

**Programs and Behaviors that  
Can Improve Motorcyclists Conspicuity**

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A Presentation to

Lifesavers Conference  
Denver, CO  
April 2013

The presentation reviews definitions of conspicuity, including passive and active and summarizes its role in risk reduction for motorcyclists. With a focus on rider choices that reflect a safety attitude, Ochs reviews programs that the Motorcycle Safety Foundation has developed to assist motorcyclists in assessing and improving their hazard perception skills and judgments.

# *Programs and Behaviors That Can Improve Motorcyclist Conspicuity*



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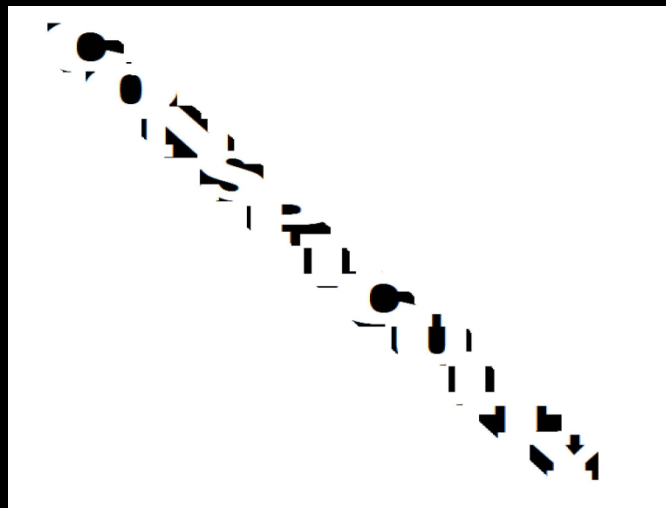
MSF Training Systems

# Subtitle

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Strategic Conspicuity:

Rider Behaviors Appropriate for Being  
Less Than Perfectly Conspicuous



# Theme

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Conspicuity is a two-way phenomenon:  
riders and everyone else

If a tree branch falls in the forest but no one hears it, did it  
make a sound?

If a rider and motorcycle are visible but no one sees them,  
were they conspicuous?

[http://www.myvidster.com/video/249582/The\\_monkey\\_business\\_illusion](http://www.myvidster.com/video/249582/The_monkey_business_illusion)

***The problem is not with the limitations on motor control, but with limitations on attention resources and awareness.***

Chabris and Simons  
*the invisible gorilla*

the invisible **gorilla**



And Other Ways Our Intuitions Deceive Us

Christopher Chabris and Daniel Simons

# Conspicuity

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A term to define the condition of:

- Being visible, easy to notice, or obvious
- Ability of an object to draw attention to itself, even if no one is actively searching for it

Is this even possible?

**“I didn’t see the motorcycle.”**



**2 vehicle, at fault:**

**MC: 30-70%**  
**OVD: 30-70%**

[http://www.youtube.com/watch?feature=player\\_embedded&v=gBmE92n5mEI](http://www.youtube.com/watch?feature=player_embedded&v=gBmE92n5mEI)



# Rider Strategic Conspicuity

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Passive: riding gear and motorcycle

Active: perception and executive functions

# *Passive*

*(Requires some action by the rider)*

## Rider

- Bright clothing
- Reflective clothing
- White or bright helmet
  - Lighting and Reflection
- Contrast
- Hand signals
  - Semi-active

# *Passive*

*(Requires some action by the rider)*

## Motorcycle

- Headlight
  - Modulated
- Tail light
- Brake light
  - Flashing
- Turn signals
- Reflectors
- Extra lighting
- Horn

# *Active*

## Rider strategy

- Search-Evaluate-Execute
- Assume not conspicuous
- Assume others are asleep, blind or drunk
- Have a good time-and-space safety margin
- Have at least two escape paths
- Make a good lane choice
- Choose a good lane position
- Be aware of blind spots
- *Support development of drivers*

# Risk Reduction

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Physical Skill

+

Perception

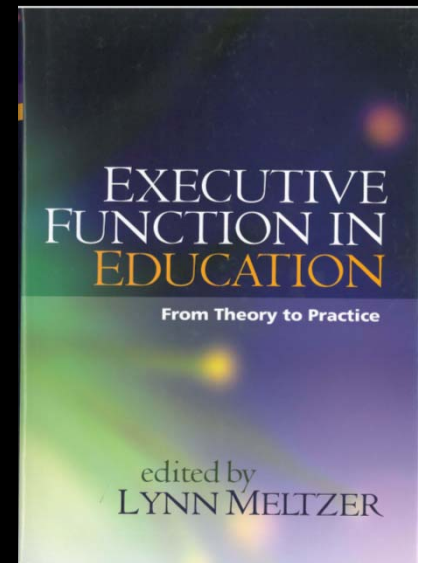
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Executive Functions

