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ON-SITE NOT IN TRAFFIC SURVEILLANCE BACK OVER INVESTIGATION

CASE NUMBER - IN-07-025
LOCATION - NEW MEXICO
VEHICLE - 2002 FORD F-150 SUPERCAB
CRASH DATE - March 2007

Submitted:

September 10, 2007
Revised: September 17, 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. *Report No.* IN-07-025	2. *Government Accession No.*	3. *Recipient's Catalog No.*	
4. *Title and Subtitle* On-Site Not InTraffic Surveillance Back Over Investigation Vehicle - 2002 Ford F-150 Supercab Location - New Mexico		5. *Report Date:* September 10, 2007 6. *Performing Organization Code*	
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15. *Supplementary Notes* On-site not in traffic surveillance back over investigation involving a 2002 Ford F-150 Supercab and a nonmotorist.			
16. *Abstract* This report covers an on-site not in traffic surveillance back over investigation involving a 2002 Ford F-150 Supercab (case vehicle) and a nonmotorist. This incident is of special interest because the case vehicle's driver backed over the nonmotorist [18-month-old, White (Hispanic) female], who sustained police reported "B" (non-incapacitating) injuries. The case vehicle's 66-year-old driver and her 12-year-old son were at their residence visiting with her daughter and granddaughter (the nonmotorist). The driver and her son left the residence to walk to their vehicle and travel to the daughter's residence. Unknown to the driver, the nonmotorist followed them out the door. The nonmotorist sat down behind the case vehicle's back right corner as the driver and her son were entering the vehicle and preparing to leave. The nonmotorist was in the case vehicle's rear blind zone and the driver did not see her. The driver backed approximately 1.5 meters (4.9 feet) and the exhaust pipe probably impacted the nonmotorist. The right rear tire then rolled onto the nonmotorist's upper buttocks and lower back. The nonmotorist was transported by ambulance to the hospital and was admitted for treatment of her injuries.			
17. *Key Words* Back Over Child Injury Motor Vehicle Traffic Incident Injury Severity		18. *Distribution Statement* General Public	
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BACKGROUND

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This incident was brought to NHTSA's attention on or before June 25, 2007 by GES sampling activities. This incident involved a 2002 Ford F150 Supercab 4x2 pickup truck (case vehicle) and a nonmotorist. The incident occurred in March, 2007 at 5:37 p.m., in New Mexico and was investigated by the applicable city police department. The police completed a standard "State of New Mexico Uniform Crash Report" and submitted a copy of the report to the state. This incident is of special interest because the case vehicle's driver backed over a nonmotorist [18-month-old, White (Hispanic) female], who sustained police reported "B" (non-incapacitating) injuries. This contractor inspected the scene and case vehicle on July 23, 2007. This contractor also interviewed the case vehicle's driver and a witness to the incident on July 23, 2007. This report is based on the police crash report, interviews with the case vehicle's driver and witness, scene and vehicle inspections, and this contractor's evaluation of the evidence.

SUMMARY

The case vehicle's 66-year-old driver and her 12-year-old son were at their residence visiting with her daughter and granddaughter (the nonmotorist). The driver and her son left the residence to walk to their vehicle and travel to the daughter's residence. Unknown to the driver, the nonmotorist followed them out the door. The driver and her son both entered the case vehicle through the driver's door. The driver's son started the vehicle and crawled over the console to the front right seat, and they both put on their safety belts. The driver put her right foot on the brake and shifted the vehicle into reverse. She turned her head to the right to look out of the backlight and proceeded to back up. Unknown to the driver, the nonmotorist had sat down behind the case vehicle's back right corner. The nonmotorist was in the case vehicle's rear blind zone and the driver did not see her. The driver backed approximately 1.5 meters (4.9 feet) and the exhaust pipe probably impacted the nonmotorist. The right rear tire then rolled onto the nonmotorist's upper buttocks and lower back. The nonmotorist was transported by ambulance to the hospital and was admitted for treatment of her injuries.

