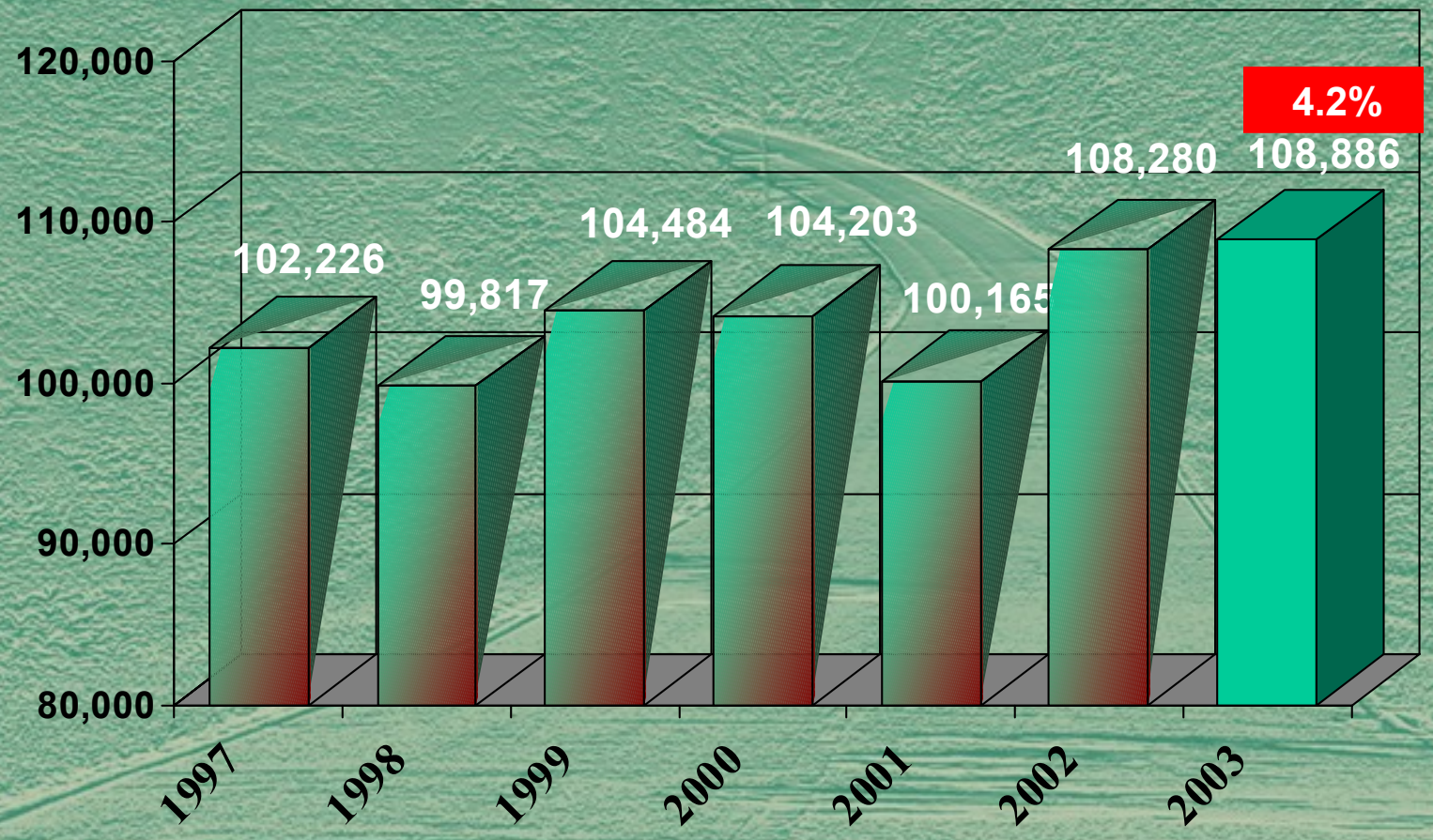

Highway Safety…
It's a Team Effort
Terecia Wilson
Director of Safety
SCDOT
November 2004


Today's Presentation
• Review of Crash Trends
• Update on Legislation
• SCDOT Safety Programs
• Ways You Can Help

South Carolina Traffic Trends

Traffic Crashes



Source: SCDPS

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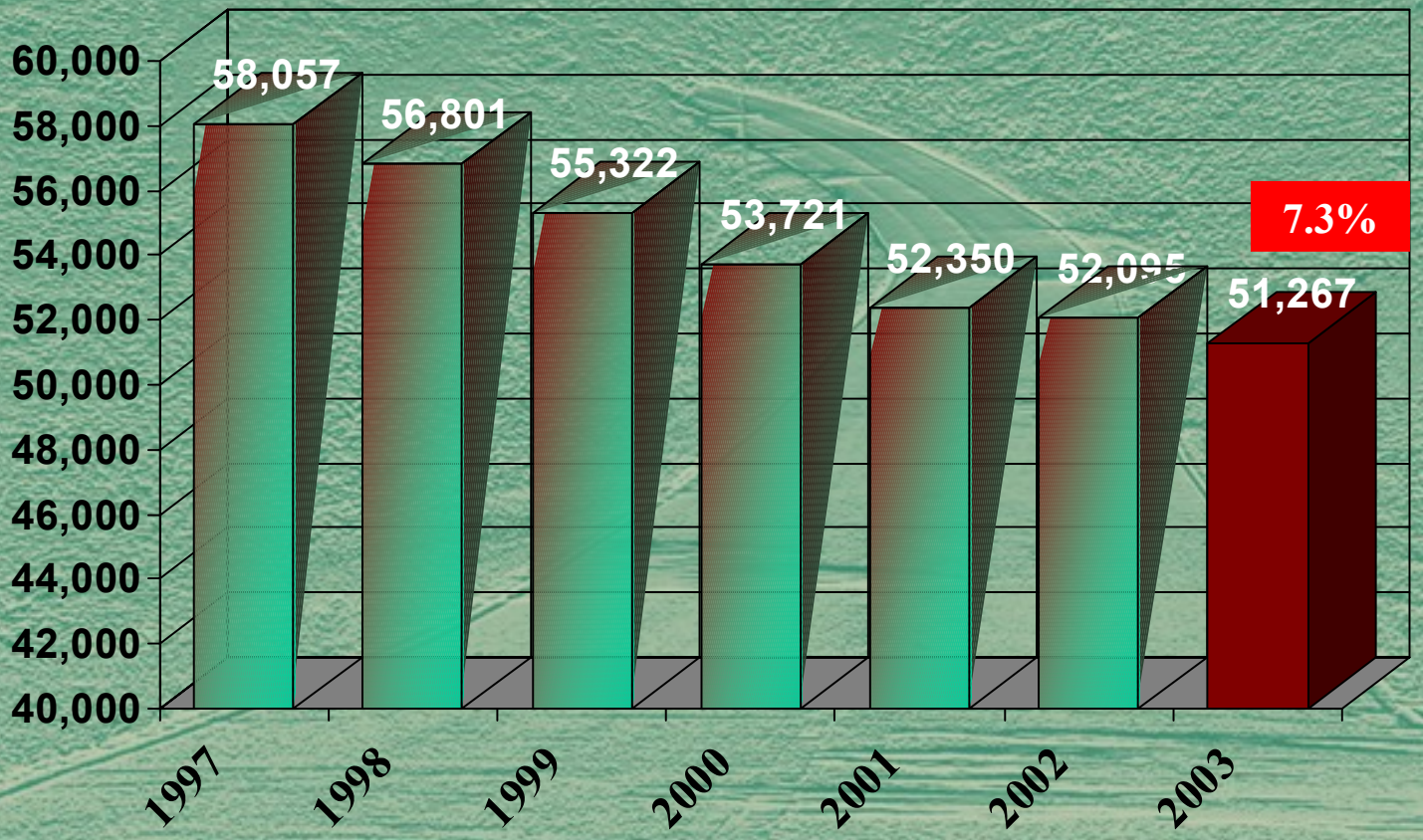
South Carolina Traffic Trends

Non-Fatal Traffic Injuries



Source: SCDPS

2003 data is preliminary

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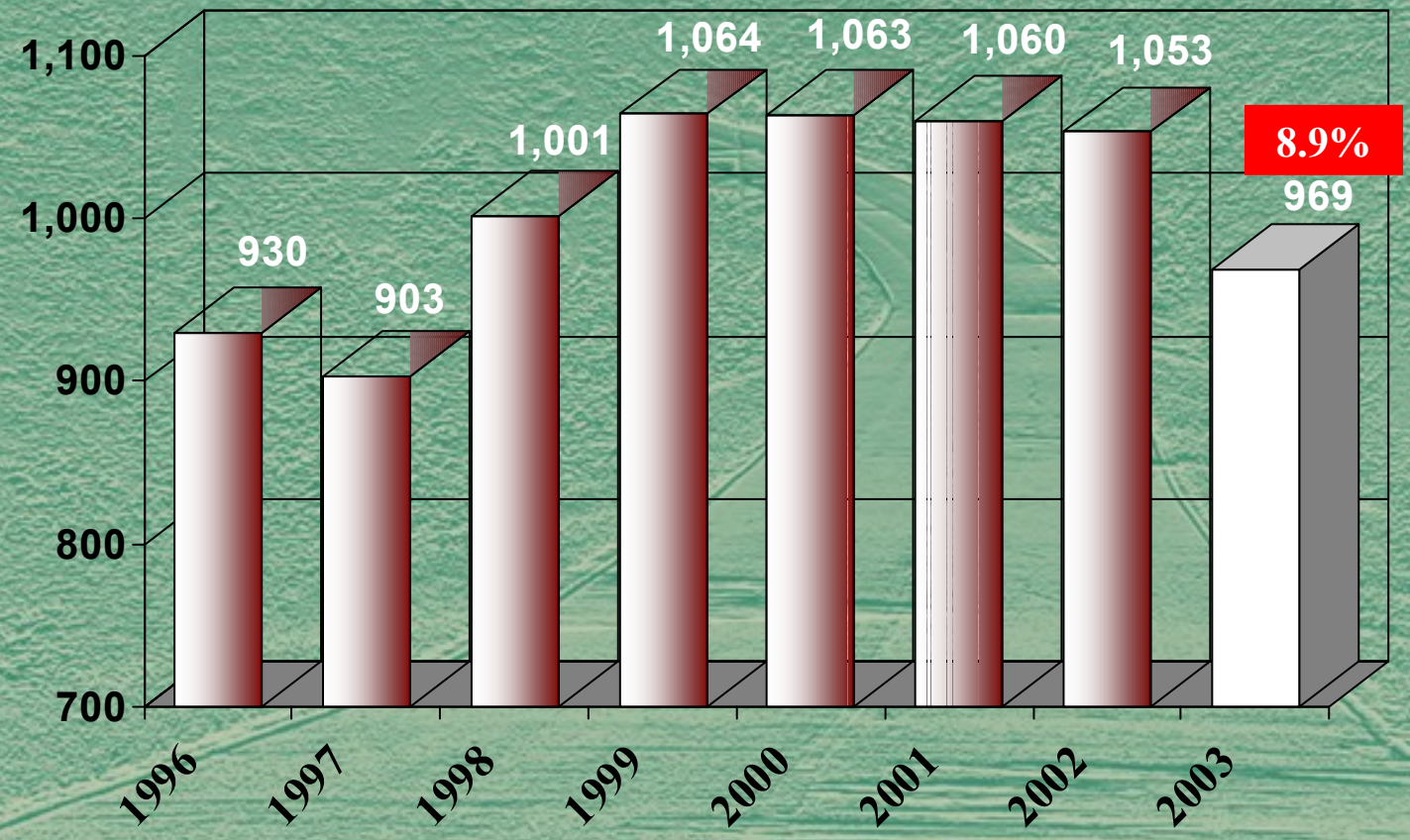
Traffic Fatalities



Source: SCDPS

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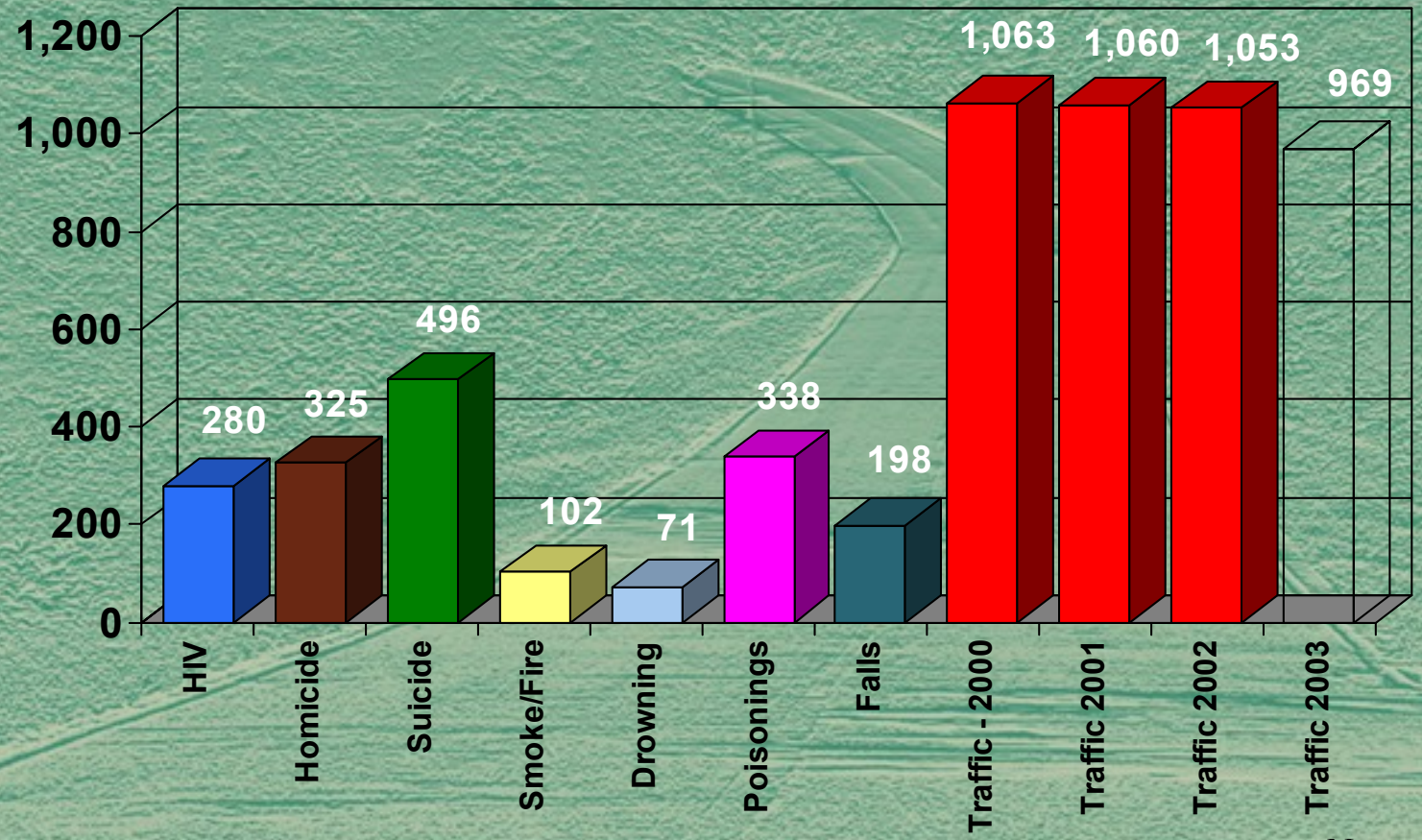
South Carolina Traffic Trends

Traffic Deaths vs. Deaths from Other Causes

(Deaths from Other Causes are 2003 Figures as provided by SCDHEC)



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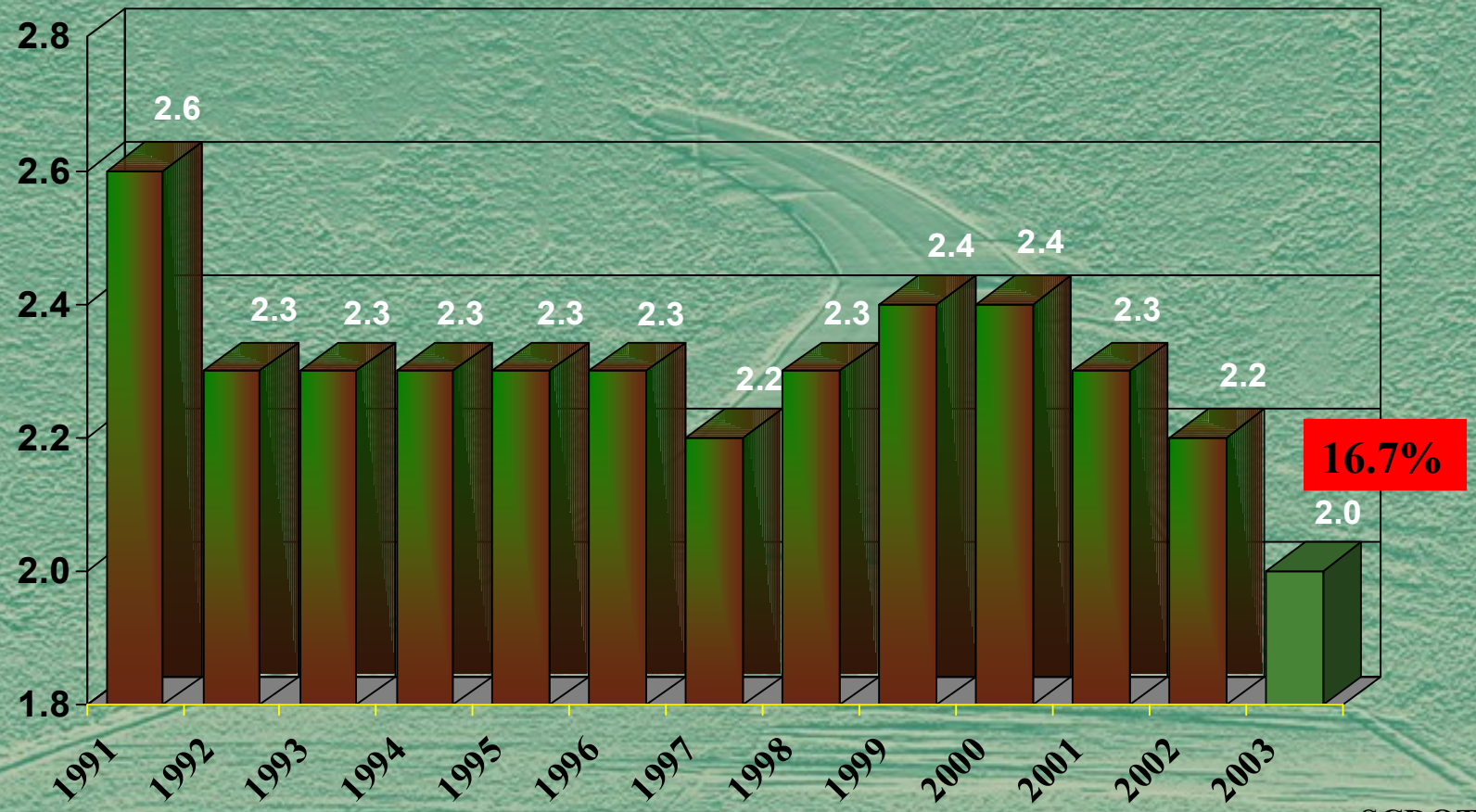
Mileage Death Rate

(Traffic Deaths per 100 million vehicle miles traveled)



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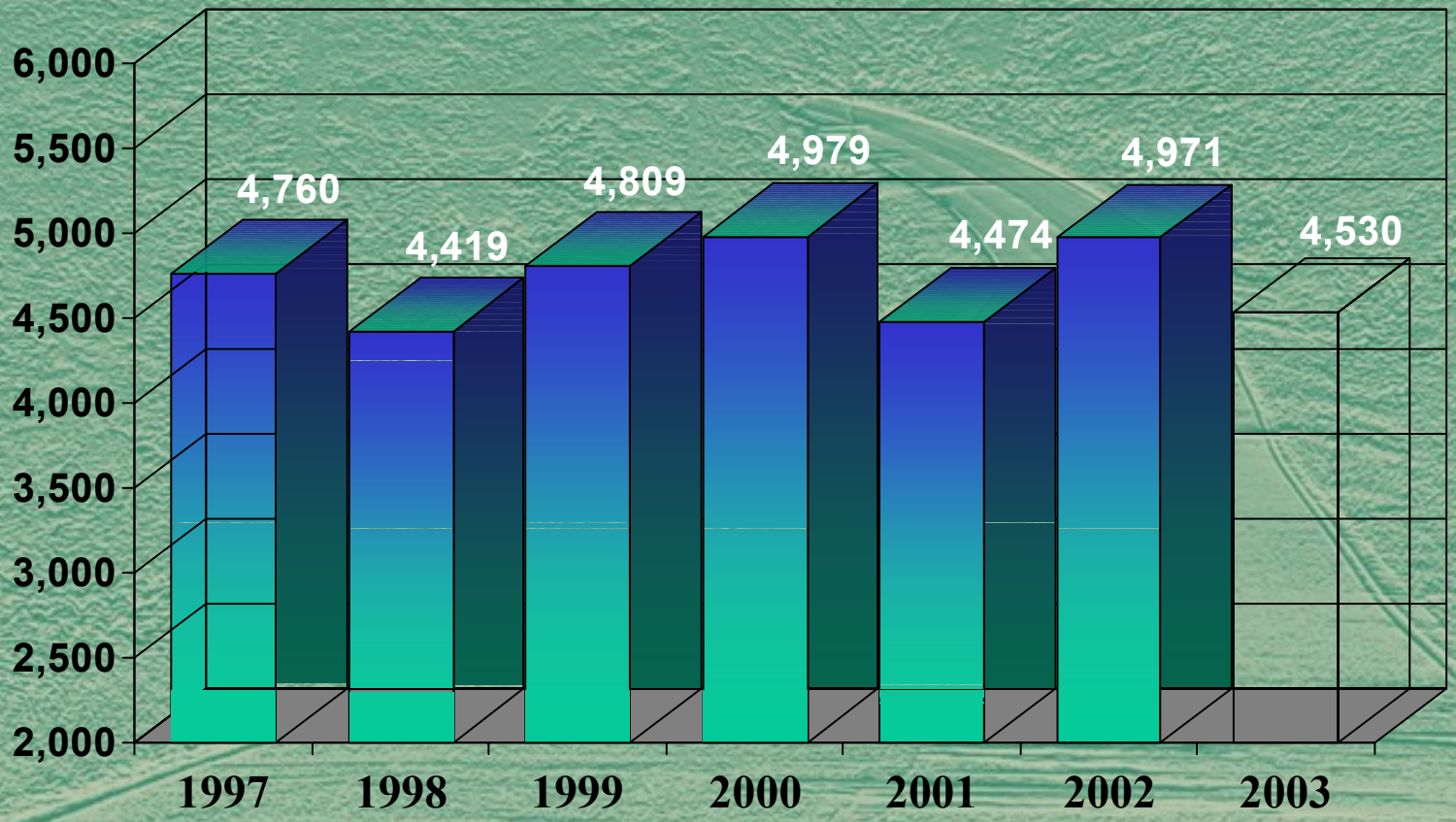
Alcohol/Drug Related Collisions



Source: SCDPS

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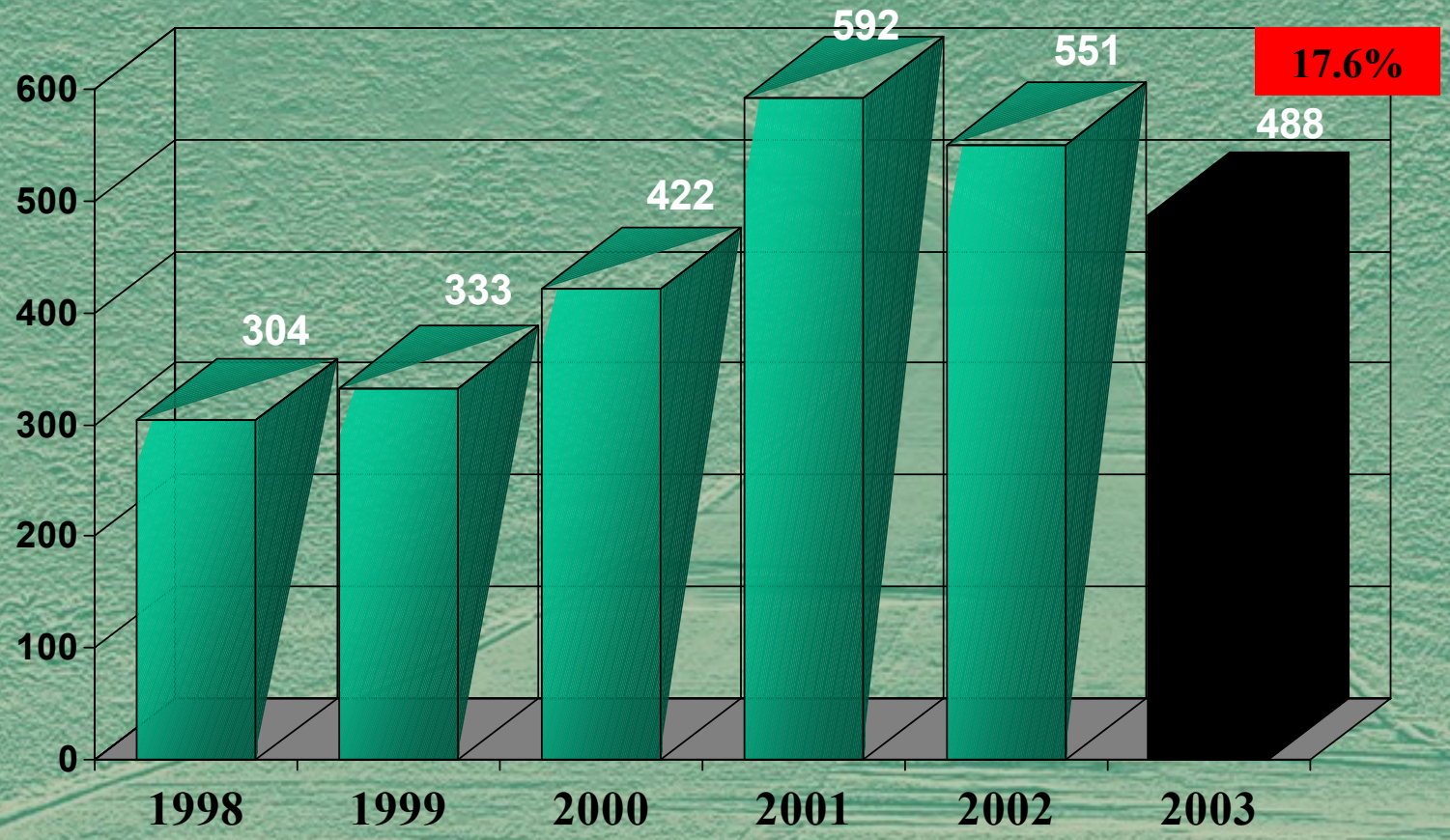
South Carolina Traffic Trends

Alcohol/Drug Related Fatalities



Source: FARS

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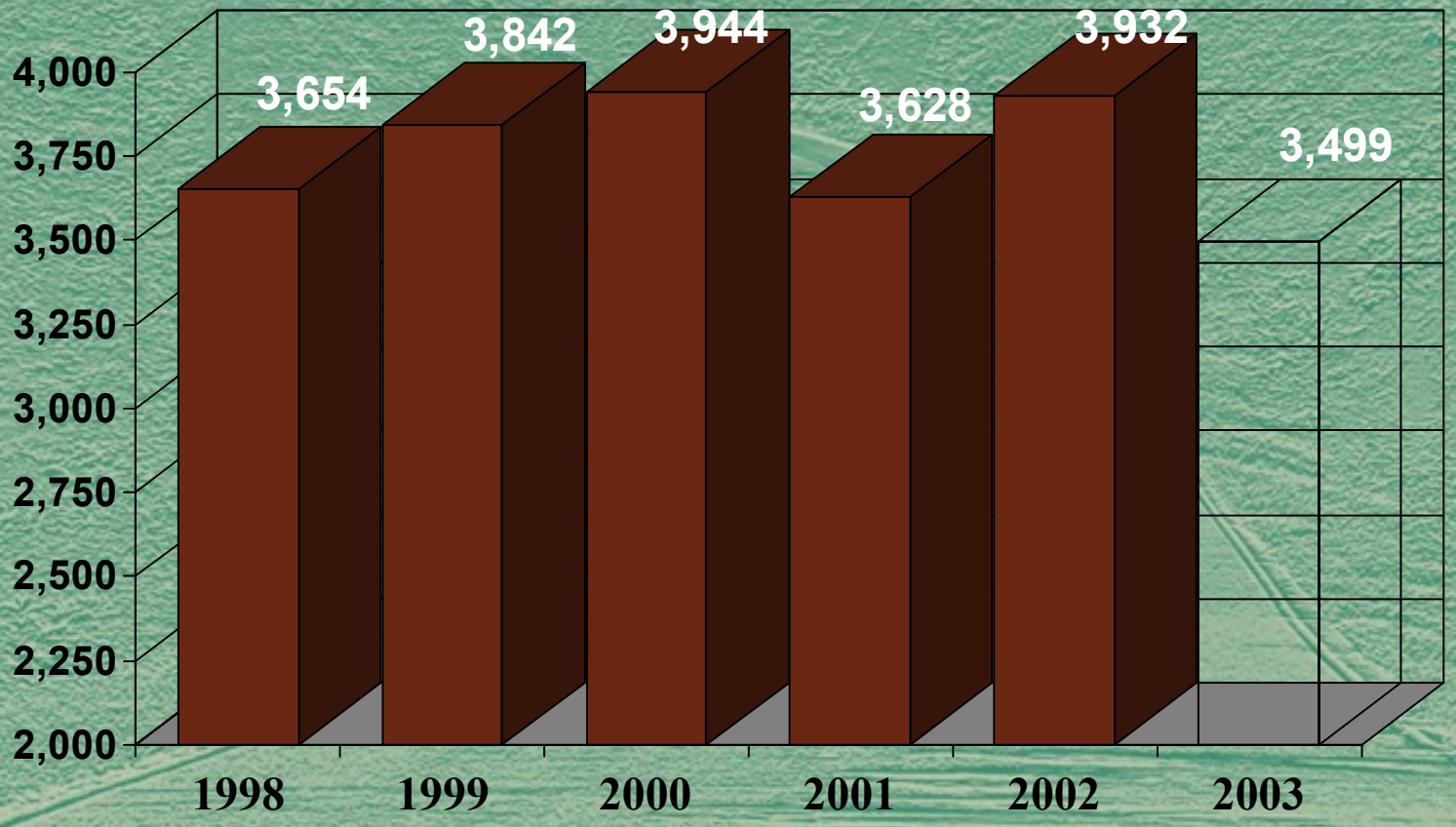
Non-Fatal Injuries in Alcohol Involved Collisions