# Executive Functions

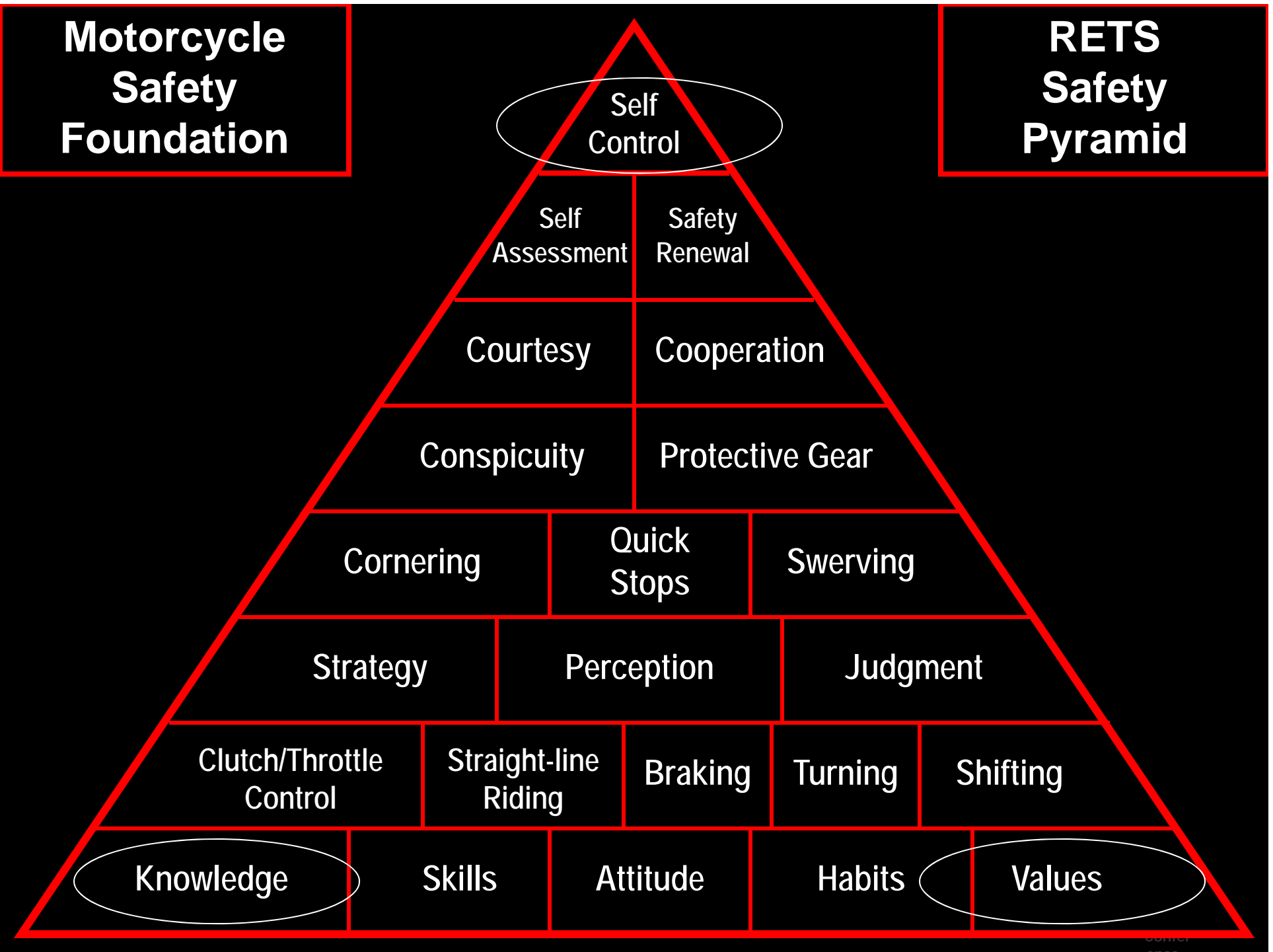
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- Regulate goal-oriented behavior
  - Make safety a top-of-mind priority
- Actions in light of
  - Current situational cues
  - Personally relevant values



# Motorcycle Safety Foundation

# RETS Safety Pyramid



## Serious About Safety?

As a car or truck driver, respond to the following statements.

