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ON-SITE NOT IN TRAFFIC SURVEILLANCE BACK OVER INVESTIGATION

CASE NUMBER - IN08028

LOCATION - OHIO

VEHICLE - 2000 CHRYSLER CIRRUS LX

CRASH DATE - July 2008

Submitted:

September 19, 2008



Contract Number: DTNH22-07-C-00044

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
National Center for Statistics and Analysis
Washington, D.C. 20590-0003

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Technical Report Documentation Page

1. <i>Report No.</i> IN08028		2. <i>Government Accession No.</i>		3. <i>Recipient's Catalog No.</i>	
4. <i>Title and Subtitle</i> On-Site Not In Traffic Surveillance Back Over Investigation Vehicle - 2000 Chrysler Cirrus LX Location - Ohio			5. <i>Report Date:</i> September 19, 2008		
			6. <i>Performing Organization Code</i>		
7. <i>Author(s)</i> Special Crash Investigations Team #2			8. <i>Performing Organization Report No.</i>		
9. <i>Performing Organization Name and Address</i> Transportation Research Center Indiana University 501 South Madison, Suite 105 Bloomington, Indiana 47403-2452			10. <i>Work Unit No. (TRAIS)</i>		
			11. <i>Contract or Grant No.</i> DTNH22-07-C-00044		
12. <i>Sponsoring Agency Name and Address</i> U.S. Department of Transportation (NVS-411) National Highway Traffic Safety Administration National Center for Statistics and Analysis Washington, D.C. 20590-0003			13. <i>Type of Report and Period Covered</i> Technical Report Incident Date: July 2008		
			14. <i>Sponsoring Agency Code</i>		
15. <i>Supplementary Notes</i> On-site not in traffic surveillance back over investigation involving a 2000 Chrysler Cirrus LX and a nonmotorist.					
16. <i>Abstract</i> This report covers an on-site not in traffic surveillance back over investigation involving a 2000 Chrysler Cirrus LX and a nonmotorist. This incident is of special interest because the vehicle was being driven in reverse and the 19-year-old female driver backed over a nonmotorist (21-month-old male unrelated to the driver). This on-site investigation focused on determining and documenting the circumstances of the incident and the rear visibility characteristics of the involved vehicle. The vehicle was parked in the parking lot of an apartment complex. The driver was in the process of backing out of a parking space in a clockwise arc when the nonmotorist ran from a raised grass island within the parking lot into the path of the vehicle. The nonmotorist's trajectory was from the vehicle's back right and the right rear portion of the back bumper struck him. The impact knocked him to the bituminous pavement and he sustained abrasions on his forehead and right chest. Other adults in the area saw the incident occur and yelled at the driver to stop and she immediately stopped the vehicle. The nonmotorist was transported by ambulance to a hospital and was treated for his injuries in the emergency room and released.					
17. <i>Key Words</i> Back Over Child Injury			Motor Vehicle Traffic Incident Injury Severity		18. <i>Distribution Statement</i> General Public
19. <i>Security Classif. (of this report)</i> Unclassified	20. <i>Security Classif. (of this page)</i> Unclassified		21. <i>No. of Pages</i> 16	22. <i>Price</i>	

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ATTACHMENTS: NOT IN TRAFFIC SURVEILLANCE BACK OVER DATA FORMS

This incident was brought to the National Highway Traffic Safety Administration's attention on or before July 18, 2008 by an article published by an unknown source. The incident occurred in July, 2008, at 14:10 hours, in Ohio and involved a 2000 Chrysler Cirrus LX (**Figure 1**). This incident is of special interest because the vehicle was being driven in reverse and the 19-year-old female driver backed over a nonmotorist (21-month-old male unrelated to the driver). The incident was investigated by the applicable city police department and an Ohio Traffic Crash Report was completed and a copy was submitted to the state. This contractor inspected the Chrysler and the crash scene, and interviewed the Chrysler's driver on August 5, 2008. This report is based on the police crash report, scene and vehicle inspections, and an interview with the Chrysler's driver.

CRASH CIRCUMSTANCES

Crash Environment: The Chrysler was parked in the parking lot of an apartment complex (**Figure 2**). The grade within the parking stall was negative 7.5% in the direction of backing and became level on the parking lot roadway. A passenger car was parked on the left side of the Chrysler and no vehicle was parked on its right side. The parking lot was connected to the driver's apartment building by a concrete sidewalk and was located 6.3 meters (20.6 feet) from the front door of the building. The struck nonmotorist was located near or within a raised grassy island that was located 8.8 meters (28.9 feet) behind and 2.8 meters (9.1 feet) to the left of the Chrysler. There were also several other children playing and riding bicycles as well as a few adults in and around the parking lot. At the time of the incident, the light condition was daylight, the atmospheric condition was clear, and the parking lot was dry bituminous.

