City of Alexandria, Virginia

MEMORANDUM

DATE: JUNE 12, 2019

TO: MARK B. JINKS, CITY MANAGER
DEBRA R. COLLINS, DEPUTY CITY MANAGER
LAURA B. TRIGGS, DEPUTY CITY MANAGER
MICHAEL. L. BROWN, CHIEF OF POLICE
JEREMY S. McPIKE, DIRECTOR DEPARTMENT OF GENERAL SERVICES

FROM: ROBERT SNYDER, ACTING CHIEF INTERNAL AUDITOR
JENNIFER KANE, QUALITY ASSURANCE DIRECTOR, DEPARTMENT OF COMMUNITY AND HUMAN SERVICES

SUBJECT: REPORT OF INQUIRY – FLEET CALIBRATION PROGRAM (ROI 19-02)

Please find the attached referenced audit report. On January 23, 2019 the Office of Internal Audit was directed by the City Manager to conduct a review of the Department of General Services (DGS) Fleet Service Division's (FSD) calibration program. FSD supervisors determined that an employee had conducted certain calibrations on four-wheel drive Alexandria Police Department (APD) vehicles which failed to comply with proper procedures. The objectives of our review were to determine what regulations, policies and procedures govern the calibration of law enforcement vehicles, determine if any procedures were violated, and develop recommendations to ensure proper functioning of the program in the future.

Our review determined the following: 1) FSD did not have written policies governing the calibration program, 2) FSD utilized informal procedures based on factory provided training which were inconsistently applied, 3) there was a lack of formal communication between FSD and APD regarding the program, and 4) the lack of formal communications contributed to the failure to meet program objectives for accurate and timely calibrations.

We recommended that the Department of General Services create written policies and procedures, retrain staff members, and develop a quality control process to ensure all elements of the program are operating properly. We recommended that the DGS and the APD formally meet and create written program objectives for the calibration program. The program objectives should include scheduled meetings and formal notifications to ensure program compliance. Finally, we are recommending that the Police Department undertake a review of all citations issued using vehicles identified in the conclusion section of our report.

We would like to thank the Fleet Services Division Chief and Police Department Fleet Sergeant for their assistance during our review. If you would like to meet to discuss the findings of the review, please contact me at extension 4743.

Office of Internal Audit REPORT

Report of Inquiry
Fleet Calibration Program
June 12, 2019

June 12, 2019 **ROI19-02**

Review of Fleet Calibration Program

ROI 19-02

This Audit Report has been approved for release and has been transmitted to the individuals listed below.

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June 12, 2019

EXECUTIVE SUMMARY

What We Reviewed

Law Enforcement vehicles that conduct speed enforcement through pacing or moving radar are required to have their speedometers calibrated per State Code. In October 2017, the Department of General Services (DGS) Fleet Services Division (FSD) identified an incident where it appeared that an FSD employee performed calibrations in contravention of proper procedures. Improperly calibrated vehicles present a risk to the Alexandria Police Department (APD), as traffic citations issued with uncalibrated vehicles could be contested in court. To ensure proper functioning of the calibration program, we interviewed staff members, examined policies and procedures, and reviewed program records. Our review was confined to records of calibrations conducted on FSD's four-wheel drive dynamometer system. We examined records from the installation of the system to February 20, 2019 when DGS conducted additional training of staff and tightened calibration standards.

What We Found

Our review identified that FSD did not have written policies governing the program. FSD utilized informal procedures based on factory provided training. Interviews with staff and review of records indicated an inconsistent application of the informal procedures. In addition, staff members had difficulty articulating ethical concepts or an understanding of the ramifications of failure to properly complete the functions of the calibration process. After FSD had detected the incident of improperly conducted calibrations in October 2017, the employee continued to be assigned calibration duties and subsequently performed 109 additional calibrations. When the APD and the City Manager became aware that this employee was still performing calibrations in December 2018, they voiced concern to DGS and the employee was subsequently assigned other duties. We reviewed the five (5) calibrations involved in the above stated incident and then examined records to determine if other calibrations or employees were involved. We identified 32 other calibrations which were performed in a suspiciously short time period. In addition to these questionable calibrations, we identified 107 calibrations which exceeded a factory training derived 3-MPH calibration variance.

The program also contained lack of formal communication between FSD and APD. No written expectations for the program were established by either department. The APD depends on FSD for their regular preventative maintenance of their fleet. APD assumed that tests provided by FSD were accurate and did not feel the need to conduct audits or reviews of the program. Meetings and communications focused on developing a response framework regarding the improperly conducted

calibrations and did not focus on overall program objectives. The communication that did take place were done in an informal manner through email or word of mouth.

The major requirement of the program is derived from Virginia State Code §46.2-882, which states that calibrations must be performed every six (6) months. Our review identified 160 vehicles which did not comply with the six (6) month testing requirement. The calibration process is part of regularly scheduled preventative maintenance procedures. Notification of preventative maintenance is provided by email and is often submitted to the APD on or near the last workday of each month. FSD staff members stated that this practice maximizes their ability to accurately schedule preventative maintenance but may not provide the APD the ability to ensure all vehicles are present for services.

