

The background features a stylized illustration of a road with a yellow center line. On the left, a grey silhouette of a pedestrian is walking. In the center, a grey silhouette of a car is driving. On the right, a grey silhouette of a cyclist is riding. The text is overlaid on this scene.

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

Sgt. Tom Morehouse  
Baltimore County Police Department  
Traffic Training Team

# Objectives

Upon completion of this block, the student will be able to:

- Describe past practices and why they didn't work
- Describe the LETEP principles used to address the problem
- Describe the pedestrian enforcement seminar
- Explain the pedestrian enforcement detail

# 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

# 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 <b>Severe Injury</b> for Pedestrian Struck by a Vehicle	16 mph	23 mph	31 mph	39 mph	46 mph
Chance of <b>Fatal Injury</b> 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: the car  
outlawed c

By Aidan Lewis

**NBC NEWS**  
HEALTH NEWS

'Mind-boggling': Pedestrian

**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

ver cars on the road  
**Pedestrian deaths surged in  
ver cars on the road**

SHARE THIS —



# Why are we here?

Number of Pedestrian-Involved Injury and Fatal Crashes by Jurisdiction 2015–2019

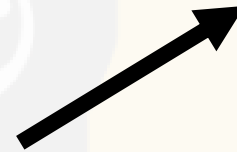
Jurisdiction	Total
Baltimore City	5,104
Montgomery	2,382
Baltimore	2,366
Prince George's	2,243
Anne Arundel	1,202
Howard	334
Harford	325
Frederick	308
Washington	284
Wicomico	231
Charles	227
Worcester	200
Cecil	191
Carroll	183
St. Mary's	131
Calvert	82
Dorchester	71
Talbot	51
Allegany	46
Queen Anne's	41
Garrett	29
Somerset	26
Caroline	23
Kent	22
	16,102

Number of Pedestrian-Involved Fatal Crashes by Jurisdiction 2015–2019

Jurisdiction	Total
Prince George's	126
Baltimore	104
Baltimore City	81
Montgomery	65
Anne Arundel	52
Howard	20
Charles	18
Harford	18
Cecil	17
Carroll	16
Washington	14
Worcester	10
Frederick	9
Wicomico	8
St. Mary's	7
Calvert	6
Allegany	4
Dorchester	4
Talbot	3
Caroline	2
Garrett	2
Kent	1
Queen Anne's	1
Somerset	1
	588