Pre-Crash: The driver stated during the interview that she was leaving the apartment building at approximately 14:05 hours to drive to work. She exited the front door of the building and walked



Figure 1: Back right view of Chrysler Cirrus



Figure 2: Right arrow shows pre-incident position of Chrysler; left arrow shows area of impact

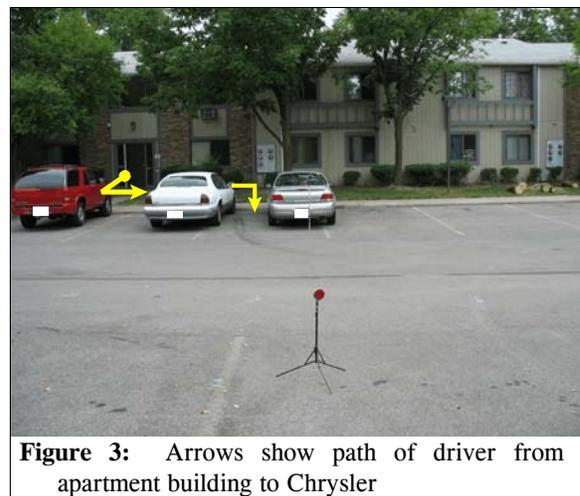


Figure 3: Arrows show path of driver from apartment building to Chrysler

11 meters (36.1 feet) on the sidewalk to the Chrysler (**Figure 3**). She approached the Chrysler from the front left and her entry was not interrupted. She entered the vehicle, put on her safety belt and looked at her right and left side view mirrors as well as her rearview mirror, but she did not remember looking over her right or left shoulder. She saw no one behind the vehicle at this time. After checking the mirrors, she started the vehicle. Meanwhile, the nonmotorist was about to start running east toward the apartment building from the raised island (**Figure 4**). The path of the nonmotorist was 8.8 meters (28.9 feet) behind and 6.4 meters (21 feet) to the left of the vehicle's centerline. The nonmotorist's mother was awaiting him by the same doorway that the driver had just exited. The doorway was located directly east from the parking lot, the raised island, and the nonmotorist.

Crash: After the driver shifted into reverse, she backed clockwise out of the parking space, moving her foot on and off the brake, never pressing the accelerator. As she backed, she was looking at the right side view mirror but did not see the nonmotorist running toward the apartment building. It is possible that as the driver backed up and the vehicle's and nonmotorist's trajectories converged, the nonmotorist was continually moving away from the right side view mirror's visibility zone. The driver estimated that she had backed up 2-5 seconds when she heard other adults in the area yelling for her to stop, and she immediately stopped the vehicle. She exited and walked to the rear of the vehicle where the nonmotorist was lying just behind the right rear bumper corner (**Figure 5**). The right portion of the back bumper had struck the nonmotorist and knocked him down, but the driver did not feel the impact. At final rest, he was lying on his right side with his head toward the right side of the vehicle. Based on the information obtained from the driver and the on-site investigation, the vehicle traveled backward 11 meters (36.1 feet) to the point of impact and an additional 0.6 meters (2 feet) to the point of final rest. The impact speed was estimated at 3 km/h (2 mph.).

Post-Crash: The nonmotorist's mother ran over to the vehicle and picked up the nonmotorist. She was soon joined by her husband. They checked him for injuries and told the driver he was alright. The driver assumed that the matter was resolved and exchanged information with the nonmotorist's mother before going on to work. The nonmotorist's parents subsequently reported the incident to police. The police report indicated they were notified at 14:16 hours and arrived on scene at 14:22 hours. An ambulance was called and the nonmotorist was transported to a

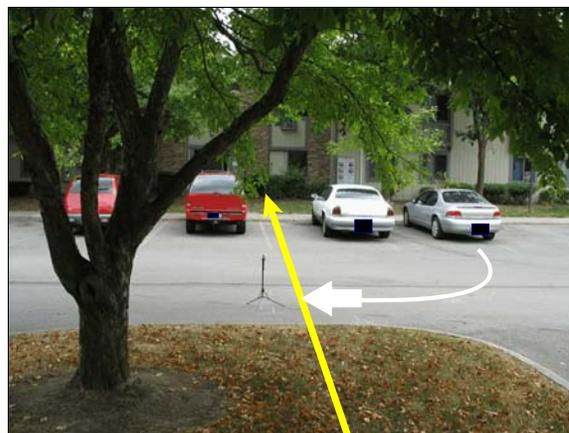


Figure 4: Path of nonmotorist (shown by left arrow) and Chrysler (right arrow); tripod stand shows area of impact



Figure 5: Final rest positions of the Chrysler and nonmotorist (arrow)

hospital with minor injuries. A search for the driver ensued and a local news station broadcast an account of the incident. The driver was contacted at work by a friend who told her the incident was on the news and she was wanted by the police. The driver contacted police and filed a statement regarding the incident. No charges were brought against the driver.

