Action Center Operations Audit
June 2018

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June 4, 2018

Honorable Mayor and Members of the City Council:

The City Auditor's Office has completed the Action Center Operations Audit. The purpose of the audit was to assess the Action Center operational environment to determine its capability to meet business objectives.

Management's response to our audit findings and recommendations, including target implementation dates and responsibility, is included following the report.

We would like to thank staff from the Management Resources, Information Technology and Water Departments for their cooperation and assistance during the audit.

Lori Brooks Jaquess

Lori Brooks Jaquess, CPA, CIA, CGAP, CRMA
City Auditor

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     Jim Parajon, Deputy City Manager
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     Jennifer Wichmann, Interim Deputy City Manager
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     Mike Bass, Code Compliance Administrator
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Action Center Operations Audit
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Executive Summary

The City Auditor's Office has completed the Action Center Operations Audit. The performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit objectives were to:

- Assess the Action Center operational environment to determine its capability to meet business objectives

- Evaluate the statistical data and performance measures utilized in the Action Center for appropriateness and usefulness

- Determine if necessary, appropriate and customary technology is being utilized by the Action Center

- Ensure NICE call recording software includes adequate internal controls to protect sensitive information

The City Auditor's Office noted strengths in the following areas:

- Customer service, based on review of recorded calls

- Use of NICE call recording software that is hosted internally and provides reasonable assurance that sensitive data is protected

- Use of ShoreTel telephone management software that can manage the inbound call volume

We noted opportunities for improvement in the following areas:

- Employee training and adequate associated resources to improve efficiency and effectiveness

- Staffing and scheduling to balance absenteeism

- Introduction of a customer survey tool to assess service quality

- Revised use of Amanda software to gain efficiency

- Increased marketing efforts for the Ask Arlington phone application to increase usage

- Expedited error resolution associated with the Ask Arlington phone application software interface to increase efficiency

- Introduction of enterprise call management software to improve efficiency

Details of audit findings, conclusions and recommendations are included in the following report.

Audit Scope and Methodology

The audit was conducted in accordance with generally accepted government auditing standards. The following methodology was used in completing the audit.

- Examined and compared Action Center vs. Citywide absenteeism
- Reviewed current staff training methods
- Assessed how customer feedback is currently obtained
- Reviewed how Amanda software is used by the Action Center
- Examined how the Ask Arlington phone application is used to improve operational efficiency
- Reviewed software interfaces in the Ask Arlington phone application
- Assessed utilization of tools and technology by the Action Center
- Interviewed staff and management at the Action Center

Background

The Action Center was created in January 2007, as the existing City Switchboard was re-branded to include customer service for City services. Prior to this, the City Switchboard staff answered inbound phone calls from citizens and then transferred the calls to applicable individual City departments for resolution. The Switchboard organizational structure was primarily four employees and four telephones, with no access to City departments' systems (i.e. Amanda, Enquesta, Cartegraph, Incode). A timeline and key events relative to development of the Action Center are shown in the table below.

Time	Activity	Employees
Prior to 2007	City Switchboard	4
January 2007	Switchboard branded as Action Center	4
January 2008	Action Center provides Code Enforcement and Spanish customer service	4
July 2008	Action Center provides Municipal Court customer service	5
October 2010	Action Center provides Animal Services customer service	7
October 2010	Introduced expanded customer service 8am to 6pm	7
February 2014	Four part time positions added to the Action Center	7FT 4PT
October 2014	Action Center provides Water Customer Service	12FT 4PT
October 2014	Action Center provides Water dispatch services. No after-hours service	12FT 4PT
January 2015	Saturday service introduced	12FT 4 PT
April 2015	Water dispatch after hour calls outsourced to Signius	N/A
January 2017	Ask Arlington phone application introduced to communicate with the Action Center	N/A

Per management, the Action Center business plan was revised to align with the new "one step planning process" of the Community Development and Planning Department for City services that began in 2007. The one step concept was launched with the restructuring of the Community Development and Planning department and the building permitting process. The goal of the one step program was to provide citizen services via one visit. The Action Center began answering questions about the new permitting process. Since then, the role and scope of the Action Center and its staff has been steadily expanding through the years.

