



# Class "B" Apparatus Driver Course





## Managing Risk

### Overview

- Sleep Deprivation & The EVO
- Emotional Drivers
- Department Risk Controls
- Intersections





## Sleep Deprivation & The EVO

### Fatigue and Driving

- People often think that driver fatigue means falling asleep at the wheel
- Falling asleep is an extreme form of driver fatigue
- Fatigue is tiredness, weariness or exhaustion





## DRIVER FATIGUE

### Causes of Driver Fatigue

- Stress
- Lack of quality sleep
- Substance abuse
- Irregular work hours
- Irregular meal times/eating habits





## DRIVER FATIGUE

### Affects of Driver Fatigue

- Slowing reaction time
- Decreased awareness
- Impaired judgment
- Risky driving behaviors are increased





## Sleep Deprivation & The EVO

### Signs and Symptoms of Fatigue

- Forgetfulness
- Being fixated
- Poor decision making
- Apathy
- Slow reaction times
- Lethargy
- Moodiness
- Not communicating
- Nodding off





## Sleep Deprivation & The EVO

### Why is Driver Fatigue a Problem ?

- Staying alert is crucial for EVO
- Fatigued drivers have slower reaction times
- Driver Fatigue can “KILL YOU”
- 12% of all fatal crashes





## Sleep Deprivation & The EVO

### Fatigue and other factors

- Alcohol
- Speed
- Over the counter medications





## Sleep Deprivation & The EVO

### What Causes Driver Fatigue?

- Sleep loss & Sleep debt
- Sleep disorders
  - Insomnia, Sleep Apnea, Narcolepsy
- Circadian Rhythms





## Sleep Deprivation & The EVO

How can I improve my alertness?

- Get plenty of sleep the night before shift
- Take breaks and nap
- Get fresh air into your vehicle
- Stay hydrated
- Share the driving
- Avoid medications that make you drowsy





## Managing Risk

### Emotional Drivers

- Aggressive drivers/Road rage
- Response to siren
- Call type
- State of mind/Outside influences
- Shift dynamic/communication skills





## Siren Audibility Factors

### Weather Conditions

- The siren may be heard sooner on an overcast day
- Siren audibility tends to dissipate on clear days
- Fog will block sound from traveling at longer distances





## Siren Audibility Factors

### Traffic Conditions

- The siren becomes less audible with the increase of traffic
- Heavy truck or bus traffic will decrease siren effectiveness
- Large buildings may block, deflect or funnel the audibility of the siren





## Siren Audibility Factors

### Siren Syndrome

- The siren may effect the EVO performance
- Tunnel vision may develop
- EVO must remain calm, control speed
- Be aware that the excitement of the moment can adversely affect the EVO’S ability to concentrate
- Take deep breaths to reduce symptoms





## Managing Risk

### MCFRS Risk Controls

- MVA driver records screening
- MVA Flagging program
- EVOOC & Class "A" & "B" Driver Courses
- Driver Training
- Remedial Training/Collision review
- Driver Refresher & Recertification Training
- Policies and Procedures





## Intersection Practices

Intersections are the locations where the largest percentage of major accidents involving emergency vehicles occurs. Even with the use of warning devices, intersections pose a serious threat to the safety of both emergency service personnel as well as the general public. All emergency service organizations should adopt and practice intersection operating guidelines during all emergency responses. Standard Operating Guidelines should meet the following recommended practices at a minimum.





## Intersection Practices

### Controlled Intersections

- An intersection controlled by a stop sign, yield sign, yellow traffic light, or a red traffic light requires **Prudent Action** by the emergency vehicle driver. The following steps should be taken:
  - Do not rely on warning devices to clear traffic.
  - Scan the intersection for possible hazards (right turns on red, pedestrians, vehicles traveling fast etc.) as well as driver options.





## Intersection Practices

- Begin to slow down well before reaching the intersection and cover the brake pedal with the driver’s foot, continue to scan in four directions (left, right, front, back).
- Change the siren cadence not less than 200 feet from the intersection.





## Intersection Practices

- If traffic in all lanes can not be accounted for, the driver should bring the vehicle to a complete stop. If the driver proceeds past a control device with a negative right-of-way without coming to a complete stop would be negligent.





## Intersection Practices

### Controlled Intersection

- ✓ Scan intersection for possible passing options (pass on right, left, wait, etc.) avoid using the opposing lane of traffic if at all possible.





## Intersection Practices

- ✓ Establish eye contact with other vehicle drivers; have partner communicate all is clear; reconfirm all other vehicles are stopped.
- ✓ Account for traffic one lane at a time, treating each lane as a separate intersection.





## Intersection Practices

### Uncontrolled intersections

Any intersection without a control device (stop sign, yield, or traffic signal) in the direction of travel of the emergency vehicle or where a traffic control signal is green upon the approach of the emergency vehicle, all emergency vehicle drivers should do the following:





## Intersection Practices

### Uncontrolled intersections

- ✓ Slow down if any potential hazards are detected and cover the brake pedal with the driver’s foot.
- ✓ Change the siren cadence not less than 200 feet from the intersection.
- ✓ Avoid using the opposing lane of traffic if at all possible.





## Intersection Practices

### Reading the Intersection

- Traffic Lights/Traffic control devices
- Lane configuration
- Traffic flow
- Yield Area's
- Lane of least resistance
- Obstructions/ Large vehicles





## INTERSECTIONS

### Eight Signs for Intersection Safety

- ◆ Don't rely on warning devices to clear traffic
- ◆ Scan intersections for potential hazards
- ◆ Begin to slow down well before the intersection and cover the brake
- ◆ Change the siren cadence 200 ft from the intersection





## INTERSECTIONS

### Eight Signs for Intersection Safety

- ◆ Scan intersection for possible passing options, avoid using the opposing lane
- ◆ Stop the vehicle if you cannot account for all lanes of traffic
- ◆ Establish eye contact with other drivers
- ◆ Treat each lane of traffic as a separate intersection