CASE VEHICLE

The 2000 Chrysler Cirrus LX (**Figure 6**) was a front wheel drive, 4-door, sedan (VIN: 1C3EJ46X0YN-----) equipped with a 2.4L, 4-cylinder engine and automatic transmission. All side windows and the backlight were equipped with AS-2 non-tinted glazing. At the time of the incident the left front window was partially open and the other side windows were closed. The manufacturer’s recommended tire size was P195/70R14 and the vehicle was equipped with P195/65R15 size tires. The vehicle’s specified wheelbase was 274 centimeters (108 inches), the specified rear overhang was 105 centimeters (41.3 inches), and the specified overall length was 475 centimeters (187 inches). The distance from the ground to the bottom of the back bumper (**Figure 7**) was 29 centimeters (11.4 inches) and the distance from the ground to the beltline was 88 centimeters (34.6 inches).



Figure 5: Front left view of the Chrysler Cirrus LX



Figure 7: Chrysler’s back bumper

CASE VEHICLE DAMAGE

There was no damage and no evidence of nonmotorist contact to the Chrysler’s back bumper rear tires or rear undercarriage. Based on the driver’s description of the incident and the Collision Deformation Classification (CDC) guidelines for pedestrian impacts, a CDC of **06-BRLN-1** was assigned to describe the nonmotorist’s contact to the back bumper.

CASE VEHICLE DRIVER

The Chrysler’s driver was a 19-year-old, female, 160 centimeters (63 inches) tall and weighed 64 kilograms (140 pounds). The driver had driven the vehicle for two years and drove it in and out of the parking lot on a daily basis. She was not wearing eyeglasses or contact lenses at the time of the incident.

A visibility study was conducted at the incident scene in order to determine the nominal blind zone behind the vehicle as well as the nominal blind zone of both side view mirrors and the rearview mirror. The standard 71 centimeters (28 inches) high target was used for the observations. The Chrysler's driver assisted the Special Crash Investigations (SCI) investigator in making the visibility observations. The driver's eye height above the ground was measured as 110 centimeters (43.3 inches) as she sat in the driver's seat. The driver's seat track was adjusted between the middle and forward most positions, which was her normal seat track position. This placed her head 260 centimeters (102 inches) forward of the back bumper.

The assessments for each side view mirror were made by moving the target along the side of the vehicle until the driver could see it. The driver honked the horn when the target first came into view and the location was marked and measured. It was determined through this process that the visibility zone began 0.1 meters (0.3 feet) forward of the back bumper for the left side view mirror and 0.9 meters (3 feet) forward of the back bumper for the right side view mirror. The target was then placed at the bumper corner and moved laterally away from the side of the vehicle until it went out of the respective side view mirror's field of view. The width of the left side view mirror visibility zone at the back bumper was 0.5 meters (1.6 feet) and 0.8 meters (2.6 feet) for the right side view mirror. The rearview mirror blind zone and the blind zone behind the vehicle as the driver looked out of the backlight were determined in a similar manner. The target was moved rearward along the vehicle's centerline until the driver could see it. The target was then moved to the left and right until it went out of the driver's view. Each location was located relative to the vehicle's centerline. The depth of the blind zone behind the vehicle was 7 meters (23 feet) for the rearview mirror and 10.2 meters (33.5 feet) when the driver was looking through the backlight. The results of the visibility study indicated that the nonmotorist was within the blind zone to the back left of the vehicle when the driver checked the side view and rearview mirrors prior to backing up. The blind zone measurements are depicted on the Nominal Visibility Diagram on page 7 of this report.