What We Recommend

We recommend that the Department of General Services update their *Fleet Management Standards* manual to include written policies and procedures for the calibration program. The written policies and procedures must include development of written step by step instructions, checklists, signage, and other training material to ensure consistent testing. We also recommended that the Department of General Services retrain staff members on the calibration process, ethics in the workplace, Freedom of Information Act (FOIA) and establish regular staff meetings to increase communication within the department.

We recommend that the Department of General Services, and the Alexandria Police Department formally meet and create written program objectives for the calibration program. The program objectives should include scheduled meetings and formal notifications to ensure program compliance. We recommended that the Alexandria Police Department update Directive 6.4 "*Vehicle Use and Maintenance*" and 11.21 "*Traffic Enforcement*" to formalize the calibration program. Finally we recommend that the APD review all citations associated with the calibrations identified in the conclusion section of our report.

Fleet Calibration Program

FY 2019

June 12, 2019

ROI 19-02

Fleet Calibration Program
ROI 19 – 02
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Background

In October 2017 the Department of General Services (DGS) Fleet Services Division (FSD) identified an incident in which calibration reports performed by a single employee were performed in contravention of proper procedures. Specifically, the employee used the same vehicle to generate calibration reports for five (5) vehicles. The incident was detected by an FSD supervisor who observed that the vehicle's location had not changed despite submission of tests for other vehicles. FSD reviewed records for a six (6) month period from April 2017 to October 2017 to determine which vehicles were calibrated by the employee or other vehicles that may have been improperly calibrated. FSD provided this information to the Alexandria Police Department (APD) who conducted their own internal review to determine which citations may have been affected. During this time period the APD suspended enforcement using pacing and moving radar while they recalibrated the effected vehicles.

FSD calibrates law enforcement vehicles using dynamometer systems in order to comply with Virginia State Code Section §46.2-882. This Code Section states that vehicles used for speed enforcement will be calibrated every six (6) months. Citations issued by law enforcement agencies using uncalibrated vehicles could be contested in court.

The dynamometer system uses high-speed rollers in conjunction with a computer system to confirm that the vehicles speedometer matches actual speed within specified tolerances. During the calibration, a technician accelerates the vehicle to various speeds on the dynamometer, while matching the speedometer reading to the speed indicated by the dynamometer screen. Review of records, interviews with staff, and observation of the calibration process indicated that vehicles rarely if ever fail to meet calibration standards, and if they do the main cause is operator error. Vehicles that do fail may require replacement of instrument panel components or may have faulty tires. If a vehicle does fail the calibration it would be repaired and retested until it meets calibration standards. The tests in question were conducted using a 4WD dynamometer purchased from the Mustang corporation in 2016 for use with the City's all-wheel drive (AWD) Ford Interceptor and Explorer vehicles.

Objective, Scope, and Methodology

The objective of our review was to determine what regulations, policies and procedures govern the calibration of law enforcement vehicles, determine if any procedures were violated, and develop recommendations to ensure proper functioning of the program in the future.

Scope, and Methodology

We examined records from the installation of the 4WD dynamometer system on March 23, 2016 to February 20, 2019 when DGS conducted additional training of staff and tightened the calibration variance. Our review was confined to records of calibrations conducted on FSD's 4WD dynamometer system. The conclusions expressed in our report were derived from interviews with staff members, review of policies and procedures, and review of records related to the calibration program. We did not review other Fleet Services Division or Alexandria Police Department procedures and will express no opinion on their compliance or lack thereof.

Findings, Conclusions, and Recommendations

Lack of Written Policies and Procedures

The City of Alexandria's vehicle calibration program is hampered by lack of written policies and procedures. Virginia State Code §46.2-882 discusses various systems used for traffic speed enforcement but is silent on acceptable variances allowed during the calibration process. The code section does require that the speedometer of the vehicle will be calibrated every six (6) months. The FSD provided a copy of their draft *"Fleet Management Standards Manual"* which provides guidance on general administration, personnel administration, shop operations-preventative maintenance and repair, fuel operations, and parts management and operations, but does not reference the calibration program. FSD utilizes an informal procedure derived from training received from the vendor to perform calibrations. The most critical requirement of FSD's calibration program was the use of a 3-MPH calibration variance between the vehicle's speedometer and the dynamometer. This variance was developed based on training received from the manufacturer when the system was installed. Any calibration that varies from this standard requires a retest.

After detection of the problem in October 2017, FSD implemented a corrective action plan which included additional supervisory review, training of notaries, distribution of workload, and installation of video surveillance cameras. Although these measures enhanced the internal controls surrounding the program, they did not include written step by step instructions, checklists, signage, and other training material to ensure consistent testing. Interviews with staff members indicated lack of understanding of the requirements for successful calibration, lack of awareness of the importance of the program and ramifications of failure, lack of quality assurance measures, and in one (1) instance a disregard for the consequences. Some FSD employees were unable to properly articulate concepts regarding ethical standards and the Freedom of Information Act (FOIA) which may have contributed to this incident and the lack of awareness regarding the potential cost to the City. Our investigation also identified that the FSD is currently operating without the benefit of a Fleet Services Supervisor whose position has been

vacant since October 2018. The vacancy has caused other staff members to assume the supervisor's duties which may reduce the ability of other staff members to perform quality control processes.