Source: SCDPS

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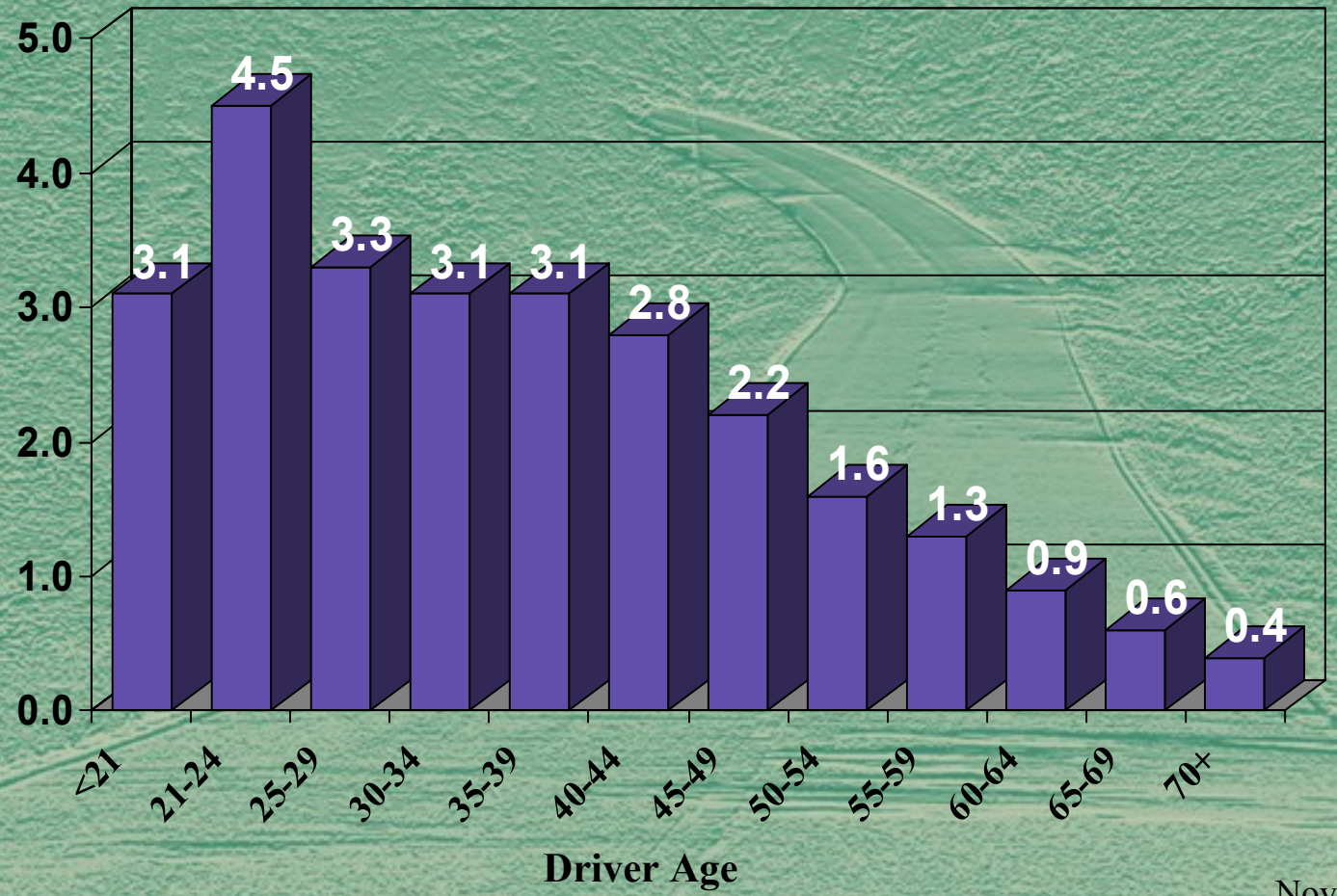
Drivers Involved in Traffic Collisions Where the Probable Cause was Alcohol or Drugs - 2002

(Per 1,000 Licensed Drivers)



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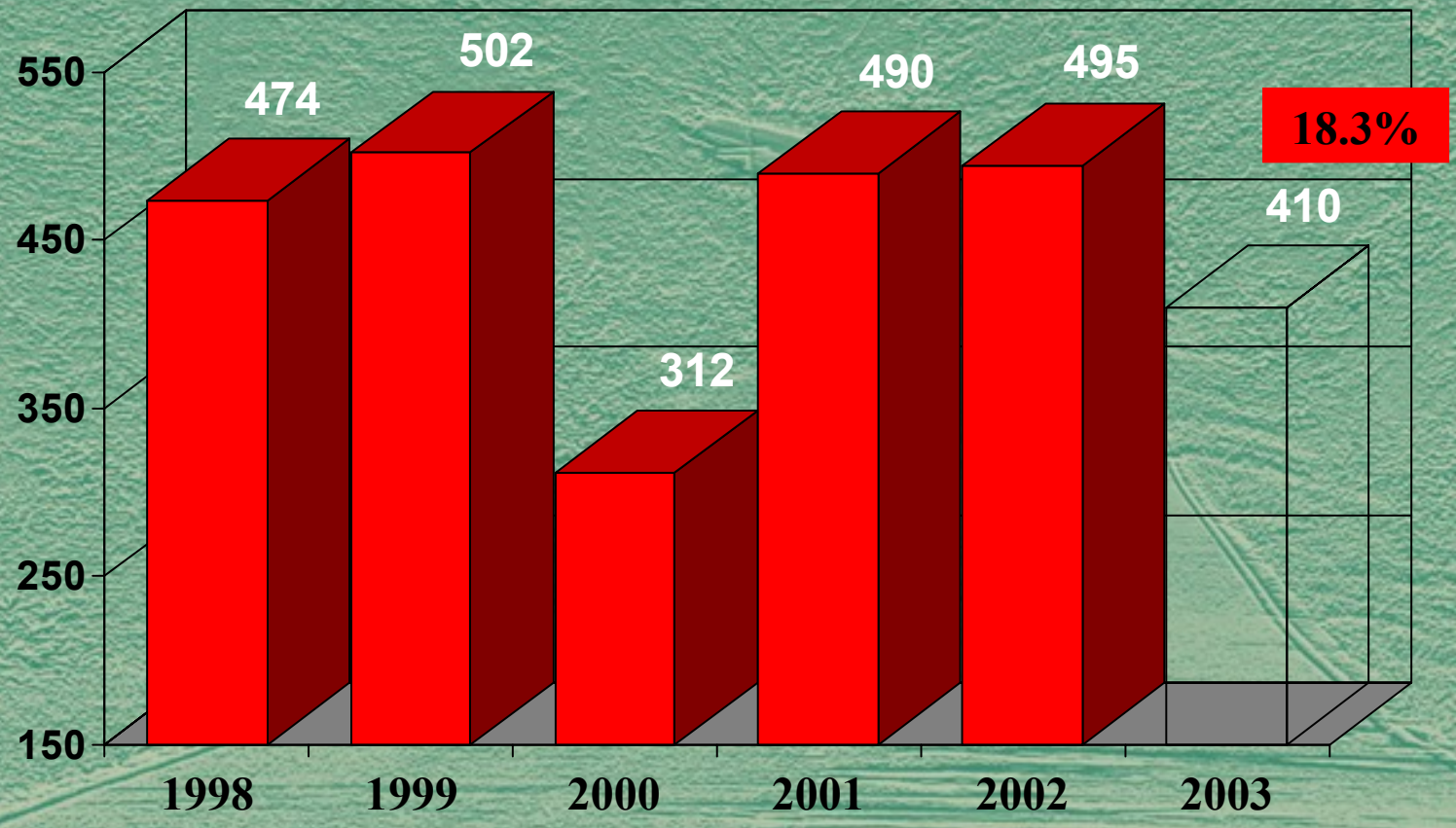
Fatalities in Speed Related Collisions



Source: FARS

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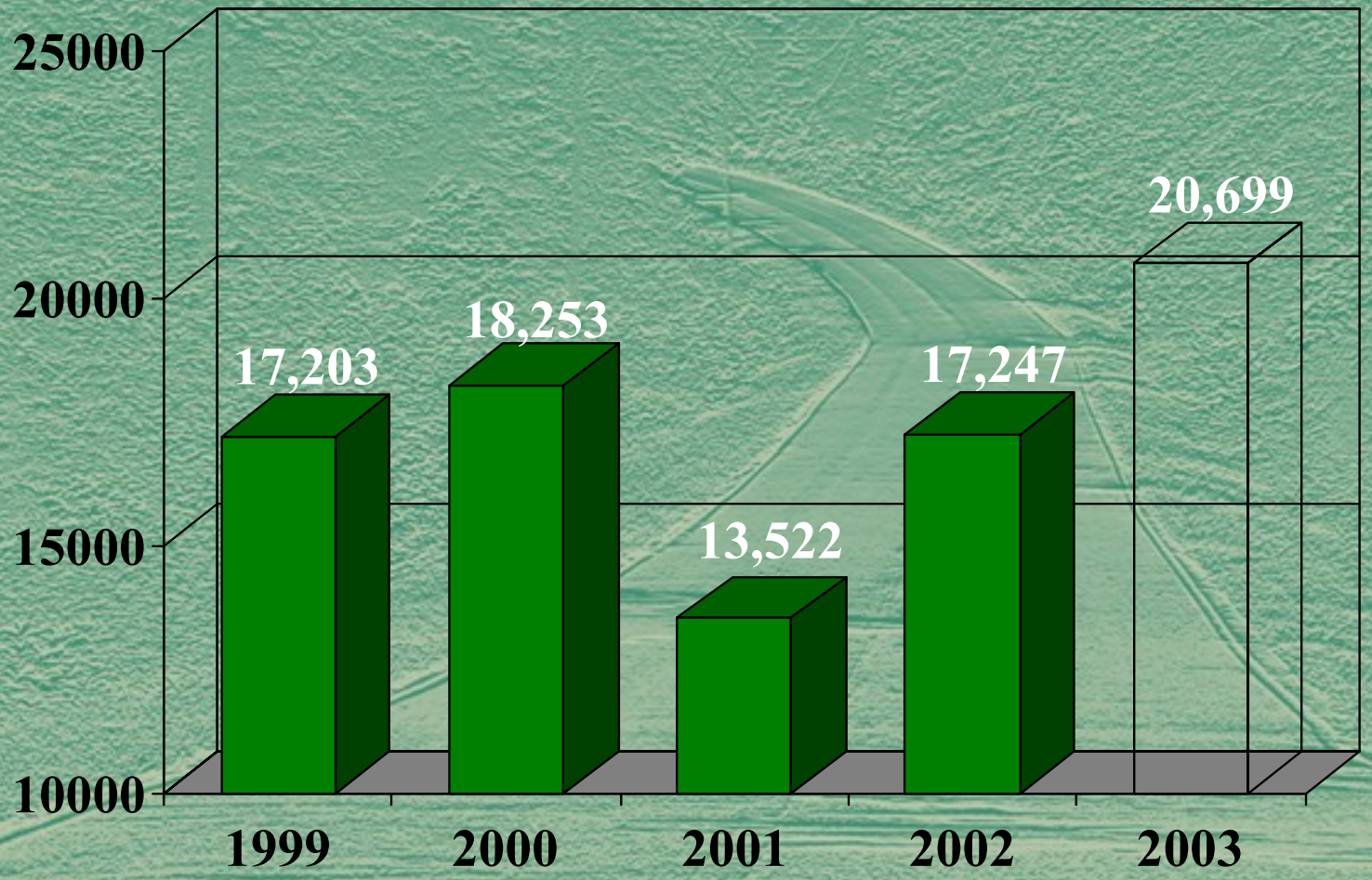
Run-Off-Road Crashes



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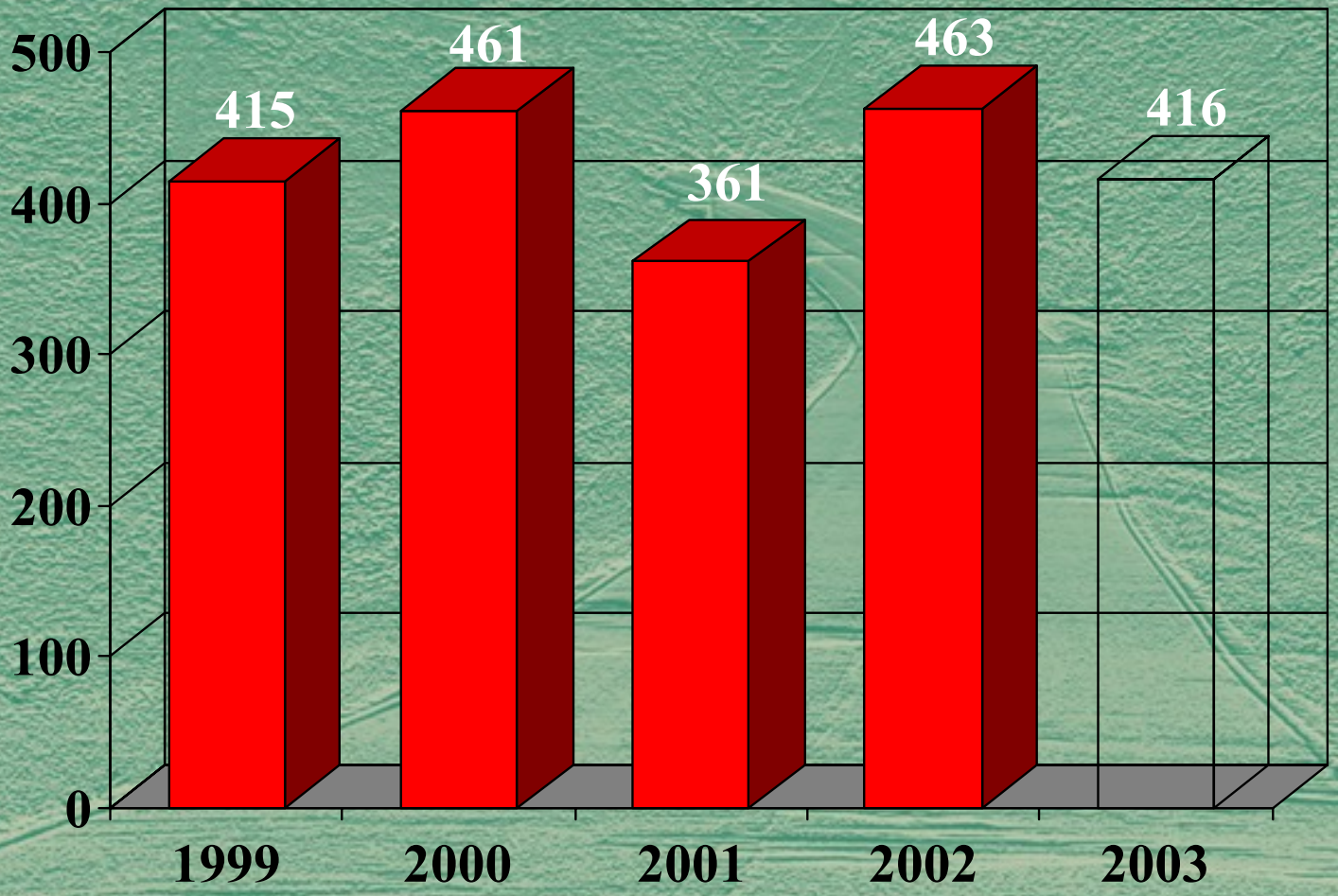
Run-Off-Road Fatalities



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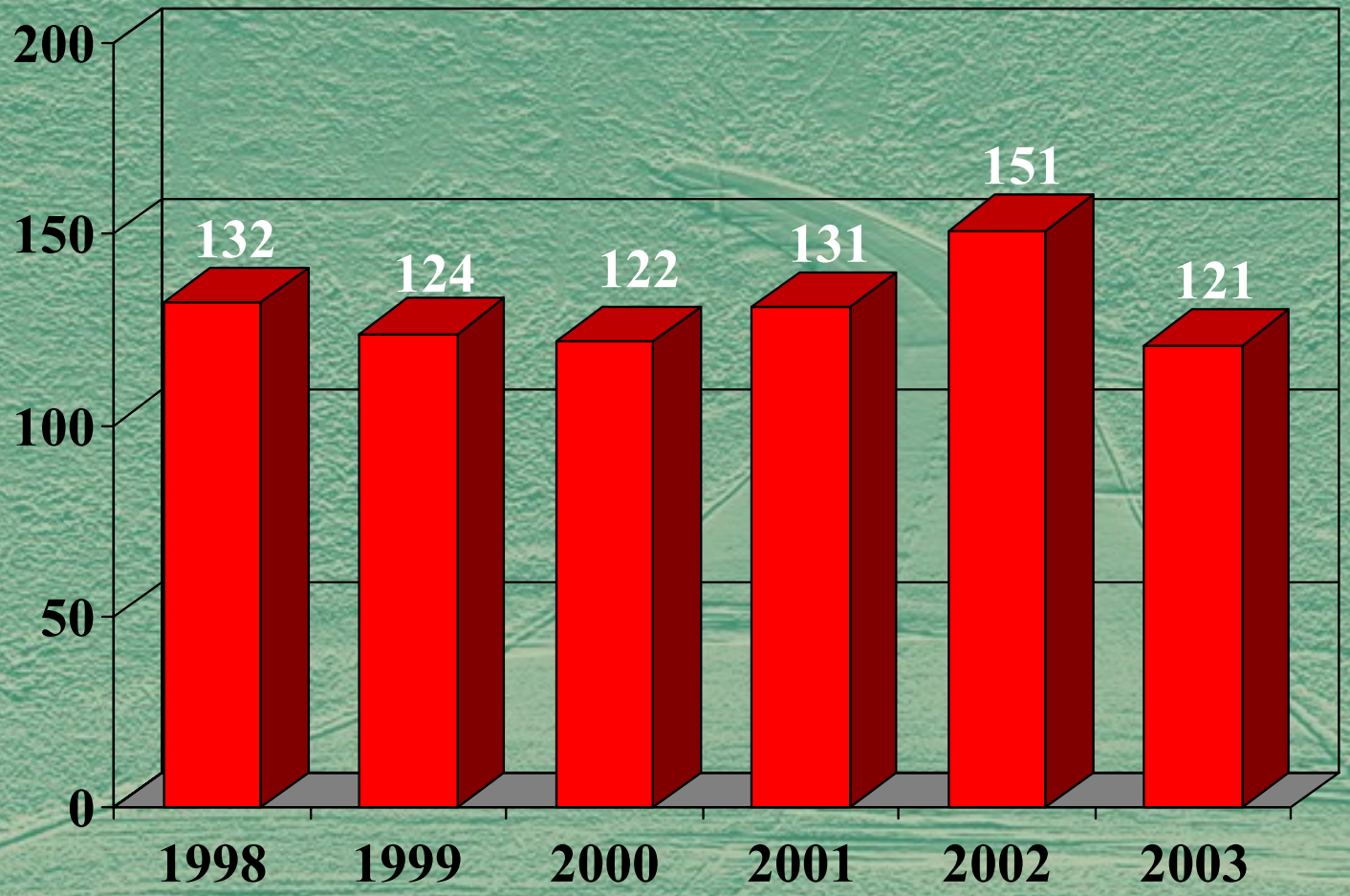
Head-on Traffic Fatalities



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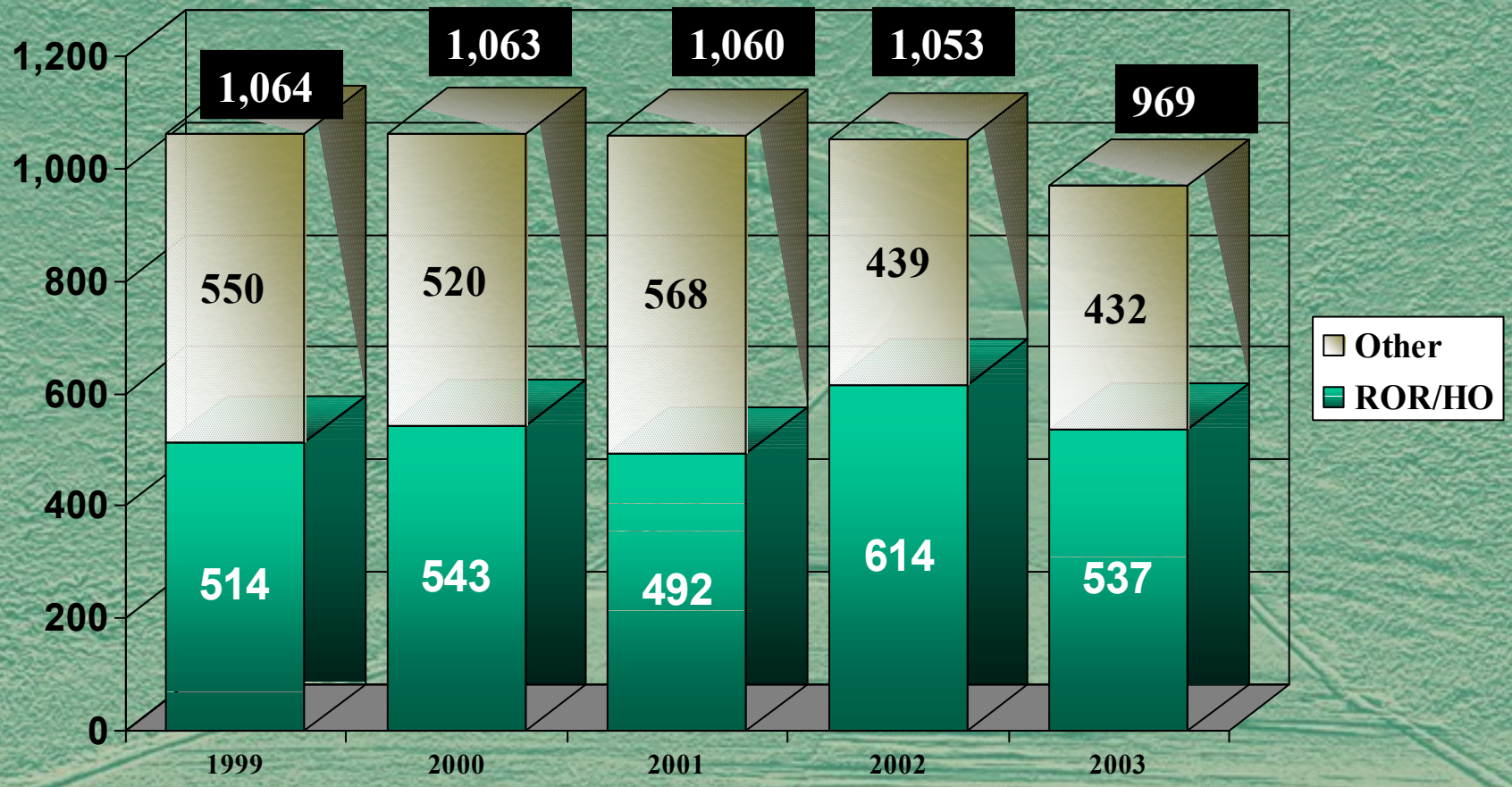
South Carolina Traffic Trends

Run-off-Road/Head On Fatalities Compared to all Fatalities 1999-2003



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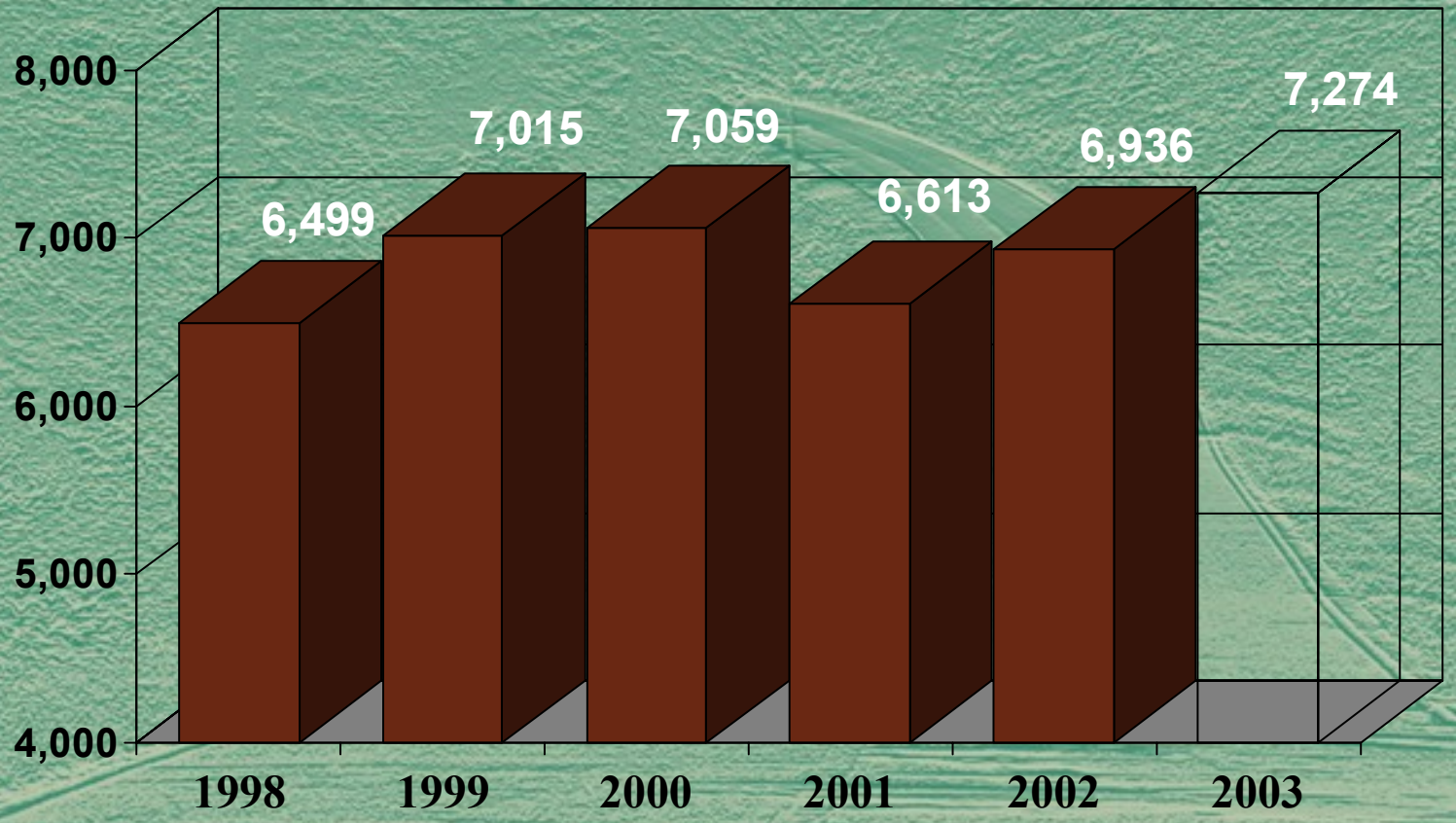
South Carolina Traffic Trends

Following-Too-Closely Traffic Collisions



Source: SCDPS

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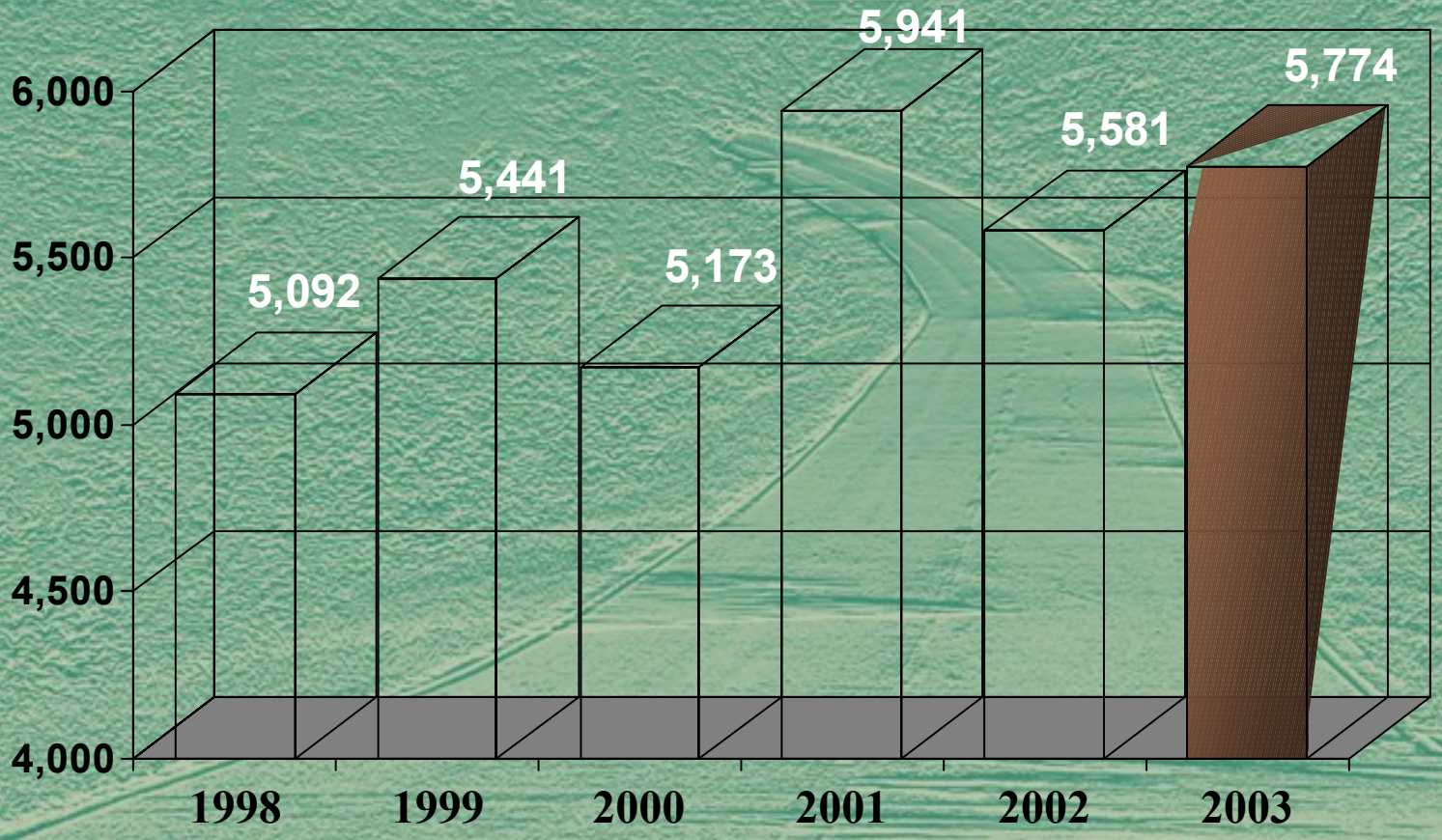
South Carolina Traffic Trends

Traffic Collisions with Disregarding Sign/Signal as the Probable Cause



Source: SCDPS

2001 figures are preliminary

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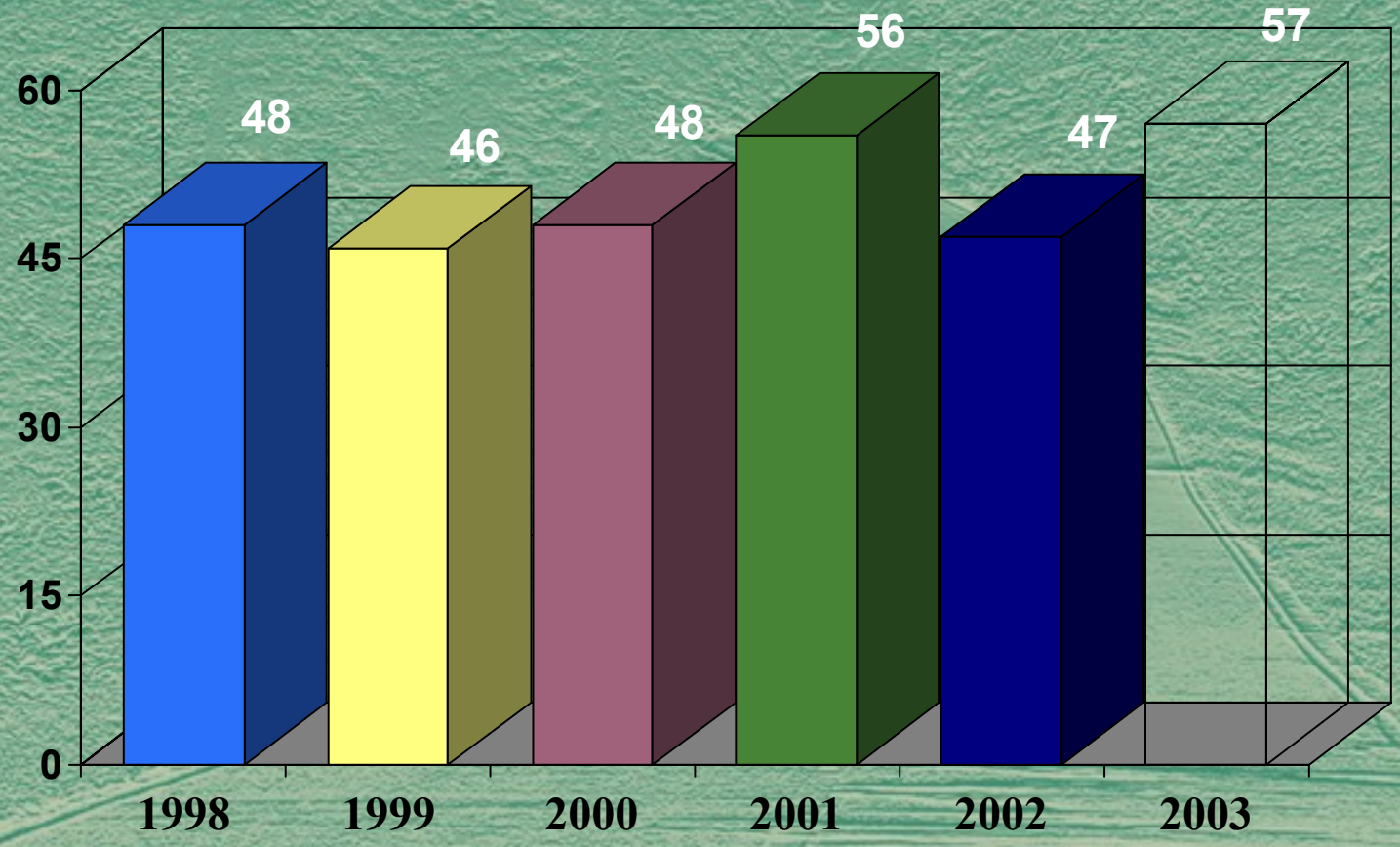
South Carolina Traffic Trends