NONMOTORIST

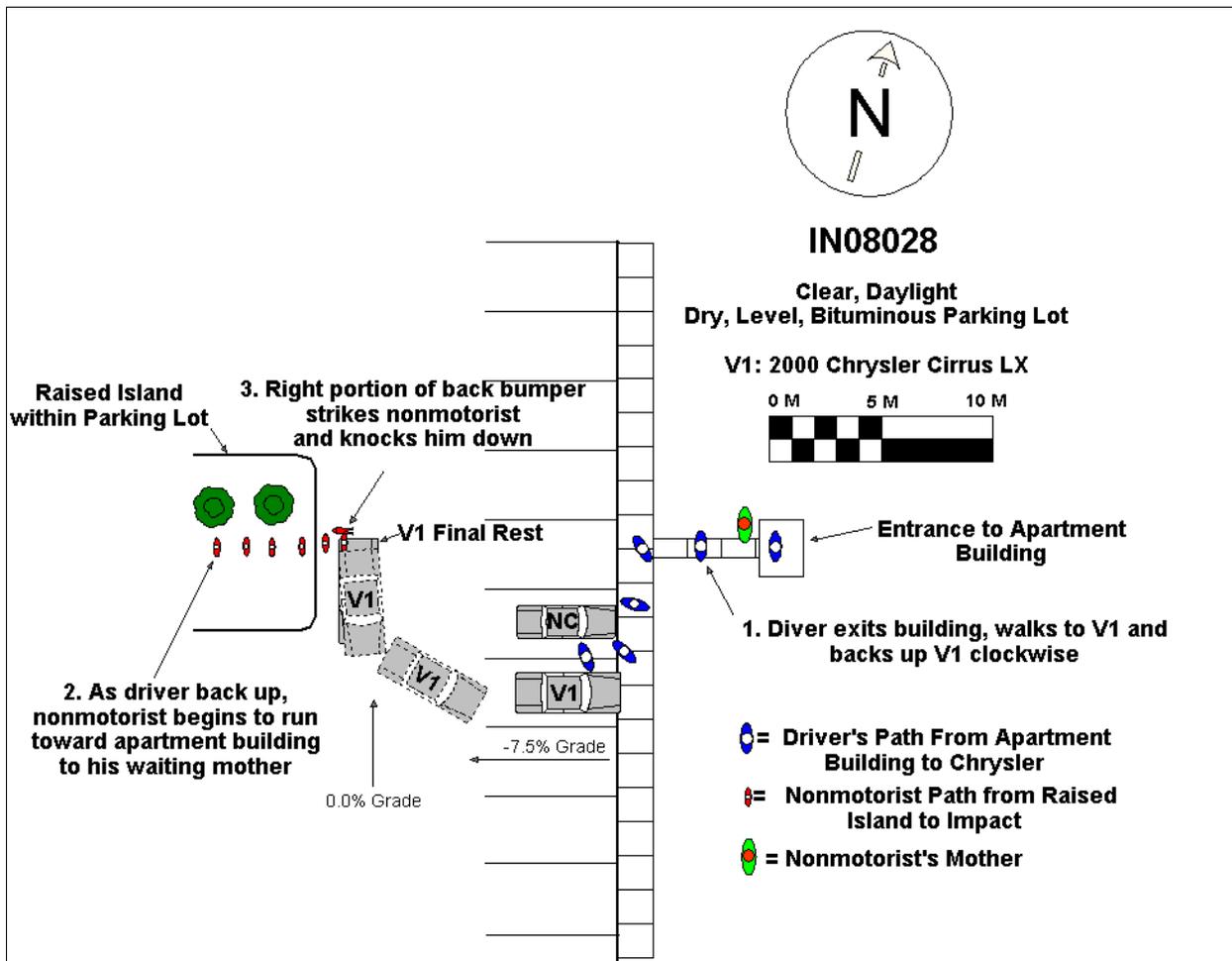
The nonmotorist was a 21-month-old male, 64 centimeters (25 inches) tall and weighed 10 kilograms (23 pounds). He was wearing blue jean shorts and no shirt. It is not known if he was wearing shoes. The nonmotorist was transported by ambulance to a hospital and was treated in the emergency room and released.

