

The Mature Driver in New Jersey

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Overview of Our Study

- Background for the study
- Analysis of crash and accident data
 - Where the data come from
 - Results of our analyses
 - Some outstanding characteristics
- Policy issues related of older drivers

Background for the Study

- New Jersey's Older Population in 2000
 - Slightly older than the US population
 - 13.2 % in NJ vs 12.4 % in USA over 65
 - Growth rate of older olds is increasing rapidly
 - 85s and older grew by 94.3 % in NJ vs 37.6 % in USA from 1980 to 2000.
 - More older drivers on the road in NJ
 - Licensed drivers in NJ increased by 3% from 1996-2000
 - Licensed drivers 85 and up increased by 26% from 1996-2000

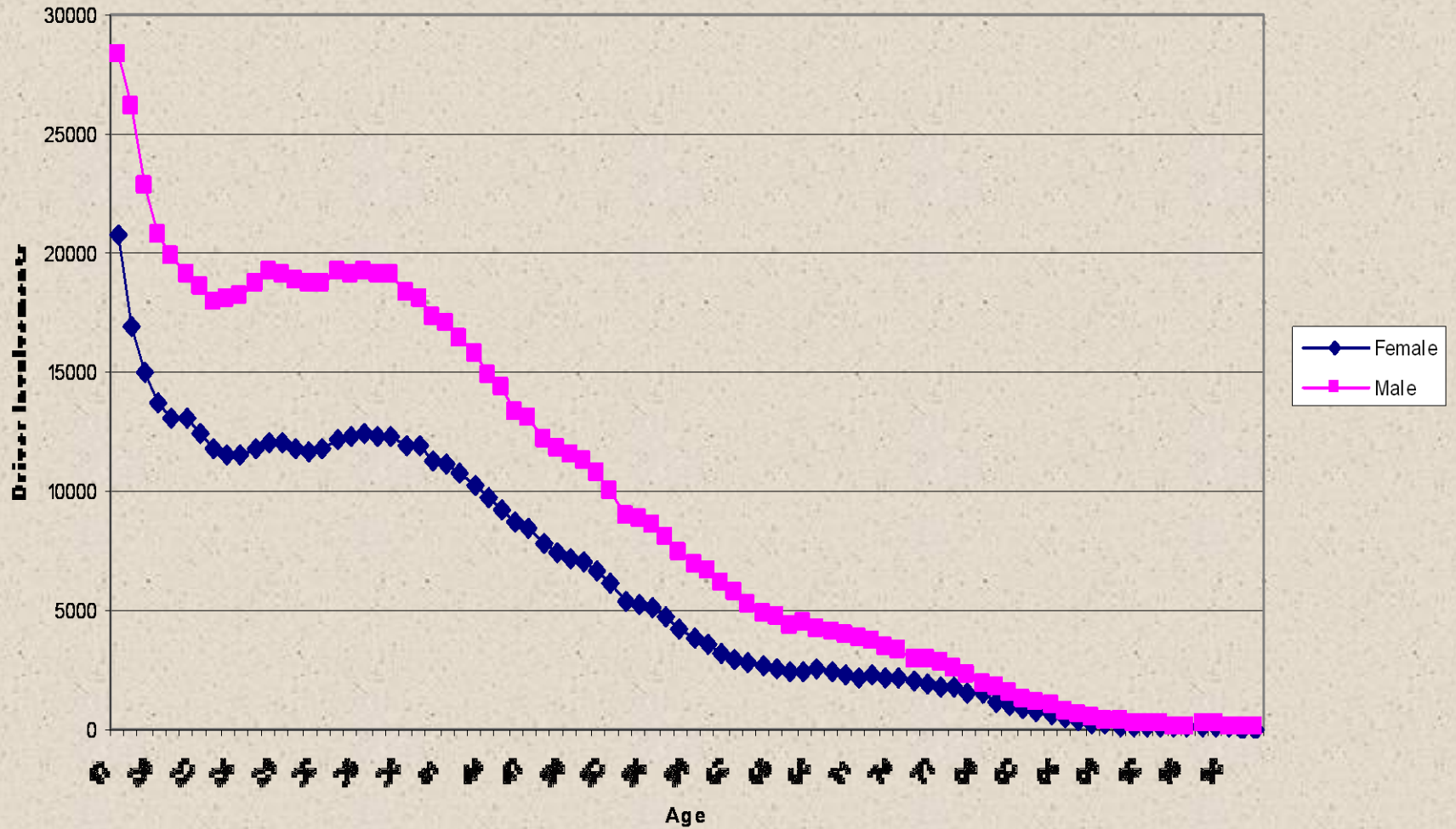
Crash and Violation Data Analysis

- Two sets of data – crash data and accident and violation data
- Crash records from the NJDOT cover 1998-2000
- Suspension and violation data from DMV cover 1996-2000
- Exposure measures
 - involvements per licensed driver
 - involvements per population
 - vehicles miles per drivers was not available as an exposure measure.

