

**CRASH DATA RESEARCH CENTER**

Calspan Corporation  
Buffalo, NY 14225

**NOT-IN-TRAFFIC SURVEILLANCE**

**CALSPAN ON-SITE BACK OVER INCIDENT INVESTIGATION**

**SCI CASE NO.: CA08032**

**VEHICLE: 2004 NISSAN ALTIMA**

**LOCATION: NEW YORK**

**CRASH DATE: JULY 2008**

Contract No. DTNH22-07-C-00043

Prepared for:

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Washington, D.C. 20590

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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 are 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 STANDARD TITLE PAGE**

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16. Abstract This on-site investigation focused on the sight distances and the circumstances involving a back over incident that resulted in non-fatal injuries to a 3-year-old male. The vehicle in this incident was a 2004 Nissan Altima that was operated by a 28-year-old female driver. The 3-year-old-old male non-motorist is the son of the driver. He was struck by the vehicle's rear bumper as the vehicle was backing into the driveway. The non-motorist was consequently knocked to the ground and was struck by the undercarriage components of the Altima. The non motorist sustained multiple soft tissue injuries to the face and extremities and was hospitalized for five days. It was determined during the on-site investigation, that the non-motorist entered the blind zone during the backing trajectory; therefore, he was not visible to the driver at the time of the incident.					
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**TABLE OF CONTENTS**

**BACKGROUND ..... 1**

**SUMMARY ..... 1**

INCIDENT SITE ..... 1

VEHICLE DATA ..... 2

DRIVER DATA ..... 3

NON-MOTORIST DATA ..... 3

INCIDENT SEQUENCE ..... 3

PRE-INCIDENT ..... 3

INCIDENT ..... 4

POST-INCIDENT ..... 4

VEHICLE CONTACT DAMAGE/EVIDENCE ..... 4

REAR VISIBILITY ..... 5

FIGURE 7: REAR VISIBILITY DIAGRAM ..... 6

FIGURE 8: INCIDENT SCHEMATIC ..... 7

ATTACHMENT A: NOT IN TRAFFIC SURVEILLANCE FORMS ..... 8

**NOT-IN-TRAFFIC SURVEILLANCE  
CALSPAN ON-SITE BACK OVER INCIDENT INVESTIGATION  
SCI CASE NO.: CA08032  
VEHICLE: 2004 NISSAN ALTIMA  
LOCATION: NEW YORK  
CRASH DATE: JULY 2008**

**Background**

This on-site investigation focused on the sight distances and the circumstances involving a back over incident that resulted in non-fatal injuries to a 3-year-old male. The vehicle in this incident was a 2004 Nissan Altima (**Figure 1**) that was operated by a 28-year-old female driver. The 3-year-old-old male non-motorist is the son of the driver. He was struck by the vehicle's rear bumper as the vehicle was backing into the driveway. The non-motorist was consequently knocked to the ground and was struck by the undercarriage components of the Altima. The non motorist sustained multiple soft tissue injuries to the face and extremities and was hospitalized for five days. It was determined during the on-site investigation, that the non-motorist entered the blind zone during the backing trajectory; therefore, he was not visible to the driver at the time of the incident.



**Figure 1. 2004 Nissan Altima.**

This incident was identified by the Calspan Special Crash Investigations (SCI) team through an Internet news search. Details of the incident were forwarded to the Crash Investigation Division (CID) of the National Highway Traffic Safety Administration (NHTSA) on July 30, 2008. The SCI team established cooperation with the investigating police agency and the driver of the Nissan on August 12, 2008 to facilitate the inspection of the Nissan and the incident site. Due to the Agency's interests in Not-In-Traffic incidents, this case was assigned as an on-site investigation on August 12, 2008. The inspection of the vehicle, incident site, and driver interview were conducted on August 14, 2008.

**Summary**

***Incident Site***

This incident occurred during the daylight hours of July 2008 in the driveway of a private residence. The weather at the time of the incident was clear with no adverse conditions and the temperature was recorded at 81 degrees F (27.2 degrees C).

