CRASH DATA RESEARCH CENTER
Calspan Corporation
Buffalo, NY 14225

NOT-IN-TRAFFIC SURVEILLANCE
CALSPAN REMOTE CARBON MONOXIDE POISONING FATALITY INVESTIGATION

SCI CASE NO.: CA09011

VEHICLE: 2000 DODGE CARAVAN
LOCATION: FLORIDA
DATE: JANUARY 2009

Contract No. DTNH22-07-C-00043

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
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 remote investigation focused on the circumstances surrounding the carbon monoxide poisoning-related fatalities of an 88-year-old male and an 83-year-old female. This incident developed over an approximate 24 hour time period in January, 2009 at the couple's single family home. The single story dwelling had an attached garage and the 2000 Dodge Caravan was left unattended and idling in the garage for an unknown extended time period. The fatalities were discovered by the son of the deceased during the evening hours after the couple failed to meet a scheduled dinner engagement.			
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BACKGROUND

This remote investigation focused on the circumstances surrounding the carbon monoxide poisoning-related fatalities of an 88-year-old male and an 83-year-old female. This incident developed over an approximate 24 hour time period in January, 2009 at the couple's single family home (**Figure 1**). The single story dwelling had an attached garage and the 2000 Dodge Caravan was left unattended and idling in the garage for an unknown extended time period. The fatalities were discovered by the son of the deceased during the evening hours after the couple failed to meet a scheduled dinner engagement.

Figure 1: Police image of the single family home.

This incident was identified by the Crash Investigation Division (CID) of the National Highway Traffic Safety Administration (NHTSA) and was subsequently assigned as a remote investigation to the Calspan Special Crash Investigations (SCI) team on February 25, 2009. This case was assigned as part of the Not-in-Traffic Surveillance data collection conducted by the Agency. Calspan SCI initiated follow-up investigation and established cooperation with the investigating police agency. After a lengthy delay, the incident report was released by the investigating police department. A review of the incident report and interviews with the detective in-charge of the investigation, the police department's media relations officer and the son of the deceased provided the detail that is summarized in this report.

SUMMARY

Incident Site

This incident occurred over an approximate 24 hour period over two calendar days in January, 2009. The fatalities occurred within a single family dwelling in a residential neighborhood. The single story house was a three bedroom/two bath home of CBS (Concrete Block and Stucco) construction with an attached garage. The interior of the garage was finished with drywall and had a single entry door into home. Entering the dwelling via the entry door from the garage, an

individual would first enter a laundry room. Passing through an interior door in the laundry room would place the individual in a hallway adjacent to the master bedroom and the kitchen area. A schematic of the incident site is attached to the end of this report as **Figure 4.**

Vehicle Data

The involved vehicle was a 2000 Dodge Grand Caravan and was identified by the Vehicle Identification Number (VIN): 1B4GP44R2YB (production sequence deleted). The 4-door, front wheel drive vehicle was configured on a 303 cm (119.3 in) wheelbase and was equipped with a 3.3-liter V6 engine and a 4-speed automatic transmission. The rear bumper of the Dodge had been modified and an after-market wheelchair ramp had been installed in the vehicle. The manufacturer/installer of the wheelchair ramp was unknown. The son of the deceased reported that at the time of the incident, the ramp could only be operated manually. The electronic deployment of the ramp was inoperative. **Figures 2 and 3** are views of the parked vehicle within the garage.

Figure 2: Right rear oblique view of the Dodge.

Figure 3: Left front oblique view of the Dodge.

Victim Data

The 88-year-old male and the 83-year-old female were a retired, married couple living independently in the single story dwelling. Both individuals were found deceased within the home by a family member (their son). The deceased couple did not make a scheduled dinner engagement which prompted the son to investigate. The 83-year-old female was found in the garage adjacent to the right front door of the Dodge. The 88-year-old male was found at the entrance to the master bedroom adjacent to the hallway and the entry way to the garage. Both individuals were dressed in sleep-wear. The medical examiner determined the cause of death for both individuals was chemical asphyxia by carbon monoxide inhalation (AIS code 919200.2,0). Autopsies were not conducted.

