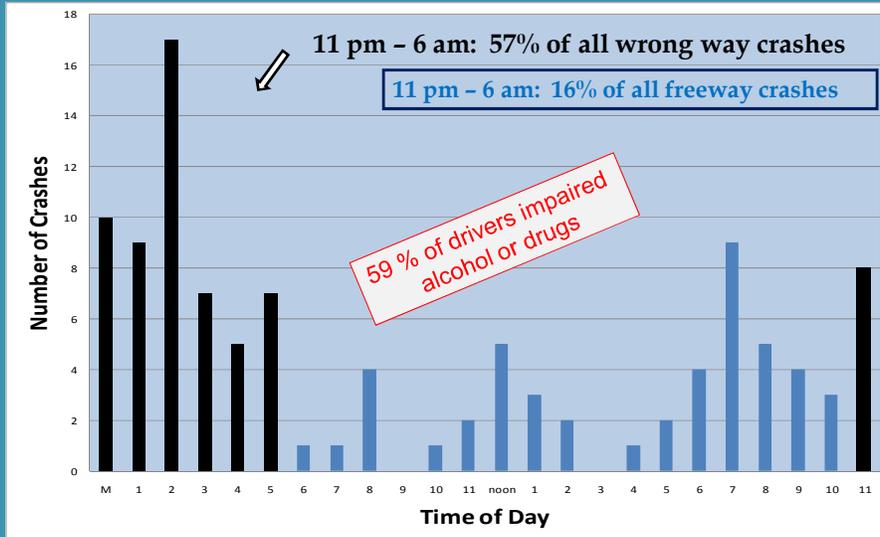


TIME OF DAY



CRASH SEVERITY DEPENDS ON LOCATION

32% of crashes resulted in K or A-injury

Comparison: 2% of all freeway crashes result in K or A

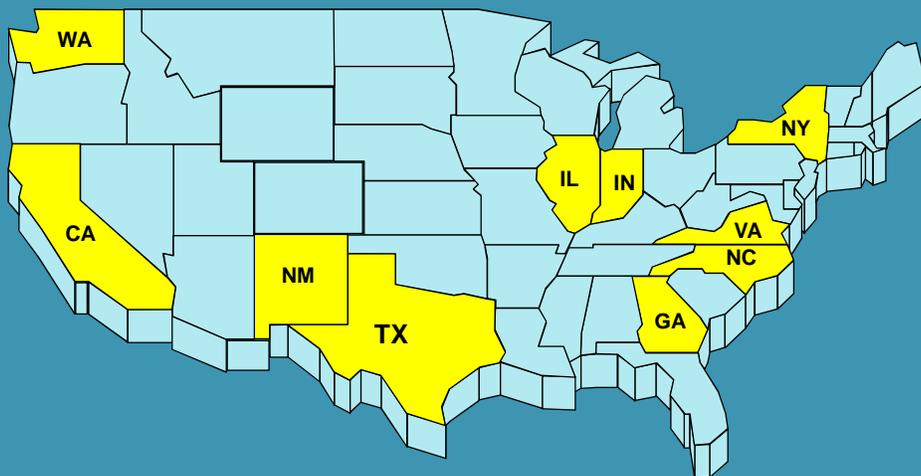
By location:

- exit ramp - 6% of crashes resulted in K or A
- mainline - 42% of crashes resulted in K or A

INTERCHANGE DESIGN

Could that affect
wrong way crashes?

Who else has studied wrong way
crashes in a big way?



LOCATION:

Crash occurred on:

- exit ramp - 31
- mainline - 71
 - entry point unknown - 67
 - entry ramp known - 4
- freeway-to-freeway ramp - 6
- entrance ramp - 2

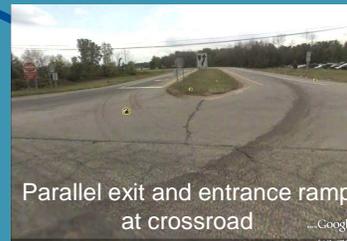
LOCATION:

Crash occurred on:

- exit ramp - **31**
- mainline - 71
 - entry point unknown - 67
 - entry ramp known - **4**
- freeway-to-freeway ramp - 6
- entrance ramp - 2

35 known
entry points

Bad Actor = Partial Cloverleaves:



MDOT's Plan

- 161 interchanges identified with side-by-side ramps
- Systematic approach

**Low Cost
Countermeasures!!**

1. Lower Sign Height



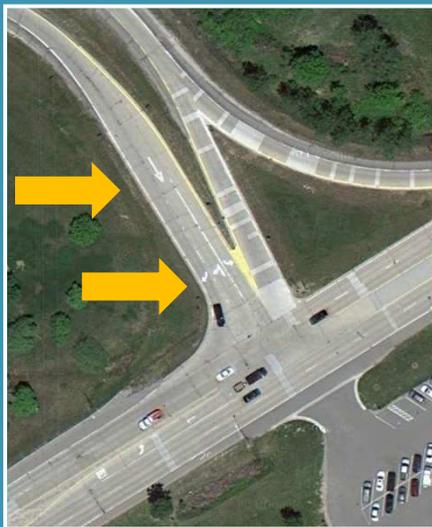
2. Reflective Sign Post Sheeting



3. Stop Bars



4. Ramp Arrows



5. Pavement Marking Extensions



6. Painted Island



7. Wrong-Way Delineation



MDOT's Effort

161 Interchanges with side-by-side ramp feature
est \$1,161,300.

In 2016, work to be done on I-75 and US-127 in the
North Region. Painting the gores in
Shiawassee County.

In 2017, projects in the Southwest and University
Regions.

In 2018, projects in the Metro Region

I-94 AT GRATIOT AVENUE



Alcohol	No Alc
3	7

Dark	Daylight
5	5

I-94 AT EB GRATIOT AVENUE

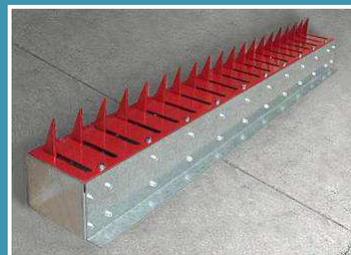


I-94 at Gratiot Avenue Improvements



Other Countermeasures Considered Statewide

- ❑ ITS Deployments
- ❑ Tire Deflation Devices
- ❑ Interchange Lighting
- ❑ Raised Pavement Markers



DMS Warning

- ❑ New Protocol in 2016
- ❑ SEMTOC, WMTOC, STOC, and BWB
- ❑ Initial report from 911

**WRONG WAY DRIVER
REPORTED IN AREA
USE EXTREME CAUTION**

Any Questions?

