Effects of crosswalk illuminators and RRFBs on speed reductions and yielding to pedestrians at night

Regional Safety Advisory Committee Meeting

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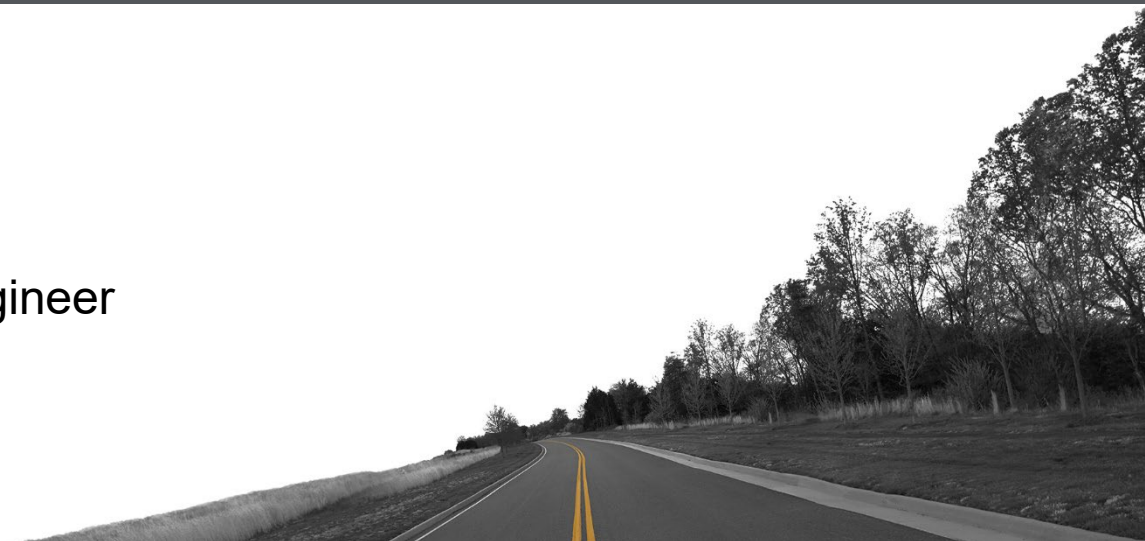
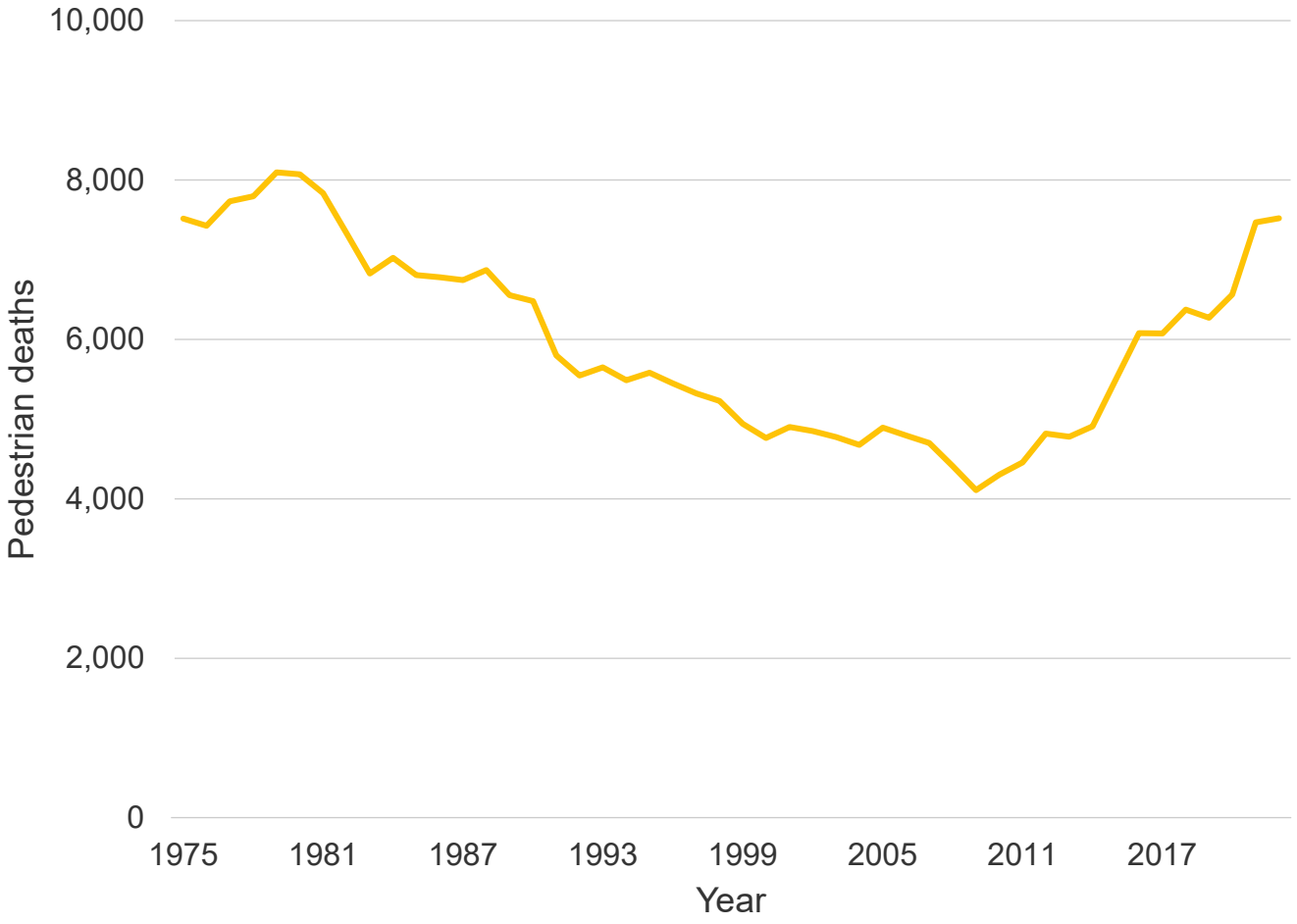
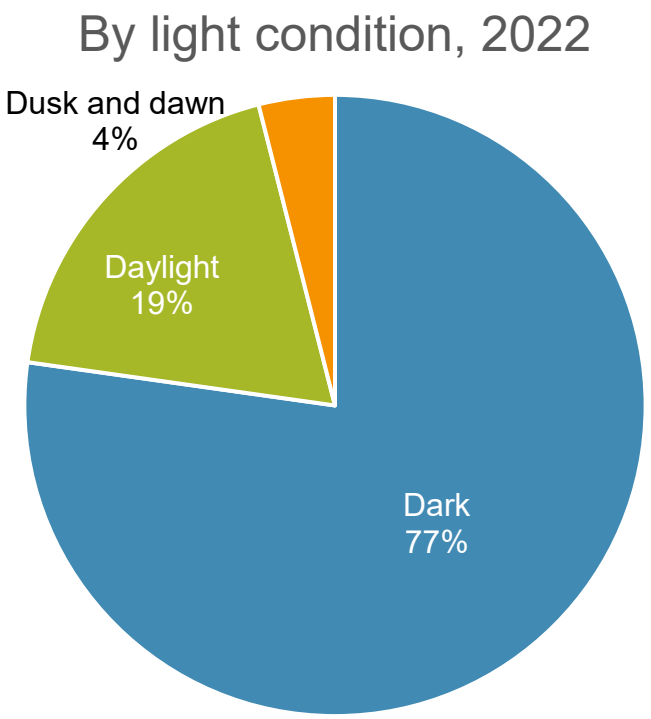