In his interview, the son of the deceased indicated that his parents had some health issues but were very independent. They did not need assistance for their day-to-day living. The 83-year-old female was the primary care-giver for 88-year-old male, who at times was in need of

wheelchair and/or walker assistance. The 88-year-old male individual could "shuffle along" throughout the house and ambulate from the garage into the house, but he was in need of a wheelchair for longer distances.

The son reported that typically when his parents were away from the house his father would use a wheelchair and/or walker. The 83-year-old female would manually access the wheelchair ramp at their destination. However, when they returned home and parked in the garage, his father would walk back into the house assisted by his mother. There was no need to access the wheelchair ramp while the vehicle was parked in the garage. The wheelchair ramp modification and its operation were not a factor in this carbon monoxide poisoning incident. Additionally, the son reported that three days prior to the incident, his mother had left the vehicle idling unattended outside a restaurant while the couple was having dinner.

Incident

On the evening prior to the incident, it is believed the elderly couple returned home from a dinner engagement and the 83-year-old female drove the Dodge into the garage. The driver exited through the left door, left the vehicle idling and assisted the 88-year old male into the house. The couple entered the house and closed the entry door leading from the garage for the evening leaving the vehicle idling overnight. Through the course of the night, toxic levels of carbon monoxide built-up inside the enclosed garage.

The police investigation revealed that on the morning of the incident, the couple had been awake and had been seated at the kitchen table. The husband's daily medication was set out on the table and divided for his use. The 83-year-old female apparently left the kitchen, walked through the laundry room and opened the entry door to the garage (presumably to attend to the idling vehicle). She walked to the Dodge opened the front right door and turned the ignition "Off". Post-incident, the front right door was found open; the fuel gauge indicated the fuel tank was half-empty.

As 83-year-old female attempted to return to the house, the woman was overcome by the carbon monoxide fumes. She was found deceased in the garage, near the entry door. The 88-year-old male attempted to respond to his ill wife and approached the garage. He entered the hallway and was overcome by the fumes as well. A small dog was found on the bed in master bedroom. The dog was also deceased.

Post-Incident

The deceased couple was found by their son that evening. He reported that he had last spoken to his parents on the prior afternoon and had discussed dinner plans for the following evening. He further indicated he had attempted to contact his parents several times the day of the incident regarding the dinner engagement. He was unable to reach his parents via telephone and became

worried as their meeting time approached. He traveled to their residence and entered the home noticing a strong odor of vehicle exhaust. He observed his parents unconscious and deceased on the floor and exited the house. He contacted the police via the emergency response system.

The police and fire personnel responded to the incident site. The responding fire department personnel measured the level of carbon monoxide (CO) and it was determined that it was unsafe to enter the home without the assistance of an air pack. The level of CO was reported as 13 percent. *[This reported percentage value appeared to be inaccurate based on a literature review. CO concentration is typically measured in parts per million (ppm). One ppm is equivalent to 0.0001%. A 13% CO level is not possible.]* It was not known where that measurement was taken, but the home reportedly had been ventilated approximately 30 minutes prior to the reading. The house was ventilated an additional 45 to 60 minutes prior to the entry of the police detective.

Literature Review

The toxic effect of CO exposure is related to both the length of the exposure and concentration of CO, in addition to the physical condition of involved individual. In blood chemistry, CO tightly binds to hemoglobin, the molecule in the blood responsible for transporting oxygen throughout the body. The binding of CO and hemoglobin form carboxyhemoglobin which does not perform oxygen transport. CO's affinity for hemoglobin is approximately 240 times greater than that of oxygen. Over time carboxyhemoglobin gradually builds up in the bloodstream degrading the oxygen transport in the body. The brain and vital organs of the oxygen starved body slowly shut down, ultimately leading to death if the symptoms of CO poisoning are not detected. Research has determined that exposure to CO levels above 300 ppm (0.03%) for more than 1 to 2 hours can lead to death and exposure to 800 ppm (0.08%) can be fatal after an hour. Only trace levels of carbon monoxide are present under normal atmospheric conditions.