CRASH CIRCUMSTANCES

Crash Environment: The case vehicle was parked in the driveway heading west between the south side of the driver's residence and a wooden fence. The front door and small front porch of the residence were located immediately adjacent to the right rear corner of the case vehicle. The driver and her son were both inside the residence visiting with her daughter and granddaughter (the nonmotorist). The driver and her son were about to leave and travel to the daughter's residence. In order to reach the case vehicle, they had to exit the front door, walk a short distance north to exit the front porch, then turn back south and walk around the southeast corner of the porch (**Figure**

Figure 1: Overview of incident scene, case vehicle in same parked location as at time of incident, arrow shows front door to residence

1). The driver's intent was to back the case vehicle out of the driveway to the street. At the time of the incident the light condition was daylight and the atmospheric condition was clear and windy. The driveway was level and the driveway surface was a combination of dry dirt and gravel. There were no other vehicles present in the driveway. The site of the incident was residential. See the Scene Diagram on page 6 of this report.

Pre-Crash: The driver and her son exited the front door of the residence (**Figure 1** above), walked around the back of the case vehicle from right to left and approached the vehicle's left front door. The driver's son entered the vehicle first through the left front door and started the engine. He then crawled over the console to the front right seat. The driver entered the vehicle and they both put on their safety belts. The driver put her right foot on the brake and shifted the vehicle into reverse. She turned her head to the right to look out of the backlight and proceeded to back up. The driver did not check her side view or rear view mirrors prior to backing. The driver estimated that the elapsed time between entering the vehicle and the start of the backing maneuver was approximately 10 seconds. Unknown to the driver or her son, the nonmotorist had followed them out of the house and sat down in the driveway at the back right corner of the case vehicle facing east away from the vehicle and was reportedly playing in the dirt. The nonmotorist was located in the vehicle's blind zone approximately 1.1 meters (3.6 feet) behind the back right corner of the vehicle and could not be seen by the driver or her son.

Crash: The driver began to back the case vehicle eastbound while looking through the backlight. She turned the steering wheel slightly to the right as she backed. Almost immediately the driver heard the nonmotorist's mother, who had just walked out of the residence, yell at the driver to stop. The driver stated she stopped immediately. However, by this time the vehicle's back bumper (**Figure 2**) had passed over the seated nonmotorist and the exhaust pipe probably impacted her. The right rear tire then rolled onto her upper buttocks and lower back. Based on the scene inspection, police crash report, and driver and witness interview, it was determined that the case vehicle traveled backward approximately 1.5 meters (4.9 feet) to impact. The vehicle then traveled an additional 0.2 meters (0.7 feet) to final rest. The case vehicle's impact speed was estimated to be 2 km.p.h. (1.2 m.p.h.). The time to impact was estimated to be in a range of 2 to 5 seconds.

Figure 2: Back bumper, exhaust pipe and right rear tire, scale in 10th of meter

Post-Crash: The front right passenger stated he exited the case vehicle and walked to the back right corner of the vehicle and discovered the nonmotorist face down and bent over at the waist with her buttocks and lower back wedged under the right rear tire. At this point, the driver, who never got out of the case vehicle, moved the vehicle forward off of the nonmotorist. The nonmotorist's mother then took the nonmotorist into the residence and called police and the

emergency medical service. The nonmotorist was transported by ambulance to the hospital and was admitted for treatment of her injuries. The extent of the nonmotorist's injuries is not known.

