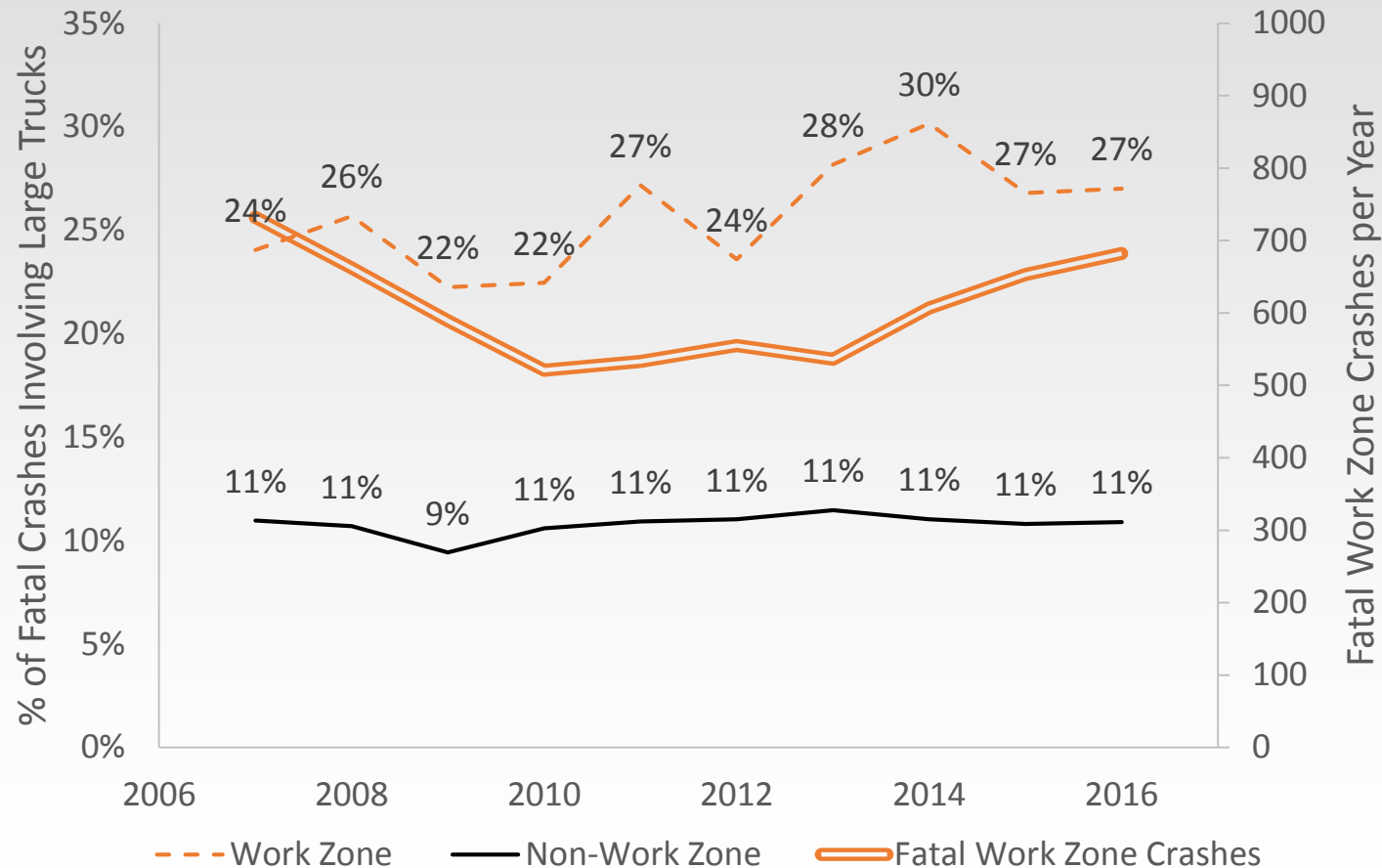


Improving Large Truck Safety in Work Zones

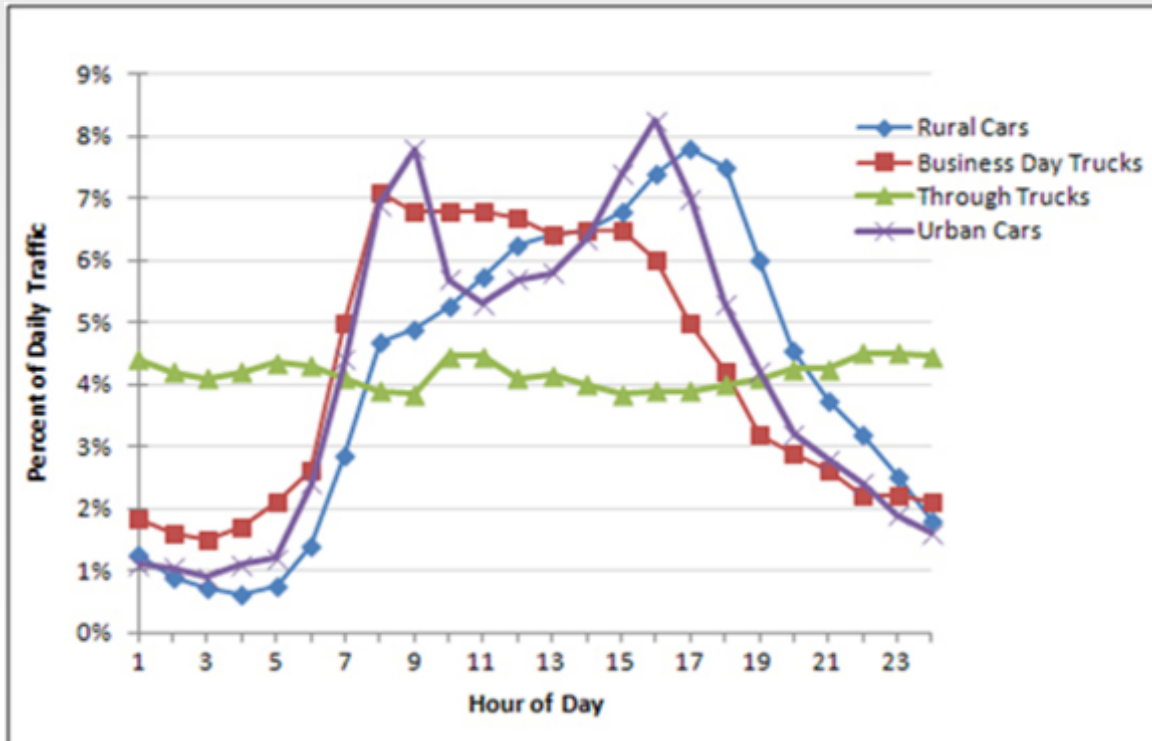


Large Trucks are Overrepresented in Work Zones...

