

Safe Parking...



*... While Operating
In or Near
Moving Traffic*

The Crash Pyramid



U.S.

43,220
Fatalities

* Police Reported

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2002



2002 FD & EMS

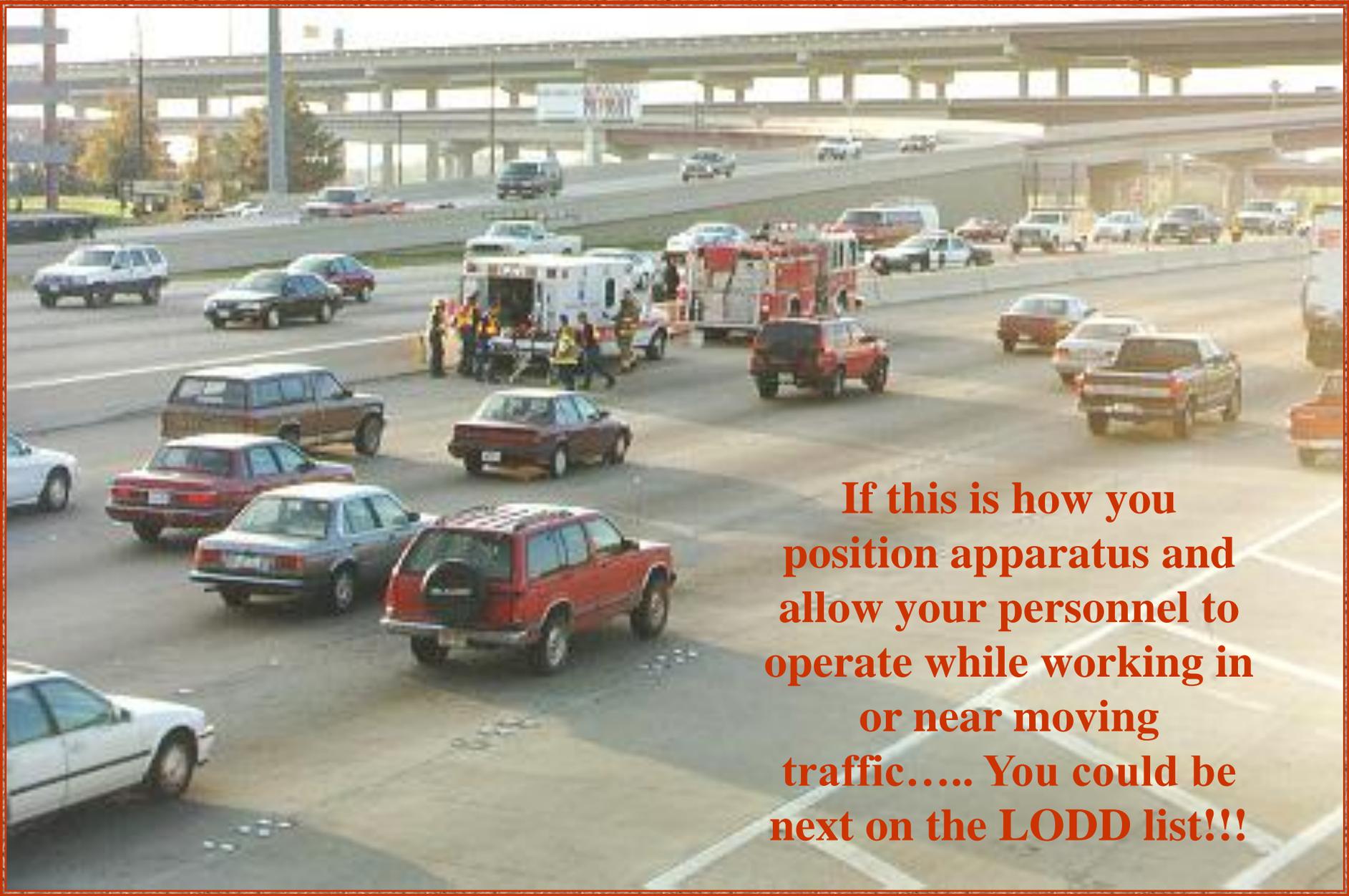
"Struck-By" Incidents

Fatalities

8 firefighters killed
plus
3 EMS responders

Injured

17 personnel struck
5 apparatus direct hits



If this is how you position apparatus and allow your personnel to operate while working in or near moving traffic..... You could be next on the LODD list!!!

Definition of a “Traffic Incident”

**A traffic incident is defined as
any non-recurrent event,
(vehicle crash, vehicle breakdown, special event)
that causes a reduction of roadway
capacity or an abnormal increase
in traffic demand or congestion.**



That means that when responders operate at any highway incident that interferes with the normal flow of traffic, a “Temporary” Work Zone has been established.



**Five components of a
Work Zone;**

- **Advance Warning**
- **Transition Area**
- **Buffer Space**
- **Work Area**
- **Termination Area**

Responder Highway Terms

“Lane Numbering”

Develop a system to identify lanes; such as from left to right as one faces the direction of travel.