CASE VEHICLE

The 2002 Ford F150 Supercab (**Figures 3** and **4**) was a rear wheel drive, two-door, pickup truck (VIN: 1FTRX17W92K------), equipped with a 4.6L, V8 engine; automatic transmission and four wheel anti-lock brakes. The case vehicle was equipped with tinted glass in the second row side windows and backlight. The case vehicle was not equipped with any after market equipment, and was not equipped with any backup/parking aid. The case vehicle's recommended tire size was P235/70R16. However, the vehicle was equipped with P255/70R16 tires. The P255/70R16 tires would raise the vehicle approximately 2.5 centimeters (1 inch) higher than the recommended tires, assuming proper tire inflation. The distance from the ground to the case vehicle's beltline was 125 centimeters (49 inches). The distance from the ground to the bottom of the back bumper was 49 centimeters (19.3 inches). The distance from the ground to the bottom of the exhaust pipe was 23 centimeters (9.1 inches). The case vehicle's wheelbase was measured as 350 centimeters (138 inches). The measured rear overhang was 120 centimeters (47 inches) and the specification overall length was 573 centimeters (225.5 inches).

Figure 3: Overview of front and right side of case vehicle

Figure 4: Overview of back and right side of case vehicle

CASE VEHICLE DAMAGE

There was no evidence of nonmotorist contact to the case vehicle's back bumper, exhaust pipe or right rear tire. Based on the available information, a Collision Deformation Classification (CDC) was assigned as **06-BRLU-1** (**180** degrees) to describe the case vehicle's impact to the nonmotorist.

CASE VEHICLE DRIVER

The case vehicle's driver was a White (Hispanic) 66-year-old female. She was 165 centimeters (65 inches) tall and weighed 104 kilograms (229 pounds). She indicated she drove the case vehicle daily. The driver was wearing eyeglasses at the time of the incident.

A visibility study was conducted during the case vehicle inspection in order to determine the nominal blind zone behind the case vehicle as well as the right "C"pillar blind zone. In addition, the approximate field of view of the side view and rear view mirrors were also assessed. The case vehicle driver's eye height as she sat in the driver's seat was measured as 150 centimeters (59 inches) above the ground. The driver had her seat adjusted to the approximate middle track position. The standard 71 centimeters (28 inches) high target was used for the visibility observations. Please refer to the Case Vehicle Nominal Visibility diagram on page 7 of this report when reading the following discussion.

For the assessment of the blind zone behind the case vehicle, the driver was asked to look over her right shoulder out of the backlight (**Figure 5**) as she did at the time of the incident. The target was positioned behind the case vehicle and moved rearward until it came into the driver's view. It was necessary to move the target rearward from the back of the vehicle 6.1 meters (20 feet) before the driver could see it. At this point, the target was moved to the right from the vehicle's approximate centerline 10.3 meters (33.8 feet) where it became obstructed by the right "C"-pillar. The target was then moved an additional 4.2 meters (13.8 feet) to the right where it became visible again through the right rear window. The target was then returned to the centerline and moved to the left. The driver immediately lost view of the target because she could not turn far enough to her right to see it.

Figure 5: View out of case vehicle's backlight from driver's seat

The driver was then asked to view behind the case vehicle through the rear view mirror (**Figure 6**). Again, the target was not visible to the driver until it was moved rearward from the back of the vehicle 6.1 meters (20 feet). When moved 2 meters (6.6 feet) to the right of the vehicle's approximate centerline, the target went out of the rear view mirror's field of view. The target was then moved 2.6 meters (8.5 feet) to the left of the centerline where it again went out of the mirror's field of view.