Traffic Fatalities with Disregarded Sign/Signal the Probable Cause



Source: SCDPS

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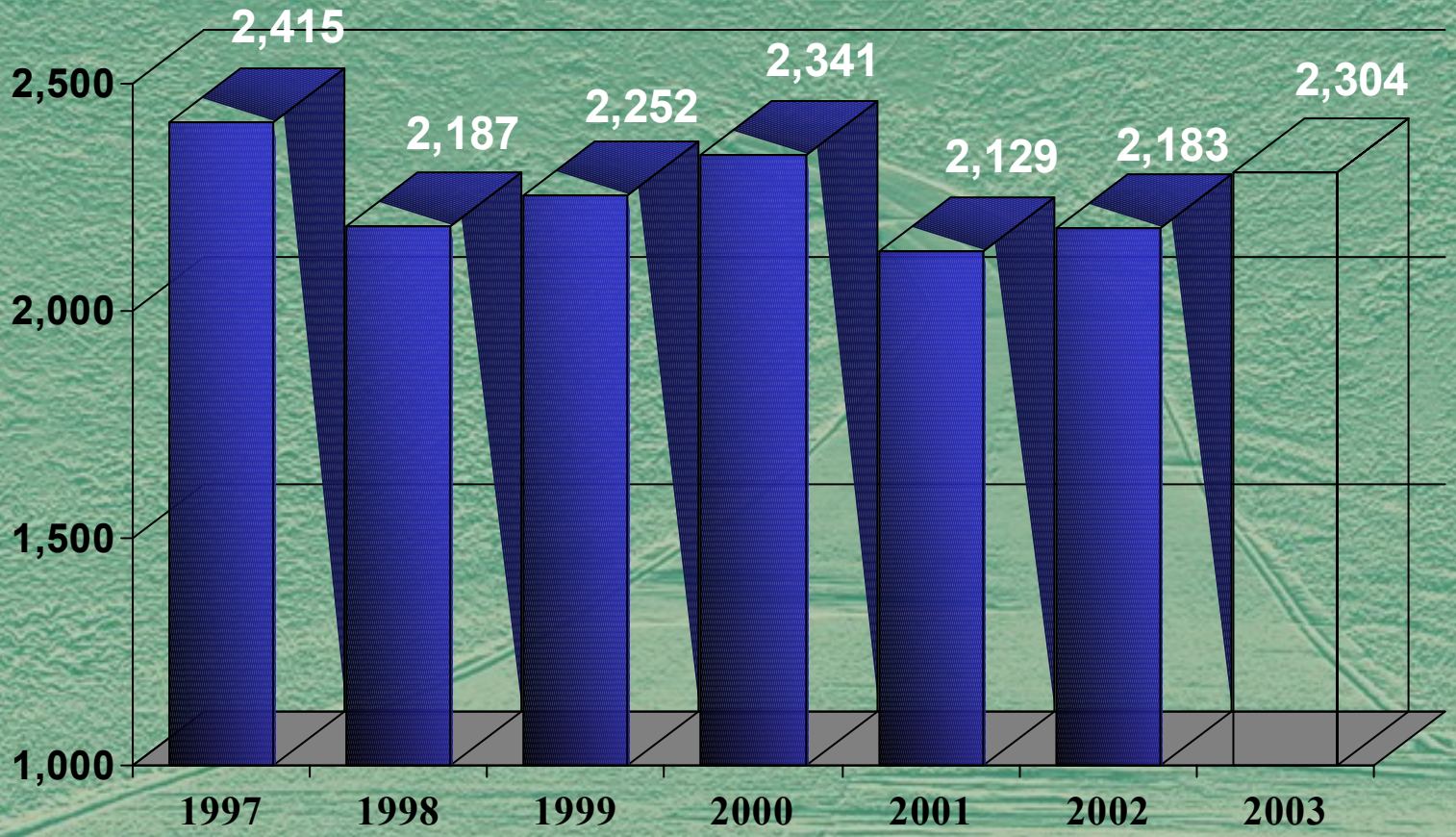
Traffic Collisions with Improper Turn as the Probable Cause



Source: SCDPS

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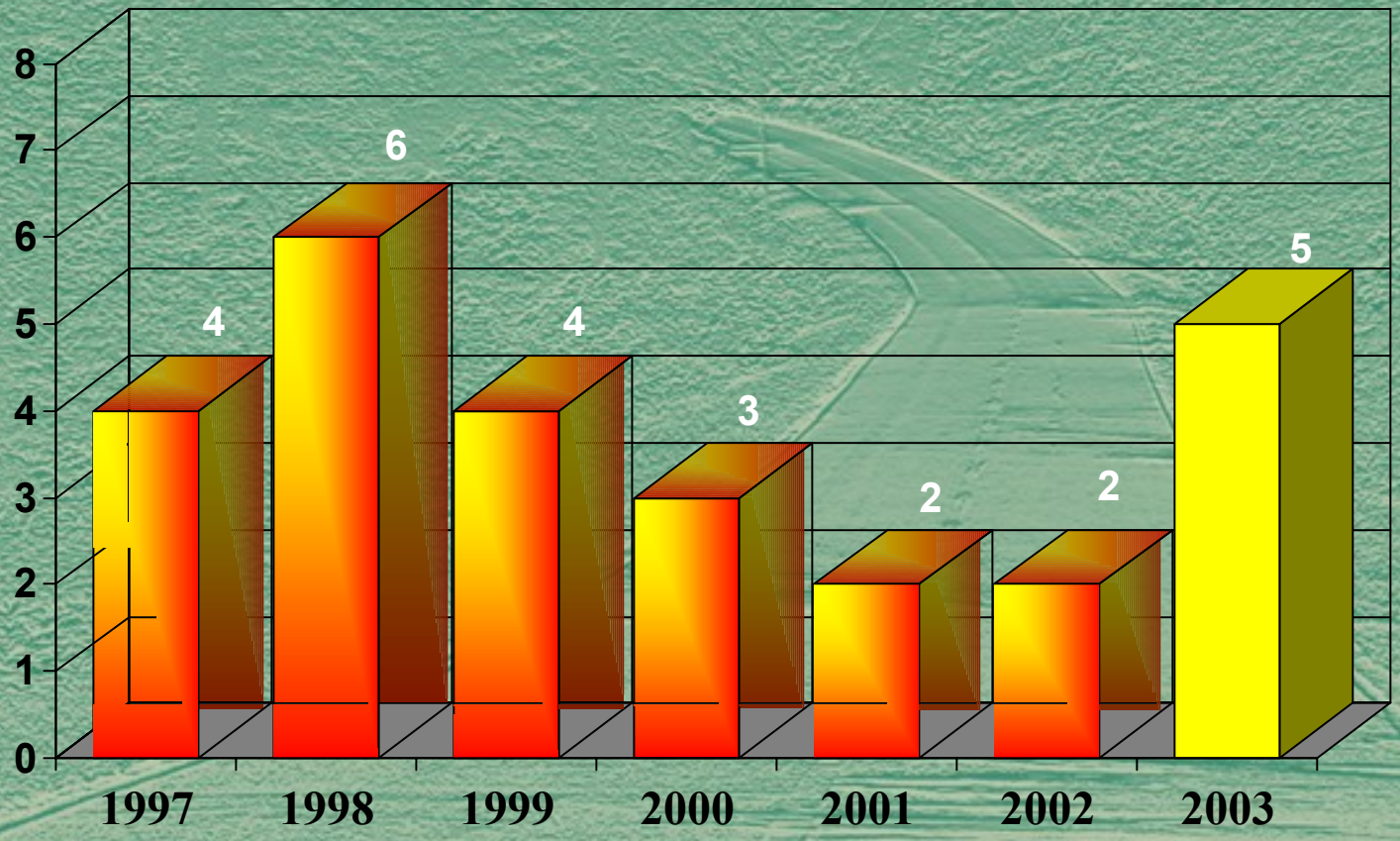
Traffic Fatalities with Improper Turn as the Probable Cause



Source: SCDPS

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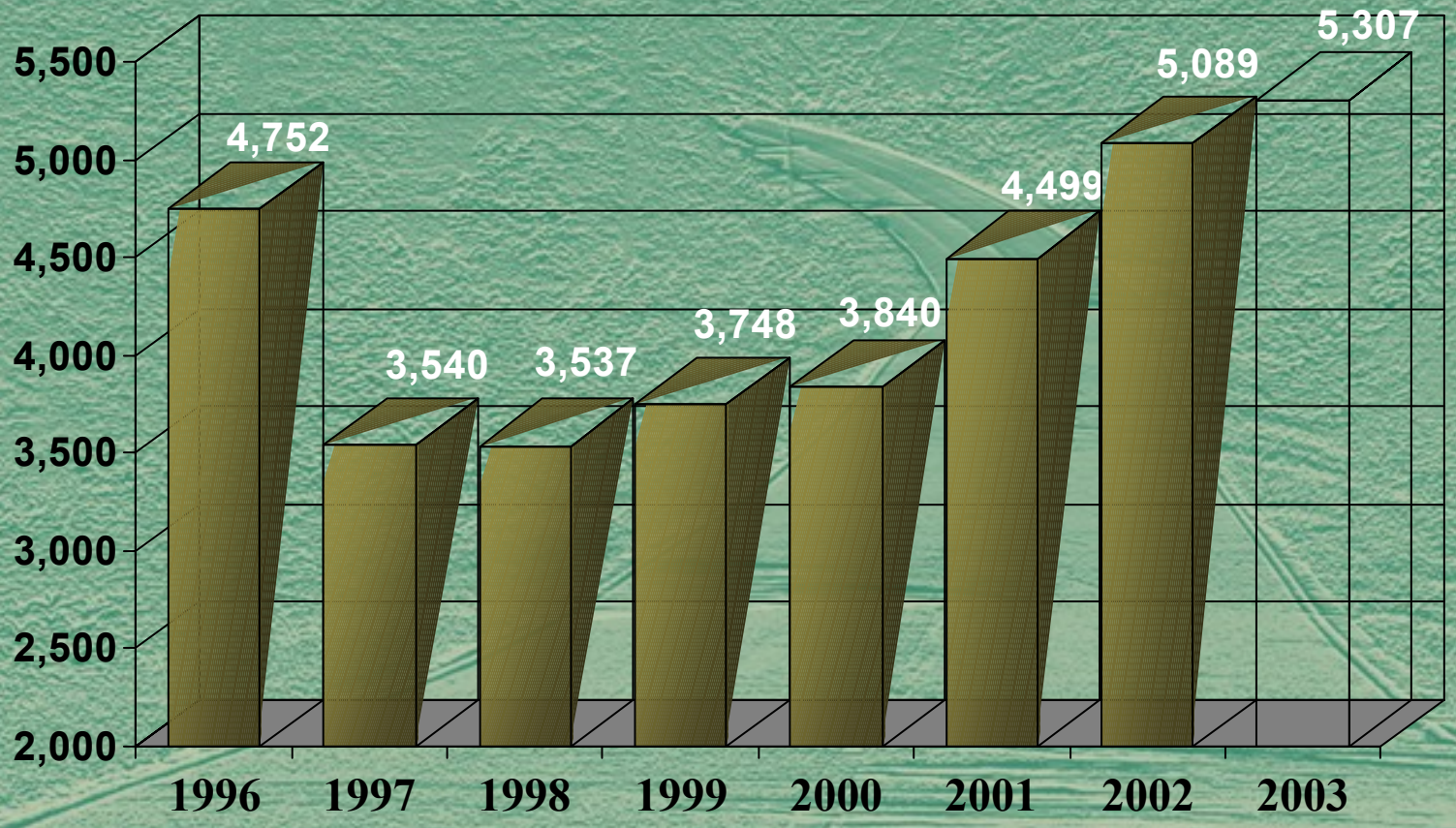
Traffic Collisions with Improper Lane Change as the Probable Cause



Source: SCDPS

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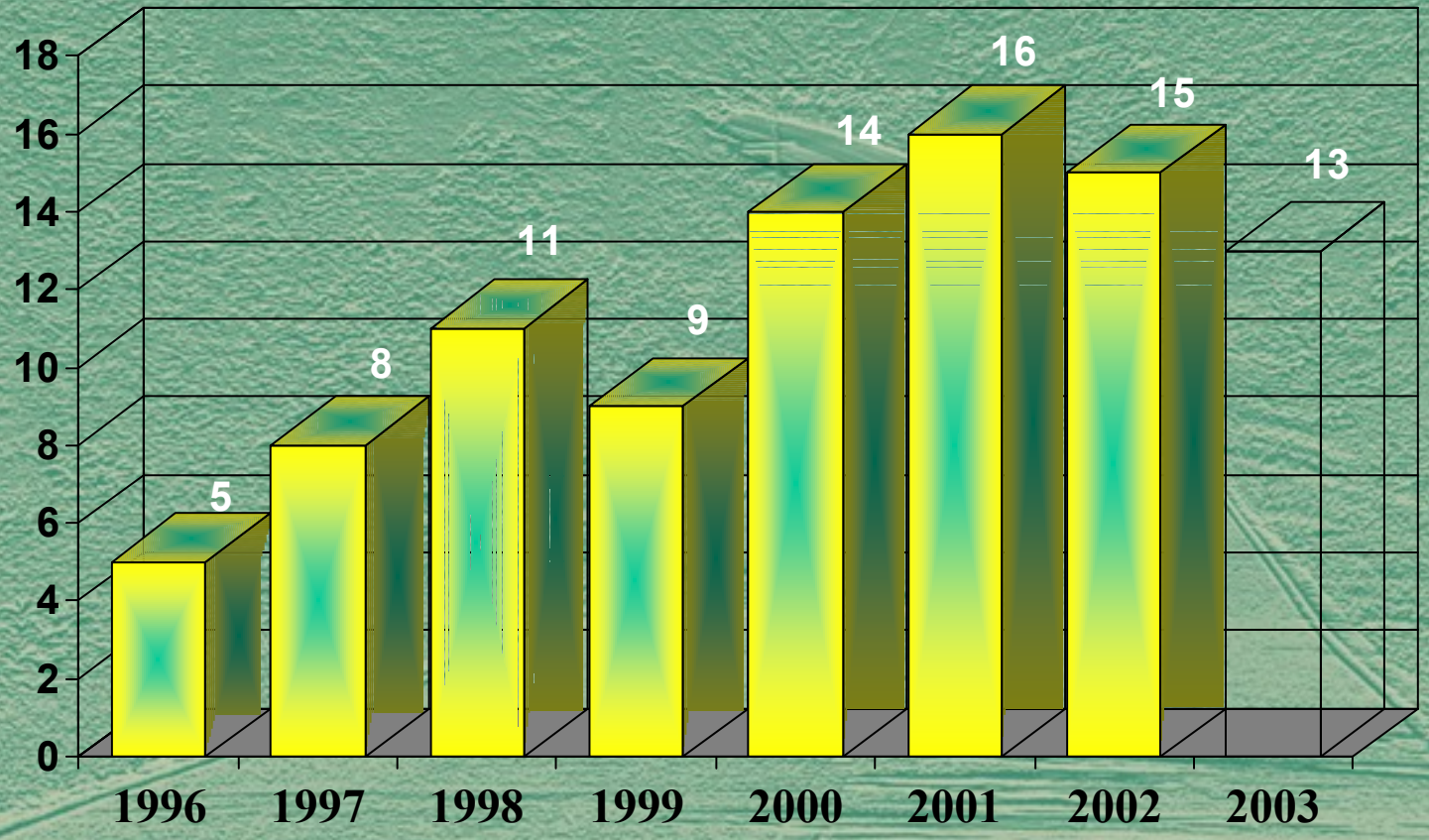
Traffic Fatalities with Improper Lane Change as the Probable Cause



Source: SCDPS

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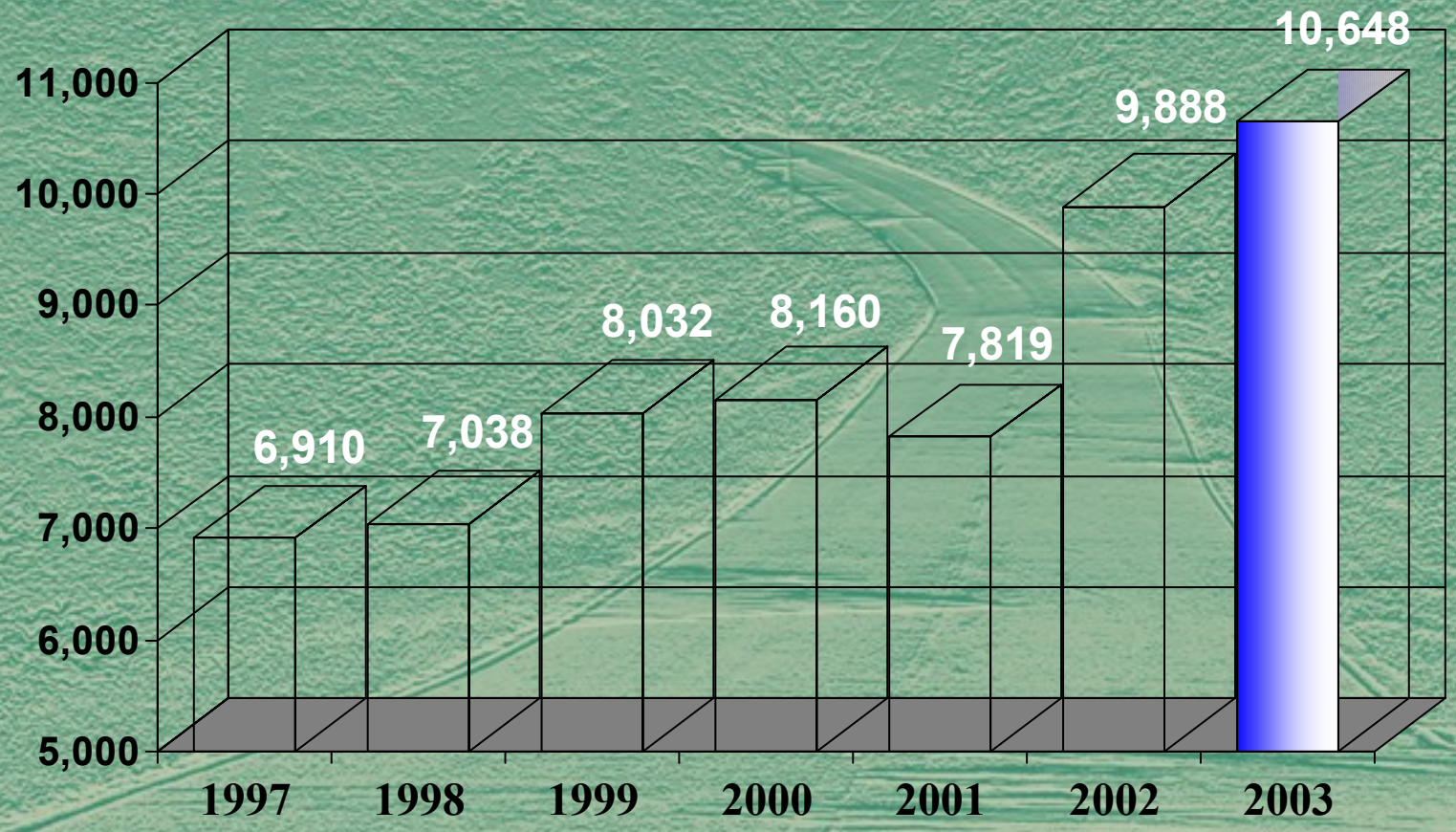
South Carolina Traffic Trends

Traffic Collisions on Interstate Highways



Source: SCDPS

2003 figure is preliminary

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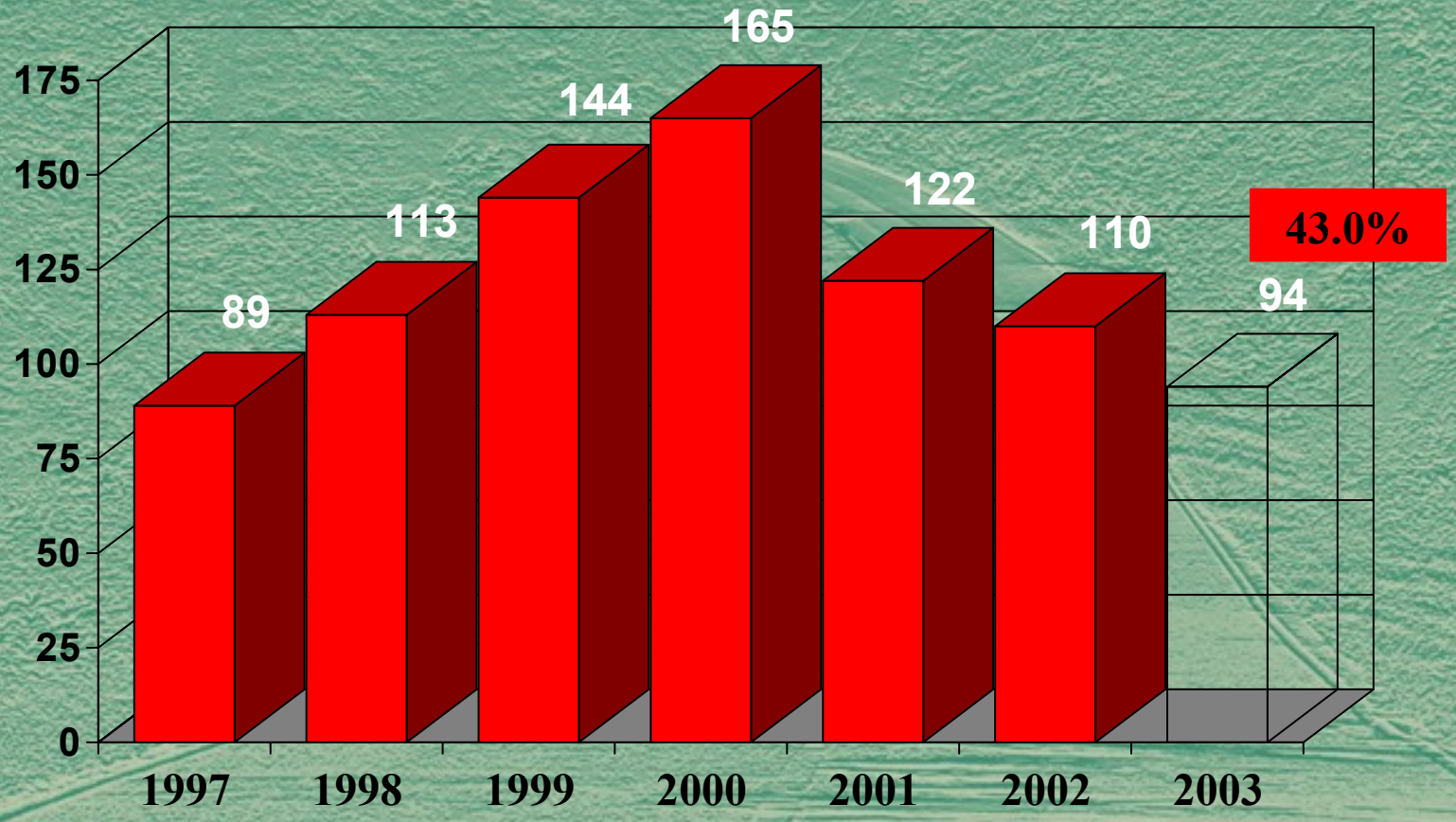
Traffic Fatalities on Interstate Highways



Source: SCDPS

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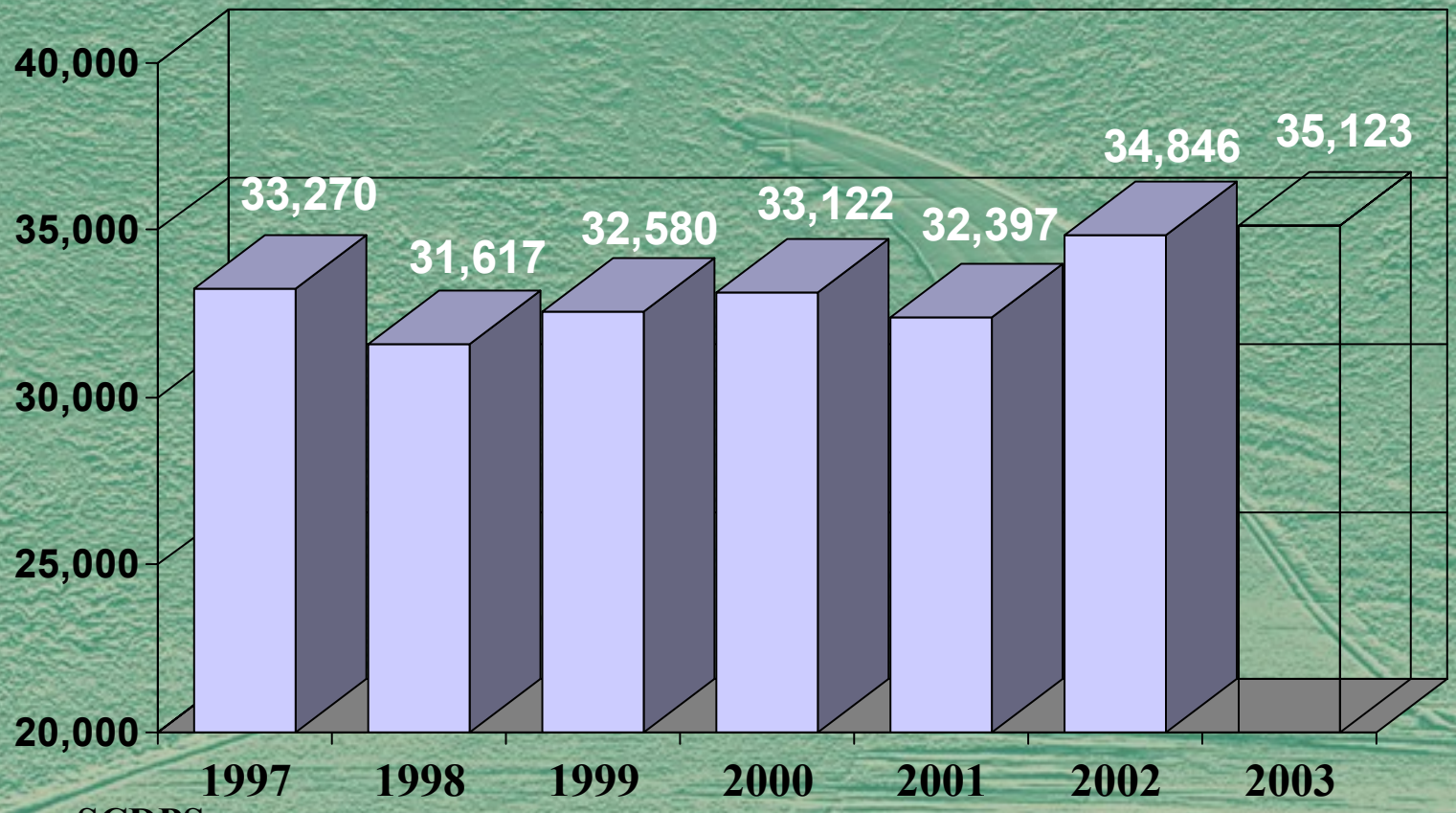
South Carolina Traffic Trends

Traffic Collisions on Secondary Highways



Source: SCDPS

2003 figures are preliminary

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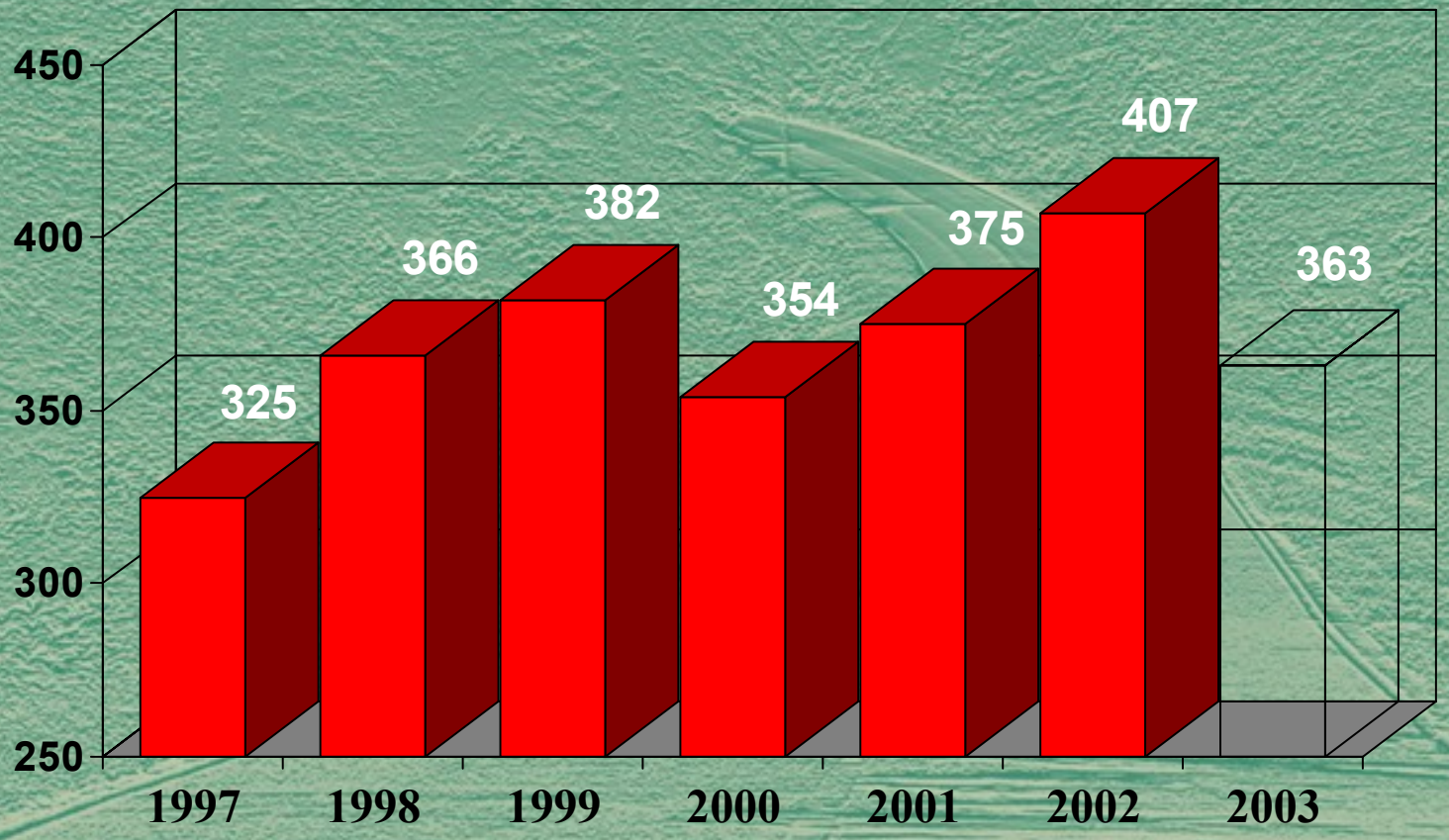
South Carolina Traffic Trends

