

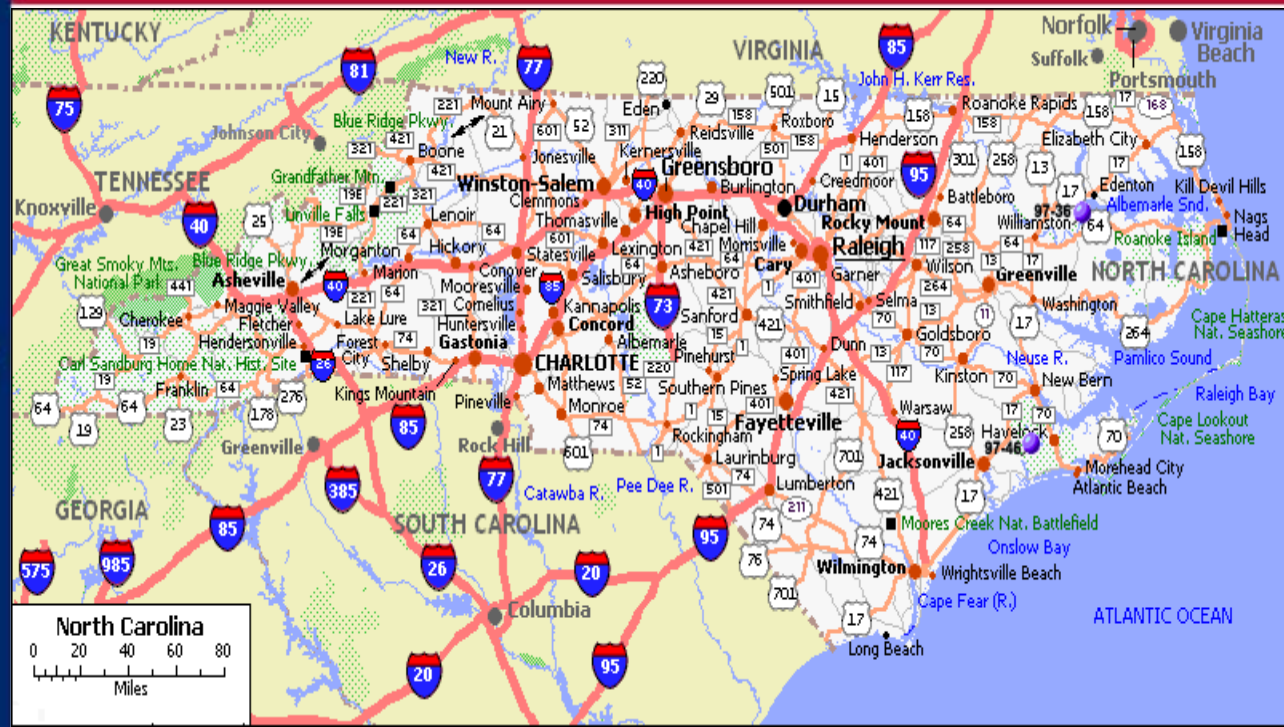
# Work Zone Fatality Reduction Strategies

NCDOT- WORK ZONE TRAFFIC CONTROL SECTION  
MAY 23, 2012

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## Basic NCDOT facts

- 2<sup>nd</sup> largest state maintained road system in US, over 80,000 miles
- Over 1000 miles of Interstate
- Size is roughly 400 miles by 200 miles
- 3 Distinctly different geographical regions

