INDIANA UNIVERSITY

TRANSPORTATION RESEARCH CENTER

School of Public and Environmental Affairs 501 S. Madison Street–Suite 105 Bloomington, Indiana 47403-2452 (812) 855-3908 Fax: (812) 855-3537

REMOTE NOT IN TRAFFIC SURVEILLANCE HYPERTHERMIA INVESTIGATION

CASE NUMBER - IN09038 LOCATION - LOUISIANA VEHICLE - 2009 Dodge Ram 1500 Crew Cab INCIDENT DATE - June 2009

Submitted:

May 11, 2010



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

DISCLAIMERS

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no responsibility for the contents or use thereof.

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.

The incident 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-incident, incident, and post-incident movements of involved vehicles and occupants.

Because each Incident 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

		Te					
1.	Report No. IN09038	2. Government Accession No.	3. Recipient's Catalog No.				
4.	<i>Title and Subtitle</i> Remote Not In Traffic Surveilla Vehicle - 2009 Dodge Ram 1 Location - Louisiana	 S. Report Date: May 11, 2010 6. Performing Organization Code 					
7.	Author(s) Special Crash Investigations	Team #2	8. Performing Organization Report No.				
9.	Performing Organization Name and Transportation Research Cen	10. Work Unit No. (TRAIS)					
	Indiana University 501 S. Madison Street–Suite Bloomington, Indiana 47403-		11. Contract or Grant No. DTNH22-07-C-00044				
12.	Sponsoring Agency Name and Addr. U.S. Department of Transpo National Highway Traffic Sa	rtation (NVS-411) fety Administration	13. Type of Report and Period Covered Technical Report Incident Date: June 2009				
	National Center for Statistics Washington, D.C. 20590-000	•	14. Sponsoring Agency Code				
15	 Supplementary Notes Remote Not in Transport Hyperthermia Investigation involving a 2009 Dodge Ram 1500 Crew Cal 						
	pickup and a 5-month-old ma Abstract This report covers a remote i	ale child who had been left unatt	ended in the vehicle. Surveillance Hyperthermia incident that				
	pickup and a 5-month-old ma <i>Abstract</i> This report covers a remote if involved a 2009 Dodge Ram 1 surrounding the death of a 5- incident occurred in Louisian building, and happened betw normally drops off her infant to drop off her infant and pre (CSS) in the second row of the that the child was still inside the arriving at approximately 153 still seated and secured in the the child and seat on the po	investigation of a Not In Traffic 1500 Crew Cab pickup truck. The month-old, male child who had ha, in June 2009, in the parking ween the hours of 0530 and 153 to n her way to work at a resident exceded to work with the child still he vehicle. After work the drive he vehicle in the rear-facing CSS 30 hours and went inside to pick to CSS. A neighbor removed the prch where paramedics found a					
16.	pickup and a 5-month-old ma <i>Abstract</i> This report covers a remote if involved a 2009 Dodge Ram 1 surrounding the death of a 5- incident occurred in Louisian building, and happened betw normally drops off her infant to drop off her infant and pre (CSS) in the second row of the that the child was still inside the arriving at approximately 152 still seated and secured in the the child and seat on the po- unconscious, unresponsive, a	investigation of a Not In Traffic 1500 Crew Cab pickup truck. The month-old, male child who had ha, in June 2009, in the parking ween the hours of 0530 and 153 to n her way to work at a resident exceded to work with the child still he vehicle. After work the drive he vehicle in the rear-facing CSS 30 hours and went inside to pick to CSS. A neighbor removed the prch where paramedics found a	surveillance Hyperthermia incident that e focus of this case was the circumstances been left unattended in the vehicle. The lot of a single-story branch bank office 30. The driver (mother) of the vehicle ntial daycare facility. The mother forgot l seated in a rear-facing child safety seat er went to her vehicle and did not notice . The driver drove to the daycare facility, up her child. At this time, the child was child from the car in the CSS and placed nd examined the child. The child was				

TABLE OF CONTENTS

IN09038

Page No.