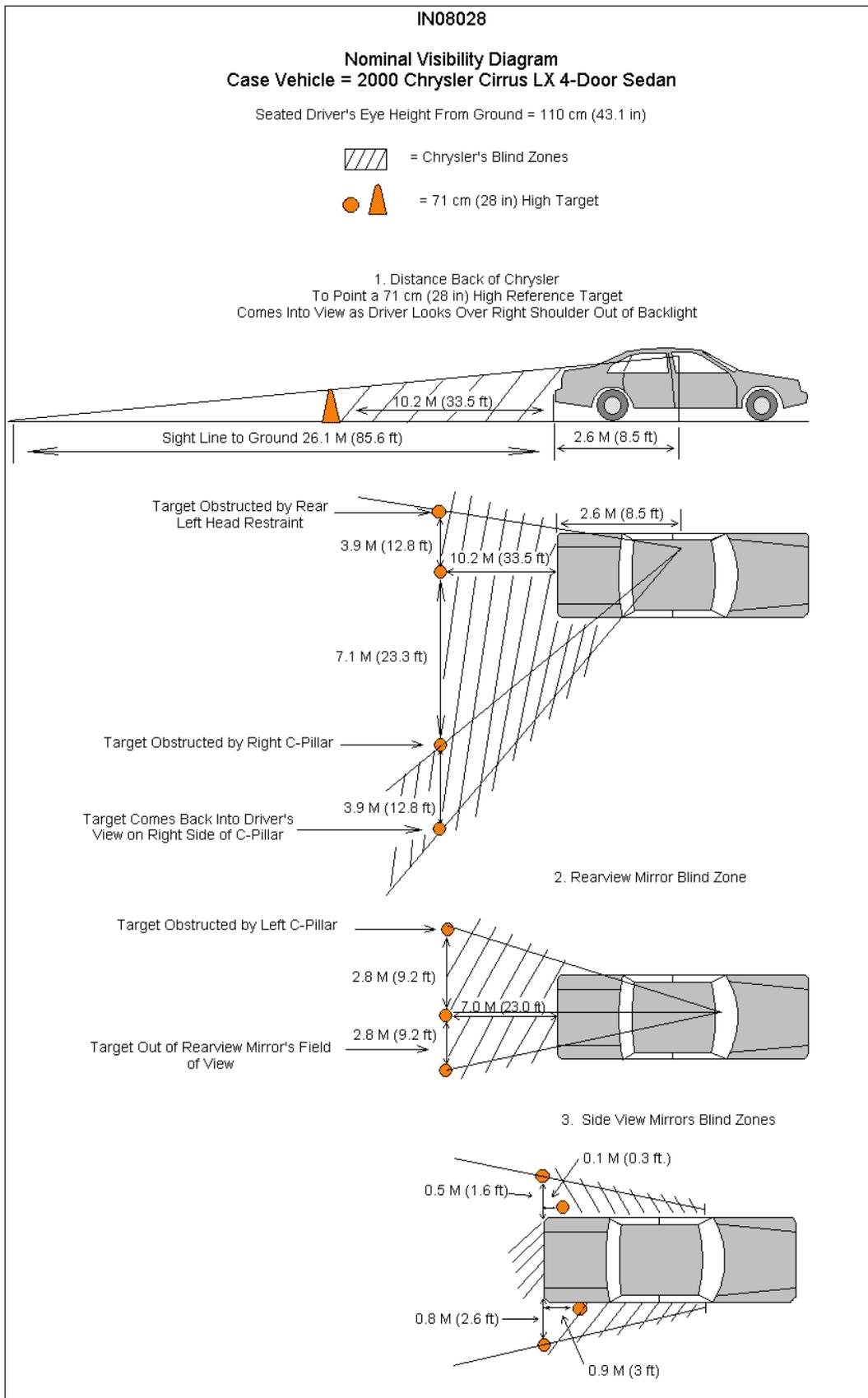
NONMOTORIST INJURIES

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The nonmotorist sustained minor injuries due to contact with the ground. The injuries as reported by the Chrysler's driver are shown in the table below.

Injury Number	Injury Description (including Aspect)	NASS Injury Code & AIS 90	Injury Source	Source Confidence	Source of Injury Data
1	Abrasion forehead, not further specified	minor 290202.1,7	Ground	Certain	Interviewee (driver)
2	Abrasion right chest, not further specified	minor 490202.1,1	Ground	Probable	Interviewee (driver)







1. Case Number

IDENTIFICATION

2. Date of Crash ____ / ____ / ____

3. Time of Crash _____
Code reported military time of crash.

NOTE: Midnight = 2400
Unknown = 9999

AMBIENT CONDITIONS

4. Light Conditions

- Daylight
- Dark
- Dark but lighted
- Dawn
- Dusk
- Unknown

5. Atmospheric Conditions
(Select all that apply)

- Clear-No adverse conditions
- Cloudy
- Rain
- Snow
- Fog, Smog, Smoke
- Sleet, Hail (freezing rain or drizzle)
- Blowing Snow
- Severe Crosswinds
- Blowing Sand, Soil, Dirt
- Other (specify): _____
- Unknown

6. Temperature

- Below 0 degrees Celsius (Below 32 F)
- 1-10 degrees Celsius (33-50 F)
- >10-24 degrees Celsius (51-75 F)
- Over 24 degrees Celsius (Over 75 F)
- Unknown

SCENE INFORMATION

7. Type of area in which crash occurred
(Select all that apply)

- Single family residential
- Row houses/townhouses
- Multi family housing
- Commercial
- Industrial
- Rural
- Unknown

8. Driver exterior sightline obstructions
(Select all that apply)

- None
- Other vehicles
- Building
- Trees
- Shrubby
- Other (specify) _____
- Utility poles
- Signs
- Glare
- Unknown
- No driver present

9. Crash location

- Driveway
- Parking Lot
- Sidewalk
- Alley
- Intersection of driveway and sidewalk
- Road / street
- Roadside / shoulder
- Other (specify) _____
- Unknown

10. Non motorist sightline obstructions
(Select all that apply)

- None
- Other vehicles
- Building
- Trees
- Shrubby
- Utility poles
- Signs
- Glare
- Other (specify) _____
- Unknown