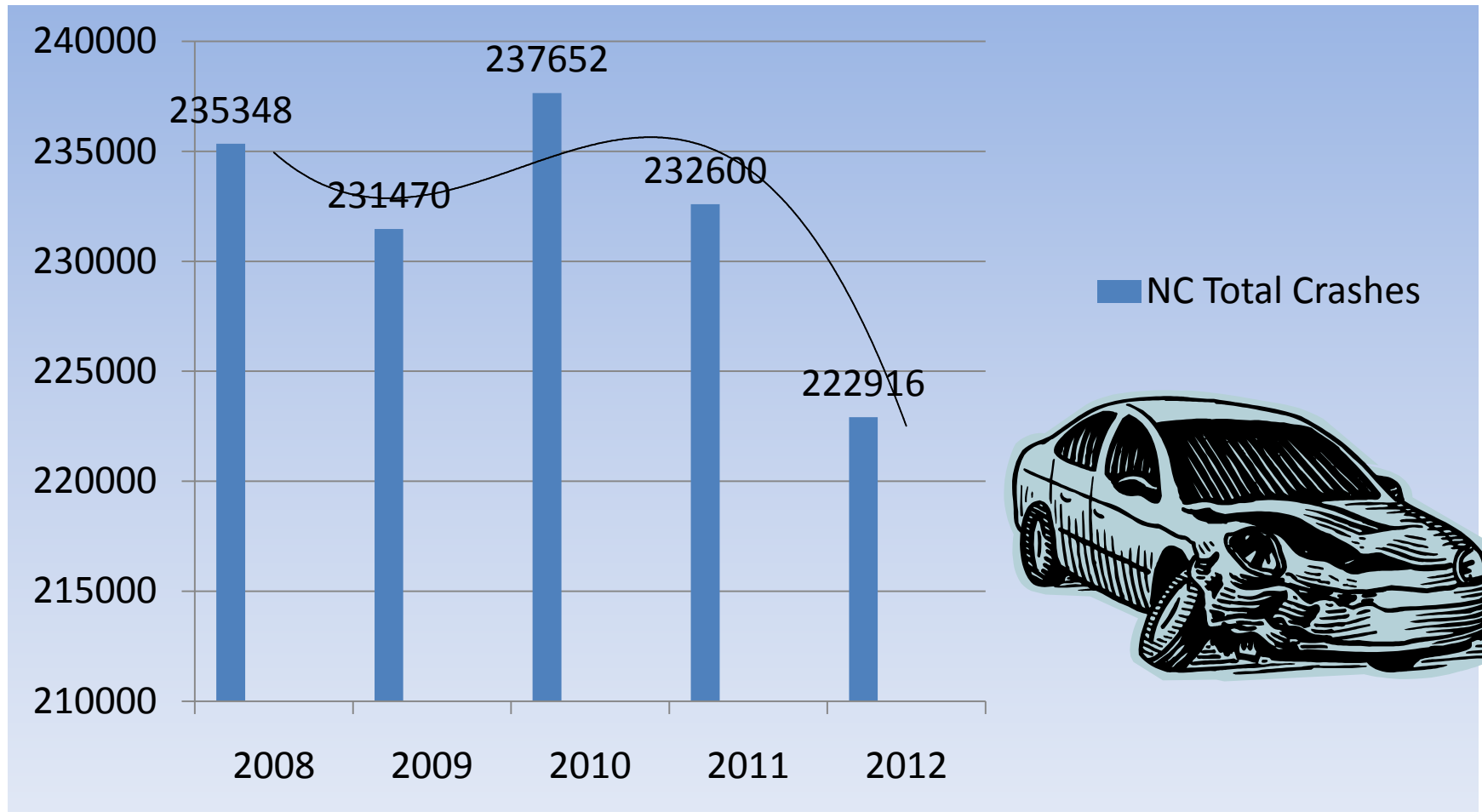


# Why are we seeing a “downward” trend in WZ fatalities?

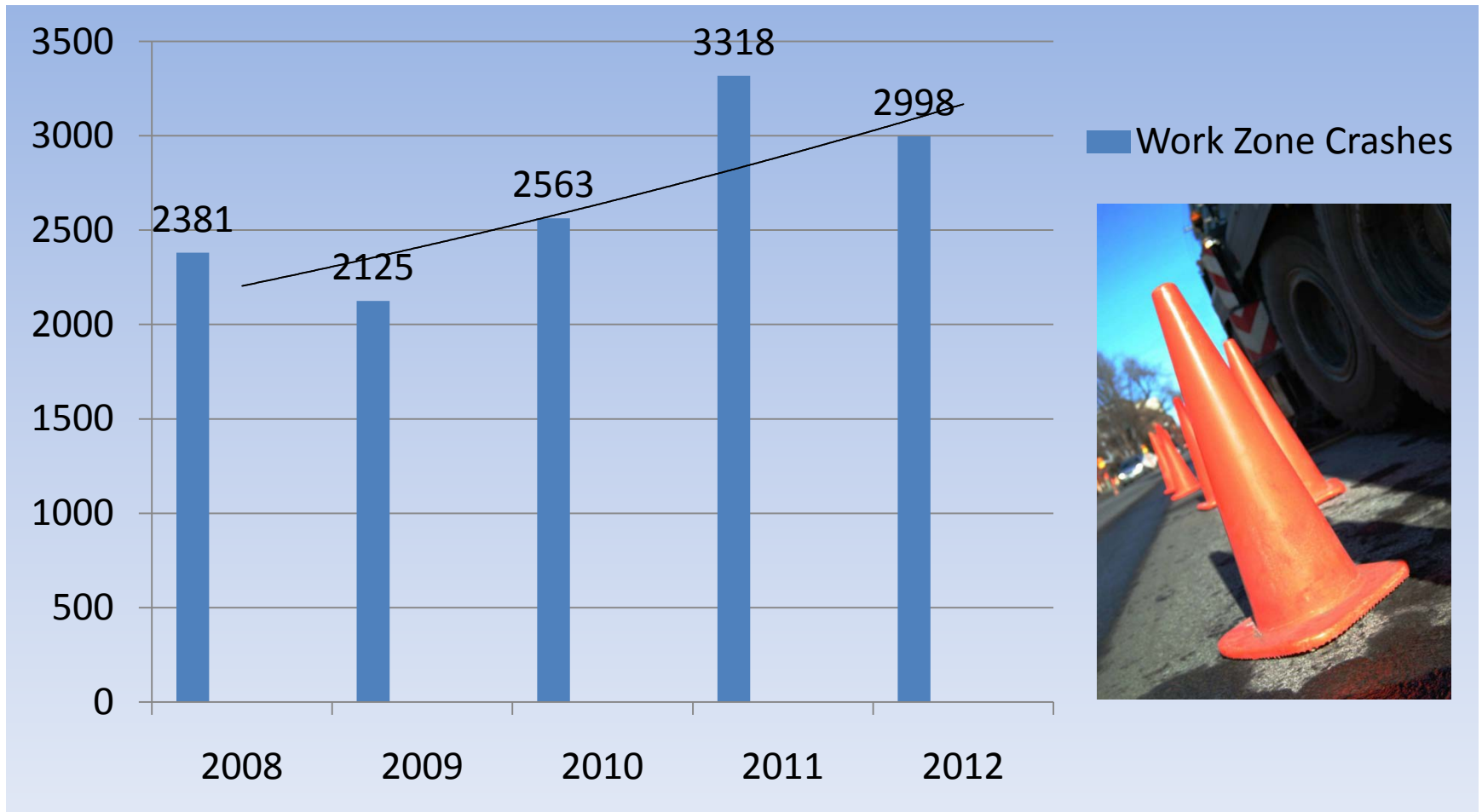
- Better drivers?
- Fewer drivers?
- Better Engineering/TMP's?
- Fewer Projects?
- Fewer “Significant” Projects
- More Law Enforcement in Work Zones?
- Better “Outreach” and Public Information?
- Better Coordination with Partners?