# Class "B" Apparatus Drivers Course

# INTERSECTIONS

## Reading Intersections



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## INTERSECTIONS



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## INTERSECTIONS



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## BLIND INTERSECTIONS



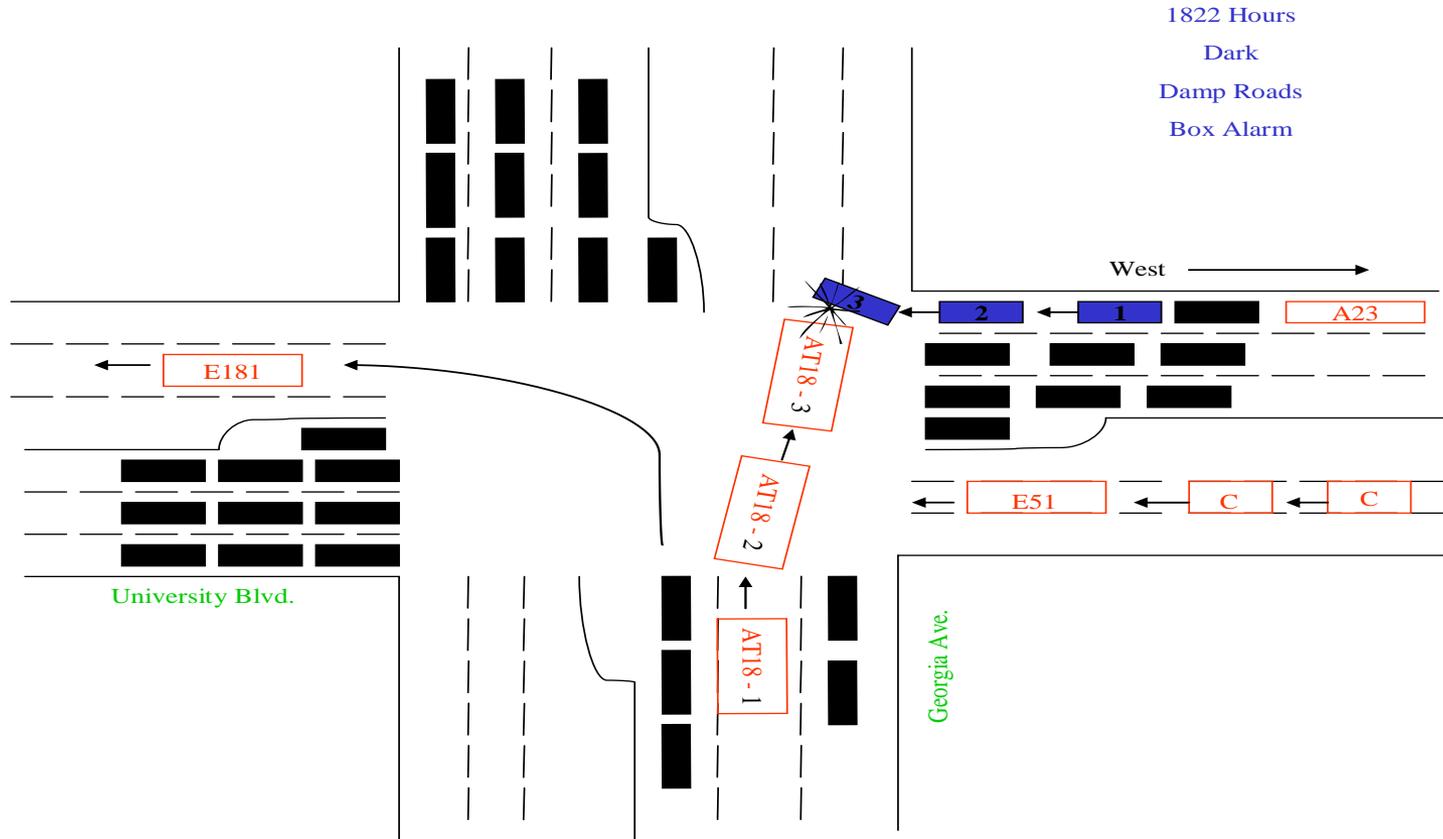
**IF YOU CAN'T SEE THEM, THEY CAN'T SEE YOU**





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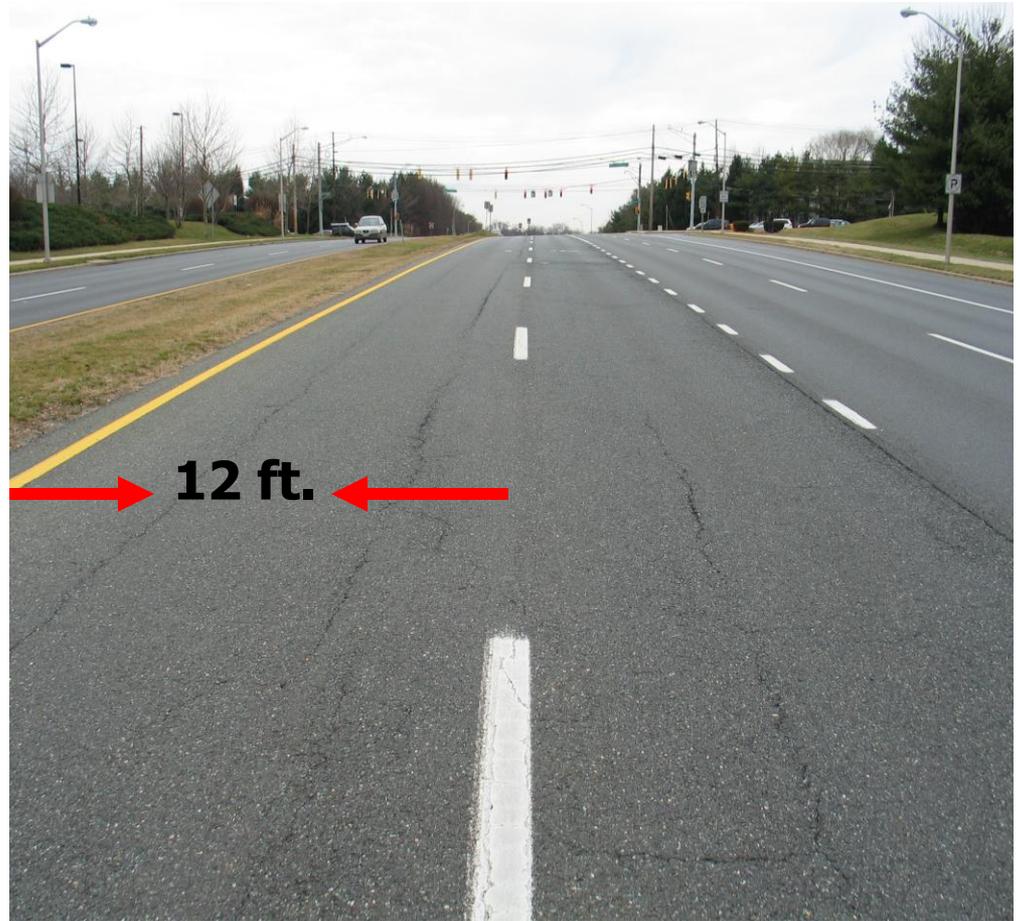
## CASE STUDY