Several phone numbers are available to Arlington citizens to contact the City. The phone numbers and associated City services are listed below:

817-459-6777 - General Switchboard, Code Enforcement, Spanish calls and Municipal Court
817-459-5858 - Animal Services
817-275-5931 - Water Customer Service
817-459-5900 - Water Dispatch Services

When an individual calls one of these numbers, he/she is given a numerical option to choose a service. A numerical option for Spanish service is available for each number. All phone numbers, except Animal and Water Services, include an option to leave a voicemail or enter a phone number

for a call back from a representative, after holding for a specific amount of time. The call back function acts as a place holder in the caller queue, and the phone system automatically dials the individual's number when the representative comes on line. At 15-minute intervals, representatives check the voicemails for needed call backs. Also, the Water customer service number includes an option to make a Water account payment, without speaking to a representative.

Citizens are provided 24-hour service for Water dispatch services. Water dispatch services staff monitor performance of water capital assets, such as water mains that carry water to be delivered to individual homes and businesses. After 5 p.m., Water dispatch customer service is outsourced to Signius, a call center service provider based in Arlington. A review of outsourced Water customer service was deemed beyond the scope of the Action Center audit.

The table below shows the Action Center call volume for calendar years 2016 and 2017, as reported by Action Center management to Internal Audit. The data shown in this table is presented for background information and has not been audited for accuracy. However, detailed audit testing included validation of data reported by Action Center management for a sample time period, which is addressed later in this report. Calls abandoned are defined as those disconnected before reaching an Action Center agent.

	CY2016				CY2017		
	Incoming	Answered	Abandoned		Incoming	Answered	Abandoned
Water Cust. Svc.	134,739	85,339	15,611		142,016	86,689	24,503
Animal Services	44,847	32,285	7,281		41,177	31,250	5,442
Municipal Court	71,121	50,764	9,758		69,094	50,804	8,602
Code	11,615	9,097	1,222		11,383	9,136	1,118
Switchboard	87,658	65,487	13,453		79,844	59,128	14,657
Spanish	14,515	606	2,769		13,715	5,386	2,781

Comparable Call Center Statistics

The Arlington Action Center is a member of a government call center trade group called 311 Synergy Group. Members are governmental 311 and 10-digit call centers. The group gathers statistical data from its members and serves as an advisory entity for its members. The table below shows comparable data for call centers in cities similar in size to Arlington, gathered by the 311 Synergy Group. Other cities in the DFW metroplex are listed separately at the bottom of the table. The data is for CY2016.

City	Population Estimate	# Of Call Taker Staff	Super-visors	Part Time Staff	Staff Turnover %	Call Volume	Calls Answered	Call Abandon-ment Rate %
Arlington	400,000	14	1	4	21.00	361,673	255,548	13.70
Pittsburgh	304,000	3	3	5	8.00	89,665	88,523	0.30
Cleveland	388,000	7	1	0	5.00	213,311	198,765	7.00
Tulsa	395,000	32	3	5	43.00	517,887	472,865	17.00
Wichita	390,000	12	1	5	15.78	189,273	168,261	10.95
Fort Worth	860,000	15	2	*	1.00	255,560	242,780	4.50
Dallas	1.3 Mil	66	8	*	11.00	1,073,496	918,500	12.70
Garland	235,000	17	1	0	*	290,751	241,863	15.48

*not provided

Ask Arlington Phone Application

The Ask Arlington smartphone application was introduced to Arlington residents in January 2017. It is currently available for Android and Apple smartphone operating systems. It is available from the Google or Apple application store. The phone application provides or allows the following for Arlington citizens:

- Request City services or report an issue
- Feedback pertaining to the kindness initiative
- Access to the City website
- Location of City facilities and tourism related information

Prior to the introduction of the Ask Arlington phone application, a Citizen Action Request Form (CARF) was used to submit complaints and requests for City services. As of February 2018, the Ask Arlington phone application had 6,266 users. Users include approximately 170 City employees who use the application to notify the Action Center of issues found throughout the City. In CY2017, a total of 19,469 complaints were received from the phone application.

Audit Summary

Additional resources are needed for the Action Center to operate as a one stop call center incorporating much broader operational objectives than when it initially began as a telephone switchboard. The staff members must be educated and knowledgeable about the operations of Code Compliance, Animal Services, Municipal Court Services and Water Utilities, as well as general Citywide information. These staff members are expected to answer citizen questions, determine action required and initiate work orders, primarily without assistance from the departments.