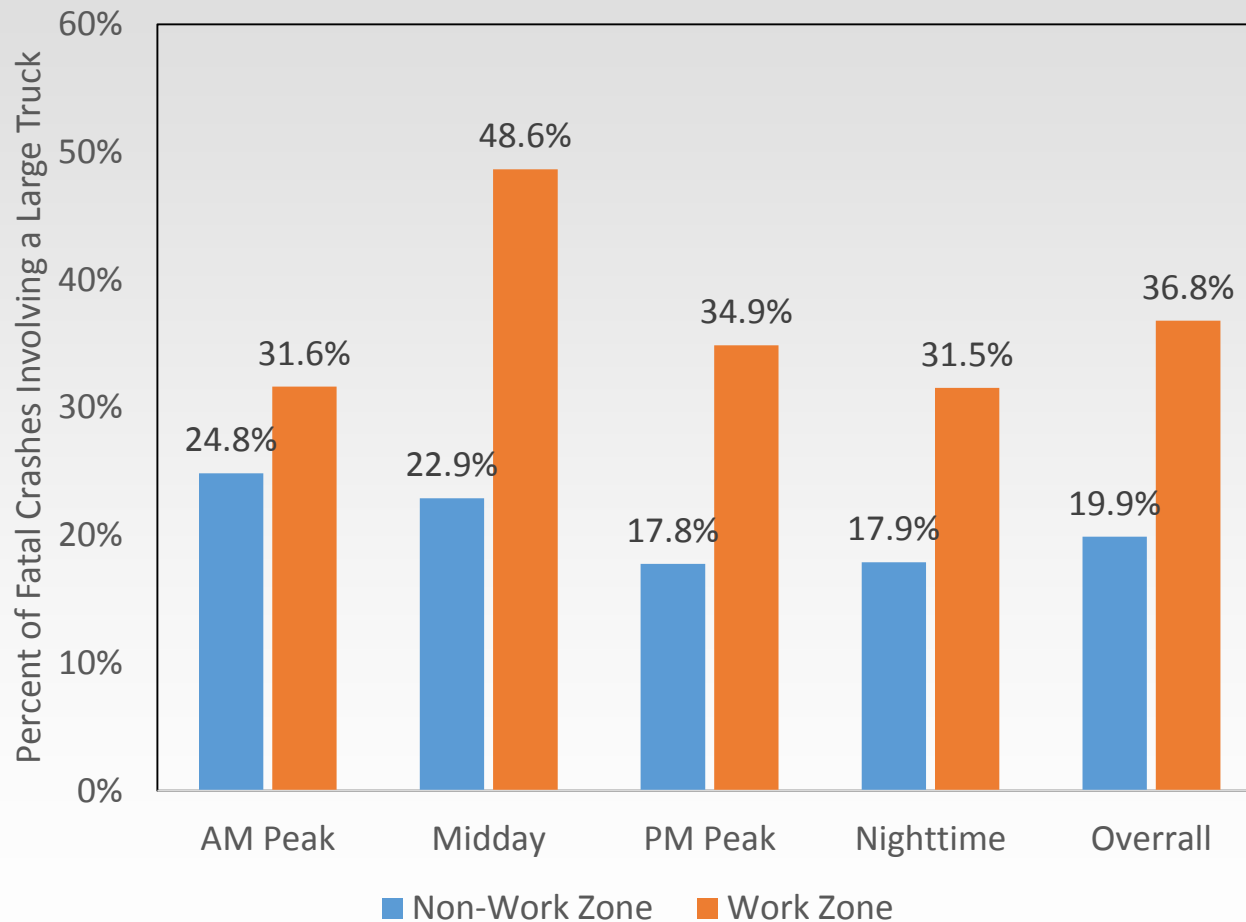


Why the Overrepresentation?

- More large trucks around work zones
- More work zones when trucks travel more
- Work zones more challenging for trucks to negotiate