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

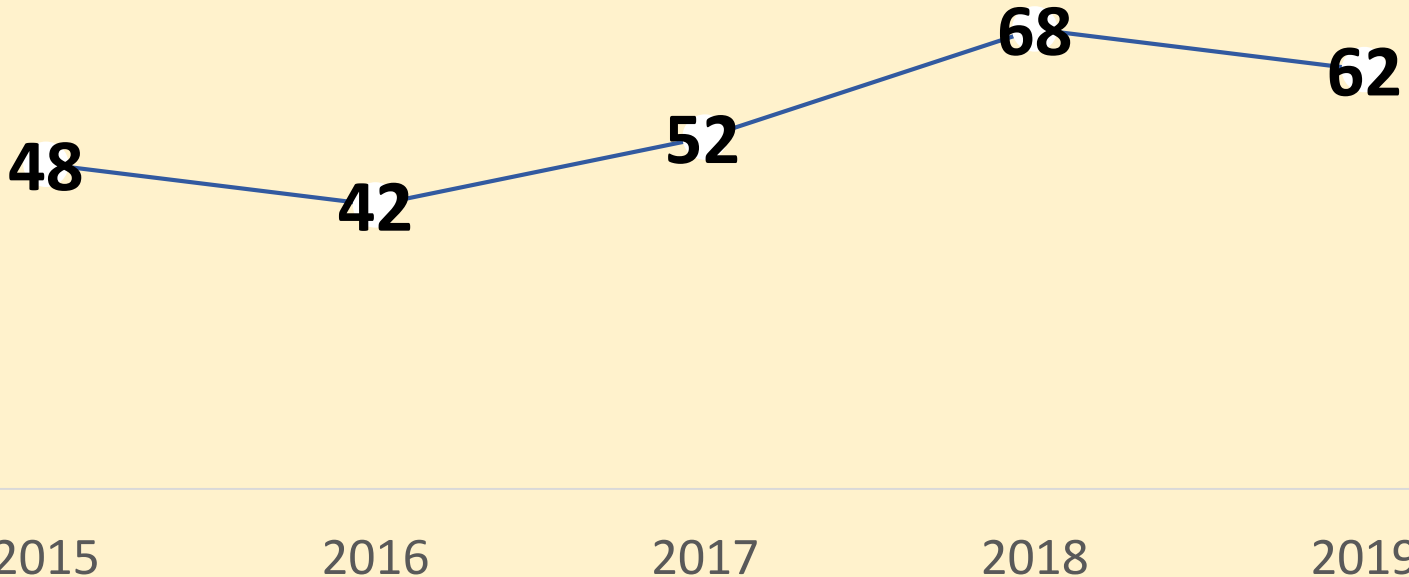


72.7% of all fatal pedestrian crashes in Maryland occurred in five (5) jurisdictions.



# Why are we here?

Baltimore Metropolitan Region Pedestrian Fatalities  
2013–2019





# 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
	<b>2,771</b>

Source: Automated Crash Reporting System

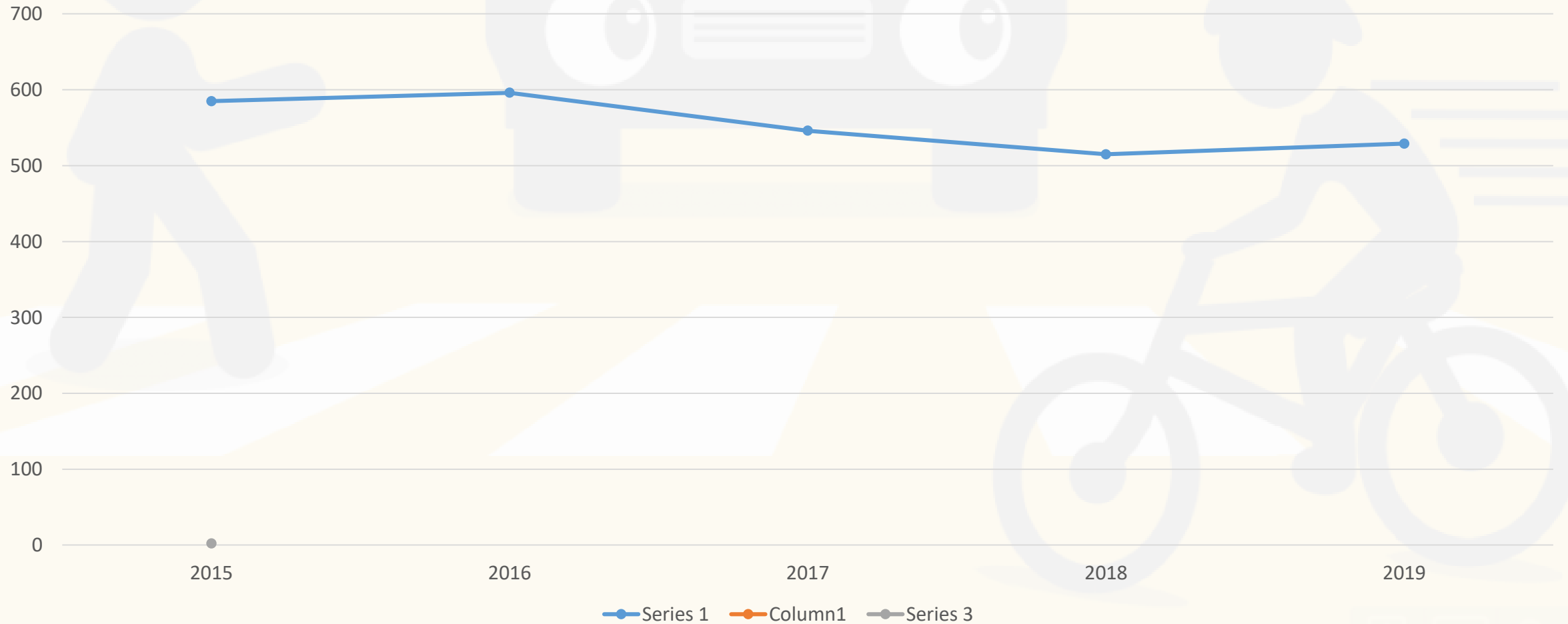
Table 1

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
	<b>7</b>	<b>14</b>	<b>9</b>	<b>12</b>	<b>9</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>25</b>	<b>27</b>	<b>124</b>