Responder Highway Terms

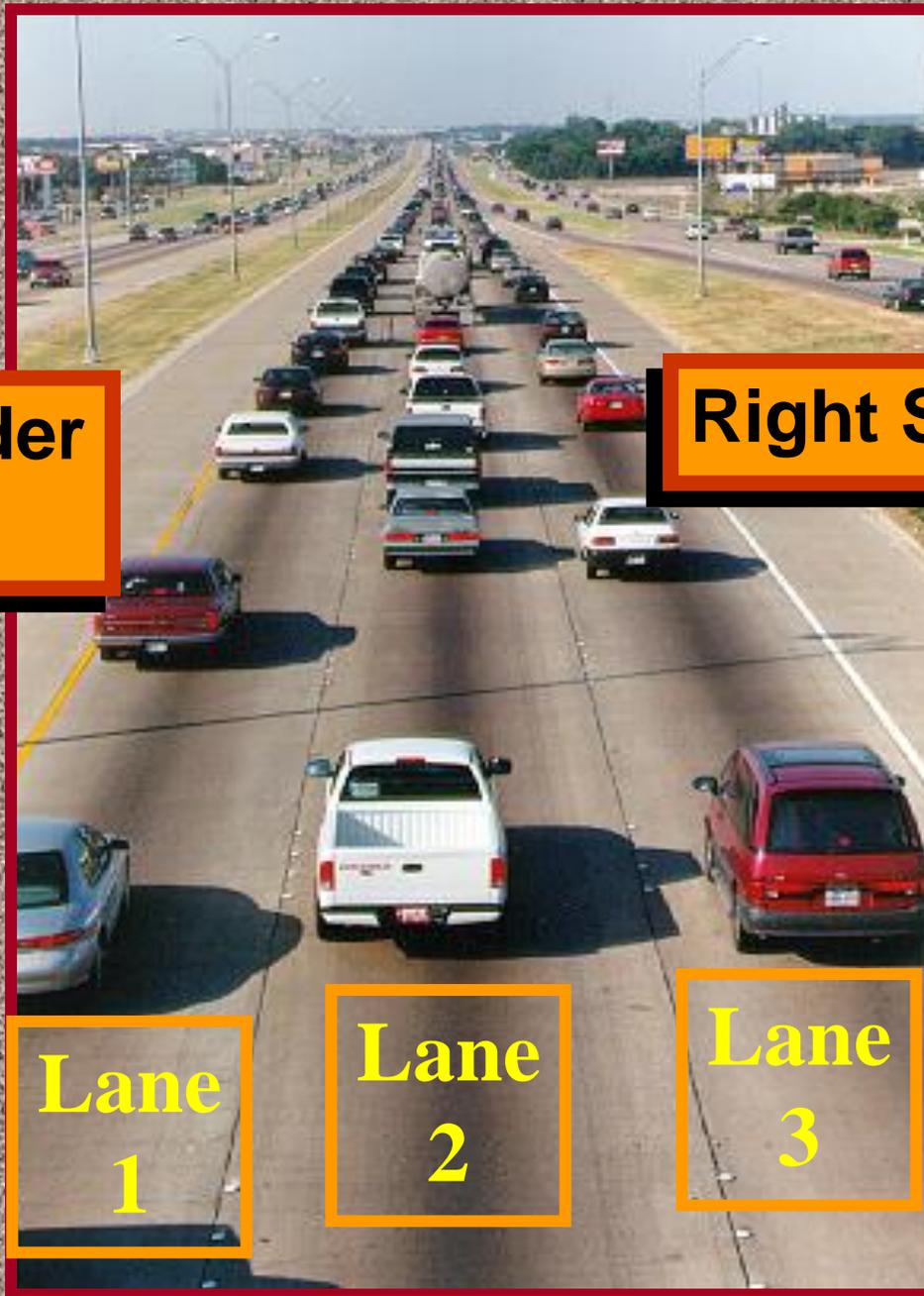
Left Shoulder

Right Shoulder

Lane
1

Lane
2

Lane
3



Responder Highway Terminology

“upstream” and “downstream”

‘Upstream’ or **‘downstream’** refers to the direction of normal vehicle travel on the road, street or highway.



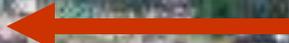


If the crash scene is here...



**then this area is “Upstream”
from the crash scene...**

and this is “Downstream”





If moving traffic occupies this lane, is there an adequate “buffer”?



Just by the very nature of our business, we need the initial obstructed lane PLUS one more.

Primary Objective ...



Always position first-arriving vehicle or apparatus to protect the scene, patients & responders

Responsibilities of First-Due Fire Department Officer



- ✓ **‘Block’**
- ✓ **Prioritize the moving traffic hazards**
- ✓ **Set out your traffic control devices**
- ✓ **Create a protected loading area
for the ambulance**
- ✓ **Everyone’s safety is at risk out
on the street and you are the
“Safety Officer” who can fix that!**

“Blocking ” is the action of positioning an apparatus or vehicle at an angle to halt the flow of moving traffic in one or more lanes.



Fire apparatus provide the best 'Blocks'



Blocking creates a protected temporary “Work Zone”



**This Engine blocks the left and center lanes.
This “block to the right” directs
all upstream traffic into the right lane.**





**A
“Shadow ”
is the
area immediately
downstream
of any
apparatus
or vehicle
that blocks
moving traffic**

**Work within this “shadow” area
for greatest degree of safety
and protection from moving traffic.**



A “Temporary Traffic Control Zone”



The ‘shadow’ created by the ‘upstream’ ‘block’ from the FD engine establishes the ‘temporary traffic control zone’

All fire, rescue and EMS activities must occur within this protected 'work zone'.



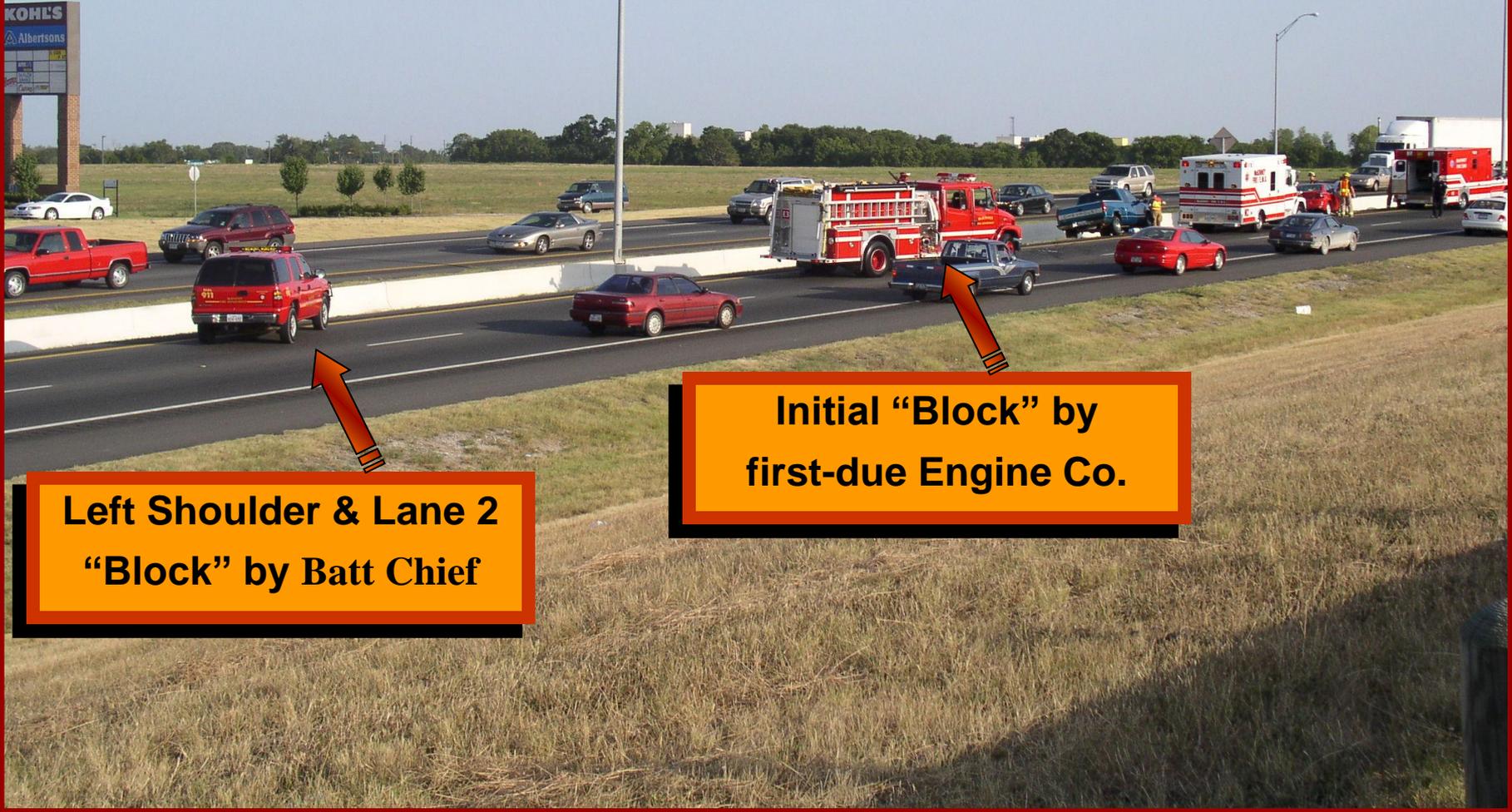
**The patient
“loading area”
at the rear of
the ambulance
must be within
the
protected area**