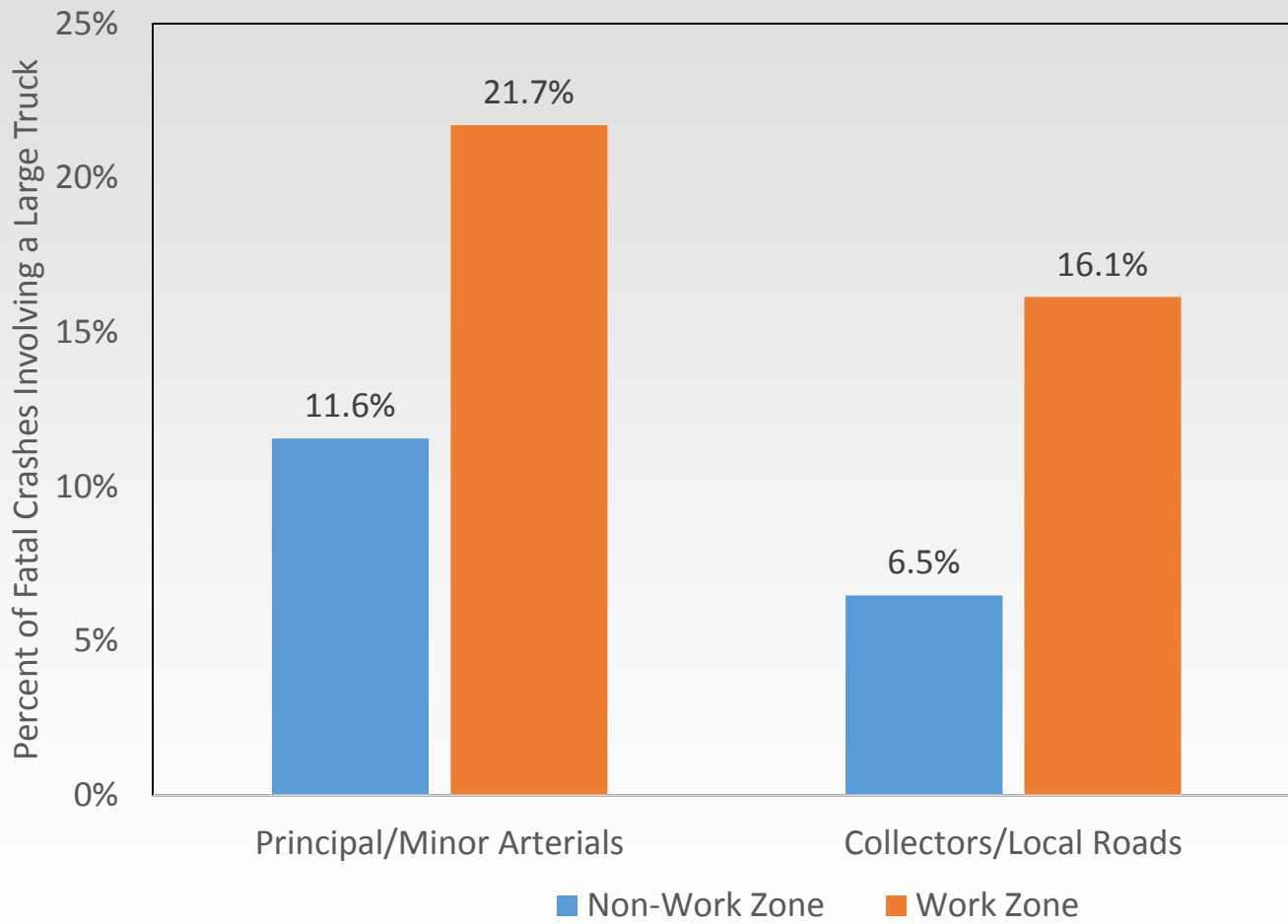
Interstate and Freeway Work Zones are Especially Problematic...



