



# DELAWARE WATER GAP TRAFFIC SAFETY STUDY

OPEN HOUSE  
JULY 15, 2008



## DEWA TRAFFIC SAFETY STUDY Open House Objectives



- Introduce study
- Explain role of stakeholders
- Solicit stakeholder input
  - Provide ideas on problems/solutions
  - Provide information on sensitive issues
  - Provide volume and crash data



## DEWA TRAFFIC SAFETY STUDY

### Project Purpose



- Look in detail at DEWA roads and intersections
- Taking a Context Sensitive Solutions (CSS) based approach determine specific improvements to address safety issues
- Using a data driven process, identify patterns/locations with issues
- Develop proposed scope for implementation phase, and funding
- Prototype for other parks using new industry standards and safety measures



# DEWA TRAFFIC SAFETY STUDY

## Project Scope



- Project Development and input -- use CSS structured decision process that includes Project Management Team (PMT) and stakeholder input
- Three PMT meetings, site visits and stakeholder input
- Collect / analyze data from available sources including local information
- Review safety/land use issues based on local traffic studies
- Determine set of draft countermeasures/strategies
- Produce / present report
- Develop scope and funding level for implementation plan
- Produce guidelines for park safety studies based on DEWA experience



## DEWA TRAFFIC SAFETY STUDY Context Sensitive Solutions



### **Context Sensitive Solutions**

“A transportation project that is designed collaboratively by an interdisciplinary team, which includes community and regulatory agency stakeholders and fits its regulatory setting by supporting community values and preserving scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility is a context sensitive solution.”

Source : Performance Measures for Context Sensitive Solutions – A Guidebook for State DOTs



# DEWA TRAFFIC SAFETY STUDY US 209/Community Drive





## DEWA TRAFFIC SAFETY STUDY Stakeholder Outreach



- Purpose
- Superintendent's letter & responses
- Field visits
- Requested volume and crash data
- Open House input – comment forms & maps
- How input will be considered





# DEWA TRAFFIC SAFETY STUDY

## Data Collection



- 53 contacts made to request data
  - 5 federal departments      - 9 state departments
  - 37 local jurisdictions      - 2 engineering firms
- 1,220 crash reports used in analysis:
  - 996 crashes from the NPS Servicewide Traffic Accident Reporting System (STARS)
  - 3 crashes from the Fatal Accident Record System (FARS)
  - 107 crashes from New Jersey Department of Transportation
  - 114 crashes from Pennsylvania Department of Transportation
- 54 locations for traffic volumes
- 11 reports reviewed for previous recommendations, etc.





