

# **MOTORCYCLE ACCIDENT CAUSE FACTORS AND IDENTIFICATION OF COUNTERMEASURES VOLUME II: APPENDIX/SUPPLEMENTAL DATA**

**H.H. Hurt, Jr.  
J.V. Ouellet  
D.R. Thom**

**Traffic Safety Center  
University of Southern California  
Los Angeles, California 90007**

**Contract No. DOT HS-5-01160  
Contract Amount \$501,814.00**



**JANUARY 1981  
FINAL REPORT**

This document is available to the U.S. public through the  
National Technical Information Service,  
Springfield, Virginia 22161

Prepared For  
**U.S. DEPARTMENT OF TRANSPORTATION  
National Highway Traffic Safety Administration  
Washington, D.C. 20590**

This document was prepared under the sponsorship of the National Center for Statistics and Analysis, National Highway Traffic Safety Administration, Department of Transportation, in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof. The findings and conclusions in this report are those of the author and not necessarily those of the National Highway Traffic Safety Administration.

1. Report No. DOT-HS-05 63		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Final Report Motorcycle Accident Cause Factors and Identification of Countermeasures				5. Report Date January, 1981	
				6. Performing Organization Code	
7. Author(s) HURT, H.H., Jr., OUELLET, J.V., and THOM, D.R.				8. Performing Organization Report No. USC Traffic Safety Center 81-	
9. Performing Organization Name and Address University of Southern California Traffic Safety Center Motorcycle Accident Research University Park, Los Angeles, CA. 90007				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. DOT-HS-5-01160	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590				13. Type of Report and Period Covered FINAL REPORT	
				14. Sponsoring Agency Code	
15. Supplementary Notes Contract Technical Manager - Nicholas G. Tsongos, NCSA (202) 426-9124					
16. Abstract  This report presents the data and findings from the on-scene, in-depth investigations of 900 motorcycle accidents and the analysis of 3600 traffic accident reports of motorcycle accidents in the same study area. Comprehensive data were collected and synthesized for these accidents to cover all details of environmental, vehicle and human factors. In addition, exposure data were collected and analyzed at 505 accident sites at the same time-of-day, same day-of-week, with same environmental conditions. These exposure data define the population at risk so that comparison with accident data will reveal the factors which are over-represented in the accident population.  The analysis and review of these data identify cause factors of motorcycle accidents, relates the effectiveness of safety equipment and protective devices, and identifies countermeasures for accident and injury prevention.  Volume I is the Technical Report containing the most significant data, data analysis, findings, conclusions and recommended countermeasures.  Volume II is the Appendix with terminology, field data forms, and supplemental data and analysis.					
17. Key Words Motorcycles, Motorcycle Accidents, Motorcycle Injuries, Safety Helmets.			18. Distribution Statement Unlimited Available through the National Technical Information Service Springfield, VA 22161		
19. Security Classif. (of this report) UNCLASSIFIED		20. Security Classif. (of this page) UNCLASSIFIED		21. No. of Pages Vol 1: 425 Vol 2: 404	
22. Price					

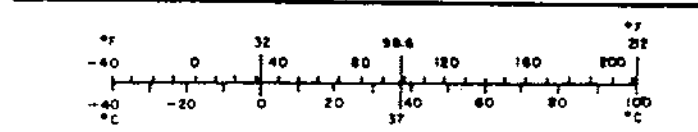
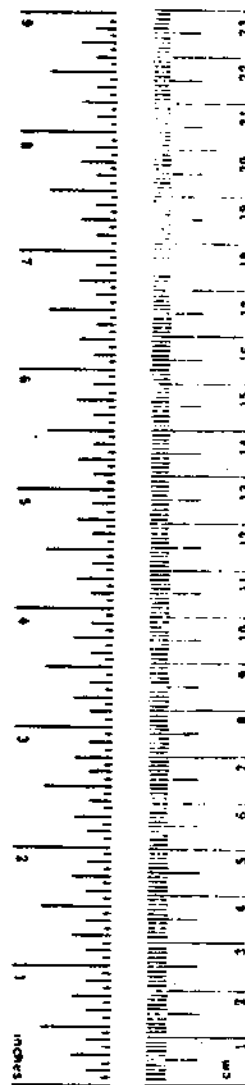
## METRIC CONVERSION FACTORS

### Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
in <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>
acres	acres	0.4	hectares	ha
<b>MASS (weight)</b>				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
<b>VOLUME</b>				
teaspoon	teaspoons	5	milliliters	ml
Tablespoon	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit Temperature	5/9 (after subtracting 32)	Celsius temperature	°C

### Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
<b>AREA</b>				
cm <sup>2</sup>	square centimeters	0.16	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	1.2	square yards	yd <sup>2</sup>
km <sup>2</sup>	square kilometers	0.4	square miles	mi <sup>2</sup>
ha	hectares (10,000 m <sup>2</sup> )	2.5	acres	acres
<b>MASS (weight)</b>				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	short tons
<b>VOLUME</b>				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m <sup>3</sup>	cubic meters	35	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.3	cubic yards	yd <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



1. This is a 2.54 inch ruler. For other exact conversions, and more detailed information, see NBS Monograph 16, Units of Weights and Measures, Publication 22, NBS Circular No. 57, 1974.

VOLUME II - APPENDIX AND SUPPLEMENTAL DATA

CONTENTS

A.	TERMINOLOGY	1
B.	FIELD DATA COLLECTION FORMS	4
B.1	Accident Data Collection Forms	4
B.2	Exposure Data Collection Forms	39
C.	SUPPLEMENTAL ACCIDENT DATA	46
C.1	Supplemental Data for Volume I, Section 5.0, Accident Characteristics and Environmental Factors	46
C.2	Supplemental Data for Volume I, Section 6.0, Vehicle Factors	72
C.3	Supplemental Data for Volume I, Section 7.0, Motorcycle Rider, Passenger, and Other Vehicle Driver Characteristics	98
C.4	Supplemental Data for Volume I, Section 8.0, Human Factors - Injuries	139
C.5	Supplemental Data for Volume I, Section 9.0, Protection Systems Effectiveness	341
D.	SUPPLEMENTAL EXPOSURE DATA	386
D.1	Supplemental Data for Volume I, Section 10.0, Exposure Data	386

## A. TERMINOLOGY

Within the report are certain terms not usually encountered in the review and analysis of accidents, which are special to motorcycles and motorcycle accidents. The following section will provide explanations for most of those special terms.

### Motorcycle Types

Street OEM is the original equipment manufactured motorcycle without significant modification. Such a motorcycle may have equipment added such as a fairing, luggage rack, modified rear shocks, etc., and such additions would be thus noted in the data. The frame, wheels, tires, front forks, tank, seat, etc., are without modification.

Dirt Bike is the off-road motorcycle without lights, license, horn, muffler, etc., and is not expected to be present in traffic because it does not have the legal equipment. However, it is sometimes present in traffic and involved in accidents.

Enduro is the terminology used here to describe the dual purpose motorcycle, which is supposed to be properly equipped for traffic with lights, license, horn, muffler, etc. In this way, this motorcycle is equipped with tires suitable for highway and off-road, and has the equipment to be street legal.

Semi-Chopper is the street motorcycle which has been significantly modified with extended front forks, six-bend pullback handlebars, rear struts or short shocks replacing the standard shocks, and sometimes equipped with a Harley rear wheel and tire, and modified seat. This motorcycle is made to appear like a chopper with bolt-on modifications.

Chopper is the term used to describe the bonafide modified motorcycle with custom frame, extended front suspension, and sometimes a hardtail rear suspension, spool front hub without brake, custom seat, sissy bar, etc.

Cafe Racer is the motorcycle modified to look like the road racer with custom exhaust pipes and chambers, set-back controls, clip-ons or short drag bars, and sometimes mag wheels and race tires.

### Helmet Types

The conventional safety helmet is generally referred to as the Full Coverage helmet since it covers all of the conventional areas of the head for protection.

The Partial Coverage helmet generally covers only the upper parts of the head and leaves the ears and back of the head exposed.

The Full Facial Coverage helmet includes an integral chin coverage with accompanying padding to provide coverage and protection for the facial regions.

## Body Regions

In these data, there was a special need to distinguish head and neck injuries. So these data have Head and Neck region injuries analyzed separately, but include all regions of the face since facial impacts can be closely related to brain injury. Somatic was the term used to describe all of those areas below the neck, i.e., the body wall and contents and extremities.

## Rider, Passenger

The convention of motorcycle custom describes the operator or driver of the motorcycle as the Rider. The Passenger is that other person on the motorcycle with the Rider, usually in position on the seat behind the Rider.

## Motorcycle Motions

Wobble is the high frequency oscillation of the front mass of the motorcycle (the assembly of the front wheel, tire, forks, clamps and handlebars) without significant motion of the rear mass of the motorcycle. Wobble is usually associated with high speed, and some alteration of the front mass distribution or stiffness.

Weave is the coupled yaw-roll oscillation of the motorcycle, also tending to be associated with high speeds and adverse loading on the motorcycle. Weave motion can couple with pitch motion due to an undulating roadway, and result in pitch-weave. Most motorcycle riders do not distinguish between wobble and weave, and whatever oscillation occurs at high speed is called the "dreaded speed wobbles."

Capsize is the roll instability of the motorcycle at low speed, which is compensated for by rider control inputs to keep the motorcycle upright.

Slide-out occurs upon reaching the limits of tire traction or side force, during braking, accelerating or cornering, and the tire slides out in the direction of the applied side force. If this happens at the rear wheel -- as in the case of locked rearwheel braking -- the rear end of the motorcycle slides out to one side. If the motorcycle falls to the inside during this slide-out, the result is a low-side fall; if the motorcycle falls to the outside during this slide-out, the result is a high-side fall. If the front wheel slides out as in locked front wheel braking, the motorcycle always falls to the high-side with the rider down ahead of the motorcycle. If the motorcycle slides out low side, e.g., from overbraking at the rear wheel, then suddenly regains traction, the motorcycle can flip upright and vault the rider high-side.

End-over is the motorcycle tumbling rear over front.

## Injury Severity

The injury severity measures used in this report are as follows:

(i) Each individual injury is given a severity according to the Abbreviated Injury Scale, but modified as seen necessary by the medical consultants. For example, many of the injuries to the brain are not specifically rated and

separated as they are available for detailed examination, and require interpretation. In the main part of the injury analysis, there are only a few exceptions to the use of the AIS, and those are noted within the text of the report where necessary.

(ii) The injury regions of concern have been separated into two groups: the head, neck and face and referred to simply as the head and neck region to include the face, and the somatic region to include all other body regions except the head, neck and face.

(iii) The measures of general injury severity are taken as the sums of squares of the two injury regions.

SS1 is the designated sum of squares of the individual injury severities for the Somatic regions, i.e.,  $SS1 = \sum AIS^2$  for the somatic regions.

SS2 is the designated sum of squares of the individual injury severities for the Head and Neck regions, i.e.,  $SS2 = \sum AIS^2$  for the head and neck regions.

SS is the designated sum of squares of all the individual injury severities for the entire body, i.e.,  $SS = SS1 + SS2$ .

Note that these designations do not correspond to the "Injury Severity Score" and this terminology is not used within the report. For the case of these data, it is considered that the designations utilized are more useful in the association of various factors with injury severity.



## B. FIELD DATA COLLECTION FORMS

### B.1 Accident Data Collection Forms

Included in this section are the following data collection forms:

	Page
Administrative Data Sheet	5
On-Scene, In-Depth Accident Investigation Control Sheet	6
Environmental Factors Data Sheets	7
Vehicle Factors Data Sheets	13
Rider Background Information	23
Human Factors, Pre-crash, Crash and Post-crash Data	26
Somatic Injury Questionnaire	29
Head/Neck Injury Questionnaire	30
Other Vehicle Driver Information	31
Helmet Data Sheets	33
Passenger Supplement Data Sheets	37

ADMINISTRATIVE

USC ACCIDENT NUMBER \_\_\_\_\_

ACCIDENT LOCATION \_\_\_\_\_

AREA OF CITY \_\_\_\_\_

NAME OF M/C RIDER \_\_\_\_\_ DL# \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NAME OF M/C PASSENGER \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NAME OF O/V DRIVER \_\_\_\_\_ DL# \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NAME OF WITNESS \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NAME OF WITNESS \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NAME OF WITNESS \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

NOTES \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

UNIVERSITY OF SOUTHERN CALIFORNIA

MOTORCYCLE ACCIDENT RESEARCH

DATA FORM

FOR

ON-SCENE, IN-DEPTH ACCIDENT INVESTIGATION

USC Accident Number

--	--	--	--	--	--	--	--

Time of Day (24 hour clock)

--	--	--	--

Day Accident Occurred

- 1) Monday 2) Tuesday 3) Wednesday 4) Thursday 5) Friday  
6) Saturday 7) Sunday

Type of USC Investigation

- 1) On-scene 2) Follow-up

Police Report Number

--	--	--	--	--	--

000000) No Report Taken

ENVIRONMENTAL FACTORS  
(Revision 12/13/76)

1. TYPE OF AREA: . . . . .
- 1) Industrial 2) Business/shopping 3) Apartments 4) Residential  
5) Undeveloped 6) School 7) Rural 9) Unknown
2. ILLUMINATION: . . . . .
- 1) Daylight 2) Dusk/dawn 3) Night-lighted 4) Night-unlighted  
3) Unknown
3. TYPE OF ARTIFICIAL ILLUMINATION: . . . . .
- 0) None 1) Incandescent 2) Mercury vapor 3) Neon 4) Argon  
5) Other \_\_\_\_\_ 8) Unknown
4. TEMPERATURE: \_\_\_\_\_ Fahrenheit . . . . .
- 998) Unknown
5. RELATIVE HUMIDITY: \_\_\_\_\_ % . . . . .
- 998) Unknown
6. WEATHER: . . . . .
- 1) Clear 2) Rain 3) Drizzle 4) Snow 5) Hail 6) Sleet  
7) Cloudy or partly cloudy 8) Overcast 98) Unknown
7. WIND: . . . . .
- 0) None 1) Light 2) Strong 3) Light and gusty 4) Strong and gusty  
5) Variable 8) Unknown
8. WIND DIRECTION CLOCKWISE FROM MOTORCYCLE DIRECTION OF TRAVEL . . . . .
- 98) Unknown 99) N/A (no wind)



9. INTERSECTION TYPE: . . . . .
- 0) Non-intersection 1) "T" intersection 2) Cross (+) intersection  
3) Angle intersection 4) Alley or driveway 5) Offset intersection  
6) Other \_\_\_\_\_ 8) Unknown
- (ROAD MOTORCYCLE WAS TRAVELING)
10. DESCRIPTION: . . . . .
- 1) Freeway mainline 2) Freeway on-ramp 3) Freeway off-ramp  
4) Freeway transition 5) Freeway frontage 6) Major arterial  
7) Non-arterial 8) Temporary 9) Parking lot 10) Alley 11) Driveway  
12) Other \_\_\_\_\_ 98) Unknown
11. NUMBER OF THROUGH LANES: . . . . .
12. LANE WIDTH (In Feet): . . . . .
13. CURB TO CURB WIDTH: . . . . .
14. TYPE SURFACE: . . . . .
- 1) Concrete 2) Asphalt 3) Gravel 4) Multiple 5) Dirt  
6) Other \_\_\_\_\_ 8) Not observed
15. SURFACE TEXTURE: . . . . .
- 1) Unworn asphalt 2) Worn smooth asphalt 3) Unpolished concrete  
4) Worn polished concrete 5) Grooved concrete 6) Painted striping  
7) Other, describe \_\_\_\_\_ 8) Not observed
16. SURFACE DEFECTS: . . . . .
- 0) None 1) Surface cracking 2) Spalling 3) Holes 4) Bump  
5) Pavement ripple 6) Pavement edge 7) Other \_\_\_\_\_ 8) Not observed

(ROAD MOTORCYCLE WAS TRAVELING--CONT'D)

17. SURFACE OBSTRUCTIONS:
- 0) None 1) Expansion joints 2) Reflectors 3) Manholes 4) 1 and 2  
 5) Drain grating 6) Railroad rails 7) Botts dots 8) Traffic control sensors  
 9) Drainage defile 10) Drainage defile with square gutter 11) Other, describe  
 98) Not observed
18. RAILROAD CROSSING: Rail direction with reference to motorcycle direction   
 of travel.
- 9) N/A (no railroad) 1  
3
19. SURFACE WETNESS:  6
- 1) Dry 2) Dry with wet paint striping 3) Wet with dry tire tracks  
 4) Damp 5) Wet 6) Puddled water 7) Flooded 8) Unknown
20. SURFACE CONTAMINATION:
- 0) None 1) Water 2) Oil 3) Sand 4) Gravel 5) Mud 6) Other \_\_\_\_\_  
 7) Reverted rubber 8) Unknown
21. SOURCE OF CONTAMINATION:
- 1) Rain 2) Sprinklers 3) Vehicle residue 4) Truck spill  
 5) Tire skid marks 6) Construction area 8) Unknown 9) N/A
22. VISIBILITY LIMITATION:
- 0) None 1) Dust 2) Fog 3) Smoke 4) Windshield condition 5) Glare  
 6) Other \_\_\_\_\_ 8) Unknown
23. STATIONARY VIEW OBSTRUCTIONS:
- 0) None 1) Buildings 2) Sign(s) 3) Vegetation (trees, bushes, etc.)  
 4) Walls, vegetation covered fences, etc. 5) Hill 6) Curve  
 7) Stationary or parked vehicles 8) Barricades 9) Other \_\_\_\_\_  
 98) Unknown
24. MOBILE VIEW OBSTRUCTIONS:
- 0) None 1) Vehicles 2) People 3) Animals 4) Construction or road  
 5) Other \_\_\_\_\_ 8) Unknown equipment
25. VERTICAL ALIGNMENT:
- 1) Level 2) Crest of hill 3) Slope of hill up 4) Bottom of hill  
 5) Slope of hill down 6) Dip 7) Other, describe \_\_\_\_\_ 8) Not observed
26. HORIZONTAL ALIGNMENT:
- 1) Straight 2) Curve-right 3) Curve-left 4) Corner-right 5) Corner-left  
 6) Jog-right 7) Jog-left 8) Not observed
27. TYPE TRAFFIC CONTROL:
- 0) None 1) Stop sign 2) Four-way stop 3) Traffic control signal  
 4) Traffic officer 5) Construction personnel 6) Yield 7) Markings on pavement  
 8) Other \_\_\_\_\_ 98) Not observed
28. TRAFFIC CONTROL SIGNAL FACE:
- 1) Vertical 2) Horizontal 8) Not observed 9) N/A (no signal)
29. TRAFFIC CONTROL SIGNAL LENS SIZE:
- 1) 8 inch 2) 12 inch 3) 1 and 2 4) Other \_\_\_\_\_ 8) Not observed  
 9) N/A (no signal)
30. LEFT TURN POCKET OR LEFT TURN ONLY LANE:
- 1) Yes 2) No 9) Not observed 9) N/A (no intersection)
31. LEFT TURN GREEN ARROW:
- 1) Yes 2) No 8) Not observed 9) N/A (no signal)
32. RIGHT TURN ONLY LANE:
- 1) Yes 2) No 8) Not observed 9) N/A (no intersection)
33. NUMBER OF TRAFFIC CONTROL SIGNAL FACES PRESENTED:
- 1) One 2) Two 3) Three 4) Four 5) More than four 8) Not observed  
 9) N/A (No signal)

ROAD MOTORCYCLE WAS TRAVELING--CONT'D

- 34. TRAFFIC CONTROL OPERATING PROPERLY:   
1) Yes 2) No 3) Not observed 9) N/A (no traffic control)
- 35. TRAFFIC CONTROL VISIBLE:   
1) Yes 2) No 3) Not observed 9) N/A (no traffic control)
- 36. WAS TRAFFIC CONTROL VIOLATED BY MOTORCYCLE:   
1) Yes 2) No 3) Not observed 9) N/A (no traffic control)
- 37. POSTED SPEED LIMIT IN M.P.H.
- 38. TRAFFIC DENSITY:   
1) Light 2) Moderate 3) Heavy 3) Not observed
- 39. ADT IF AVAILABLE:
- 40. CONTRIBUTORY DEBRIS ON ROADWAY:   
0) None 1) Yes 3) Not observed 9) N/A Specific description \_\_\_\_\_
- 41. MEASURED COEFFICIENT OF BRAKING FRICTION:   
3.3) Not observed 9.9) Not Applicable
- 42. ROADWAY - RIGHT-OF-WAY DIVIDER - RIGHT SIDE:   
1) Guardrail 2) Fence 3) Curb 4) Shoulder 5) Cable-post 6) Other \_\_\_\_\_  
3) Not observed
- 43. RIGHT-OF-WAY ENVIRONMENT - RIGHT SIDE:   
1) Grass, ground cover 2) Shrubs 3) Dirt 4) Gravel 5) sidewalk,  
paved or topped surface 3) Not observed
- 44. RIGHT-OF-WAY OBSTACLES - RIGHT SIDE:   
0) None 1) Buildings 2) Ditch 3) Trees 4) Post 5) Parked vehicles  
6) Embankment 7) Other \_\_\_\_\_ 8) Not observed
- 45. ROADWAY - RIGHT-OF-WAY DIVIDER - LEFT SIDE OR MEDIAN:   
1) Guardrail 2) Fence 3) Curb 4) shoulder 5) Cable-post  
6) Other 3) Unknown
- 46. RIGHT-OF-WAY ENVIRONMENT - LEFT SIDE OR MEDIAN:   
1) Grass, ground cover 2) Shrubs 3) Dirt 4) Gravel 5) Sidewalk,  
paved or topped surface 5) Other \_\_\_\_\_ 8) Not observed
- 47. RIGHT-OF-WAY OBSTACLES - LEFT SIDE OR MEDIAN:   
0) None 1) Buildings 2) Ditch 3) Trees 4) Posts 5) Parked vehicles  
6) Guard Rail 7) Other \_\_\_\_\_ 8) Not observed
- 48. INSECT POPULATION:   
0) None 1) Light 2) Moderate 3) Heavy 4) Other, describe \_\_\_\_\_  
8) Not observed 9) N/A
- 49. WAS TURN SIGNAL TRAFFIC SENSOR INVOLVED?:   
1) Yes 2) No 3) Not observed 9) N/A (no signal)
- 50. MOTORCYCLE CONTRAST CONSPICUITY IN THE PRE-CRASH CIRCUMSTANCES:   
1) Highly conspicuous, outstanding 2) Distinguishable but not outstanding  
3) Blends with background, low conspicuity 4) Clearly inconspicuous  
3) Not observed 9) N/A (single vehicle accident)
- 51. ANIMAL INVOLVEMENT:   
1) Small dog 2) Big dog 3) Cat 4) Bird 5) Cow 6) Horse  
7) Other, describe \_\_\_\_\_ 8) Not observed 9) N/A (No animal involvement)
- 52. WAS ANIMAL PURSUING?   
1) Yes 2) No 3) Not observed 9) N/A (no animal involved)
- 53. WAS ANIMAL STRUCK?   
1) Yes 2) No 3) Not observed 9) N/A (no animal involved)

(ROAD OTHER VEHICLE WAS TRAVELING)

54. DESCRIPTION:
- 1) Freeway mainline 2) Freeway on-ramp 3) Freeway off-ramp  
4) Freeway transition 5) Freeway frontage 6) Major arterial  
7) Non-arterial 8) Temporary 9) Parking lot 10) Alley 11) Driveway  
12) Other \_\_\_\_\_ 98) Unknown
55. NUMBER OF THROUGH LANES:
56. LANE WIDTH (In Feet):
57. CURB TO CURB WIDTH:
58. TYPE SURFACE:
- 1) Concrete 2) Asphalt 3) Gravel 4) Multiple 5) Dirt  
6) Other \_\_\_\_\_ 8) Not observed
59. SURFACE TEXTURE:
- 1) Unworn asphalt 2) Worn smooth asphalt 3) Unpolished concrete  
4) Worn polished concrete 5) Grooved concrete 6) Painted striping  
7) Other, describe \_\_\_\_\_ 8) Not observed
60. SURFACE DEFECTS:
- 0) None 1) Surface cracking 2) Spalling 3) Holes 4) Bump  
5) Pavement ripple 6) Pavement edge 7) Other \_\_\_\_\_ 8) Not observed
61. SURFACE OBSTRUCTIONS:
- 0) None 1) Expansion joints 2) Reflectors 3) Manholes 4) 1 and 2  
5) Drain grating 6) Railroad rails 7) Botts dots 8) Traffic control sensors  
9) Drainage defile 10) Drainage defile with square gutter 11) Other, describe  
98) Not observed
62. SURFACE WETNESS:
- 1) Dry 2) Dry with wet paint striping 3) Wet with dry tire tracks  
4) Damp 5) Wet 6) Puddled water 7) Flooded 8) Unknown
63. SURFACE CONTAMINATION:
- 0) None 1) Water 2) Oil 3) Sand 4) Gravel 5) Mud  
6) Other \_\_\_\_\_ 7) Reverted rubber 8) Unknown
64. SOURCE OF CONTAMINATION:
- 1) Rain 2) Sprinklers 3) Vehicle residue 4) Truck spill  
5) Tire skid marks 6) Construction area 8) Unknown 9) N/A
65. VISIBILITY LIMITATION:
- 0) None 1) Dust 2) Fog 3) Smoke 4) Windshield 5) Glare  
6) Other \_\_\_\_\_ 8) Unknown
66. STATIONARY VIEW OBSTRUCTIONS:
- 0) None 1) Buildings 2) Sign(s) 3) Vegetation (trees, bushes, etc.)  
4) Walls, vegetation covered fences, etc. 5) Hill 6) Curve  
7) Stationary or parked vehicles 8) Barricades 9) Other \_\_\_\_\_  
98) Unknown
67. MOBILE VIEW OBSTRUCTIONS:
- 0) None 1) Vehicles 2) People 3) Animals 4) Construction or road  
5) Other \_\_\_\_\_ 8) Unknown equipment
68. VERTICAL ALIGNMENT:
- 1) Level 2) Crest of hill 3) Slope of hill up 4) Bottom of hill  
5) Slope of hill down 6) Dip 7) Other, describe \_\_\_\_\_ 8) Not observed

(ROAD OTHER VEHICLE WAS TRAVELING--CONT'D)

69. HORIZONTAL ALIGNMENT: . . . . .
- 1) Straight 2) Curve-right 3) Curve-left 4) Corner-right  
5) Corner-left 6) Jog-right 7) Jog-left 8) Not observed
70. TYPE TRAFFIC CONTROL: . . . . .
- 0) None 1) Stop sign 2) Four-way stop 3) Traffic control signal  
4) Traffic officer 5) Construction personnel 6) Yield  
7) Markings on pavement 8) Other \_\_\_\_\_ 9) Not observed
71. TRAFFIC CONTROL SIGNAL FACE: . . . . .
- 1) Vertical 2) Horizontal 8) Not observed 9) N/A (no signal)
72. TRAFFIC CONTROL SIGNAL LENS SIZE: . . . . .
- 1) 8 inch 2) 12 inch 3) 1 and 2 4) Other \_\_\_\_\_  
8) Not observed 9) N/A (no signal)
73. LEFT TURN POCKET OR LEFT TURN ONLY LANE: . . . . .
- 1) Yes 2) No 3) Not observed 9) N/A (no intersection)
74. LEFT TURN GREEN ARROW: . . . . .
- 1) Yes 2) No 8) Not observed 9) N/A (no signal)
75. RIGHT TURN ONLY LANE: . . . . .
- 1) Yes 2) No 3) Not observed 9) N/A (no intersection)
76. NUMBER OF TRAFFIC CONTROL SIGNAL FACES PRESENTED: . . . . .
- 1) One 2) Two 3) Three 4) Four 5) More than four 8) Not observed  
9) N/A (no traffic signal)
77. TRAFFIC CONTROL OPERATING PROPERLY: . . . . .
- 1) Yes 2) No 8) Not observed 9) N/A (no traffic control)
78. TRAFFIC CONTROL VISIBLE: . . . . .
- 1) Yes 2) No 8) Not observed 9) N/A (no traffic control)
79. WAS TRAFFIC CONTROL VIOLATED BY OTHER VEHICLE: . . . . .
- 1) Yes 2) No 3) Not observed 9) N/A (no traffic control)
80. ADT IF AVAILABLE: . . . . .
81. CONTRIBUTORY DEBRIS ON ROADWAY: . . . . .
- 0) None 1) Yes 8) Not observed 9) N/A Specific description \_\_\_\_\_
82. MEASURED COEFFICIENT OF BRAKING FRICTION: . . . . .
- 3.2) Not observed 9.9) Not applicable
83. ROADWAY - RIGHT-OF-WAY DIVIDER - RIGHT SIDE: . . . . .
- 1) Guardrail 2) Fence 3) Curb 4) Shoulder 5) Cable-post  
6) Other \_\_\_\_\_ 8) Not observed
84. RIGHT-OF-WAY ENVIRONMENT - RIGHT SIDE: . . . . .
- 1) Grass, ground cover 2) Shrubs 3) Dirt 4) Gravel 5) Sidewalk,  
paved or topped surface 6) Other \_\_\_\_\_ 8) Not observed
85. RIGHT-OF-WAY OBSTACLES - RIGHT SIDE: . . . . .
- 0) None 1) Buildings 2) Ditch 3) Trees 4) Post 5) Parked vehicles  
6) Embankment 7) Other \_\_\_\_\_ 8) Not observed
86. ROADWAY - RIGHT-OF-WAY DIVIDER - LEFT SIDE OR MEDIAN: . . . . .
- 0) None 1) Guardrail 2) Fence 3) Curb 4) Shoulder 5) Cable-post  
6) Other \_\_\_\_\_ 8) Not observed 9) N/A
87. RIGHT-OF-WAY ENVIRONMENT - LEFT SIDE OR MEDIAN: . . . . .
- 1) Grass, ground cover 2) Shrubs 3) Dirt 4) Gravel 5) Sidewalk,  
paved or topped surface 6) Other \_\_\_\_\_ 8) Not observed 9) N/A





VEHICLE FACTORS  
(Revision 29/5/76)  
GENERAL

1. MOTORCYCLE MANUFACTURER: (See Appendix A) . . . . .
2. MODEL: \_\_\_\_\_
3. YEAR: . . . . .
4. ENGINE DISPLACEMENT (c.c.'s): . . . . .
5. NO. CYLINDERS: . . . . .
6. MOTORCYCLE TYPE: . . . . .   
 1) Street OEM    2) Dirt    3) Enduro    4) Semi-chopper    5) Chopper  
 6) Cafe racer    7) Trike    8) Other \_\_\_\_\_
7. ENGINE TYPE: . . . . .   
 1) 4-cycle    2) 2-cycle    3) Rotary
8. MOTORCYCLE FRAME NO.: \_\_\_\_\_
9. MOTORCYCLE ENGINE NO.: \_\_\_\_\_
10. LICENSE PLATE NO.: \_\_\_\_\_
11. LICENSING STATE: (See Appendix B) . . . . .   
 05) California
12. ODOMETER READING: . . . . .
13. COLOR OF MOTORCYCLE: . . . . .   
 1) White    2) Yellow    3) Orange    4) Black    5) Brown    6) Blue    7) Red  
 8) Purple    9) Green    10) Silver    11) Gold    12) Chrome/metal flake  
 13) Other \_\_\_\_\_    98) Unknown
14. WHERE WAS VEHICLE REGISTRATION KEPT? . . . . .   
 0) No registration present    1) Seat    2) Tool box    3) Headlight    4) Other \_\_\_\_\_  
 8) Unknown
15. DISPOSITION OF MOTORCYCLE:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

MOTORCYCLE EQUIPMENT

16. CRASH BARS: . . . . .   
 0) None    1) Yes    8) Unknown
17. SKID PLATE: . . . . .   
 0) None    1) Yes    8) Unknown
18. WINDSHIELD: . . . . .   
 0) None    1) Yes    8) Unknown
19. LUGGAGE RACK: . . . . .   
 0) None    1) Yes    8) Unknown
20. FRONT FENDER: . . . . .   
 0) None    1) Steel    2) Plastic    3) Fiberglass    8) Unknown
21. REAR FENDER: . . . . .   
 0) None    1) Steel    2) Plastic    3) Fiberglass    8) Unknown
22. PASSENGER FOOTRESTS: . . . . .   
 0) None    1) Yes    8) Unknown
23. REFLECTORS: . . . . .   
 0) None    1) Yes    8) Unknown

- 24. SPEEDOMETER: . . . . .
- 0) None 1) Equipped and operational 2) Equipped but not operational  
3) Equipped, not known whether operational 4) Not observed
- 25. ODOMETER: . . . . .
- 0) None 1) Equipped and operational 2) Equipped but not operational  
3) Equipped, not known whether operational 4) Not observed
- 26. TACHOMETER: . . . . .
- 0) None 1) Equipped and operational 2) Equipped but not operational  
3) Equipped, not known whether operational 4) Not observed
- 27. TAIL LAMP: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at  
3) On at time of accident time of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 28. STOP LAMP: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 29. LICENSE PLATE LAMP: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 30. HEADLAMP: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 31. TURN SIGNALS: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 32. FRONT BRAKE: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 33. REAR BRAKE: . . . . .
- 0) Not equipped 1) Equipped but not operational 2) Operational but not on at time  
3) On at time of accident of accident  
4) Equipped, unable to determine if operational 5) Unable to determine if on at  
6) Not observed time of accident
- 34. LEFT REAR VIEW MIRROR: . . . . .
- 0) None 1) Yes 2) Unknown
- 35. RIGHT REAR VIEW MIRROR: . . . . .
- 0) None 1) Yes 2) Unknown
- 36. REAR VIEW MIRROR TYPE: . . . . .
- 0) None 1) Flat 2) Convex 3) Other \_\_\_\_\_ 4) Unknown
- 37. FAIRING/SHIELD. . . . .
- 0) None 1) Frame-mounted 2) Handlebar-mounted
- 38. SIZE OF HEADLAMP (TO NEAREST INCH; ROUND 1/2 TO NEAREST EVEN NUMBER): . . . . .

- 39. TYPE OF HEADLAMP ASSEMBLY: . . . . .
- 0) No headlamp 1) Sealed beam 2) Bulb 3) Other \_\_\_\_\_
- 40. TYPE OF HEADLAMP: . . . . .
- 0) No headlamp 1) Vacuum/tungsten/nichrome 2) Quartz-halogen 3) Other \_\_\_\_\_
- 41. TYPE OF TURN SIGNALS: . . . . .
- 0) None 1) OEM 2) OEM removed 3) OEM, prior damage 4) Modified  
5) Modified, prior damage
- 42. TYPE OF FRONT BRAKE: . . . . .
- 0) None 1) Mechanical, single-leading shoe 2) Mechanical, double-leading shoe  
3) Mechanical disc 4) Hydraulic disc 5) Double hydraulic discs
- 43. TYPE OF REAR BRAKE: . . . . .
- 0) None 1) Mechanical, single-leading shoe 2) Mechanical, double-leading shoe  
3) Mechanical disc 4) Hydraulic disc 5) Double hydraulic discs

MOTORCYCLE MODIFICATIONS

- 44. FRAME: . . . . .
- 1) Yes 2) No 3) Not observed
- 45. GAS TANK: . . . . .
- 1) Yes 2) No 3) Not observed
- 46. SEAT: . . . . .
- 1) Yes 2) No 3) Not observed
- 47. BISSY BAR: . . . . .
- 1) Yes 2) No 3) Not observed
- 48. TRIPLE CLAMP: . . . . .
- 1) Yes 2) No 3) Not observed
- 49. ELEVATED FOOTRESTS / HIGHWAY PEGS . . . . .
- 1) Yes 2) No 3) Not observed
- 50. REAR WHEEL/TIRE: . . . . .
- 1) Yes 2) No 3) Not observed
- 51. FRONT SPOOL WHEEL: . . . . .
- 1) Yes 2) No 3) Not observed
- 52. MUFFLER / EXHAUST SYSTEM . . . . .
- 1) Yes 2) No 3) Not observed
- 53. LUGGAGE BOX / RACK. . . . .
- 1) Yes 2) No 3) Not observed
- 54. SIDECAR: . . . . .
- 1) Yes 2) No 3) Not observed
- 55. SADDLE BAGS: . . . . .
- 1) Yes 2) No 3) Not observed
- 56. ACCESSORIES (RADIO, ORNAMENTS, ETC.): . . . . .
- 1) Yes 2) No 3) Not observed
- 57. EXTENDED FRONT FORKS: . . . . .
- 0) None 1) Tubes 2) Slugs 3) Not observed
- 58. LENGTH OF FRONT FORKS IF MODIFIED (in.): . . . . .
- 99) N/A (not modified)

59. FRONT SUSPENSION: . . . . .   
 1) Telescoping tube 2) Solid 3) Springer 4) Girder 5) Leading link on fork  
 6) Other

60. REAR SUSPENSION: . . . . .   
 1) OEM 2) Hardtail 3) Modified shocks 4) Strut

61. DESCRIBE ADDITIONAL MODIFICATIONS:  
 \_\_\_\_\_  
 \_\_\_\_\_

MOTORCYCLE DIMENSIONS (IN.)

62. WHEELBASE (IF MODIFIED): . . . . .   
 999) N/A (OEM)

63. HANDLEBAR WIDTH (IF MODIFIED): . . . . .   
 99) N/A (OEM)

64. HEIGHT FUEL CAP PROTRUDES ABOVE TOP OF TANK (INCHES): . . . . .

MOTORCYCLE CONTROLS

65. FRONT BRAKE CABLE OR HOSE CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

66. REAR BRAKE ROD LINKAGE, CABLE, OR HOSE CONDITION . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

67. FRONT BRAKE ADJUSTMENT: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

68. REAR BRAKE ADJUSTMENT: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

69. CLUTCH CABLE CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

70. CLUTCH ADJUSTMENT: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

71. BRAKE STAYS OR CALIPER MOUNTS CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

72. THROTTLE CABLE CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

73. THROTTLE DRUM CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

74. STEM BOLT TORQUE: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

75. STEERING BEARINGS AND RACE CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

76. STEERING SEALS CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

77. STEERING STOPS CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

78. HANDLEBAR SECURITY: . . . . .   
 1) Good 2) Fair 3) Poor 8) Unknown

79. STEERING DAMPER TYPE: . . . . .   
0) None 1) Friction disc 2) Tube viscous 3) Other \_\_\_\_\_

80. HANDLEBAR TYPE: . . . . .   
1) OEM 2) Clip on 3) Clubman or cafe racer 4) Highsweep or touring  
5) Pullback 6) Flat tracker 7) Motocross 8) Ferrybar 9) Double-H  
10) Z-bar 11) M-bar 12) Double-T 13) Square-O 14) Other \_\_\_\_\_

81. HANDLEBAR MOUNTING: . . . . .   
1) OEM, solid 2) OEM, rubber bushing 3) Setbacks 4) Dog bones 5) Risers  
6) Other \_\_\_\_\_

82. FRONT SUSPENSION CONDITION: . . . . .   
1) Good 2) Fair 3) Poor 3) Unknown

83. FRONT AXLE SECURITY: . . . . .   
1) Good 2) Fair 3) Poor 3) Unknown

84. REAR SHOCK CONDITION: . . . . .   
1) Good 2) Fair 3) Poor 8) Unknown 9) N/A

85. SWING ARM CONDITION: . . . . .   
1) Good 2) Fair 3) Poor 8) Unknown 9) N/A

86. REAR AXLE SECURITY: . . . . .   
1) Good 2) Fair 3) Poor 8) Unknown

TIRES AND WHEELS

87. TYPE OF FRONT WHEEL: . . . . .   
1) OEM 2) Accessory

88. FRONT WHEEL ALIGNMENT: . . . . .   
1) Good 2) Fair 3) Poor 3) Unknown

89. FRONT TIRE BRAND: . . . . .   
1) Goodyear 2) Michelin 3) Yokohama 4) Dunlop 5) Avon 6) Cheng-Shin  
7) Nanjiang 8) Metzeler 9) Pirelli 10) Bridgestone 11) Nitto  
12) Mitsuboshi 13) IRC (Inoue) 14) Carlisle 15) Other \_\_\_\_\_  
16) Arco 17) Barom 18) "MC" 19) Continental 20) Riken

90. FRONT TIRE - TREAD TYPE: . . . . .   
1) Roadrace 2) Universal 3) Ribbed Pattern 4) Trials block 5) Knobby  
6) Slick 7) Automobile 8) Other \_\_\_\_\_ 98) Not observed 99) N/A

91. FRONT TIRE MINIMUM TREAD DEPTH (1/32 inch) (7 for 7/32 or more) . . . . .

92. FRONT TIRE SIZE: . . . . .

93. FRONT TIRE SIZE OEM: . . . . .   
1) Yes 2) No 3) Unknown

94. FRONT TIRE PRESSURE (psi): . . . . .

95. FRONT TIRE CONDITION: . . . . .   
1) Good 2) Fair 3) Poor

96. FRONT TREAD WEAR PATTERN: . . . . .   
0) None 1) Scalloped 2) Slip wear 3) Overinflated 4) Underinflated  
5) Camber wear 6) High mileage 7) Severe braking 8) Severe cornering

97. CONTRIBUTORY FRONT TIRE CONDITION, IF ACCIDENT INVOLVED: . . . . .   
0) None 1) Puncture flat 2) Blowout 3) Worn smooth 4) Low pressure  
5) High pressure 6) Valve failure 7) Other \_\_\_\_\_

98. TYPE OF REAR WHEEL: . . . . .   
1) OEM 2) Accessory

99. REAR WHEEL ALIGNMENT: . . . . .
- 1) Good 2) Fair 3) Poor 8) Unknown
100. REAR TIRE BRAND: . . . . .
- 1) Goodyear 2) Michelin 3) Yokohama 4) Dunlop 5) Avon 6) Cheng-Shin  
 7) Nankang 8) Metzeler 9) Pirelli 10) Bridgestone 11) Nitto  
 12) Mitsubishi 13) IRC (Inoue) 14) Carlisle 15) Other \_\_\_\_\_
101. REAR TIRE TREAD TYPE: . . . . .
- 1) Roadrace 2) Universal 3) Ribbed Pattern 4) Trials block 5) Knobby  
 6) Slick 7) Automobile 8) Other \_\_\_\_\_ 98) Not observed 99) N/A
102. REAR TIRE MINIMUM TREAD DEPTH (1/32 inch) 7 for 7/32 more
103. REAR TIRE SIZE: . . . . .
104. REAR TIRE SIZE OEM: . . . . .
- 1) Yes 2) No 8) Unknown
105. REAR TIRE PRESSURE (psi): . . . . .
106. REAR TIRE CONDITION: . . . . .
- 1) Good 2) Fair 3) Poor 5) Unknown
107. REAR TREAD WEAR PATTERN: . . . . .
- 0) None 1) Scalloped 2) Slip wear 3) Overinflated 4) Underinflated  
 5) Camber wear 6) High mileage 7) Severe braking 8) Severe cornering
108. CONTRIBUTORY REAR TIRE CONDITION, IF ACCIDENT INVOLVED: . . . . .
- 0) None 1) Puncture flat 2) Blowout 3) Worn smooth 4) Low pressure  
 5) High pressure 6) Valve failure 7) Other \_\_\_\_\_
109. DESCRIBE ANY OTHER TIRE OR WHEEL DAMAGE:
- \_\_\_\_\_

PROPULSION SYSTEM

110. TYPE OF DRIVE: . . . . .
- 1) Chain 2) Drive shaft 3) Fluid coupling 4) Other \_\_\_\_\_
111. CHAIN OR DRIVE SHAFT CONDITION: . . . . .
- 1) Good 2) Fair 3) Poor 8) Unknown
112. CHAIN ADJUSTMENT (PLAY): . . . . .
- 1) Good 2) Fair 3) Poor 8) Unknown 9) N/A
113. SPROCKET CONDITION: . . . . .
- 1) Good 2) Fair 3) Poor 8) Unknown 9) N/A
114. CONTRIBUTORY ELECTRICAL CONDITION: . . . . .
- 0) None 1) Lighting system failure 2) Ignition system failure  
 3) Battery failure 4) Other \_\_\_\_\_
115. CONTRIBUTORY ENGINE CONDITION: . . . . .
- 0) None 1) Fuel starvation 2) Electrical failure 3) Mechanical failure  
 4) Lubrication failure 5) Other \_\_\_\_\_
116. CONTRIBUTORY TRANSMISSION CONDITION: . . . . .
- 0) None 1) Mechanical failure 2) Lubrication failure  
 3) Other \_\_\_\_\_

117. CORNERING CLEARANCE (IF ACCIDENT INVOLVED): . . . . .   
 1) Sidestand 2) Centerstand 3) Foot pegs 4) Muffler/pipes 5) Crash bars  
 6) Other \_\_\_\_\_ 9) N/A (not involved)

FUEL TANK

118. FUEL TANK MATERIAL: . . . . .   
 1) Steel 2) Aluminum 3) Fiberglass 4) Plastic 5) Other \_\_\_\_\_

119. FUEL CAP TYPE: . . . . .   
 1) Bayonet 2) Monza (flip-up) 3) Screw down 4) Push plug 5) Other \_\_\_\_\_

120. FUEL SHUTOFF TYPE: . . . . .   
 1) Manual 2) Automatic

121. DESCRIBE ANY TANK OBSTRUCTIONS:  
 \_\_\_\_\_  
 \_\_\_\_\_

EXHAUST SYSTEM

122. CONDITION: . . . . .   
 1) Good 2) Fair 3) Poor 3) Unknown

123. NOISE LEVEL: . . . . .   
 1) Regular 2) Loud 3) Unknown

124. WAS NOISE LEVEL CONTRIBUTORY? . . . . .   
 1) Yes 2) No 3) Unknown

125. IF SO, DESCRIBE:  
 \_\_\_\_\_  
 \_\_\_\_\_

VEHICLE DYNAMICS

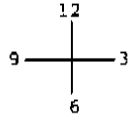
- 126. MOTORCYCLE MOTION PRIOR TO COLLISION: (see Appendix C) . . . . . 

- 127. O/V MOTION PRIOR TO COLLISION: (see Appendix C). . . . . 

- 128. SPEED OF MOTORCYCLE (PRE-CRASH): . . . . . 

- 129. SPEED OF MOTORCYCLE (CRASH): . . . . . 

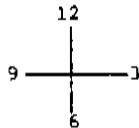
- 130. RELATIVE BEARING OF O/V, AS SEEN FROM MOTORCYCLE (12-HOUR CODE): . . . . . 

- 131. SPEED OF O/V (PRE-CRASH): . . . . . 

- 132. SPEED OF O/V (CRASH): . . . . . 

- 133. RELATIVE BEARING OF MOTORCYCLE, AS SEEN FROM O/V (12-HOUR CODE): . . . . . 

CRASH

134. OBJECT STRUCK: . . . . .   
 1) Passenger car 2) Other motorcycle 3) Fixed object 4) Animal 5) Roadway  
 6) Other four-wheel vehicle 7) Other \_\_\_\_\_ 8) Unknown



135. IF AUTOMOBILE WAS INVOLVED, AUTOMOBILE MAKE (SEE APPENDIX D): . . . . . 

--	--

  
 98) Unknown 99) N/A
136. O/V MODEL TYPE: . . . . . 

--	--

  
 1) 2 door hardtop 2) 2 door sedan or coupe 3) 4 door hardtop 4) 4 door sedan or coupe  
 5) Station wagon 6) Convertable/roadster 7) Van 8) Pickup 9) Commercial truck  
 10) Other \_\_\_\_\_ 98) Unknown 99) N/A

137. IF AUTOMOBILE WAS INVOLVED, WHAT SIZE: (SEE APPENDIX D). . . . . 

--

  
 1) Full size 2) Intermediate 3) Compact 4) Sub-compact 5) Unknown 9) N/A

138. COLLISION CONTACT OF MOTORCYCLE: (SEE APPENDIX E) . . . . . 

--	--	--	--
139. COLLISION CONTACT OF O/V: (SEE APPENDIX E) . . . . . 

--	--	--	--
140. MOTORCYCLE WHEELBASE REDUCTION (INCHES): . . . . . 

--	--	--	--

CRASH PERFORMANCE

For questions 141 through 172 use 0) No damage; 1) Damage, no injury involvement;  
 2) Damage, injury involvement; 7) Damage, injury involvement unknown; 8) Not observed;  
 9) N/A.

- |     |  |  |
|-----|--|--|
| 141 | CRASH BARS: . . . . .                      |  |
| 142 | WINDSHIELD: . . . . .                      |  |
| 143 | FAIRING: . . . . .                         |  |
| 144 | LUGGAGE RACK: . . . . .                    |  |
| 145 | SEAT: . . . . .                            |  |
| 146 | LUGGAGE BOX: . . . . .                     |  |
| 147 | SADDLEBAGS: . . . . .                      |  |
| 148 | SISSY BARS: . . . . .                      |  |
| 149 | FRONT FENDER: . . . . .                    |  |
| 150 | REAR FENDER: . . . . .                     |  |
| 151 | FOOT PEGS, FOOTREST: . . . . .             |  |
| 152 | HANDLEBARS: . . . . .                      |  |
| 153 | ENGINE CRANKCASE, CYLINDERS: . . . . .     |  |
| 154 | MUFFLER/EXHAUST PIPES: . . . . .           |  |
| 155 | FRONT BRAKE LEVER: . . . . .               |  |
| 156 | CLUTCH LEVER: . . . . .                    |  |
| 157 | THROTTLE ASSEMBLY: . . . . .               |  |
| 158 | REAR BRAKE PEDAL: . . . . .                |  |
| 159 | TRANSMISSION: . . . . .                    |  |
| 160 | GEAR SHIFT LEVER: . . . . .                |  |
| 161 | FRONT SUSPENSION: . . . . .                |  |
| 162 | FRONT WHEEL AND TIRE: . . . . .            |  |
| 163 | HEADLIGHT: . . . . .                       |  |
| 164 | BRAKE LIGHT, REAR RUNNING LIGHT: . . . . . |  |
| 165 | TURN SIGNALS: . . . . .                    |  |

For questions 166 through 172, use 0) No damage; 1) Damage, no injury involvement; 2) Damage, injury involvement; 7) Damage, injury involvement unknown; 8) Not observed; 9) N/A.

- 166. REAR VIEW MIRRORS:
- 167. FRAME:
- 168. REAR SUSPENSION:
- 169. REAR WHEEL AND TIRE:
- 170. GAS TANK:
- 171. OIL TANK:
- 172. BATTERY:

FUEL SYSTEM INTEGRITY

- 173. TANK RETENTION:   
1) Complete 2) Partial 3) Total separation from mount
- 174. TANK DEFORMATION:   
0) None 1) Mild 2) Moderate 3) Severe
- 175. TANK VIOLATION:   
0) None 1) Yes
- 176. DESCRIBE SOURCE OF VIOLATION:  
\_\_\_\_\_

- 177. DID FUEL CAP STAY CLOSED DURING IMPACT:   
1) Yes 2) No 3) Unknown/not observed
- 178. FUEL SPILLAGE:   
1) Yes 2) No 3) Unknown/not observed
- 179. FUEL LEAKAGE:   
1) Yes 2) No 3) Unknown/not observed
- 180. SOURCE OF FUEL LEAKAGE OR SPILLAGE:   
1) Tank 2) Lines/fittings 3) Filter 4) Carburetor 5) Other \_\_\_\_\_ 9) Unknown  
9) N/A (no spills or leaks)
- 181. TANK FUEL SELECTOR POSITION:   
1) On 2) Off 3) Reserve 3) Unknown
- 182. APPROXIMATE TANK CONTENTS:   
1) Full 2) 3/4 full 3) 1/2 full 4) 1/4 full 5) Empty 8) Unknown

POST CRASH

- 183. ESTIMATED TIME WHEN RIDER AND MOTORCYCLE SEPARATED:   
1) Pre-crash 2) Crash 3) Post-crash 3) Unknown 9) N/A (no separation)
- 184. DISTANCE BETWEEN POINT OF FIRST IMPACT AND POSITION OF REST OF RIDER (IN FEET):
- 185. DISTANCE BETWEEN POINT OF FIRST IMPACT AND POSITION OF REST OF MOTORCYCLE (IN FEET):
- 186. DISTANCE BETWEEN POINT OF FIRST IMPACT AND POSITION OF REST OF PASSENGER (IN FEET):     
998) Unknown 999) No passenger

187. MOTORCYCLE MOTION AFTER CONTACT: . . . . .
- 0) Remained at or very near point of impact 1) Deflected to side  
 2) Became airborne 3) Slid to stop 4) End-overs  
 5) Trapped in or under other vehicle 6) Other \_\_\_\_\_ 9) Not observed/Unknown
188. RIDER MOTION AFTER CONTACT: . . . . .
- 0) Stopped near point of impact 1) Vaulted from motorcycle 2) Fell from motorcycle  
 3) Tumbled or rolled to stop 4) Slid to stop 5) Trapped under motorcycle  
 6) Trapped in or under O/V 7) Struck or dragged by O/V 8) Unknown 9) N/A
189. PASSENGER MOTION AFTER CONTACT: . . . . .
- 0) Stopped near point of impact 1) Vaulted from motorcycle 2) Fell from motorcycle  
 3) Tumbled or rolled to stop 4) Slid to stop 5) Trapped under motorcycle  
 6) Trapped in or under O/V 7) Struck or dragged by O/V 8) Unknown 9) N/A
190. ESTIMATED HIGHEST POINT OF TRAJECTORY FOR EJECTED RIDER (IN FEET):  
 \_\_\_\_\_ 98) Unknown 99) N/A
191. ESTIMATED HIGHEST POINT OF TRAJECTORY FOR EJECTED PASSENGER (IN FEET):  
 98) Unknown 99) no passenger \_\_\_\_\_
192. DID PRE-CRASH FIRE OCCUR: . . . . .
- 1) Yes 2) No 3) Unknown
193. WAS PRE-CRASH FIRE AN ACCIDENT CAUSE: . . . . .
- 1) Yes 2) No 3) Unknown 9) N/A (no pre-crash fire)
194. DID CRASH FIRE OCCUR: . . . . .
- 1) Yes 2) No 3) Unknown
195. DID POST-CRASH FIRE OCCUR: . . . . .
- 1) Yes 2) No 3) Unknown
196. FUEL SOURCE FOR FIRE: . . . . .
- 1) Tank rupture 2) Tank cap separation 3) Carburetor 4) Fuel lines  
 5) Petcock 6) Other \_\_\_\_\_ 8) Unknown 9) N/A (no fire)
197. IGNITION SOURCE FOR FIRE: . . . . .
- 1) Electrical system violation 2) Exposed exhaust 3) Friction sparks  
 4) Other 8) Unknown 9) N/A (no fire)

RIDER BACKGROUND INFORMATION

(Revision 29/6/76)

1. DATE OF BIRTH: . . . . . 

--	--	--	--

  
MONTH YEAR
2. CLASS OF DRIVER'S LICENSE: . . . . . 

--

  
0) No license or permit 1) Class 1 2) Class 2 3) Class 3  
4) Class 4 or equivalent 5) Learner's permit 8) Not observed
3. IF NO CLASS 4 LICENSE, DOES OPERATOR HAVE MOTORCYCLE PERMIT: . . . . . 

--

  
1) Yes 2) No 8) Not observed 9) N/A
4. STATE OF LICENSE ISSUANCE: . . . . . 

--	--

  
05) California (see code sheet for other states) 98) Not observed 99) N/A
5. HEIGHT: . . . . . 

--	--

  
\_\_\_\_\_ inches 98) Not observed
6. WEIGHT: . . . . . 

--	--	--

  
\_\_\_\_\_ lbs. 998) Not observed
7. MARITAL STATUS: . . . . . 

--

  
1) Single 2) Married 3) Separated 4) Divorced 8) Not observed  
5) Widowed 6) Cohabiting
8. SEX: . . . . . 

--

  
1) Male 2) Female 8) Not observed
9. NUMBER OF CHILDREN: . . . . . 

--

  
0-6) Specify number of children 7) Seven or more children 8) Not observed
10. EDUCATIONAL STATUS: . . . . . 

--

  
1) Grad school (or degree) professional training 2) College/university graduate  
3) Partial college training 4) High school graduate 5) Partial high school  
6) Junior high school or grammar school graduate 7) Less than 7 years of schooling  
8) Unknown
11. OCCUPATIONAL CODE OF OPERATOR: Occupation (1970 Census Users Guide) . . . . . 

--	--

  
1) Professional, technical 2) Manager, administrator (except farm)  
3) Sales worker 4) Clerical, kindred 5) Craftman, kindred  
6) Operatives (except transport) 7) Transport equipment operatives (drivers)  
8) Laborers (except farm) 9) Farmers, farm managers 10) Farm laborers, foreman  
11) Service worker (except below) service workers  
12) Private household worker 13) Housewife 14) Student 15) Military  
16) Retired 17) Unemployed (over 1 month) 98) Unknown
12. TWO FACTOR INDEX OF SOCIAL POSITION (HOLLINGSHEAD): . . . . . 

--

  
1) Class I (11-17) 2) Class II (18-27) 3) Class III (28-43)  
4) Class IV (44-60) 5) Class V (61-77) 6) Unknown
13. HAND PREFERENCE: . . . . . 

--

  
1) Right 2) Left 3) Ambidextrous 8) Not observed
14. WAS EYE CORRECTION WORN AT TIME OF ACCIDENT: . . . . . 

--

  
0) Required but not worn 1) Glasses 2) Contacts 8) Not observed  
9) N/A (eye correction not required)
15. OFF ROAD OR DIRT BIKE RIDING EXPERIENCE: . . . . . 

--

  
1) Yes 2) No 8) Not observed 9) N/A

15. AMOUNT OF STREET MOTORCYCLE RIDING EXPERIENCE: (IN MONTHS) . . . . .    
 97) More than 96 months of experience 98) Not observed
17. NUMBER OF DAYS PER WEEK THAT MOTORCYCLES ARE RIDDEN BY RIDER: . . . . .   
 \_\_\_\_\_ days 8) Unknown 9) N/A
18. AMOUNT OF MOTORCYCLE RIDING EXPERIENCE ON ACCIDENT INVOLVED MOTORCYCLE: . . . . .    
 \_\_\_\_\_ months 97) More than 96 months of experience 98) Not observed
19. TYPE OF TRAINING RECEIVED BY MOTORCYCLIST: . . . . .   
 0) None, self taught 1) Friends and/or family  
 2) School, club, dealership, or law enforcement sponsored motorcycle course  
 3) Formal training by highly experienced persons or professionals, i.e. AMA, AFM, FIM  
 competition license  
 4) Other \_\_\_\_\_ 8) Not observed
20. WHAT MEASURES DOES THE RIDER FEEL COULD HAVE BEEN TAKEN TO PREVENT THE ACCIDENT  
 OR ALLEVIATE ITS SEVERITY: . . . . .   
 0) No preventive measures suggested 1) Education of motorists to watch for motorcyclists  
 2) More rigorous licensing procedures for motorcyclists  
 3) Rigorous training courses in motorcycle safety 4) Other \_\_\_\_\_ 8) Not observed
21. NUMBER OF TIMES RIDER TRAVERSED INVOLVED ROADWAY: . . . . .   
 0) Never before 1) Daily 2) Weekly, 1-4 times 3) Monthly, 1-3 times  
 4) Quarterly, 1-2 times 5) Annually, 1-3 times 6) Less than annual 8) Not observed
22. PURPOSE OF TRIP: TRIP PLAN: . . . . .    
 1) Home 2) Work 3) Shopping, errand 4) Recreation  
 5) Friends, relatives 6) Bar, drinking party 7) School 8) Unknown  
 9) Other \_\_\_\_\_  
 ORIGIN DESTINATION
23. LENGTH OF TRIP: . . . . .    
 \_\_\_\_\_ Miles 98) Not observed
24. LENGTH OF TIME RIDING MOTORCYCLE JUST BEFORE ACCIDENT: . . . . .    
 \_\_\_\_\_ hours 98) Not observed
25. ALCOHOL AND/OR DRUG IMPAIRMENT: . . . . .   
 1) Had been drinking, not under influence 2) Had been drinking, under influence  
 3) Had been drinking, impairment unknown 4) Under drug influence  
 5) Combination 6) Other Impairment \_\_\_\_\_ 8) Unknown 9) N/A
26. BLOOD ALCOHOL LEVEL CORRECTED TO TIME OF ACCIDENT INVOLVEMENT: . . . . .    
 00) No alcohol in blood 01-96) Hundredths of 1% of blood alcohol  
 97) Blood alcohol higher than .96% 98) Not observed
27. USE OF DRUGS OTHER THAN ALCOHOL: . . . . .    
 (A) 0) None 1) Prescription 2) Non-prescription 8) Not observed  
 (B) 0) None 1) Marijuana 2) Stimulants 3) Depressants 4) Psychedelics  
 5) Antihistamines, depressant 6) Antihistamines, stimulant 7) Multiple (including  
 8) Not observed alcohol)
28. ACCIDENT RELATED PHYSIOLOGICAL IMPAIRMENT: . . . . .    
 A. Permanent condition 0) None 1) Infirmities, arthritis, senility 2) Diabetes  
 3) Brain - epilepsy, stroke 4) Cardio vascular - coronary, angina, infection  
 5) Vision 6) Hearing 7) Respiratory 8) Paraplegic, amputees 9) Other \_\_\_\_\_  
 B. Transient condition 0) None 1) Fatigue 2) Hunger 3) Thirst 4) Siesta syndrome  
 5) Elimination urgency 6) Minor malaise 7) Muscle spasm, cramp 8) Other \_\_\_\_\_
29. STRESS THAT DAY: . . . . .   
 0) No stress observed or noted 1) Conflict with relatives, friends  
 2) Conflict with supervisor, coworker 3) Death, illness of friend, relative  
 4) Financial distress 5) School or work problems 6) Legal, police problems  
 7) Social agency, counselor problems 8) Reward stress

30. ATTENTION TO DRIVING TASK: . . . . .
- 1) Attention diverted to surrounding traffic  
 2) Attention diverted to non-traffic item (specify) \_\_\_\_\_  
 3) Attention diverted to motorcycle operation 4) Inattentive mode 8) Not observed  
 9) N/A, Attention to driving task not a factor
31. FREQUENCY OF FRONT BRAKE USAGE DURING STREET RIDING: . . . . .
- 0) Never 1) Sometimes, but not frequently 2) Usually 3) Always  
 9) Not observed 9) N/A (no front brakes)
32. NUMBER OF PASSENGERS ON MOTORCYCLE: . . . . .
- 0) None 1) One 2) Two 3) Three
33. FREQUENCY OF RIDING WITH PASSENGER: . . . . .
- 0) Never rode with passenger before 1) Very little experience with passenger on m/c  
 2) Moderate experience riding with passenger 3) Extensive experience riding  
 8) Not observed 9) N/A with passenger
34. NUMBER OF MOVING VIOLATIONS IN LAST TWO YEARS: . . . . .
- 0-6) number of violations 7) More than six violations 8) Unknown
35. NUMBER OF TRAFFIC ACCIDENTS IN LAST TWO YEARS: . . . . .
- 0-6) Number of accidents 7) More than six accidents 8) Not observed 9) N/A
36. BODY TATTOOS . . . . .
- 0-6) Number of tattoos 7) More than 6 8) Unknown

HUMAN FACTORS  
IMMEDIATE PRE-CRASH, CRASH AND POST-CRASH

1. MOTORCYCLE POSITION IN LANE PRIOR TO ACCIDENT ONSET: 
  - 1) Center 2) Right of center 3) Left of center 4) Stripe riding
  - 5) Crossing lanes 6) Opposing traffic 7) Other \_\_\_\_\_ 8) Not observed/unknown
  - 9) N/A
2. O/V POSITION IN LANE: 
  - 1) Center 2) Right of center 3) Left of center 4) Turning or crossing lanes
  - 5) Opposing traffic 6) Other \_\_\_\_\_ 8) Not observed/unknown 9) N/A (no O/V)
3. MOTORCYCLE IN LANE # \_\_\_\_\_ OF \_\_\_\_\_ THROUGH LANES:  
  - 1) One 2) Two 3) Three 4) Four or more 5) Left turn pocket or left turn only lane
  - 6) Right turn only lane 7) Other \_\_\_\_\_ 8) Not observed 9) N/A
4. OTHER VEHICLE IN LANE # \_\_\_\_\_ OF \_\_\_\_\_ THROUGH LANES:  

Same choices as #3 above
5. MOTORCYCLE CONTROL OPERATIONS BEFORE ACCIDENT ONSET:  
  - 0) None 1) Upshifting/accelerating 2) Downshifting 3) Braking
  - 4) Operating fuel control valve or choke 5) Throttle change 6) Mirror adjustment
  - 7) Turning 8) Adjusting/operating vehicle lights 9) Other 98) Unknown
6. DID CONTROL OPERATIONS INTERFERE WITH DRIVING TASK: 
  - 1) Yes (explain) \_\_\_\_\_ 2) No 3) Possibly (explain) \_\_\_\_\_
  - 8) Not observed/unknown 9) N/A
7. EVIDENCE OF PASSENGER INTERFERENCE WITH MOTORCYCLE OPERATION OR EVASIVE MANEUVER: 
  - 0) None 1) Yes (describe) \_\_\_\_\_ 2) Possibly yes 9) Not observed/unknown
  - 9) N/A (no passenger)
8. ACCIDENT PRECIPITATING FACTOR: 
  - 0) Phantom vehicle involved 1) M/C operator error 2) O/V violation of M/C R.O.W.
  - 3) Roadway defect 4) Illegal pedestrian obstruction of R.O.W. 5) Animal in R.O.W.
  - 6) Vehicle defect/mechanical failure 7) Other \_\_\_\_\_
  - 8) Not observed
9. MOTORCYCLE VIOLATION OF TRAFFIC CODE: (See Appendix G)  
  - 00) No violation 98) Not observed
10. O/V VIOLATION OF TRAFFIC CODE: (See Appendix G)  
  - 00) No violation 98) Not observed 99) N/A (no O/V)
11. DID MOTORCYCLIST USE HORN TO WARN OTHER VEHICLE(S): 
  - 1) Yes 2) No 8) Not observed 9) N/A (no OV)
12. TIME FROM PRECIPITATING EVENT TO IMPACT (IN 1/10 SEC. INCREMENTS):  
  - 98) Not observed 99) N/A
13. EVASIVE ACTION TAKEN OR ATTEMPTED BY MOTORCYCLIST:  
  - 0) No evasive action 1) Rear braking only 2) Front brake only
  - 3) Front and rear braking 4) Swerve around hazard or obstacle 5) Lay-down & slide
  - 6) Accelerate 7) 1 and 4 8) 2 and 4 9) 3 and 4 10) 4 and 6
  - 11) Brake release 12) Other \_\_\_\_\_ 98) Not observed
14. WAS MOTORCYCLIST'S EVASIVE ACTION PROPER FOR THE SITUATION: 
  - 1) Yes 2) Probable 3) Undecided 4) Improbable 5) No 9) N/A
15. WAS MOTORCYCLIST'S EVASIVE ACTION PROPERLY EXECUTED: 
  - 1) Yes 2) No 3) UNDECIDED 9) N/A
16. EVASIVE ACTION TAKEN BY OTHER VEHICLE: 
  - 0) No evasive action taken 1) Braking 2) Steering 3) 1 and 2 4) Accelerate
  - 5) Accelerate and steering 6) Brake release 7) Other \_\_\_\_\_
  - 8) Unknown, not observed 9) N/A

17. LOSS OF CONTROL MODE (USUALLY IN SINGLE VEHICLE ACCIDENTS):
- 1) Capsize or fall over 2) Wobble 3) Weave 4) Lost wheelie 5) Slide-out  
 6) High side 7) Ran wide on turn, ran off 8) End-over 98) Not observed 99) N/A  
 road, undercornering
18. ANGLE OF IMPACT IN DEGREES:
- (draw diagram; use acute angles only in coding)
- 98) Not observed 99) N/A
19. OPERATOR POSITION ON MOTORCYCLE AT TIME OF IMPACT:
- 1) Normal seated position 2) Standing on footrests, footpegs 3) Head down  
 4) Shoulder check, left 5) Shoulder check right 6) Dismounting, bailing out  
 7) Other \_\_\_\_\_ 8) Not observed
20. UPPER TORSO COVERAGE:
- 0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth or naugahyde  
 4) Leather 8) Not observed
21. DID COVERAGE PREVENT OR REDUCE INJURY:
- 1) Yes 2) No 8) not observed 9) N/A  
 0) No contact in area
22. LOWER TORSO COVERAGE:
- 0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth or naugahyde  
 4) Leather 8) Not observed
23. DID COVERAGE PREVENT OR REDUCE INJURY:
- 1) Yes 2) No 8) Not observed 9) N/A  
 0) No contact in area
24. FOOT COVERAGE:
- 0) None 1) Light sandal, loafer 2) Medium street shoe 3) Heavy shoe or boot  
 8) Not observed
25. DID COVERAGE PREVENT OR REDUCE INJURY:
- 1) Yes 2) No 8) Not observed 9) N/A  
 0) No contact in area
26. GLOVES:
- 0) None 1) Light 2) Medium 3) Heavy 8) Not observed
27. DID COVERAGE PREVENT OR REDUCE INJURY:
- 1) Yes 2) No 8) Not observed 9) N/A  
 0) No contact in area
28. HELMET WORN:
- 1) Yes, helmet acquired for examination (fill out additional helmet supplement)  
 2) Yes, helmet not acquired for examination 3) No 8) Not observed
29. REASON FOR NOT WEARING A HELMET:
- 1) Inconvenient and/or uncomfortable 2) Cost excessive 3) Reduce awareness of traffic  
 4) No expectation of accident involvement  
 5) Owns helmet, not accessible or in possession at time of accident  
 6) Wary of helmet-induced injuries 7) Other 8) Unknown, not observed 9) N/A
30. ON-SCENE MEDICAL ASSISTANCE TO INJURED:
- 0) None 1) Private ambulance 2) Public ambulance 3) M.D. 4) Coroner  
 5) Private party 6) Law enforcement 7) Other (specify) 8) Not observed 9) N/A
31. RESCUE AMBULANCE NUMBER: \_\_\_\_\_



(TYPE OF EMERGENCY MEDICAL TREATMENT ADMINISTERED TO PASSENGER: 0) None, 1) Yes, 8) Not observed.)

- 32. HEMORRHAGE CONTROL: . . . . .
- 33. SPLINTING OF LIMBS (BACK BOARDS): . . . . .
- 34. RESUSCITATION: . . . . .
- 35. I.V. - INJECTIONS: . . . . .
- 36. CARDIO-VASCULAR Rx: . . . . .
- 37. Rx OF HEAD WOUNDS: . . . . .

38. OTHER (SPECIFY): \_\_\_\_\_

- 39. STATUS OF TRAUMATIC INJURIES: . . . . .