Source: 2014-2016 FARS



...But Other Roadway Types Experience It As Well

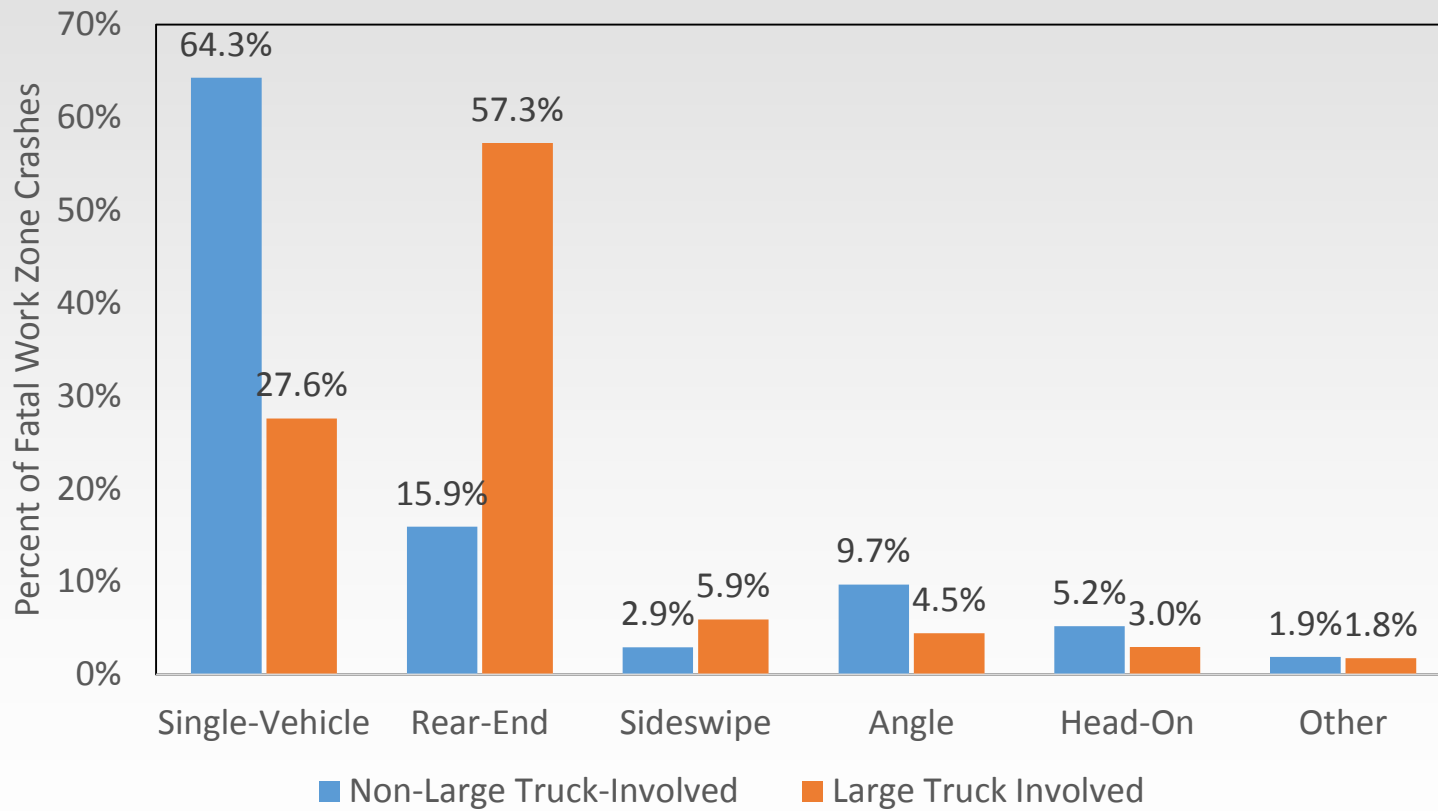


Source: 2014-2016 FARS



Large Truck Crashes in Work Zones are Different than Non-Truck Crashes

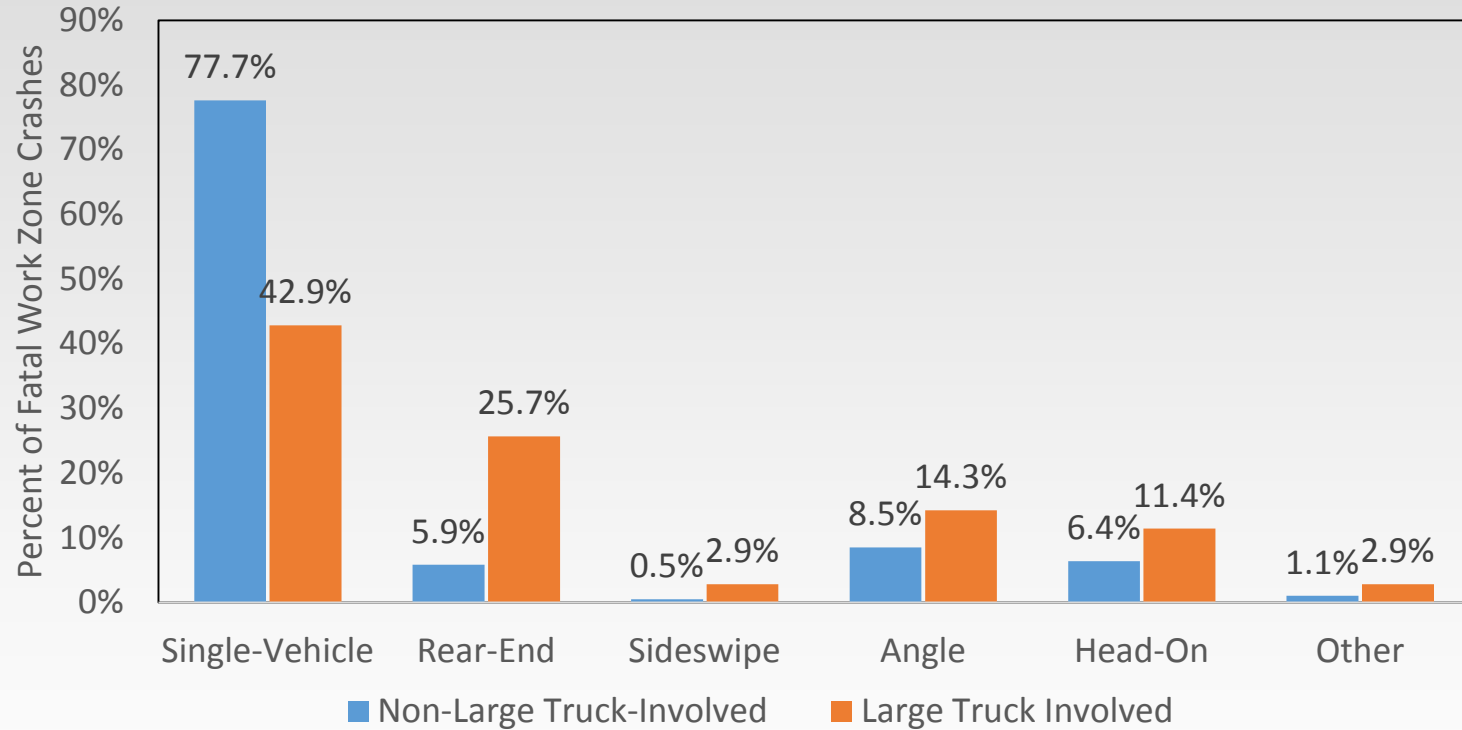
Fatal Work Zone Crashes on Interstates/Freeways



Source: 2014-2016 FARS



Fatal Work Zone Crashes on Collectors and Local Roads

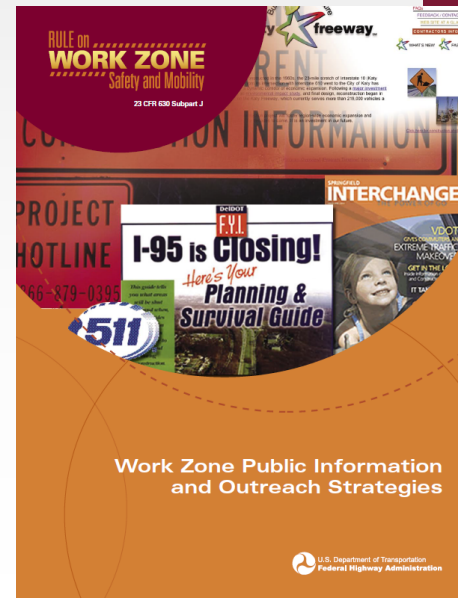
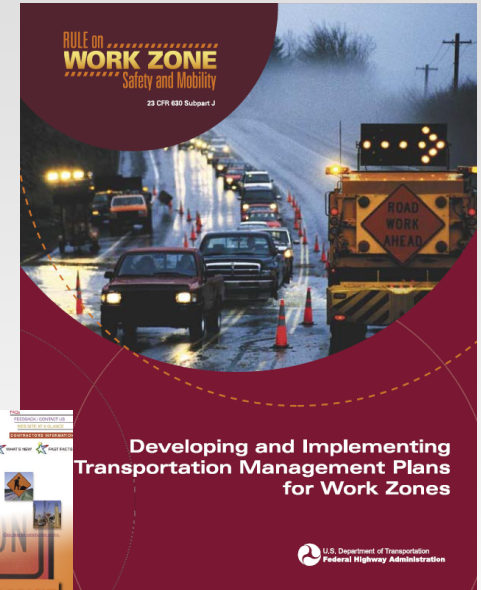