The residence consisted of a two story home with a single vehicle attached garage (**Figure 2**)



**Figure 2. Overall view of the incident site.**

located on the north side of a two-lane east/west road. A concrete surfaced driveway that measured 3.3 meters (10.8 feet) in width and 8.9 meters (29.2 feet) in length extended from the residence to the roadway. The roadway measured 10.3 meters (33.9 feet) wide and was surfaced with asphalt. The driveway was bordered by a red colored decorative concrete border that was 4.6 cm (1.8”) in height. Adjacent to the border was a landscaped area that consisted of decorative stone, shrubs, and small trees. The landscaping did not interfere with the driver’s vision during this backing incident. Due to the crown of the roadway, there was a negative grade of -1.4 percent as the vehicle approached the mouth of the driveway. A positive grade of 1.8 percent was present leading from the mouth of the driveway towards the garage. The Incident Schematic is attached as **Figure 8** of this report.

### ***Vehicle Data***

The vehicle in this incident was a 2004 Nissan Altima SL sedan (**Figure 3**). The Nissan was manufactured in 01/04 and was identified by Vehicle Identification Number (VIN): 1N4AL11D94C (production number deleted). The Nissan was equipped with a 2.5-liter, four-cylinder engine, a four-speed automatic transmission, and front-wheel drive. The tires on the vehicle were P205/65R16 mounted on OEM alloy wheels. The Nissan was not equipped with a backup camera or parking assist system.



**Figure 3. 2004 Nissan Altima, case vehicle.**

The window glazing was AS1 for the laminated windshield. The front door glazing was AS2 and the rear door glazing and backlight were AS2 with aftermarket tint. The Nissan was equipped with an OEM sun roof that contained AS3 glazing. The driver stated that all windows were closed during the incident. Other than the aftermarket tint, the clarity of the glass was clear at the time of the incident. There were no obstructions to the side or back glazing; however, at the time of the investigation, a rosary and an air freshener were present hanging from the rearview mirror. It could not be confirmed if these items were present at the time of the incident; however, these items would not have appeared to obstruct the driver’s view.

The interior of the Nissan was configured with front bucket seats for the first row and a bench seat for the second row. The front seats were equipped height adjustable head restraints. The front left was adjusted to the full-down position and the front right was adjusted to 9 cm (3.5”) above the full-down position. The second row contained integrated head restraints for the outboard seats.

The vertical clearance heights of the rear components of the Nissan were measured from the paved surface of the roadway in front of the residence and are listed in the following table:

<b>Component</b>	<b>Clearance Height</b>
Beltline	102 cm (40")
Bottom of bumper	26 cm (10.3")
Top of bumper	57 cm (22.5")
Base of spoiler	104 cm (41")
Top of spoiler	108 cm (42.5")
Muffler	16 cm (6.3")
Tail pipe	19 cm (7.5")
Exhaust pipe (forward of muffler)	14 cm (5.5")
Stabilizer link	11 cm (4.3")
Left and right lower control arms	14 cm (5.5")
Control arm mounts	19 cm (7.3")
Base of trunk/spare tire compartment	19 cm (7.6")

***Driver Data***

The driver of the Nissan was a 28-year old female with a height of 159 cm (62.5") and a weight of 55 kg (122 lb). The driver does not have any vision deficiencies; however, at the time of the incident, she was wearing non-prescription sunglasses. The driver stated that she had approximately three years of driving experience as an unlicensed driver. She had been licensed in the State of New York since May 19, 2008. She was familiar with the driveway as she enters/exits frequently since this is her personal residence. The driver stated during the interview that all windows were closed and the radio and air conditioner were in the "On" position. The driver did not believe that the radio and air conditioner distracted her. She also noted that she used the rear view mirror while backing. Additionally, the driver did not mention if the items hanging from the rearview mirror were present at the time of the incident. The positions of these components are described in detail in the ***Rear Visibility*** section of this report.