## Traffic Lanes

Traffic Travel Lanes are not created equally





## Traffic Lanes

Traffic Travel  
Lanes are not  
created  
equally





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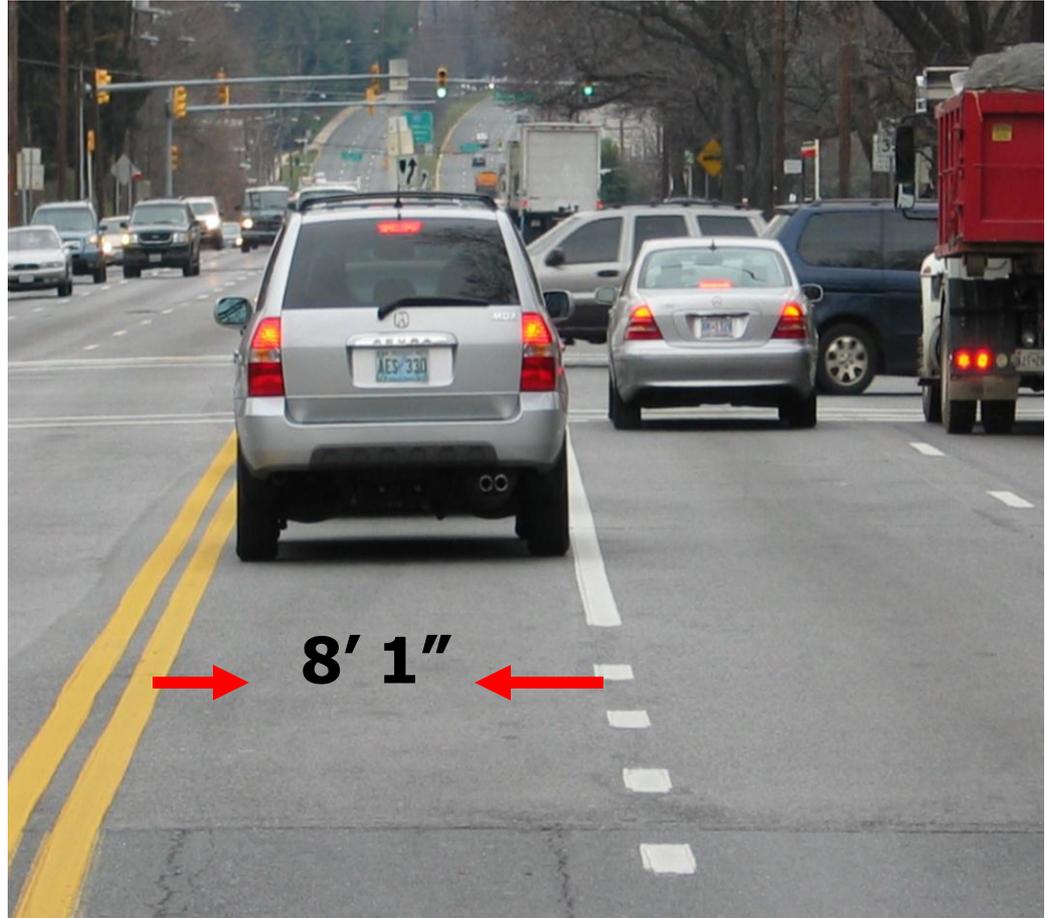
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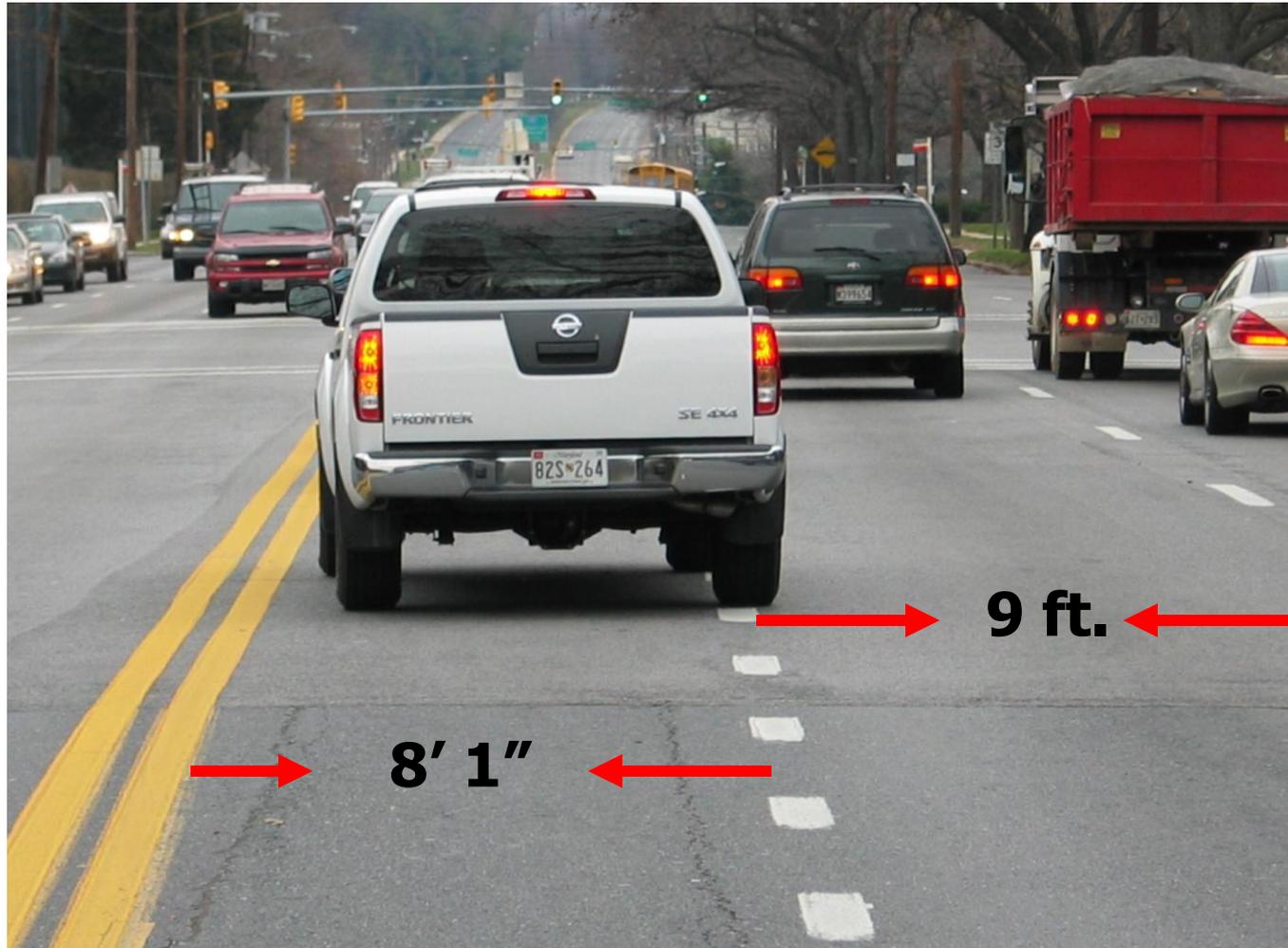
## Traffic Lanes

Turn Lanes  
are often  
smaller in  
width than  
travel lanes





# Class "B" Apparatus Drivers Course





# Class "B" Apparatus Drivers Course

What do you do when there is no room for your unit?