**Excellent blocking
angle of this ambulance
places
patient loading area
away from
moving traffic**

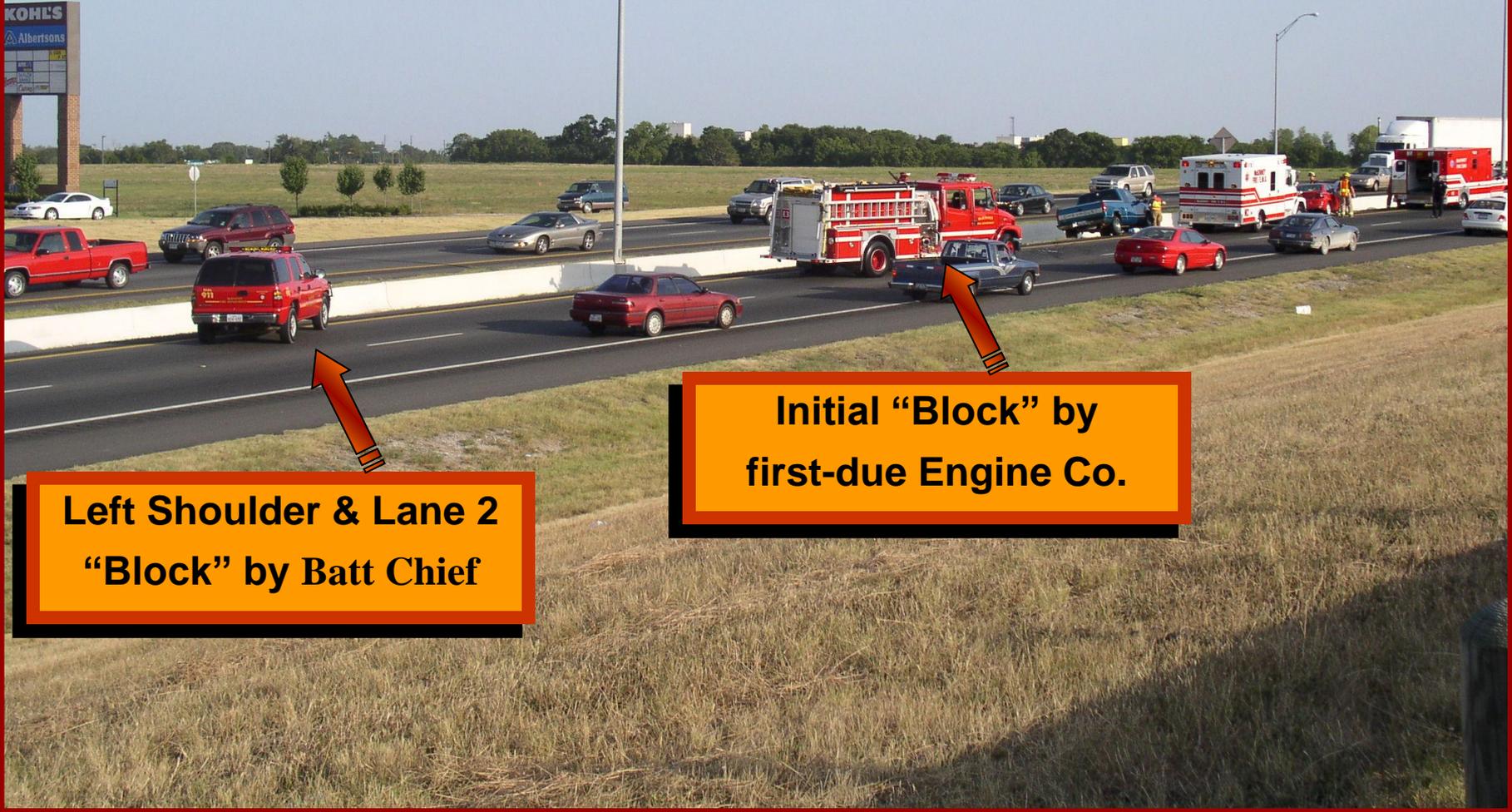
**Three patient “loading areas”
are protected by the ‘block’**



**Left Shoulder & Lane 2
“Block” by Batt Chief**

**Initial “Block” by
first-due Engine Co.**

**Three patient “loading areas”
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**Left Shoulder & Lane 2
“Block” by Batt Chief**

**Initial “Block” by
first-due Engine Co.**



**Three ambulances all
parked within the
protected
“Shadow” area**

The concept of “Quick Clearance”

Goal is to minimize...

- ✓ time on scene,
- ✓ number of lanes blocked,
- ✓ secondary crash potential



Another Work Zone requirement is “Advance Warning”





A diamond-shaped sign with a pink background and a black border. The sign is mounted on a silver metal tripod stand. The text on the sign is in black, bold, sans-serif capital letters, arranged in three lines: "EMERGENCY", "SCENE", and "AHEAD". The sign is positioned in front of a fire truck's equipment compartment, which is open, showing various tools and equipment. The background shows a grassy area and a white van with its door open.

**EMERGENCY
SCENE
AHEAD**

36" x 36"