Traffic Fatalities on Secondary Highways



Source: SCDPS

2003 figures are preliminary

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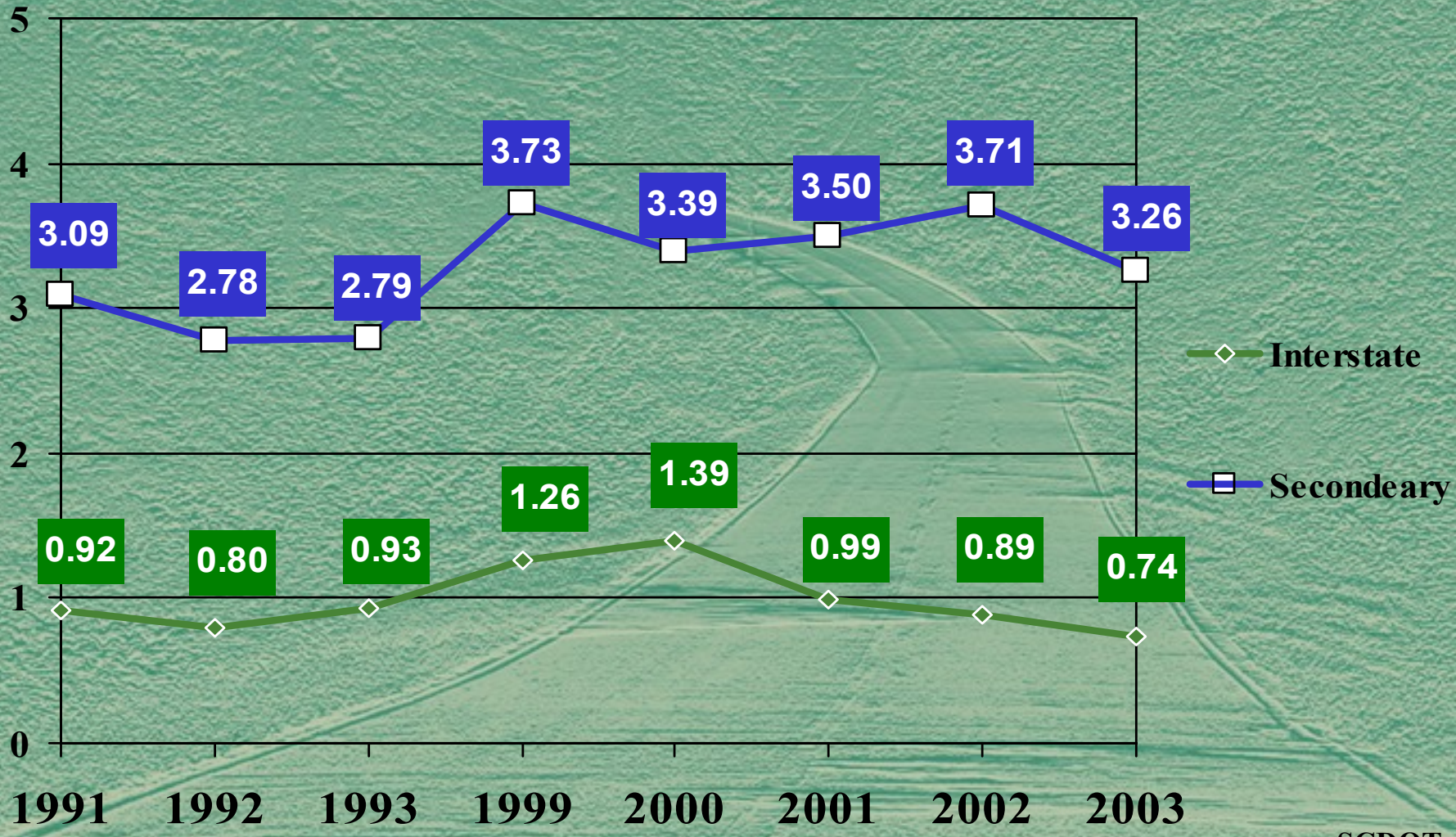
South Carolina Mileage Death Rates
Interstate vs Secondary Roads
Traffic Deaths per 100 Million Vehicle Miles Traveled



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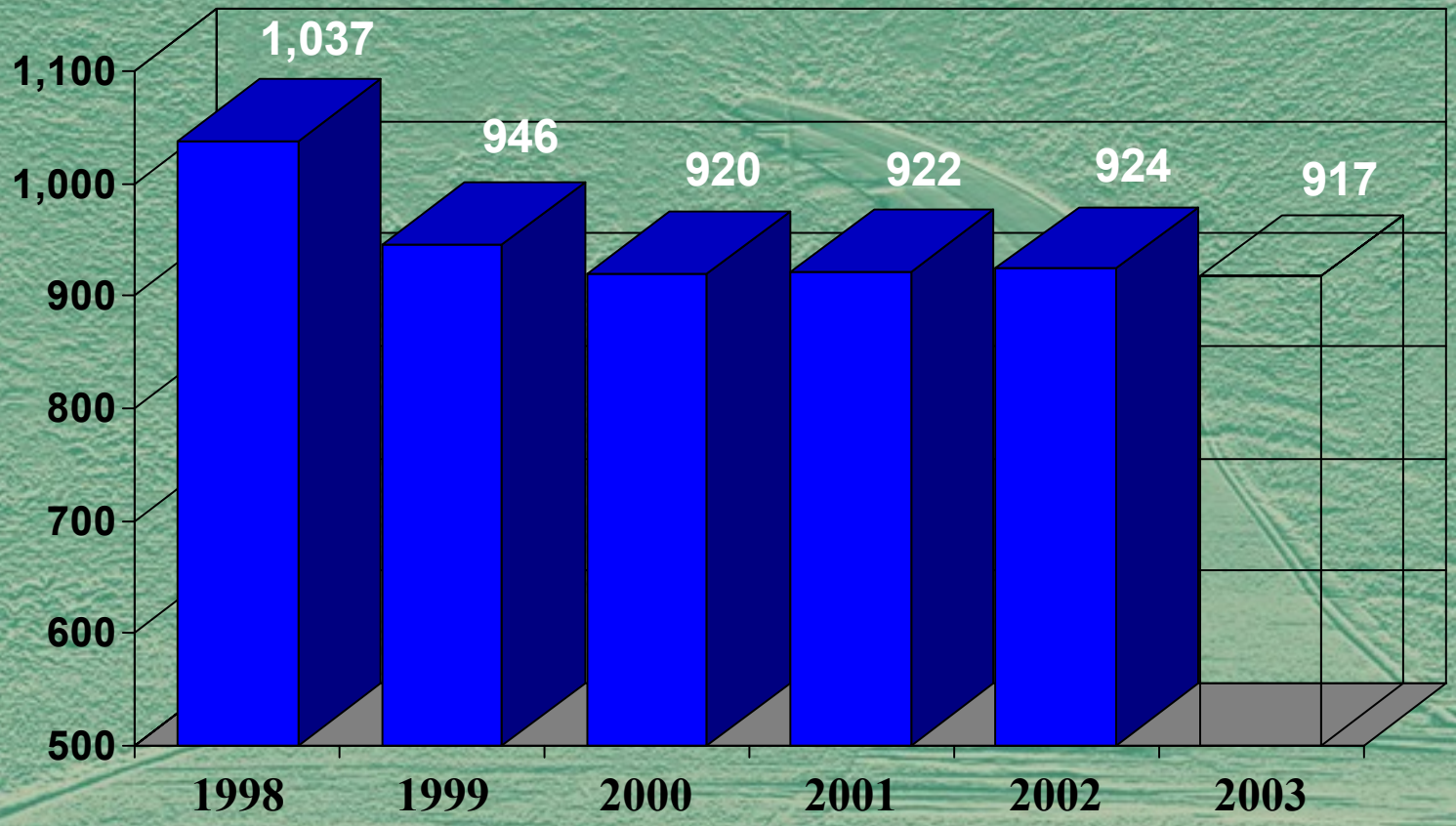
South Carolina Traffic Trends

Traffic Collisions Involving Pedestrians



Source: SCDPS

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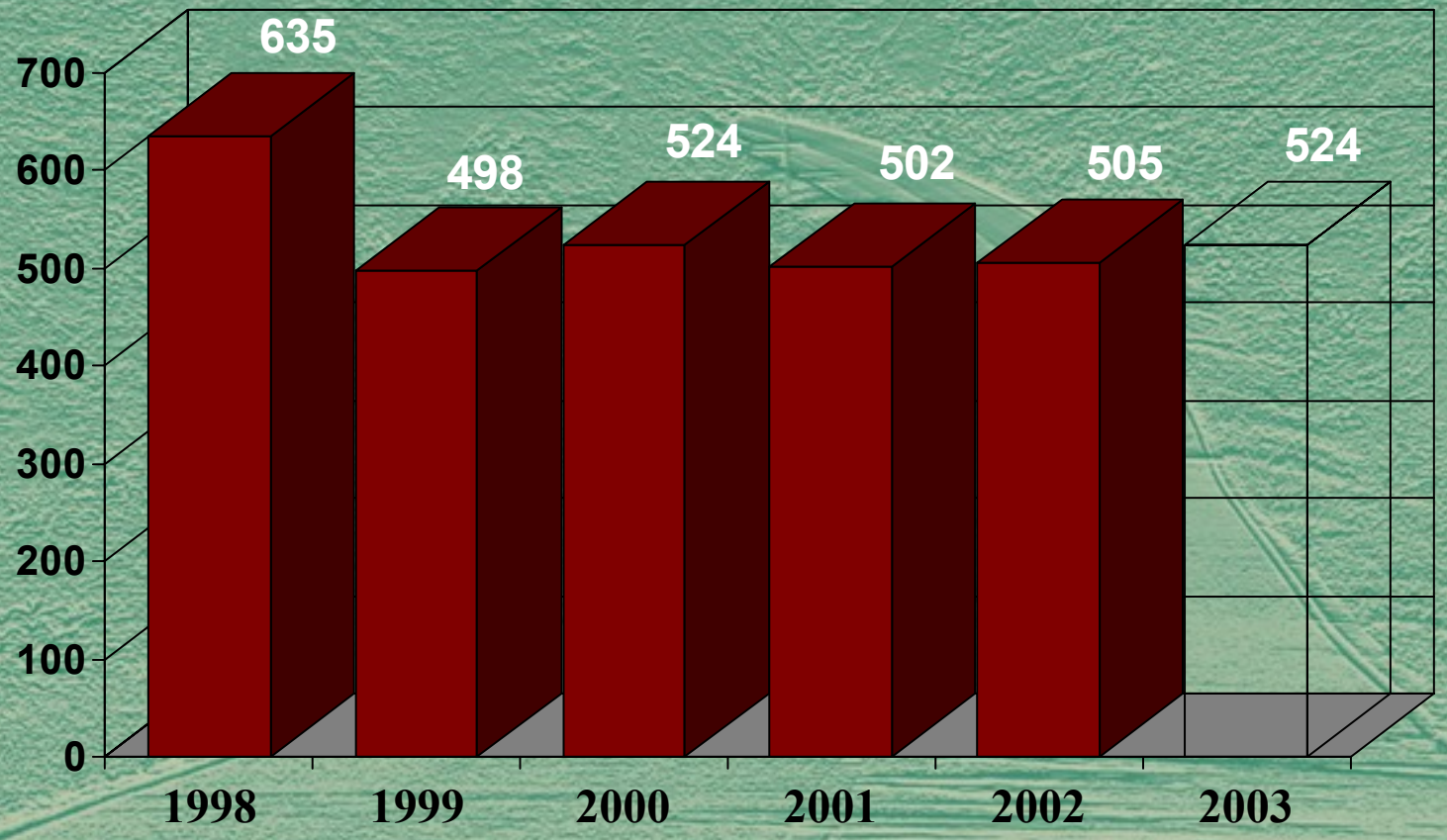
Non-Fatal Injuries in Collisions Involving Pedalcyclists



Source: SCDPS

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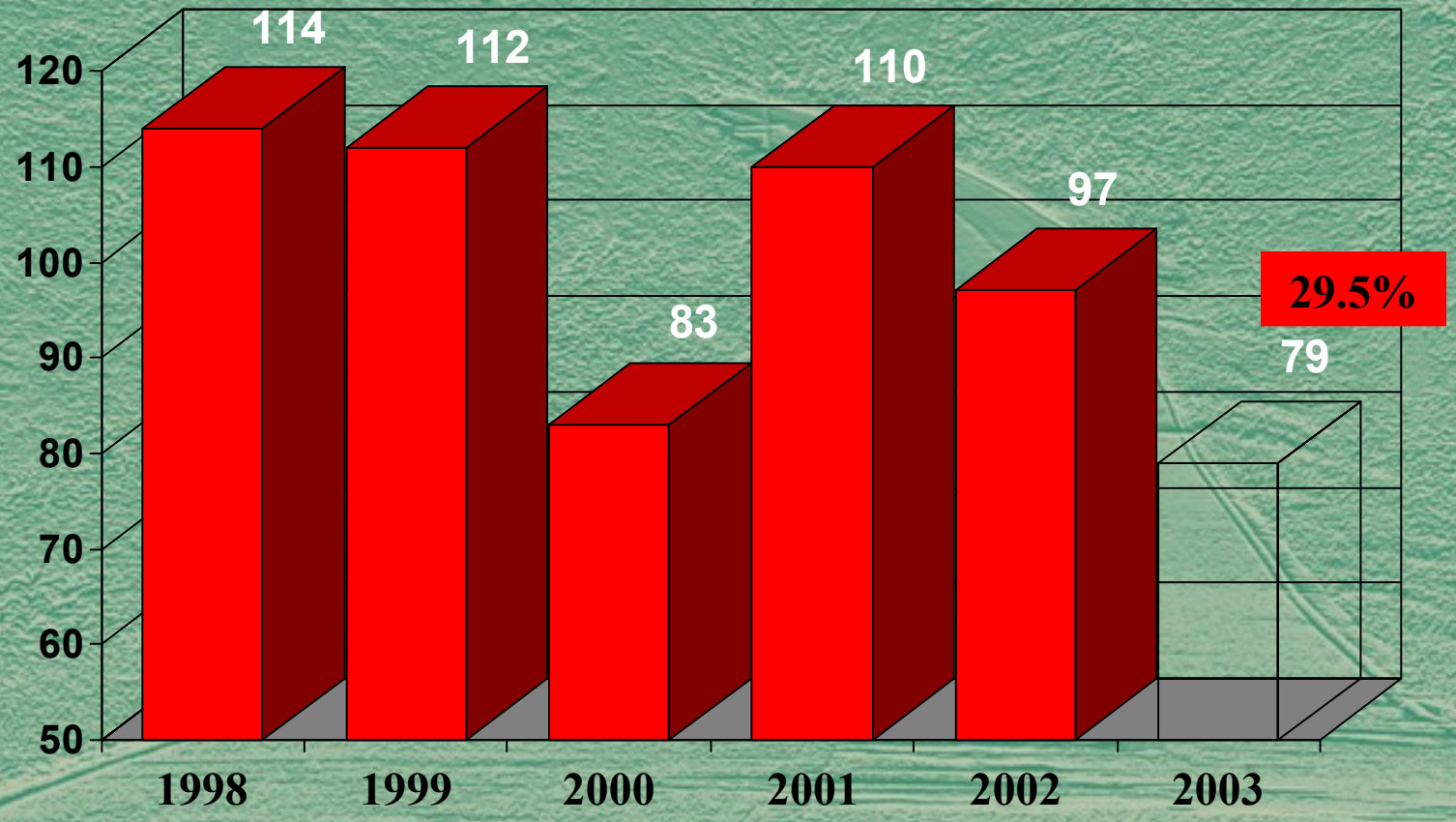
Fatalities in Collisions Involving Pedestrians



Source: SCDPS

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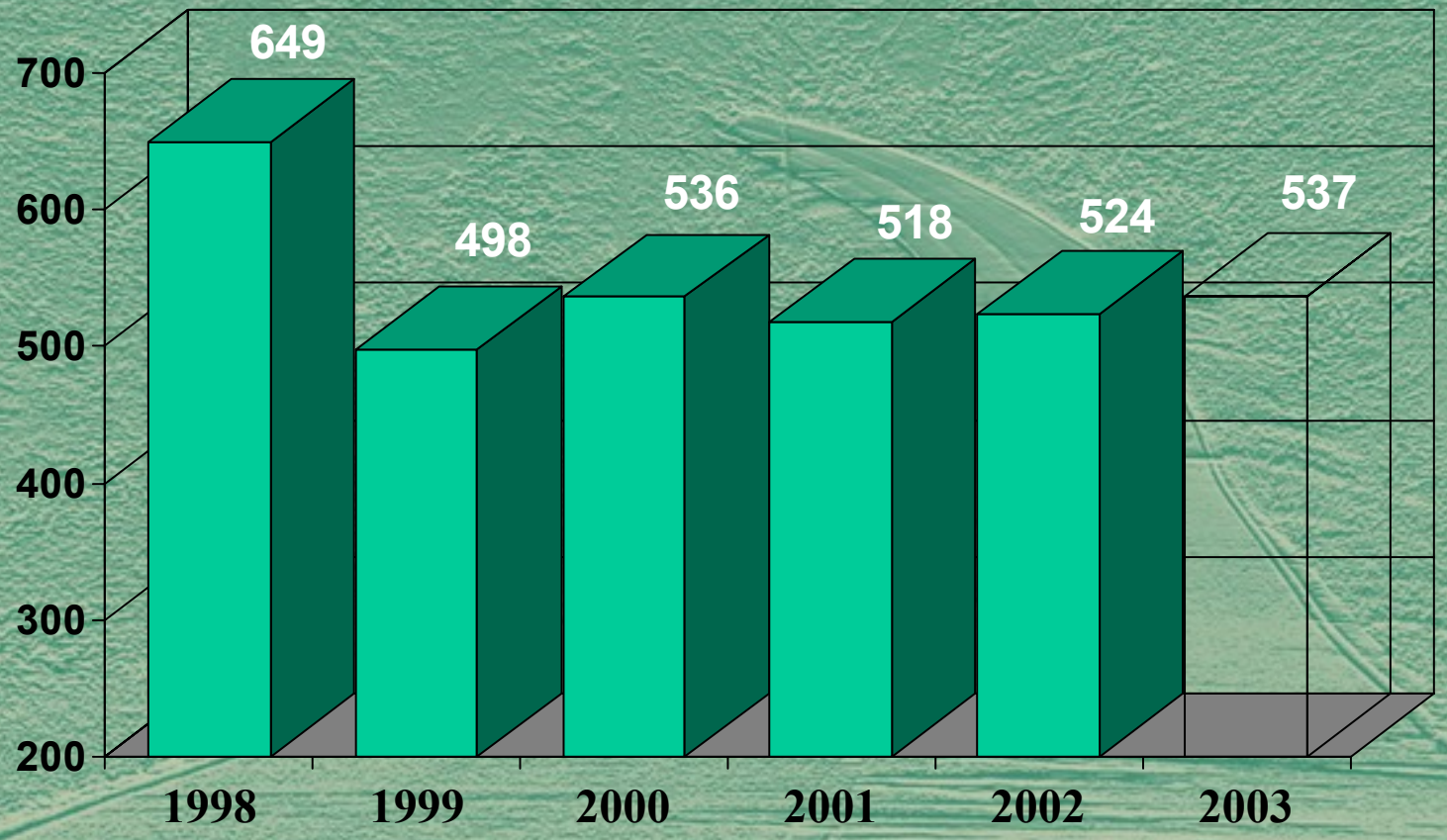
South Carolina Traffic Trends

Traffic Collisions Involving Pedalcyclists



Source: SCDPS

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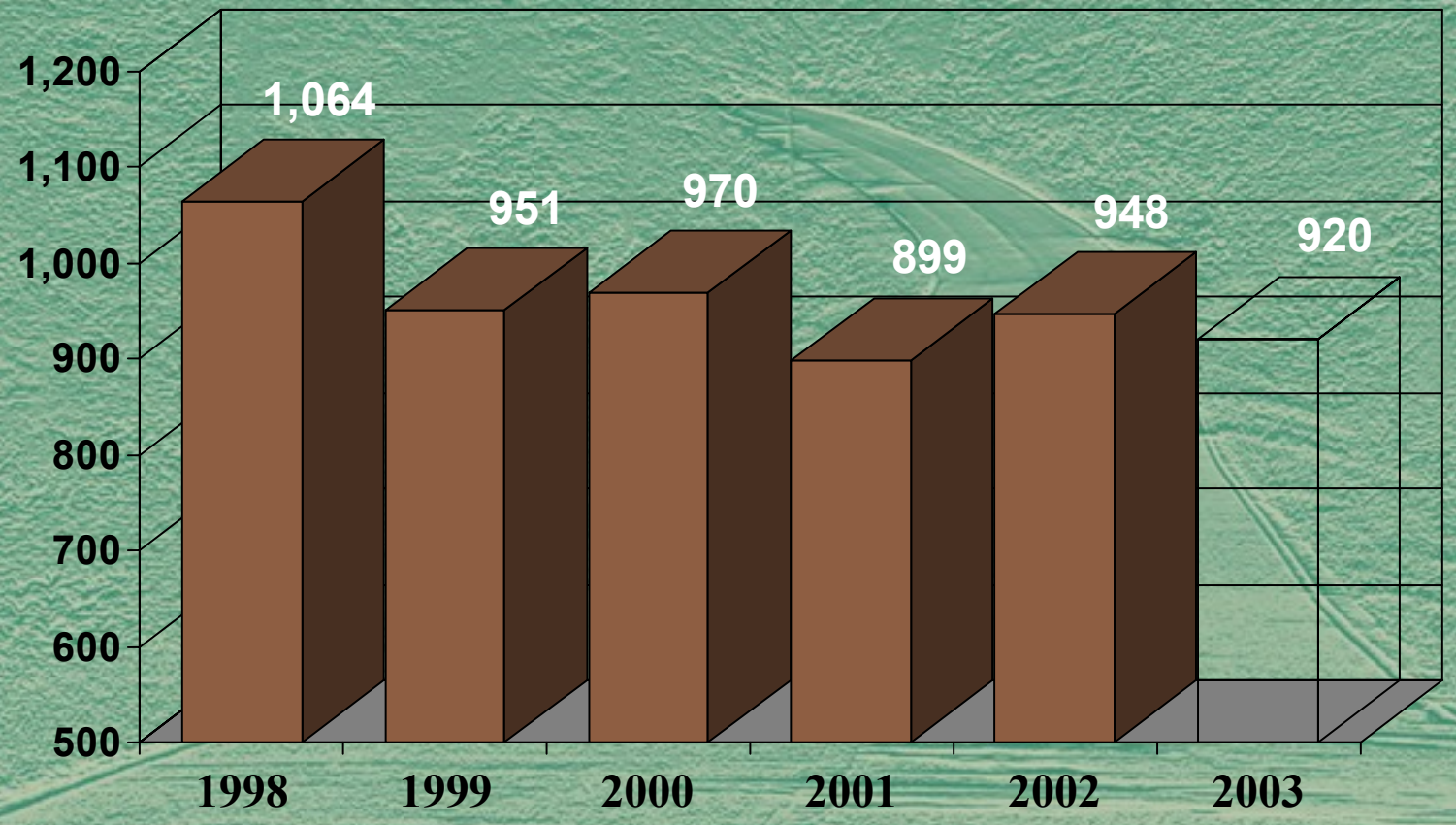
Non-Fatal Injuries in Collision Involving Pedestrians



Source: SCDPS

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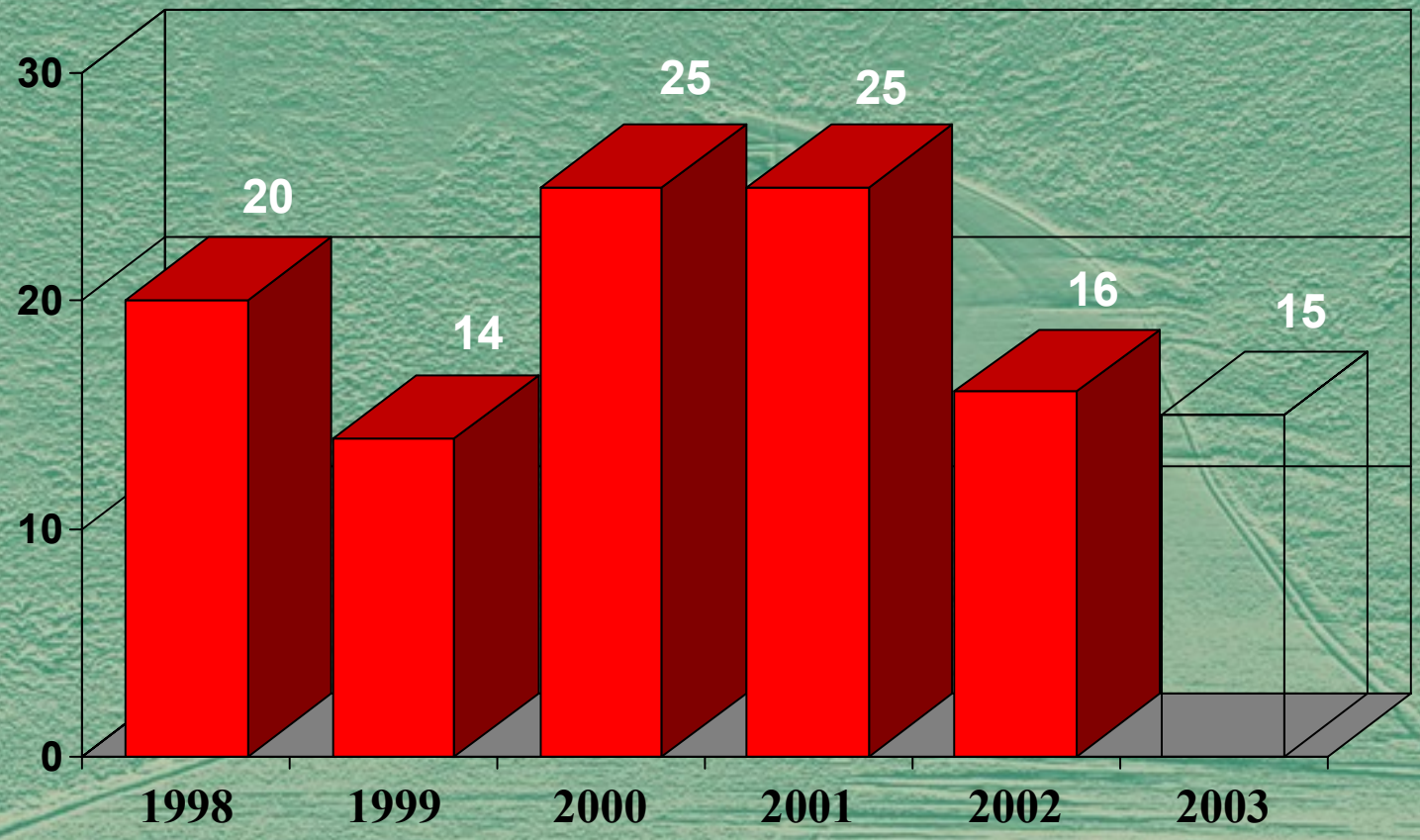
South Carolina Traffic Trends

Fatalities in Collisions Involving Pedalcyclists



Source: SCDPS

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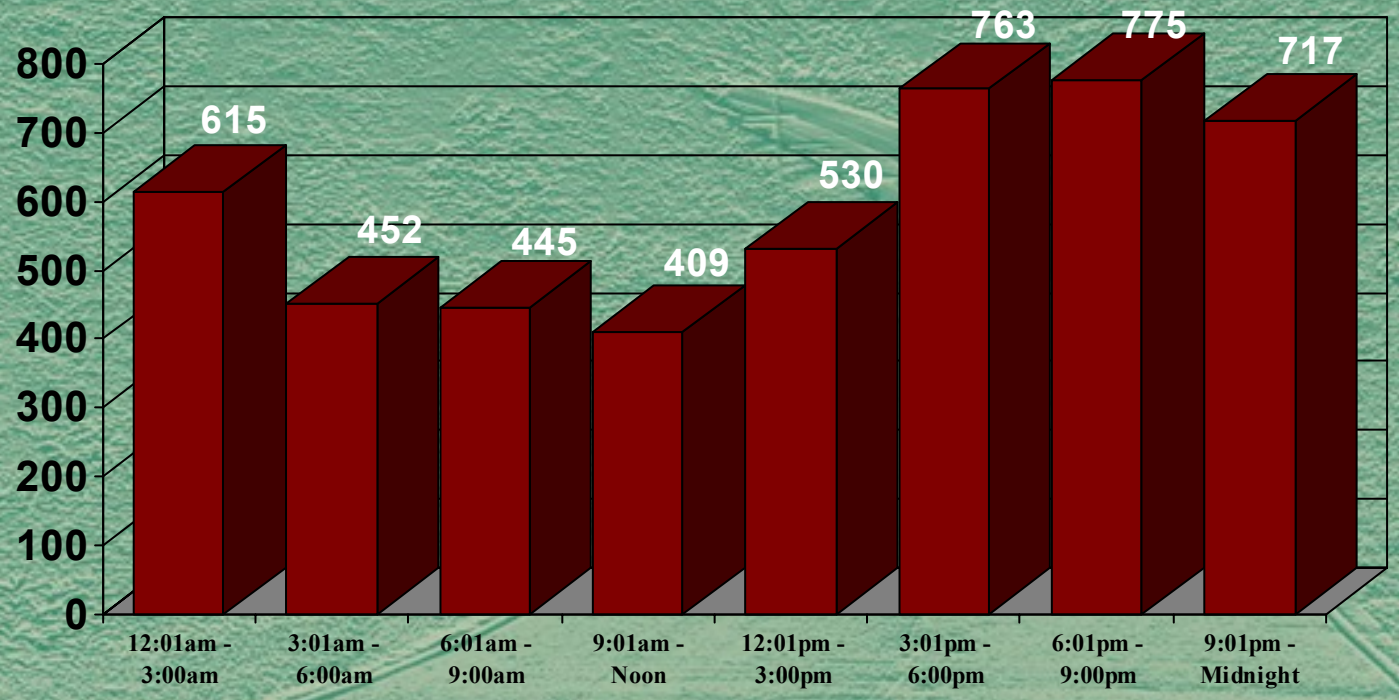
South Carolina Traffic Trends

Fatal Traffic Crashes by Time of Day

1999-2003



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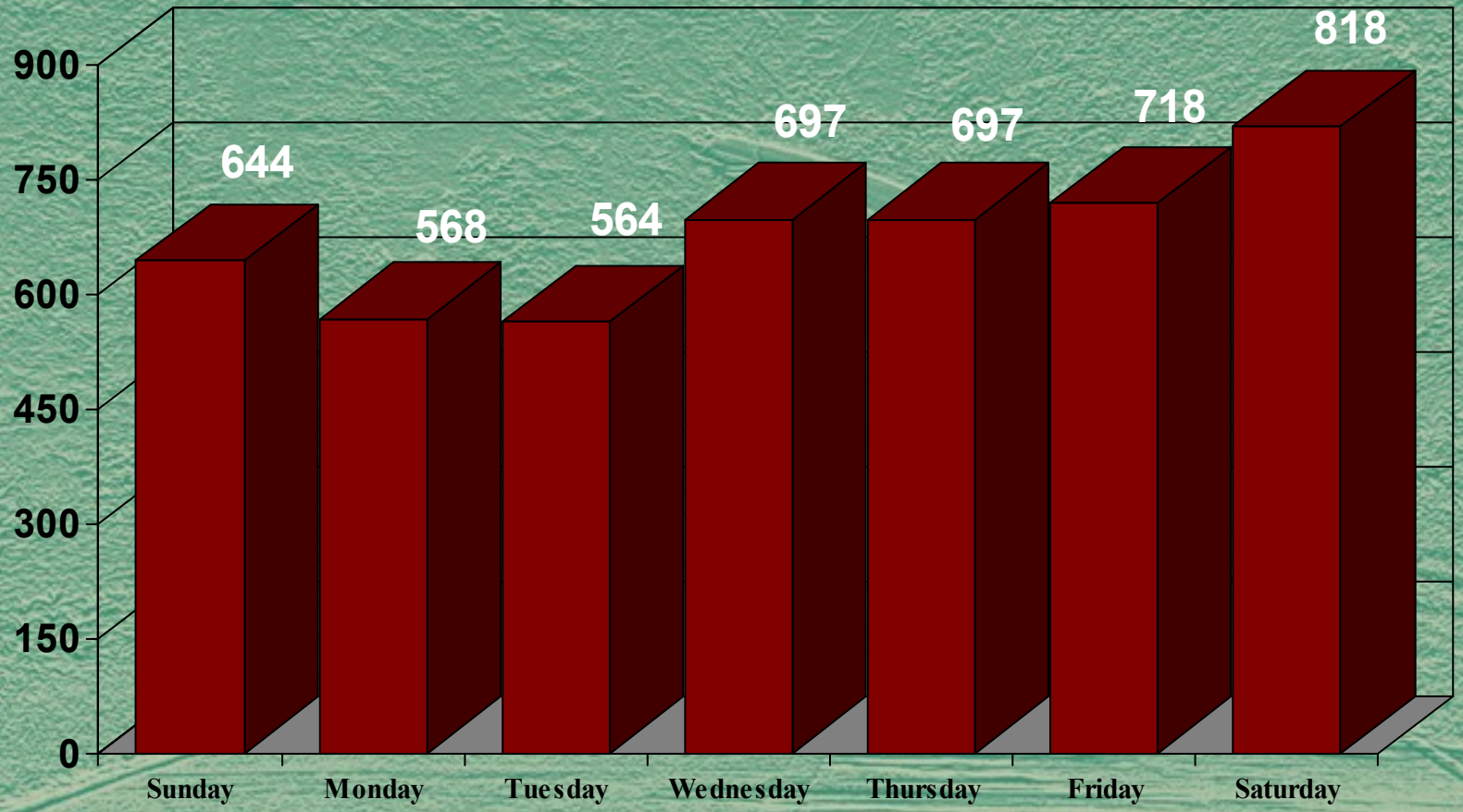
Fatal Traffic Crashes by Day of Week

