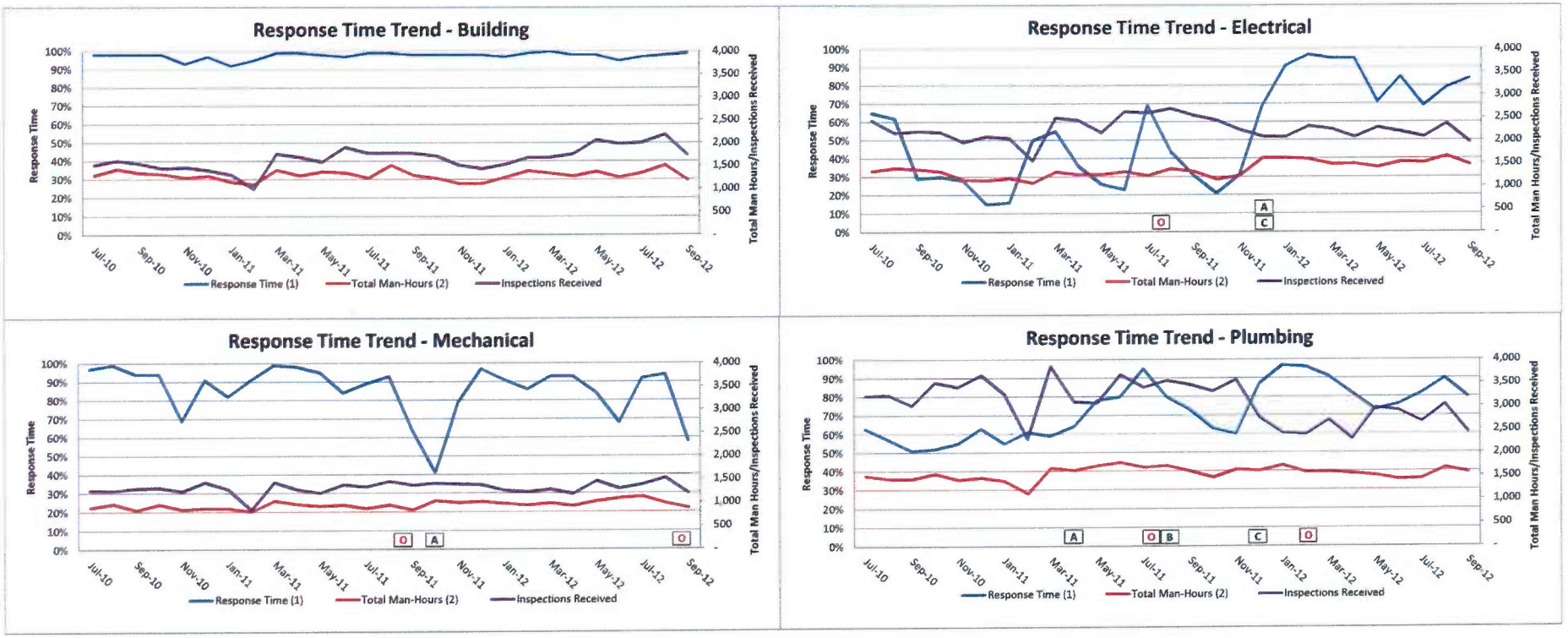
Observation: On an average day in May 2011, the 135 plumbing inspections completed was sufficient to complete all 127 (75 + 52) inspections that were older than two days at the start of the day. Instead, 21 inspections already older than the Development Center's performance goal of two days were allowed to age another day and 34 inspections were allowed to age beyond the stated two day goal.

Source: Accela data

Attachment A

Example Management Report

See note "O" for auditor's observation.



(1) Response Time reflects % of inspections completed within two days.

(2) Total Man-Hours reflects total regular and overtime hours spent performing inspections.

[A] Mechanical section became fully staffed in October 2011 after having been short staffed by one position during the preceding 13 month period; Electrical section became fully staffed in December 2011 after having been short staffed by an average of 1.5 positions during the preceding 15 month period; Plumbing section became fully staffed in April 2011 after having been short staffed by one position during the preceding 9 month period.

