CITY AUDITOR'S OFFICE

AUDIT OF DEPARTMENT OF BUILDING & SAFETY
Off-site Inspection and Testing Division

Report BS005-1617-04

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CITY AUDITOR

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BACKGROUND

The Off-site Inspection and Testing division (OIT) of the Department of Building & Safety (B&S) is comprised of two work units including off-site inspection services and the laboratory. The focus of this audit was on the off-site inspection services work unit.

OIT oversees inspections of privately funded civil projects within the public and private rights of way. These projects range in size from large residential and commercial developments to minor construction, maintenance, and repair projects. Many projects are initiated by the utility companies. OIT inspectors ensure that these projects are completed in compliance with the standards applicable to the project and related civil plans. Inspections are completed of the construction, repair, maintenance, and alteration of streets, curbs, sidewalks, drainage facilities, underground utilities and related structures.

Once project permits are obtained by a developer or contractor, they can schedule the day (but not the time) for off-site inspections over the phone or on-line. Inspections are to be scheduled 24 hours in advance. On the morning of the scheduled inspection, the contractor contacts the OIT inspector over the area where the inspection is needed to coordinate a specific time for the inspection.

The off-site inspection services work unit currently has eight employees including a supervisor, a senior construction supervisor, five construction inspectors, and an administrative support assistant. The work unit is overseen by a B&S Manager and the B&S Director.

Regular work hours for inspections are Monday through Friday, 6:00 a.m. to 5:00 p.m. However, overtime inspections can be scheduled with OIT during non-regular work hours for a stipulated hourly fee. Inspections needed during regular work hours but not previously scheduled by a contractor (same-day inspections) can also be arranged for a stipulated hourly fee.

The OIT inspectors document the results of their inspections in a software application known as Hansen. This software will soon be upgraded to an application known as INFOR10.

OBJECTIVES

Our objectives in completing this audit were to:

- Evaluate the efficiency and effectiveness of the OIT inspections process.
- Determine whether the OIT inspections performance measurements are being accurately calculated and reported.
- Evaluate whether the methodology being followed by OIT for retention of hard copy documents is in compliance with the department's document retention standards.

SCOPE AND METHODOLOGY

The scope of this audit was limited to the operations of the off-site inspection services work unit. OIT's laboratory was not subject to this audit. The scope of our work on internal controls was limited to the controls within the context of the audit objectives and the scope of the audit. Specific testing samples were judgmentally selected. Our audit did not include a review of upcoming changes to the Hansen system. The last fieldwork date of this audit was June 2, 2016.

Our audit methodology included:

- Review of existing policies and procedures
- Interviews with OIT staff members and other city employees
- Review of various inspection data, documents, and reports within Hansen
- Review of documents within inspection files
- Observation of inspection process while accompanying inspectors in the field

We conducted this performance audit in accordance with generally accepted government auditing standards except for the requirement for an external peer review every three years. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The exception to full compliance is because the City Auditor's Office has not yet undergone an external peer review. However, this exception has no effect on the audit or the assurances provided.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The following conclusions to our audit objectives were noted:

Evaluate the efficiency and effectiveness of the OIT inspections process.

- Additional information needs to be provided to contractors when using the automated scheduling system. (Finding 1)
- Erroneous warranty inspections are being automatically scheduled for completion by the OIT inspectors and under the current process there is the potential of warranty bonds being released prior to a warranty inspection being successfully completed. (Finding 2)
- Additional documented procedures on OIT's operations are needed. (Finding 3)
- Manually prepared spreadsheets are being maintained with the same data being input into Hansen. (Finding 5)
- The overtime inspection request form needs additional information and the current overtime inspection fee structure needs to be re-evaluated. (Finding 6)
- Increased transparency is needed for OIT inspectors on the overtime inspection scheduling rotation process. (Finding 7)

- Additional performance information is needed for proper oversight of inspectors. (Finding 8)
- The opportunity exists for increased digitization of OIT inspection documents. (Finding 9)

Determine whether the OIT inspections performance measurements are being accurately calculated and reported.

- The OIT performance measurements do not accurately reflect management's intentions for these measurements. (Finding 4)

Evaluate whether the methodology being followed by OIT for retention of hard copy documents is in compliance with the department's document retention standards.