To achieve the necessary level of knowledge and expertise required to do their jobs effectively, staff must be properly trained and educated. They must also have necessary technology and information resources to accomplish their tasks and achieve the expectations currently established for the Action Center. Staff trainers and training resources are necessary. Also, there appears to be a current need for increased staffing to balance employee absenteeism. Further, professional call center software is desirable to incorporate multiple systems used by the City for resident services, including a centralized knowledge base. These additional resources are expected to be costly and would involve a significant commitment by the City.

In the absence of these needed resources, the Action Center will most likely not be successful in providing call center services to citizens at the level that is currently expected, particularly considering projected growth of the City of Arlington. Expected service shortfalls could include longer hold times for callers, extended time to resolve issues over the phone, high staff turnover, inability to contact the Action Center staff, and instances of work orders that fail to reach work crews for resolution.

In the event these resources are not considered a priority for the City, management will need to reconsider its objectives for the Action Center and adjust performance expectations, accordingly.

The following section outlines detailed audit findings and recommendations.

Detailed Audit Findings

Formal Training

Currently, new employee training at the Action center is limited to observing experienced employees and learning through trial and error when answering citizen calls. A formal training function, including a designated staff trainer, is not in place. Specialized training on use of the Water Utilities' Enquesta system, Municipal Court's Incode system, or the Amanda system used for Code Enforcement and Animal Services is not provided to new employees. Continuous training, on topics such as enhancements to systems, new city programs or new issues affecting citizens are not provided in a formalized manner. Specific training tools, such as workbooks, quizzes to assess subject matter knowledge, or interactive learning tools are also not utilized.

An effective, comprehensive training program is considered necessary for all organizational units. Training programs typically include designated and dedicated staff who are considered subject matter experts. Employees are provided with training materials, such as information booklets and interactive material related to the subject matter. Measurement tools, such as quizzes, are used to assess the effectiveness of the training methods. Continuous training is also necessary for employees to sharpen their existing skills and ensure they are aware of new programs, system updates or enhancements to existing programs.

Even as the role of the Action Center was expanded to provide customer service for Municipal Court and Water Utilities, funding for formal training was not included in the budget. The staff size increased because of service expansion; however, the training was still based on observation and trial and error methodologies.

Some Action Center employees are unable to serve all incoming calls, due to limited training. Inbound calls are divided between Water Utilities' customer service and all other departments. Not all employees are able to serve both segments of inbound calls. Changes and updates to various systems are not communicated, and training not provided, in a timely manner. Program changes in City departments are also not communicated to Action Center staff in a timely manner, resulting in staff being unable to communicate current and applicable information to citizens.

Recommendations:

1. The City Auditor's Office recommends the Action Center Manager seek resources for formal training, to include a designated trainer, effective training materials, and cross training for all employees.

2. The City Auditor's Office recommends the Action Center Manager coordinate with Water Utilities, Municipal Court, Code Enforcement and Animal Services subject matter experts, as well as system administrators for Enquesta, Amanda and Incode, to provide periodic specialized training to Action Center agents.

Customer Survey Tools

A methodology to obtain caller feedback, regarding phone service quality, is not being utilized at the Action Center. Most call center environments include a telephone option that allows callers to offer their feedback on service quality.

Citizen feedback is currently limited to an annual survey conducted by the City. The survey is sent to selected citizens across the City. The survey solicits feedback regarding whether the citizen has utilized the Action Center for City services. Since the survey is not sent specifically to users of the Action Center, the feedback is not very helpful in improving customer service.

Inbound and outbound call centers employ various methods to obtain customer feedback on phone service quality. The feedback is then used to address specific service quality issues and improve customer satisfaction. The most common method of obtaining feedback is the telephone option. The caller can choose the option at the end of their call to give feedback. The phone menu typically includes push button options to assess service quality, and a recording option to leave any voice feedback on specific issues.

The Action Center currently uses ShoreTel Software to manage the voice over internet (VoIP) telephone system. The system is capable of routing calls based on numerical options. It is also capable of recording voicemail.

The Action Center has not utilized real time survey techniques since its inception. Due to the lack of customer survey tools, the Action Center is unable to continuously improve customer service, based on real time caller feedback. Information gathered from such tools would allow the opportunity to coach employees on specific customer service issues, based on caller feedback.