**Official color:
Retro-reflective
"Florescent Pink"**



MARK

THRU TRAFFIC

EMERGENCY SCENE AHEAD

911-677

Another "Block" Gets Hit

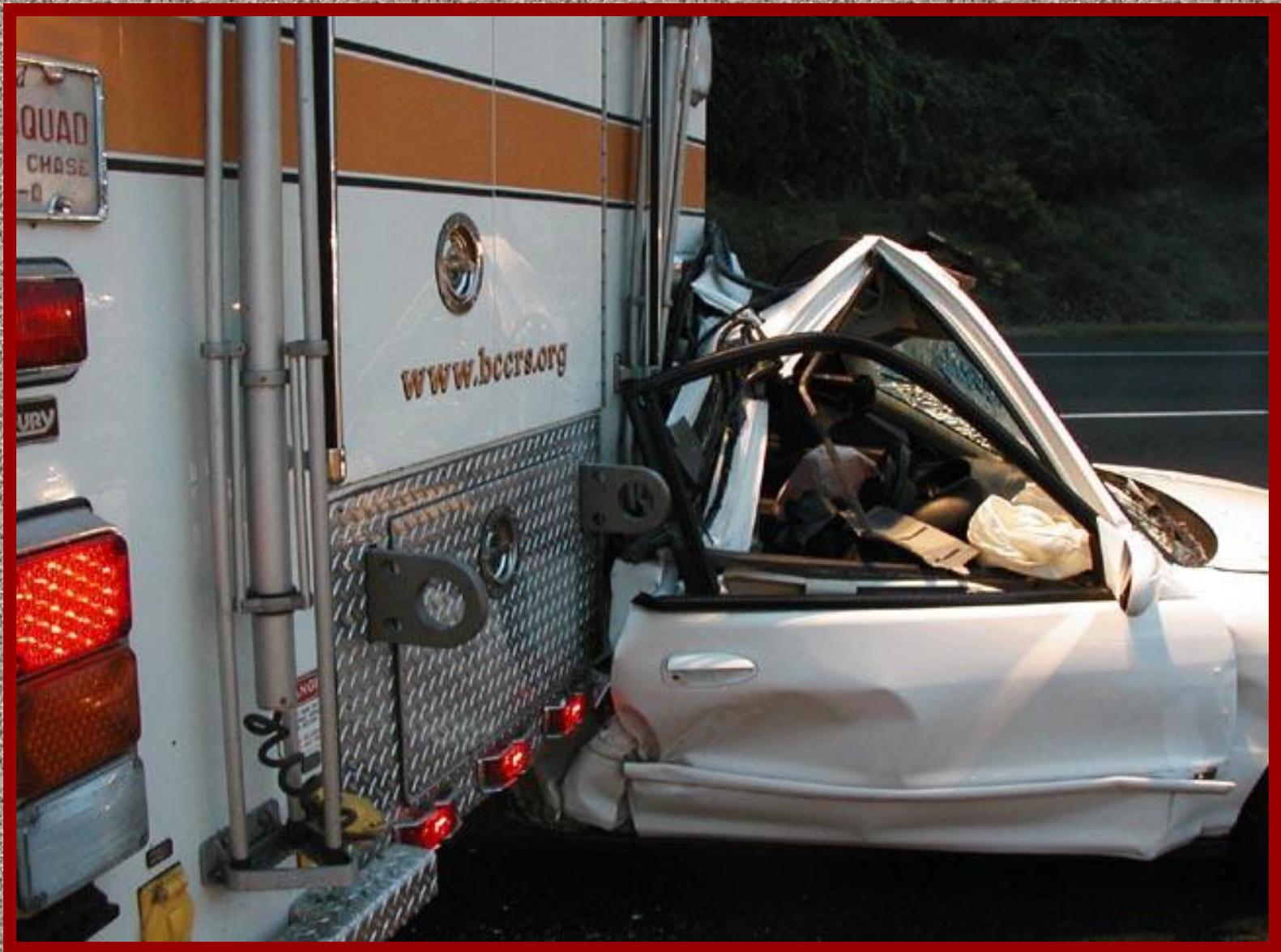
BETHESDA-CHEVY CHASE RESCUE SQUAD INC.



**“...we stopped
and were hit
within 30
seconds.”**









Typical FD advance warning consists of flashing lights, traffic cones, and/or flares



Most fire apparatus can only carry a handful of cones; 18” cones typically.



**A stack of
even 8
cones is
big, bulky,
and heavy.**



**11 patents now exist
for collapsible cones!**



**Goal is to deploy cones
upstream 8 times the posted
speed limit using cones spaced
at 15' intervals**



**At a 15' interval,
that's almost 35
cones!!**

**If you clear the scene in
less than 30 minutes,
your 4 or 5 cones are
considered "legal"**

Cones don't stop the "D" Drivers...