- The methodology being followed by OIT's inspection services work unit for the retention of documents is in compliance with the department's document retention standards. However, the document retention process being followed by OIT is not fully documented. (Finding 3)

Further information on these issues is contained in the sections below. While other issues were identified and discussed with management, they were deemed less significant for reporting purposes.

1. Insufficient Information Provided by Scheduling System

Criteria

Greater operational efficiency and customer satisfaction is achieved when customers are aware of the process to be followed in working with a service provider.

Condition

Contractors are able to schedule off-site inspections online or over the automated phone system (automated scheduling system). At the time of scheduling, the contractor identifies the permit key number, the inspection type, and the desired date of inspection. The scheduling system then responds with the scheduled date, an inspection number, a confirmation number, and the name of the inspector to whom the inspection is assigned and their contact phone number. Contractors must then call their assigned inspector the morning of the scheduled inspection date to arrange a mutually agreeable time for the inspection.

The following deficiencies were noted with this process and with the information provided when using the automated scheduling system:

- There are no instructions to contractors regarding the need to call the inspector over their area on the day of the inspection to arrange a mutually agreeable time for the inspection.

- There are no instructions on who to call when the assigned inspector is not available (e.g., on leave, day off, involved in another inspection). The phone numbers of the other inspectors are not provided.
- While a confirmation number is provided to the contractor, this confirmation number cannot be used by the OIT inspectors to reference the scheduled inspection when provided by a contractor.
- Multiple inspections using the same inspection code cannot be scheduled by the contractors. They are instructed by OIT staff to use the "other" inspection code when they need to schedule multiple inspections of the same type.
- Contractors will sometimes identify an inspection time in the "special instructions" section of the inspection scheduling screen and incorrectly assume that their inspection is automatically scheduled for that time and not phone their assigned inspector.

OIT inspectors are continually reminding contractors of the inspections scheduling process and distribute flyers with this information for their reference.

Cause

- Insufficient information on the OIT inspection process is provided to contractors when using the automated scheduling system.

Effect

- Inadequate information on the scheduling process provided to contractors at the time of scheduling an inspection.
- Inefficiencies are created for the inspectors when contractors fail to call their assigned inspector the morning of the day of their inspection.

Recommendations

1.1 OIT management working with systems support personnel should enhance the information provided to contractors when scheduling an inspection using the automated scheduling system by including the following information:

- Instructions on the process to follow after scheduling an inspection
- Instructions on who to contact when the assigned inspector is not available
- Reminder that the time of an inspection must be made directly with the assigned inspector the morning of the inspection

1.2 OIT management working with systems support personnel should make required programming changes to allow the inspection confirmation number to be used by inspectors to reference the scheduled inspection within the system.

1.3 OIT management working with systems support personnel should make required programming changes to allow for the scheduling of multiple inspections of the same type of inspection within the system.

2. Erroneous Warranty Inspections Being Scheduled

Criteria

Warranty bonds are obtained from developers as a surety that any warranty issues that arise subsequent to the closure of a project are addressed or that the bond proceeds are available to be used to remedy the warranty issues in case of default. Procedures must be in place to ensure that warranty bonds are not released prior to verification that all warranty issues have been addressed.

Condition

Warranty inspections are completed by OIT inspectors on bonded projects where a warranty bond (or retainer) is required. Warranty bonds are effective for a year after the completion of a project. Warranty inspections are to be completed by OIT inspectors approximately 10 months after a project's completion date to verify that no problems have arisen and to place a hold on release of the warranty bond if warranty issues are identified. Hansen automatically schedules warranty inspections for the OIT inspectors. For the period of January 2015 through March 2016, 371 warranty inspections were scheduled.

When there is a warranty inspection failure, the inspector records the failure in Hansen and OIT management is to alert the B&S land development division (land development) of the problem and request a hold be placed on release of the warranty bond. If no hold is requested by OIT, warranty bonds are released by land development approximately twelve months after the project completion date.