On February 20, 2019, FSD conducted maintenance of the 4-WD dynamometer and retraining of staff members using a manufacturer's representative. Due to a winter storm event, not all staff members were retrained and personnel from the Police Department were not in attendance. At that time the calibration variance for the dynamometer system was changed from a 3-MPH calibration variance to a 2-MPH variance. This change was made to standardize the calibration variance with standards that APD uses for their hand-held radar systems used by their motorcycle unit. Although the State Code is silent to the calibration variance, a closer tolerance is now obtainable due to the increased sophistication of the vehicles in the law enforcement fleet.

The APD depends on FSD to provide maintenance to their fleet of patrol cars, motorcycles, special units, and other non-emergency vehicles. Similar to FSD, the APD does not have a written policy governing the calibration program. APD Directives 6.4 "*Vehicle Use and Maintenance*" and 11.21 "*Traffic Enforcement*" contain relevant sections that should reference the calibration program. Both directives are silent as to the standards necessary to ensure compliance with State code. The APD assumed that calibration reports they receive were completed in accordance with proper procedures and were passing tests. As stated above, FSD utilized a 3-MPH calibration variance until February 20, 2019. The APD stated that this 3-MPH standard was adequate for calibration testing, but with the acquisition of newer vehicles a tighter standard may be obtainable. During the course of our review the APD indicated that their motorcycle unit utilized a 2-MPH calibration variance for use with their hand-held radar units. This standard is used during radar training provided to officers and if implemented would allow for a uniform standard. Research indicated that other law enforcement organizations, most notably the Virginia State Police, utilize a 2-MPH calibration variance. FSD's change to the 2-MPH calibration variance allows for a uniform standard to be reflected in APD's written directives.

Questionable Calibrations

In October 2017 a supervisor noticed that a vehicle was parked on the dynamometer machine for an extended period of time. FSD reviewed calibration records and determined that a single employee utilized the same vehicle to perform calibrations on multiple vehicles. We reviewed records extracted from the dynamometer system in order to verify FSD's analysis. We identified calibrations on five (5) separate vehicles that were associated with the incident. The employee continued to conduct calibrations until January 3, 2019. By which time 109 additional calibrations had been completed before the APD and the City Manager became aware and voiced concerns regarding the validity of calibrations conducted by this employee. We believe that the

APD should review and void citations issued by officers using these vehicles until they were recalibrated by a different employee. (See Condition #1 & #2 Page 9)

In an effort to confirm that this incident was not widespread or involved other employees, we reviewed records generated from the dynamometer machine. Using time series analysis, we identified calibrations that were performed on multiple vehicles in a short period of time by individual employees. Although a surveillance camera system had been installed in the dynamometer bay, we were unable to positively verify that 32 calibrations were properly performed. We believe that the APD should review and void citations issued by officers using these vehicles until they were recalibrated. (See Condition #3 Page 10)

Calibration Variances

During our review of the calibration reports we identified 107 calibrations that exceeded the FSD 3-MPH variation requirement. Interviews with technicians assigned to perform calibrations, indicated that there was inconsistent understanding of this 3-MPH requirement. Staff members charged with reviewing completed calibrations also had problems fully articulating the requirements for passing tests. DGS did not have written step by step instructions, checklists, signage, and other training material that could have assisted the employees with identification of failing tests. We believe that the APD should review and void citations issued by officers using these vehicles until the vehicles were recalibrated in accordance with the correct calibration variance. (See Condition #4 Page 11)

On February 20, 2019 the contractor who installed the system performed maintenance on the dynamometer and conducted refresher training of staff members. The calibration variance was changed from 3-MPH to 2-MPH in order to standardize the calibration variance with standards that APD uses for their hand-held radar systems used by their motorcycle unit. Similar to the older 3-MPH requirement, staff members had difficulty articulating the new standard. We believe that written step by step instructions, checklists, signage, and other training material must be prepared, and staff retrained to ensure consistent application of the new standards.

Lack of Inter-Departmental Communication

The calibration program has been inhibited by lack of formal communications between FSD and the APD. Interviews indicate that coordination between FSD and APD began with discussions of the requirement to install the new system due to the acquisition of the Ford Police Interceptor and Explorer type all-wheel drive (AWD) vehicles. Staff members could not confirm occurrence of formal meetings after the acquisition of the dynamometer system. Communication between departments appears to be limited to the submission of *Preventive Maintenance Due* lists which.

provide information on when each unit must be calibrated, individual email traffic regarding specific incidents, and passing conversation between FSD and APD staff members.

When the incident was detected, FSD developed a corrective action plan to ensure program compliance. This corrective action plan does not appear to have been provided to APD in its entirety. Information was conveyed to the APD via email or word of mouth, but high-level meetings to discuss the calibration program as a whole did not occur. The main piece of information provided to APD was the list of vehicles that the employee calibrated in the prior six months before the incident. Based on this information the APD returned vehicles to FSD for retesting. Interviews with FSD staff indicated that they felt that if they recalibrated all vehicles that the employee had worked on for the prior six (6) month period, that they would capture all potentially inaccurate calibrations. After the vehicles were recalibrated, FSD continued to use the same employee involved in the incident to conduct calibrations. A major consequence to the lack of communications between FSD and APD was the failure to take into account a common legal principle, that any subsequent calibrations produced by the employee would also be considered tainted evidence which could be contested in court. The APD and the City Manager became aware that the employee was still conducting calibrations in late December 2018. The employee conducted his last calibration on January 3, 2019 and was reassigned to other duties.