# Class “B” Apparatus Drivers Course

Very Little  
margin for error  
with large  
vehicles  
traveling side by  
side.



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## Angle of Departure

Use caution  
on sloped  
driveways  
Going in and  
departing





## Angle of Departure

Due to the size of our Apparatus Sloped driveways pose a risk of the undercarriage dragging.



**Drag Marks**





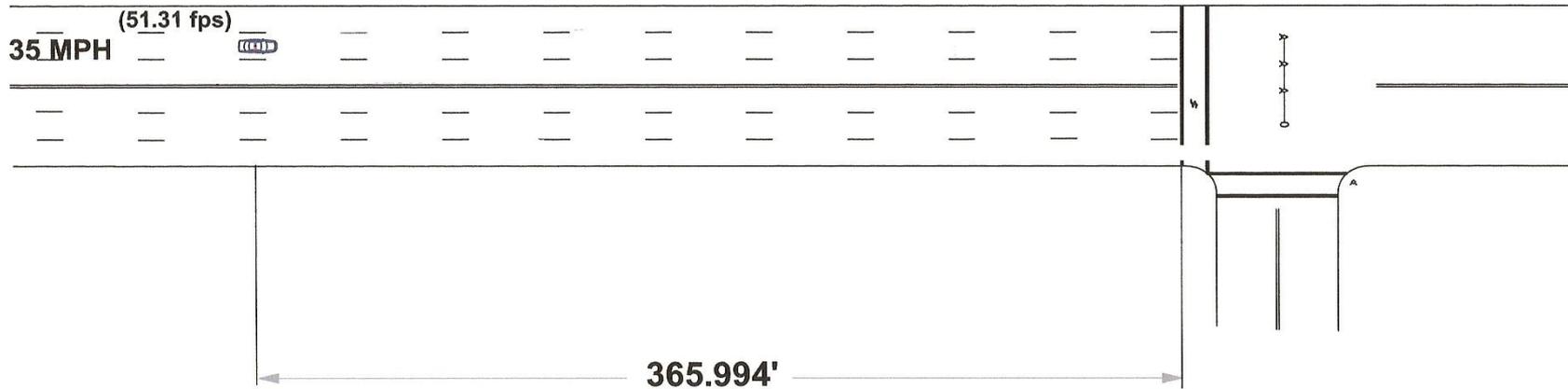
## Angle of Departure

The more the overhang of the body from the rear axle;  
the greater the risk of dragging the undercarriage



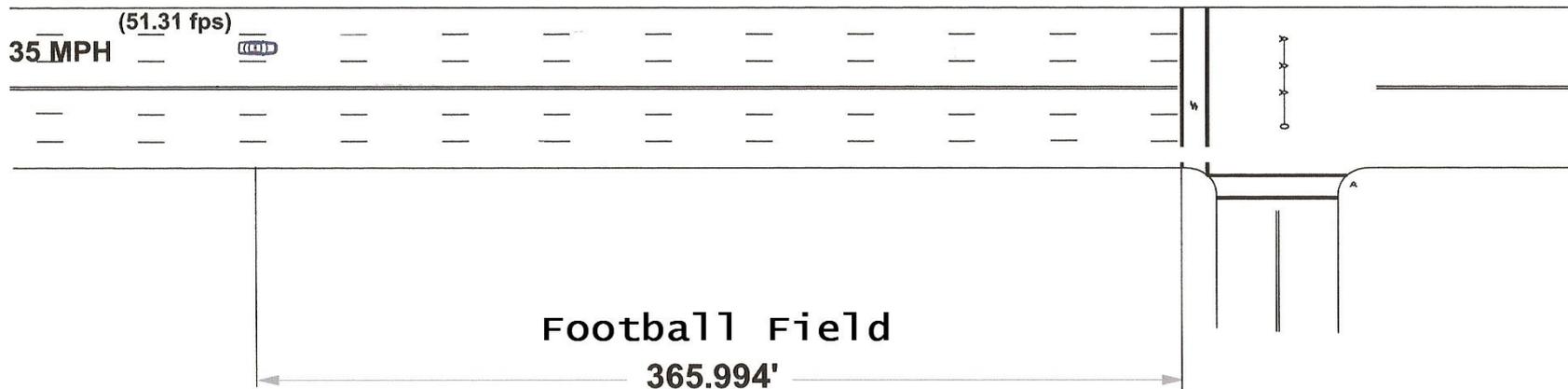


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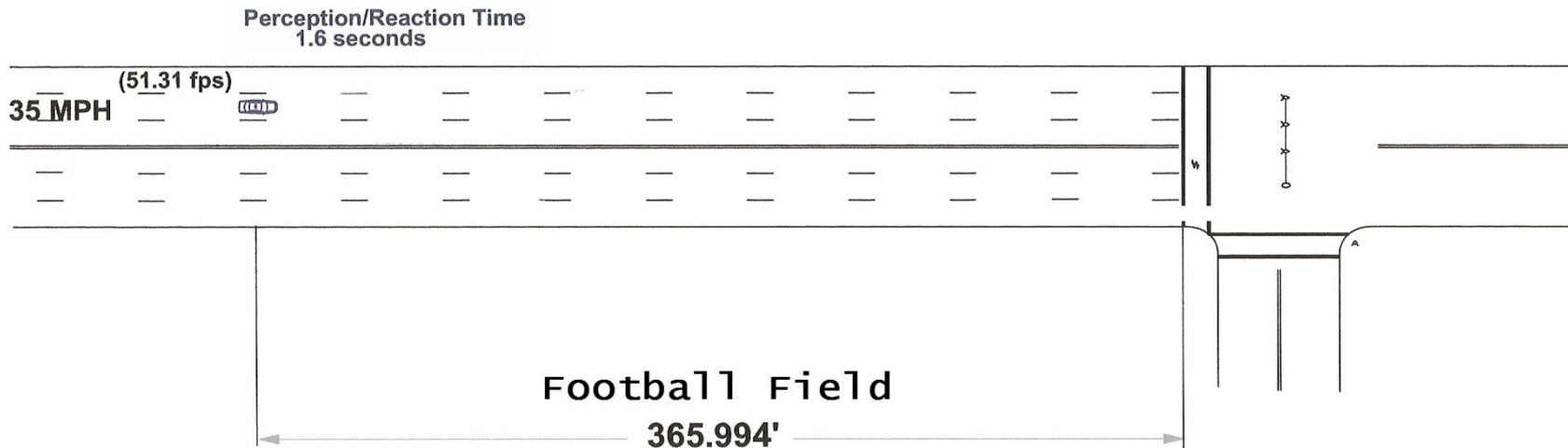