1999-2003



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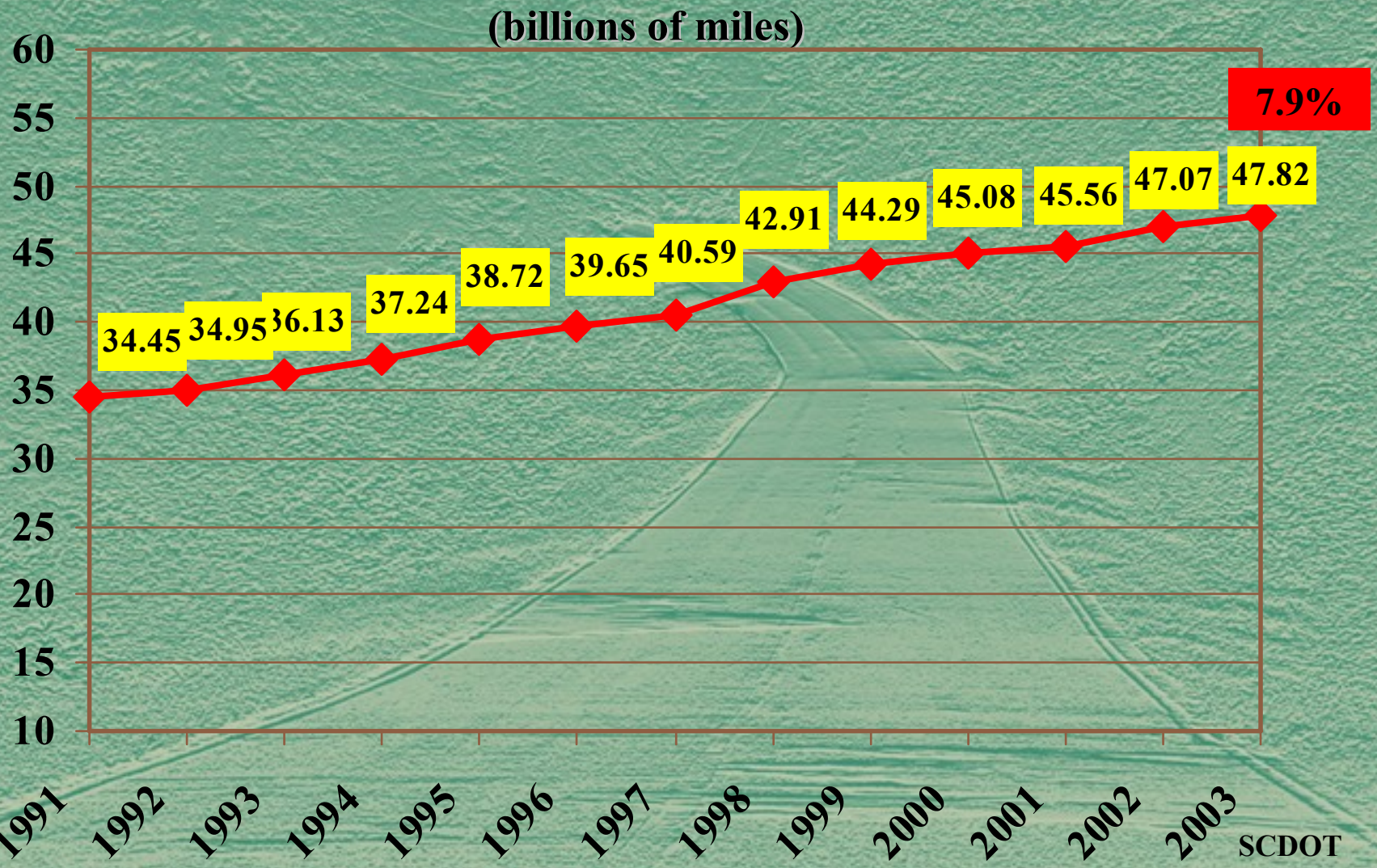
Vehicle Miles of Travel



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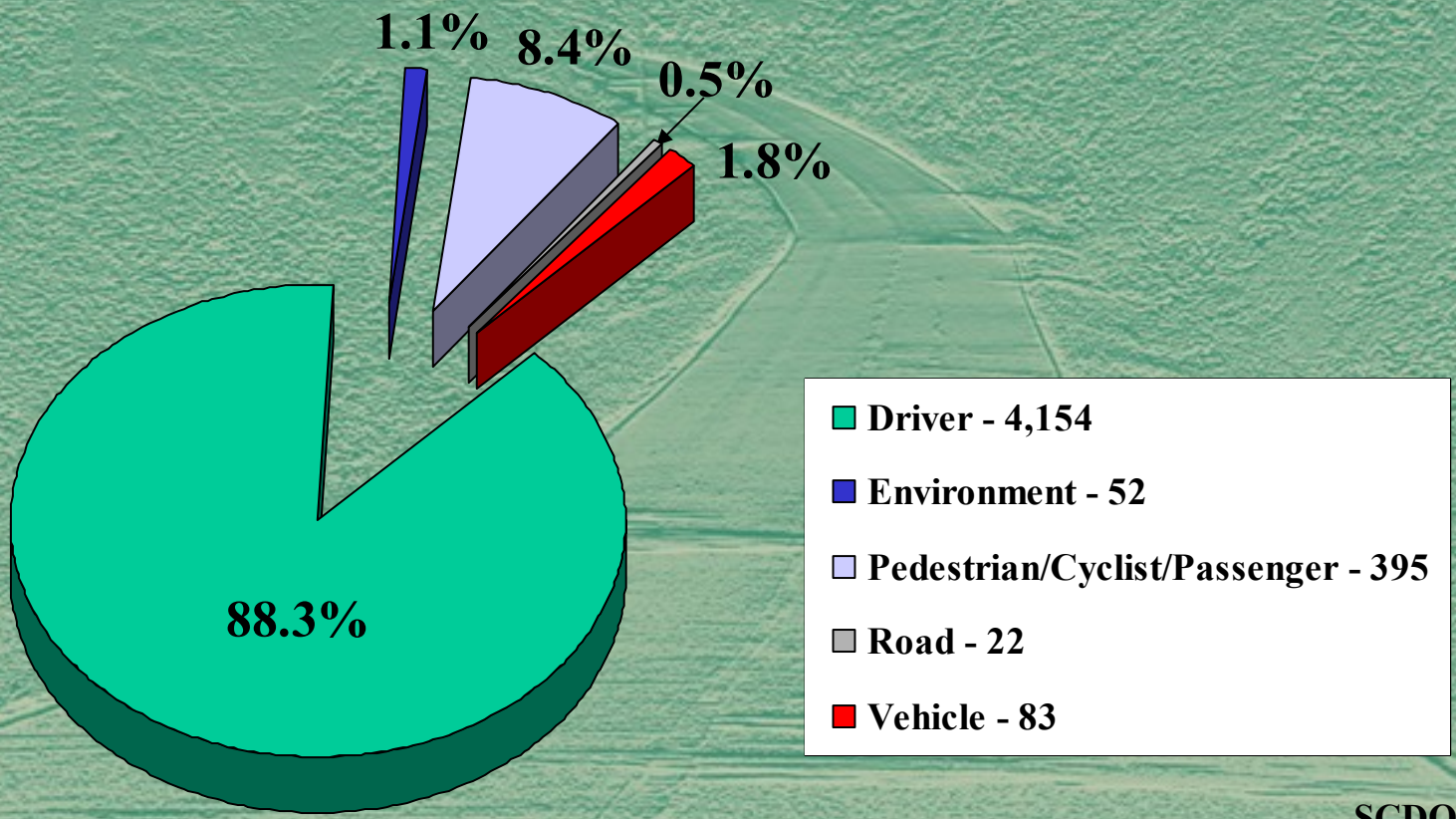
Fatality Crash Probable Cause Categories
1999-2003



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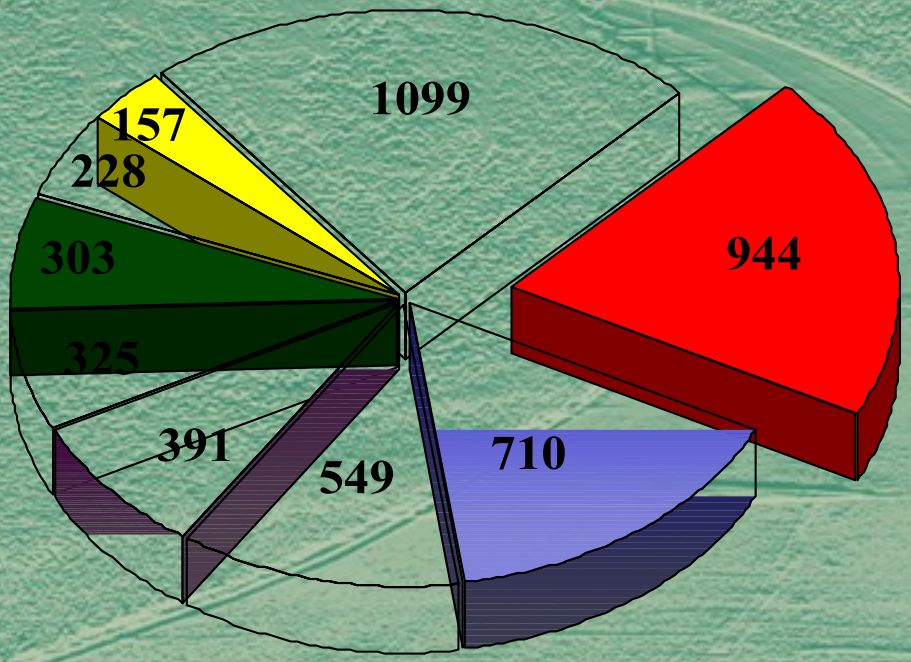
Leading Driver Probable Causes
Fatal Crashes: 1999-2003



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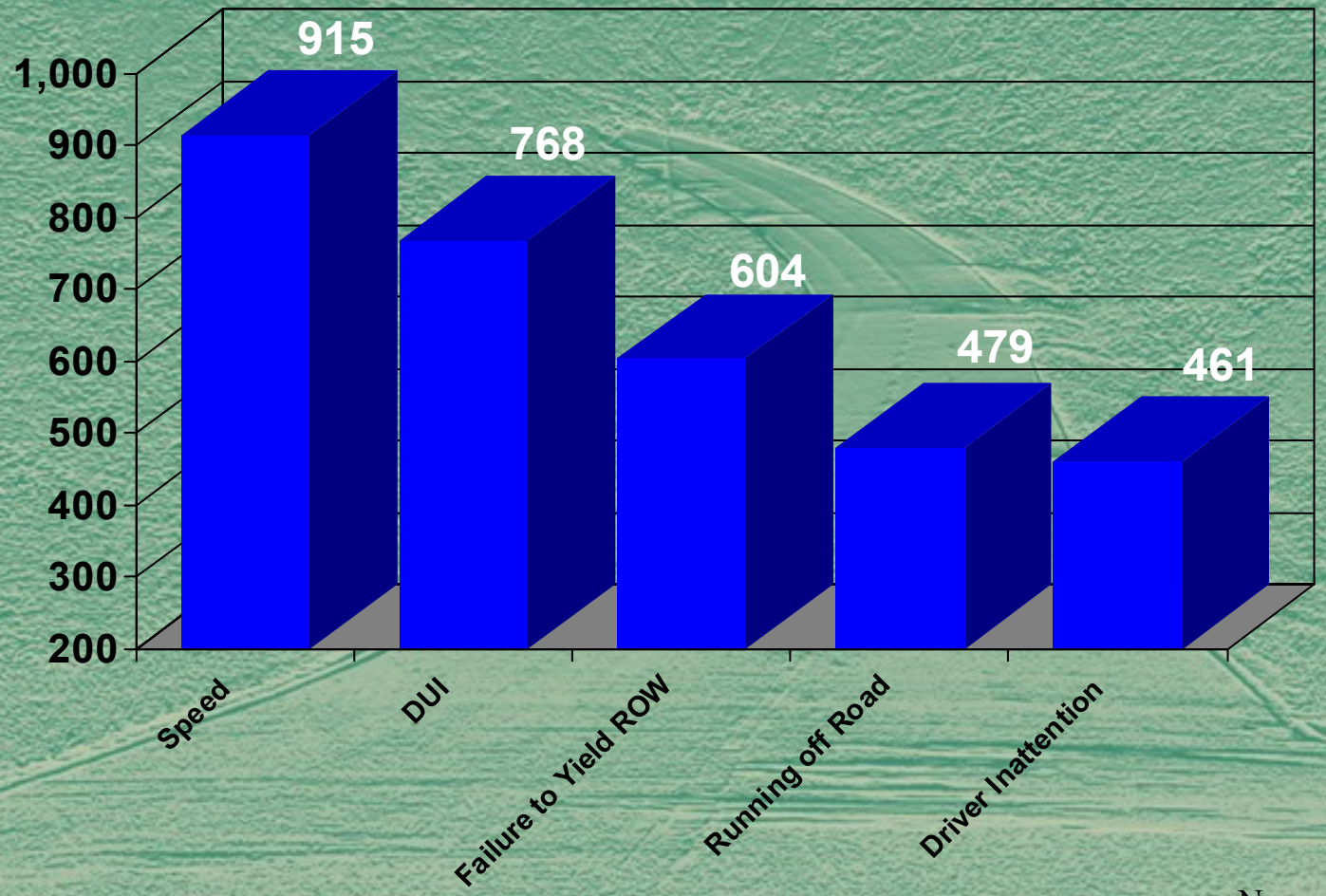
Traffic Fatalities - leading Probable Causes 2003



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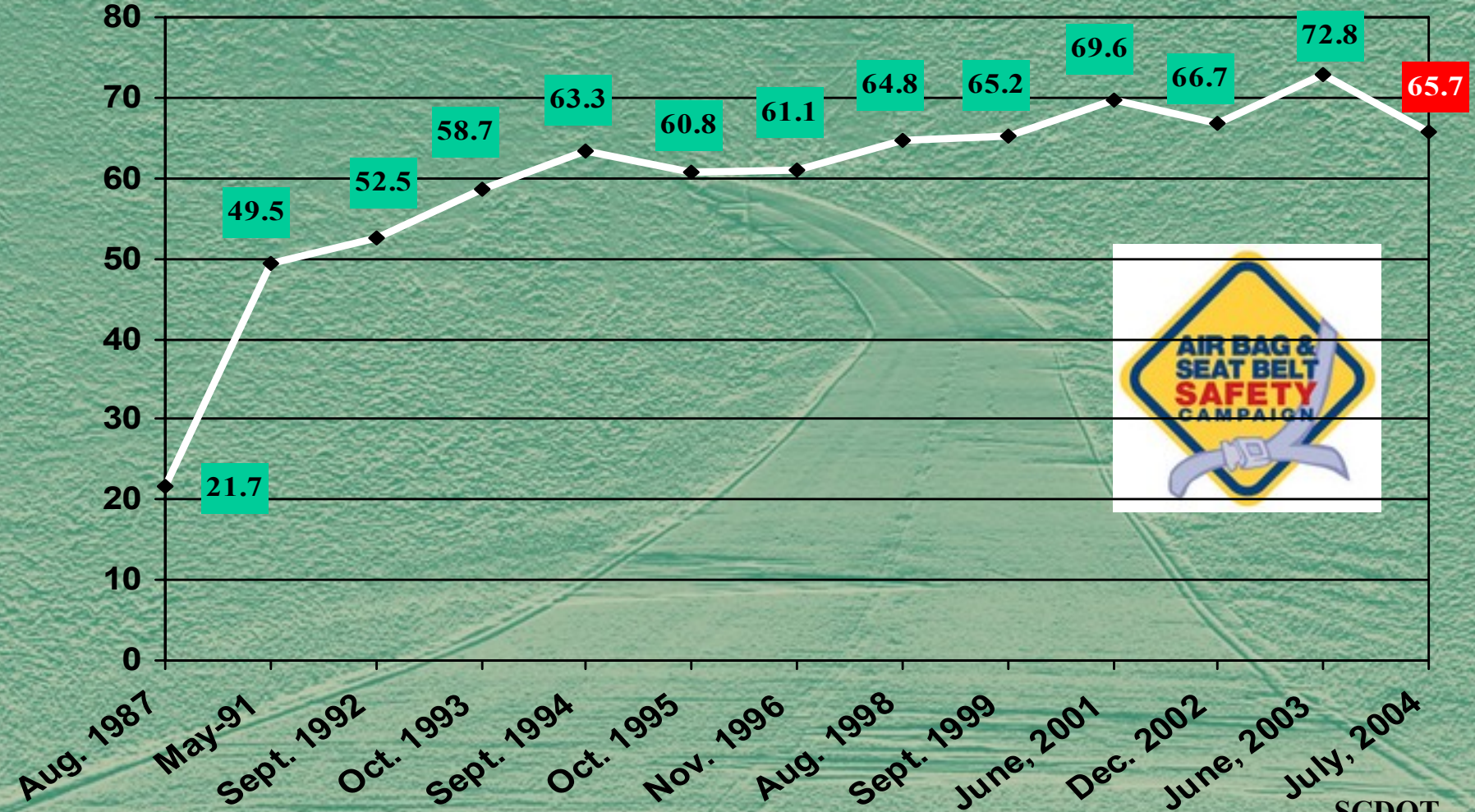
Restraint Utilization



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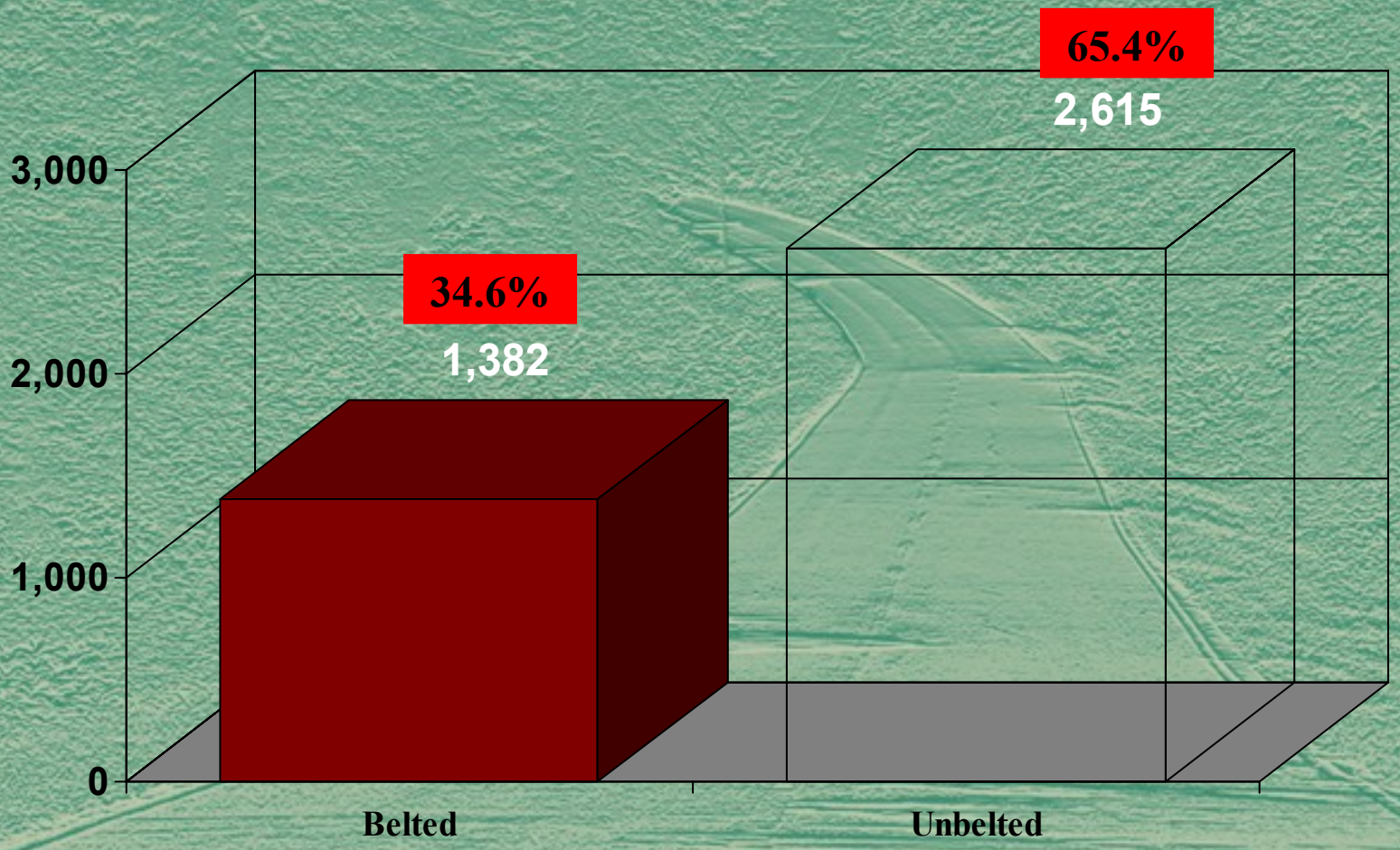
Belt Usage of Vehicle Occupants Killed in Traffic Crashes
(excludes occupants with unknown belt usage)
1999-2003



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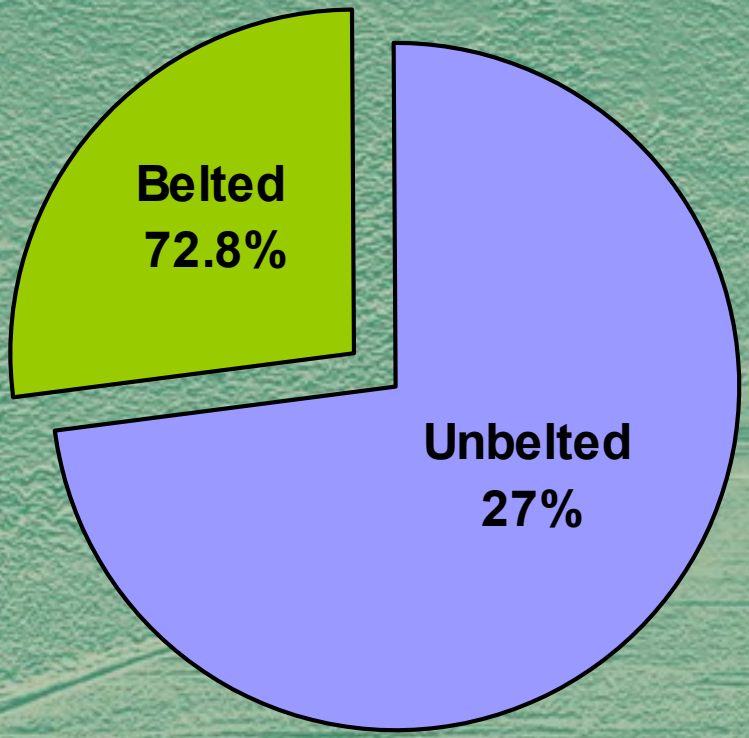
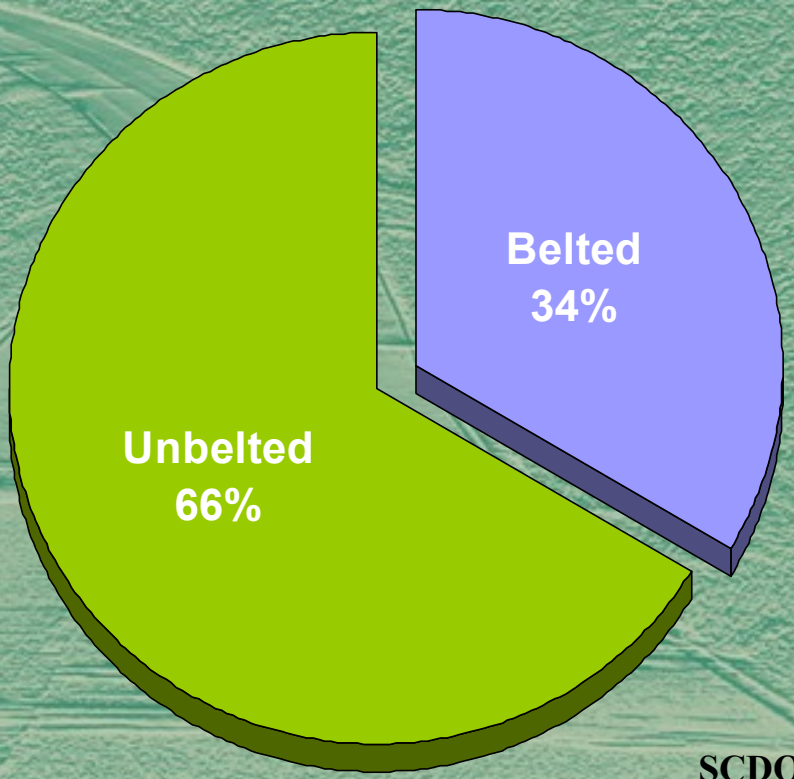
Observed Belt Usage vs. Belt Usage for Fatalities in South Carolina 2003

Observed Usage



Fatality Usage



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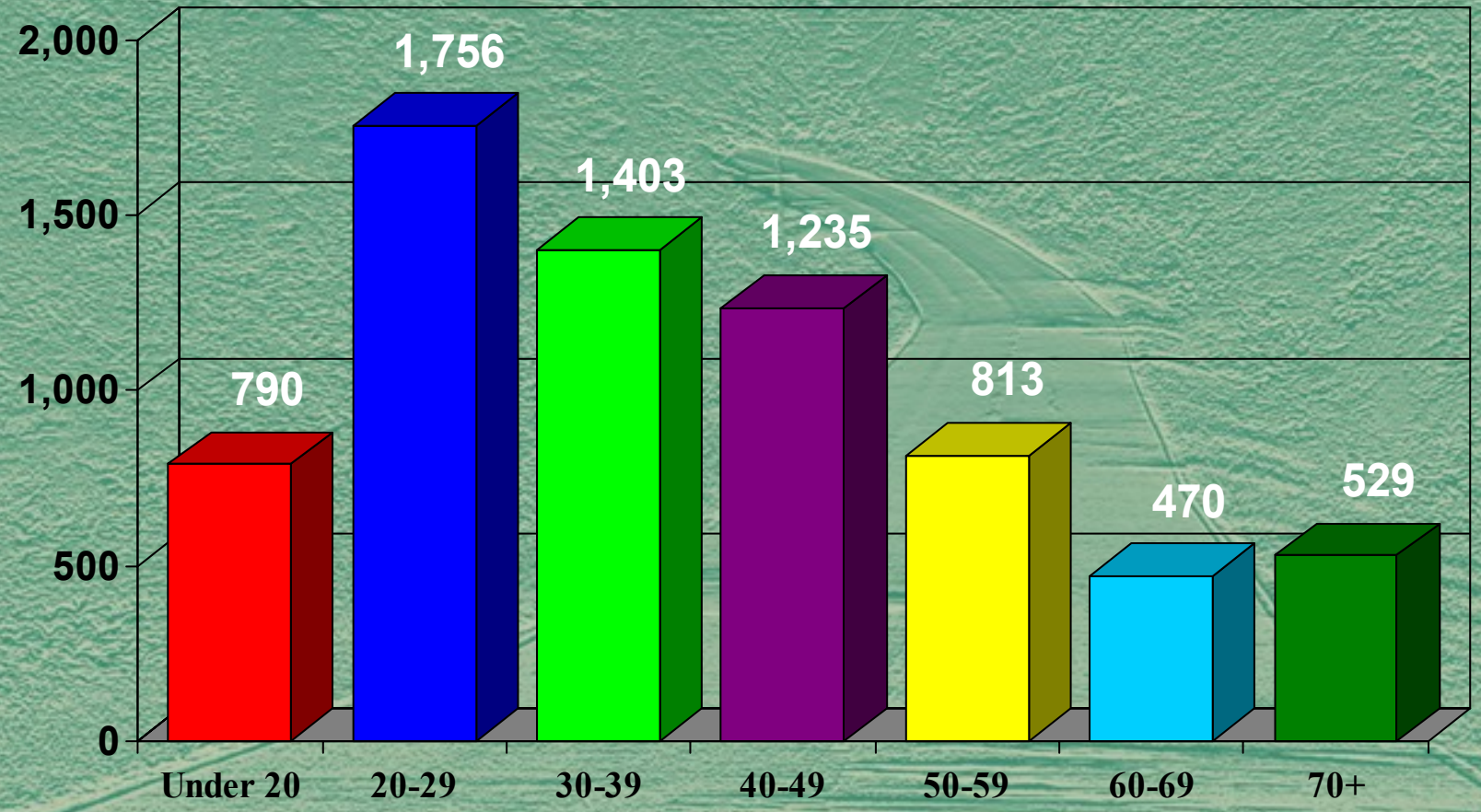
Leading Counties for Fatalities 1999-2003

- **Horry ……... 343**
- **Greenville …… 342**
- **Spartanburg ……... 282**
- **Richland …….. 266**
- **Anderson …….. 242**
- **Charleston ……... 224**

South Carolina Traffic Trends

Age of Drivers in Fatal Traffic Crashes

1999-2003



Graph does not include 222 drivers with unspecified ages.
Excludes pedestrians

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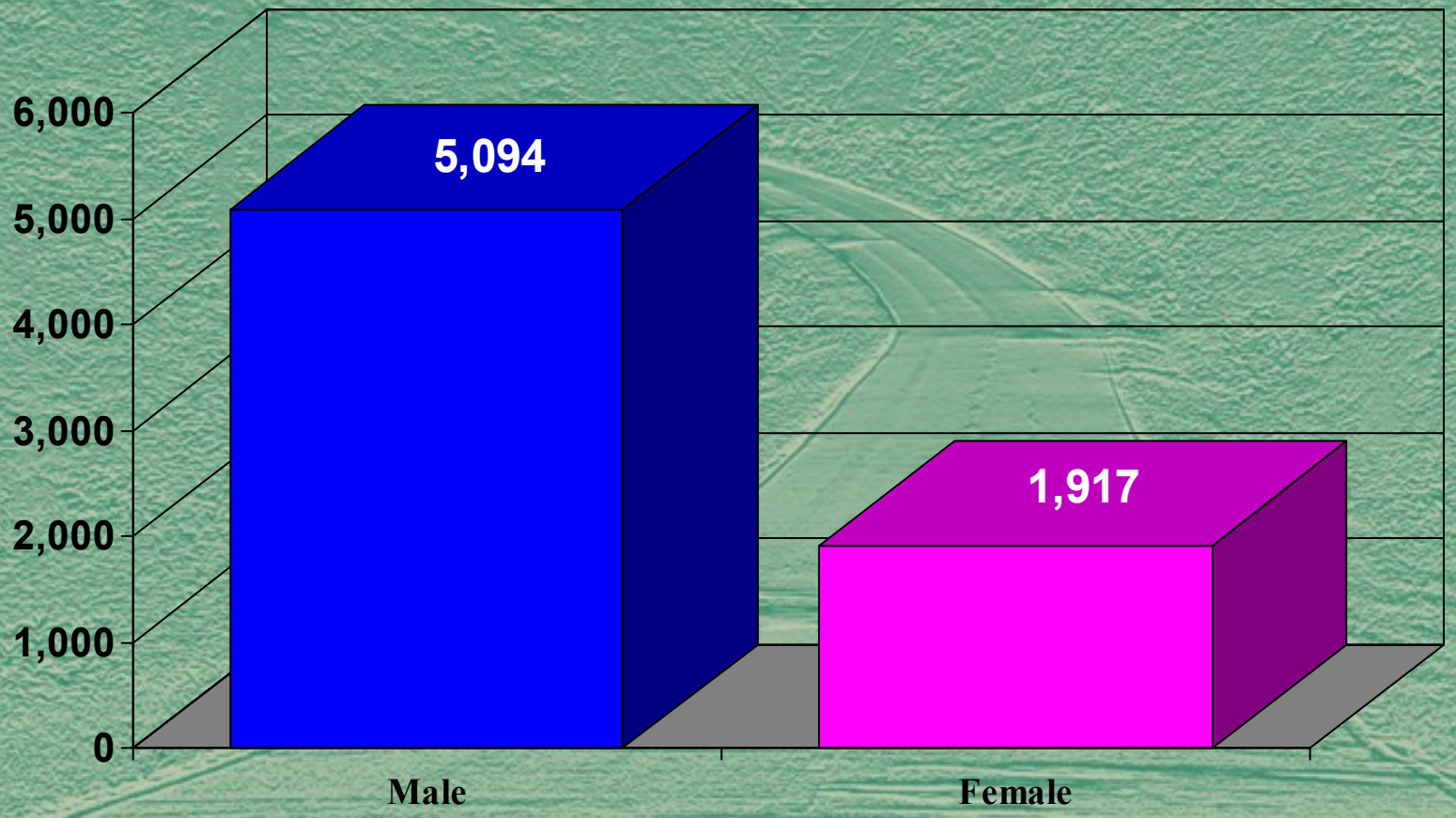
South Carolina Traffic Trends

Sex of Drivers in Fatal Crashes
1999-2003



Excludes Pedestrians. All other vehicle operators included.

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Economic Loss Valuations

(per incident)

Property Damage Only	$ 6,200
Possible Injury	$ 9,800
Non-incapacitating Injury	$ 17,500
Incapacitating Injury	$ 52,100
Fatality	$1,090,000
Average Cost Per Crash	$ 21,155

South Carolina Total Economic Loss in 2002: $2,303,000.00

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Economic Loss if You had to Pay

Cost Per Person	**$**	**555**
Cost Per Family of Four	**$**	**2,220**

You ARE paying the bill !!!