APD staff members indicated that they felt that calibration records produced by FSD were accurate and indicated passing tests, otherwise they would not have been submitted. Interviews with APD staff also indicated concern with the calibration program and general maintenance activity as a whole. Their major concern was the scheduling of maintenance activity. FSD utilizes the City's maintenance system of record, FASTER, to prepare the *Preventative Maintenance (PM) Due* lists. The *Preventative Maintenance (PM) Due* list, which shows all vehicles that the department must send to FSD for service, are sent out very close to the end of the month. This creates a situation where vehicle calibrations may fall behind due to officer scheduling requirements. FSD stated that they submit the *PM Due* lists at the end of the month in order to capture the maximum number of vehicles needing service. Improved communications between departments may reconcile concerns regarding scheduling. In addition to maintenance scheduling, the APD fleet management section is operating with one (1) vacant position of Fleet Maintenance Coordinator. This position has been vacant since November 2017 and was responsible for coordinating Police maintenance with FSD, as well as compiling records for the calibration program, notarizing them, and forwarding them to the Commonwealth's Attorney Office.

Timeliness of Calibrations

The State code requirement to ensure that vehicles are calibrated every six (6) months was of prime concern to the APD. Their officers are provided a *Preventative Maintenance (PM) Due* list that is sent from FSD to the APD Fleet Management Sergeant and disseminated to APD staff.

Vehicles on the PM list must come to the shop for a variety of services to include state safety inspections, emission testing, oil changes, and calibrations. We identified 160 vehicles which had periods of noncompliance with calibration standards. These include tests administered during the original incident, tests administered by the employee after the incident, questionable calibrations, and tests over the 3-MPH standard. Our review indicated that APD vehicles are calibrated during the six (6) month time period approximately 72% of the time. If calibrations that occur up to 14 days after that are included, the percentage increases to 88%, and if 30 days are added, increases to 96%. Some of the reasons that APD provided for vehicles not meeting the six (6) month standard were officers not bringing vehicles to the shop due to leave, training, or special assignments. Officers are aware that calibration reports must be submitted to the Commonwealth Attorney as part of court proceedings. Despite the general knowledge of the calibration requirement, we believe that the APD should review and void citations issued by officers using these vehicles until the vehicles were recalibrated to meet the six (6) month requirement. (See Condition #5 Page 12)

Conclusion

The City of Alexandria's Law Enforcement vehicle calibration program did not contain adequate policies and procedures to ensure that it achieved program objectives. Based on the State Code and legal components of the program, an extremely high degree of accuracy is required. Written policies should have been developed in conjunction with a vigorous quality control program. All staff members should have been trained and provided with written step by step instructions, checklists, signage, and other training material to ensure consistent testing. Individuals responsible for notarizing documents should have understood that they are required to identify and reject any calibrations that do not meet standards. Communication to staff members regarding the full ramifications and consequences of inaccurate calibration testing appears to have been missed. A quality control program should have included monthly review and verification of records extracted from the dynamometer system, the FASTER system, and video surveillance cameras. All elements of the program should have been documented and fully communicated to APD.

The APD will now need to review and void citations issued by officers on the following conditions: 1) all calibrations that were based on the original incident, 2) all calibrations performed by the employee after identification of the incident, 3) all calibrations performed in suspicious time period, 4) all calibrations that exceed the 3-MPH variance, 5) and all calibrations that occurred outside of the State Code mandated six (6) month testing window.

Recommendations:

Based on the conclusions of this report of inquiry the Office of Internal Audit recommends that the Director of the Department of General Services take the following actions:

1. Amend the *Fleet Management Standards Manual* to include written step by step instructions, checklists, signage, and other training material to ensure consistent testing for both the 2WD and 4WD dynamometer systems;

2. Retrain all staff members involved in the calibration process, to include those notarizing completed tests and those reviewing records on the new written standards;

3. Conduct annual Ethics in the Workplace and Freedom of Information (FOIA) training for all Fleet Services staff members. Establish regular staff meeting times to address mission/vision of the Fleet Services Division, relevant communication, business and work flow processes and accomplishments and goals;

4. Develop a quality control program which will utilize the video camera system as well as records from the FASTER system and dynamometer machines to ensure the accuracy of the calibration program;

5. Fill the vacant Fleet Services Supervisor position which has been vacant since October 2018;

6. Formally meet with the Chief of Police to develop formal written program objectives for the calibration program and schedule periodic meetings to ensure proper functioning of the calibration program.

Based on the conclusions of this report of inquiry the Office of Internal Audit recommends that the Chief of Police take the following actions:

7. Amend APD Directives 6.4 "*Vehicle Use and Maintenance*" and 11.21 "*Traffic Enforcement*" to reference the requirement for all APD vehicles used in traffic enforcement duties to be calibrated within a six (6) month time period, and ensure that calibrations do not exceed the new 2-MPH standard;

8. Prepare a written directive to all Police Officers regarding the importance of the speedometer calibration program and requiring Police Officers to maintain a record of the most recent calibration report in their vehicle;

9. Formally meet with the Director of General Services to develop formal written program objectives for the calibration program and schedule periodic meetings to ensure proper functioning of the calibration program;

10. Consider adoption or expanded use of hand-held radar systems in order to reduce the need for pacing or moving radar enforcement;

11. Fill the vacant Fleet Maintenance Coordinator position which has been vacant since November 2018;

12. Review and void all traffic citations identified in the conclusion section of this report and listed in Attachment 1:

    a. Condition Number 1: Calibrations related to the incident (5)

    b. Condition Number 2: Vehicles calibrated by employee after incident (109)

    c. Condition Number 3: Questionable calibrations (32)

    d. Condition Number 4: Calibrations that exceed 3-MPH variance (107)

    e. Condition Number 5: Vehicles with one (1) or more calibration outside of six (6) month testing window (160)

Departmental Response

Department heads were directed to provide a written response and action plan no later than 30 days from the date of this report. All departments provided the requested documents and their response is listed after the attachment section of this report.