1. I signal for turns and lane changes.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
2. I stop completely at stop signs.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
3. I stop completely before turning right on red.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
4. I make decisions based on safety.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
5. Others consider me a courteous driver.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
6. I turn my head to check blind spots when changing lanes.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
7. I buckle up.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
8. I do honk at bad drivers.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
9. I use my cell phone to talk or text.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
10. I need to brake hard or swerve when driving normally.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
11. I am in a hurry when I drive.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No
12. My friends crash and get tickets.      \_\_\_ Yes    \_\_\_ Sometimes    \_\_\_ No

Discussion point:

Anything but a *Yes* on 1-7 and a *No* on 8-12 may indicate a less than ideal emotional commitment to safety.

Agree or disagree? Why?



# VISUAL

Acuity  
Gaze

# COGNITIVE

Perception  
Executive Functions

# MOTOR SKILL

Precision  
Smoothness

**Search**

**Evaluate**

**Execute**

**S.E.E.**

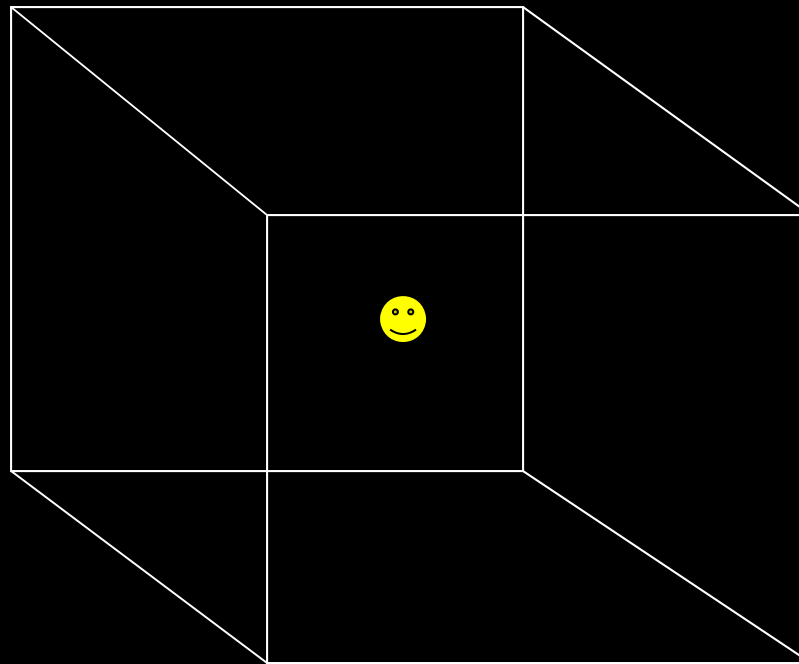
What do you see?

