

The Pedestrian Problem in Maryland: Using LETEP principles to save lives

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Objectives

- Describe past practices and why they didn't work
- Describe the LETEP training and how it works
- Describe the LETEP principles used to address the problem
- Describe the pedestrian enforcement seminar
- Explain the pedestrian enforcement detail
- Explain recent expansion efforts

Why are we here?

- We are losing pedestrians at an alarming rate
- Regional problem needs a regional approach
- Don't focus on the type of roadway

82.6% of all injury and fatal pedestrian crashes in Maryland occur in 5 jurisdictions

72.7% of all fatal pedestrian crashes in Maryland occurred in five (5) jurisdictions.

That doesn't mean that the other jurisdictions are immune. Every 2 or 3 percent counts. Traffic fatalities are some of the easiest to prevent.

Baltimore Metro Region includes Harford and Howard Counties. Washington Metro Region includes Calvert and Frederick Counties.

US and Maryland roads include **List road names and number from several local jurisdictions**. While most deaths are occurring on these roads, most injuries are happening on local roads and they are not immune to deaths either. Every death is one too many which is why we are focusing on a goal of zero deaths. Imagine the publicity from a death on **name local roads here**.

Montgomery County showed reductions of 17 to 61% on the roads the High Injury Areas they targeted.

Why are we here?

Table 1. Average Risk of Severe or Fatal Injury for Pedestrians Struck by a Vehicle at Various Speeds

	10%	25%	50%	75%	90%
Chance of Severe Injury for Pedestrian Struck by a Vehicle	16 mph	23 mph	31 mph	39 mph	46 mph
Chance of Fatal Injury for Pedestrian Struck by a Vehicle	23 mph	32 mph	42 mph	50 mph	58 mph

Source: Tefft, 2011

Why are we here?

- We are losing pedestrians at an alarming rate
- Regional problem needs a regional approach
- Don't focus on the type of roadway
- Targeted enforcement from properly trained officers works

In the past

Jaywalking
outlawed c

By Aidan Lewis

NEWS

**A growing pedestrian safety crisis:
Speed, short lights and SUVs are
worsening a health epidemic**

Nathan Bomey USA TODAY

**We all have to walk across roads —
why aren't pedestrians a focus of
road safety?**

U.S. Pedes
Driving Decline

pedestrian deaths surged in
over cars on the road



Don't lose focus just because you may not be in the top 5 jurisdictions. All of the jurisdictions in the combined injury/fatal column can be considered numbers that are too high. In the fatal column, the top 12 jurisdictions are in double digits. Imagine injuries as violent crimes and fatal crashes as murders. Would the leadership in these jurisdictions be happy with these numbers if they were crimes? Let's take a look at a crash/crime comparison.

Maryland *Crime/Crash* Clock 2020

Crime

- 1** *murder*
every **15** hours
- 1** *aggravated assault*
every **34** minutes
- 1** *violent crime*
every **21** minutes
- 1** *property crime*
every **5** minutes
- 1** *crime*
every **4** minutes



Crash

- 1** *traffic fatality*
every **15** hours
- 1** *traffic injury*
every **14** minutes
- 1** *property damage crash*
every **8** minutes
- 1** *law enforcement reported crash*
every **6** minutes

Data Sources: Uniform Crime Reports-MSP, CRD and SHA, OOTS-TSAD

Prepared By:
**UNIVERSITY of MARYLAND
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SHOCK, TRAUMA AND ANESTHESIOLOGY
RESEARCH CENTER
National Study Center for Trauma & Emergency Medical Services

Explain crash/crime clock. Acknowledge that the fatality and injury numbers represent all crashes and not just pedestrian crashes.

Why are we here?

Table 2

PEDESTRIAN PERSONAL INJURIES REPORTED FROM OR DIRECTED TO THE BALTIMORE COUNTY POLICE DEPARTMENT BY YEAR JANUARY 1, 2015 => AUGUST 30, 2021	
2015	585
2016	596
2017	546
2018	515
2019	529
2020	N/A
2021 (8/30)	N/A
	2,771