***Non-Motorist Data***

The non-motorist was the 3-year-old male son of the driver. The non-motorist measured 100 cm (39.5") in height and weighed 14 kg (30 lbs). At the time of the incident, he was wearing a shirt with blue and white stripes and a diaper. The child has no known sight or hearing impairments. As a result of the incident, the non-motorist sustained multiple soft tissue injuries to the face and extremities and was hospitalized for five days.

***Incident Sequence***

***Pre-Incident***

Prior to the incident, the driver had been conducting errands away from her residence. During this activity, the non-motorist and his sibling were in the residence under the care of their grandmother. The driver stated that she was returning from conducting errands and approached the front of the residence from the east. Once she reached the driveway, she applied a left steering input and turned the vehicle in a southward direction. This

maneuver positioned the vehicle perpendicular to the roadway and parallel to the driveway. She stopped the vehicle in the roadway and placed the transmission selector in reverse and began a backing trajectory into the driveway. The driver noted that she used the rear view mirror while backing. During this time, the non-motorist exited the residence through the front door, and walked down the driveway and approached the rear of the vehicle. The exact path/walking trajectory of the non-motorist was not known. A sibling of the non-motorist observed him exit the residence through the front door. The sibling exited the residence and began pursuing the 3-year-old male.

### ***Incident***

The driver backed the Nissan approximately 6 meters (20 feet) and struck the non-motorist at the mouth of the driveway. The sibling ran to the front left door and alerted the driver of the incident. The driver stopped the Nissan, placed the transmission selector in drive and pulled the vehicle forward (south) approximately 0.3-0.6 (1-2 feet). The driver did not detect the non-motorist in the rear view mirror during the backing maneuver. **Figure 4** is of Nissan at the location of the incident.



**Figure 4. Nissan at the incident location.**

The circumstances of the incident and backing distances were based on the statement provided by the driver to the SCI investigator.

### ***Post-Incident***

The driver opened the front left door, exited the vehicle and observed the non-motorist lying on the driveway. She exited the vehicle and attended to the non-motorist. The driver placed the child in the Nissan and transported him to a hospital where he was hospitalized for five days for treatment of multiple soft tissue injuries to the face and extremities.

Police personnel responded to the hospital and documented the incident on a New York State Department of Motor Vehicle Police Accident Report. Additionally, the police department's Crime Scene Investigation unit responded to the incident site and documented the site in the event of criminal proceedings. Criminal charges were not filed against the driver.

### ***Vehicle Contact Damage/Evidence***

The SCI investigator inspected the vehicle during the on-site investigation. Due to the passage of time between the incident and the investigation, evidence of contact was not present on the Nissan's rear bumper fascia or undercarriage. **Figure 5** is an overall view of the undercarriage components.