1) First aid at scene 2) Treated at hospital/clinic and released  
3) Hospitalized for less than 24 hours 4) Hospitalized for significant Rx  
5) Anticipated outpatient care only 6) Fatal - dead on scene 7) Fatal - DOA  
8) Fatal - dead within 24 hours 9) Fatal - dead period unknown  
98) Not observed 99) N/A

40. HOSPITAL TAKEN TO: \_\_\_\_\_



# HEAD/NECK INJURY QUESTIONNAIRE

ENTER CODE(S) FOR  
 AREA(S) OF POSSIBLE  
 CONTACT (SEE APPEN-  
 DICES E & F)  
 (Alphanumeric, 4 each)


---



---



---



---

REGION \*  
 SIDE \*  
 ASPECT \*  
 LESION \*  
 SYSTEM/ORGAN \*  
 SEVERITY @


REGION \*  
 SIDE \*  
 ASPECT \*  
 LESION \*  
 SYSTEM/ORGAN \*  
 SEVERITY @




REGION \*  
 SIDE \*  
 ASPECT \*  
 LESION \*  
 SYSTEM/ORGAN \*  
 SEVERITY @


(Keypunch by columns,  
 left to right)

OTHER VEHICLE DRIVER INFORMATION

1. DATE OF BIRTH: . . . . . 

--	--	--	--

  
 9998) Unknown 9999) N/A (no OV)

2. CLASS OF DRIVER'S LICENSE: . . . . . 

--	--

  
 0) No license or permit 1) 1 2) 2 3) 3 4) 4 or equivalent  
 5) Learner's permit 8) Not observed 9) N/A (no O/V)

3. STATE ISSUING DRIVER'S LICENSE OR PERMIT: . . . . . 

--	--

  
 05) California (see code sheet for other states) 98) Not observed 99) N/A

4. SEX: . . . . . 

--

  
 1) Male 2) Female 3) Not observed 9) N/A (no OV)

5. MARITAL STATUS: . . . . . 

--

  
 1) Single 2) Married 3) Separated 4) Divorced 8) Not observed 9) N/A (no O/V)

6. NUMBER OF CHILDREN: . . . . . 

--

  
 0-6) Specify number of children 7) Seven or more children 8) Not observed  
 9) N/A (no O/V)

7. EDUCATIONAL STATUS: . . . . . 

--

  
 1) Grad school (or degree) professional training 2) College/university graduate  
 3) Partial college training 4) High school graduate 5) Partial high school  
 6) Junior high school or grammar school graduate 7) Less than 7 years of schooling  
 8) Unknown 9) N/A

8. OCCUPATIONAL CODE OF OPERATOR: 1970 CENSUS USERS GUIDE). . . . . 

--	--

  
 1) Professional, technical 2) Manager, administrator (except farm)  
 3) Sales workers 4) Clerical, kindred 5) Craftman, kindred  
 6) Operatives (except transport) 7) Transport equipment operatives (drivers)  
 8) Laborers (except farm) 9) Farmers, farm managers 10) Farm laborers, foreman  
 11) Service worker (except below) 12) Private household worker 13) Housewife  
 14) Student 15) Military 16) Retired 17) Unemployed (over 1 month) 98) Unknown  
 99) N/A

9. TWO FACTOR INDEX OF SOCIAL POSITION (MOLLINGSHEAD): . . . . . 

--

  
 (1) Class I (11-17) 2) Class II (18-27) 3) Class III (28-43) 4) Class IV (44-60)  
 5) Class V (61-77) 8) Unknown 9) N/A

10. DRIVING EXPERIENCE: . . . . . 

--	--

  
 \_\_\_\_\_ months 97) More than 96 months (8 years) experience 98) Not observed 99) N/A

11. EXPERIENCE DRIVING ACCIDENT INVOLVED VEHICLE: . . . . . 

--	--

  
 \_\_\_\_\_ months 98) Not observed 99) N/A

12. PURPOSE OF TRIP OR TRIP PLAN: . . . . . 

--	--

  
 1) Home 2) Work 3) Shopping, errand 4) Recreation  
 5) Friends, relatives 6) Bar, drinking party 7) School 8) Unknown  
 9) Other \_\_\_\_\_ 99) N/A (no OV)

ORIGIN DESTINATION

13. ALCOHOL AND/OR DRUG IMPAIRMENT: . . . . . 

--

  
 1) Had been drinking, not under influence 2) Had been drinking, under influence  
 3) Had been drinking, impairment unknown 4) Under drug influence 5) Combination  
 6) Other impairment \_\_\_\_\_ 8) Unknown 9) N/A

14. BLOOD ALCOHOL LEVEL CORRECTED TO TIME OF ACCIDENT INVOLVEMENT: . . . . . 

--	--

  
 00) No alcohol in blood 01-96) Hundredths of 1% of blood alcohol  
 97) Blood alcohol higher than .96% 98) Not observed 99) N/A

15. USE OF DRUGS OTHER THAN ALCOHOL: . . . . .
- A. 0) None 1) Prescription 2) Non-prescription 8) Not observed A. B.
- B. 0) None 1) Marijuana 2) Stimulants 3) Depressants 4) Psychedelics
- 5) Antihistamines, depressant 6) Antihistamines, stimulant 7) Multiple (including alcohol)
- 9) Not observed 9) N/A
16. NUMBER OF TRAFFIC ACCIDENTS IN LAST TWO YEARS (INVOLVED AS DRIVER): . . . . .
- 0-6) Number of accidents 7) More than six accidents in last two years
- 8) Not observed 9) N/A

HELMET

1. USC ACCIDENT #:
2. HELMET INFORMATION FOR:  
1) Rider 2) Passenger
3. HELMET MANUFACTURER: (SEE LISTING)   
(Model, if known) \_\_\_\_\_  
98) Not observed 99) N/A
4. HELMET DATE OF MANUFACTURE:   
98) Not observed 99) N/A  
MONTH YEAR
5. DOT FMVSS-218 QUALIFICATION LABEL:   
1) Yes 2) No 3) No. U.S. DOT disclaimer label attached 8) Not observed  
9) N/A
6. ANSI Z-90 standard labeled:   
1) Yes, 1966 2) Yes, 1971 3) No 8) Not observed 9) N/A
7. SHCA certified:   
SHCA Certification No.: \_\_\_\_\_ 1) Yes 2) No 8) Not observed  
9) N/A
8. SNELL QUALIFICATION: SERIAL # \_\_\_\_\_   
1) Yes, 1962 2) Yes, 1963 3) Yes, 1970  
4) Yes, 1975 5) No 8) Not observed 9) N/A
9. HELMET WEIGHT: ACTUAL WEIGHT LBS.   
1) Less than 1.75 lbs. 2) 1.75 to 1.99 lbs. 3) 2.00 to 2.24 lbs.  
4) 2.25 to 2.49 lbs. 5) 2.50 to 2.74 lbs. 6) 2.75 to 2.99 lbs.  
7) 3.00 to 3.24 lbs. 8) 3.25 lbs and over 98) Unknown 99) N/A
10. TYPE OF COVERAGE:   
1) Partial 2) Full 3) Full facial 105° 4) Full facial 120°  
8) Not observed 9) N/A
11. CONDITION OF HELMET PRIOR TO TRAFFIC ACCIDENT:   
1) Damaged (describe) \_\_\_\_\_  
2) Not damaged 8) Not observed 9) N/A
12. WAS RETENTION SYSTEM FASTENED PRIOR TO TRAFFIC ACCIDENT:   
1) Yes 2) No 8) Not observed 9) N/A
13. DID HELMET REMAIN ON HEAD DURING CRASH IMPACT AND/OR FALL:   
1) Yes 2) No 8) Not observed 9) N/A
14. TYPE RETENTION SYSTEM:   
0) None 1) D-rings 2) Snaps 3) Snaps & D-rings 4) Quick release  
5) Other 8) Not observed 9) N/A
15. IF RETENTION SYSTEM FAILED, WHAT KIND OF FAILURE:   
1) Pulled through D-rings 2) Quick release let go 3) Unsnapped  
4) Broke rivet 5) Webbing failure 6) Shell failure at rivet hole  
7) Other \_\_\_\_\_ 8) Not observed/unknown 9) N/A, no failure
16. HELMET FIT:   
1) Small - too tight 2) Approximately correct 3) Large - too big  
4) Extremely loose 5) Poor contour match 8) Not observed 9) N/A
17. ETHNICITY:   
1) Negroid 2) Caucasoid 3) Oriental 4) Mexican-American  
5) American-Indian 6) Other \_\_\_\_\_ 8) Not observed/unknown

18. SHELL MATERIAL:

1) Fiberglass 2) Polycarbonate 3) Other (specify) \_\_\_\_\_  
 8) Not observed 9) N/A

19. MEASURED DENSITY OF FOAM LINER OR CROWN \_\_\_\_\_ LBS./FT<sup>3</sup>:   
 98) Not observed 99) N/A

20. THICKNESS OF LINER AT POINT SYMMETRICAL TO IMPACT (IN.):   
 98) Not observed 99) N/A

21. LINER MATERIAL AT POINT OF IMPACT:

0) None, including comfort or fitting pad 1) Styrofoam (EPS) Large bead  
 2) Styrofoam (EPS) small bead 3) Polyurethane 4) Ethafoam  
 5) Neoprene sponge 6) Polypropylene 7) Other 8) Not observed 9) N/A

22. MAXIMUM AMOUNT OF CRUSH AT P.O.I. (IN)   
 98) Not observed 99) N/A

23. AREA OF CRUSH OR SIGNATURE: (IN<sup>2</sup>).   
 9998) Not observed 9999) N/A

24. LENGTH OF TIME AFTER IMPACT TO CRUSH ANALYSIS:   
 98) Not observed 99) N/A HOURS

25. NORMAL COMPONENT OF IMPACT VELOCITY   
 98) Not observed 99) N/A M.P.H.

26. TYPE OF IMPACT:

1) Essentially normal 2) Essentially tangential 3) Crushing  
 8) Unknown, not observed 9) N/A

27. NUMBER OF IMPACTS AT THIS SITE:   
 8) Not observed 9) N/A

28. MOST SERIOUS TYPE OF DAMAGE TO SHELL

0) No damage 1) Abrasion 2) Puncture 3) Crack, split, shatter  
 4) Resin fracture 5) Delamination 6) Craziing from residual stress  
 7) Internal damage only 8) Fire 9) Multiple \_\_\_\_\_ 10) Other \_\_\_\_\_  
 98) Not observed 99) N/A

29. LOCATION OF DAMAGE TO SHELL: (SEE DIAGRAMS)   
 \_\_\_\_\_ (top) x \_\_\_\_\_ (side) 8) Not observed 9) N/A TOP SIDE

30. GEOMETRY OF STRUCK OBJECT:

1) Flat 2) Blunt edge 3) Sharp edge 4) Blunt object 5) Sharp object  
 8) Not observed 9) N/A

31. MATERIAL OF OBJECT STRUCK:

1) Metal 2) Glass 3) Wood 4) Soil 5) Pavement 6) Other \_\_\_\_\_  
 8) Not observed 9) N/A

SECOND IMPACT (QUESTIONS 32-41)

32. THICKNESS OF LINER AT POINT SYMMETRICAL TO IMPACT (IN.):   
 98) Not observed 99) N/A

33. LINER MATERIAL AT POINT OF IMPACT:

0) None, including comfort or fitting pad 1) Styrofoam (EPS) large bead  
 2) Styrofoam (EPS) small bead 3) Polyurethane 4) Ethafoam  
 5) Neoprene sponge 6) Polypropylene 7) Other 8) Not observed 9) N/A

34. MAXIMUM AMOUNT OF CRUSH AT P.O.I. (IN IN.):   
 98) Not observed 99) N/A

35. AREA OF CRUSH OR SIGNATURE: (IN<sup>2</sup>).   
 9998) Not observed 9999) N/A

36. LENGTH OF TIME AFTER IMPACT TO CRUSH ANALYSIS: (HOURS) . . . . .    
98) Not observed 99) N/A

37. NORMAL COMPONENT OF IMPACT VELOCITY . . . . .   M.P.H.  
98) Not observed 99) N/A

38. TYPE OF IMPACT: . . . . .   
1) Essentially normal 2) Essentially tangential 3) Crushing  
8) Unknown, not observed 9) N/A

39. NUMBER OF IMPACTS AT THIS SITE: . . . . .   
8) Not observed 9) N/A

40. MOST SERIOUS TYPE OF DAMAGE TO SHELL . . . . .    
0) No damage 1) Abrasion 2) Puncture 3) Crack, split, shatter  
4) Resin fracture 5) Delamination 6) Crazeing from residual stress  
7) Internal damage only 8) Fire 9) Multiple \_\_\_\_\_ 10) Other \_\_\_\_\_  
98) Not observed 99) N/A

41. LOCATION OF DAMAGE TO SHELL: (SEE DIAGRAMS): . . . . .      
\_\_\_\_\_ (top) x \_\_\_\_\_ (side) 98) Not observed 99) N/A  
TOP SIDE

42. PREDOMINATING COLOR OF HELMET: . . . . .    
1) White 2) Yellow 3) Orange 4) Black 5) Brown 6) Blue 7) Red  
8) Purple 9) Green 10) Silver 11) Grey 12) Gold 13) Chrome/Metal Flake  
14) Other \_\_\_\_\_ 98) Not observed, unknown 99) N/A

43. ANY EYE AND FACE PROTECTION (EXCLUDING GLASSES AND CONTACTS) USED AT  
TIME OF TRAFFIC ACCIDENT: . . . . .   
0) None 1) Goggles 2) Wrap around face shield 3) Bubble type face shield  
4) Visor and face shield combination 5) Other (specify) \_\_\_\_\_  
8) Not observed, unknown

44. COLOR OF EYE PROTECTORS: . . . . .   
1) Clear 2) Green 3) Amber 4) Smoke 5) Blue 6) Other (specify) \_\_\_\_\_  
8) Not observed 9) N/A

45. WAS MOTORCYCLE RIDER WEARING: . . . . .   
0) None of the following 1) Prescription glasses 2) Contacts  
3) Prescription sunglasses 4) Contacts and sunglasses 8) Not observed  
5) Non-prescription sunglasses 5) Non-prescription clear glasses

46. WAS ANY FAILURE TO DETECT TRAFFIC HAZARD RELATED TO HEAD, FACE, OR EYE  
PROTECTION: . . . . .   
0) None 1) Helmet attenuated critical traffic sounds 2) Helmet limited vision  
3) Helmet caused fatigue 4) Eye protection faulty, unclear or distorted vision  
5) Eye protection framework limited or obstructed vision 6) 1 and 2  
7) 2 and 4 8) Unknown, not observed 9) N/A

47. TYPE OF ACCIDENT-INDUCED DAMAGE TO FACE SHIELD: . . . . .   
0) None 1) Abrasion 2) Puncture 3) Crack 4) Shatter 5) Other (specify) \_\_\_\_\_  
8) Not observed 9) N/A

48. LOCATION OF ACCIDENT-INDUCED DAMAGE TO FACE SHIELD: . . . . .   
1) Center 2) Upper right 3) Upper left 4) Lower right 5) Lower left  
8) Not observed 9) N/A

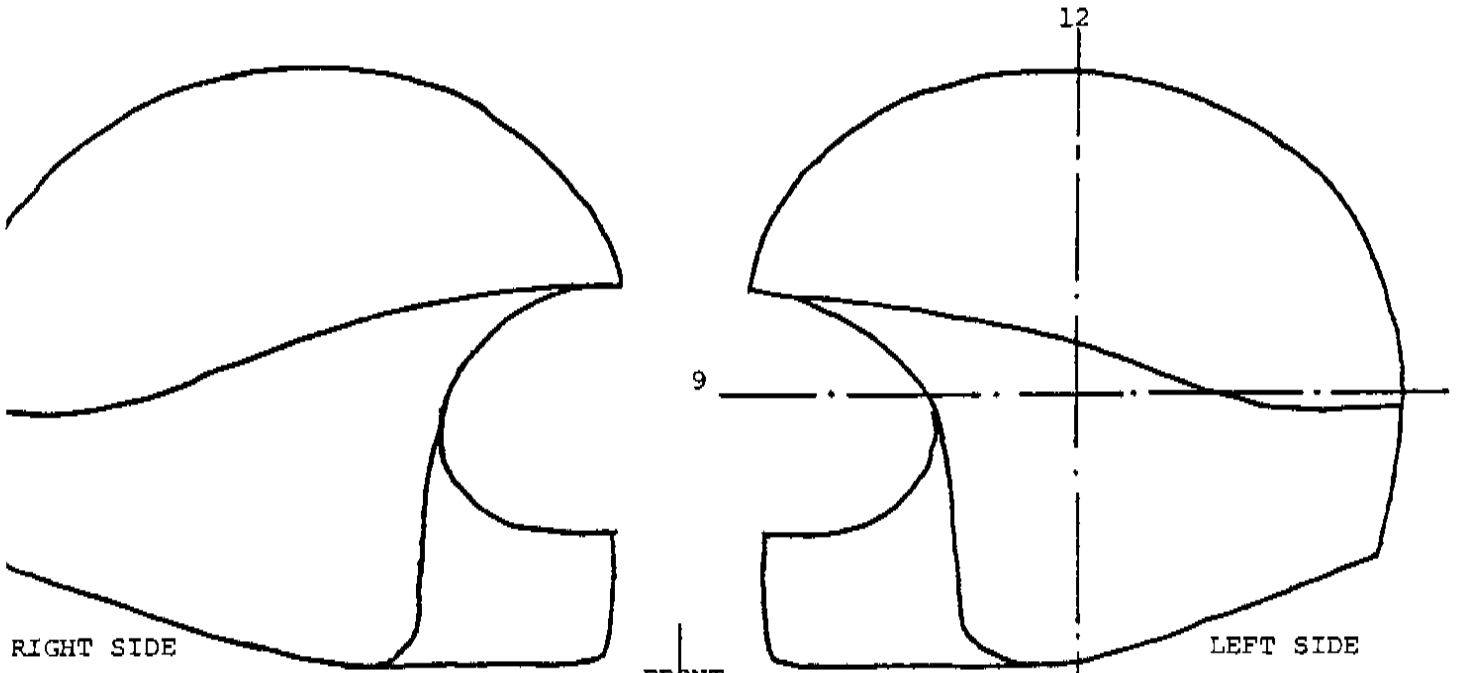
49. CRASH INJURIES ATTRIBUTABLE TO EYE PROTECTION: . . . . .   
0) None 1) Yes (describe) \_\_\_\_\_ 8) Not observed  
9) N/A

50. FREQUENCY OF HELMET USE: . . . . .     
\_\_\_\_\_ % of time 0) Never 998) Not observed

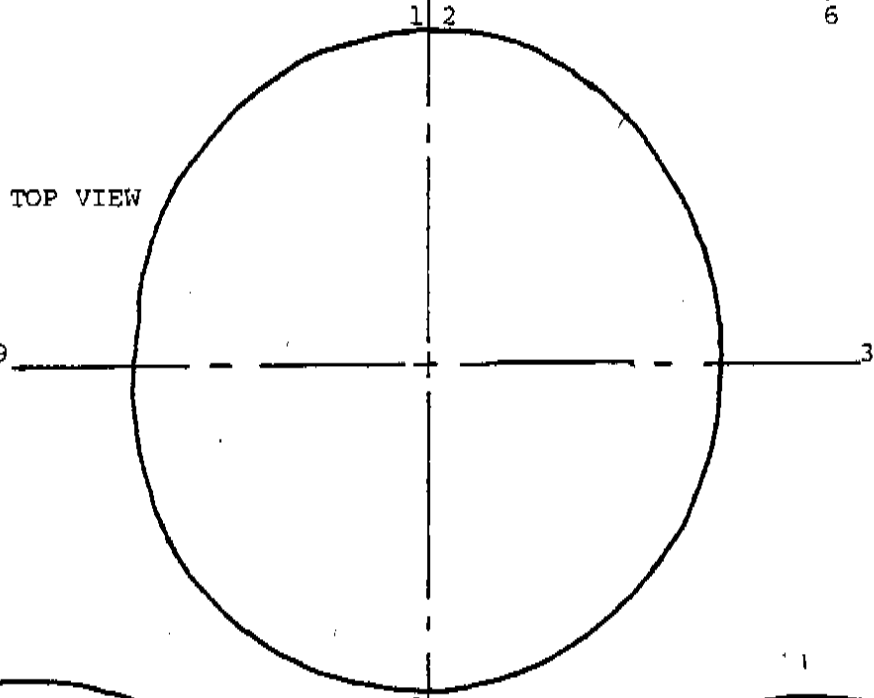
51. CONDITIONS UNDER WHICH HELMET IS USUALLY WORN: . . . . .   
0) Never 1) Surface roads 2) Highway and freeway use 3) Always  
4) Other (specify) \_\_\_\_\_ 8) Not observed

52. HELMET RELATION TO INJURIES: . . . . .   
0) None 1) Prevented injury 2) Attenuated injury 3) Caused or aggravated  
4) Attenuated or prevented one injury but caused or  
aggravated another injury 5) Other \_\_\_\_\_ 8) Unknown 9) N/A



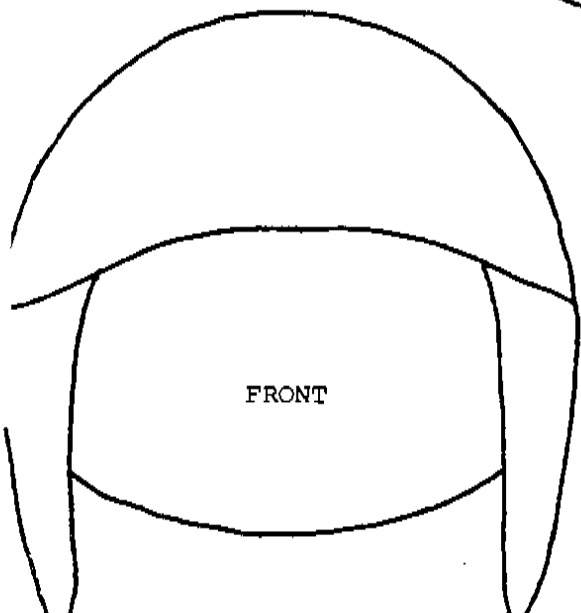


FRONT

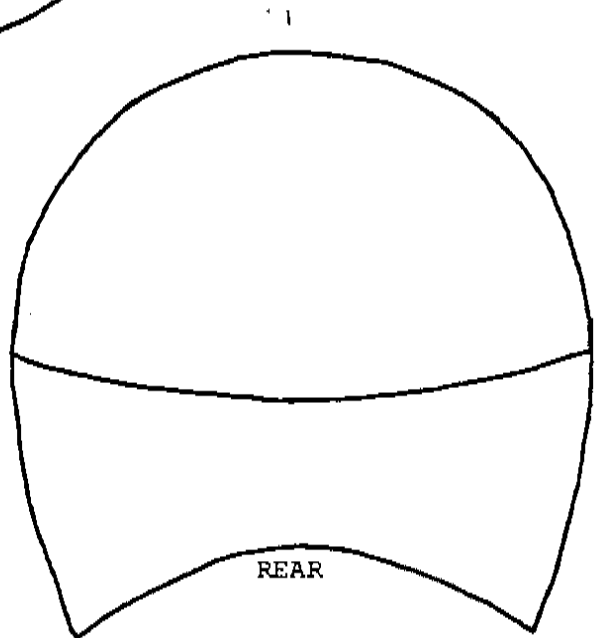


DRAW AND NUMBER  
IMPACT REGIONS

6  
REAR



36



PASSENGER SUPPLEMENT  
(Revision 29/6/76)

1. U S C Accident No. . . . .
2. Passenger #: 1 2
3. SEX: . . . . .   
 1) Male 2) Female 3) Not observed
4. HEIGHT: . . . . .    
 \_\_\_\_\_ inches 98) Not observed
5. WEIGHT: . . . . .    
 \_\_\_\_\_ lbs. 998) Not observed
6. OCCUPATIONAL CODE OF OPERATOR: . . . . .    
 1) Professional, technical 2) Manager, administrator (except farm) 3) Sales workers  
 4) Clerical, kindred 5) Craftman, kindred 6) Operatives (except transport)  
 7) Transport equipment operatives (drivers) 8) Laborers (except farm)  
 9) Farmers, farm managers 10) Farm laborers, foreman 11) Service worker (except below)  
 12) Private household worker 13) Housewife 14) Student 15) Military  
 16) Retired 17) Unemployed (over 1 month) 98) Unknown
7. PASSENGER RIDE ON MOTORCYCLES OFTEN: . . . . .   
 0) Never before 1) Seldom 2) Occasionally 3) Often 4) Very often  
 8) Not observed
8. ALCOHOL AND/OR DRUG IMPAIRMENT: . . . . .   
 1) Had been drinking, not under influence 2) Had been drinking, under influence  
 3) Had been drinking, impairment unknown 4) Under drug influence 5) Combination  
 6) Other impairment \_\_\_\_\_ 8) Unknown 9) N/A
9. BLOOD ALCOHOL LEVEL CORRECTED TO TIME OF ACCIDENT INVOLVEMENT: . . . . .    
 00) No alcohol in blood 01-96) Hundredths of 1% of blood alcohol  
 97) Blood alcohol higher than .06% 98) Blood alcohol level not observed
10. USE OF DRUGS OTHER THAN ALCOHOL: . . . . .    
 A. 0) None 1) Prescription 2) Non-prescription 8) Not observed/unknown  
 B. 0) None 1) Marijuana 2) Stimulants 3) Depressants 4) Psychedelics  
 5) Antihistamines, depressant 6) Antihistamines, stimulant  
 7) Multiple (including alcohol) \_\_\_\_\_ 8) Not observed/unknown
11. PASSENGER POSITION ON MOTORCYCLE AT TIME OF IMPACT: . . . . .   
 1) Normal seated position 2) Standing on footrests, foot pegs 3) Head down  
 4) Shoulder check left 5) Shoulder check right 6) Dismounting, bailing out  
 7) Other \_\_\_\_\_ 8) Not observed 9) N/A
12. UPPER TORSO COVERAGE: . . . . .   
 0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth or naugahyde 4) Leather  
 8) Not observed
13. DID COVERAGE PREVENT OR REDUCE INJURY: . . . . .   
 1) Yes 2) No 8) Not observed 9) N/A 0) No contact in area
14. LOWER TORSO COVERAGE: . . . . .   
 0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth or naugahyde 4) Leather  
 8) Not observed
15. DID COVERAGE PREVENT OR REDUCE INJURY: . . . . .   
 1) Yes 2) No 8) Not observed 9) N/A 0) No contact in area
16. FOOT COVERAGE: . . . . .   
 0) None 1) Light sandal, loafer 2) Medium, street shoe 3) Heavy shoe or boot  
 8) Not observed

17. DID COVERAGE PREVENT OR REDUCE INJURY: . . . . .   
 1) Yes 2) No 3) Not observed 4) N/A 5) No contact in area
18. GLOVES: . . . . .   
 0) None 1) Light 2) Medium 3) Heavy 4) Not observed
19. DID COVERAGE PREVENT OR REDUCE INJURY: . . . . .   
 1) Yes 2) No 3) Not observed 4) N/A 5) No contact in area
20. HELMET WORN: . . . . .   
 1) Yes, helmet acquired for examination (fill out helmet supplement)  
 2) Yes, helmet not acquired for examination 3) No 4) Not observed
21. REASONS FOR NOT WEARING HELMET: . . . . .   
 1) Inconvenient and/or uncomfortable 2) Cost excessive 3) Reduced awareness of traffic  
 4) No expectation of accident involvement 5) Owns helmet, not accessible or in possession  
 6) Wary helmet-induced injuries at time of accident  
 7) Other \_\_\_\_\_ 8) Not observed 9) N/A
22. ON-SCENE MEDICAL ASSISTANCE: . . . . .   
 0) None 1) Private ambulance 2) Public ambulance 3) M.D. 4) Coroner  
 5) Private party 6) Law enforcement 7) Other (specify) 8) Not observed
23. RESCUE AMBULANCE NUMBER: \_\_\_\_\_
24. (TYPE OF EMERGENCY MEDICAL TREATMENT ADMINISTERED TO PASSENGER: 0) None 1) Yes  
 2) Not observed)
25. HEMORRHAGE CONTROL: . . . . .
26. SPLINTING OF LIMBS (BACK BOARDS): . . . . .
27. RESUSCITATION: . . . . .
28. I.V. - INJECTIONS: . . . . .
29. CARDIO-VASCULAR RX: . . . . .
30. RX OF HEAD WOUNDS: . . . . .
31. OTHER (SPECIFY): \_\_\_\_\_
32. STATUS OF TRAUMATIC INJURIES: . . . . .   
 1) First aid at scene 2) Treated at hospital/clinic and released  
 3) Hospitalized for less than 24 hours 4) Hospitalized for significant Rx  
 5) Anticipated outpatient care only 6) Fatal - dead on scene 7) Fatal - DOA  
 8) Fatal - dead within 24 hours 9) Fatal - dead period unknown 98) Not observed 99) N/A
33. HOSPITAL TAKEN TO: \_\_\_\_\_
34. BODY TATTOOS: . . . . .   
 0-6) Number of tattoos 7) More than 6 8) Unknown

## B.2 Exposure Data Collection Forms

Included in this section are the following data collection forms:

	Page
Exposure Data Case Coordination Sheet	40
Exposure Data Observer Form	41
Exposure Data Interview Form	43

University of Southern California

EXPOSURE DATA

M/C Accident Investigation

Case Coordination Sheet

1. Exposure Data Collection Case Code

2. Reference Accident Case Code

3. Accident Time (24-hour clock)

4. Accident location \_\_\_\_\_

5. M/C Traveling \_\_\_\_\_


6. O/V Traveling \_\_\_\_\_

7. Weather \_\_\_\_\_

8. Special Event Affecting Traffic: \_\_\_\_\_  
\_\_\_\_\_

9. Special Environmental Conditions: \_\_\_\_\_  
\_\_\_\_\_

10. Sketch accident site and pre-crash paths of M/C and O/V.  
Plan stop site, observer and interviewer locations.


  
N

UNIVERSITY OF SOUTHERN CALIFORNIA

EXPOSURE DATA  
Precoded Field Form

Observer Form (Initials \_\_\_\_\_)

1. Exposure Data Collection Case Code . . . . . 

0	2								
---	---	--	--	--	--	--	--	--	--

2. Motorcycle Interview/Observation No. (correlate with interview form) . . . . . 

--	--

Motorcycle Data

3. Manufacturer (See Appendix A) . . . . . 

--	--

4. Displacement . . . . . 

--	--	--	--

5. Model: \_\_\_\_\_

6. Color . . . . . 

--	--

  
 1) White 2) Yellow 3) Orange 4) Black 5) Brown 6) Blue 7) Red  
 8) Purple 9) Green 10) Silver-gray 11) Gold 12) Chrome/metal flake  
 97) Other \_\_\_\_\_

7. Year . . . . . 

--	--

8. Motorcycle Type . . . . . 

--	--

  
 1) Street OEM 2) Dirt 3) Enduro 4) Semi-chopper 5) Chopper  
 6) Cafe racer 7) Triks 8) Moped 9) Police motorcycle

Motorcycle Modifications      0) None    1) Yes

9. Front Suspension . . . . . 

--	--

10. Fairing . . . . . 

--	--

11. Shield . . . . . 

--	--

12. Handlebars . . . . . 

--	--

13. Crash Bars . . . . . 

--	--

14. Seat . . . . . 

--	--

15. Sissy Bar . . . . . 

--	--

16. Rear Wheel/Tire . . . . . 

--	--

17. Exhaust System . . . . . 

--	--

18. Headlamp:      1) On    2) Off . . . . . 

--	--

19. High Visibility Upper Torso Garment Worn:    1) Yes    2) No . . . . . 

--	--

Rider Equipment Data

20. Helmet Type . . . . . 

--	--

  
 0) None worn    1) Partial    2) Full    3) Full facial 105°    4) Full facial  
 6) Helmet not worn but carried on M/C    6) Not observed

21. Helmet Predominating Color . . . . . 

--	--

  
 1) White 2) Yellow 3) Orange 4) Black 5) Brown 6) Blue 7) Red  
 8) Purple 9) Green 10) Silver-gray 11) Gold 12) Chrome/metal flake  
 97) Other \_\_\_\_\_    98) Not observed/unknown    99) N/A, no helmet used

22. Eye Protection  
0) None 1) Glasses, sun glasses 2) Shields 3) Goggles

23. Upper Torso Garment  
0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth  
or naugahyde 4) Leather 8) Not observed, unknown

24. Lower Torso Garment  
0) None 1) Light cloth 2) Medium cloth 3) Heavy cloth  
or naugahyde 4) Leather 8) Not observed, unknown

25. Gloves  
0) None 1) Light 2) Medium 3) Heavy 8) Not observed

26. Foot Coverage  
0) None 1) Light sandal, loafer 2) Medium street shoe  
3) Heavy shoe or boot 8) Not observed

Passenger Equipment Data (Same codes as Rider Equipment - if no pass, code with 9's)

27. Helmet Type .....

28. Helmet Predominating Color .....

29. Eye Protection .....

30. Upper Torso Garment .....

31. Lower Torso Garment .....

32. Gloves .....

33. Foot Coverage .....

UNIVERSITY OF SOUTHERN CALIFORNIA

EXPOSURE DATA  
Precoded Field Form

Interview Form (Initials: \_\_\_\_\_)

1. Exposure Data Collection Case Code 

0	3								
---	---	--	--	--	--	--	--	--	--

2. Motorcycle Interview/Observation No. (Correlate with observer form) 

--	--	--	--	--	--	--	--	--	--

3. Interview Type

1) Roadside interview    2) Roadside ID, non-volunteer follow-up  
3) Observed at non-stop site, follow-up

Personal Data

4. Date of Birth 

--	--	--	--	--	--	--	--	--	--

5. Class of Driver's License: DL# \_\_\_\_\_  
0) No license or permit    1) Class 1    2) Class 2    3) Class 3  
4) Class 4 or equivalent    5) Learner's permit    6) Lic. revoked    8) Unk.

6. If no Class 4 License, Does Operator Have Motorcycle Permit  
1) Yes    2) No    8) Not observed    9) Not applicable

7. State of License Issuance  
05) California (see code sheet for other states)    98) Unknown    99) N/A

8. Height \_\_\_\_\_ inches    98) Not observed

9. Weight \_\_\_\_\_ lbs.    99B) Not observed

10. Marital Status  
1) Single    2) Married    3) Separated    4) Divorced    5) Widowed  
6) Cohabiting    8) Not observed

11. Sex  
1) Male    2) Female    8) Not observed    9) Unknown, undecided

12. Number of Children  
0-6) Specify number of children    7) Seven or more    8) Not observed

13. Educational Status  
1) Grad school (or degree) professional training    2) College/university grad.  
3) Partial college training    4) High school graduate    5) Partial high school  
6) Junior high school or grammar school graduate    7) Less than 7 years of schooling    8) Unknown

14. Occupational Code of Operator: (1970 Census Users Guide)

1) Professional, technical    2) Manager, administrator    3) Sales worker  
4) Clerical, kindred    5) Craftman, kindred    6) Operatives (except transport)  
7) Transport equipment operatives (drivers)    8) Laborers (except farm)  
9) Farmers, farm managers    10) Farm laborers, foreman service workers  
11) Service worker    12) Private household worker    13) Housewife    14) Student  
15) Military    16) Retired    17) Unemployed (over 1 month)    98) Unknown    99) N/A



15. Two Factor Index of Social Position: (Hollingshead)  
 1) Class I (11-17)    2) Class II (18-27)    3) Class III (28-43)  
 4) Class IV (44-60)    5) Class V (61-77)    8) Unknown □
16. Hand Preference  
 1) Right    2) Left    3) Ambidextrous    8) Not observed □
17. Was Eye Correction Worn at Time of Interview  
 0) Required but not worn    1) Glasses    2) Contacts    8) Not observed  
 9) Not applicable (eye correction not required) □
18. Off Road or Dirt Bike Riding Experience  
 0) None    1) Some trail bike riding    2) Enduro, MX, desert  
 or extensive trail riding experience    8) Unknown □
19. Amount of Street Motorcycle Riding Experience (In Months)  
 97) More than 96 months of experience    98) Not observed □ □
20. Number of Days Per Week That Motorcycles are Ridden by Rider  
 \_\_\_\_\_ days    8) Unknown    9) Not applicable □
21. Amount of Motorcycle Riding Experienced on Observed Motorcycle  
 \_\_\_\_\_ months    97) More than 96 months of experience    98) Not observed □ □
22. Type of Training Received by Motorcyclist  
 0) None, self taught    1) Friends and/or family    2) School, club, dealership,  
 or law enforcement sponsored motorcycle course    3) Formal training by highly  
 experienced persons or professionals, i.e., AMA, AFM, FIM, competition license  
 7) Other \_\_\_\_\_    8) Not observed, unknown □
23. What Measures Does the Rider Feel Could Be Used to Prevent Motorcycle  
 Accidents or Alleviate Their Severity:  
 0) No preventative measures suggested    1) Education of motorists to watch  
 for motorcyclists    3) Rigorous training courses in motorcycle safety  
 7) Other \_\_\_\_\_    8) Unknown, not observed □
24. Number of Times Rider Traversed Involved Roadway  
 0) Never before    1) Daily    2) Weekly, 1-4 times    3) Monthly, 1-3  
 times    4) Quarterly, 1-2 times    5) Annually, 1-3 times  
 6) Less than annual    8) Not observed □
25. Purpose of Trip (Trip Plan)  
 1) Home    2) Work    3) Shopping, errand    4) Recreation  
 5) Friends, relatives    6) Bar, drinking party    7) School  
 7) Other: \_\_\_\_\_    8) Unknown, not observed From To  
□ □
26. Length of Trip  
 \_\_\_\_\_ miles    98) Not observed □ □ □ □
27. Length of Time Riding Motorcycle Just Before Interview/Observation  
 \_\_\_\_\_ hours    98) Not observed □ □ □

28. Alcohol and/or Drug Impairment

- 1) Had been drinking, not under influence
- 2) Had been drinking, under influence
- 3) Had been drinking, impairment unknown
- 4) Under drug influence
- 5) Combination
- 6) Other impairment \_\_\_\_\_
- 7) Unknown
- 8) Not applicable

29. Blood Alcohol Level Corrected to Time of Observation (Estimated from Int.)

- 00) No alcohol in blood
- 01-96) Hundredths of 1% of blood alcohol
- 97) Blood alcohol higher than .96%
- 98) Not observed

30. Use of Drugs Other than Alcohol

- A. 0) None 1) Prescription 2) Non-prescription 8) Not observed
- B. 0) None 1) Marijuana 2) Stimulants 3) Depressants 4) Psychedelics
- 5) Antihistamines, depressants 6) Antihistamines, stimulants
- 7) Multiple, including alcohol 8) Not observed

A	B
<input type="checkbox"/>	<input type="checkbox"/>

31. Observed Physiological Impairment

- A. Permanent Condition: 0) None 1) Infirmities, arthritis, senility
- 2) Diabetes 3) Brain (epilepsy, stroke)
- 4) Cardio-vascular (coronary, angina, infection)
- 5) Vision 6) Hearing 9) Respiratory 8) Paraplegic, amputees 7) Other \_\_\_\_\_
- B. Transient Condition: 0) None 1) Fatigue 2) Hunger 3) Thirst
- 4) Siesta syndrome 5) Elimination urgency 6) Minor malaise 7) Other \_\_\_\_\_ 8) Muscle spasm, cramp

A	B
<input type="checkbox"/>	<input type="checkbox"/>

32. Stress That Day

- 0) No stress observed or noted
- 1) Conflict with relatives, friends
- 2) Conflict with supervisor, co-worker
- 3) Death, illness of friend, relative
- 4) Financial distress
- 5) School or work problems
- 6) Legal, police problems
- 7) Social agency, counselor problems
- 8) Reward stress

33. Attention to Driving Task (as observed)

- 1) Attention diverted to surrounding traffic
- 2) Attention diverted to non-traffic item (specify) \_\_\_\_\_
- 3) Attention diverted to motorcycle operation
- 4) Inattentive mode
- 5) Not observed
- 6) Not applicable, attention to driving task not a factor.

34. Frequency of Front Brake Usage During Street Riding

- 0) Never
- 1) Sometimes, but not frequently
- 2) Usually
- 3) Always
- 8) Not observed
- 9) Not applicable (no front brakes)

35. Number of Passengers on Motorcycle

- 0) None
- 1) One
- 2) Two
- 3) Three

36. Number of Moving Violations in Last Two Years

- 0-6) Number of violations
- 7) More than six violations
- 8) Unknown

37. Number of Traffic Accidents in Last Two Years

- 0-6) Number of accidents
- 7) More than six accidents
- 8) Not observed
- 9) Not applicable

38. Body Tattoos

- 0-6) Number of Tattoos
- 7) More than six
- 8) Unknown

69

### C. SUPPLEMENTAL ACCIDENT DATA

#### C.1 Supplemental Accident Data for Volume I, Section 5.0, Accident Characteristics and Environmental Factors

Included in this section are the following Tables:

5.5.1	Motorcycle Precrash Motion by Other Vehicle Precrash Motion	47
5.5.2	Motorcycle Precrash Motion by Other Vehicle Precrash Motion, (Single Vehicle Motorcycle Accidents)	51
5.5.3	Motorcycle Precrash Motion by Other Vehicle Precrash Motion, (TARs)	53
5.5.4	Accident Precipitating Factor by Precrash Motorcycle Motion, (OSIDs)	57
5.5.5	Accident Precipitating Factor by Precrash Other Vehicle Motion, (OSIDs)	59
5.9.2	Motorcycle Rider Trip Plan - Origin and Destination	61
5.9.5	Other Vehicle Trip Plan - Trip Origin by Trip Destination	62
5.11.3	Motorcycle Roadway Contamination	63
5.11.4	Motorcycle Road Surface Condition	64
5.11.5	Alignment of Motorcycle Road of Travel	65
5.11.6	Motorcycle Precrash Position/Lane	66
5.11.7	Number of Lanes Motorcycle Roadway	67
5.12.1	Other Vehicle Roadway Contamination	68
5.12.3	Alignment of Other Vehicle Road of Travel	69
5.12.4	Other Vehicle Precrash Position/Lane	70
5.12.5	Number of Through Lanes, Other Vehicle	70
	Supplement to 5.15.7, Motorcycle - Other Vehicle Precrash View Obstruction	71

Table 5.5.1

Motorcycle Pre-Crash Motion by Other Vehicle Pre-Crash Motion  
(OSIDs)

MC MOTION	COUNT ROW PCT COL PCT TOT PCT	OVMOTION									
		1. STRAIGHT	2. OVERTAKE	3. RIGHT RN	4. LEFT N	5. U TURN	6. STOPPING	7. START IN LANE	8. START FR OM PARKE	9. BACKING	10. STOPPED IN ROAD
STRAIGHT	1.	98	2	19	240	16	41	32	1	5	13
		15.5	0.3	3.0	37.9	2.5	6.5	5.1	0.2	0.8	2.1
		55.7	40.0	59.4	87.6	80.0	83.7	91.4	90.0	62.5	81.3
OVERTAKE	2.	3	0	8	16	3	1	0	0	0	0
		7.1	0.0	19.0	38.1	7.1	2.4	0.0	0.0	0.0	0.0
		1.7	0.0	25.0	5.8	15.0	2.0	0.0	0.0	0.0	0.0
RIGHT TURN	3.	5	1	1	3	0	0	0	0	0	0
		13.9	2.8	2.8	8.3	0.0	0.0	0.0	0.0	0.0	0.0
		2.0	20.0	3.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
LEFT TURN	4.	28	2	2	1	0	1	1	0	1	0
		40.6	2.9	2.9	1.4	0.0	1.4	1.4	0.0	1.4	0.0
		15.9	40.0	6.3	0.4	0.0	2.0	2.9	0.0	12.5	0.0
U TURN	5.	3	0	0	0	0	0	0	0	0	0
		37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STOPPING	6.	9	0	1	1	0	2	0	0	1	0
		45.0	0.0	5.0	5.0	0.0	10.0	0.0	0.0	5.0	0.0
		5.1	0.0	3.1	0.4	0.0	4.1	0.0	0.0	12.5	0.0
START IN LANE	7.	4	0	0	2	0	0	0	0	0	0
		40.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
		2.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
START FROM PARKE	8.	0	0	0	1	0	0	0	0	0	0
		0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
STOPPED IN ROAD	10.	2	0	0	0	0	0	2	0	0	1
		33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	16.7
		1.1	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	6.3
PARKED	11.	2	0	0	0	0	0	0	0	0	0
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

47

Table 5.5.1

Continued

DESCRIPTION	COUNT	ACTION										
		11.	12.	13.	14.	15.	16.	17.	18.	21.	98.	
OTHER	12.	0	0	0	0	0	0	0	0	0	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
CHANGING LANES	13.	6	0	0	5	0	3	0	0	0	0	2
		22.3	0.0	0.0	18.5	0.0	11.1	0.0	0.0	0.0	0.0	7.4
		3.4	0.0	0.0	1.8	0.0	6.1	0.0	0.0	0.0	0.0	12.5
ENTERING TRAFFIC	15.	5	0	0	0	0	0	0	0	0	0	0
		55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER UNSAFE TUR	16.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OPPOSING LANES	17.	6	0	1	2	1	0	0	1	0	0	0
		50.0	0.0	8.3	16.7	8.3	0.0	0.0	8.3	0.0	0.0	0.0
		3.4	0.0	3.1	6.7	5.0	0.0	0.0	50.0	0.0	0.0	0.0
MERGING	18.	1	0	0	0	0	0	0	0	0	0	0
		50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WRONG WAY	19.	1	0	0	1	0	0	0	0	0	0	0
		50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.6	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EVASIVE ACTION	21.	1	0	0	1	0	1	0	0	0	0	0
		11.1	0.0	0.0	11.1	0.0	11.1	0.0	0.0	0.0	0.0	0.0
		0.6	0.0	0.0	0.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0
STRIPE RIDING	22.	1	0	0	0	0	0	0	0	0	0	0
		25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNKNOWN	98.	1	0	0	0	0	0	0	0	1	0	0
		50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
		0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
COLUMN TOTAL		176	5	32	274	20	89	35	2	8	16	
		19.6	0.6	3.6	30.4	2.2	5.4	3.9	0.2	0.9	1.8	

Continued

Table 5.5.1

Continued

MOTION	COUNT	ROW PCT	COL PCT	TDY PCT	MARKED	OTHER	CHANGING LANES	PARKING MANEUVER	ENTERING TRAFFIC	OTHER SAFE	UN OPPOSING	MERGING	EVASIVE ACTION	N A	ROW TOTAL
STRAIGHT	1.	12			31	0	19		3		0	1	98		633
		1.9	0.2	4.9	0.0	3.0	0.2	0.5	0.0	0.2	15.5				
		48.0	50.0	77.5	0.0	86.4	100.0	75.0	0.0	16.7	54.1				
OVERTAKE	2.	3			2	0	1		0		0	1	4		42
		7.1	0.0	4.8	0.0	2.4	0.0	0.0	2.4	0.0	9.5				
		12.0	0.0	5.0	0.0	4.5	0.0	0.0	100.0	0.0	2.2				
RIGHT TURN	3.	1			0	0	2		0		0	0	23		36
		2.8	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	63.9				
		4.9	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	12.7				
LEFT TURN	4.	3			1	0	0		0		0	0	29		69
		4.3	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	42.0				
		12.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	16.0				
U TURN	5.	0			0	0	0		0		1	0	4		8
		0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	50.0				
		0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	2.2				
STOPPING	6.	0			0	0	0		0		0	2	4		20
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	20.0				
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	2.2				
START IN LANE	7.	3			0	0	0		0		0	0	1		10
		30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0				
		12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6				
START FROM PARKED	8.	1			0	0	0		0		0	0	1		3
		33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3				
		4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6				
STOPPED IN ROAD	10.	0			0	0	0		0		0	0	0		6
		0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
		0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
PARKED	11.	0			0	0	0		0		0	0	0		2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Continued

Continued

Table 5.5.1

DESCRIPTION	COUNT ROW PCT COL PCT TOT PCT	11.	12.	13.	14.	15.	16.	17.	18.	21.	99.	ROW TOTAL
OTHER	12.	0	0	0	0	0	0	0	0	0	50.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
CHANGING LANES	13.	0	0	3	1	0	0	0	0	0	7	27
		0.0	0.0	11.1	3.7	0.0	0.0	0.0	0.0	0.0	25.7	3.0
		0.0	0.0	7.5	100.0	0.0	0.0	0.0	0.0	0.0	3.9	
		0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.9	
ENTERING TRAFFIC	15.	1	0	0	0	0	0	0	0	0	1	9
		11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	1.0
		4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
OTHER UNSAFE TUR	16.	0	0	0	0	0	0	0	0	0	2	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
OPPOSING LANES	17.	1	0	0	0	0	0	0	0	0	0	12
		8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
		4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MERCING	18.	0	0	0	0	0	0	0	0	0	1	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
WRONG WAY	19.	0	0	0	0	0	0	0	0	0	0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EVASIVE ACTION	21.	0	0	0	0	0	0	0	0	3	3	9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	33.3	1.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	1.7	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	
STRIPE RIDING	22.	0	0	3	0	0	0	0	0	0	0	4
		0.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOWN	98.	0	0	0	0	0	0	0	0	0	0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		25	2	40	1	22	1	4	1	6	181	900
		2.4	0.2	4.4	0.1	2.4	0.1	0.4	0.1	0.7	20.1	100.0

Table 5.5.2

Motorcycle Pre-Crash Motion by Other Vehicle Pre-Crash Motion  
(Single Vehicle Motorcycle Accidents)

MOTION	COUNT ROW COL TOT PCT	DVMOTION								
		STRAIGHT	RIGHT	TO LEFT	U TURN	STOPPING	START IN	BACKING		
		1.1	3.1	4.1	5.1	6.1	7.1	9.1		
STRAIGHT	1.	4	0	19	1	4	3	0		
		2.9	0.0	13.8	0.7	2.9	2.2	0.0		
		57.1	0.0	95.0	100.0	100.0	100.0	0.0		
OVERTAKE	2.	1	1	0	0	0	0	0		
		14.3	14.3	0.0	0.0	0.0	0.0	0.0		
		14.3	50.0	0.0	0.0	0.0	0.0	0.0		
RIGHT TURN	3.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
LEFT TURN	4.	0	1	1	0	0	0	0		
		0.0	3.2	3.2	0.0	0.0	0.0	0.0		
		0.0	50.0	5.0	0.0	0.0	0.0	0.0		
U TURN	5.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
STOPPING	6.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
START IN LANE	7.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
START FROM PARKED	8.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
OTHER	12.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CHANGING LANES	13.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ENTERING TRAFFIC	15.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
OTHER UNSAFE TURN	16.	0	0	0	0	0	0	0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MERGING	18.	1	0	0	0	0	0	0		
		50.0	0.0	0.0	0.0	0.0	0.0	0.0		
		14.3	0.0	0.0	0.0	0.0	0.0	0.0		
EVASIVE ACTION	21.	1	0	0	0	0	0	0		
		25.0	0.0	0.0	0.0	0.0	0.0	0.0		
		14.3	0.0	0.0	0.0	0.0	0.0	0.0		
UNKNOWN	98.	0	0	0	0	0	0	1		
		0.0	0.0	0.0	0.0	0.0	0.0	100.0		
		0.0	0.0	0.0	0.0	0.0	0.0	100.0		
COLUMN TOTAL		7	2	20	1	4	3	1		
		3.0	0.9	8.7	0.4	1.7	1.3	0.4		



Table 5.5.2

Continued

MOTION	COUNT	ROW PCT	COL PCT	TOT PCT	PARKED		CHANGING LANES		ENTERING TRAFFIC		OTHER UNSAFE TUR		MERGING		N A		ROW TOTAL
					11.	13.	15.	16.	16.	99.							
STRAIGHT	1.	0.7	100.0	0.4	1	6	2	1	0	0	97	130					
		0.7	85.7	2.6	4.3	1.4	0.7	0.0	70.3	60.0							
		0.4	2.6	0.9	0.4	0.0	42.2										
OVERTAKE	2.	0.0	0.0	0.0	0	0	0	0	1	4	7						
		0.0	0.0	0.0	0.0	0.0	14.3	57.1	3.0								
		0.0	0.0	0.0	0.0	0.0	100.0	2.2	1.7								
RIGHT TURN	3.	0.0	0.0	0.0	0	0	1	0	0	22	23						
		0.0	0.0	33.3	4.3	0.0	0.0	95.7	10.0								
		0.0	0.0	0.4	0.0	0.0	0.0	12.3	9.0								
LEFT TURN	4.	0.0	0.0	0.0	0	0	0	0	0	29	31						
		0.0	0.0	0.0	0.0	0.0	0.0	93.5	13.5								
		0.0	0.0	0.0	0.0	0.0	0.0	16.2	12.6								
U TURN	5.	0.0	0.0	0.0	0	0	0	0	0	4	4						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.7								
		0.0	0.0	0.0	0.0	0.0	0.0	2.2	1.7								
STOPPING	6.	0.0	0.0	0.0	0	0	0	0	0	4	4						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.7								
		0.0	0.0	0.0	0.0	0.0	0.0	2.2	1.7								
START IN LANE	7.	0.0	0.0	0.0	0	0	0	0	0	1	1						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.4								
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4								
START FROM PARKED	8.	0.0	0.0	0.0	0	0	0	0	0	1	1						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.4								
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4								
OTHER	12.	0.0	0.0	0.0	0	0	0	0	0	1	1						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.4								
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4								
CHANGING LANES	13.	0.0	0.0	0.0	0	1	0	0	0	7	8						
		0.0	12.5	0.0	0.0	0.0	0.0	67.5	3.5								
		0.0	14.3	0.0	0.0	0.0	0.0	3.9	3.0								
ENTERING TRAFFIC	15.	0.0	0.0	0.0	0	0	0	0	0	3	3						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.3								
		0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.3								
OTHER UNSAFE TUR	16.	0.0	0.0	0.0	0	0	0	0	0	2	2						
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.9								
		0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9								
MERGING	18.	0.0	0.0	0.0	0	0	0	0	0	1	2						
		0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.9								
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4								
EVASIVE ACTION	21.	0.0	0.0	0.0	0	0	0	0	0	3	4						
		0.0	0.0	0.0	0.0	0.0	0.0	75.0	1.7								
		0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.3								
UNKNOWN	98.	0.0	0.0	0.0	0	0	0	0	0	0	1						
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4								
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
COLUMN TOTAL		1	7	3	1	1	179	230									
		0.4	3.0	1.3	0.4	0.4	77.6	100.0									

Table 5.5.3

Motorcycle Pre-Crash Motion by Other Vehicle Pre-Crash Motion  
(TARs)

MMB	COUNT ROW PCT COL PCT TOT PCT	OMB									
		GOING STR	OVERTAKE	MAKING R TGT TUR	MAKING L TGT TUR	U-TURN	SLOWING- STOPPED	START IN TRF-LAN	START FR OM PARKED	BACKING	STOPPED IN ROADW
		1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1	10.1
GOING STRAIGHT	1.	782	9	117	911	47	114	8	30	32	51
		26.2	0.3	3.9	30.6	1.6	3.8	0.3	1.0	1.1	1.7
		75.3	75.0	83.6	95.1	98.0	82.6	88.9	93.8	72.7	85.0
OVERTAKE	2.	14	0	8	25	0	0	0	0	0	1
		24.6	0.0	14.0	43.9	0.0	0.0	0.0	0.0	0.0	1.6
		1.3	0.0	5.7	2.6	0.0	0.0	0.0	0.0	0.0	1.7
MAKING RIGHT TUR	3.	30	0	10	6	0	1	0	0	0	2
		23.3	0.0	7.8	4.7	0.0	0.8	0.0	0.0	0.0	1.6
		2.9	0.0	7.1	0.6	0.0	0.7	0.0	0.0	0.0	1.3
MAKING LEFT TUR	4.	94	3	1	9	0	3	1	0	0	0
		53.1	1.7	0.6	5.1	0.0	1.7	0.6	0.0	0.0	0.0
		9.0	25.0	0.7	0.9	0.0	2.2	11.1	0.0	0.0	0.0
U-TURN	5.	5	0	0	0	0	0	0	0	0	0
		83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLOWING-STOPPED	6.	44	0	0	3	0	13	0	0	0	4
		53.7	0.0	0.0	3.7	0.0	15.9	0.0	0.0	0.0	4.9
		4.2	0.0	0.0	0.3	0.0	9.4	0.0	0.0	0.0	6.7
START IN TRF-LAN	7.	1	0	0	0	0	1	0	0	0	0
		20.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
START FROM PARKED	8.	9	0	0	0	0	0	0	0	0	0
		64.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BACKING	9.	1	0	0	1	0	0	0	0	0	0
		50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
STOPPED IN ROADW	10.	18	0	3	0	0	3	0	0	3	1
		58.1	0.0	9.7	0.0	0.0	6.5	0.0	0.0	9.7	3.2
		1.7	0.0	2.1	0.0	0.0	1.4	0.0	0.0	6.8	1.7
PARKED	11.	11	0	1	1	1	0	0	2	9	0
		37.9	0.0	3.4	3.4	3.4	0.0	0.0	6.0	31.0	0.0
		1.1	0.0	0.7	0.1	2.0	0.0	0.0	6.3	20.5	0.0
	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	

Continued

Table 5.5.3

Continued

MNB	COUNT		OMR									
	ROW	PCT	GOING STRAIGHT	ST OVERTAKE	MAKING R IGT	MAKING L TUR	U-TURN	SLOWING-STOPPED	START IN TRF-LAN	START UP ON PARKED	BACKING	STOPPED IN ROADW
	COL	PCT	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
OTHER	12.	5	0	0	0	0	0	1	0	0	0	1
		20.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	4.0
		0.5	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.7
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHANGING LANE	13.	14	0	0	0	0	2	0	0	0	0	0
		51.9	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0
		1.3	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
		0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
PARKING MANEUVER	14.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENTERING TRAFFIC	15.	4	0	0	0	0	0	0	0	0	0	0
		66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER UNSAFE TURN	16.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CROSS INTO OPP L	17.	3	0	0	1	0	0	0	0	0	0	0
		50.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MERGING	18.	0	0	0	0	0	1	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TRAVELING WRONG	19.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRIFTING	20.	1	0	0	0	0	0	0	0	0	0	0
		25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EVASIVE ACTION	21.	3	0	0	1	0	0	0	0	0	0	0
		37.5	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UNKNOWN-NOT REPD	98.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N.A.--SINGLE VEH	99.	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL		1039	12	140	958	90	138	0.3	32	44	60	
		28.9	0.3	3.9	26.6	1.4	3.8		0.9	1.2	1.7	

Continued

Table 5.5.3

Continued

MHD	COUNT ROW PCT COL PCT TOT PCT	PARKED	OTHER	CHANGING LANE	ENTERING TRAFFIC	OTHER SAFE	UN TUR	CROSS TO OPP L	IN MERGING	EVASIVE ACTION	UNKNOWN- NOT REPO	N.A.- GLE VEH	SIN 99.1	ROW TOTAL
GOING STRAIGHT	1-	59	29	63	14	5	1	1	0	32	674	2981		
		3.3	1.0	2.1	0.5	0.2	0.0	0.0	0.0	1.1	21.3	82.8		
		80.7	80.6	94.0	93.3	83.3	100.0	100.0	0.0	71.1	77.2			
OVERTAKE	2-	3	0	0	0	0	0	0	0	1	5	57		
		5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	8.8	1.6		
		2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.6			
MAKING RIGHT TURN	3-	7	1	0	0	0	0	0	0	2	69	129		
		5.4	0.8	0.0	0.8	0.0	0.0	0.0	0.0	1.6	53.5	3.6		
		5.7	2.8	0.0	6.7	0.0	0.0	0.0	0.0	4.4	8.4			
MAKING LEFT TURN	4-	5	0	0	0	0	0	0	1	1	59	177		
		2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	33.3	4.9		
		4.1	0.0	0.0	0.0	0.0	0.0	0.0	50.0	2.2	7.2			
U-TURN	5-	0	0	0	0	0	0	0	0	0	1	6		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.2		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
SLOWING-STOPPED	6-	2	0	1	0	0	0	0	1	0	14	82		
		2.4	0.0	1.2	0.0	0.0	0.0	0.0	1.2	0.0	17.1	2.3		
		1.6	0.0	1.5	0.0	0.0	0.0	0.0	50.0	0.0	1.7			
START IN TRF-LANE	7-	1	0	0	0	0	0	0	0	0	2	5		
		20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.1		
		0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2			
START FROM PARKED	8-	1	0	0	0	0	0	0	0	1	3	14		
		7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	21.4	0.4		
		0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.4			
BACKING	9-	0	0	0	0	0	0	0	0	0	0	2		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
STOPPED IN ROADW	10-	0	0	2	0	0	0	0	0	2	0	31		
		0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.9		
		0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0			
PARKED	11-	0	1	0	0	1	0	0	0	2	0	29		
		0.0	3.4	0.0	0.0	3.4	0.0	0.0	0.0	6.9	0.0	0.8		
		0.0	2.8	0.0	0.0	16.7	0.0	0.0	0.0	4.4	0.0			
		1	5	0	0	0	0	0	0	0	12	25		
		4.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	0.7		
		0.8	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5			

Continued

55

Table 5.5.3

Continued

	11.	12.	13.	14.	15.	16.	17.	18.	21.	98.	99.	ROW TOTAL
	TRAPPED	OTHER	CHANGING LANE	ENTERING TRAFFIC	OTHER UNSAFE TURN	CROSS INTO OPPOSITE LANE	MERGING	EVASIVE ACTION	UNKNOWN-NOT REPORTED	N.A.-SINGLE VEHICLE		
OTHER	1	0	1	0	0	0	0	0	1	8		1
	3.7	0.0	3.7	0.0	0.0	0.0	0.0	0.0	3.7	20.6		0.0
	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	2.2	1.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CHANGING LANE	0	0	0	0	0	0	0	0	0	1		1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PARKING MANEUVER	0	0	0	0	0	0	0	0	0	2		6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
ENTERING TRAFFIC	0	0	0	0	0	0	0	0	0	1		1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
OTHER UNSAFE TURN	1	0	0	0	0	0	0	0	1	0		6
	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CROSS INTO OPPOSITE LANE	0	0	0	0	0	0	0	0	0	2		3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.7		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
MERGING	1	0	0	0	0	0	0	0	0	1		2
	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TRAVELING WRONG	0	0	0	0	0	0	0	0	0	3		4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
DRIFTING	0	0	0	0	0	0	0	0	1	3		8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	37.5		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.4		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
EVASIVE ACTION	1	0	0	0	0	0	0	0	1	1		3
	23.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	33.3		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
UNKNOWN-NOT REPORTED	0	0	0	0	0	0	0	0	0	1		1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
N.A.-SINGLE VEHICLE	122	36	67	15	6	1	1	2	45	823		3600
	3.4	1.0	1.9	0.4	0.2	0.0	0.0	0.1	1.3	22.9		100.0

COLUMN TOTAL

Table 5.5.4

Accident Precipitating Factor by Pre-Crash Motorcycle Motion (OSIDs)

FACTOR	COUNT ROW PCT COL PCT TOT PCT	MOTION											ROW TOTAL		
		1	2	3	4	5	6	7	8	9	10	11			
		STRAIGHT	OVERTAKE	RIGHT TO RN	LEFT FOR U N	TURN	STOPPING	START IN LANE	START FR OM PARKE	STOPPED IN ROAD	PARKED				
PHANTOM VEHICLE	0.4	75.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
HC ERROR	1.4	174	32	26	58	7	6	5	2	1	0	0	0	367	
	40.0	47.4	6.7	7.1	15.8	1.9	1.6	1.4	0.5	0.3	0.0	0.0	0.0	40.0	
		27.5	76.2	72.2	84.1	87.5	30.0	50.0	66.7	16.7	0.0	0.0	0.0		
OV VIOLATION OF	2.5	19.3	3.6	2.9	6.4	0.8	0.7	0.6	0.2	0.1	0.0	0.0	457		
	50.8	399	9	5	9	1	12	5	1	4	1	0	50.8		
		87.3	2.0	1.1	2.0	0.2	2.6	1.1	0.2	0.9	0.2	0.0			
ROADWAY DEFLECT	3.2	63.0	21.4	13.9	13.0	12.5	60.0	50.0	33.3	66.7	50.0	0.0	18		
	2.0	44.3	1.0	0.6	1.0	0.1	1.3	0.6	0.1	0.4	0.1	0.0	2.0		
		13	0	4	1	0	0	0	0	0	0	0			
PEDESTRIAN	4.7	72.2	0.0	22.2	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18		
	2.0	2.1	0.0	11.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0		
		1.4	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ANIMAL	5.1	5	0	0	0	0	1	0	0	0	0	0	6		
	0.7	83.3	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.7		
		0.6	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0			
VEHICLE FAILURE	6.1	0.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	6		
	1.1	9	0	0	0	0	0	0	0	0	0	0	1.1		
		90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
OTHER	7.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10		
	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1		
		21	1	1	0	0	0	0	0	0	0	0			
UNKNOWN	8.2	84.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25		
	2.8	3.3	2.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8		
		2.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PHANTOM VEHICLE	9.1	7	0	0	0	0	1	0	0	1	1	0	11		
	1.2	63.6	0.0	0.0	0.0	0.0	9.1	0.0	0.0	9.1	9.1	0.0	1.2		
		1.1	0.0	0.0	0.0	0.0	5.0	0.0	0.0	16.7	50.0	0.0			
ROADWAY DEFLECT	10.2	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	10.2		
	0.7	2	0	0	0	0	0	0	0	0	0	0	0.7		
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PEDESTRIAN	11.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1		
	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7		
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL		633	42	36	69	8	20	10	3	6	2	900			
		70.3	4.7	4.0	7.7	0.9	2.2	1.1	0.3	0.7	0.2	100.0			

57

Continued

Table 5.5.4

Continued

FACTOR	COUNT ROW PCT COL PCT TOT PCT	MOTION											ROW TOTAL	
		OTHER	CHANGING	ENTERING	OTHER ON	OPPOSING	MIRGING	WRONG WA	EVASIVE	STRIPE R	UNKNOWN			
		12.1	LANE S	TRAFFIC	SAFE	LANE S	17.1	18.1	19.1	21.1	22.1	98.1		
PHANTOM VEHICLE	0.	0	0	0	0	0	0	0	0	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC ERROR	1.	1	19	9	2	11	2	2	6	2	2	2	367	
	0.3	5.2	2.5	0.5	3.0	0.5	0.5	1.6	0.5	0.5	0.5	40.8		
	50.0	70.4	100.0	100.0	91.7	100.0	100.0	66.7	50.0	100.0	100.0			
OV VIOLATION	2.	1	5	0	0	1	0	0	2	2	0	0	457	
	0.2	1.1	0.0	0.0	0.2	0.0	0.0	0.4	0.4	0.4	0.0	50.8		
	50.0	18.5	0.0	0.0	8.3	0.0	0.0	22.2	50.0	0.0	0.0			
ROADWAY DEFECT	3.	0	0	0	0	0	0	0	0	0	0	0	18	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PEDESTRIAN	4.	0	0	0	0	0	0	0	0	0	0	0	6	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ANIMAL	5.	0	0	0	0	0	0	0	1	0	0	0	10	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	1.1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0			
VEHICLE FAILURE	6.	0	2	0	0	0	0	0	0	0	0	0	25	
	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8		
	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
OTHER	7.	0	1	0	0	0	0	0	0	0	0	0	11	
	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2		
	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
UNKNOWN	8.	0	0	0	0	0	0	0	0	0	0	0	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL		2	27	9	2	12	2	2	9	4	2	900		
		0.2	3.0	1.0	0.2	1.3	0.2	0.2	1.0	0.4	0.2	100.0		

Table 5.5.5

Accident Precipitating Factor by Pre-Crash Other Vehicle Motion (OSIDs)

FACTORS	COUNT HOW COL TOT	PCT COL PCT	MOTION										ROW TOTAL		
			1. STRAIGHT	2. OVERTAKE	3. RIGHT TO LEFT	4. TURN	5. U TURN	6. STOPPING	7. START IN LANE	8. START FR UM	9. BACKING	10. STOPPED IN ROAD			
			1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1	10.1			
PHANTOM VEHICLE	0.		0	0	0	2	0	1	0	0	0	0	0	0	0.4
			0.0	0.0	0.0	50.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.7	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
MC ERROR	1.		86	0	12	39	5	36	1	1	5	13		367	
			23.4	0.0	3.3	10.6	1.4	9.8	0.3	0.3	1.4	3.5		40.8	
			48.9	0.0	37.5	14.2	25.0	73.5	2.9	50.0	62.5	81.3			
			9.6	0.0	1.3	4.3	0.6	4.0	0.1	0.1	0.6	1.4			
OV VIOLATION	2.		83	5	19	231	15	8	34	1	3	1		457	
			18.2	1.1	4.2	50.5	3.3	1.8	7.4	0.2	0.7	0.2		50.8	
			47.2	100.0	59.4	84.3	75.0	16.3	97.1	50.0	37.5	6.3			
			9.2	0.6	2.1	25.7	1.7	0.9	3.8	0.1	0.3	0.1			
ROADWAY DEFECT	3.		2	0	0	0	0	0	0	0	0	1		18	
			11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6		2.0	
			1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3			
			0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
PEDESTRIAN	4.		1	0	0	0	0	0	0	0	0	0		6	
			16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.7	
			0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
			0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ANIMAL	5.		0	0	0	0	0	0	0	0	0	0		10	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.1	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
VEHICLE FAILURE	6.		1	0	1	1	0	0	0	0	0	0		25	
			4.0	0.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0		2.8	
			0.6	0.0	3.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0			
			0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
OTHER	7.		2	0	0	1	0	4	0	0	0	1		11	
			18.2	0.0	0.0	9.1	0.0	35.4	0.0	0.0	0.0	9.1		1.2	
			1.1	0.0	0.0	0.4	0.0	8.2	0.0	0.0	0.0	6.3			
			0.2	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.1			
UNKNOWN	8.		1	0	0	0	0	0	0	0	0	0		2	
			50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.2	
			0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
			0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL			176	5	32	274	20	49	35	2	8	16		900	
			19.6	0.6	3.6	30.4	2.2	5.4	3.9	0.2	0.9	1.8		100.0	

Continued



Table 5.5.5

Continued

FACTOR	COUNT ROW PCT COL PCT TOT PCT	VIOLATION											ROW TOTAL											
		PARKED 11.1	OTHER 12.1	CHANGING LANES 13.1		PARKING MANEUVER 14.1		ENTERING TRAFFIC 15.1		OTHER UN SAFE TRP 16.1		OPPOSIM. LANES 17.1		MERGING 18.1		EVASIVE ACTION 21.1		N A 99.1						
				11.1	12.1	13.1	14.1	15.1	16.1	17.1	18.1	21.1		99.1										
PHANTOM VEHICLE	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.6					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1						
RC ERROR	1.	22	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	127	367					
	6.0	0.0	3.0	0.0	1.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	34.6	40.8					
	88.0	0.0	27.5	0.0	27.3	100.0	27.3	100.0	25.0	0.0	16.7	70.2	2.4	0.0	1.2	0.0	0.1	14.1						
OV VIOLATION OF	2.	0	2	29	1	16	0	0	0	0	0	0	0	0	0	0	0	0	457					
	0.0	0.4	8.3	0.2	3.5	0.0	0.2	0.7	0.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.8					
	0.0	100.0	72.5	100.0	72.7	0.0	75.0	100.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
ROADWAY DEFECT	3.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	18					
	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8	2.0					
	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7						
PEDESTRIAN	4.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	0.7					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8						
ANIMAL	5.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10					
	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.0	1.1					
	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0						
VEHICLE FAILURE	6.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	25					
	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0	2.8					
	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6						
OTHER	7.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	1.2					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7						
UNKNOWN	8.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.2					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6						
COLUMN TOTAL	25	2	46	1	22	1	22	1	4	1	6	181	900	4.8	0.2	4.4	0.1	2.4	0.1	0.4	0.1	0.7	20.1	100.0

09

Table 5.9.2

Motorcycle Rider Trip Plan--Origin and Destination  
(OSIDs)

RORIGIN	COUNT ROW PCT COL PCT TOT PCT	RDEST							ROW TOTAL
		HOME	WORK	SHOPPING	RECREATI ON	FRIENDS, RELATIVE	BAR,DRIN KING PAR	SCHDOL	
		1.	2.	3.	4.	5.	6.	7.	
HOME	1.	3	81	77	60	59	1	22	303
		1.0	26.7	25.4	19.8	19.5	0.3	7.3	37.5
		1.1	54.4	55.0	50.0	53.2	100.0	88.0	
		0.4	10.0	9.5	7.4	7.3	0.1	2.7	
WORK	2.	83	44	23	0	11	0	0	161
		51.6	27.3	14.3	0.0	6.8	0.0	0.0	20.0
		31.8	29.5	16.4	0.0	9.9	0.0	0.0	
		10.3	5.5	2.9	0.0	1.4	0.0	0.0	
SHOPPING	3.	50	15	13	3	7	0	1	89
		56.2	16.9	14.6	3.4	7.9	0.0	1.1	11.0
		19.2	10.1	9.3	2.5	6.3	0.0	4.0	
		6.2	1.9	1.6	0.4	0.9	0.0	0.1	
RECREATION	4.	35	3	3	29	7	0	0	77
		45.5	3.9	3.9	37.7	9.1	0.0	0.0	9.5
		13.4	2.0	2.1	24.2	6.3	0.0	0.0	
		4.3	0.4	0.4	3.6	0.9	0.0	0.0	
FRIENDS,RELATIVE	5.	52	3	20	22	19	0	2	118
		44.1	2.5	16.9	18.6	16.1	0.0	1.7	14.6
		19.9	2.0	14.3	18.3	17.1	0.0	8.0	
		6.4	0.4	2.5	2.7	2.4	0.0	0.2	
BAR,DRINKING PAR	6.	9	0	1	4	4	0	0	18
		50.0	0.0	5.6	22.2	22.2	0.0	0.0	2.2
		3.4	0.0	0.7	3.3	3.6	0.0	0.0	
		1.1	0.0	0.1	0.5	0.5	0.0	0.0	
SCHOOL	7.	29	3	3	2	4	0	0	41
		70.7	7.3	7.3	4.9	9.8	0.0	0.0	5.1
		11.1	2.0	2.1	1.7	3.6	0.0	0.0	
		3.6	0.4	0.4	0.2	0.5	0.0	0.0	
COLUMN TOTAL		261 32.3	149 18.5	140 17.3	120 14.9	111 13.8	1 0.1	25 3.1	807 100.0

Table 5.9.5

Other Vehicle Trip Plan  
 Trip Origin by Trip Destination  
 (OSIDs)