[B] Plumbing section became short staffed by 1 position in August through October 2011.

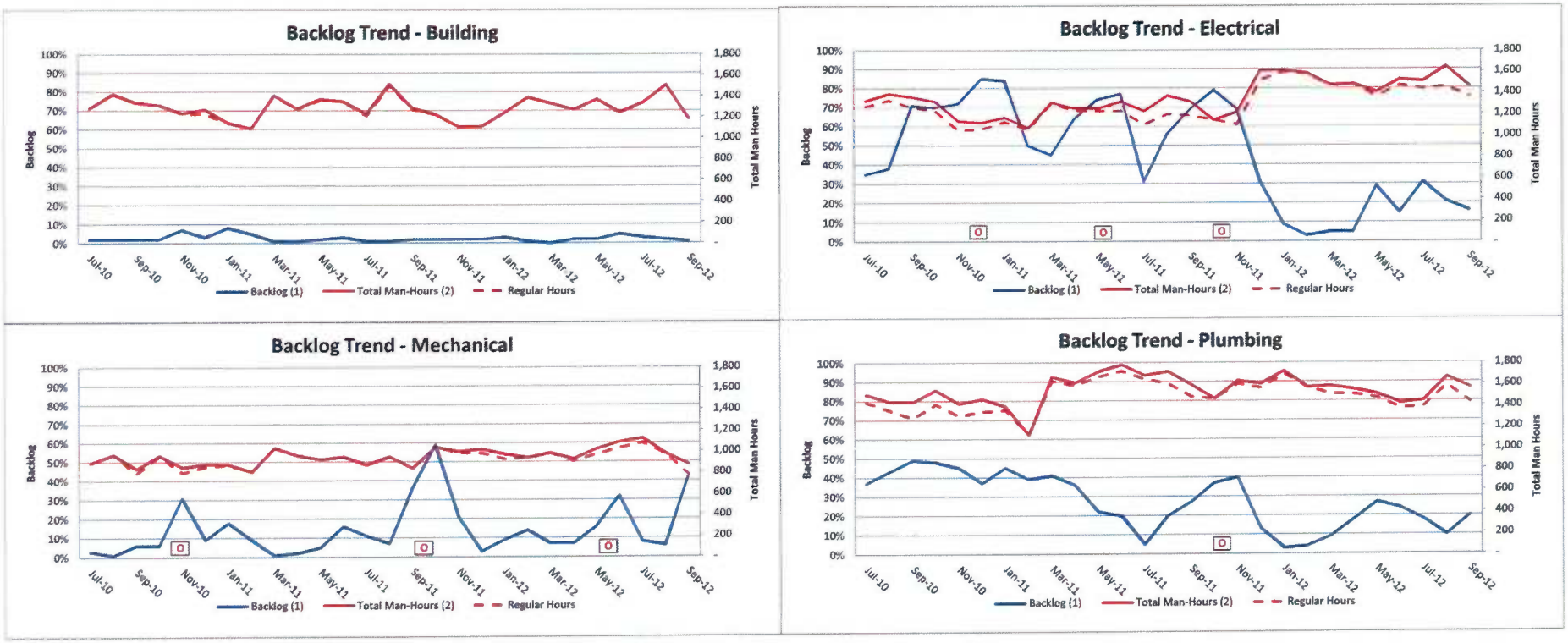
[C] Inspections Received reflects the changing trend that occurred approximately December 2011 when inspection types were combined allowing a single inspection record for multiple inspection types.

[O] Dramatic fluctuations in Response Time Performance would have been worthy of management investigation given lack of corresponding change in Total Man-Hours and/or Inspections Received.

Source: Accela and Kronos data

Attachment A

Example Management Report
See note "O" for auditor's observation.