We reviewed the 108 warranty inspections completed from October 2015 through March 2016 (99 were passed, 6 were closed, and 3 were failed). The following deficiencies were identified in the warranty inspection scheduling and completion process:

- Erroneous warranty inspections are automatically being scheduled for the OIT inspectors. Examples were found of warranty inspections being scheduled for civil projects without warranty bonds, utility permits, and bus stops for which no warranty inspections are required. No warranty inspection appeared to be needed for 61 of the 108 warranty inspections completed as there was no record of a warranty bond for the related permit within Hansen.
- Warranty bond inspections are being completed by OIT inspectors on projects not requiring a warranty inspection.
- Warranty bond inspections were found to be scheduled beyond 10 months after a project's completion. We identified that 23 of the completed warranty inspections were scheduled more than a year after the project completion date. Only 6 of these 23 inspections had a warranty bond associated with the permit.
- Inconsistencies were found in how the inspectors use the closed and passed inspection result classifications when closing off erroneous warranty inspections or when verification of the work was not possible.

- No automatic hold is placed on a warranty bond in the case of a warranty inspection failure. Land development relies on OIT management to alert them when a warranty bond should not be released. Land development employees do not review whether or not a warranty inspection was scheduled, completed, and passed prior to release of a warranty bond.
- The warranty bonds on the three failed inspections were released despite there being no record within Hansen or documented communication with land development that the cause of the failures had been addressed and the warranty inspections passed. On one of the failed inspections, the warranty inspection was scheduled after the warranty bond was released. While not documented, OIT management confirmed that the warranty issues had been addressed.
- When the result of a warranty inspection is a failure, a second warranty inspection is automatically created within Hansen; however, this second inspection is not automatically rescheduled. The inspector must remember to go back in and close out the second warranty inspection once the cause of the failure is addressed. This was not done with three of the four failed warranty inspections.

Cause

- Hansen programming errors.
- Hansen does not automatically put a hold on the release of warranty bonds subsequent to failed warranty inspections.
- OIT does not have any documented procedures outlining the process to be followed by inspectors for completing warranty inspections and handling warranty inspection failures.

Effect

- Inefficiencies created for OIT by warranty inspections being scheduled that are not needed.
- Lack of assurance that warranty bonds will be retained following a failed warranty inspection.

Recommendations

2.1 OIT management working with systems support personnel should correct the programming errors causing the scheduling of erroneous and untimely warranty inspections.

2.2 OIT management working with systems support personnel should evaluate what enhancements can be made to the system and/or its procedures to prevent a warranty bond from being released prior to the related warranty bond inspection being successfully completed, approved, and recorded in the system.

2.3 OIT management should document and implement the process for completing warranty inspections and communicating warranty inspection failures to land development.

3. Need for Additional Documented Procedures

Criteria

Documented procedures formally establish employee accountability, provide orientation and reference material for employees, and document the institutional knowledge of existing staff in case of employee turnover or extended absences.

Condition

OIT has the following documented policies and procedures:

- Documentation for educating developers and contractors on its inspection process including informational handouts provided at pre-inspection meetings
- Internal technical guidance for reference by the inspectors in performing their inspections
- Internal administrative procedures performed by the OIT Administrative Support Assistant
- B&S work rules

OIT lacks formal procedural documentation specific to some key areas of their operation for training and reference by the inspectors:

- Daily inspection scheduling process
- Preparation for leave (to ensure inspections in assigned area are covered)
- Time tracking expectations and requirements
- Rescheduling inspections
- Same-day inspections
- Failed inspections
- Overtime inspections
- Warranty inspections
- Handling inspection result disagreements with contractors
- Handling and recording customer service requests and complaints
- Document retention process followed in OIT
- Training requirements and expectations

Cause

- Incomplete documentation on OIT operational procedures.

Effect

- Potential for lack of uniformity in how procedures are carried out.

- Lack of adequate documentation for use by new employees in learning OIT's operations.
- Potential for loss of knowledge base with employee turnover.

Recommendations

3.1 OIT management should document procedures for the following areas:
- Daily inspection scheduling process
- Preparation for leave (to ensure inspections in assigned area are covered)
- Time tracking expectations and requirements
- Rescheduling inspections
- Same-day inspections
- Failed inspections
- Overtime inspections
- Warranty inspections
- Handling inspection result disagreements with contractors
- Handling and recording customer service requests and complaints
- Document retention process followed in OIT
- Training requirements and expectations

3.2 OIT management should evaluate and document what additional technical inspection issues/procedures would be beneficial to document for training and reference purposes and continue to add to these procedures as new issues arise.

4. Performance Measurement Deficiencies

Criteria

Performance measurements should accurately reflect the activities of an organization.