ORIGIN	COUNT ROW PCT COL PCT TOT PCT	DEST							ROW TOTAL
		HOME	WORK	SHOPPING ERRAND	RECREATI ON	FRIENDS RELATIVE	BAR DRINKING	SCHOOL	
		1.	2.	3.	4.	5.	6.	7.	
HOME	1.	0	40	72	20	31	1	4	168
		0.0	23.8	42.9	11.9	18.5	0.6	2.4	34.3
		0.0	37.7	62.6	52.6	51.7	100.0	57.1	
		0.0	8.2	14.7	4.1	6.3	0.2	0.8	
WORK	2.	55	56	18	4	7	0	2	142
		38.7	39.4	12.7	2.8	4.9	0.0	1.4	29.0
		33.7	52.8	15.7	10.5	11.7	0.0	28.6	
		11.2	11.4	3.7	0.8	1.4	0.0	0.4	
SHOPPING ERRAND	3.	57	7	13	1	6	0	0	84
		67.9	8.3	15.5	1.2	7.1	0.0	0.0	17.1
		35.0	6.6	11.3	2.6	10.0	0.0	0.0	
		11.6	1.4	2.7	0.2	1.2	0.0	0.0	
RECREATION	4.	19	0	3	8	3	0	0	33
		57.6	0.0	9.1	24.2	9.1	0.0	0.0	6.7
		11.7	0.0	2.6	21.1	5.0	0.0	0.0	
		3.9	0.0	0.6	1.6	0.6	0.0	0.0	
FRIENDS RELATIVE	5.	23	3	9	2	11	0	0	48
		47.9	6.3	18.8	4.2	22.9	0.0	0.0	9.8
		14.1	2.8	7.8	5.3	18.3	0.0	0.0	
		4.7	0.6	1.8	0.4	2.2	0.0	0.0	
BAR DRINKING	6.	1	0	0	1	0	0	0	2
		50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.4
		0.6	0.0	0.0	2.6	0.0	0.0	0.0	
		0.2	0.0	0.0	0.2	0.0	0.0	0.0	
SCHOOL	7.	8	0	0	2	2	0	1	13
		61.5	0.0	0.0	15.4	15.4	0.0	7.7	2.7
		4.9	0.0	0.0	5.3	3.3	0.0	14.3	
		1.6	0.0	0.0	0.4	0.4	0.0	0.2	
COLUMN TOTAL		163	106	115	38	60	1	7	490
		33.3	21.6	23.5	7.8	12.2	0.2	1.4	100.0

Table 5.11.3  
Motorcycle Roadway Contamination  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Type Contamination</u>				
None	0.	828	92.0	92.1
Water	1.	28	3.1	3.1
Oil	2.	14	1.6	1.6
Sand	3.	12	1.3	1.3
Gravel	4.	11	1.2	1.2
Mud	5.	4	0.4	0.4
Other	6.	2	0.2	0.2
Not Applicable	9.	<u>1</u>	<u>0.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Source of Contamination</u>				
Rain	1.	20	2.2	36.4
Sprinklers	2.	3	0.3	5.5
Vehicle Residue	3.	10	1.1	18.2
Truck Spill	4.	11	1.2	20.0
Construction	6.	11	1.2	20.0
Unknown	8.	18	2.0	MISSING
Not Applicable	9.	<u>827</u>	<u>91.9</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 5.11.4  
Motorcycle Road Surface Condition

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>OSIDs</u>				
Dry	1.	864	96.0	96.0
Dry with wet paint stripe	2.	1	0.1	0.1
Wet with dry tire tracks	3.	1	0.1	0.1
Damp	4.	8	0.9	0.9
Wet	5.	18	2.0	2.0
Puddled Water	6.	<u>8</u>	<u>0.9</u>	<u>0.9</u>
	TOTAL	900	100.0	100.0
<u>TARs</u>				
Dry	1.	3465	96.2	96.5
Wet-Muddy	2.	95	2.6	2.6
Other	4.	28	0.8	0.8
Slippery	5.	3	0.1	0.1
Unknown-Not Reported	8.	<u>9</u>	<u>0.2</u>	<u>MISSING</u>
	TOTAL	3600	100.0	100.0

Table 5.11.5  
 Alignment of Motorcycle Road of Travel  
 (OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Vertical</u>				
Level	1.	732	81.3	81.3
Crest of Hill	2.	14	1.6	1.6
Slope of Hill Up	3.	60	6.7	6.7
Bottom of Hill	4.	9	1.0	1.0
Slope of Hill Down	5.	82	9.1	9.1
Dip	6.	2	0.2	0.2
Other	7.	<u>1</u>	<u>0.1</u>	<u>0.1</u>
	TOTAL	900	100.0	100.0
<u>Horizontal</u>				
Straight	1.	721	80.1	80.1
Curve to Right	2.	74	8.2	8.2
Curve to Left	3.	75	8.3	8.3
Corner Right	4.	16	1.8	1.8
Corner Left	5.	7	0.8	0.8
Jog Right	6.	1	0.1	0.1
Jog Left	7.	<u>6</u>	<u>0.7</u>	<u>0.7</u>
	TOTAL	900	100.0	100.0

Table 5.11.6  
Motorcycle Precrash Position/Lane  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Motorcycle Pre-Crash Position in Lane</u>				
Center	1.	220	24.4	25.5
Right	2.	246	27.3	28.5
Left of Center	3.	295	32.8	34.2
Stripe Riding	4.	10	1.1	1.2
Crossing Lanes	5.	50	5.6	5.8
Opposing Traffic	6.	37	4.1	4.3
Other	7.	4	0.4	0.5
Unknown	8.	33	3.7	MISSING
Not Applicable	9.	<u>5</u>	<u>0.6</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Pre-Crash Lane Number</u>				
Lane Number 1	1.	510	56.7	57.1
Lane Number 2	2.	263	29.2	29.5
Lane Number 3	3.	56	6.2	6.3
Four or More	4.	15	1.7	1.7
Left Turn Lane	5.	15	1.7	1.7
Right Turn Lane	6.	2	0.2	0.2
Other	7.	32	3.6	3.6
Unknown	8.	1	0.1	MISSING
Not Applicable	9.	<u>6</u>	<u>0.7</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 5.11.7  
Number of Lanes Motorcycle Roadway

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>OSIDs</u>				
One Lane	1.	305	33.9	34.1
Two Lanes	2.	404	44.9	45.2
Three Lanes	3.	120	13.3	13.4
Four or More Lanes	4.	42	4.7	4.7
Left Turn Lane	5.	15	1.7	1.7
Right Turn Lane	6.	3	0.3	0.3
Other	7.	5	0.6	0.6
Not Applicable	9.	<u>6</u>	<u>0.7</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
 <u>TARs</u>				
One Lane	1.	1152	32.0	34.5
Two Lanes	2.	1720	47.8	51.5
Three Lanes	3.	277	7.7	8.3
Four Lanes	4.	151	4.2	4.5
Five Lanes	5.	31	0.9	0.9
Six Lanes	6.	6	0.2	0.2
Unknown-Not Reported	8.	<u>263</u>	<u>7.3</u>	<u>MISSING</u>
	TOTAL	3600	100.0	100.0



Table 5.12.2  
Other Vehicle Roadway Contamination  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Surface Wetness of OV Road of Travel</u>				
Dry	1.	680	75.6	97.6
Wet-Dry Tire Tracks	3.	1	0.1	0.1
Damp	4.	3	0.3	0.4
Wet	5.	12	1.3	1.7
Puddled Water	6.	1	0.1	0.1
Not Applicable, No OV	9	<u>203</u>	<u>22.6</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Surface Contamination OV Road of Travel</u>				
None	0.	673	74.8	96.6
Water	1.	16	1.8	2.3
Sand	3.	2	0.2	0.3
Gravel	4.	4	0.4	0.6
Other	6.	2	0.2	0.3
Unknown	8.	1	0.1	MISSING
Not Applicable	9.	<u>202</u>	<u>22.4</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 5.12.3

Alignment of Other Vehicle Road of Travel  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Vertical</u>				
Level	1.	584	64.9	83.5
Crest of Hill	2.	14	1.6	2.0
Slope of Hill-Up	3.	48	5.3	6.9
Bottom of Hill	4.	11	1.2	1.6
Slope of Hill-Down	5.	42	4.7	6.0
Not Applicable	9.	201	22.3	MISSING
	TOTAL	<u>900</u>	<u>100.0</u>	<u>100.0</u>
<u>Horizontal</u>				
Straight	1.	611	67.9	87.5
Curve Right	2.	29	3.2	4.2
Curve Left	3.	34	3.8	4.9
Corner Right	4.	5	0.6	0.7
Corner Left	5.	13	1.4	1.9
Jog Right	6.	3	0.3	0.4
Jog Left	7.	3	0.3	0.4
Not Applicable	9.	202	22.4	MISSING
	TOTAL	<u>900</u>	<u>100.0</u>	<u>100.0</u>

Table 5.12.4  
Other Vehicle Precrash Position/Lane  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>OV Precrash Lane Position</u>				
Center	1.	264	29.3	37.3
Right of Center	2.	37	4.1	5.2
Left of Center	3.	37	4.1	5.2
Turning, Crossing	4.	345	38.3	48.7
Opposing Traffic	5.	10	1.1	1.4
Other	6.	15	1.7	2.1
Unknown	8.	5	0.6	MISSING
Not Applicable	9.	187	20.8	MISSING
	TOTAL	900	100.0	100.0
<u>OV Precrash Lane Number</u>				
Lane Number 1	1.	414	46.0	58.0
Lane Number 2	2.	110	12.2	15.4
Lane Number 3	3.	37	4.1	5.2
Four or more Lanes	4.	10	1.1	1.4
Left Turn Lane	5.	110	12.2	15.4
Other	7.	33	3.7	4.6
Unknown	8.	1	0.1	MISSING
Not Applicable	9.	185	20.6	MISSING
	TOTAL	900	100.0	100.0

Table 5.12.5  
Number of Through Lanes, Other Vehicle  
Road of Travel

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
One Lane	1.	276	30.7	38.7
Two Lanes	2.	285	31.7	40.0
Three Lanes	3.	90	10.0	12.6
Four or more Lanes	4.	30	3.3	4.2
Left Turn Lane	5.	11	1.2	1.5
Right Turn Lane	6.	2	0.2	0.3
Other	7.	19	2.1	2.7
Not Applicable	9.	187	20.8	MISSING
	TOTAL	900	100.0	100.0

Supplement to

Table 5.15.7

Motorcycle-Other Vehicle Precrash View Obstruction  
(OSIDs)

<u>Motorcycle Path</u>	COUNT ROW PCT COL PCT TOT PCT	Other Vehicle Path		Total
		None	Yes	
None	446 88.7 96.3 65.3	57 11.3 25.9 8.3	503 73.6	
Yes	17 9.4 3.7 2.5	163 90.6 74.1 23.9	180 26.4	
Column Total	463 67.8	220 32.2	683 100.0	

C.2 Supplemental Accident Data for Volume I, Section 6.0, Vehicle Factors

Included in this section are the following Tables:

6.8.1	Motorcycle Precrash Speed by Multiple/Single Vehicle Collision, (OSIDs)	73
6.8.2	Motorcycle Crash Speed by Multiple/Single Vehicle Collision, (OSIDs)	81
6.9.2	Contributory Front Tire Conditions, (OSIDs)	90
6.9.3	Contributory Rear Tire Conditions, (OSIDs)	91
6.14.2	Automobile Manufacturer, (OSIDs)	92
6.14.3	Other Vehicle Model Type, (OSIDs)	93
6.14.4	Size of Involved Automobile	94
6.14.5	Collision Contact of Other Vehicle, (OSIDs)	95

Table 6.8.1

Motorcycle Pre-Crash Speed  
by  
Multiple/Single Vehicle Collision  
(OSIDs)

MCSPEED	COUNT	COL PCT			ROW TOTAL
	ROW PCT	ISINGLE	V MULTI-	VE UNKNOWN	
	TOT PCT	VEHICLE	A HICLE	AC	
		1.1	2.1	8.1	
0.	12	34	1	1	47
	25.5	72.3	2.1	2.1	5.2
	5.8	5.1	3.2	3.2	
	1.3	3.8	0.1	0.1	
5.	2	1	0	0	3
	66.7	33.3	0.0	0.0	0.3
	1.0	0.2	0.0	0.0	
	0.2	0.1	0.0	0.0	
8.	0	2	0	0	2
	0.0	100.0	0.0	0.0	0.2
	0.0	0.3	0.0	0.0	
	0.0	0.2	0.0	0.0	
10.	3	9	1	1	13
	23.1	69.2	7.7	7.7	1.4
	1.4	1.4	3.2	3.2	
	0.3	1.0	0.1	0.1	
11.	0	1	0	0	1
	0.0	100.0	0.0	0.0	0.1
	0.0	0.2	0.0	0.0	
	0.0	0.1	0.0	0.0	
12.	1	1	0	0	2
	50.0	50.0	0.0	0.0	0.2
	0.5	0.2	0.0	0.0	
	0.1	0.1	0.0	0.0	
14.	3	1	0	0	4
	75.0	25.0	0.0	0.0	0.4
	1.4	0.2	0.0	0.0	
	0.3	0.1	0.0	0.0	
COLUMN TOTAL	208	661	31	900	
	23.1	73.4	3.4	100.0	

Continued

Table 6.8.1

Continued

MCSPEED:	COUNT	VEHICLE			UNKNOWN	ROW TOTAL
	ROW PCT	SINGLE	V	MULTI-VE	AC	
	COL PCT	1.1	2.1	8.1		
15.	7	16	1		24	
	29.2	66.7	4.2		2.7	
	3.4	2.4	3.2			
	0.8	1.8	0.1			
16.	0	1	0		1	
	0.0	100.0	0.0		0.1	
	0.0	0.2	0.0			
	0.0	0.1	0.0			
17.	2	1	0		3	
	66.7	33.3	0.0		0.3	
	1.0	0.2	0.0			
	0.2	0.1	0.0			
18.	2	13	1		16	
	12.5	81.3	6.3		1.8	
	1.0	2.0	3.2			
	0.2	1.4	0.1			
19.	0	2	0		2	
	0.0	100.0	0.0		0.2	
	0.0	0.3	0.0			
	0.0	0.2	0.0			
20.	8	41	2		51	
	15.7	80.4	3.9		5.7	
	3.8	6.2	6.5			
	0.9	4.6	0.2			
21.	0	2	0		2	
	0.0	100.0	0.0		0.2	
	0.0	0.3	0.0			
	0.0	0.2	0.0			
COLUMN TOTAL	208	661	31		900	
	23.1	73.4	3.4		100.0	

Continued

Table 6.8.1

Continued

MCSPEED	MOLS IN				ROW TOTAL
	CCUNT	SINGLE	V MULTI-	VE UNKNOWN	
	ROW PCT	VEHICLE	A HICLE	AC	
	TOT PCT	1. I	2. I	8. I	
22.	2	9	0	11	
	18.2	81.8	0.0	1.2	
	1.0	1.4	0.0		
	0.2	1.0	0.0		
23.	2	4	1	7	
	28.6	57.1	14.3	0.8	
	1.0	0.6	3.2		
	0.2	0.4	0.1		
24.	3	4	0	7	
	42.9	57.1	0.0	0.8	
	1.4	0.6	0.0		
	0.3	0.4	0.0		
25.	16	66	2	84	
	19.0	78.6	2.4	9.3	
	7.7	10.0	6.5		
	1.8	7.3	0.2		
26.	3	16	0	19	
	15.8	84.2	0.0	2.1	
	1.4	2.4	0.0		
	0.3	1.8	0.0		
27.	1	14	4	19	
	5.3	73.7	21.1	2.1	
	0.5	2.1	12.9		
	0.1	1.6	0.4		
28.	5	18	1	24	
	20.8	75.0	4.2	2.7	
	2.4	2.7	3.2		
	0.6	2.0	0.1		
COLUMN TOTAL	208	661	31	900	
	23.1	73.4	3.4	100.0	

Continued



Table 6.8.1

Continued

MC SPEED I	COUNT	I			ROW TOTAL
	ROW PCT	SINGLE VEHICLE	MULTI-VEHICLE	UNKNOWN	
	TOT PCT	1. I	2. I	3. I	
29.	I	1	11	0	12
	I	8.3	91.7	0.0	1.3
	I	0.5	1.7	0.0	
	I	0.1	1.2	0.0	
30.	I	14	94	4	112
	I	12.5	83.9	3.6	12.4
	I	6.7	14.2	12.9	
	I	1.6	10.4	0.4	
31.	I	2	8	0	10
	I	20.0	80.0	0.0	1.1
	I	1.0	1.2	0.0	
	I	0.2	0.9	0.0	
32.	I	5	33	2	40
	I	12.5	82.5	5.0	4.4
	I	2.4	5.0	6.5	
	I	0.6	3.7	0.2	
33.	I	1	13	0	14
	I	7.1	92.9	0.0	1.6
	I	0.5	2.0	0.0	
	I	0.1	1.4	0.0	
34.	I	2	17	0	19
	I	10.5	89.5	0.0	2.1
	I	1.0	2.6	0.0	
	I	0.2	1.9	0.0	
35.	I	12	70	0	82
	I	14.6	85.4	0.0	9.1
	I	5.8	10.6	0.0	
	I	1.3	7.0	0.0	
COLUMN TOTAL		208	661	31	900
		23.1	73.4	3.4	100.0

Continued

Table 6.8.1

Continued

MC SPEED 1	COUNT	I			ROW
	PCT	SINGLE	V	MULTI-VE	UNKNOWN
	COL	VEHICLE	A	VEHICLE	AC
	TOT	PCT	1.1	2.1	8.1
					ROW
					TOTAL
36.	3	13	1		17
	17.6	76.5	5.9		1.9
	1.4	2.0	3.2		
	0.3	1.4	0.1		
37.	0	13	2		15
	0.0	86.7	13.3		1.7
	0.0	2.0	6.5		
	0.0	1.4	0.2		
38.	4	23	0		27
	14.8	85.2	0.0		3.0
	1.9	3.5	0.0		
	0.4	2.6	0.0		
39.	0	8	0		8
	0.0	100.0	0.0		0.9
	0.0	1.2	0.0		
	0.0	0.9	0.0		
40.	13	23	1		37
	35.1	62.2	2.7		4.1
	6.3	3.5	3.2		
	1.4	2.6	0.1		
41.	1	6	0		7
	14.3	85.7	0.0		0.8
	0.5	0.9	0.0		
	0.1	0.7	0.0		
42.	3	6	0		9
	33.3	66.7	0.0		1.0
	1.4	0.9	0.0		
	0.3	0.7	0.0		
COLUMN	208	661	31		900
TOTAL	23.1	73.4	3.4		100.0

Continued

Continued

Table 6.8.1

MCSPEED1	CCUNT	I			ROW TOTAL
	ROW PCT	SINGLE V	MULTI-V	UNKNOWN	
	COL PCT	EHICLE A	HICLE AC		
TOT PCT	1. I	2. I	8. I		
43.	I	1	10	1	12
	I	8.3	83.3	8.3	1.3
	I	0.5	1.5	3.2	
	I	0.1	1.1	0.1	
44.	I	5	9	0	13
	I	38.5	61.5	0.0	1.4
	I	2.4	1.2	0.0	
	I	0.6	0.9	0.0	
45.	I	14	13	1	28
	I	50.0	46.4	3.6	3.1
	I	6.7	2.0	3.2	
	I	1.6	1.4	0.1	
46.	I	0	3	0	3
	I	0.0	100.0	0.0	0.3
	I	0.0	0.5	0.0	
	I	0.0	0.3	0.0	
47.	I	1	3	0	4
	I	25.0	75.0	0.0	0.4
	I	0.5	0.5	0.0	
	I	0.1	0.3	0.0	
48.	I	2	2	1	5
	I	40.0	40.0	20.0	0.6
	I	1.0	0.3	3.2	
	I	0.2	0.2	0.1	
49.	I	1	1	0	2
	I	50.0	50.0	0.0	0.2
	I	0.5	0.2	0.0	
	I	0.1	0.1	0.0	
COLUMN TOTAL		208 23.1	661 73.4	31 3.4	900 100.0

Continued

Continued

Table 6.8.1

MC SPEED I	COUNT ROW PCT COL PCT TOT PCT	VEHICLE			ROW TOTAL
		SINGLE	V	MULTI-VE	
		1.1	2.1	8.1	
50.	17	0	7	2	17
	47.1	41.2	11.8	1.9	
	3.0	1.1	5.5		
	0.9	0.9	0.2		
51.	1	0	1	0	1
	0.0	100.0	0.0	0.1	
	0.0	0.2	0.0		
	0.0	0.1	0.0		
52.	1	1	0	0	1
	100.0	0.0	0.0	0.1	
	0.5	0.0	0.0		
	0.1	0.0	0.0		
53.	3	0	0	0	3
	100.0	0.0	0.0	0.3	
	1.4	0.0	0.0		
	0.3	0.0	0.0		
54.	0	1	0	0	1
	0.0	100.0	0.0	0.1	
	0.0	0.2	0.0		
	0.0	0.1	0.0		
55.	11	8	1	20	
	55.0	40.0	5.0	2.2	
	5.3	1.2	3.2		
	1.2	0.9	0.1		
58.	1	0	0	0	1
	100.0	0.0	0.0	0.1	
	0.5	0.0	0.0		
	0.1	0.0	0.0		
COLUMN TOTAL	208	661	31	900	
	23.1	73.4	3.4	100.0	

Continued

Continued

Table 6.8.1

MC SPEED 1	COUNT	SINGLE VEHICLE			MULTI-VEHICLE		UNKNOWN	ROW TOTAL
	ROW PCT	1.1	2.1	3.1	4.1	5.1		
	TOT PCT	1.1	2.1	3.1	4.1	5.1		
MC SPEED 1	60.	6	4	1	1	1	11	
		54.5	36.4	9.1	0.0	0.0	1.2	
		2.9	0.6	3.2	0.0	0.0		
		0.7	0.4	0.1	0.0	0.0		
	63.	1	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.1	
		0.5	0.0	0.0	0.0	0.0		
		0.1	0.0	0.0	0.0	0.0		
	64.	1	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.1	
		0.5	0.0	0.0	0.0	0.0		
		0.1	0.0	0.0	0.0	0.0		
65.	3	1	0	0	0	4		
	75.0	25.0	0.0	0.0	0.0	0.4		
	1.4	0.2	0.0	0.0	0.0			
	0.3	0.1	0.0	0.0	0.0			
68.	2	0	0	0	0	2		
	100.0	0.0	0.0	0.0	0.0	0.2		
	1.0	0.0	0.0	0.0	0.0			
	0.2	0.0	0.0	0.0	0.0			
69.	1	0	0	0	0	1		
	100.0	0.0	0.0	0.0	0.0	0.1		
	0.5	0.0	0.0	0.0	0.0			
	0.1	0.0	0.0	0.0	0.0			
70.	6	0	0	0	0	6		
	100.0	0.0	0.0	0.0	0.0	0.7		
	2.9	0.0	0.0	0.0	0.0			
	0.7	0.0	0.0	0.0	0.0			
80.	1	0	0	0	0	1		
	100.0	0.0	0.0	0.0	0.0	0.1		
	0.5	0.0	0.0	0.0	0.0			
	0.1	0.0	0.0	0.0	0.0			
85.	2	0	0	0	0	2		
	100.0	0.0	0.0	0.0	0.0	0.2		
	1.0	0.0	0.0	0.0	0.0			
	0.2	0.0	0.0	0.0	0.0			
98.	4	5	0	0	0	9		
UNKNOWN	44.4	55.6	0.0	0.0	0.0	1.0		
	1.9	0.8	0.0	0.0	0.0			
	0.4	0.6	0.0	0.0	0.0			
COLUMN TOTAL	208	661	31	900				
	23.1	73.4	3.4	100.0				

Table 6.8.2

Motorcycle Crash Speed  
by  
Multiple/Single Vehicle Collision  
(OSIDs)

MCSPEED2	COUNT	COL PCT				ROW TOTAL
	1	SINGLE VEHICLE	MULTI-VEHICLE	UNKNOWN		
	1	1	2	0		
	TOT PCT	1	2	0		
0.	17	23.5	70.6	5.9	1.9	
		1.9	1.8	3.2		
		0.4	1.3	0.1		
3.	4	50.0	50.0	0.0	0.4	
		1.0	0.3	0.0		
		0.2	0.2	0.0		
4.	3	0.0	100.0	0.0	0.3	
		0.0	0.5	0.0		
		0.0	0.3	0.0		
5.	8	37.5	50.0	12.5	0.9	
		1.4	0.6	3.2		
		0.3	0.4	0.1		
6.	3	0.0	100.0	0.0	0.3	
		0.0	0.5	0.0		
		0.0	0.3	0.0		
7.	7	14.3	85.7	0.0	0.8	
		0.5	0.9	0.0		
		0.1	0.7	0.0		
8.	8	37.5	62.5	0.0	0.9	
		1.4	0.8	0.0		
		0.3	0.6	0.0		
COLUMN TOTAL		208	661	31	900	
		23.1	73.4	3.4	100.0	

Continued

Continued

Table 6.8.2

MC SPEED2	COUNT	I			UNKNOWN	ROW TOTAL
	ROW PCT	ISINGLE	V	MULTI-VE		
	TOT PCT	VEHICLE	A HICLE	AC		
		1.I	2.I	8.I		
9.	I	1	5	0	I	6
	I	16.7	83.3	0.0	I	0.7
	I	0.5	0.8	0.0	I	
	I	0.1	0.6	0.0	I	
10.	I	4	22	1	I	27
	I	14.8	81.5	3.7	I	3.0
	I	1.9	3.3	3.2	I	
	I	0.4	2.4	0.1	I	
11.	I	3	7	2	I	12
	I	25.0	58.3	16.7	I	1.3
	I	1.4	1.1	6.5	I	
	I	0.3	0.8	0.2	I	
12.	I	8	36	1	I	45
	I	17.8	80.0	2.2	I	5.0
	I	3.8	5.4	3.2	I	
	I	0.9	4.0	0.1	I	
13.	I	4	6	1	I	11
	I	36.4	54.5	9.1	I	1.2
	I	1.9	0.9	3.2	I	
	I	0.4	0.7	0.1	I	
14.	I	3	11	1	I	15
	I	20.0	73.3	6.7	I	1.7
	I	1.4	1.7	3.2	I	
	I	0.3	1.2	0.1	I	
15.	I	12	65	2	I	79
	I	15.2	82.3	2.5	I	8.8
	I	5.8	9.8	6.5	I	
	I	1.3	7.2	0.2	I	
COLUMN TOTAL		208	661	31		900
		23.1	73.4	3.4		100.0

Continued

Continued

Table 6.8.2

MC SPEED2	COUNT	I			B			ROW TOTAL
	ROW PCT	SINGLE VEHICLE	MULTI-VEHICLE	UNKNOWN	SINGLE VEHICLE	MULTI-VEHICLE	UNKNOWN	
TOT PCT		1.1	2.1	8.1				
16.	4	16	1	1	21			
	19.0	76.2	4.8	1.0	2.3			
	1.9	2.4	3.2					
	0.4	1.8	0.1					
17.	6	12	2	1	20			
	30.0	60.0	10.0	5.0	2.2			
	2.9	1.8	6.5					
	0.7	1.3	0.2					
18.	6	34	1	1	41			
	14.6	82.9	2.4	0.1	4.6			
	2.9	5.1	3.2					
	0.7	3.8	0.1					
19.	2	7	0	0	9			
	22.2	77.8	0.0	0.0	1.0			
	1.0	1.1	0.0					
	0.2	0.8	0.0					
20.	13	79	4	1	96			
	13.5	82.3	4.2	0.0	10.7			
	6.3	12.0	12.9					
	1.4	8.8	0.4					
21.	1	6	0	0	7			
	14.3	85.7	0.0	0.0	0.8			
	0.5	0.9	0.0					
	0.1	0.7	0.0					
22.	1	20	0	0	21			
	4.8	95.2	0.0	0.0	2.3			
	0.5	3.0	0.0					
	0.1	2.2	0.0					
COLUMN TOTAL	208	661	31	900				
	23.1	73.4	3.4	100.0				

Continued



Continued

Table 6.8.2

MCSPEED2	COUNT							ROW TOTAL
	ROW PCT	SINGLE	V	MULTI-	-VE	UNKNOWN		
	TOT PCT	VEHICLE	A	HICLE	AC			
	1.	1.	2.	1	8.	1		
23.	5	16	3				24	
	20.8	66.7	12.5				2.7	
	2.4	2.4	9.7					
	0.6	1.8	0.3					
24.	3	19	0				22	
	13.6	86.4	0.0				2.4	
	1.4	2.9	0.0					
	0.3	2.1	0.0					
25.	14	49	1				64	
	21.9	76.6	1.6				7.1	
	6.7	7.4	3.2					
	1.6	5.4	0.1					
26.	7	17	0				24	
	29.2	70.8	0.0				2.7	
	3.4	2.6	0.0					
	0.8	1.9	0.0					
27.	3	13	1				17	
	17.6	76.5	5.9				1.9	
	1.4	2.0	3.2					
	0.3	1.4	0.1					
28.	4	23	0				27	
	14.8	85.2	0.0				3.0	
	1.9	3.5	0.0					
	0.4	2.6	0.0					
29.	4	3	0				7	
	57.1	42.9	0.0				0.8	
	1.9	0.5	0.0					
	0.4	0.3	0.0					
COLUMN TOTAL	208	661	31				900	
	23.1	73.4	3.4				100.0	

Continued

Continued

Table 6.8.2

MCSPEED2	COUNT	I			ROW			
	PCT	ISINGLE	V	MULTI-VE	UNKNOWN			
	TOT PCT	VEHICLE	1. I	2. I	8. I			
COL	PCT	VEHICLE	1. I	2. I	8. I	ROW		
TOT PCT	TOT PCT	VEHICLE	1. I	2. I	8. I	TOTAL		
30.	I	8	I	49	I	0	I	57
	I	14.0	I	86.0	I	0.0	I	6.3
	I	3.8	I	7.4	I	0.0	I	
	I	0.9	I	5.4	I	0.0	I	
31.	I	3	I	3	I	0	I	6
	I	50.0	I	50.0	I	0.0	I	0.7
	I	1.4	I	0.5	I	0.0	I	
	I	0.3	I	0.3	I	0.0	I	
32.	I	4	I	16	I	0	I	20
	I	20.0	I	80.0	I	0.0	I	2.2
	I	1.9	I	2.4	I	0.0	I	
	I	0.4	I	1.8	I	0.0	I	
33.	I	5	I	7	I	0	I	12
	I	41.7	I	58.3	I	0.0	I	1.3
	I	2.4	I	1.1	I	0.0	I	
	I	0.6	I	0.8	I	0.0	I	
34.	I	1	I	4	I	0	I	5
	I	20.0	I	80.0	I	0.0	I	0.6
	I	0.5	I	0.6	I	0.0	I	
	I	0.1	I	0.4	I	0.0	I	
35.	I	8	I	30	I	2	I	40
	I	20.0	I	75.0	I	5.0	I	4.4
	I	3.8	I	4.5	I	6.5	I	
	I	0.9	I	3.3	I	0.2	I	
36.	I	1	I	3	I	0	I	4
	I	25.0	I	75.0	I	0.0	I	0.4
	I	0.5	I	0.5	I	0.0	I	
	I	0.1	I	0.3	I	0.0	I	
COLUMN		208		661		31		900
TOTAL		23.1		73.4		3.4		100.0

Continued

Continued

Table 6.8.2

MCSPEED2	COUNT	VEHICLE			UNKNOWN	ROW TOTAL
	ROW PCT	SINGLE	V	MULTI-VE	AC	
	COL PCT	1.	2.	8.		
	TOT PCT	1.	2.	8.		
37.	0	3	0		3	
	0.0	100.0	0.0		0.3	
	0.0	0.5	0.0			
	0.0	0.3	0.0			
38.	5	7	0		12	
	41.7	58.3	0.0		1.3	
	2.4	1.1	0.0			
	0.5	0.8	0.0			
39.	1	1	0		2	
	50.0	50.0	0.0		0.2	
	0.5	0.2	0.0			
	0.1	0.1	0.0			
40.	10	11	4		25	
	40.0	44.0	16.0		2.8	
	4.8	1.7	12.9			
	1.1	1.2	0.4			
42.	4	4	0		8	
	50.0	50.0	0.0		0.9	
	1.9	0.6	0.0			
	0.4	0.4	0.0			
43.	1	5	0		6	
	16.7	83.3	0.0		0.7	
	0.5	0.8	0.0			
	0.1	0.6	0.0			
44.	2	0	0		2	
	100.0	0.0	0.0		0.2	
	1.0	0.0	0.0			
	0.2	0.0	0.0			
COLUMN TOTAL	208	661	31		900	
	23.1	73.4	3.4		100.0	

Continued

Continued

Table 6.8.2

MCSPEED2	COUNT	VEHICLE			UNKNOWN	ROW TOTAL
	ROW PCT	SINGLE	MULTI-	VE		
	COL PCT	VEHICLE	A	HICLE	AC	
	TOT PCT	1.1	2.1	8.1		
45.	4	4	4	1	9	
	44.4	44.4	11.1	1.9	1.9	
	1.9	0.6	3.2			
	0.4	0.4	0.1			
47.	0	1	0	1	1	
	0.0	100.0	0.0	0.1	0.1	
	0.0	0.2	0.0			
	0.0	0.1	0.0			
50.	3	3	0	6		
	50.0	50.0	0.0	0.7		
	1.4	0.5	0.0			
	0.3	0.3	0.0			
51.	0	1	0	1		
	0.0	100.0	0.0	0.1		
	0.0	0.2	0.0			
	0.0	0.1	0.0			
52.	2	1	0	3		
	66.7	33.3	0.0	0.3		
	1.0	0.2	0.0			
	0.2	0.1	0.0			
53.	1	1	0	2		
	50.0	50.0	0.0	0.2		
	0.5	0.2	0.0			
	0.1	0.1	0.0			
54.	0	0	1	1		
	0.0	0.0	100.0	0.1		
	0.0	0.0	3.2			
	0.0	0.0	0.1			
COLUMN TOTAL		208	661	31	900	
		23.1	73.4	3.4	100.0	

Continued

Continued

Table 6.8.2

MC SPEED2	COUNT	IS INGLE V MULTI~VE UNKNOWN			ROW
	ROW PCT	IS INGLE V	MULTI~VE	UNKNOWN	TOTAL
	COL PCT	VEHICLE AC	VEHICLE AC		
TOT PCT	1.1	2.1	8.1		
55.	5	4	0	9	
	55.6	44.4	0.0	1.0	
	2.4	0.6	0.0		
	0.6	0.4	0.0		
58.	1	0	0	1	
	100.0	0.0	0.0	0.1	
	0.5	0.0	0.0		
	0.1	0.0	0.0		
59.	1	0	0	1	
	100.0	0.0	0.0	0.1	
	0.5	0.0	0.0		
	0.1	0.0	0.0		
60.	4	2	0	6	
	66.7	33.3	0.0	0.7	
	1.9	0.3	0.0		
	0.4	0.2	0.0		
62.	2	0	0	2	
	100.0	0.0	0.0	0.2	
	1.0	0.0	0.0		
	0.2	0.0	0.0		
63.	2	0	0	2	
	100.0	0.0	0.0	0.2	
	1.0	0.0	0.0		
	0.2	0.0	0.0		
65.	1	0	0	1	
	100.0	0.0	0.0	0.1	
	0.5	0.0	0.0		
	0.1	0.0	0.0		
COLUMN TOTAL	208	661	31	900	
	23.1	73.4	3.4	100.0	

Continued

Continued

Table 6.8.2

MC SPEED2	COUNT	VEHICLE AC				PCW TOTAL			
	ROW PCT	SINGLE	V	MULTI-VE	UNKNOWN				
	COL PCT	VEHICLE	A	HICLE	AC				
	TOT PCT	1. I	2. I	8. I					
67.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
68.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
69.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
70.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
73.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
75.	I	1	I	0	I	0	I	1	
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
UNKNOWN	98.	I	1	I	0	I	0	I	1
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
N A	99.	I	1	I	0	I	0	I	1
	I	100.0	I	0.0	I	0.0	I	0.1	
	I	0.5	I	0.0	I	0.0	I		
	I	0.1	I	0.0	I	0.0	I		
COLUMN TOTAL		208		661		31		900	
		23.1		73.4		3.4		100.0	

Table 6.9.2  
 Contributory Front Tire Conditions  
 (OSIDs)

	COUNT	NPASS			ROW TOTAL	
		ROW PCT	IND	YES		UNKNOWN
		COL PCT				
		TOT PCT	0.1	1.1		8.1
NONE	0.	708	149	2	859	
		82.4	17.3	0.2	95.4	
		95.2	96.8	100.0		
		78.7	16.6	0.2		
PUNCTURE FLAT	1.	1	0	0	1	
		100.0	0.0	0.0	0.1	
		0.1	0.0	0.0		
		0.1	0.0	0.0		
BLOWOUT	2.	0	1	0	1	
		0.0	100.0	0.0	0.1	
		0.0	0.6	0.0		
		0.0	0.1	0.0		
WORN SMOOTH	3.	3	1	0	4	
		75.0	25.0	0.0	0.4	
		0.4	0.6	0.0		
		0.3	0.1	0.0		
LOW PRESSURE	4.	22	1	0	23	
		95.7	4.3	0.0	2.6	
		3.0	0.6	0.0		
		2.4	0.1	0.0		
HIGH PRESSURE	5.	8	1	0	9	
		88.9	11.1	0.0	1.0	
		1.1	0.6	0.0		
		0.9	0.1	0.0		
OTHERS	7.	2	0	0	2	
		100.0	0.0	0.0	0.2	
		0.3	0.0	0.0		
		0.2	0.0	0.0		
UNKNOWN	6.	0	1	0	1	
		0.0	100.0	0.0	0.1	
		0.0	0.6	0.0		
		0.0	0.1	0.0		
COLUMN TOTAL		744	154	2	900	
		82.7	17.1	0.2	100.0	

Table 6.9.3  
 Contributory Rear Tire Conditions  
 (OSIDs)

	COUNT	NPASS			ROW TOTAL
		INO	YES	UNKNOWN	
		ROW PCT	COL PCT	TOT PCT	
		INO	YES	UNKNOWN	
		0.1	1.1	8.1	
NONE	0.	697	138	2	837
		83.3	16.5	0.2	93.0
		93.7	89.6	100.0	
		77.4	15.3	0.2	
PUNCTURE FLAT	1.	6	5	0	11
		54.5	45.5	0.0	1.2
		0.8	3.2	0.0	
		0.7	0.6	0.0	
BLOWOUT	2.	1	0	0	1
		100.0	0.0	0.0	0.1
		0.1	0.0	0.0	
		0.1	0.0	0.0	
WORN SMOOTH	3.	7	4	0	11
		63.6	36.4	0.0	1.2
		0.9	2.6	0.0	
		0.8	0.4	0.0	
LOW PRESSURE	4.	18	4	0	22
		81.8	18.2	0.0	2.4
		2.4	2.6	0.0	
		2.0	0.4	0.0	
HIGH PRESSURE	5.	10	2	0	12
		83.3	16.7	0.0	1.3
		1.3	1.3	0.0	
		1.1	0.2	0.0	
VALVE FAILURE	6.	1	0	0	1
		100.0	0.0	0.0	0.1
		0.1	0.0	0.0	
		0.1	0.0	0.0	
OTHERS	7.	4	1	0	5
		80.0	20.0	0.0	0.6
		0.5	0.6	0.0	
		0.4	0.1	0.0	
COLUMN TOTAL		744	154	2	900
		82.7	17.1	0.2	100.0



Table 6.14.2

Automobile Manufacturer  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
AMC	1.	15	1.7	2.3
Buick	2.	25	2.8	3.9
Cadillac	3.	31	3.4	4.8
Chevrolet	4.	157	17.4	24.3
Chrysler	5.	9	1.0	1.4
Dodge	6.	28	3.1	4.3
Ford	7.	132	14.7	20.4
Imperial	8.	2	0.2	0.3
Lincoln	9.	9	1.0	1.4
Mercury	10.	22	2.4	3.4
Oldsmobile	11.	30	3.3	4.6
Plymouth	12.	40	4.4	6.2
Pontiac	13.	39	4.3	6.0
Jensen	20.	1	0.1	0.2
Mercedes Benz	23.	4	0.4	0.6
Subaru	27.	1	0.1	0.2
Volvo	28.	4	0.4	0.6
Datsun	29.	16	1.8	2.5
Audi	31.	1	0.1	0.2
Austin	32.	2	0.2	0.3
BMW	33.	1	0.1	0.2
Fiat	35.	6	0.7	0.9
Honda	36.	3	0.3	0.5
MG	39.	1	0.1	0.2
Mazda	40.	2	0.2	0.3
Opel	41.	4	0.4	0.6
Peugeot	42.	1	0.1	0.2
Toyota	47.	22	2.4	3.4
Triumph	48.	2	0.2	0.3
Volkswagen	49.	28	3.1	4.3
Other	97.	9	1.0	1.4
Unknown	98.	36	4.0	MISSING
Not Applicable	99.	<u>217</u>	<u>24.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 6.14.3

Other Vehicle Model Type  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
2-door Hardtop	1.	251	27.9	38.0
2-door Sedan	2.	132	14.7	20.0
4-door Hardtop	3.	40	4.4	6.1
4-door Sedan	4.	81	9.0	12.3
Station Wagon	5.	66	7.3	10.0
Convertible	6.	15	1.7	2.3
Van	7.	19	2.1	2.9
Pickup Truck	8.	32	3.6	4.8
Commercial Truck	9.	17	1.9	2.6
Other	10.	8	0.9	1.2
Unknown	98.	31	3.4	MISSING
Not Applicable	99.	<u>208</u>	<u>23.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 6.14.4

## Size of Involved Automobile

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>OSIDs</u>				
Full Size	1.	280	31.1	44.1
Intermediate	2.	133	14.8	20.9
Compact	3.	99	11.0	15.6
Subcompact	4.	123	13.7	19.4
Unknown	8.	27	3.0	MISSING
Not Applicable	9.	<u>238</u>	<u>26.4</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>TARs</u>				
Full Size	1.	966	26.8	44.7
Intermediate	2.	373	10.4	17.3
Compact	3.	273	7.6	12.6
Sub-Compact	4.	486	13.5	22.5
Others	5.	63	1.7	2.9
Unknown	8.	604	16.8	MISSING
Not Applicable, single vehicle accident	9.	<u>835</u>	<u>23.2</u>	<u>MISSING</u>
	TOTAL	3600	100.0	100.0

Table 6.14.5

Collision Contact of Other Vehicle  
(OSIDs)

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)	
Bus	BS01	1	0.1	0.1	0.1	
	BS21	1	0.1	0.1	0.3	
	BS33	1	0.1	0.1	0.4	
Car (Back)	CB01	46	5.1	6.9	7.3	
	CB03	6	0.7	0.9	8.2	
	CB14	3	0.3	0.4	8.7	
	CB16	1	0.1	0.1	8.8	
	CB25	25	2.8	3.7	12.6	
	CB27	2	0.2	0.3	12.9	
	CB98	1	0.1	0.1	13.0	
	(Front)	CF01	115	12.8	17.2	30.3
		CF02	5	0.6	0.7	31.0
		CF03	57	6.3	8.5	39.6
		CF04	1	0.1	0.1	39.7
		CF05	2	0.2	0.3	40.0
		CF46	1	0.1	0.1	40.2
		CF98	3	0.3	0.4	40.6
(Side)	CS01	19	2.1	2.8	43.5	
	CS02	63	7.0	9.4	52.9	
	CS03	42	4.7	6.3	59.2	
	CS06	58	6.4	8.7	67.9	
	CS07	4	0.4	0.6	68.5	
	CS12	10	1.1	1.5	70.0	
	CS14	45	5.0	6.7	76.8	

Continued

Continued

Table 6.14.5

Car (Side)	CS15	1	0.1	0.1	76.9	
	CS21	21	2.3	3.1	80.1	
	CS23	16	1.8	2.4	82.5	
	CS25	14	1.6	2.1	84.6	
	CS31	2	0.2	0.3	84.9	
	CS35	14	1.6	2.1	87.0	
	CS98	2	0.2	0.3	87.3	
	(Top)	CT37	1	0.1	0.1	87.4
Motorcycle	MC05	4	0.4	0.6	88.0	
	MC08	1	0.1	0.1	88.2	
	MC11	4	0.4	0.6	88.8	
	MC12	2	0.2	0.3	89.1	
	MC13	1	0.1	0.1	89.2	
	MC20	1	0.1	0.1	89.4	
	MC22	4	0.4	0.6	90.0	
	MC25	1	0.1	0.1	90.1	
	MC26	2	0.2	0.3	90.4	
	MC33	1	0.1	0.1	90.6	
	MC34	1	0.1	0.1	90.7	
	MC98	2	0.2	0.3	91.0	
	Pick Up Truck	PB01	1	0.1	0.1	91.2
		PB03	4	0.4	0.6	91.8
		PU25	1	0.1	0.1	91.9
		PB97	1	0.1	0.1	92.1
PF01		4	0.4	0.6	92.7	
PF03		2	0.2	0.3	93.0	
PS02		3	0.3	0.4	93.4	
PS03		2	0.2	0.3	93.7	

Continued

Continued

Table 6.14.5

	PS06	1	0.1	0.1	93.9
	PS14	4	0.4	0.6	94.5
	PS21	2	0.2	0.3	94.8
	PS23	3	0.3	0.4	95.2
	PT37	1	0.1	0.1	95.4
	PO01	1	0.1	0.1	95.5
Truck	TB01	1	0.1	0.1	95.7
	TB03	2	0.2	0.3	96.0
	TS14	2	0.2	0.3	96.3
	TS21	5	0.6	0.7	97.0
	TS27	4	0.4	0.6	97.6
Van	VB01	5	0.6	0.7	98.4
	VB03	1	0.1	0.1	98.5
	VF01	2	0.2	0.3	98.8
	VF97	1	0.1	0.1	99.0
	VS01	1	0.1	0.1	99.1
	VS03	2	0.2	0.3	99.4
	VS25	2	0.2	0.3	99.7
	VS33	2	0.2	0.3	100.0
Unknown	9998	3	0.3	MISSING	100.0
Not Applicable	9999	230	25.6	MISSING	100.0
	TOTAL	400	100.0	100.0	

C.3 Supplemental Data for Volume I, Section 7.0, Motorcycle Rider, Passenger, and Other Vehicle Driver Characteristics

Included in this section are the following Tables:

7.2.1	Sex of Motorcycle Rider	100
7.2.2	Rider Marital Status	101
7.2.3	Rider Number of Children	101
7.3.1	Rider Height	102
7.3.2	Rider Weight	103
7.5.3	State of Motorcycle Rider Driver License	106
7.6.3	Number of Rider Violations Last Two Years by Rider Driver License	107
7.6.4	Number of Rider Accidents Last Two Years by Number of Rider Violations Last Two Years	108
7.6.5	Accident Precipitating Factor by Number of Rider Violations Last Two Years	109
7.6.6	Accident Precipitating Factor by Number of Accidents in Last Two Years	110
7.9.2	Rider Street Motorcycle Riding Experience	111
7.9.3	Experience on Accident-Involved Motorcycle	113
7.13.3	Time Riding on Motorcycle Before Accident by Rider Temporary Physiological Impairment	115
7.17.8	Motorcycle Rear Brake Operation by Front Brake Operation, (0-6 Months Experience)	119
7.17.9	Motorcycle Rear Brake Operation by Front Brake Operation, (7-12 Months Experience)	120
7.17.10	Motorcycle Rear Brake Operation by Front Brake Operation, (1-2 Years Experience)	121
7.17.11	Motorcycle Rear Brake Operation by Front Brake Operation, (2-3 Years Experience)	122
7.17.12	Motorcycle Rear Brake Operation by Front Brake Operation, (3-4 Years Experience)	123
7.17.13	Motorcycle Rear Brake Operation by Front Brake Operation, (Over 4 Years Experience)	124

7.17.14	Motorcycle Rear Brake Operation by Front Brake Operation, (Training: Self-Taught)	125
7.17.15	Motorcycle Rear Brake Operation by Front Brake Operation, (Training: Friends-Family)	126
7.17.16	Motorcycle Rear Brake Operation by Front Brake Operation, (Training: M/C Course)	127
7.17.17	Motorcycle Rear Brake Operation by Front Brake Operation, (Training: Professional)	128
7.17.18	Motorcycle Rear Brake Operation by Front Brake Operation, (Training: Others)	129
7.17.22	Motorcycle Precrash Control Operations by Control Operations Interference	130
7.20.1	Height of Passenger	131
7.20.2	Weight of Passenger	132
7.22.1	Passenger Motorcycle Experience and Interference with Riding Task	134
7.23.1	Passenger Alcohol Involvement	135
7.23.2	Passenger Drug Involvement	136
7.26.4	Other Vehicle Driver Social Index	137
7.27.1	Other Vehicle Driver License Class	137
7.27.2	Other Vehicle Driver License Issuing State	138



Table 7.2.1

Sex of Motorcycle Rider

(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Male	1.	865	96.1	96.2
Female	2.	34	3.8	3.8
Unknown	8.	<u>1</u>	<u>0.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

(TARs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Female	F	102	2.8	2.9
Male	M	3454	95.9	97.1
Unknown-Not Reported	8	<u>44</u>	<u>1.2</u>	<u>MISSING</u>
	TOTAL	3600	100.0	100.0

Table 7.2.2

Rider Marital Status  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Single	1.	515	57.2	59.6
Married	2.	230	25.6	26.6
Separated	3.	30	3.3	3.5
Divorced	4.	54	6.0	6.3
Widowed	5.	1	0.1	0.1
Cohabiting	6.	34	3.8	3.9
Unknown	8.	36	4.0	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 7.2.3

Rider Number of Children  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Number of Children	0.	572	63.6	67.8
	1.	109	12.1	12.9
	2.	84	9.3	10.0
	3.	37	4.1	4.4
	4.	22	2.4	2.6
	5.	10	1.1	1.2
	6.	5	0.6	0.6
7 Or More	7.	5	0.6	0.6
Unknown	8.	56	6.2	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 7.3.1  
Rider Height  
(OSIDs)

Category	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Height, in.	53.	1	0.1	0.1	0.1
	56.	3	0.3	0.3	0.5
	57.	2	0.2	0.2	0.7
	58.	2	0.2	0.2	0.9
	59.	3	0.3	0.3	1.3
	60.	5	0.6	0.6	1.8
	61.	3	0.3	0.3	2.2
	62.	14	1.6	1.6	3.8
	63.	16	1.8	1.8	5.6
	64.	25	2.8	2.9	8.5
	65.	29	3.2	3.3	11.8
	66.	57	6.3	6.5	18.3
	67.	69	7.7	7.9	26.2
	68.	103	11.4	11.8	37.9
	69.	91	10.1	10.4	48.3
	70.	96	10.7	11.0	59.3
	71.	90	10.0	10.3	69.6
	72.	112	12.4	12.8	82.4
	73.	69	7.7	7.9	90.3
	74.	42	4.7	4.8	95.1
75.	23	2.6	2.6	97.7	
76.	12	1.3	1.4	99.1	
77.	4	0.4	0.5	99.5	
78.	2	0.2	0.2	99.8	
80.	2	0.2	0.2	100.0	
Unknown	98.	25	2.8	MISSING	100.0
	TOTAL	900	100.0	100.0	

Table 7.3.2  
Rider Weight  
(OSTDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	50.	1	0.1	0.1	0.1
	60.	1	0.1	0.1	0.2
	80.	1	0.1	0.1	0.3
	85.	2	0.2	0.2	0.6
	100.	1	0.1	0.1	0.7
	101.	1	0.1	0.1	0.8
	102.	1	0.1	0.1	0.9
	104.	1	0.1	0.1	1.0
	105.	4	0.4	0.5	1.5
	107.	1	0.1	0.1	1.6
	108.	1	0.1	0.1	1.7
	110.	6	0.7	0.7	2.4
	115.	8	0.9	0.9	3.3
	116.	2	0.2	0.2	3.5
	117.	1	0.1	0.1	3.7
	118.	2	0.2	0.2	3.9
	120.	16	1.8	1.8	5.7
	122.	1	0.1	0.1	5.8
	123.	1	0.1	0.1	5.9
	124.	1	0.1	0.1	6.1
	125.	21	2.3	2.4	8.5
	127.	1	0.1	0.1	8.6
	129.	1	0.1	0.1	8.7
	130.	39	4.3	4.5	13.1
	132.	2	0.2	0.2	13.4
	135.	44	4.9	5.0	18.4
	136.	1	0.1	0.1	18.5
	137.	2	0.2	0.2	18.7
	138.	4	0.4	0.5	19.2
	140.	51	5.7	5.8	25.0
	143.	1	0.1	0.1	25.1
	145.	43	4.8	4.9	30.1
	147.	6	0.7	0.7	30.7
	148.	6	0.7	0.7	31.4
	149.	2	0.2	0.2	31.7
	150.	70	7.8	8.0	39.7
	151.	2	0.2	0.2	39.9
	152.	3	0.3	0.3	40.2
	153.	3	0.3	0.3	40.6
	154.	2	0.3	0.2	40.8
	155.	48	5.3	5.5	46.3
	157.	4	0.4	0.5	46.7

Continued

Table 7.3.2  
Rider Weight  
(OSIDs)

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	158.	4	0.4	0.5	47.2
	159.	1	0.1	0.1	47.3
	160.	58	6.4	6.6	53.9
	161.	1	0.1	0.1	54.1
	162.	4	0.4	0.5	54.5
	163.	3	0.3	0.3	54.9
	164.	3	0.3	0.3	55.2
	165.	53	5.9	6.1	61.3
	166.	1	0.1	0.1	61.4
	167.	2	0.2	0.2	61.6
	168.	1	0.1	0.1	61.7
	169.	1	0.1	0.1	61.8
	170.	50	5.6	5.7	67.5
	172.	3	0.3	0.3	67.9
	173.	2	0.2	0.2	68.1
	175.	51	5.7	5.8	73.9
	176.	1	0.1	0.1	74.1
	178.	4	0.4	0.5	74.5
	179.	1	0.1	0.1	74.6
	180.	37	4.1	4.2	78.9
	182.	2	0.2	0.2	79.1
	183.	2	0.2	0.2	79.3
	184.	2	0.2	0.2	79.5
	185.	30	3.3	3.4	83.0
	187.	3	0.3	0.3	83.3
	190.	38	4.2	4.3	87.7
	191.	1	0.1	0.1	87.8
	192.	3	0.3	0.3	88.1
	193.	2	0.2	0.2	88.3
	195.	16	1.8	1.8	90.2
	196.	1	0.1	0.1	90.3
	198.	1	0.1	0.1	90.4
	200.	19	2.1	2.2	92.6
202.	2	0.2	0.2	92.8	
203.	1	0.1	0.1	92.9	
205.	5	0.6	0.6	93.5	
206.	2	0.2	0.2	93.9	
207.	1	0.1	0.1	93.8	
208.	1	0.1	0.1	93.9	
209.	1	0.1	0.1	94.1	

Continued

Table 7.3.2  
Rider Weight  
(OSIDs)

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	210.	13	1.4	1.5	95.5
	213.	1	0.1	0.1	95.7
	215.	1	0.1	0.1	95.8
	216.	2	0.2	0.2	96.0
	220.	8	0.9	0.9	96.9
	225.	4	0.4	0.5	97.4
	228.	1	0.1	0.1	97.5
	229.	1	0.1	0.1	97.6
	230.	8	0.9	0.9	98.5
	231.	1	0.1	0.1	98.6
	240.	1	0.1	0.1	98.7
	245.	2	0.2	0.2	99.0
	247.	1	0.1	0.1	99.1
	250.	2	0.2	0.2	99.3
	265.	1	0.1	0.1	99.4
	270.	1	0.1	0.1	99.5
	275.	1	0.1	0.1	99.7
	280.	1	0.1	0.1	99.8
	310.	1	0.1	0.1	99.9
	380.	1	0.1	0.1	100.0
Unknown	998.	<u>25</u>	<u>2.8</u>	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0	

Table 7.5.3  
State of Rider Driver License  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Arizona	3.	2	0.2	0.2
California	5.	784	87.1	96.1
Connecticut	7.	1	0.1	0.1
Florida	10.	1	0.1	0.1
Georgia	11.	1	0.1	0.1
Illinois	14.	1	0.1	0.1
Indiana	15.	1	0.1	0.1
Kansas	17.	1	0.1	0.1
Louisiana	19.	1	0.1	0.1
Maine	20.	1	0.1	0.1
Massachusetts	22.	1	0.1	0.1
Michigan	23.	4	0.4	0.5
Nebraska	28.	1	0.1	0.1
New Jersey	31.	1	0.1	0.1
New Mexico	32.	1	0.1	0.1
New York	33.	2	0.2	0.2
North Carolina	34.	1	0.1	0.1
Ohio	36.	3	0.3	0.4
Oklahoma	37.	2	0.2	0.2
Tennessee	43.	1	0.1	0.1
Texas	44.	1	0.1	0.1
Virginia	47.	1	0.1	0.1
Wisconsin	50.	2	0.2	0.2
Foreign	52.	1	0.1	0.1
Unknown	98.	10	1.1	MISSING
Not Applicable, No License	99.	74	8.2	MISSING
	TOTAL	900	100.0	100.0

Table 7.6.3

Number of Rider Violations Last Two Years by Rider Driver License

(OSIDs)

VIOLATIONS	LICENSE										ROW TOTAL
	CDUNT	INONE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	LEARNER PERMIT	CLASS 3 REVOKED	CLASS 4 REVOKED		
	ROW PCT	0.1	1.1	2.1	3.1	4.1	5.1	6.1	7.1		
0.	40	4	1	97	163	16	0	1			322
	12.4	1.2	0.3	30.1	50.6	5.0	0.0	0.3			38.5
	60.6	28.5	100.0	39.6	34.6	64.0	0.0	50.0			
	4.8	0.5	0.1	11.6	19.5	1.9	0.0	0.1			
1.	9	4	0	64	133	6	1	0			217
	4.1	1.8	0.0	29.5	61.3	2.8	0.5	0.0			25.9
	13.6	28.6	0.0	26.1	28.2	24.0	7.7	0.0			
	1.1	0.5	0.0	7.6	15.9	0.7	0.1	0.0			
2.	5	1	0	44	76	2	1	0			129
	3.9	0.8	0.0	34.1	58.9	1.0	0.8	0.0			15.4
	7.6	7.1	0.0	18.0	16.1	8.0	7.7	0.0			
	0.6	0.1	0.0	5.3	9.1	0.2	0.1	0.0			
3.	4	2	0	16	42	1	3	0			68
	5.9	2.2	0.0	23.5	61.8	1.5	4.4	0.0			8.1
	6.1	14.3	0.0	6.5	8.9	4.0	23.1	0.0			
	0.5	0.2	0.0	1.9	5.0	0.1	0.4	0.0			
4.	4	1	0	10	19	0	3	1			38
	10.5	2.6	0.0	26.3	50.0	0.0	7.9	2.6			4.5
	6.1	7.1	0.0	4.1	4.0	0.0	23.1	50.0			
	0.5	0.1	0.0	1.2	2.3	0.0	0.4	0.1			
5.	1	1	0	4	16	0	1	0			23
	4.3	4.3	0.0	17.4	69.6	0.0	4.3	0.0			2.7
	1.5	7.1	0.0	1.6	3.4	0.0	7.7	0.0			
	0.1	0.1	0.0	0.5	1.4	0.0	0.1	0.0			
6.	0	1	0	4	8	0	1	0			14
	0.0	7.1	0.0	28.6	57.1	0.0	7.1	0.0			1.7
	0.0	7.1	0.0	1.6	1.7	0.0	7.7	0.0			
	0.0	0.1	0.0	0.5	1.0	0.0	0.1	0.0			
7. OR MORE	3	0	0	6	14	0	3	0			26
	11.5	0.0	0.0	23.1	53.8	0.0	11.5	0.0			3.1
	4.5	0.0	0.0	2.4	3.0	0.0	23.1	0.0			
	0.4	0.0	0.0	0.7	1.7	0.0	0.4	0.0			
COLUMN TOTAL	66	14	1	245	471	25	13	2			837
	7.9	1.7	0.1	29.3	56.3	3.0	1.6	0.2			100.0



Table 7.6.4

Number of Rider Accidents Last Two Years  
by Number of Rider Violations Last Two Years

(OSIDs)

COUNT ROW PCT COL PCT TOT PCT	Violations										ROW TOTAL
	0.1	1.1	2.1	3.1	4.1	5.1	6.1	7 OR MOR E	7.1		
Accidents	267	144	79	45	18	14	2	14	583		
	45.8	24.7	13.6	7.7	3.1	2.4	0.3	2.4	69.5		
	82.2	66.7	61.2	66.2	47.4	60.9	14.3	53.8			
	31.8	17.2	9.4	5.4	2.1	1.7	0.2	1.7			
1.	48	58	35	17	14	9	9	7	197		
	24.4	29.4	17.8	8.6	7.1	4.6	4.6	3.6	23.5		
	14.8	26.9	27.1	25.0	36.8	39.1	64.3	26.9			
	5.7	6.9	4.2	2.0	1.7	1.1	1.1	0.8			
2.	5	11	7	4	6	0	3	4	40		
	12.5	27.5	17.5	10.0	15.0	0.0	7.5	10.0	4.8		
	1.5	5.1	5.4	5.9	15.8	0.0	21.4	15.4			
	0.6	1.3	0.8	0.5	0.7	0.0	0.4	0.5			
3.	4	3	7	2	0	0	0	1	17		
	23.5	17.6	41.2	11.8	0.0	0.0	0.0	5.9	2.0		
	1.2	1.4	5.4	2.9	0.0	0.0	0.0	3.8			
	0.5	0.4	0.8	0.2	0.0	0.0	0.0	0.1			
4.	1	0	1	0	0	0	0	0	2		
	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.2		
	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0			
	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL	325	216	129	68	38	23	14	26	839		
	38.7	25.7	15.4	8.1	4.5	2.7	1.7	3.1	100.0		

Table 7.6.5

Accident Precipitating Factor by Number of Rider Violations Last 2 Years  
(OSIDs)

FACTOR	COUNT ROW PCI COL PCI TOT PCI	TICKETS							7 OR MORE	ROW TOTAL
		0.1	1.1	2.1	3.1	4.1	5.1	6.1		
PHANTOM VEHICLE	0.	3	0	0	0	0	1	0	0	4
		75.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.5
		0.9	0.0	0.0	0.0	0.0	4.3	0.0	0.0	
MC ERROR	1.	137	81	56	26	15	9	4	9	337
		40.7	24.9	16.6	7.7	4.5	2.7	1.2	2.7	40.1
		42.2	37.5	43.4	38.2	39.5	39.1	28.6	33.3	
OV VIOLATION OF	2.	158	110	65	37	20	10	8	16	433
		36.5	27.5	15.0	8.5	4.6	2.3	1.8	3.7	51.5
		48.6	55.1	50.4	54.4	52.6	43.5	57.1	59.3	
ROADWAY DEFECT	3.	8	6	1	0	1	2	0	0	18
		44.4	33.3	5.6	0.0	5.6	11.1	0.0	0.0	2.1
		2.5	2.8	0.8	0.0	2.6	8.7	0.0	0.0	
PEDESTRIAN	4.	2	1	0	1	1	0	1	0	6
		33.3	16.7	0.0	16.7	16.7	0.0	16.7	0.0	0.7
		0.6	0.5	0.0	1.5	2.6	0.0	7.1	0.0	
ANIMAL	5.	6	0	3	0	0	0	0	1	10
		60.0	0.0	30.0	0.0	0.0	0.0	0.0	10.0	1.2
		1.8	0.0	2.3	0.0	0.0	0.0	0.0	3.7	
VEHICLE FAILURE	6.	9	5	3	3	1	0	1	1	23
		39.1	21.7	13.0	13.0	4.3	0.0	4.3	4.3	2.7
		2.9	2.3	2.3	4.4	2.6	0.0	7.1	3.7	
OTHER	7.	2	4	1	1	0	1	0	0	9
		22.2	44.4	11.1	11.1	0.0	11.1	0.0	0.0	1.1
		0.6	1.9	0.8	1.5	0.0	4.3	0.0	0.0	
	0.2	0.5	0.1	0.1	0.0	0.1	0.0	0.0		
COLUMN TOTAL		325	216	129	68	38	23	14	27	840
		38.7	25.7	15.4	8.1	4.5	2.7	1.7	3.2	100.0

Table 7.6.6

Accident Precipitating Factor by Number of Accidents in Last 2 Years  
(OSIDs)

FACTOR	COUNT	ACCIDENT					ROW TOTAL
		0.	1.	2.	3.	4.	
PHANTOM VEHICLE	0.	2	2	0	0	0	4
	ROW PCT	50.0	50.0	0.0	0.0	0.0	0.5
	COL PCT	0.3	1.0	0.0	0.0	0.0	
	TOT PCT	0.2	0.2	0.0	0.0	0.0	
MC ERROR	1.	246	74	12	7	1	340
	ROW PCT	72.4	21.8	3.5	2.1	0.3	40.1
	COL PCT	42.0	37.0	29.3	38.4	50.0	
	TOT PCT	29.0	8.7	1.4	0.8	0.1	
DV VIOLATION OF	2.	291	109	25	10	1	436
	ROW PCT	66.7	25.0	5.7	2.3	0.2	51.5
	COL PCT	49.7	54.5	61.0	58.6	50.0	
	TOT PCT	34.4	12.9	3.0	1.2	0.1	
ROADWAY DEFECT	3.	12	4	2	0	0	18
	ROW PCT	66.7	22.2	11.1	0.0	0.0	2.1
	COL PCT	2.0	2.0	4.9	0.0	0.0	
	TOT PCT	1.4	0.5	0.2	0.0	0.0	
PEDLSTRIAN	4.	2	4	0	0	0	6
	ROW PCT	33.3	66.7	0.0	0.0	0.0	0.7
	COL PCT	0.3	2.0	0.0	0.0	0.0	
	TOT PCT	0.2	0.5	0.0	0.0	0.0	
ANIMAL	5.	8	1	1	0	0	10
	ROW PCT	80.0	10.0	10.0	0.0	0.0	1.2
	COL PCT	1.4	0.5	2.4	0.0	0.0	
	TOT PCT	0.9	0.1	0.1	0.0	0.0	
VEHICLE FAILURE	6.	18	4	1	1	0	24
	ROW PCT	75.0	16.7	4.2	4.2	0.0	2.8
	COL PCT	3.1	2.0	2.4	5.6	0.0	
	TOT PCT	2.1	0.5	0.1	0.1	0.0	
OTHER	7.	7	2	0	0	0	9
	ROW PCT	77.8	22.2	0.0	0.0	0.0	1.1
	COL PCT	1.2	1.0	0.0	0.0	0.0	
	TOT PCT	0.8	0.2	0.0	0.0	0.0	
	COLUMN TOTAL	596	200	41	18	2	847
	TOTAL	62.2	23.6	4.8	2.1	0.2	100.0

Table 7.9.2

Amount Of Rider Street Motorcycle Riding Experience  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Experience, months	0.	37	4.1	4.5	4.5
	1.	29	3.2	3.5	8.1
	2.	27	3.0	3.3	11.4
	3.	18	2.0	2.2	13.6
	4.	14	1.6	1.7	15.3
	5.	7	0.8	0.9	16.1
	6.	24	2.7	2.9	19.1
	7.	8	0.9	1.0	20.0
	8.	7	0.8	0.9	20.9
	9.	6	0.7	0.7	21.6
	10.	3	0.3	0.4	22.0
	11.	2	0.2	0.2	22.2
	12.	57	6.3	7.0	29.2
	13.	2	0.2	0.2	29.5
	14.	3	0.3	0.4	29.8
	15.	3	0.3	0.4	30.2
	16.	2	0.2	0.2	30.4
	17.	1	0.1	0.1	30.6
	18.	24	2.7	2.9	33.5
	19.	4	0.4	0.5	34.0
	20.	2	0.2	0.2	34.2
	22.	2	0.2	0.2	34.5
	24.	64	7.1	7.8	42.3
	25.	1	0.1	0.1	42.4
	26.	1	0.1	0.1	42.5
	28.	1	0.1	0.1	42.7
	30.	21	2.3	2.6	45.2
	33.	1	0.1	0.1	45.4
	34.	1	0.1	0.1	45.5
	35.	1	0.1	0.1	45.6
	36.	66	7.3	8.1	53.7
	37.	2	0.2	0.2	53.9
	38.	1	0.1	0.1	54.0
	39.	1	0.1	0.1	54.2
	40.	3	0.3	0.4	54.5
	42.	12	1.3	1.5	56.0
	46.	1	0.1	0.1	56.1
	48.	44	4.9	5.4	61.5
	49.	1	0.1	0.1	61.6
	50.	2	0.2	0.2	61.9

Table 7.9.2

Amount Of Rider Street Motorcycle Riding Experience  
(OSIDs)

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)	
Experience, months	51.	1	0.1	0.1	62.0	
	54.	6	0.7	0.7	62.7	
	56.	2	0.2	0.2	63.0	
	59.	1	0.1	0.1	63.1	
	60.	45	5.0	5.5	68.6	
	66.	7	0.8	0.9	69.4	
	69.	2	0.2	0.2	69.7	
	72.	24	2.7	2.9	72.6	
	75.	1	0.1	0.1	72.7	
	78.	4	0.4	0.5	73.2	
	82.	1	0.1	0.1	73.3	
	84.	20	2.2	2.4	75.8	
	90.	2	0.2	0.2	76.0	
	96.	18	2.0	2.2	78.2	
	> 96 months	97.	178	19.8	21.8	100.0
	Unknown	98	82	9.1	MISSING	100.0
	TOTAL	900	100.0	100.0		

Table 7.9.3

Experience On Accident-Involved Motorcycle  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Experience, months	0.	129	14.3	15.1	15.1
	1.	106	11.8	12.4	27.5
	2.	71	7.9	8.3	35.8
	3.	62	6.9	7.3	43.0
	4.	38	4.2	4.4	47.5
	5.	30	3.3	3.5	51.0
	6.	55	6.1	6.4	57.4
	7.	23	2.6	2.7	60.1
	8.	16	1.8	1.9	62.0
	9.	13	1.4	1.5	63.5
	10.	10	1.1	1.2	64.7
	11.	5	0.6	0.6	65.3
	12.	69	7.7	8.1	73.3
	13.	8	0.9	0.9	74.3
	14.	6	0.7	0.7	75.0
	15.	7	0.8	0.8	75.8
	16.	2	0.2	0.2	76.0
	17.	4	0.4	0.5	76.5
	18.	37	4.1	4.3	80.8
	19.	4	0.4	0.5	81.3
	20.	1	0.1	0.1	81.4
	21.	1	0.1	0.1	81.5
	22.	1	0.1	0.1	81.6
	23.	2	0.2	0.2	81.9
	24.	39	4.3	4.6	86.4
	25.	4	0.4	0.5	86.9
	26.	1	0.1	0.1	87.0
	27.	1	0.1	0.1	87.1
	28.	1	0.1	0.1	87.3
	29.	1	0.1	0.1	87.4
	30.	13	1.4	1.5	88.9
	31.	2	0.2	0.2	89.1
	34.	1	0.1	0.1	89.2
	35.	1	0.1	0.1	89.4
	36.	38	4.2	4.4	93.8
	41.	1	0.1	0.1	93.9
	42.	6	0.7	0.7	94.6
	45.	1	0.1	0.1	94.7
	48.	18	2.0	2.1	96.8

Continued

Table 7.9.3

Experience On Accident Involved Motorcycle  
(OSIDs)

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Experience, months	49.	1	0.1	0.1	97.0
	54.	1	0.1	0.1	97.1
	55.	1	0.1	0.1	97.2
	58.	1	0.1	0.1	97.3
	60.	9	1.0	1.1	98.4
	66.	2	0.2	0.2	98.6
	72.	3	0.3	0.4	98.9
	74.	1	0.1	0.1	99.1
	84.	1	0.1	0.1	99.2
	96.	1	0.1	0.1	99.3
More than 96 months	97.	6	0.7	0.7	100.0
Unknown	98.	45	5.0	MISSING	100.0
	TOTAL	900	100.0	100.0	

Table 7.13.3

Time Riding Motorcycle Before Accident (Hours)  
by  
Rider Temporary Physiological Impairment

	COUNT ROW PCT COL PCT TOT PCT	Impairment										ROW TOTAL
		0.I	1.I	2.I	3.I	4.I	5.I	6.I	8.I			
		NONE	FATIGUE	HUNGER	THIRST	SIESTA S YNDROME	ELIMINAT ION	MINOR MA LAISE	OTHER			
Time Riding	0.0	166	3	2	0	0	1	0	2			174
		95.4	1.7	1.1	0.0	0.0	0.6	0.0	1.1			19.3
		20.1	15.0	10.0	0.0	0.0	33.3	0.0	8.0			
		18.4	0.3	0.2	0.0	0.0	0.1	0.0	0.2			
	0.1	210	6	8	1	1	1	0	5			232
		90.5	2.6	3.4	0.4	0.4	0.4	0.0	2.2			25.8
		25.4	30.0	40.0	50.0	100.0	33.3	0.0	20.0			
		23.3	0.7	0.9	0.1	0.1	0.1	0.0	0.6			
	0.2	135	4	7	1	0	1	3	0			151
		89.4	2.6	4.6	0.7	0.0	0.7	2.0	0.0			16.8
		16.3	20.0	35.0	50.0	0.0	33.3	100.0	0.0			
		15.0	0.4	0.8	0.1	0.0	0.1	0.3	0.0			
	0.3	110	2	0	0	0	0	0	0			112
		98.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0			12.4
		13.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0			
		12.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0			
	0.4	12	0	0	0	0	0	0	0			12
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			1.3
		1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.5	44	3	1	0	0	0	0	0			48
		91.7	6.3	2.1	0.0	0.0	0.0	0.0	0.0			5.3
		5.3	15.0	5.0	0.0	0.0	0.0	0.0	0.0			
		4.9	0.3	0.1	0.0	0.0	0.0	0.0	0.0			
	0.6	8	1	0	0	0	0	0	0			9
		88.9	11.1	0.0	0.0	0.0	0.0	0.0	0.0			1.0
		1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0			
		0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL		826	20	20	2	1	3	3	25			900
		91.8	2.2	2.2	0.2	0.1	0.3	0.3	2.8			100.0