- ✓ Drunk,
- ✓ Drugged,
- ✓ Drowsy,
- ✓ Distracted, or
just plain...
- ✓ Dumb

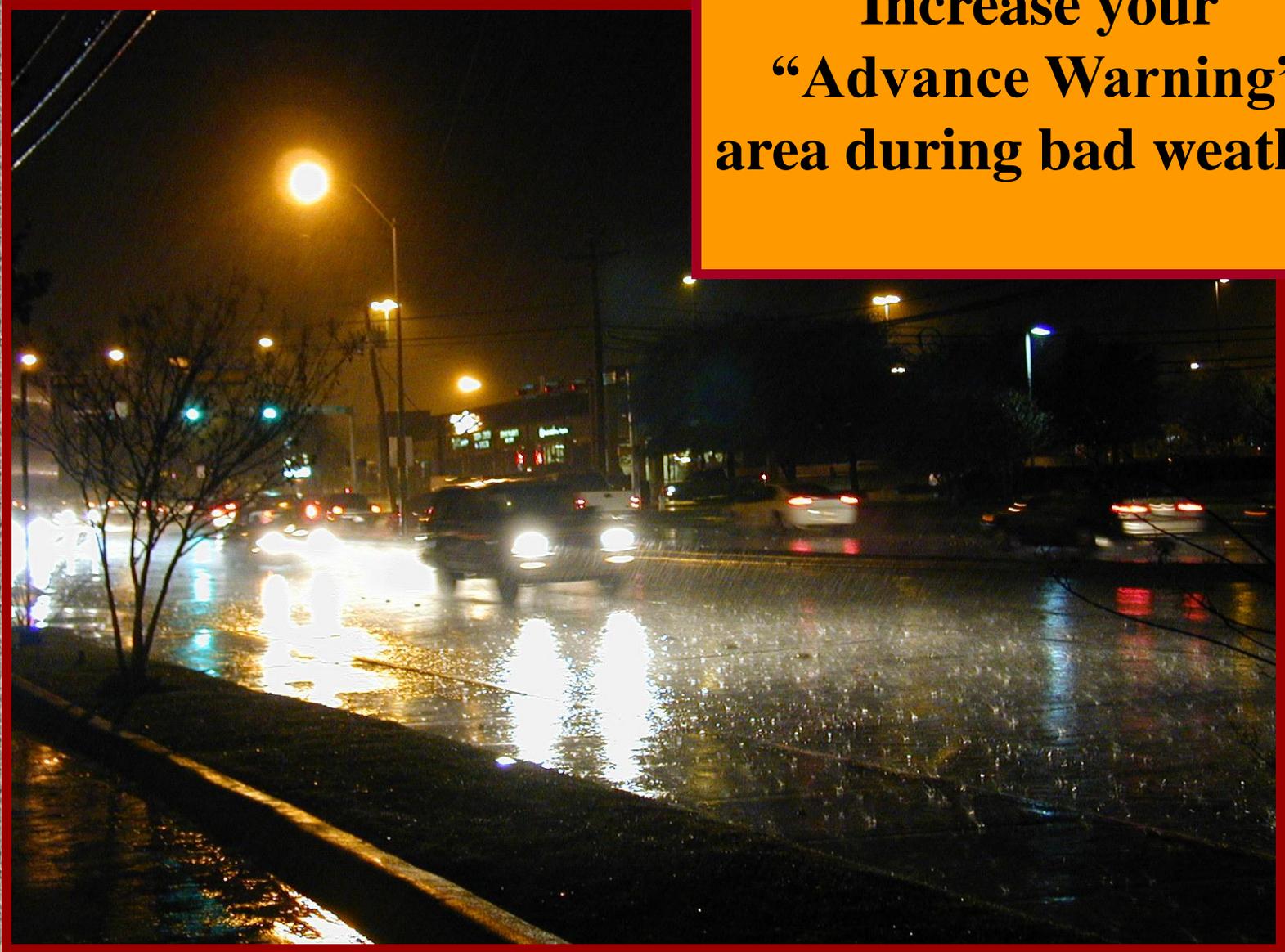


Figure 3-9: Traffic management at the incident site

**Use flares to
illuminate cones
at night or bad
weather**



**Increase your
“Advance Warning”
area during bad weather**





**This 'bad weather'
occurs every morning
and every evening!!**





M171

731-376

EQUUS

PLANO
FIRE-RESCUE

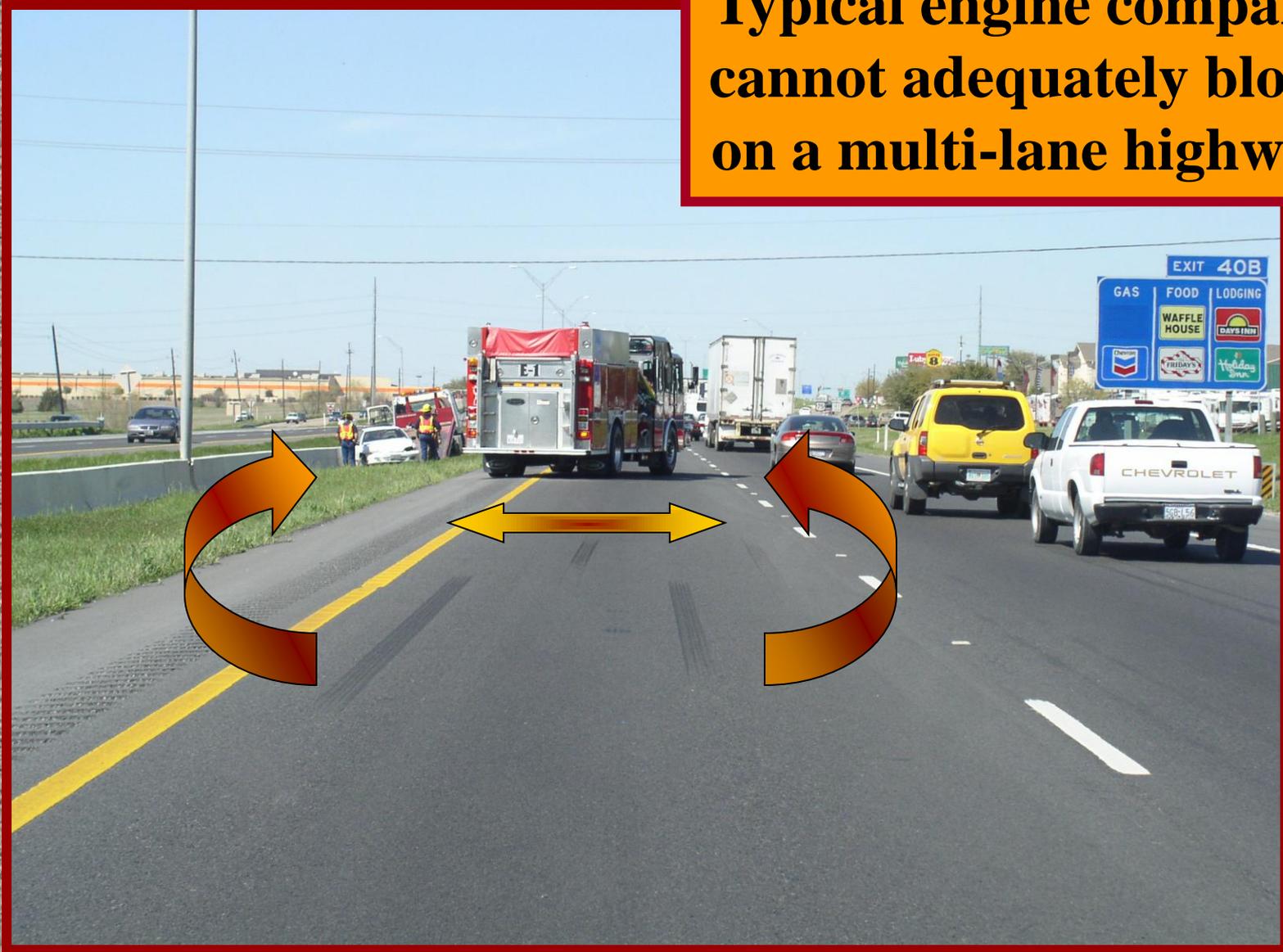
PLANO
FIRE-RESCUE



Add second apparatus for Blocking



**Typical engine company
cannot adequately block
on a multi-lane highway**



**Ladder truck,
second engine, or tanker
can block.**





‘Crossing the Median’