Source: 2014-2016 FARS

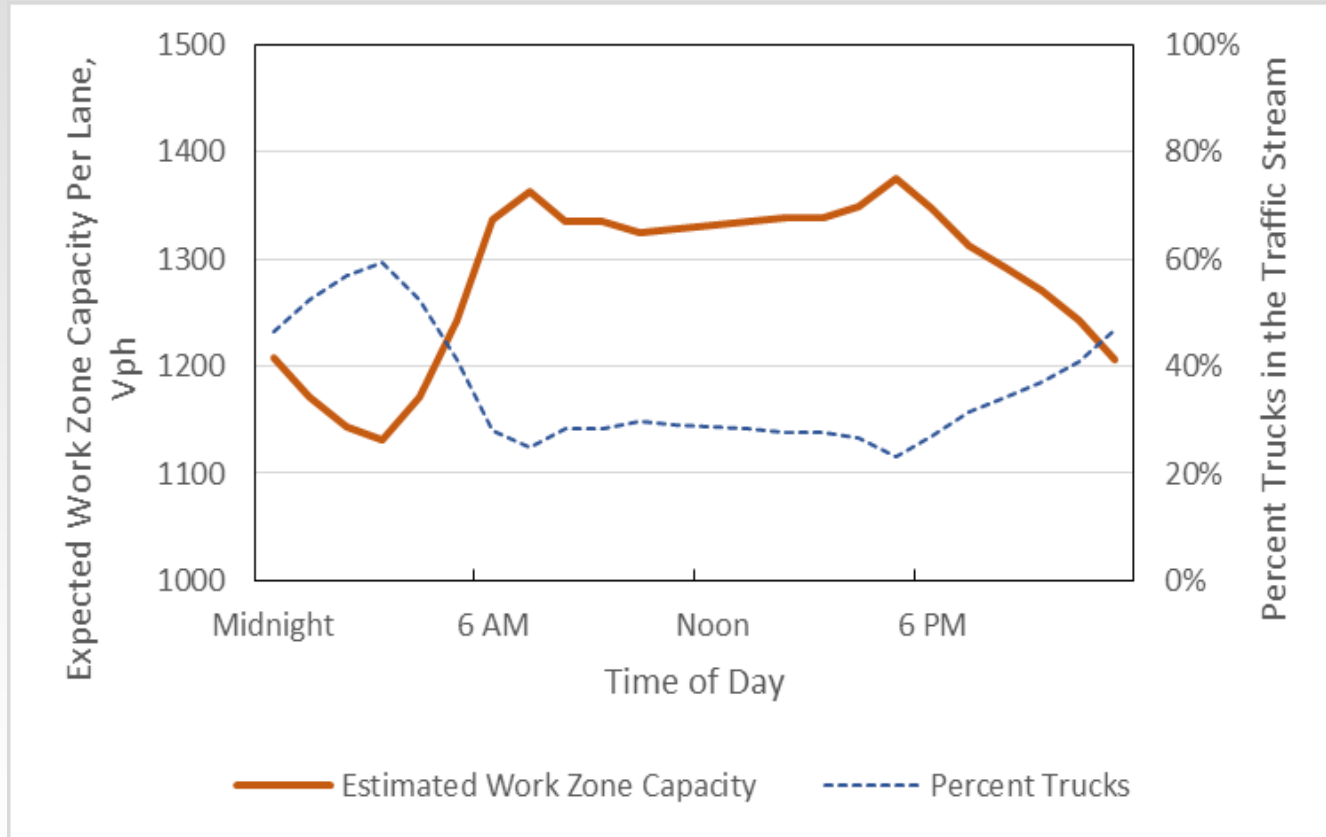
So How Can Large Truck
Safety in Work Zone be
Increased?

Incorporate Large Truck Considerations into Transportation Management Plan

- Traffic control plan
- Traffic operations plan
- Public information and outreach plan