11. Grade at parked position _____ +/- _____ %

12. Estimated distance from parked position to impact
_____ . _____ m

13. Estimated speed at impact _____ +/- _____ kmph

14. Grade at impact _____ +/- _____ %

15. Estimated distance from impact to vehicle final rest
_____ . _____ m

Unknown = 999 Reference Items 11,12, 13, 14, 15



VEHICLE FORM

1. Case Number _____

VEHICLE IDENTIFICATION

2. VIN _____

3. Model Year _____

4. Vehicle Make (specify): _____

5. Vehicle Model (specify): _____

GLAZING

Location	Presence (check)	Status (select)	Clarity (select)	Tint (check)	Glazing Obstructions (specify if present)
Windshield		Fixed / Closed / Open / Partially Open / Unknown	Clear / Hazy / Very Dirty / Unknown		
LF		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
RF		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
2 nd Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
2 nd Right		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
3 rd Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
3 rd Right		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
Left Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
Right Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
Roof		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
Other (specify)		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		

TIRE DATA

6. Vehicle Manufacturer Recommended Tire Size _____

7. LF Tire Size _____

9. RF Tire Size _____

8. LR Tire Size _____

10. RR Tire Size _____

Seats / Head Restraint Data

Seat Position	Seat Type (Select from below)	Head Restraint (Check if available)	Head Restraint Adjustment (select)	NOTES:
Front Left			Full Down / Mid / Full Up	
Front Middle			Full Down / Mid / Full Up	
Front Right			Full Down / Mid / Full Up	
2 nd Left			Full Down / Mid / Full Up	
2 nd Middle			Full Down / Mid / Full Up	
2 nd Right			Full Down / Mid / Full Up	
3 rd Left			Full Down / Mid / Full Up	
3 rd Middle			Full Down / Mid / Full Up	
3 rd Right			Full Down / Mid / Full Up	

Seat Type codes:

- | | |
|-------------------------------------------|--------------------------------------|
| 0 = No seat or seat folded down | 8 = Pedestal (i.e. column supported) |
| 1 = Bucket | 9 = Box mounted (i.e. van type) |
| 2 = Bucket w/ folding back | 10= Other seat type (specify) |
| 3 = Bench | 99= Unknown seat type |
| 4 = Bench with folding back cushions | |
| 5 = Bench w/ folding back | |
| 6 = Split bench w/ separate back cushions | |
| 7 = Split bench w/ separate folding back | |

VEHICLE MEASUREMENTS

Clearance Heights	Measurements (all from ground, and in centimeters)	NOTES
Beltline		
Top of trunk/tailgate		
Bottom of bumper		
Trailer hitch (if applicable)		
Undercarriage		
Sway bar		
Axle		
Differential		
Other (specify):		
Sensor Height (if equipped)		
Camera Height (if equipped)		



1. Case Number

PARKING AID PRESENCE

2. Type of backing/parking aid present

- OEM camera
- OEM ultrasonic/radar sensor
- OEM combination camera-ultrasonic/radar sensor
- OEM Fresnel lens
- OEM interior mirrors
- Aftermarket camera
- Aftermarket ultrasonic/radar sensor
- Aftermarket combination camera-ultrasonic radar sensor
- Aftermarket Fresnel lens
- Aftermarket interior mirrors
- Other (specify): _____

CAMERA INFORMATION

Specify field of view measurements on diagram

3. System make/model

4. Video monitor type

- None present
- LCD (color)
- CRT (black & white)
- Unknown

5. Video display size _____ cm
(Diagonal)

6. Camera location

- None present
- Bumper
- License plate
- Tailgate/Hatch/Trunk
- Other (specify): _____

7. Video image quality under scene lighting conditions

- None present
- Good
- Average
- Poor (specify): _____
- Unknown

8. Was the camera functioning properly

- None present
- Yes
- No, poor image quality due to glare
- No, poor image quality due to atmospheric conditions
- No, camera turned off
- No, camera inoperable
- Unknown

ULTRASONIC/RADAR SENSOR

Specify object detection range on diagram

9. System make/model

10. Auditory warning illumination

- No sensor present
- Yes
- No
- Unknown

11. Number of sensors _____

12. Sensor locations
(Select all that apply)

- No sensor present
- Left bumper
- Center bumper
- Right bumper
- License plate area
- Tailgate/Hatch/Trunk

13. Was warning system functioning properly

- No sensor present
- Yes, system alerted driver
- No, system did not alert driver
- No, system turned off
- No, system inoperable
- Unknown