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Young Driver Crashes In South Carolina

Definition: Any Crash Involving One or More Drivers Age 15 - 18

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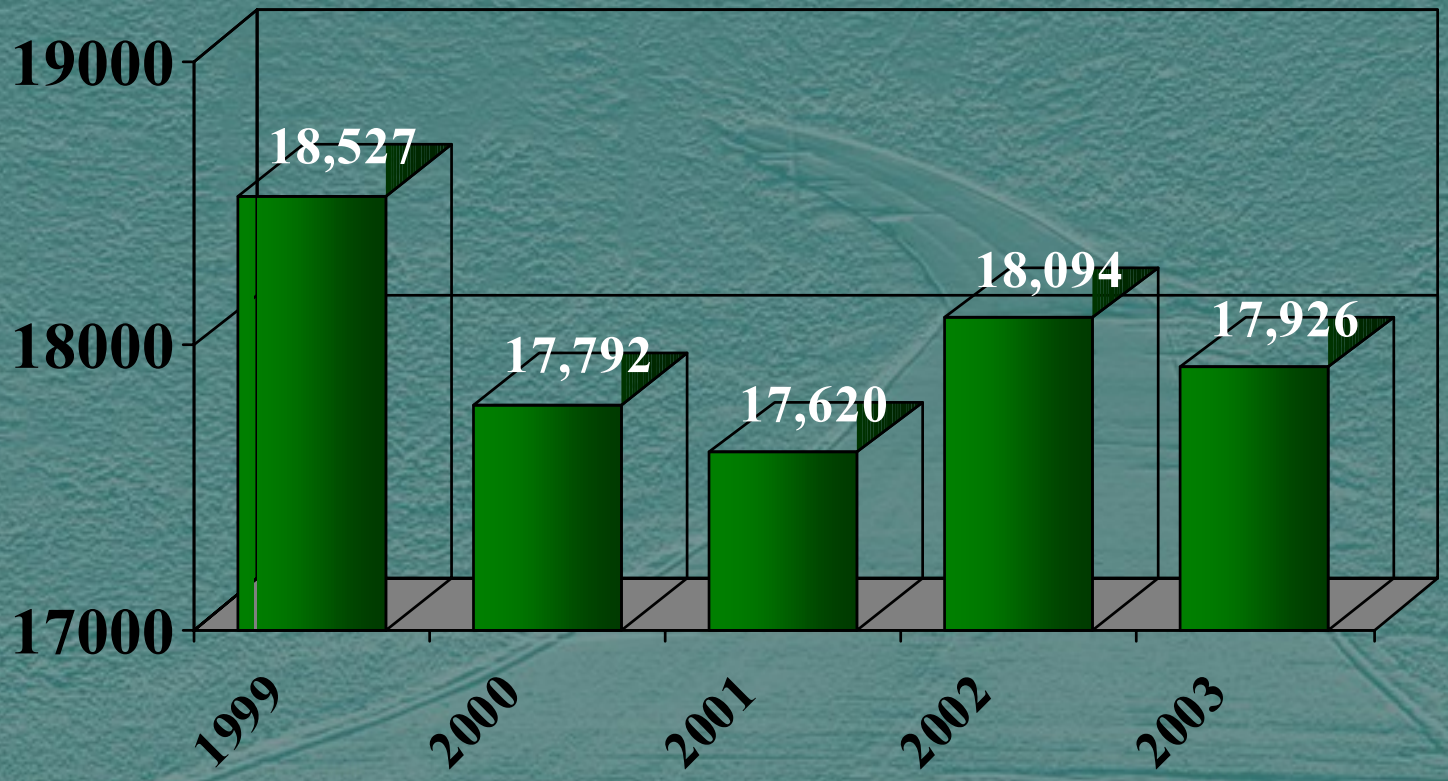
Young Driver Crashes
1999 - 2003



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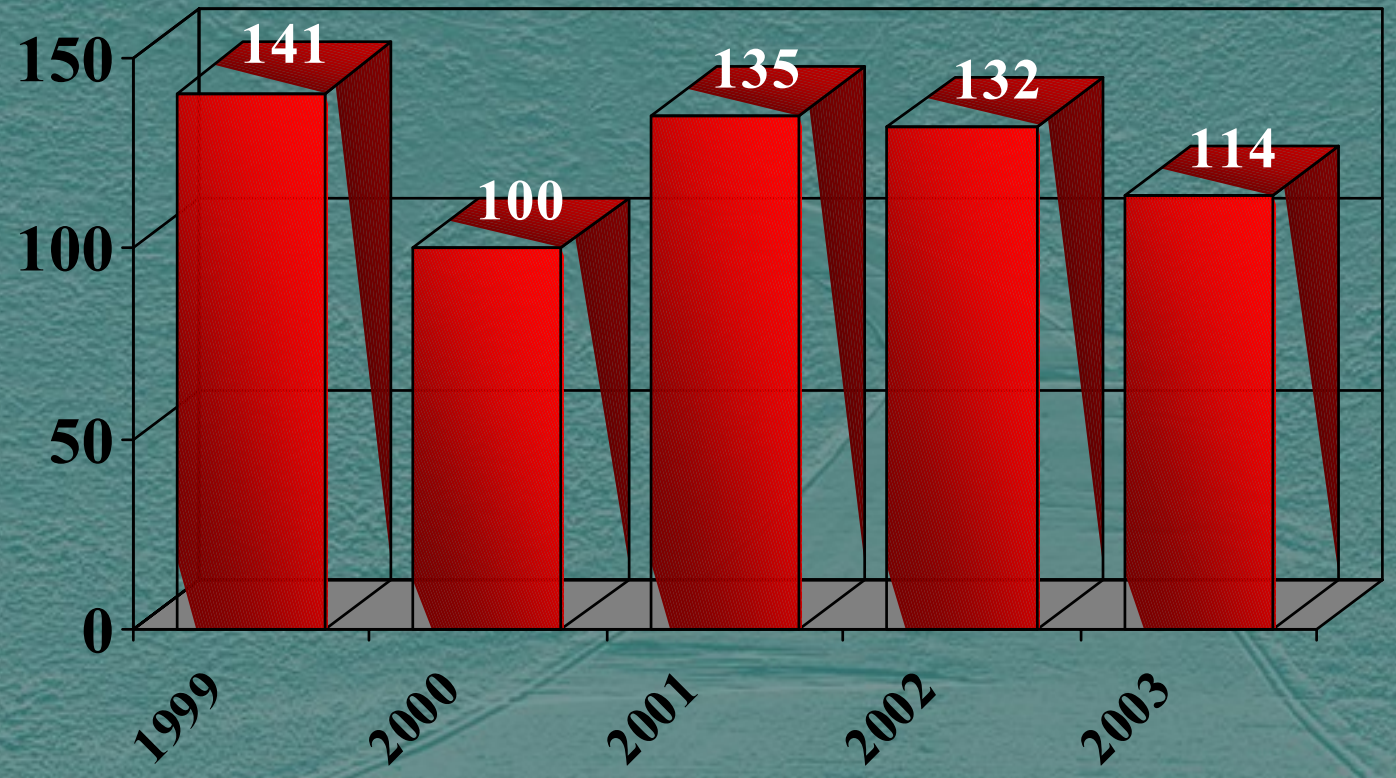
Young Driver Crash Fatalities
1999 - 2003



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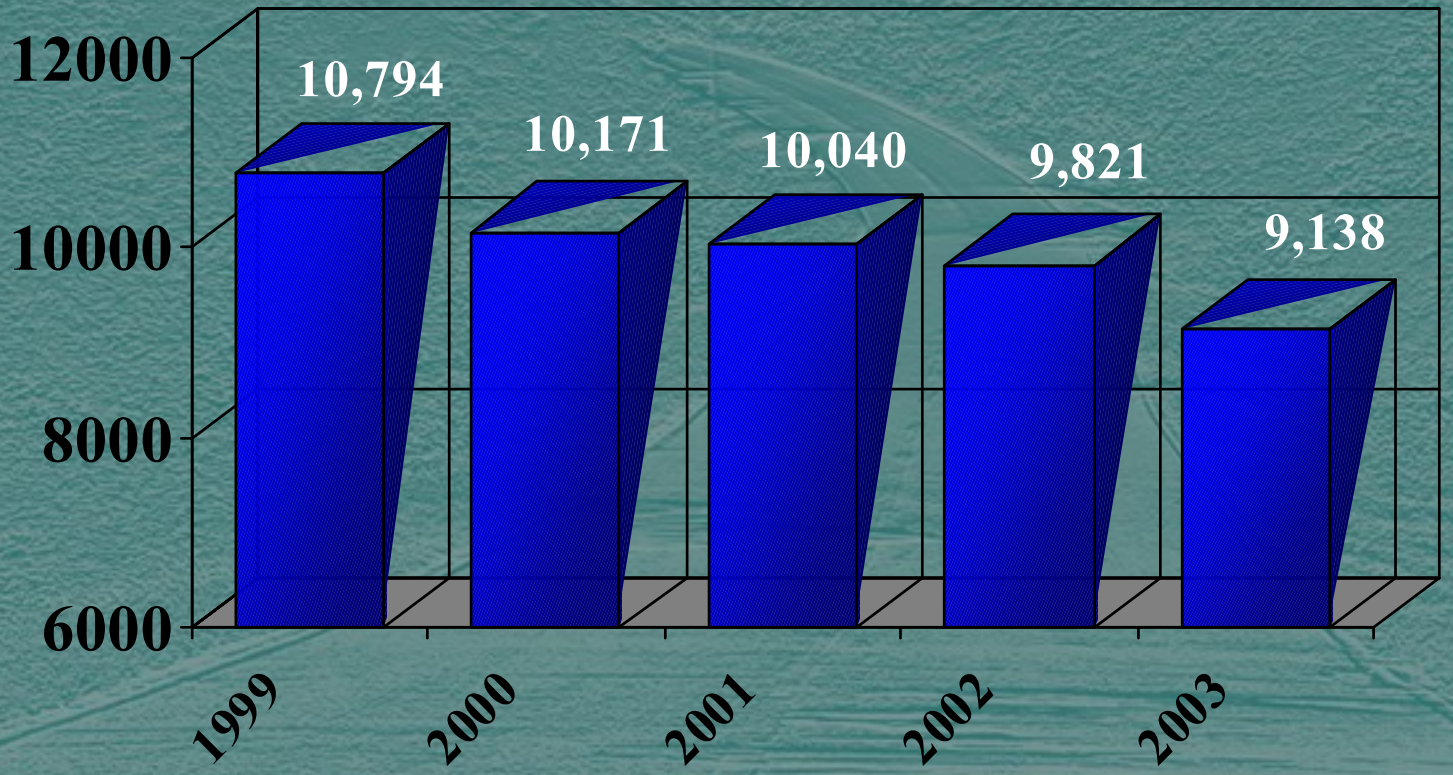
Young Driver Crash Injuries
1999 - 2003



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Economic Loss Resulting From South Carolina Young Driver 1998-2002

Property Damage Only Crashes	$ 736,600,000
Young Driver Crash Fatalities	$ 885,600,000
Pedestrian Crash Injuries	$ 203,100,000

Total Economic Loss Due to Young Driver Crashes:

$1,825,300,000

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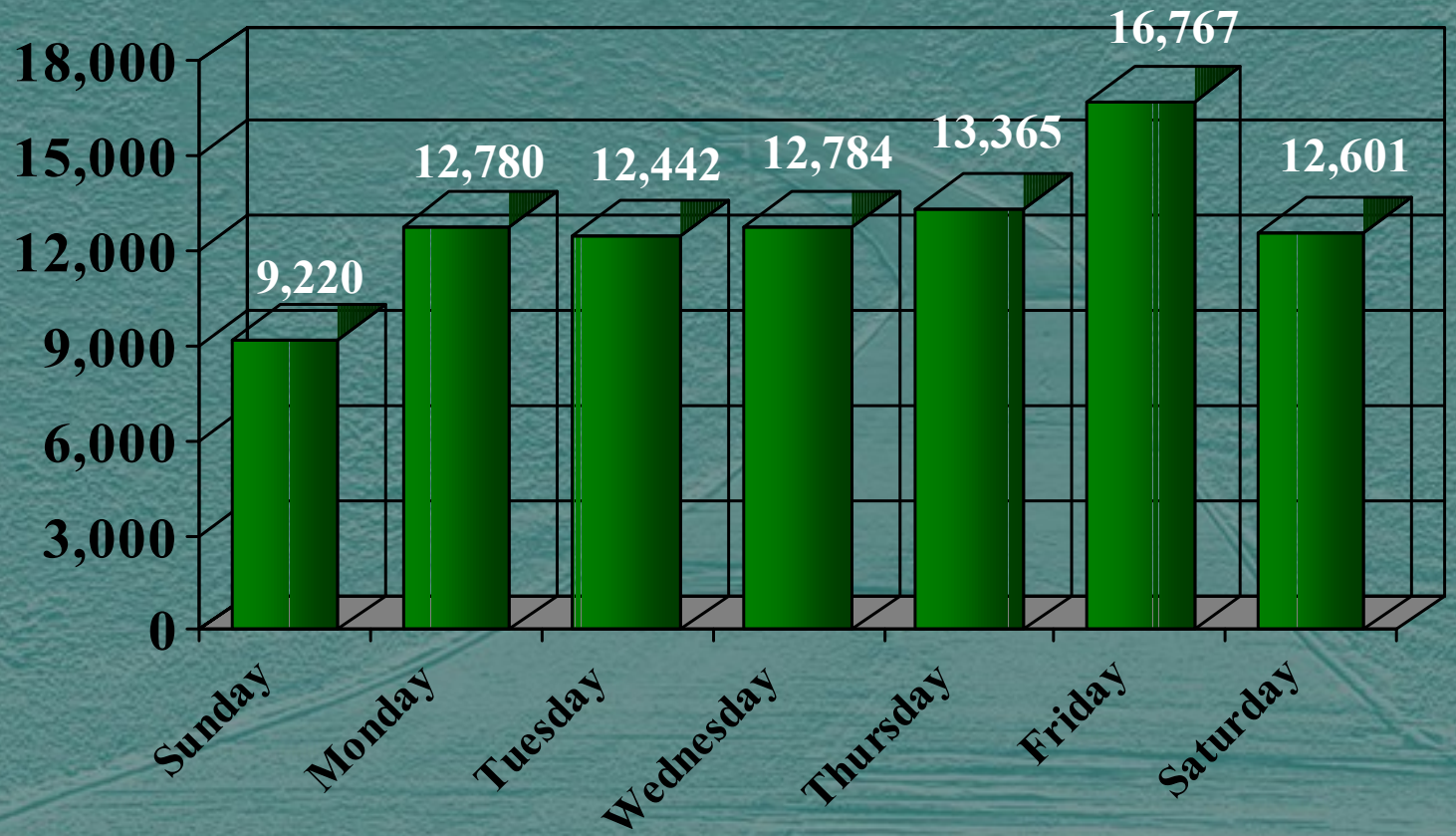
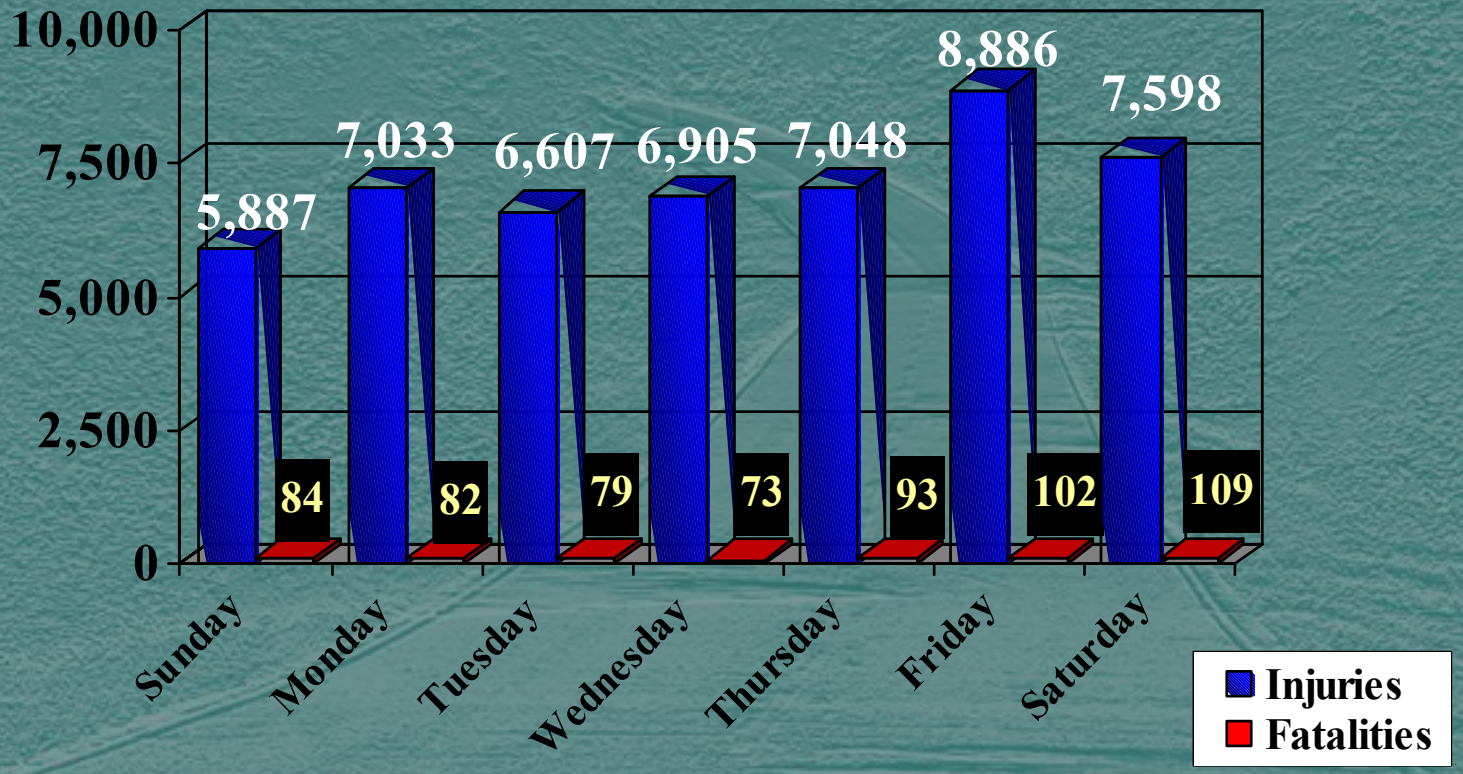
South Carolina Traffic Crashes
Involving Young Drivers
By Day of the Week – 1999 - 2003



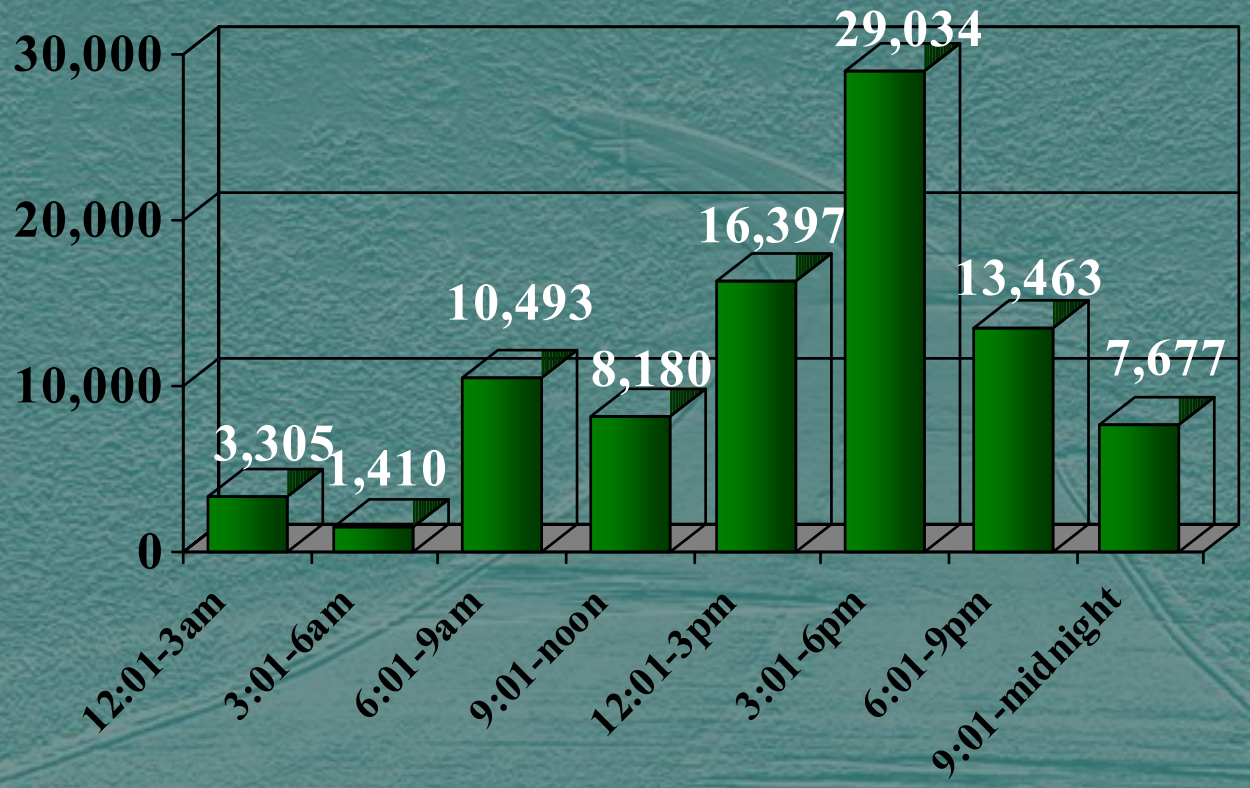
SCDOT
November 2004

South Carolina Traffic Injuries/Fatalities
Involving Young Drivers
By Day of the Week – 1999 - 2003



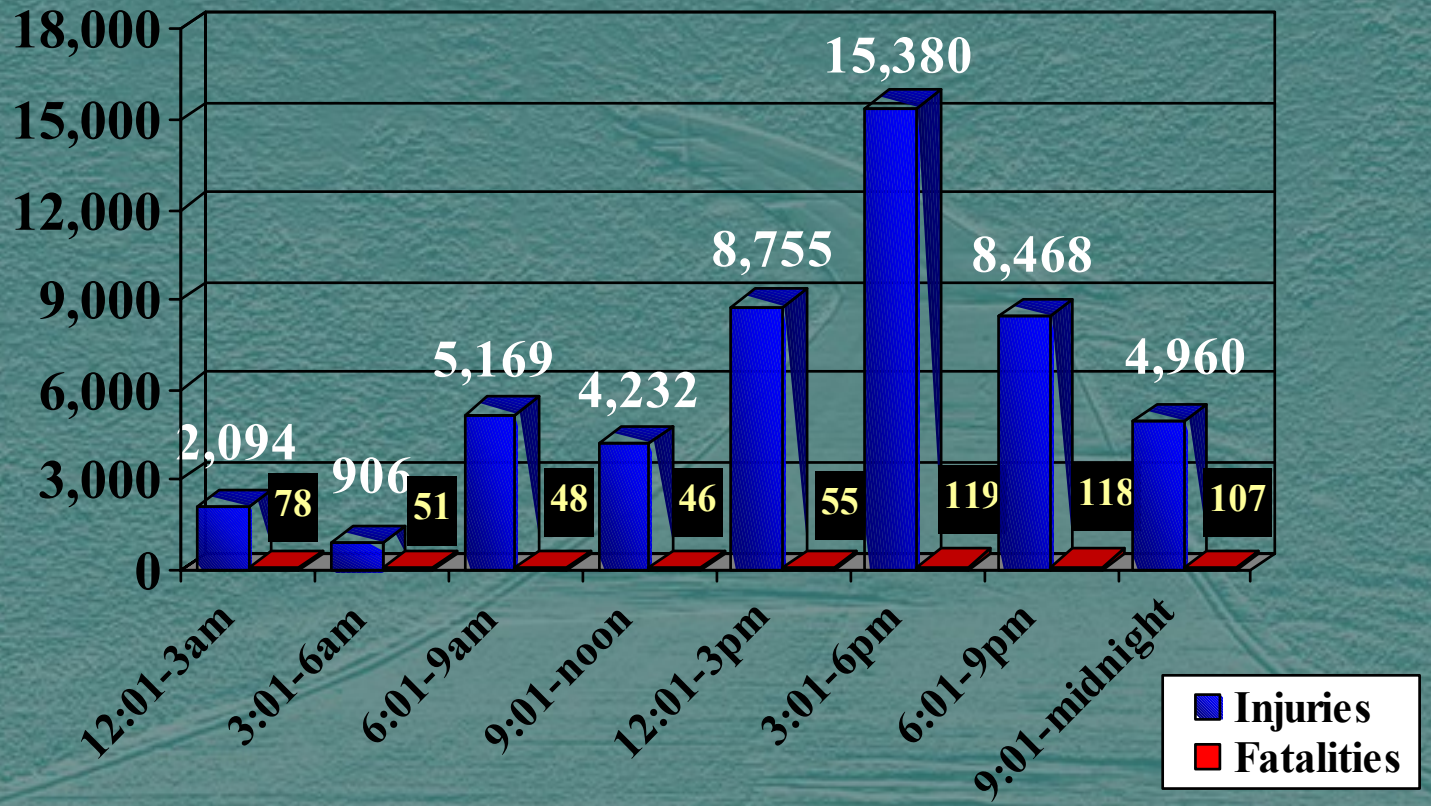
SCDOT
November 2004

South Carolina Traffic Crashes
Involving Young Drivers
By Time of Day – 1999 - 2003



SCDOT
November 2004

South Carolina Traffic Injuries/Fatalities
Crashes Involving Young Drivers
By Time of Day – 1999 - 2003



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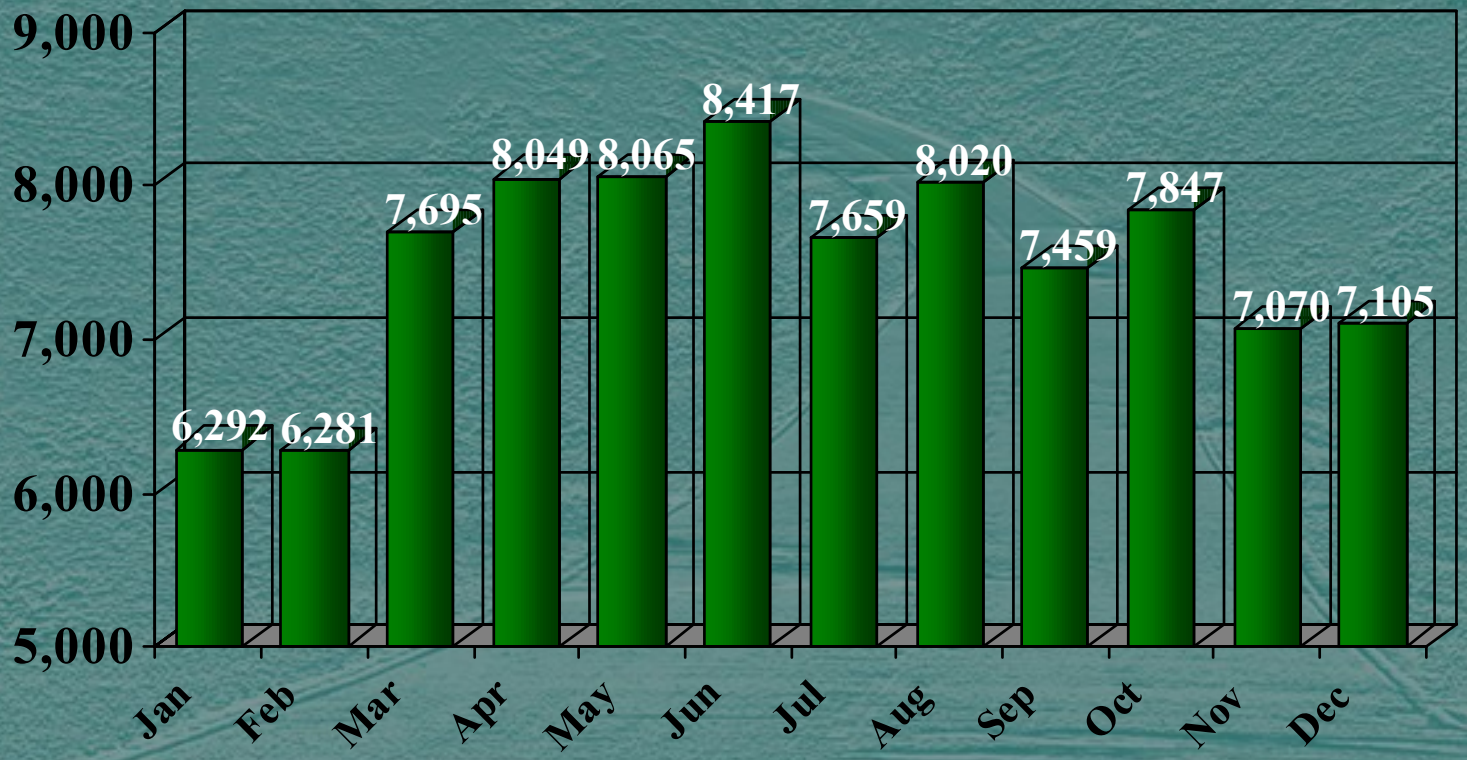
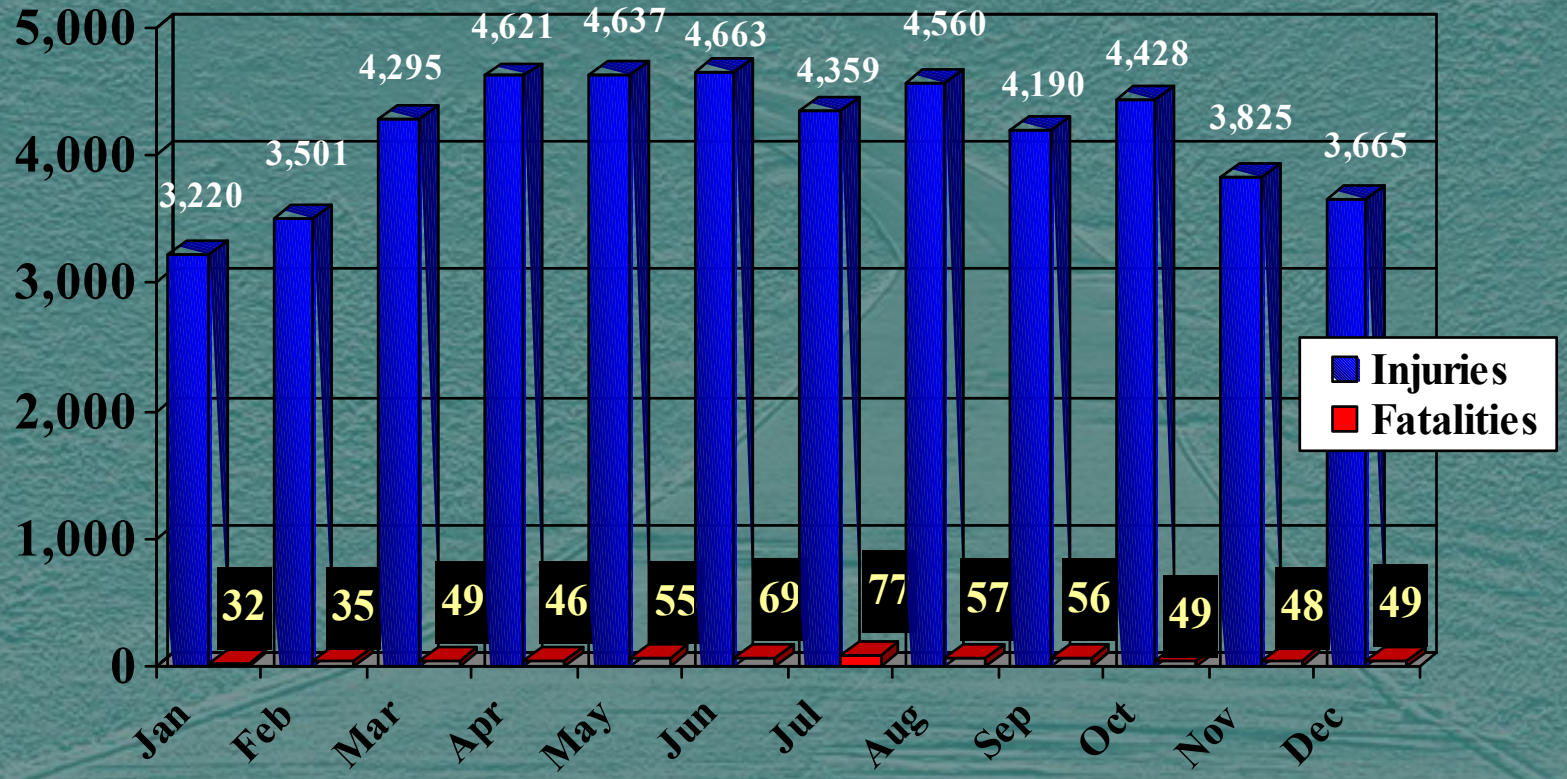
South Carolina Traffic Crashes
Involving Young Drivers
By Month – 1999 - 2003