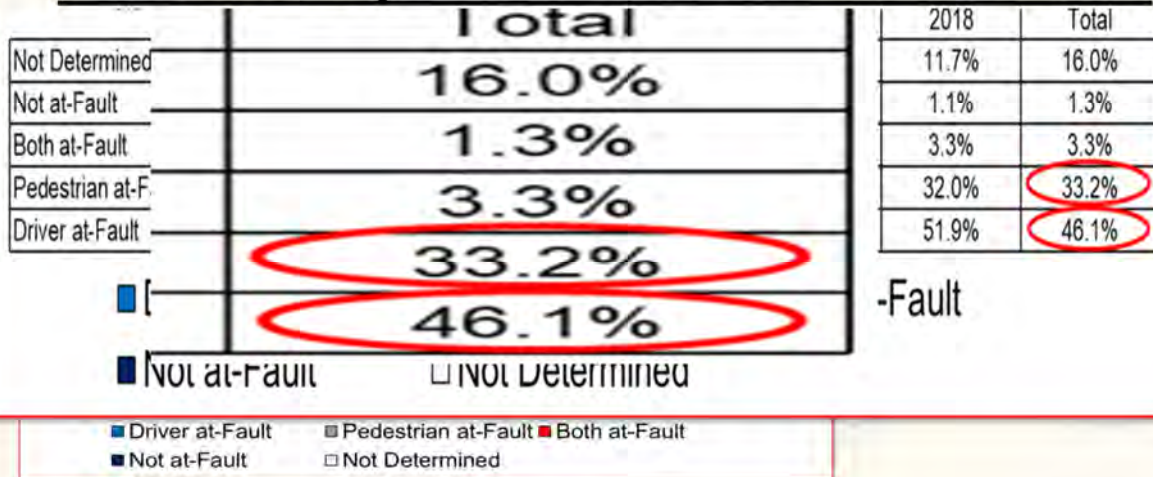
Source: Automated Crash Reporting System

Table 1

PEDESTRIAN TRAFFIC FATALITIES REPORTED FROM OR DIRECTED TO THE BALTIMORE COUNTY POLICE DEPARTMENT BY YEAR JANUARY 1, 2015 => AUGUST 30, 2021											
	PC1	PC2	PC3	PC4	PC6	PC7	PC8	PC9	PC11	PC12	TOTAL
2015	1	4	1			1	2	2	4	3	18
2016	4	3	2	2			1	1	3	2	18
2017					3				6	4	13
2018	2	3	2	3	2	3		2	3	4	24
2019		3	2	3	3			2	3	4	20
2020		1	2	2			1	4	3	3	16
2021 (8/30)				2	1		1	1	3	7	15
	7	14	9	12	9	4	5	12	25	27	124

Source: Traffic Management Unit

Drivers are most often at fault in pedestrian crashes



LETEP to the rescue!



LETEP – Leading Effective Traffic Enforcement Programs

The 4-Es of Highway Safety



Engineering



EMS



Education



Enforcement

Explain the LETEP training. LETEP is an acronym for Leading Effective Traffic Enforcement Programs. Traffic leaders of ANY rank from all over the state can benefit from this training. Students learn how to address traffic safety issues with the 4-Es of highway safety. They are then put into groups and given real world scenarios and statistics and are tasked with how they would address the problem. Problems considered are pedestrian crashes, aggressive driving, speeding, DUI, and others.

Current Actions/Strategies

Conduct training of police officers on best management practices for enforcement of pedestrian safety laws-four year plan.

Develop a Baltimore Regional Education-Enforcement Campaign, similar to Washington Street Smart Campaign, building regional collaboration.

This type of program began in Montgomery County. Sgt. Jeremy Smalley runs the program. They were seeing great successes. We adopted the program and adapted it to our needs. Our program is similar in nature, but executed differently according to what works for us.

Pedestrian Enforcement Seminar

- One day of training!
- Hosted by the Traffic Training Team
- Flexible
- Includes resources from NHTSA and MHSO
- Field Trip



For us, it starts with this training seminar. Any Baltimore County officers who want to work this detail MUST take this training. The roster is then forwarded to Lori Hippensteel in our Traffic Management Unit so she knows who she can schedule for the detail.