Attachment 1: ROI19-02 Fleet Calibration Program

Condition Number 1: Calibrations Related to the Incident	
Unit Number	**Date**
1412	10/16/2017
1731	10/16/2017
1600	10/17/2017
1613	10/18/2017
1712	10/18/2017

Condition Number 2 Calibrations Performed by Employee after Incident							
Unit Number	**Date**	**Unit Number**	**Date**	**Unit Number**	**Date**	**Unit Number**	**Date**
1717	12/12/2017	**1414**	5/24/2018	**1708**	8/10/2018	**1510**	11/7/2018
1411	12/13/2017	**1314**	5/29/2018	**1603**	8/22/2018	**1730**	11/7/2018
1423	1/8/2018	**1417**	5/29/2018	**1307**	8/28/2018	**1417**	11/7/2018
1739	1/16/2018	**1638**	5/30/2018	**1407**	8/29/2018	**1517**	11/7/2018
1724	1/16/2018	**1316**	5/30/2018	**1504**	8/30/2018	**1733**	11/8/2018
1701	1/22/2018	**1400**	5/31/2018	**1404**	8/30/2018	**1621**	11/19/2018
1620	1/24/2018	**1619**	6/4/2018	**1202**	9/5/2018	**1450**	11/19/2018
1401	2/15/2018	**1511**	6/4/2018	**1401**	9/6/2018	**1707**	11/19/2018
1202	2/28/2018	**1406**	6/6/2018	**1605**	9/6/2018	**1211**	11/19/2018
1536	3/1/2018	**1706**	6/14/2018	**1310**	9/6/2018	**1308**	11/20/2018
1424	3/1/2018	**1731**	6/14/2018	**1427**	9/18/2018	**1312**	11/20/2018
1711	3/15/2018	**1613**	6/18/2018	**1706**	9/20/2018	**1719**	11/20/2018
1426	4/2/2018	**1614**	6/19/2018	**1723**	9/25/2018	**1422**	11/20/2018
1615	4/9/2018	**1618**	6/21/2018	**1515**	9/25/2018	**1709**	11/27/2018
1427	4/11/2018	**1452**	6/21/2018	**1419**	9/25/2018	**1316**	11/28/2018
1703	4/12/2018	**1213**	6/26/2018	**1812**	9/26/2018	**1207**	11/28/2018
1662	4/16/2018	**1606**	7/9/2018	**1309**	9/26/2018	**1600**	12/3/2018
1734	4/18/2018	**1311**	7/9/2018	**1424**	9/27/2018	**1714**	12/3/2018
1300	5/2/2018	**1262**	7/11/2018	**1317**	10/10/2018	**1717**	12/5/2018
1610	5/8/2018	**1722**	7/16/2018	**1261**	10/11/2018	**1511**	12/11/2018
1621	5/9/2018	**1701**	7/16/2018	**1604**	10/16/2018	**1507**	12/17/2018
1611	5/9/2018	**1451**	7/30/2018	**1702**	10/17/2018	**1414**	12/17/2018
1725	5/10/2018	**1724**	8/2/2018	**1721**	10/18/2018	**1529**	12/19/2018
1600	5/15/2018	**1403**	8/7/2018	**1102**	10/18/2018	**1447**	1/3/2019
1203	5/21/2018	**1302**	8/7/2018	**1201**	10/22/2018	**1423**	1/3/2019
1707	5/22/2018	**1318**	8/8/2018	**1426**	10/25/2018		
1317	5/22/2018	**1516**	8/10/2018	**1734**	10/29/2018		
1612	5/22/2018	**2015**	8/10/2018	**1615**	10/29/2018		

Attachment 1: ROI19-02 Fleet Calibration Program

Condition Number 3: Questionable Calibrations					
Unit Number	**Date**	**Unit Number**	**Date**	**Unit Number**	**Date**
1205	5/5/2016	**1405**	8/3/2017	**1504**	8/30/2017
1318	6/27/2016	**1507**	8/3/2017	**1515**	8/30/2017
1318	2/14/2017	**1304**	8/10/2017	**1212**	9/21/2017
1317	2/22/2017	**1513**	8/14/2017	**1213**	10/2/2017
1312	2/22/2017	**1317**	8/14/2017	**1619**	10/4/2017
1509	3/23/2017	**1417**	8/22/2017	**1302**	2/4/2018
1213	4/12/2017	**1312**	8/22/2017	**1708**	2/4/2018
1716	4/21/2017	**1313**	8/23/2017	**1404**	8/30/2018
1425	7/27/2017	**1509**	8/29/2017	**1221**	10/23/2018
1414	8/2/2017	**1417**	8/29/2017	**1450**	11/19/2018
1709	8/2/2017	**1511**	8/30/2017		