**Front lower right surface?**

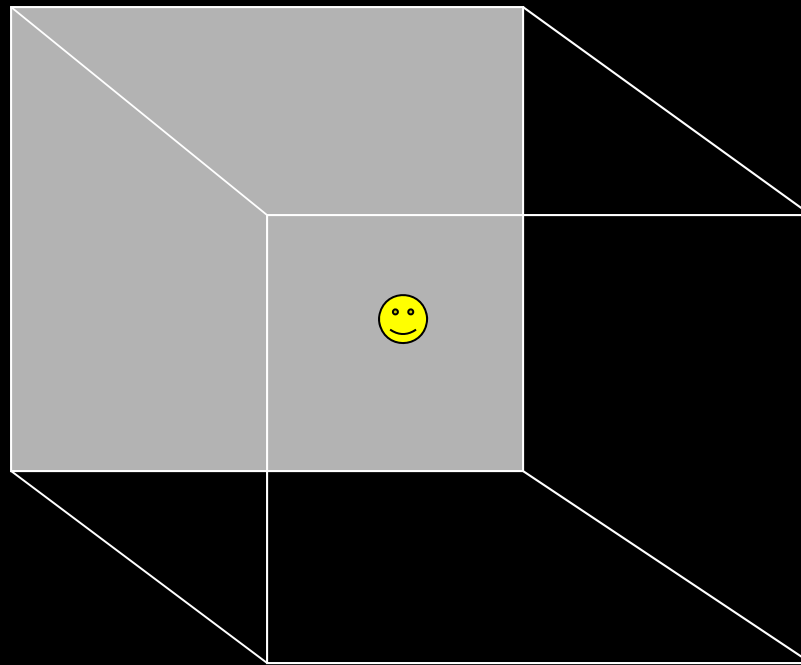
**Back upper left surface?**

**Front upper left surface?**

**Back lower right surface?**



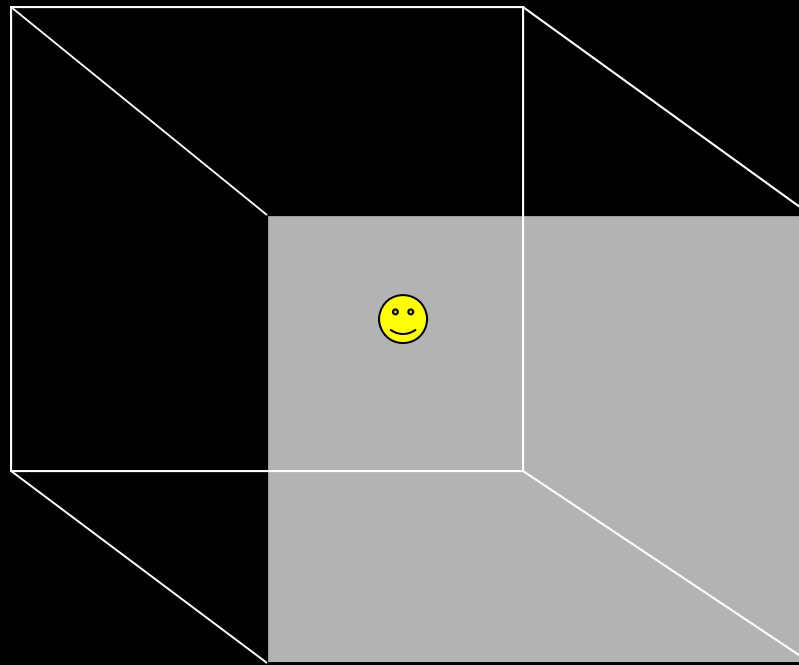
**Front lower right surface?**



**Back lower right surface?**

**Back upper left surface?**

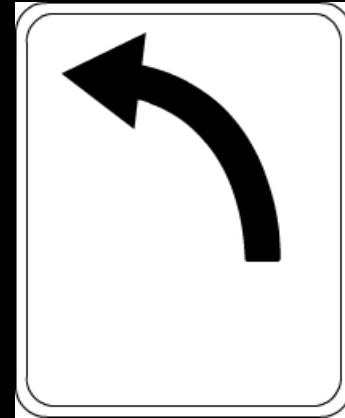
**Front upper left surface?**



# Sign Perception

## One U.S. Sign

(Two examples)







**Left Turn Only**









**Sharp Left Turn**

# Sets of 2 U.S. Signs

(Two examples)



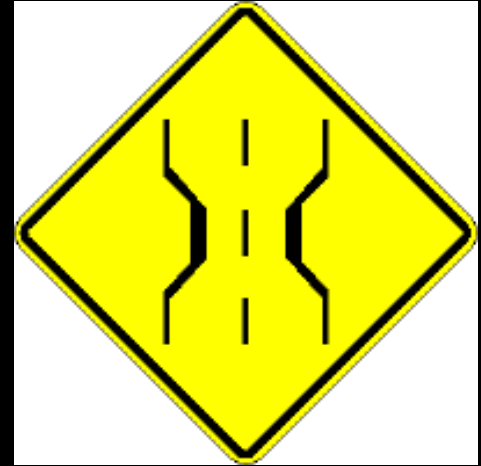


**No U-Turn**



**Multiple Curves**







# Sharp Right Turn



**Narrow Bridge**



Traffic Controls & Roadway Features

Highway Users

Surface Conditions

Escape Paths

You are traveling on a U.S.  
roadway and observe this...