Pedestrian Enforcement Seminar Agenda

- The Pedestrian Problem
- Pedestrian Safety Through Enhanced Enforcement
- Grant System
- Washington College (RAVEN)

Pedestrian Enforcement Seminar Agenda

- Successful Prosecution
- Driver Enforcement
- Pedestrian Enforcement
- Field Trip

Pedestrian Enforcement Seminar Resources



**DRIVER VIOLATION
DID UNLAWFULLY VIOLATE:**

(14-0300) Failure to stop for pedestrian in crosswalk
Driver of a vehicle shall come to a complete stop when a pedestrian crossing the roadway in a crosswalk or, if not on half of the roadway on which the vehicle is moving or if approaching from an adjacent lane on the other half of the roadway. **Penalty: \$300 or up to \$500.00. One Point.**

(14-0301) Passing a vehicle stopped for a pedestrian
It is unlawful for a driver to pass a vehicle that is stopped for a pedestrian either in a marked or unmarked crosswalk. **Penalty: \$300 or up to \$500.00. One Point.**

(14-0302) Failure to yield right-of-way when turning on green signal
Vehicles facing a circular green signal, including any vehicle turning left or right, shall yield right-of-way to any pedestrian lawfully within an adjacent crosswalk. **Penalty: \$300 or up to \$500.00. One Point.**

(14-0303) Failure to stop at clearly marked stop line
Vehicles facing a steady circular red signal or red arrow signal shall stop at the front edge of the intersection at a clearly marked stop line, or before entering the crosswalk. **Penalty: \$140 or up to \$300.00. Two Points.**

(14-0304) Failure to yield to pedestrian before turn on red
Vehicles facing a red signal shall, after stopping, yield the right-of-way to any pedestrian lawfully within an adjacent crosswalk. **Penalty: \$300 or up to \$500.00. One Point.**

(14-0305) Failure to exercise due care to avoid hitting a pedestrian
The driver of a vehicle shall exercise due care to avoid colliding with any pedestrian, shall warn any pedestrian by sounding a horn, and shall exercise proper precaution in observing any pedestrian who appears to be crossing or about to cross a roadway.

(14-0310) Special dangers as to pedestrians
The driver of a vehicle shall drive at an appropriate, reduced speed when any special danger exists as to pedestrian safety.

YOU HAVE RECEIVED THIS NOTICE FOR FAILING TO ABIDE BY THE MARYLAND LAWS INDICATED ABOVE.

On average, every year more than 100 pedestrians are killed and more than 2,300 pedestrians are injured in Maryland as a result of collisions with motor vehicles.
Look Out for Each Other!

towardzerdeathmd.com
MDOT STREET IS SMART

**PEDESTRIAN VIOLATION
DID UNLAWFULLY VIOLATE:**

(14-0300) Failure to obey red traffic signal
Pedestrian facing a steady red traffic signal shall not enter the roadway. **Penalty: \$300 or up to \$500.00.**

(14-0301) Failure to obey pedestrian control signal
Pedestrian may not start to cross the roadway in the direction of a steady "don't walk" or "prohibited hand" signal. **Penalty: \$300 or up to \$500.00.**

(14-0302) Failure to yield right-of-way to vehicle
If a pedestrian crosses a roadway at any point other than at a marked crosswalk or at an unmarked crosswalk at an intersection, the pedestrian shall yield the right-of-way to any vehicle. **Penalty: \$300 or up to \$500.00.**

(14-0303) Failure to cross at signalized intersection
When a signalized intersection of which a traffic control signal is in operation, a pedestrian may cross only in a marked crosswalk. **Penalty: \$300 or up to \$500.00.**

(14-0304) Crossing intersection diagonally
Pedestrian may not cross an intersection diagonally unless authorized by a traffic control device. **Penalty: \$300 or up to \$500.00.**

(14-0305) Pedestrian unlawfully on roadway
Where a sidewalk is provided, a pedestrian may not walk along and on an adjacent roadway. Where no sidewalk is provided, a pedestrian may not walk along on the left shoulder or on the left side of the roadway. **Penalty: \$300 or up to \$500.00.**

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Pedestrian Enforcement Seminar Resources



LOOK ALIVE

Safety Tips For Pedestrians,
Bicyclists, and Drivers

LookAliveMD.org

A public safety program of the Business & Metropolitan Council, Western, Juniata, and York State Police Departments of York County, PA.

For Driving:



Stop for pedestrians at crosswalks.



Be careful when passing buses or stopped vehicles.



Slow down and obey the speed limit.



When turning, yield to people walking and biking.



Look for bicyclists before opening your door.



Allow at least 3 feet when passing bikes.

For Biking:



Obey signs and signals.



Ride with traffic.