Source: Traffic Management Unit

# Why are we here?

Baltimore County Pedestrian Injury Crashes



# Drivers are most often at fault in pedestrian crashes

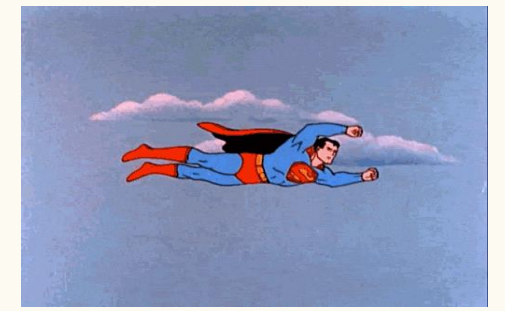
	Total
Not Determined	16.0%
Not at-Fault	1.3%
Both at-Fault	3.3%
Pedestrian at-Fault	33.2%
Driver at-Fault	46.1%

2018	Total
11.7%	16.0%
1.1%	1.3%
3.3%	3.3%
32.0%	33.2%
51.9%	46.1%

-Fault

- Driver at-Fault
- Not at-Fault
- Pedestrian at-Fault
- Both at-Fault
- Not Determined

# LETEP to the rescue!



LETEP – Leading Effective Traffic Enforcement Programs

## The 4-Es of Highway Safety



Engineering



EMS



Education



Enforcement

# 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.

# Pedestrian Enforcement

## Seminar

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



# Pedestrian Enforcement

## Seminar Agenda

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

# Pedestrian Enforcement

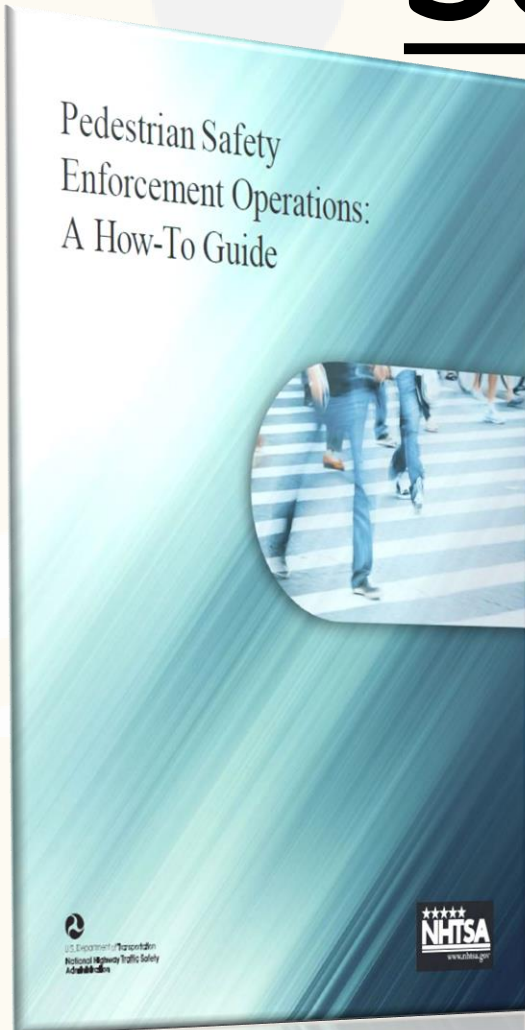
## Seminar Agenda

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



# Pedestrian Enforcement

## Seminar Resources



### DRIVER VIOLATION DID UNLAWFULLY VIOLATE:

21-502(a)2 **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 is: (i) on the half of the roadway on which the vehicle is traveling or (ii) approaching from an adjacent lane on the other half of the roadway. **Penalty: \$80 or up to \$500.00. One Point.**

21-502(c) **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: \$80 or up to \$500.00. One Point.**

21-202(c) **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: \$90 or up to \$500.00. One Point.**

21-202(h) **Failure to stop at clearly marked stop line**  
Vehicles facing a steady circular red signal or red arrow signal shall stop at the near side of the intersection at a clearly marked stop line, or before entering the crosswalk. **Penalty: \$140 or up to \$500.00. Two Points.**

21-202(k) **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: \$90 or up to \$500.00. One Point.**

21-504 (a,b,c) **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 on observing any confused or incapacitated pedestrians. **Penalty: \$70 or up to \$500.00. One Point.**