Condition

OIT uses the following two performance measurements to evaluate the effectiveness of its off-site inspection services work unit:
- 90% of off-site permit inspections completed next business day.
- 90% of off-site utility permit inspections completed within 2 business days.

The results for these performance measurements are calculated automatically in a customized monthly report that uses inspection data from Hansen (monthly performance measurement report). This report is used by OIT to summarize the quarterly performance measurement results for reporting to city management.

The following deficiencies were identified with these performance measurements and their calculation:

Unclear Performance Measurement Titles

- The performance measurement titles do not clearly represent the information being tracked.
- The titles are confusing as they do not clearly identify the point of reference for "the next business day" or "within 2 business days."
- The titles do not accurately reflect the types of permits being included in the measurements. For example, the *off-site permit inspections* measurement includes both civil and combination utility inspections. The *off-site utility permit inspections* performance measurement includes more than just utility permits. It also includes permits for small scale projects that are issued over the counter without a plan review.

Measurement Calculation Errors

Using a judgmentally selected sample of 25 days from the first and second quarters of fiscal year 2016 (7/1/15 through 12/31/15), we tested the accuracy of the monthly performance measurement report against detailed inspection results from Hansen. Based on our testing, we found the following:

- According to management, the *off-site permit inspections completed next business day* measurement is to only include those inspections completed the same day as the scheduled inspection. This monthly performance measurement report includes inspections completed not only the day of the scheduled inspection but also those inspections completed the following day.
- According to management, the *off-site utility permit inspections completed within 2 business days* measurement is to only include those inspections completed the day of the scheduled inspection or the following business day. The monthly performance measurement report includes inspections completed the day of the scheduled inspection and the following two days.
- Weekends and holidays are not being properly considered when identifying the next business day in the calculation of the performance measurement data.

Lack of a Detailed Monthly Performance Measurement Report

- The monthly performance measurement report only identifies the number of inspections on each day. The detail on which inspections roll into that report is not easily accessible for review.

Cause

- Performance measurement titles do not clearly reflect the data being gathered.
- The monthly performance measurement report does not coincide with management's intentions for the performance measurements.

Effect

- Confusing performance measurement titles.
- Inaccurate performance measurement results.

Recommendations

4.1 OIT management should evaluate the titles of the performance measurements and determine what adjustments can be made so that they more accurately reflect the data being gathered and the types of inspections included in the measurements.

4.2 OIT management should request that systems support personnel make changes to the monthly performance measurement report so that the data coincides with their intentions for the performance measurements and that weekends and holidays are properly accounted for in the calculations.

4.3 OIT management working with systems support personnel should create a detailed performance measurement report showing the individual inspections that roll into the summarized monthly performance measurement report.

5. Redundant Data Input

Criteria

The input of the same data values into multiple systems creates operational inefficiencies and the potential for inconsistent data.

Condition

The Administrative Support Assistant for OIT maintains excel spreadsheets of both civil and permit projects (titled NUPRJCTS) in which significant project milestones are tracked. Much of the information input into this spreadsheet is also recorded into Hansen. The OIT supervisor and the inspectors rely heavily on this spreadsheet for information on the projects due to the ease in accessibility of the information compared with trying to get the same summarized data from Hansen.

Cause

- Data accessibility limitations within Hansen.
- Data needs of OIT not fully evaluated when Hansen was initially implemented.

Effect

- Inefficiencies created through duplicate input of data into both Hansen and the project spreadsheet.

Recommendation

5.1 OIT management working with systems support personnel should evaluate what system enhancements can be made and/or reports created that allow for the information currently contained within the manually prepared spreadsheets to be generated directly from the system for reference by the supervisor and inspectors.

6. Additional Information Needed on Overtime Inspection Form

Criteria

Independent acknowledgment and approval by a customer of overtime fees to be charged and actual overtime hours worked helps ensure the fees charged are acceptable to the customer.

Condition

Regular hours for off-site inspections are Monday through Friday, 6 a.m. to 5 p.m. If a contractor needs an offsite inspection outside of these hours, they must complete an overtime inspection request form and fax it into the OIT office. The OIT Supervisor confirms the overtime request with the contractor and asks one of his inspectors on a rotational basis to perform the overtime inspection. Upon completion of the overtime work, the form is signed by the inspector, approved by the supervisor, and submitted for processing. Contractors are charged a fixed amount of $330 for the first three hours (the minimum number of hours an inspector is paid if the overtime is not in conjunction with the employee's regular work hours) and then an additional $216 for each hour after that. During calendar year 2015, OIT inspectors were compensated for approximately 523 hours of overtime.