**Figure 5. Overall view of undercarriage components.**



### ***Rear Visibility***

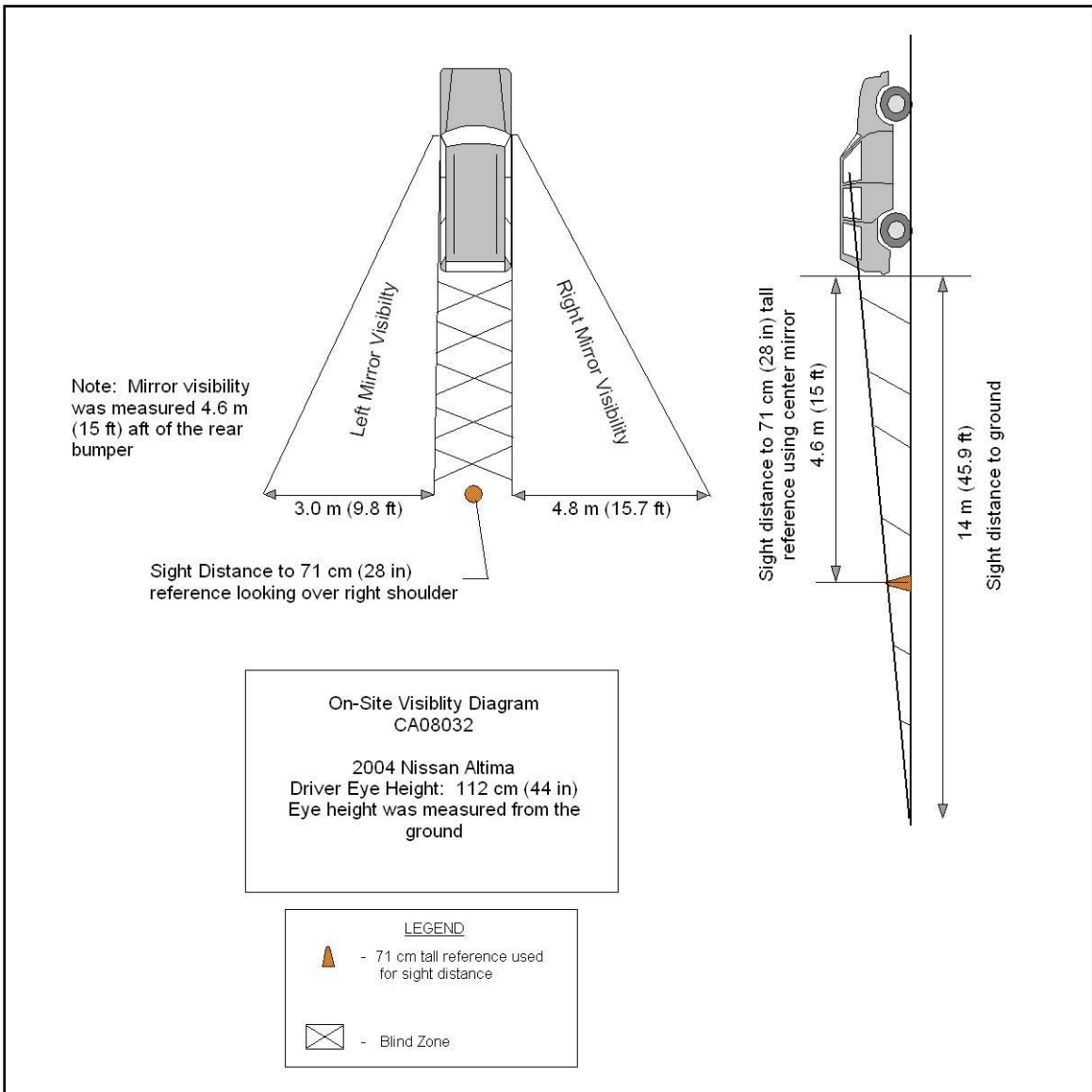
During the on-site investigation, a rear visibility study was conducted with the driver positioned in the front left seat of the Nissan. The Nissan was parked against the north curb on level ground to conduct the study. In the seated position, the driver's eye height measured 112 cm (44") from the ground. The SCI investigator asked the driver to sit in the vehicle and place the various components including the seat track in respective positions at the time of the incident. Based on the driver's recreation, the radio was determined to be adjusted between 21 and 23 decibels and the air conditioning was set on high. Additionally, her seat track was located approximately in the mid position of the 24 cm (9.5") seat track.