## DEWA TRAFFIC SAFETY STUDY Data Analysis



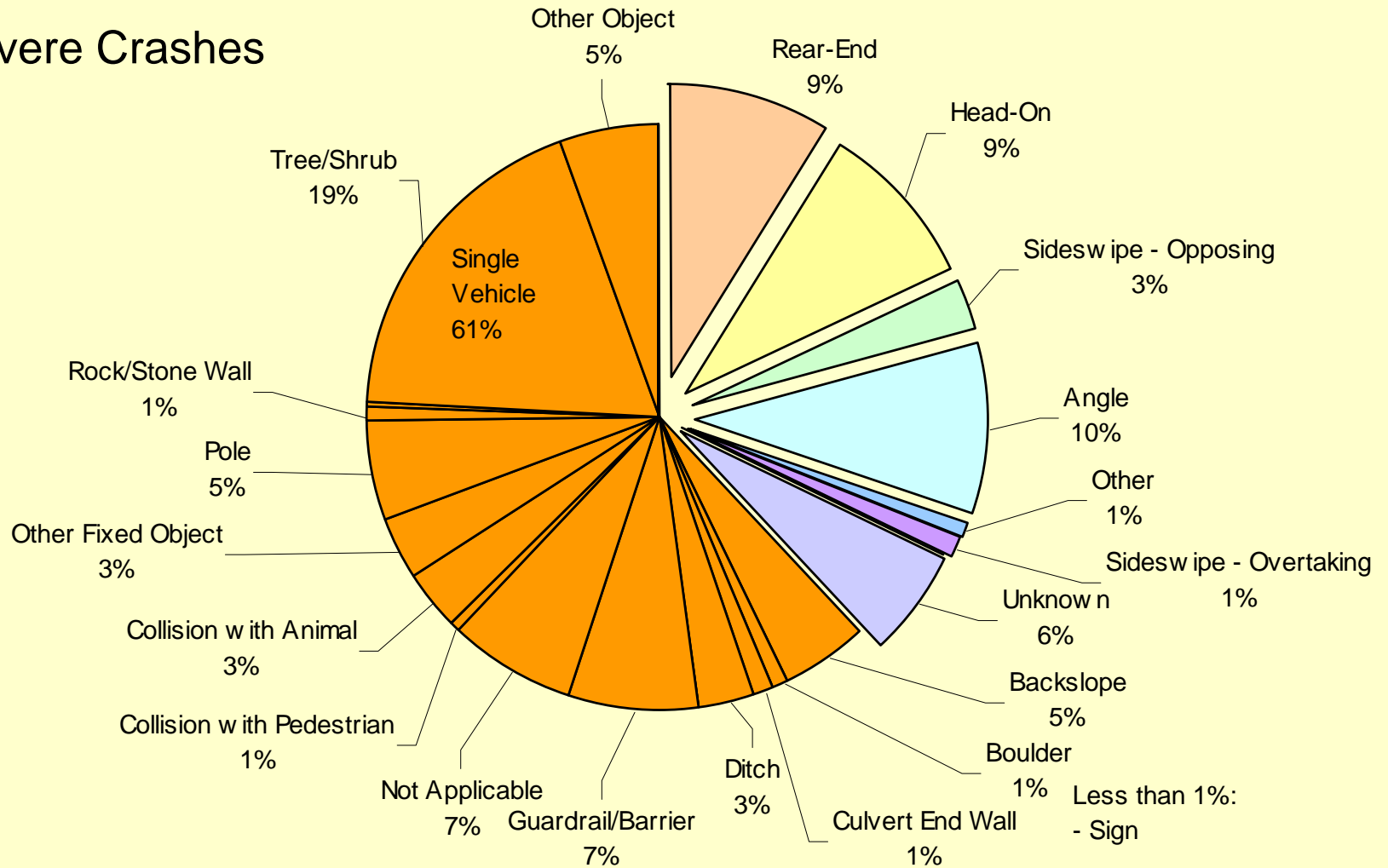
- Analyzed crash characteristics 2001-2007
- 11 fatal crashes resulted in 12 fatalities
- 336 injury (non-fatal) crashes resulted in 520 injuries
- 873 property damage only crashes