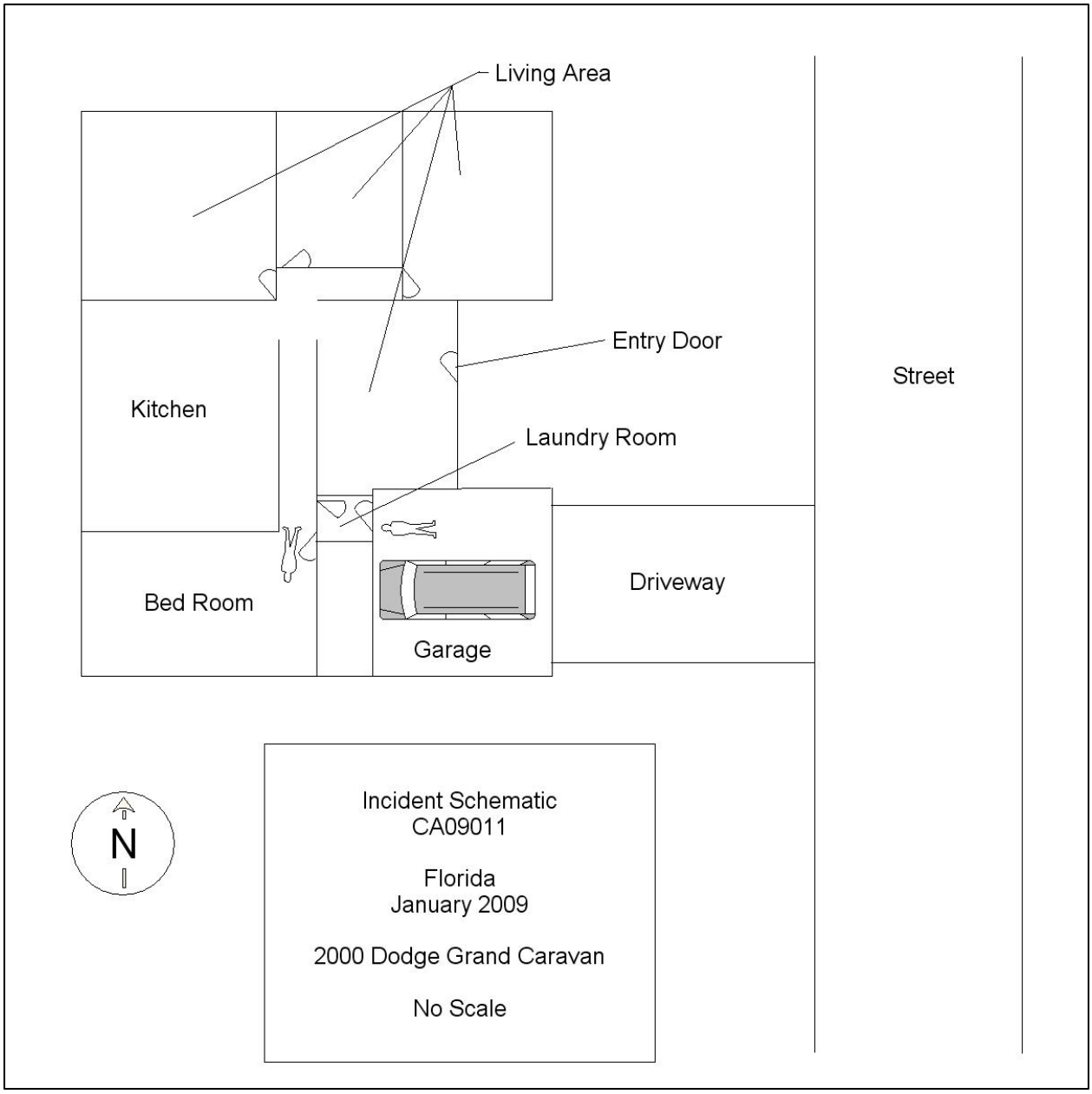

Figure 4: Incident schematic.

ATTACHMENT A

Not-In-Traffic Surveillance Forms

Not Applicable ☐

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

SCENE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

C A 0 9 0 1 1

IDENTIFICATION

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

3. Time of Crash 9 9 9 9

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) Garage
- ☐ 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 %