Pedestrian fatalities have increased rapidly

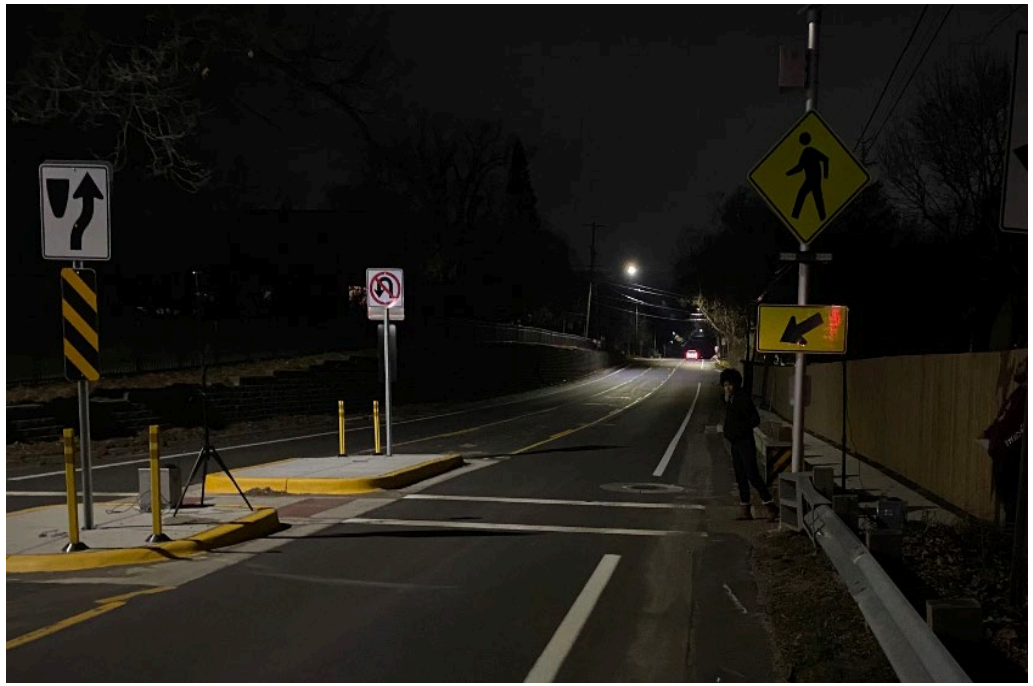




Examine effects of crosswalk illuminators and RRFBs at night

- Staged pedestrian crossings at 4 sites in Kalamazoo, Michigan
- The study examined 5 conditions:
  - Baseline with existing street lighting
  - Crosswalk illuminators continuously on
  - Crosswalk illuminators triggered by a pedestrian
  - RRFBs
  - RRFBs + triggered illuminators
- Driver behavior measurements
  - Yielding
  - Reducing speeds by ≥ 10 mph
  - Reducing speeds by ≥ 5 mph