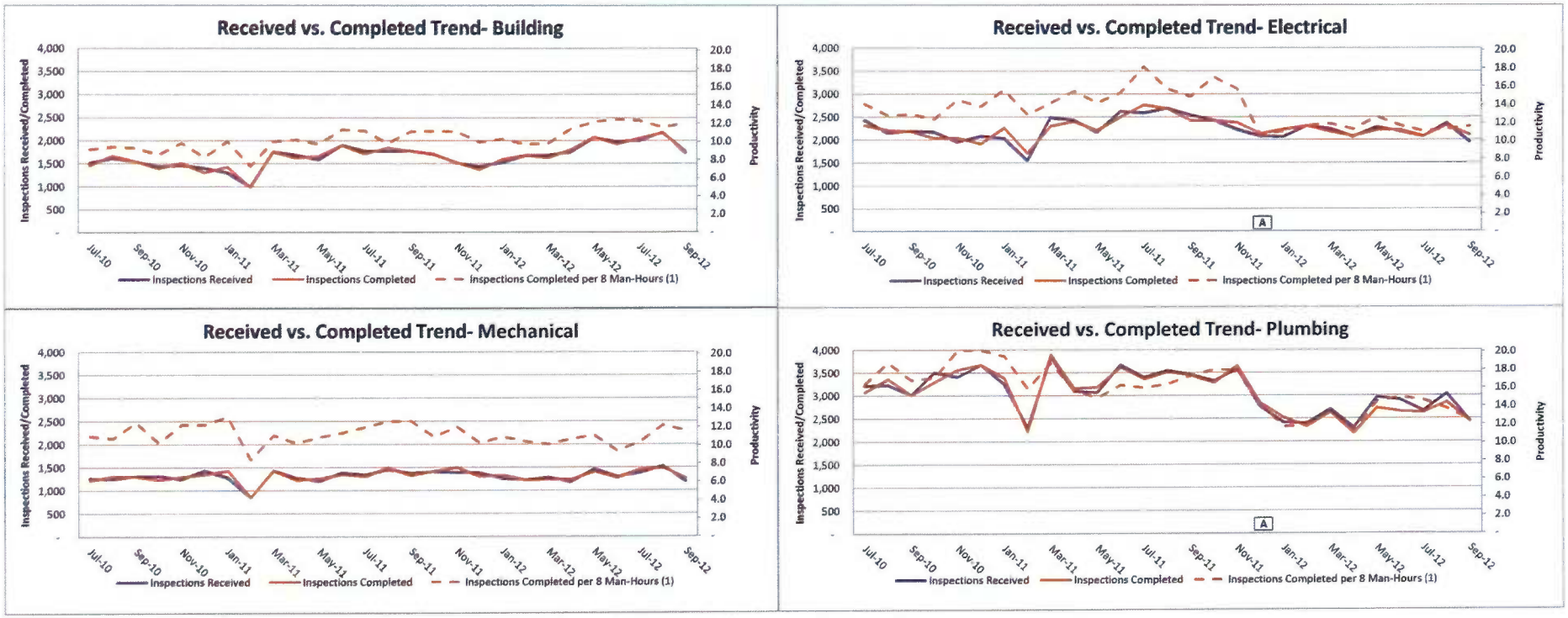
(1) Backlog reflects percentage of inspections not completed within two days.
(2) Total Man-Hours reflects total regular and overtime hours spent performing inspections.
O There may be question surrounding adequacy of the additional work effort being applied (i.e., increase in total man-hours, overtime) during periods of backlogs.

Source: Accela and Kronos data

Attachment A

Example Management Report

See note "O" for auditor's observation.



(1) Inspections Completed per 8 Man-Hours reflects the number of inspections completed for every eight hours of work (i.e., productivity).