Use hand signals to tell drivers what you intend to do.



Use lights at night and when visibility is poor.



Wear a helmet.



Ride in a straight line at least 3 feet from parked cars.

For Walking:



Cross the street at crosswalks and intersections.



Watch for turning vehicles. Look left, right, and left again.



Use the pushbuttons.



Wait for the walk signal.



Be visible. Wear something light or reflective after dark.



Watch out for blind spots around trucks and buses.

Pedestrian Enforcement Seminar Resources



MIRA CON VIDA.

Consejos de seguridad vial para los peatones, ciclistas y conductores

LookAliveMD.org

Este programa es propiedad pública de los Archivos de los Archivos del Gobierno del Estado de Maryland y del Departamento de Transporte de Maryland.

Conductores:



Para por los peatones en los cruces.



Ten cuidado al pasar autobuses o vehículos estacionados.



Reduce la velocidad y obedece el límite de velocidad.



Al doblar, cede el paso a los peatones y ciclistas.



Atento a los ciclistas antes de abrir la puerta.



Deja un espacio de más de 3 pies al pasar a un ciclista.

Ciclistas:



Obedece todas las señales y semáforos.



Recorrido con tráfico.



Usa señales de mano para indicarte a los conductores qué vas a hacer.



Usa luces en la noche cuando la visibilidad sea baja.



Usa un casco.



Monta en líneas recta a un mínimo de 3 pies de los autos estacionados.

Peatones:



Cruza en los cruces de peatones e intersecciones.



Atento a los vehículos que doblan. Mira a la izquierda, a la derecha y a la izquierda de nuevo.



Oprimo los botones en los cruces de peatones.



Espera por la señal de cruzar.



Qué te vean. Al oscurecer, vistete con algo reflectante.



Atento a los puntos ciegos de los camiones y autobuses.

Pedestrian Enforcement Seminar Detail



The safe stopping distance assumes a 2 second reaction time as opposed to the average 1.66 seconds used in crash investigation. This gives the benefit to the driver. It also assumes the vehicle is traveling at 10mph OVER the speed limit. SAFETY FIRST! Decoy officers are wearing bright yellow shirts or reflective vests. Decoy officers DO NOT enter the crosswalk if the vehicle is past the cone. If the decoy officer doesn't feel comfortable entering the crosswalk for whatever reason (speed or vehicle for example), then they do not enter the crosswalk. Enforcement officers are also wearing reflective vests since they are stepping into traffic to flag the offending vehicles. Offending vehicles are then directed to a parking lot or other safe parking area so the flow of traffic does not present a hazard.



Factors that must be in place:

1. The detail is a Daytime detail only. It is not done at night, during rain, or other low visibility days.
2. We use mid-block crosswalks. That is where most of our problems lie, and it avoids any issues related to a crosswalk at a signalized intersection.
3. There must be a crosswalk that is not in need of repair and is easily visible to motorists.
4. There must be visible signage that is not in need of repair.
5. The detail is not done on crests or curves. Good visibility of the pedestrian for a long distance is necessary.

Point out these conditions in the photos.



This picture is taken from the beginning of the safe stopping distance where the cone is placed. This part of Eastern Ave is a 35mph zone which requires a safe stopping distance of 229 feet. This picture is taken from the cone which is 229 feet from the crosswalk. You can see that from this distance, the signage for the crosswalk and the crosswalk itself is easily visible to the driver.



The next two slides are screenshots from a video showing the decoy crossing at the crosswalk. You can see that the vehicle is outside of the safe stopping distance when the decoy enters the crosswalk.



This screenshot shows the vehicle at a complete stop allowing the decoy to safely finish crossing the street.

Pedestrian Enforcement Seminar Detail



This is a video of a violation that occurred during the detail. Notice how the vehicle moves into the turn lane to avoid the pedestrian and doesn't seem to even slow down. The enforcement officers are set up a safe distance away and are wearing their reflective vests which results in a safe stop of the vehicle. The officers then direct the offending vehicle into a parking lot for a safe enforcement/education encounter.

