

AUDIT REPORT

Date:	December 3, 2020
Department:	Police
Subject:	Photo Safety Program
Lead Auditor:	Karen Newman, Sr Internal Auditor

OBJECTIVE

This audit was conducted to:

- Analyze the financial impact of the Photo Safety Program.
- Determine how the associated revenues are used.
- Determine whether the established goals and objectives are being met.

SCOPE & METHODOLOGY

We conducted this audit in accordance with Generally Accepted Government Auditing Standards, which 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 scope of the audit was from February 2019 to January 2020. The audit period was selected to align with a new contract with the photo safety enforcement vendor beginning February 2019. To accomplish our objective, we interviewed City staff, performed tests of program revenues and expenditures, and reviewed both City and external traffic and speed studies.

BACKGROUND & DISCUSSION

Program Objectives & Goals

The City of Mesa Police Department uses automated photo safety cameras to supplement traffic enforcement by Mesa police officers. The photo safety program uses a combination of violation detection systems, digital cameras, and streaming video cameras to capture alleged violations. The components may be installed at intersections or mid-block at school zones. As of Spring 2020, there are 19 intersection safety cameras and 7 school zone cameras.

The Police Department, Transportation Department, and the Municipal Court are responsible for program outcomes. The Police Department contracts with and oversees the photo enforcement vendor who manages the cameras and other equipment, processes images, and issues citations as approved by the Police Photo Safety-Towing Unit. The Transportation Department primarily identifies and monitors dangerous intersections and analyzes speed data

to determine where cameras should be installed. Finally, the Municipal Court is responsible for adjudicating the camera violations and collecting the associated violation revenue. The purpose of the photo safety program is to deter red light violations, reduce speeding violations, increase traffic situational awareness, and reduce collision severity.

Due to the expertise necessary to analyze traffic data we were unable to perform any independent traffic safety analysis. However, the Transportation Department provided additional studies and reports regarding how speed affects traffic accidents and the impacts of photo safety cameras on intersection safety. Links to the additional studies and reports can be found in Appendix A. Transportation also provided traffic safety speed data before and after cameras were installed for 7 school zone cameras and 1 intersection camera. The following are the results of their review:

Speed Comparisons of Speed Cameras in 7 School Zone Sites

School Zone	Average speed before cameras installed		Average speed after cameras installed		Reduction in average speed	
	School Hours	Non-School Hours	School Hours	Non-School Hours	School Hours	Non-School Hours
Franklin @ Brimhall	33.3	42.9	31.9	40.1	-1.4	-2.8
Fremont JHS	38.6	43.3	34.0	40.1	-4.6	-3.2
Mesa HS	33.2	39.2	29.8	35.7	-3.4	-3.5
Rhodes JHS	36.0	40.8	30.0	37.9	-6.0	-2.9
Skyline HS	32.9	41.3	31.7	39.1	-1.2	-2.2
Porter Elem	32.4	40.4	28.7	34.4	-3.7	-6.0
Red Mountain HS	36.2	38.7	30.6	39.4	-5.6	0.7
Average @ 7 sites					-3.7	-2.8

Speed Comparison of Speed Camera at Guadalupe & Carriage Intersection

Posted Speed Limit: 45mph

Average speed before camera installed	Average speed after camera installed	Reduction in average speed
50.7	41.6	-9.1

Financial Information

The fine for an average camera violation during our audit period was assessed at approximately \$290.50, however only \$153 remains with the City. The remaining is obligated to the State or Maricopa County for various fees. The following table shows the approximate revenue distribution of a standard photo safety violation:

Standard Civil Traffic Sanction Breakdown

Total Standard Civil Traffic Fine/Sanction	\$ 290.50
State & County Surcharges and Assessments	
Maricopa County Probation Fee*	\$ 20.00
Public Safety Equipment Fund*	\$ 4.00
GITTM - Border Security and Law Enforcement*	\$ 4.00
Victims' Rights Enforcement*	\$ 2.00
Victims' Rights Assessment*	\$ 9.00
County Treasurer - Justice Courts*	\$ 1.00
Peace Officer Training Equipment Fund*	\$ 4.00
Court Sustainability Fee Surcharge (78% of \$15 Court Sustainability Fee)	\$ 11.70
Various State Surcharges (78% of \$ 105.22 Base Fine/Sanction)	\$ 82.08
Total State & County Surcharges and Assessments	\$ 137.78
City of Mesa - Earmarked Revenue	
AZ Hwy & Citing Agency*	\$ 4.00
Court Construction Fee*	\$ 28.50
Court Sustainability Fee*	\$ 15.00
Total City of Mesa - Earmarked Revenue	\$ 47.50
City of Mesa - General Fund Revenue	
Base Fine/Sanction	\$ 105.22
Total Base Fine/Sanction	\$ 105.22
*Fixed Fee per Case	