Attachment 1: ROI19-02 Fleet Calibration Program

Condition Number 4: Calibrations that Exceed 3-MPH Variance							
Unit Number	**Date**	**Unit Number**	**Date**	**Unit Number**	**Date**	**Unit Number**	**Date**
1614	3/25/2016	**1419**	10/12/2016	**1414**	8/2/2017	**1707**	5/22/2018
1427	4/6/2016	**1450**	10/14/2016	**1709**	8/2/2017	**1612**	5/22/2018
1319	4/7/2016	**1611**	10/25/2016	**1507**	8/3/2017	**1207**	5/24/2018
1213	4/7/2016	**1618**	10/28/2016	**1725**	8/11/2017	**1414**	5/24/2018
1601	4/11/2016	**1206**	11/16/2016	**1506**	8/15/2017	**1501**	5/25/2018
1406	4/19/2016	**1261**	11/18/2016	**1262**	8/16/2017	**1423**	5/31/2018
1413	4/19/2016	**1312**	12/15/2016	**1451**	8/21/2017	**1712**	6/7/2018
1414	4/25/2016	**1452**	12/20/2016	**1603**	8/24/2017	**1502**	6/8/2018
1618	5/5/2016	**1504**	1/27/2017	**1310**	8/24/2017	**1704**	6/14/2018
1604	5/6/2016	**1608**	2/3/2017	**1408**	9/27/2017	**1706**	6/14/2018
1611	5/9/2016	**1262**	2/22/2017	**1203**	11/2/2017	**1731**	6/14/2018
1306	6/21/2016	**1317**	2/22/2017	**8604**	12/1/2017	**1614**	6/19/2018
1501	6/21/2016	**1312**	2/22/2017	**1305**	12/4/2017	**1453**	7/31/2018
1315	6/23/2016	**1402**	2/23/2017	**1709**	12/6/2017	**1404**	8/30/2018
1508	6/27/2016	**1451**	3/1/2017	**1609**	12/6/2017	**1310**	9/6/2018
1260	6/29/2016	**1615**	3/8/2017	**1704**	12/29/2017	**1313**	9/7/2018
1307	6/29/2016	**1313**	3/21/2017	**1739**	1/16/2018	**1508**	9/21/2018
1515	7/8/2016	**1703**	4/6/2017	**1603**	2/28/2018	**1309**	9/26/2018
1513	7/11/2016	**1661**	4/21/2017	**1604**	4/12/2018	**1740**	10/10/2018
1516	7/12/2016	**1716**	4/21/2017	**1261**	4/13/2018	**1730**	11/7/2018
1314	7/12/2016	**1206**	4/28/2017	**1721**	5/1/2018	**1305**	11/12/2018
1507	8/4/2016	**1314**	6/1/2017	**1610**	5/8/2018	**1606**	1/7/2019
1201	8/31/2016	**1715**	6/13/2017	**1621**	5/9/2018	**1614**	1/25/2019
1609	9/8/2016	**1609**	6/14/2017	**1611**	5/9/2018	**1734**	2/5/2019
1319	9/26/2016	**1415**	7/14/2017	**1600**	5/15/2018	**1435**	2/6/2019
1403	10/7/2016	**1617**	7/28/2017	**1707**	5/22/2018	**8693**	2/13/2019
1613	10/12/2016	**1612**	8/2/2017	**1317**	5/22/2018		

Attachment 1: ROI19-02 Fleet Calibration Program

Condition Number 5: Vehicles with One (1) or more Calibrations Outside six (6) month Testing Window					
Vehicle Number					
1102	1306	1412	1503	1610	1711
1149	1307	1413	1504	1611	1712
1201	1308	1414	1505	1612	1713
1202	1309	1415	1506	1613	1714
1203	1310	1416	1507	1614	1715
1204	1311	1417	1508	1615	1716
1205	1312	1418	1509	1616	1717
1206	1313	1419	1510	1617	1719
1207	1314	1420	1511	1618	1721
1208	1315	1421	1512	1619	1722
1209	1316	1422	1513	1620	1723
1210	1317	1423	1514	1621	1724
1211	1318	1424	1515	1638	1725
1212	1319	1425	1516	1660	1726
1213	1320	1426	1517	1661	1730
1221	1400	1427	1529	1662	1731
1222	1401	1435	1536	1700	1732
1223	1402	1445	1600	1701	1733
1260	1403	1446	1601	1702	1734
1261	1404	1447	1602	1703	1738
1262	1405	1448	1603	1704	1739
1300	1406	1450	1604	1705	1740
1301	1407	1451	1605	1706	8604
1302	1408	1452	1606	1707	8670
1303	1409	1453	1607	1708	8693
1304	1410	1501	1608	1709	
1305	1411	1502	1609	1710	

Note: Vehicles may have a period of only a single day or a period of multiple days out of calibration. In addition, vehicles may be subject to the previous four (4) conditions which would also make them out of tolerance for calibration.