SCDOT
November 2004

South Carolina Traffic Injuries/Fatalities
Involving Young Drivers
By Month – 1999 – 2003



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Young Driver Crashes
Leading Probable Causes
1999 - 2003

Driver Failed to Yield Right of Way	22,397
Driver Inattention	18,042
Driving too fast for Conditions/Speeding	16,647
Following Too Closely	7,132
Disregarding Sign or Signal	4,504

SCDOT
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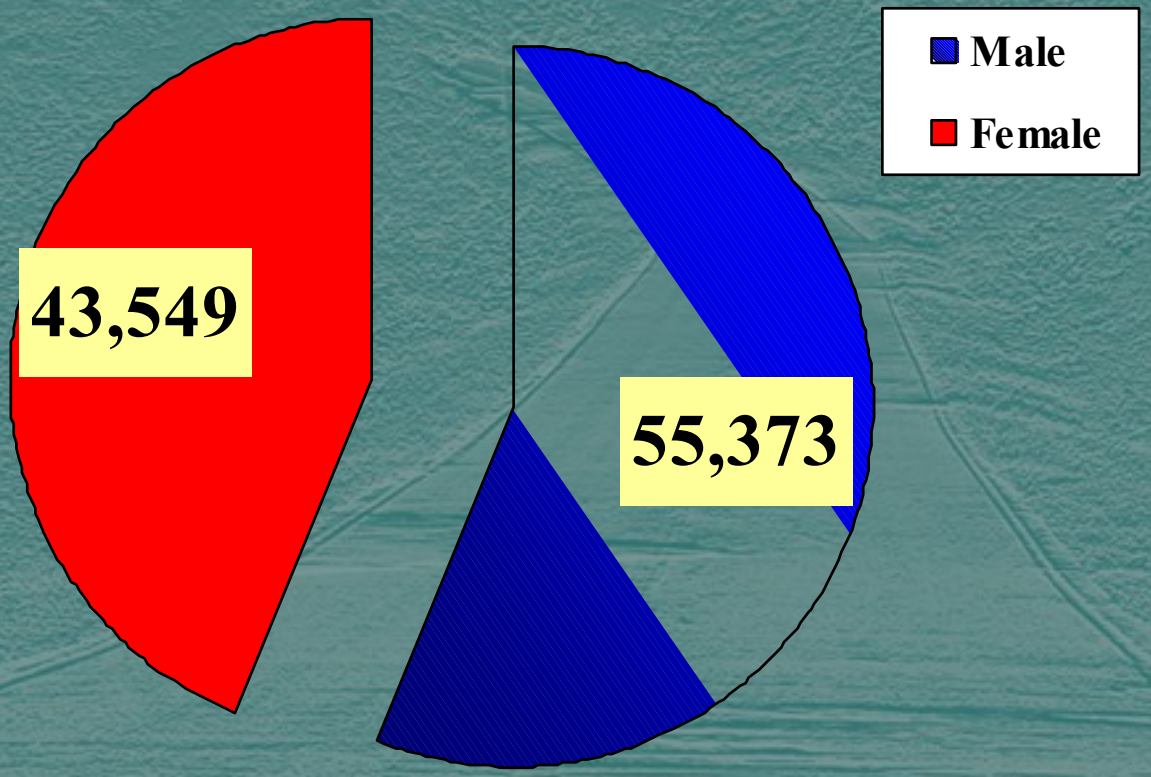
Young Driver Crash Fatalities
Leading Probable Causes
1999 - 2003

Driving too fast for Conditions/Speeding	174
Driver Failed to Yield Right of Way	80
Driving on Wrong Side of the Road	63
Driving under the Influence	60
Ran Off Road	41

Young Driver Involvement in South Carolina Traffic Crashes

By Sex - 1998-2002



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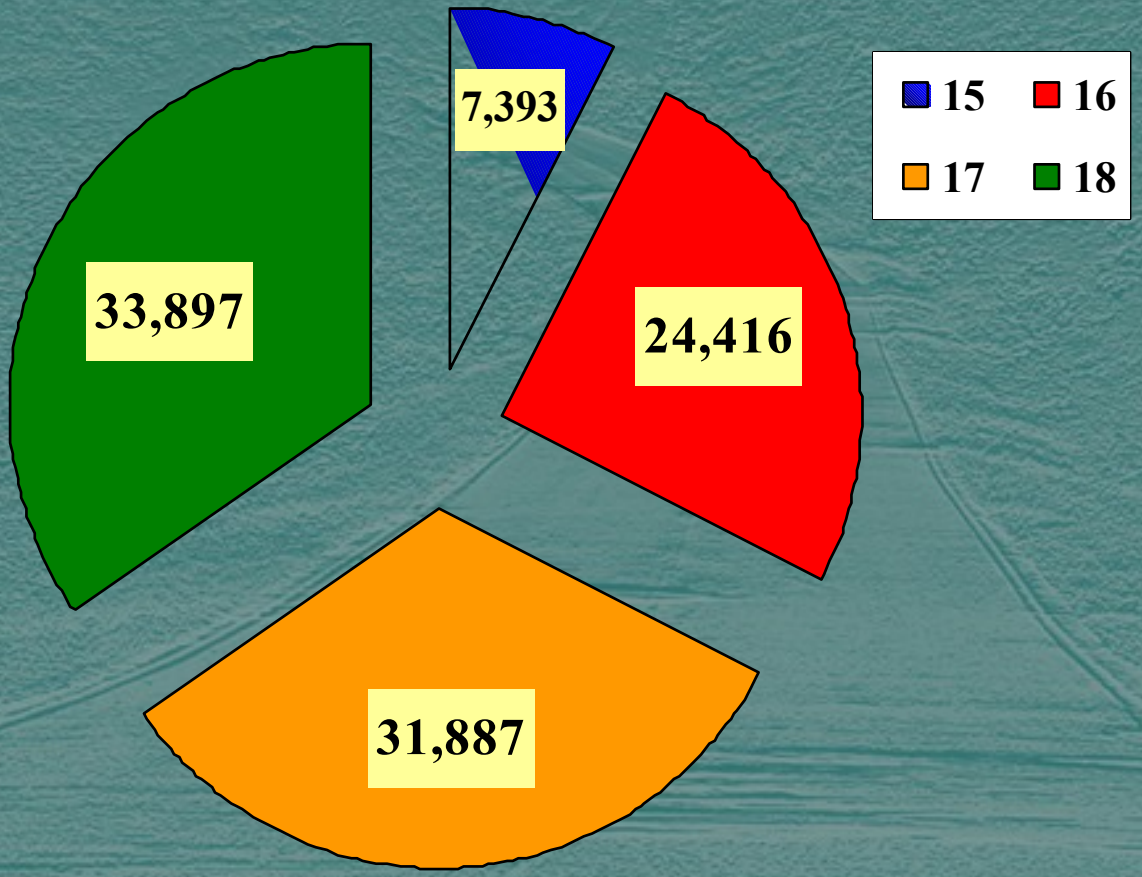
Young Driver Involvement in South Carolina Traffic Crashes By Age – 1999 - 2003



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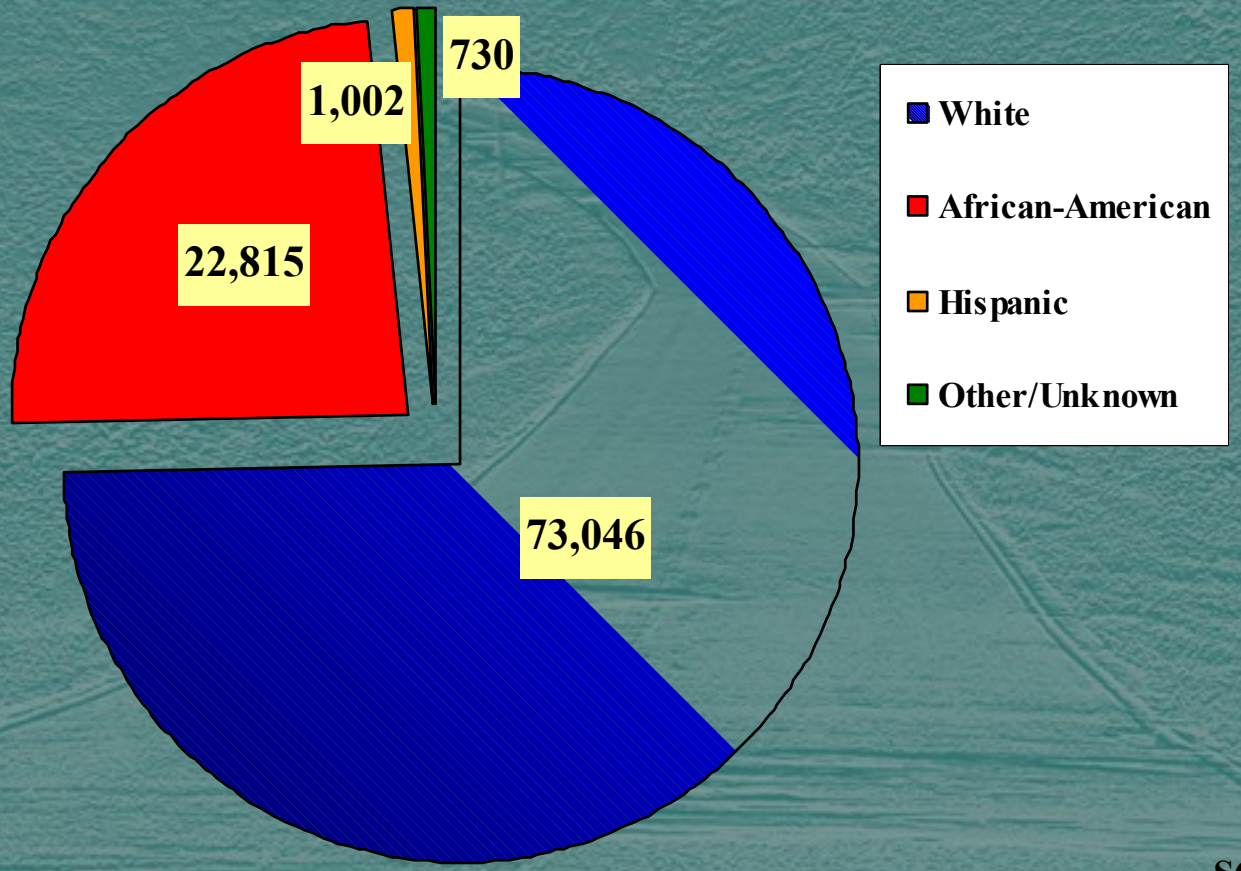
Young Driver Involvement in South Carolina Traffic Crashes By Race – 1999 - 2003



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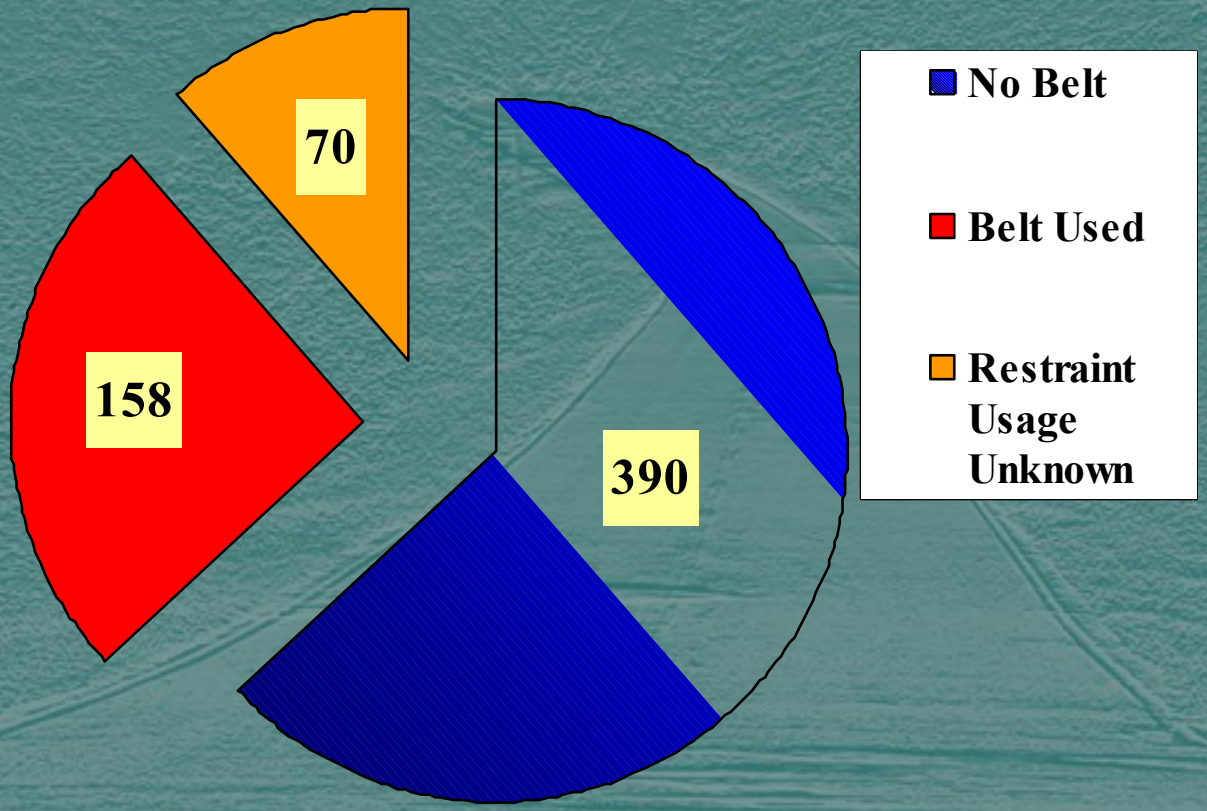
Fatally Injured Occupants*
Age 15-18 in South Carolina Traffic Crashes
By Restraint Usage – 1999 - 2003



*Includes only occupants of automobiles, trucks, SUVs, Vans and Buses

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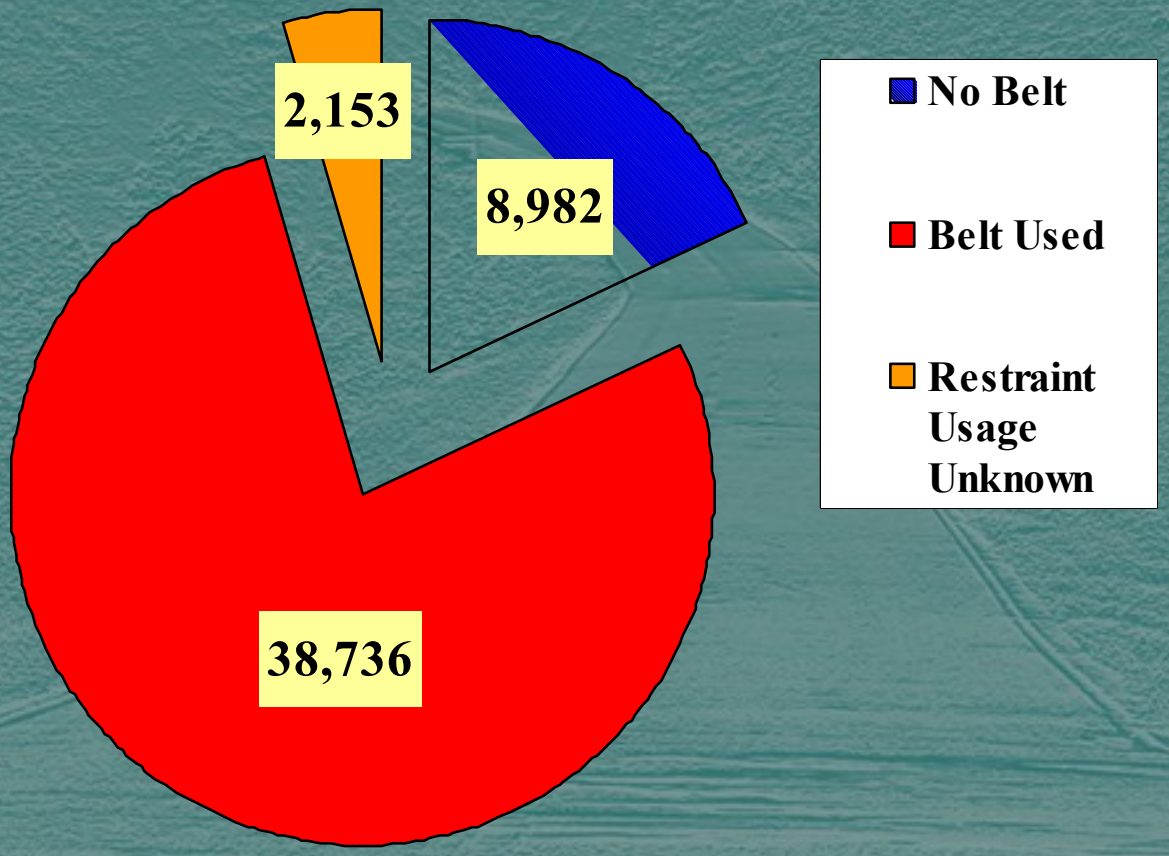
Non-Fatally Injured Occupants*
Age 15 - 18 in South Carolina Traffic Crashes
By Restraint Usage – 1999 - 2003



*Includes only occupants of automobiles, trucks, SUVs, Vans and Buses

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Legislative Update

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November 2004

ACT 307

Safe Routes To School

- Introduced in the House on February 11, 2004
- Introduced in the Senate on April 20, 2004
- Last Amended on June 3, 2004
- The General Assembly passed it on June 3, 2004
- Signed by the Governor on September 8, 2004

Safe Routes To School Bill

- Law is titled "South Carolina Safe Routes to Schools Act".
- Law is located in Chapter 17, Title 59 of the 1976 Code of Laws amended , Section 59-17-150.

Section 59-17-150. (A)

- Directs municipal and county governments to work with local schools to identify problems and/or hazards to children walking or bicycling to school
- Directs municipalities, counties and school districts to develop a plan for funding improvements.
- Identifies sources of potential funding for improvements
- Does not obligate the sources listed to provide funding

Section 59-17-150. (B)

- Encourages each school district to establish a Safe Routes to School Coordinating Committee
- Requires multidisciplinary and community representation on the committee
- Defines the duties/responsibilities of the Coordinating Committee
- Establishes and defines the composition and duties/responsibilities of a Safe Routes to School Team for each school where desired

The Coordinating Committee Members

- Parents
- Children
- Teachers
- Administrators
- Local Law Enforcement Officials
- Public Health Officials
- Interested Citizens
- Other persons familiar with the transportation needs or the school district

Duties of Coordinating Committee

- Gathering information (through surveys and traffic counts)
- Organizing incentive based events to encourage children to try new modes of transportation
- Promoting the program through newsletters, assemblies, web sites and other means to reach parents and students.

The Safe Routes To School Team

- The team shall include parents, children, teachers, administrators, and neighbors of the school.
- The team may be expanded to include local law enforcement officials, public health officials, and other persons familiar with the transportation needs of the school.
- The team shall select a representative to serve on the Coordinating Committee.

The Safe Routes To School Team Duties

- Gathering information (through surveys and traffic counts)
- Organizing incentive based events to encourage children to try new modes of transportation
- Promoting the program through newsletters, and other means to reach parents and students.

Section 59-17-150. (C)

- Declares the first Wednesday of October each year as “Walk or Bicycle with Your Child to School Day”

ACT 286

Steer It and Clear It

- Introduced in the House on March 12, 2003
- Introduced in the Senate on February 26, 2004
- Last Amended on June 2, 2004
- The General Assembly passed it on June 3, 2004
- Signed by the Governor on July 22, 2004

Steer It Clear It

- In property damage only crashes, driver must move vehicle so traffic is not blocked.
- Driver does not have to wait for arrival of a law enforcement officer to move vehicle.
- Driver not considered liable for cause of the crash solely by reason of moving the vehicle.
- Instructional signs to be erected, asking drivers to move any vehicle capable of being driven off of roadway.

Rubbernecking Law

- (A) Defines a temporary work zone as “an area on a roadway identified by orange work zone signs or equipment with flashing lights, and the presence of workers on the scene.”

- (B) Recognizes “A temporary work zone as a special hazard. “

Rubbernecking Law

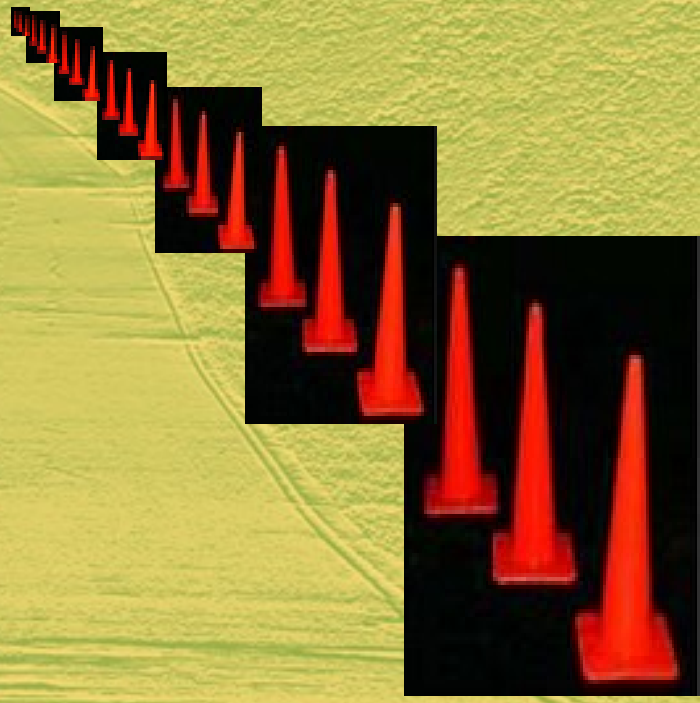
- Requires drivers approaching temporary work zones to:
  - keep vehicle under control
  - proceed with due caution
  - significantly reduce vehicle speed.
  - yield the right of way by making a lane change into a lane not adjacent to temporary work vehicle or equipment if on a highway with at least four lanes, with at least two lanes proceeding in the same direction
  - maintain safe speed for road conditions if changing lanes is impossible or unsafe

Rubbernecking Law

- Misdemeanor of endangering temporary work zone personnel
- Upon conviction fine not less than $300.00 nor more than $500.00.


SCDOT Safety
Programs...
CLOSED

WORK ZONE SAFETY...



A Major Initiative at SCDOT

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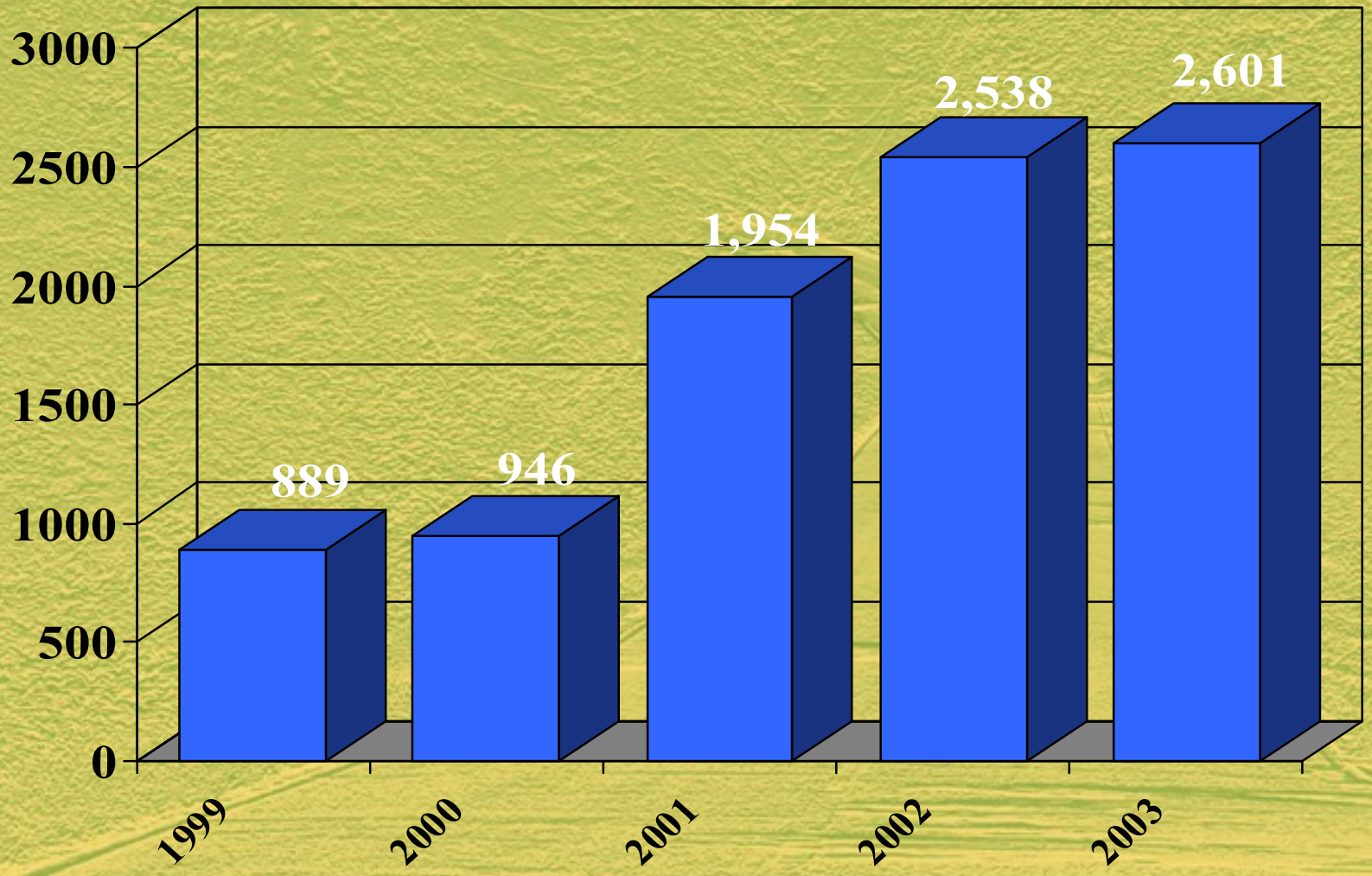
Work Zone Traffic Crashes
1999 - 2003



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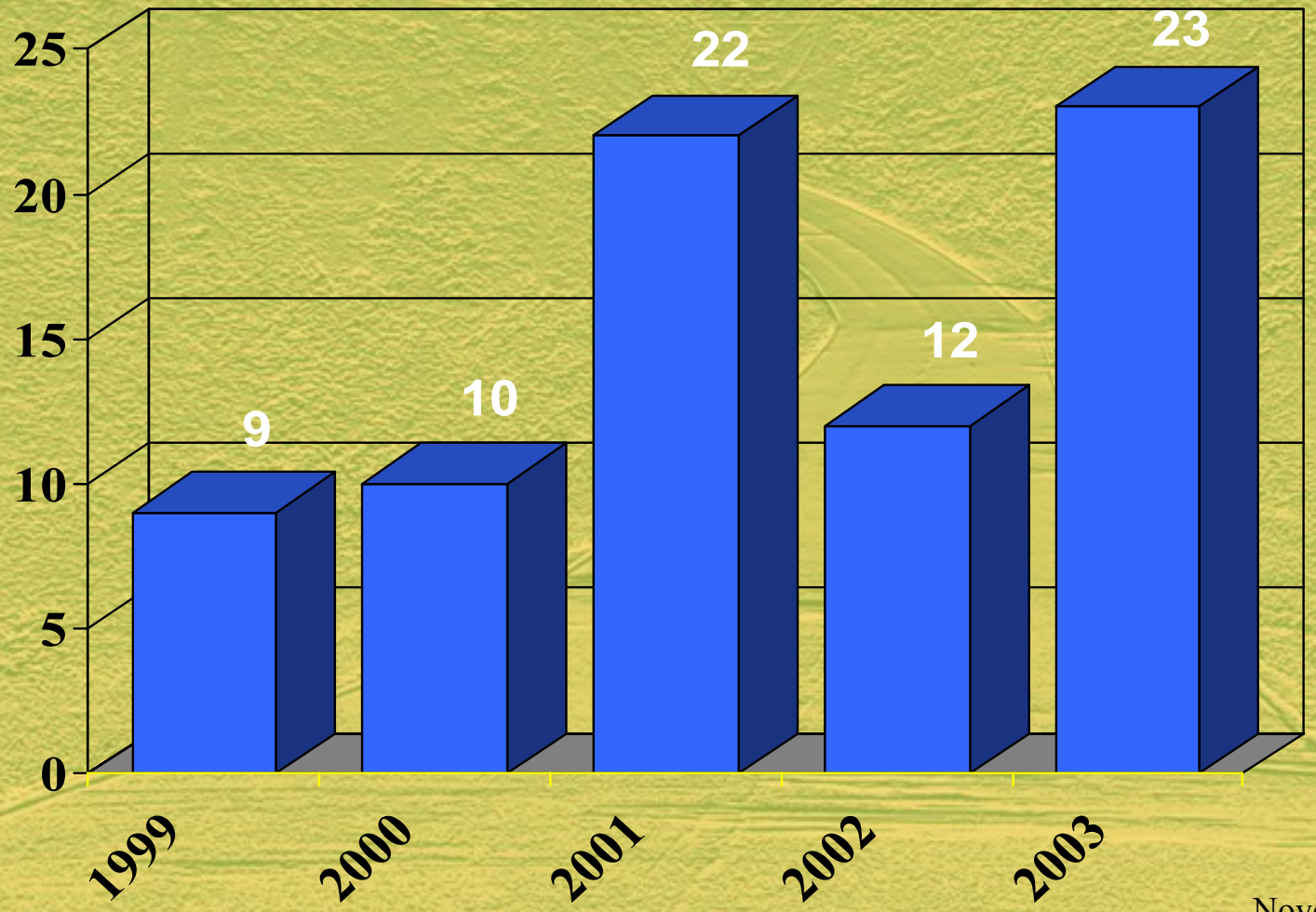
Work Zone Traffic Fatalities
1999 - 2003



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Award Winning
Public Awareness
Statewide Campaigns

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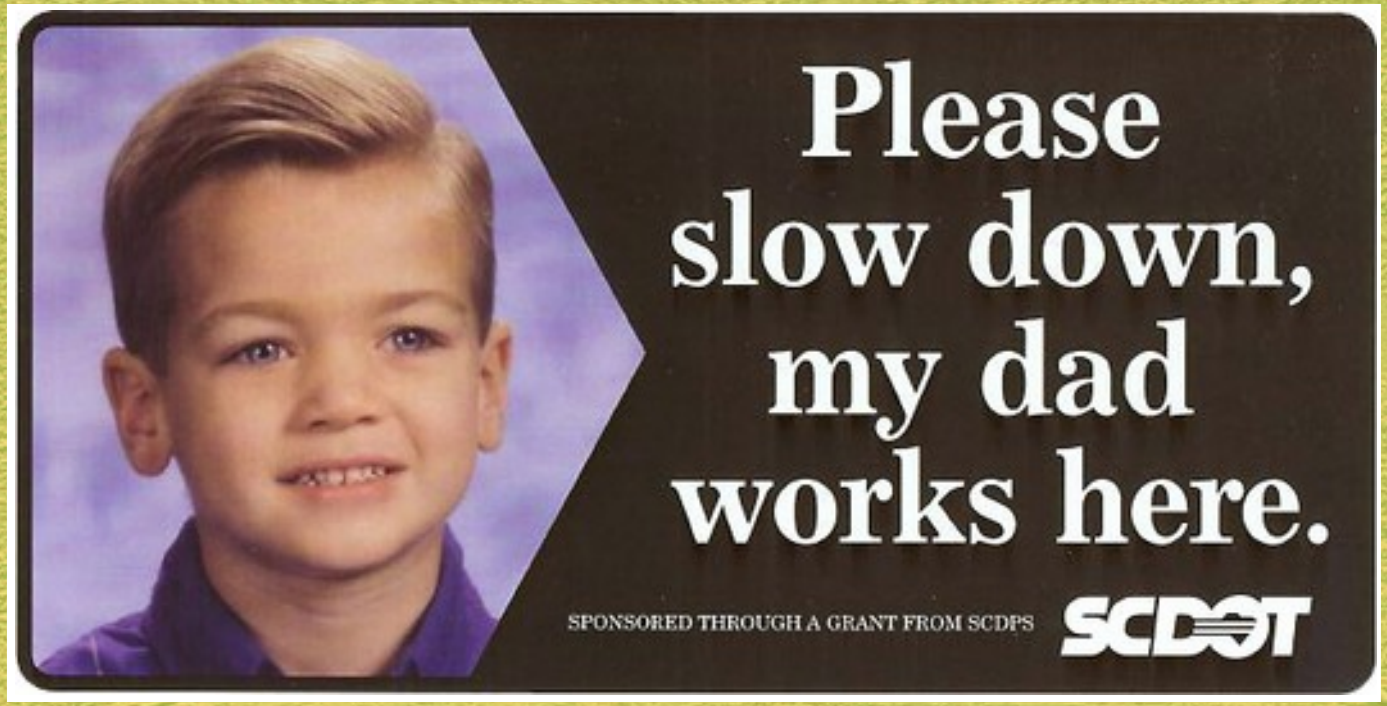
Public Awareness
Television PSA's