Figure 6: View through rear view mirror from driver's seat

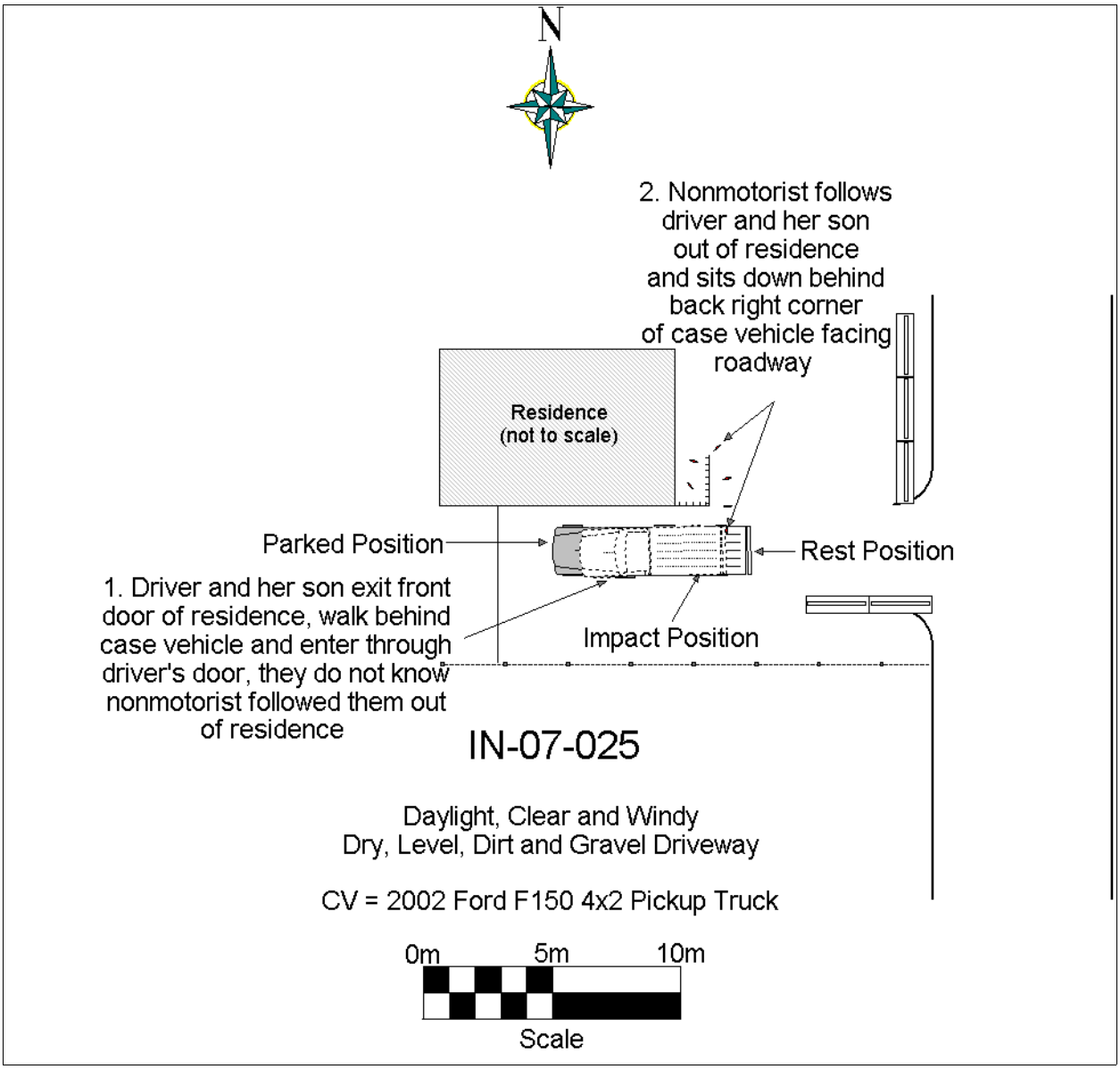
The driver had the side view mirrors adjusted such that she could see the target down each side of the vehicle through the respective side view mirror. Therefore, the target was placed at each back corner of the vehicle and moved outward until the driver could not longer see it in the mirror. For the left side view mirror, the target had to be moved outward from the back left corner 1.4 meters (4.6 feet) where it went out of the driver's view. For the right side view

mirror, the target had to be moved outward from the back right corner 1.6 meters (5.2 feet) where it went out of the driver's view.