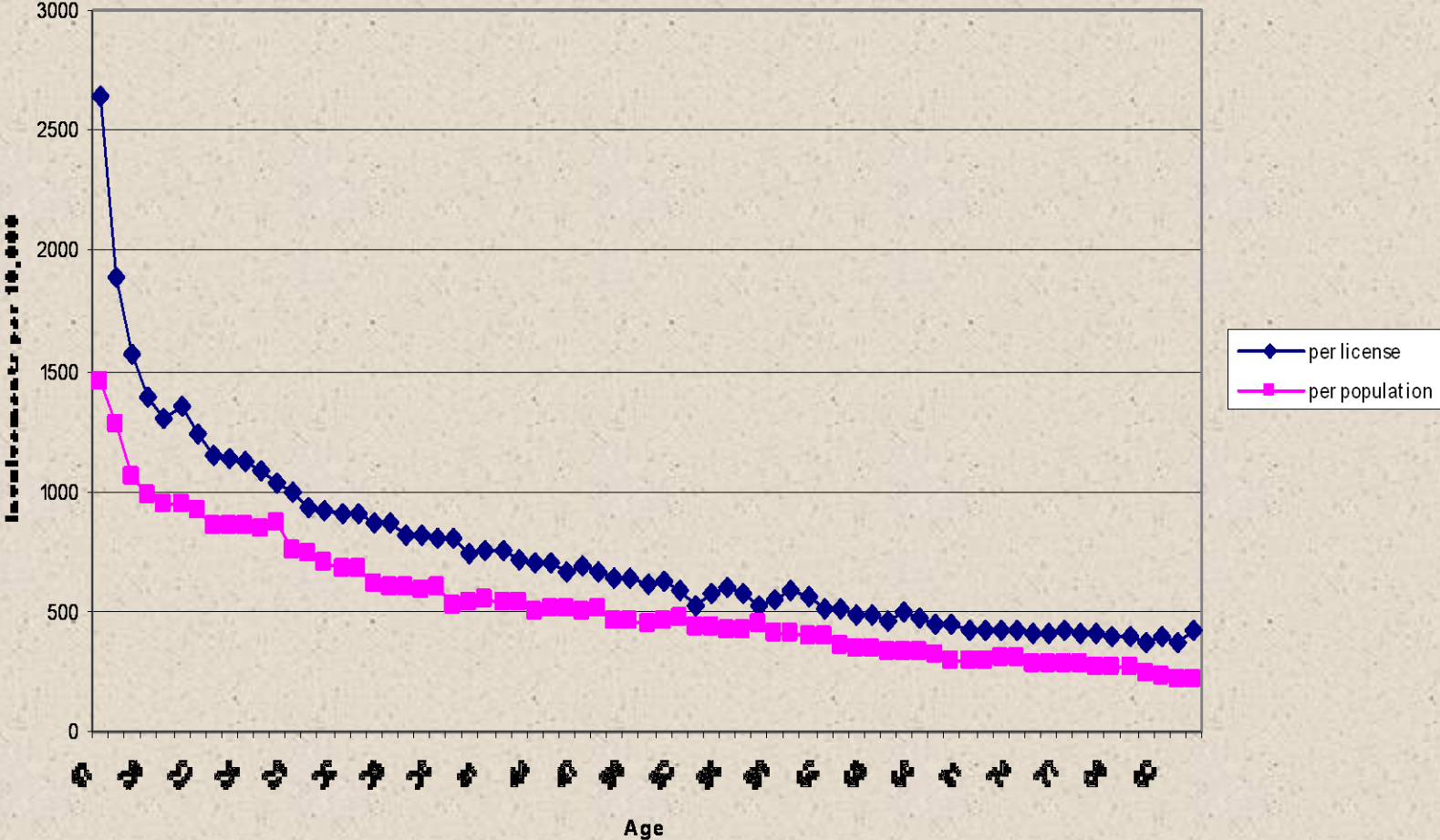
Crash Results by Age

- Crashes decline with age for
 - Crashes per population
 - Crashes per licensed driver.