Continued

115



Continued

Table 7.13.3

		Impairment										ROW TOTAL	
COUNT ROW PCT COL PCT TOT PCT	I	NONE	FATIGUE	HUNGER	THIRST	SIESTA YNDROME	5 4.1	ELIMINAT ION	MINOR LAISE	MA 6.1	OTHER 8.1		
		0.1	1.1	2.1	3.1	4.1	5.1	6.1	8.1				
		0.7	1.0	1.1	1.2	1.3	1.5						
Time Riding	9	0	0	0	0	0	0	0	0	0	0	9	
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	
	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.4	6	0	0	0	0	0	0	0	0	0	0	6	
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	
	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.0	23	0	1	0	0	0	0	0	0	0	0	24	
	95.8	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	
	2.8	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.1	1	0	0	0	0	0	0	0	0	0	0	1	
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.2	1	0	0	0	0	0	0	0	0	0	0	1	
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.3	4	0	0	0	0	0	0	0	0	0	0	4	
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	
	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.5	5	0	0	0	0	0	0	0	0	0	1	6	
	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.7	
	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0		
COLUMN TOTAL	826	20	20	2	1	3	3	25	0.1	0.3	0.3	2.8	988
	91.8	2.2	2.2	0.2	0.1	0.3	0.3	2.8	0.1	0.3	0.3	2.8	100.0

Continued

Table 7.13.3

Continued

		Impairment										ROW TOTAL
COUNT		NONE	FATIGUE	HUNGER	THIRST	SIESTA S YNDROME	ELIMINAT ION	MINOR MA LAISE	OTHER			
POW PCT												
COL PCT												
TOT PCT		0.1	1.1	2.1	3.1	4.1	5.1	6.1	8.1			
Time Riding	1.7	1	0	0	0	0	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2.0	11	0	1	0	0	0	0	0	0	0	12	
		91.7	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	
		1.3	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0		
2.5	2	0	0	0	0	0	0	0	0	0	2	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3.0	4	0	0	0	0	0	0	0	0	0	4	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	
		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3.5	2	0	0	0	0	0	0	0	0	0	2	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4.0	3	1	0	0	0	0	0	0	0	0	4	
		75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	
		0.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5.0	5	0	0	0	0	0	0	0	0	0	5	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
		0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL	826	20	20	2	1	3	3	25	900			
	91.8	2.2	2.2	0.2	0.1	0.3	0.3	2.8	100.0			

Continued

Continued

Table 7.43.3

		Impairment										ROW TOTAL
COUNT	ROW PCT	INONE	FATIGUE	HUNGER	THIRST	SIESTA S YNDROME	ELIMINAT ION	MINOR MA LAISE	OTHER			
CUL PCT	TOT PCT	0.1	1.1	2.1	3.1	4.1	5.1	6.1	8.1			
Time Riding	5.5	1	0	0	0	0	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	6.0	1	0	0	0	0	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	7.5	1	0	0	0	0	0	0	0	0	1	
		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	9.8	61	0	0	0	0	0	0	0	17	78	
		78.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	8.7	
		7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0		
		6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9		
COLUMN TOTAL		826	20	20	2	1	3	3	25	900		
		91.8	2.2	2.2	0.2	0.1	0.3	0.3	2.8	100.0		

Table 7.17.8

Motorcycle Rear Brake Operation by Front Brake Operation

(0-6 Months Experience)

RBRAKE	F BRAKE											ROW TOTAL
	ROW COL	NOT IPPED	EQUI PPED	EQUIP., NOT OPER	OPER, ON	NO ON AT ACCIDENT	AC EQUIP., NOT KNOWN	N UNKNOWN IF ON				
	PCT											
	TOT PCT	0.1	1.1	2.1	3.1	4.1	5.1					
1.	0	0	0	0	2	0	0	0			2	
EQUIP., NOT OPER	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0			1.3	
	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0				
	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0				
2.	1	5	63	2	0	0	0			71		
OPER, NOT ON	1.4	7.0	88.7	2.8	0.0	0.0	0.0			45.5		
	100.0	50.0	60.0	6.3	0.0	0.0	0.0					
	0.6	3.2	40.4	1.3	0.0	0.0	0.0					
3.	0	5	42	28	0	4				79		
ON AT ACCIDENT	0.0	6.3	53.2	35.4	0.0	5.1				50.6		
	0.0	50.0	40.0	87.5	0.0	57.1						
	0.0	3.2	26.9	17.9	0.0	2.6						
5.	0	0	0	0	1	3				4		
UNKNOWN IF ON	0.0	0.0	0.0	0.0	25.0	75.0				2.6		
	0.0	0.0	0.0	0.0	100.0	42.9						
	0.0	0.0	0.0	0.0	0.6	1.9						
COLUMN TOTAL	1	10	105	32	1	7				156		
	0.6	6.4	67.3	20.5	0.6	4.5				100.0		

Table 7.17.9

Motorcycle Rear Brake Operation by Front Brake Operation

(7-12 Months Experience)

RBRAKE	F BRAKE										ROW TOTAL		
	COUNT	1					2						
	ROW PCT	INDT EQUI	EQUIP..	OPER.	NO ON AT AC	UNKNOWN	ROW PCT	INDT EQUI	EQUIP..	OPER.		NO ON AT AC	UNKNOWN
	TOT PCT	IPPED	NOT OPER	T ON	CIDENT	IF ON	TOT PCT	IPPED	NOT OPER	T ON		CIDENT	IF ON
0.	1	0.1	1.1	2.1	3.1	5.1	1	0.1	1.1	2.1	3.1	5.1	1
NOT EQUIPPED	1	100.0	0.0	0.0	0.0	0.0	1	33.3	0.0	0.0	0.0	0.0	1.2
	1	1.2	0.0	0.0	0.0	0.0	1	1.2	0.0	0.0	0.0	0.0	1
1.	1	0.0	0.0	1.0	0.0	0.0	1	0.0	0.0	1.0	0.0	0.0	1
EQUIP.. NOT OPER	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	2.0	0.0	0.0	1.2
	1	0.0	0.0	1.2	0.0	0.0	1	0.0	0.0	1.2	0.0	0.0	1
2.	1	1	1	22	1	0	1	4.0	4.0	88.0	4.0	0.0	25
OPER, NOT ON	1	33.3	33.3	43.1	4.2	0.0	1	33.3	33.3	43.1	4.2	0.0	30.1
	1	1.2	1.2	26.5	1.2	0.0	1	1.2	1.2	26.5	1.2	0.0	1
3.	1	1	2	28	23	2	1	1.8	3.6	50.0	41.1	3.6	56
ON AT ACCIDENT	1	33.3	66.7	54.9	95.8	100.0	1	1.2	2.4	33.7	27.7	2.4	67.5
	1	1.2	2.4	33.7	27.7	2.4	1	1.2	2.4	33.7	27.7	2.4	1
COLUMN TOTAL		3	3	51	24	2		3.6	3.6	61.4	28.9	2.4	83
		3.6	3.6	61.4	28.9	2.4							100.0

Table 7.17.10

Motorcycle Rear Brake Operation by Front Brake Operation

(1-2 Years Experience)

RBRAKE	COUNT ROW PCT COL PCT TOT PCT	F BRAKE					ROW TOTAL	
		NOT EQUI IPPED	EQUIP., NOT OPER	OPER, T ON	NO ON AT ACCIDENT	AC EQUIP., NOT KNOWN		UNKNOWN IF ON
		0.1	1.1	2.1	3.1	4.1	5.1	
OPER, NOT ON	2.	0	0	34	2	1	0	37
		0.0	0.0	91.9	5.4	2.7	0.0	34.6
		0.0	0.0	51.5	5.9	100.0	0.0	
		0.0	0.0	31.8	1.9	0.9	0.0	
ON AT ACCIDENT	3.	2	2	32	32	0	0	68
		2.9	2.9	47.1	47.1	0.0	0.0	63.6
		100.0	100.0	48.5	94.1	0.0	0.0	
		1.9	1.9	29.9	29.9	0.0	0.0	
UNKNOWN IF ON	5.	0	0	0	0	0	2	2
		0.0	0.0	0.0	0.0	0.0	100.0	1.9
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	1.9	
COLUMN TOTAL		2	2	66	34	1	2	107
		1.9	1.9	61.7	31.8	0.9	1.9	100.0

Table 7.17.11

Motorcycle Rear Brake Operation by Front Brake Operation  
(2-3 Years Experience)

R BRAKE	F BRAKE										ROW TOTAL
	COUNT	1		2		3		4		5	
	ROW PCT	NOT EQUIPPED	EQUIP., NOT OPER	OPER, NOT ON	ON AT ACCIDENT	AC EQUIP., NOT KNOWN IF ON	UNKNOWN IF ON	UNKNOWN IF ON	UNKNOWN IF ON		
	2.	1	0	33	0	0	0	0	0	0	34
OPER, NOT ON		2.9	0.0	97.1	0.0	0.0	0.0	0.0	0.0	0.0	36.6
		50.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	
		1.1	0.0	35.5	0.0	0.0	0.0	0.0	0.0	0.0	
	3.	1	3	21	30	0	1	1	1	1	56
ON AT ACCIDENT		1.9	5.4	37.5	53.6	0.0	1.8	1.8	1.8	1.8	60.2
		50.0	100.0	38.2	100.0	0.0	50.0	50.0	50.0	50.0	
		1.1	3.2	22.6	32.3	0.0	1.1	1.1	1.1	1.1	
	5.	0	0	1	0	1	1	1	1	1	3
UNKNOWN IF ON		0.0	0.0	33.3	0.0	33.3	33.3	33.3	33.3	33.3	3.2
		0.0	0.0	1.8	0.0	100.0	50.0	50.0	50.0	50.0	
		0.0	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1	
COLUMN TOTAL		2	3	55	30	1	2	2	2	2	93
		2.2	3.2	59.1	32.3	1.1	2.2	2.2	2.2	2.2	100.0

Table 7.17.12

Motorcycle Rear Brake Operation by Front Brake Operation

(3-4 Years Experience)

RBRAKE	COUNT ROW PCT COL PCT TOT PCT	F BRAKE					ROW TOTAL
		1	2	3	4	5	
		NOT EQUI IPPED	EQUIP., NOT OPER	OPER, NOT ON	ON AT AC CIDENT	UNKNOWN IF ON	
		0.1	1.1	2.1	3.1	5.1	
EQUIP., NOT OPER	1	0	0	0	1	0	1
		0.0	0.0	0.0	100.0	0.0	1.6
		0.0	0.0	0.0	4.5	0.0	
		0.0	0.0	0.0	1.6	0.0	
OPER, NOT ON	2	0	0	21	0	0	21
		0.0	0.0	100.0	0.0	0.0	32.8
		0.0	0.0	60.0	0.0	0.0	
		0.0	0.0	32.8	0.0	0.0	
ON AT ACCIDENT	3	2	2	14	21	2	41
		4.9	4.9	34.1	51.2	4.9	64.1
		100.0	100.0	40.0	95.5	66.7	
		3.1	3.1	21.9	32.8	3.1	
UNKNOWN IF ON	5	0	0	0	0	1	1
		0.0	0.0	0.0	0.0	100.0	1.6
		0.0	0.0	0.0	0.0	33.3	
		0.0	0.0	0.0	0.0	1.6	
COLUMN TOTAL		2	2	35	22	3	64
		3.1	3.1	54.7	34.4	4.7	100.0



Table 7.17.13

Motorcycle Rear Brake Operation by Front Brake Operation

(Over 4 Years Experience)

R BRAKE	COUNT ROW PCT COL PCT TOT PCT	F BRAKE					ROW TOTAL	
		1. NOT EQUIP.	2. EQUIP., NOT OPER.	3. OPER., NOT ON	4. ON AT ACCIDENT	5. EQUIP., UNKNOWN IF ON		
		0.1	1.1	2.1	3.1	4.1 5.1		
EQUIP., NOT OPEP	1.	0	0	0	1	0	1	
		0.0	0.0	0.0	100.0	0.0	0.3	
		0.0	0.0	0.0	1.2	0.0	0.0	
		0.0	0.0	0.0	0.3	0.0	0.0	
OPER., NOT ON	2.	7	6	105	3	0	121	
		5.8	5.0	86.8	2.5	0.0	38.8	
		50.0	50.0	54.4	3.6	0.0	0.0	
		2.2	1.9	33.7	1.0	0.0	0.0	
ON AT ACCIDENT	3.	7	6	87	79	1	183	
		3.8	3.3	47.5	43.2	0.5	58.7	
		50.0	50.0	45.1	95.2	100.0	33.3	
		2.2	1.9	27.9	25.3	0.3	1.0	
UNKNOWN IF ON	5.	0	0	1	0	0	7	
		0.0	0.0	14.3	0.0	0.0	2.2	
		0.0	0.0	0.5	0.0	0.0	66.7	
		0.0	0.0	0.3	0.0	0.0	1.9	
COLUMN TOTAL		14 4.5	12 3.8	193 61.9	83 26.6	1 0.3	9 2.9	312 100.0

Table 7.17.14

Motorcycle Rear Brake Operation by Front Brake Operation

(Training: Self-Taught)

RBRAKE	COUNT		FBRAKE					ROW TOTAL	
	ROW PCT	COL PCT	NOT EQUIPPED	EQUIP., NOT OPER	OPER. NOT ON	ON AT ACCIDENT	EQUIP., NOT KNOWN IF ON		
	TOT PCT	TOT PCT	0.1	1.1	2.1	3.1	4.1		5.1
NOT EQUIPPED	0.		1	0	0	0	0	0	1
			100.0	0.0	0.0	0.0	0.0	0.0	0.3
			5.9	0.0	0.0	0.0	0.0	0.0	
EQUIP., NOT OPER	1.		0	0	1	2	0	0	3
			0.0	0.0	33.3	66.7	0.0	0.0	0.8
			0.0	0.0	0.4	1.7	0.0	0.0	
OPER. NOT ON	2.		7	4	131	5	1	0	148
			4.7	2.7	88.5	3.4	0.7	0.0	37.1
			41.2	33.3	55.0	4.2	100.0	0.0	
ON AT ACCIDENT	3.		9	8	106	111	0	3	237
			3.8	3.4	44.7	46.8	0.0	1.3	59.4
			52.9	66.7	44.5	94.1	0.0	23.1	
UNKNOWN IF ON	5.		0	0	0	0	0	10	10
			0.0	0.0	0.0	0.0	0.0	100.0	2.5
			0.0	0.0	0.0	0.0	0.0	76.9	
		0.0	0.0	0.0	0.0	0.0	0.0	2.5	
COLUMN TOTAL			17	12	238	118	1	13	399
			4.3	3.0	59.6	29.6	0.3	3.3	100.0

Table 7.17.15

Motorcycle Rear Brake Operation by Front Brake Operation

(Training: Friends-Family)

RBRAKE	COUNT ROW PCT COL PCT TOT PCT	F BRAKE					ROW TOTAL	
		1 NOT EQUI IPPED	2 EQUIP., NOT OPER	3 OPER, T ON	4 NO ON AT ACCIDENT	5 EQUIP.,N UNKNOWN IF ON		
OPER. NOT ON	2.	3	7	122	3	1	0	136
		2.2	5.1	89.7	2.2	0.7	0.0	39.8
		60.0	38.9	55.2	3.6	33.3	0.0	
		0.9	2.0	35.7	0.9	0.3	0.0	
ON AT ACCIDENT	3.	2	11	97	80	1	8	199
		1.0	5.5	48.7	40.2	0.5	4.0	58.2
		40.0	61.1	43.9	96.4	33.3	66.7	
		0.6	3.2	28.4	23.4	0.3	2.3	
UNKNOWN IF ON	5.	0	0	2	0	1	4	7
		0.0	0.0	28.6	0.0	14.3	57.1	2.0
		0.0	0.0	0.9	0.0	33.3	33.3	
		0.0	0.0	0.6	0.0	0.3	1.2	
COLUMN TOTAL		5	18	221	83	3	12	342
		1.5	5.3	64.6	24.3	0.9	3.5	100.0

Table 7.17.16

Motorcycle Rear Brake Operation by Front Brake Operation

(Training: M/C Course)

R BRAKE	COUNT ROW PCT COL PCT TOT PCT	F BRAKE					ROW TOTAL
		1. EQUIP., NOT OPER	2. OPER, NOT ON	3. ON AT ACCIDENT	4. UNKNOWN IF ON	5.	
		1. I	2. I	3. I	4. I	5. I	
EQUIP., NOT OPER	1.	0	0	1	0	1	1
		0.0	0.0	100.0	0.0	0.0	2.4
		0.0	0.0	8.3	0.0	0.0	
		0.0	0.0	2.4	0.0	0.0	
OPER, NOT ON	2.	2	15	0	0	0	17
		11.8	88.2	0.0	0.0	0.0	41.5
		100.0	57.7	0.0	0.0	0.0	
		4.9	36.6	0.0	0.0	0.0	
ON AT ACCIDENT	3.	0	11	11	1	1	23
		0.0	47.8	47.8	4.3	0.0	56.1
		0.0	42.3	91.7	100.0	0.0	
		0.0	26.8	26.8	2.4	0.0	
COLUMN TOTAL		2	26	12	1	1	41
		4.9	63.4	29.3	2.4	0.0	100.0

Table 7.17.17

Motorcycle Rear Brake Operation by Front Brake Operation  
(Training: Professional)

R BRAKE	F BRAKE					ROW TOTAL	
	COUNT	I					
	ROW COL TOT	PCT PCT PCT	OPER. IT I	ND ON 2. I	ON AT AC CIDENT 3. I		
OPER. NOT ON	2.	I	9	I	0	I	9
		I	100.0	I	0.0	I	45.0
		I	50.0	I	0.0	I	
		I	45.0	I	0.0	I	
ON AT ACCIDENT	3.	I	6	I	5	I	11
		I	54.5	I	45.5	I	55.0
		I	40.0	I	100.0	I	
		I	30.0	I	25.0	I	
COLUMN TOTAL			15		5		20
			75.0		25.0		100.0



Table 7.17.22  
 Motorcycle Precrash Control Operations  
 by Control Operations Interference  
 (OSIDs)

CONTROLS	COUNT ROW OCT COL PCT TOT OCT	INTERFERE					ROW TOTAL	
		YES		NO		POSSIBLY UNKNOWN		N/A
		1.	2.	3.	4.			
NONF	0.	0	75	1	0	303	379	
		0.0	10.8	0.3	0.0	79.9	42.1	
		0.0	16.8	16.7	0.0	93.8		
		0.0	8.3	0.1	0.0	33.7		
ACCELERATING	1+	26	176	3	6	7	218	
		11.9	80.7	1.4	2.8	3.2	24.2	
		43.3	32.4	50.0	0.4	2.2		
		2.0	19.6	0.3	0.7	0.8		
DOWNSHIFTING	2.	2	54	0	0	5	61	
		3.1	88.5	0.0	0.0	8.2	6.8	
		3.1	12.1	0.0	0.0	1.5		
		0.2	5.0	0.0	0.0	0.6		
BRAKING	3.	4	42	0	2	1	49	
		4.2	85.7	0.0	4.1	2.0	5.4	
		6.7	0.4	0.0	3.1	0.3		
		0.4	4.7	0.0	1.2	0.1		
FUEL ADJUSTMENT	4.	4	2	0	0	0	6	
		66.7	33.3	0.0	0.0	0.0	0.7	
		6.7	0.4	0.0	0.0	0.0		
		0.4	0.2	0.0	0.0	0.0		
THROTTLE CHANGE	5.	1	27	0	0	1	29	
		3.4	93.1	0.0	0.0	3.4	3.2	
		1.7	6.0	0.0	0.0	0.3		
		0.1	3.0	0.0	0.0	0.1		
TURNING	7.	22	67	2	2	6	99	
		22.2	67.7	2.0	2.0	6.1	11.0	
		46.7	15.0	33.3	3.1	1.9		
		2.4	7.4	0.7	0.7	0.7		
OTHER	0.	0	1	0	0	0	1	
		0.0	100.0	0.0	0.0	0.0	0.1	
		0.0	0.2	0.0	0.0	0.0		
		0.0	0.1	0.0	0.0	0.0		
UNKNOWN	GR.	1	3	0	54	0	58	
		1.7	5.2	0.0	93.1	0.0	6.4	
		1.7	0.7	0.0	84.4	0.0		
		0.1	0.1	0.0	6.0	0.0		
COLUMN TOTAL		60	447	6	64	323	900	
		6.7	49.7	0.7	7.1	35.9	100.0	

Table 7.20.1  
 Height Of Passenger  
 (OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)	
Height, in.	38.	1	0.1	0.7	0.7	
	45.	1	0.1	0.7	1.5	
	48.	1	0.1	0.7	2.2	
	56.	1	0.1	0.7	3.0	
	57.	1	0.1	0.7	3.7	
	58.	3	0.3	2.2	5.9	
	59.	1	0.1	0.7	6.7	
	60.	6	0.7	4.4	11.1	
	61.	3	0.3	2.2	13.3	
	62.	9	1.0	6.7	20.0	
	63.	4	0.4	3.0	23.0	
	64.	13	1.4	9.6	32.6	
	65.	6	0.7	4.4	37.0	
	66.	12	1.3	8.9	45.9	
	67.	15	1.7	11.1	57.0	
	68.	14	1.6	10.4	67.4	
	69.	8	0.9	5.9	73.3	
	70.	7	0.8	5.2	78.5	
	71.	10	1.1	7.4	85.9	
	72.	10	1.1	7.4	93.3	
	73.	6	0.7	4.4	97.8	
	74.	3	0.3	2.2	100.0	
	Unknown	98.	17	1.9	MISSING	100.0
	N.A.	99.	<u>748</u>	<u>83.1</u>	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0		



Table 7.20.2  
 Weight Of Passenger  
 (OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	40.	1	0.1	0.7	0.7
	70.	2	0.2	1.4	2.2
	80.	2	0.2	1.4	3.6
	90.	1	0.1	0.7	4.3
	93.	1	0.1	0.7	5.0
	96.	1	0.1	0.7	5.8
	97.	1	0.1	0.7	6.5
	100.	4	0.4	2.9	9.4
	102.	1	0.1	0.7	10.1
	105.	2	0.2	1.4	11.5
	106.	1	0.1	0.7	12.2
	107.	2	0.2	1.4	13.7
	110.	6	0.7	4.3	18.0
	114.	1	0.1	0.7	18.7
	115.	10	1.1	7.2	25.9
	117.	1	0.1	0.7	26.6
	118.	2	0.2	1.4	28.1
	119.	1	0.1	0.7	28.8
	120.	8	0.9	5.8	34.5
	121.	1	0.1	0.7	35.3
	122.	1	0.1	0.7	36.0
	123.	2	0.2	1.4	37.4
	125.	6	0.7	4.3	41.7
	128.	1	0.1	0.7	42.4
	129.	1	0.1	0.7	43.2
	130.	11	1.2	7.9	51.1
	135.	6	0.7	4.3	55.4
	138.	1	0.1	0.7	56.1
	140.	9	1.0	6.5	62.6
	143.	1	0.1	0.7	63.3
	145.	4	0.4	2.9	66.2
	147.	1	0.1	0.7	66.9
	148.	2	0.2	1.4	68.3
	150.	9	1.0	6.5	74.8
	153.	1	0.1	0.7	75.5
	155.	3	0.3	2.2	77.7
	158.	1	0.1	0.7	78.4
	160.	3	0.3	2.2	80.6

Continued

Table 7.20.2  
Weight of Passenger  
(OSIDs)

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)	
Weight, lbs.	165.	7	0.8	5.0	85.6	
	169.	1	0.1	0.7	86.3	
	170.	5	0.6	3.6	89.9	
	175.	3	0.3	2.2	92.1	
	180.	1	0.1	0.7	92.8	
	185.	2	0.2	1.4	94.2	
	190.	2	0.2	1.4	95.7	
	195.	1	0.1	0.7	96.4	
	197.	1	0.1	0.7	97.1	
	198.	1	0.1	0.7	97.8	
	200.	2	0.2	1.4	99.3	
	250.	1	0.1	0.7	100.0	
	Unknown	998.	13	1.4	MISSING	MISSING
	N.A.	999.	748	83.1	MISSING	MISSING
	TOTAL	900	100.0	100.0	100.0	

Table 7.22.1  
 Passenger Motorcycle Experience  
 and Interference with Riding Task  
 (OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
<u>Passenger Frequency of Riding on Motorcycle</u>				
Never Before	0.	14	1.6	9.9
Seldom	1.	47	5.2	33.1
Occasionally	2.	35	3.9	24.6
Often	3.	23	2.6	16.2
Very Often	4.	23	2.6	16.2
Unknown	8.	10	1.1	MISSING
N.A.	9.	<u>748</u>	<u>83.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Rider Frequency of Riding with Passenger</u>				
Never Before	0.	18	2.0	8.7
Very Little	1.	75	8.3	36.2
Moderate	2.	58	6.4	28.0
Extensive	3.	56	6.2	27.1
Unknown	8.	22	2.4	MISSING
N.A.	9.	<u>671</u>	<u>74.6</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Passenger Interference with Riding Task</u>				
None	0.	110	12.2	72.8
Yes	1.	22	2.4	14.6
Possibly	2.	19	2.1	12.6
Unknown	8.	10	1.1	MISSING
N.A.	9.	<u>739</u>	<u>82.1</u>	<u>MISSING</u>
		900	100.0	100.0

Table 7.23.1  
 Passenger Alcohol Involvement  
 (OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
<u>Passenger Use of Alcohol</u>				
HBD, Not Under Influence	1.	8	0.9	50.0
HBD, Under Influence	2.	2	0.2	12.5
HBD, Impairment Unknown	3.	6	0.7	37.5
Unknown	8.	11	1.2	MISSING
N.A.	9.	<u>873</u>	<u>97.0</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
<u>Blood Alcohol Level at Time of Accident</u>				
Blood Alcohol, %	.03	1	0.1	3.3
Unknown	.98	26	2.9	96.7
N.A., No Alcohol or No Passenger	.99	<u>873</u>	<u>97.0</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 7.23.2  
 Passenger Drug Involvement  
 (OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
<u>Prescription/Non-Prescription Status</u>				
None	0.	134	14.9	97.8
Prescription	1.	2	0.2	1.5
Non-Prescription	2.	1	0.1	0.7
Unknown	8.	15	1.7	MISSING
N.A.	9.	<u>748</u>	<u>83.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0
 <u>Type of Drug</u>				
None	0.	134	14.9	97.8
Depressant	3.	2	0.2	1.5
Depressant Antihistamine	5.	1	0.1	0.7
Unknown	8.	15	1.7	MISSING
N.A.	9.	<u>748</u>	<u>83.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 7.26.4

Other Vehicle Driver Social Index  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	
Class I	11-17	1.	32	3.6	9.4
Class II	18-27	2.	36	4.0	10.6
Class III	28-43	3.	81	9.0	23.8
Class IV	44-60	4.	95	10.6	27.9
Class V	61-77	5.	96	10.7	28.2
Unknown		8.	235	26.1	MISSING
Not Applicable		9.	<u>325</u>	<u>36.1</u>	<u>MISSING</u>
	TOTAL		900	100.0	100.0

Table 7.27.1

Other Vehicle Driver License Class  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
No License-Permit	0.	36	4.0	5.8
Class 1 - Commercial	1.	17	1.9	2.7
Class 2 - Chauffeur	2.	7	0.8	1.1
Class 3 - Standard	3.	528	58.7	85.3
Class 4 - Motorcycle	4.	26	2.9	4.2
Learner Permit	5.	3	0.3	0.5
License Suspended	6.	2	0.2	0.3
Unknown	8.	72	8.0	MISSING
N.A.	9.	<u>209</u>	<u>23.2</u>	<u>MISSING</u>
	TOTAL		900	100.0

Table 7.27.2

Other Vehicle Driver License Issuing State  
(OSIDs)

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Arizona	3.	1	0.1	0.2
California	5.	569	63.2	96.4
Connecticut	7.	1	0.1	0.2
Florida	10.	1	0.1	0.2
Georgia	11.	1	0.1	0.2
Illinois	14.	1	0.1	0.2
Indiana	15.	1	0.1	0.2
Louisiana	19.	1	0.1	0.2
Massachusetts	22.	1	0.1	0.2
Nevada	29.	1	0.1	0.2
New York	33.	2	0.2	0.3
Oregon	38.	1	0.1	0.2
Pennsylvania	39.	1	0.1	0.2
Texas	44.	4	0.4	0.7
Washington	48.	2	0.2	0.3
Wisconsin	50.	1	0.1	0.2
Foreign	52.	1	0.1	0.2
Unknown	98.	67	7.4	MISSING
N.A.	99.	243	27.0	MISSING
	TOTAL	900	100.0	100.0

#### C.4 Supplemental Data for Volume I, Section 8.0, Human Factors - Injuries

Included in this section are the following Tables:

8.4.4	Medical Assistance to Passenger	141
8.4.5	Motorcycle Passenger On-Scene Medical Treatment	142
8.4.6	Motorcycle Passenger Injury Status	143
8.5.18	Rider Most Severe Somatic Injury, Injury Region by Injury Severity	144
8.5.21	Injuries to Passengers, Body Region	149
8.5.22	Passenger Somatic Injury Side	150
8.5.23	Passenger Somatic Injury Lesion Type	150
8.5.24	System/Organ Involved-Passenger Somatic Injuries	151
8.5.25	Passenger Somatic Injuries/Severity	151
8.6.14	Passenger Head and Neck Injury Region	152
8.6.15	Side of Passenger Head and Neck Injuries	153
8.6.16	Passenger Head and Neck Injuries-Type of Lesion	154
8.6.17	Passenger Head and Neck Injury-System/Organ Involved	155
8.6.18	Passenger Head and Neck Injury Region by Severity	156
8.7.1a	Motorcycle Contact Codes	158
8.7.1b	Automobile Contact Codes	159
8.7.1c	Pickup Truck Contact Codes	161
8.7.1d	Van Contact Codes	163
8.7.1e	Environment Contact Codes	165
8.7.2a	Rider Somatic Injury, Motorcycle Contact Surfaces	166
8.7.2b	Rider Somatic Injury, Automobile Contact Surfaces	168
8.7.2c	Rider Somatic Injury, Pickup, Truck, Bus and Van Contact Surfaces	170
8.7.2d	Rider Somatic Injury, Environment Contact Surfaces	172
8.7.3	Injury Contact Surface by Rider Body Region (Somatic Injuries)	173



8.7.4	Contact Surface by Rider Somatic Injury Severity	218
8.7.5a	Rider Head and Neck Injury, Motorcycle Contact Surfaces	229
8.7.5b	Rider Head and Neck Injury, Automobile Contact Surfaces	230
8.7.5c	Rider Head and Neck Injury, Pickup, Truck, Bus and Van Contact Surfaces	232
8.7.5d	Rider Head and Neck Injury, Environment Contact Surfaces	233
8.7.6	Contact Surface by Head and Neck Injury Region	234
8.7.7	Contact Surface by Head and Neck Injury Severity	268
8.8.2	Severities Sum (SS) by Injury Status	277
8.8.3	Fatal/Non-Fatal Outcome by Severities Sum (SS)	297
8.8.5	Rider Severities Sum (SS) by Crash Speed	302
8.8.9	Rider Severities Sum (SS) by Alcohol/Drug Involvement	316
8.8.13	Rider Severities Sum (SS) by Motorcycle Displacement	330
8.9.12	Contact Surface by Groin Injury Severity	337
8.9.13	Groin Injury Severity by Motorcycle Crash Speed	339
8.9.14	Groin Injury Severity by Motorcycle Manufacturer	340

Table 8.4.4  
Medical Assistance to Passenger

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
None	0.	24	2.7	15.8
Private Ambulance	1.	1	0.1	0.7
Public Ambulance	2.	120	13.3	78.9
M.D. On-Scene	3.	1	0.1	0.7
Coroner	4.	3	0.3	2.0
Private Party	5.	2	0.2	1.3
Police	6.	1	0.1	0.7
N.A. No Passenger Involved	9.	<u>748</u>	<u>83.1</u>	<u>MISSING</u>
	TOTAL	900	100.0	100.0

Table 8.4.5

## Motorcycle Passenger On-Scene Medical Treatment

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>Hemorrhage Control--Passenger</u>				
None	0.	87	9.7	63.5
Yes	1.	50	5.6	36.5
Unknown	8.	13	1.4	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0
<u>Splinting of Limbs--Passenger</u>				
None	0.	97	10.8	69.3
Yes	1.	43	4.8	30.7
Unknown	8.	10	1.1	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0
<u>Resuscitation--Passenger</u>				
None	0.	140	15.6	100.0
Unknown	8.	10	1.1	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0
<u>I.V. or Injections--Passenger</u>				
None	0.	125	13.9	90.6
Yes	1.	13	1.4	9.4
Unknown	8.	12	1.3	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0
<u>Cardio Vascular Rx-Passenger</u>				
None	0.	139	15.4	98.6
Yes	1.	2	0.2	1.4
Unknown	8.	9	1.0	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0
<u>RX of Head Wounds--Passenger</u>				
None	0.	124	13.8	87.9
Yes	1.	17	1.9	12.1
Unknown	8.	9	1.0	MISSING
N.A.	9.	750	83.3	MISSING
	TOTAL	900	100.0	100.0

Table 8.4.6

## Motorcycle Passenger Injury Status

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
First Aid at Scene	1.	12	1.3	9.1	9.1
Treated & Released	2.	65	7.2	49.2	58.3
Hosp. < 24 Hours	3.	3	0.3	2.3	60.6
Hosp. Significant Rx	4.	32	3.6	24.2	84.8
Outpatient Care	5.	15	1.7	11.4	96.2
Dead on Scene	6.	3	0.3	2.3	98.5
Fatal Within 24 Hrs.	8.	1	0.1	0.8	99.2
Other Fatal	9.	1	0.1	0.8	100.0
Unknown	98.	1	0.1	MISSING	100.0
N.A., No Injury, No Treatment or No Passenger	99.	<u>767</u>	<u>85.2</u>	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0	

Table 8.5.18

Rider Most Severe Somatic Injury, Injury Region by Injury Severity  
(OSIDs)

	COUNT											ROW TOTAL
	ROW PCT	COL PCT	ABRASION	BURN	CONTUSION	DISLOCATION	FRACTURE	SWELLING	HEMORRHAGE	LACERATION	AMPUTATION	
	A	B	C	D	F	G	H	L	M	N		
UPPER ARM	11	0	5	0	5	0	0	1	0	0	26	
	42.3	0.0	19.2	0.0	19.2	0.0	0.0	3.8	0.0	0.0	3.0	
	4.8	0.0	3.2	0.0	2.2	0.0	0.0	1.1	0.0	0.0		
	1.3	0.0	0.6	0.0	0.6	0.0	0.0	0.1	0.0	0.0		
BACK	3	0	4	0	4	0	0	1	0	0	35	
	8.6	0.0	11.4	0.0	11.4	0.0	0.0	2.9	0.0	0.0	4.0	
	1.3	0.0	2.6	0.0	1.8	0.0	0.0	1.1	0.0	0.0		
	0.3	0.0	0.5	0.0	0.5	0.0	0.0	0.1	0.0	0.0		
CHEST	0	0	8	0	14	0	4	16	0	2	52	
	0.0	0.0	15.4	0.0	26.9	0.0	7.7	30.8	0.0	3.8	6.0	
	0.0	0.0	5.2	0.0	6.3	0.0	100.0	18.2	0.0	66.7		
	0.0	0.0	0.9	0.0	1.6	0.0	0.5	1.8	0.0	0.2		
ELBOW	25	0	2	1	4	0	0	1	0	0	35	
	71.4	0.0	5.7	2.9	11.4	0.0	0.0	2.9	0.0	0.0	4.0	
	10.8	0.0	1.3	5.0	1.8	0.0	0.0	1.1	0.0	0.0		
	2.9	0.0	0.2	0.1	0.5	0.0	0.0	0.1	0.0	0.0		
KNEE	43	0	22	2	9	1	0	14	0	0	113	
	38.1	0.0	19.5	1.8	8.0	0.9	0.0	12.4	0.0	0.0	13.0	
	18.6	0.0	14.2	10.0	4.0	20.0	0.0	15.9	0.0	0.0		
	5.0	0.0	2.5	0.2	1.0	0.1	0.0	1.6	0.0	0.0		
LOWER LEG	38	0	21	0	85	0	0	19	1	0	173	
	22.0	0.0	12.1	0.0	49.1	0.0	0.0	11.0	0.6	0.0	20.0	
	16.5	0.0	13.5	0.0	38.1	0.0	0.0	21.6	33.3	0.0		
	4.4	0.0	2.4	0.0	9.8	0.0	0.0	2.2	0.1	0.0		
ABDOMEN	6	1	22	0	0	1	0	13	0	0	45	
	13.3	2.2	48.9	0.0	0.0	2.2	0.0	28.9	0.0	0.0	5.2	
	2.6	25.0	14.2	0.0	0.0	20.0	0.0	14.8	0.0	0.0		
	0.7	0.1	2.5	0.0	0.0	0.1	0.0	1.5	0.0	0.0		
COLUMN TOTAL	231	4	155	20	223	5	4	88	3	3	866	
	26.7	0.5	17.9	2.3	25.8	0.6	0.5	10.2	0.3	0.3	100.0	

Continued

771

Table 8.5.18

Rider Most Severe Somatic Injury, Injury Region by Injury Severity  
(OSIDs)

Continued

	COUNT ROW PCT COL PCT TOT PCT	INJURY SEVERITY						ROW TOTAL
		OTHER	PAIN	RUPTURE	SPRAIN	UNKNOWN	AVULSION	
		O	P	R	S	U	V	
A UPPER ARM	0 0.0 0.0 0.0	4 15.4 6.0 0.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	26 3.0
B BACK	0 0.0 8.0 0.0	28 57.1 29.9 2.3	1 2.9 16.7 0.1	2 5.7 8.4 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	35 4.0
C CHEST	1 1.9 108.0 0.1	1 1.9 1.5 0.1	4 7.7 66.7 0.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 3.8 20.0 0.2	52 6.0
E ELBOW	0 0.0 0.0 0.0	1 2.9 1.5 0.1	0 0.0 0.0 0.0	1 2.9 2.2 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	35 4.0
K KNEE	0 0.0 0.0 0.0	8 7.1 11.9 0.9	1 0.9 16.7 0.1	9 8.9 20.0 1.9	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 3.5 40.0 0.5	113 13.0
L LOWER LEG	0 0.0 0.0 0.0	7 4.0 10.4 0.8	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.6 108.0 0.1	1 0.6 10.0 0.1	173 20.0
M ABDOMEN	0 0.0 0.0 0.0	1 2.2 1.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 2.2 10.0 0.1	45 5.2
COLUMN TOTAL	1 0.1	67 7.7	6 0.7	45 5.2	1 0.1	10 1.2	866 100.0	

Continued

Table 8.5.18

Rider Most Severe Somatic Injury, Injury Region by Injury Severity  
(OSIDs)

Continued

	COUNT												ROW TOTAL		
	ROW PCT	COL PCT	ABRASION	BURN	CONTUSIO N	DISLOCAT ION	FRACTURE	SWELLING	HEMORRHAG E	LACERATI ON	AMPUTATI ON	CRUSHING			
	TOT PCT		A	B	C	D	F	G	H	L	M	N			
0 WHOLE BODY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
P PELVIC HIP	13	0	24	5	8	0	0	2	0	1	0	1	0	57	
	22.8	0.0	42.1	8.8	14.0	0.0	0.0	3.5	0.0	0.0	1.8	0.0	0.0	6.6	
	5.6	0.0	15.5	25.0	3.6	0.0	0.0	2.3	0.0	0.0	33.3	0.0	0.0		
	1.5	0.0	2.8	0.6	0.9	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0		
0 ANKLE FOOT	10	0	10	1	27	3	0	9	1	0	0	0	0	86	
	11.6	0.0	11.6	1.2	31.4	3.5	0.0	10.5	1.2	0.0	0.0	0.0	0.0	9.9	
	4.3	0.0	6.5	5.0	12.1	60.0	0.0	10.2	33.3	0.0	0.0	0.0	0.0		
	1.2	0.0	1.2	0.1	3.1	0.3	0.0	1.0	0.1	0.0	0.0	0.0	0.0		
R FOREARM	22	0	4	0	13	0	0	2	0	0	0	0	0	45	
	48.9	0.0	8.9	0.0	28.9	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	5.2	
	9.5	0.0	2.6	0.0	5.8	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0		
	2.5	0.0	0.5	0.0	1.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		
S SHOULDERS	12	0	6	9	10	0	0	0	0	0	0	0	0	46	
	26.1	0.0	13.0	19.6	21.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	
	5.2	0.0	3.9	45.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	1.4	0.0	3.7	1.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
I THIGH	4	2	22	0	24	0	0	4	3	0	0	0	0	59	
	6.8	3.4	37.3	0.0	40.7	0.0	0.0	6.8	6.0	0.0	0.0	0.0	0.0	6.8	
	1.7	50.0	14.2	0.0	10.8	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0		
	0.5	0.2	2.5	0.0	2.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0		
W WRIST-HAND	40	0	5	2	20	0	0	5	1	0	0	0	0	89	
	44.9	0.0	5.6	2.2	22.5	0.0	0.0	6.7	1.1	0.0	0.0	0.0	0.0	10.3	
	17.3	0.0	3.2	10.0	9.0	0.0	0.0	6.8	33.3	0.0	0.0	0.0	0.0		
	4.6	0.0	0.6	0.2	2.3	0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0		
COLUMN TOTAL	231	4	155	20	223	5	4	88	3	3	3	3	3	866	
	26.7	0.5	17.9	2.3	25.8	0.6	0.5	10.2	0.3	0.3	0.3	0.3	0.3	100.0	

Continued

Table 8.5.18

Rider Most Severe Somatic Injury, Injury Region by Injury Severity  
(OSIDs)

Continued

	COUNT ROW PCT COL PCT TOT PCT	OTHER O	PAIN P		RUPTURE R		SPRAIN S		UNKNOWN U		AVULSION V		ROW TOTAL
O WHOLE BODY	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
P PELVIC HIP	0	0	4	0	0	0	0	0	0	0	0	0	57
	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
O ANKLE FOOT	0	0	4	0	0	20	0	0	0	0	1	0	86
	0.0	0.0	4.7	0.0	0.0	23.3	0.0	0.0	0.0	0.0	1.2	0.0	9.9
	0.0	0.0	6.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0	10.0	0.1	
R FOREARM	0	0	4	0	0	0	0	0	0	0	0	0	45
	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
S SHOULDERS	0	0	7	0	0	2	0	0	0	0	0	0	46
	0.0	0.0	15.2	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3
	0.0	0.0	10.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	
T THIGH	0	0	3	0	0	0	0	0	0	0	0	0	59
	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
W WRIST-HAND	0	0	3	0	0	11	0	0	0	0	1	0	89
	0.0	0.0	3.4	0.0	0.0	12.4	0.0	0.0	0.0	0.0	1.1	0.0	10.3
	0.0	0.0	4.5	0.0	0.0	24.4	0.0	0.0	0.0	0.0	10.0	0.0	
COLUMN TOTAL		1	67	6	45	1	10	866					100.0
		0.1	7.7	0.7	5.2	0.1	1.2						

Continued



Table 8.5.18

Rider Most Severe Somatic Injury, Injury Region by Injury Severity  
(OSIDs)

	COUNT ROW PCT COL PCT TOT PCT	ABRASION BURN		CONUSIO N		DISLOCAT ION		FRACTURE		SWELLING		HEMORRAG E		LACERATI ON		AMPUTATI ON		CRUSHING		ROW TOTAL
		A	B	C	D	F	G	H	L	M	N									
X UPPER EXTREMITIE		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Y TRUNK		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
		0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
O NONE-N.A.		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		231 26.7	4 0.5	155 17.9	20 2.3	223 25.8	5 0.6	4 0.5	88 10.2	3 0.3	3 0.3	866 100.0								

	COUNT ROW PCT COL PCT TOT PCT	OTHER		PAIN		RUPTURE		SPRAIN		UNKNOWN		AVULSION		ROW TOTAL
		O	P	R	S	U	V							
X UPPER EXTREMITIE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Y TRUNK		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
O NONE-N.A.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1 0.1	67 7.7	6 0.7	45 5.2	1 0.1	10 1.2	866 100.0						

Table 8.5.21

Injuries to Passengers, Body Region  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Upper Arm	A	12	3.0	3.0
Back	B	25	6.2	6.2
Chest	C	21	5.2	5.2
Elbow	E	22	5.5	5.5
Knee	K	49	12.2	12.2
Lower Leg	L	59	14.7	14.7
Abdomen	M	19	4.7	4.7
Whole Body	O	1	0.2	0.2
Pelvic-Hip	P	19	4.7	4.7
Ankle-Foot	Q	53	13.2	13.2
Forearm	R	29	7.2	7.2
Shoulders	S	21	5.2	5.2
Thigh	T	23	5.7	5.7
Wrist-Hand	W	42	10.5	10.5
Upper Extremities	X	4	1.0	1.0
Trunk	Y	1	0.2	0.2
	8	<u>1</u>	<u>0.2</u>	<u>MISSING.</u>
	TOTAL	401	100.0	100.0

Table 8.5.22  
 Passenger Somatic Injury Side  
 (OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Bilateral	B	53	13.2	13.2
Central	C	25	6.2	6.2
Left	L	167	41.6	41.6
Right	R	155	38.7	38.7
Unknown	U	<u>1</u>	<u>0.2</u>	MISSING
	TOTAL	401	100.0	100.0

Table 8.5.23  
 Passenger Somatic Injury Lesion Type  
 (OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Abrasion	A	177	44.1	44.1
Burn	B	2	0.5	0.5
Contusion	C	81	20.2	20.2
Dislocation	D	1	0.2	0.2
Fracture	F	52	13.0	13.0
Swelling	G	5	1.2	1.2
Hemorrhage	H	5	1.2	1.2
Laceration	L	32	8.0	8.0
Crushing	N	3	0.7	0.7
Pain	P	33	8.2	8.2
Sprain	S	8	2.0	2.0
Avulsion	V	<u>2</u>	<u>0.5</u>	<u>0.5</u>
	TOTAL	401	100.0	100.0

Table 8.5.24

## System/Organ Involvement-Passenger Somatic Injuries

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Arteries	A	1	0.2	0.2
Spinal Cord	C	1	0.2	0.2
Urogenital	G	6	1.5	1.6
Integumentary	I	279	69.6	72.1
Joints	J	20	5.0	5.2
Kidney	K	2	0.5	0.5
Liver	L	1	0.2	0.2
Muscle	M	10	2.5	2.6
Pulmonary/Lungs	P	3	0.7	0.7
Spleen	Q	1	0.2	0.2
Skeletal	S	48	12.0	12.4
Unknown	U	14	3.5	MISSING
Vertebrae	V	7	1.7	1.8
All Systems in Region	W	8	2.0	2.1
	TOTAL	401	100.0	100.0

Table 8.5.25

## Passenger Somatic Injuries/Severity

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Minor	1	324	80.8	80.8	80.8
Moderate	2	42	10.5	10.5	91.3
Severe	3	21	5.2	5.2	96.5
Serious	4	10	2.5	2.5	99.0
Critical	5	3	0.7	0.7	99.8
Fatal	6	1	0.2	0.2	100.0
	TOTAL	401	100.0	100.0	

Table 8.6.14

## Passenger Head and Neck Injury Region

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Basal	B	7	5.1	5.2
Cervical- General	C	10	7.4	7.6
Frontal	F	21	15.4	15.7
Face-General	K	7	5.1	5.2
Mandible	M	9	6.6	6.7
Nasal	N	6	4.4	4.5
Occipital	O	15	11.0	11.2
Parietal	P	10	7.4	7.6
Brain- General	Q	27	19.9	20.3
Orbit	R	11	8.1	8.3
Temporal	T	2	1.5	1.5
Unknown	U	3	2.2	MISSING
Maxilla	X	4	2.9	3.0
Zygoma	Z	4	2.9	3.0
	TOTAL	136	100.0	100.0

Table 8.6.15

Side of Passenger Head and Neck Injuries

(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Bilateral	B	32	23.5	24.4
Central	C	19	14.0	14.5
Left	L	39	28.7	29.8
Right	R	41	30.1	31.3
Unknown	U	5	3.7	MISSING
	TOTAL	136	100.0	100.0

Table 8.6.16  
 Passenger Head and Neck Injuries  
 Type of Lesion  
 (OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Abrasion	A	27	19.9	19.9
Contusion	C	20	14.7	14.7
Fracture	F	17	12.5	12.5
Hemorrhage	H	8	5.9	5.9
Hematoma	J	8	5.9	5.9
Concussion	K	18	13.2	13.2
Laceration	L	25	18.4	18.4
Pain	P	11	8.1	8.1
Sprain	S	1	0.7	0.7
Avulsion	V	1	0.7	0.7
	TOTAL	136	100.0	100.0

Table 8.6.17

Passenger Head And Neck Injury - System/Organ Involved  
(OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Pons-Medulla	B	2	1.5	1.6
Cerebellum	C	3	2.2	2.4
Dural- Extradural	D F	1 1	0.7 0.7	0.7 0.7
Integumentary	I	73	53.7	57.5
Muscles	M	2	1.5	1.6
Neural Tissues	N	21	15.4	16.5
Oral Soft Tissues	O	3	2.2	2.4
Piarachnoid- Subdural	P	4	2.9	3.1
Skeletal	S	15	11.0	11.8
Teeth	T	2	1.5	1.6
Unknown	U	9	6.6	MISSING
	TOTAL	136	100.0	100.0



Table 8.6.18  
 Passenger Head and Neck Injury Region by Severity

	COUNT						ROW TOTAL	
		MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL		
ROW PCT	COL PCT	TOT PCT	1	2	3	4	5	
B BASAL			0	0	6	0	1	7
			0.0	0.0	85.7	0.0	14.3	5.1
			0.0	0.0	46.2	0.0	7.7	
			0.0	0.0	4.4	0.0	0.7	
C CERVICAL-GENERAL			10	0	0	0	0	10
			100.0	0.0	0.0	0.0	0.0	7.4
			10.3	0.0	0.0	0.0	0.0	
			7.4	0.0	0.0	0.0	0.0	
F FRONTAL			20	0	0	0	1	21
			95.2	0.0	0.0	0.0	4.8	15.4
			20.6	0.0	0.0	0.0	7.7	
			14.7	0.0	0.0	0.0	0.7	
K FACE-GENERAL			7	0	0	0	0	7
			100.0	0.0	0.0	0.0	0.0	5.1
			7.2	0.0	0.0	0.0	0.0	
			5.1	0.0	0.0	0.0	0.0	
M MANDIBLE			9	0	0	0	0	9
			100.0	0.0	0.0	0.0	0.0	6.6
			9.3	0.0	0.0	0.0	0.0	
			6.6	0.0	0.0	0.0	0.0	
N NASAL			5	1	0	0	0	6
			83.3	16.7	0.0	0.0	0.0	4.4
			5.2	8.3	0.0	0.0	0.0	
			3.7	0.7	0.0	0.0	0.0	
D OCCIPITAL			9	2	3	0	1	15
			60.0	13.3	20.0	0.0	6.7	11.0
			9.3	16.7	23.1	0.0	7.7	
			6.6	1.5	2.2	0.0	0.7	
	COLUMN TOTAL		97	12	13	1	13	136
			71.3	8.8	9.6	0.7	9.6	100.0

(continued)

Table 8.6.18

Passenger Head and Neck Injury Region by Severity

Continued

	COUNT	SEVERITY					ROW TOTAL	
		MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL		
ROW PCT	COL PCT	TOT PCT	1	2	3	4	5	
P	8	1	0	0	1		10	
PARIETAL	80.0	10.0	0.0	0.0	10.0		7.4	
	8.2	8.3	0.0	0.0	7.7			
	5.9	0.7	0.0	0.0	0.7			
Q	7	7	3	1	9		27	
BRAIN-GENERAL	25.9	25.9	11.1	3.7	33.3		19.9	
	7.2	58.3	23.1	100.0	69.2			
	5.1	5.1	2.2	0.7	6.6			
R	10	0	1	0	0		11	
ORBIT	90.9	0.0	9.1	0.0	0.0		8.1	
	10.3	0.0	7.7	0.0	0.0			
	7.4	0.0	0.7	0.0	0.0			
T	2	0	0	0	0		2	
TEMPORAL	100.0	0.0	0.0	0.0	0.0		1.5	
	2.1	0.0	0.0	0.0	0.0			
	1.5	0.0	0.0	0.0	0.0			
U	3	0	0	0	0		3	
UNKNOWN	100.0	0.0	0.0	0.0	0.0		2.2	
	3.1	0.0	0.0	0.0	0.0			
	2.2	0.0	0.0	0.0	0.0			
X	4	0	0	0	0		4	
MAXILLA	100.0	0.0	0.0	0.0	0.0		2.9	
	4.1	0.0	0.0	0.0	0.0			
	2.9	0.0	0.0	0.0	0.0			
Z	3	1	0	0	0		4	
ZYGOMA	75.0	25.0	0.0	0.0	0.0		2.9	
	3.1	8.3	0.0	0.0	0.0			
	2.2	0.7	0.0	0.0	0.0			
COLUMN TOTAL	97	12	13	1	13		136	
	71.3	8.8	9.6	0.7	9.6		100.0	

Table 8.7.1a

Motorcycle Contact Codes

MC01 Filler cap	MC20 Crash bars
MC02 Gas tank	MC21 Turn signals
MC03 Steering head assembly	MC22 Engine/transmission
MC04 Brake, clutch levers	MC23 Front fender
MC05 Handlebars	MC24 Luggage box/rack
MC06 Instruments	MC25 Exhaust header pipe
MC07 Windshield	MC26 Muffler
MC08 Front forks/front suspension	MC27 Chain/sprocket
MC09 Mirrors	MC28 Chain guard
MC10 Reflectors	MC29 Sissy bar
MC11 Front wheel assembly	MC30 Gearshift, rear brake
MC12 Rear suspension	MC31 Side stand
MC13 Rear wheel assembly	MC32 Center stand
MC14 Rear fender	MC33 Rider footpegs
MC15 Rear light, brake light	MC34 Passenger footpegs
MC16 License plate	MC35 Saddlebags
MC17 Fairing	MC36 Battery/acid
MC18 Highway pegs	MC37 Fuel
MC19 Headlight	MC38 Helmet

Table 8.7.1b  
Automobile Contact Codes

Odd numbers indicate hard points  
Even numbers indicate soft points

<u>CS</u>	<u>SIDE</u>		
CS01	Rocker panel	CS21	Tires/wheels
CS02	Front fender	CS23	Rear fender wheel house
CS03	Front corner	CS25	Rear corner
CS04	Top of hood	CS27	Undercarriage (runover
CS05	Side of hood	CS29	"C" pillar
CS06	Front door	CS31	Lower "C" pillar
CS07	Lower "A" pillar	CS33	Lower back window molding
CS08	Side glass	CS35	Front fender wheel house
CS09	Upper "A" pillar	CS37	Side of trunk
CS10	Front top	CS43	Door handle
CS11	Roof rail	CS45	Rear view mirror
CS12	Rear door	CS46	Other
CS13	Belt line	CS98	Unknown
CS14	Rear fender		
CS15	Upper/lower "B" pillar		
CS16	Deck lid		
CS17	Front cowl		
CS18	Rear top		
CS19	Back window roof rail/header		
<u>CF</u>	<u>FRONT</u>		
CF01	Bumper	CF20	Windshield
CF02	Grill	CF21	Tires/wheels (runover)
CF03	Headlight/corner	CF27	Undercarriage (runover)
CF04	Top of hood		or snag)

Table 8.7.1b  
(continued)

CF05	Front/side of hood	CF45	Rear view mirror
CF09	Front "A" pillar	CF46	Other
CF10	Front top	CF98	Unknown
CF17	Front cowl		
CF19	Windshield roof rail/header		

CB    BACK

CB01	Rear bumper	CB21	Tires/wheels(runover)
CB03	Tail light/sub-trunk panel	CB25	Rear corner
CB05	Trailer hitch	CB27	Undercarriage
CB14	Rear fender	CB29	"C" pillar
CB16	Deck lid	CB33	Back window lower molding
CB18	Rear top	CB37	Side of trunk
CB19	Back window roof rail	CB38	Other
CB20	Back:	CB98	Unknown

CT    TOP

CT04	Top of hood	CT19	Windshield/back window roof rail
CT05	Side of hood	CT20	Windshield/back window glass
CT10	Front top	CT33	Back light lower moulding
CT11	Roof rail	CT37	Side of trunk
CT16	Deck lid	CT38	Other
CT17	Front cowl	CT98	Unknown

Table 8.7.1c  
Pickup Truck Contact Codes  
(also bed truck codes)

Odd numbers indicate hard points  
Even numbers indicate soft points

<u>PS</u>	<u>PICK UP SIDE</u>		
PS01	Rocker panel	PS27	Undercarriage (runover or snag)
PS02	Front fender	PS29	"D" pillar (if camper)
PS03	Front corner	PS30	"C" pillar (if camper)
PS04	Top of hood	PS35	Front fender wheel house
PS05	Side of hood	PS37	Upper side border of cargo space/cargo bed rail
PS06	Door		
PS07	Lower "S" pillar	PS39	Roof rail of camper
PS08	Side glass	PS43	Door handle
PS09	Upper "A" pillar	PS45	Rear view mirror
PS10	Front top	PS46	Other
PS11	Roof rail	PS98	Unknown
PS13	Belt line		
PS14	Rear panel		
PS15	Upper/lower "B" pillar		
PS17	Rear top (if camper)		
PS21	Tires/wheels		
PS23	Rear fender wheel house		
PS25	Rear corner		
<u>PF</u>	<u>PICK UP FRONT</u>		
PF01	Bumper	PF19	Windshield roof rail/header
PF03	Grill	PF20	Windshield
PF04	Top of hood	PF21	Tires/wheels (runover)
PF05	Side of hood	PF27	Undercarriage (runover or snag)
PF09	"A" pillar		
PF10	Front top	PF45	Rear View mirror
PF17	Cowl	PF44	Other
		PF98	Unknown

Table 8.7.1c

(continued)

PB     PICK UP BACK

PB01 Rear bumper, OEM  
 PB03 Step bumper  
 PB05 Trailer hitch  
 PB15 "B" pillar  
 PB17 Tailgate  
 PB19 Back window roof rail/header  
 PB20 Back window glass  
 PB21 Tires/wheels (runover)  
 PB25 Rear corner  
 PB33 Back  
 PB43 Tailgate handle/hardware  
 PB44 Other  
 PB98 Unknown

PT     PICK UP TOP

PT04 Top of hood  
 PT05 Front edge and side of hood  
 PT10 Roof top  
 PT11 Roof side rail  
 PT17 Cowl  
 PT19 Windshield roof rail/header  
 PT20 Windshield glass  
 PT37 Upper side border of cargo space/cargo bed rail  
 PT41 Truck bed  
 PT42 Other  
 PT98 Unknown

Table 8.7.1d

Van Contact Codes

(also Box Body Truck and Bus codes)

Odd numbers indicate hard points  
Even numbers indicate soft points

<u>VS</u>	<u>VAN SIDE</u>	<u>VS</u>	<u>VAN SIDE</u>
VS01	Rocker panel	VS21	Tires/wheels
VS03	Front corner lower	VS23	Rear fender wheel house
VS05	Front corner upper	VS25	Lower rear corner
VS06	Front door	VS27	Undercarriage (runover or sna
VS07	Lower "A" pillar	VS29	Upper rear corner
VS09	Upper "A" pillar	VS31	Middle panel
VS10	Front roof top	VS33	Lower panel
VS11	Door roof rail	VS35	Front fender wheel house
VS13	Forward belt line	VS39	Side panel roof rail
VS14	Upper panel	VS43	Door handle
VS15	Upper "B" pillar	VS45	Rear view mirror
VS18	Rear roof top	VS46	Other
		VS98	Unknown
<u>VF</u>	<u>VAN FRONT</u>		
VF01	Bumper		
VF03	Grill/front corner		
VF04	Sub-cowl panel		
VF05	Front corner		
VF09	"A" pillar		
VF10	Front top		
VF17	Cowl		
VF19	Windshield roof rail/header		
VF20	Windshield		
VF45	Rear view mirror		
VF46	Other		
VF98	Unknown		



Table 8.7.1d

(continued)

<u>VB</u>	<u>VAN BACK</u>
VB01	Bumper
VB03	Trailer hitch
VB05	Belt line
VB15	Upper rear door post
VB17	Rear door panel
VB19	Back window roof rail/header
VB20	Rear door glass-if sheet metal code (17)
VB21	Tires/wheels (runover)
VB23	Lower rear door post
VB25	Lower rear corner
VB27	Undercarriage (runover or snag)
VB29	Upper rear corner
VB43	Door handle
VB44	Other
VB98	Unknown

<u>VT</u>	<u>VAN TOP</u>
VT10	Front top
VT11	Front door roof rail
VT18	Rear roof top
VT19	Windshield roof rail/header
VT39	Side panel roof rail
VT40	Other
VT98	Unknown

Table 8.7.1e  
Environment Contact Codes

TEXTURE

EA Asphalt  
EC Concrete  
EG Glass  
EH Water  
EM Metal  
ES Soil, dirt, sand or gravel  
EW Wood  
EY Other texture

OBJECT OR GEOMETRY

01 Pavement  
02 Tree, pole or post  
03 Embankment  
04 Barrier, guard rail  
06 Curb  
07 Unpaved shoulder  
08 Cable, wire  
09 Brush  
10 Blunt edge  
11 Sharp edge  
12 Pointed object  
13 Flat surface  
14 Blunt surface  
97 Other  
98 Not observed

(Examples: Light pole - EM 02; telephone pole - FW 02;  
drainage pipe - EC10 or EC 12)

Table 8.7.2a

Rider Somatic Injury, Motorcycle  
Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Motorcycle Contact Surface	MC01	4	0.1	0.1
	MC02	321	6.3	6.3
	MC03	27	0.5	0.5
	MC04	8	0.2	0.2
	MC05	869	17.2	17.2
	MC06	20	0.4	0.4
	MC07	42	0.8	0.8
	MC08	14	0.3	0.3
	MC09	47	0.9	0.9
	MC11	5	0.1	0.1
	MC12	90	1.8	1.8
	MC13	7	0.1	0.1
	MC14	12	0.2	0.2
	MC15	2	0.0	0.0
	MC16	4	0.1	0.1
	MC17	31	0.6	0.6
	MC18	4	0.1	0.1
	MC20	23	0.5	0.5
	MC21	37	0.7	0.7
	MC22	256	5.1	5.1
	MC23	4	0.1	0.1
	MC24	5	0.1	0.1
	MC25	11	0.2	0.2
	MC26	27	0.5	0.5
	MC27	2	0.0	0.0
	MC29	8	0.2	0.2
	MC31	1	0.0	0.0
	MC32	1	0.0	0.0

Table 8.7.2a  
 Rider Somatic Injury, Motorcycle  
 Contact Surfaces

Continued

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Motorcycle Contact Surface	MC33	7	0.1	0.1
	MC34	16	0.3	0.3
	MC35	7	0.1	0.1
	MC36	3	0.1	0.1
	MC37	9	0.2	0.2
	MC97	18	0.4	0.4
	MC98	19	0.4	0.4

Table 8.7.2b

Rider Somatic Injury  
Automobile Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Car Contact Surface	CB01	44	0.9	0.9
	CB03	12	0.2	0.2
	CB14	3	0.1	0.1
	CB16	18	0.4	0.4
	CB18	1	0.0	0.0
	CB19	1	0.0	0.0
	CB20	1	0.0	0.0
	CB25	34	0.7	0.7
	CB27	3	0.1	0.1
	CB37	4	0.1	0.1
	CB98	1	0.0	0.0
	CF01	139	2.7	2.7
	CF02	17	0.3	0.3
	CF03	106	2.1	2.1
	CF04	10	0.2	0.2
	CF05	79	1.6	1.6
	CF09	6	0.1	0.1
	CF10	2	0.0	0.0
	CF19	7	0.1	0.1
	CF20	16	0.3	0.3
	CF21	1	0.0	0.0
	CF27	17	0.3	0.3
	CF46	1	0.0	0.0
	CF98	3	0.1	0.1
	CS01	34	0.7	0.7
	CS02	107	2.1	2.1
	CS03	89	1.8	1.8
	CS05	35	0.7	0.7
	CS06	88	1.7	1.7

Table 8.7.2b  
Rider Somatic Injury  
Automobile Contact Surfaces

Continued

CS07	8	0.2	0.2
CS08	13	0.3	0.3
CS09	37	0.7	0.7
CS10	4	0.1	0.1
CS11	36	0.7	0.7
CS12	24	0.5	0.5
CS13	13	0.3	0.3
CS14	96	1.9	1.9
CS15	17	0.3	0.3
CS19	4	0.1	0.1
CS20	2	0.0	0.0
CS21	17	0.3	0.3
CS22	2	0.0	0.0
CS23	11	0.2	0.2
CS25	22	0.4	0.4
CS27	3	0.1	0.1
CS29	32	0.6	0.6
CS31	4	0.1	0.1
CS35	1	0.0	0.0
CS37	9	0.2	0.2
CS43	6	0.1	0.1
CS45	7	0.1	0.1
CS98	4	0.1	0.1
CT04	8	0.2	0.2
CT05	1	0.0	0.0
CT10	1	0.0	0.0
CT16	2	0.0	0.0
CT38	1	0.0	0.0
CT97	1	0.0	0.0

Table 8.7.2c

## Rider Somatic Injury

## Pickup, Truck, Bus and Van Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>CONTACT AREA</u>				
BUS	BS03	1	0.0	0.0
PICKUP TRUCK	PB03	9	0.2	0.2
	PB25	2	0.0	0.0
	PF01	4	0.1	0.1
	PF03	7	0.1	0.1
	PF04	4	0.1	0.1
	PF05	2	0.0	0.0
	PS02	3	0.1	0.1
	PS03	10	0.2	0.2
	PS06	3	0.1	0.1
	PS14	10	0.2	0.2
	PS21	2	0.0	0.0
	PS23	5	0.1	0.1
	PS37	3	0.1	0.1
	PS45	1	0.0	0.0
	PS46	3	0.1	0.1
	TRUCK	PT05	2	0.0
TB01		4	0.1	0.1
TB03		7	0.1	0.1
TB25		2	0.0	0.0
TS21		23	0.5	0.5
TS27		7	0.1	0.1
TS97		1	0.0	0.0
TS98		4	0.1	0.1
VAN	VB01	10	0.2	0.2
	VB03	1	0.0	0.0
	VB25	5	0.1	0.1
	VF01	5	0.1	0.1

Table 8.7.2c

Rider Somatic Injury

Pickup, Truck, Bus and Van Contact Surfaces

Continued

Category Label	Code	Absolute Frequency (%)	Relative Frequency (%)	Adjusted Frequency (%)
VAN	VF03	1	0.0	0.0
	VF05	1	0.0	0.0
	VF97	4	0.1	0.1
	VS01	1	0.0	0.0
	VS03	3	0.1	0.1
	VS05	2	0.0	0.0
	VS25	2	0.0	0.0
	VS33	2	0.0	0.0



Table 8.7.2d

Rider Somatic Injury  
Environment Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
<u>ENVIRONMENT</u>	EA01	1160	22.9	22.9
	EA06	2	0.0	0.0
	EC01	224	4.4	4.4
	EC04	4	0.1	0.1
	EC06	40	0.8	0.8
	EC11	2	0.0	0.0
	EC13	18	0.4	0.4
	EG11	1	0.0	0.0
	EM02	46	0.9	0.9
	EM04	43	0.8	0.8
	EM08	9	0.2	0.2
	EM10	5	0.1	0.1
	EM12	1	0.0	0.0
	ES01	4	0.1	0.1
	ES03	21	0.4	0.4
	ES07	5	0.1	0.1
	ES13	16	0.3	0.3
	ES98	1	0.0	0.0
	EW02	44	0.9	0.9
	EW04	16	0.3	0.3
	EW10	3	0.1	0.1
	EY09	1	0.0	0.0
	EY13	1	0.0	0.0
	EY97	1	0.0	0.0
Unknown	9998	<u>1</u>	<u>0.0</u>	<u>MISSING</u>
TOTAL SOMATIC SURFACES:		5067	100.0	100.0

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		CHEST			ELBOW		KNEE		LOWER LE		ABDOMEN		WHOLE BY	BO IP	PELVIC DT	ANKLE DT	FO	ROW TOTAL
	A	B	C	E	K	G	L	M	U	P	Q	R	S	T	V	W	X		
BS03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CU01	0	3	3	1	6	14	2	0	3	8	0	0	0	0	0	0	0	0	44
	0.0	6.8	6.8	2.3	13.6	31.8	4.5	0.0	6.8	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.4	0.4	0.5	0.8	1.8	0.5	0.0	1.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.1	0.1	0.0	0.1	0.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CR03	0	0	0	0	4	5	1	0	0	0	0	0	0	0	0	0	0	0	12
	0.0	0.0	0.0	0.0	33.3	41.7	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CB14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CB16	0	0	5	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	17
	0.0	0.0	29.4	0.0	23.5	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.4	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CB18	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CB19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL	149	208	363	218	764	797	373	8	278	478	5059	100.0							
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4									