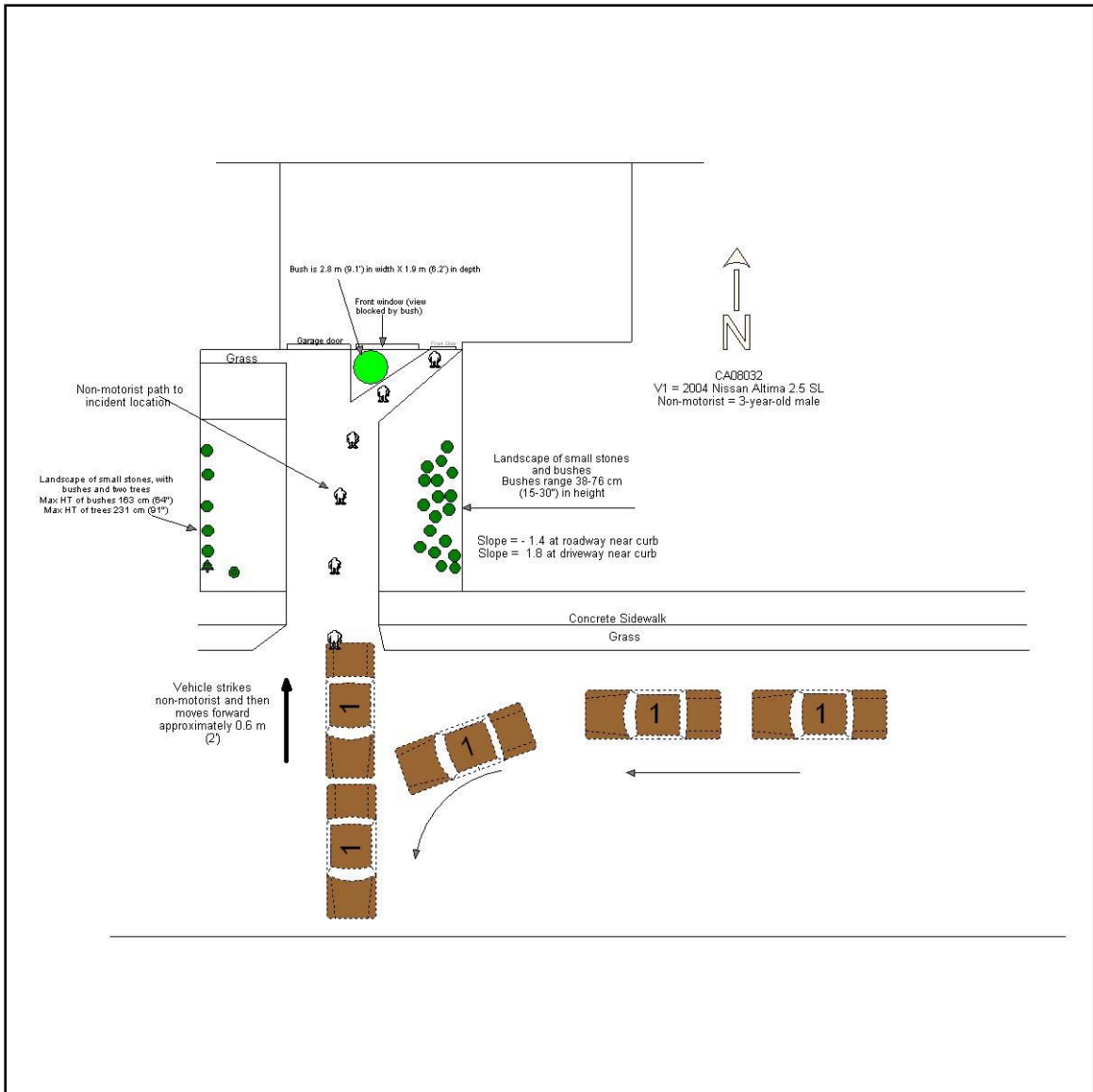
**Figure 6. Overall view of targets with driver using the rear view mirror.**

The rear visibility was measured using an 8 cm (3") diameter reflective red marker that was positioned in a stand and set 71 cm (28") above the ground. The driver stated that she used the rear view mirror at the time incident; therefore, she was asked to locate the reflective marker looking in the rear view. The driver located the target 4.6 meters (15 feet) rear of the rear bumper along the centerline of the vehicle. The driver continued a straight line of sight that intersected the ground at a point that was 14 m (45.9 feet) from the rear bumper. Lateral cones of visibility were established with driver looking into the door mounted mirrors. The left lateral cone of visibility measured 3 meters (9.8 feet) with a right lateral cone of 4.8 meters (15.7 feet). Based on this visibility study, it appeared that the non-motorist entered the blind zone as he approached the vehicle, thus resulting in this back over incident.