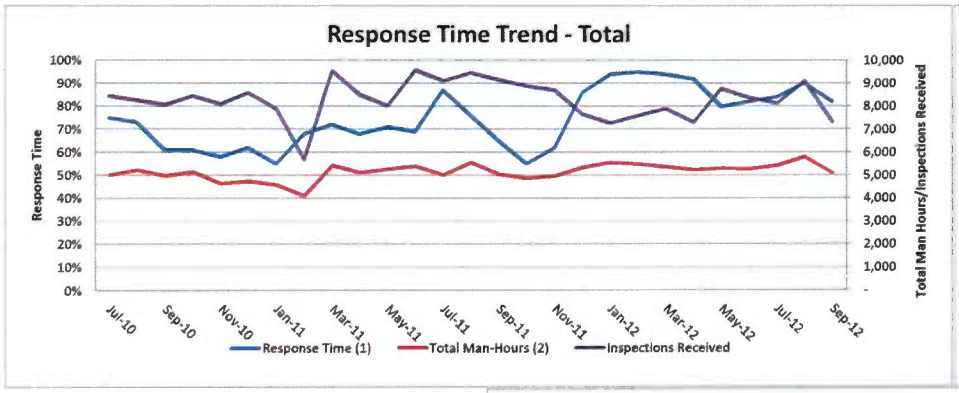
[A] Inspections Received, Inspections Completed, and Inspections Completed per 8 Man-Hours reflects the changing trend that occurred approximately December 2011 when inspection types were combined allowing a single inspection record for multiple inspection types.

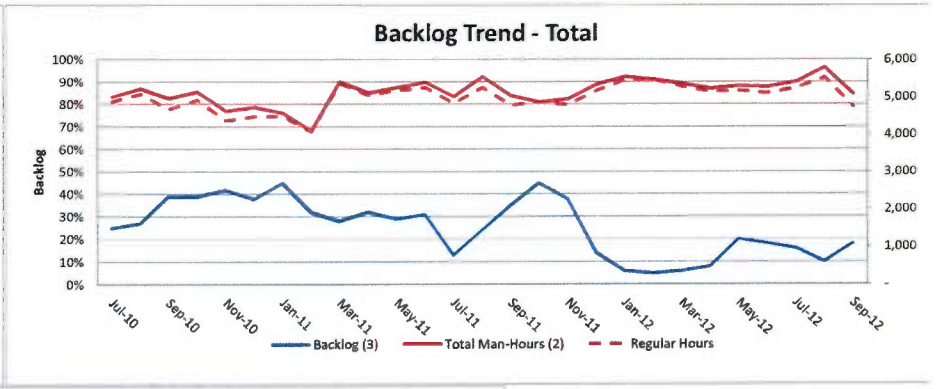
[O] Inspector productivity appears worthy of management investigation given that the average number of Inspections Completed per 8 Man-Hours fluctuates with the number of new inspection requests. The inspection backlogs presented in the graphs on page A-3 indicate sufficient workload to warrant a more constant level of productivity (i.e., Inspections Completed per 8 Man-Hours).

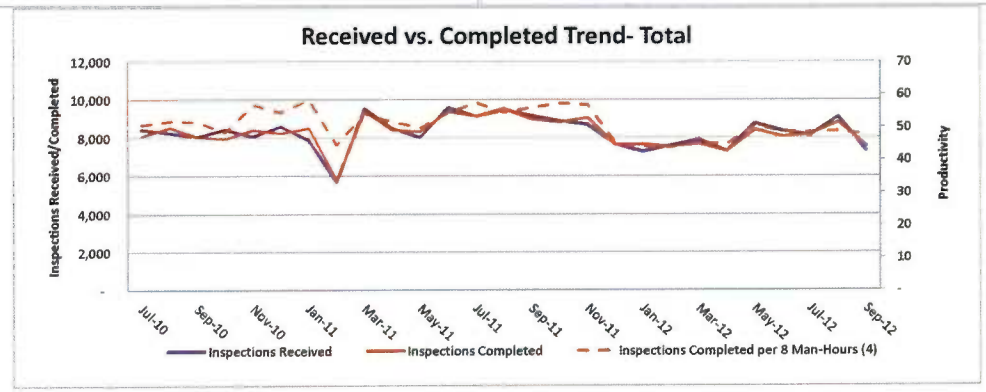
Source: Accela and Kronos data

Example Management Report

See note "O" for auditor's observation.







