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# *Analysis of Pedestrian Fatalities*

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# Overview of Pedestrian Fatalities

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- Long-term trend shows a decline from a high of 8,096 in 1979 to a low of 4,763 in 2000
- In 2002, Pedestrian fatalities
  - ◆ Accounted for over 11 percent of all fatalities from motor vehicle crashes
  - ◆ Reached 4,808 fatalities
  - ◆ 86 percent of all non-occupant fatalities



# General Pedestrian Facts-2002 ...

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- **Sixty eight percent of fatally injured pedestrians were male**
  - ◆ Male pedestrian fatality rate 2.31 compared to 1.05 for females
- **The fatality rate for pedestrians ages 70+ was 3.21, higher than any other age group**
- **Almost one-fourth of the children between 5 and 9 years old killed in traffic crashes were pedestrians**
- **Forty percent of all young pedestrian fatalities (under 16) occurred between 5:00 PM and 9:00 PM**



# Single Motor Vehicle Crashes ...

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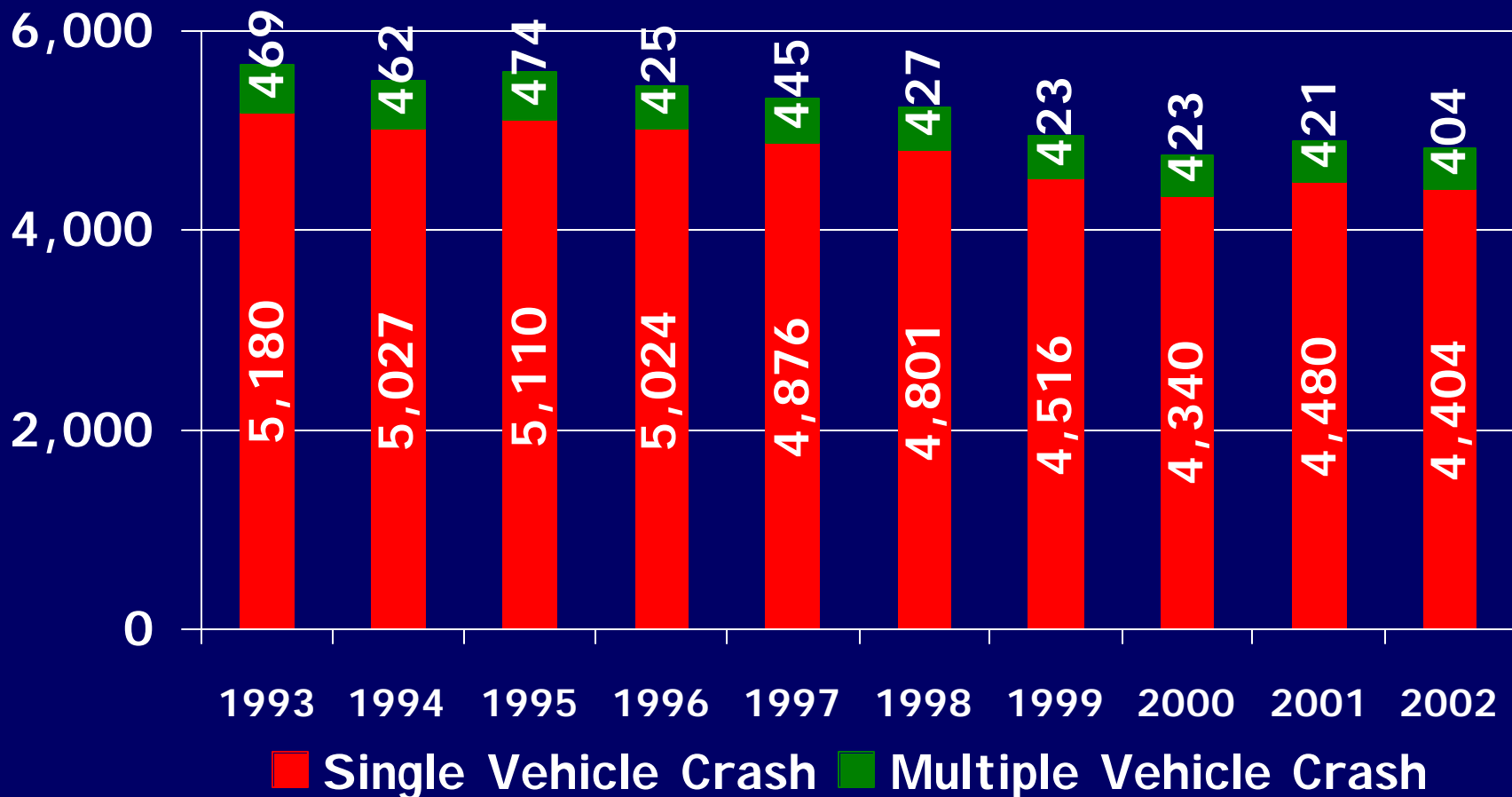