12. Estimated distance from parked position to impact

0 0 0 . 0 m

13. Estimated speed at impact 0 0 0 kmph

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

15. Estimated distance from impact to vehicle final rest

0 0 0 . 0 m

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

Not Applicable ☐

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

VEHICLE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number C A 0 9 0 1 1

VEHICLE IDENTIFICATION

2. VIN 1 B 4 G P 4 4 R 2 Y B X X X X X X

3. Model Year 2 0 0 0

4. Vehicle Make (specify): DODGE

5. Vehicle Model (specify): GRAND CARAVAN

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 P205/65R16

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)
Front Left	1	☑	☑ Full Down / ☐ Mid / ☐ Full Up
Front Middle	0	☐	☐ Full Down / ☐ Mid / ☐ Full Up
Front Right	1	☑	☑ Full Down / ☐ Mid / ☐ Full Up
2nd Left	99	☐	☐ Full Down / ☐ Mid / ☐ Full Up
2nd Middle	99	☐	☐ Full Down / ☐ Mid / ☐ Full Up
2nd Right	99	☐	☐ 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

NOTES:

Per the interview with the son of the deceased - the third row seat was removed to accomodate the wheelchair ramp. The second row seat type was unknown.

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	
Top of trunk/tailgate	N/A	
Bottom of bumper	N/A	
Trailer hitch (if applicable)	N/A	
Undercarriage		
Sway bar	N/A	
Axle	N/A	
Differential	N/A	
Other (specify): N/A	N/A	
Sensor Height (if equipped)	N/A	
Camera Height (if equipped)	N/A	

Not Applicable ☑

Undo Not Applicable

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

C A 0 9 0 1 1

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
- ☐ 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

U.S. Department of Transportation
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DRIVER FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

C A 0 9 0 1 1

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
   - ☐ Nea sighted
   - ☐ Far ighted
   - ☐ st m ism
   - ☐ O r (s ecify) ___
   - ☐ 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

Not Applicable

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

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number: C A 0 9 0 1 1

NON-MOTORIST PROFILE

2. Non-motorist's Age: 8 3 ☐ Months ☉ Years
   99 = Unknown

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

4. Non-motorist's Height: 9 9 9 cm
   999 = Unknown

5. Non-motorist's Weight: 9 9 9 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: Carbon Monoxide
   ☐ 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): N/A
    ☐ Unknown

12. Non-motorist approach relative to rear of vehicle
    ☐ Stationary
    ☐ From left
    ☐ From right
    ☐ From behind
    ☉ Other (specify): N/A
    ☐ Unknown

13. Non-motorist first avoidance action
    ☐ No avoidance actions
    ☐ Slopped
    ☐ 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): N/A
    ☐ 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) N/A
    ☐ 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	Unknown	Unknown	Unknown
UPPER BODY	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown	Unknown	Unknown	Unknown	Unknown
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): _____				
	Unknown	Unknown	Unknown	Unknown	Unknown

Not Applicable ☐

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   - ☐ Hospitalized 5 days or more
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   - ☐ Unknown

7. Source of most severe injury
   - ☐ Bumper
   - ☐ Tire
   - ☐ Undercarriage
   - ☉ Other Specify: Carbon Monoxide
   - ☐ Ground
   - ☐ N/A
   - ☐ Unknown

8. Non-motorist impairment
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NON-MOTORIST ACTIONS

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    - ☐ Sitting
    - ☐ Crouching
    - ☐ Kneeling
    - ☐ On skates/skateboard
    - ☐ On bike/scooter
    - ☐ Other (specify)_____
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    - ☐ Walking rapidly
    - ☐ Running or jogging
    - ☐ Skipping/Hopping/Jumping
    - ☐ Falling/Stumbling/Rising
    - ☐ On skates/skateboard
    - ☐ On bike/scooter
    - ☉ Other (specify): N/A
    - ☐ Unknown

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    - ☐ Stationary
    - ☐ From left
    - ☐ From right
    - ☐ From behind
    - ☉ Other (specify): N/A
    - ☐ 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): N/A
    - ☐ Unknown

14. Non-motorist primary focus of attention
    - ☐ Striking vehicle
    - ☐ Play object
    - ☐ Person
    - ☐ Surrounding traffic
    - ☐ Animal
    - ☐ Handheld electronic (phone, MP3 player, etc.)
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    - ☐ Multiple children present
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NON MOTORIST CLOTHING

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- Indicate "*NONE*" if applicable
- Available codes:

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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	Unknown	Unknown	Unknown
UPPER BODY	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown	Unknown	Unknown	Unknown	Unknown
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): _____				
	Unknown	Unknown	Unknown	Unknown	Unknown