

GOVERNMENT OF THE DISTRICT OF COLUMBIA
District Department of Transportation



Public Roundtable:

The District Department of Transportation's Use of Automated Traffic
Enforcement Cameras

Testimony of
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Before the
Committee on Transportation and the Environment

Council of the District of Columbia

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Virtual Hearing
John A. Wilson Building
1350 Pennsylvania Avenue, NW
Washington, D.C. 20004



Good afternoon, Chairperson Cheh and members of the Committee. My name is Everett Lott, Acting Director of the District Department of Transportation, often referred to as “DDOT.” I am also joined by Charles Turner, Director of DDOT’s Automated Traffic Enforcement Branch. I am here today to discuss DDOT’s use of automated traffic enforcement (ATE) cameras to improve the safety of the District’s roadways.

Automated Traffic Camera Program Overview

The District of Columbia has used automated traffic enforcement (ATE) cameras since the early 2000’s when red-light safety cameras were introduced. This was followed by speed safety enforcement cameras in 2002 and stop sign safety enforcement cameras in 2013.

The ATE program was first housed within the Metropolitan Police Department (MPD). Recently, Mayor Bowser, together with DDOT and MPD leaders, determined that the ATE program could be more effectively managed if it were transferred to DDOT. Primarily, this transfer improves our ATE program performance by coordinating the review of camera placement and assessing the effectiveness of our cameras in collaboration with other transportation safety installations, under one roof.



Equity is the center of everything we do at DDOT. We recognize that historical inequities in transportation policy exist that have had disproportionate negative effects on the well-being of residents in underserved communities. A primary tenet of DDOT's mission is to correct these inequities where they exist in our transportation system and improve safety. As with our ATE camera program, we remain committed to delivering a service that is rooted in equity, data, industry best practices, and best-in-class technology that improves safety for all users on our roadways.

In FY21, the vast majority of ATE cameras rotated to new locations were initiated by citizen and community requests. While these requests demonstrate significant community support for ATE cameras as a tool to improve safety, these requests are coupled with rigorous engineering analysis to determine whether a camera would be an effective safety measure. This analysis includes traffic speed measurements and volume counts, crash history review, roadway geometry, and identification of any safety considerations that may exist for vulnerable users. Once we have determined that a location meets our initial screening criteria, our ATE team and the vendor conduct site assessments to determine feasibility of installation. Factors including available roadside space, line of sight, constructability, view obstructions, and the availability of underground conduit for wiring all play a role in making final location and installation decisions.



Last month, DDOT announced that we can now receive community requests for ATE safety cameras through our recently revamped Transportation Safety Investigation (TSI) process, which as of November 1 takes in requests via 311, without the need for ANC endorsement. Reducing the burden on ANCs to justify safety requests allows requests to advance more quickly to DDOT's engineering analysis process, where we can determine the most effective safety measures.

Automated Traffic Control Camera Inventory

At present, DDOT deploys 129 ATE cameras, including red-light safety cameras, speed safety cameras, stop sign safety cameras, and truck enforcement cameras (to detect over-height trucks where they are prohibited). Of the cameras in our inventory, speed safety cameras are the most mobile. We can rotate them to new locations depending on new safety priorities that arise. In FY21, we rotated 26 speed safety cameras to new locations. As I mentioned earlier, these rotations are often initiated by community requests, and we provide advance notice when cameras are shifted to a new site. Of note, red-light safety cameras, and to a lesser extent stop sign safety cameras, are highly constrained by the installation requirements associated with those camera types. Once installed, they are rarely moved due to the effort and expense involved.



Current Contract and Procurement

When DDOT assumed full responsibility for the ATE program from MPD in FY22, we inherited a contract with the vendor that carries out many of the analysis, installation, and maintenance functions. The contract with this vendor is nearing the end of its fifteen-year term, and the available technology and our understanding of best practices have evolved. Accordingly, in partnership with the Office of Contracting and Procurement, DDOT recently released an RFP for a new contract to update and expand the ATE program; and on October 22nd Mayor Bowser announced this contract would be expedited in further support of our Vision Zero goals. The current contract, which expires in March 2022, provides us with limited ability to expand and maintain our inventory of cameras. The District owns a set of aging equipment and software that is increasingly difficult to repair or receive vendor support. DDOT's strategy for the new contract is to lease cameras, ensuring that we will be able to promptly replace and upgrade equipment and take advantage of rapidly improving technology over the life of the contract.

Additionally, the RFP includes a new camera category: bus lane and bus zone camera enforcement. Beginning in 2020 and continuing this year we launched two camera research pilots, including an onboard Circulator camera pilot and a stationary bus camera pilot. We learned how the bus lanes and bus zones are being used and collected data on the number of unauthorized vehicles using bus



lanes and bus zones. Next year, for the first time in the District, we will be installing on-board Circulator cameras and stationary cameras to enforce bus zone and bus lane violations. We know that by enforcing our bus lanes and zones we will help bus riders quickly and reliably get to and from work and school. Faster and more reliable bus service will help us reach our moveDC goal of getting the vast majority of trips to be taken by modes other than automobiles.

The ATE camera technology now available ensures DDOT can deliver improved levels of compliance. By the end of this calendar year, we will install additional new cameras, using funding made available in this fiscal year. And with the new contract award, we anticipate being able to upgrade existing cameras beginning in Spring of 2022. Together, these procurements will improve the quality, number, and flexibility of our ATE camera inventory.