Include Temporal Effects of Large Trucks in Impact Analyses

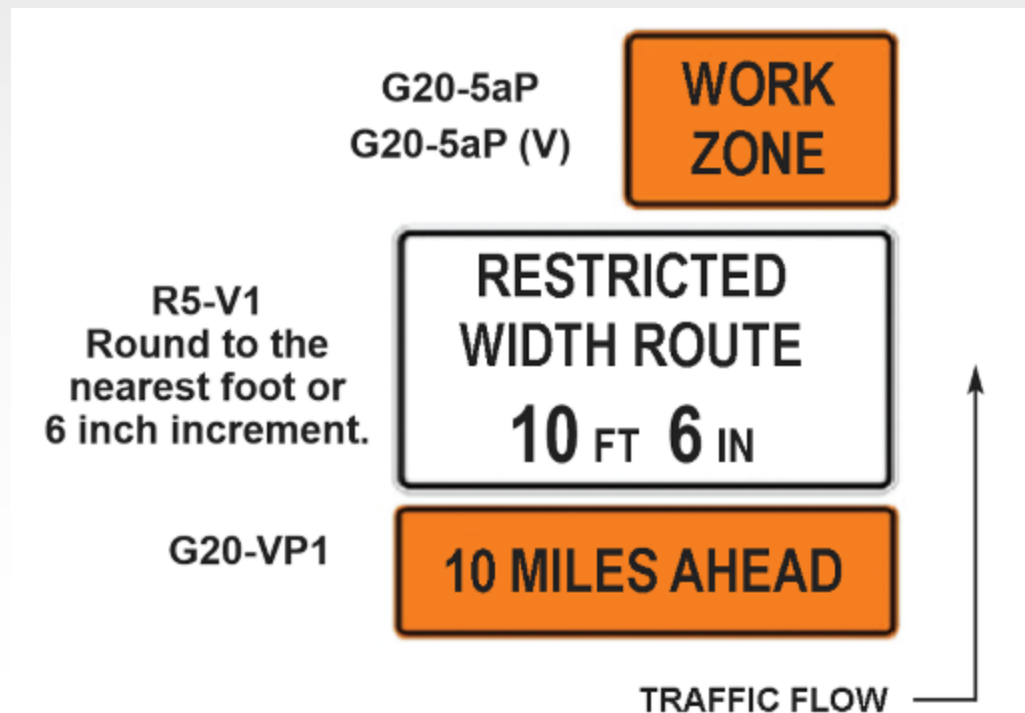


Work Zone Design Practices to Better Accommodate Large Trucks



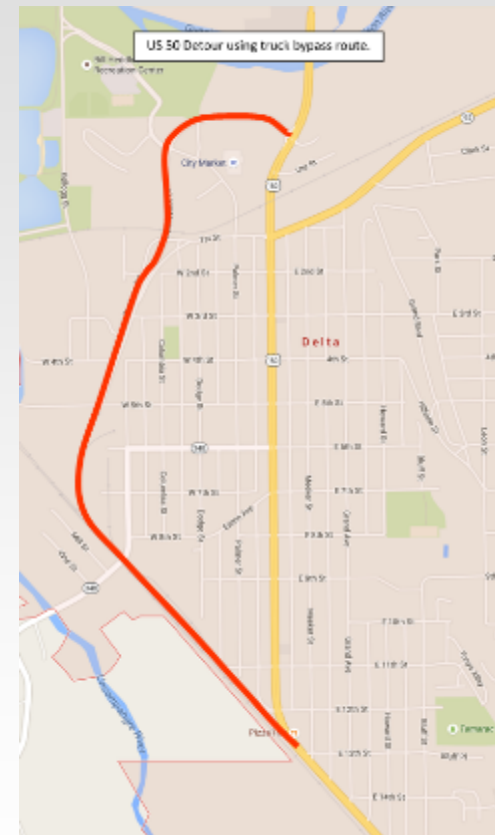
Lane Width Considerations

- 11 ft minimum, 12 ft desirable
- Differential lane widths
- Provide sufficient warning of limited lane width work zones



Encourage Large Truck Diversion

- Ensure that the route can accommodate:
 - Volumes
 - Heights, widths, and weights
 - Turning, off-tracking
- Minimize additional travel distance
- Good outreach is critical



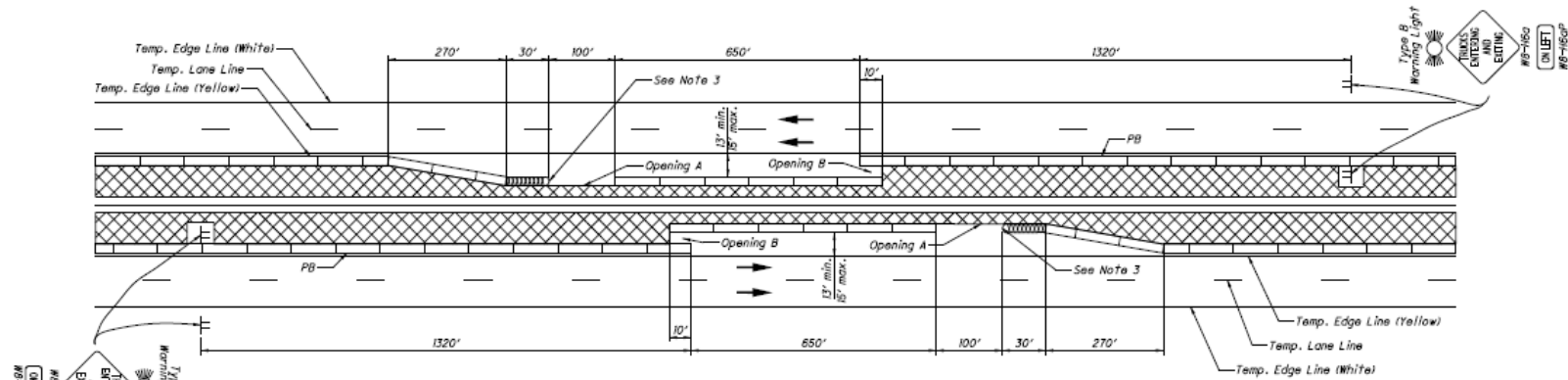
Establish Truck-Only Lane(s) through Work Zone



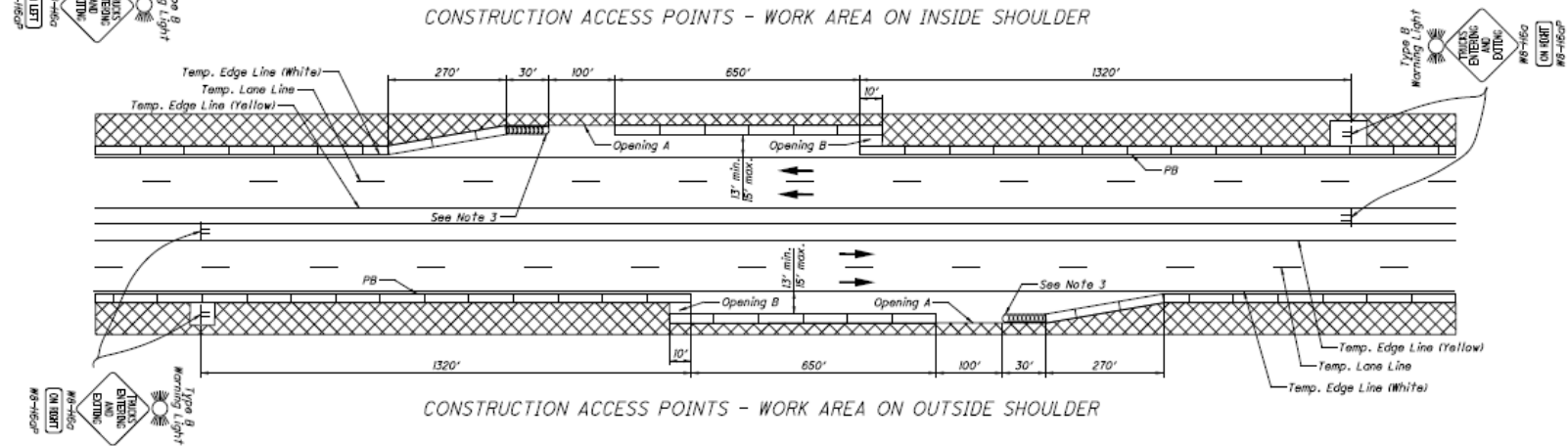
Maintain Adequate Truck Parking at Nearby Rest Areas