The driver stated in her interview that before backing the case vehicle, she looked over her right shoulder and continued to view through the backlight as she backed up. She did not check her rearview or side view mirrors before backing up. The visibility study showed that the nonmotorist, who was sitting on the ground approximately 1.1 meters (3.6 feet) behind the case vehicle's back right corner was well within the case vehicles's rear blind zone and could not be seen by the driver.

NONMOTORIST

The nonmotorist [18-month-old, White (Hispanic) female; 91 centimeters and 14 kilograms (36 inches, 30 pounds)] was reportedly wearing just a diaper and an unknown color shirt. She was transported from the scene by ambulance to a hospital and was hospitalized for approximately 4 days. The extent of the nonmotorist's injuries is not known.


N
2. Nonmotorist follows driver and her son out of residence and sits down behind back right corner of case vehicle facing roadway
Residence (not to scale)
Parked Position
Rest Position
1. Driver and her son exit front door of residence, walk behind case vehicle and enter through driver's door, they do not know nonmotorist followed them out of residence
Impact Position
IN-07-025
Daylight, Clear and Windy
Dry, Level, Dirt and Gravel Driveway
CV = 2002 Ford F150 4x2 Pickup Truck
0m
5m
10m
Scale

IN-07-025

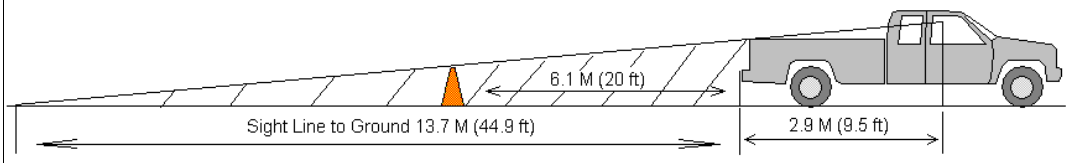
Case Vehicle Nominal Visibility Diagram
Case Vehicle = 2002 Ford F150 4x2 Supercab

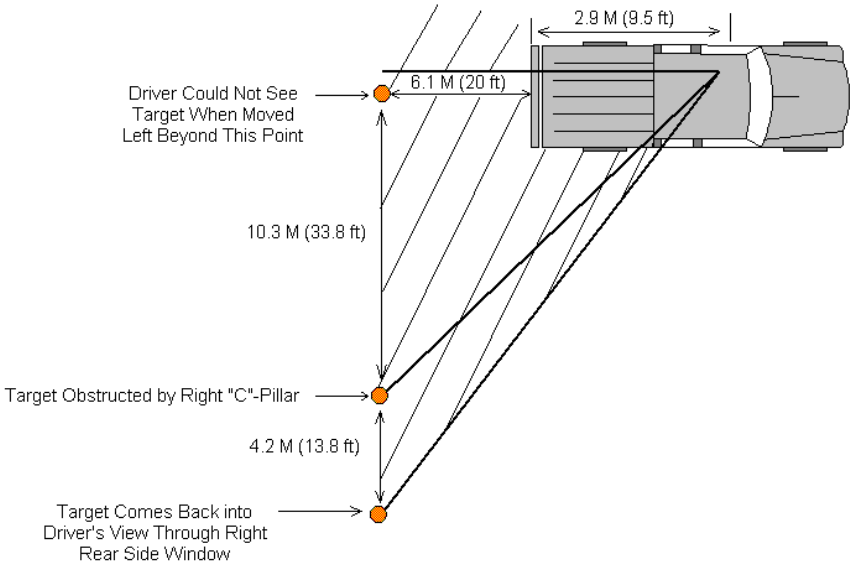
Driver's Eye Height From Ground = 150 cm (59.1 in)