The following deficiencies were noted with the overtime inspection request process and form:

- The overtime inspection request form is not available for completion online but must be printed out, manually prepared, and faxed to the OIT office. If the fax machine is not regularly checked, the overtime request could go unnoticed.
- No confirmation is immediately provided to contractors as evidence that their overtime inspection request has been received by the city.
- The overtime fees are not identified anywhere on the overtime inspection request form. The form just states that the "contractor will be billed and agrees to pay for overtime incurred by city of Las Vegas personnel."
- The contractor does not provide evidence of approval of the actual time worked by the OIT inspector (e.g., signature on the form) following the completion of the inspection.

Contractors sometimes try to avoid the additional cost per hour for overtime inspections they anticipate exceeding three hours ($110 per hour for the first three hours vs. $216 per hour thereafter) by scheduling two (or more) overtime inspections rather than one overtime inspection. While not occurring frequently according to the inspectors, the current rate structure lends itself to this practice.

Cause

- Overtime inspection requests must be manually prepared and faxed to OIT office.
- Overtime inspection request form missing key elements.
- Overtime inspection fee structure loophole.

Effect

- Potential for untimely response to overtime inspection requests.
- Potential for disagreement with contractors on overtime hours charged.
- Potential for contractors to take advantage of fee structure loophole to avoid paying increased hourly overtime inspection fees after three hours.

Recommendations

6.1 OIT management should improve the overtime request approval form by:
- Adding the overtime rates to the form
- Adding a line for contractors to sign following the completion of the overtime
- Making the form available for completion and submittal online

6.2 OIT management should evaluate how the faxed overtime request form could be sent to the supervisor's email (and others as deemed appropriate) in addition to the fax machine to ensure it is properly accounted for. Consideration should be given to doing the same for other forms that are routinely faxed into the OIT office (e.g., Request for Pre-Final/Final Walkthrough).

6.3 OIT management should implement a process by which a confirmation is immediately sent to a contractor upon receipt of an overtime inspection request. Consideration should be given to doing the same for other forms that are routinely faxed into the OIT Office (e.g., Request for Pre-Final/Final Walkthrough).

6.4 OIT management should evaluate the current overtime inspection fee structure and determine whether changes are needed to eliminate the opportunity for avoidance of increased hourly overtime inspection fees after three hours by contractors. If no changes are deemed necessary, OIT management should evaluate and document how inspectors should address situations where a contractor is attempting to manipulate the overtime scheduling to avoid the additional overtime fees.

7. Need for Increased Transparency on Overtime Rotation Process

Criteria

The sharing of information with employees on overtime rotation assignments and the methodology followed in making those assignments creates trust in the equity of the process.

Condition

The Las Vegas City Employees Agreement states the following:

Overtime Requests and Rotation. Supervisors may require that employees work overtime. Overtime work shall be voluntary and shall be rotated amongst employees in the classification needed to work overtime on an equal basis. If no one agrees or volunteers to work the overtime, the supervisor may require (mandate) that a qualified employee work the overtime. Such mandated overtime will also be rotated amongst employees in the classification needed to work overtime on an equal basis, as long as the employee(s) are qualified to do the work. (Article 23.8)

The OIT Supervisor maintains a spreadsheet to track the rotation of overtime assignments among his inspectors.

While the process followed by the OIT supervisor in assigning overtime is documented on his overtime rotation spreadsheet, these rules are not documented elsewhere for reference by the OIT inspectors. In addition, the overtime rotation spreadsheet is not accessible by the OIT inspectors for reference.

Cause

- Lack of formal procedures outlining the overtime assignment rotation process.
- Lack of access by OIT inspectors to overtime rotation spreadsheet.

Effect

- Information on overtime assignment rotations is not readily available to inspectors.
- Potential for the perception of preferential assignment of overtime.

Recommendations

7.1 OIT management should formally document the overtime assignment rotation rules followed by the OIT Supervisor.

7.2 OIT management should make the overtime rotation spreadsheet available online to all inspectors for review.

8. Improved Information Needed for Oversight of Inspectors

Criteria

Accountability is enhanced when employees track their time incurred on their daily tasks and when supervisors monitor this information. This information is also valuable in protecting employees from conflicting reports on their activities.