Crash Involvements by Age and Gender (1998 to 2000)



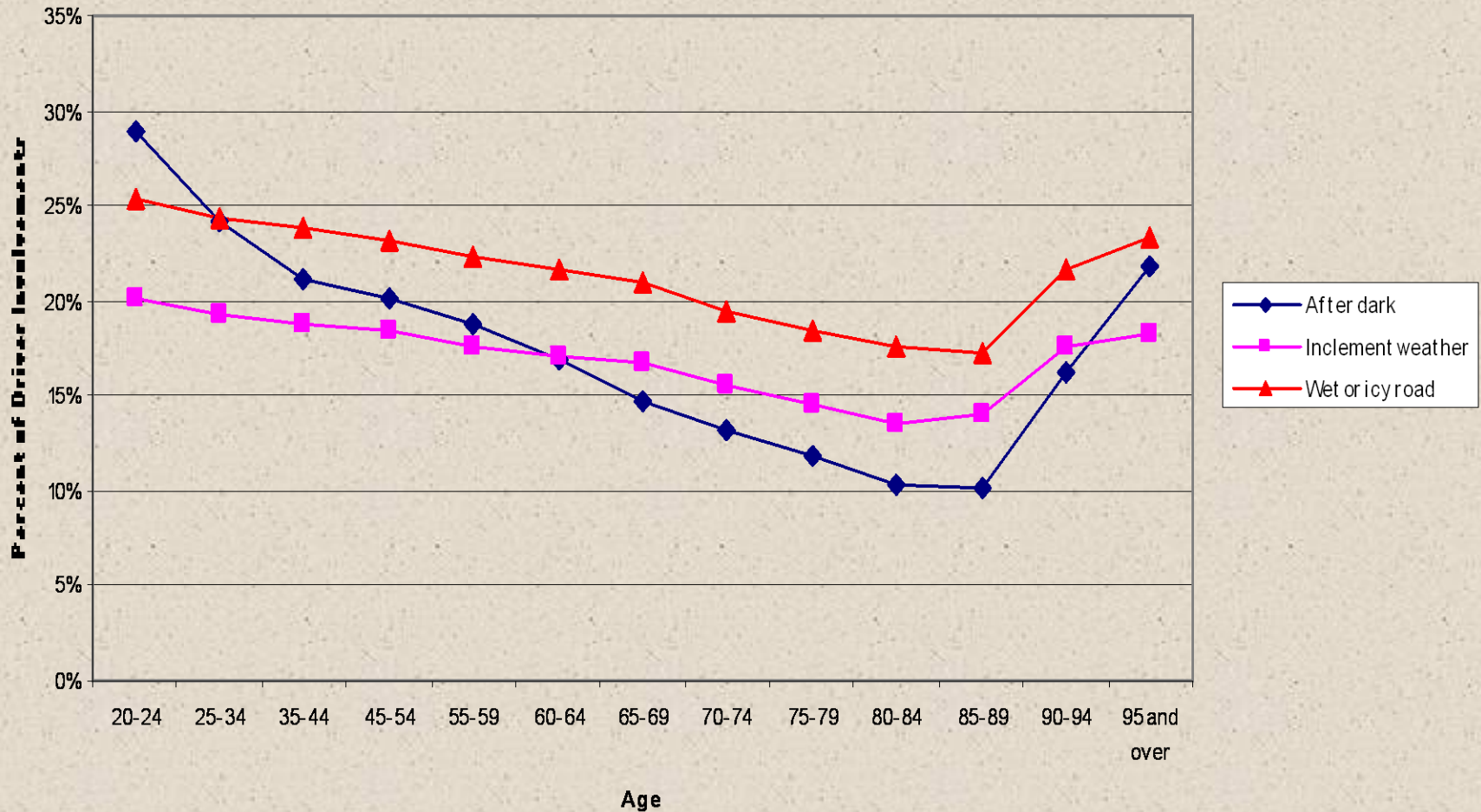
Crash Involvement Rate per 10,000 Population and per 10,000 Licensed Drivers