# DEWA TRAFFIC SAFETY STUDY Parkwide Data Analysis



347 Severe Crashes

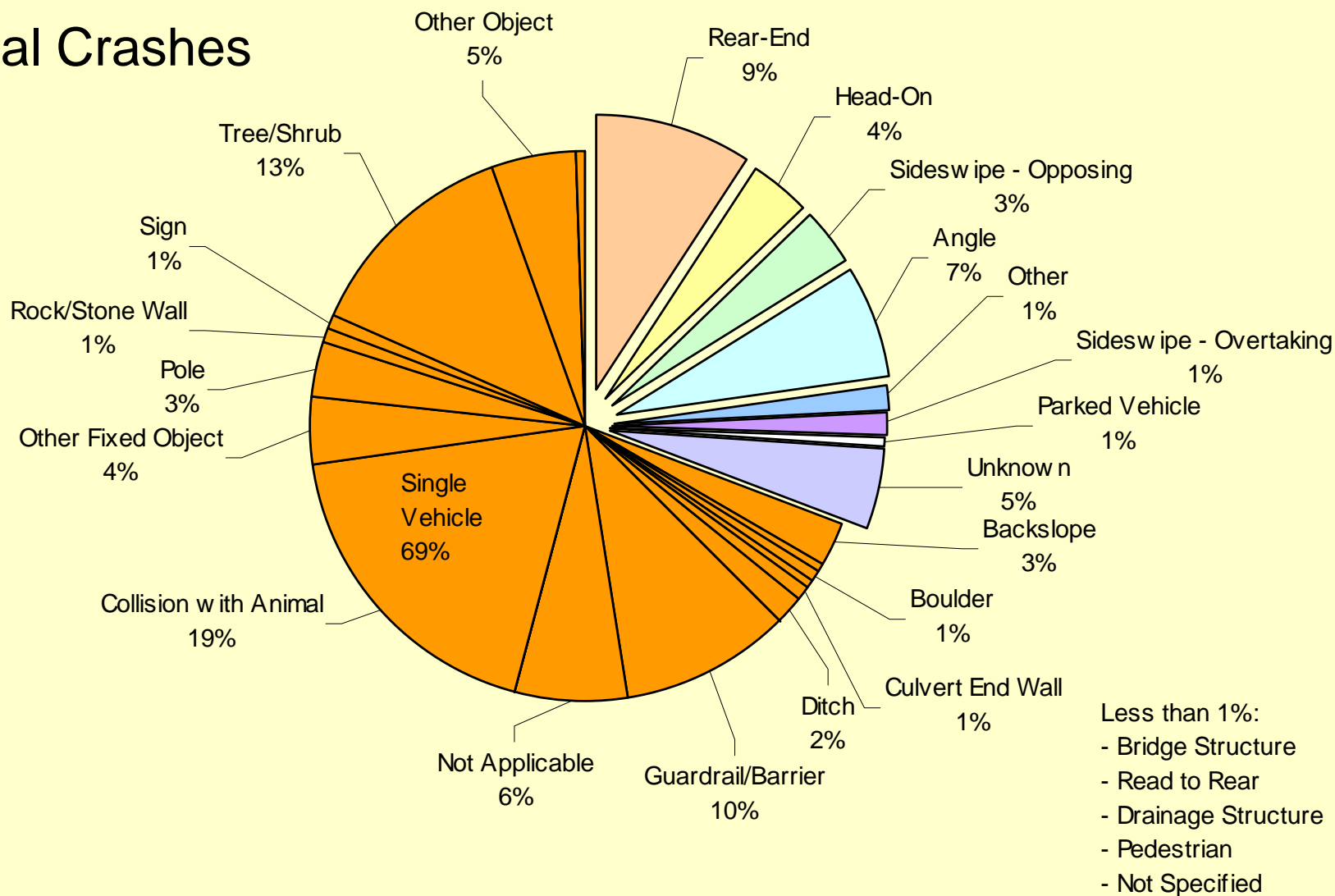




# DEWA TRAFFIC SAFETY STUDY Parkwide Data Analysis



## Total Crashes





# DEWA TRAFFIC SAFETY STUDY



Guardrail Collision Brodhead Rd/US 209

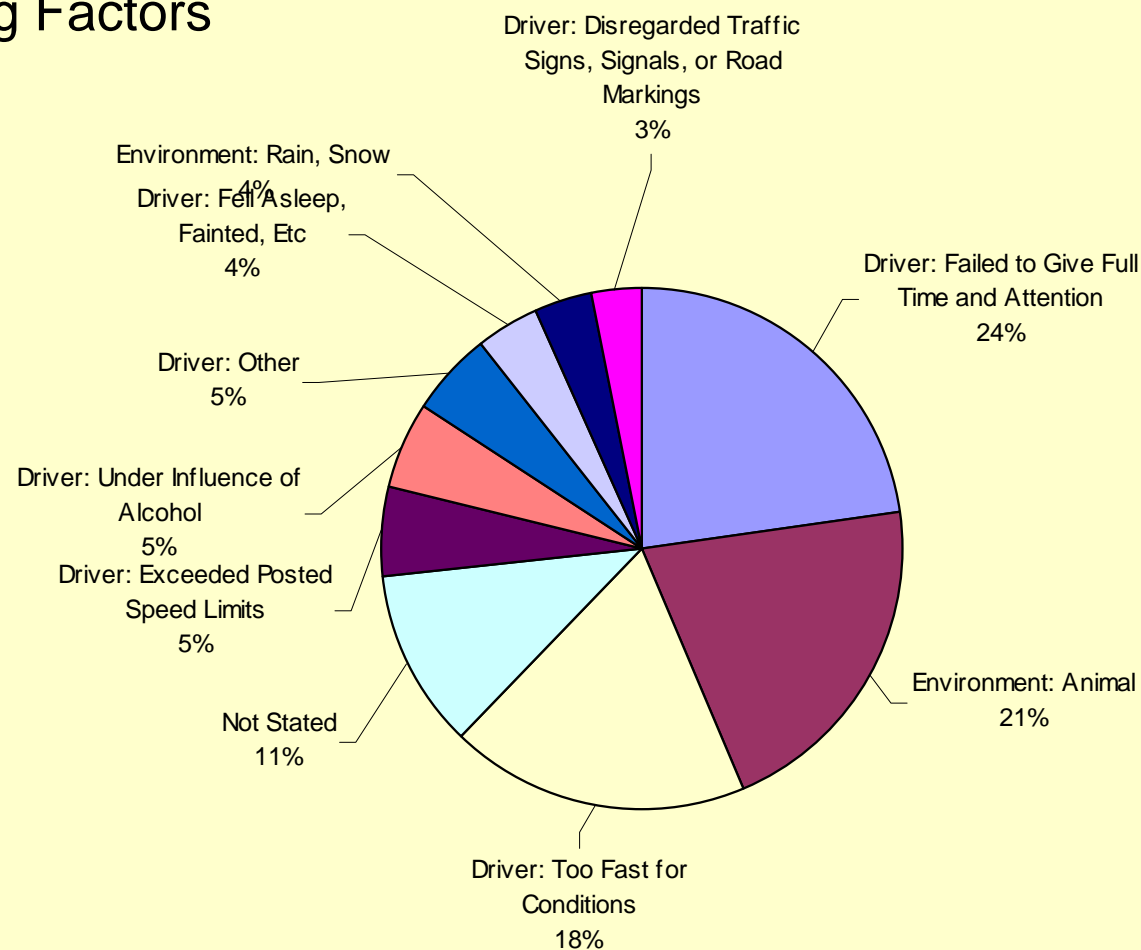




# DEWA TRAFFIC SAFETY STUDY Parkwide Data Analysis



## Top Contributing Factors





# DEWA TRAFFIC SAFETY STUDY

## Data Analysis



### Pattern Identification

- Animal Collisions
- Run-off-Road
- Sideswipe Opposing
- Curved Segments
- Guardrail Collisions
- Darkness
- Non-dry Pavements
- Driver Condition
- Driver Error



## DEWA TRAFFIC SAFETY STUDY Intersections Data Analysis



- All US 209 intersections
- Top 3: Brodhead Rd, Bushkill Falls Rd, SR 739
- Primarily rear-end and angle collisions





# DEWA TRAFFIC SAFETY STUDY

## Bushkill Road / US 209 Intersection





## DEWA TRAFFIC SAFETY STUDY Specific Locations Analysis



- US 209
- River Road
- CR 560
- SR 739
- SR 2001
- CR 521



# DEWA TRAFFIC SAFETY STUDY

## River Rd/Community Dr Intersection





## DEWA TRAFFIC SAFETY STUDY

### Next Steps



- Obtain stakeholder input
- Determine countermeasures
- Develop implementation plan
- Produce report