- Accounted for over **90** percent of all pedestrian fatalities
- Over **166,000** pedestrians killed between 1975 and 2002
- **4,404** fatalities in 2002



# Pedestrian Fatalities, by Year and Type of Crash

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# Major Findings - Single Vehicle Crash

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- **Alcohol involvement (37 percent) among pedestrians is a major factor**
  - ◆ High intoxication levels with BAC 0.08+ (32 percent) highlight the seriousness of the problem
- **Alcohol involvement among drivers (18 percent) combined with pedestrian alcohol involvement enhances the problem**
- **Almost two-thirds of fatalities occur on urban roads**
- **Over three-fourths of fatalities occur at non-intersections**



# Major Findings - Single Vehicle Crash cont ...

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- Over **40** percent of fatalities occur on roads without crosswalks
- Almost **two-thirds** of fatalities occurred when dark and dark but lighted
- Nearly **half** of the fatalities occurred between 6 PM and midnight
- Almost one in five (**18** percent) of the fatalities as a result of hit-and-run crashes



# Major Findings - Factors in Fatal Pedestrian Crashes

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- **Major pedestrian factors in SV crash**
  - ◆ Improper crossing of roadway (29%)
  - ◆ Walking, playing etc. in roadway (25%)
  - ◆ Failure to yield right of way (14%)
  - ◆ Darting or running into road (12%)
- **Major driver factors in SV crash**
  - ◆ Inattentive (7%)
  - ◆ Failure to keep in proper lane (6%)
  - ◆ Failure to yield right-of-way (7%)





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# State Fatality Rates Show ...

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- Among states, New Mexico ranked **first** based on pedestrian fatality rate per 100,000 population (**3.23**), Florida was **second** (**2.91**) and Arizona was **third** (**2.82**)
- California had the **highest** number of pedestrian fatalities in 2002 (**707**) followed by Florida (**487**)



# Top ten states based on Fatality Rate Ranking

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Rank	State	Pedestrians Killed	Fatality Rate*
1	New Mexico	60	3.23
2	Florida	487	2.91
3	Arizona	154	2.82
4	Hawaii	33	2.65
5	Nevada	52	2.39
6	South Carolina	98	2.39
7	Alaska	14	2.17
8	North Carolina	176	2.12
9	Louisiana	93	2.07
10	New Jersey	178	2.07

\*Based on 100,000 Population National Rate=1.67



# City Fatality Rates Show ...

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- Based on pedestrian fatality rates, 5 of the top ten ranked cities were in Florida
- The top two ranked cities with highest pedestrian fatality rates were in Florida



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# Top ten cities with 100,000 or more population based on Fatality Rate Ranking

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Rank	City, State	Pedestrians Killed*	Fatality Rate**
1	Miami, FL	22	5.96
2	Tampa, FL	16	4.97
3	Denver, CO	28	4.94
4	Baton Rouge, LA	11	4.87
5	Detroit, MI	45	4.86
6	Louisville, KY	12	4.77
7	Ft. Lauderdale, FL	7	4.64
8	Clearwater, FL	5	4.62
9	Orlando, FL	9	4.47
10	San Bernardino, CA	8	4.35

\*Average of 2000-2002 fatalities

\*\*Based on 100,000 Population



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# Cities with 500,000 or more population Highest and Lowest Rates

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Rank	City, State	Pedestrians Killed*	Fatality Rate**
<b>Highest Rate</b>			
1	Denver, CO	28	4.94
2	Detroit, MI	45	4.86
3	Phoenix, AZ	58	4.25
4	Tucson, AZ	18	3.51
5	Dallas, TX	38	3.16
<b>Lowest Rate</b>			
1	Indianapolis, IN	9	1.11
2	Columbus, OH	10	1.38
3	Seattle, WA	8	1.46
4	Milwaukee, WI	10	1.64
5	Portland, OR	10	1.85
*Average of 2000-2002 fatalities		**Based on 100,000 Population	

- Long-term data shows a declining trend
- However, pedestrians still account for over 11 percent of traffic fatalities
- There is not a single strategy that will reduce pedestrian fatalities – it is a **comprehensive** approach employing the '3Es'
  - ◆ Education
  - ◆ Enforcement, and
  - ◆ Engineering



# NHTSA's Analytical Reports on the Web

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- **DOT HS 809 614 – Traffic Safety Facts 2002:**  
<http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2002/2002pedfacts.pdf>
- **DOT HS 809 456 – Pedestrian Roadway Fatalities:** <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2003/809-456.pdf>

# Questions?

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