BACKGROUND	1
Incident Circumstances.	1
CASE VEHICLE: 2009 DODGE RAM 1500 CREW CAB PICKUP TRUCK Second Row Passenger Kinematics Second Row Passenger Injuries	4
Incident Diagram	5

BACKGROUND

IN09038

This incident was brought to our attention by the National Highway Traffic Safety Administration on June 17, 2009 through an online news article. This investigation was assigned on November 11, 2009. This incident involved a 2009 Dodge Ram 1500 Crew Cab pickup truck and a 5-month-old male child who had been left unattended in the vehicle. The incident occurred in June 2009, between the hours of 0530 and 1530, in Louisiana and was investigated by the city police department. The focus of this investigation was the circumstances surrounding the death of a child who had been left unattended in the vehicle. The police completed two reports. The first was entitled an "Initial Report" and the second was prepared by the Criminal Investigations Division and was presumably a final report. Neither of these reports were submitted to the state. The District Attorney's office also completed a report on the death of the child. Because the Dodge was not available, a remote investigation was conducted based on all available information. This report is based on the two police reports cited above and the report of the district attorney. Furthermore, this report is based on police on-scene vehicle photographs obtained from the investigating police agency, and the evaluation of the evidence.

INCIDENT CIRCUMSTANCES

Incident Environment: The incident occurred in the parking lot of a single-story branch bank office building located in the northwest quadrant of the intersection of a state highway and a city street in the downtown area of a city. The building and parking areas occupied the majority of the block along the state route with the building located adjacent to the state route. Customer parking areas were located east and west of main building. A drive-through route was located northward of



Figure 1: Northward view of branch bank's parking areas; arrow indicates parking area where child occupant was left in child seat and died; parking area was north and west of drive-through canopy which was located on northern side of bank

the building and parking areas. The entrance to the drive-through was from the city street. The drive-through route made a 90 degree left turn toward where an ATM was located with the drive-through's exit onto the state route. An additional parking area (probably for employees) was located north of the drive-through route and west of the drive-through canopy (**Figure 1**). The driver (and mother of the child) of the Dodge parked during the day in the employee parking area while she went to work in the bank. The specific parking location and heading of the Dodge while parked are unknown. On this particular day the light condition was daylight, the atmospheric condition was clear, and the pavement of the parking lot was dry. The site of the incident was urban commercial. The INCIDENT DIAGRAM is on page 5.

Pre-Incident: According to the various reports, the driver normally drops off her two children (3-year-old, female and 5-month-old, male) on her way to work at a residential daycare facility. The normal workday routine was disrupted because the 3-year-old was staying at home with a relative. The mother placed the infant in its child safety seat (CSS) in the second seating row of her vehicle and headed for work. The specific seat position of the infant was not specified.

Incident Circumstances (Continued)

Inexplicably¹, the mother forgot to drop off her 5-month-old and preceded to work with the infant still seated in a rear-facing CSS. The driver exited the vehicle after parking in her normal parking space at work without noticing that the child was still seated in the CSS. According to the investigation, her workday was somewhat hectic, and she never had occasion to access her vehicle during the day. Nothing alerted her that she had forgotten her unattended child in the vehicle.

Incident: After work, at approximately 1500 hours, the driver entered the vehicle, still never noticing that the child was still inside, and drove to the daycare facility. She arrived at approximately 1530 hours and went inside to pick up her child (Figure 2). The operator of the facility told her that she had never dropped off her child. According to the reports, the driver realized that the child had remained in the vehicle. The driver and members of the daycare facility rushed to her vehicle (Figure 3). The driver opened the left rear door and located her child still seated and secured in the child safety seat in the second row of the Dodge (Figure 4). The mother fainted and fell onto the driveway.

Post-Incident: The police were notified by 911 at 1536 hours and responded to the scene. A neighbor who had heard screaming removed the infant from the car in the CSS and placed him and the CSS on the porch. Paramedics found and examined the child and noted that the infant was unconscious, unresponsive, and extremely hot. A paramedic ran a portable electrocardiogram (ECG) on the child, and the infant was pronounced dead at 1545 hours on the porch.

