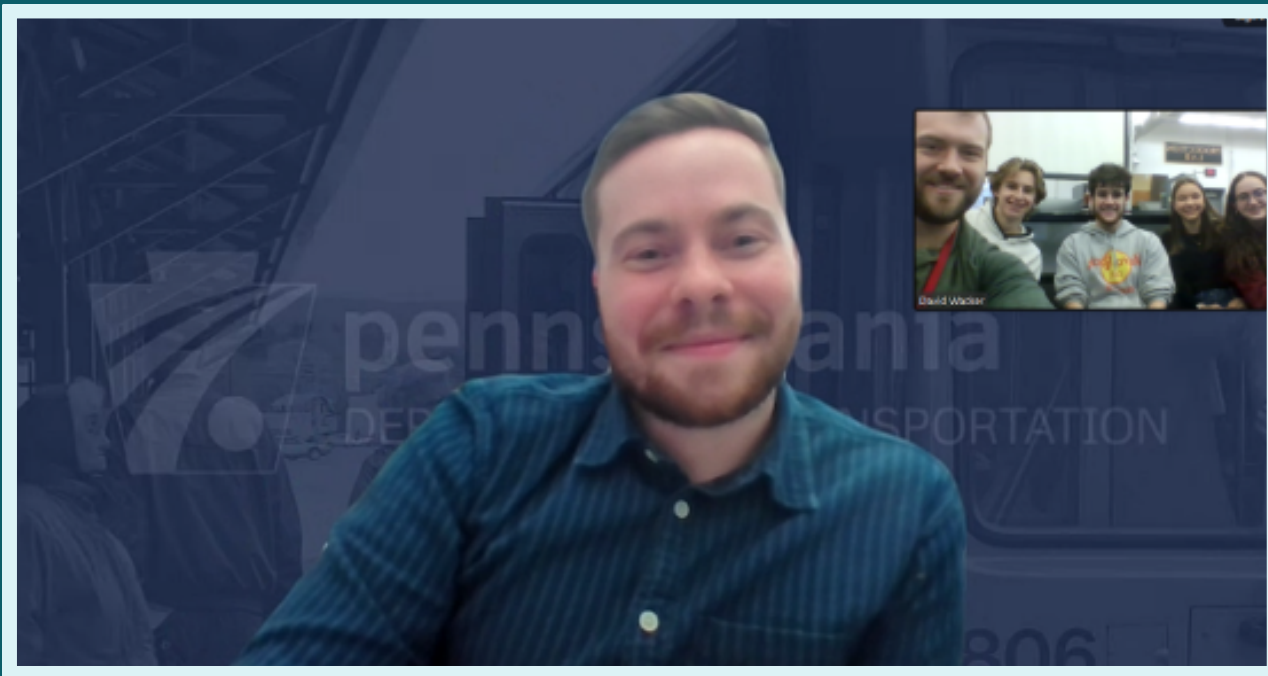


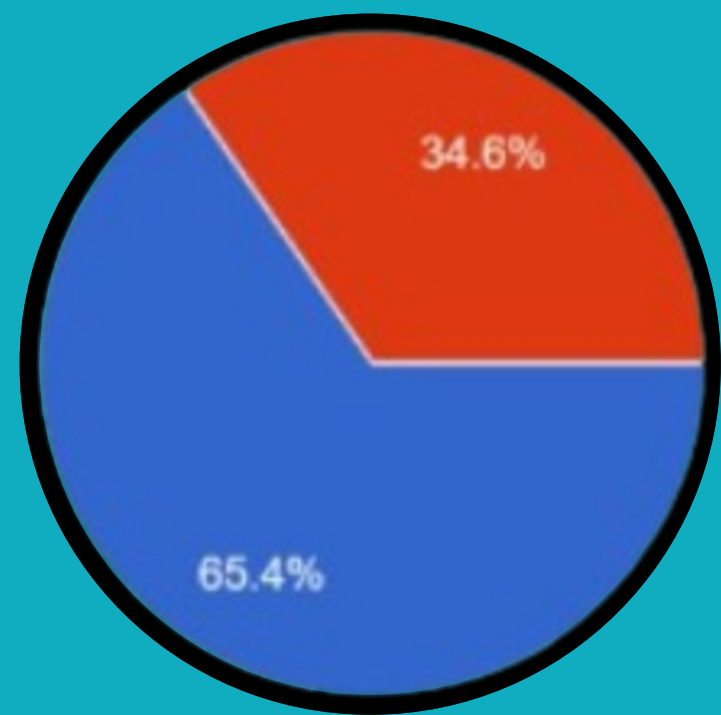
PENNSYLVANIA RESEARCH

- Backroads have highest rates of collisions and fatalities out of all road types in PA.
- Over 10,000 miles of backroads in PA
- Around 20 cyclist and 150 pedestrian fatalities every year due to collisions, majority occurring on backroads or rural roads

PARTNERSHIP WITH DERRICK HERMANN FROM PENNDOT