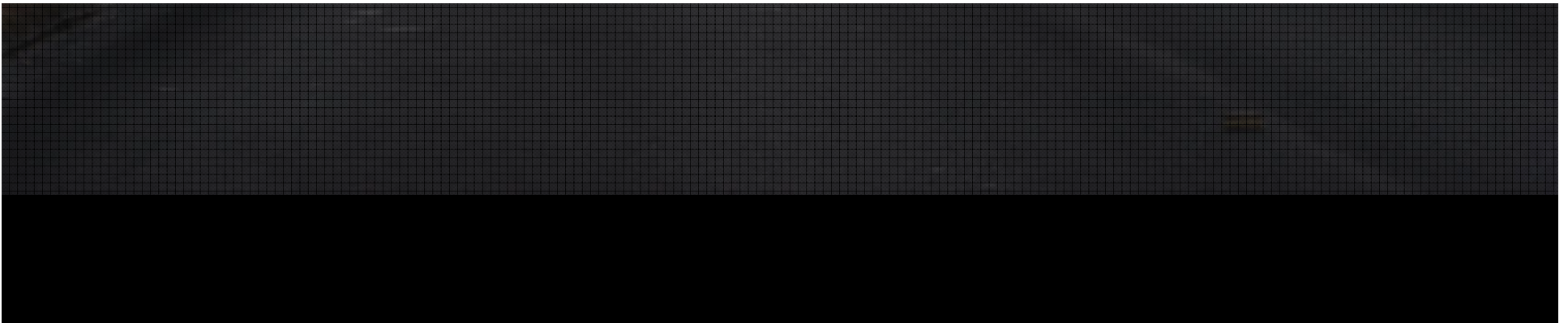
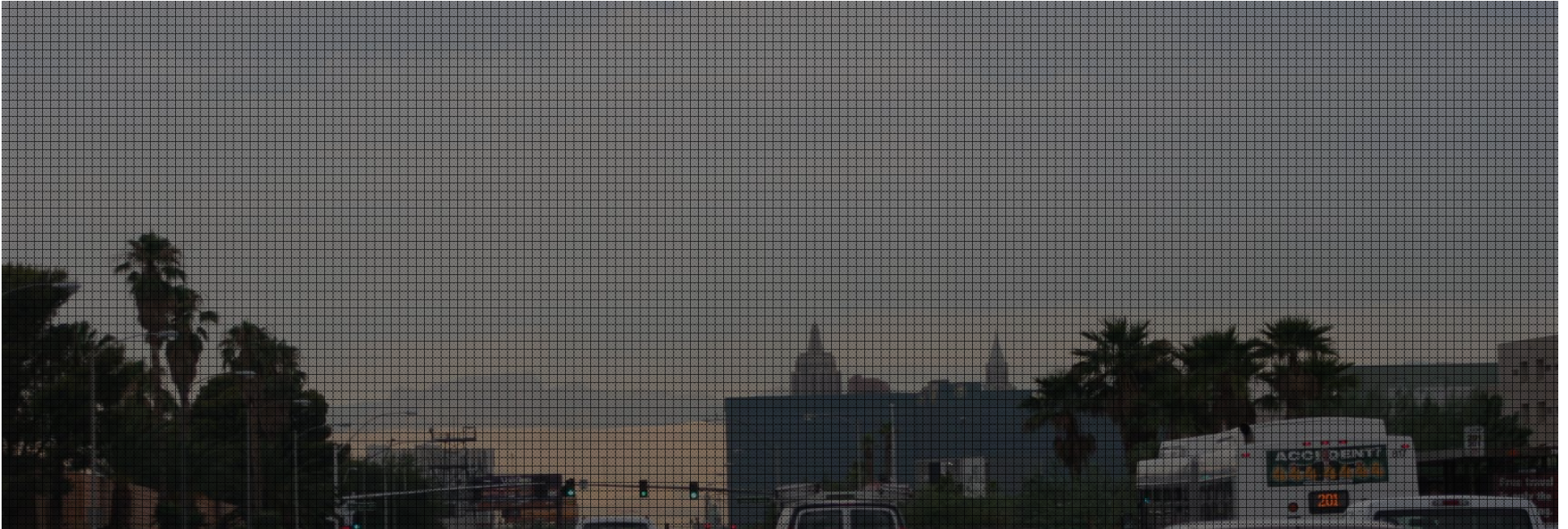
Traffic Controls & Roadway Features