At 1638 hours a deputy coroner took a rectal core temperature of 42.06 $^{\circ}$ C (107.7 $^{\circ}$ F) with a

IN09038



Figure 2: Vicinity of home daycare facility where infant occupant was discovered inside Dodge pickup



Figure 3: On-scene police photo of Dodge in driveway of daycare facility where infant was discovered in second row seat



Figure 4: On-scene police photo of left side of Dodge in driveway of daycare facility; infant was found within CSS in second row seat of vehicle

mercury thermometer. At 1645 hours the child and seat were removed from the scene. According to the District Attorney's report, the temperature that day reached in excess of 32.2 °C (90 °F).

¹ This is the term used by the District Attorneys office. The police department interviewed the father and mother (driver) of the infant, but a transcript of that interview was not provided.

Incident Circumstances (Continued)

Time	Tempe	Temperature Dew Point		Relative	Pressure	Heat Index		
Time	°C	°F	°C	°F	Humidity	mmHg	°C	°F
0453	23.3	74	21.1	70	87	29.86	24	75
0553	23.9	75	21.7	71	87	29.87	25	76
0653	26.1	79	21.7	71	77	29.88	28	82
0753	27.8	82	21.7	71	69	29.89	30	86
0853	29.4	85	20.6	69	59	29.88	32	89
0953	31.7	89	20.0	68	50	29.89	34	93
1053	32.2	90	19.4	67	47	29.87	34	93
1153	32.2	90	19.4	67	47	29.86	34	93
1253	32.8	91	20.0	68	47	29.85	35	95
1353	32.8	91	18.9	66	44	29.85	34	94
1453	32.8	91	18.9	66	44	29.85	34	94
1553	32.2	90	19.4	67	47	29.83	34	93

Weather data for the incident date were obtained and are presented in the table below.

CASE VEHICLE

The 2009 Dodge Ram 1500 rear wheel drive, 6-passenger, 4-door, crew cab, regular bed pickup truck (VIN: 1D3HB13T38S-----) equipped with a 5.7-liter, V-8 engine and a 5-speed automatic transmission. The Dodge was equipped with 4-wheel, anti-lock brakes with electronic brake force distribution and braking assist, traction control, and electronic stability control, and

this vehicle's frontal air bags are certified by the manufacturer to be compliant to the Advanced Air Bag portion of Federal Motor Vehicle Safety Standard (FMVSS) No. 208. The vehicle was equipped with height adjustable seat belts, height adjustable head restraints for at least all outboard positions, Lower Anchors and Tethers for Children (LATCH) system features, a tire pressure monitoring system, and power-adjustable pedals. The vehicle was equipped with tinted windows (**Figure 5**), and all windows were closed that day.



Figure 5: On-scene police photo of right side of Dodge parked in driveway of daycare facility

SECOND ROW PASSENGER KINEMATICS

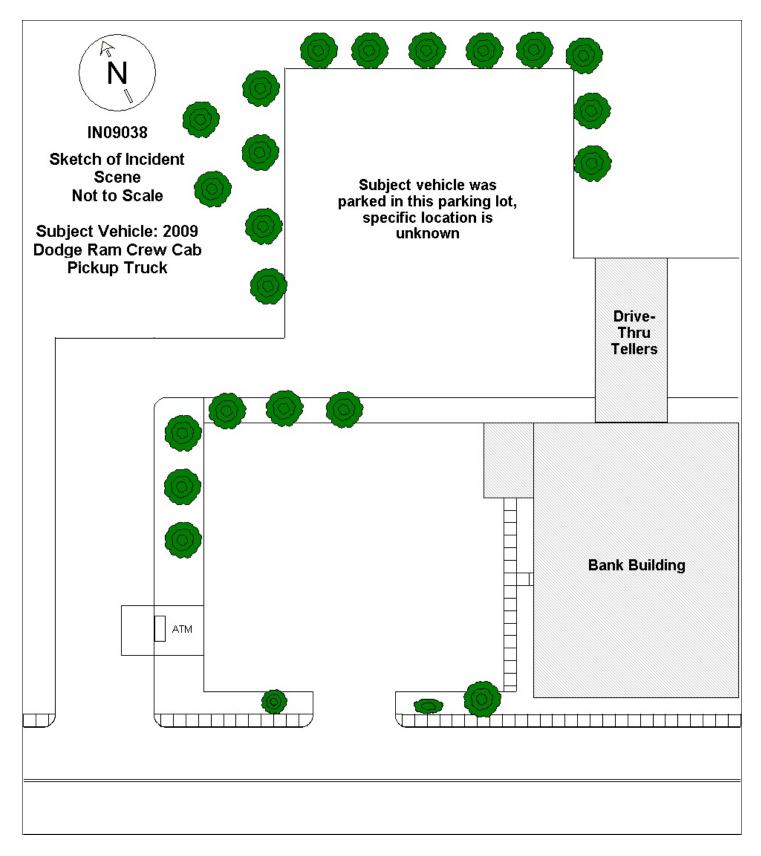
The second row passenger of the Dodge [5-month-old, male; 70 centimeters and 9 kilograms (27.6 inches, 19.8 pounds)] was restrained in a Graco rear-facing CSS which had been secured by the vehicle's lap-and-shoulder, safety belt system.