Recommendation:

3.   The City Auditor's Office recommends the Action Center Manager, with assistance from the City's Information Technology Department, enhance the ShoreTel Telephone system to obtain real time caller feedback on service quality.

Staff Scheduling

The staff scheduling process needs to include assessing the average sick time used per employee and using the information to optimally staff the center to balance absenteeism.

An analysis of sick leave used by Action Center staff was performed for calendar years 2016 and 2017. The leave categories examined included substantiated and unsubstantiated sick leave, family illness leave (substantiated and unsubstantiated), as well as authorized and unauthorized leave without pay. Vacation time was excluded from the analysis, since these absences are planned and required resources are scheduled in advance.

The following was noted:

Leave Used* (Avg. hours per year per Employee)	Action Center	City-wide
Calendar year 2016	110	79
Calendar year 2017	94[1]	78

*Includes the categories listed in the above paragraph (excludes vacation time)

The City of Arlington grants 15 sick leave days (120 hours) per year for full-time employees. Part-time staff members are not granted sick leave. Employees may use sick leave at their discretion, and the leave is categorized as substantiated or unsubstantiated. Sick leave is usually substantiated by a physician. Unsubstantiated sick leave is limited to 48 hours per year. Other rules for sick leave are outlined in detail in the City's personnel policy manual.

Use of allowed sick leave cannot be considered excessive, since it is granted to the employee by the City. Leave that exceeds the amount granted to each employee is classified as authorized and unauthorized leave without pay. The amount of leave without pay in the Action Center was a total of 82 hours in 2016 and 157 hours in 2017. These hours appear negligible, considering total man hours of approximately 41,600 annually at the Action Center.

Action Center management stated that unscheduled staff leave has an impact on achieving staffing levels needed to provide adequate customer service to Arlington citizens. A review of the use of leave, excluding vacation time, indicates higher leave use averages at the Action Center, compared to leave use by employees citywide. Use of sick leave causes sudden, unplanned staffing shortages, which results in having less staff to answer incoming phone calls from Arlington citizens. Sick leave is called in on short notice, usually just before the shift begins, making it difficult for management to find alternative staff to fill in for absences.

Balancing the above average leave use may require increasing the overall staff count by either a full time or part-time employee, based on average leave use, as a means of gaining additional labor capacity.

Recommendation:

4. The City Auditor's Office recommends the Action Center Manager consider assessing average sick time utilized per employee and schedule staff on an overfill basis, accordingly.

Employee Performance Goals

Performance goals for Action Center agents do not include metrics tied to goals the Action Center endeavors to attain, related to inbound call volume and customer service. Currently, management has established performance goals primarily related to employee training. Employees are given the choice of setting other goals as part of the self-evaluation process. Most employees elect not to set any

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[1] The leave usage in the Action Center declined from 2016 to 2017 and may be related to recent employment engagement efforts by the Management Resources department.

performance goals for themselves. Examples of performance goals for Action Center employees are listed below.

- Goals to cross train on customer service for various departments (Water, Animal Services, Court or Code Enforcement)
- Enroll in courses offered by the City's Human Resources Department, such as courses pertaining to personal growth
- Minimize wrap up time from one call to another. Wrap up time is classified as time taken to document and notate customer accounts after contact

Reviewing and assessing performance goals are part of the annual employee performance review process. Reviews are typically completed and documented by supervisors towards the end of each fiscal year, submitted to Human Resources and retained in personnel files.

The Arlington Action Center strives to attain many goals pertaining to incoming call volume and customer service. Management periodically reports statistical data related to these goals and results attained. Some categories and goals they intend to achieve are shown below.

- Lower abandoned call ratio (minimize call hang ups by citizens due to long wait time to reach an operator)
- Higher calls answered ratio
- Lower wait time for an operator
- Lower talk time for each call

Achieving these goals would result in an increase of calls answered by the Action Center and a decrease in customers disconnecting calls due to lack of service.

The Action Center has not established specific performance goals for its employees directly related to its objective to improve customer service and increase the number of phone calls answered. Currently, employees primarily establish their own goals. It is important that the Action Center establish employee performance goals that are aligned with the department's goals and objectives. Additionally, specific resources to monitor and coach individual employees in attaining numerical and statistical goals have not been established.

Currently, the goals established for individual employees have a minimal effect on what the Action Center is trying to achieve.