Education and Outreach

At DDOT, we understand that we have a responsibility to educate the public on how to comply with DC traffic laws, how to travel safely, where cameras are located, and how the cameras work. Additionally, while motorists should be following traffic laws regardless of the presence of a camera, in order to ensure that residents have confidence in the safety-first placement of ATE cameras, it is important to give fair warning that there will be a consequence for breaking the



law. DDOT has been making more robust efforts to educate motorists about the ATE program, including where cameras are located. You can find the location of every ATE camera in the District at ddot.dc.gov. We now, as a standard practice, issue a press release when new cameras are installed or when existing cameras are rotated to a new location. It is now our policy to provide a 30-day warning period prior to issuing tickets. Also, as every camera is installed, we make sure signage and pavement markings give drivers adequate notice that a camera is present and enough guidance for how to comply with the law. When we have been advised that signage or markings could be clearer, we have adjusted signage and refreshed markings so motorists can know how fast they can go and where they should stop. DDOT is in the business of safety and equity, and not establishing “speed traps.”

It is important that motorists have confidence in how the cameras work, both so they can know how to comply with the law and avoid tickets, and so they will also understand that we have a functioning system. Our camera assets continue to work with the following methodologies:

- Speed and stop sign cameras use radar detection to monitor and detect vehicles.
- Speed violations are triggered when a motorist is traveling above the posted speed limit.



- Stop sign violations are determined when an evidence examiner's review of the video finds that a motorist failed to stop at the stop sign prior to the stop-bar.
- Red-light cameras use in-ground detectors to monitor vehicle movement. Detector readings are supported by video review to confirm that the vehicle did not come to a stop prior to the stop-bar when the light is red.
- Truck cameras use radar to determine if a vehicle with a truck height profile is in a prohibited zone.
- All radar detection systems are certified as accurate on a yearly basis.
- All speed systems are monitored daily with automated review of violation data and with actual violation images, video and data review.
- Speed cameras are tested every 48 hours.
- All images collected by the cameras are separately reviewed three times by examiners for accuracy.
- Once a violation is verified, a notice of infraction is mailed.
- ATE camera captured infractions are issued by the Department of Motor Vehicles (DMV) to the registered owner of the vehicle.
- Upon receipt of an infraction, the registered vehicle owner can provide payment or pursue adjudication through the DMV if they believe the fine was unjustly issued.



DDOT will continue these practices as we move forward with a new contract to operate the ATE system.

Motorist Behavior

The good news is that when we deploy ATE cameras, motorists change their behavior. Our own research—which has been peer-reviewed and accepted for publication¹—has found that typically, the speed camera citation rate goes down by 30-50 percent within the first year of installation of a new camera. Some vehicle owners do receive fines at first. But most learn that they must adhere to the rules of the road and adapt. However, there are repeat offenders, and this is a concern.

DDOT is partnering with The Lab @ DC in the City Administrator's office on an innovative effort to work with higher-risk motorists, identified through repeat ATE offenses, to encourage safer driving behavior. The project's first phase, currently underway, is establishing the level of correlation between repeat automated enforcement citations and crash involvement, a linkage two other major cities (Chicago and New York City) have already found to be significant. Our goal in the second phase is to find ways to influence the behavior of this higher-risk

¹ Data Enforced: An Exploratory Impact Analysis of Automated Speed Enforcement in the District of Columbia, accepted for publication at the 24th IEEE Intelligent Transportation Systems Conference (ITSC 2021)



population, through interventions and messaging studies. Again, the goal is to establish safer driving behavior, not simply to continue to issue citations.

Revenue

As DDOT Director, it is my commitment that we will not lose sight of our responsibility to build and support an equitable transportation network, and that we do so in a manner that keeps safety as a leading priority.

Revenue was mentioned as a topic for discussion during this roundtable and it is often part of the conversation around the District's ATE program. At DDOT we measure the success of the ATE program in our ability to improve motorist, pedestrian, and cyclist safety. We deploy cameras to reduce speeds, reduce crashes, and improve compliance with our traffic laws. While fines from our ATE cameras are issued to registered vehicle owners, our partner agency, the Department of Motor Vehicles, can detail the strategies used to encourage payment of these fines and the Office of Chief Financial Officer can provide historical data about how this revenue is reflected in the District's budget. Our ATE camera placement and program safety goals are established separately from the matter of revenue collected from the program.



Conclusion

Earlier, I discussed how we have found that installing ATE cameras generates better compliance with our traffic laws, that motorists quickly adjust their behavior, and that the vast majority of motorists only receive one ticket before choosing to drive more safely.

But does all of this produce safer streets? Our evidence says yes.

The peer-reviewed DDOT research I mentioned earlier found that after installing speed cameras, injury crashes went down by 30 percent at locations where the cameras were installed. Traffic safety cameras are not an instant fix. They are one tool in a comprehensive toolbox that we at DDOT, along with our partner agencies, deploy to change behavior and make streets safer.

As we update and expand the ATE program, we will continue to use community input, our rigorous engineering analysis, and a holistic approach to installing cameras where they can be most effective in improving safety.

Thank you for the opportunity to testify on this matter and I am happy to answer any questions you may have.