Other fees and charges may be added to the standard sanction as the photo safety case progresses. The following are some of the more common additional fees and charges which result in additional photo safety revenue to the General Fund:

Additional Fees and Charges

Type of Charge	Amount
Process Server Charges (within Maricopa County)	\$ 50.00
Process Server Charges (Outside Maricopa County)	\$ 60.00
Time Payment Fees - State Portion	\$ 13.00
Time Payment Fees - City Portion	\$ 7.00
Default Fee	\$ 70.00
Returned Check Fee	\$ 25.00
Copying & Recording	Varies

The following are total program revenues and operating expenses for the audit period February 2019 to January 2020:

Program Revenue

Revenue Type	Amount
State and County Surcharges & Assessments	\$ 2,217,914
City of Mesa – Earmarked Revenue	\$ 1,096,896
City of Mesa – General Fund Revenue	\$ 3,931,560
Total Program Revenue	\$ 7,246,370

Program Operating Expenses

Expense Type	Amount
Photo Safety Enforcement Vendor	\$ 1,265,639
Process Server Vendor	\$ 493,900
City of Mesa Police Personnel	\$ 275,326
Total Operating Expenses	\$ 2,034,865

The City of Mesa – General Fund Revenue is used to cover program operating expenses. The remaining General Fund Revenue is used for traffic safety events, education, and Transportation Department traffic safety improvements, however that amount is not included above due to those expenses not being specifically tracked (please see our recommendation below).

CONCLUSION

In our opinion, additional and improved review of program goals and objectives is needed to monitor and measure the program's success. A brief summary of our observations and recommendations is included below. For additional details and management's response, please see the attached Issue and Action Plan (IAP).

SUMMARY OF OBSERVATIONS & RECOMMENDATIONS

- 1. Observation:** Program goals and objectives are not documented, communicated to all appropriate departments, or periodically reviewed to ensure that they are being met.

Recommendations:

The Police Department should:

- 1-1 Establish, define, and communicate program goals, responsibilities, and objectives.
- 1-2 Report photo safety projects and results to departments involved in the program.
- 1-3 Conduct the Traffic Safety Committee Meeting at least biannually.

The Municipal Court should:

- 1-4 Provide photo safety revenue data to the Police Department at least monthly.

The Transportation Department should:

- 1-5 Conduct follow-up speed reviews on a consistent schedule and/or an independent photo enforcement study.
- 1-6 Provide traffic review data and analysis directly to the Police Department.

Issue and Action Plan #1

Issue #1: Program goals and objectives documentation and review need improvement.

Observation: Program goals and objectives are not documented, communicated to all appropriate departments, or periodically reviewed to ensure that they are being met.

Criteria: As a general control and since this is a high-profile program, it is essential that the goals and objectives are documented and communicated to all departments that are involved with the program. To be effective, the documented goals and objectives should be specific, demonstrate that the program is for improving traffic safety, and be reviewed periodically to ensure that they are being met.

Comments: The goals and objectives of the Photo Safety Program are to improve traffic safety and to reduce collision severity and have been verbally communicated during City Council Meetings. However, specific goals and objectives have not been formally documented.

Additionally, there is no process in place to periodically analyze or review the goals and objectives to ensure that they are being met. Although both the Police and Transportation departments do have some documentation regarding traffic safety improvements and education, a more formal process should be established to monitor the outcomes of the program and to provide that information to the individuals and departments involved with the Photo Safety Program.

Also, the periodic review of goals and objectives should include an analysis of program revenues and expenses. This has not been performed on a consistent basis as there was miscommunication between the Municipal Court and Police Department regarding the detailed revenue information needed and the required format; and expenses related to traffic safety improvements and education performed were not tracked.

Recommendation(s) and Management's To ensure the goals and objectives of the program are established, communicated, and reviewed;

Action Plan(s):

The Police Department should:

Recommendation #1-1: Establish goals and objectives for the program, clearly define each department's role and responsibilities for

the program and communicate them to the departments involved with the program.