Recommendation:

5. The City Auditor's Office recommends the Action Center Manager establish individual employee performance goals that are aligned with the Action Center's desired achievements and seek resources to monitor and coach employees to attain their goals on an ongoing basis.

Enterprise Call Center Software

The Arlington Action Center does not utilize enterprise call center software, which is a necessary tool for achieving efficient and effective customer service in a call center environment. Action Center

employees currently access customer records individually from four different software systems, without an integration process.

Enterprise call center software acts as a dashboard and would integrate the various software currently used by Action Center staff. Action Center staff utilizes Amanda, Incode, Enquesta and Cartegraph software to access customer accounts, generate work orders and update customer accounts in varying systems, individually. Enterprise Call Center software is capable of extracting data from varying systems, providing a single point access to information from various systems, and updating other systems with Action Center agent input. The software is also capable of linking work orders to customer accounts. As the number of inbound calls for City services increases, it is cumbersome to access four different systems individually to provide customer service and initiate work orders. Enterprise call center software is also capable of properly routing inbound calls and integrating them with the applicable software.

A centralized knowledge base is also included in enterprise call center software. It incorporates key search words, courses of action for common problems, updates to programs and system operations instructions.

The Action Center began as a "call one number" for various City of Arlington services in 2006. It consisted of four agents, an inbound phone system and callers were transferred to individual departments for service. However, as the Action Center took on the task of servicing the callers themselves, necessary tools such as enterprise call center software were not acquired, due to lack of funding.

Without adequate tools, providing customer service is more cumbersome, as agents must access data from several systems and update them individually. Due to a limited number of agents available to answer inbound calls, the time spent with each caller is lengthier and results in increased hold times for the other callers and a higher call abandonment rate.

Recommendation:

6. The City Auditor's Office recommends the Action Center Manager research Enterprise Call Center Software that aligns with the needs of the Arlington Action Center and through the budgetary and IT governance process seek necessary approval for procurement.

Use of Amanda Software

Action Center agents use Amanda software to track the types of incoming calls they receive. The calls are documented to track customer contacts and discussions with the customers. It also helps ensure good customer service in the future. For instance, statistical data associated with incoming calls is distributed to individual departments to assist in their proactive operational planning. For example, if a large volume of incoming calls involves loose animals, that data is given to the Animal Services Division to plan staffing necessary to respond to loose animals in Arlington.

When calls are received, the agents create a record, referred to as a folder in Amanda software, and document the nature of the call received, such as a water bill or court citation inquiry. In addition to

documenting and tracking the call in Amanda software, they create a secondary folder for any associated work order in Amanda or another software.

The work orders related to Animal Services and Code Enforcement are processed in Amanda and routed to appropriate field service personnel for service. Similarly, work orders related to Water customer calls are initiated in Enquesta software. Although Action Center agents do not currently document customer contacts in Incode software for Municipal Court calls, this appears to simply be due to a lack of coordination between Action Center and Municipal Court on system use and coordinated training, as the agents have access to Incode software.

We noted further duplication related to Animal and Code issues. If the Action center receives a call about an existing Animal Services or Code Enforcement incident with a pending work order, the secondary, existing folder is not updated in Amanda. Instead, the new call is recorded in Amanda for tracking purposes, and a new work order is created.

The current call documentation process is redundant, considering Enquesta, Amanda and Incode software all have the capability of tracking Action Center staff activity based on user ID and activity codes in each system. The initial calls can be documented in the related, appropriate software only, without the additional documentation in Amanda. The current method of documenting the calls both in Amanda and other software was introduced when the Action Center customer service expanded to include Water Utilities and Municipal Court customers. This duplicative method is time consuming and takes the agent away from answering incoming phone calls.

Recommendations:

7. The City Auditor's Office recommends the Action Center Manager discontinue use of Amanda software for tracking inbound customer calls and begin documenting customer contacts directly in Amanda, Enquesta and Incode software, as applicable.

8. The City Auditor's Office recommends the Action Center Manger coordinate with Amanda, Enquesta and Incode system administrators to extract data on Action Center agent activity for tracking, statistical, and operational improvement purposes.