14. Did driver react to warning

- No sensor present
- Yes
- No
- Unknown

15. Did driver report common false warnings

- No sensor present
- Yes
- No
- Unknown



DRIVER FORM

<p>1. Case Number _____</p>	<p>10. Driver entry interruption (Select all that apply)</p> <p><input type="radio"/> Direct trip from building to vehicle</p> <p><input type="radio"/> Loaded items into vehicle</p> <p><input type="radio"/> Spoke with family</p> <p><input type="radio"/> Spoke with neighbors</p> <p><input type="radio"/> Spoke with contacted nonmotorist</p> <p><input type="radio"/> Return trip (backing into driveway/lot)</p> <p><input type="radio"/> Other (specify): _____</p> <p><input type="radio"/> N/A Unknown</p>
DRIVER PROFILE	
<p>2. Driver's Age _____ 99 = Unknown</p> <p>3. Driver's Sex <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Unknown</p> <p>4. Driver's Height _____ cm 999 = Unknown</p> <p>5. Driver's Weight _____ kg 999 = Unknown</p> <p>6. Driver eyewear worn (Select all that apply)</p> <p><input type="radio"/> None</p> <p><input type="radio"/> Eyeglasses</p> <p><input type="radio"/> Sunglasses</p> <p><input type="radio"/> Contacts</p> <p><input type="radio"/> Unknown</p> <p>7. Driver vision deficiency condition (Select all that apply)</p> <p><input type="radio"/> None</p> <p><input type="radio"/> Near sighted</p> <p><input type="radio"/> Far sighted</p> <p><input type="radio"/> Astigmatism</p> <p><input type="radio"/> Other (specify): _____</p> <p><input type="radio"/> Unknown</p> <p>8. Non motorist's relationship to driver</p> <p><input type="radio"/> No relationship</p> <p><input type="radio"/> Child</p> <p><input type="radio"/> Grandchild</p> <p><input type="radio"/> Sibling</p> <p><input type="radio"/> Neighbor</p> <p><input type="radio"/> Friend</p> <p><input type="radio"/> Other (specify): _____</p> <p><input type="radio"/> Unknown</p>	<p><input type="checkbox"/> 11. Purpose of backing</p> <p><input type="radio"/> Leaving parking space in parking lot</p> <p><input type="radio"/> Backing onto roadway from driveway</p> <p><input type="radio"/> Entering parking space in parking lot</p> <p><input type="radio"/> Backing into driveway from roadway</p> <p><input type="radio"/> Other (specify): _____</p> <p><input type="radio"/> N/A Unknown</p> <p>12. Where was driver going Description: _____ _____</p> <p>13. Driver in a hurry</p> <p><input type="radio"/> Yes N/A</p> <p><input type="radio"/> No Unknown</p> <p><input type="radio"/> Unknown</p> <p>14. How did driver check behind (rear area of vehicle) after vehicle entry (Select all that apply)</p> <p><input type="radio"/> Did not look</p> <p><input type="radio"/> Checked mirrors</p> <p><input type="radio"/> Turned right and looked back</p> <p><input type="radio"/> Turned left and looked back</p> <p><input type="radio"/> Viewed Camera</p> <p><input type="radio"/> Listened for auditory/visual warning from system</p> <p><input type="radio"/> Other (specify): _____ N/A Unknown</p> <p>15. Estimated time between vehicle entry and start of backing</p> <p><input type="radio"/> 0-10 Seconds <input type="radio"/> Over 60 Seconds</p> <p><input type="radio"/> 11-30 Seconds <input type="radio"/> N/A</p> <p><input type="radio"/> 31-60 Seconds Unknown</p>
DRIVER ACTIONS	
<p>9. Driver approach to vehicle for entry</p> <p>From left front</p> <p><input type="radio"/> From left</p> <p><input type="radio"/> From left rear</p> <p><input type="radio"/> From right rear</p> <p><input type="radio"/> From right front</p> <p><input type="radio"/> Circled vehicle</p> <p><input type="radio"/> Return trip (backing into driveway/lot)</p> <p><input type="radio"/> Other (specify): _____</p> <p><input type="radio"/> N/A</p> <p><input type="radio"/> Unknown</p>	