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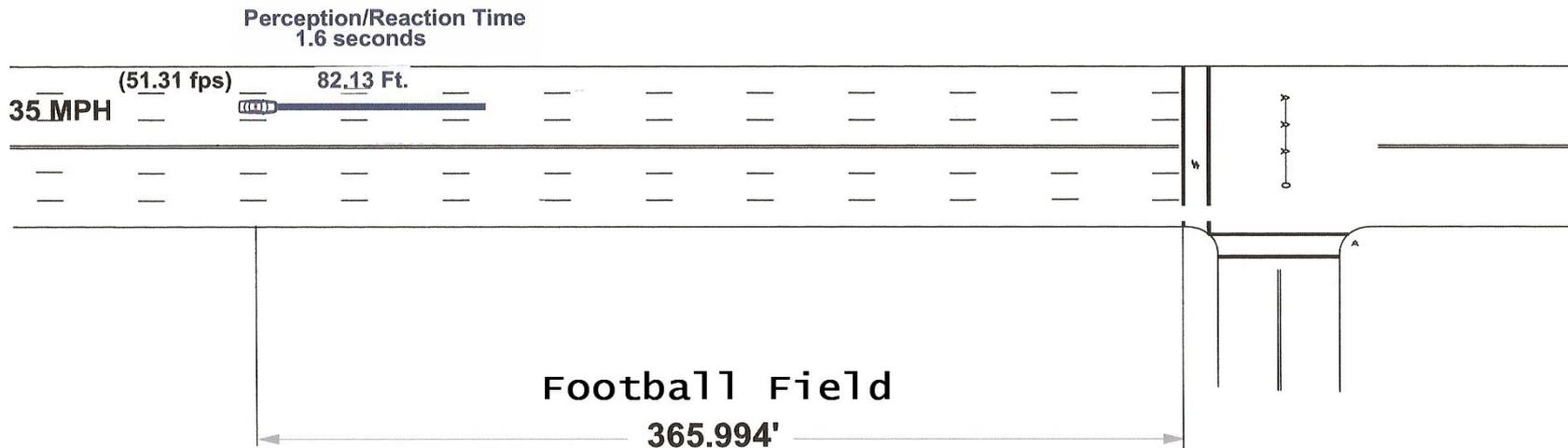


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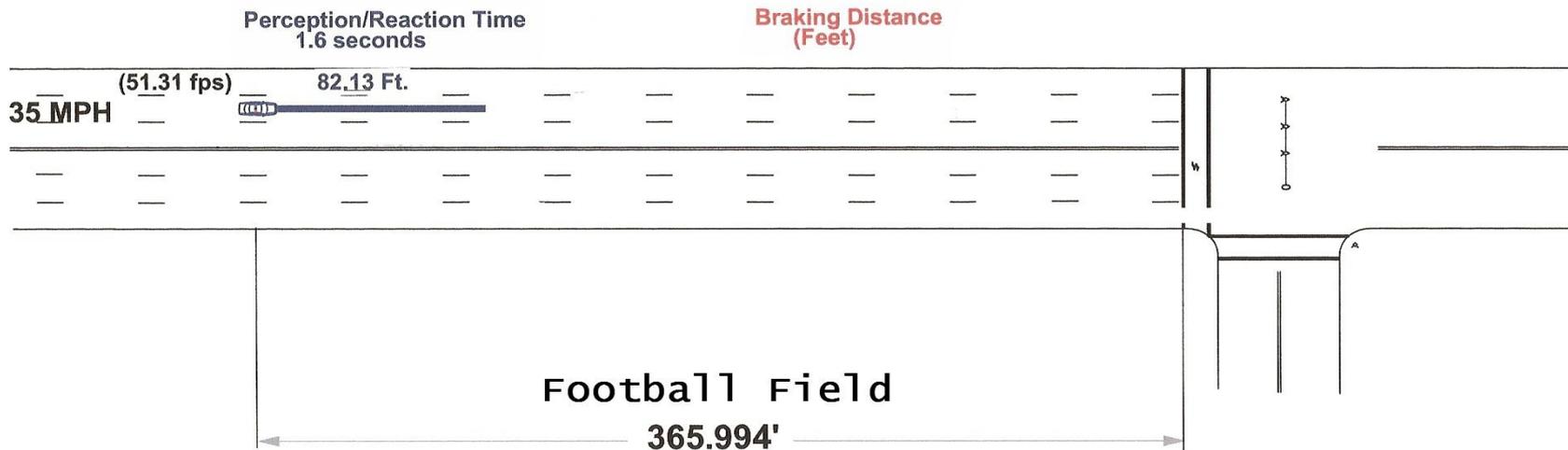