Call Volume Accuracy

Action Center management gathers call volume data from the ShoreTel phone software to assess productivity. The data is also provided to senior management periodically. The ShoreTel software only retains detailed call statistics for a 90-day period. As a result of Internal Audit's review, analysis and reconciliation of the call volume data, the following was noted:

- Inbound phone calls transferred to voicemail by the customers themselves, or system forced to voicemail after a 4-minute hold, are not reflected in call volume data
- Inbound calls transferred by customer or forced to voicemail by the system that result in the customer hanging up instead of leaving a message for customer service are not considered an abandoned call
- Reported inbound phone call volume is not currently reconciled to inbound call volume at the City's phone exchange to ensure reporting accuracy

Inbound call volume from March 1, 2017 to December 31, 2017 was selected for detailed review by Internal Audit. The source data was generated from ShoreTel software and compared to data reported to senior management by the Action Center.   Summary data for the period March 1, 2017 to December 31, 2017 is listed below and illustrates the variance between source data and reported data.

	Source Data	Action Center Data
Total Inbound	**296,937**	**293,994**
Calls Answered	208,901	186,256
Calls Abandoned	43,221	43,796
Calls Transferred or System Forced to Voicemail	42,627	Not Reported
Other	2,188*	Not Reported

 *Call back request/left message

Additionally, inconsistencies were noted in call volume statistics retained by the Action Center used to measure productivity. Action Center management compiles inbound call volume, for purposes of measuring productivity, and reports to senior management. Call volume data is generated from the ShoreTel software, then sorted by department for reporting. The data set below shows the allocation of calls received by department as originally reported to management. The primary error noted here is the individual departmental call volume does not equal the total call volume shown.

	CY 2016	CY 2017
Total Call Volume	361,673	356,766
Service Type	**CY2016**	**CY2017**
Water Customer Service	130,120	143,457
Animal Services	32,168	31,435
Municipal Court	70,672	67,460
Code Enforcement	9,052	9,122
Switchboard	86,147	80,044
Spanish	12,623	13,922
Calculated Total	**340,782**	**345,440**

Note: These numbers are unrevised (as originally provided to senior management) and do not match the revised numbers provided to Internal Audit and presented on page 4 for background information.

Calls transferred or system forced to voicemail have been excluded from data reported to management, since the transfers were not a result of activity by Action Center employees. Reconciliation to source data (inbound call volume to the city exchange) has never been performed and has not been established as a data validation method. Further, individual department call volume statistics appear to include mathematical errors, compounded by lack of reconciliation to source data that would have detected errors in a timely manner.

Most of the calls transferred to voicemail are system initiated (forced) after holding for four minutes. Longer hold times could reflect customer service delays. These transferred calls should be

included to measure actual customer service efficiency. Further, lack of reconciliation to source data compromises accuracy in reported data.

Recommendations:

9. The City Auditor's Office recommends the Action Center Manager include transferred call volume and instances of transferred disconnections in their data used to assess performance efficiency.

10. The City Auditor's Office recommends the Action Center Manager, with assistance from Information Technology staff, reconcile reported call volume to source data generated by the City phone exchange to ensure accuracy.

11. The City Auditor's Office recommends the Action Center Manager review and reconcile individual departmental call volume statistics to Shortel source data to improve accuracy and reliability of reported data.

Ask Arlington Phone Application Marketing

The Ask Arlington phone application has been available to Arlington residents since January 2017. Software records indicate there is a total of 6,266 registered users of the Ask Arlington phone application. It is encouraging that residents are using the application; however, compared to over 380,000 Arlington residents, this number appears low.

Arlington residents can use the Ask Arlington phone application to communicate with the City and submit complaints, such as those related to Animal Services, Code Enforcement, Water Utilities, and the Public Works Department. The phone application is available as a download for Android and Apple smart phones. Citizens may also submit issues on the City website and may download the Ask Arlington app from the website.

Residents are using the phone application to submit complaints about loose animals; code violations, such as weeds and grass; needed street repairs, such as potholes; and utility line locates for the Water Department. A total of 19,469 complaints were received via the phone application in CY2017. Upon receipt of a citizen complaint, the phone application software can transfer the complaint in the form of a work order to software used by individual departments. These include Amanda software for Animal Services and Code Enforcement operations and Cartegraph software for the Public Works Department and Water Department's capital asset related work orders.

Marketing of the software is currently the responsibility of the Action Center and the Office of Communications. According to management, *"A robust marketing effort for the Ask Arlington App, included: a media relations campaign resulting in dozens of TV and print stories, extensive social media posts on multiple platforms over an 18-month window, a video PSA promoted online and on the City's cable channel, multiple web articles/news releases, more than 24 public presentations, and internal communication with City staff."* Despite the active marketing campaign, the number of users has not met expectations. Additional social media marketing and PSA billboard opportunities are suggested to grow the app use base.