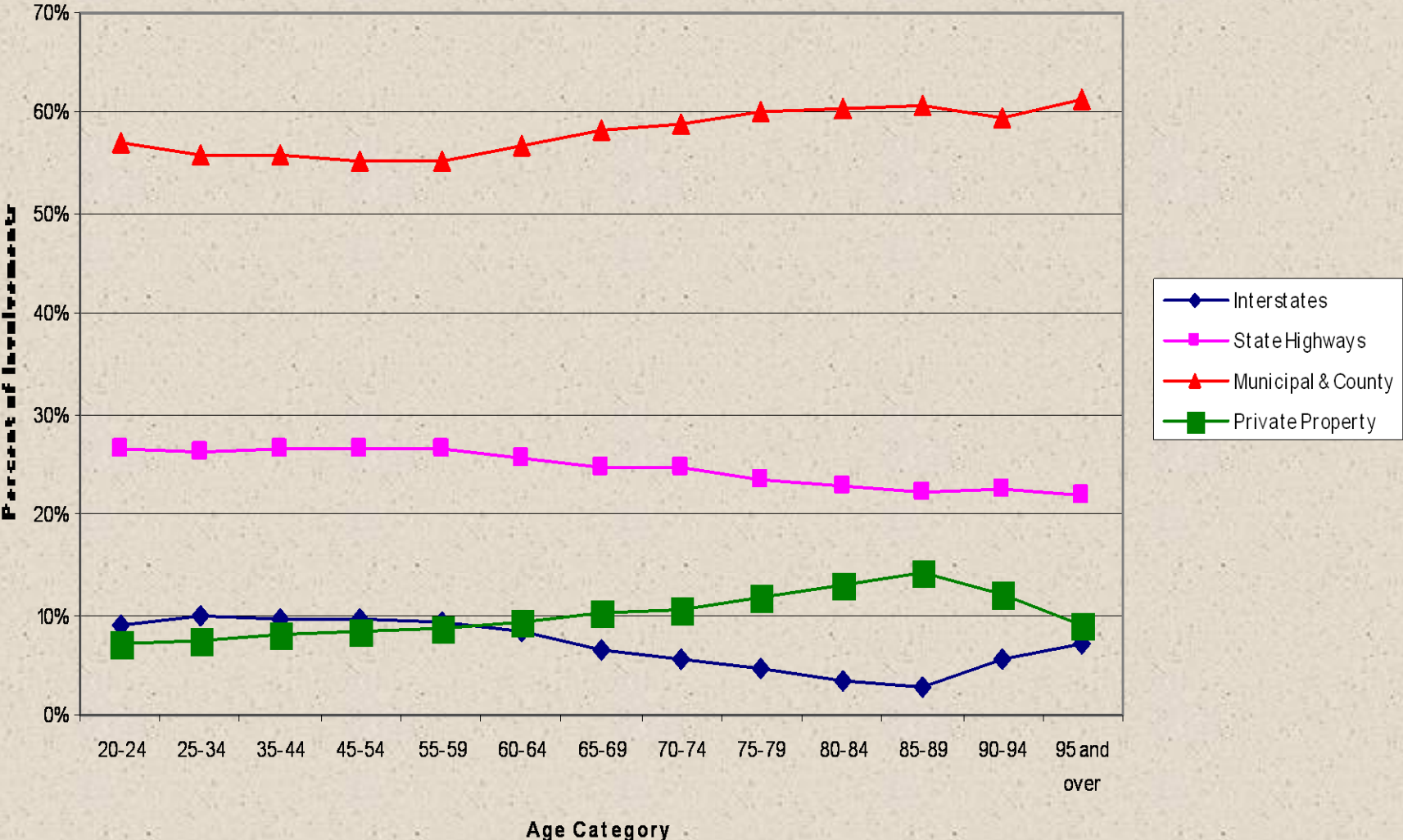
Crash Results by Conditions

- More accidents during daylight hours and good weather
 - probably avoid dark and bad weather
- More accidents on local and private roads
 - probably avoid high speed roads