**Figure 6** is an overall view of the driver locating the target using the rear view mirror. The Rear Visibility Diagram is attached as **Figure 7** of this report. Included as **Attachment A** of this report is the Not In Traffic Surveillance Forms.



**Figure 7: Rear Visibility Diagram**



**Figure 8: Incident Schematic**

**Attachment A: Not In Traffic Surveillance Forms**



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 <sup>nd</sup> Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
2 <sup>nd</sup> Right		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
3 <sup>rd</sup> Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty		
3 <sup>rd</sup> 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 <sup>nd</sup> Left			Full Down / Mid / Full Up	
2 <sup>nd</sup> Middle			Full Down / Mid / Full Up	
2 <sup>nd</sup> Right			Full Down / Mid / Full Up	
3 <sup>rd</sup> Left			Full Down / Mid / Full Up	
3 <sup>rd</sup> Middle			Full Down / Mid / Full Up	
3 <sup>rd</sup> 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

1. Case Number  
\_\_\_\_\_

## DRIVER PROFILE

2. Driver's Age \_\_\_\_\_  
99 = Unknown

3. Driver's Sex  Male  
 Female  
 Unknown

4. Driver's Height \_\_\_\_\_ cm  
999 = Unknown

5. Driver's Weight \_\_\_\_\_ kg  
999 = Unknown

6. Driver eyewear worn  
(Select all that apply)  
 None  
 Eyeglasses  
 Sunglasses  
 Contacts  
 Unknown

7. Driver vision deficiency condition  
(Select all that apply)  
 None  
 Near sighted  
 Far sighted  
 Astigmatism  
 Other (specify): \_\_\_\_\_  
 Unknown

8. Non motorist's relationship to driver  
 No relationship  
 Child  
 Grandchild  
 Sibling  
 Neighbor  
 Friend  
 Other (specify): \_\_\_\_\_  
 Unknown

## DRIVER ACTIONS

9. Driver approach to vehicle for entry  
From left front  
 From left  
 From left rear  
 From right rear  
 From right front  
 Circled vehicle  
 Return trip (backing into driveway/lot)  
 Other (specify): \_\_\_\_\_  
 N/A  
 Unknown

10. Driver entry interruption  
(Select all that apply)  
 Direct trip from building to vehicle  
 Loaded items into vehicle  
 Spoke with family  
 Spoke with neighbors  
 Spoke with contacted nonmotorist  
 Return trip (backing into driveway/lot)  
 Other (specify): \_\_\_\_\_  
 N/A  
Unknown

11. Purpose of backing  
 Leaving parking space in parking lot  
 Backing onto roadway from driveway  
 Entering parking space in parking lot  
 Backing into driveway from roadway  
 Other (specify): \_\_\_\_\_  
 N/A  
Unknown

12. Where was driver going  
Description:  
\_\_\_\_\_  
\_\_\_\_\_

13. Driver in a hurry  
 Yes N/A  
 No Unknown  
 Unknown

14. How did driver check behind (rear area of vehicle) after vehicle entry  
(Select all that apply)  
 Did not look  
 Checked mirrors  
 Turned right and looked back  
 Turned left and looked back  
 Viewed Camera  
 Listened for auditory/visual warning from system  
 Other (specify): \_\_\_\_\_  
N/A Unknown

15. Estimated time between vehicle entry and start of backing  
 0-10 Seconds  Over 60 Seconds  
 11-30 Seconds  N/A  
 31-60 Seconds  Unknown

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><b>Colors</b></u>		<u><b>Fabrics</b></u>		<u><b>Textures</b></u>		<u><b>Weights</b></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)						

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