173

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FORARM			SHOULDER THIGH			WRIST-HA ND		UPPER EX TRUNK TREMITE			ROW TOTAL
	R	S	T	S	T	W	X	Y				
RS03	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CR01	0	1	2	1	2	1	0	0	0	0	0	44
	0.0	2.3	4.5	2.3	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.5	0.5	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
CR03	0	0	1	0	1	0	0	0	0	0	0	12
	0.0	0.0	8.3	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CR14	0	0	2	0	2	0	0	0	0	0	0	3
	0.0	0.0	66.7	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CR16	0	0	4	1	4	1	0	0	0	0	0	17
	0.0	0.0	23.5	5.9	23.5	5.9	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	1.0	0.2	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
CR18	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CR19	1	0	0	0	0	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL	255	212	301	547	301	547	9	9	9	9	9	5059
	5.0	4.2	7.7	10.3	7.7	10.3	0.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNEE	LOWER LE		ABDOMEN	WHOLE BO	PELVIC H	ANKLE FO	ROW TOTAL
	A	B	C	E	K	G	L	M	O	P	OT			
CB20	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB25	0	0	0	1	0	14	0	0	0	2	3		34	
	0.0	0.0	0.0	2.9	17.6	41.2	0.0	0.0	0.0	5.9	8.8		0.7	
	0.0	0.0	0.0	0.5	0.8	1.8	0.0	0.0	0.0	0.7	0.6			
	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.1			
CB27	0	0	0	0	1	1	0	0	0	0	0		3	
	0.0	0.0	0.0	0.0	33.3	33.3	0.0	0.0	0.0	0.0	0.0		0.1	
	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CB37	0	0	1	1	0	1	0	0	0	0	0		4	
	0.0	0.0	25.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0		0.1	
	0.0	0.0	0.3	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CB9H	0	0	0	0	0	0	0	0	0	0	1		1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CF01	1	2	7	0	0	51	5	0	7	44			139	
	0.7	1.4	5.0	0.0	4.3	36.7	3.6	0.0	5.0	35.3			2.7	
	0.7	1.0	1.9	0.0	0.8	6.4	1.3	0.0	2.5	10.3				
	0.0	0.0	0.1	0.0	0.1	1.0	0.1	0.0	0.1	1.0				
CF02	0	1	1	1	5	1	0	0	1	1			17	
	0.0	5.9	5.9	5.9	29.4	5.9	0.0	0.0	5.9	5.9			0.3	
	0.0	0.5	0.3	0.5	0.7	0.1	0.0	0.0	0.4	0.2				
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0				
COLUMN TOTAL	149	208	363	218	764	797	373	8	278	478			5059	
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4			100.0	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA ND		UPPER EX TRMITIE		TRUNK		ROW TOTAL
	R	S	S	T	T	W	X	X	Y	Y			
CR29	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CR25	0	1	1	1	6	0	0	0	0	0	0	0	14
	0.0	2.9	2.9	2.9	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
	0.0	0.5	0.3	0.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CR27	1	0	0	0	0	0	0	0	0	0	0	0	3
	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CR37	0	0	1	1	0	0	0	0	0	0	0	0	4
	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CR28	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF01	2	1	7	7	1	0	0	0	0	0	0	0	119
	1.4	0.7	5.0	5.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
	0.8	0.5	1.8	1.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF02	2	1	2	2	1	0	0	0	0	0	0	0	17
	11.8	5.9	11.8	11.8	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.8	0.5	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	191	191	547	9	9	9	9	9	9	9	5059
	5.0	4.2	7.7	7.7	10.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNEE	LOWER LE	ABDOMEN	WHDLE BO	PELVIC	H ANKLE	FO	ROW TOTAL
	A	B	C	E	K	L	M	U	P	Q				
CF03	2	4	13	3	10	29	7	0	10	12				106
	1.9	3.8	12.3	2.8	9.4	27.4	6.6	0.0	9.4	11.3				2.1
	1.3	1.9	3.6	1.4	1.3	3.6	1.9	0.0	3.6	2.5				
	0.0	0.1	0.3	0.1	0.2	0.6	0.1	0.0	0.2	0.2				
CF04	1	0	4	1	1	0	1	0	0	0				10
	10.0	0.0	40.0	10.0	10.0	0.0	10.0	0.0	0.0	0.0				0.2
	0.7	0.0	1.1	0.5	0.1	0.0	0.3	0.0	0.0	0.0				
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CF05	3	8	7	1	7	9	3	0	11	3				79
	3.8	10.1	3.9	1.3	8.9	11.4	3.8	0.0	13.9	3.8				1.6
	2.0	3.8	1.9	0.5	0.9	1.1	0.8	0.0	4.0	0.6				
	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.0	0.2	0.1				
CF09	0	0	1	1	0	0	0	0	0	0				6
	0.0	0.0	16.7	16.7	0.0	0.0	0.0	0.0	0.0	0.0				0.1
	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CF10	0	0	2	0	0	0	0	0	0	0				2
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CF19	1	0	3	1	0	0	0	0	0	0				7
	14.3	0.0	42.9	14.3	0.0	0.0	0.0	0.0	0.0	0.0				0.1
	0.7	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
CF20	7	3	1	1	1	0	0	0	0	0				16
	12.5	18.8	6.3	6.3	6.3	0.0	0.0	0.0	0.0	0.0				0.3
	1.1	1.4	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0				
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
COLUMN TOTAL	146	206	363	218	764	797	373	8	278	478				5059
	2.0	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4				100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	I	FOREARM		SHOULDER		THIGH		WRIST-HA NO	UPPER EX TRUNK		ROW TOTAL
		R	S	S	T	X	Y				
105	2	0	11	3	0	0					105
2.1	1.9	0.0	10.4	2.8	0.0	0.0					2.1
	0.8	0.0	2.8	0.5	0.0	0.0					
	0.0	0.0	0.2	0.1	0.0	0.0					
10	2	0	0	0	0	0					10
0.2	20.0	0.0	0.0	0.0	0.0	0.0					0.2
	0.8	0.0	0.0	0.0	0.0	0.0					
	0.0	0.0	0.0	0.0	0.0	0.0					
79	2	2	15	8	0	0					79
1.6	2.5	2.5	19.0	10.1	0.0	0.0					1.6
	0.8	0.9	3.8	1.5	0.0	0.0					
	0.0	0.0	0.3	0.2	0.0	0.0					
6	1	1	0	2	0	0					6
0.1	16.7	16.7	0.0	33.3	0.0	0.0					0.1
	0.4	0.5	0.0	0.4	0.0	0.0					
	0.0	0.0	0.0	0.0	0.0	0.0					
2	0	0	0	0	0	0					2
0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0
	0.0	0.0	0.0	0.0	0.0	0.0					
	0.0	0.0	0.0	0.0	0.0	0.0					
7	1	1	0	0	0	0					7
0.1	14.3	14.3	0.0	0.0	0.0	0.0					0.1
	0.4	0.5	0.0	0.0	0.0	0.0					
	0.0	0.0	0.0	0.0	0.0	0.0					
16	1	2	0	5	0	0					16
0.3	6.3	12.5	0.0	31.3	0.0	0.0					0.3
	0.4	0.9	0.0	0.9	0.0	0.0					
	0.0	0.0	0.0	0.1	0.0	0.0					
SUMMI TOTAL	255	212	301	547	9	9					5059
	5.0	4.2	7.7	10.8	0.2	0.2					100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT FLOW PCT CUM PCT TOT PCT	UPPER AR		BACK			CHEST			FLOW			KNEE			LOWER LE			ABDOMEN			WHOLE BO			PELVIC H			ANKLE FO			ROW TOTAL
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z				
CEP1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CEP7	1	2	7	2	1	0	0	2	0	1	0	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	17			
	5.9	11.8	41.2	11.8	5.9	0.0	0.0	11.8	0.0	5.9	0.0	0.0	11.8	0.0	5.9	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3			
	0.7	1.0	1.9	0.3	0.1	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CEP6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CEP9	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
USAT	1	1	2	0	7	0	0	0	2	4	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	34			
	2.9	2.9	5.9	0.0	20.6	0.0	0.0	0.0	5.9	11.8	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.7			
	0.7	3.5	0.6	0.0	0.9	0.0	0.0	1.0	0.7	0.8	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CEP7	3	1	3	3	26	27	6	0	5	9	0	0	0	0	5	0	0	0	0	5	0	0	0	0	0	107				
	2.8	0.9	2.8	2.8	24.3	25.2	5.6	0.0	4.7	8.4	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	2.1				
	2.0	0.5	0.8	1.4	3.4	3.4	1.6	0.0	1.8	1.9	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0				
	0.1	0.0	0.1	0.1	0.5	0.5	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0				
CEP6	1	5	7	1	13	23	3	1	8	12	0	0	0	0	8	0	0	0	0	8	0	0	0	0	0	89				
	1.1	5.6	7.9	1.1	14.6	25.0	3.4	1.1	7.0	13.5	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	1.8				
	0.7	2.4	1.9	0.5	1.7	2.9	0.8	12.5	2.9	2.5	0.0	0.0	0.0	12.5	2.9	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	0.1	0.1	0.0	0.0	0.5	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0				
CUMMUN TOTAL	149	208	363	218	764	777	373	8	278	478	0	0	0	0	278	0	0	0	0	278	0	0	0	0	0	5052				
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	100.0				

179

Continued



Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	I	FOREARM		SHOULDER		THIGH		WRIST-HA		UPPER EX TRUNK		ROW TOTAL
		R	L	S	S	T	T	W	X	Y		
CF21		0	0	0	0	0	0	0	0	0	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF27		0	0	0	0	0	1	0	0	0	0	17
		0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.3
		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF46		0	0	0	0	0	0	0	0	0	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF98		0	0	1	0	0	0	0	0	1	1	3
		0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.1
		0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	11.1	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS01		1	2	2	3	1	1	0	0	0	0	34
		2.9	5.9	5.9	8.8	2.9	2.9	0.0	0.0	0.0	0.0	0.7
		0.4	0.9	0.5	0.5	0.5	11.1	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CS02		4	1	12	7	0	0	0	0	0	0	107
		3.7	0.9	11.2	6.5	0.0	0.0	0.0	0.0	0.0	0.0	2.1
		1.6	0.5	3.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	
		0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CS03		2	2	9	1	0	1	0	0	1	1	49
		2.2	2.2	10.1	1.1	0.0	0.0	0.0	0.0	1.1	1.1	1.0
		0.8	0.9	2.3	0.2	0.0	2.0	0.0	0.0	11.1	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		255	212	101	647	9	9	0	0	0	0	5059
		5.0	4.2	1.7	10.8	0.2	0.2	0.0	0.0	0.0	0.0	100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER		BACK		CHEST		CLOW		KNEE		LOWER LF		ABDOMEN		MIDDLE RD		PELVIC H		ANKLE FO		ROW TOTAL
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
CS05	0	1	6	1	3	2	5	0	1	1	2	1	0	1	0	1	1	1	1	1	35
	0.0	2.9	17.1	2.9	8.6	5.7	14.3	0.0	2.9	2.9	14.3	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.7
	0.0	0.5	1.7	0.5	0.4	0.3	1.3	0.0	0.4	0.4	1.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS06	5	7	0	5	25	17	17	0	1	4	7	0	0	4	4	1	7	0	0	80	
	5.7	8.0	0.0	5.7	23.4	19.3	19.3	0.0	1.1	4.5	8.0	0.0	0.0	4.5	4.5	1.4	7.7	0.0	0.0	1.7	
	3.4	3.4	0.0	2.3	3.3	2.1	2.1	0.0	0.3	0.3	0.3	0.0	0.0	1.4	1.4	0.1	1.5	0.0	0.0	0.1	
	0.1	0.1	0.0	0.1	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	
CS07	0	1	1	0	1	1	0	0	1	0	2	0	0	1	0	1	2	0	0	8	
	0.0	12.5	12.5	0.0	12.5	12.5	0.0	0.0	12.5	0.0	25.0	0.0	0.0	12.5	0.0	12.5	25.0	0.0	0.0	0.2	
	0.0	0.5	0.3	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.4	0.0	0.4	0.8	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS08	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	13	
	0.0	0.0	23.1	0.0	7.7	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS09	4	2	8	1	1	1	1	0	1	1	0	0	0	2	2	0	0	0	0	37	
	10.4	5.4	21.6	2.7	2.7	2.7	2.7	0.0	2.7	2.7	0.0	0.0	0.0	5.4	5.4	0.0	0.0	0.0	0.0	0.7	
	2.7	1.0	2.2	0.5	0.1	0.1	0.1	0.0	0.3	0.3	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS10	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS11	1	0	10	2	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	16	
	11.1	0.0	27.8	5.6	5.6	5.6	5.6	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	
	2.7	0.0	2.9	0.9	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	149	209	363	218	764	797	373	8	278	478	509	0.2	5.5	278	478	9.4	509	109.0			
	2.3	4.1	7.2	4.1	15.1	15.8	7.4	0.0	4.1	7.4	0.0	0.0	0.0	4.1	7.4	0.0	7.4	15.1	15.8	7.4	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH	WRIST-HA ND		UPPER EX TREMITIE	TRUNK	ROW TOTAL
	R	S	S	T	T	W	X	Y		
CS05	3 A.6 1.2 0.1	1 2.9 0.5 0.0	6 17.1 1.5 0.1	5 14.3 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	35 0.7	
CS06	2 2.3 0.9 0.0	9 0.0 0.0 0.0	5 5.7 1.3 0.1	10 11.4 1.8 0.2	0 0.0 0.0 0.0	1 12.5 11.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	99 1.7	
CS07	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 11.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 0.2	
CS08	4 30.8 1.6 0.1	2 15.4 0.9 0.0	0 0.0 0.0 0.0	3 23.1 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	13 0.3	
CS09	6 16.2 2.4 0.1	5 13.5 2.4 0.1	0 0.0 0.0 0.0	6 16.2 1.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	37 0.7	
CS10	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 50.0 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1	
CS11	5 13.9 2.0 0.1	8 22.2 3.8 0.2	0 0.0 0.0 0.0	3 8.3 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	36 0.7	
COLUMN TOTAL	255 5.0	212 4.2	391 7.7	547 10.8	4 0.2	4 0.2	4 0.2	4 0.2	5059 100.0	

Continued

Table 8.7.3

## Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	ROW PCT	COL PCT	TOT PCT	UPPER	AR	BACK	CHEST	ELBOW	KNEE	LOWER LE	ABDOMEN	WHOLE BO	PELVIC H	ANKLE H	FO	ROW TOTAL
				A	B	C	E	K	G	L	M	DY	IP	OT		
CS12	0	4	2	0	4	5	2	0	4	5	2	0	1	1		24
	0.0	16.7	8.3	0.0	16.7	20.8	8.3	0.0	16.7	20.8	8.3	0.0	4.2	4.2		0.5
	0.0	1.9	0.6	0.0	0.5	0.6	0.5	0.0	0.5	0.6	0.5	0.0	0.4	0.2		
	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0		
CS13	0	0	2	0	2	0	1	0	2	0	1	0	0	0		13
	0.0	0.0	0.0	0.0	15.4	15.4	0.0	7.7	15.4	0.0	7.7	0.0	0.0	0.0		0.3
	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS14	2	5	5	5	22	9	4	0	22	9	4	0	5	7		95
	2.1	5.3	5.3	5.3	23.2	9.5	4.2	0.0	23.2	9.5	4.2	0.0	5.3	7.4		1.9
	1.3	2.4	1.4	2.3	2.9	1.1	1.1	0.0	2.9	1.1	1.1	0.0	1.8	1.5		
	0.0	0.1	0.1	0.1	0.4	0.2	0.1	0.0	0.4	0.2	0.1	0.0	0.1	0.1		
CS15	1	0	4	0	4	0	0	0	4	0	0	0	0	0		17
	5.9	0.0	23.5	0.0	23.5	0.0	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0		0.3
	0.7	0.0	1.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
CS19	0	0	0	0	0	0	1	0	0	0	1	0	1	0		4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0		0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS20	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS21	1	1	1	1	0	5	0	0	0	5	0	0	2	2		17
	5.9	5.9	5.9	5.9	0.0	29.4	0.0	0.0	0.0	29.4	0.0	0.0	11.8	11.8		0.3
	0.7	0.5	0.3	0.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.7	0.4		
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
COLUMN TOTAL	149	200	363	218	764	797	373	8	764	797	373	8	278	478		5059
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	15.1	15.8	7.4	0.2	5.5	9.4		100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH	WRIST-HA ND	UPPER EXTREMITY		TRUNK	ROW TOTAL
	R	S	S	T		W	X	Y		
CS37	22.2 0.8 0.0	11.1 0.5 0.0	22.2 0.5 0.0	11.1 0.2 0.0	0	1	0	0	0	9 0.2
CS43	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.2 0.0	16.7 0.2 0.0	1	0	0	0	6 0.1
CS45	0 0.0 0.0	0 0.0 0.0	14.3 0.3 0.0	1 0.0 0.0	0 0.0 0.0	0	0	0	0	7 0.1
CS90	0 0.0 0.0	0 0.0 0.0	25.0 0.3 0.0	1 0.0 0.0	50.0 0.4 0.0	2	0	0	0	4 0.1
CT04	12.5 0.4 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	62.5 0.9 0.1	5	0	0	0	8 0.2
CT05	0 0.0 0.0	0 0.0 0.0	100.0 0.3 0.0	1 0.0 0.0	0 0.0 0.0	0	0	0	0	1 0.0
CT10	0 0.0 0.0	1 100.0 0.5 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0	0	0	0	1 0.0
COLUMN TOTAL	255 5.0	212 4.2	391 7.7	547 10.0	9 0.2	9 0.2	9 0.2	9 0.2	5059 100.0	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

CCONE ROW PCT COL PCT TOT PCT	UPPER ARM		BACK	CHEST			ELBOW		KNEE	LOWER LEG		ABDOMEN	WHOLE BODY	PELVIC	HANKLE	FOOT	ROW TOTAL
	A	B		C	E	K	L	M		N	O						
CT16	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CT38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CT97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FA01	44	73	41	125	174	98	26	3	78	84	1158	22.9					
	3.8	6.3	3.5	10.8	15.0	8.5	2.2	0.3	6.7	7.3							
	29.5	35.1	11.3	57.3	22.8	12.3	7.0	37.5	28.1	17.6							
FA04	0	0	0	0	0	1	0	0	1	0	0.2	2 0.0					
	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0						
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0						
FC01	9	14	9	24	45	11	3	0	15	12	223	4.4					
	4.0	6.3	4.0	10.8	20.2	4.9	1.3	0.0	6.7	5.4							
	6.0	6.7	2.5	11.0	5.9	1.4	0.8	0.0	5.4	2.5							
FC04	0	0	0	0	0	2	0	0	0	0	0.1	4 0.1					
	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0						
	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0						
COLUMN TOTAL	149	208	36.1	214	764	797	373	5	278	478	5059	100.0					
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4							

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	ROW PCT	COL PCT	TOT PCT	FOREARM	SHOULDER	THIGH	WRIST-HA	UPPER EX	TRUNK	ROW TOTAL
				P	S	T	NO	TREMITTE	Y	
C116	0	0	0	0	0	0	0	0	0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C130	0	1	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C197	0	0	0	0	0	1	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
E A 01	101	25	24	187	3	2	1158	22.0		
	0.7	8.2	2.1	16.1	0.3	0.2				
	39.6	44.7	6.1	14.2	33.3	22.2				
	2.0	1.9	0.5	3.7	0.1	0.0				
E A 06	0	0	0	0	0	0	0	0	0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
E C 01	19	22	3	37	1	0	203	4.4		
	8.1	9.9	1.3	16.6	0.4	0.0				
	7.1	10.4	0.8	6.9	11.1	0.0				
	0.4	0.4	0.1	0.7	0.0	0.0				
E C 04	1	0	0	1	0	0	4	0.1		
	25.0	0.0	0.0	25.0	0.0	0.0				
	0.4	0.0	0.0	0.2	0.0	0.0				
	0.0	0.0	0.0	0.0	0.0	0.0				
	0.0	0.0	0.0	0.0	0.0	0.0				
COLUMN TOTAL	255	212	341	547	9	9	5059	100.0		
	5.0	4.2	7.7	10.8	0.2	0.2				

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

	COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK		CHEST		ELBOW		KNEE		LOWER LE		ABDOMEN		WHOLE HD		PELVIC		ANKLE		ROW TOTAL
		A	B	C	E	K	G	I	H	O	P	Q	TOTAL									
EC06		0	5	4	0	2	3	1	0	0	0	5										40
		0.0	12.5	10.0	0.0	5.0	7.5	2.5	0.0	0.0	0.0	12.5										0.8
		0.0	2.4	1.1	0.0	0.3	0.4	0.3	0.0	0.0	0.0	1.0										
EC11		0	0	0	0	1	0	0	0	0	1	0										2
		0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0										0.0
		0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0										
EC13		1	0	3	1	1	1	0	0	0	3	1										18
		5.6	0.0	16.7	5.6	5.6	5.6	0.0	0.0	0.0	16.7	5.6										0.4
		0.7	0.0	0.8	0.5	0.1	0.1	0.0	0.0	0.0	1.1	0.2										
EG11		0	0	0	0	0	0	0	0	0	0	0										1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
EM02		10	1	21	0	0	1	10	0	0	1	0										46
		10.0	2.2	45.7	0.0	0.0	2.2	21.7	0.0	0.0	2.2	0.0										0.9
		3.4	0.5	5.8	0.0	0.0	0.1	2.7	0.0	0.0	0.2	0.0										
EM04		0	1	10	1	4	0	1	1	0	0	0										43
		11.7	2.3	23.3	2.3	9.3	0.0	2.3	2.3	0.0	0.0	0.0										0.8
		3.4	0.5	2.8	0.5	0.5	0.0	0.3	2.3	0.0	0.0	0.0										
EM08		2	1	0	0	1	1	0	0	0	0	0										9
		2.2	11.1	0.0	0.0	11.1	11.1	0.0	0.0	0.0	0.0	0.0										0.2
		1.1	0.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0										
COLUMN TOTAL		14.7	208	363	218	764	797	373	8	278	478	505.9										
		2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4	100.0										

Continued



Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM	SHOULDER	THIGH	WRIST-HA NO	UPPER EX TRUNK TRINITIF	ROW TOTAL	
	P	S	T	W	X		Y
EC06	5 12.5 2.0 0.1	5 12.5 2.4 0.1	2 5.0 0.5 0.0	8 20.0 1.5 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	40 0.8
FC11	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0
EC13	2 11.1 0.8 0.0	0 0.0 0.0 0.0	2 11.1 0.5 0.0	3 16.7 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	18 0.4
EG11	1 100.0 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
FM02	0 0.0 0.0 0.0	4 8.7 1.9 0.1	3 6.5 0.8 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	46 0.9
FM04	3 7.0 1.2 0.1	5 11.6 2.4 0.1	4 9.3 1.0 0.1	4 18.6 1.5 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	43 0.8
FM08	1 11.1 0.4 0.0	1 11.1 0.5 0.0	0 0.0 0.0 0.0	2 22.2 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 0.2
COLUMN TOTAL	255 5.0	212 4.2	301 7.7	547 10.8	9 0.2	9 0.2	5059 100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

	COUNT ROW PCI COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNIFE	LOWER LE		ABDOMEN	WHOLE UD	PELVIC H	ANKLE H	FO	ROW TOTAL
		A	B	C	D	E	K	G	L	M	O	P	Q			
EM10		0	0	2	0	0	0	0	0	1	0	1	0			5
		0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	20.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.0	
EM12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ES01		0	0	0	0	0	1	0	0	0	0	1	0	0	0	4
		0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	
ES03		2	0	5	0	0	1	1	1	1	0	0	0	0	0	21
		9.5	0.0	23.8	0.0	0.0	4.6	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.4
		1.3	0.0	1.4	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
ES07		0	0	0	0	0	2	0	1	0	0	0	0	0	0	5
		0.0	0.0	0.0	0.0	0.0	40.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
FS13		1	1	2	0	0	0	1	3	0	2	2	2	2	16	
		6.3	6.3	12.6	0.0	0.0	0.0	6.3	18.8	0.0	12.6	12.6	12.6	12.6	0.3	
		0.7	0.5	0.6	0.0	0.0	0.0	0.1	0.8	0.0	0.7	0.4	0.4	0.4		
ES9B		0	1	0	0	0	0	0	0	0	0	0	0	0	1	
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	149	208	363	218	764	797	373	0.2	278	478	5059	100.0				
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4	100.0					

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	ROW PCT	COL PCT	TOT PCT	RIDER BODY REGION							ROW TOTAL
				FOREARM	SHOULDER	THIGH	WRIST-HAND	UPPER LIMB	EXTR	TRUNK	
				R	S	T	W	X	Y		
FM10	1	20.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	5	
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FM12	0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	1	
		0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FS01	0	0.0	0.0	0.0	1	0.0	1	0.0	0.0	4	
		0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.5	0.0	0.2	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FS03	6	28.6	7.4	0.1	2	0.0	3	0.0	0.0	21	
		2.4	0.9	0.0	9.5	0.0	14.3	0.0	0.0	0.4	
		0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0		
FS07	0	0.0	0.0	0.0	2	0.0	0	0.0	0.0	5	
		0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FS13	1	6.3	0.4	0.0	1	0.0	1	0.0	0.0	16	
		0.4	0.5	0.0	6.3	0.3	6.3	0.0	0.0	0.3	
		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FS08	0	0.0	0.0	0.0	0	0.0	0	0.0	0.0	1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL		255	5.0		212	3.1	547	0.2	9	5059	
			5.0		4.2	7.7	10.0	0.2	0.2	100.0	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER ARM		BACK	CHEST			ELBOW	KNIFE	LOWER LE	ABDOMEN	WIDLE BU	PELVIC	H ANKLE	FO	ROW TOTAL
	A	B	C	E	K	G	L	M	O	P	Q				
EW02	3 7.0 2.0 0.1	1 2.3 0.5 0.0	10 23.3 2.0 0.2	0 0.0 0.0 0.0	1 2.3 0.1 0.0	3 7.0 0.4 0.1	4 9.3 1.1 0.1	0 0.0 0.0 0.0	1 2.3 0.4 0.0	0 0.0 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	43 0.8		
EW04	1 6.3 0.7 0.0	0 0.0 0.0 0.0	7 43.8 1.9 0.1	0 0.0 0.0 0.0	1 6.3 0.1 0.0	2 12.5 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 6.3 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 0.3			
EW10	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1			
EY09	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0			
EY13	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0			
EY97	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0			
MC01	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.1 0.0	0 0.0 0.0 0.0	2 50.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1			
COLUMN TOTAL	149 2.9	208 4.1	363 7.2	218 4.3	764 15.1	797 15.8	373 7.4	8 0.2	278 5.5	478 9.4	5059 100.0				

195

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH	WRIST-HA ND	UPPER LIMB	EX TRUNK	ROW TOTAL	
	R	S	S	L		W	X	Y		
FW02	3	0		2		6		0	43 0.0	
	7.0	20.9		4.7		14.0		0.0		
	1.2	4.2		0.5		1.1		0.0		
	0.1	0.2		0.0		0.1		0.0		
FW04	2	1		1		0		0	16 0.3	
	12.5	6.3		6.3		0.0		0.0		
	0.8	0.5		0.3		0.0		0.0		
	0.0	0.0		0.0		0.0		0.0		
FW10	1	0		1		0		0	3 0.1	
	33.3	0.0		33.3		0.0		0.0		
	0.4	0.0		0.3		0.0		0.0		
	0.0	0.0		0.0		0.0		0.0		
FY00	0	0		0		1		0	1 0.0	
	0.0	0.0		0.0		100.0		0.0		
	0.0	0.0		0.0		0.2		0.0		
	0.0	0.0		0.0		0.0		0.0		
FY13	0	0		0		1		0	1 0.0	
	0.0	0.0		0.0		100.0		0.0		
	0.0	0.0		0.0		0.2		0.0		
	0.0	0.0		0.0		0.0		0.0		
FY97	0	1		0		0		0	1 0.0	
	0.0	100.0		0.0		0.0		0.0		
	0.0	0.5		0.0		0.0		0.0		
	0.0	0.0		0.0		0.0		0.0		
MC01	0	3		1		0		0	4 0.1	
	0.0	0.0		25.0		0.0		0.0		
	0.0	0.0		0.3		0.0		0.0		
	0.0	0.0		0.0		0.0		0.0		
COLUMN TOTAL	255 5.0	212 4.2		301 7.7		547 10.8		9 0.2	9 0.2	5059 100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT CUL PCT TOT PCT	UPPER AR		BACK	CRST	ELBOW	KNEE	LOWER LE		ABDOMEN	WHOLE B	PELVIC	ANKLE	FO	ROW TOTAL
	A	B	C	E	K	G	L	M	O	P	Q			
MC02	0	11	7	1	75	28	115	0	20	5	321			
	0.0	3.4	2.2	0.3	23.4	8.7	35.8	0.0	6.2	1.6	6.3			
	0.0	5.3	1.9	0.5	9.8	3.5	30.8	0.0	7.2	1.0				
	0.0	0.2	0.1	0.0	1.5	0.6	2.3	0.0	0.4	0.1				
MC03	0	0	4	0	2	3	9	0	4	1	27			
	0.0	0.0	14.8	0.0	7.4	11.1	31.3	0.0	14.8	3.7	0.5			
	0.0	0.0	1.1	0.0	0.3	0.4	2.4	0.0	1.4	0.2				
	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.0				
MC04	0	0	0	1	2	0	1	0	0	1	8			
	0.0	0.0	0.0	12.5	25.0	0.0	12.5	0.0	0.0	12.5	0.2			
	0.0	0.0	0.0	0.5	0.3	0.0	0.3	0.0	0.0	0.2				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MC05	13	18	69	8	163	126	102	0	46	44	867			
	1.5	2.1	8.0	0.9	18.8	14.5	11.8	0.0	5.3	5.1	17.1			
	8.7	8.7	19.0	3.7	21.3	15.8	27.3	0.0	16.5	9.2				
	0.3	0.4	1.4	0.2	3.2	2.5	2.0	0.0	0.9	0.9				
MC06	0	1	1	0	2	1	13	0	1	0	20			
	0.0	5.0	5.0	0.0	10.0	5.0	65.0	0.0	5.0	0.0	0.4			
	0.0	0.5	0.3	0.0	0.3	0.1	3.5	0.0	0.4	0.0				
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0				
MC07	3	1	5	1	8	7	4	0	1	2	42			
	7.1	2.4	11.9	2.4	19.0	16.7	9.5	0.0	2.4	4.8	0.8			
	2.0	0.5	1.4	0.5	1.0	0.9	1.1	0.0	0.4	0.4				
	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0				
MC08	0	0	3	0	1	2	5	0	3	0	14			
	0.0	0.0	21.4	0.0	7.1	14.3	35.7	0.0	21.4	0.0	0.3			
	0.0	0.0	0.6	0.0	0.1	0.3	1.3	0.0	1.1	0.0				
	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0				
COLUMN TOTAL	149	208	363	218	764	797	373	8	278	478	5059			
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4	100.0			

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TDI PCT	FOREARM	SHOULDER		THIGH	WRIST-HA ND	UPPER LIMB	EX TRUNK	ROW TOTAL
	R	S	S	T	W	X	Y	
MC02	2 0.6 0.8 0.0	1 0.3 0.5 0.0		52 16.2 13.3 1.0	4 1.2 0.7 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	321 6.3
MC03	0 0.0 0.0 0.0	1 3.7 0.5 0.0		1 1.7 0.3 0.0	2 7.4 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	27 0.5
MC04	0 0.0 0.0 0.0	0 0.0 0.0 0.0		0 0.0 0.0 0.0	3 37.5 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 0.2
MC05	25 2.9 9.8 0.5	10 1.2 4.7 0.2		123 14.2 31.5 2.4	118 13.6 21.6 2.3	1 0.1 11.1 0.0	1 0.1 11.1 0.0	867 17.1
MC06	0 0.0 0.0 0.0	0 0.0 0.0 0.0		1 5.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	20 0.4
MC07	3 7.1 1.2 0.1	1 2.4 0.5 0.0		1 2.4 0.3 0.0	5 11.9 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	42 0.8
MC08	0 0.0 0.0 0.0	0 0.0 0.0 0.0		0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	14 0.3
COLUMN TOTAL	255 5.0	212 4.2		391 7.7	547 10.8	9 0.2	9 0.2	5059 100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR BACK		CHES1	FLBDW	KNEE	LOWER LE ADDUMEN			WHOLE BO	PELVIC	H ANKLE	FO	ROW TOTAL
	A	B	C	E	K	G	L	M	U	IP	OT		
MC09	3 6.4 2.0 0.1	1 2.1 0.5 0.0	7 14.9 1.9 0.1	0 0.0 0.0 0.0	7 14.9 0.9 0.1	10 21.3 1.3 0.2	3 6.4 0.8 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 4.3 0.4 0.0			47 0.9
MC11	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 20.0 0.3 0.0	0 0.0 0.0 0.0	2 40.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 20.0 0.2 0.0			5 0.1
MC12	1 1.1 0.7 0.0	2 2.2 1.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	11 12.2 1.4 0.2	33 36.7 4.1 0.7	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 2.2 0.7 0.0	28 31.1 5.9 0.6		90 1.8
MC13	0 0.0 0.0 0.0	1 14.3 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 42.9 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 14.3 0.4 0.0	1 14.3 0.2 0.0		7 0.1
MC14	0 0.0 0.0 0.0	1 8.3 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 25.0 0.4 0.1	2 16.7 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 33.3 0.8 0.1		12 0.2
MC15	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.1 0.0	1 50.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0		2 0.0
MC16	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 50.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 50.0 0.4 0.0		4 0.1
COLUMN TOTAL	144 2.9	208 4.1	363 7.2	218 4.3	764 15.1	797 15.8	373 7.4	8 0.2	278 5.5	478 9.4		5859 100.0	

Continued



Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA NO		UPPER EXTREMITIE		TRUNK		ROW TOTAL
	R	S	S	T	T	W	X	X	Y	Y			
MC09	0	0	0	0	12.8	17.0	0	0	0	0	0	0	47 0.0
	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
MC11	1	0	0	0	0	0	0	0	0	0	0	0	5 0.1
	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC12	0	0	0	13	14.4	0	0	0	0	0	0	0	90 1.8
	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC13	0	0	0	1	14.3	0	0	0	0	0	0	0	7 0.1
	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC14	0	0	0	1	8.3	1	1	0	0	0	0	0	12 0.2
	0.0	0.0	0.0	0.3	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC15	0	0	0	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC16	0	0	0	0	0	0	0	0	0	0	0	0	4 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	391	547	9	9	5059						100.0
	5.0	4.2	7.7	10.8	0.2	0.2							

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNIE	LOWER LE	ADDOMEN	WHOLE BU	PELVIC H	ANKLE H	FO	HOW TOTAL
	A	B	C	E	K	L	M	U	P	Q	OT			
MC17	0	0	2	1	2	4	5	0	3	3				31
	0.0	0.0	0.5	3.2	6.5	12.9	16.1	0.0	9.7	9.7				0.6
	0.0	0.0	0.6	0.5	0.3	0.5	1.3	0.0	1.1	0.6				
	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1				
MC18	0	0	0	0	1	3	0	0	0	0				4
	0.0	0.0	0.0	0.0	25.0	75.0	0.0	0.0	0.0	0.0				0.1
	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0				
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0				
MC20	0	0	0	0	4	16	0	0	1	1				23
	0.0	0.0	0.0	0.0	17.4	69.6	0.0	0.0	4.3	4.3				0.5
	0.0	0.0	0.0	0.0	0.5	2.0	0.0	0.0	0.4	0.2				
	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0				
MC21	0	0	0	0	16	7	0	0	1	10				37
	0.0	0.0	0.0	0.0	43.2	18.9	0.0	0.0	2.7	27.0				0.7
	0.0	0.0	0.0	0.0	2.1	0.9	0.0	0.0	0.4	2.1				
	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.2				
MC22	0	2	1	0	28	119	0	0	5	84				256
	0.0	0.8	0.4	0.0	10.9	46.5	0.0	0.0	2.0	32.8				5.1
	0.0	1.0	0.3	0.0	3.7	14.9	0.0	0.0	1.8	17.6				
	0.0	0.0	0.0	0.0	0.6	2.4	0.0	0.0	0.1	1.7				
MC23	0	0	0	0	1	1	0	0	0	2				4
	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	50.0				0.1
	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.4				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MC24	0	0	0	0	0	1	0	0	0	2				5
	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	40.0				0.1
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4				
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
COLUMN TOTAL	149	208	363	218	764	797	373	8	278	478				5059
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4				100.0

201

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH	WRIST-HA ND	UPPER EX TREMITY	TRUNK	ROW TOTAL
	R	S	S	T		M	X	Y	
MC17	3 9.7 1.2 0.1	0 0.0 0.0 0.0	3 9.7 0.8 0.1	4 12.9 0.7 0.1	1 3.2 11.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	31 0.6
MC18	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
MC20	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 4.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	23 0.5
MC21	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 8.1 0.8 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	37 0.7
MC22	1 0.4 0.4 0.0	0 0.0 0.0 0.0	11 4.3 2.8 0.2	3 1.2 0.5 0.1	0 0.0 0.0 0.0	2 0.8 22.2 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	256 5.1
MC23	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
MC24	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 40.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
COLUMN TOTAL	255 5.0	212 4.2	391 7.7	547 10.0	9 0.2	9 0.2	9 0.2	9 0.2	5059 100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

MC	COUNT ROW PCT CUL PCT TOT PCT	UPPER AR		BACK	CHEST	ELBOW	KNEE	LOWER LE		ADDOMEN	WHOLE BO DY	PELVIC IP	H OT	ANKLE FO	HOW TOTAL
		A	B					C	E						
MC25	1 9.1 0.7 0.0	1 9.1 0.5 0.0	0 0.0 0.0 0.0	1 9.1 0.5 0.0	0 0.0 0.0 0.0	1 9.1 0.5 0.0	0 0.0 0.0 0.0	5 45.5 0.6 0.1	0 0.0 0.0 0.0	1 9.1 12.5 0.0	0 0.0 0.0 0.0	1 9.1 0.2 0.0	1 9.1 0.2 0.0	11 0.2	
MC26	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	6 22.2 0.8 0.1	9 33.3 1.1 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	11 40.7 2.3 0.2	11 0.5		
MC27	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.2 0.0	1 0.0		
MC29	0 0.0 0.0 0.0	4 50.0 1.9 0.1	2 25.0 0.6 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 0.2 0.0	1 0.2		
MC31	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.2 0.0	1 0.0		
MC32	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.2 0.0	1 0.0		
MC33	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 14.3 0.1 0.0	1 14.3 0.1 0.0	1 14.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 71.4 1.0 0.1	7 0.1		
COLUMN TOTAL	149 2.9	208 4.1	36.3 7.2	214 4.3	764 15.1	797 15.8	373 7.4	8 0.2	278 5.5	478 9.4	5089 100.0				

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH	WRIST-HA ND		UPPER EXTREMITIE	EX TRUNK	ROW TOTAL
	R	S	S	T	T	W	X	Y		
MC25	0	0	0	1	0	0	0	0	0	11 0.2
	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC26	1	0	0	0	0	0	0	0	0	27 0.5
	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC27	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC29	0	0	0	0	0	0	0	0	0	8 0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC31	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC32	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC33	0	0	0	0	0	0	0	0	0	7 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255 5.0	212 4.2	391 7.7	547 10.9	9 0.2	9 0.2	5059 100.0			

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNIFE	LOWER LE		ABDOMEN	WHOLE	DD	PELVIC	H	ANKLE	FO	ROW TOTAL
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
MC34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	0.0	10	62.5	16
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	2.1		0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
MC35	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	42.9	3	2	28.6	7
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.1	0.4			0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0			
MC36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	1		3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	33.3		0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
MC37	11.1	11.1	11.1	0.0	0.0	0.0	0.0	0.0	11.1	11.1	11.1	0.0	0.0	0.0	0.0		9
	0.7	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.3	12.5	0.0	0.0	0.0	0.0	0.0		0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MC97	0.0	3	6	0.0	1	3	2	0.0	0.0	0.0	0.0	0.0	1	0.0			16
	0.0	16.7	33.3	0.0	5.6	16.7	11.1	0.0	0.0	0.0	0.0	0.0	5.6	0.0			0.4
	0.0	1.4	1.7	0.0	0.1	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.4	0.0			
	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
MC98	0.0	0.0	5.3	5.3	5.3	5.3	26.3	0.0	0.0	0.0	0.0	0.0	0.0	4			19
	0.0	0.0	0.3	0.5	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1			0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1			
PU03	0.0	0.0	0.0	0.0	33.3	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2			9
	0.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2			0.2
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4			
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
COLUMN TOTAL	149	208	363	216	764	797	373	8	278	478	5059						100.0
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4							

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA ND		UPPER EX TREMITIE		TRUNK		ROW TOTAL
	R	S	S	T	W	X	Y						
MC 34	0	0	0	0	0	0	0	0	0	0	0	0	16
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC 35	0	0	0	0	1	0	0	0	0	0	0	0	7
	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC 36	0	0	0	0	0	0	0	0	0	0	0	0	3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC 37	0	0	3	1	1	0	0	0	0	0	0	0	9
	0.0	0.0	33.3	11.1	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC 97	0	1	1	1	0	0	0	0	0	0	0	0	18
	0.0	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC 98	1	1	3	1	1	0	1	0	1	1	1	1	19
	5.3	5.3	15.0	5.3	5.3	0.0	5.3	0.0	0.0	5.3	5.3	5.3	0.4
	0.4	0.5	0.2	0.2	0.2	0.0	0.2	0.0	0.0	11.1	11.1	11.1	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DP 03	0	1	1	1	0	0	0	0	0	0	0	0	9
	0.0	11.1	11.1	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	391	547	9	9	9	9	9	9	9	9	5059
	5.0	4.2	7.7	10.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR BACK			CHEST C	ELBOW E	KNEE K	LOWER LE		WHOLE DY	PELVIC IP	H ANKLE OT	ROW TOTAL
	A	B					G	M				
PR25	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PF01	1 25.0 0.7 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.5 0.0	0 0.0 0.0 0.0	2 50.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
PF03	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 14.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 14.3 0.1 0.0	1 14.3 0.1 0.0	1 14.3 0.3 0.0	0 0.0 0.0 0.0	2 28.6 0.7 0.0	0 0.0 0.0 0.0	7 0.1
PF04	1 25.0 0.7 0.0	1 25.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.4 0.0	0 0.0 0.0 0.0	4 0.1
PF05	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PS02	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PS03	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 40.0 1.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 20.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 10.0 0.2 0.2	10 0.2
COLUMN TOTAL	149 2.9	208 4.1	363 7.2	218 4.3	764 15.1	797 15.8	373 7.4	8 0.2	278 5.5	478 9.4	5059 100.0	

Continued



Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM R	SHOULDER S		THIGH T		WRIST-HA ND W	UPPER EX TRUNK TREMITE X Y		ROW TOTAL
		S	T	T	X		Y		
PF00	0 0.0 0.0	0 0.0 0.0	2 100.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	2 0.0
PF01	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	4 0.1
PF03	1 14.3 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
PF04	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 3.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
PF05	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PF07	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 66.7 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PF08	1 10.0 0.4 0.0	0 0.0 0.0 0.0	1 10.0 0.3 0.0	1 10.0 0.2 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 0.2
COLUMN TOTAL	255 5.0	212 4.2	301 7.7	547 10.8	9 0.7	9 0.2	9 0.2	5059 100.0	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK		CHEST		ELBOW		KNEE		LOWER LE		ABDOMEN		WHOLE B		PELVIC		H ANKLE		ROW TOTAL	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	TOTAL		
PS06	1 33.3 0.7 0.0	0 0.0 0.0 0.0	1 33.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1	
PS14	0 0.0 0.0 0.0	1 10.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 10.0 0.1 0.0	1 10.0 0.1 0.0	1 10.0 0.3 0.0	0 0.0 0.0 0.0	2 20.0 0.7 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 0.3	
PS21	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.1 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0	
PS23	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 40.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 20.0 0.4 0.0	1 20.0 0.2 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1	
PS37	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1	
PS45	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0	
PS46	1 33.3 0.7 0.0	0 0.0 0.0 0.0	1 33.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
COLUMN TOTAL	149 2.9	208 4.1	36.3 7.2	218 4.3	704 15.1	797 15.8	373 7.4	8 0.2	278 5.5	478 9.4	5059 100.0											

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA ND		UPPER EX TRFMITIE		TRUNK		ROW TOTAL
	R	S	S	T	W	X	Y						
PS06	0	0	0	0	1	0	0	0	0	0	0	0	3
	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS14	1	0	0	0	3	0	0	0	0	0	0	0	10
	10.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS21	0	0	0	0	0	0	0	0	0	0	0	0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS23	0	0	0	0	1	0	0	0	0	0	0	0	5
	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS37	0	1	0	0	2	0	0	0	0	0	0	0	3
	0.0	33.3	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS45	0	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PS46	0	0	0	0	1	0	0	0	0	0	0	0	3
	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	391	547	9	9	9	9	9	9	9	9	5059
	5.0	4.2	7.7	10.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	UPPER AR		CHEST			ELBOW		KNEE		LOWER LE		ADDOMEN		WHOLE BO		PELVIC H		ANKLE FO		HOW TOTAL
	A	B	C	E	K	G	L	M	DY	IP	OT									
PT05	50.0 0.7 0.0	0.0 0.0 0.0	50.0 0.3 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	2 0.0	
TH01	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	2 50.0 0.3	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	4 0.1	
TH03	0.0 0.0 0.0	0.0 0.0 0.0	3 42.0 0.8	0.0 0.0 0.0	1 14.3 0.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	7 0.1	
TH25	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	1 50.0 0.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	2 0.0	
TS21	1 4.3 0.7 0.0	1 4.3 0.5 0.0	5 21.7 1.4 0.1	3 13.0 1.4 0.1	0.0 0.0 0.0	0.0 0.0 0.0	3 13.0 0.4 0.1	4 17.4 1.1 0.1	1 4.3 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	1 4.3 0.2 0.0	1 4.3 0.2 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	23 0.5	
TS27	1 14.3 0.7 0.0	1 14.3 0.5 0.0	2 28.6 0.6 0.0	1 14.3 0.5 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	7 0.1	
TS97	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0	
COLUMN TOTAL	149 2.9	208 4.1	363 7.2	218 4.3	764 15.1	797 15.8	373 7.4	8 0.2	276 5.5	478 9.4	50.0 100.0									

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA NH		UPPER LIMB		EX TRUNK		ROW TOTAL
	R	S	S	T	W	X	Y						
PT05	0	0	0	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
T001	1	0	0	0	1	0	0	0	0	0	0	0	4 0.1
	25.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TR03	0	0	1	1	2	0	0	0	0	0	0	0	7 0.1
	0.0	0.0	0.0	14.3	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TR25	0	1	0	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TS21	1	0	2	1	1	0	0	0	0	0	0	0	23 0.5
	4.3	0.0	8.7	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	0.5	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TS27	1	0	1	1	0	0	0	0	0	0	0	0	7 0.1
	14.3	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TS97	0	0	0	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	321	547	9	9	9	9	9	9	9	9	5059 100.0
	5.0	4.2	7.7	10.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

	COUNT		I UPPER ARM	D BACK	C CHEST	E ELBOW	K KNEE	G LOWER LEG	M ABDOMEN	O WHOLE BODY	P DELVIC HIP	Q ANKLE FOOT	POW TOTAL
	ROW	CUL											
	PCT	PCT											
TS9A	0	0	0	0	0	0	0	1	1	0	0	0	4 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	
VB01	0	0	3	0	0	1	2	0	0	0	0	2	10 0.2
	0.0	0.0	30.0	0.0	0.0	10.0	20.0	0.0	0.0	0.0	0.0	20.0	
	0.0	0.0	0.8	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.4	
VB03	0	0	0	0	0	0	1	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
VB25	0	0	3	0	0	0	0	0	0	0	0	0	5 0.1
	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF01	0	0	0	0	0	0	2	0	0	0	0	3	5 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	60.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.6	
VF03	0	0	0	1	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF05	0	0	0	1	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	149	208	363	215	764	797	373	8	278	478	5059	100.0	
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4			

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FORCAPH		SHOULDER		THIGH	WRIST-HA ND	UPPER EX TRMITIE	TRUNK	ROW TOTAL
	R	S	S	T	T	W	X	Y	
TS98	1 25.0 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
VI01	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 20.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 0.2
VI03	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
VI25	1 20.0 0.4 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 20.0 0.2 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
VI01	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
VI03	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
VI05	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
COLUMN TOTAL	255 5.0	212 4.7	391 7.7	547 10.8	9 0.2	9 0.2	5059 100.0		

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

CDUNT ROW PCT COL PCT TOT PCT	UPPER AR		BACK	CHEST		ELBOW	KNEE	LOWER LE		ABDOMEN	WHOLE DY	NO IP	PELVIC H	ANKLE OT	FO	ROW TOTAL
	A	D	D	C	E	K	G	L	M	O	P	Q				
VF97	0	0	2	0	0	0	0	0	1	0	1	0	0	0	4	
	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
VS01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
VS03	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	
	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
VS05	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
VS25	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	
	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
VS33	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	
	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.7	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9997	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COL D4N TOTAL	149	208	363	218	764	797	373	0	278	478	5059				100.0	
	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4						

Continued



Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREARM		SHOULDER		THIGH		WRIST-HA ND		UPPER EX TREMITIE		TRUNK		ROW TOTAL
	R	S	S	T	T	W	X	Y	Y				
VF97	0	0	0	0	0	0	0	0	0	0	0	0	4 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS01	0	0	0	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS03	1	0	0	0	0	0	0	0	0	0	0	0	3 0.1
	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS05	0	0	0	0	0	1	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS25	0	0	0	0	0	1	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS33	0	0	0	0	0	0	0	0	0	0	0	0	2 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9997	0	0	0	0	0	0	0	0	0	0	0	0	1 0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	255	212	391	547	9	9	5059						100.0
	5.0	4.2	7.7	10.8	0.2	0.2							

Continued

Table 8.7.3

Injury Contact Surface by Rider Body Region (Somatic Injuries)

Continued

COUNT	UPPER	AR	BACK	CHEST	ELBOW	KNEE	LOWER LE	ABDOMEN	WHOLE BO	PELVIC H	ANKLE FU	ROW
ROW PCT	A	B	C	E	K	L	M	O	P	Q	TOTAL	
COL PCT												
TOT PCT												
9998	2	1	0	0	3	1	0	0	1	1	16	
	12.5	6.3	0.0	0.0	18.8	6.3	0.0	0.0	6.3	6.3	0.3	
	1.3	0.5	0.0	0.0	0.4	0.1	0.0	0.0	0.4	0.2		
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
COLUMN	149	208	363	218	764	797	373	8	278	478	5059	
TOTAL	2.9	4.1	7.2	4.3	15.1	15.8	7.4	0.2	5.5	9.4	100.0	

COUNT	FOREARM	SHOULDER	THIGH	WRIST-HA	UPPER EX	TRUNK	ROW
ROW PCT	R	S	T	W	X	Y	TOTAL
COL PCT							
TOT PCT							
9998	3	0	3	1	0	0	16
	18.8	0.0	18.8	6.3	0.0	0.0	0.3
	1.2	0.0	0.8	0.2	0.0	0.0	
	0.1	0.0	0.1	0.0	0.0	0.0	
COLUMN	255	212	391	547	9	9	5059
TOTAL	5.0	4.2	7.7	10.8	0.2	0.2	100.0

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

COUNT ROW PCT COL PCT TDT PCT	INONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL	
	0	1	2	3	4	5	6		
BS03	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CB01	0 0.0 0.0 0.0	22 50.0 0.6 0.4	11 25.0 1.6 0.2	5 11.4 1.3 0.1	5 11.4 2.7 0.1	1 2.3 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	44 0.9
CB03	0 0.0 0.0 0.0	12 100.0 0.3 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	12 0.2
CB14	0 0.0 0.0 0.0	2 66.7 0.1 0.0	0 0.0 0.0 0.0	1 33.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
CB16	0 0.0 0.0 0.0	16 88.9 0.4 0.3	1 5.6 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 5.6 5.3 0.0	0 0.0 0.0 0.0	18 0.4
CB18	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CB19	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CB20	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CB25	0 0.0 0.0 0.0	22 66.7 0.6 0.4	5 15.2 0.7 0.1	6 18.2 1.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	33 0.7
CB27	0 0.0 0.0 0.0	2 66.7 0.1 0.0	0 0.0 0.0 0.0	1 33.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
CB37	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
CB98	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CF01	0 0.0 0.0 0.0	64 46.0 1.7 1.3	37 26.6 5.3 0.7	22 15.8 5.6 0.4	15 10.8 8.0 0.3	1 0.7 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	139 2.7
CF02	0 0.0 0.0 0.0	14 82.4 0.4 0.3	2 11.8 0.3 0.0	1 5.9 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	17 0.3
COL UMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
	0	1	2	3	4	5	6	
CF03	0 0.0 0.0 0.0	50 47.2 1.4 1.0	22 20.8 3.1 0.4	16 15.1 4.0 0.3	12 11.3 6.4 0.2	5 4.7 7.4 0.1	1 0.9 5.3 0.0	106 2.1
CF04	0 0.0 0.0 0.0	6 60.0 0.2 0.1	0 0.0 0.0 0.0	2 20.0 0.5 0.0	1 10.0 0.5 0.0	1 10.0 1.5 0.0	0 0.0 0.0 0.0	10 0.2
CF05	0 0.0 0.0 0.0	57 72.2 1.5 1.1	9 11.4 1.3 0.2	9 11.4 2.3 0.2	2 2.5 1.1 0.0	2 2.5 2.9 0.0	0 0.0 0.0 0.0	79 1.6
CF09	0 0.0 0.0 0.0	5 83.3 0.1 0.1	1 16.7 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	6 0.1
CF10	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.3 0.0	1 50.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
CF19	0 0.0 0.0 0.0	4 57.1 0.1 0.1	3 42.9 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
CF20	0 0.0 0.0 0.0	11 68.8 0.3 0.2	4 25.0 0.6 0.1	1 6.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 0.3
CF21	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CF27	0 0.0 0.0 0.0	5 29.4 0.1 0.1	3 17.6 0.4 0.1	4 23.5 1.0 0.1	3 17.6 1.6 0.1	2 11.8 2.9 0.0	0 0.0 0.0 0.0	17 0.3
CF46	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CF9B	0 0.0 0.0 0.0	1 33.3 0.0 0.0	2 66.7 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
CS01	0 0.0 0.0 0.0	21 61.8 0.6 0.4	9 26.5 1.3 0.2	3 8.8 0.8 0.1	1 2.9 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	34 0.7
CS02	0 0.0 0.0 0.0	43 77.6 2.2 1.5	11 10.3 1.6 0.2	4 3.7 1.0 0.1	4 3.7 2.1 0.1	5 4.7 7.4 0.1	0 0.0 0.0 0.0	107 2.1
CS03	0 0.0 0.0 0.0	46 51.7 1.2 0.9	17 19.1 2.4 0.3	19 21.3 4.8 0.4	6 6.7 3.2 0.1	0 0.0 0.0 0.0	1 1.1 5.3 0.0	89 1.8
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
	0	1	2	3	4	5	6	
CS05	0 0.0 0.0 0.0	15 42.9 0.4 0.3	4 11.4 0.6 0.1	7 20.0 1.8 0.1	3 8.6 1.6 0.1	5 14.3 7.4 0.1	1 2.9 5.3 0.0	35 0.7
CS06	0 0.0 0.0 0.0	69 78.4 1.9 1.4	12 13.6 1.7 0.2	5 5.7 1.3 0.1	2 2.3 1.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	89 1.7
CS07	0 0.0 0.0 0.0	5 62.5 0.1 0.1	1 12.5 0.1 0.0	2 25.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 0.2
CS08	0 0.0 0.0 0.0	8 61.5 0.2 0.2	1 7.7 0.1 0.0	3 23.1 0.8 0.1	1 7.7 0.5 0.0	0 0.0 8.0 0.0	0 0.0 0.0 0.0	13 0.3
CS09	0 0.0 0.0 0.0	15 40.5 0.4 0.3	11 29.7 1.6 0.2	9 24.3 2.3 0.2	2 5.4 1.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	37 0.7
CS10	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
CS11	0 0.0 0.0 0.0	24 66.7 0.6 0.5	6 16.7 0.9 0.1	4 11.1 1.0 0.1	0 0.0 0.0 0.0	1 2.8 1.5 0.0	1 2.8 5.3 0.0	36 0.7
CS12	0 0.0 0.0 0.0	21 87.5 0.6 0.4	2 8.3 0.3 0.0	1 4.2 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	24 0.5
CS13	0 0.0 0.0 0.0	7 53.8 0.2 0.1	5 38.5 0.7 0.1	1 7.7 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	13 0.3
CS14	0 0.0 0.0 0.0	79 82.3 2.1 1.6	10 10.4 1.4 0.2	3 3.1 0.8 0.1	3 3.1 1.6 0.1	1 1.0 1.5 0.0	0 0.0 0.0 0.0	96 1.9
CS15	0 0.0 0.0 0.0	6 35.3 0.2 0.1	5 29.4 0.7 0.1	2 11.8 0.5 0.0	0 0.0 0.0 0.0	2 11.8 2.9 0.0	2 11.8 10.5 0.0	17 0.3
CS19	0 0.0 0.0 0.0	1 25.0 0.0 0.0	1 25.0 0.1 0.0	0 0.0 0.0 0.0	1 25.0 0.5 0.0	1 25.0 1.5 0.0	0 0.0 0.0 0.0	4 0.1
CS20	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
CS21	0 0.0 0.0 0.0	9 52.9 0.2 0.2	4 23.5 0.6 0.1	3 17.6 0.8 0.1	1 5.9 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	17 0.3
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

	COUNT ROW PCT COL PCT TOT PCT	1	2	3	4	5	6	ROW TOTAL	
		NONE 0	MINOR 1	MODERATE 2	SEVERE 3	SERIOUS 4	CRITICAL 5		FATAL 6
CS22	0 0.0 0.0 0.0	2 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
CS23	0 0.0 0.0 0.0	9 81.8 0.2 0.2	0 0.0 0.0 0.0	2 18.2 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	11 0.2
CS25	0 0.0 0.0 0.0	16 72.7 0.4 0.3	3 13.6 0.4 0.1	3 13.6 0.8 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	22 0.4
CS27	0 0.0 0.0 0.0	2 66.7 0.1 0.0	1 33.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
CS29	0 0.0 0.0 0.0	24 75.0 0.6 0.5	4 12.5 0.6 0.1	3 9.4 0.8 0.1	0 0.0 0.0 0.0	1 3.1 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	32 0.6
CS31	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 75.0 0.4 0.1	1 25.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
CS35	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CS37	0 0.0 0.0 0.0	8 88.9 0.2 0.2	0 0.0 0.0 0.0	1 11.1 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 0.2
CS43	0 0.0 0.0 0.0	5 83.3 0.1 0.1	1 16.7 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	6 0.1
CS45	0 0.0 0.0 0.0	6 85.7 0.2 0.1	1 14.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
CS98	0 0.0 0.0 0.0	3 75.0 0.1 0.1	1 25.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
CT04	0 0.0 0.0 0.0	8 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 0.2
CT05	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CT10	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL	
	0	1	2	3	4	5	6		
CT16	0 0.0 0.0 0.0	2 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
CT38	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
CT97	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
EA01	1 0.1 100.0 0.0	1015 87.5 27.5 20.0	102 8.8 14.6 2.0	27 2.3 6.8 0.5	10 0.9 5.3 0.2	5 0.4 7.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1160 22.9
EA06	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
EC01	0 0.0 0.0 0.0	202 90.2 5.3 4.0	12 5.4 1.7 0.2	8 3.6 2.0 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.9 10.8 0.0	0 0.0 0.0 0.0	224 4.4
EC04	0 0.0 0.0 0.0	3 75.0 0.1 0.1	0 0.0 0.0 0.0	1 25.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
EC06	0 0.0 0.0 0.0	27 67.5 0.7 0.5	10 25.0 1.4 0.2	1 2.5 0.3 0.0	1 2.5 0.5 0.0	1 2.5 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	40 0.8
EC11	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
EC13	0 0.0 0.0 0.0	15 83.3 0.4 0.3	3 16.7 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	18 0.4
EG11	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
EM02	0 0.0 0.0 0.0	10 21.7 0.3 0.2	10 21.7 1.4 0.2	0 0.0 2.0 0.2	8 17.4 4.3 0.2	7 15.2 10.3 0.1	3 6.5 15.8 0.1	0 0.0 0.0 0.0	46 0.9
EM04	0 0.0 0.0 0.0	20 46.5 0.5 0.4	13 30.2 1.9 0.3	7 16.3 1.8 0.1	2 4.7 1.1 0.0	1 2.3 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	43 0.8
EM08	0 0.0 0.0 0.0	7 77.8 0.2 0.1	2 22.2 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 0.2
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.0	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

	COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
		0	1	2	3	4	5	6	
EM10	0 0.0 0.0 0.0	3 60.0 0.1 0.1	1 20.0 0.1 0.0	0 0.0 0.0 0.0	1 20.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
EM12	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
ES01	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
FS03	0 0.0 0.0 0.0	16 76.2 0.4 0.3	1 4.0 0.1 0.0	3 14.3 0.8 0.1	1 4.8 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	21 0.4
ES07	0 0.0 0.0 0.0	5 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
ES13	0 0.0 0.0 0.0	8 50.0 0.2 0.2	1 6.3 0.1 0.0	3 18.8 0.8 0.1	2 12.5 1.1 0.0	2 12.5 2.9 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 0.3
ES98	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
EW02	0 0.0 0.0 0.0	22 50.0 0.6 0.4	7 15.9 1.0 0.1	9 20.5 2.3 0.2	5 11.4 2.7 0.1	1 2.3 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	44 0.9
EW04	0 0.0 0.0 0.0	2 12.5 0.1 0.0	6 37.5 0.9 0.1	5 31.3 1.3 0.1	2 12.5 1.1 0.0	1 6.3 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 0.3
FW10	0 0.0 0.0 0.0	2 66.7 0.1 0.0	0 0.0 0.0 0.0	1 33.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
EY09	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
EY13	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
EY97	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
MC01	0 0.0 0.0 0.0	3 75.0 0.1 0.1	0 0.0 0.0 0.0	1 25.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued



Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	I	NONE	MINDR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
MC02	0	248	47	17	7	2	0	321	
	0.0	77.3	14.6	5.3	2.2	0.6	0.0	6.3	
	0.0	6.7	6.7	4.3	3.7	2.9	0.0		
	0.0	4.9	0.9	0.3	0.1	0.0	0.0		
MC03	0	14	4	4	4	1	0	27	
	0.0	51.9	14.8	14.0	14.8	3.7	0.0	0.5	
	0.0	0.4	0.6	1.0	2.1	1.5	0.0		
	0.0	0.3	0.1	0.1	0.1	0.0	0.0		
MC04	0	7	0	0	1	0	0	8	
	0.0	87.5	0.0	0.0	12.5	0.0	0.0	0.2	
	0.0	0.2	0.0	0.0	0.5	0.0	0.0		
	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
MC05	0	672	107	56	24	9	1	869	
	0.0	77.3	12.3	6.4	2.8	1.0	0.1	17.2	
	0.0	18.2	15.3	14.1	12.8	13.2	5.3		
	0.0	13.3	2.1	1.1	0.5	0.2	0.0		
MC06	0	14	3	1	2	0	0	20	
	0.0	70.0	15.0	5.0	10.0	0.0	0.0	0.4	
	0.0	0.4	0.4	0.3	1.1	0.0	0.0		
	0.0	0.3	0.1	0.0	0.0	0.0	0.0		
MC07	0	32	4	2	1	2	1	42	
	0.0	76.2	9.5	4.0	2.4	4.8	2.4	0.8	
	0.0	0.9	0.6	0.5	0.5	2.9	5.3		
	0.0	0.6	0.1	0.0	0.0	0.0	0.0		
MC08	0	4	3	1	6	0	0	14	
	0.0	28.6	21.4	7.1	42.9	0.0	0.0	0.3	
	0.0	0.1	0.4	0.3	3.2	0.0	0.0		
	0.0	0.1	0.1	0.0	0.1	0.0	0.0		
MC09	0	45	0	2	0	0	0	47	
	0.0	95.7	0.0	4.3	0.0	0.0	0.0	0.9	
	0.0	1.2	0.0	0.5	0.0	0.0	0.0		
	0.0	0.9	0.0	0.0	0.0	0.0	0.0		
MC11	0	3	1	0	1	0	0	5	
	0.0	60.0	20.0	0.0	20.0	0.0	0.0	0.1	
	0.0	0.1	0.1	0.0	0.5	0.0	0.0		
	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
MC12	0	53	19	12	6	0	0	90	
	0.0	58.9	21.1	13.3	6.7	0.0	0.0	1.8	
	0.0	1.4	2.7	3.0	3.2	0.0	0.0		
	0.0	1.0	0.4	0.2	0.1	0.0	0.0		
MC13	0	7	0	0	0	0	0	7	
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.2	0.0	0.0	0.0	0.0	0.0		
	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
MC14	0	10	1	1	0	0	0	12	
	0.0	83.3	8.3	8.3	0.0	0.0	0.0	0.2	
	0.0	0.3	0.1	0.3	0.0	0.0	0.0		
	0.0	0.2	0.0	0.0	0.0	0.0	0.0		
MC15	0	1	0	1	0	0	0	2	
	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.3	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MC16	0	4	0	0	0	0	0	4	
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL	1	3696	699	396	187	68	19	5066	
	0.0	73.0	13.8	7.8	3.7	1.3	0.4	100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE 0	MINDR 1	MODERATE 2	SEVERE 3	SERIOUS 4	CRITICAL 5	FATAL 6	ROW TOTAL
MC17	0 0.0 0.0 0.0	22 71.0 0.6 0.4	5 16.1 0.7 0.1	3 9.7 0.8 0.1	1 3.2 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	31 0.6
MC18	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
MC20	0 0.0 0.0 0.0	12 52.2 0.3 0.2	4 17.4 0.6 0.1	4 17.4 1.0 0.1	3 13.0 1.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	23 0.5
MC21	0 0.0 0.0 0.0	33 89.2 0.9 0.7	3 8.1 0.4 0.1	1 2.7 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	37 0.7
MC22	0 0.0 0.0 0.0	156 60.9 4.2 3.1	59 23.0 8.4 1.2	26 10.2 6.6 0.5	15 5.9 8.0 0.3	0 0.0 0.0 0.0	0 0.0 0.0 0.0	256 5.1
MC23	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
MC24	0 0.0 0.0 0.0	5 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
MC25	0 0.0 0.0 0.0	5 45.5 0.1 0.1	4 36.4 0.6 0.1	1 9.1 0.3 0.0	1 9.1 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	11 0.2
MC26	0 0.0 0.0 0.0	16 59.3 0.4 0.3	4 14.8 0.6 0.1	3 11.1 0.8 0.1	4 14.8 2.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	27 0.5
MC27	0 0.0 0.0 0.0	2 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
MC29	0 0.0 0.0 0.0	5 62.5 0.1 0.1	1 12.5 0.1 0.0	1 12.5 0.3 0.0	0 0.0 0.0 0.0	1 12.5 1.5 0.0	0 0.0 0.0 0.0	8 0.2
MC31	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
MC32	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
MC33	0 0.0 0.0 0.0	4 57.1 0.1 0.1	2 28.6 0.3 0.0	1 14.3 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0

Continued

Table 8.7.4

## Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL	
	0	1	2	3	4	5	6		
MC34	0 0.0 0.0 0.0	14 87.5 0.4 0.3	2 12.5 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 0.3
MC35	0 0.0 0.0 0.0	6 85.7 0.2 0.1	1 14.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
MC36	0 0.0 0.0 0.0	2 66.7 0.1 0.0	1 33.3 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
MC37	0 0.0 0.0 0.0	0 0.0 0.0 0.0	8 88.9 1.1 0.2	0 0.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 11.1 5.3 0.0	9 0.2
MC97	0 0.0 0.0 0.0	9 50.0 0.2 0.2	3 16.7 0.4 0.1	2 11.1 0.5 0.0	2 11.1 1.1 0.0	2 11.1 2.9 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	18 0.4
MC98	0 0.0 0.0 0.0	8 42.1 0.2 0.2	9 47.4 1.3 0.2	1 5.3 0.3 0.0	1 5.3 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	19 0.4
PR03	0 0.0 0.0 0.0	7 77.8 0.2 0.1	0 0.0 0.0 0.0	2 22.2 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 0.2
PR25	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PF01	0 0.0 0.0 0.0	3 75.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
PF03	0 0.0 0.0 0.0	5 71.4 0.1 0.1	0 0.0 0.0 0.0	2 28.6 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
PF04	0 0.0 0.0 0.0	4 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
PF05	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 100.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PS02	0 0.0 0.0 0.0	3 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PS03	0 0.0 0.0 0.0	3 30.0 0.1 0.1	1 10.0 0.1 0.0	3 30.0 0.8 0.1	2 20.0 1.1 0.0	1 10.0 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 0.2
COLUMN TOTAL	1 0.0	3698 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	NONE	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL	
									0
PS06	0 0.0 0.0 0.0	3 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PS14	0 0.0 0.0 0.0	6 60.0 0.2 0.1	2 20.0 0.3 0.0	2 20.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 0.2
PS21	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
PS23	0 0.0 0.0 0.0	4 80.0 0.1 0.1	1 20.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 0.1
PS37	0 0.0 0.0 0.0	3 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PS45	0 0.0 0.0 0.0	1 100.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
PS46	0 0.0 0.0 0.0	3 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.1
PT05	0 0.0 0.0 0.0	2 100.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
TR01	0 0.0 0.0 0.0	3 75.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 0.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.1
TR03	0 0.0 0.0 0.0	2 28.6 0.1 0.0	0 0.0 0.0 0.0	3 42.9 0.8 0.1	1 14.3 0.5 0.0	1 14.3 1.5 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.1
TR25	0 0.0 0.0 0.0	1 50.0 0.0 0.0	1 50.0 0.1 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.0
TS21	0 0.0 0.0 0.0	9 34.1 0.2 0.2	3 13.0 0.4 0.1	7 30.4 1.8 0.1	2 8.7 1.1 0.0	2 8.7 2.9 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	23 0.5
TS27	0 0.0 0.0 0.0	1 14.3 0.0 0.0	1 14.3 0.1 0.0	3 42.9 0.8 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 28.6 10.5 0.0	0 0.0 0.0 0.0	7 0.1
TS97	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.0
COLUMN TOTAL	1 0.0	3696 73.0	699 13.8	396 7.8	187 3.7	68 1.3	19 0.4	5066 100.0	

Continued

Table 8.7.4

Contact Surface by Rider Somatic Injury Severity

Continued

	COUNT							ROW TOTAL	
	ROW PCT	NONE	MINDR	MODERATE	SEVERE	SERIOUS	CRITICAL		FATAL
	COL PCT	0	1	2	3	4	5	6	
	TOT PCT								
TS98		0	1	1	2	0	0	0	4
		0.0	25.0	25.0	50.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.1	0.5	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VB01		0	4	0	4	1	0	1	10
		0.0	40.0	0.0	40.0	10.0	0.0	10.0	0.2
		0.0	0.1	0.0	1.0	0.5	0.0	5.3	
		0.0	0.1	0.0	0.1	0.0	0.0	0.0	
VB03		0	1	0	0	0	0	0	1
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VB25		0	2	0	2	0	0	1	5
		0.0	40.0	0.0	40.0	0.0	0.0	20.0	0.1
		0.0	0.1	0.0	0.5	0.0	0.0	5.3	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF01		0	2	1	1	1	0	0	5
		0.0	40.0	20.0	20.0	20.0	0.0	0.0	0.1
		0.0	0.1	0.1	0.3	0.5	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF03		0	1	0	0	0	0	0	1
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF05		0	1	0	0	0	0	0	1
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF97		0	0	1	1	1	1	0	4
		0.0	0.0	25.0	25.0	25.0	25.0	0.0	0.1
		0.0	0.0	0.1	0.3	0.5	1.5	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS01		0	0	0	0	1	0	0	1
		0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.5	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS03		0	3	0	0	0	0	0	3
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	
VS05		0	2	0	0	0	0	0	2
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS25		0	1	1	0	0	0	0	2
		0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS33		0	2	0	0	0	0	0	2
		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9997		0	0	0	1	0	0	0	1
		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.3	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9998		0	13	2	1	0	0	0	16
		0.0	81.3	12.5	6.3	0.0	0.0	0.0	0.3
		0.0	0.4	0.3	0.3	0.0	0.0	0.0	
		0.0	0.3	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1	3696	699	396	107	60	19	5066
		0.0	73.0	13.8	7.8	3.7	1.3	0.4	100.0

Table 8.7.5a  
 Rider Head and Neck Injury  
 Motorcycle Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Contact Surface	MC02	5	0.4	0.4
	MC03	4	0.3	0.3
	MC05	26	2.0	2.0
	MC06	3	0.2	0.2
	MC07	14	1.1	1.1
	MC09	3	0.2	0.2
	MC11	2	0.2	0.2
	MC13	1	0.1	0.1
	MC14	6	0.5	0.5
	MC17	10	0.8	0.8
	MC37	2	0.2	0.2
	MC38	4	0.3	0.3
	MC97	6	0.5	0.5
	MC98	5	0.4	0.4

Table 8.7.5b  
Rider Head and Neck Injury  
Automobile Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Contact Surface	CB01	10	0.8	0.8
	CB03	1	0.1	0.1
	CB14	1	0.1	0.1
	CB16	5	0.4	0.4
	CB18	2	0.2	0.2
	CB19	9	0.7	0.7
	CB20	4	0.3	0.3
	CB25	1	0.1	0.1
	CB27	10	0.8	0.8
	CB29	6	0.5	0.5
	CB33	1	0.1	0.1
	CB37	1	0.1	0.1
	CB98	2	0.2	0.2
	CF01	18	1.4	1.4
	CF02	7	0.5	0.5
	CF03	1	0.1	0.1
	CF04	7	0.5	0.5
	CF05	11	0.9	0.9
	CF09	4	0.3	0.3
	CF10	2	0.2	0.2
	CF19	8	0.6	0.6
	CF20	22	1.7	1.7
	CF27	13	1.0	1.0
	CF98	1	0.1	0.1
	CS01	14	1.1	1.1
	CS02	7	0.5	0.5
	CS03	8	0.6	0.6

Table 8.7.5b  
Rider Head and Neck Injury  
Automobile Contact Surfaces

Continued

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Contact Surface	CS06	20	1.6	1.6
	CS07	3	0.2	0.2
	CS08	15	1.2	1.2
	CS09	18	1.4	1.4
	CS10	10	0.8	0.8
	CS11	34	2.6	2.6
	CS13	6	0.5	0.5
	CS14	19	1.5	1.5
	CS15	9	0.7	0.7
	CS18	1	0.1	0.1
	CS19	1	0.1	0.1
	CS21	4	0.3	0.3
	CS23	1	0.1	0.1
	CS25	2	0.2	0.2
	CS27	7	0.5	0.5
	CS29	18	1.4	1.4
	CS37	3	0.2	0.2
	CS45	1	0.1	0.1
	CS46	2	0.2	0.2
	CS98	12	0.9	0.9
	CT04	9	0.7	0.7
	CT05	4	0.3	0.3
	CT10	8	0.6	0.6
	CT16	2	0.2	0.2
	CT37	3	0.2	0.2
	CT38	2	0.2	0.2



Table 8.7.5c  
 Rider Head and Neck Injury  
 Pickup, Truck, Bus and Van Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Contact Surface	BS33	2	0.2	0.2
	PB03	1	0.1	0.1
	PF01	1	0.1	0.1
	PF03	3	0.2	0.2
	PF05	3	0.2	0.2
	PS04	2	0.2	0.2
	PS14	4	0.3	0.3
	PS23	2	0.2	0.2
	PS37	7	0.5	0.5
	PS46	4	0.3	0.3
	TB01	2	0.2	0.2
	TB03	5	0.4	0.4
	TB25	2	0.2	0.2
	TS21	6	0.5	0.5
	TS27	1	0.1	0.1
	TS98	3	0.2	0.2
	VB01	4	0.3	0.3
	VB25	6	0.5	0.5
	VF17	2	0.2	0.2
	VF97	2	0.2	0.2
VS01	2	0.2	0.2	
VS45	2	0.2	0.2	