21-801(h) **Special dangers as to pedestrians**  
The driver of a vehicle shall drive at an appropriate, reduced speed when any special danger exists as to pedestrians. **Penalty: \$90 or up to \$500.00. One Point.**

YOU HAVE RECEIVED THIS NOTICE FOR FAILURE TO ABIDE BY THE MARYLAND LAW(S) 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!

towardzerodeathsmd.com

MDOT  
MARYLAND DEPARTMENT  
OF TRANSPORTATION

STREET  
III SMART

11/18

### PEDESTRIAN VIOLATION DID UNLAWFULLY VIOLATE:

21-202(l) **Failure to obey red traffic signal**  
Pedestrian facing a steady red traffic signal alone may not enter the roadway. **Penalty: \$90 or up to \$500.00.**

21-203(c) **Failure to obey pedestrian control signal**  
Pedestrian may not start to cross the roadway in the direction of a solid "don't walk" or "upraised hand" signal. **Penalty: \$50 or up to \$500.00.**

21-503(a) **Failure to yield right-of-way to vehicle**  
If a pedestrian crosses a roadway at any point other than in a marked crosswalk or in an unmarked crosswalk at an intersection, the pedestrian shall yield the right-of-way to any vehicle. **Penalty: \$50 or up to \$500.00.**

21-503(c) **Failure to cross at signalized intersection**  
Between adjacent intersections at which a traffic control signal is in operation, a pedestrian may cross only in a marked crosswalk. **Penalty: \$50 or up to \$500.00.**

21-503(d) **Crossing intersection diagonally**  
Pedestrian may not cross an intersection diagonally unless authorized by a traffic control device. **Penalty: \$50 or up to \$500.00.**

21-506(a,b) **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 walk only on the left shoulder or on the left side of the roadway, facing traffic. **Penalty: \$50 or up to \$500.00.**

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III SMART

# Pedestrian Enforcement

## Seminar Resources

### INFRACCIÓN DEL CONDUCTOR INFRACCIÓN ILEGAL:

- 21-502(a)2 **No frenó en un paso de peatones**  
El conductor del vehículo deberá frenar por completo cuando un peatón que está cruzando la calle en un paso de peatones esté: (i) en la mitad de la calle en la que el vehículo está transitando o (ii) acercándose desde un carril adyacente en la otra mitad de la calle. **Multa: \$80 o hasta \$500.00. Un punto.**
- 21-502(c) **Pasar a un vehículo que está detenido para que pase un peatón**  
Se considera ilegal que un conductor pase un vehículo que se encuentra detenido esperando que pase un peatón en un paso de peatones, esté marcado o no. **Multa: \$80 o hasta \$500.00. Un punto.**
- 21-202(c) **No ceder el paso al girar con luz verde**  
Al llegar a una luz verde, los vehículos, independientemente de si giran hacia la derecha o la izquierda, deberán cederle el paso a los peatones que se encuentren en un paso de peatones adyacente. **Multa: \$90 o hasta \$500.00. Un punto.**
- 21-202(h) **No detenerse en una línea de detención marcada claramente**  
Al llegar a una señal circular roja o a una flecha roja constante, los vehículos deberán detenerse en la parte más cercana de la intersección en una línea de detención marcada claramente, o bien, antes de llegar al paso de peatones. **Multa: \$140 o hasta \$500.00. Dos puntos.**
- 21-202(k) **No ceder el paso a los peatones antes de que el semáforo se ponga en rojo**  
Ante la señal roja, los vehículos deberán, después de detenerse, cederle el paso a los peatones que se encuentren legalmente dentro de un paso de peatones adyacente. **Multa: \$90 o hasta \$500.00. Un punto.**
- 21-504 (a,b,c) **No tener cuidado para evitar golpear a un peatón.**  
El conductor de un vehículo deberá tener cuidado para evitar colisionar con un peatón, deberá advertirle al peatón haciendo sonar la bocina y deberá tener cuidado y observar peatones confundidos o incapacitados. **Multa: \$70 o hasta \$500.00. Un punto.**
- 21-801(h) **Peligros especiales en cuanto a peatones**  
El conductor de un vehículo deberá conducir a una velocidad adecuada y reducida cuando existan peligros especiales relativos a peatones. **Multa: \$90 o hasta \$500.00. Un punto.**

RECIBIÓ ESTE AVISO POR NO HABER CUMPLIDO CON LA(S) LEY(ES) DE MARYLAND INDICADAS ANTERIORMENTE.