Pedestrian Enforcement Seminar Detail

- Be safe
- Have good signage
- Have a good line of sight
- Have enough room to make the stop
- Everyone on the detail should be wearing traffic safety vests

Pedestrian Enforcement is as easy as 1-2-3

1. Get your officers trained
2. Select a location
3. Work the detail

Results

- Prior to requiring officers to attend the training:

- Almost NO citations were issued
- 2009 warnings to 129 citations over 10 separate details
- 15.5 to 1 ratio in favor of warnings
- No noticeable difference in behavior patterns



- After requiring officers to attend the training:

- Immediate difference
- Fourth quarter of 2019 - 3 warnings for every citation issued
- Average for all details in 2020 was a 2 to 1 ratio in favor of citations
- Same number of details as in 2019
- Positive change in behavior of drivers and pedestrians



Expanding

- September of 2021, MML Chief's Conference presentation
- March of 2022, presented to the MHSO Supervisor's Traffic Conference
- May of 2022, BCoPD partnered with Delaware for training
- BCoPD expanded their details to include Liberty Rd on the west side of Baltimore County

In September of 2021, Mike Bible from the MHSO and I showed this presentation to the Maryland Municipal League Maryland Chief's Conference. It was well received and there were many inquiries about how smaller agencies can use this idea. They were particularly impressed with the fact the detail doesn't require a large number of resources.

In March of 2022, I gave this presentation at the MD Highway Safety Office Supervisor's Traffic Conference. Supervisors from large and small agencies all over Maryland were present. It was once again well received and there were many follow up emails from their supervisors about getting their people trained and setting up their own details.

In May of 2022, the Traffic Training Team partnered with the TSRP and other traffic leaders from Delaware. We held joint and separate classes. The separate classes were those that were state specific concerning state laws and pedestrian statistics. We then came together to explain the training and the enforcement detail. Delaware has recently gone through a review and was looking to improve and increase their pedestrian enforcement and increase safety for their pedestrians.

In the fall of 2022, the BCoPD expanded their detail to include Liberty Rd on the west side of the county. Liberty Rd is a main artery and runs through many underserved neighborhoods in Baltimore County. Liberty Rd is consistently one of Baltimore County's

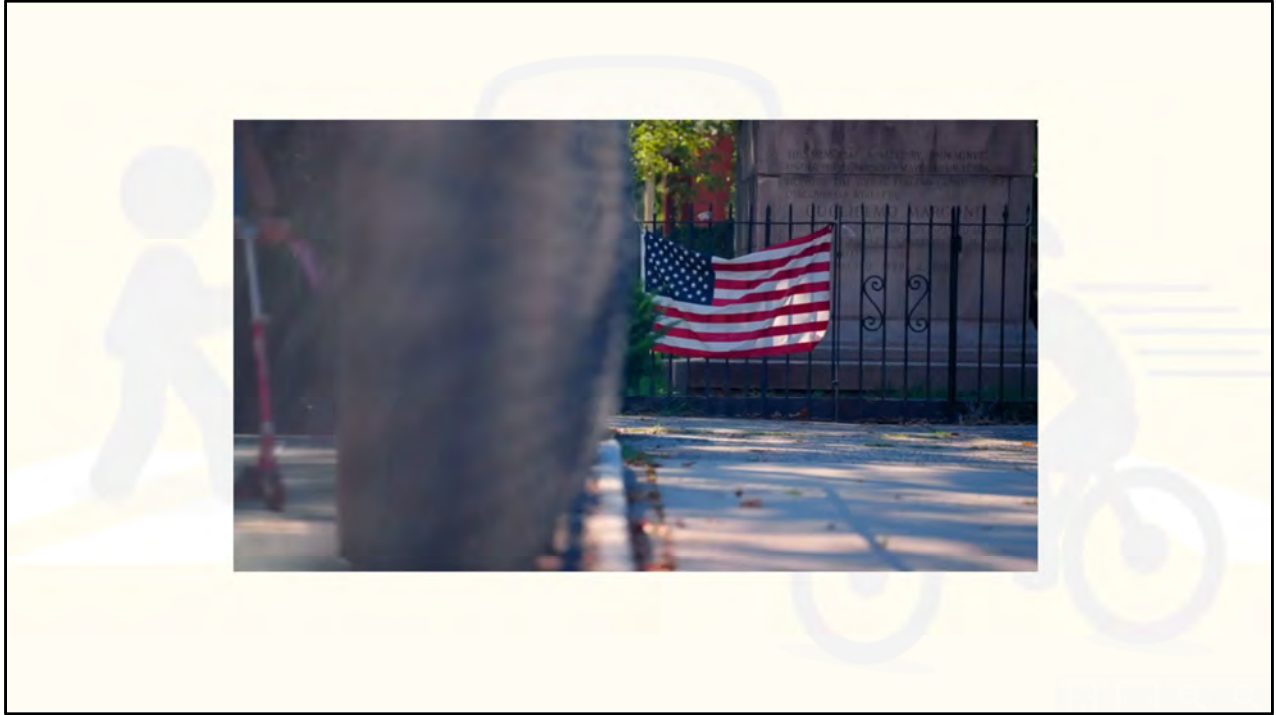
deadliest roads, especially for pedestrians. The most dangerous stretch is from I-695 (near the Baltimore City line) to Old Court Rd. The detail has only been running on Liberty Rd for a couple of months, but we are already seeing positive results with our education and enforcement efforts.