Improve Work Space Access



CONSTRUCTION ACCESS POINTS - WORK AREA ON INSIDE SHOULDER



CONSTRUCTION ACCESS POINTS - WORK AREA ON OUTSIDE SHOULDER

LEGEND

WORK AREA	
PORTABLE BARRIER (PB)	
IMPACT ATTENUATOR	
DIRECTION OF TRAVEL	

THIS DRAWING REPLACES PIS 209563 DATED 07-18-2014.
 SD NUMBER
MT-103.10
 1 / 2

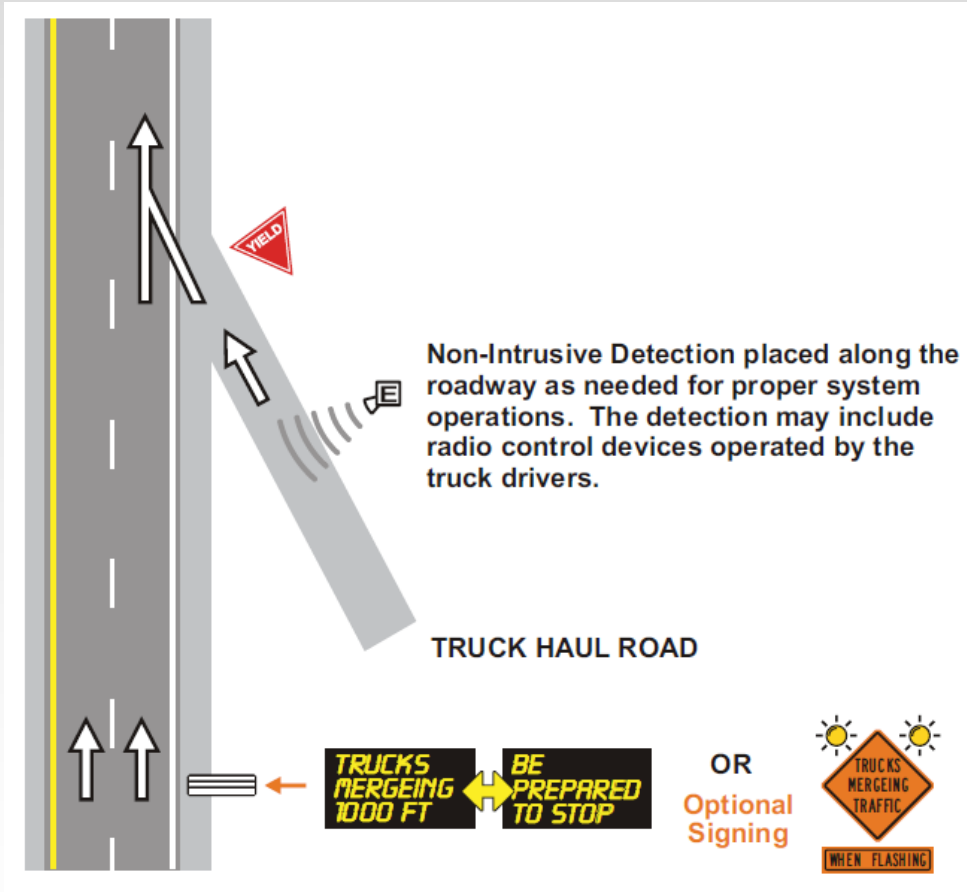
STANBRO HIGHWAY CONSTRUCTION DRAWING
CONSTRUCTION ACCESS POINTS

OFFICE OF ROADWAY ENGINEERING
 SOLUTIONS

STATE OF MONTANA DEPARTMENT OF TRANSPORTATION
 ADMINISTRATOR
 DATE: 01-16-2015



Construction Access Warnings



Improve Sight Triangles



Other Good Practices

- Establish reasonable design speeds and speed limits
- Maintain good sign, channelizing device, and pavement marking visibility
- Avoid short or no-acceleration lane entrance ramps
- Establish contingencies for hazardous material incidents

