



MEMORANDUM

Date: July 9, 2009

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

A handwritten signature in black ink, appearing to be "CHH", is written over the printed name "C.H. Huckelberry".

Re: Photo Enforcement Cameras - Effects on Excessive Speeding

Attached please find a speed study of the general locations of installed photo enforcement cameras. The data indicates that there has been a significant reduction in excessive speeding in the proximity of and, in some cases, significant distances away from speed camera locations.

In one location at River Road, excessive speeding defined as greater than 10 miles per hour over the posted speed limit has been reduced by nearly 90 percent, from 13.6 percent of all vehicles to 1.7 percent. Other locations show significant excessive speed reduction by, in the case of Ina Road, more than 50 percent. In addition, at the Valencia location, 4,000 feet away from the speed camera excessive speeds have been reduced by 40 percent.

This information indicates that speed cameras have been successful in reducing excessive speeding. We will continue to monitor photo enforcement camera locations for effects on excessive speeding. In addition, within a year to 18 months of installation we will also have accident statistics that should reflect positive benefits in roadway safety from the installation of the photo enforcement cameras.

CHH/jj

Attachment


c: The Honorable Clarence Dupnik, Pima County Sheriff
John Bernal, Deputy County Administrator for Public Works
Lindy Funkhouser, Assistant County Administrator for Justice and Law Enforcement Policy
Priscilla Cornelio, Transportation Director



MEMORANDUM



Department of Transportation
Traffic Engineering Division

DATE: 7/6/09
TO: Lindy Funkhouser
FROM: Albert Letzkus 
SUBJECT: Impact of Photo Enforcement Cameras on Speeds at 4 Locations

Attached to this memo is a copy of our first Before/After study of the cameras' impact on speeds. The "after" period is only for 2 - 3 weeks following the activation of all the cameras in late May. The reduction in the 85th percentile speed for the entire day is generally low – only a few miles per hour overall. However, the impact on those speeders traveling more than 10 mph over the speed limit was significantly reduced – sometimes by up to 90%.

We will expand these before/after studies for "after" periods of approximately 6 months and we will also look at the other 6 camera locations where we have recent "before" speed data and within one mile of the camera locations.

Thank you.

Attachment

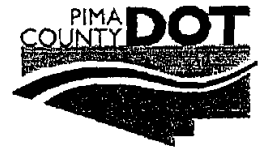
cc: Priscilla Cornelio
Ben Goff
Lt. Woolridge
Mo Farhat
Denise Silvester
Marshall Beaty

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MEMORANDUM

Department of Transportation



DATE: July 1, 2009

TO: Albert G. Letzkus, P.E., PTOE
Traffic Engineering Division Manager

FROM: Mohamad Farhat, P.E., PTOE
Traffic Studies Manager

SUBJECT: Before/After Speed Comparison Study
Permanent Counter Station/Speed Camera Locations

In an effort to reduce speeding and speed-related crashes on Pima County maintained roadways, the Pima County Sheriff's Department has installed speed-cameras at various locations within Pima County. Several of these cameras are located in close proximity to Pima County Department of Transportation (PCDOT), Traffic Engineering Division (TED), permanent traffic counting stations. Where equipment is available, these counters stations are also collecting speed data.

As an information-only study, a comparison was made at four separate counter stations to determine the effect of the speed cameras on the overall vehicle speeds on the roadways. The data was compiled for a one-week period, Wednesday through Tuesday, in both March (before period) and June (after period).

The results of the comparative study found that the speeds at the stations were marginally reduced. A larger difference is shown at Station #34—River Road, most likely due to the close proximity of the counter and camera (approximately 350 feet). At the other three stations, the reduction is much less. Based on the studies, the magnitude of speed reduction obtained by the speed camera installations may be isolated to the immediate vicinity of the camera. However, as shown on the attached summaries, the number of vehicles travelling greater than 10 mph over the speed limit has considerably decreased.

Attached are a summary table of the before/after speeds and counter station information with the speeds and number of vehicles travelling 10 mph over the posted speed limit.