Condition

The OIT inspectors complete the majority of their inspections alone. Utilizing a city vehicle, the inspectors drive from one inspection to another throughout the day. Laptops with Hansen software are installed in the vehicles for use by the inspectors. Inspectors are required to record the results of inspections and inspection start and end times into Hansen as well as time spent completing administrative activities and lunch time.

The process of recording inspection times into Hansen can be burdensome for the inspectors in trying to keep up with their scheduled inspections during the day. Several of the inspectors prefer to keep a manual log of their activities while out in the field and input the information into Hansen at the end of the day. Connectivity issues in some parts of the city also create a challenge in using the laptops. The times input into Hansen by the inspectors are subject to human error and/or manipulation.

A detailed report known as the *OIT Inspections Completed* report contains the detailed activity information recorded into Hansen by the inspectors. While the information within this report is a good resource for management in reviewing the daily activities of the inspectors, the activity times cannot be reconciled to any independent source such as data from global positioning system (GPS) units installed on inspector vehicles. In addition, the only summarization of activity on this report is the total number of inspections. There are no efficiency measurements included on this report such as actual time spent on inspections, administration, meetings, training, etc. or average inspection times.

Cause

- Lack of independent source for verification of time spent on inspections during the day.
- Inspector activity report lacks summarized efficiency information.

Effect

- Lack of assurance on the reliability of the time being input by inspectors into Hansen.
- Efficiency of inspectors not easily monitored from current activity report.

Recommendations

8.1 OIT management should evaluate the costs required for purchasing, installing, and maintaining GPS units on the inspector vehicles and determine whether to proceed with this option for improving inspector oversight. If the decision is made to proceed and funding is approved, OIT management should implement a GPS vehicle tracking system and supervisory procedures for reconciliation of inspector activities recorded in the Hansen system to the GPS system reports.

8.2 OIT management should review the *OIT Inspections Completed* report and determine what additional summary information and efficiency measurements could be added to this report to make it a more useful supervisory tool. OIT management should request that systems support personnel make these report enhancements.

9. Opportunity for Increased Digitization of Inspection Documents

Criteria

Digitized documents are more easily accessible for reference than filed paper copies. In addition, digitized documents reduce the amount of physical storage space required.

Condition

Various paperwork including forms, reports, and memos are created by OIT. Much of this paperwork continues to be maintained in hardcopy project files. Very little of this paperwork is retained in electronic form and linked to the respective permits within Hansen.

Cause

- Continued reliance on hard copy documents.

Effect

- Most OIT inspection documents are not easily accessible from within Hansen.
- Hard copy files continue to be maintained and stored.

Recommendation

9.1 OIT management should identify which hard copy documents would be beneficial to maintain electronically and develop and document a plan for moving forward with digitizing these documents and linking them to the corresponding permit within the system.

MANAGEMENT RESPONSES

1. Insufficient Information Provided by Scheduling System

1.1 OIT management working with systems support personnel should enhance the information provided to contractors when scheduling an inspection using the automated scheduling system by including the following information:

- Instructions on the process to follow after scheduling an inspection
- Instructions on who to contact when the assigned inspector is not available
- Reminder that the time of an inspection must be made directly with the assigned inspector the morning of the inspection

Management Action Plan: OIT management will evaluate and determine if the programming changes needed to provide additional information are possible for the new IVR and IWR systems. Any changes that can be made will be added during the design of the new IVR and IWR systems.

Estimated Date of Completion: June 1st, 2017

1.2 OIT management working with systems support personnel should make required programming changes to allow the inspection confirmation number to be used by inspectors to reference the scheduled inspection within the system.

Management Action Plan: OIT Management will evaluate the programming changes needed to make the confirmation number more easily referenced with the design and implementation of the new IVR and IWR systems being developed.

Estimated Date of Completion: June 1st, 2017

1.3 OIT management working with systems support personnel should make required programming changes to allow for the scheduling of multiple inspections of the same type of inspection within the system.

Management Action Plan: OIT management has evaluated this and it is currently designed in the new INFOR10 system. The new system allows multiple inspections of the same type to be scheduled and will go live with INFOR10.