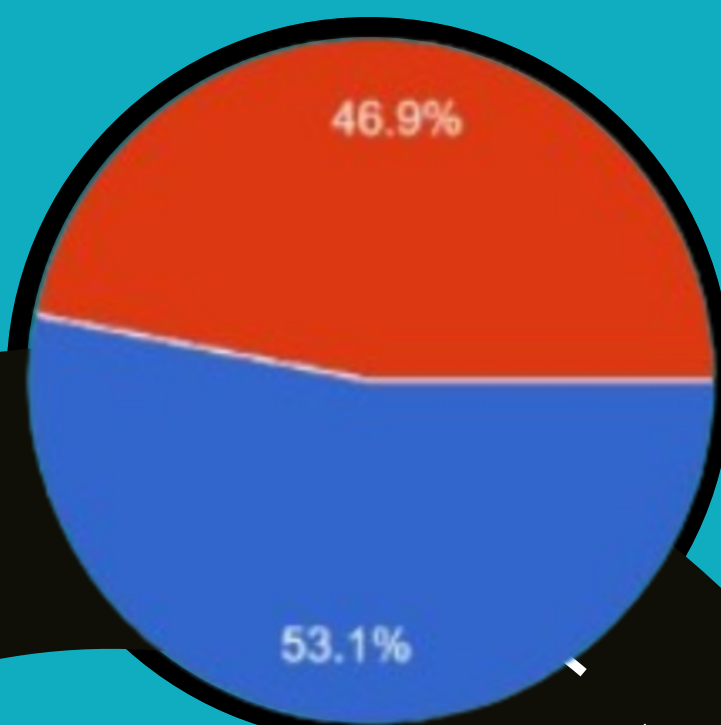


COMMUNITY DRIVING SURVEY



65.4% answered that they have witnessed a collision or near collision between driver and pedestrian/biker

53.1% answered that they have experienced a collision or near collision between themselves (driver) and pedestrian/biker



MATERIALS

- Luan Wood
- Aluminum Sheet Metal
- LED Board
- LED Rings
- Yellow + Black Paint
- Letter Stickers

