Remote Not-In-Traffic Surveillance Falling Vehicle Investigation
Dynamic Science, Inc. (DSI), Case Number DS09012
1994 GMC Jimmy
Nebraska
January 2009

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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

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16. Abstract

This remote investigation focused on the circumstances surrounding the fatal injuries sustained by a non-motorist when a vehicle rolled off a pair of repair ramps. The subject vehicle was a 1994 GMC Jimmy sport utility vehicle The rear of the vehicle was suspended on a pair of vehicle ramps and was being worked on by a 44-year-old male. For unknown reasons, the vehicle rolled down the ramps and trapped the non-motorist beneath the left rear tire. He was found to be unresponsive when discovered and was transported to a local trauma center by ground ambulance. He died later that day of compression asphyxia to the chest.

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Dynamic Science, Inc.
Crash Investigation
Case Number: DS09012
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BACKGROUND

This remote investigation focused on the circumstances surrounding the fatal injuries sustained by a non-motorist when a vehicle rolled off a pair of repair ramps. The subject vehicle was a 1994 GMC Jimmy sport utility vehicle (**Figure 1**). The rear of the vehicle was suspended on a pair of vehicle ramps and was being worked on by a 44-year-old male. For unknown reasons, the vehicle rolled down the ramps and trapped the non-motorist beneath the left rear tire. He was found to be unresponsive when discovered and was transported to a local trauma center by ground ambulance. He died later that day of compression asphyxia to the chest.

Figure 1. 1994 GMC Jimmy (police photo)

This Remote Not-In-Traffic Surveillance (NITS) Falling Vehicle Investigation was identified by DSI in an internet news article. The article was forwarded to the National Highway Traffic Safety Administration (NHTSA) on February 23, 2009 and the case was assigned on March 6, 2009. An incident report was obtained from the investigating police agency on March 7, 2009. According to their records department, the incident was not reported to the state as a traffic fatality. On scene photographs were received on May 22, 2009.

SUMMARY

Incident Site

This incident occurred in January 2009 during the daylight hours. The incident occurred in an east/west driveway adjacent to a private residence that intersected a north/south roadway. The driveway was on private property and was located adjacent to a residence. The driveway was concrete composition and had an estimated eastbound downhill grade of negative 2 percent. There was grass on either side of the driveway. The temperature at the nearest reporting station was 2 degrees C (35 degrees F). The weather was clear and the wind was out of the west northwest at 29 km/h (18 mph). Based on the police photos, it appeared that the driveway was wet in spots from melted snow and that it was wet beneath the repair ramps.

Figure 2. View east from driveway (police photo)

Pre-Crash

The GMC was parked facing east with its rear tires raised by the ramps (**Figure 2**). The vehicle was owned by another party and was being repaired by the non-motorist in this incident. The ramps were placed with the inclines in the direction of the driveway's negative grade and the ramp's molded tire stops were behind the tires. The police photos show that the right ramp had been placed slightly forward of the left ramp. It was not known if the ramps had been moved post-incident. There was no data available to determine if the vehicle transmission was in PARK or if the parking brake had been engaged. The non-motorist was lying on his back underneath the GMC, forward of the left rear tire. The driver was working on the vehicle's drive shaft; the shaft had been removed and was located on the ground near the right front tire. The manufacturer specifically states on their warning sticker not to remove the drive shaft while the vehicle is on the ramps (see ramp information on the following page).

Incident

For unknown reasons, the GMC began moving and rolled down the ramps in a forward direction to the east. The removal of the drive shaft probably played a role in the incident. Removal of the drive shaft would have rendered the parking pawl inoperative thus allowing the vehicle to possibly roll if the parking brake was not applied. The GMC rolled down the ramp and traveled approximately 1.5 m (5 ft) before coming to rest with the non-motorist's chest and abdomen trapped beneath the left rear tire. The non-motorist was discovered by the owner of the GMC and the incident was reported to the police at 1456 hours. It was not known how long the non-motorist had been trapped. The owner of the GMC indicated that he had spoken to the non-motorist by phone approximately two hours before arriving on-scene. The owner of the GMC indicated that the non-motorist was unresponsive when he arrived.