En promedio, cada año son más de **100 los peatones que resultan muertos** y más de **2,300 los heridos** en Maryland a raíz de colisiones contra vehículos automotores.

¡Cuidémonos!

[towardzerodeathsmd.com](http://towardzerodeathsmd.com)

### INFRACCIÓN DEL PEATÓN INFRACCIÓN ILEGAL:

- 21-202(i) **No obedeció la luz roja del semáforo**  
Al llegar a una señal de tránsito de luz roja constante, los peatones no podrán ingresar a la calle. **Multa: \$90 o hasta \$500.00.**
- 21-203(c) **No obedeció la señal de control del peatón**  
El peatón no puede comenzar a cruzar la calle en dirección hacia una clara señal de "Don't walk" (No cruzar) ni "Mano en alto". **Multa: \$50 o hasta \$500.00.**
- 21-503(a) **No cedió el paso a un vehículo**  
Si un peatón cruza la calle en un lugar que no sea un paso de peatones marcado o en un paso de peatones no marcado en una intersección, el peatón deberá cederle el paso al vehículo. **Multa: \$50 o hasta \$500.00.**
- 21-503(c) **No cruzó en una intersección señalizada**  
Entre intersecciones adyacentes en las que funciona un semáforo, el peatón puede cruzar únicamente en un paso de peatones marcado. **Multa: \$50 o hasta \$500.00.**
- 21-503(d) **Cruzar intersecciones diagonalmente**  
Los peatones no pueden cruzar las intersecciones diagonalmente a menos que así lo autorice un dispositivo de control de tránsito. **Multa: \$50 o hasta \$500.00.**
- 21-506 (a,b) **Peatón en la calle de forma ilegal**  
En los casos donde haya aceras, los peatones no podrán caminar por la calle ni por las calles adyacentes. Donde no haya aceras, los peatones pueden caminar únicamente en la parte izquierda de la calle, de frente al tránsito de vehículos. **Multa: \$50 o hasta \$500.00.**

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# Pedestrian Enforcement

# Seminar Resources



## LOOK ALIVE

Safety Tips For Pedestrians,  
Bicyclists, and Drivers

[LookAliveMD.org](http://LookAliveMD.org)

A public safety program of the Baltimore Metropolitan Council Member Jurisdictions and  
the Maryland Department of Transportation

### 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



### 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 indicarles a los conductores  
qué vas a hacer.



**Usa luces en la noche**  
cuando la visibilidad sea baja.



**Usa un casco.**



**Monta en línea 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.



**Oprime los botones**  
en los cruces de peatones.



**Espera por la señal**  
de cruzar.



**Qué te vean.**  
Al oscurecer, vístete con algo reflectante.



**Atento a los puntos ciegos**  
de los camiones y autobuses.

## MIRA CON VIDA.

Consejos de seguridad vial para los  
peatones, ciclistas y conductores

[LookAliveMD.org](http://LookAliveMD.org)

Un programa de seguridad pública de las Jurisdicciones de los Miembros del Consejo  
Metropolitano de Baltimore y del Departamento de Transporte de Maryland

# Pedestrian Enforcement

## Seminar Detail



# Pedestrian Enforcement

## Seminar Detail

### Appendix G. Calculating a Safe Stopping Distance

The safe stopping distance should be marked a specific number of feet from the crosswalk (in both directions, as appropriate). It is based on two conservative assumptions: (1) that the vehicle is traveling 10 mph above the posted speed limit, and (2) that the driver's reaction time is two seconds. The distance reflects the total time to stop, which includes both reaction time and stopping time.

The chart below shows appropriate safe stopping distances for posted speed limits from 15 to 45 mph.

Posted speed (mph)	Assumed speed (limit + 10 mph)	Feet per second (at assumed speed)	Distance to react (2 seconds) (feet)	Distance to stop (feet)	Total safe stopping distance (feet)
15	25	36	72	30	102
20	30	44	88	43	131
25	35	51.3	103	59	162
30	40	58.7	117	76	193
35	45	66	132	97	229
40	50	73.3	147	119	266
45	55	80.7	161	144	305

Note: This assumes a street with no grade.











# Pedestrian Enforcement

## Seminar Detail



# 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



**Thomas Morehouse**

**Sergeant**

**Training Section**

**Specialized Training Supervisor**

**Traffic Training Supervisor**

**Agency DRE Coordinator**

**Baltimore County Police Department**

**7200 Sollers Point Road**

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