City of Alexandria, Virginia

MEMORANDUM

DATE: JULY 12, 2019

TO: ROBERT SNYDER, ACTING CHIEF INTERNAL AUDITOR
JENNIFER KANE, QUALITY ASSURANCE DIRECTOR, DCHS

THROUGH: LAURA TRIGGS, DEPUTY CITY MANAGER

FROM: JEREMY MCPIKE, DIRECTOR, GENERAL SERVICES

SUBJECT: FLEET CALIBRATION PROGRAM – RESPONSE

The purpose of this memorandum is to respond to the recommendations detailed in the Office of Internal Audit Report of the Department of General Services Fleet Services Division Calibration Program, dated May 3, 2019 and received by General Services on Monday, May 6, 2019 and the Internal Audit Exit Conference held on June 12, 2019.

On January 23, 2019, the Office of Internal Audit was directed by the City Manager to conduct a review of the Department of General Services (DGS) Fleet Services Division's four-wheel drive vehicle calibration program. Based on data collection, staff interviews and investigation Internal Audit made several recommendations to address the deficiencies in the calibration program.

The Department of General Services acknowledges and concurs with the findings and recommendations of the Office of Internal Audit and have taken steps to comply and implement the recommendations to ensure that the deficiencies identified in the DGS Fleet Services Division Calibration Program are remediated.

Below are the Department of General Services' responses to the recommendations contained in the draft Internal Audit report:

Internal Audit Recommendation #1: "Amend the Fleet Services Division's Fleet Management Standards manual to include written step-by-step instructions, checklists, signage, and other training material to ensure consistent testing and those reviewing records on the new written standards."

General Services agrees that revisions and amendments to the Fleet Services Division's *Fleet Management Standards* manual should be made, including written step-by-step instructions, checklists, signage, and other training material to ensure consistent testing and those reviewing records on the new written standards. General Services is currently revising and amending the existing manual to include the recommendations of Internal Audit and anticipates that the amended standards manual will be available by August 9, 2019.

Internal Audit Recommendation #2: "Retrain all staff members involved in the calibration process, to include those notarizing completed tests and those reviewing records on the written standards."

All Fleet Services Division staff, including technicians, administrative and management staff have been retrained on the use of the Mustang four-wheel drive dynamometer and the related calibration process. Two training sessions were held. The first training was held on February 20, 2019 and the second training was held on June 25, 2019 to ensure attendance by all staff. Training was held at the Fleet Services facility, located at 3550 Wheeler Avenue and was conducted by Mustang Dynamometer (MD) staff and City Fleet Services management. A log-in sheet was distributed and retained to ensure and document that all staff were in attendance.

Internal Audit Recommendation #3: "Conduct annual Ethics in the Workplace and Freedom of Information (FOIA) training for all Fleet Services staff members."

Ethics in the Workplace and Freedom of Information Act (FOIA) training was held on July 17, 2019. The training was held at the Fleet Services Division facility located at 3550 Wheeler Avenue. Two Assistant City Attorneys conducted the training and responded to staff questions. All but one Fleet Services staff member were present. The employee not in attendance had prior approved leave for that day but will be included in a subsequent training to be scheduled for a later date. A log-in sheet was distributed and retained. All Fleet staff have now been made aware of and understand the City A.R.'s particularly A.R. 2-4, Freedom of Information and 6-1, Code of Ethics.

Internal Audit Recommendation #4: "Establish regular staff meeting times to address mission/vision of the Fleet Services Division, relevant communication, business and workflow processes and accomplishments and goals."

Fleet Services Division management, including the Fleet Services Division Chief and Fleet Services Supervisor now hold weekly meetings with all Fleet Services staff to discuss business, workflow and other relevant topics to ensure that weekly and monthly goals are met. The goal of these meetings is to increase and improve communication with and between staff and ensure staff is made aware of division goals, mission, vision and values. Fleet Services management also hold meetings with individual staff members every 90 days to discuss individual performance, goals and expectations.

Internal Audit Recommendation #5: "Develop a quality control program which will utilize the video camera system as well as records from the FASTER system and dynamometer machines to ensure the accuracy of the calibration system."

General Services agrees that a quality control program needs to be developed which will utilize the video camera system and records from FASTER and the dynamometer. Staff is currently drafting the details of the quality control program, in addition, is working with the video camera contractor to ensure that the camera has the ability to retain records for the period designated by state retention policies. General Services anticipates that the quality control program will be drafted and in place by August 9, 2019.

Internal Audit Recommendation #6: "Fill the vacant Fleet Services Supervisor position which has been vacant since October 2018"

General Services has held three recruitments to fill the vacant Fleet Services Supervisor position all of which were unsuccessful in identifying an experienced candidate to fill this position. As a result, management has named the most senior and qualified Fleet Services Technician as Acting Fleet Services Supervisor for a six-month period. The Fleet Services Technician III has been serving in acting status since April 2019. The Acting Supervisor has established a plan to improve shop operations; set goals for staff; adhere to rules and regulations; improve the quality of work and ensure the timely completion of all repairs and maintenance. The Acting Supervisor has met with and continues to regularly meet with all fleet services technicians to improve communication and goal setting. The Acting Fleet Services Supervisor has also met with all of Fleet Services' major customers to improve relationships and confidence in the work completed by shop staff. If the Acting Supervisor meets the goals and expectations that have been established within the six-month period, this individual may be considered for the full-time permanent Fleet Services Supervisor position.