Table 8.7.5d  
 Rider Head and Neck Injury  
 Environment Contact Surfaces

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Contact Surface	EA01	429	33.3	33.3
	EC01	65	5.0	5.0
	EC02	4	0.3	0.3
	EC04	7	0.5	0.5
	EC06	59	4.6	4.6
	EC13	10	0.8	0.8
	EG11	2	0.2	0.2
	EM02	33	2.6	2.6
	EM04	26	2.0	2.0
	EM08	17	1.3	1.3
	EM11	4	0.3	0.3
	EM13	1	0.1	0.1
	EM97	1	0.1	0.1
	ES01	6	0.5	0.5
	ES03	11	0.9	0.9
	ES13	8	0.6	0.6
	ES14	3	0.2	0.2
	ES98	2	0.2	0.2
	EW02	26	2.0	2.0
	EW04	2	0.2	0.2
	EW09	1	0.1	0.1
	EW13	3	0.2	0.2
	EY13	1	0.1	0.1

Table 8.7.6  
Contact Surface by Head and Neck Injury Region

COUNT	NO. PCI	TOT PCI	HEAD AND NECK INJURY REGION											ROW TOTAL
			BASAL	CERVICAL	FRONTAL	PARANASAL	FACE-GEN	MANDIBULAR	NASAL	OCIPITAL	PARIETAL	TEMPORAL		
			B	C	F	H	K	M	N	L	P	Q		
BS33	0	0	0	0	1	0	0	1	0	0	0	0	2	
	3.0	3.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
CB01	1	0	2	1	1	1	1	1	0	0	0	1	10	
	13.0	3.0	20.0	10.0	13.0	10.0	10.0	0.0	0.0	0.0	0.0	10.0	0.8	
	1.0	0.0	1.2	50.0	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.6		
CB02	0	0	0	0	0	0	0	0	0	1	0	0	1	
	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0		
CB14	0	0	0	0	0	0	1	0	0	0	0	0	1	
	0.0	0.0	0.0	0.0	0.0	0.0	130.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0		
CB15	0	1	1	0	0	0	0	0	1	1	0	0	5	
	0.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.4	
	3.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	0.0	0.0	0.0		
CB18	0	0	1	0	0	0	0	0	0	0	0	1	2	
	3.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.2	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
CB19	0	0	0	0	0	2	3	2	2	0	0	0	9	
	3.0	0.0	0.0	0.0	22.2	33.3	22.2	0.0	0.0	0.0	0.0	0.0	0.7	
	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL	65	125	171	2	71	153	78	71	87	161	1279	100.0		
	0.1	9.0	13.4	0.2	0.6	12.0	0.1	5.0	0.6	12.6				

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	SPHENOID	TEMPORAL	WHOLE SKIN	NOSE	MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	ROW TOTAL
ROW PCT	S	T	W	N	X	Y	Z	1	2	5	6	7	TOTAL
CUM PCT													
US13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB16	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
CB18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB19	11.1	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.7
	1.4	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL	74	2	67	5	55	6	60	15	2	2	2	2	1279
	0.3	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

235

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT	BASAL		CERVICAL -GENERAL		FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL		MANDIBL	NASAL	OCCIPITA		PARIETAL	BEHIN-GE NERAL	ROW TOTAL
	B	C	C	F	F	H	K	M	N	O	P	Q			
0920	0	0	0	0	0	0	1	1	1	0	0	0	0	4	
	0.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	25.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.7	1.3	0.0	0.0	0.0	0.0		
0925	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0927	1	0	2	1	1	1	1	1	0	0	0	0	1	10	
	10.0	0.0	20.0	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	10.0	0.8	
	1.5	0.0	1.2	1.0	1.4	1.4	0.7	0.7	0.0	0.0	0.0	0.0	0.6		
0929	0	0	0	0	0	0	1	2	2	0	0	0	0	6	
	0.0	0.0	0.0	0.0	0.0	0.0	16.7	33.3	33.3	0.0	0.0	0.0	0.0	0.5	
	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.3	2.6	0.0	0.0	0.0	0.0		
0933	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
0937	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0948	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2		
COLUMN TOTAL	65	125	171	2	71	153	78	71	87	161	1279	100.0			
	5.1	9.8	13.4	0.2	5.6	12.0	6.1	5.6	6.8	12.6					

236

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

CODE	FURDIE	SPHENOID		TEMPORAL		ORBITAL		MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR 1	CERVICAL VERTEBR 2	CERVICAL VERTEBR 5	CERVICAL VERTEBR 6	CERVICAL VERTEBR 7	RLW TOTAL
		R	S	T	W	X	Y									
CB20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
CB25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB27	30.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB29	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB37	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CB59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	4	7	5	5	0	6	0	4	15	2	2	2	2	1279	
TOTAL	5.8	4.2	5.2	0.5	4.3	0.0	4.7	0.0	1.2	0.2	0.2	0.2	0.2	0.2	100.0	

237

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW COL	PCI PCI PCI	HEAD AND NECK INJURY REGION											NUM TOTAL
		BASEL U	CERVICAL -GENERAL C	FRONTAL F	FORAMEN MAGNUM H	FACE-GEN ERAL K	MANDIBLE M	NASAL N	OCIPITA L	PARIETAL P	BRAIN-GE NERAL Q		
CF01	1	0	0	4	0	0	2	0	0	0	2	10	
	1	3.3	33.3	22.2	0.0	0.0	11.1	0.0	0.0	0.0	11.1	1.4	
	1	0.0	0.0	2.3	0.0	0.0	1.3	0.0	0.0	0.0	1.2		
CF02	1	0	1	2	0	0	0	1	0	1	1	7	
	1	3.3	14.3	28.6	0.0	0.0	3.0	14.3	3.0	14.3	14.3	0.5	
	1	0.0	0.0	1.2	0.0	0.0	0.0	1.3	0.0	1.1	0.6		
CF03	1	0	1	2	0	0	0	1	0	1	1	7	
	1	3.3	3.0	100.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.1	
	1	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CF04	1	0	1	2	0	1	0	0	0	1	1	6	
	1	3.3	16.7	33.3	0.0	16.7	0.0	0.0	0.0	16.7	16.7	0.5	
	1	0.0	0.0	1.2	0.0	1.4	0.0	0.0	0.0	1.1	0.6		
CF05	1	0	2	3	0	0	1	2	0	0	0	11	
	1	3.3	16.2	27.3	0.0	3.0	9.1	18.2	3.0	0.0	0.0	0.9	
	1	0.0	0.0	1.8	0.0	0.0	0.7	2.6	0.0	0.0	0.0		
CF09	1	0	0	0	0	1	0	0	0	1	2	4	
	1	3.3	3.0	3.0	0.0	25.0	0.0	0.0	3.0	25.0	50.0	0.3	
	1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.1	1.2		
CF10	1	0	0	0	0	0	0	0	1	0	0	2	
	1	30.0	3.0	3.0	0.0	0.0	3.0	3.0	30.0	3.0	0.0	0.2	
	1	1.5	0.0	3.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0		
COLUMN TOTAL	55	125	171	2	71	153	78	71	87	161	1279		
	3.1	9.8	13.4	0.2	5.6	12.0	6.1	3.6	6.6	12.6	100.0		

238

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	FRONTAL	SPRINT	TEMPERAL	WILLE RE SION	MAXILLA	THROAT	ZYGURA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	ROW TOTAL
ROW PCT	A	B	I	W	X	Y	Z	1	2	5	6	7	TOTAL
TOT PCT													
CF01	3.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	10
	1.4	0.0	0.0	0.0	0.0	0.0	1.7	6.7	0.0	0.0	0.0	0.0	1.4
	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	
CF02	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	7
	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
CF03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF05	0.0	0.0	18.2	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	11
	0.0	0.0	3.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.9
	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
CF09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	2	27	0	56	8	60	15	2	2	2	2	1279
	3.0	0.2	3.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

239

Continued



Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCI COL PCI TOT PCI	NASAL U	CERVICAL -GENERAL C	FRONTAL F	TEMPORAL MAGNUM T	FACE-GEN HEAL K	MANDIBLE M	NASAL N	OCCIPITA L		PARIETAL P	BRAIN-GE NERAL G	HOW TOTAL
								U	P			
CF19	0 0.0 0.0 0.0	1 12.5 0.8 0.1	1 12.5 0.6 0.1	0 0.0 0.0 0.0	0 0.3 0.0 0.0	2 25.0 1.3 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 25.0 1.2 0.2	8 0.6	
CF20	0 0.0 0.0 0.0	3 13.6 2.4 0.2	2 9.1 1.2 0.2	0 0.0 0.0 0.0	1 4.5 1.4 0.1	2 9.1 1.3 0.2	4 18.2 5.1 0.3	0 0.0 0.0 0.0	1 4.5 1.1 0.1	4 18.2 2.5 0.3	22 1.7	
CF27	1 0.3 1.5 0.1	2 10.7 1.6 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 10.7 2.8 0.2	1 8.3 0.7 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 33.3 2.5 0.3	12 0.9	
CF98	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.6 0.1	1 0.1	
CS01	3 0.0 3.3 0.0	2 14.3 1.6 0.2	2 14.3 1.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 14.3 1.3 0.2	2 14.3 2.6 0.2	0 0.0 0.0 0.0	1 7.1 1.1 0.1	2 14.3 1.2 0.2	14 1.1	
CS92	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 57.1 2.6 0.3	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 14.3 0.6 0.1	7 0.5	
CS93	1 12.5 1.5 0.1	0 0.0 0.0 0.0	1 12.5 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 1.4 0.1	0 0.0 0.0 0.0	3 37.5 1.9 0.2	8 0.6	
COLUMN TOTAL	65 5.1	125 9.8	171 13.4	2 0.2	71 5.6	153 12.0	78 6.1	71 5.6	87 6.6	161 12.6	1279 100.0	

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	ROW PCT	DURBIT	SPHENOID TEMPORAL							WHOLE RE		MAXILLA		THROAT		ZYGOMA		CERVICAL		CERVICAL		CERVICAL		HOW TOTAL	
			S	T	M	X	Y	Z	1	2	3	4	5	6	7										
CF19			0.0	0.0	0.0	0.0	0.0	12.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
			0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF20			0.0	0.0	0.0	0.0	4.5	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22
			0.0	0.0	0.0	0.0	1.8	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
			0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF27			8.3	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
			1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
			0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CF28			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS21			0.0	0.0	7.1	0.0	7.1	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14
			0.0	0.0	1.5	0.0	1.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
			0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS22			14.3	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
			1.4	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
			0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS23			0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8
			0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
			0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		74	2	67	6	55	8	60	15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1279	
		0.0	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0	

241

Contact surface

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	ROW PCT	COL PCT	NASAL	CERVICAL -GENERAL	FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL	MANDIBLE	NASAL	OCCIPITA L	PARIETAL	BRAIN-GE NERAL	ROW TOTAL
CS95	1	0	1	0	1	0	0	4	1	1	0	3	13
	7.7	0.0	7.7	0.0	0.0	0.0	30.8	7.7	7.7	0.0	23.1	1.0	
	1.5	0.0	0.6	0.0	0.0	0.0	2.6	1.3	1.4	0.0	1.9		
	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.2		
CS96	4	3	4	0	0	0	2	1	0	1	2	20	
	20.0	15.0	20.0	0.0	0.0	0.0	10.0	5.0	0.0	5.0	10.0	1.6	
	5.2	2.4	2.3	0.0	0.0	0.0	1.3	1.3	0.0	1.1	1.2		
	0.3	0.2	0.3	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.2		
CS97	3	0	0	0	0	0	1	0	0	0	0	3	
	3.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
CS98	0	0	0	0	1	6	3	0	0	0	2	15	
	0.0	0.0	0.0	0.0	6.7	40.0	20.0	0.0	0.0	0.0	13.3	1.2	
	0.0	0.0	0.0	0.0	1.4	3.9	3.8	0.0	0.0	0.0	1.2		
	0.0	0.0	0.0	0.0	0.1	0.5	0.2	0.0	0.0	0.0	0.2		
CS99	3	3	1	0	1	4	1	0	0	0	3	18	
	0.0	16.7	5.6	0.0	5.6	22.2	5.6	0.0	0.0	0.0	16.7	1.4	
	0.0	2.4	0.6	0.0	1.4	2.6	1.3	0.0	0.0	0.0	1.9		
	0.0	0.2	0.1	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.2		
CS10	0	2	2	0	0	1	0	0	0	1	3	10	
	0.0	20.0	20.0	0.0	0.0	10.0	0.0	0.0	0.0	10.0	30.0	0.8	
	0.0	1.6	1.2	0.0	0.0	0.7	0.0	0.0	0.0	1.1	1.9		
	0.0	0.2	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2		
CS11	1	5	3	0	1	8	3	0	0	3	4	34	
	2.9	14.7	8.0	0.0	2.9	23.5	8.8	0.0	0.0	8.8	11.2	2.7	
	1.5	4.0	1.8	0.0	1.4	5.2	3.8	0.0	0.0	3.4	2.5		
	0.1	0.4	0.2	0.0	0.1	0.6	0.2	0.0	0.0	0.2	0.3		
COLUMN TOTAL	0.5	125	171	2	71	153	78	71	87	161	1279	100.0	
	5.1	9.8	13.4	0.2	5.6	12.0	6.1	5.6	6.6	12.6			

242

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	FRONTAL	SPHENOID	TEMPORAL	WHOLE GILL	RE MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	ROW TOTAL
ROW PCT	R	S	T	W	X	Y	Z	1	2	5	6	7	
CS05	7.7	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	13
	1.4	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	1.0
	0.1	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
							0.1	0.0	0.0	0.0	0.0	0.0	
CS06	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	20
	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	1.6
	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	
							0.2	0.0	0.0	0.0	0.0	0.0	
CS07	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3
	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.2
	1.4	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
CS08	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15
	0.0	0.0	6.7	0.0	6.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	0.0	0.0	1.5	0.0	1.8	12.5	0.0	0.0	0.0	0.0	0.0	0.0	
			0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CS09	1.0	0.0	1.0	0.0	2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	19
	5.0	0.0	5.6	0.0	11.1	0.0	5.6	0.0	0.0	0.0	0.0	0.0	1.4
	1.4	0.0	1.5	0.0	3.6	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
CS10	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
					0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS11	0.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	34
	0.0	0.0	5.9	0.0	5.9	0.0	5.9	0.0	0.0	0.0	0.0	0.0	2.7
	0.0	0.0	3.0	0.0	3.6	0.0	3.3	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	2	67	0	55	8	60	15	2	2	2	2	1279
	3.0	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	ROW	COL	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12	PC13	PC14	PC15	PC16	PC17	PC18	PC19	PC20	PC21	PC22	PC23	PC24	PC25	PC26	PC27	PC28	PC29	PC30	PC31	PC32	PC33	PC34	PC35	PC36	PC37	PC38	PC39	PC40	PC41	PC42	PC43	PC44	PC45	PC46	PC47	PC48	PC49	PC50	PC51	PC52	PC53	PC54	PC55	PC56	PC57	PC58	PC59	PC60	PC61	PC62	PC63	PC64	PC65	PC66	PC67	PC68	PC69	PC70	PC71	PC72	PC73	PC74	PC75	PC76	PC77	PC78	PC79	PC80	PC81	PC82	PC83	PC84	PC85	PC86	PC87	PC88	PC89	PC90	PC91	PC92	PC93	PC94	PC95	PC96	PC97	PC98	PC99	PC100	PC101	PC102	PC103	PC104	PC105	PC106	PC107	PC108	PC109	PC110	PC111	PC112	PC113	PC114	PC115	PC116	PC117	PC118	PC119	PC120	PC121	PC122	PC123	PC124	PC125	PC126	PC127	PC128	PC129	PC130	PC131	PC132	PC133	PC134	PC135	PC136	PC137	PC138	PC139	PC140	PC141	PC142	PC143	PC144	PC145	PC146	PC147	PC148	PC149	PC150	PC151	PC152	PC153	PC154	PC155	PC156	PC157	PC158	PC159	PC160	PC161	PC162	PC163	PC164	PC165	PC166	PC167	PC168	PC169	PC170	PC171	PC172	PC173	PC174	PC175	PC176	PC177	PC178	PC179	PC180	PC181	PC182	PC183	PC184	PC185	PC186	PC187	PC188	PC189	PC190	PC191	PC192	PC193	PC194	PC195	PC196	PC197	PC198	PC199	PC200	PC201	PC202	PC203	PC204	PC205	PC206	PC207	PC208	PC209	PC210	PC211	PC212	PC213	PC214	PC215	PC216	PC217	PC218	PC219	PC220	PC221	PC222	PC223	PC224	PC225	PC226	PC227	PC228	PC229	PC230	PC231	PC232	PC233	PC234	PC235	PC236	PC237	PC238	PC239	PC240	PC241	PC242	PC243	PC244	PC245	PC246	PC247	PC248	PC249	PC250	PC251	PC252	PC253	PC254	PC255	PC256	PC257	PC258	PC259	PC260	PC261	PC262	PC263	PC264	PC265	PC266	PC267	PC268	PC269	PC270	PC271	PC272	PC273	PC274	PC275	PC276	PC277	PC278	PC279	PC280	PC281	PC282	PC283	PC284	PC285	PC286	PC287	PC288	PC289	PC290	PC291	PC292	PC293	PC294	PC295	PC296	PC297	PC298	PC299	PC300	PC301	PC302	PC303	PC304	PC305	PC306	PC307	PC308	PC309	PC310	PC311	PC312	PC313	PC314	PC315	PC316	PC317	PC318	PC319	PC320	PC321	PC322	PC323	PC324	PC325	PC326	PC327	PC328	PC329	PC330	PC331	PC332	PC333	PC334	PC335	PC336	PC337	PC338	PC339	PC340	PC341	PC342	PC343	PC344	PC345	PC346	PC347	PC348	PC349	PC350	PC351	PC352	PC353	PC354	PC355	PC356	PC357	PC358	PC359	PC360	PC361	PC362	PC363	PC364	PC365	PC366	PC367	PC368	PC369	PC370	PC371	PC372	PC373	PC374	PC375	PC376	PC377	PC378	PC379	PC380	PC381	PC382	PC383	PC384	PC385	PC386	PC387	PC388	PC389	PC390	PC391	PC392	PC393	PC394	PC395	PC396	PC397	PC398	PC399	PC400	PC401	PC402	PC403	PC404	PC405	PC406	PC407	PC408	PC409	PC410	PC411	PC412	PC413	PC414	PC415	PC416	PC417	PC418	PC419	PC420	PC421	PC422	PC423	PC424	PC425	PC426	PC427	PC428	PC429	PC430	PC431	PC432	PC433	PC434	PC435	PC436	PC437	PC438	PC439	PC440	PC441	PC442	PC443	PC444	PC445	PC446	PC447	PC448	PC449	PC450	PC451	PC452	PC453	PC454	PC455	PC456	PC457	PC458	PC459	PC460	PC461	PC462	PC463	PC464	PC465	PC466	PC467	PC468	PC469	PC470	PC471	PC472	PC473	PC474	PC475	PC476	PC477	PC478	PC479	PC480	PC481	PC482	PC483	PC484	PC485	PC486	PC487	PC488	PC489	PC490	PC491	PC492	PC493	PC494	PC495	PC496	PC497	PC498	PC499	PC500	PC501	PC502	PC503	PC504	PC505	PC506	PC507	PC508	PC509	PC510	PC511	PC512	PC513	PC514	PC515	PC516	PC517	PC518	PC519	PC520	PC521	PC522	PC523	PC524	PC525	PC526	PC527	PC528	PC529	PC530	PC531	PC532	PC533	PC534	PC535	PC536	PC537	PC538	PC539	PC540	PC541	PC542	PC543	PC544	PC545	PC546	PC547	PC548	PC549	PC550	PC551	PC552	PC553	PC554	PC555	PC556	PC557	PC558	PC559	PC560	PC561	PC562	PC563	PC564	PC565	PC566	PC567	PC568	PC569	PC570	PC571	PC572	PC573	PC574	PC575	PC576	PC577	PC578	PC579	PC580	PC581	PC582	PC583	PC584	PC585	PC586	PC587	PC588	PC589	PC590	PC591	PC592	PC593	PC594	PC595	PC596	PC597	PC598	PC599	PC600	PC601	PC602	PC603	PC604	PC605	PC606	PC607	PC608	PC609	PC610	PC611	PC612	PC613	PC614	PC615	PC616	PC617	PC618	PC619	PC620	PC621	PC622	PC623	PC624	PC625	PC626	PC627	PC628	PC629	PC630	PC631	PC632	PC633	PC634	PC635	PC636	PC637	PC638	PC639	PC640	PC641	PC642	PC643	PC644	PC645	PC646	PC647	PC648	PC649	PC650	PC651	PC652	PC653	PC654	PC655	PC656	PC657	PC658	PC659	PC660	PC661	PC662	PC663	PC664	PC665	PC666	PC667	PC668	PC669	PC670	PC671	PC672	PC673	PC674	PC675	PC676	PC677	PC678	PC679	PC680	PC681	PC682	PC683	PC684	PC685	PC686	PC687	PC688	PC689	PC690	PC691	PC692	PC693	PC694	PC695	PC696	PC697	PC698	PC699	PC700	PC701	PC702	PC703	PC704	PC705	PC706	PC707	PC708	PC709	PC710	PC711	PC712	PC713	PC714	PC715	PC716	PC717	PC718	PC719	PC720	PC721	PC722	PC723	PC724	PC725	PC726	PC727	PC728	PC729	PC730	PC731	PC732	PC733	PC734	PC735	PC736	PC737	PC738	PC739	PC740	PC741	PC742	PC743	PC744	PC745	PC746	PC747	PC748	PC749	PC750	PC751	PC752	PC753	PC754	PC755	PC756	PC757	PC758	PC759	PC760	PC761	PC762	PC763	PC764	PC765	PC766	PC767	PC768	PC769	PC770	PC771	PC772	PC773	PC774	PC775	PC776	PC777	PC778	PC779	PC780	PC781	PC782	PC783	PC784	PC785	PC786	PC787	PC788	PC789	PC790	PC791	PC792	PC793	PC794	PC795	PC796	PC797	PC798	PC799	PC800	PC801	PC802	PC803	PC804	PC805	PC806	PC807	PC808	PC809	PC810	PC811	PC812	PC813	PC814	PC815	PC816	PC817	PC818	PC819	PC820	PC821	PC822	PC823	PC824	PC825	PC826	PC827	PC828	PC829	PC830	PC831	PC832	PC833	PC834	PC835	PC836	PC837	PC838	PC839	PC840	PC841	PC842	PC843	PC844	PC845	PC846	PC847	PC848	PC849	PC850	PC851	PC852	PC853	PC854	PC855	PC856	PC857	PC858	PC859	PC860	PC861	PC862	PC863	PC864	PC865	PC866	PC867	PC868	PC869	PC870	PC871	PC872	PC873	PC874	PC875	PC876	PC877	PC878	PC879	PC880	PC881	PC882	PC883	PC884	PC885	PC886	PC887	PC888	PC889	PC890	PC891	PC892	PC893	PC894	PC895	PC896	PC897	PC898	PC899	PC900	PC901	PC902	PC903	PC904	PC905	PC906	PC907	PC908	PC909	PC910	PC911	PC912	PC913	PC914	PC915	PC916	PC917	PC918	PC919	PC920	PC921	PC922	PC923	PC924	PC925	PC926	PC927	PC928	PC929	PC930	PC931	PC932	PC933	PC934	PC935	PC936	PC937	PC938	PC939	PC940	PC941	PC942	PC943	PC944	PC945	PC
-------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	----

Table 8.7.6  
Contact Surface by Head and Neck Injury Region

COUNT		INJURY REGION														NO. TOTAL
ROW	COL	R	S	T	W	X	Y	Z	1	2	5	6	7			
TCF	PCI	SPHENOID		TEMPORAL	WHOLE	RE	MAXILLA	THROAT	ZYGOMA	CERVICAL	CERVICAL	CERVICAL	CERVICAL	CERVICAL		
					GLIEN					VERTEBR	VERTEBR	VERTEBR	VERTEBR	VERTEBR		
CS11		33.2	0.0	0.0	0.0	16.7	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		2.7	0.0	0.0	0.0	1.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		3.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS14		15.3	0.0	5.3	0.0	5.3	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		4.1	0.0	1.5	0.0	1.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		3.2	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS16		0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS18		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS19		0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS21		0.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	1.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS23		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CUMULAN		74	2	67	6	55	8	60	15	2	2	2	2	2	1277	
TOTAL		5.8	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	100.0	

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCI COL PCI	BASAL		CERVICAL -GENERAL		FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL		MANDIBLE	NASAL	OCCIPITAL		PARIETAL	FRONTAL-GE NERAL		ROW TOTAL
	D	L	L	R	F	H	K	M	N	L	P	Q	R	S		
CS25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS27	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7 0.0
	0.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS26	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	10 1.4
	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3 0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CS58	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12 0.5
	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL	0.0	0.0	0.0	0.0	171	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1279 100.0

246

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	INJURY REGION													ROW TOTAL
	FRONTAL	SPHENOID	TEMPORAL	WEDGE GLEN	MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR		
COL. PCI	K	J	T	R	X	Y	Z	1	2	5	6	7		
CS26	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS27	14.3	0.0	14.3	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
	1.4	0.0	1.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS29	0.0	0.0	1	0.0	2	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	1.0
	0.0	0.0	5.0	0.0	11.1	0.0	0.0	0.0	0.0	50.6	0.0	0.0	0.0	1.4
	0.0	0.0	1.5	0.0	3.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
CS37	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CS45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CS68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	0.2	67	6	33	0.6	60	1.2	0.2	0.2	0.2	0.2	0.2	127.2
	0.0	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	100.0

Continued



Table 8.7.6  
Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT	BASAL		CERVICAL -GENERAL		FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL		MANDIBL	NASAL	OCCIPITA		PARIETAL	FRAN-GE NERAL	ROW TOTAL
	B	C	F	H	K	M	N	L	P	O	TOTAL				
C104	0	1	2	0	0	3	0	0	0	0	0	0	0	9	
	0.0	11.1	22.2	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	
	0.0	0.8	1.2	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.1	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
C105	0	1	2	0	0	0	0	0	0	0	0	0	1	4	
	0.0	25.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.3	
	0.0	0.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6		
	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
C110	1	0	4	0	0	1	0	0	0	0	0	0	1	8	
	12.5	0.0	50.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.6	
	1.0	0.0	2.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.6		
	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
C116	0	0	0	0	0	0	0	0	1	0	0	0	0	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
C117	0	1	0	0	0	0	0	0	0	0	1	1	1	3	
	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	33.3	33.3	0.2	
	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.6		
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1		
C118	0	0	0	0	0	2	0	0	0	0	0	0	0	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
SAG1	11	44	68	0	21	37	20	36	33	57	33	57	57	422	
	2.0	10.4	16.1	0.0	5.0	8.8	4.7	8.5	7.4	13.5	7.4	13.5	13.5	33.0	
	10.9	30.2	39.8	0.0	29.6	24.2	25.6	50.7	37.9	35.4	37.9	35.4	35.4		
	0.9	3.4	5.3	0.0	1.6	2.9	1.6	2.8	2.6	4.5	2.6	4.5	4.5		
COLUMN TOTAL	63	125	171	2	71	153	78	71	87	161	87	161	161	1277	
	5.1	9.8	13.4	0.2	5.6	12.0	6.1	5.6	6.8	12.6	6.8	12.6	12.6	100.0	

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	FURROW	SPHENOID			TEMPORAL			FRONTAL			MAXILLA			THROAT			ZYGOMA			CERVICAL VERTEBR			ROW TOTAL
		R	S	T	W	X	Y	Z	1	2	5	6	7										
CT04	11.1	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	
	1.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CT05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CT10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CT16	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CT37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CT12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
FAD1	20	0	0	20	1	10	1	1	22	1	1	1	0	1	1	0	1	1	0	1	0	4.22	
	0.2	0.0	0.0	6.2	0.2	3.8	0.2	0.2	5.2	0.2	0.2	0.2	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.2	0.0	33.0	
	30.1	0.0	0.0	38.8	16.7	29.1	12.5	1	36.7	6.7	50.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0		
	2.0	0.0	0.0	2.3	0.1	1.3	0.1	1.7	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
COLUMN TOTAL	74	2	0	67	6	55	6	60	15	2	2	0	2	2	0	2	2	0	2	2	0	127.9	
TOTAL	5.8	0.2	0.0	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.2	0.2	0.0	100.0	

249

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	BASAL	CERVICAL -GENERAL	FRONTAL	FORAMEN MAGNUM	FACE-GEN FRONTAL	MANDIBLE	NASAL	CCCIPITA	PARIETAL	ETHMOIDAL	ROW TOTAL
ROW PCT	U	C	F	H	K	M	N	L	P	Q	
FC01	0	2	9	0	5	4	5	6	7	11	65
	0.0	3.1	13.8	0.0	7.7	6.2	7.7	9.2	10.8	16.9	5.1
	0.0	1.6	5.3	0.0	7.0	2.6	6.4	8.5	8.0	6.8	
	0.0	0.2	0.7	0.0	0.4	0.3	0.4	0.5	0.5	0.9	
FC02	0	0	0	0	0	1	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
FC04	0	0	1	0	0	0	0	0	0	2	7
	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.5
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.2	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
FC05	8	3	5	0	2	5	1	6	6	7	59
	13.6	5.1	8.5	0.0	3.4	8.5	1.7	10.2	13.6	11.9	4.6
	12.3	2.4	2.9	0.0	2.8	3.3	1.3	8.5	9.2	4.3	
	0.6	0.2	0.4	0.0	0.2	0.4	0.1	0.5	0.6	0.5	
FC13	0	1	1	0	1	2	0	2	0	1	10
	0.0	10.0	10.0	0.0	10.0	20.0	0.0	20.0	0.0	10.0	0.8
	0.0	0.9	0.6	0.0	1.4	1.3	0.0	2.8	0.0	0.6	
	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.2	0.0	0.1	
FC11	0	0	0	0	1	1	0	0	0	0	2
	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	1.4	0.7	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	
FC02	2	2	4	0	3	5	0	3	2	2	33
	6.1	6.1	12.1	0.0	9.1	15.2	0.0	9.1	6.1	6.1	2.6
	3.1	1.6	2.3	0.0	4.2	3.3	0.0	4.2	2.3	1.2	
	0.2	0.2	0.3	0.0	0.2	0.4	0.0	0.2	0.2	0.2	
COLUMN TOTAL	65	125	171	2	71	153	78	71	87	161	1279
	5.1	9.8	13.4	0.2	5.6	12.0	6.1	5.6	6.6	12.6	100.0

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT TOT PCT	FOREIT	SPHENDID	TEMPORAL	WHOLE RE GLEN	MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VLRTBR	CERVICAL VLRTBR	ROW TOTAL
	R	S	T	W	X	Y	Z	1	2	5	6	7	
FC01	7.7	0.0	4	0	4	0	3	0	0	0	0	0	15 5.1
	0.8	0.0	6.2	0.0	6.2	0.0	4.6	0.0	0.0	0.0	0.0	0.0	
	0.4	0.0	6.0	0.0	7.3	0.0	5.0	0.0	0.0	0.0	0.0	0.0	
FC02	0	0	1	0	1	0	0	0	0	0	0	0	4 0.3
	0.0	0.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	
	0.0	0.0	1.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	50.0	0.0	
FC04	2	0	0	1	1	0	0	0	0	0	0	0	7 0.5
	26.0	0.0	0.0	14.3	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2.7	0.0	0.0	16.7	1.8	0.0	0.0	0.0	0.0	0.0	3.0	3.0	
FC06	1	0	7	0	3	1	1	0	0	1	0	0	59 4.6
	1.7	0.0	11.9	0.0	5.1	1.7	1.7	0.0	0.0	1.7	0.0	0.0	
	1.4	0.0	10.4	0.0	5.5	12.5	1.7	0.0	0.0	50.0	0.0	0.0	
FC12	0	0	1	0	0	0	1	0	0	0	0	0	10 0.8
	0.0	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	1.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
FC13	0	0	0	0	0	0	0	0	0	0	0	0	2 0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FC02	0	0	3	1	2	0	0	4	0	0	0	0	33 2.6
	0.0	0.0	5.1	3.0	6.1	0.0	0.0	12.1	0.0	0.0	0.0	0.0	
	3.0	0.0	4.3	16.7	3.6	0.0	0.0	26.7	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	2	67	6	55	8	60	15	2	2	2	2	1279
	3.8	0.2	3.2	0.3	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

251

Continued

Table 8.7.6

## Contact Surface by Head and Neck Injury Region

Continued

	COUNT	NASAL		CERVICAL		FRONTAL		FORAMEN		FACE-GEN		MANDIBLE		NASAL		OCCIPITA		PARIETAL		FRONTAL-GE		ROW
		PCI	PCY	C	F	F	M	K	M	N	L	P	Q	R	S	T	U	V	W	X	Y	
EM04	1																					26
	1	3.6		19.2		11.5		0.0		11.5		11.5		3.8		3.8		0.0		11.5		2.0
	1	1.5		4.0		1.0		0.0		4.2		2.0		1.3		1.4		0.0		1.5		
EM02	1	0.1		0.4		0.2		0.0		0.2		0.2		0.1		0.1		0.0		0.2		
	1	2		4		2		0		1		1		1		0		0		2		17
	1	11.0		23.5		11.8		0.0		5.9		5.9		5.9		0.0		0.0		11.8		1.3
EM11	1	3.1		3.2		1.2		0.0		1.4		0.7		1.3		0.0		0.0		1.2		
	1	0.2		0.3		0.2		0.0		0.1		0.1		0.1		0.0		0.0		0.2		
	1	0		1		0		0		0		0		0		0		2		1		4
EM13	1	0.0		25.0		0.0		0.0		0.0		0.0		0.0		0.0		50.0		25.0		0.3
	1	0.0		0.8		0.0		0.0		0.0		0.0		0.0		0.0		2.3		0.6		
	1	3.0		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.2		0.1		
EM17	1	0		0		0		0		0		0		0		0		0		1		1
	1	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		100.0		0.1
	1	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.6		
ES01	1	0.0		0.0		0.0		0.0		0.0		0.0		100.0		0.0		0.0		0.0		1
	1	0.0		0.0		0.0		0.0		0.0		0.0		1.3		0.0		0.0		0.0		0.1
	1	0.0		0.0		0.0		0.0		0.0		0.0		0.1		0.0		0.0		0.0		
ES03	1	0		0		0		0		1		0		0		0		1		0		6
	1	50.0		0.0		0.0		0.0		10.7		0.0		0.0		0.0		10.7		0.0		0.5
	1	4.0		0.0		0.0		0.0		1.4		0.0		0.0		0.0		1.1		0.0		
ES03	1	0.2		0.0		0.0		0.0		0.1		0.0		0.0		0.0		0.1		0.0		
	1	2		0		1		0		0		2		2		0		2		0		10
	1	20.0		0.0		10.0		0.0		0.0		20.0		20.0		0.0		20.0		0.0		0.8
COLUMN	1	3.1		0.0		0.6		0.0		0.0		1.3		2.6		0.0		2.3		0.0		
	1	0.2		0.0		0.1		0.0		0.0		0.2		0.2		0.0		0.2		0.0		
	1	0.0		12.5		17.1		2		7.1		15.3		7.8		7.1		5.7		11.1		127.9
TOTAL	0.1		4.8		15.4		0.2		5.6		12.0		6.1		5.6		6.6		12.6		100.0	

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW COL TOT COL	FOURIT	SPHENOID		TEMPORAL		MIDLINE GIGN		MAXILLA		THROAT		ZYGOMA		CERVICAL VERTEBR		CERVICAL VERTEBR		CERVICAL VERTEBR		CERVICAL VERTEBR		CERVICAL VERTEBR		ROW TOTAL
		H	S	T	W	X	Y	Z	1	2	5	6	7											
EM04	1	3.8	0.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26	
	1	1.4	0.0	3.0	16.7	3.8	1.8	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	
	1	3.1	0.0	3.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM19	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM11	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM13	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM17	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM31	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
EM33	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL		74	2	67	0	55	8	60	15	2	2	2	2	2	2	2	2	2	2	2	2	1279		
		3.8	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0		

253

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW COL TBT PCT	BASAL		CERVICAL -GENERAL		FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL	MANDIBLE	NASAL	OCCIPITA		PARIENTAL	BRAIN-GE NERAL	ROW TOTAL
	E		C		F	H	K	M	N	L	O	P	G	
RS13	2		1		0	0	0	2	0	0	0	0	0	8 0.6
	25.0		12.5		0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	
	3.1		0.8		0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	
RS14	3		6		0	0	0	0	0	0	2	2	1	3 0.2
	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3	33.3	
	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	0.6	
RS5B	0		0		0	0	0	0	0	0	2	0	0	2 0.2
	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	
	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	
RW92	1		1		7	0	5	4	1	2	2	2	1	26 2.0
	3.8		3.8		26.9	0.0	19.2	15.4	3.8	7.7	7.7	7.7	3.8	
	1.5		0.8		4.1	0.0	7.0	2.6	1.3	2.8	2.3	2.3	0.6	
RW11	0		0		1	0	1	0	0	0	0	0	0	2 0.2
	0.0		0.0		50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0		0.0		0.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	
RW12	0		0		0	0	1	0	0	0	0	0	0	1 0.1
	0.0		0.0		0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0		0.0		0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	
RW13	0		0		1	0	0	0	0	0	0	0	1	3 0.2
	0.0		0.0		33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	
	0.0		0.0		0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
COLUMN TOTAL	65		125		171	2	71	153	78	71	87	161	1279	100.0
	5.1		9.8		13.4	0.2	5.6	12.0	6.1	5.6	6.6	12.6	127.9	

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

CLOTH ROW PCI COL PCI TOT PCI	INJURY REGION														ROW TOTAL
	FRONT	SPHENOID	TEMPORAL	FRONTAL	ORBITAL	MAXILLA	MANDIBULAR	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	
	R	S	T	W	X	Y	Z	1	2	3	4	5	6	7	
ES13	12.5	0.0	12.5	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	8
	1.4	0.0	1.5	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ES14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ES18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EW32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EW34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EW09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EW13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL	74	0.2	67	0.5	55	0.6	60	1.2	0.2	0.2	0.2	0.2	0.2	0.2	1279
	0.0	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0

255

Continued



Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT	BASAL		CERVICAL -GENERAL		FRONTAL	FORAMEN MAGNUM	FACE-GEN ERAL		MANDIBLE	NASAL	OCCIPITA L		PARIETAL	BFRAIN-GE NERAL	RW TOTAL
	E	C	F	H	K	M	N	O	P	C	TOTAL				
4C01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4C02	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0.4
	43.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	
	3.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	
4C03	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.3
	3.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.3	0.0	0.0	0.0	0.6	0.0	
4C05	3	2	0	0	0	0	3	3	3	0	0	0	1	1	2.0
	11.5	7.7	0.0	0.0	0.0	0.0	11.5	11.5	11.5	0.0	0.0	3.8	3.8	0.6	
	4.6	1.6	0.0	0.0	0.0	0.0	4.2	2.0	3.8	0.0	0.0	1.1	0.6	0.1	
4C06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	
4C07	0	2	2	0	0	0	2	2	1	0	0	0	0	0	1.1
	0.0	14.3	14.3	0.0	0.0	0.0	14.3	14.3	7.1	0.0	0.0	0.0	0.0	0.0	
	0.0	1.6	1.2	0.0	0.0	0.0	2.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0	
4C09	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2
	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	65	125	171	2	71	153	78	71	67	161	1279	100.0			

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	UNBIT		SPHENOID			TEMPORAL		WHOLE RE		MAXILLA		THROAT	ZYGOMA	CERVICAL	CERVICAL	CERVICAL	CERVICAL	CERVICAL	RLN
ROW PCT	COL PCT												VERTEBR	VERTEBR	VERTEBR	VERTEBR	VERTEBR	TOTAL	
TOT PCT	R	S	T	W	X	Y	Z	1	2	5	6	7							
BY11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC32	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC33	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC35	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	26
	11.5	0.0	3.4	0.0	3.8	0.0	3.8	0.0	3.8	0.0	3.8	0.0	15.4	0.0	0.0	0.0	0.0	0.0	2.0
	4.1	0.0	1.5	0.0	1.8	0.0	1.8	0.0	1.7	0.0	1.7	0.0	26.7	0.0	0.0	0.0	0.0	0.0	
	0.2	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
MC36	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC37	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	14
	0.0	0.0	7.1	0.0	21.4	0.0	21.4	0.0	7.1	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	0.0	1.5	0.0	5.5	0.0	5.5	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MC38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	74	2	67	6	55	8	60	15	2	2	2	2	15	2	2	2	2	2	1279
TOTAL	0.3	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	1.2	0.2	0.2	0.2	0.2	0.2	100.0

257

Continued

Table 8.7.6  
Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT TCT PCT	BASAL		CERVICAL -GENERAL		FRONTAL		FORAMEN MAGNUM		FACE-GEN EHAL		MANDIBLE		NASAL		OCCIPITA		PARIETAL		BRAIN-GE NERAL		RCM TOTAL
	E	C	F	B	K	M	N	L	P	C											
4C11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
4C13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
4C14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
4C17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
4C37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
4C38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
4C97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
COLUMN TOTAL	5.1	9.8	13.4	0.2	5.2	12.0	0.1	5.6	7.1	12.6	127.9	100.0									

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	FRONTAL	SPRINDLE	TEMPERAL	WILLE GLBN	AL MAXILLA	THREAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VLRTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	ROW TOTAL
ROW PCI	H	S	T	A	X	Y	Z	1	2	5	6	7	TOTAL
NC11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NC13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NC14	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NC17	1	0.0	0.0	0.0	0.0	0.0	0.0	1	0	0	0	0	10
	10.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.8
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
NC37	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NC53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4007	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLU 4N	74	2	67	6	55	8	60	15	2	2	2	2	1279
TOTAL	5.6	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

259

Continued







Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT TOT PCT	ORBIT	SPRINTED	TEMPORAL	WHOLE FACE	RE MAXILLA	THROAT	ZYGOMA	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	CERVICAL VERTEBR	ROW TOTAL
PS23	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
PS37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
PS46	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
PT41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TB01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TB03	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
TB35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
COLUMN TOTAL	74	2	27	2	55	8	47	15	2	2	2	2	1277
	0.0	0.2	0.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0

263

Continued



Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT INJURY CUL TUI	PCT PCT PCT	HEAD AND NECK INJURY REGION											ROW TOTAL
		BASAL U	CERVICAL -GENERAL C	FRONTAL F	TEMPORAL MAGNUM F	FACE-GLN LKNL K	MANDIBULAR M	NASAL N	OCIPITAL U	PARIENTAL P	TRAIIN-GE NERAL Q		
1521		0	0	0	0	0	1	0	0	2	2	0	0.5
	J.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	2.3	3.3	1.2	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2		
1527		0	0	0	0	0	0	0	0	0	0	0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1598		0	0	0	0	1	0	0	1	0	1	1	0.2
	0.0	0.0	0.0	0.0	33.3	0.0	0.0	33.3	0.0	0.0	33.3	0.6	
	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4	0.0	0.0	0.0	0.1	
VB01		2	0	1	0	0	0	0	0	0	0	0	0.3
	50.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	3.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VE25		2	0	1	0	1	0	0	0	0	0	1	0.5
	33.3	0.0	16.7	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	16.7	
	3.1	0.0	0.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
VF17		0	0	0	0	0	0	1	0	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	
VF97		0	0	0	0	0	0	1	0	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		53	125	171	2	71	153	78	71	87	141	1279	100.0
		0.1	9.8	13.4	0.2	5.0	12.0	0.1	5.0	0.8	12.6		

264

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	SUM PCT	FOREFT	SPRINDID	TEMPORAL	WHOLE HE	MAXILLA	THROAT	ZYGOMA	CERVICAL	CERVICAL	CERVICAL	CERVICAL	CERVICAL	ROW
1521	0	0	0	0	0	16.7	0	0	0	0	0	0	0	6
	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1527	0	0	100.0	0	0	0	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1558	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VB21	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VB25	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF17	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VF27	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN	74	2	67	6	55	8	60	15	2	2	2	2	2	1279
TOTAL	5.0	0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	0.2	100.0

Continued

Table 8.7.6  
Contact Surface by Head and Neck Injury Region

Continued

COUNT ROW PCT COL PCT	BASAL H	CERVICAL -GENERAL C	FRONTAL F	FRONTAL MACRUM F	FACE-GEN ERAL K	MANDIBLE M	NASAL N	OCCIPITA L U	PARIETAL P	BRAIN-GE NERAL O	ROW TOTAL
VS01	0	0	0	0	0	0	0	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
VS45	0	0	0	0	0	0	1	0	0	0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	
VS77	0	2	0	0	0	1	1	0	0	0	0.4
	0.0	40.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	
	0.0	1.6	0.0	0.0	0.0	0.7	1.3	0.0	0.0	0.0	
VS98	0	1	0	0	0	0	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	5.1	125	171	2	71	153	78	71	87	161	1279
	5.1	9.8	13.4	0.2	5.6	12.0	6.1	5.6	6.8	12.6	100.0

Continued

Table 8.7.6

Contact Surface by Head and Neck Injury Region

Continued

COUNT	ROW PCT	IDREF	HEAD				THROAT			ZYGOMA	CERVICAL	CERVICAL	CERVICAL	CERVICAL	CERVICAL	RC#	TOTAL
			R	S	T	W	X	Y	Z	1	2	5	6	7			
VS71	53.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
	1.4	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
VS45	53.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2			
	1.4	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
	0.1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
9597	23.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4			
	1.4	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
	0.1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
9558	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
COLUMN TOTAL	74		2	67	6	55	8	60	15	2	2	2	2	1279			
	5.8		0.2	5.2	0.5	4.3	0.6	4.7	1.2	0.2	0.2	0.2	0.2	100.0			

267

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

	COUNT							ROW TOTAL
	ROW PCT	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	
	TOT PCT	1	2	3	4	5	6	
BS13	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
CE01	40.0	10.0	30.0	10.0	0.0	10.0		10
	0.5	0.6	2.6	2.4	0.0	2.5		0.8
	0.3	0.1	0.2	0.1	0.0	0.1		
CE03	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CE14	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CE16	50.0	40.0	0.0	0.0	0.0	0.0	0.0	5
	0.4	1.1	0.0	0.0	0.0	0.0	0.0	0.4
	0.2	0.2	0.0	0.0	0.0	0.0	0.0	
CE18	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
CE19	66.7	22.2	11.1	0.0	0.0	0.0	0.0	9
	0.7	1.1	0.9	0.0	0.0	0.0	0.0	0.7
	0.5	0.2	0.1	0.0	0.0	0.0	0.0	
CE20	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4
	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
CE25	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CE27	40.0	10.0	30.0	10.0	0.0	10.0		10
	0.5	0.6	2.6	2.4	0.0	2.5		0.8
	0.3	0.1	0.2	0.1	0.0	0.1		
CE28	50.0	33.3	16.7	0.0	0.0	0.0	0.0	6
	0.4	1.1	0.9	0.0	0.0	0.0	0.0	0.5
	0.2	0.2	0.1	0.0	0.0	0.0	0.0	
CE32	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CE37	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
CE58	0.0	1.0	1.0	0.0	0.0	0.0	0.0	2
	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.2
	0.0	0.1	0.1	0.0	0.0	0.0	0.0	
COLUMN TOTAL	334	176	115	42	82	40	1289	100.0
	64.7	33.7	21.9	8.2	15.4	7.1		

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

COUNT ROW PCI COL PCI TOT PCI	INJURY SEVERITY						ROW TOTAL
	1 MINOR	2 MODERATE	3 SEVERE	4 SERIOUS	5 CRITICAL	6 FATAL	
CF19	37.3	37.5	12.5	12.5	0.0	0.0	8 0.2
	0.4	1.7	0.9	2.4	0.0	0.0	
	0.2	0.2	0.1	0.1	0.0	0.0	
CF20	10	5	1	0	0	0	22
	72.7	22.7	4.5	0.0	0.0	0.0	1.7
	1.9	2.0	0.9	0.0	0.0	0.0	
	1.2	0.4	0.1	0.0	0.0	0.0	
CF27	3	8	2	0	0	0	13
	23.1	61.5	15.4	0.0	0.0	0.0	1.0
	0.4	4.5	1.7	0.0	0.0	0.0	
	0.2	1.6	0.2	0.0	0.0	0.0	
CF58	0	1	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
CS31	11	1	0	0	2	0	14
	70.0	7.1	0.0	0.0	14.3	0.0	1.1
	1.9	0.4	0.0	0.0	2.4	0.0	
	0.2	0.1	0.0	0.0	0.2	0.0	
CS32	5	1	0	0	1	0	7
	71.4	14.3	0.0	0.0	14.3	0.0	0.5
	0.0	0.0	0.0	0.0	1.2	0.0	
	0.4	0.1	0.0	0.0	0.1	0.0	
CS33	2	0	3	2	1	0	6
	25.0	0.0	37.5	25.0	12.5	0.0	0.6
	0.2	0.0	2.0	4.8	1.2	0.0	
	0.2	0.0	0.2	0.2	0.1	0.0	
CF31	10	2	2	1	2	1	18
	55.6	11.1	11.1	5.6	11.1	5.6	1.4
	1.2	1.1	1.7	2.4	2.4	2.5	
	0.3	0.2	0.2	0.1	0.2	0.1	
CF32	0	0	0	0	1	0	7
	85.7	0.0	0.0	0.0	14.3	0.0	0.5
	0.7	0.0	0.0	0.0	1.2	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
CF34	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
CF34	5	1	0	0	0	0	7
	85.7	14.3	0.0	0.0	0.0	0.0	0.5
	0.7	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
CF35	11	0	0	0	0	0	11
	100.0	0.0	0.0	0.0	0.0	0.0	0.9
	1.3	0.0	0.0	0.0	0.0	0.0	
	0.5	0.0	0.0	0.0	0.0	0.0	
CF35	2	1	0	0	1	0	4
	50.0	25.0	0.0	0.0	25.0	0.0	0.3
	0.2	0.6	0.0	0.0	1.2	0.0	
	0.2	0.1	0.0	0.0	0.1	0.0	
CF10	0	0	0	0	2	0	2
	0.0	0.0	0.0	0.0	100.0	0.0	0.2
	0.0	0.0	0.0	0.0	2.4	0.0	
	0.0	0.0	0.0	0.0	0.2	0.0	
COLUMN TOTAL	834	176	115	42	82	40	1209
	64.7	13.7	8.9	3.3	6.4	3.1	100.0

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

COUNT	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
0805	7	2	2	1	1	0	13
	53.8	15.4	15.4	7.7	7.7	0.0	1.0
	0.3	1.1	1.7	2.4	1.2	0.0	
	3.3	0.2	0.2	0.1	0.1	0.0	
0816	13	1	1	1	1	1	20
	75.0	5.0	5.0	5.0	5.0	5.0	1.6
	1.3	0.6	0.9	2.4	1.2	2.5	
	1.2	0.1	0.1	0.1	0.1	0.1	
0807	3	0	0	0	0	0	3
	100.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.4	0.0	0.0	0.0	0.0	0.0	
	0.2	0.0	0.0	0.0	0.0	0.0	
0812	10	5	0	0	0	0	15
	66.7	33.3	0.0	0.0	0.0	0.0	1.2
	1.7	2.8	0.0	0.0	0.0	0.0	
	0.0	0.4	0.0	0.0	0.0	0.0	
0809	13	4	0	0	1	0	18
	76.9	22.2	0.0	0.0	5.6	0.0	1.4
	1.6	2.3	0.0	0.0	1.2	0.0	
	1.3	0.3	0.0	0.0	0.1	0.0	
0810	7	1	1	0	1	0	10
	70.0	10.0	10.0	0.0	10.0	0.0	0.8
	0.3	0.0	0.0	0.0	1.2	0.0	
	0.5	0.1	0.1	0.0	0.1	0.0	
0811	23	6	2	1	2	0	34
	67.6	17.6	5.9	2.9	5.9	0.0	2.6
	2.8	3.4	1.7	2.4	2.4	0.0	
	1.8	0.5	0.2	0.1	0.2	0.0	
0813	4	1	1	0	0	0	6
	66.7	16.7	16.7	0.0	0.0	0.0	0.5
	0.3	0.6	0.9	0.0	0.0	0.0	
	0.3	0.1	0.1	0.0	0.0	0.0	
0814	13	3	2	0	1	0	19
	68.4	15.8	10.5	0.0	5.3	0.0	1.5
	1.5	1.7	1.7	0.0	1.2	0.0	
	1.0	0.2	0.2	0.0	0.1	0.0	
0815	3	2	1	1	1	1	9
	33.3	22.2	11.1	11.1	11.1	11.1	0.7
	0.4	1.1	0.9	2.4	1.2	2.5	
	0.2	0.2	0.1	0.1	0.1	0.1	
0818	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
0819	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	2.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
0821	2	2	0	0	0	0	4
	50.0	50.0	0.0	0.0	0.0	0.0	0.3
	0.2	1.1	0.0	0.0	0.0	0.0	
	0.2	0.2	0.0	0.0	0.0	0.0	
0823	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	634	176	115	42	82	40	1289
	69.7	19.7	8.9	3.3	6.4	3.1	100.0

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

	COUNT HOW PCT COL PCT TOT PCT	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
		1	2	3	4	5	6	
CT34	9 100.0 1.1 0.7	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 0.7
CT35	3 75.0 0.4 0.2	1 25.0 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.3
CT10	5 62.5 0.6 0.4	0 0.0 0.0 0.0	1 12.5 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 1.2 0.1	1 12.5 2.5 0.1	8 0.6
CT15	2 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
CT37	2 66.7 0.2 0.2	1 33.3 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.2
CT39	2 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
CA01	310 72.4 37.2 24.0	49 11.4 27.8 3.8	30 7.0 26.1 2.3	11 2.6 26.2 0.9	26 6.1 31.7 2.0	2 0.5 5.0 0.2	428 33.2	
CS25	2 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
CS27	2 28.6 0.2 0.2	1 14.3 0.6 0.1	2 28.6 1.7 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 28.6 2.4 0.2	0 0.0 0.0 0.0	7 0.5
CS29	13 72.2 1.6 1.0	0 0.0 0.0 0.0	4 22.2 3.5 0.3	1 5.2 2.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	18 1.4
CS37	2 66.7 0.2 0.2	1 33.3 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.2
CS45	3 100.0 3.0 3.0	1 100.0 0.2 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
CS46	2 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
CS58	9 75.0 1.1 0.7	2 16.7 1.1 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 8.3 1.2 0.1	0 0.0 0.0 0.0	12 0.9
COLUMN TOTAL	834 04.7	176 1.7	115 0.9	42 0.3	62 0.4	40 0.1	1289 100.0	

Continued



Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

COUNT ROW PCI COL PCI TOT PCI	INJURY SEVERITY						ROW TOTAL
	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	
	1	2	3	4	5	6	
EC01	4.5	14	4	1	1	2	65
	65.2	21.5	6.2	1.5	1.5	3.1	5.0
	5.2	8.0	3.5	2.4	1.2	5.3	
	3.3	1.1	0.3	0.1	0.1	0.2	
EC02	0	2	1	0	0	1	4
	0.0	50.0	25.0	0.0	0.0	25.0	0.3
	0.0	1.1	0.9	0.0	0.0	2.5	
	0.3	0.2	0.1	0.0	0.0	0.1	
EC04	1	3	1	0	0	2	7
	14.3	42.9	14.3	0.0	0.0	28.6	0.5
	0.1	1.7	0.9	0.0	0.0	5.0	
	0.1	0.2	0.1	0.0	0.0	0.2	
EC06	23	7	12	4	10	3	59
	30.0	11.9	20.0	6.0	16.9	5.1	4.0
	2.3	4.0	10.4	9.5	12.2	7.5	
	1.8	0.5	3.9	0.3	0.8	0.2	
EC13	10	8	0	0	0	0	10
	100.0	0.0	0.0	0.0	0.0	0.0	0.8
	1.2	0.0	0.0	0.0	0.0	0.0	
	3.8	0.0	0.0	0.0	0.0	0.0	
EG11	2	0	0	0	0	0	2
	100.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0	
	0.2	0.0	0.0	0.0	0.0	0.0	
EM02	14	7	5	1	5	3	33
	30.4	21.2	15.2	3.0	15.2	9.1	2.0
	1.4	4.0	4.1	2.4	6.1	7.5	
	0.9	0.5	0.4	0.1	0.4	0.2	
EM04	15	4	4	0	1	4	26
	50.0	15.4	15.4	0.0	3.8	15.4	2.0
	1.0	2.3	3.5	0.0	1.2	10.0	
	1.0	0.3	0.3	0.0	0.1	0.3	
EM04	7	2	1	3	2	2	17
	41.2	11.8	5.9	17.6	11.8	11.8	1.3
	0.5	1.1	0.9	7.1	2.4	5.0	
	0.5	0.2	0.1	0.2	0.2	0.2	
EM11	1	2	1	0	0	0	4
	25.0	50.0	25.0	0.0	0.0	0.0	0.3
	0.1	1.1	0.9	0.0	0.0	0.0	
	0.1	0.2	0.1	0.0	0.0	0.0	
EM13	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
EM07	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
ES01	1	0	1	2	1	1	6
	16.7	0.0	16.7	33.3	16.7	16.7	0.5
	0.1	0.0	0.9	4.8	1.2	2.5	
	0.1	0.0	0.1	0.2	0.1	0.1	
ES03	7	1	1	1	1	0	11
	63.0	9.1	5.1	5.1	9.1	0.0	0.9
	0.5	0.6	0.9	2.4	1.2	0.0	
	0.5	0.1	0.1	0.1	0.1	0.0	
COUNT TOTAL	64	176	115	42	62	40	1289
TOTAL	64.7	13.7	8.9	3.3	6.4	3.1	100.0

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

	COUNT	INJURY SEVERITY						NO. TOTAL
	ROW PCT	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	
	TOT PCT	1	2	3	4	5	6	
ES13		9	1	2	0	0	1	8
	50.0	12.5	25.0	0.0	0.0	12.5	0.6	
	0.5	0.6	1.7	0.0	0.0	2.5		
	0.3	0.1	0.2	0.0	0.0	0.1		
FS14		1	3	0	0	0	0	3
	50.7	33.3	0.0	0.0	0.0	0.0	0.2	
	0.4	0.6	0.0	0.0	0.0	0.0		
	3.2	0.1	0.0	0.0	0.0	0.0		
ES48		0	0	0	0	0	0	2
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0		
	3.2	0.0	0.0	0.0	0.0	0.0		
EW02		3	3	1	4	2	2	26
	50.0	11.5	11.5	3.8	15.4	7.7	2.0	
	1.0	1.7	2.6	2.4	4.9	5.0		
	1.0	3.2	0.2	6.1	3.3	0.2		
EW14		0	0	0	0	0	0	2
	100.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.2	0.0	0.0	0.0	0.0	0.0		
	0.2	0.0	0.0	0.0	0.0	0.0		
FW09		1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.1	0.0	0.0	0.0	0.0	0.0		
	3.1	0.0	0.0	0.0	0.0	0.0		
FW13		1	0	0	0	0	0	3
	50.7	33.3	0.0	0.0	0.0	0.0	0.2	
	0.2	0.6	0.0	0.0	0.0	0.0		
	0.2	0.1	0.0	0.0	0.0	0.0		
EY13		1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.1	0.0	0.0	0.0	0.0	0.0		
	3.1	0.0	0.0	0.0	0.0	0.0		
MC02		1	1	1	0	1	1	5
	20.0	20.0	20.0	0.0	20.0	20.0	0.4	
	0.1	0.6	0.7	0.0	1.2	2.5		
	0.1	0.1	0.1	0.0	0.1	0.1		
MC13		3	1	0	0	0	0	4
	75.0	25.0	0.0	0.0	0.0	0.0	0.3	
	0.4	0.6	0.0	0.0	0.0	0.0		
	0.2	0.1	0.0	0.0	0.0	0.0		
MC05		3	3	4	0	1	2	26
	51.5	11.5	15.4	0.0	3.8	7.7	2.0	
	1.0	1.7	3.5	0.0	1.2	5.0		
	1.2	3.2	3.3	0.0	3.1	3.2		
MC06		0	0	0	0	0	0	3
	100.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.4	0.0	0.0	0.0	0.0	0.0		
	3.2	0.0	0.0	0.0	0.0	0.0		
MC07		14	0	0	0	0	0	14
	100.0	0.0	0.0	0.0	0.0	0.0	1.1	
	1.7	0.0	0.0	0.0	0.0	0.0		
	1.1	0.0	0.0	0.0	0.0	0.0		
MC08		3	0	0	0	0	0	3
	100.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.4	0.0	0.0	0.0	0.0	0.0		
	0.2	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL		834	176	115	42	82	40	1289
		64.7	13.7	8.9	3.3	6.4	3.1	100.0

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

	COUNT		INJURY SEVERITY						ROW TOTAL
	ROW	PCT	MINOR	MODERATE	SEVERE	SERIOUS	CRITICAL	FATAL	
	TOT	PCT	1	2	3	4	5	6	
4C11	1	0	0	0	0	0	0	2	2
	1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
4C13	1	0	0	0	0	0	0	0	1
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
4C14	1	0	0	0	0	0	0	1	6
	1	16.7	0.0	16.7	33.3	16.7	16.7	0.0	
	1	0.1	0.0	0.9	4.8	1.2	2.5	0.1	
4C17	1	0	0	2	0	0	0	0	10
	1	66.7	0.0	20.0	0.0	20.0	0.0	0.0	
	1	0.7	0.0	1.7	0.0	2.4	0.0	0.0	
4C37	1	0	0	0	0	0	0	0	2
	1	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
4C39	1	0	0	0	0	0	0	0	4
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4C42	1	0	0	0	0	0	0	0	6
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	
4C43	1	0	0	0	0	0	0	0	5
	1	80.0	0.0	0.0	0.0	20.0	0.0	0.0	
	1	0.0	0.0	0.0	0.0	1.2	0.0	0.0	
4F01	1	0	0	0	0	0	0	0	1
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
4F03	1	0	0	0	0	0	0	0	1
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
4F04	1	0	0	0	0	0	0	1	3
	1	66.7	0.0	0.0	0.0	0.0	33.3	0.0	
	1	0.2	0.0	0.0	0.0	0.0	2.5	0.1	
4F05	1	0	0	0	0	0	0	1	3
	1	66.7	0.0	0.0	0.0	0.0	33.3	0.0	
	1	0.2	0.0	0.0	0.0	0.0	2.5	0.1	
4F06	1	0	0	0	0	0	0	0	2
	1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
4F14	1	0	1	0	0	0	0	0	4
	1	75.0	25.0	0.0	0.0	0.0	0.0	0.0	
	1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		334	176	115	42	82	40	1289	
		64.7	13.7	8.9	3.3	6.4	3.1	100.0	

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

COUNT ROW PCT COL PCT TOT PCT	INJURY SEVERITY							ROW TOTAL
	1	2	3	4	5	6		
PS23	1 50.0 0.1 0.1	1 50.0 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
PS17	4 57.1 0.5 0.3	0 0.0 0.0 0.0	2 25.6 1.7 0.2	1 14.3 2.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 0.5
PS46	4 100.0 0.5 0.3	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.3
TA41	1 50.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 2.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
TD01	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 2.4 0.1	0 0.0 0.0 0.0	1 50.0 2.4 0.1	2 0.2
TH03	1 33.3 0.1 0.1	1 20.0 0.6 0.1	1 20.0 0.9 0.1	1 20.0 2.4 0.1	0 0.0 0.0 0.0	1 20.0 1.2 0.1	0 0.0 0.0 0.0	5 0.4
TB25	2 100.0 0.2 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
TS21	2 33.3 0.2 0.2	1 16.7 0.6 0.1	1 16.7 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 33.3 5.0 0.2	6 0.5
TS27	1 100.0 0.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
TS14	3 100.0 0.4 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 0.2
VF01	2 50.0 0.2 0.2	0 0.0 0.0 0.0	1 25.0 0.7 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 1.2 0.1	0 0.0 0.0 0.0	4 0.3
VF25	4 66.7 0.5 0.3	0 0.0 0.0 0.0	1 16.7 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 16.7 1.2 0.1	0 0.0 0.0 0.0	6 0.5
VF17	1 50.0 0.1 0.1	1 50.0 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
VF27	1 50.0 0.1 0.1	1 50.0 0.6 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
COLUMN TOTAL	834 64.7	176 13.7	115 9.9	42 3.3	82 6.4	40 3.1	1289 100.0	

Continued

Table 8.7.7

Contact Surface by Head and Neck Injury Severity

Continued

	COUNT	MINOR		MODERATE		SEVERE	SERIOUS	CRITICAL	FATAL	ROW TOTAL
		EDW PCT	TOT PCT	1	2	3	4	5	6	
V501										
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
V545										
	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9537										
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9598										
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>GRAND TOTAL</b>	<b>834</b>	<b>17.0</b>	<b>13.7</b>	<b>8.9</b>	<b>3.3</b>	<b>6.4</b>	<b>3.1</b>	<b>1289</b>	<b>100.0</b>	

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

	SS=SS1+SS2											ROW TOTAL
	0.1	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1		
COUNT	1	7	19	20	13	5	6	1	3	3	80	
ROW PCT	1.3	9.8	23.8	25.0	16.3	6.3	7.5	1.3	3.8	3.8	8.9	
COL PCT	5.0	13.5	19.3	19.2	12.7	8.2	9.0	2.3	7.7	11.5		
TOT PCT	0.1	0.8	2.1	2.2	1.4	0.6	0.7	0.1	0.3	0.3		
FIRST AID-SCENE	0	13	34	49	49	38	39	26	22	10	328	
TREATED, RELEASED	0.0	4.0	10.4	14.2	14.9	11.6	11.9	7.0	6.7	3.0	36.4	
	0.0	25.0	32.7	47.1	48.0	62.3	58.2	60.5	56.4	38.5		
	0.0	1.4	1.8	5.4	5.4	4.2	4.3	2.9	2.4	1.1		
HOSP < 24 HRS	0	0	2	1	4	3	3	3	2	3	29	
	0.0	0.0	6.9	3.4	13.8	10.3	10.3	10.3	6.9	10.3	3.2	
	0.0	0.0	1.0	1.0	3.9	4.9	4.5	7.0	5.1	11.5		
	0.0	0.0	0.2	0.1	0.4	0.3	0.3	0.3	0.2	0.3		
HOSP SIGNIFICANT	0	0	1	1	4	8	12	10	9	8	219	
	0.0	0.0	2.5	0.5	1.8	3.7	5.5	4.6	4.1	3.7	24.3	
	0.0	0.0	1.0	1.0	3.9	13.1	17.9	23.3	23.1	30.8		
	0.0	0.0	0.1	0.1	0.4	0.9	1.3	1.1	1.0	0.9		
OUTPATIENT CARE	3	9	23	14	18	2	4	1	2	2	79	
	3.8	11.4	29.1	17.7	22.8	2.5	5.1	1.3	2.5	2.5	8.8	
	15.0	17.3	22.1	13.5	17.6	3.3	6.0	2.3	5.1	7.7		
	0.3	1.0	2.6	1.6	2.0	0.2	0.4	0.1	0.2	0.2		
DEAD ON SCENE	0	0	0	0	0	0	0	0	0	0	31	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
D. O. A.	0	0	0	0	0	0	0	0	0	0	10	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
COLUMN TOTAL	20	52	104	104	102	61	67	43	39	26	900	
TOTAL	2.2	5.8	11.6	11.6	11.3	6.0	7.4	4.8	4.3	2.9	100.0	

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW TOTAL
COUNT		0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	
FATAL WITHIN 24	99.	0	0	0	0	0	0	0	0	0	0	9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL	99.	0	0	0	0	0	0	0	0	0	0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOWN	99.	1	0	0	0	1	0	0	1	0	0	4
		25.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.4
		0.1	0.0	0.0	0.0	1.0	0.0	0.0	2.3	0.0	0.0	
		0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	
N A	99.	15	23	25	19	13	5	3	1	1	0	107
		14.0	21.5	23.4	17.8	12.1	4.7	2.8	0.9	0.9	0.0	11.9
		75.0	44.2	24.0	18.3	12.7	8.2	4.5	2.3	2.6	0.0	
		1.7	2.6	2.8	2.1	1.4	0.6	0.3	0.1	0.1	0.0	
COLUMN TOTAL		20	52	104	104	102	61	67	43	39	26	900
		2.2	5.8	11.6	11.6	11.3	6.8	7.4	4.8	4.3	2.9	100.0

Continued

2000-2001

Continued

	COUNT	Significance
	ROW PCT	
	COL PCT	
	TOT PCT	
	10	
FIRST AID-SCENE	1 1.3 4.5 0.1	
TREATED, RELEASED	10 3.0 45.5 1.1	
HOSP < 24 HRS	1 3.4 4.5 0.1	
HOSP SIGNIFICANT	9 4.1 40.9 1.0	
OUTPATIENT CARE	0 0.0 0.0 0.0	
DEAD ON SCENE	0 0.0 0.0 0.0	
D. O. A.	0 0.0 0.0 0.0	
COLUMN TOTAL	22 2.4	



Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW TOTAL
COUNT		10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	
ROW PCT												
COL PCT												
TOT PCT												
FATAL WITHIN 24	0	0	0	0	0	0	0	0	0	0	0	9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL	0	0	0	0	0	0	0	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N/A	107	0	0	0	0	0	0	0	0	0	0	107
	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	22	25	22	11	13	7	13	8	13	8	8	900
ROW TOTAL	2.4	2.8	2.4	1.2	1.4	0.8	1.4	0.9	1.4	0.9	0.9	100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2										ROW TOTAL	
	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	28.1	29.1		
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TREATED, RELEASED	0	1	1	0	0	0	0	0	0	0	0	0
	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	12.5	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	1	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
HOSP SIGNIFICANT	5	7	4	5	8	3	4	3	7	0	0	0
	2.3	3.2	1.8	2.3	3.7	1.4	1.8	1.4	3.2	0.0	0.0	0.0
	100.0	87.5	80.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0
	0.6	0.8	0.4	0.6	0.9	0.3	0.4	0.3	0.8	0.0	0.0	0.0
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEAD ON SCENE	0	0	0	0	0	0	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
O. G. A.	0	0	0	0	0	0	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLUMN TOTAL	5	8	5	5	8	3	4	3	7	1	0	0
	0.6	0.9	0.6	0.6	0.9	0.3	0.4	0.3	0.8	0.1	0.0	0.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW TOTAL
	COUNT ROW PCT COL PCT TOT PCT	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	28.1	29.1	
FATAL WITHIN 24	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	9 1.0
CEREB FATAL	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.4
UNKNOWN	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 0.4
N A	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	107 11.9
COLUMN TOTAL	5 0.6	8 0.9	5 0.6	5 0.6	8 0.9	3 0.3	4 0.4	3 0.3	7 0.8	1 0.1	900 100.0	

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2											ROW TOTAL
	COUNT	30.1	31.1	32.1	33.1	35.1	36.1	37.1	39.1	40.1	41.1	
ROW PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COL PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOT PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TREATED, RELEASED	0	0	0	0	0	0	0	0	0	0	0	328
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP SIGNIFICANT	2	2	1	1	4	1	1	2	5	3		219
	0.2	0.0	0.5	0.5	1.8	0.5	0.5	0.9	2.3	1.4		24.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
	0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.6	0.3		
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	0	0	0	0	0	0	0	0	0	0	0	31
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
D. O. A.	0	0	0	0	0	0	0	0	0	0	0	10
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	2	2	1	1	4	1	1	2	5	3		900
	0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.6	0.3		100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										
	COUNT	30.1	31.1	32.1	33.1	35.1	36.1	37.1	38.1	40.1	41.1	ROW TOTAL
	ROW PCT											
	COL PCT											
	TOT PCT											
FATAL WITHIN 24	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOW	98.	0	0	0	0	0	0	0	0	0	0	4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N A	99.	0	0	0	0	0	0	0	0	0	0	107
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		2	2	1	1	4	1	1	2	5	3	900
		0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.6	0.3	100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2										ROW TOTAL				
	COUNT	POW PCT	CIV PCT	TOT PCT	42.	43.	44.	45.	46.	47.	48.	49.	50.	51.	
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
TREATED, RELEASED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
HOSP SIGNIFICANT	1	1	2	1	0	1	1	1	1	1	1	1	0	1	219
	0.5	0.5	0.9	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	24.3
	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	
	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD EN SCENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
O. O. A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	1	1	2	1	1	1	1	1	1	1	1	1	1	1	900
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