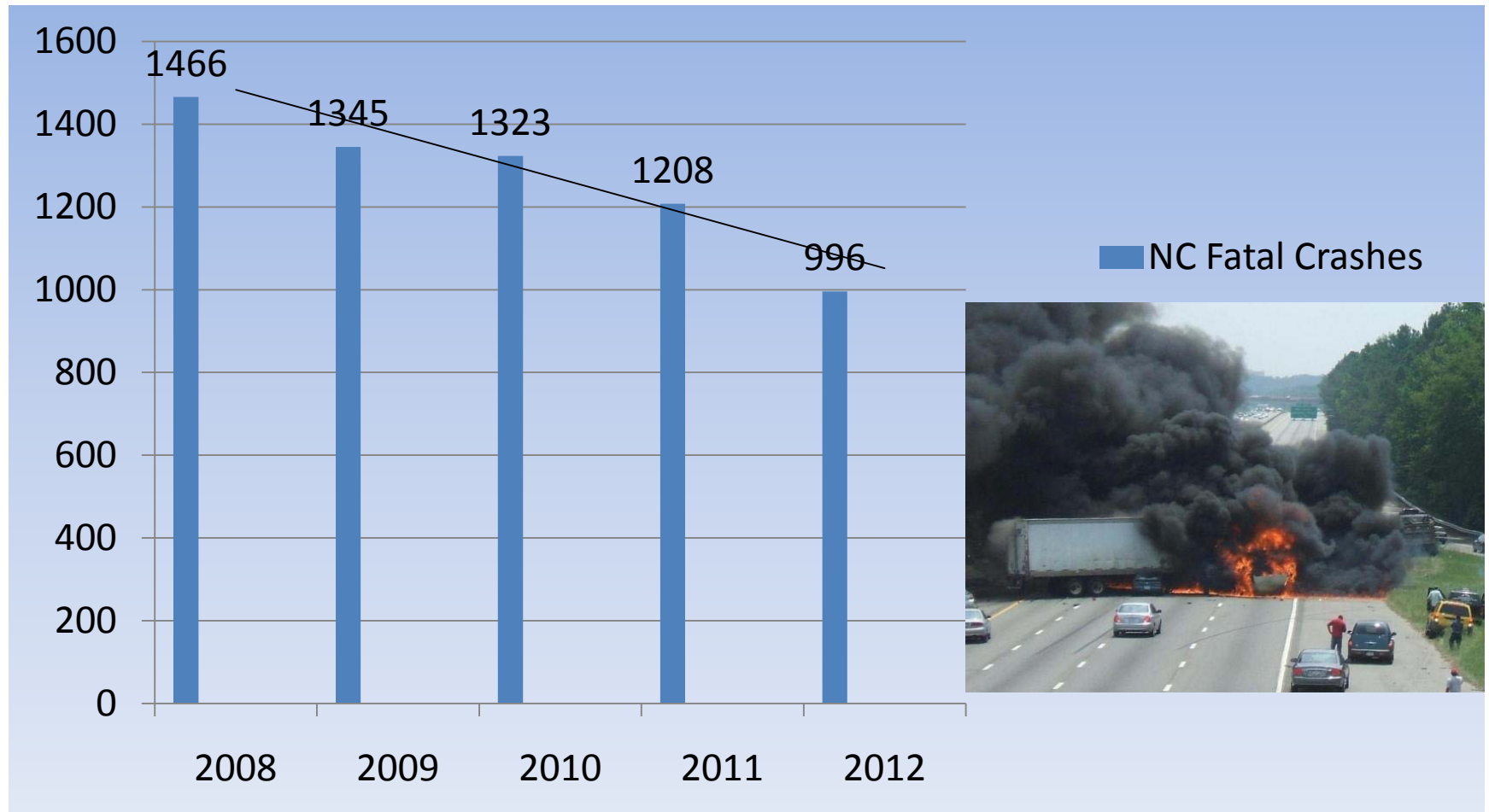
# North Carolina Total Crashes



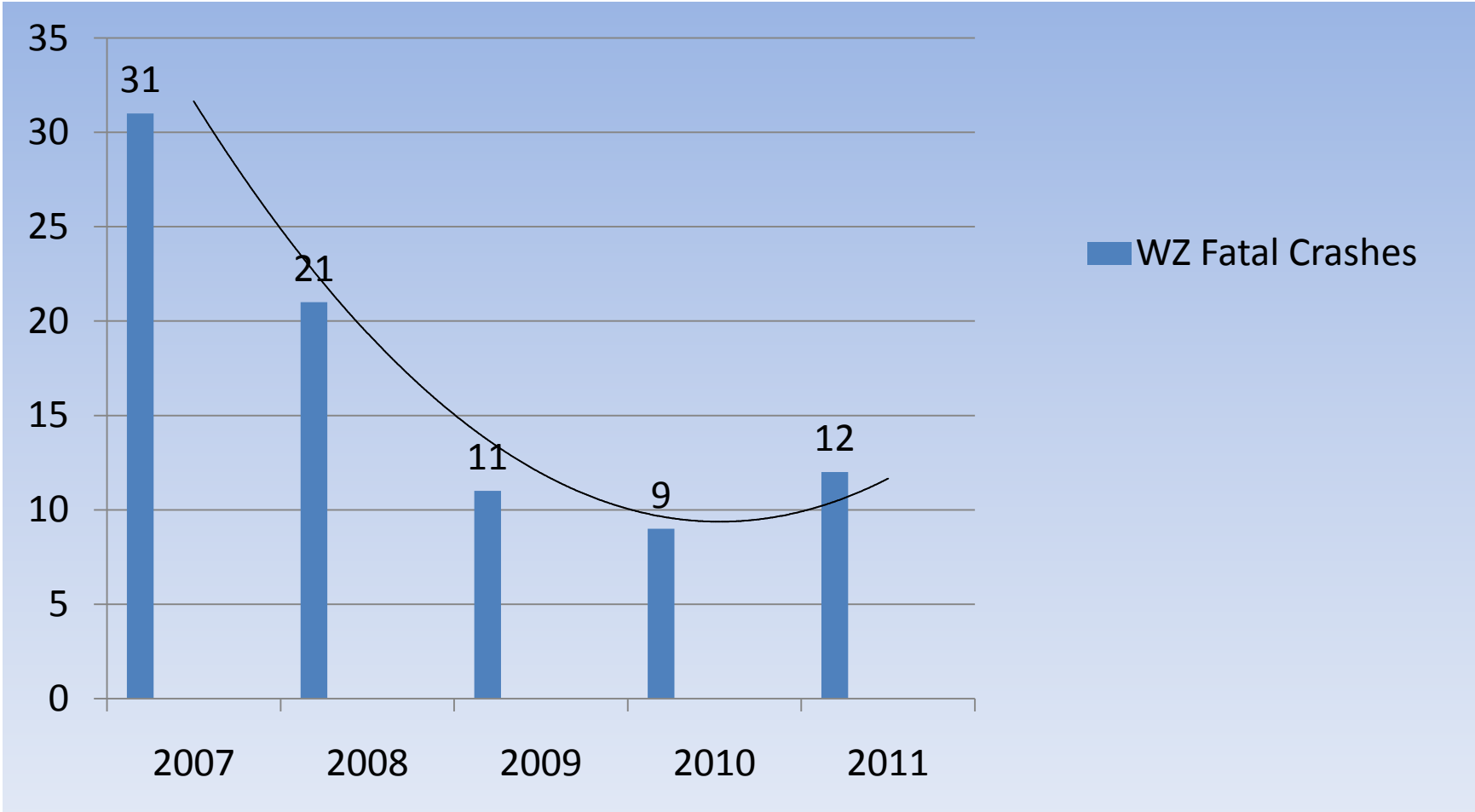
# Work Zone Crashes



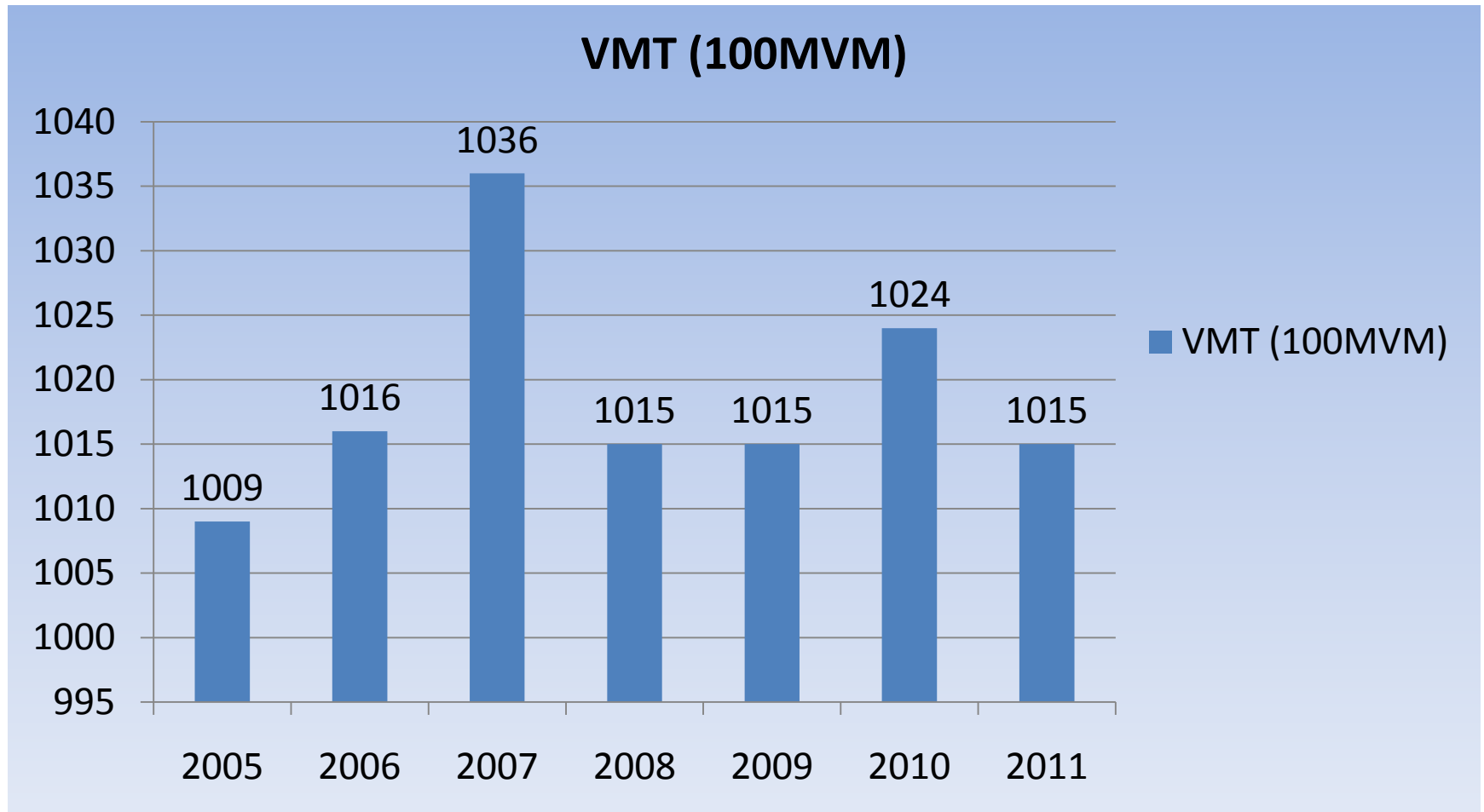
# North Carolina Fatal Crashes



# Work Zone Fatal Crashes



# Vehicle Miles Driven





# So....what factors are contributing to the WZ fatality reductions?

1. Not a “unique” solution or strategy...it’s a **combination of multiple strategies and processes**
2. Let’s face the reality....some “GOOD LUCK”!

# Work Zone Planning

1. Identification of “**Significant Projects**” in the Scoping Process
2. Investigating more “Accepted” ***Traffic Management Strategies*** to reduce Project Durations
3. Using ***more “innovative” contracting approaches*** for the **“Significant”** Projects

# 1. Identification of Significant Projects in the Scoping Process

- This is a coordinated effort between the Work Zone Traffic Control Section, Planning Engineers and the Divisions
- This begins at the Scoping Timeframe
- It initiates more conversation/discussion about Traffic Management Strategy selections and Project Durations

## 2. Investigating more “Innovative” Traffic Management Strategies to reduce Project Durations and Cost

- Full Road Closures
- Partial Road Closures
- Cross-Over Strategies
- “*System-wide*” Improvements
- Utilization of more Department Owned Assets (Permanent ITS and IMAP Services)

### 3. Using more “innovative” contracting approaches for the “Significant” Projects

- Design/Build