Internal Audit Recommendation #7: "General Services and the Alexandria Police Department (APD) formally meet to develop formal written program objectives for the calibration program and schedule periodic meetings to ensure proper functioning of the calibration program."

General Services agrees with the recommendation that Alexandria Police Department and General Services needs to formally meet to develop written program objectives for the calibration program and schedule periodic meetings to ensure proper functioning of the calibration program. General Services is working to schedule a meeting with the Police Department. In the meantime, General Services is working on a draft of the written program objectives for discussion with the Police Department. General Services staff has scheduled a meeting with the Alexandria Police Department on July 31, 2019 to discuss formal written program objectives. Additional meetings will be scheduled as required, and we anticipate adoption of the formal written program objectives by August 30, 2019.

In addition to the recommendations provided in the Internal Audit Report, Fleet Services staff shall implement other organizational changes to improve overall job performance, quality, teamwork and customer satisfaction. Planned improvements include the retention of an organizational consultant to work with the Fleet Services team to improve individual and team performance, communication and collaboration; develop vision and values for the Fleet Services Division; develop a goals and mission statement to ensure that all staff is aligned; recommend that ASE certifications become a job requirement for fleet services technicians with the goal of having an ASE certified shop; and make minor improvements to the work place with the goal of improving employee morale and job satisfaction (i.e. paint, flooring, doors, etc.).

Thank you for conducting and completing an audit of the Fleet Services Division Calibration Program. Internal Audit staff have provided our staff with a greater understanding of the

calibration program and areas of needed improvement. If you have any questions, concerns or additional recommendations, please feel free to contact me. Thank you.

Cc: Mark Jinks, City Manager
Debra Collins, Deputy City Manager
Michael Brown, Chief, Police Department
Alfred Coleman, Deputy Director, General Services
Darrel Reynolds, Division Chief, Fleet Services

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July 16, 2019

Robert Snyder
Acting Chief Internal Auditor
City of Alexandria
Office of Internal Audit
421 King Street, Suite 210
Alexandria, VA 22314

Dear Mr. Snyder:

This letter is in response to your Fleet Calibration Program FY2019 report dated May 3, 2019 and will detail the Alexandria Police Department's response to recommendations 7-12 listed in the report. Below are the recommendations which resulted from the audit conducted by the City's Internal Auditor.

APD is committed to addressing and bringing to resolution the recommendations identified by your office:

7. Amend APD Directives 6.4 "Vehicle Use and Maintenance" and 11.21 "Traffic Enforcement" to reference the requirement for all APD vehicles used in traffic enforcement duties to be calibrated within a six (6) month time period, and ensure that calibrations do not exceed the new 2-MPH standard.

8. Prepare a written directive to all Police Officers regarding the importance of the speedometer calibration program and requiring Police officers to maintain a record of the most recent calibration report in their vehicle.

Response: The Alexandria Police Department agrees with this recommendation. The following language will be added to Police Directives 6.4 and 11.21.

1. Calibration due dates are listed on the monthly Preventive Maintenance (PM) list. It is the responsibility of the assigned officer/s to ensure the calibration is completed before the due date. If a calibration is not completed by the due date, the officer will not utilize the vehicle to measure speed by pacing nor will it be used to perform moving radar. The assigned officer/s will also notify the Fleet

Management Unit, through their chain of command, in writing the reason the calibration was not completed by the due date and the date the calibration was ultimately completed.

2. The Fleet Management Unit will review each certified calibration report completed by the Department of General Services' Fleet Services staff to ensure calibrations do not exceed the 2-MPH standard. If a calibration exceeds the 2-MPH standard, the officer will be notified by the Fleet Management Unit and the vehicle will not be used to measure speed by pacing nor will it be used to perform moving radar until the vehicle is retested and determined to be within the 2-MPH standard.
3. Officers will maintain a copy of the most recent certified calibration report in their vehicles.

9. Formally meet with the Director of General Services to develop formal written program objectives for the calibration program and schedule periodic meetings to ensure proper functioning of the calibration program.

Response: The Alexandria Police Department agrees with this recommendation. APD will immediately begin working with DGS to develop a formal written calibration program and to schedule periodic meetings to discuss and review the calibration program.

10. Consider adoption or expanded use of hand-held radar systems in order to reduce the need for pacing or moving radar enforcement.

Response: The Alexandria Police Department agrees with this recommendation. The Department is currently in the process of equipping every patrol vehicle with hand-held radars. To date, fifty-five (55) hand-held radars have been purchased and are in the process of being installed. The remaining sixty (60) hand-held radars will be ordered and installed during FY20.

11. Fill the vacant Fleet Maintenance Coordinator position which has been vacant since November 2018.

Response: The Alexandria Police Department agrees with this recommendation. APD will advertise the vacancy in the next few weeks and begin interviewing potential candidates.

12. Review and void all traffic citations identified in the conclusion section of this report and listed in Attachment 1.

Response: The Alexandria Police Department agrees with this recommendation. This is a massive, time consuming process for APD staff that involves identifying, researching, and voiding all citations that met one of the conditions listed in the report. APD staff is expected to complete the first phase of this process, identifying all affected citations, by July 31, 2019. Once this phase is completed, APD staff will begin its research phase to understand the magnitude and repercussions of each citation (amount of fine, reckless driving, loss of license, etc.) in order to determine what corrective action must be taken.