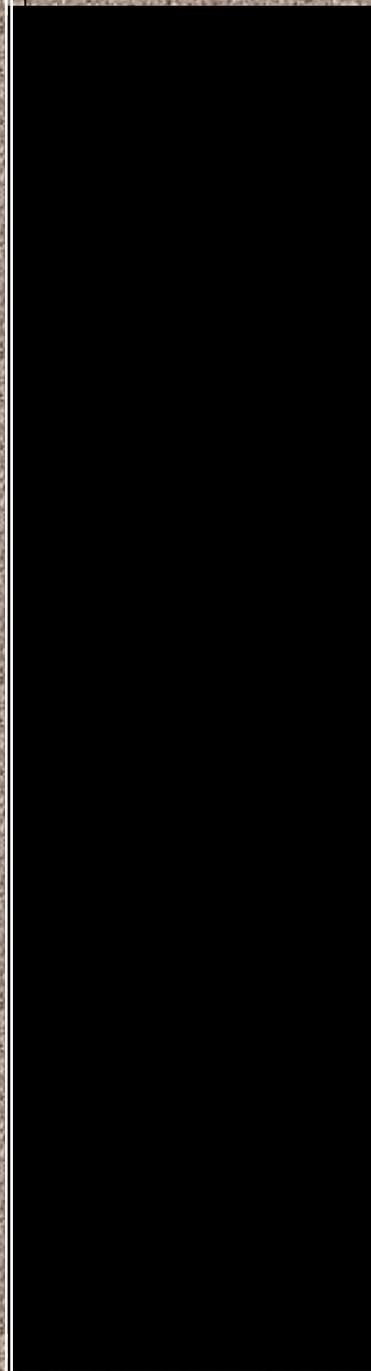
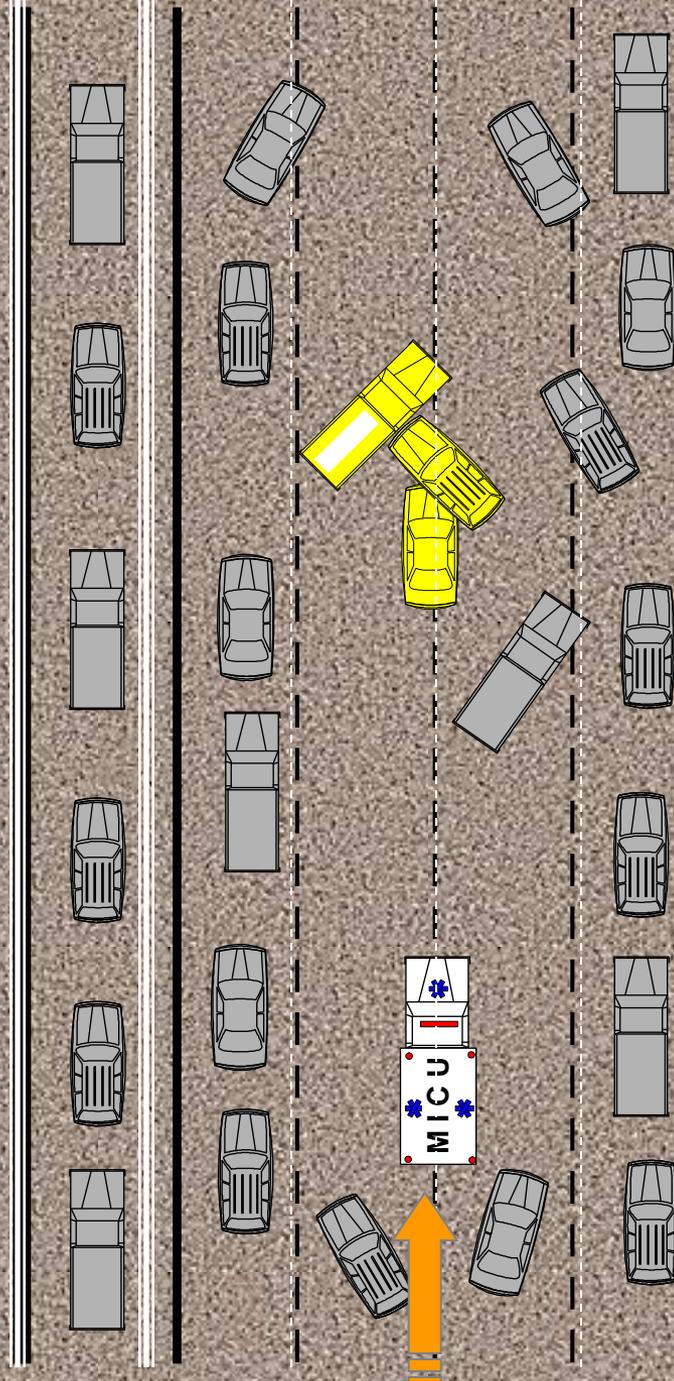


Southbound ambulance crew stops and jumps the median for a patient on the northbound shoulder....

Should NOT be permitted!!

You're arriving first-due in the ambulance at this incident on a 5-lane limited access expressway.

How do you position????



Street Survival Skills



2001 LODD



Killed Just Getting Out of the Rig

Firefighter struck by a van while battling a grass fire. The incident happened just before 4 p.m. when the firefighter stepped out of the cab of the fire truck directly into the westbound lanes of traffic. The passing van struck the firefighter in the lane of traffic.

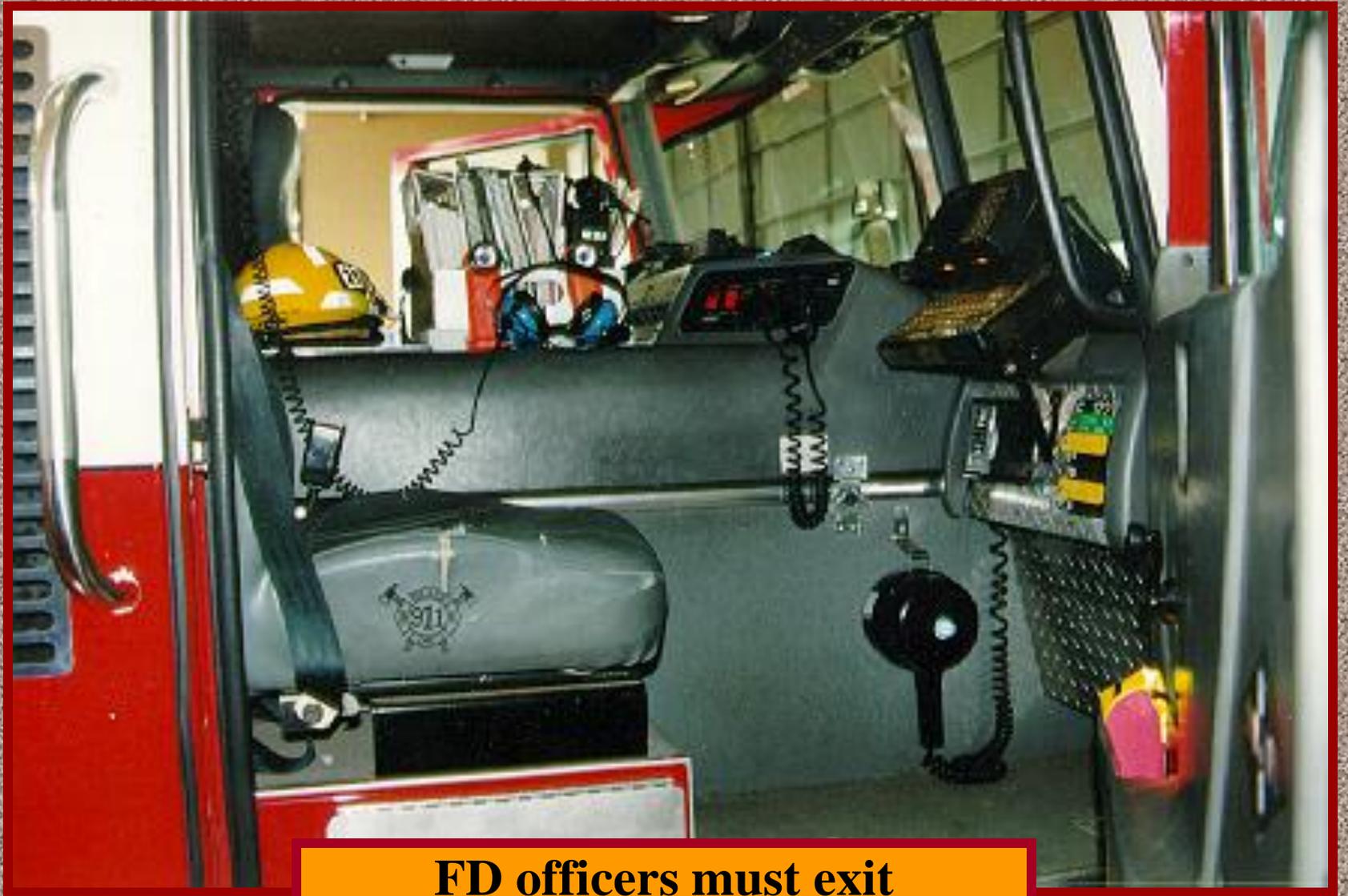
Department's Fire Chief reported visibility was very bad at the time of the impact, and that most of the cars passing the fire scene did not slow down.