Increased use of the phone application by Arlington residents can reduce the phone call volume to the Action Center. Also, citizens can monitor progress associated with the complaint-related work orders, through the Ask Arlington application.

Recommendation:

12. The City Auditor's Office recommends the Action Center Manager, in collaboration with the City's Office of Communications, consider enhancing marketing efforts for the Ask Arlington phone application that will result in an increase of users.

Ask Arlington Phone Application and Public Works Complaints

Some citizen complaints submitted through the Ask Arlington phone application, intended for the City's Public Works Department, are not shown as work orders in Cartegraph software. For CY2017 Ask Arlington software shows 3,448 incoming complaints that warrant work orders related to services offered by the City's Public Works Department. For the same period, Cartegraph software used for work order generation shows approximately 1,300 work orders originating from the Ask Arlington phone application. Citizen complaints related to the Public Works Department include pot holes in streets, street light issues, graffiti, traffic signal issues, storm water problems, and litter in City streets.

As noted, citizens can submit complaints and concerns to the City through the Ask Arlington phone application. The phone application then transfers the complaints via an interface to software used by individual departments to generate work orders to initiate problem resolution. For the Public Works Department, the work orders are sent to Cartegraph software. Once the work orders are in Cartegraph software, they are assigned to work crews for resolution.

Due to compatibility issues, the interface used to transfer data between the Ask Arlington phone application and Cartegraph software is not reliable and has experienced failures since its introduction in January 2017. Management explained that updates to the Ask Arlington phone application, as well as the use of two versions of Cartegraph software, are the primary causes of the failures. Cartegraph system administrators perform manual data transfers in the event of failures. However, lack of reconciliation between the two systems, in the event of interface failures, has contributed to delayed detection of missing data in Cartegraph.

For CY2017, there were approximately 2,140 work orders missing in Cartegraph. A review of Ask Arlington work orders showed that approximately 5% in a sample of 500 complaints were duplicates. Duplicate complaints occur when more than one resident submits the same complaint, based on the problem location address. Considering the duplicates, approximately 2,030 work orders were actually missing from Cartegraph records for CY2017.

The missing work orders may result in additional calls to the Action Center and potentially unsafe situations for the public, as well as poor citizen satisfaction.

Recommendation:

13. The City Auditor's Office recommends the Action Center Manager, with vendor assistance, ensure resolution of interface errors between the Ask Arlington phone application and

Cartegraph software; and manually review and reconcile work orders with assistance from Cartegraph system administrators to ensure accurate work order transfer between the Ask Arlington Phone Application and Cartegraph software.

CITY OF ARLINGTON
ACTION CENTER OPERATIONS AUDIT
AUDIT RECOMMENDATIONS AND MANAGEMENT RESPONSE

AUDIT RECOMMENDATION	CONCUR/DO NOT CONCUR	MANAGEMENT'S RESPONSE	RESPONSIBLE PARTY	DUE DATE
1. *The City Auditor's Office recommends the Action Center Manager seek resources for formal training, to include a designated trainer, effective training materials, and cross training for all employees.*	Concur	The need for training has been acknowledged in the Action Center, although a formal request for additional resources to do so has not been requested. These resources will be requested as a part of the FY19 budget process.	Action Center Manager	January 2019
2. *The City Auditor's Office recommends the Action Center Manager coordinate with Water Utilities, Municipal Court, Code Enforcement and Animal Services subject matter experts, as well as system administrators for Enquesta, Amanda and Incode, to provide periodic specialized training to Action Center agents.*	Concur	Additional opportunities to engage with the Action Center's customer departments will be added to the training curriculum. Meetings have already begun with these stakeholders in formulating an action plan.	Action Center Manager/Action Center Supervisor	January 2019
3. *The City Auditor's Office recommends the Action Center Manager, with assistance from the City's Information Technology Department, enhance the ShoreTel Telephone system to obtain real time caller feedback on service quality.*	Concur	The Action Center manager will meet with the assigned business analyst to begin possible phone application improvements.	Action Center Manager	January 2019