285

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										
CCUNT		42.1	43.1	44.1	45.1	46.1	47.1	48.1	49.1	50.1	51.1	ROW TOTAL
ROW PCT												
COL PCT												
TOT PCT												
FATAL WITHIN 24		0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	9
		0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	1.0
		0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
UNKNOWN	98.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N A	99.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1	1	2	1	1	1	1	1	1	1	900
		0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2										ROW TOTAL	
	COUNT	54.1	55.1	57.1	5A.1	59.1	62.1	63.1	65.1	67.1		69.1
ROW PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COL PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOT PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TREATED, RELEASED	0	0	0	0	0	0	0	0	0	0	0	378
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP SIGNIFICANT	1	0	1	0	1	1	0	0	0	0	0	219
	0.5	0.0	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	24.3
	100.0	0.0	100.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	0	0	0	2	0	0	1	0	1	0	0	31
	0.0	0.0	0.0	6.5	0.0	0.0	3.2	0.0	3.2	0.0	0.0	3.4
	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	
	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	
O. O. A.	0	1	0	0	1	0	0	0	0	0	0	10
	0.0	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	100.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	1	1	1	2	2	2	1	2	1	2	2	900
	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	100.0

Continued



Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW
CDUNT	ROW	54.1	55.1	57.1	58.1	59.1	62.1	63.1	65.1	67.1	69.1	TOTAL
PC1	PC1											
COL	COL											
PC1	PC1											
TOT	TOT											
FATAL WITHIN 24		0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	11.1	9
		0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	1.0
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	
OTHER FATAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
UNKDWN	98.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
N A	99.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	107
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	11.9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
COLUMN	TOTAL	1	1	1	2	2	2	1	2	1	2	900
		0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2											ROW TOTAL
	72.1	79.1	80.1	81.1	84.1	86.1	88.1	89.1	90.1	91.1		
FIRST AID-SCENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TREATED, RELEASED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	328
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP SIGNIFICANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	219
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OUTPATIENT CARE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	0.0	0.0	1.1	0.0	0.0	1.1	0.0	0.0	1.1	1.1	1.1	31
	0.0	0.0	3.2	0.0	0.0	3.2	0.0	0.0	3.2	3.2	3.2	3.4
	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	100.0	100.0	
	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	
D. G. A.	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	10
	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	1.1
	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
COLUMN TOTAL	1	1	1	2	1	1	1	1	1	1	1	900
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

289

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW TOTAL		
COUNT	ROW PCT	COL PCT	TOT PCT	70.1	70.1	80.1	81.1	84.1	86.1	88.1	89.1	90.1	91.1	
FATAL WITHIN 24	1	11.1	100.0	1	11.1	0.0	11.1	11.1	0.0	11.1	0.0	0.0	0.0	9
		0.1	100.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	1.0
OTHER FATAL	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
UNKNOWN	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
N A	0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
COLUMN TOTAL		0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	900
														100.0

Continued

Table 8.8.2

Continued Severities Sum (SS=SS1+SS2) by Injury Status

	SS=SS1+SS2											ROW TOTAL			
	COUNT	ROW PCT	COL PCT	TOT PCT	97.1	97.1	99.1	102.1	104.1	106.1	107.1		109.1	112.1	116.1
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TREATED, RELEASED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP SIGNIFICANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	1	1	0	1	1	1	0	1	0	1	0	1	1	1	31
	3.2	3.2	0.0	3.2	3.2	3.2	0.0	3.2	0.0	3.2	0.0	3.2	3.2	3.2	3.4
	100.0	100.0	0.0	100.0	50.0	50.0	0.0	50.0	0.0	50.0	0.0	100.0	100.0	100.0	
	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	
D. O. A.	0	0	1	0	1	0	0	0	0	0	0	0	0	0	10
	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	0.0	100.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	1	1	1	1	2	1	2	1	1	1	1	1	1	1	900
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

291

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										
	COUNT	93.1	97.1	99.1	102.1	104.1	106.1	107.1	109.1	112.1	116.1	ROW TOTAL
	ROW PCT											
	COL PCT											
	TOT PCT											
FATAL WITHIN 24		0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	9
		0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	1.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
OTHER FATAL		0.0	0.0	0.0	0.0	0.0	1	0	1	0	0	4
		0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	
UNKNOWN	98.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N A	99.	0	0	0	0	0	0	0	0	0	0	107
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1	1	1	1	2	1	2	1	1	1	900
		0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	100.0

Continued

Table 8.8.2

Continued Severities Sum (SS=SS1+SS2) by Injury Status

	SS=SS1+SS2											RCW TOTAL
	COUNT	117.1	120.1	125.1	126.1	127.1	132.1	135.1	140.1	144.1	145.1	
POW PCT	0	0	0	0	0	0	0	0	0	0	0	80
COL PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
INT PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FIRST AID-SCENE	0	0	0	0	0	0	0	0	0	0	0	328
TREATED, RELEASED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0	0	0	0	0	0	0	0	0	0	0	29
HOSP SIGNIFICANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OUTPATIENT CARE	0	0	0	0	0	0	0	0	0	0	0	219
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	1	1	1	0	2	1	1	1	1	0	1	79
	3.2	3.2	3.2	0.0	6.5	3.2	3.2	3.2	3.2	0.0	3.2	8.8
	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	50.0	0.0	100.0	
	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.0	0.1	
D. O. A.	0	0	0	1	0	0	0	0	1	1	0	31
	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	3.4
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	50.0	100.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	
COLUMN TOTAL	1	1	1	1	2	1	1	1	2	1	1	900
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	100.0

293

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2										ROW
		117.1	120.1	125.1	126.1	127.1	132.1	135.1	140.1	144.1	145.1	TOTAL
COUNT												
ROW PCT												
COL PCT												
TOT PCT												
FATAL WITHIN 24	99.	0	0	0	0	0	0	0	0	0	0	9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL	99.	0	0	0	0	0	0	0	0	0	0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOWN	99.	0	0	0	0	0	0	0	0	0	0	4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N A	99.	0	0	0	0	0	0	0	0	0	0	107
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		1	1	1	1	2	1	1	2	1	1	900
		0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	100.0

Continued

Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

	SS=SS1+SS2								ROW TOTAL
	156.1	161.1	170.1	197.1	189.1	192.1	204.1	250.1	
FIRST AID-SCENE	0	0	0	0	0	0	0	0	80
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TREATED, RELEASED	0	0	0	0	0	0	0	0	328
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.4
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP < 24 HRS	0	0	0	0	0	0	0	0	29
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HOSP SIGNIFICANT	0	0	0	0	0	0	0	0	219
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OUTPATIENT CARE	0	0	0	0	0	0	0	0	79
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEAD ON SCENE	1	1	1	1	1	0	1	1	31
	3.2	3.2	3.2	3.2	3.2	0.0	3.2	3.2	3.4
	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	
	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	
D. U. A.	0	0	0	0	0	1	0	0	10
	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	1.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
COLUMN TOTAL	1	1	1	1	1	1	1	1	900
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

295

Continued



Table 8.8.2

Severities Sum (SS=SS1+SS2) by Injury Status

Continued

		SS=SS1+SS2									ROW TOTAL
		COUNT	1	2	3	4	5	6	7	8	9
		ROW PCT	1	2	3	4	5	6	7	8	9
		COL PCT	1	2	3	4	5	6	7	8	9
		TOT PCT	156.1	161.1	170.1	187.1	189.1	192.1	204.1	250.1	
FAT			0	0	0	0	0	0	0	0	9
FATAL WITHIN 24			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTHER FATAL			0	0	0	0	0	0	0	0	4
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UNKNOWN	98.		0	0	0	0	0	0	0	0	4
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
N A	99.		0	0	0	0	0	0	0	0	107
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL			1	1	1	1	1	1	1	1	900
			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

Table 8.8.3

Fatal/Non-Fatal Outcome by Severities Sum (SS)

		SS=SS1+SS2										ROW TOTAL
		0.1	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1	
COUNT	ROW PCT											
COL PCT	TOT PCT											
NON FATAL		20	52	174	174	102	61	67	43	39	26	846
		2.4	6.1	12.3	12.3	12.1	7.2	7.9	5.1	4.6	3.1	94.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		2.2	5.8	11.6	11.6	11.3	6.8	7.4	4.8	4.3	2.9	
FATAL		0	0	0	0	0	0	0	0	0	0	54
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		20	52	104	104	102	61	67	43	39	26	900
		2.2	5.8	11.6	11.6	11.3	6.8	7.4	4.8	4.3	2.9	100.0

		SS=SS1+SS2										ROW TOTAL
		10.1	11.1	12.1	13.1	14.1	15.1	16.1	17.1	18.1	19.1	
COUNT	ROW PCT											
COL PCT	TOT PCT											
NON FATAL		22	25	22	11	13	7	13	8	13	8	846
		2.6	3.0	2.6	1.3	1.5	0.8	1.5	0.9	1.5	0.9	94.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		2.4	2.8	2.4	1.2	1.4	0.8	1.4	0.9	1.4	0.9	
FATAL		0	0	0	0	0	0	0	0	0	0	54
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		22	25	22	11	13	7	13	8	13	8	900
		2.4	2.8	2.4	1.2	1.4	0.8	1.4	0.9	1.4	0.9	100.0

Continued

Table 8.8.3

Fatal/Non-Fatal Outcome by Severities Sum (SS)

Continued

		SS=SS1+SS2										ROW TOTAL
CCOUNT	PCW PCT	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.1	28.1	29.1	
COL PCT	TOT PCT											
NON FATAL		5	8	5	5	8	3	4	3	7	1	846
		0.6	0.9	0.6	0.6	0.9	0.4	0.5	0.4	0.8	0.1	94.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.6	0.9	0.6	0.6	0.9	0.3	0.4	0.3	0.8	0.1	
FATAL		0	0	0	0	0	0	0	0	0	0	54
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		5	8	5	5	8	3	4	3	7	1	900
		0.6	0.9	0.6	0.6	0.9	0.3	0.4	0.3	0.8	0.1	100.0

		SS=SS1+SS2										ROW TOTAL
CCOUNT	PCW PCT	30.1	31.1	32.1	33.1	35.1	36.1	37.1	38.1	40.1	41.1	
COL PCT	TOT PCT											
NON FATAL		2	2	1	1	4	1	1	2	5	3	846
		0.2	0.2	0.1	0.1	0.5	0.1	0.1	0.2	0.6	0.4	94.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.6	0.3	
FATAL		0	0	0	0	0	0	0	0	0	0	54
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		2	2	1	1	4	1	1	2	5	3	900
		0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.6	0.3	100.0

Continued

Table 8.8.3

Fatal/Non-Fatal Outcome by Severities Sum (SS)

Continued

		SS=SS1+SS2										ROW TOTAL
		42.1	43.1	44.1	45.1	46.1	47.1	48.1	49.1	50.1	51.1	
COUNT	1											
ROW PCT	1											
COL PCT	1											
TOT PCT	1											
NON FATAL	1	1	1	2	1	0	1	1	1	0	1	846
	1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.1	94.0
	1	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0	100.0	
	1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.1	
FATAL	1	0	0	0	0	1	0	0	0	1	0	54
	1	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.9	0.0	6.0
	1	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	
	1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	
COLUMN TOTAL	1	1	1	2	1	1	1	1	1	1	1	900
	1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

		SS=SS1+SS2										ROW TOTAL
		54.1	55.1	57.1	58.1	59.1	62.1	63.1	65.1	67.1	69.1	
COUNT	1											
ROW PCT	1											
COL PCT	1											
TOT PCT	1											
NON FATAL	1	1	0	1	0	1	1	0	2	0	0	846
	1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.0	94.0
	1	100.0	0.0	100.0	0.0	50.0	50.0	0.0	100.0	0.0	0.0	
	1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.0	
FATAL	1	0	1	0	2	1	1	1	0	1	2	54
	1	0.0	1.9	0.0	3.7	1.9	1.9	1.9	0.0	1.9	3.7	6.0
	1	0.0	100.0	0.0	100.0	50.0	50.0	100.0	0.0	100.0	100.0	
	1	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.2	
COLUMN TOTAL	1	1	1	1	2	2	2	1	2	1	2	900
	1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	100.0

Continued

Table 8.8.3  
 Fatal/Non-Fatal Outcome by Severities Sum (SS)

Continued

		SS=SS1+SS2										ROW TOTAL	
		COUNT											
		ROW PCT											
		COL PCT											
		TOT PCT	72.1	78.1	80.1	81.1	84.1	86.1	88.1	89.1	90.1	91.1	
NON FATAL		0	0	0	0	0	0	0	0	0	0	0	846
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FATAL		1	1	1	2	1	1	1	1	1	1	1	54
		1.9	1.9	1.9	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	6.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
COLUMN TOTAL		1	1	1	2	1	1	1	1	1	1	1	900
		0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

		SS=SS1+SS2										ROW TOTAL	
		COUNT											
		ROW PCT											
		COL PCT											
		TOT PCT	93.1	97.1	99.1	102.1	104.1	106.1	107.1	109.1	112.1	116.1	
NON FATAL		0	0	0	0	0	0	0	0	0	0	0	846
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FATAL		1	1	1	1	2	1	2	1	1	1	1	54
		1.9	1.9	1.9	1.9	3.7	1.9	3.7	1.9	1.9	1.9	1.9	6.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	
COLUMN TOTAL		1	1	1	1	2	1	2	1	1	1	1	900
		0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	100.0

Continued

Table 8.8.3

Fatal/Non-Fatal Outcome by Severities Sum (SS)

Continued

		SS=SS1+SS2										ROW TOTAL
COUNT		117.1	120.1	125.1	126.1	127.1	132.1	135.1	140.1	144.1	145.1	
ROW PCT												
COL PCT												
TOT PCT												
NON FATAL		0	0	0	0	0	0	0	0	0	0	846
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FATAL		1	1	1	1	2	1	1	2	1	1	54
		1.9	1.0	1.9	1.9	3.7	1.9	1.9	3.7	1.9	1.9	6.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	
COLUMN TOTAL		1	1	1	1	2	1	1	2	1	1	900
		0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	100.0

		SS=SS1+SS2								ROW TOTAL
COUNT		156.1	161.1	170.1	187.1	189.1	192.1	204.1	250.1	
ROW PCT										
COL PCT										
TOT PCT										
NON FATAL		0	0	0	0	0	0	0	0	846
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FATAL		1	1	1	1	1	1	1	1	54
		1.9	1.0	1.9	1.9	1.9	1.9	1.9	1.9	6.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
COLUMN TOTAL		1	1	1	1	1	1	1	1	900
		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Crash Speed, mph

COUNT	Crash Speed, mph										ROW TOTAL	
	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.		
FOR PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1		
TOT PCT												
SS	0.	5	9	4	1	0	0	1	0	0	0	20
	25.0	45.0	20.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	2.2
	6.0	2.6	1.5	0.8	0.0	0.0	11.1	0.0	0.0	0.0	0.0	
	0.6	1.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
1.	14	28	7	2	0	0	0	0	0	0	1	52
	26.9	53.8	13.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.8
	16.9	8.0	2.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	
	1.6	3.1	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
2.	14	53	24	12	1	0	0	0	0	0	0	104
	17.5	51.0	23.1	11.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6
	16.9	15.2	8.9	0.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	
	1.6	5.9	2.7	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
3.	14	55	23	0	2	2	0	0	0	0	0	104
	17.5	52.9	22.1	7.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	11.6
	16.9	15.8	8.5	6.2	6.3	8.3	0.0	0.0	0.0	0.0	0.0	
	1.6	6.1	2.6	0.9	0.2	0.2	0.0	0.0	0.0	0.0	0.0	
4.	5	52	29	11	2	3	0	0	0	0	0	102
	4.9	51.0	28.4	10.8	2.0	2.9	0.0	0.0	0.0	0.0	0.0	11.3
	6.0	14.9	10.7	8.5	6.3	12.5	0.0	0.0	0.0	0.0	0.0	
	0.6	5.8	3.2	1.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	
5.	7	29	17	3	1	2	1	0	1	0	0	61
	11.5	47.5	27.0	4.9	1.6	3.3	1.6	0.0	0.0	1.6	0.0	6.8
	8.4	8.3	6.3	2.3	3.1	8.3	11.1	0.0	100.0	0.0	0.0	
	0.8	3.2	1.9	0.3	0.1	0.2	0.1	0.0	0.1	0.0	0.0	
6.	6	26	23	9	0	3	0	0	0	0	0	67
	9.0	38.8	34.3	13.4	0.0	4.5	0.0	0.0	0.0	0.0	0.0	7.4
	7.2	7.4	8.5	7.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	
	0.7	2.9	2.6	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	83	349	270	129	32	24	0	2	1	1	900	
	9.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0	

302

Continued

Table 8.8.5  
Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

		Crash Speed, mph										ROW TOTAL
COUNT		10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	
ROW PCT		1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1	99.1	
SS 7.		4	12	18	5	4	0	0	0	0	0	43
		9.3	27.9	41.9	11.6	9.3	0.0	0.0	0.0	0.0	0.0	4.8
		4.8	3.4	6.7	3.9	12.5	0.0	0.0	0.0	0.0	0.0	
		0.4	1.3	2.0	0.6	0.4	0.0	0.0	0.0	0.0	0.0	
8.		1	14	17	4	3	0	0	0	0	0	39
		2.6	35.9	43.6	10.3	7.7	0.0	0.0	0.0	0.0	0.0	4.3
		1.2	4.0	6.3	3.1	9.4	0.0	0.0	0.0	0.0	0.0	
		0.1	1.6	1.9	0.4	0.3	0.0	0.0	0.0	0.0	0.0	
9.		3	9	10	3	0	1	0	0	0	0	26
		11.5	34.6	38.5	11.5	0.0	3.8	0.0	0.0	0.0	0.0	2.9
		3.6	2.6	3.7	2.3	0.0	4.2	0.0	0.0	0.0	0.0	
		0.3	1.0	1.1	0.3	0.0	0.1	0.0	0.0	0.0	0.0	
10.		1	15	4	1	0	1	0	0	0	0	22
		4.5	60.2	18.2	4.5	0.0	4.5	0.0	0.0	0.0	0.0	2.4
		1.2	4.3	1.5	0.8	0.0	4.2	0.0	0.0	0.0	0.0	
		0.1	1.7	0.4	0.1	0.0	0.1	0.0	0.0	0.0	0.0	
11.		1	6	12	4	1	0	1	0	0	0	25
		4.0	24.0	48.0	16.0	4.0	0.0	4.0	0.0	0.0	0.0	2.8
		1.2	1.7	4.4	3.1	3.1	0.0	11.1	0.0	0.0	0.0	
		0.1	0.7	1.3	0.4	0.1	0.0	0.1	0.0	0.0	0.0	
12.		1	6	9	5	0	1	0	0	0	0	22
		4.5	27.3	40.9	22.7	0.0	4.5	0.0	0.0	0.0	0.0	2.4
		1.2	1.7	3.3	3.9	0.0	4.2	0.0	0.0	0.0	0.0	
		0.1	0.7	1.0	0.6	0.0	0.1	0.0	0.0	0.0	0.0	
13.		0	3	4	2	2	0	0	0	0	0	11
		0.0	27.3	36.4	18.2	18.2	0.0	0.0	0.0	0.0	0.0	1.2
		0.0	0.9	1.5	1.6	6.3	0.0	0.0	0.0	0.0	0.0	
		0.0	0.3	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	
COUNT		33	349	274	129	32	24	9	2	1	1	900
TOTAL		9.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued



Table 8.8.5  
Rider Severities Sum (SS-SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	Crash Speed, mph										ROW TOTAL	
	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.		
ROW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	0.1	98.1	99.1		
COL PCT												
TOT PCT												
SS 14.	0	4	3	6	0	0	0	0	0	0	7	13
	0.0	30.8	21.1	46.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	0.0	1.1	1.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.4	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15.	1	2	2	2	0	0	0	0	0	0	0	7
	14.3	28.6	28.6	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
	1.2	0.6	0.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16.	1	4	4	2	1	0	1	0	0	0	6	13
	7.7	30.8	30.8	15.4	7.7	0.0	7.7	0.0	0.0	0.0	0.0	1.4
	1.2	1.1	1.5	1.6	3.1	0.0	1.1	0.0	0.0	0.0	0.0	
	0.1	0.4	0.4	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	
17.	0	0	4	3	0	1	0	0	0	0	0	8
	0.0	0.0	50.0	37.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.9
	0.0	0.0	1.5	2.3	0.0	4.2	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.4	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
18.	2	2	6	1	0	0	1	1	0	0	0	13
	15.4	15.4	46.2	7.7	0.0	0.0	7.7	7.7	0.0	0.0	0.0	1.4
	2.4	0.6	2.2	0.4	0.0	0.0	1.1	50.0	0.0	0.0	0.0	
	0.2	0.2	0.7	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	
19.	0	0	7	0	1	0	0	0	0	0	0	8
	0.0	0.0	47.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.9
	0.0	0.0	2.6	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
20.	0	1	4	0	0	0	0	0	0	0	0	5
	0.0	25.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
	0.0	0.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	83	340	270	120	32	24	9	2	1	1	900	
	0.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0	

Continued

Table 8.8.5  
Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
ROW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1	
COL PCT											
TOT PCT											
SS 21.	0	1	4	2	1	0	0	0	0	0	8
	0.0	12.5	50.0	25.0	12.5	0.0	0.0	0.0	0.0	0.0	0.9
	0.0	0.3	1.5	1.6	3.1	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	
22.	0	0	4	1	0	0	0	0	0	0	5
	0.0	0.0	80.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
	0.0	0.0	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
23.	1	0	1	1	1	0	0	1	0	0	5
	20.0	0.0	20.0	20.0	20.0	0.0	0.0	20.0	0.0	0.0	0.6
	1.2	0.0	0.4	0.8	3.1	0.0	0.0	50.0	0.0	0.0	
	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	
24.	0	2	5	0	0	1	0	0	0	0	8
	0.0	25.0	62.5	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.9
	0.0	0.6	1.9	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
	0.0	0.2	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
25.	0	0	2	1	0	0	0	0	0	0	3
	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
26.	0	0	0	1	3	0	0	0	0	0	4
	0.0	0.0	0.0	25.0	75.0	0.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.0	0.0	0.8	9.4	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	
27.	1	0	1	1	0	0	0	0	0	0	3
	33.3	0.0	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	1.2	0.0	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	93	349	270	129	32	24	9	2	1	1	990
	9.2	38.8	30.0	14.3	4.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT ROW PCT COL PCT TOT PCT	Crash Speed, mph										ROW TOTAL
	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	
SS 29.	0	0	3	4	0	0	0	0	0	0	7
	0.0	0.0	42.9	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8
	0.0	0.0	1.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	
30.	0	1	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30.	0	1	0	1	0	0	0	0	0	0	2
	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
31.	0	0	1	1	0	0	0	0	0	0	2
	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
32.	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
33.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
35.	0	1	1	1	0	1	0	0	0	0	4
	0.0	25.0	25.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	0.4
	0.0	0.3	0.4	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	
COLUMN TOTAL	43	349	270	129	32	24	9	2	1	1	900
	0.2	38.9	30.0	14.1	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	Crash Speed, mph											RLW TOTAL
	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.		
FLOW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	0.1	98.1	99.1		
COL PCT												
TOT PCT												
SS 36.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37.	0	0	1	0	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
38.	0	1	1	0	0	0	0	0	0	0	0	2
	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
40.	0	0	2	2	1	0	0	0	0	0	0	5
	0.0	0.0	40.0	40.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
	0.0	0.0	0.7	1.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
41.	0	1	1	1	0	0	0	0	0	0	0	3
	0.0	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.3	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
42.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
43.	0	1	0	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	83	349	270	129	32	24	9	2	1	1	900	
TOTAL	9.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0	

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

CRASH SPEED	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
SS 44.	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
45.	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
46.	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
47.	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
48.	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
49.	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
50.	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
COLUMN TOTAL	0.3	34.2	27.0	129	32	24	9	2	1	1	900
TOTAL	2.2	38.4	30.0	14.7	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT ROW PCT COL PCT TOT PCT	Crash Speed, mph										ROW TOTAL	
	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.		
SS 51.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
54.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
55.	0	0	1	0	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
57.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
58.	0	0	2	0	0	0	0	0	0	0	0	2
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
59.	0	0	0	2	0	0	0	0	0	0	0	2
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
62.	0	1	0	0	1	0	0	0	0	0	0	2
	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
COLUMN TOTAL	43	349	270	124	32	24	9	2	1	1	900	100.0
	0.2	30.8	23.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0	

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

ROW	COL	TOT	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
PCT	PCT	PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1	
SS 63.	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
65.	0.0	1	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
67.	0.0	0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
69.	0.0	1	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
72.	0.0	0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
78.	0.0	0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
80.	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
COLUMN TOTAL	0.3	349	270	129	32	24	9	2	1	1	900		
TOTAL	0.2	30.0	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0		

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	1	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
ROW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1		
COL PCT												
TOT PCT												
SS 81.	0	1	0	1	0	0	0	0	0	0	0	2
	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
84.	0	1	0	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
86.	0	0	1	0	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
88.	0	0	0	0	0	0	1	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
89.	0	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
90.	0	1	0	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
91.	0	1	0	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CORUMIN	83	349	270	129	32	24	9	2	1	1		400
TOTAL	9.2	38.8	30.0	14.7	3.6	2.7	1.0	0.2	0.1	0.1		100.0

Continued



Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

SS	COUNT ROW PCT COL PCT TOT PCT	Crash Speed, mph										ROW TOTAL	
		10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.		
93.		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
97.		0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
99.		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
102.		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
104.		0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
106.		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
107.		0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.2
COLUMN TOTAL		83	349	270	129	32	24	9	2	1	1	900	100.0

Continued

Table 8.8.5  
Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
ROW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1	
SS 109.	0	0	0	0	1	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
112.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
116.	0	1	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
117.	1	0	0	0	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
120.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
125.	0	0	1	0	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
126.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
COLUMN TOTAL	43	349	270	129	32	24	9	2	1	1	900
	4.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

	COUNT	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
	PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1	
	COL PCT											
	TOT PCT											
SS 127.		0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	
		0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	
132.		0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
135.		0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
140.		0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.2
		0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.4	0.0	3.1	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
144.		0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
145.		0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
156.		0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		0.3	36.0	27.0	12.0	3.2	2.4	9.0	0.2	1.0	0.1	90.0
TOTAL		0.2	38.0	30.0	14.1	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Continued

Table 8.8.5

Rider Severities Sum (SS=SS1+SS2) by Crash Speed

Continued

Crash Speed, mph

COUNT	10-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	UNKNOWN	N.A.	ROW TOTAL
ROW PCT	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	98.1	99.1	
CUM PCT											
TOT PCT											
SS 161.	0	0	0	0	1	0	0	0	0	0	1
	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
170.	0	0	0	0	0	0	1	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
187.	0	0	0	0	0	1	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
189.	0	0	0	0	0	1	0	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
192.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
204.	0	0	0	0	0	0	1	0	0	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
253.	0	0	0	1	0	0	0	0	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMNS TOTAL	81	349	270	129	32	24	9	2	1	1	908
TOTAL	9.2	38.8	30.0	14.3	3.6	2.7	1.0	0.2	0.1	0.1	100.0

Table 8.8.9  
 Severities Sum (SS) by Rider Alcohol/Drug Involvement

SEVERITY	ALCOHOL INVOLVEMENT	DRUG INVOLVEMENT	COMBINATION	UNKNOWN	N/A	ROW TOTAL
COUNT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
0.	0	2	1	0	2	15
0.0	10.0	5.0	0.0	0.0	10.0	75.0
SS	0.0	5.4	4.3	0.0	9.3	1.9
	0.0	0.7	0.1	0.0	0.7	1.7
1.	1	4	0	0	1	46
1.9	7.7	0.0	0.0	0.0	1.9	88.5
2.9	10.8	0.0	0.0	0.0	4.2	6.0
0.1	0.4	0.0	0.0	0.0	0.1	5.1
2.	3	3	1	0	2	95
2.9	2.9	1.0	0.0	0.0	1.9	91.3
8.6	9.1	4.3	0.0	0.0	8.3	12.3
0.3	0.3	0.1	0.0	0.0	0.2	10.6
3.	5	2	2	0	2	93
4.8	1.0	1.0	0.0	0.0	1.9	89.4
14.3	5.4	8.7	0.0	0.0	8.3	12.0
0.6	0.2	0.2	0.0	0.0	0.2	10.3
4.	3	4	0	1	3	91
2.9	1.0	0.0	1.0	0.0	2.9	89.2
8.6	10.6	0.0	33.3	0.0	12.5	11.8
0.3	0.4	0.0	0.1	0.0	0.3	10.1
5.	3	2	2	0	0	54
4.9	3.3	3.3	0.0	0.0	0.0	88.5
8.6	5.4	8.7	0.0	0.0	0.0	7.0
0.3	0.2	0.2	0.0	0.0	0.0	6.0
6.	2	2	0	0	1	61
3.0	3.0	0.0	0.0	1.5	1.5	91.0
5.7	5.4	0.0	0.0	20.0	4.2	7.9
0.2	0.2	0.0	0.0	0.1	0.1	6.8
COLUMN TOTAL	35	37	3	3	5	24
	1.0	4.1	2.6	0.3	0.4	2.7
						773
						85.9
						100.0

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	DRUG	ALCOHOL	UNDE	INPA	DRUG	INF	COMBINAT	UNKNOWN	N A	ROW
POW	INFLU	INFLU	INFLU	INFLU	INFLU	INFLU	INFLU	INFLU	INFLU	TOTAL
DTY	EN	EN	EN	EN	EN	EN	EN	EN	EN	
PCT	EN	EN	EN	EN	EN	EN	EN	EN	EN	
7.	0	0	1	0	2	1	39			43
SS	0.0	0.0	2.3	0.0	4.7	2.3	90.7			4.8
	0.0	0.0	4.3	0.0	40.0	4.2	5.0			
	0.0	0.0	0.1	0.0	0.2	0.1	4.3			
8.	0	0	0	0	0	2	37			39
SS	0.0	0.0	0.0	0.0	0.0	5.1	94.9			4.3
	0.0	0.0	0.0	0.0	0.0	8.3	4.8			
	0.0	0.0	3.0	0.0	0.0	0.2	4.1			
9.	1	1	1	0	0	0	23			26
SS	3.8	3.8	3.8	0.0	0.0	0.0	88.5			2.9
	2.9	2.7	4.3	0.0	0.0	0.0	3.0			
	0.1	0.1	0.1	0.0	0.0	0.0	2.6			
10.	1	0	0	0	0	1	20			22
SS	4.5	0.0	0.0	0.0	0.0	4.5	90.9			2.4
	2.9	0.0	0.0	0.0	0.0	4.2	2.6			
	0.1	0.0	0.0	0.0	0.0	0.1	2.2			
11.	1	1	1	0	0	0	22			25
SS	4.0	4.0	4.0	0.0	0.0	0.0	88.0			2.8
	2.9	2.7	4.3	0.0	0.0	0.0	2.8			
	0.1	0.1	0.1	0.0	0.0	0.0	2.4			
12.	2	1	2	0	0	0	17			22
SS	9.1	4.5	9.1	0.0	0.0	0.0	77.3			2.4
	5.7	2.7	8.7	0.0	0.0	0.0	2.2			
	3.2	0.1	0.2	0.0	0.0	0.0	1.9			
13.	1	0	0	0	0	1	9			11
SS	9.1	0.0	0.0	0.0	0.0	9.1	81.8			1.2
	2.9	0.0	0.0	0.0	0.0	4.2	1.2			
	0.1	0.0	0.0	0.0	0.0	0.1	1.0			
COLUMN	35	37	23	1	5	24	773			900
TOTAL	4.9	4.1	2.6	0.3	0.6	2.7	85.9			100.0

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	DRUG, POL	BRID, UNDE	BRID, IMPA	DRUG, INF	COMBINAT	UNKNOWN	N A	ROW
COL PCT	NUMBER IN	P INFLU	IP INFLU	INFLU	ION			TOTAL
COL PCT								
14.	0	0	1	0	0	0	12	13
SS	0.0	0.0	7.7	0.0	0.0	0.0	92.3	1.4
	0.0	0.0	4.3	0.0	0.0	0.0	1.6	
	0.0	0.0	0.1	0.0	0.0	0.0	1.3	
15.	0	0	0	0	0	0	7	7
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.8
	0.0	0.0	0.0	0.0	0.0	0.0	0.9	
	0.0	0.0	0.0	0.0	0.0	0.0	0.8	
16.	2	0	0	0	0	1	10	13
	15.4	0.0	0.0	0.0	0.0	7.7	76.9	1.4
	5.7	0.0	0.0	0.0	0.0	4.2	1.3	
	0.2	0.0	0.0	0.0	0.0	0.1	1.1	
17.	0	0	2	0	0	0	6	8
	0.0	0.0	25.0	0.0	0.0	0.0	75.0	0.9
	0.0	0.0	8.7	0.0	0.0	0.0	0.8	
	0.0	0.0	0.2	0.0	0.0	0.0	0.7	
18.	1	0	1	0	0	1	10	13
	7.7	0.0	7.7	0.0	0.0	7.7	76.9	1.4
	2.9	0.0	4.3	0.0	0.0	4.2	1.3	
	0.1	0.0	0.1	0.0	0.0	0.1	1.1	
19.	0	1	0	0	0	0	7	8
	0.0	12.5	0.0	0.0	0.0	0.0	87.5	0.9
	0.0	2.7	0.0	0.0	0.0	0.0	0.9	
	0.0	0.1	0.0	0.0	0.0	0.0	0.8	
20.	0	0	0	0	0	0	5	5
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
	0.0	0.0	0.0	0.0	0.0	0.0	0.6	
COLUMN	35	37	23	1	5	24	773	900
TOTAL	3.0	4.1	2.6	0.1	0.6	2.7	85.9	100.0

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

ROW	COL	SS	ALCOHOL	DRUG	INF	COMBINAT	UNKNDWN	N A	ROW
TOT	PCT								TOTAL
21.		0	0	0	0	0	0	8	8
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.9
		0.0	0.0	0.0	0.0	0.0	0.0	1.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.9	
22.		0	0	0	0	0	0	5	5
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.6
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	
		0.0	0.0	0.0	0.0	0.0	0.0	0.6	
23.		1	1	1	0	0	0	2	5
		20.0	20.0	20.0	0.0	0.0	0.0	40.0	0.6
		2.9	3.7	4.3	0.0	0.0	0.0	0.3	
		0.1	0.1	0.1	0.0	0.0	0.0	0.2	
24.		0	0	1	0	0	1	6	8
		0.0	0.0	12.5	0.0	0.0	12.5	75.0	0.9
		0.0	0.0	0.3	0.0	0.0	4.2	0.8	
		0.0	0.0	0.1	0.0	0.0	0.1	0.7	
25.		0	0	0	0	0	0	3	3
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.3
		0.0	0.0	0.0	0.0	0.0	0.0	0.4	
		0.0	0.0	0.0	0.0	0.0	0.0	0.3	
26.		1	0	0	0	0	0	3	4
		20.0	0.0	0.0	0.0	0.0	0.0	75.0	0.4
		2.9	0.0	0.0	0.0	0.0	0.0	0.4	
		0.1	0.0	0.0	0.0	0.0	0.0	0.3	
27.		0	0	0	0	0	0	3	3
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.3
		0.0	0.0	0.0	0.0	0.0	0.0	0.4	
		0.0	0.0	0.0	0.0	0.0	0.0	0.3	
COLUMN		35	37	23	3	5	24	773	900
TOTAL		3.9	4.1	2.6	0.3	0.6	2.7	85.2	100.0

Continued



Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	HBD,NOT	HBD,UNDT	HBD,IMPA	DRUG	INF	COMBINAT	UNKNOWN	N/A	ROW
CUR PCT	UNDER	IN P	IR UNKAC	LOFNCE	ION				TOTAL
TOT PCT									
28.	0	0	2	0	0	0	0	5	7
SS	0.0	0.0	20.6	0.0	0.0	0.0	0.0	71.4	0.0
	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.6	
	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.6	
29.	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
30.	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
31.	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
32.	0	0	0	0	0	1	0	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
33.	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
35.	0	0	1	0	0	0	1	2	4
	0.0	0.0	25.0	0.0	0.0	0.0	25.0	50.0	0.4
	0.0	0.0	4.3	0.0	0.0	0.0	4.2	0.3	
	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	
COLUMN	35	37	23	3	5	24	773	900	
TOTAL	3.9	4.1	2.6	0.3	0.6	2.7	85.9	100.0	

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

ROW	COL	1	2	3	4	5	6	7	8	9	10	ROW TOTAL
PCT	PCT	UNDR	IN H	INFLU	IN UNKN	DRUG	INF	COMBINA	UNKNOW	N A		TOTAL
36.		0	0	0	0	0	0	0	0	1		1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.1
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
37.		0	0	0	0	0	0	0	0	1		1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
38.		0	0	0	0	0	0	0	0	2		2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
40.		0	0	1	0	0	0	0	0	4		5
		0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	80.0		0.6
		0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.5		
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4		
41.		0	0	0	0	0	0	0	0	3		3
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.3
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3		
42.		0	0	0	0	0	0	0	0	1		1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
43.		0	0	0	0	0	0	0	0	1		1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		
COLUMN		15	37	23	3	5	20	773		900		
TOTAL		3.9	4.1	2.6	0.3	0.6	2.7	85.9		100.0		

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	ROW PCT	COL PCT	TOT PCT	HHD.NOT UNDER	HHD.UNDE IN P INFLUC	HHD.IMPA IP UNKNG	DRUG INF LUGNCE	COMBINAT ION	UNKNOWN	N A	ROW TOTAL
44.	0	0	0	0	0	0	0	0	0	2	0.2
SS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
45.	0	0	0	0	0	1	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
46.	0	0	0	0	0	0	0	0	1	1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
47.	0	1	0	0	0	0	0	0	0	1	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
48.	0	0	0	0	0	0	0	0	1	1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
49.	0	0	0	0	0	0	0	0	1	1	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
50.	0	1	0	0	0	0	0	0	0	1	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	35	37	23	3	5	24	773	900			
	3.9	4.1	2.6	0.3	0.6	2.7	85.9	100.0			

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	HBD,NOT	HBD,UNDE	HBD,INPA	DRUG INF	COMBINAT	UNKNRN	N A	ROW
ROW PCT	UNDER IN	R INFLU	IR UNKN	LUFNCC	ION			TOTAL
TOT PCT								
51.	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
SS	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.3	0.0	0.0	0.1	
54.	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.3	0.0	0.0	0.0	0.1	
55.	1	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	2.9	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
57.	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
58.	1	1	0	0	0	0	0	2
	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.2
	2.9	2.7	0.0	0.0	0.0	0.0	0.0	
	0.1	0.1	0.0	0.3	0.0	0.0	0.0	
59.	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
62.	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
COLUMN TOTAL	35	37	23	3	5	24	773	900
	3.9	4.1	2.6	0.3	0.6	2.7	85.9	100.0

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

ROW	COL	COUNT	UNDRI	INFLU	IMP	DRUG	INFLU	COMBINAT	UNKNOWN	N A	ROW
NO.	NO.										TOTAL
63.		0	0	0	0	0	0	0	0	1	1
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
65.		0	0	1	0	0	0	1	0	0	2
SS		0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.2
		0.0	0.0	4.3	0.0	0.0	0.0	4.2	0.0	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	
67.		0	1	0	0	0	0	0	0	0	1
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
69.		0	0	1	0	0	0	0	1	0	2
SS		0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.1	0.2
		0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.1	0.0	
		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	
72.		1	0	0	0	0	0	0	0	0	1
SS		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
78.		0	0	0	0	0	0	0	1	0	1
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
80.		0	1	0	0	0	0	0	0	0	1
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		35	37	23	3	5	24	773	900	100.0	
		3.0	4.1	2.6	0.3	0.6	2.7	85.0			

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

ROW TOT	COL TOT	COUNT PCT	HBD,NGT UNDRS	HBD,INR INFLUE	HBD,IMPA IR UNKAC	DRUG INF LUENCE	COMBINAT ION	UNKNOWN	N A	ROW TOTAL
81.		0	0	0	0	0	0	0	2	2
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
84.		0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
86.		0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
88.		0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
89.		1	0	0	0	0	0	0	1	
SS		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
90.		1	0	0	0	0	0	0	1	
SS		100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
91.		0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL		35	37	23	3	5	24	773	900	
		3.9	4.1	2.6	0.3	0.6	2.7	85.9	100.0	

Continued

Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

CONTR	ROW PCT	ALCOH, NOT	ALCOH, UNDE	ALCOH, IMPA	DRUG, INF	COMBINAT	UNKNOWN	N A	ROW
TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOT PCT	TOTAL
93.	0	0	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
97.	1	0	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
99.	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
102.	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
104.	0	0	0	1	0	0	0	1	2
	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.2
	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	
126.	0	0	0	0	0	0	1	0	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
107.	0	1	0	0	0	0	0	1	2
	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.2
	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN	35	37	23	3	5	24	773	900	
TOTAL	1.2	4.1	2.6	0.3	0.6	2.7	05.9	100.0	

Continued





Table 8.8.9

Severities Sum (SS) by Rider Alcohol/Drug Involvement

Continued

COUNT	HBO.NOT UNDER INFL	HBO.UNDER INFL	HBO.IMPA IN UNKND	DRUG INF LUENCE	COMBINAT ION	UNKNOWN	N A	ROW TOTAL
COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT	COL OCT TOT PCT
127.	0	1	0	0	0	1	0	2
SS	0.0	50.0	0.0	0.0	0.0	50.0	0.0	0.2
	0.0	2.7	0.0	0.0	0.0	4.2	0.0	
	0.0	0.1	0.0	0.0	0.0	0.1	0.0	
132.	0	0	0	0	0	1	0	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	4.2	0.0	
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
135.	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
140.	0	2	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
144.	0	1	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	2.7	0.0	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
145.	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
156.	1	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	2.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL	35	37	23	3	5	24	773	900
	1.0	4.1	2.6	0.3	0.6	2.7	85.9	100.0

Continued

Table 8.8.9  
 Severities Sum (SS) by Rider Alcohol/Drug Involvement  
 Continued

ROW NO.	COL NO.	COUNT	1000.001 UNDER	1000.002 IN R	1000.100A R INCL	1000.100B DRUG IN	1000.100C INF	1000.100D COMBINAT ION	1000.100E UNKNOWN	1000.100F N/A	ROW TOTAL
161.		0	0	1	0	0	0	0	0	0	1
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
170.		0	0	0	0	0	1	0	0	1	
SS		0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
177.		0	1	0	0	0	0	0	0	1	
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
190.		0	1	0	0	0	0	0	0	1	
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
192.		0	0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
204.		0	1	0	0	0	0	0	0	1	
SS		0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
250.		0	0	0	0	0	0	0	1	1	
SS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL		35	37	23	3	5	24	773	900	100.0	
		1.9	4.1	2.6	0.3	0.6	2.7	85.0			

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Motorcycle Displacement, cc.

COUNT	0-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
ROW PCT							
COL PCT							
TOT PCT							
0.	4	3	6	3	4	0	20
SS	20.0	15.0	30.0	15.0	20.0	0.0	2.2
	4.8	2.5	1.8	1.3	2.8	0.0	
	0.4	0.3	0.7	0.3	0.4	0.0	
1.	5	5	19	14	9	0	52
	9.6	9.6	36.5	26.9	17.3	0.0	5.8
	6.0	4.2	5.8	6.1	6.4	0.0	
	0.6	0.5	2.1	1.6	1.0	0.0	
2.	11	13	34	32	14	0	104
	10.6	12.5	32.7	30.8	13.5	0.0	11.6
	13.1	10.8	10.4	14.0	9.9	0.0	
	1.2	1.4	3.8	3.6	1.6	0.0	
3.	13	18	38	22	13	0	104
	12.5	17.3	36.5	21.2	12.5	0.0	11.6
	15.7	15.0	11.6	9.6	9.2	0.0	
	1.4	2.0	4.2	2.4	1.4	0.0	
4.	5	19	49	26	12	0	102
	4.9	18.6	39.2	25.5	11.8	0.0	11.3
	6.0	15.8	12.2	11.4	8.5	0.0	
	0.6	2.1	4.4	2.9	1.3	0.0	
5.	4	9	24	13	11	0	61
	6.6	14.8	35.3	21.3	18.0	0.0	6.8
	4.8	7.5	7.3	5.7	7.8	0.0	
	0.4	1.0	2.7	1.4	1.2	0.0	
6.	9	10	22	14	12	0	67
	13.4	14.9	32.8	20.9	17.9	0.0	7.4
	10.8	8.3	6.7	6.1	8.5	0.0	
	1.0	1.1	2.4	1.6	1.3	0.0	
7.	4	5	19	11	4	0	43
	9.3	11.6	44.2	25.6	9.3	0.0	4.8
	4.8	4.2	5.8	4.8	2.8	0.0	
	0.4	0.6	2.1	1.2	0.4	0.0	
8.	4	3	15	11	6	0	39
	10.3	7.7	38.9	28.2	15.4	0.0	4.3
	4.8	2.5	4.6	4.8	4.3	0.0	
	0.4	0.3	1.7	1.2	0.7	0.0	
9.	2	6	10	6	2	0	26
	7.7	23.1	38.5	23.1	7.7	0.0	2.9
	2.4	5.0	3.1	2.6	1.4	0.0	
	0.2	0.7	1.1	0.7	0.2	0.0	
10.	5	4	6	4	3	0	22
	22.7	18.2	27.3	19.2	13.6	0.0	2.4
	6.0	3.3	1.8	1.8	2.1	0.0	
	0.6	0.4	0.7	0.4	0.3	0.0	
11.	1	4	12	4	4	0	25
	4.0	16.0	48.0	16.0	16.0	0.0	2.8
	1.2	3.3	3.7	1.8	2.8	0.0	
	0.1	0.4	1.3	0.4	0.4	0.0	
12.	2	2	10	5	3	0	22
	9.1	9.1	45.5	22.7	13.6	0.0	2.4
	3.4	1.7	3.1	2.2	2.1	0.0	
	0.2	0.2	1.1	0.6	0.3	0.0	
13.	0	2	2	4	3	0	11
	0.0	18.2	18.2	36.4	27.3	0.0	1.2
	0.0	1.7	0.6	1.0	2.1	0.0	
	0.0	0.2	0.2	0.4	0.3	0.0	
COL PCT	0.3	1.20	32.7	22.8	14.1	1	90.0
TOTAL	9.2	13.3	36.3	25.3	15.7	0.1	100.0

Continued

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement  
Continued

	COUNT	10-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
	PER PCT							
	PER PCT							
	PER PCT							
14.	0	1	5	5	2	0	13	
	0.0	7.7	36.5	36.5	15.4	0.0	1.4	
	0.0	0.0	1.5	2.2	1.8	0.0		
	0.0	0.1	0.6	0.6	0.2	0.0		
15.	1	1	3	0	2	0	7	
	14.3	14.3	42.9	0.0	28.6	0.0	0.6	
	1.2	0.8	0.9	0.0	1.4	0.0		
	0.1	0.1	0.3	0.0	0.2	0.0		
16.	1	3	4	4	1	0	13	
	7.7	23.1	36.8	36.8	7.7	0.0	1.4	
	1.2	2.5	1.2	1.8	0.7	0.0		
	0.1	0.3	0.4	0.4	0.1	0.0		
17.	0	1	3	3	1	0	8	
	0.0	12.5	37.5	37.5	12.5	0.0	0.9	
	0.0	0.8	0.9	1.3	0.7	0.0		
	0.0	0.1	0.3	0.3	0.1	0.0		
18.	1	0	2	5	5	0	13	
	7.7	0.0	16.4	38.5	38.5	0.0	1.4	
	1.2	0.0	0.6	2.2	3.5	0.0		
	0.1	0.0	0.2	0.6	0.6	0.0		
19.	2	0	3	2	1	0	8	
	25.0	0.0	17.5	25.0	12.5	0.0	0.9	
	2.4	0.0	0.9	0.9	0.7	0.0		
	0.2	0.0	0.3	0.2	0.1	0.0		
20.	0	1	1	1	2	0	5	
	0.0	20.0	20.0	20.0	40.0	0.0	0.4	
	0.0	0.8	0.3	0.4	1.4	0.0		
	0.0	0.1	0.1	0.1	0.2	0.0		
21.	2	0	2	1	3	0	8	
	25.0	0.0	25.0	12.5	37.5	0.0	0.4	
	2.4	0.0	0.6	0.4	2.1	0.0		
	0.2	0.0	0.2	0.1	0.3	0.0		
22.	1	0	4	0	0	0	5	
	20.0	0.0	80.0	0.0	0.0	0.0	0.6	
	1.2	0.0	1.2	0.0	0.0	0.0		
	0.1	0.0	0.4	0.0	0.0	0.0		
23.	0	0	1	0	1	1	5	
	0.0	0.0	60.0	0.0	20.0	20.0	0.6	
	0.0	0.0	0.9	0.0	0.7	100.0		
	0.0	0.0	0.3	0.0	0.1	0.1		
24.	0	1	1	4	2	0	8	
	0.0	12.5	12.5	50.0	25.0	0.0	0.9	
	0.0	0.8	0.3	1.8	1.4	0.0		
	0.0	0.1	0.1	0.4	0.2	0.0		
25.	0	0	3	0	0	0	3	
	0.0	0.0	100.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.9	0.0	0.0	0.0		
	0.0	0.0	0.3	0.0	0.0	0.0		
26.	0	1	1	1	1	0	4	
	0.0	25.0	25.0	25.0	25.0	0.0	0.4	
	0.0	0.8	0.3	0.4	0.7	0.0		
	0.0	0.1	0.1	0.1	0.1	0.0		
27.	0	0	1	1	1	0	3	
	0.0	0.0	33.3	33.3	33.3	0.0	0.3	
	0.0	0.0	0.3	0.4	0.7	0.0		
	0.0	0.0	0.1	0.1	0.1	0.0		
COLUMN TOTAL	83	120	327	228	141	1	900	
	0.2	13.3	16.3	25.3	15.7	0.1	100.0	

Continued

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Continued

COUNT OF ACCI COL DCI TOT PCT	MOTORCYCLE DISPLACEMENT						ROW TOTAL
	0-100	101-250	251-500	501-750	>750	UNKNOWN	
28.	1	0	2	2	2	0	7
SS	14.3	0.0	28.6	28.6	28.6	0.0	0.8
	1.2	0.0	0.6	0.9	1.4	0.0	
	0.1	0.0	0.2	0.2	0.2	0.0	
29.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
30.	0	0	1	0	1	0	2
SS	0.0	0.0	50.0	0.0	50.0	0.0	0.2
	0.0	0.0	0.3	0.0	0.7	0.0	
	0.0	0.0	0.1	0.0	0.1	0.0	
31.	0	0	1	1	0	0	2
SS	0.0	0.0	50.0	50.0	0.0	0.0	0.2
	0.0	0.0	0.3	0.4	0.0	0.0	
	0.0	0.0	0.1	0.1	0.0	0.0	
32.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
33.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
35.	1	0	1	1	1	0	4
SS	25.0	0.0	25.0	25.0	25.0	0.0	0.4
	1.2	0.0	0.3	0.4	0.7	0.0	
	0.1	0.0	0.1	0.1	0.1	0.0	
36.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
37.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
38.	0	0	1	1	0	0	2
SS	0.0	0.0	50.0	50.0	0.0	0.0	0.2
	0.0	0.0	0.3	0.4	0.0	0.0	
	0.0	0.0	0.1	0.1	0.0	0.0	
40.	0	1	0	2	2	0	5
SS	0.0	20.0	0.0	40.0	40.0	0.0	0.6
	0.0	0.8	0.0	0.9	1.4	0.0	
	0.0	0.1	0.0	0.2	0.2	0.0	
41.	0	0	1	2	0	0	3
SS	0.0	0.0	33.3	66.7	0.0	0.0	0.3
	0.0	0.0	0.3	0.9	0.0	0.0	
	0.0	0.0	0.1	0.2	0.0	0.0	
42.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
43.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
COLUMN TOTAL	83	120	327	228	141	1	900
	9.2	13.3	36.4	25.3	15.7	0.1	100.0

Continued

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Continued

UNIT ROW PCT COL PCT TOT PCT	3-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
44.	0	1	1	0	0	0	2
SS	0.0	50.0	50.0	0.0	0.0	0.0	0.2
	0.0	0.3	0.3	0.0	0.0	0.0	
	0.0	0.1	0.1	0.0	0.0	0.0	
45.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
46.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
47.	1	0	0	0	0	0	1
SS	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	1.2	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
48.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
49.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
50.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
51.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
54.	1	0	0	0	0	0	1
SS	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	1.2	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
55.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
57.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
58.	0	0	0	2	0	0	2
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.2
	0.0	0.0	0.0	0.9	0.0	0.0	
	0.0	0.0	0.0	0.2	0.0	0.0	
59.	0	0	2	0	0	0	2
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.2
	0.0	0.0	0.6	0.0	0.0	0.0	
	0.0	0.0	0.2	0.0	0.0	0.0	
62.	0	0	1	1	0	0	2
SS	0.0	0.0	50.0	50.0	0.0	0.0	0.2
	0.0	0.0	0.3	0.4	0.0	0.0	
	0.0	0.0	0.1	0.1	0.0	0.0	
COLUMN TOTAL	83	120	127	228	141	1	600
	0.2	13.3	30.3	25.3	15.7	0.1	100.0

Continued

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Continued

COUNT ROW PCT COL PCT TOT PCT	9-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
63.	1	0	0	0	0	0	1
SS	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	1.2	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
65.	0	2	0	0	0	0	2
SS	0.0	100.0	0.0	0.0	0.0	0.0	0.2
	0.0	1.7	0.0	0.0	0.0	0.0	
	0.0	0.2	0.0	0.0	0.0	0.0	
67.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
69.	1	0	0	0	1	0	2
SS	50.0	0.0	0.0	0.0	50.0	0.0	0.2
	1.2	0.0	0.0	0.0	0.7	0.0	
	0.1	0.0	0.0	0.0	0.1	0.0	
72.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
73.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
80.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
81.	0	2	0	0	0	0	2
SS	0.0	100.0	0.0	0.0	0.0	0.0	0.2
	0.0	1.7	0.0	0.0	0.0	0.0	
	0.0	0.2	0.0	0.0	0.0	0.0	
84.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
86.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
88.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
89.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
90.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
91.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
COLUMN TOTAL	83	120	127	229	141	1	900
	9.2	13.3	16.3	25.3	15.7	0.1	100.0

Continued

Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Continued

COUNT ROW PCT COL PCT TOT PCT	0-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
93.	0	0	1	0	0	0	1
SS	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
97.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
99.	0	0	1	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
102.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
104.	0	0	1	0	1	0	2
	0.0	0.0	50.0	0.0	50.0	0.0	0.2
	0.0	0.0	0.3	0.0	0.7	0.0	
	0.0	0.0	0.1	0.0	0.1	0.0	
106.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
107.	0	0	1	0	1	0	2
	0.0	0.0	50.0	0.0	50.0	0.0	0.2
	0.0	0.0	0.3	0.0	0.7	0.0	
	0.0	0.0	0.1	0.0	0.1	0.0	
109.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
112.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.4	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
116.	0	0	1	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
117.	0	1	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.6	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
120.	0	0	0	0	1	0	1
	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.7	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
125.	0	0	1	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
126.	0	0	1	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.3	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	
COLUMN TOTAL	83	120	377	228	141	1	900
	9.2	13.3	36.4	25.3	15.7	0.1	100.0

Continued



Table 8.8.13

Rider Severities Sum (SS) by Motorcycle Displacement

Continued

COUNT ROW PCT COL PCT TOT PCT	0-100	101-250	251-500	501-750	>750	UNKNOWN	ROW TOTAL
127. SS	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 100.0 0.7 0.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
132.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.3 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
135.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
140.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 0.3 0.1	1 50.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.2
144.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.3 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
145.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.7 0.1	0 0.0 0.0 0.0	1 0.1
156.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.3 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
161.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
170.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
187.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.7 0.1	0 0.0 0.0 0.0	1 0.1
189.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
192.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.4 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
204.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.7 0.1	0 0.0 0.0 0.0	1 0.1
250.	0 0.0 0.0 0.0	1 100.0 0.9 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
COLUMN TOTAL	1 9.2	120 13.3	307 36.3	228 25.3	141 15.7	1 0.1	900 100.0

Table 8.9.12

Contact Surface by Groin Injury Severity

Groin Injury Severity

	COUNT				ROW TOTAL			
	ROW	PCT	MINOR	Moderate		SEVERE	SERIOUS	
	COL	PCT						
	TOT	PCT						
CF01	1	0	1	0	1	0	1	1
		0.0		0.0	100.0	0.0	0.0	0.5
Contact Surface	1	0.0	1	0.0	8.3	0.0	0.0	
	1	0.0	1	0.0	0.5	0.0	0.0	
CF03	1	0	1	0	1	0	1	1
		0.0		0.0	100.0	0.0	0.0	0.5
	1	0.0	1	0.0	8.3	0.0	0.0	
	1	0.0	1	0.0	0.5	0.0	0.0	
CS02	1	0	1	1	0	0	1	1
		0.0		100.0	0.0	0.0	0.0	0.5
	1	0.0	1	3.3	0.0	0.0	0.0	
	1	0.0	1	0.5	0.0	0.0	0.0	
CS06	1	1	1	0	0	0	1	1
		100.0		0.0	0.0	0.0	0.0	0.5
	1	0.7	1	0.0	0.0	0.0	0.0	
	1	0.5	1	0.0	0.0	0.0	0.0	
CS12	1	1	1	0	0	0	1	1
		100.0		0.0	0.0	0.0	0.0	0.5
	1	0.7	1	0.0	0.0	0.0	0.0	
	1	0.5	1	0.0	0.0	0.0	0.0	
CS14	1	1	1	0	0	0	1	1
		100.0		0.0	0.0	0.0	0.0	0.5
	1	0.7	1	0.0	0.0	0.0	0.0	
	1	0.5	1	0.0	0.0	0.0	0.0	
EA01	1	2	1	0	0	0	1	2
		100.0		0.0	0.0	0.0	0.0	1.0
	1	1.3	1	0.0	0.0	0.0	0.0	
	1	1.0	1	0.0	0.0	0.0	0.0	
EC01	1	1	1	0	0	0	1	1
		100.0		0.0	0.0	0.0	0.0	0.5
	1	0.7	1	0.0	0.0	0.0	0.0	
	1	0.5	1	0.0	0.0	0.0	0.0	
ES13	1	0	1	0	1	0	1	1
		0.0		0.0	100.0	0.0	0.0	0.5
	1	0.0	1	0.0	8.3	0.0	0.0	
	1	0.0	1	0.0	0.5	0.0	0.0	
COLUMN TOTAL			151	30	12	3		196
			77.0	15.3	6.1	1.5		100.0

Continued

Table 8.9.12  
Contact Surface by Groin Injury Severity

Continued

	COUNT		MINOR	MODERATE	SEVERE	SERIOUS	ROW TOTAL
	ROW PCT	COL PCT					
EW02	1	1	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.7	0.0	0.0	0.0	0.0	0.0	
	0.5	0.0	0.0	0.0	0.0	0.0	
MC01	1	1	0	1	0	0	2
	50.0	0.0	0.0	50.0	0.0	0.0	1.0
	0.7	0.0	0.0	8.3	0.0	0.0	
	0.5	0.0	0.0	0.5	0.0	0.0	
MC02	83	16	3	1	1	1	103
	80.6	15.5	2.9	1.0	1.0	1.0	52.6
	55.0	53.3	25.0	33.3	33.3	33.3	
	42.3	8.2	1.5	0.5	0.5	0.5	
MC03	6	1	1	1	0	0	8
	75.0	12.5	12.5	12.5	0.0	0.0	4.1
	4.0	3.3	8.3	8.3	0.0	0.0	
	3.1	0.5	0.5	0.5	0.0	0.0	
MC05	45	9	2	1	1	1	57
	78.9	15.8	3.5	1.8	1.8	1.8	29.1
	29.8	30.0	16.7	33.3	33.3	33.3	
	23.0	4.6	1.0	0.5	0.5	0.5	
MC06	6	1	0	1	1	1	8
	75.0	12.5	0.0	12.5	12.5	12.5	4.1
	4.0	3.3	0.0	0.0	33.3	33.3	
	3.1	0.5	0.0	0.0	0.5	0.5	
MC07	1	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.7	0.0	0.0	0.0	0.0	0.0	
	0.5	0.0	0.0	0.0	0.0	0.0	
MC08	1	1	0	0	0	0	2
	50.0	50.0	0.0	0.0	0.0	0.0	1.0
	0.7	3.3	0.0	0.0	0.0	0.0	
	0.5	0.5	0.0	0.0	0.0	0.0	
MC17	0	1	1	1	0	0	2
	0.0	50.0	50.0	50.0	0.0	0.0	1.0
	0.0	3.3	8.3	8.3	0.0	0.0	
	0.0	0.5	0.5	0.5	0.0	0.0	
MC97	1	0	1	1	0	0	2
	50.0	0.0	50.0	50.0	0.0	0.0	1.0
	0.7	0.0	8.3	8.3	0.0	0.0	
	0.5	0.0	0.5	0.5	0.0	0.0	
COLUMN TOTAL	151	30	12	3	196	100.0	
	77.0	15.3	6.1	1.5			

Table 8.9.13

Groin Injury Severity by Motorcycle Crash Speed

Crash Speed, mph

Groin Injury Severity	COUNT							RCW TOTAL	
	ROW PCT	10 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60		61 - 70
	COL PCT								
TOT PCT									
MINOR	I	2	22	36	25	5	2	0	92 78.6
	I	2.2	23.9	39.1	27.2	5.4	2.2	0.0	
	I	66.7	88.0	80.0	69.4	100.0	100.0	0.0	
	I	1.7	18.8	30.8	21.4	4.3	1.7	0.0	
MODERATE	I	1	2	7	7	0	0	0	17 14.5
	I	5.9	11.8	41.2	41.2	0.0	0.0	0.0	
	I	33.3	8.0	15.6	19.4	0.0	0.0	0.0	
	I	0.9	1.7	6.0	6.0	0.0	0.0	0.0	
SEVERE	I	0	1	2	2	0	0	1	6 5.1
	I	0.0	16.7	33.3	33.3	0.0	0.0	16.7	
	I	0.0	4.0	4.4	5.6	0.0	0.0	100.0	
	I	0.0	0.9	1.7	1.7	0.0	0.0	0.9	
SERIOUS	I	0	0	0	2	0	0	0	2 1.7
	I	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
	I	0.0	0.0	0.0	5.6	0.0	0.0	0.0	
	I	0.0	0.0	0.0	1.7	0.0	0.0	0.0	
COLUMN TOTAL		3	25	45	36	5	2	1	117
		2.6	21.4	38.5	30.8	4.3	1.7	0.9	100.0

Table 8.9.14

Groin Injury Severity by Motorcycle Manufacturer

	COUNT							ROW TOTAL
	ROW PCT	BMW	BSA	DUCATI	HARLEY-D AVIDSON	HONDA	KAWASAKI	
	COL PCT							
	TOT PCT							
MINOR		2	2	1	13	51	5	92
		2.2	2.2	1.1	14.1	55.4	5.4	78.6
		66.7	100.0	100.0	72.2	86.4	83.3	
		1.7	1.7	0.9	11.1	43.6	4.3	
MODERATE		0	0	0	3	7	0	17
		0.0	0.0	0.0	17.6	41.2	0.0	14.5
		0.0	0.0	0.0	16.7	11.9	0.0	
		0.0	0.0	0.0	2.6	6.0	0.0	
SEVERE		1	0	0	1	1	1	6
		16.7	0.0	0.0	16.7	16.7	16.7	5.1
		33.3	0.0	0.0	5.6	1.7	16.7	
		0.9	0.0	0.0	0.9	0.9	0.9	
SERIOUS		0	0	0	1	0	0	2
		0.0	0.0	0.0	50.0	0.0	0.0	1.7
		0.0	0.0	0.0	5.6	0.0	0.0	
		0.0	0.0	0.0	0.9	0.0	0.0	
COLUMN TOTAL		3	2	1	18	59	6	117
		2.6	1.7	0.9	15.4	50.4	5.1	100.0

	COUNT							ROW TOTAL
	ROW PCT	MOTO	GUZ	NORTON	SUZUKI	TRIUMPH	VESPA	
	COL PCT							
	TOT PCT							
MINOR		0	1	5	1	1	10	92
		0.0	1.1	5.4	1.1	1.1	10.9	78.6
		0.0	33.3	83.3	33.3	100.0	76.9	
		0.0	0.9	4.3	0.9	0.9	8.5	
MODERATE		0	1	1	2	0	3	17
		0.0	5.9	5.9	11.8	0.0	17.6	14.5
		0.0	33.3	16.7	66.7	0.0	23.1	
		0.0	0.9	0.9	1.7	0.0	2.6	
SEVERE		1	1	0	0	0	0	6
		16.7	16.7	0.0	0.0	0.0	0.0	5.1
		50.0	33.3	0.0	0.0	0.0	0.0	
		0.9	0.9	0.0	0.0	0.0	0.0	
SERIOUS		1	0	0	0	0	0	2
		50.0	0.0	0.0	0.0	0.0	0.0	1.7
		50.0	0.0	0.0	0.0	0.0	0.0	
		0.9	0.0	0.0	0.0	0.0	0.0	
COLUMN TOTAL		2	3	6	3	1	13	117
		1.7	2.6	5.1	2.6	0.9	11.1	100.0

C.5 Supplemental Data for Volume I, Section 9.0, Protection Systems Effectiveness

Included in this section are the following Tables:

9.3.1	Motorcycle Rider Stated Frequency of Helmet Use	342
9.3.14	Helmet Use by Motorcycle Rider Age	343
9.3.25	Trip Origin by Trip Destination for Helmeted Riders	351
9.3.26	Trip Origin by Trip Destination for Unhelmeted Riders	352
9.4.6	Helmet Liner Thickness at Most Severe Impact Site	353
9.4.7	Helmet Liner Density at Most Severe Impact Site	355
9.5.6	Motorcycle Rider Ethnicity by Helmet Fit	357
9.8.7	Rider Most Severe Helmet Impact Location	358
9.8.8	Rider Second Most Severe Helmet Impact Location	360
9.8.9	Passenger Most Severe Helmet Impact Location	362
9.8.10	Passenger Second Most Severe Helmet Impact Location	363
9.8.13	Rider Helmet Liner Crush at Impact Sites	364
9.8.14	Rider Helmet Liner Signature Area at Impact Site	366
9.11.1	Overall Severities Sum (SS) by Helmet Use	372
9.11.2	Head and Neck Severities Sum (SS2) by Helmet Use	379
9.11.3	Head and Neck Severities Sum (SS2) by Helmet Use-Fatal Accidents	383

Table 9.3.1  
 Motorcycle Rider Stated Frequency of Helmet Use  
 (OSIDs)

Category Label	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Rider Stated	0.	204	22.7	28.1	28.1
Helmet Use,	1.	2	0.2	0.3	28.4
Percent of	2.	2	0.2	0.3	28.7
Time	5.	10	1.1	1.4	30.0
	7.	1	0.1	0.1	30.1
	10.	20	2.2	2.8	32.9
	15.	2	0.2	0.3	33.2
	20.	5	0.6	0.7	33.9
	25.	12	1.3	1.7	35.5
	30.	6	0.7	0.8	36.4
	33.	1	0.1	0.1	36.5
	35.	1	0.1	0.1	36.6
	40.	4	0.4	0.6	37.2
	45.	1	0.1	0.1	37.3
	50.	45	5.0	6.2	43.5
	55.	3	0.3	0.4	43.9
	60.	12	1.3	1.7	45.6
	65.	3	0.3	0.4	46.0
	67.	1	0.1	0.1	46.1
	70.	8	0.9	1.1	47.2
	75.	24	2.7	3.3	50.6
	80.	20	2.2	2.8	53.3
	85.	10	1.1	1.4	54.7
	90.	38	4.2	5.2	59.9
	93.	1	0.1	0.1	60.1
	95.	23	2.6	3.2	63.2
	97.	1	0.1	0.1	63.4
	98.	11	1.2	1.5	64.9
	99.	17	1.9	2.3	67.2
	100.	238	26.4	32.8	100.0
Unknown	998.	174	19.3	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0	

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

AGE	RHELMET						ROW TOTAL
	COUNT						
	ROW PCT	YES	NO	UNKNOWN			
	COL PCT						
TOT PCT							
9.	1	100.0	0.0	0.0	0.0	1	
	0.3	0.0	0.0	0.0	0.1		
	0.1	0.0	0.0	0.0			
12.	1	50.0	50.0	0.0	0.0	2	
	0.3	0.2	0.2	0.0	0.2		
	0.1	0.1	0.1	0.0			
13.	0	0.0	100.0	0.0	0.0	1	
	0.0	0.2	0.2	0.0	0.1	0.1	
	0.0	0.1	0.1	0.0			
14.	1	50.0	50.0	0.0	0.0	2	
	0.3	0.2	0.2	0.0	0.0	0.2	
	0.1	0.1	0.1	0.0			
15.	0	0.0	100.0	0.0	0.0	3	
	0.0	0.6	0.6	0.0	0.0	0.3	
	0.0	0.3	0.3	0.0			
16.	1	20.0	80.0	0.0	0.0	5	
	0.3	0.7	0.7	0.0	0.0	0.6	
	0.1	0.4	0.4	0.0			
17.	6	28.6	71.4	0.0	0.0	21	
	1.7	2.8	2.8	0.0	0.0	2.3	
	0.7	1.7	1.7	0.0			
COLUMN TOTAL	355	537	8	900		100.0	
	19.4	59.7	0.9				

Continued



Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	RHELMET						ROW TOTAL
	COUNT				UNKNOWN		
	ROW PCT	YES	NO				
	COL PCT						
TOT PCT							
18.		10	26	0		36	
		27.8	72.2	0.0		4.0	
		2.8	4.8	0.0			
		1.1	2.9	0.0			
19.		9	27	0		36	
		25.0	75.0	0.0		4.0	
		2.5	5.0	0.0			
		1.0	3.0	0.0			
20.		28	33	1		62	
		45.2	53.2	1.6		6.9	
		7.9	6.1	12.5			
		3.1	3.7	0.1			
21.		20	43	1		64	
		31.3	67.2	1.6		7.1	
		5.6	8.0	12.5			
		2.2	4.8	0.1			
22.		17	45	1		63	
		27.0	71.4	1.6		7.0	
		4.8	8.4	12.5			
		1.9	5.0	0.1			
23.		24	34	0		58	
		41.4	58.6	0.0		6.4	
		6.8	6.3	0.0			
		2.7	3.8	0.0			
24.		17	35	0		52	
		32.7	67.3	0.0		5.8	
		4.8	6.5	0.0			
		1.9	3.9	0.0			
COLUMN TOTAL		355	537	8		900	
		39.4	59.7	0.9		100.0	

Continued

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	RHELMET						ROW TOTAL
	COUNT						
	ROW PCT	YES	NO	UNKNOWN			
	COL PCT						
25.	25	31	0			56	
	44.6	55.4	0.0			6.2	
	7.0	5.8	0.0				
	2.8	3.4	0.0				
26.	16	29	1			46	
	34.8	63.0	2.2			5.1	
	4.5	5.4	12.5				
	1.8	3.2	0.1				
27.	9	33	0			42	
	21.4	78.6	0.0			4.7	
	2.5	6.1	0.0				
	1.0	3.7	0.0				
28.	13	21	1			35	
	37.1	60.0	2.9			3.9	
	3.7	3.9	12.5				
	1.4	2.3	0.1				
29.	14	17	0			31	
	45.2	54.8	0.0			3.4	
	3.9	3.2	0.0				
	1.6	1.9	0.0				
30.	9	27	0			36	
	25.0	75.0	0.0			4.0	
	2.5	5.0	0.0				
	1.0	3.0	0.0				
31.	12	9	0			21	
	57.1	42.9	0.0			2.3	
	3.4	1.7	0.0				
	1.3	1.0	0.0				
COLUMN TOTAL	355	537	8			900	
	39.4	59.7	0.9			100.0	

Continued

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	RHELMET				ROW TOTAL
	COUNT	YES	NO	UNKNOWN	
	ROW PCT				
	COL PCT				
32.	8	11	0	19	
	42.1	57.9	0.0	2.1	
	2.3	2.0	0.0		
	0.9	1.2	0.0		
33.	14	12	0	26	
	53.8	46.2	0.0	2.9	
	3.9	2.2	0.0		
	1.6	1.3	0.0		
34.	10	8	1	19	
	52.6	42.1	5.3	2.1	
	2.8	1.5	12.5		
	1.1	0.9	0.1		
35.	6	6	0	12	
	50.0	50.0	0.0	1.3	
	1.7	1.1	0.0		
	0.7	0.7	0.0		
36.	8	11	0	19	
	42.1	57.9	0.0	2.1	
	2.3	2.0	0.0		
	0.9	1.2	0.0		
37.	16	3	0	19	
	84.2	15.8	0.0	2.1	
	4.5	0.6	0.0		
	1.8	0.3	0.0		
38.	3	7	0	10	
	30.0	70.0	0.0	1.1	
	0.8	1.3	0.0		
	0.3	0.8	0.0		
COLUMN TOTAL	355	537	8	900	
	39.4	59.7	0.9	100.0	