IIHS HLDI

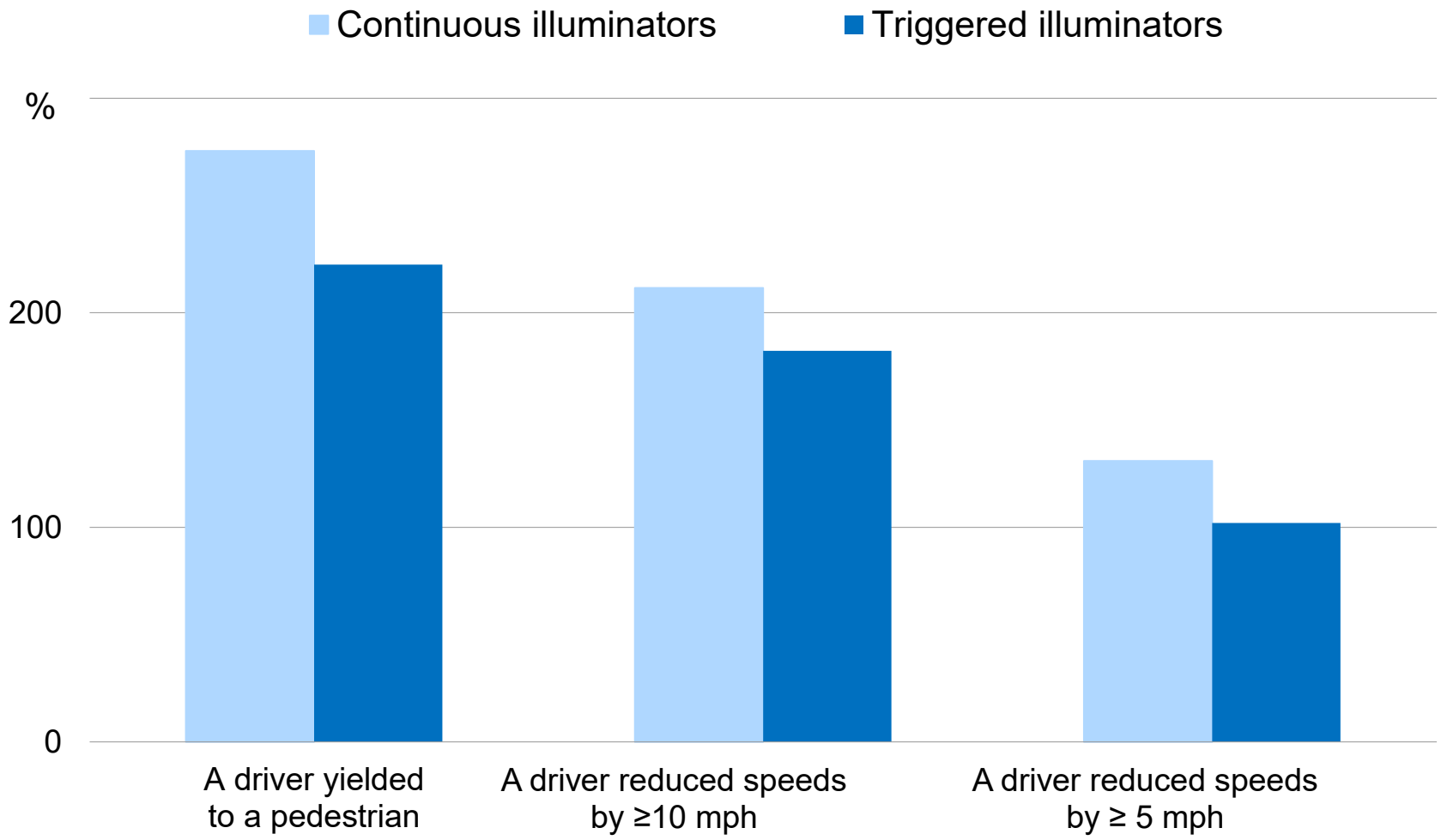


Baseline condition at site #4

Illuminators on at site #4

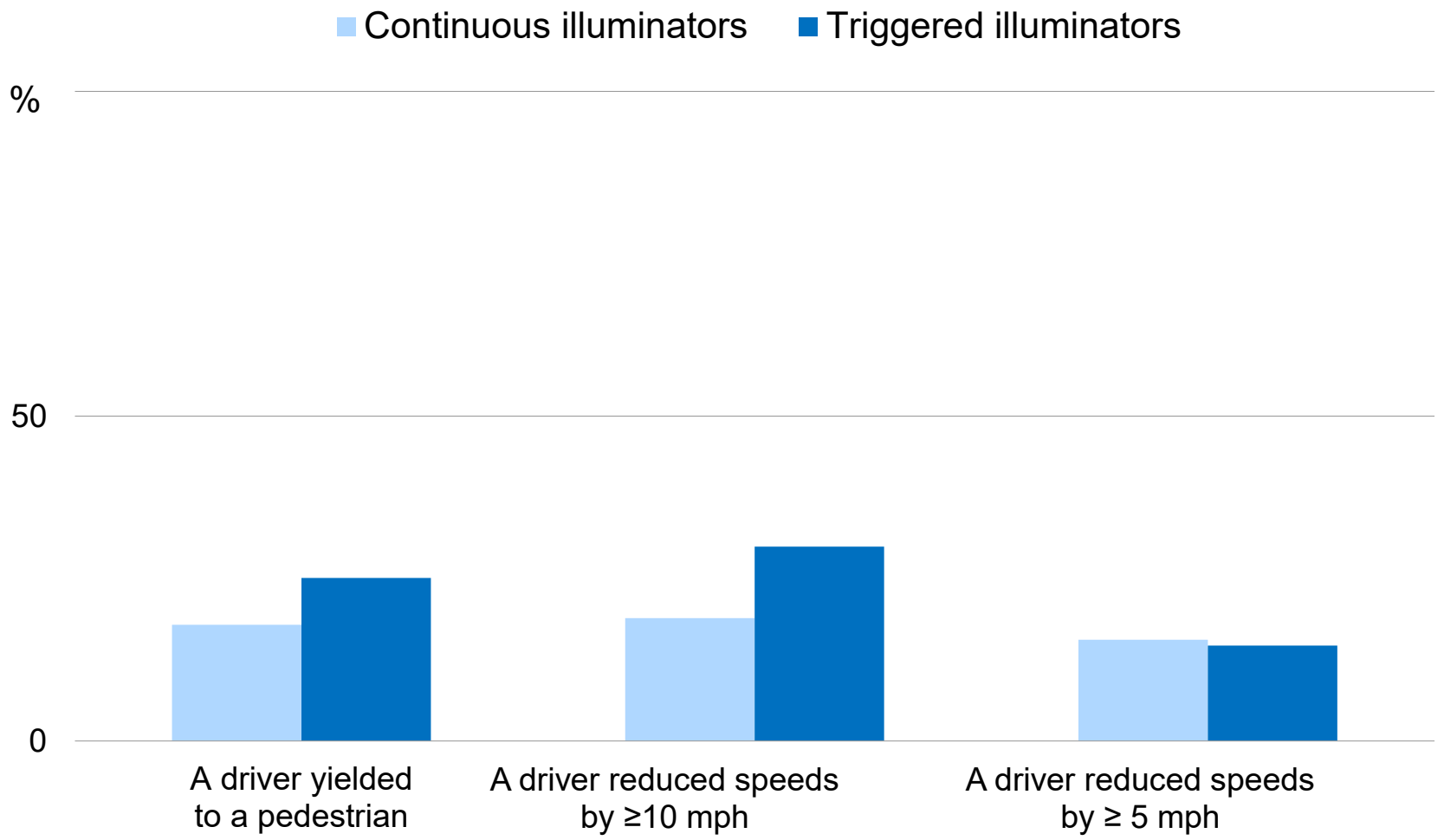
Estimated percentage increases in likelihood

Relative to baseline condition, at sites #1–2 with poor existing lighting



Estimated percentage increases in likelihood

Relative to baseline condition, at site #3 with optimal existing lighting



Estimated percentage increases in likelihood

Relative to baseline condition, at site #4 with poor existing lighting