SECOND ROW PASSENGER INJURIES

The infant passenger was pronounced dead at the daycare facility at 1545 hours in the CSS on the porch. An autopsy conducted the following morning indicated that the child died of hyperthermia with numerous petechial hemorrhages noted to the child's visceral and parietal pleura, thymus gland, and epicardium.

INCIDENT DIAGRAM

IN09038



U.S. Department of Transportation National Highway Traffic Safety Administration	FORM Special Crash Investigations Not In Traffic Surveillance
1. Coop Number	SCENE INFORMATION
1. Case Number IDENTIFICATION 2. Date of Crash /	 7. Type of area in which crash occurred (Select all that apply) O Single family residential O Row houses/townhouses O Multi family housing O Commercial O Industrial O Rural O Unknown
3. Time of Crash Code reported military time of crash.	8. Driver exterior sightline obstructions (Select all that apply)
NOTE: Midnight = 2400 Unknown = 9999	O None O Utility poles O Other vehicles O Signs O Building O Glare O Trees O Unknown
4. Light Conditions	O Shrubbery O No driver present O Other (specify)
 O Daylight O Dark O Dark but lighted O Dawn O Dusk O Unknown 5. Atmospheric Conditions (Select all that apply) O Clear-No adverse conditions O Cloudy O Rain O Snow O Fog, Smog, Smoke 	 9. Crash location O Driveway O Road / street O Parking Lot O Roadside / shoulder O Sidewalk O Other (specify) O Alley O Unknown O Intersection of driveway and sidewalk 10. Non motorist sightline obstructions (Select all that apply) O None O Other vehicles O Building O Trees O Shrubbery
 O Sleet, Hail (freezing rain or drizzle) O Blowing Snow O Severe Crosswinds O Blowing Sand, Soil, Dirt O Other (specify): O Unknown 	O Utility poles O Signs O Glare O Other (specify) O Unknown + / - 11. Grade at parked position %
6. Temperature	12. Estimated distance from parked position to impact
O Below 0 degrees Celsius (Below 32 F) O 1-10 degrees Celsius (33-50 F) O >10-24 degrees Celsius (51-75 F) O Over 24 degrees Celsius (Over 75 F) O Unknown	 12. Estimated distance from parked position to impact 13. Estimated speed at impact m 14. Grade at impact % 15. Estimated distance from impact to vehicle final rest m
	Unknown = 999 Reference Items 11,12, 13, 14, 15

1. Case Number _____ ____ ____

VEHICLE IDENTIFICATION

- 3. Model Year ____ ___ ___
- 4. Vehicle Make (specify):
- 5. Vehicle Model (specify):

	GLAZING						
Location	Presence (check)	Status (select)	Clarity (select)	Tint (check)	Glazing Obstructions (specify if present)		
Windshield		Fixed / Closed / Open / Partially Open / Unknown	Clear / Hazy / Very Dirty / Unknown				
LF		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
RF		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
2 nd Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
2 nd Right		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
3 rd Left		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
3 rd Right		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
Left Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
Right Backlight		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
Roof		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
Other (specify)		Fixed / Closed / Open / Partially Open	Clear / Hazy / Very Dirty				
		TIRE D	ΑΤΑ				
6. Vehicle	Manufactu	irer Recommended Tire Size _					
7. LF Tire	Size		RF Tire Size				
8. LR Tire	Size	10.	RR Tire Size				
		10.					