Figure 3. Contact between GMC and Ford. GMC on left side of image (police photo).

Post-Crash

The owner of the GMC used his Ford Explorer in an attempt to either push the GMC rearward off the non-motorist or to prevent the GMC from rolling any further forward (**Figure 3**). The effort to free the non-motorist using the Ford was not successful. A floor jack was used by police and rescue personnel to extricate the non-motorist and he was transported to a local trauma center by ground ambulance. He died later that day from crush-related injuries to his chest. According to the coroner's office, the cause of death was compression asphyxia.

Vehicle Information

The subject vehicle in this incident was a 1994 GMC Jimmy 4-door sport utility vehicle. The vehicle was equipped with a 4.3-liter, 6-cylinder engine, automatic transmission, and 4-wheel

drive.

Vehicle Damage

There was no damage to the GMC related to the contact with the non-motorist. The GMC probably sustained minor front end damage from contact Ford Explorer.

Ramp Information

The GMC was being supported on a pair of Blitz RhinoRamps Model 8000 vehicle ramps (**Figures 4-5**). The Model 8000 was designed for vehicles with a Gross Vehicle Weight (GVW) up to 3629 kg (8000 lbs). The GMC had a GVW of 2132 kg (4700 lbs). The ramps were constructed of structural foam plastic and had non-skid bases. The ramp specifications are as follows:

Weight tolerance: 907 kg (2000 lbs) per ramp or 1814 kg (4000 lbs) per pair
Length: 88.9 cm (35.0 in)
Width: 26.6 cm (10.5 in)
Height: 21.6 cm (8.5 in)
Incline: 17 degrees

Instructions were located on the "Warning" sticker on each ramp. An exemplar sticker was obtained from the ramp manufacturer. An overview of the warning sticker quotes are shown below:

- Do not exceed rated capacity of 907 kg (2000 lbs) each or 1814 kg (4000 lbs) per pair or 3629 kg (8000 lbs) GVW.
- Use only on hard level surface.
- Center loads between ramps.
- Use only as a matched pair to support either front or back end of vehicle.
- Inspect ramps before each use.
- Use on vehicles with maximum tire width of 19 cm (7.5 in).
- Do not use other lifting equipment in conjunction with the ramps.
- Do not disconnect brakes, engine, transmission components, driver train, drive shaft, universal joints, or wheels while the vehicle in on the ramps.
- Never accelerate or apply brakes suddenly.
- Do not use ramps on slick surfaces.
- Set emergency brake.
- Place vehicle in park (or in reverse for manual transmissions).
- Chock wheels on ground.

Figure 4. Blitz RhinoRamp (exemplar view)

Figure 5. Wheel ramp (police photo)