The impact was so severe, it knocked the firefighter completely out of his shoes.

The Fire Chief also reported that his firefighters have come close to being hit by cars several times while battling blazes.

Personal survival skills include safe exit protocols for drivers, officers and crew members.

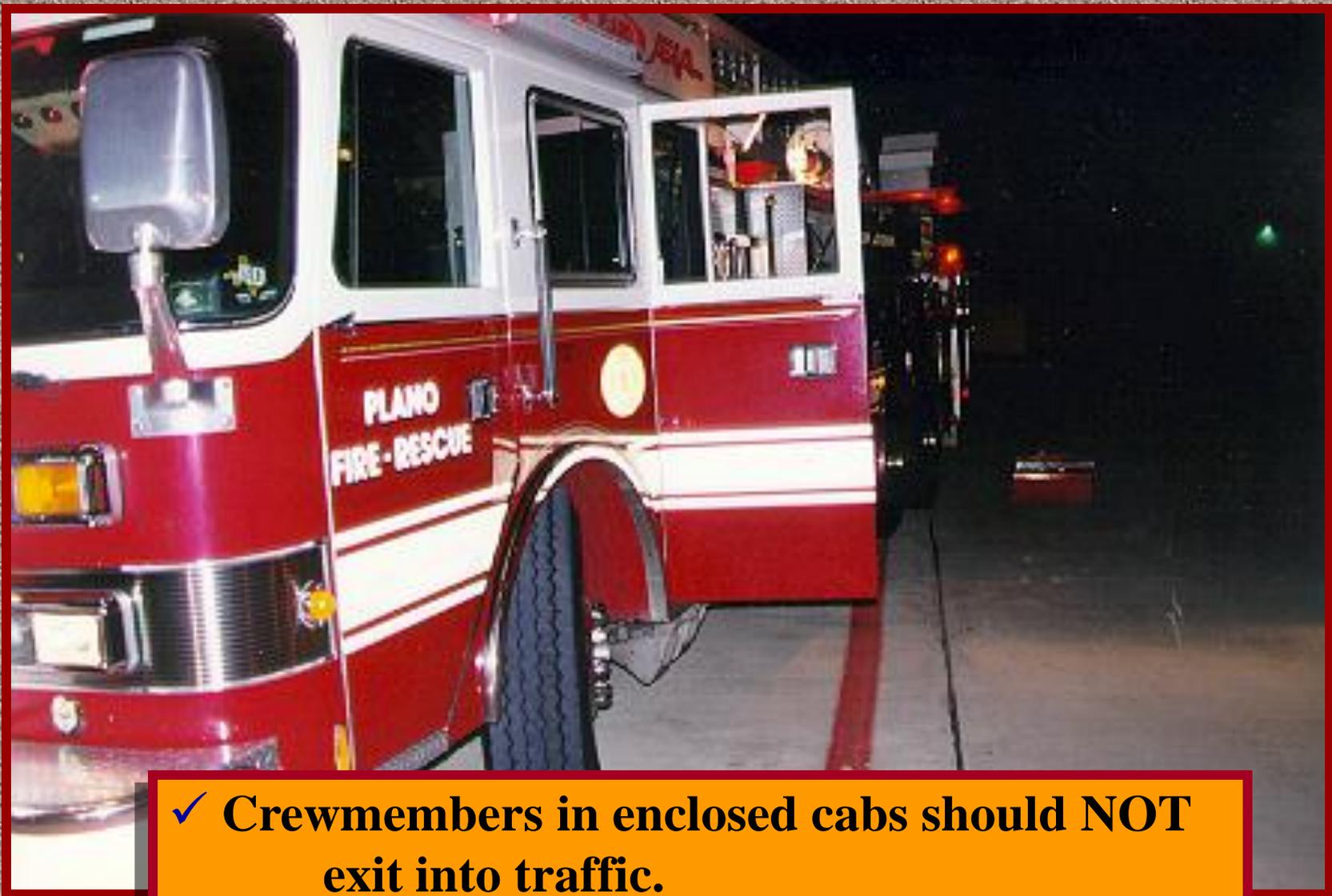




**FD officers must exit
to their right**



- ✓ **Maintain
“Low Profile”**
- ✓ **Do NOT
open door fully**
- ✓ **Do NOT
walk around
end of open
door**



- ✓ **Crewmembers in enclosed cabs should NOT exit into traffic.**
- ✓ **Crew exits out the protected side of the enclosed cab; NO EXCUSES!!!**

**Ambulance crews have to exit
out their respective doors.**



- ✓ Getting into or out of the ambulance side door can be at increased risk to personal safety
- ✓ Maintain “Low Profile”
- ✓ Do NOT open door fully
- ✓ Do NOT walk around end of an open door



✓ Don't stand in a "Crumple Zone"



Leave interior lights 'ON'