AUDIT RECOMMENDATION	CONCUR/DO NOT CONCUR	MANAGEMENT'S RESPONSE	RESPONSIBLE PARTY	DUE DATE
4. The City Auditor's Office recommends the Action Center Manager consider assessing average sick time utilized per employee and schedule staff on an overfill basis, accordingly.	Concur	There is an existing practice in the Action Center to utilize historical call data in determining time off for vacations and other appointments. Additional staffing resources have been requested in the FY19 budget process to create the capacity to staff adequately to cover for times when employee absence cannot be avoided.	Action Center Manager/Action Center Supervisor	January 2019
5. The City Auditor's Office recommends the Action Center Manager establish individual employee performance goals that are aligned with the Action Center's desired achievements and seek resources to monitor and coach employees to attain their goals on an ongoing basis.	Concur	We do have performance guidelines; however, incorporating specific call center performance measures will be part of the evaluation process for individual staff members going forward. We are working with staff to find common areas to measure.	Action Center Manager/Action Center Supervisor	January 2019
6. The City Auditor's Office recommends the Action Center Manager research Enterprise Call Center Software that aligns with the needs of the Arlington Action Center and through the budgetary and IT governance process seek necessary approval for procurement.	Concur	The Action Center manager will meet with the assigned business analyst to begin possible phone application improvements. However, due to the cost for such an application there will also be an effort to investigate other more cost-effective methods to help improve call center efficiencies.	Action Center Manager	January 2019

AUDIT RECOMMENDATION	CONCUR/DO NOT CONCUR	MANAGEMENT'S RESPONSE	RESPONSIBLE PARTY	DUE DATE
7. **The City Auditor's Office recommends the Action Center Manager discontinue use of Amanda software for tracking inbound customer calls and begin documenting customer contacts directly in Amanda, Enquesta and Incode software, as applicable.**	Concur	We have already implemented this recommendation.	Action Center Manager	Completed April 2018
8. **The City Auditor's Office recommends the Action Center Manger coordinate with Amanda, Enquesta and Incode system administrators to extract data on Action Center agent activity for tracking, statistical, and operational improvement purposes.**	Concur	We have already implemented this recommendation.	Action Center Manager	Completed April 2018
9. **The City Auditor's Office recommends the Action Center Manager include transferred call volume and instances of transferred disconnections in their data used to assess performance efficiency.**	Concur	As per the audit team's recommendation, both transferred call volume and disconnects will be included. Assistance from the Network Information Team may be required.	Action Center Manager/ Network Information Technology Team	June 2018
10. **The City Auditor's Office recommends the Action Center Manager, with assistance from Information Technology staff, reconcile reported call volume to source data generated by the City phone exchange to ensure accuracy.**	Concur	The Action Center manager will meet with the assigned business analyst to begin possible phone application improvements	Action Center Manager	June 2018

AUDIT RECOMMENDATION	CONCUR/DO NOT CONCUR	MANAGEMENT'S RESPONSE	RESPONSIBLE PARTY	DUE DATE
11. The City Auditor's Office recommends the Action Center Manager review and reconcile individual departmental call volume statistics to Shortel source data to improve accuracy and reliability of reported data.	Concur	The Action Center manager will meet with the Network Information Technology team to assist in creating a check and balance process for statistical call volume report accuracy.	Action Center Manager/ Network Information Technology Team	June 2018
12. The City Auditor's Office recommends the Action Center Manager, in collaboration with the City's Office of Communications, consider enhancing marketing efforts for the Ask Arlington phone application that will result in an increase of users.	Concur	In coordination with the Office of Communication, additional marketing efforts have already been enacted, including: an updated PSA billboard, additional web and social media posts, and boosting the Ask Arlington App PSA on YouTube. These were all cost-effective options that were implemented with existing funding.	Marketing Communications Manager	Completed May 2018
13. The City Auditor's Office recommends the Action Center Manager, with vendor assistance, ensure resolution of interface errors between the Ask Arlington phone application and Cartegraph software; and manually review and reconcile work orders with assistance from Cartegraph system administrators to ensure accurate work order transfer between the Ask Arlington Phone Application and Cartegraph software.	Concur	The Action Center manager will schedule periodic meetings with the Public Works and Transportation Information Services coordinator. If integration issues exist, The Action Center manager will make the phone app vendor aware immediately to ensure the issue is corrected in a timely manner.	Action Center Manager	July 2018