Attachments

MF:ds

SPEED COMPARISON BEFORE/AFTER SPEED CAMERA INSTALLATION

| LOCATON | | BEFORE | | | AFTER | | | Variance in MPH | | |
|--|----------------------------|-------------------|------|------|------------------|------|------|-----------------|------|------|
| | | March 18-24, 2009 | | | June 17-23, 2009 | | | WB | EB | AVG |
| | | WB | EB | AVG | WB | EB | AVG | | | |
| #34: River Road, E of Country Club Rd approximately 350' E of speed camera | Mean | 44.7 | 46.2 | 45.4 | 40.3 | 42.4 | 41.3 | -4.4 | -3.8 | -4.1 |
| | 85th | 49.5 | 50.4 | 49.8 | 44.5 | 46.4 | 45.2 | -5.0 | -4.0 | -4.6 |
| | %Veh >10 mph | 11.4 | 15.8 | 13.6 | 1.5 | 2.0 | 1.7 | -- | -- | -- |
| #6: Ina Road, E of 1st Av approximately 1200' E of speed camera | Mean | 50.5 | 50.7 | 50.6 | 48.4 | 50.3 | 49.3 | -2.1 | -0.4 | -1.3 |
| | 85th | 54.9 | 56.9 | 55.9 | 53.3 | 54.6 | 54.1 | -1.6 | -2.3 | -1.8 |
| | %Veh >10 mph | 13.8 | 20.8 | 17.3 | 5.3 | 11.6 | 8.4 | -- | -- | -- |
| #22: Valencia Rd, W of Wilmot Road approximately 4000' W of speed camera | Mean | 57.0 | 55.4 | 56.2 | 55.1 | 54.4 | 54.6 | -1.9 | -1.0 | -1.6 |
| | 85th | 63.0 | 61.2 | 62.3 | 60.5 | 59.9 | 59.8 | -2.5 | -1.3 | -2.5 |
| | %Veh >10 mph | 26.0 | 18.1 | 22.1 | 15.9 | 12.1 | 13.4 | -- | -- | -- |
| #36: Valencia Road, E of Camino de Oeste approximately 5900' W of camera location | Mean | 46.0 | 45.2 | 45.6 | 45.4 | 44.6 | 45.0 | -0.6 | -0.6 | -0.6 |
| | 85th | 51.3 | 50.3 | 50.8 | 49.9 | 49.6 | 49.7 | -1.4 | -0.7 | -1.1 |
| | %Veh >10 mph | 4.2 | 2.9 | 3.6 | 2.8 | 2.0 | 2.4 | -- | -- | -- |

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Pima County Department of Transportation
Traffic Engineering

Column Speed Study Final Report

Site ID : STA-36 Data Starts : 00:00 on 03/18/09
Info 1 : VALENCIA RD Data Ends : 23:00 on 03/24/09
Info 2 : W CMO DE OESTE Adj. Factor : 1.000%

45 MPH Speed Limit

| | Mean 85%L | | Overspeeds (MPH) | | | | | | Total |
|----------------|-----------|------|------------------|-----|------|-----|-----|-----|--------|
| | | >55 | % | >60 | % | >65 | % | | |
| Grand Total EB | 45.2 | 50.3 | 2515 | 2.9 | 401 | 0.5 | 68 | 0.1 | 87388 |
| Grand Total WB | 46.0 | 51.3 | 3730 | 4.2 | 664 | 0.8 | 130 | 0.1 | 88285 |
| Combined Total | 45.6 | 50.8 | 6245 | 3.6 | 1065 | 0.6 | 198 | 0.1 | 175673 |

07/01/09
12:24:16

Pima County Department of Transportation
Traffic Engineering

Column Speed Study Final Report

Site ID : STA-36 Data Starts : 00:00 on 06/17/09
Info 1 : VALENCIA RD Data Ends : 23:00 on 06/23/09
Info 2 : W CMO DE OESTE Adj. Factor : 1.000%

45 MPH Speed Limit

| | Mean 85%L | | Overspeeds (MPH) | | | | | | Total |
|----------------|-----------|------|------------------|-----|-----|-----|-----|-----|--------|
| | | >55 | % | >60 | % | >65 | % | | |
| Grand Total EB | 44.6 | 49.6 | 1654 | 2.0 | 326 | 0.4 | 76 | 0.1 | 84115 |
| Grand Total WB | 45.4 | 49.9 | 2377 | 2.8 | 350 | 0.4 | 86 | 0.1 | 84948 |
| Combined Total | 45.0 | 49.7 | 4030 | 2.4 | 676 | 0.4 | 161 | 0.1 | 169063 |