✓ Personnel visibility



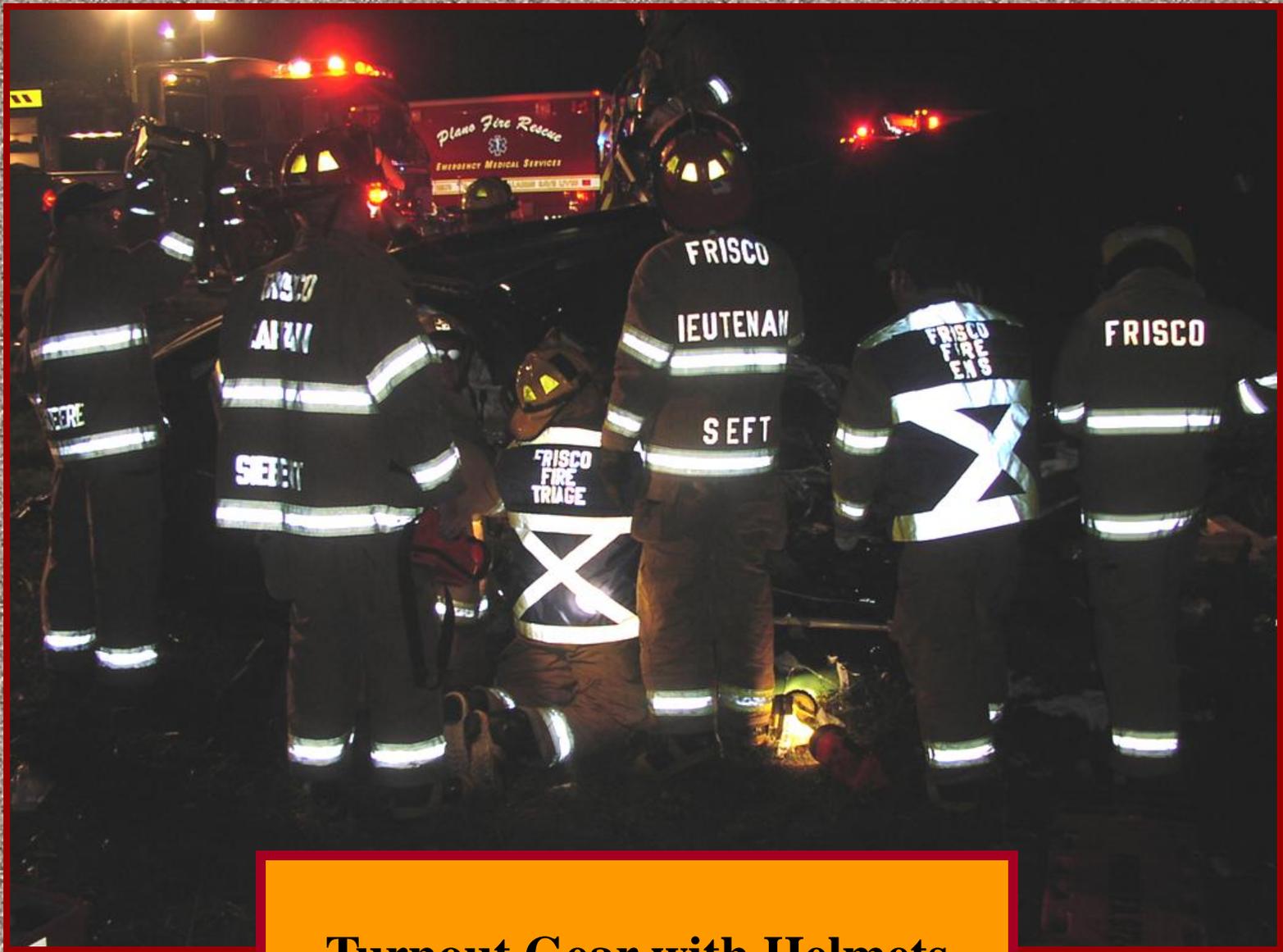
Personnel Identification or Uniforms



- Be SEEN
- Wear Vests
- Be Agency Identifiable
- Vests May Also Indicate

Roles of Responders





Turnout Gear with Helmets

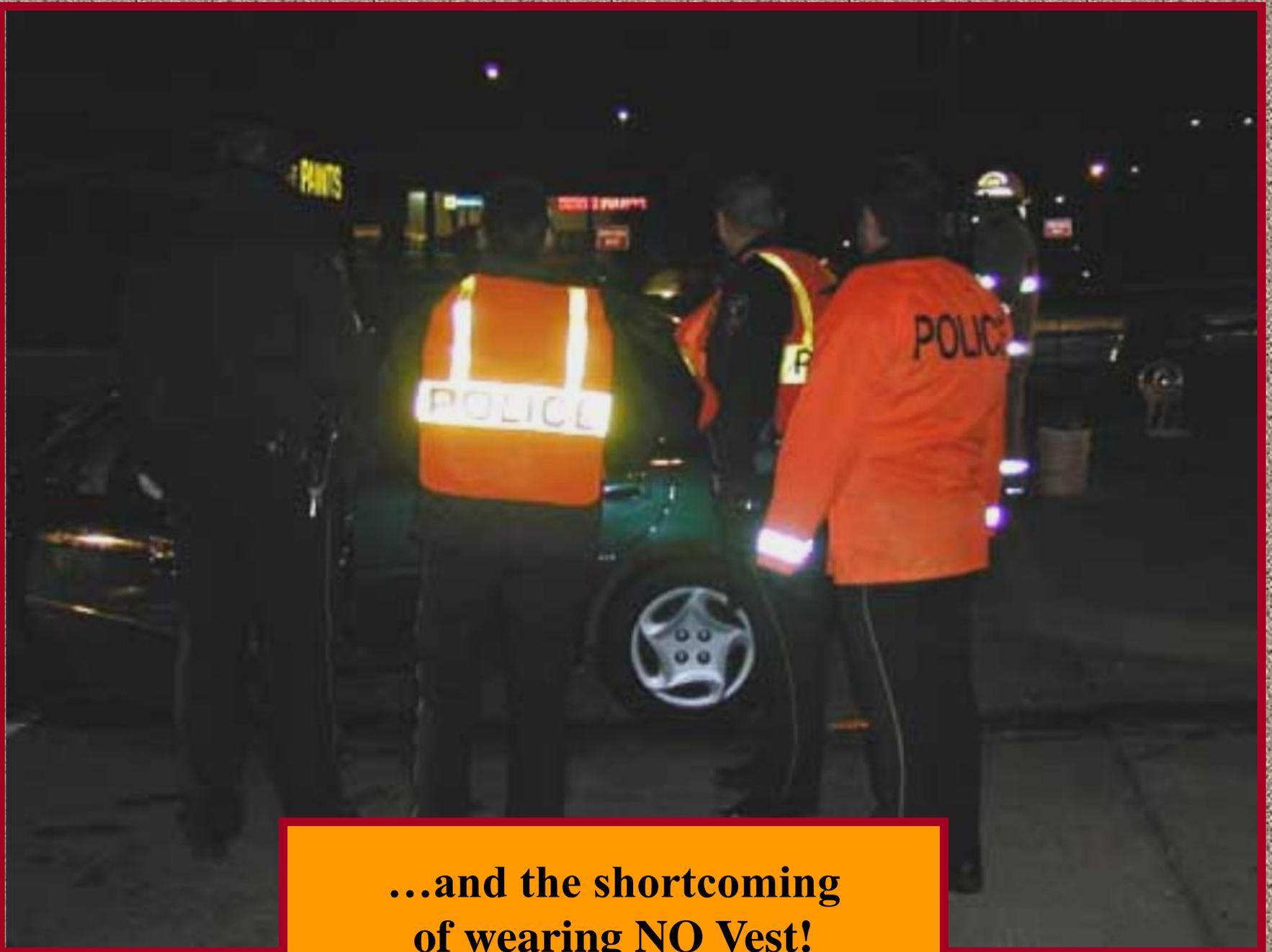
Anybody even see the cops over here...?





Responders wearing an open side vest are not readily visible from the side





**...and the shortcoming
of wearing NO Vest!**



Reflective trim effectiveness