Percent of Crashes after Dark, in Bad Weather, or on Wet Roads by Age



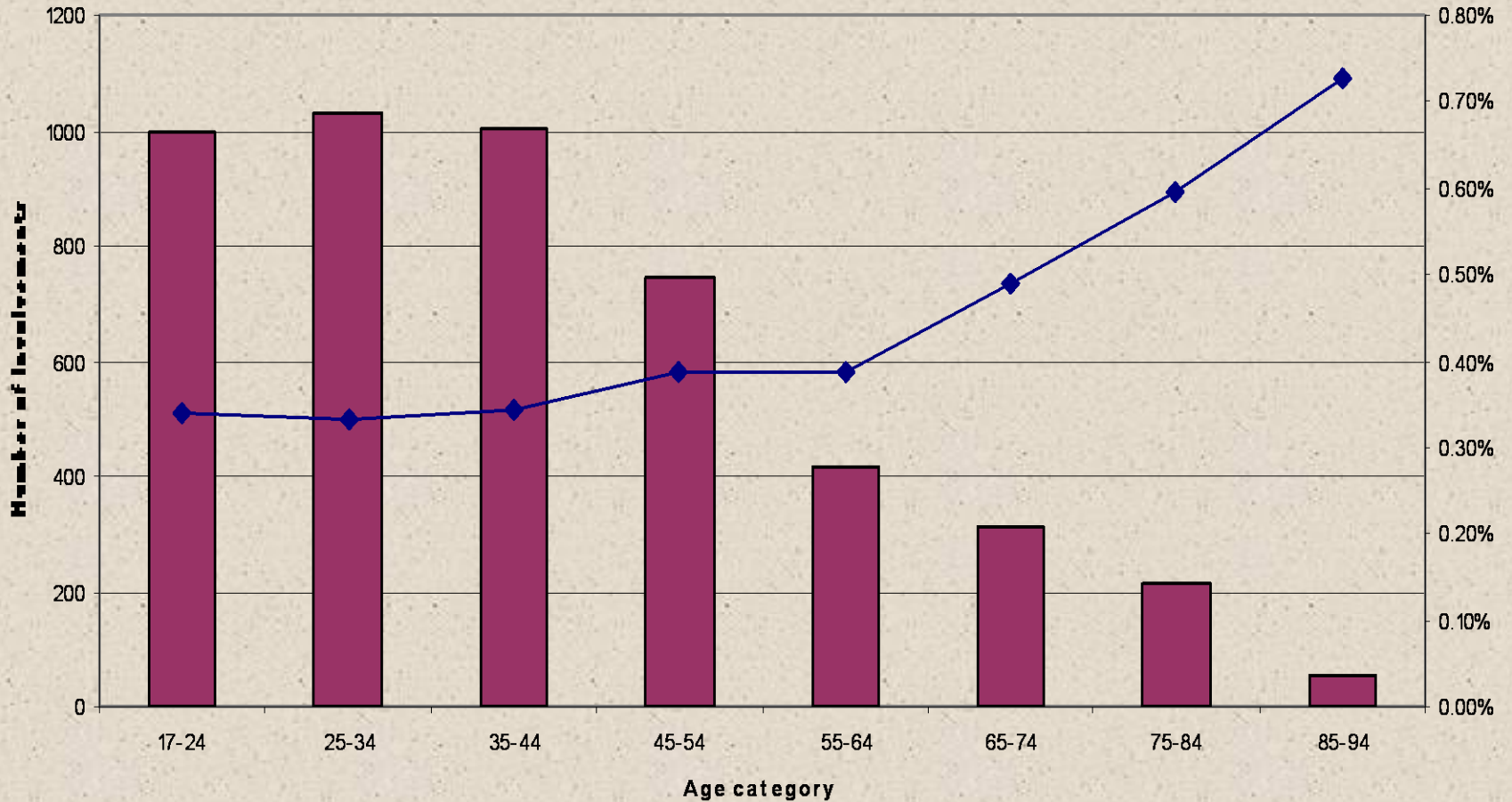
Percent of Involvements by Road System



Severity of Crash

- A greater percent fatal
 - but fewer fatal accidents than younger drivers.