BUDGET

EX. ROADWAY



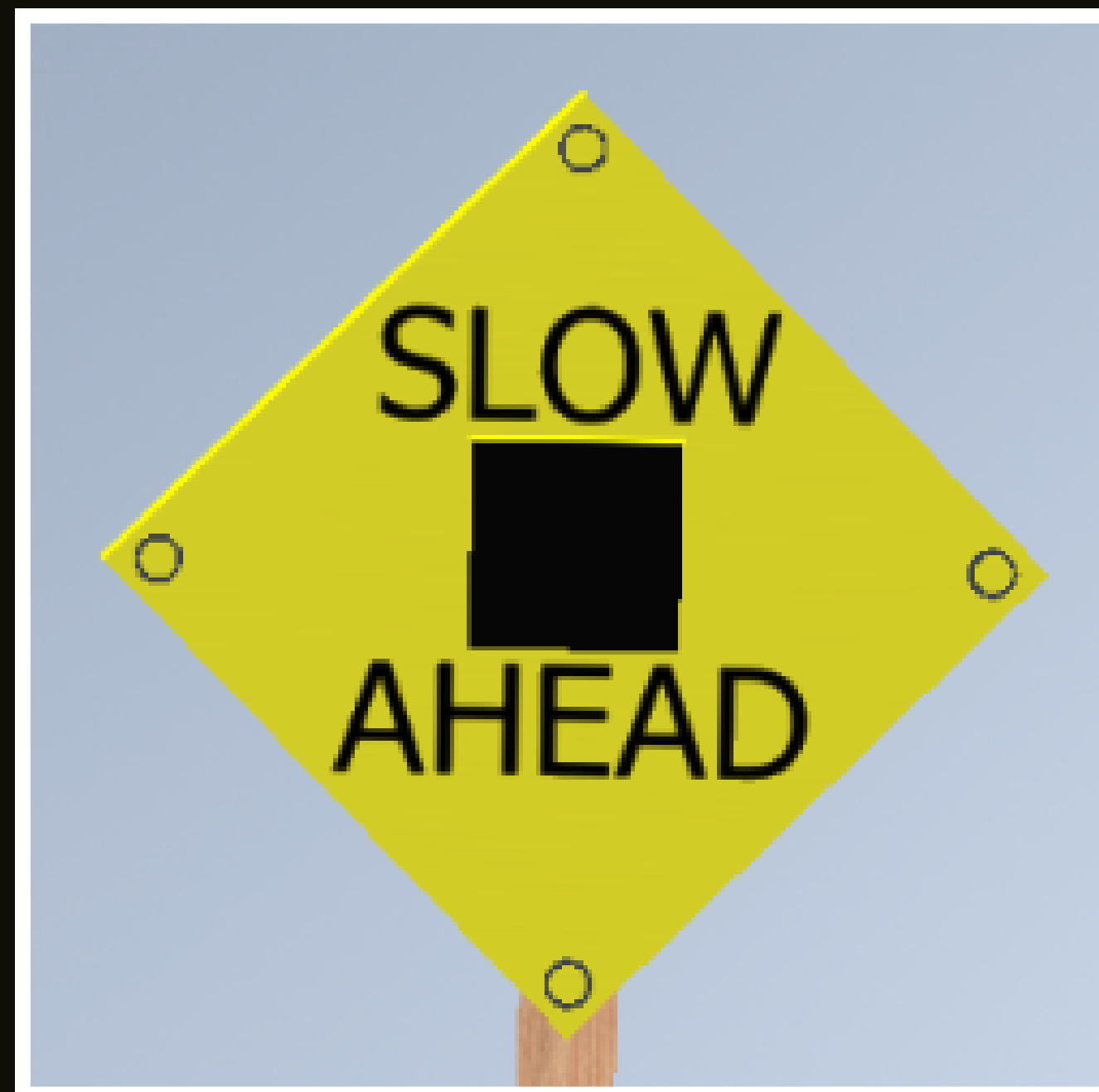
SlowPOKE

PARKLAND HIGH SCHOOL 

PROBLEM STATEMENT

In Pennsylvania, collisions occur frequently between people and motorized vehicles. Whether its a biker, pedestrian, or another driver traveling on the road, drivers face a constant risk of collisions and resulting casualties. Vehicles or people traveling under the speed limit may be in danger of faster approaching vehicles from behind. Roads with visibility issues, such as sharp turns or hills, make it challenging for a driver to know what is ahead of them on the road. This increases the risk of collisions between cars and other vehicles—which can potentially be deadly.

FINAL DESIGN CONCEPT



SLIDESHOW PRESENTATION



VIDEO PRESENTATION

UNIVERSAL DESIGN + ART CONNECTION



CODING

```
// @brief Shows parallel usage of WS2812 strips, blink yellow.
// @example BlinkParallel.ino

#include "FastLED.h"

// How many leds in your strip?
#define NUM_LEDS 16

//

// Demo of driving multiple WS2812 strips on different pins

// Define the array of leds
RGB leds[NUM_LEDS]; // Yes, they all share a buffer.

void setup() {
  Serial.begin(115200);
  FastLED.addLeds<WS2812, 12>(leds, NUM_LEDS); // GRB ordering is assumed
  FastLED.addLeds<WS2812, 13>(leds, NUM_LEDS); // GRB ordering is assumed
  FastLED.addLeds<WS2812, 10>(leds, NUM_LEDS); // GRB ordering is assumed
  FastLED.addLeds<WS2812, 11>(leds, NUM_LEDS); // GRB ordering is assumed
  delay(1000);
}
```

Excerpt of code

FUNCTIONING DESIGN



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