Special Crash Investigations – Not In Traffic Surveillance: Vehicle Form

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

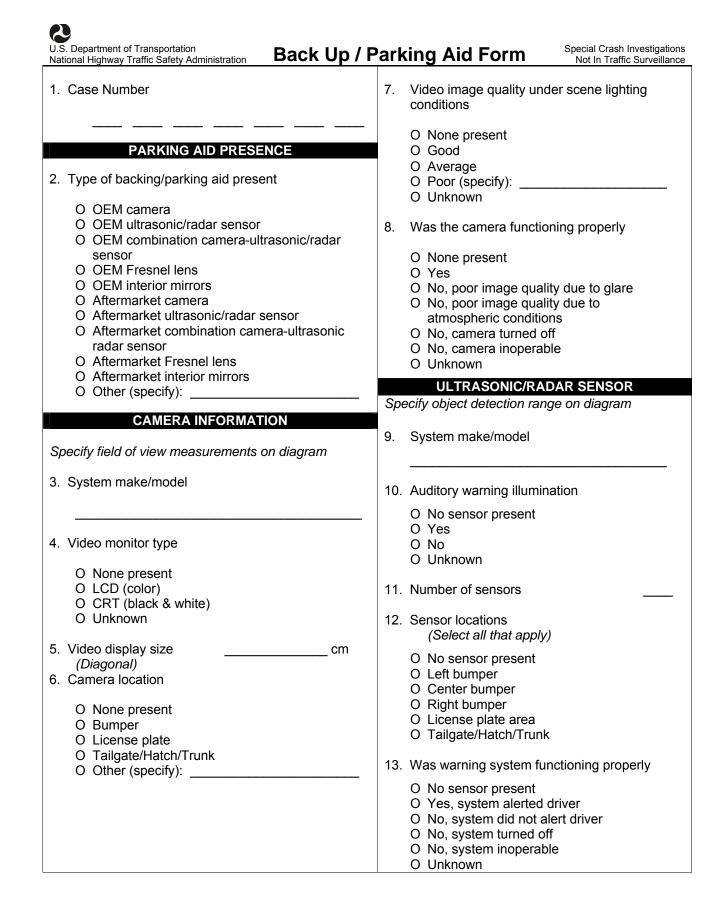
Seat Type codes:

- 0 = No seat or seat folded down
- 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

VEHICLE MEASUREMENTS

Clearance Heights	Measurements (all from ground, and in centimeters	
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)		

- 8 = Pedestal (i.e. column supported)
- 9 = Box mounted (i.e. van type)
- 10= Other seat type (specify)
- 99= Unknown seat type



Special Crash Investigations – Not In Traffic Surveill	Iance: Back Up / Parking Aid Form Page 2
14. Did driver react to warning	
O No sensor present O Yes O No O Unknown	
15. Did driver report common false warnings	
O No sensor present O Yes O No O Unknown	

U.S. Department of Transportation National Highway Traffic Safety Administration	FORM Special Crash Investigations Not In Traffic Surveillance
1. Case Number	10. Driver entry interruption (Select all that apply)
DRIVER PROFILE 2. Driver's Age	 O Direct trip from building to vehicle O Loaded items into vehicle O Spoke with family O Spoke with neighbors O Spoke with contacted nonmotorist O Return trip (backing into driveway/lot) O Other (specify):
 5. Driver's Weight kg 999 = Unknown 6. Driver eyewear worn (Select all that apply) O None O Eyeglasses O Sunglasses O Contacts O Unknown 	 O Leaving parking space in parking lot O Backing onto roadway from driveway O Entering parking space in parking lot O Backing into driveway from roadway O Other (specify):
 7. Driver vision deficiency condition (Select all that apply) O None O Near sighted O Far sighted O Astigmatism O Other (specify) O Unknown 	13. Driver in a hurry O Yes N/A O No Unknown O Unknown
 8. Non motorist's relationship to driver O No relationship O Child O Grandchild O Sibling O Neighbor O Friend O Other (specify): O Unknown DRIVER ACTIONS	 14. How did driver check behind (rear area of vehicle) after vehicle entry (Select all that apply) O Did not look O Checked mirrors O Turned right and looked back O Turned left and looked back Viewed Camera Listened for auditory/visual warning from system
 9. Driver approach to vehicle for entry From left front O From left O From left rear O From right rear O From right front O Circled vehicle O Return trip (backing into driveway/lot) O Other (specify): O N/A O Unknown 	O Other (specify): N/A Unknown 15. Estimated time between vehicle entry and start of backing O 0-10 Seconds O Over 60 Seconds O 11-30 Seconds O N/A O 31-60 Seconds Unknown