Number and Percent of Fatal Crash Involvements by Driver Age



■ Number of Fatal Involvements ◆ Percent of Involvements

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Safe Mobility at Any Age

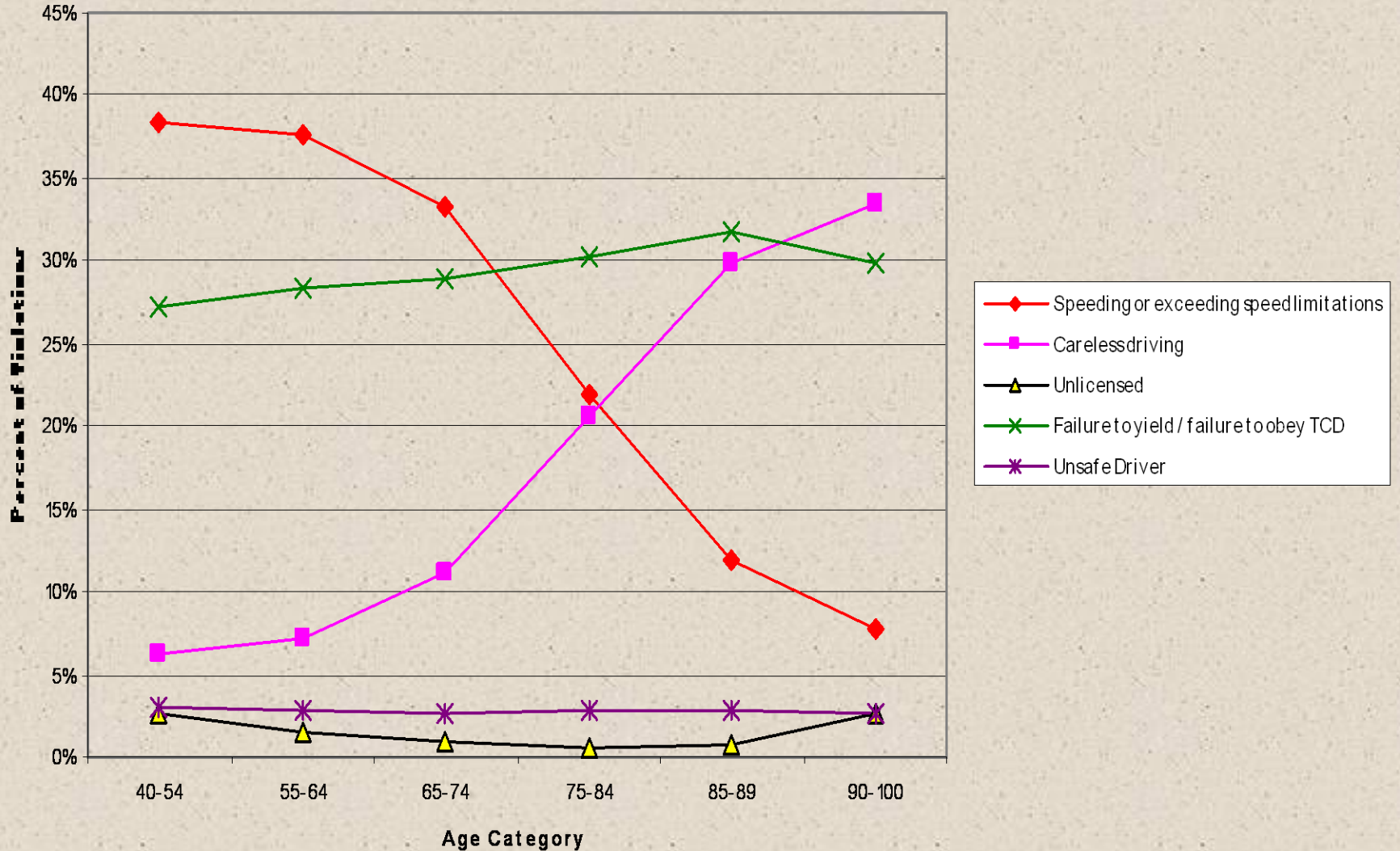
Crash Characteristics

- Left turns
- Inattention
- Failure to yield right of way
- Failure to obey traffic signals
- More likely to be at fault