## Time - Distance





# Time - Distance





# Time - Distance



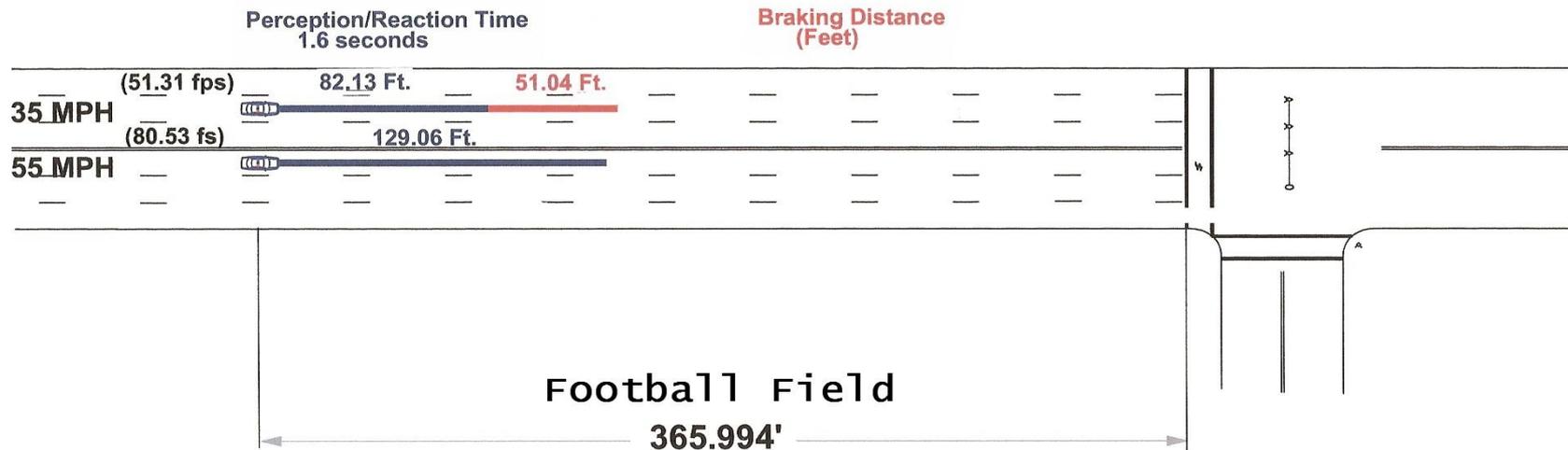


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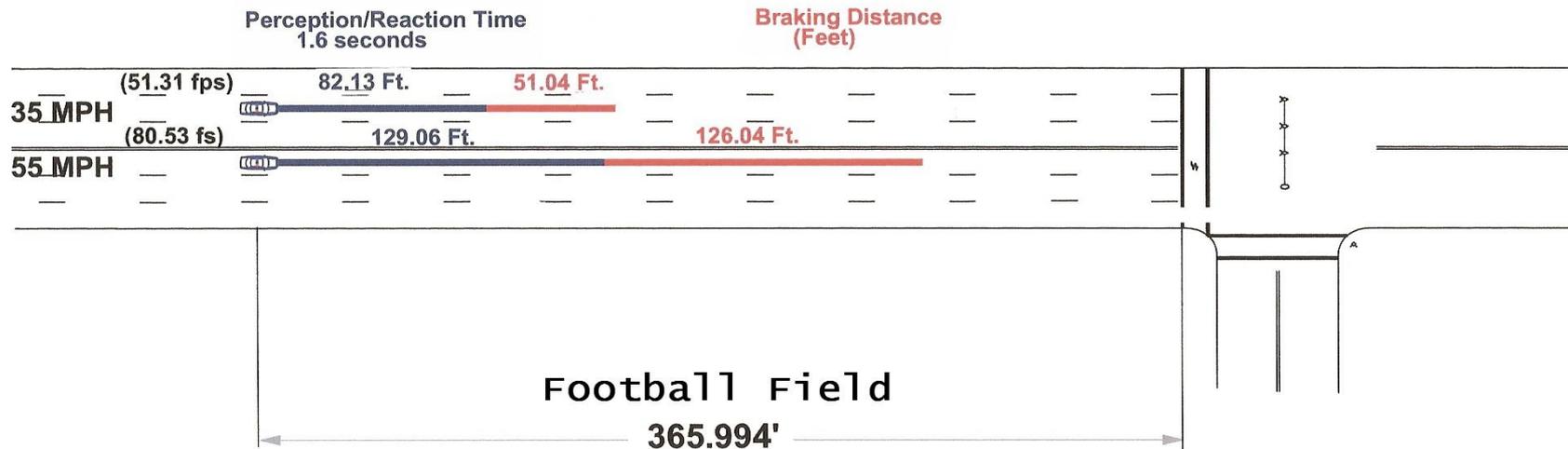


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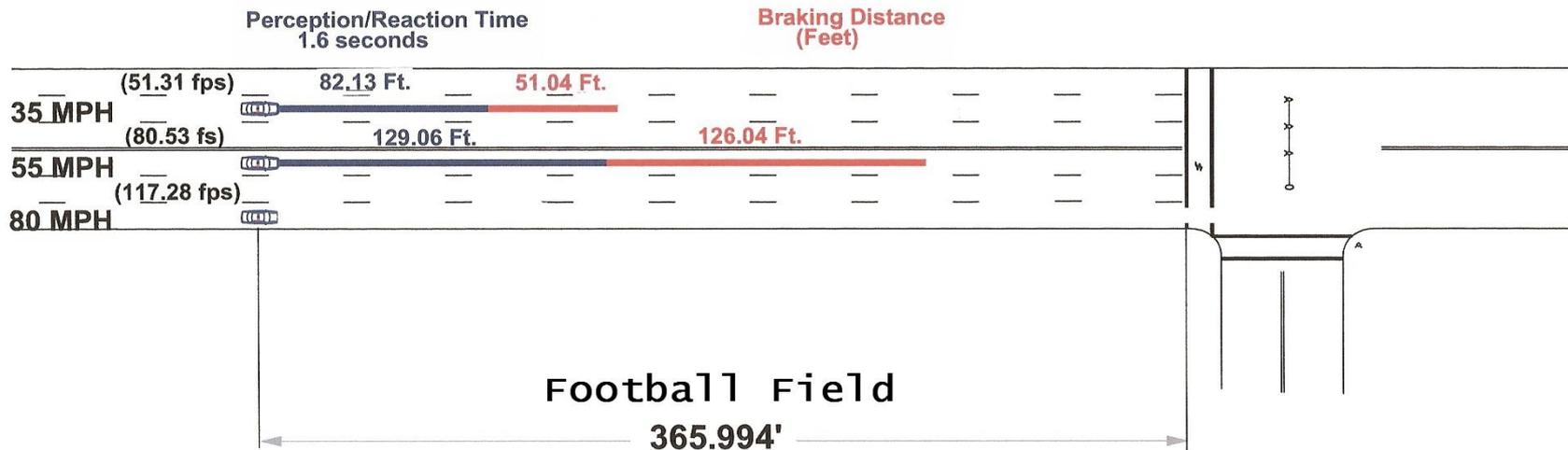