Can we get there?



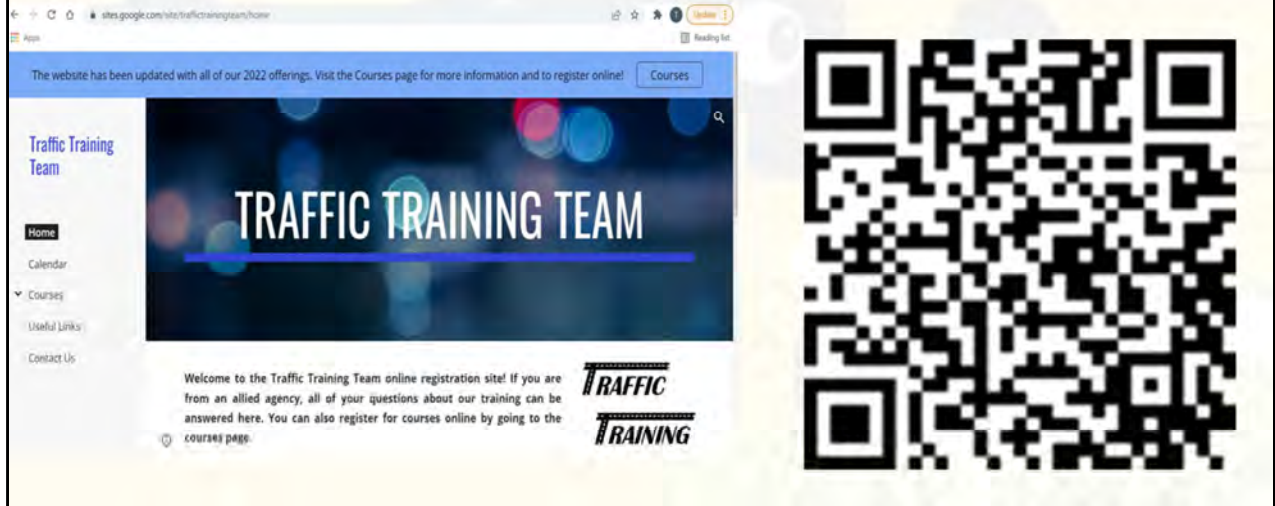
ZERO DEATHS
MARYLAND

It is possible to get to zero deaths. Baltimore County has not had a pedestrian crash in this area since we started the detail. We still return to this spot for maintenance, but are now on Liberty Rd and we appear to be on our way to success there. One bite at a time. Inspiration can be seen from cities like Hoboken, NJ which hasn't seen a pedestrian fatality in 5 years!



Video is 3:44.

The Traffic Training Team can help!

A screenshot of a web browser displaying the Traffic Training Team website. The browser's address bar shows the URL "sites.google.com/site/traffictrainingteam/home". A notification banner at the top of the page reads: "The website has been updated with all of our 2022 offerings. Visit the Courses page for more information and to register online!" with a "Courses" button. The main content area features a dark blue background with the text "TRAFFIC TRAINING TEAM" in white. Below this, a welcome message states: "Welcome to the Traffic Training Team online registration site! If you are from an allied agency, all of your questions about our training can be answered here. You can also register for courses online by going to the courses page." To the right of the text is the "TRAFFIC TRAINING" logo. A large QR code is positioned to the right of the website screenshot, intended for scanning to access the site.

Officers from allied agencies can register for our training through our website at www.traffictrainingteam.com. You can also scan the QR code on the screen which will link you to our website.



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