16. What direction was the driver looking during backing maneuver
(Select all that apply)
- Straight ahead
 - Right
 - Left
 - Rearward
 - At object inside the car
 - At mirrors
 - Other (specify): _____
 - N/A
 - Unknown
17. Was the driver distracted during back up maneuver
(Select all that apply)
- No non-driving activities
 - External**
 - Looking at other vehicles
 - Looking at other non motorist
 - Looking at intended turn destination
 - External focus, not specified
 - Other external focus (specify): _____
 - Internal**
 - Looking at other occupant
 - Talking to passenger
 - Dialing phone
 - Talking on phone
 - Listening to radio/cd/portable playback device
 - Adjusting radio/cd player
 - Adjusting climate controls
 - Using a device/controls integral to vehicle (specify): _____
 - Reading/adjusting navigation system
 - Eating or drinking
 - Smoking related
 - Retrieving fallen object (specify): _____
 - Internal focus, not specified
 - Focused on other internal object (specify): _____
 - N/A
 - Unknown
18. Driver avoidance actions prior to impact
(Select all that apply)
- None
 - Braking
 - Steering left
 - Steering right
 - Accelerating
 - Other (specify): _____
 - N/A
 - Unknown
19. Did driver see struck non motorist prior to impact
(Select all that apply)
- No, never saw non motorist
 - Saw non motorist prior to entering vehicle
 - Saw non motorist after entering vehicle
 - Other (specify): _____
 - N/A
 - Unknown
20. Est time between start of backing and impact
- <2 or = 1 second
 - 2-5 seconds
 - 6-10 seconds
 - > 10 seconds
 - N/A
 - Unknown
21. Driver interior sightline obstructions
(Select all that apply)
- Pillar
 - Headrest
 - Cargo
 - Other occupant
 - Other (specify) _____
 - Unknown
 - None
22. Recent experience driving this vehicle
- More than 10 times the last three months
 - 6-10 times the last three months
 - 2-5 times the last three months
 - Less than 2 times the last three months
 - First time driving this vehicle
 - N/A
 - Unknown
23. Frequency of driving in this parking lot/driveway
- Daily
 - Weekly
 - Several times a month
 - Monthly
 - Rarely
 - First time in lot/driveway
 - N/A
 - Unknown
24. Driver Impairment
(Select all that apply)
- No drugs or alcohol present
 - Alcohol present (specify BAC): _____
 - Drugs present (specify): _____
 - Unknown
25. Source of alcohol/drug results
- Police reported
 - Medical record
 - Other (specify) _____
 - Not Tested
 - Unknown if tested



Non Motorist Form

1. Case Number

NON-MOTORIST PROFILE

2. Non-motorist's Age _____ Months
_____ Years
99 = Unknown

3. Non-motorist's Sex
 Male
 Female
 Unknown

4. Non-motorist's Height _____ cm
999 = Unknown

5. Non-motorist's Weight _____ kg
999 = Unknown

6. Medical outcome
 Not injured
 ER only
 Hospitalized 1-4 days
 Hospitalized 5 days or more
 Treatment later
 Fatal
 Unknown

7. Source of most severe injury
 Bumper
 Tire
 Undercarriage
 Other Specify: _____
 Ground
 N/A
 Unknown

8. Non-motorist impairment
(Select all that apply)
 No drugs or alcohol present
 Positive for alcohol (specify BAC): _____
 Positive for drugs (specify): _____
 Unknown

9. Source of alcohol/drug results
 Police reported
 Medical Report
 Other (specify) _____
 Not Tested
 Unknown if tested

NON-MOTORIST ACTIONS

10. Non-motorist attitude
 Standing
 Bending at waist
 Sitting
 Crouching
 Kneeling
 On skates/skateboard
 On bike/scooter
 Other (specify) _____
 Unknown

11. Non-motorist motion
 Not moving
 Walking slowly
 Walking rapidly
 Running or jogging
 Skipping/Hopping/Jumping
 Falling/Stumbling/Rising
 On skates/skateboard
 On bike/scooter
 Other (specify): _____
 Unknown

12. Non-motorist approach relative to rear of vehicle
 Stationary
 From left
 From right
 From behind
 Other (specify): _____
 Unknown

13. Non-motorist first avoidance action
 No avoidance actions
 Stopped
 Accelerated pace
 Ran away (along vehicle path)
 Jumped
 Turned away from vehicle
 Turned toward vehicle and braced
 Dove or fell away from vehicle
 Other (specify): _____
 Unknown

14. Non-motorist primary focus of attention
 Striking vehicle
 Play object
 Person
 Surrounding traffic
 Animal
 Handheld electronic (phone, MP3 player, etc.)
 Other Object (specify) _____
 Unknown

15. Were any other Non-motorists present?
(Select all that apply)
 Alone
 One adult present
 One other child present
 Multiple adults present
 Multiple children present
 Unknown

NON MOTORIST CLOTHING

NOTES:

- Specify Color, Fabric and Texture/Weight for outermost layer only
- Indicate "NONE" if applicable
- Available codes:

	<u>Colors</u>		<u>Fabrics</u>		<u>Textures</u>		<u>Weights</u>
Black	Charcoal gray		Natural		Soft		Heavy
Lt gray/silver	Brown		Synthetic		Slick		Medium
Gold/tan	Purple		Blend		Coarse		Light
Dark blue	Light blue						
Dark green	Light green						
Maroon	Red						
Orange	Yellow						
White	Other (specify)						

	Clothing	Color	Fabric	Texture	Weight
H E A D W E A R	Hat				
	Helmet				
	Hood				
	Other (specify): _____				
U P P E R B O D Y	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
L O W E R B O D Y	Shorts				
	Pants				
	Shoes				
	Other (specify): _____				