(1) Response Time reflects % of inspections completed within two days.
(2) Total Man-Hours reflects total regular and overtime hours spent performing inspections.
(3) Backlog reflects percentage of inspections not completed within two days.
(4) Inspections Completed per 8 Man-Hours reflects the total number of inspections completed for every eight hours of work (i.e., productivity).

Source: Accela and Kronos data

ATTACHMENT B

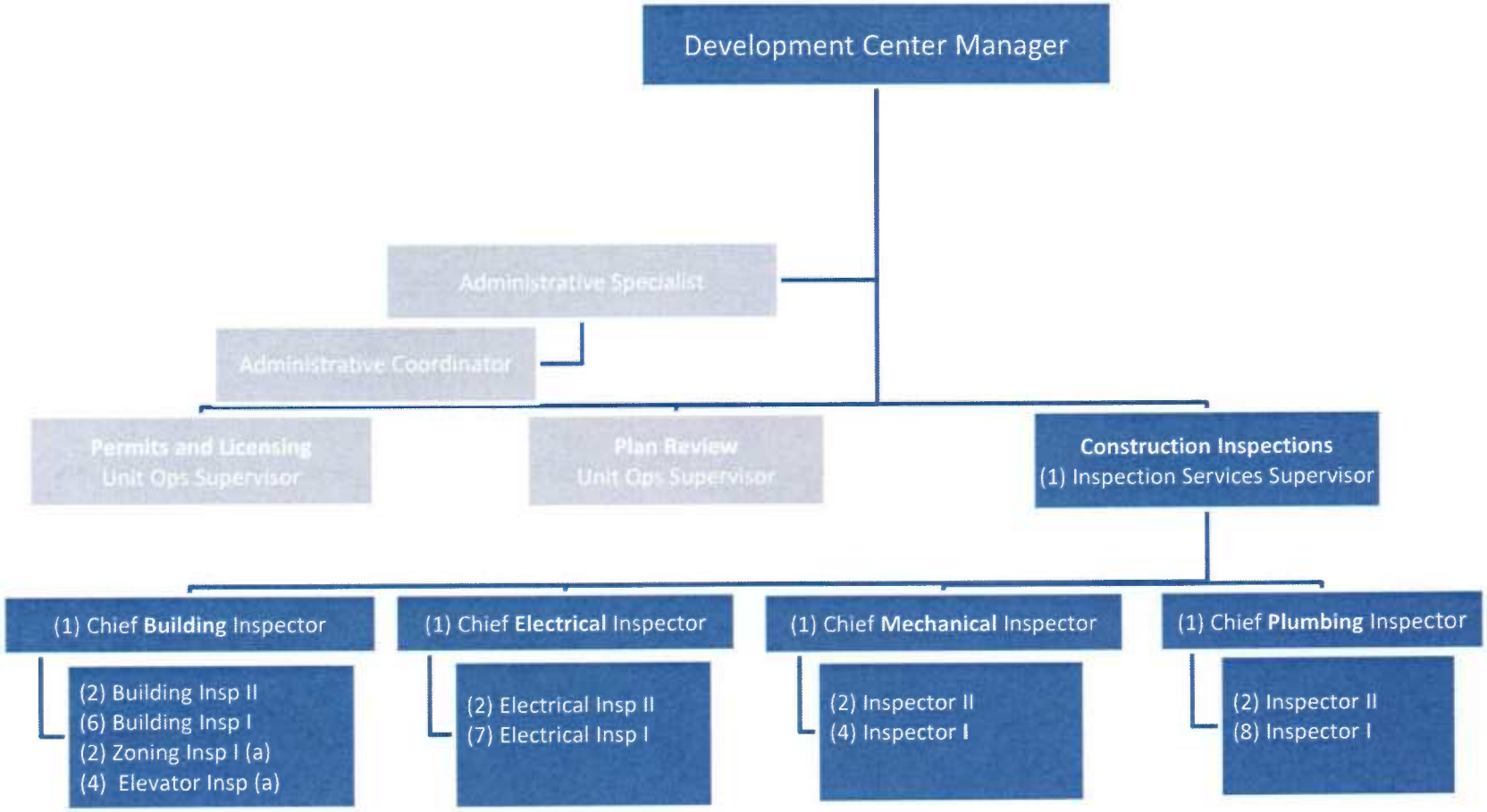
Development Center Organizational Chart

Attachment B

Development Services

Development Center Division

FY 2012-2013



(a) These positions do not perform private construction-related inspections and are not included as "inspector" positions for the purpose of this audit.

Source: Development Services

ATTACHMENT C

Management Responses

MEMORANDUM

The City of
OKLAHOMA CITY

FEB 2013
RECEIVED
CITY AUDITOR-OKC

TO: Jim Williamson, City Auditor

THROUGH: James D. Couch, City Manager

FROM: Bob Tener, Development Services Director

DATE: February 1, 2013

SUBJECT: Development Services Department, Development Center Division, Construction Inspections Audit

Following are management's responses to the status of recommendations outlined in the recent Development Services, Development Center Division, Construction Inspections Audit.

1. Agree with recommendation. Management is committed to providing the most efficient and effective customer service possible. Response time performance targets will be reviewed in comparison to peer cities. Audit recommendations will be implemented as discussed below.

2. Agree with modification. By December 31, 2013, management will visit or consult with several peer cities with more successful response time performance to understand factors that contribute to those response times. Performance improvement ideas generated from these efforts will be implemented as resources are available. Since we will be studying the practices of peer cities, other recommendations will follow in a similar timeframe.

3. Agree with recommendation. By September 1, 2013, management will examine the possible impacts of implementing combination inspections. If combination inspections are desired, management will propose language to modify the applicable State Statutes to allow such inspections as part of the City's 2014 legislative agenda.