Highway Users

Surface Conditions

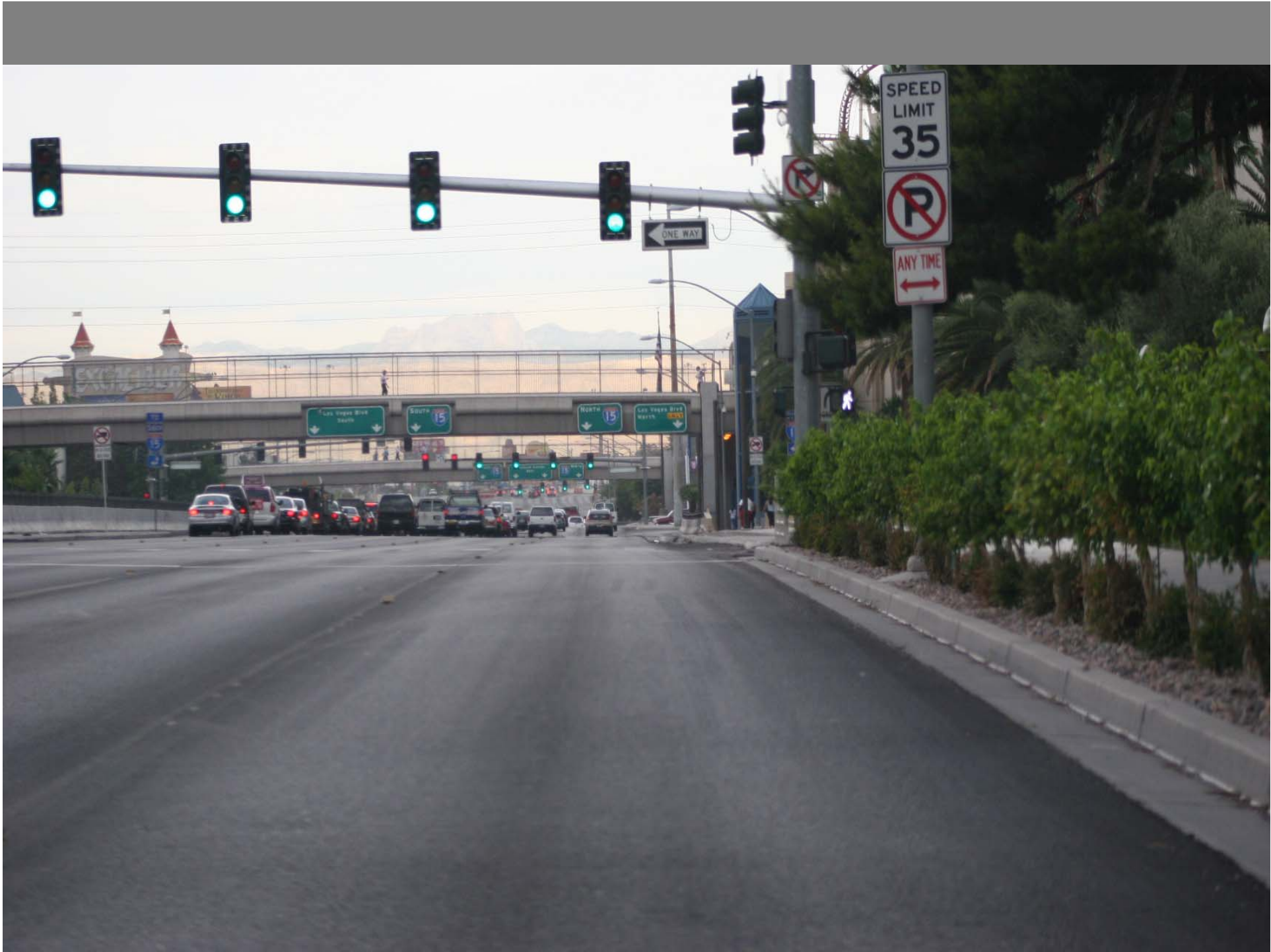
Escape Paths