Estimated Date of Completion: June 1st, 2017

2. Erroneous Warranty Inspections Being Scheduled

2.1 OIT management working with systems support personnel should correct the programming errors causing the scheduling of erroneous and untimely warranty inspections.

Management Action Plan: OIT management will evaluate the warranty scheduling process during the design of the new INFOR10 system and correct the erroneous and untimely warranty inspections.

Estimated Date of Completion: June 1st, 2017

2.2 OIT management working with systems support personnel should evaluate what enhancements can be made to the system and/or its procedures to prevent a warranty bond from being released prior to the related warranty bond inspection being successfully completed, approved, and recorded in the system.

Management Action Plan: OIT management will evaluate the warranty bond hold process during the design of the new INFOR10 system. A new written procedure and system enhancements will be created to prevent warranty bonds from being released prematurely.

Estimated Date of Completion: June 1st, 2017

2.3 OIT management should document and implement the process for completing warranty inspections and communicating warranty inspection failures to land development.

Management Action Plan: OIT management will work with staff to create a written policy and procedure for completing the warranty inspections. This policy and procedure will be added to the Building and Safety SharePoint library for OIT and be readily available to staff.

Estimated Date of Completion: December 31st, 2016

3. Need for Additional Documented Procedures

3.1 OIT management should document procedures for the following areas:

- Daily inspection scheduling process
- Preparation for leave (to ensure inspections in assigned area are covered)
- Time tracking expectations and requirements
- Rescheduling inspections
- Same-day inspections
- Failed inspections
- Overtime inspections
- Warranty inspections

- Handling inspection result disagreements with contractors
- Handling and recording customer service requests and complaints
- Document retention process followed in OIT
- Training requirements and expectations

Management Action Plan: OIT management will work with staff to document policies and procedures for areas identified above. These written policies and procedures will be added to the Building and Safety SharePoint library and be made available to staff.

Estimated Date of Completion: February 1st, 2017

3.2 OIT management should evaluate and document what additional technical inspection issues/procedures would be beneficial to document for training and reference purposes and continue to add to these procedures as new issues arise.

Management Action Plan: OIT management will work with staff to evaluate what additional policies and procedures may be needed for staff to perform their job duties. Any policies or procedures created will be added to the Building and Safety SharePoint library and be made available to staff, along with informational handouts for customers. This will be an on-going process and be discussed in OIT management's monthly meeting with staff.

Estimated Date of Completion: February 1st, 2017

4. Performance Measurement Deficiencies

4.1 OIT management should evaluate the titles of the performance measurements and determine what adjustments can be made so that they more accurately reflect the data being gathered and the types of inspections included in the measurements.

Management Action Plan: OIT management will work with upper management to have the OIT Strategic Business Plan updated to more accurately reflect the data being gathered. The new titles may be but are not limited to:

- 90% of offsite permit inspections completed same business day as scheduled
- 90% of offsite utility/minor permit inspections completed within 48 hours of the day scheduled

Estimated Date of Completion: December 31st, 2017

4.2 OIT management should request that systems support personnel make changes to the monthly performance measurement report so that the data coincides with their intentions for the performance measurements and that weekends and holidays are properly accounted for in the calculations.

Management Action Plan: OIT management will work with the systems support personnel to have the monthly report updated to match the intention of the performance measurement.

Estimated Date of Completion: December 31st, 2016

4.3 OIT management working with systems support personnel should create a detailed performance measurement report showing the individual inspections that roll into the summarized monthly performance measurement report.

Management Action Plan: OIT management will work with the systems support personnel to generate a detailed report for the performance plus summary report.

Estimated Date of Completion: December 31st, 2016

5. Redundant Data Input

5.1 OIT management working with systems support personnel should evaluate what system enhancements can be made and/or reports created that allow for the information currently contained within the manually prepared spreadsheets to be generated directly from the system for reference by the supervisor and inspectors.

Management Action Plan: OIT management will evaluate what system enhancements are available within INFOR10 and implement them, to create a report that can be used by OIT in lieu of the manually prepared spreadsheet.

Estimated Date of Completion: June 1st, 2017

6. Additional Information Needed on Overtime Inspection Form

6.1 OIT management should improve the overtime request approval form by:

- Adding the overtime rates to the form
- Adding a line for contractors to sign following the completion of the overtime
- Making the form available for completion and submittal online

Management Action Plan: OIT management will have the OT form revised to add additional information and revise it to be submitted via email.