  - Letting larger projects instead of a series of projects
  - Utilizing the Contractor/PEF Team approach to delivering projects faster with innovative designs
- Accelerated Construction to match the Traffic Management Strategy (i.e., full closure)
- “A+B” Bidding
- Incentive payment contracts for early completion

# Work Zone Management

1. Utilization of Project Coordination Teams consisting of Incident Mgt, State Highway Patrol, Construction Personnel, Contractors, WZTCS, Division Traffic.
2. Utilization of the “HAWKS” program to increase Law Enforcement in High Risk Work Zones
3. Access/Availability to work zone crash information in a reasonable timeframe
4. Better Public Information Outreach Efforts
5. Enhancement of Speed Reduction Criteria to allow for “short term” speed limit reductions

# 1. Utilization of Project Coordination Teams for “Significant” Projects

- Utilization of Project Coordination Teams consisting of Incident Mgt, State Highway Patrol, Construction Personnel, Contractors, WZTCS, Division Traffic.
- These teams meet monthly to discuss on going issues related to trends in crashes, wz congestion, upcoming traffic switches etc.

## 2. Utilization of “HAWKS” Program

- “HAWKS”- Helping All Work Zones Keep Safe
- Made up of “off duty” Highway Patrolman
- 80% reimbursement by FHWA
- Coordinated with Resident Engineer’s Office to alert them when their services are needed
- Projects selected based on prior crash history and historical data related to speeding



### 3. Access/Availability of WZ Crash Data

- WZ Crash Data is being supplied more timely and consistently
- This data is shared with Project Coordination Teams
- Discussion takes place about location and types of crashes currently being witnessed by Project Coordination Team
- Recommendations provided to Resident Engineer and the Division for possible incorporation

## 4. Outreach Efforts

- Leveraging the Rulemaking to increase public information through local media outlets
- Increasing the use and capabilities of the portable changeable message signs
- Posting more videos/public service messages on public media sites such as Facebook and Twitter

# 5. Enhancement of Speed Reduction Criteria

- Established separate criteria for short-term speed limit reductions versus long-term
- Revised criteria for speed reductions and speeding penalties
- Better enforcement of these and better **“COMPLIANCE” by motorists of these.**

# Can North Carolina maintain the Current Trend?

- No one knows for sure, but as the economy improves so will ridership and crashes will increase
- The biggest threat to overall highway safety is distracted driving through the use of cell phones and various other e-gadgets
- What will we do to combat these ongoing issues?

# QUESTIONS/COMMENTS?

For more Information

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