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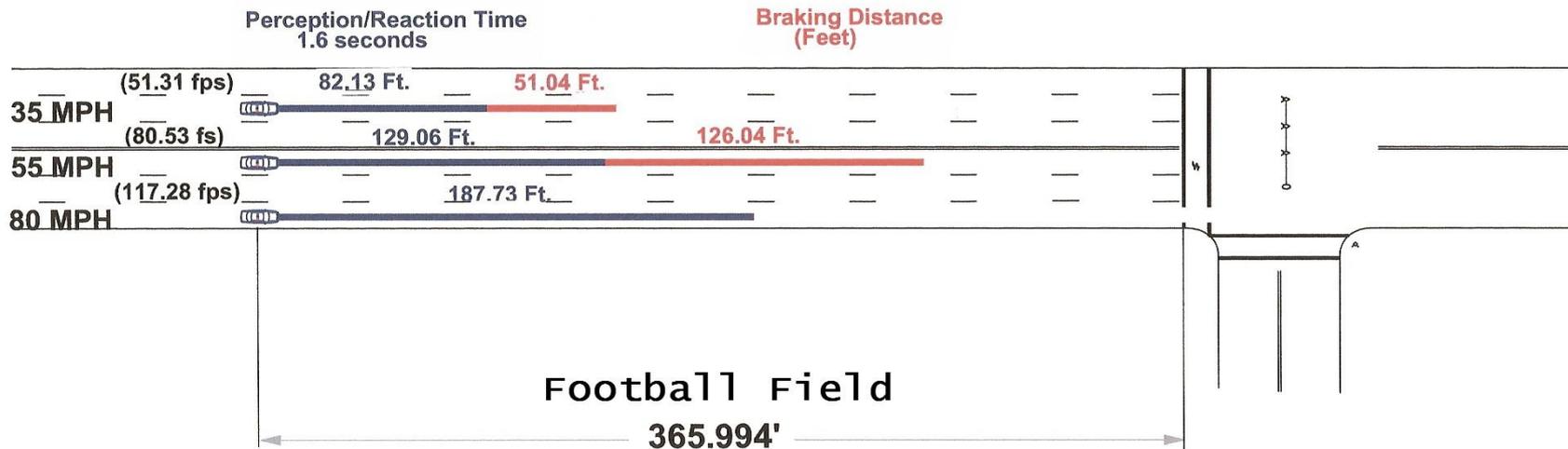


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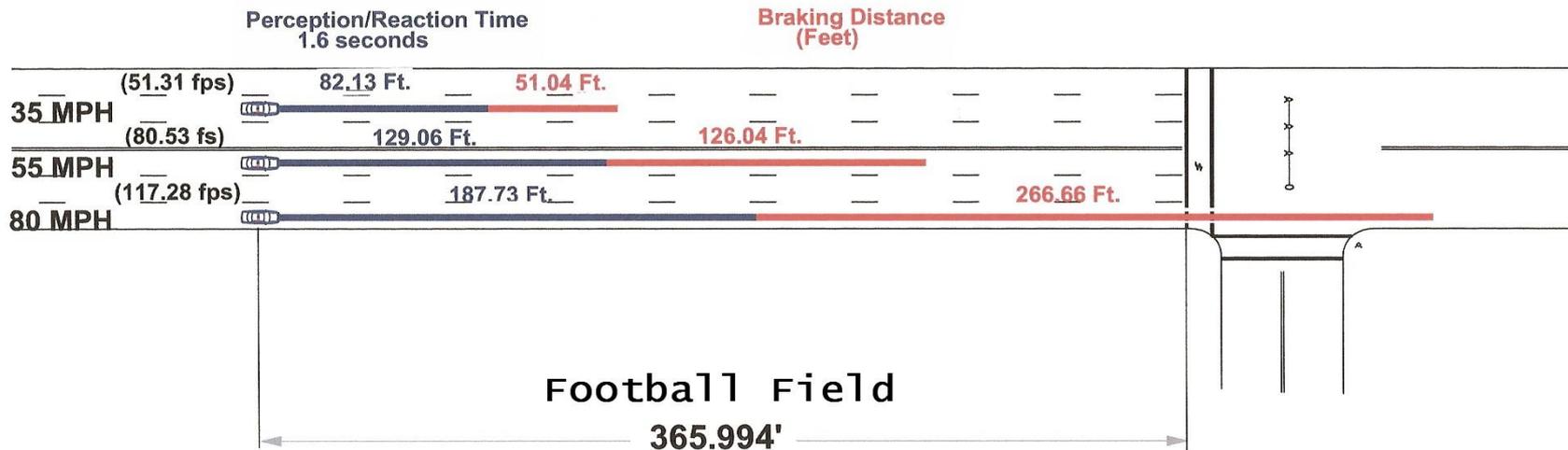


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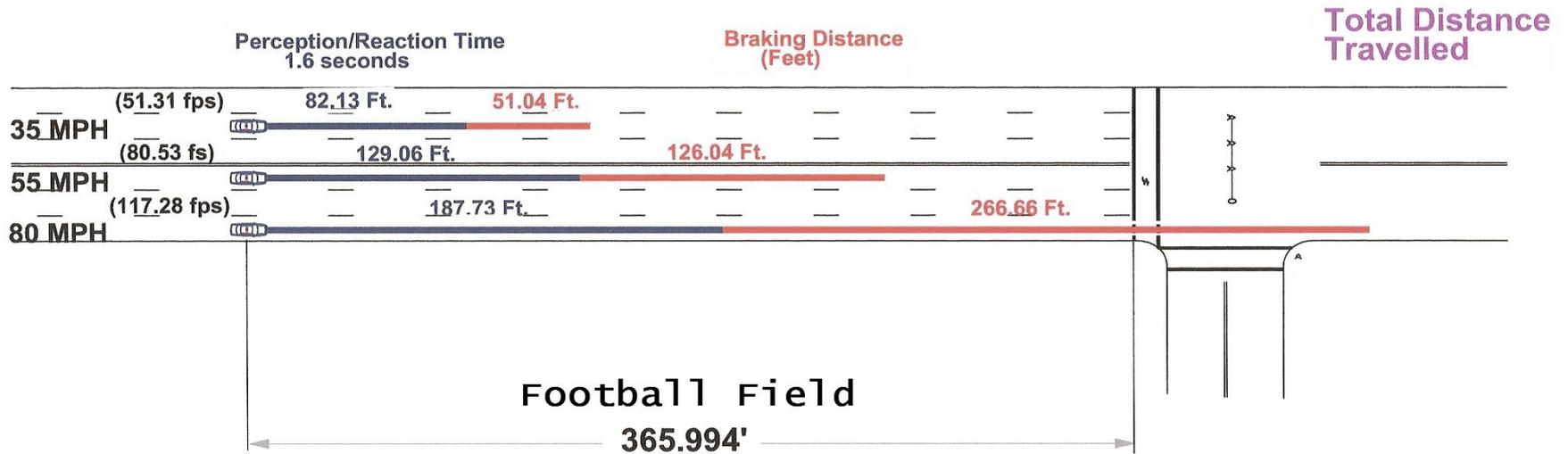