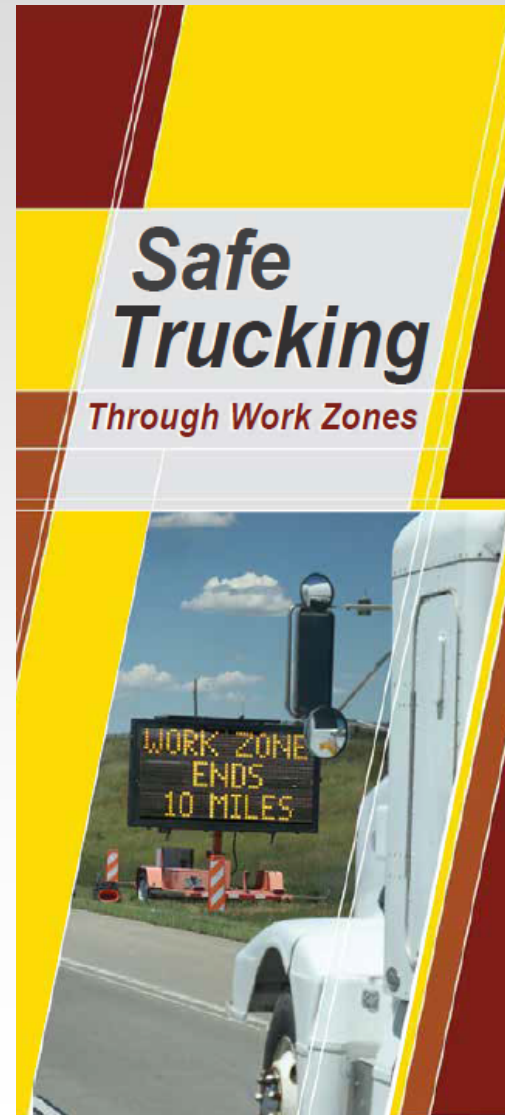




Strategies to Help Truck Drivers Traverse Work Zones Safer and More Easily

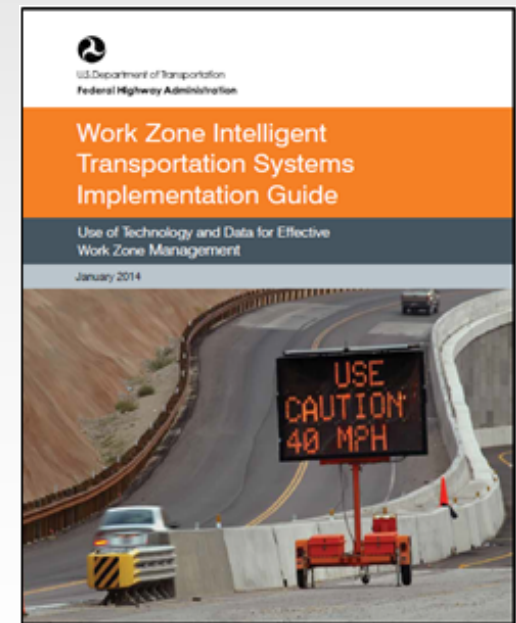
Truck Driver-Focused Information and Outreach

- Distribute at truck stops, rest areas, dispatching centers, etc.
- General work zone safety outreach
- Targeted project-specific information



Utilize Work Zone ITS Where Appropriate

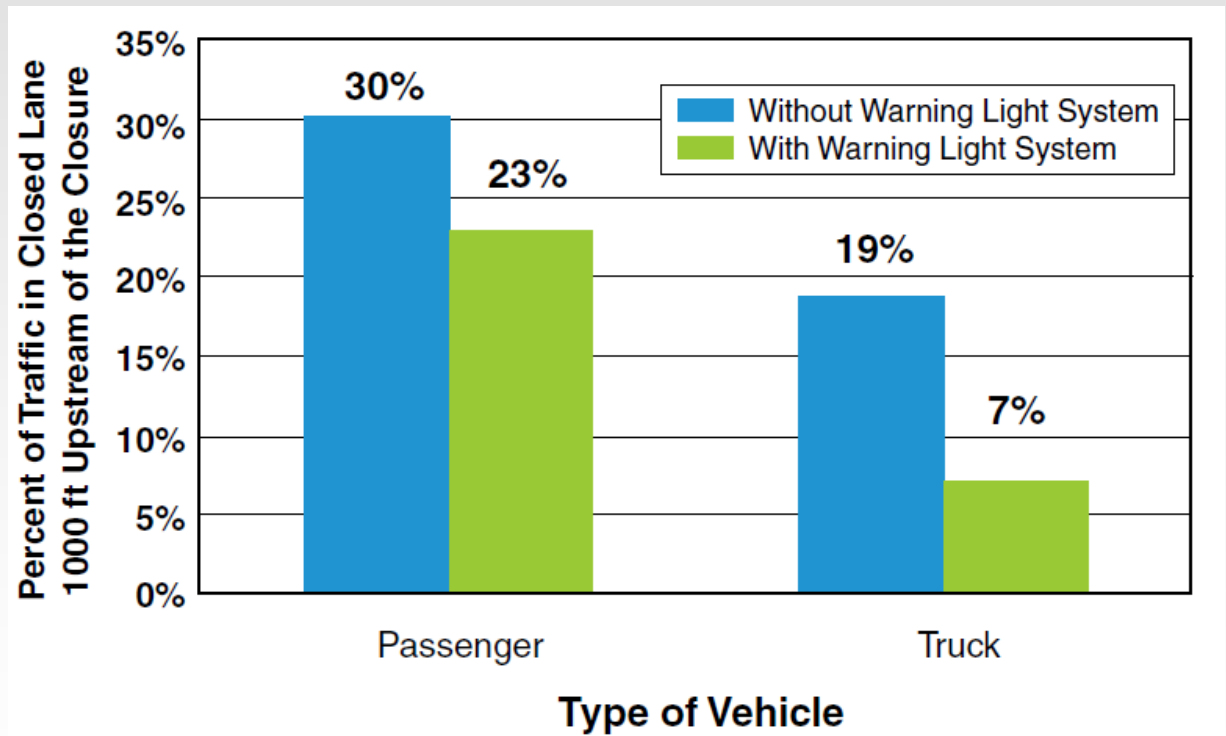
- Real-time traveler information
- Queue warning
- Dynamic merging
- Construction access warning
- Variable speed limits
- Automated enforcement
- Temporary ramp metering



Portable Rumble Strips

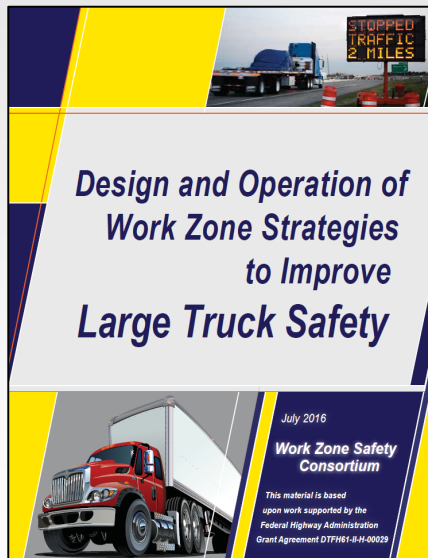


Sequential Warning Light Systems



Resources

- **Large Trucks in Work Zones webpage:**
https://www.workzonesafety.org/work_zone_topics/heavy-vehicles/



Questions?

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