Action Plan #1-1: Goals are currently under development and being revised to reflect actual impact to the community and public safety. We want to ensure that we have reportable metrics to accurately account for performance. Once developed we will communicate these goals to all departments impacted and discuss finalization at a January Bi-Annual Photo Safety Committee Meeting.

Individual or Position Responsible: Lt. Stephanie Derivan/Traffic Lieutenant

Estimated Completion Date: January 31, 2021

Recommendation #1-2: Report photo safety projects, citation information, and financial results to all departments involved in the program on at least a quarterly basis.

Action Plan #1-2: A monthly report will be generated by the Photo Safety Unit to include photo safety projects, operational & upgrade status, program statistical data, and financial results. This report will be reviewed by Traffic Lieutenant monthly. Quarterly reports will be sent to all departments involved.

Individual or Position Responsible: Paul Dieringer/Photo Safety Unit Supervisor

Estimated Completion Date: January 31, 2021

Recommendation #1-3: Conduct the Traffic Safety Committee Meeting at least biannually.

Action Plan #1-3: A Bi-Annual Photo Safety Committee Meeting will be scheduled for January and July of each year. At the next meeting in January we will discuss with the committee if these dates work moving forward or if April and October are more conducive to each department, however, we do not want to wait until April to have our next Committee Meeting as we are overdue for one. Photo safety issues and performance will be discussed using the last two quarterly reports data.

Individual or Position Responsible: Lt. Stephanie Derivan/Traffic Lieutenant

Estimated Completion Date: January 31, 2021

The Municipal Court should:

Recommendation #1-4: Provide photo safety revenue data to the Police Department at least monthly.

Action Plan #1-4: The Court will provide the photo safety revenue data to the Police Department by the 10th of each month. (Note: The Court has already provided the photo safety revenue data to the Police Department up to and through October 2020.)

Individual or Position Responsible: Edna Ramon or Loretta Daniels, Customer Service Supervisors

Estimated Completion Date: October 2020

The Transportation Department should:

Recommendation #1-5: Conduct follow-up speed reviews on a consistent schedule and/or conduct an independent photo enforcement study (*Note – Consider implementation post COVID-19 pandemic and traffic conditions return to normal*).

Action Plan #1-5: Transportation will conduct speed counts for all existing photo enforced school locations as well as any new photo enforcement locations on an annual basis. Counts have been ordered for 2020 and will be available before Christmas.

Individual or Position Responsible: City Traffic Engineer

Estimated Completion Date: Annually in late Oct/early Nov.

Recommendation #1-6: Provide any traffic review data and analysis directly to the Police Department.

Action Plan #1-6: Transportation will work with PD on setting up a location where speed count data can be accessed at any time.

Individual or Position Responsible: City Traffic Engineer

Estimated Completion Date: Before Christmas in the year the counts were taken.

Appendix A

The following are links to the studies and reports that were provided by the Transportation Department regarding how speed affects traffic accidents and the impacts of photo safety cameras on intersection safety:

- City of Scottsdale Photo Enforcement Independent Evaluation:
<https://www.scottsdaleaz.gov/Assets/ScottsdaleAZ/Transportation/Photo+Enforcement/Scottsdale+Photo+Enforcement+Study+Tech+Memo+1.pdf>
- NACTO - Setting Safe Speed Limits on Urban Streets:
https://nacto.org/wp-content/uploads/2020/07/NACTO_CityLimits_Spreads.pdf
- Institute of Transportation Engineers – Speed as a Safety Problem Information:
<https://www.ite.org/technical-resources/topics/speed-management-for-safety/speed-as-a-safety-problem/>
- Institute of Transportation Engineers – Impacts of Red-Light Cameras on Intersection Safety Journal Article:
https://www.nxtbook.com/ygsreprints/ITE/ITE_December2019/index.php#/p/28
- Effects of Red Light Running Camera System Installations & then Deactivation on Intersection Safety Study Summary:
http://www.cmfclearinghouse.org/study_detail.cfm?stid=513
- Safety Evaluation of Red Light Camera and Intersection Speed Camera Programs in Alberta Study Summary:
http://www.cmfclearinghouse.org/study_detail.cfm?stid=412
- Safety Effects of Fixed Speed Cameras - An Empirical Bayes Evaluation Study Summary:
http://www.cmfclearinghouse.org/study_detail.cfm?stid=441