Special Crash Investigations – Not In Traffic Surveillance: Driver Form

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

U.S. Department of Transportation	Non M		Special Crash Investigati
National Highway Traffic Safety Administra	tion Fo	rm	Not In Traffic Surveilla
1. Case Number		11. Non-motorist motion	
		O Not moving	
NON-MOTORIS	T PROFILE	O Walking slowly	
	Mont	O Walking rapidly O Running or jogging	
2. Non-motorist's Age	Year		na
99 = Unknown		O Falling/Stumbling/Rising	
		O On skates/skateboard	
Non-motorist's Sex	O Male	O On bike/scooter	
	O Female	O Other (specify):	
	O Unknown	O Unknown	
 Non-motorist's Height 999 = Unknown 	cm	12. Non-motorist approach relat	ive to rear of vehicle
		O Stationary	
	kg	O From left	
999 = Unknown		O From right O From behind	
6. Medical outcome		O Other (specify):	
		O Unknown	
O Not injured			
O ER only		13. Non-motorist first avoidance	e action
O Hospitalized 1-4 days			
 O Hospitalized 5 days or r O Treatment later 	nore	O No avoidance actions O Stopped	
O Fatal		O Accelerated pace	
O Unknown		O Ran away (along vehicle	e path)
		O Jumped	
 Source of most severe injury 		O Turned away from vehic	
Bumper		O Turned toward vehicle a	
O Tire O Undercarriage		O Dove or fell away from v O Other (specify):	enicie
O Other Specify:		O Unknown	
O Ground			
O N/A		14. Non-motorist primary focus	of attention
Unknown			
8. Non-motorist impairment		O Striking vehicle	
(Select all that apply) O No drugs or alcohol pres	cont	O Play object O Person	
O Positive for alcohol (spe	cify BAC):	O Surrounding traffic	
O Positive for drugs (spec	ify):	O Animal	
O Unknown		O Handheld electronic (ph	
0 Source of clochol/drug result	0	O Other Object (specify) _ O Unknown	
 Source of alcohol/drug result Police reported 	3	O UTKHOWH	
Medical Report		15. Were any other Non-motori	sts present?
O Other (specify)		(Select all that apply)	· · · · ·
O Not Tested			
O Unknown if tested		O Alone	
NON-MOTORIS		O One adult present	
NON-MOTORIS	ACTIONS	O One other child present O Multiple adults present	
10. Non-motorist attitude		O Multiple adults present	t
		O Unknown	
O Standing O	On skates/skateboard		

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

Sp	ecial Crash Inve	stigations – Not In Traffi	c Surveillance: Non-	Motorist Form	Page 2			
NI								
740	 NOTES: Specify Color, Fabric and Texture/Weight for outermost layer only 							
		NE' if applicable	,,,	,				
	Available codes:							
	<u>Colors </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 Maroon	Light green Red						
	Orange	Yellow						
	White	Other (specify)						
	Clothing	Color	Fabric	Texture	Weight			
		COIOI	Fabric	Texture	weight			
н	Hat							
E	Helmet							
A								
D W	Hood							
Ε	Other (specify):							
Α								
R								
U	Short Sleeve							
Ρ	Long Sleeve							
Ρ								
E R	Light Jacket							
n								
В	Heavy Jacket							
D D	Other (Specify):							
Y								
L	Shorts							
0								
W	Pants							
E R								
	Shoes							
B	Other (specify):							
O D								
D Y								
			1	1				