Continued

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	HELMET						ROW TOTAL
	COUNT	YES		NO	UNKNOWN		
	ROW PCT						
	COL PCT						
TOT PCT							
39.	3	4	0	7			
	42.9	57.1	0.0	0.8			
	0.8	0.7	0.0				
	0.3	0.4	0.0				
40.	6	4	0	10			
	60.0	40.0	0.0	1.1			
	1.7	0.7	0.0				
	0.7	0.4	0.0				
41.	0	1	0	1			
	0.0	100.0	0.0	0.1			
	0.0	0.2	0.0				
	0.0	0.1	0.0				
42.	3	3	1	7			
	42.9	42.9	14.3	0.8			
	0.8	0.6	12.5				
	0.3	0.3	0.1				
43.	3	2	0	5			
	60.0	40.0	0.0	0.6			
	0.8	0.4	0.0				
	0.3	0.2	0.0				
44.	5	1	0	6			
	83.3	16.7	0.0	0.7			
	1.4	0.2	0.0				
	0.6	0.1	0.0				
45.	1	1	0	2			
	50.0	50.0	0.0	0.2			
	0.3	0.2	0.0				
	0.1	0.1	0.0				
COLUMN TOTAL	355	537	8	900			
	39.4	59.7	0.9	100.0			

Continued

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	HELMET						ROW TOTAL
	COUNT	YES			NO	UNKNOWN	
	ROW PCT						
	COL PCT						
46.	5	1	0	0	6	0.7	
	83.3	16.7	0.0	0.0			
	1.4	0.2	0.0	0.0			
	0.6	0.1	0.0	0.0			
47.	2	3	0	5	0.6		
	40.0	60.0	0.0	0.0			
	0.6	0.6	0.0	0.0			
	0.2	0.3	0.0	0.0			
48.	3	0	0	3	0.3		
	100.0	0.0	0.0	0.0			
	0.8	0.0	0.0	0.0			
	0.3	0.0	0.0	0.0			
49.	1	5	0	6	0.7		
	16.7	83.3	0.0	0.0			
	0.3	0.9	0.0	0.0			
	0.1	0.6	0.0	0.0			
50.	0	1	0	1	0.1		
	0.0	100.0	0.0	0.0			
	0.0	0.2	0.0	0.0			
	0.0	0.1	0.0	0.0			
51.	1	2	0	3	0.3		
	33.3	66.7	0.0	0.0			
	0.3	0.4	0.0	0.0			
	0.1	0.2	0.0	0.0			
52.	0	1	0	1	0.1		
	0.0	100.0	0.0	0.0			
	0.0	0.2	0.0	0.0			
	0.0	0.1	0.0	0.0			
COLUMN TOTAL	355	537	8	900	100.0		
	39.4	59.7	0.9				

Continued

Table 9.3.14

Helmet Use by Motorcycle Rider Age

(OSIDs)

Continued

AGE	RHELMET						ROW TOTAL
	COUNT	YES		NO	UNKNOWN		
	POW PCT						
	COL PCT						
53.	3	2	0	5	0.6		
	60.0	40.0	0.0	0.6			
	0.8	0.4	0.0	0.0			
	0.3	0.2	0.0	0.0			
54.	3	0	0	3	0.3		
	100.0	0.0	0.0	0.0	0.3		
	0.8	0.0	0.0	0.0	0.0		
	0.3	0.0	0.0	0.0	0.0		
55.	3	2	0	5	0.6		
	60.0	40.0	0.0	0.6			
	0.8	0.4	0.0	0.0			
	0.3	0.2	0.0	0.0			
56.	4	0	0	4	0.4		
	100.0	0.0	0.0	0.0	0.4		
	1.1	0.0	0.0	0.0	0.0		
	0.4	0.0	0.0	0.0	0.0		
57.	1	0	0	1	0.1		
	100.0	0.0	0.0	0.0	0.1		
	0.3	0.0	0.0	0.0	0.0		
	0.1	0.0	0.0	0.0	0.0		
58.	1	0	0	1	0.1		
	100.0	0.0	0.0	0.0	0.1		
	0.3	0.0	0.0	0.0	0.0		
	0.1	0.0	0.0	0.0	0.0		
59.	2	0	0	2	0.2		
	100.0	0.0	0.0	0.0	0.2		
	0.6	0.0	0.0	0.0	0.0		
	0.2	0.0	0.0	0.0	0.0		
COLUMN TOTAL	355	537	8	900	100.0		
	39.4	59.7	0.9				

Continued

Table 9.8.7

Rider Helmet Most Severe Impact Location  
(OSIDs)

COUNT ROW PCT COL PCT TOT PCT	Top View Clock Position												ROW TOTAL
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	
	1.	0.0 0.0 0.0	5.2 11.8 0.7	1 2.5 5.9 0.4	10 25.0 50.0 3.7	1 2.5 5.6 0.4	7 17.5 21.9 2.6	9 22.5 36.0 3.3	10 25.0 38.5 3.7	0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	
2.	0.0 0.0 0.0	1 2.7 5.9 0.4	1 2.7 5.9 0.4	5 13.5 25.0 1.9	5 13.5 27.8 1.9	8 21.6 29.0 3.0	4 10.8 16.0 1.5	6 16.2 23.1 2.2	6 16.2 23.1 2.2	1 2.7 6.7 0.4	0 0.0 0.0 0.0	0 0.0 0.0 0.0	37 13.7
3.	0.0 0.0 0.0	0.0 0.0 0.0	3 7.0 17.6 1.1	5 11.6 25.0 1.9	6 14.0 33.3 2.2	13 30.2 40.6 4.8	6 14.0 24.0 2.2	6 14.0 25.1 2.2	4 9.3 15.4 1.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	43 15.9
4.	0.0 0.0 0.0	0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 30.8 22.2 1.5	1 7.7 3.1 0.4	5 38.5 20.0 1.9	3 23.1 11.5 1.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	13 4.8
5.	0.0 0.0 0.0	0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 3.8 0.4	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.4
6.	0.0 0.0 0.0	0.0 0.0 0.0	2 100.0 11.8 0.7	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 0.7
7.	0.0 0.0 0.0	0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 3.8 0.4	2 50.0 13.3 0.7	1 25.0 3.8 0.4	0 0.0 0.0 0.0	4 1.5
COLUMN TOTAL	22 8.1	17 6.3	17 6.3	20 7.4	18 6.7	32 11.9	25 9.3	26 9.6	26 9.6	15 5.6	26 9.6	26 9.6	270 100.0

Table 9.8.7

Rider Helmet Most Severe Impact Location  
(OSIDs)

Continued

Left Side Clock Position	Top View Clock Position												ROW TOTAL													
	COUNT	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		12.		
	ROW COL TOT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT		PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
8.	3	30.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	10	3.7		
		13.6	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	11.5				
		1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.1				
9.	2	28.5	0.0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	7	2.6		
		9.1	0.0	5.9	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5				
		0.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1				
10.	11	21.2	9.6	0	0	2	2	0	0	0	0	1	6	13	12	52	19.3									
		50.0	29.4	0.0	0.0	3.8	3.8	0.0	0.0	0.0	1.9	11.5	25.0	23.1	19.3											
		4.1	1.9	0.0	0.0	0.7	0.7	0.0	0.0	0.4	2.2	4.8	4.4	4.4												
11.	6	18.2	24.2	0	0	0	0	0	0	1	4	8	6	33												
		27.5	47.1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	12.1	24.2	18.2	12.2												
		2.2	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	3.0	2.2													
12.	0	0.0	3.6	9	0	0	1	0	1	12	2	0	2	28												
		0.0	5.9	32.1	0.0	0.0	3.6	0.0	3.6	42.9	7.1	0.0	7.1	10.4												
		0.0	0.4	52.9	0.0	0.0	3.1	0.0	3.6	46.2	13.3	0.0	7.7													
				3.3	0.0	0.0	0.4	0.0	0.4	4.4	0.7	0.0	0.7													
COLUMN TOTAL	22	6.1	17	6.3	17	6.3	20	7.4	18	6.7	32	11.9	25	9.3	26	9.6	26	9.6	15	5.6	26	9.6	26	9.6	270	100.0



Table 9.8.8

Rider Helmet Second Most Severe Impact Location  
(OSIDs)

COUNT ROW COL TOT	Top View Clock Position						ROW TOTAL
	1.	2.	3.	4.	5.	6.	
1.	0 0.0 0.0	0 0.0 0.0	3 10.3 1.9	7 24.1 4.3	2 6.9 1.2	7 24.1 4.3	29 18.0
2.	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	3 15.0 1.9	4 20.0 2.5	2 10.0 1.2	20 12.4
3.	0 0.0 0.0	0 0.0 0.0	1 3.2 0.6	1 3.2 0.6	4 12.9 2.5	10 32.3 6.2	31 19.3
4.	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 12.5 0.6	1 12.5 0.6	2 25.0 1.2	8 5.0
5.	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 0.6
6.	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	3 1.9
7.	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	6 3.7
8.	2 33.3 1.2	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 16.7 4.2 0.6	4 2.5
9.	0 0.0 0.0	0 0.0 0.0	1 25.0 8.3 0.6	0 0.0 0.0	0 0.0 0.0	1 25.0 4.2 0.6	19 11.8
10.	3 15.8 33.3 1.9	3 15.0 42.0 1.9	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	25 15.5
11.	4 16.0 44.4 2.9	3 12.0 42.0 1.9	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	18 9.3
12.	0 0.0 0.0	1 6.7 14.3 0.6	7 46.7 58.3 4.3	0 0.0 0.0	0 0.0 0.0	1 6.7 4.2 0.6	161 100.0
COLUMN TOTAL	9 3.6	7 4.3	12 7.5	12 7.5	11 6.8	24 14.0	161 100.0

Continued

Table 9.8.8  
 Rider Helmet Second Most Severe Impact Location  
 (OSIDs)

Continued

COUNT ROW PCT COL PCT TOT PCT	Top View Clock Position						ROW TOTAL
	7.1	8.1	9.1	10.1	11.1	12.1	
1.	3 10.3 18.8 1.9	3 10.3 20.0 1.9	4 13.8 30.8 2.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	29 18.0
2.	3 15.0 18.8 1.9	7 35.0 46.7 4.3	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 5.0 7.7 0.6	0 0.0 0.0 0.0	20 12.4
3.	8 25.8 50.0 5.0	3 9.7 20.0 1.9	3 9.7 23.1 1.9	1 3.2 7.7 0.6	0 0.0 0.0 0.0	0 0.0 0.0 0.0	31 19.3
4.	2 25.0 12.5 1.2	1 12.5 6.7 0.6	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 6.3 0.6	8 5.0
6.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 7.7 0.6	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.6
7.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 7.7 0.6	2 66.7 15.4 1.2	0 0.0 0.0 0.0	3 1.9
8.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 16.7 7.7 0.6	2 33.3 12.5 1.2	6 3.7
9.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 50.0 12.5 1.2	4 2.5
10.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 10.5 15.4 1.2	6 31.6 46.2 3.7	5 26.3 31.3 3.1	19 11.8
11.	0 0.0 0.0 0.0	1 4.0 6.7 0.6	0 0.0 0.0 0.0	9 36.0 69.2 5.6	3 12.0 23.1 1.9	5 20.0 31.3 3.1	25 15.5
12.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 33.3 38.5 3.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 6.7 6.3 0.6	15 9.3
COLUMN TOTAL	16 9.9	15 9.3	13 8.1	13 8.1	13 8.1	16 9.9	161 100.0

Table 9.8.9  
 Passenger Helmet Most Severe Impact Location  
 (OSIDs)

		Top View Clock Position								
ROW TOT	COUNT PCT	1.	2.	3.	7.	8.	9.	11.	12.	ROW TOTAL
		PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	
2.	0.0	0.0	0.0	0.0	1	1	0	0	0	2
	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	7.7	7.7	0.0	0.0	0.0	0.0	
3.	0.0	0.0	0.0	1	1	0	0	0	0	2
	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	7.7	7.7	0.0	0.0	0.0	0.0	
5.	0.0	0.0	1	0	0	0	0	0	0	1
	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	
7.	0.0	1	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10.	1	1	0	0	0	0	0	1	1	4
	25.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	25.0	
	7.7	7.7	0.0	0.0	0.0	0.0	0.0	7.7	7.7	
12.	0.0	0.0	1	0	0	2	0	0	0	3
	0.0	0.0	33.3	0.0	0.0	66.7	0.0	0.0	0.0	
	0.0	0.0	7.7	0.0	0.0	15.4	0.0	0.0	0.0	
COLUMN TOTAL	1	2	2	2	2	2	1	1	13	
	7.7	15.4	15.4	15.4	15.4	15.4	7.7	7.7	100.0	

Table 9.8.10  
 Passenger Helmet Second Most Severe Impact Location  
 (OSIDs)

Left Side Clock Position	Top View Clock Position								ROW TOTAL					
	COUNT	2.		3.		5.		7.		10.		12.		
	ROW PCT COL PCT TOT PCT													
2.	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	100.0 50.0 11.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	11.1	
3.	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	25.0 100.0 11.1	25.0 50.0 11.1	50.0 100.0 22.2	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	44.4	
10.	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	100.0 100.0 11.1	0.0 0.0 0.0	0.0 0.0 0.0	11.1	
11.	50.0 100.0 11.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	50.0 100.0 11.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	22.2	
12.	0.0 0.0 0.0	0.0 100.0 11.1	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	11.1	
COLUMN TOTAL	11.1	11.1	11.1	22.2	22.2	11.1	11.1	100.0					9	

Table 9.8.13  
Rider Helmet Liner Crush at Impact Sites  
(OSIDs)

a. Most Severe Impact Site

	Code	Absolute Frequency	Relative Frequency	Adjusted Frequency	Cumulative Frequency
Crush, in.	0.0	89	9.9	41.2	41.2
	0.01	6	0.7	2.8	44.0
	0.02	9	1.0	4.2	48.1
	0.03	29	3.2	13.4	61.6
	0.04	3	0.3	1.4	63.0
	0.05	1	0.1	0.5	63.4
	0.06	33	3.7	15.3	78.7
	0.07	2	0.2	0.9	79.6
	0.08	6	0.7	2.8	82.4
	0.09	7	0.8	3.2	85.6
	0.10	2	0.2	0.9	86.6
	0.11	1	0.1	0.5	87.0
	0.12	3	0.3	1.4	88.4
	0.13	7	0.8	3.2	91.7
	0.14	1	0.1	0.5	92.1
	0.16	2	0.2	0.9	93.1
	0.17	1	0.1	0.5	93.5
	0.18	1	0.1	0.5	94.0
	0.19	3	0.3	1.4	95.4
	0.22	2	0.2	0.9	96.3
	0.25	4	0.4	1.9	98.1
	0.26	1	0.1	0.5	98.6
	0.28	1	0.1	0.5	99.1
	0.35	1	0.1	0.5	99.5
	0.44	1	0.1	0.5	100.0
Unknown	0.98	89	9.9	MISSING	100.0
N.A.	0.99	595	66.1	MISSING	100.0
	TOTAL	900	100.0	100.0	

Table 9.8.13  
Rider Helmet Liner Crush at Impact Site  
(OSIDs)

b. Second Most Severe Impact Site

	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Crush, in.	0.00	98	10.9	66.7	66.7
	0.01	3	0.3	2.0	68.7
	0.02	5	0.6	3.4	72.1
	0.03	13	1.4	8.8	81.0
	0.04	1	0.1	0.7	81.6
	0.05	1	0.1	0.7	82.3
	0.06	7	0.8	4.8	87.1
	0.07	1	0.1	0.7	87.8
	0.08	2	0.2	1.4	89.1
	0.09	3	0.3	2.0	91.2
	0.10	1	0.1	0.7	91.8
	0.11	1	0.1	0.7	92.5
	0.12	2	0.2	1.4	93.9
	0.13	4	0.4	2.7	96.6
	0.16	2	0.2	1.4	98.0
	0.22	1	0.1	0.7	98.6
	0.38	1	0.1	0.7	99.3
	0.53	1	0.1	0.7	100.0
	Unknown	9.98	53	5.9	MISSING
N.A.	9.99	700	77.8	MISSING	100.0
	<b>TOTAL</b>	<u>900</u>	<u>100.0</u>	<u>100.0</u>	

Table 9.8.14

Rider Helmet Liner Signature Area at Impact Site  
(OSIDs)

## a. Most Severe Impact Site

Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area, in. <sup>2</sup>				
0.00	60	6.7	27.9	27.9
0.49	1	0.1	0.5	28.4
0.69	1	0.1	0.5	28.8
0.79	1	0.1	0.5	29.3
0.86	1	0.1	0.5	29.8
0.88	1	0.1	0.5	30.2
1.00	2	0.2	0.9	31.2
1.13	1	0.1	0.5	31.6
1.18	1	0.1	0.5	32.1
1.20	1	0.1	0.5	32.6
1.23	1	0.1	0.5	33.0
1.25	1	0.1	0.5	33.5
1.33	1	0.1	0.5	34.0
1.38	1	0.1	0.5	34.4
1.42	2	0.2	0.9	35.3
1.57	1	0.1	0.5	35.8
1.62	1	0.1	0.5	36.3
1.76	1	0.1	0.5	36.7
1.77	1	0.1	0.5	37.2
1.80	1	0.1	0.5	37.7
1.82	1	0.1	0.5	38.1
1.96	1	0.1	0.5	38.6
2.06	4	0.4	1.9	40.5
2.10	2	0.2	0.9	41.4
2.11	1	0.1	0.5	41.9
2.20	2	0.2	0.9	42.8
2.30	1	0.1	0.5	43.3
2.32	1	0.1	0.5	43.7
2.33	1	0.1	0.5	44.2
2.36	1	0.1	0.5	44.7
2.40	2	0.2	0.9	45.6
2.41	2	0.2	0.9	46.5
2.45	1	0.1	0.5	47.0
2.46	1	0.1	0.5	47.4
2.47	1	0.1	0.5	47.9
2.50	3	0.3	1.4	49.3
2.60	1	0.1	0.5	49.8
2.64	1	0.1	0.5	50.2
2.65	1	0.1	0.5	50.7
2.66	1	0.1	0.5	51.2

Continued

Table 9.8.14

## Rider Helmet Liner Signature Area at Impact Site

a. Most Severe Impact Site

Continued

	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area, in. <sup>2</sup>	2.71	1	0.1	0.5	51.6
	2.72	1	0.1	0.5	52.1
	2.85	1	0.1	0.5	52.6
	2.92	1	0.1	0.5	53.0
	2.95	2	0.2	0.9	54.0
	3.09	2	0.2	0.9	54.9
	3.10	1	0.1	0.5	55.3
	3.16	1	0.1	0.5	55.8
	3.20	4	0.4	1.9	57.7
	3.24	1	0.1	0.5	58.1
	3.26	1	0.1	0.5	58.6
	3.29	1	0.1	0.5	59.1
	3.30	1	0.1	0.5	59.5
	3.31	1	0.1	0.5	60.0
	3.38	1	0.1	0.5	60.5
	3.40	1	0.1	0.5	60.9
	3.50	1	0.1	0.5	61.4
	3.53	3	0.3	1.4	62.8
	3.60	1	0.1	0.5	63.3
	3.61	2	0.2	0.9	64.2
	3.65	1	0.1	0.5	64.7
	3.75	1	0.1	0.5	65.1
	3.80	2	0.2	0.9	66.0
	3.82	1	0.1	0.5	66.5
	3.85	1	0.1	0.5	67.0
	3.93	1	0.1	0.5	67.4
	4.12	1	0.1	0.5	67.9
	4.13	1	0.1	0.5	68.4
	4.20	2	0.2	0.9	69.3
	4.22	1	0.1	0.5	69.8
	4.30	1	0.1	0.5	70.2
	4.32	1	0.1	0.5	70.7
	4.38	3	0.3	1.4	72.1
	4.50	1	0.1	0.5	72.6
	4.60	3	0.3	1.4	74.0
	4.73	1	0.1	0.5	74.4
	4.80	1	0.1	0.5	74.9
	4.82	2	0.2	0.9	75.8
	5.08	1	0.1	0.5	76.3
	5.10	1	0.1	0.5	76.7
5.11	2	0.2	0.9	77.7	
5.30	1	0.1	0.5	78.1	

Continued



Table 9.8.14

Rider Helmet Liner Signature Area at Impact Site  
(OSIDs)

Continued

	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area in. <sup>2</sup>	5.50	1	0.1	0.5	78.6
	5.67	1	0.1	0.5	79.1
	5.80	2	0.2	0.9	80.0
	5.89	1	0.1	0.5	80.5
	6.00	1	0.1	0.5	80.9
	6.10	2	0.2	0.9	81.9
	6.19	1	0.1	0.5	82.3
	6.21	1	0.1	0.5	82.8
	6.28	2	0.2	0.9	83.7
	6.30	1	0.1	0.5	84.2
	6.68	1	0.1	0.5	84.7
	6.80	1	0.1	0.5	85.1
	6.82	1	0.1	0.5	85.6
	7.06	1	0.1	0.5	86.0
	7.20	1	0.1	0.5	86.5
	7.36	1	0.1	0.5	87.0
	7.50	2	0.2	0.9	87.9
	7.82	1	0.1	0.5	88.4
	8.13	2	0.2	0.9	89.3
	8.20	3	0.3	1.4	90.7
	8.54	1	0.1	0.5	91.2
	8.55	1	0.1	0.5	91.6
	8.75	1	0.1	0.5	92.1
	9.00	1	0.1	0.5	92.6
	10.12	1	0.1	0.5	93.0
	10.28	1	0.1	0.5	93.5
	10.30	2	0.2	0.9	94.4
	10.60	1	0.1	0.5	94.9
	12.00	1	0.1	0.5	95.3
	12.02	1	0.1	0.5	95.8
	12.57	1	0.1	0.5	96.3
	13.85	1	0.1	0.5	96.7
	14.50	1	0.1	0.5	97.2
15.32	1	0.1	0.5	97.7	
20.52	1	0.1	0.5	98.1	
21.99	1	0.1	0.5	98.6	
28.23	1	0.1	0.5	99.1	

Continued

Table 9.8.14

## Rider Helmet Liner Signature Area at Impact Site

(OSIDs)

Continued

	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area, in. <sup>2</sup>	32.00	1	0.1	0.5	99.5
	37.88	1	0.1	0.5	100.0
Unknown	99.98	90	10.0	MISSING	100.0
N.A.	99.99	<u>595</u>	<u>66.1</u>	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0	

Table 9.8.14

Rider Helmet Liner Signature Area at Impact Site  
(OSIDs)

## b. Second Most Severe Impact Site

Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area, in. <sup>2</sup>				
0.00	78	8.7	53.1	53.1
0.54	1	0.1	0.7	53.7
0.61	1	0.1	0.7	54.4
0.77	2	0.2	1.4	55.8
0.79	1	0.1	0.7	56.5
0.82	1	0.1	0.7	57.1
0.98	1	0.1	0.7	57.8
1.10	1	0.1	0.7	58.5
1.18	1	0.1	0.7	59.2
1.22	1	0.1	0.7	59.9
1.35	1	0.1	0.7	60.5
1.37	1	0.1	0.7	61.2
1.45	1	0.1	0.7	61.9
1.55	1	0.1	0.7	62.6
1.60	1	0.1	0.7	63.3
1.72	2	0.2	1.4	64.6
1.76	1	0.1	0.7	65.3
2.10	2	0.2	1.4	66.7
2.20	1	0.1	0.7	67.3
2.21	1	0.1	0.7	68.0
2.31	1	0.1	0.7	68.7
2.36	2	0.2	1.4	70.1
2.40	1	0.1	0.7	70.7
2.45	1	0.1	0.7	71.4
2.50	4	0.4	2.7	74.1
2.58	1	0.1	0.7	74.8
2.80	1	0.1	0.7	75.5
2.94	1	0.1	0.7	76.2
3.10	1	0.1	0.7	76.9
3.14	3	0.3	2.0	78.9
3.35	1	0.1	0.7	79.6
3.50	1	0.1	0.7	80.3
3.70	1	0.1	0.7	81.0
4.14	1	0.1	0.7	81.6
4.20	2	0.2	1.4	83.0
4.31	1	0.1	0.7	83.7
4.73	1	0.1	0.7	84.4
4.86	1	0.1	0.7	85.0
5.09	1	0.1	0.7	85.7

Continued

Table 9.8.14  
 Rider Helmet Liner Signature Area at Impact Site  
 (OSIDs)

Continued

	Code	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Cumulative Frequency (%)
Signature Area, in. <sup>2</sup>	5.13	1	0.1	0.7	86.4
	5.30	1	0.1	0.7	87.1
	6.00	1	0.1	0.7	87.8
	6.12	1	0.1	0.7	88.4
	6.28	1	0.1	0.7	89.1
	6.30	1	0.1	0.7	89.8
	6.38	1	0.1	0.7	90.5
	7.07	1	0.1	0.7	91.2
	7.18	1	0.1	0.7	91.8
	7.30	1	0.1	0.7	92.5
	7.50	1	0.1	0.7	93.2
	7.54	1	0.1	0.7	93.9
	7.85	2	0.2	1.4	95.2
	8.10	1	0.1	0.7	95.9
	8.84	1	0.1	0.7	96.6
	9.13	1	0.1	0.7	97.3
	9.28	1	0.1	0.7	98.0
	14.88	1	0.1	0.7	98.6
	20.25	1	0.1	0.7	99.3
	99.69	1	0.1	0.7	100.0
Unknown	99.98	53	5.9	MISSING	100.0
N/A	99.99	<u>700</u>	<u>77.8</u>	<u>MISSING</u>	100.0
	TOTAL	900	100.0	100.0	

Table 9.11.1  
Overall Severities Sum (SS) by Helmet Use  
(OSIDs)

COUNT ROW COL TOT	PCT PCT PCT	HMCCV					ROW TOTAL	
		PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT OBSER VED		
0.		0	2	0	0	3	15	20
		0.0	10.0	0.0	0.0	15.0	75.0	2.2
		0.0	1.0	0.0	0.0	13.6	2.8	
		0.0	0.2	0.0	0.0	0.3	1.7	
1.		4	10	1	7	1	29	52
		7.7	19.2	1.9	13.5	1.9	55.8	5.8
		12.5	5.1	7.1	7.1	4.5	5.4	
		0.4	1.1	0.1	0.8	0.1	3.2	
2.		6	25	2	14	2	55	104
		5.8	24.0	1.9	13.5	1.9	52.9	11.6
		18.8	12.7	14.3	14.1	9.1	10.3	
		0.7	2.8	0.2	1.6	0.2	6.1	
3.		2	22	1	13	4	62	104
		1.9	21.2	1.0	12.5	3.8	59.6	11.6
		6.3	11.2	7.1	13.1	18.2	11.6	
		0.2	2.4	0.1	1.4	0.4	6.9	
4.		3	32	1	7	2	57	102
		2.9	31.4	1.0	6.9	2.0	55.9	11.3
		9.4	16.2	7.1	7.1	9.1	10.6	
		0.3	3.6	0.1	0.8	0.2	6.3	
5.		2	12	1	10	1	35	61
		3.3	19.7	1.6	16.4	1.6	57.4	6.8
		6.3	6.1	7.1	10.1	4.5	6.5	
		0.2	1.3	0.1	1.1	0.1	3.9	
6.		2	14	2	4	0	45	67
		3.0	20.9	3.0	6.0	0.0	67.2	7.4
		6.3	7.1	14.3	4.0	0.0	8.4	
		0.2	1.5	0.2	0.4	0.0	5.0	
7.		1	5	2	6	0	29	43
		2.3	11.6	4.7	14.0	0.0	67.4	4.4
		3.1	2.5	14.3	6.1	0.0	5.4	
		0.1	0.6	0.2	0.7	0.0	3.2	
8.		0	12	1	5	1	20	39
		0.0	30.8	2.6	12.8	2.6	51.3	4.3
		0.0	6.1	7.1	5.1	4.5	3.7	
		0.0	1.3	0.1	0.6	0.1	2.2	
9.		0	8	0	3	1	14	26
		0.0	30.8	0.0	11.5	3.8	53.8	2.9
		0.0	4.1	0.0	3.0	4.5	2.6	
		0.0	0.9	0.0	0.3	0.1	1.6	
10.		1	1	0	5	2	13	22
		4.5	4.5	0.0	22.7	9.1	59.1	2.4
		3.1	0.5	0.0	5.1	9.1	2.4	
		0.1	0.1	0.0	0.6	0.2	1.4	
11.		1	6	0	2	0	16	25
		4.0	24.0	0.0	8.0	0.0	64.0	2.8
		3.1	3.0	0.0	2.0	0.0	3.0	
		0.1	0.7	0.0	0.2	0.0	1.8	
12.		1	4	0	4	1	12	22
		4.5	18.2	0.0	18.2	4.5	54.5	2.4
		3.1	2.0	0.0	4.0	4.5	2.2	
		0.1	0.4	0.0	0.4	0.1	1.3	
13.		1	3	0	1	0	6	11
		9.1	27.3	0.0	9.1	0.0	54.5	1.2
		3.1	1.5	0.0	1.0	0.0	1.1	
		0.1	0.3	0.0	0.1	0.0	0.7	
COLUMN TOTAL		32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

Continued

Table 9.11.1

Overall Severities Sum (SS) by Helmet Use  
(OSIDs)

Continued

COUNT ROW PCT COL PCT TOT PCT	HMCOV		FULL FAC IAL 105	FULL FAC IAL 170	NOT OBSE RVFD	N A	ROW TOTAL
	PARTIAL	FULL					
14.	0	2	0	2	0	9	13
SS	0.0	15.4	0.0	15.4	0.0	69.2	1.4
	0.0	1.0	0.0	2.0	0.0	1.7	
	0.0	0.2	0.0	0.2	0.0	1.0	
15.	0	0	0	1	0	6	7
	0.0	0.0	0.0	14.3	0.0	85.7	0.8
	0.0	0.0	0.0	1.0	0.0	1.1	
	0.0	0.0	0.0	0.1	0.0	0.7	
16.	0	3	0	3	0	7	13
	0.0	23.1	0.0	23.1	0.0	53.8	1.4
	0.0	1.5	0.0	3.0	0.0	1.3	
	0.0	0.3	0.0	0.3	0.0	0.8	
17.	0	3	1	1	0	3	8
	0.0	37.5	12.5	12.5	0.0	37.5	0.9
	0.0	1.5	7.1	1.0	0.0	0.6	
	0.0	0.3	0.1	0.1	0.0	0.3	
18.	1	2	0	0	1	9	13
	7.7	15.4	0.0	0.0	7.7	69.2	1.4
	3.1	1.0	0.0	0.0	4.5	1.7	
	0.1	0.2	0.0	0.0	0.1	1.0	
19.	0	4	0	2	0	2	8
	0.0	50.0	0.0	25.0	0.0	25.0	0.9
	0.0	2.0	0.0	2.0	0.0	0.4	
	0.0	0.4	0.0	0.2	0.0	0.2	
20.	0	0	0	1	0	4	9
	0.0	0.0	0.0	20.0	0.0	80.0	0.6
	0.0	0.0	0.0	1.0	0.0	0.7	
	0.0	0.0	0.0	0.1	0.0	0.4	
21.	1	1	0	0	0	6	8
	12.5	12.5	0.0	0.0	0.0	75.0	0.9
	3.1	0.5	0.0	0.0	0.0	1.1	
	0.1	0.1	0.0	0.0	0.0	0.7	
22.	0	3	0	0	0	2	9
	0.0	60.0	0.0	0.0	0.0	40.0	0.6
	0.0	1.5	0.0	0.0	0.0	0.4	
	0.0	0.3	0.0	0.0	0.0	0.2	
23.	0	3	0	0	0	2	9
	0.0	60.0	0.0	0.0	0.0	40.0	0.6
	0.0	1.5	0.0	0.0	0.0	0.4	
	0.0	0.3	0.0	0.0	0.0	0.2	
24.	0	2	0	0	0	6	8
	0.0	25.0	0.0	0.0	0.0	75.0	0.9
	0.0	1.0	0.0	0.0	0.0	1.1	
	0.0	0.2	0.0	0.0	0.0	0.7	
25.	0	0	0	1	0	2	3
	0.0	0.0	0.0	33.3	0.0	66.7	0.3
	0.0	0.0	0.0	1.0	0.0	0.4	
	0.0	0.0	0.0	0.1	0.0	0.2	
26.	0	0	1	1	0	2	4
	0.0	0.0	25.0	25.0	0.0	50.0	0.4
	0.0	0.0	7.1	1.0	0.0	0.4	
	0.0	0.0	0.1	0.1	0.0	0.2	
27.	1	0	0	0	0	2	3
	33.3	0.0	0.0	0.0	0.0	66.7	0.3
	3.1	0.0	0.0	0.0	0.0	0.4	
	0.1	0.0	0.0	0.0	0.0	0.2	
COLUMN TOTAL	32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

Continued

Table 9.11.1

Overall Severities Sum (SS) by Helmet Use

Continued

(OSIDs)

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC TAL 105	FULL FAC TAL 120	NOT RVED	DOSE N A	
28.	0	2	0	1	0	4	7
SS	0.0	28.6	0.0	14.3	0.0	57.1	0.8
	0.0	1.0	0.0	1.0	0.0	0.7	
	0.0	0.2	0.0	0.1	0.0	0.4	
29.	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
30.	0	1	0	0	1	0	2
	0.0	50.0	0.0	0.0	50.0	0.0	0.2
	0.0	0.5	0.0	0.0	4.5	0.0	
	0.0	0.1	0.0	0.0	0.1	0.0	
31.	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
32.	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
33.	0	1	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
35.	0	2	0	0	0	2	4
	0.0	50.0	0.0	0.0	0.0	50.0	0.4
	0.0	1.0	0.0	0.0	0.0	0.4	
	0.0	0.2	0.0	0.0	0.0	0.2	
36.	0	1	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
37.	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
38.	0	0	0	1	0	1	2
	0.0	0.0	0.0	50.0	0.0	50.0	0.2
	0.0	0.0	0.0	1.0	0.0	0.2	
	0.0	0.0	0.0	0.1	0.0	0.1	
40.	1	1	0	1	0	2	5
	20.0	20.0	0.0	20.0	0.0	40.0	0.6
	3.1	0.5	0.0	1.0	0.0	0.4	
	0.1	0.1	0.0	0.1	0.0	0.2	
41.	0	1	0	0	0	2	3
	0.0	33.3	0.0	0.0	0.0	66.7	0.3
	0.0	0.5	0.0	0.0	0.0	0.4	
	0.0	0.1	0.0	0.0	0.0	0.2	
42.	0	1	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
43.	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	1.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
COLUMN TOTAL	32	197	14	99	22	536	900
	3.6	21.9	1.6	11.0	2.4	59.6	100.0

Continued

Table 9.11.1

Overall Severities Sum (SS) by Helmet Use

Continued

(OSIDs)

COUNT ROW PCT COL PCT TCT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT OBSE RVED	N A	
44.	0	0	0	0	0	2	2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
45.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
46.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
47.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
48.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
49.	1	0	0	0	0	0	1
SS	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	3.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
50.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
51.	0	1	0	0	0	0	1
SS	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
54.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
55.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
57.	1	0	0	0	0	0	1
SS	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	3.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
58.	0	0	1	0	0	1	2
SS	0.0	0.0	50.0	0.0	0.0	50.0	0.2
	0.0	0.0	7.1	0.0	0.0	0.2	
	0.0	0.0	0.1	0.0	0.0	0.1	
59.	0	0	0	0	0	2	2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
62.	0	0	0	0	0	2	2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
COLUMN TOTAL	32	197	14	99	22	536	900
	3.6	21.9	1.6	11.0	2.4	59.6	100.0

Continued



Table 9.11.1

Overall Severities Sum (SS) by Helmet Use

Continued

(OSIDs)

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT OOSE RVED	N A	
63.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
65.	0	0	0	0	0	2	2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
67.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
69.	0	0	0	0	0	2	2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
72.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
78.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
80.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
81.	0	1	0	0	0	1	2
SS	0.0	50.0	0.0	0.0	0.0	50.0	0.2
	0.0	0.5	0.0	0.0	0.0	0.2	
	0.0	0.1	0.0	0.0	0.0	0.1	
84.	0	0	0	0	1	0	1
SS	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	4.5	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
86.	0	0	0	1	0	0	1
SS	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	1.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
88.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
89.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
90.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
91.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL	32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

Continued

Table 9.11.1

Overall Severities Sum (SS) by Helmet Use

Continued

(OSIDs)

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT OBSE RVED	N A	
93.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
97.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
99.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
102.	0	1	0	0	0	0	1
SS	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
104.	1	0	0	0	0	1	2
SS	50.0	0.0	0.0	0.0	0.0	50.0	0.2
	3.1	0.0	0.0	0.0	0.0	0.2	
	0.1	0.0	0.0	0.0	0.0	0.1	
106.	0	1	0	0	0	0	1
SS	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
107.	0	1	0	0	0	1	2
SS	0.0	50.0	0.0	0.0	0.0	50.0	0.2
	0.0	0.5	0.0	0.0	0.0	0.2	
	0.0	0.1	0.0	0.0	0.0	0.1	
109.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
112.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
116.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
117.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
120.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
125.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
126.	0	0	0	0	0	1	1
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL	32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

Continued

Table 9.11.1

Overall Severities Sum (SS) by Helmet Use  
(OSIDs)

Continued

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT RVED	ORSE N A	
127.	0	0	0	0	0	2	0.2
SS	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
132.	0	0	0	0	1	0	0.1
	0.0	0.0	0.0	0.0	100.0	0.0	0.1
	0.0	0.0	0.0	0.0	4.5	0.0	
	0.0	0.0	0.0	0.0	0.1	0.0	
135.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
140.	0	0	0	0	0	2	0.2
	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.4	
	0.0	0.0	0.0	0.0	0.0	0.2	
144.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
145.	1	0	0	0	0	0	0.1
	100.0	0.0	0.0	0.0	0.0	0.0	0.1
	3.1	0.0	0.0	0.0	0.0	0.0	
	0.1	0.0	0.0	0.0	0.0	0.0	
156.	0	1	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
161.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
170.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
187.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
189.	0	1	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
192.	0	0	0	1	0	0	0.1
	0.0	0.0	0.0	100.0	0.0	0.0	0.1
	0.0	0.0	0.0	1.0	0.0	0.0	
	0.0	0.0	0.0	0.1	0.0	0.0	
204.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.1	
250.	0	1	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.5	0.0	0.0	0.0	0.0	
	0.0	0.1	0.0	0.0	0.0	0.0	
COLUMN TOTAL	32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

SS=SS1+SS2

Table 9.11.2  
 Head and Neck Severities Sum (SS2) by Helmet Use  
 (OSIDs)

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT DISE RVFD	N A	
0.	18 3.5 56.3 2.0	146 28.7 74.1 16.2	7 1.4 50.0 0.8	74 14.6 74.7 8.2	16 3.1 72.7 1.6	247 48.6 46.1 27.4	508 56.4
1.	9 5.9 28.1 1.0	26 17.1 13.2 2.9	4 2.6 28.6 0.4	11 7.2 11.1 1.2	2 1.3 9.1 0.2	100 65.8 18.7 11.1	152 16.9
2.	2 2.7 6.3 0.2	7 9.5 3.6 0.8	0 0.0 0.0 0.0	7 9.5 7.1 0.8	1 1.4 4.5 0.1	57 77.0 10.6 6.3	74 8.2
3.	0 0.0 0.0 0.0	2 8.7 1.0 0.2	0 0.0 0.0 0.0	1 4.3 1.0 0.1	0 0.0 0.0 0.0	20 87.0 3.7 2.2	23 2.6
4.	0 0.0 0.0 0.0	3 16.7 1.5 0.3	2 11.1 14.3 0.2	1 5.6 1.0 0.1	0 0.0 0.0 0.0	12 66.7 2.2 1.3	18 2.0
5.	0 0.0 0.0 0.0	1 4.5 0.5 0.1	0 0.0 0.0 0.0	1 4.5 1.0 0.1	1 4.5 4.5 0.1	19 66.4 3.5 2.1	22 2.4
6.	0 0.0 0.0 0.0	1 12.5 0.5 0.1	0 0.0 0.0 0.0	1 12.5 1.0 0.1	0 0.0 0.0 0.0	6 75.0 1.1 0.7	8 0.9
7.	0 0.0 0.0 0.0	1 12.5 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	7 87.5 1.3 0.8	8 0.9
8.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.2 0.1	1 0.1
9.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	4 100.0 0.7 0.4	4 0.4
10.	0 0.0 0.0 0.0	1 14.3 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	6 85.7 1.1 0.7	7 0.8
12.	1 100.0 3.1 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 0.1
13.	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 0.2 0.1	1 0.1
14.	0 0.0 0.0 0.0	1 33.3 0.5 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 66.7 0.4 0.2	3 0.3
COLUMN TOTAL	32 3.6	197 21.9	14 1.6	99 11.0	22 2.4	536 59.6	900 100.0

(CONTINUED)

Table 9.11.2

Head and Neck Severities Sum (SS2) by Helmet Use  
(OSIDs)

Continued

COUNT ROW PCT COL PCT TOT PCT	HMCOV						ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT OBSE RVFD	N A	
15.	0	0	0	0	0	2	0.2
SS2	0.0	0.0	0.0	0.0	0.0	100.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0		
17.	0	0	0	0	0	2	0.2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0		
18.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0		
19.	0	0	0	0	0	2	0.2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0		
20.	0	0	0	0	0	2	0.2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0		
21.	1	1	0	0	0	1	0.3
	33.3	33.3	0.0	0.0	0.0	33.3	0.2
	3.1	0.5	0.0	0.0	0.0	0.1	
	0.1	0.1	0.0	0.0	0.0		
25.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0		
26.	1	0	0	0	1	4	0.6
	16.7	0.0	0.0	0.0	16.7	66.7	0.7
	3.1	0.0	0.0	0.0	4.5	0.7	
	0.1	0.0	0.0	0.0	0.1	0.4	
27.	0	1	0	1	0	2	0.4
	0.0	25.0	0.0	25.0	0.0	50.0	0.4
	0.0	0.5	0.0	1.0	0.0	0.2	
	0.0	0.1	0.0	0.1	0.0	0.2	
28.	0	0	0	0	0	1	0.1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2
	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0		
29.	0	0	0	0	0	2	0.2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4
	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0		
30.	0	1	0	0	0	2	0.3
	0.0	33.3	0.0	0.0	0.0	66.7	0.4
	0.0	0.5	0.0	0.0	0.0	0.2	
	0.0	0.1	0.0	0.0	0.0	0.2	
34.	0	1	0	0	0	0	0.1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.5	0.0	0.0	0.0	0.0	0.0
	0.0	0.1	0.0	0.0	0.0	0.0	0.0
36.	0	1	0	0	0	1	0.2
	0.0	50.0	0.0	0.0	0.0	50.0	0.2
	0.0	0.5	0.0	0.0	0.0	0.2	
	0.0	0.1	0.0	0.0	0.0	0.1	
COLUMN TOTAL	32	197	14	99	22	536	900
	3.6	21.9	1.6	11.0	2.4	59.6	100.0

Continued

Table 9.11.2

Head and Neck Severities Sum (SS2) by Helmet Use  
(OSIDs)

Continued

COUNT ROW PCT COL PCT TOT PCT	HMCDV							ROW TOTAL
	PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120	NOT RVFD	ORSE N A		
38.	0	0	1	0	0	0	0	1
SS2	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	7.1	0.0	0.0	0.0	0.0	
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
41.	0	0	0	0	0	2	2	2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
42.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
43.	0	0	0	0	0	2	2	2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
45.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
50.	0	0	0	0	1	2	3	3
	0.0	0.0	0.0	0.0	33.3	66.7	0.4	0.3
	0.0	0.0	0.0	0.0	0.0	4.5	0.4	
	0.0	0.0	0.0	0.0	0.1	0.2	0.2	
52.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
53.	0	0	0	0	0	2	2	2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
55.	0	0	0	0	0	2	2	2
	0.0	0.0	0.0	0.0	0.0	100.0	0.4	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	
56.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
58.	0	0	0	0	0	3	3	3
	0.0	0.0	0.0	0.0	0.0	100.0	0.6	0.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
61.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
64.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
71.	0	0	0	0	0	1	1	1
	0.0	0.0	0.0	0.0	0.0	100.0	0.2	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL	32	197	14	99	22	536	900	100.0
	3.6	21.9	1.6	11.0	2.4	59.6		

Continued

Table 9.11.2

Head and Neck Severities Sum (SS2) by Helmet Use  
(OSIDs)

Continued

COUNT ROW COL TOT	PCT PCT PCT	HMCDV					NOT ORSE N A PVED	ROW TOTAL
		PARTIAL	FULL	FULL FAC IAL 105	FULL FAC IAL 120			
74.		0	0	0	0	0	1	0.1
SS2		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
75.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
77.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
81.		0	0	0	1	0	0	0.1
		0.0	0.0	0.0	100.0	0.0	0.0	
		0.0	0.0	0.0	1.0	0.0	0.0	
		0.0	0.0	0.0	0.1	0.0	0.0	
85.		0	1	0	0	0	0	0.1
		0.0	100.0	0.0	0.0	0.0	0.0	
		0.0	0.5	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	
86.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
87.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
88.		0	1	0	0	0	0	0.1
		0.0	100.0	0.0	0.0	0.0	0.0	
		0.0	0.5	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	
92.		0	0	0	1	0	0	0.1
		0.0	0.0	0.0	100.0	0.0	0.0	
		0.0	0.0	0.0	1.0	0.0	0.0	
		0.0	0.0	0.0	0.1	0.0	0.0	
98.		0	0	0	0	0	2	0.2
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.4	
		0.0	0.0	0.0	0.0	0.0	0.2	
103.		0	1	0	0	0	0	0.1
		0.0	100.0	0.0	0.0	0.0	0.0	
		0.0	0.5	0.0	0.0	0.0	0.0	
		0.0	0.1	0.0	0.0	0.0	0.0	
109.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
113.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
120.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
135.		0	0	0	0	0	1	0.1
		0.0	0.0	0.0	0.0	0.0	100.0	
		0.0	0.0	0.0	0.0	0.0	0.2	
		0.0	0.0	0.0	0.0	0.0	0.1	
COLUMN TOTAL		32	197	14	99	22	536	900
		3.6	21.9	1.6	11.0	2.4	59.6	100.0

Table 9.11.3  
 Head and Neck Severities Sum (SS2) by Helmet Use  
 OSID Fatal Accidents

COUNT	HMUSE			HOW TOTAL
	WITHOUT HELMET	WITH HELMET	NOT QUSE RVFD	
ROW PCT	COL PCT	TOT PCT		
0.	1	1	0	2
	50.0	50.0	0.0	3.7
SS2	2.5	10.0	0.0	
	1.2	1.9	0.0	
1.	3	0	0	3
	100.0	0.0	0.0	5.6
	7.5	0.0	0.0	
	5.6	0.0	9.0	
2.	2	1	0	3
	66.7	33.3	0.0	5.6
	5.0	10.0	0.0	
	3.7	1.9	0.0	
3.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
4.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
5.	0	0	1	1
	0.0	0.0	100.0	1.9
	0.0	0.0	25.0	
	0.0	0.0	1.9	
7.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
10.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
17.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
21.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
25.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
26.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
29.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
30.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
COLUMN TOTAL	40	10	4	54
	74.1	18.5	7.4	100.0

Continued



Table 9.11.3  
Head and Neck Severities Sum (SS2) by Helmet Use  
OSID Fatal Accidents

Continued

COUNT POW PCT COL PCT TOT PCT	HMUSE			ROW TOTAL
	WITHOUT HELMET	WITH HEL MET	NOT ORSE RVED	
34.	0	1	0	1
	0.0	100.0	0.0	1.9
SS2	0.0	10.0	0.0	
	0.0	1.9	0.0	
36.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
38.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
43.	2	0	0	2
	100.0	0.0	0.0	3.7
	5.0	0.0	0.0	
	3.7	0.0	0.0	
45.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
50.	1	0	1	2
	50.0	0.0	50.0	3.7
	2.5	0.0	25.0	
	1.9	0.0	1.9	
52.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
53.	2	0	0	2
	100.0	0.0	0.0	3.7
	5.0	0.0	0.0	
	3.7	0.0	0.0	
55.	2	0	0	2
	100.0	0.0	0.0	3.7
	5.0	0.0	0.0	
	3.7	0.0	0.0	
56.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
58.	3	0	0	3
	100.0	0.0	0.0	5.6
	7.5	0.0	0.0	
	5.6	0.0	0.0	
61.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
71.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
74.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
COLUMN TOTAL	40	10	4	54
	74.1	18.5	7.4	100.0

Continued

Table 9.11.3  
Head and Neck Severities Sum (SS2) by Helmet Use  
OSID Fatal Accidents

Continued

COUNT ROW PCT COL PCT TOT PCT	HMUSE			ROW TOTAL
	WITHOUT HELMET	WITH HEL MET	NOT ORSE RVCD	
75.	1	0	0	1
	100.0	0.0	0.0	1.9
SS2	2.5	0.0	0.0	
	1.9	0.0	0.0	
77.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
81.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
85.	0	0	1	1
	0.0	0.0	100.0	1.9
	0.0	0.0	25.0	
	0.0	0.0	1.9	
86.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
87.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
88.	0	0	1	1
	0.0	0.0	100.0	1.9
	0.0	0.0	25.0	
	0.0	0.0	1.9	
92.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
98.	2	0	0	2
	100.0	0.0	0.0	3.7
	5.0	0.0	0.0	
	3.7	0.0	0.0	
103.	0	1	0	1
	0.0	100.0	0.0	1.9
	0.0	10.0	0.0	
	0.0	1.9	0.0	
108.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
113.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
120.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
135.	1	0	0	1
	100.0	0.0	0.0	1.9
	2.5	0.0	0.0	
	1.9	0.0	0.0	
COLUMN TOTAL	40	10	4	54
	74.1	18.5	7.4	100.0

D. SUPPLEMENTAL EXPOSURE DATA

D.1 Supplemental Data for Volume I, Section 10.0, Exposure Data

Included in this section are the following Tables:

10.1.3	Trip Length	387
10.13.1	Rider Height	390
10.13.2	Motorcycle Rider Weight	391
10.15.3	Motorcycle Rider Driver License Issuing State	394
10.19.2	Rider Street Motorcycle Experience	395
10.19.3	Rider Experience on Observed Motorcycle	397
10.30.3	Sex and Age Distribution of Class 3 Automobile License Holders, Los Angeles County, 1977	399
10.30.4	Sex and Age Distribution of Class 3 Automobile License Holders, Los Angeles County, 1978	400
10.30.5	Sex and Age Distribution of Class 3 Automobile License Holders, Los Angeles County, 1979	401
10.30.6	Sex and Age Distribution of Class 4 Motorcycle License Holders, Los Angeles County, 1977	402
10.30.7	Sex and Age Distribution of Class 4 Motorcycle License Holders, Los Angeles County, 1978	403
10.30.8	Sex and Age Distribution of Class 4 Motorcycle License Holders, Los Angeles County, 1979	404

Table 10.1.3

## Trip Length

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Miles	0.0	5	0.2	0.2	0.2
	0.1	5	0.2	0.2	0.4
	0.2	2	0.1	0.1	0.5
	0.3	3	0.1	0.1	0.6
	0.5	7	0.3	0.3	1.0
	0.8	1	0.0	0.0	1.0
	1.0	27	1.2	1.2	2.2
	1.1	1	0.0	0.0	2.2
	1.5	18	0.8	0.8	3.0
	1.6	1	0.0	0.0	3.0
	2.0	34	1.5	1.5	4.5
	2.5	5	0.2	0.2	4.7
	2.7	1	0.0	0.0	4.8
	3.0	28	1.2	1.2	6.0
	3.5	2	0.1	0.1	6.1
	3.8	1	0.0	0.0	6.1
	4.0	36	1.6	1.6	7.7
	4.5	5	0.2	0.2	7.9
	5.0	35	1.5	1.5	9.4
	5.5	2	0.1	0.1	9.5
	6.0	28	1.2	1.2	10.7
	6.6	2	0.1	0.1	10.8
	7.0	23	1.0	1.0	11.8
	8.0	18	0.8	0.8	12.6
	9.0	9	0.4	0.4	12.9
	9.3	1	0.0	0.0	13.0
	9.5	1	0.0	0.0	13.0
	10.0	52	2.3	2.3	15.3
	10.1	1	0.0	0.0	15.3
	10.5	1	0.0	0.0	15.4
	11.0	10	0.4	0.4	15.8
	12.0	19	0.8	0.8	16.6
	12.3	1	0.0	0.0	16.7
	13.0	5	0.2	0.2	16.9
	13.1	1	0.0	0.0	16.9
	14.0	5	0.2	0.2	17.1
	15.0	27	1.2	1.2	18.3
	16.0	3	0.1	0.1	18.4
	17.0	5	0.2	0.2	18.7

Continued

Table 10.1.3

## Trip Length

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Miles	18.0	1	0.0	0.0	18.7
	19.0	1	0.0	0.0	18.7
	19.5	1	0.0	0.0	18.8
	20.0	23	1.0	1.0	19.8
	21.0	2	0.1	0.1	19.9
	22.0	3	0.1	0.1	20.0
	23.0	1	0.0	0.0	20.0
	24.0	1	0.0	0.0	20.1
	25.0	7	0.3	0.3	20.4
	26.0	3	0.1	0.1	20.5
	27.0	1	0.0	0.0	20.6
	28.0	1	0.0	0.0	20.6
	29.0	1	0.0	0.0	20.6
	30.0	18	0.8	0.8	21.4
	31.0	1	0.0	0.0	21.5
	32.0	3	0.1	0.1	21.6
	34.0	1	0.0	0.0	21.6
	35.0	5	0.2	0.2	21.9
	36.0	2	0.1	0.1	21.9
	37.0	1	0.0	0.0	22.0
	37.4	1	0.0	0.0	22.0
	40.0	9	0.4	0.4	22.4
	41.8	1	0.0	0.0	22.5
	42.0	2	0.1	0.1	22.6
	43.0	1	0.0	0.0	22.6
	44.0	1	0.0	0.0	22.6
	45.0	5	0.2	0.2	22.9
	50.0	8	0.3	0.3	23.2
	55.0	2	0.1	0.1	23.3
	60.0	8	0.3	0.3	23.6
	68.0	1	0.0	0.0	23.7
	70.0	3	0.1	0.1	23.8
	75.0	1	0.0	0.0	23.9
	80.0	2	0.1	0.1	23.9
	82.0	1	0.0	0.0	24.0
	82.5	1	0.0	0.0	24.0
	88.8	1	0.0	0.0	24.1
	90.0	5	0.2	0.2	24.3
	98.0	2	0.1	0.1	24.4
	100.0	10	0.4	0.4	24.4

Continued

Table 10.1.3  
Trip Length

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Miles	125.0	2	0.1	0.1	24.9
	130.0	2	0.1	0.1	25.0
	135.0	2	0.1	0.1	25.1
	138.0	1	0.0	0.0	25.1
	140.0	2	0.1	0.1	25.2
	150.0	1	0.0	0.0	25.2
	165.0	2	0.1	0.1	25.3
	195.6	1	0.0	0.0	25.4
	200.0	5	0.2	0.2	25.6
	354.0	1	0.0	0.0	25.6
Unknown	999.8	<u>1718</u>	<u>74.4</u>	<u>74.4</u>	100.0
	TOTAL	2310	100.0	100.0	

Table 10.13.1  
Rider Height

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Rider Height, in.	54.	1	0.0	0.2	0.2
	56.	2	0.1	0.3	0.5
	57.	1	0.0	0.2	0.6
	58.	2	0.1	0.3	1.0
	59.	2	0.1	0.3	1.3
	60.	4	0.2	0.6	1.9
	61.	1	0.0	0.2	2.1
	62.	2	0.1	0.3	2.4
	63.	9	0.4	1.4	3.8
	64.	21	0.9	3.3	7.1
	65.	17	0.7	2.7	9.8
	66.	31	1.3	4.9	14.7
	67.	49	2.1	7.8	22.5
	68.	74	3.2	11.7	34.2
	69.	66	2.9	10.5	44.7
	70.	80	3.5	12.7	57.4
	71.	58	2.5	9.2	66.6
	72.	100	4.3	15.8	82.4
	73.	55	2.4	8.7	91.1
	74.	31	1.3	4.9	96.0
	75.	11	0.5	1.7	97.8
	76.	7	0.3	1.1	98.9
	77.	5	0.2	0.8	99.7
	78.	2	0.1	0.3	100.0
Unknown	98.	<u>1679</u>	<u>72.7</u>	<u>MISSING</u>	100.0
	TOTAL	2310	100.0	100.0	

Table 10.13.2  
Motorcycle Rider Weight

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	77.	1	0.0	0.2	0.2
	95.	1	0.0	0.2	0.3
	98.	1	0.0	0.2	0.5
	100.	1	0.0	0.2	0.6
	105.	1	0.0	0.2	0.8
	110.	3	0.1	0.5	1.3
	111.	1	0.0	0.2	1.4
	112.	1	0.0	0.2	1.6
	115.	3	0.1	0.5	2.0
	116.	1	0.0	0.2	2.2
	118.	2	0.1	0.3	2.5
	120.	4	0.2	0.6	3.1
	121.	1	0.0	0.2	3.3
	122.	1	0.0	0.2	3.5
	125.	12	0.5	1.9	5.3
	126.	2	0.1	0.3	5.7
	129.	4	0.2	0.6	6.3
	130.	25	1.1	3.9	10.2
	132.	1	0.0	0.2	10.4
	134.	1	0.0	0.2	10.5
	135.	23	1.0	3.6	14.1
	138.	3	0.1	0.5	14.6
	140.	33	1.4	5.2	19.8
	141.	1	0.0	0.2	19.9
	142.	5	0.2	0.8	20.7
	143.	2	0.1	0.3	21.0
	145.	31	1.3	4.9	25.9
	146.	1	0.0	0.2	26.1
	147.	2	0.1	0.3	26.4
	148.	2	0.1	0.3	26.7
	149.	2	0.1	0.3	27.0
	150.	65	2.8	10.2	37.2
	151.	1	0.0	0.2	37.4
	152.	2	0.1	0.3	37.7
	154.	1	0.0	0.2	37.8
	156.	30	1.3	4.7	42.5
	157.	1	0.0	0.2	42.7
	158.	4	0.2	0.6	43.3
	160	46	2.0	7.2	50.5

Continued



Table 10.13.2  
Motorcycle Rider Weight

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	162.	1	0.0	0.2	50.7
	163.	2	0.1	0.3	51.0
	165.	45	1.9	7.1	58.1
	168.	3	0.1	0.5	58.6
	169.	3	0.1	0.5	59.0
	170.	35	1.5	5.5	64.5
	172.	3	0.1	0.5	65.0
	173.	1	0.0	0.2	65.1
	174.	3	0.1	0.5	65.6
	175.	32	1.4	5.0	70.6
	176.	1	0.0	0.2	70.8
	178.	4	0.2	0.6	71.4
	179.	1	0.0	0.2	71.6
	180.	32	1.4	5.0	76.6
	182.	2	0.1	0.3	76.9
	183.	1	0.0	0.2	77.1
	185.	22	1.0	3.5	80.5
	187.	1	0.0	0.2	80.7
	188.	1	0.0	0.2	80.8
	189.	1	0.0	0.2	81.0
	190.	18	0.8	2.8	83.8
	192.	1	0.0	0.2	84.0
	195.	22	1.0	3.5	87.4
	198.	1	0.0	0.2	87.6
	200.	24	1.0	3.8	91.4
	205.	5	0.2	0.8	92.2
	210.	10	0.4	1.6	93.7
	211.	1	0.0	0.2	93.9
	213.	1	0.0	0.2	94.0
	215.	3	0.1	0.5	94.5
	219.	1	0.0	0.2	94.7
	220.	11	0.5	1.7	96.4
	225.	1	0.0	0.2	96.5
	230.	9	0.4	1.4	98.0
	235.	1	0.0	0.2	98.1
	240.	3	0.1	0.5	98.6
	245.	1	0.0	0.2	98.7
	250.	3	0.1	0.5	99.2

Continued

Table 10.13.2  
Motorcycle Rider Weight

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Weight, lbs.	265.	1	0.0	0.2	99.4
	270.	1	0.0	0.2	99.5
	300.	1	0.0	0.2	99.7
	303.	1	0.0	0.2	99.8
	323.	1	0.0	0.2	100.0
Unknown	998.	<u>1673</u>	<u>72.4</u>	<u>MISSING</u>	100.0
	TOTAL	2310	100.0	100.0	

Table 10.15.3

## Rider Driver License Issuing State

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Alaska	2.	1	0.0	0.2	0.2
Arizona	3.	3	0.1	0.5	0.6
Arkansas	4.	1	0.0	0.2	0.8
California	5.	633	27.4	95.6	96.4
Colorado	6.	1	0.0	0.2	96.5
Florida	10.	5	0.2	0.8	97.3
Hawaii	12.	1	0.0	0.2	97.4
Illinois	14.	1	0.0	0.2	97.6
Indiana	15.	1	0.0	0.2	97.7
Maryland	21.	1	0.0	0.2	97.9
New Mexico	32.	1	0.0	0.2	98.0
New York	33.	1	0.0	0.2	98.2
Texas	44.	3	0.1	0.5	98.6
Virginia	47.	1	0.0	0.2	98.8
Washington	48.	2	0.1	0.3	99.1
Wisconsin	50.	1	0.0	0.2	99.2
Foreign	52.	5	0.2	0.8	100.0
Unknown	98.	1625	70.3	MISSING	100.0
N.A.	99.	23	1.0	MISSING	100.0
	TOTAL	2310	100.0	100.0	

Table 10.19.2

## Rider Street Motorcycle Experience

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Months	0.	9	0.4	1.5	1.5
	1.	16	0.7	2.6	4.1
	2.	16	0.7	2.6	6.7
	3.	6	0.3	1.0	7.7
	4.	14	0.6	2.3	10.0
	5.	6	0.3	1.0	11.0
	6.	17	0.7	2.8	13.7
	7.	2	0.1	0.3	14.1
	8.	5	0.2	0.8	14.9
	9.	2	0.1	0.3	15.2
	10.	5	0.2	0.8	16.0
	11.	3	0.1	0.5	16.5
	12.	47	2.0	7.7	24.2
	13.	4	0.2	0.7	24.9
	14.	5	0.2	0.8	25.7
	15.	3	0.1	0.5	26.2
	18.	21	0.9	3.4	29.6
	19.	3	0.1	0.5	30.1
	20.	1	0.0	0.2	30.3
	22.	1	0.0	0.2	30.4
	24.	48	2.1	7.9	38.3
	25.	1	0.0	0.2	38.5
	27.	1	0.0	0.2	38.6
	30.	10	0.4	1.6	40.3
	34.	1	0.0	0.2	40.4
	35.	2	0.1	0.3	40.8
	36.	31	1.3	5.1	45.8
	40.	1	0.0	0.2	46.0
	42.	8	0.3	1.3	47.3
	44.	1	0.0	0.2	47.5
	45.	1	0.0	0.2	47.6
	47.	1	0.0	0.2	47.8
	48.	37	1.6	6.1	53.8
	54.	1	0.0	0.2	54.0
	57.	1	0.0	0.2	54.2
	60.	44	1.9	7.2	61.4
	72.	29	1.3	4.7	66.1
	76.	1	0.0	0.2	66.3
	78.	2	0.1	0.3	66.6
	84.	15	0.6	2.5	69.1

Continued

Table 10.19.2

Rider Street Motorcycle Experience

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Months	90.	1	0.0	0.2	69.2
	91.	1	0.0	0.2	69.4
	96.	8	0.3	1.3	70.7
More Than 96 Months	97.	179	7.7	29.3	100.0
Not Observed	98.	<u>1698</u>	<u>73.5</u>	<u>MISSING</u>	100.0
	TOTAL	2310	100.0	100.0	

Table 10.19.3

## Rider Experience On Observed Motorcycle

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Months	0.	23	1.0	3.8	3.8
	1.	76	3.3	12.4	10.2
	2.	36	1.6	5.9	22.1
	3.	24	1.0	3.9	26.0
	4.	29	1.3	4.7	30.8
	5.	22	1.0	3.6	34.4
	6.	37	1.6	6.1	40.4
	7.	18	0.8	2.9	43.4
	8.	28	1.2	4.6	48.0
	9.	13	0.6	2.1	50.1
	10.	5	0.2	0.8	50.9
	11.	8	0.3	1.3	52.2
	12.	69	3.0	11.3	63.5
	13.	1	0.0	0.2	63.7
	14.	4	0.2	0.7	64.3
	15.	8	0.3	1.3	65.6
	16.	2	0.1	0.3	66.0
	17.	2	0.1	0.3	66.3
	18.	27	1.2	4.4	70.7
	19.	2	0.1	0.3	71.0
	20.	1	0.0	0.2	71.2
	22.	2	0.1	0.3	71.5
	24.	56	2.4	9.2	80.7
	26.	1	0.0	0.2	80.9
	27.	1	0.0	0.2	81.0
	28.	1	0.0	0.2	81.2
	30.	10	0.4	1.6	82.8
	36.	24	1.0	3.9	86.7
	37.	1	0.0	0.2	86.9
	40.	5	0.2	0.8	87.7
	42.	5	0.2	0.8	88.5
	45.	1	0.0	0.2	88.7
	48.	13	0.6	2.1	90.8
	52.	1	0.0	0.2	91.0
	60.	21	0.9	3.4	94.4
	72.	10	0.4	1.6	96.1
	75.	1	0.0	0.2	96.2
	76.	1	0.0	0.2	96.4
78.	1	0.0	0.2	96.6	

Continued

Table 10. 19.3

Rider Experience On Observed Motorcycle

Continued

Category Label	Code	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)	Cumulative Freq (%)
Months	84.	2	0.1	0.3	96.9
	90.	2	0.1	0.3	97.2
	96.	2	0.1	0.3	97.5
More Than 96 Months	97.	15	0.6	2.5	100.0
Not Observed	98.	<u>1699</u>	<u>73.5</u>	<u>MISSING</u>	100.0
	TOTAL	2310	100.0	100.0	

Table 10.30.3  
Sex and Age Distribution of Class 3 Automobile License Holders  
Los Angeles County, 1977

AGE	MALE	FEMALE	TOTAL
16-19	177,759	145,193 (.4496)	322,952 (.0738)
20-24	325,523	277,767 (.4604)	603,290 (.1379)
25-29	315,323	280,967 (.4712)	596,290 (.1363)
30-34	269,744	242,941 (.4739)	512,685 (.1172)
35-39	206,654	184,892 (.4722)	391,546 (.0895)
40-44	176,716	158,541 (.4709)	336,658 (.0796)
45-49	176,059	159,942 (.4760)	336,001 (.0768)
50-54	178,722	169,009 (.4860)	347,731 (.0795)
55-59	165,182	150,189 (.4762)	315,371 (.0721)
60-64	131,999	114,376 (.4642)	246,375 (.0563)
65-69	93,072	78,503 (.4575)	171,575 (.0392)
70-74	58,683	48,287 (.4514)	106,970 (.0245)
75-79	32,757	26,375 (.4460)	59,132 (.0080)
80-84	14,624	10,103 (.4086)	24,727 (.0057)
85-89	3,935	2,201 (.3587)	6,136 (.0014)
90-99	<u>445</u>	<u>163</u> (.2681)	<u>608</u> (.0001)
TOTAL	2,327,197	2,048,449	4,375,646



Table 10.30.4

Sex and Age Distribution of Class 3 Automobile License Holders  
Los Angeles County, 1978

AGE	MALE	FEMALE	TOTAL
16-19	176,444	142,566(.4469)	319,010 (.0712)
20-24	341,169	286,291(.4563)	627,460 (.1400)
25-29	330,537	288,319(.4659)	618,856 (.1381)
30-34	282,812	253,122(.4723)	535,934 (.1196)
35-39	218,760	196,103(.4727)	414,863 (.0926)
40-44	179,912	160,950(.4722)	340,862 (.0761)
45-49	174,147	156,186(.4728)	330,333 (.0737)
50-54	176,133	165,991(.4852)	342,124 (.0763)
55-59	166,767	151,966(.4768)	318,733 (.0711)
60-64	133,223	116,866(.4673)	250,089 (.0558)
65-69	95,120	61,193(.3915)	156,313 (.0349)
70-74	60,486	50,954(.4572)	111,440 (.0249)
75-79	33,882	27,664(.4495)	61,546 (.0137)
80-84	15,233	11,123(.4220)	26,356 (.0059)
85-89	4,235	2,540(.3749)	6,775 (.0015)
90-99	546	192(.2602)	738 (.0002)
TOTAL	2,389,406	2,092,026	4,481,432

Table 10.30.5  
Sex and Age Distribution of Class 3 Automobile License Holders  
Los Angeles County, 1979

AGE	MALE	FEMALE	TOTAL
16-19	170,709	135,718 (.4429)	306,427 (.0676)
20-24	345,843	287,182 (.4537)	633,025 (.1396)
25-29	341,707	292,858 (.4615)	634,565 (.1399)
30-34	292,185	261,135 (.4719)	553,320 (.1220)
35-39	225,452	203,096 (.4739)	428,548 (.0945)
40-44	183,317	163,434 (.4713)	346,751 (.0765)
45-49	170,415	152,677 (.4725)	323,092 (.0712)
50-54	172,754	160,603 (.4818)	333,357 (.0735)
55-59	168,623	154,178 (.4776)	322,801 (.0712)
60-64	133,940	118,594 (.4696)	252,534 (.0557)
65-69	98,513	84,483 (.4617)	182,996 (.0403)
70-74	62,906	53,380 (.4590)	116,286 (.0256)
75-79	36,049	29,183 (.4474)	65,232 (.0144)
80-84	16,060	11,901 (.4256)	27,961 (.0062)
85-89	4,648	2,768 (.3732)	7,416 (.0016)
90-99	660	264 (.2857)	924 (.0002)
TOTAL	2,423,781	2,111,454	4,535,235

Table 10.30.6

Sex and Age Distribution of Class 4 Motorcycle License Holders  
Los Angeles County, 1977

AGE	MALE	FEMALE	TOTAL
16-19	17,477	684 (.0376)	18,161 (.0926)
20-24	46,694	2,182 (.0446)	48,876 (.2493)
25-29	36,603	1,733 (.0452)	38,336 (.1955)
30-34	27,250	1,477 (.0514)	28,727 (.1465)
35-39	17,204	1,110 (.0606)	18,314 (.0934)
40-44	12,633	748 (.0559)	13,381 (.0683)
45-49	10,647	587 (.0523)	11,234 (.0573)
50-54	8,292	407 (.0468)	8,699 (.0444)
55-59	5,631	182 (.0313)	5,813 (.0296)
60-64	2,926	66 (.0221)	2,992 (.0153)
65-69	1,110	12 (.0107)	1,122 (.0057)
70-74	303	08 (.0258)	311 (.0016)
75-79	74	03 (.0390)	77 (.0040)
80-84	09	01 (.1000)	10 (.0001)
85-89	01	01 (.5000)	2 -
90-99	<u>0</u>	<u>0</u> -	<u>0</u> -
TOTAL	186,854	9,201 (.0469)	196,055

Table 10.30.7

Sex and Age Distribution of Class 4 Motorcycle License Holders  
Los Angeles County, 1978

AGE	MALE	FEMALE	TOTAL
16-19	16,488	765 (.0444)	17,244 (.0843)
20-24	47,640	2,238 (.0449)	49,878 (.2438)
25-29	39,877	1,952 (.0467)	41,829 (.2044)
30-34	28,429	1,513 (.0505)	29,942 (.1463)
35-39	18,673	1,161 (.0585)	19,834 (.0969)
40-44	13,151	805 (.0577)	13,956 (.0682)
45-49	10,931	602 (.0522)	11,533 (.0564)
50-54	8,669	441 (.0484)	9,110 (.0445)
55-59	6,091	209 (.0332)	6,300 (.0308)
60-64	3,209	70 (.0213)	3,279 (.0160)
65-69	1,278	16 (.0124)	1,294 (.0063)
70-74	373	06 (.0158)	379 (.0019)
75-79	4	3 (.4286)	7 -
80-84	9	1 (.1000)	10 -
85-89	2	1 (.3333)	3 -
90-99	<u>0</u>	<u>0</u> -	<u>0</u> -
TOTAL	194,824	9,774 (.0477)	204,598

Table 10.30.8  
Sex and Age Distribution of Class 4 Motorcycle License Holders  
Los Angeles County, 1979

AGE	MALE	FEMALE	TOTAL
16-19	13,837	672 (.0463)	14,509 (.0716)
20-24	44,180	2,125 (.0459)	46,305 (.2284)
25-29	41,606	2,035 (.0466)	43,641 (.2153)
30-34	28,850	1,490 (.0491)	30,340 (.1497)
35-39	19,505	1,188 (.0574)	20,693 (.1021)
40-44	13,449	836 (.0585)	14,285 (.0705)
45-49	10,814	630 (.0551)	11,444 (.0565)
50-54	8,849	468 (.0502)	9,317 (.0460)
55-59	6,360	229 (.0348)	6,589 (.0325)
60-64	3,496	89 (.0248)	3,585 (.0177)
65-69	1,410	17 (.0119)	1,427 (.0070)
70-74	438	08 (.0179)	446 (.0022)
75-79	103	03 (.0283)	106 (.0005)
80-84	15	01 (.0625)	16 (.0001)
85-89	01	01 (.5000)	2 -
90-99	<u>0</u>	<u>0</u> -	<u>0</u> -
TOTAL	192,913	9,792 (.0483)	202,705