= Case Vehicle Blind Zones

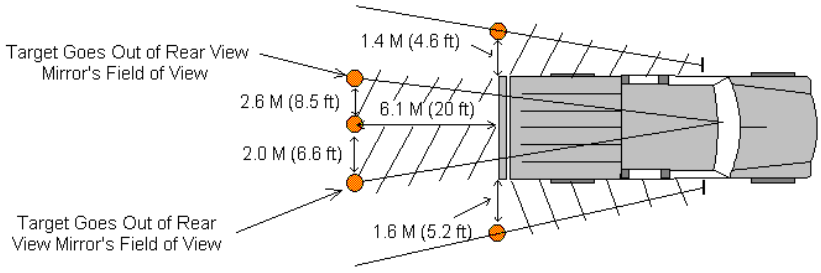
= 71 cm (28 in) High Target

1. Distance Back of Case Vehicle
To Point a 71 cm (28 in) High Reference Target
Comes Into Driver's View as She Looks Over Right Shoulder Out of Backlight





2. Rear View and Side View Mirrors Blind Zones



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

I N 0 7 0 2 5

IDENTIFICATION

2. Date of Crash 0 3 / x x / 0 7

3. Time of Crash 1 7 3 7

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) _____
- ☐ Unknown

11. Grade at parked position + / - 0 0 0 %

12. Estimated distance from parked position to impact

0 0 1 . 5 m

13. Estimated speed at impact 0 0 2 kmph

14. Grade at impact +/ - 0 0 0 %

15. Estimated distance from impact to vehicle final rest

0 0 0 . 2 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 I N 0 7 0 2 5

VEHICLE IDENTIFICATION

2. VIN 1 F T R X 1 7 W 9 2 K X X X X X X

3. Model Year 2 0 0 2

4. Vehicle Make (specify): Ford

5. Vehicle Model (specify): F150 Supercab 4x2

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	☐	

TIRE DATA

6. Vehicle Manufacturer Recommended Tire Size P235/70R16

7. LF Tire Size P255/70R16

9. RF Tire Size P255/70R16

8. LR Tire Size P255/70R16

10. RR Tire Size P255/70R16

Seats / Head Restraint Data

Seat Position	Seat Type (Select from below)	Head Restraint (Check if available)	Head Restraint Adjustment (select)	NOTES:
Front Left	7	☑	☑ Full Down / ☐ Mid / ☐ Full Up	
Front Middle	7	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
Front Right	7	☑	☑ Full Down / ☐ Mid / ☐ Full Up	
2nd Left	3	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
2nd Middle	3	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
2nd Right	3	☐	☐ 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		125	
Top of trunk/tailgate		132	
Bottom of bumper		49	
Trailer hitch (if applicable)		N/A	
Undercarriage			
	Sway bar	N/A	
	Axle	33	
	Differential	22	
	Other (specify): _____	23	
Sensor Height (if equipped)		N/A	
Camera Height (if equipped)		N/A	

Not Applicable ☑

Undo Not Applicable

Reset Values

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National Highway Traffic Safety Administration

Back Up / Parking Aid Form

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

I N 0 7 0 2 5

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

Not Applicable

No Driver Present ☐

Reset Values

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

DRIVER FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

I N 0 7 0 2 5

DRIVER PROFILE

2. Driver's Age 6 6
99 = Unknown

3. Driver's Sex
- ☐ Male
- ◉ Female
- ☐ Unknown

4. Driver's Height 1 6 5 cm
999 = Unknown

5. Driver's Weight 1 0 4 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): Let son start veh
- ☐ 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:

To daughter's residence

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

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 ☐

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
I N 0 7 0 2 5

NON-MOTORIST PROFILE

2. Non-motorist's Age — 1 8 ◉ Months ☐ Years
99 = Unknown

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

4. Non-motorist's Height — 0 9 1 cm
999 = Unknown

5. Non-motorist's Weight — 0 1 4 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 ← playing in dirt
☐ 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				
UPPER BODY	Short Sleeve	Unknown	Unknown	Unknown	Unknown
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown				
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): Diaper	White	Blend	Soft	Light
	Unknown				