Estimated Date of Completion: December 31st, 2016

6.2 OIT management should evaluate how the faxed overtime request form could be sent to the supervisor's email (and others as deemed appropriate) in addition to the fax machine to ensure it is properly accounted for. Consideration should be given to doing the same

for other forms that are routinely faxed into the OIT office (e.g., Request for Pre-Final/Final Walkthrough).

Management Action Plan: OIT management will work with Information Technologies department to develop a new process for forms currently faxed into the department. We will look at using one of the following processes:

- Emailing forms to OIT@lasvegasnevada.gov. This email will be received by the Construction Inspections Supervisor, Senior Construction Inspector and support personnel for OIT.
- Using Formstack to submit the form online. This form will be viewed by the Construction Inspections Supervisor, Senior Construction Inspector and support personnel.

Estimated Date of Completion: December 31st, 2016

6.3 OIT management should implement a process by which a confirmation is immediately sent to a contractor upon receipt of an overtime inspection request. Consideration should be given to doing the same for other forms that are routinely faxed into the OIT Office (e.g., Request for Pre-Final/Final Walkthrough).

Management Action Plan: OIT management will work with Information Technologies to ensure a confirmation email or notification is sent upon receipt of submitted forms.

Estimated Date of Completion: December 31st, 2016

6.4 OIT management should evaluate the current overtime inspection fee structure and determine whether changes are needed to eliminate the opportunity for avoidance of increased hourly overtime inspection fees after three hours by contractors. If no changes are deemed necessary, OIT management should evaluate and document how inspectors should address situations where a contractor is attempting to manipulate the overtime scheduling to avoid the additional overtime fees.

Management Action Plan: OIT has evaluated the current overtime fee structure and determined it is acceptable. A written policy will be created to provide direction to staff on how to handle requests that are attempting to manipulate the increased hourly fee.

Estimated Date of Completion: December 31st, 2016

7. Need for Increased Transparency on Overtime Rotation Process

7.1 OIT management should formally document the overtime assignment rotation rules followed by the OIT Supervisor.

Management Action Plan: OIT management will create a written policy and procedure for overtime rotation utilizing the rotation spreadsheet already being used. This policy will be added to the OIT library and be made readily available for staff.

Estimated Date of Completion: December 31st, 2016

7.2 OIT management should make the overtime rotation spreadsheet available online to all inspectors for review.

Management Action Plan: OIT management has made the overtime rotation spreadsheet available to all inspectors.

Estimated Date of Completion: Complete

8. Improved Information Needed for Oversight of Inspectors

8.1 OIT management should evaluate the costs required for purchasing, installing, and maintaining GPS units on the inspector vehicles and determine whether to proceed with this option for improving inspector oversight. If the decision is made to proceed and funding is approved, OIT management should implement a GPS vehicle tracking system and supervisory procedures for reconciliation of inspector activities recorded in the Hansen system to the GPS system reports.

Management Action Plan: OIT management is currently working with Operations and Maintenance, Finance, and Information Technologies to review and select a vendor for GPS units. Once a vendor is selected OIT management will perform a cost/benefit analysis to determine if the GPS units can be purchased. If they are purchased OIT management will create written policies and procedures for the supervisor to use. These will be added to the Building and Safety SharePoint library and be made accessible for staff.

Estimated Date of Completion: June 1st, 2017

8.2 OIT management should review the *OIT Inspections Completed* report and determine what additional summary information and efficiency measurements could be added to this report to make it a more useful supervisory tool. OIT management should request that systems support personnel make these report enhancements.

Management Action Plan: OIT management will work with the inspection supervisor and systems support personnel to identify what additional information may be needed on the report to make it more useful.

Estimated Date of Completion: December 31st, 2016

9. Opportunity for Increased Digitization of Inspection Documents

9.1 OIT management should identify which hard copy documents would be beneficial to maintain electronically and develop and document a plan for moving forward with digitizing these documents and linking them to the corresponding permit within the system.

Management Action Plan: OIT management will work with the City Clerk's office, OIT, and INFOR10 developers to identify what steps are needed to maintain electronic copies of all documents moving forward.

Estimated Date of Completion: June 1st, 2017