Non-motorist Data

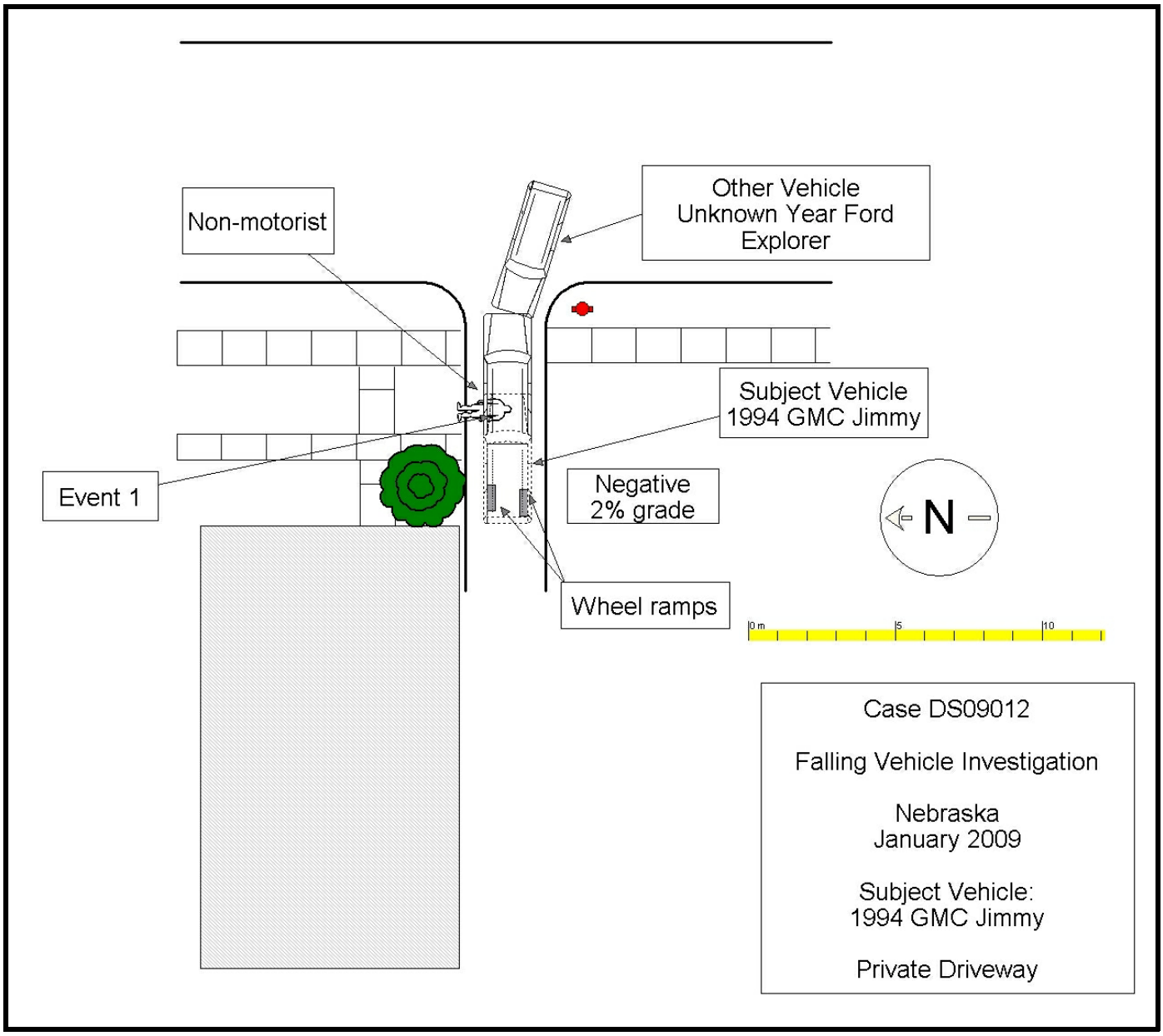
Age/Sex:	44/Male
Height:	180 cm (71 in)
Weight:	125 kg (275 lbs)
Type of medical treatment:	Transported to a local trauma center and died later that day.

Injuries

Non-motorist: Injuries obtained from interviewee.

Injury	OIC Code	Injury Mechanism	Confidence Level
Blunt/traumatic chest injury	415099.7,0	Tire	Certain

Attachment 1. Incident Diagram



Attachment 2. Data Forms

Not Applicable ☐

Reset Values | Print Forms

U.S. Department of Transportation
National Highway Traffic Safety Administration

SCENE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 2

IDENTIFICATION

2. Date of Crash 0 1 / X X / 0 9

3. Time of Crash 1 4 5 6

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
- [ ] Shrubbery
- [ ] 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
- [ ] Shrubbery
- [ ] Utility poles
- [ ] Signs
- [ ] Glare
- [•] Other (specify) UNDER VEHICLE
- [ ] Unknown