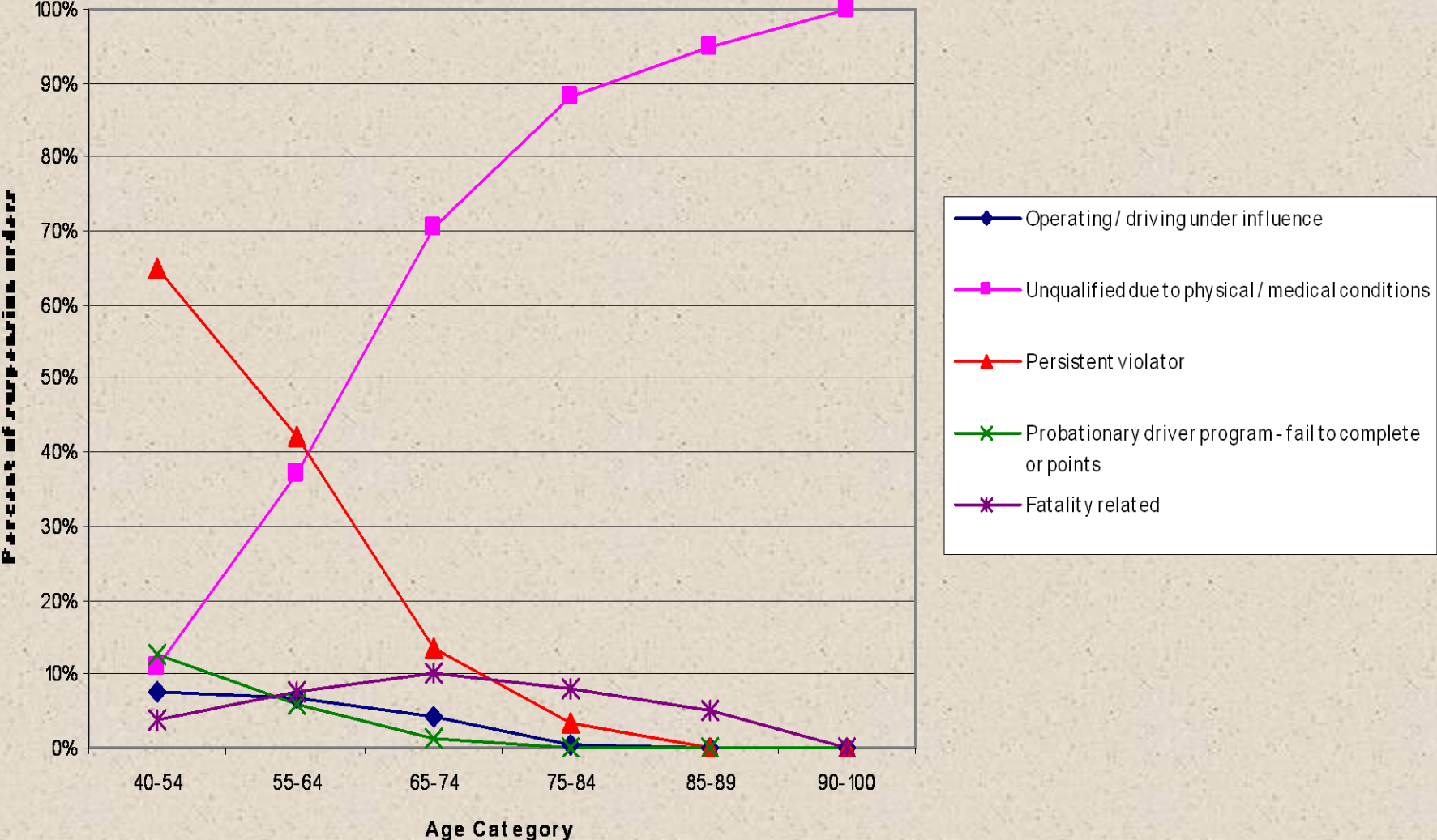
Violation & Suspension Data

- Lower rate of traffic violations per population
 - more frequently due to careless driving and
 - less frequently due to speeding.
- Lower rate of suspensions
 - due to physical or medical conditions
 - 100 percent for drivers over 90 year old.

Percent of Traffic Violations by Type by Age



Percent of License Suspension by Suspension Type by Age



Policy Issues

- Licensing issues related to older drivers
- Medical issues & Fitness to drive
- Survey of selected motor vehicle agencies

Licensing Issues

- The extent and types of restrictions
 - 32 states have no restrictions regarding older drivers including New Jersey
 - 13 states have accelerated renewal cycles
 - 7 states restrict mail renewal (some for reasons other than age)
 - 3 states have age related vision testing
 - 2 states have age related road testing

Medical & Fitness to Drive Issues

- Medical Issues
 - Utah – special licensing program for drivers with medical conditions
 - Mandated reporting of medical conditions
- Fitness to Drive Programs
 - California Department of Motor Vehicles
 - Center for Applied Gerontology at UAB
 - Maryland Motor Vehicle Agency

Survey of Motor Vehicle Authorities

- Survey design and data collection
- Survey Results
 - Medical review process
 - Types of restrictions
 - Medical review policy in New Jersey & Pennsylvania

Conclusions

- Solutions needed for specific problems such as inattention and carelessness.
- Higher fatality rate suggests need for engineering changes within the car.
- Use of medical review to evaluate fitness to drive suggests need to examine how it is used and how it can be applied more uniformly and effectively.