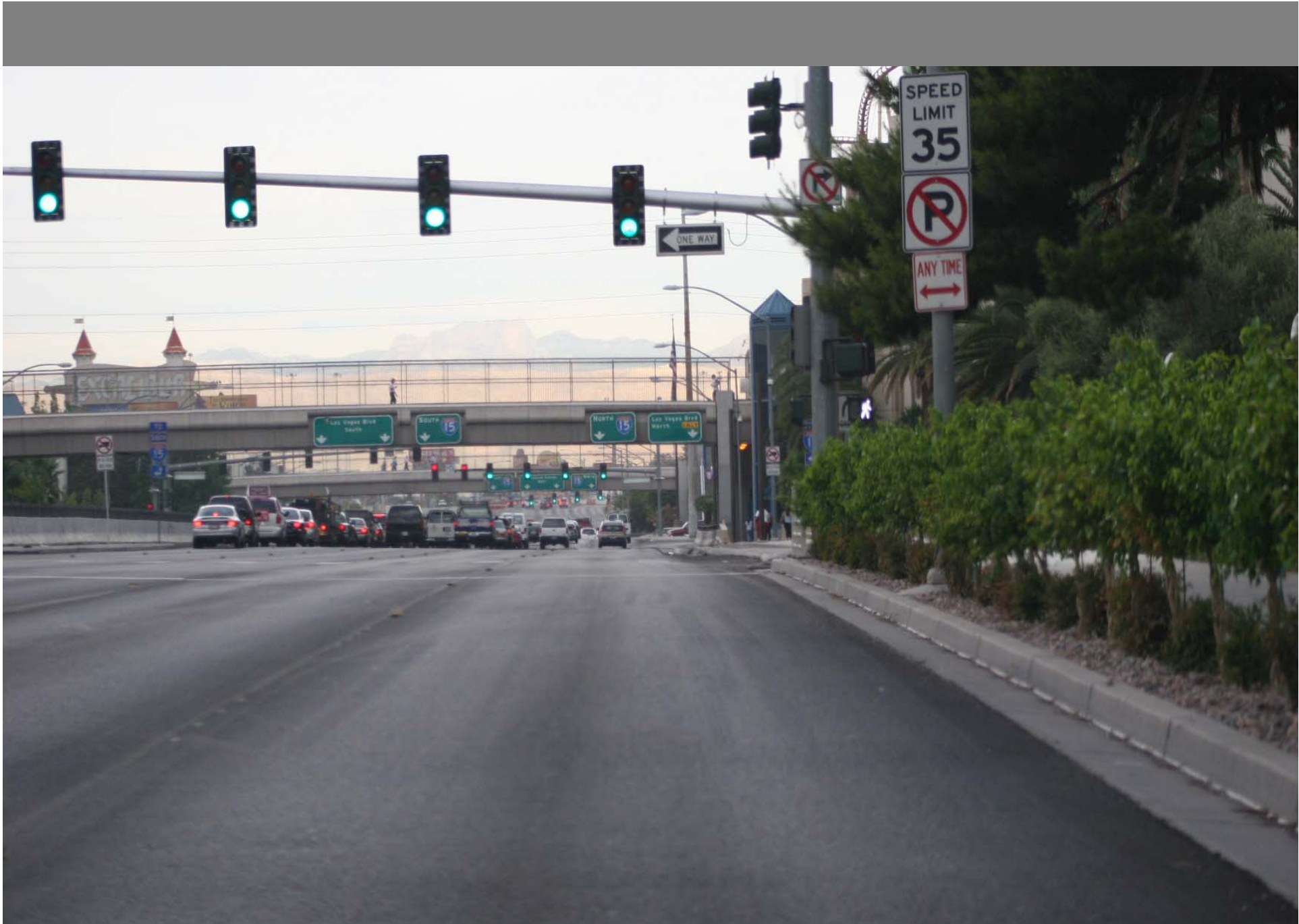


# Another Example

You are traveling on a U.S.  
roadway and observe this...