11. Grade at parked position (+ / -) - 0 2 %

12. Estimated distance from parked position to impact

0 0 1 . 5 m

13. Estimated speed at impact 0 0 3 kmph

14. Grade at impact (+/ -) - 0 2 %

15. Estimated distance from impact to vehicle final rest

0 0 1 . 5 m

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

Not Applicable ☐

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

VEHICLE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number D S 0 9 0 1 2

VEHICLE IDENTIFICATION

2. VIN 1 G K D T 1 8 W 2 R 2 X X X X X X

3. Model Year 1 9 9 4

4. Vehicle Make (specify): GMC

5. Vehicle Model (specify): JIMMY

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 / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
RF	☑	☐ Fixed / ☐ Closed / ☐ Open / ☑ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
2nd Left	☑	☐ Fixed / ☑ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
2nd Right	☑	☐ Fixed / ☑ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
3rd Left	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
3rd Right	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Backlight	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Left Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Right Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Roof	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Other (specify)	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	4th window

TIRE DATA

6. Vehicle Manufacturer Recommended Tire Size LT245/75R16

7. LF Tire Size UNKNOWN

8. LR Tire Size UNKNOWN

9. RF Tire Size UNKNOWN

10. RR Tire Size UNKNOWN

Seats / Head Restraint Data

Seat Position	Seat Type (Select from below)	Head Restraint (Check if available)	Head Restraint Adjustment (select)	NOTES:
Front Left	1	☑	Full Down / Mid / Full Up	Integral head restraints
Front Middle	0	☐	Full Down / Mid / Full Up	
Front Right	1	☑	Full Down / Mid / Full Up	
2nd Left	5	☐	Full Down / Mid / Full Up	
2nd Middle	5	☐	Full Down / Mid / Full Up	
2nd Right	5	☐	Full Down / Mid / Full Up	
3rd Left	0	☐	Full Down / Mid / Full Up	
3rd Middle	0	☐	Full Down / Mid / Full Up	
3rd Right	0	☐	Full Down / Mid / Full Up	

Seat Type codes:

0 = No seat or seat folded down
1 = Bucket
2 = Bucket w/ folding back
3 = Bench
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
8 = Pedestal (i.e. column supported)
9 = Box mounted (i.e. van type)
10= Other seat type (specify)
99= Unknown seat type

VEHICLE MEASUREMENTS

Clearance Heights		Measurements (all from ground, and in centimeters	NOTES
Beltline		N/A	Measurements from an exemplar vehicle. Ground clearance = 19.8 cm (7.8 in)
Top of trunk/tailgate		N/A	
Bottom of bumper		45	
Trailer hitch (if applicable)		45	
Undercarriage			
	Sway bar	32	
	Axle	33	
	Differential	24	
	Other (specify): _____	N/A	
Sensor Height (if equipped)		N/A	
Camera Height (if equipped)		N/A	

Not Applicable ☑

Undo Not Applicable

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

Back Up / Parking Aid Form

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 2

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

Not Applicable

14. Did driver react to warning

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown
- ☐ Sensor present, did not sound

15. Did driver report common false warnings

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown

Not Applicable

No Driver Present ✔

Undo Not Applicable

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

DRIVER FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 2

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
    - ☐ No
    - ☐ N/A
    - ☐ 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
    - ☐ 11-30 Seconds
    - ☐ 31-60 Seconds
    - ☐ Over 60 Seconds
    - ☐ N/A
    - ☐ Unknown

Not Applicable

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

Not Applicable

Not Applicable ☐

U.S. Department of Transportation
National Highway Traffic Safety Administration

Non Motorist Form

Reset Values

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number
D S 0 9 0 1 2

NON-MOTORIST PROFILE

2. Non-motorist's Age — 4 4 ☐ Months ☉ Years
99 = Unknown

3. Non-motorist's Sex
☉ Male
☐ Female
☐ Unknown

4. Non-motorist's Height — 1 8 0 cm
999 = Unknown

5. Non-motorist's Weight — 1 2 5 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) on back
☐ 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): under vehicle
☐ 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:

Colors		***Fabrics***	***Textures***	***Weights***
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)			
Pink				

	Clothing	Color	Fabric	Texture	Weight
HEADWEAR	Hat				
	Helmet				
	Hood				
	Other (specify): _____				
	Unknown	unknown			
UPPER BODY	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown	unknown			
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): _____				
	Unknown	unknown			