4. Agree with modification. By December 31, 2013, management will revise policy to remove required office time. However, inspectors may need to spend time in the office to address various needs or concerns.

5. Agree with recommendation. By December 31, 2013, every inspector shall be provided a prioritized workable list of inspections to be completed in a day's time.

6. Agree with recommendation. By December 31, 2013, after reviewing peer city inspection practices, reasonable productivity standards will be developed/implemented.

7. Agree with recommendation. By August 1, 2013, GPS technology that reduces the risk of manipulation of the unit will be installed on all inspector vehicles.

8. Agree with recommendation. By August 1, 2013, policy will be revised to require customer/contractor communication prior to all inspections.

9. Agree with recommendation. By August 1, 2013, regular meetings with customers/contractors will be scheduled. Information gained from these meetings will be used to improve inspection consistency and reduce job-site rejections.

10. Agree with recommendation. By August 1, 2013, a policy will be created concerning waiving re-inspection fees resulting from inspector error. A management report of the errors will be used for quality control.

11. Agree with recommendation. By August 1, 2013, consideration will be given to modifying Municipal Code provisions regarding inspection qualifications to mirror State Statutes.

12. Agree with recommendation. By July 1, 2013, LFR reporting inaccuracies will be corrected dependent upon IT resource availability.

13. Agree with recommendation. By August 1, 2013, system security will be revised to prohibit modification of critical dates entered into Accela dependent on IT resource availability.

14. Agree with recommendation. By August 1, 2013, weekly days out reports will be automatically created from Accela and reflect a complete view of all outstanding inspections dependent on IT resource availability.

15. Agree with recommendation. By August 1, 2013, additional management reports will be routinely provided to Department and Development Center management to assist with assessing performance and decision making.

16. Agree with recommendation. By August 1, 2013, monthly reports showing productivity by inspector will be distributed to management and used to monitor performance.

Thank you for your professional review of this program.