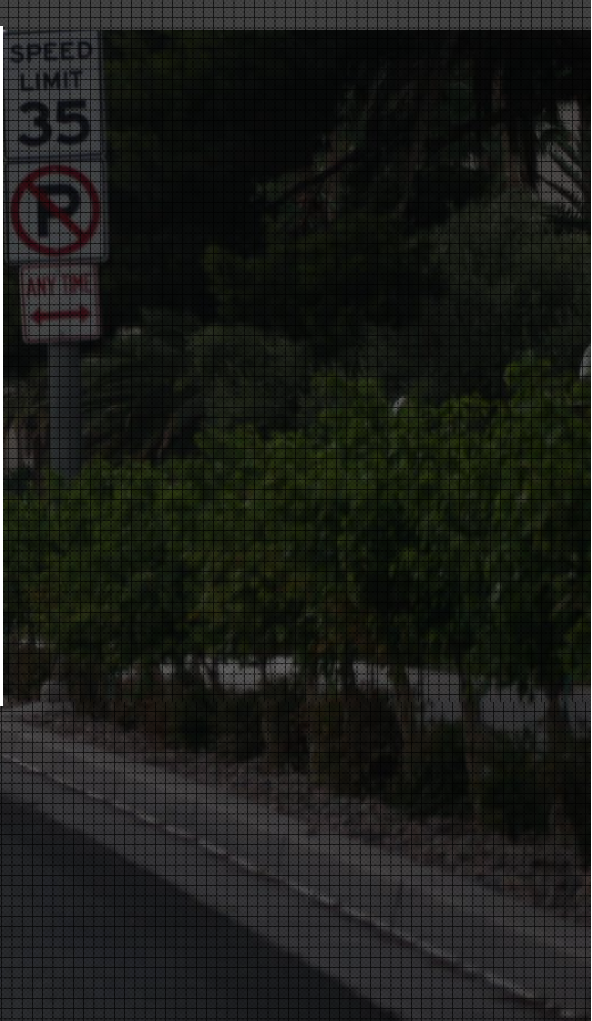
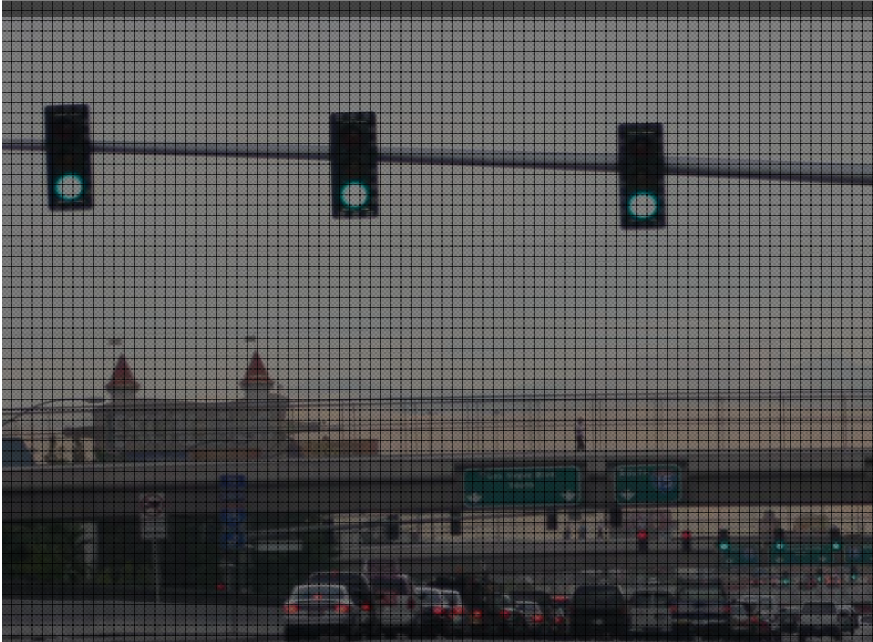


Traffic Controls & Roadway Features

Highway Users

Surface Conditions

Escape Paths



# Ponder Point

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**One must have safety as a priority to effectively use the speed of the eyes and mind.**



# Street Smart – *Rider Perception* Program



# MSF website: www.msf-usa.org

## Rider Perception Sampler

**MSF MOTORCYCLE SAFETY FOUNDATION®**

NEWS: Naturalistic Study of Motorcyclists, The New MSF CORE Curriculum

**MSF Update**  
Washington DC  
3-31-10  
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Armed Forces Locations

**3 Ways to Find the RiderCourse<sup>SM</sup> Nearest You:**

- Click on your state above
- Call (800) 446-9227
- Select from the list below

[Find a RiderCourse](#)

**5 5 7 1 4 4 5**

Students have graduated from MSF RiderCourses since 1974. 400,000 motorcyclists enroll in our courses each year.

**Key Messages:**

- Get trained and licensed
- Wear protective gear -- all the gear, all the time -- including a helmet manufactured to the standards set by the DOT
- Ride unimpaired by alcohol or other drugs
- Ride within your own skill limits
- Be a lifelong learner by taking refresher rider courses

Free Safety Tips for Car Drivers & Motorcyclists

**RIDER PERCEPTION CHALLENGE!**  
Test the limits of your perceptual abilities.  
[Click Here](#)

Take a hands on, half-day training class for entry-level scooter users offered by the Motorcycle Safety Foundation®

Visit Website >>

# *Thank You*



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**Ray Ochs**

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