- Phase I, “At the Office and “In the Elevator” Aired 1,722 Times in 2002.
- In Phase II, “The Children” and “The Other Children” Aired 7,898 Times to Date
- In Phase III, “The Brad Sanders Story” and “The Ted Yandle Story” Aired over 7,900 Times to Date

The Children's Signs



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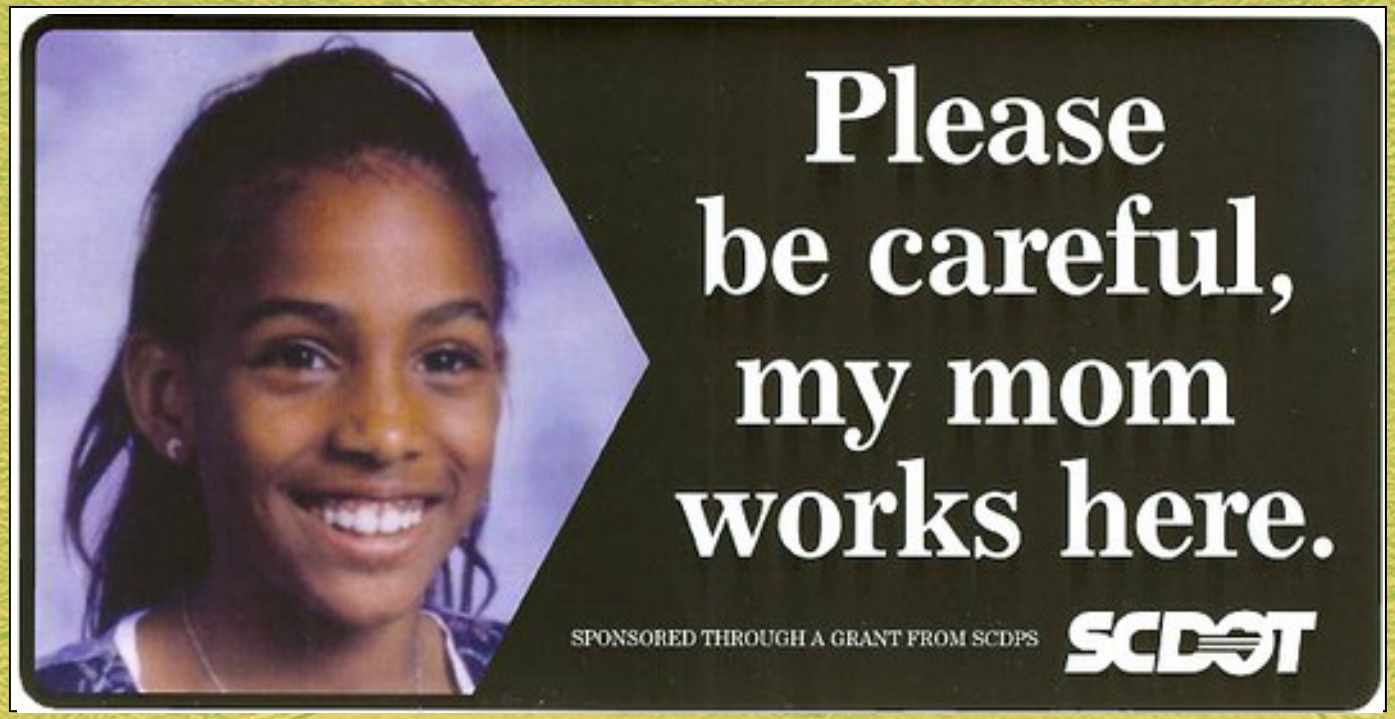
The Children's Signs



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New Work Zone Initiatives

- High visibility enforcement program
- Program to be launched April 2005
- Includes partnerships with SCHP and local law enforcement agencies
- Focus will be zero tolerance for speeding and other violations in highway work zones
- Program includes media outreach

Special Partnerships with SCHP

- Agreement under development between DOT and SCDPS to fund trooper class of 24 to 30 troopers

- Troopers to be dedicated for 3 year period to enforcement of speed and DUI in highway work zones and high crash corridors

Safety Campaigns Coming in 2005

- Steer It Clear It Educational Campaign
- Rubbernecking Legislation Educational Campaign
- Statewide Public Information and Education Campaign focusing on prevention of speed related crashes/ reducing young driver involvement in crashes

Safety Conscious Planning (SCP) and the Integrated Safety Management Process (ISMP)

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Safety Planning Requirement

TEA-21 Moving Americans into the 21st Century

Each statewide and metropolitan planning process shall provide for consideration of projects and strategies that will increase the safety and security of the transportation system for motorized and non-motorized users.

Safety Conscious Planning

"...a proactive approach for the prevention of motor vehicle crashes and unsafe transportation conditions."

Improving Safety on Our Highways

SCDOT
November 2004

Safety Conscious Planning

... a comprehensive, system wide, multi-modal, proactive process that better integrates safety into surface transportation decision making.

Safety Conscious Planning (SCP) is… continued

- Considers all aspects of highway safety – engineering, education, awareness, enforcement & emergency response

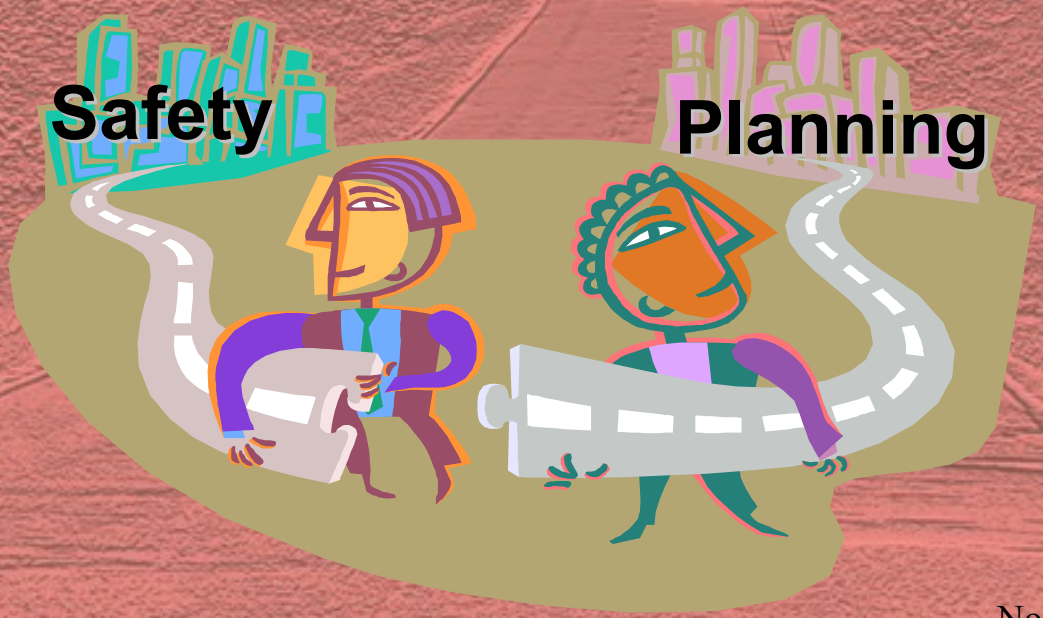
- Uses a system-wide approach including sites, corridors & entire state, regional & local transportation systems

SCP is….. continued

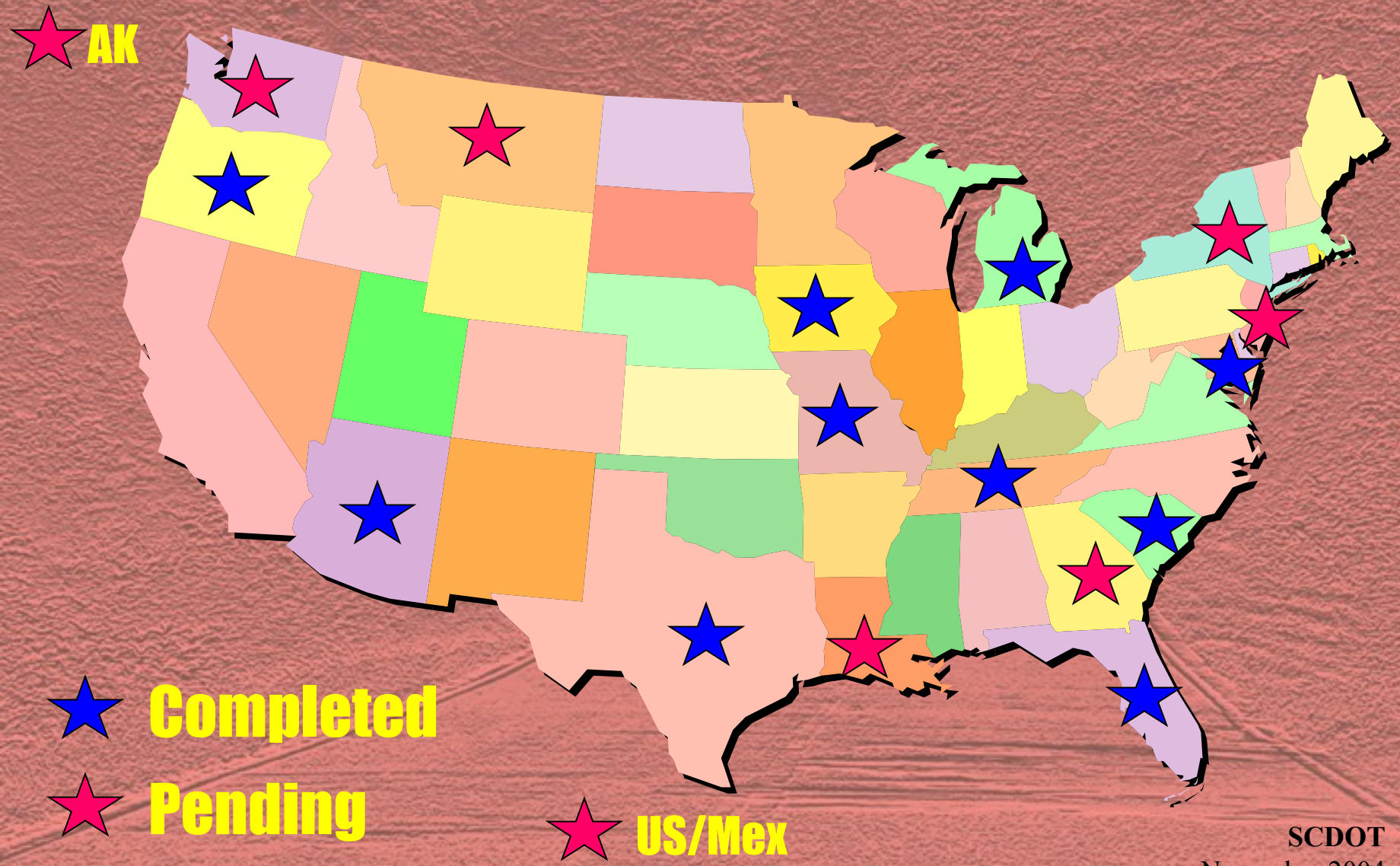
- SCP is multi-modal including transit, pedestrian & bicycle safety needs
- SCP is proactive - addresses current safety problems & looks for opportunities to prevent them in the future

SCP Communication: Forums

- Purpose - dialogue among key players
- Objective - jump start the SCP process
- Result - action plan



Communication: SCP Forums



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Pre-Planning for the Forum

- Began on August 28, 2002 with Planning Meeting
- Involved 25 key transportation and safety partners (all E's)
- Allowed participants to determine focus
  - Articulate Forum Objectives
  - Outline an Agenda
  - Develop a participant list
  - Address logistical and process issues

Key Forum Objectives

- Brief safety and planning communities on current issues/practices
- Help the partners understand the other's planning processes
- Facilitate a partnership that encourages collaborative planning and project selection
- Inform planners of products, programs, tools to support safety planning

Forum Participants

- Broad cross section of planning and safety communities
- Statewide representation
- Multidisciplinary group (including MPO's, COG's)
- Federal partners (FHWA, NHTSA, FMCSA)

Teams Planning Meeting

- Logistics & Program Team
- Data Team
- Themes & Message Team
- Goals & Objectives Team

Plans Provided to Participants

- AASHTO Strategic Highway Safety Plan
- Emergency Medical Services State Plan
- Federal Railroad Administration Action Plan
- 402 Highway Safety Plan
- Injury Control Plan
- SCDOT Strategic Plan
- SC Long Range Transportation Plan
- Others

Data Guide

- SCDOT (Road Inventory, Traffic Counts, Mileage Reports)
- SCDPS (Collision File)
- SCDMV (Driver & Vehicle Files)
- EMS (Run Reports, Trauma Registry)
- DAODAS (School Age & Adult Surveys)
- Office of Research & Statistics (CODES, Census, Hospital Discharge)

Discussion Group Assignments

- Set safety goals
- Develop recommendations for how to incorporate safety in the planning process
- Identify innovative solutions & strategies; tools & resources
- Create messages & themes to improve safety

Next Steps

- Dissemination of Forum Final Report
- Schedule follow-up meetings of Discussion Groups
  - Complete discussions
  - Reach consensus on all recommendations
- Include the recommendations in the Comprehensive Safety Plan

Forum Accomplishments

- Brought over 200 partners together, many 1st time
- Adopted several goals & strategies to improve safety – all willing to support in their plan
- Improved communications among partners (E-mail group)
- Enlightened participants on available data sources

Forum Accomplishments

- Gave SC a “step up” in complying with Reauthorization requirements for a State Strategic Highway Safety Plan

- Prepared SC for participation in National Pilot Program – Integrated Safety Management Process (ISMP)

Integrated Safety Management Process

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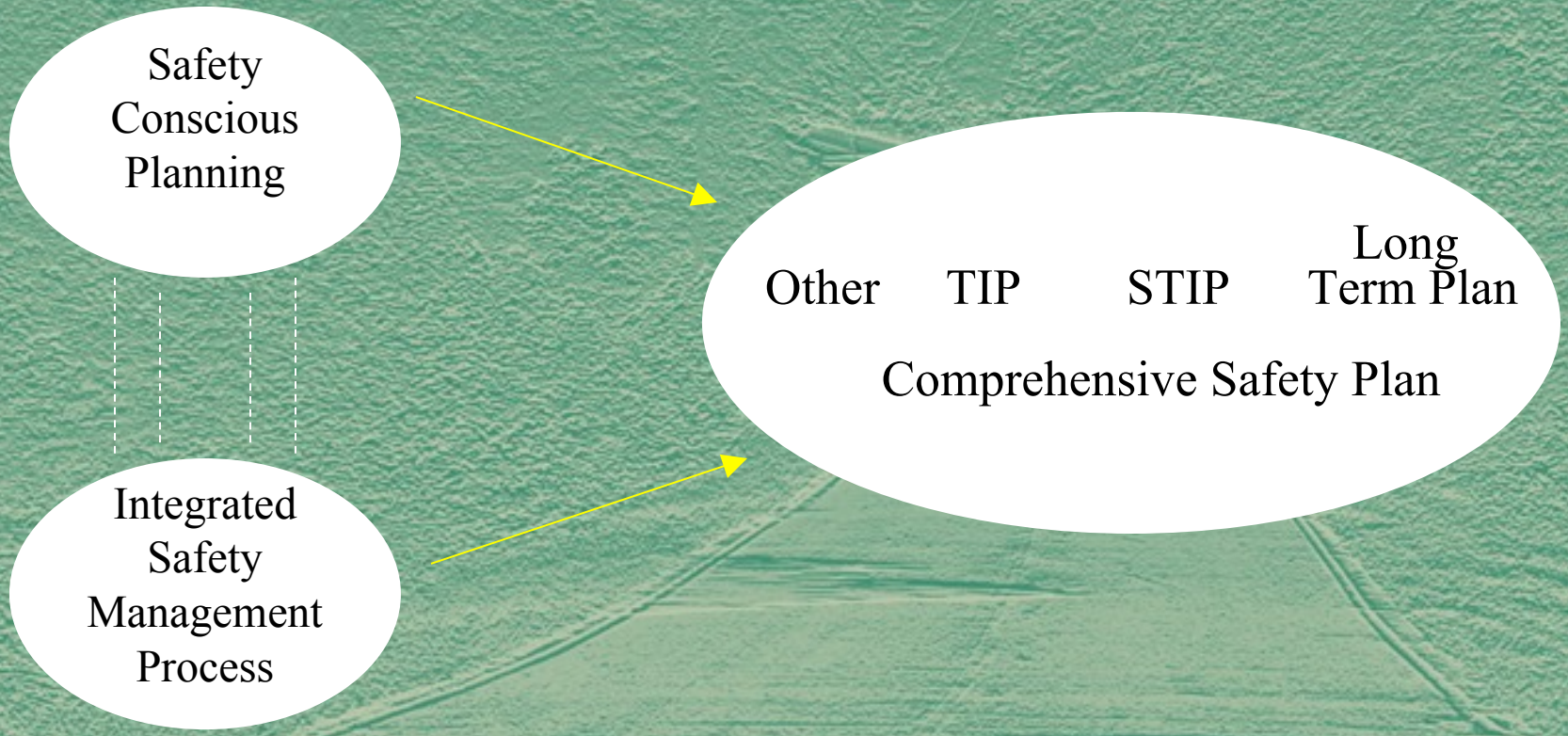
The Integrated Safety Management Process (ISMP)

- Product of the National Cooperative Highway Research Program (NCHRP) Project 17-18 (5) – NCHRP Report 501

- An integrated management system to reduce highway injuries and fatalities across a jurisdiction

The Big Picture



Integration at all Levels

- Integration starts at the decision making level with top management of various agencies working together
- Integration across 4 E's – Enforcement, Engineering, Education, and Emergency Services
- Integration across safety agencies and jurisdictions
- Integration during implementation

Implementation Guides

- Emphasis areas (e.g. run-off-road, intersection crashes, aggressive driving)
- Part of AASHTO's Strategic Highway Safety Plan

Implementation Guides provide answers to:

- What goals should we set for a particular emphasis area? (85% statewide restraint use by the end of 2004)
- What are our priorities for a particular emphasis area? (Infants, young children)
- What strategies are available to us for a particular emphasis area? (Education for new mothers at hospitals)

Implementation Guides do NOT provide answers on:

- Which emphasis areas to prioritize?
- Which combination of strategies to apply?
- How to integrate the effort of multiple agencies implementing a single strategy?
- How to optimize the implementation of multiple strategies simultaneously?
- What level of deployment should be implemented for each strategy?

Establishing an ISMP

- In order to implement an ISMP, an ISMP must first be established
- 10 requirements

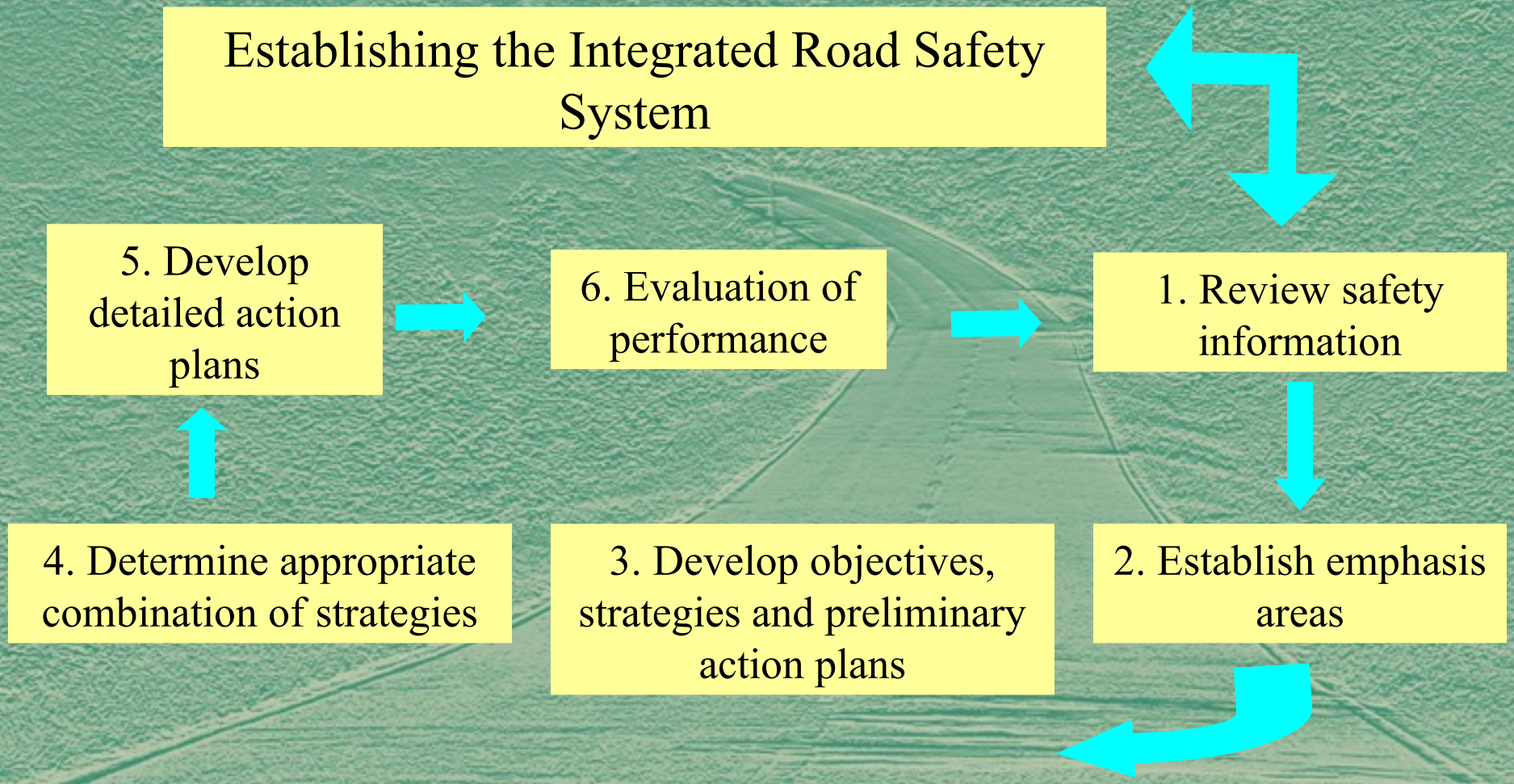
Requirements for Establishing an ISMP (1 of 2)

1. Form the Safety Program Leadership
2. Determine the coalition's mission
3. Create a Memorandum of Understanding
4. Develop a communication plan
5. Appraise the existing safety management system

Requirements for Establishing an ISMP (2 of 2)

6. Establish the administrative structure of the IMSP
7. Appoint an Operations Manager
8. Assemble the Risk Analysis and Evaluation Group (RAE)
9. Set a vision
10. Link databases

ISMP



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Benefits of the ISMP (1 of 2)

- A protocol and organizational structure for integrating across the agencies responsible for road safety
- Data driven decision making
- Quantifiable results that can be demonstrated and used to leverage for additional support and funding
- Cost effective implementation

Benefits of the ISMP (2 of 2)

- Comprehensive Safety Plan (strategic, data driven, comprehensive collaborative, integrated)
- Greater safety benefit working together than independently
- Improved road safety, a reduction in both the number and severity of crashes


CRISOS
Crash Reduction
by Improving Safety
on Secondaries
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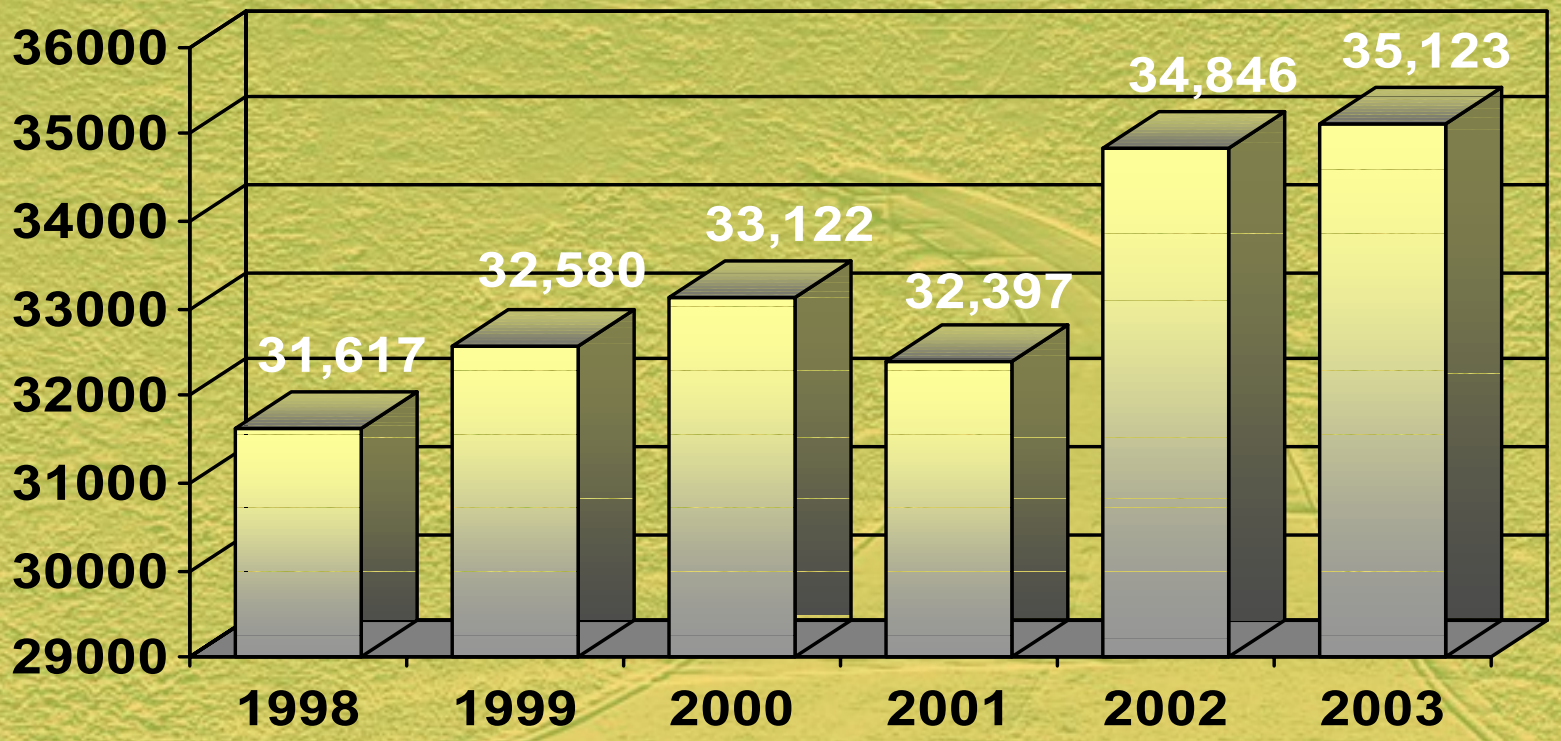
Traffic Collisions on Secondary Roads in South Carolina



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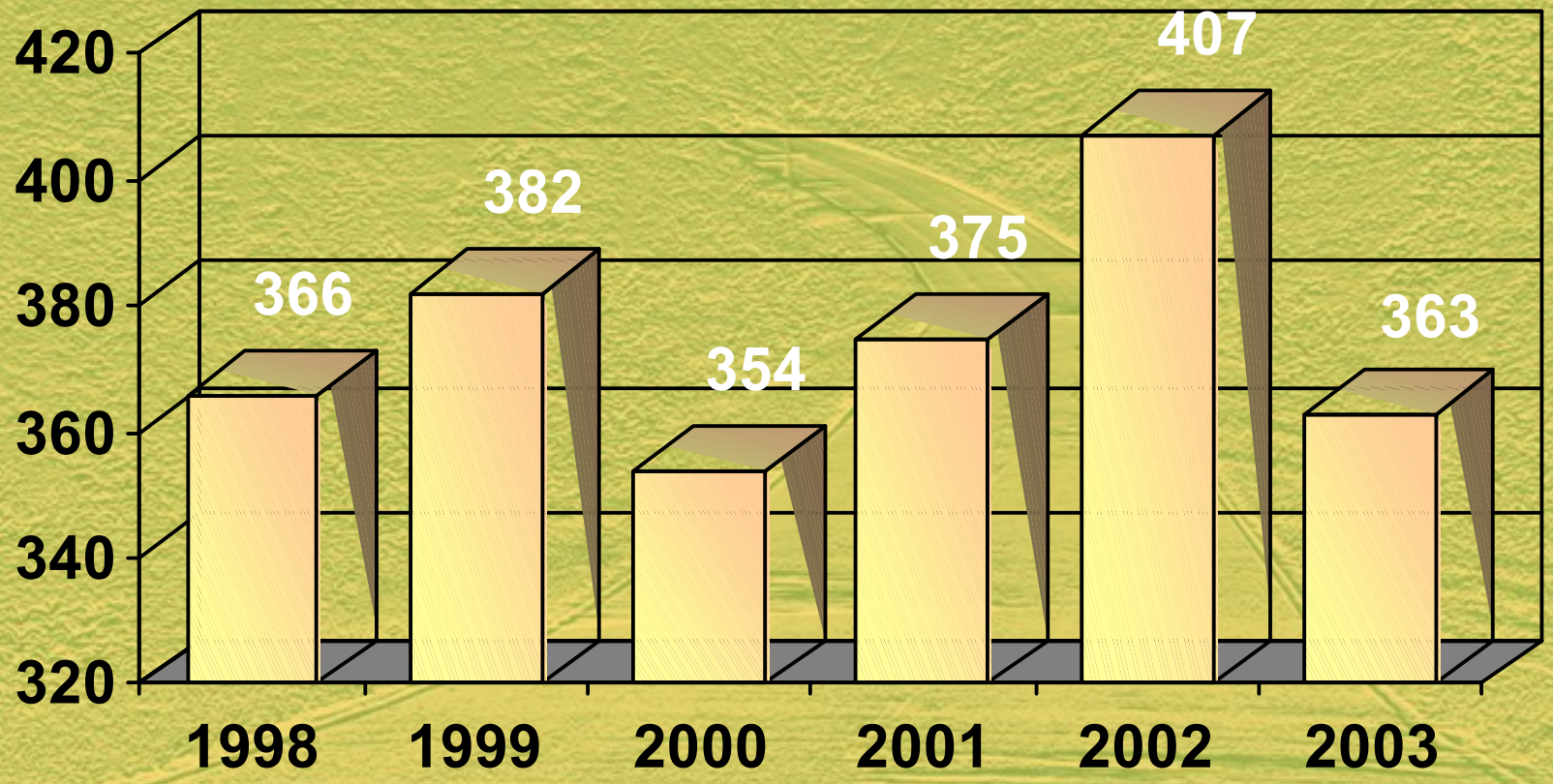
Traffic Fatalities on Secondary Roads in South Carolina



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CRISOS PROGRAM

- Focuses on safety improvements on federal aid and non-federal aid roads.
- Focuses on low-cost, short term strategies.
- Prioritizes roads based on crash rate, crash severity, and other factors.

CRISOS PROGRAM

- Focuses on safety improvements on federal aid and non-federal aid roads.
- Includes a multi-disciplinary approach within SCDOT.
- Includes local, community partners from EMS, law enforcement.
- Contacts will be made to assist in the site visits.

Legislative Issues

- Primary Seat Belt Legislation
- Strengthened DUI Legislation
- Mini Bottle Legislation
- Increased Funding for Safety Improvement to Highways

Legislative Issues: Primary Seat Belt Legislation

- Crash rates for young people are four times that of older drivers
- Fatality rates for young people are two times that of older drivers
- In SC from 1998 – 2002, 956 young people ages 16 – 24 died in crashes
- 707 young people were unbuckled
- Belt usage in SC crashes for young people at 26%

Terecia Wilson

Director of Safety

803-737-1161

Thank You!

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November 2004