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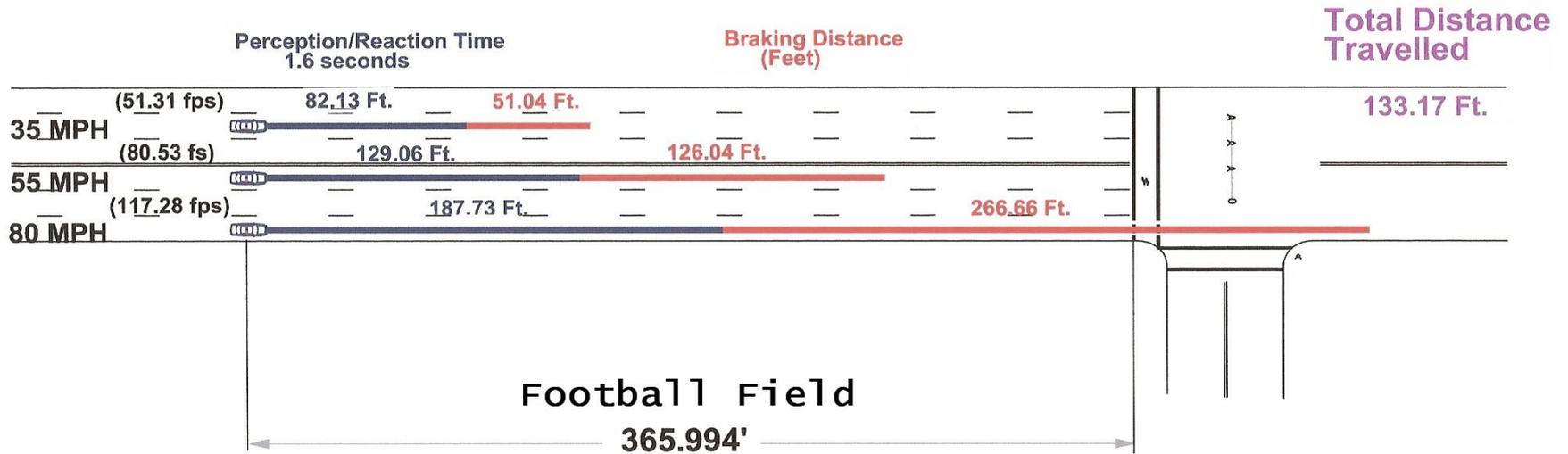


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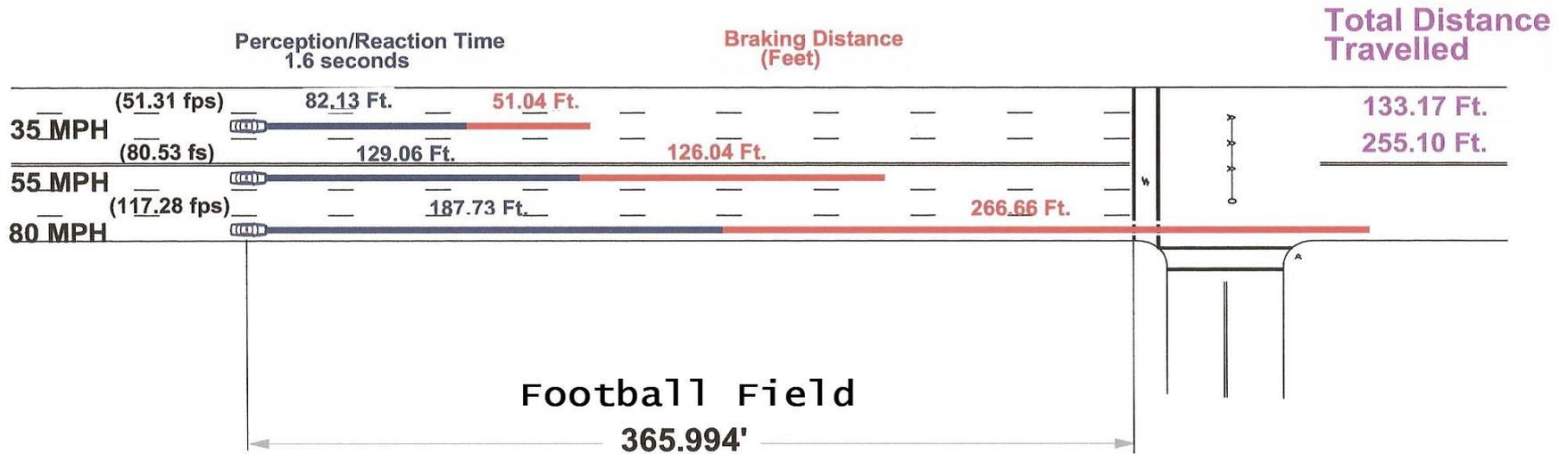


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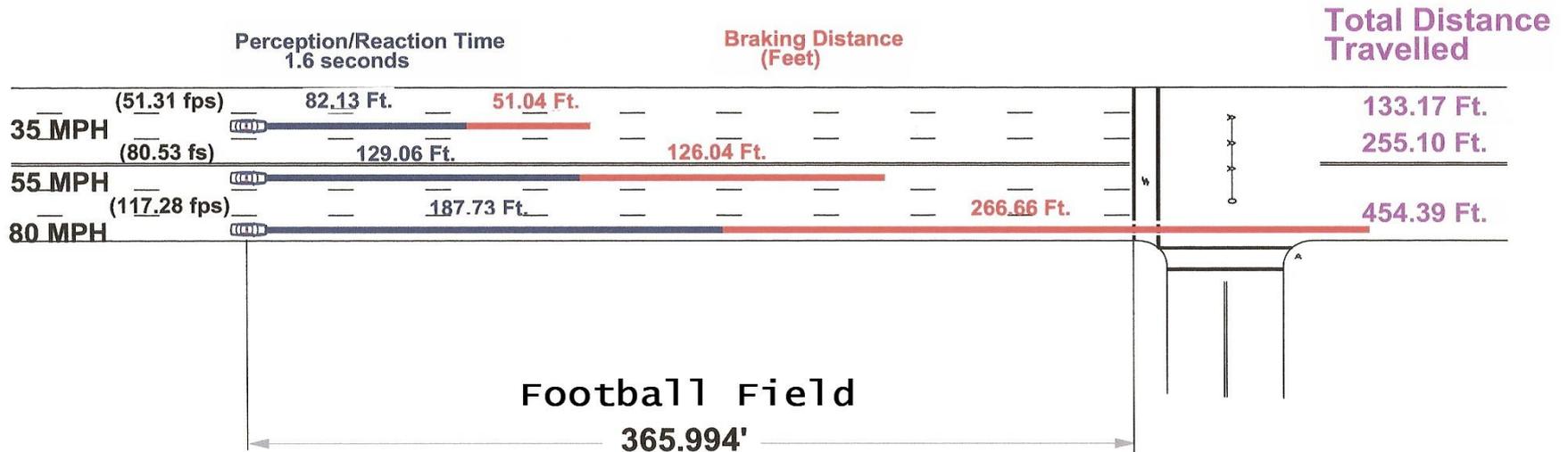


# Time - Distance





# Time - Distance





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## Show VFIS Intersection Video



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## Review

- Sleep Deprivation & The EVO
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