U.S. Department
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DOT HS 808 563

February 1994

Interim Report

IVHS Countermeasures for Rear-End Collisions, Task 1

VolumeIII: 1991 NASS CDS Case Analysis

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Technical Report Documentation Page

1. Report No. DOT HS 808 563	**2. Government Accession No.**	**3. Recipient's Catalog No.**
4. Title and Subtitle IVHS Countermeasures for Rear-End Collisions Task 1 Interim Report Volume Ill: 1991 NASS CDS Case Analysis		**5. Report Date** February 15, 1994 **6. Performing Organization Code**
7. Author(s) Terry Wilson		**8. Performing Organization Report No.**
3. Performing Organization Name and Address Frontier Engineering Advanced Program Division 7655 E. Redfield Drive, Suite 10 Scottsdale, AZ 85260		**10. Work Unit No. (TRAIS)** **11. Contract or Grant No.** DTNH22-93-C-07326
12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration (NHTSA) U. S. Department of Transportation (DOT) 400 Seventh Street, SW. Washington, D.C. 20590		**13. Type of Report and Period Covered** Interim May 1993 - February 1994 **14. Sponsoring Agency Code** NRD-51
15. Supplementary Notes NHTSA Contracting Officers Technical Representative (COTR). Arthur Carter		
16. Abstract See Attached		
17. Key Words Collision Avoidance, Rear-end Collision, Crash Analysis, Performance Specifications, Causal Factors, Dynamic Situations, Human Factors	**18. Distribution Statement** This document is available to the public from the National Technical information Service (NTIS), Springfield, VA 22161	
19. Security Classif. (of this report) Unclassified	**20 Security Classif. (of this page)** Unclassified	**21. No. of Pages** 85 **22. Price** n/a

Form DOT F 1700.7 (8-72) **Reproduction of completed page authorized**

EXECUTIVE SUMMARY / ABSTRACT

The attached report is from the NHTSA sponsored program, "IVHS Countermeasures for Rear-End Collisions,"contract #DTNH22-93-C-07326. The program's primary objective is to develop practical performance guidelines or specifications for rear-end collision avoidance systems. The program consists of three Phases: Phase one: "Laying the Foundation" (Tasks l-4), Phase two: "Understanding the state-of-the-art" (Tasks 5 & 6), and Phase three: "Testing and Reporting" (Tasks 7-9). This work focuses on light (primarily passenger) vehicles and emphasizes autonomous in-vehicle based equipment (as opposed to cooperative infrastructure-based equipment.)

Phase I of this contract, Laying the Foundation, consisted of 4 Tasks: Task 1: a detailed analysis of the rear-end crash problem, Task 2: development of system-level functional goals, Task 3: hardware testing of existing technologies, and Task 4: development of preliminary performance specifications or guidelines. The goals of Tasks 1,2 and 3 were to develop the background needed to write the preliminary performance guidelines (Task 4).

Task 1, a detailed analysis of the rear-end Crash Problem, consisted of analysis, both clinical and statistical, of available mass accident data bases, some of which include the pre-crash variables, and an initial human factors study. The goal here was to identify, determine the nature of, and quantify the causes of rear-end type crashes. A report volume was written for each of these areas.

The Task 1 Interim Report consists of six volumes. This Volume, Volume III, "1991 NASS CDS Clinical Case Analysis" presents the results of a clinical case analysis of the 1991 National Accident Sampling System (NASS) Crashworthiness Data System (CDS) data. This report (all volumes) forms the foundation for the work in the later stages of the contract. Descriptions of Volumes I, II, IV - VI are as follows:

a. Volume I, "Summary," presents background information, an overview of the framework used to analyze the rear-end collision problem, an overview of the initial human factors studies, and summarizes the clinical conclusions found in other volumes.
b. Volume II, "Statistical Analysis," presents the statistical analysis of rear-end collision accident data that characterizes the accidents with respect to their frequency, severity, time and place of occurrence, the vehicle, and the involved drivers. Data for this Volume includes NHTSA's Fatal Accident Reporting System (FARS), NHTSA's General Estimates System (GES), and some state accident data files for recent years.
c. Volume IV, "1992 NASS CDS Clinical Case Analysis," presents the results of the detailed analysis of 200 cases from the 1992 NASS CDS crash data including the new pre-crash variables.
d. Volume V, "1985 NASS Analysis, " presents the results of the analysis of the 1985 NASS crash data. Data from 1985 was selected for analysis because it provided more insight into roadway variables that are no longer available in the current CDS or GES databases.
e. Volume VI, "Human Factors," presents the results of the initial human factors literature review and study.

From this detailed analysis of the accident databases a framework of the dynamic situations of rear end collisions was developed and used to analyze the rear-end collision problem. From an in-depth analysis of the dynamic situations it was discovered that most rear-end collisions occur with the following vehicle traveling at a constant velocity and the lead vehicle decelerating to a stop, i.e. the close-following or platooning situation. It was determined that the primary causal factors for rear-end collisions were inattention and following too closely. Also determined was a list of preliminary specification information.

The results presented during Phase I, including the Preliminary Performance Guidelines or Specifications, are based on work carried out with limited interactions with the academic, research, and industry communities, any conclusions drawn from the results presented must bear this in mind.

Phase II goals include a detailed state-of-the-art review of technologies related to rear-end collision avoidance systems and the design of a test bed system. Phase II will complete in June 1996. Phase III goals include the construction and test of the test bed system, the generation of the final performance guidelines or specifications, and the final reporting on all aspects of the project. Phase III will finish in early 1998. Work continues throughout Phase II and III to add to, and to refine, these preliminary performance guidelines or specifications. Numerous items still need to be determined (TBD) throughout the remainder of the research.

Key words: Collision Avoidance, Rear-end Collision, Crash Analysis, Performance Specifications, Causal Factors, Dynamic Situations, Human Factors.

1991 NASS CDS CASE ANALYSIS

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1991 NASS CDS CASE ANALYSIS

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SECTION 1
INTRODUCTION

This volume of the Task 1 Interim Report for IVHS Countermeasures for Rear-End Collisions, Contract DTNH22-93-C-07326, deliverable item 5, contains an overview and summary of the analysis of rear-end collision cases from the 1991 National Accident Sampling System Crashworthiness Data System (NASS CDS).

NHTSA previously analyzed rear-end collisions as reported in "Rear-End Crashes: Problem Size Assessment and Statistical Description" and "Assessment of IVHS Countermeasures for Collision Avoidance: Rear-End Crashes" both by Ronald R. Knipling, et al, May, 1993.

The purpose of this analysis was to determine the specific nature of each rear-end collision in order to help identify valid collision countermeasures for each dynamic situation and system type. The different types of dynamic situations are described in detail in Volume I of this report. By analyzing in detail each accident based on the dynamic situation the occurance of each type of dynamic situation can be determined. This allows estimation of the occurance of dynamic situations within the entire population of rear-end collisions. Once the population of dynamic situations has been estimated, functional goals can be developed that are qualitative descriptions of the data processing algorithms which will drive the processing function of countermeasure systems. Functional goals will be unique to each dynamic situation and possibly unique to each system type (i.e., headway maintainence, driver warning, automatic control). The clinical analysis performed on the 1991 NASS CDS is also being used to provide inputs to the simulation effort (Task 4).

The method used to select cases to analyze is described in Section 2. A summary of the results of the analysis of cases selected from the 1991 NASS CDS is contained in Section 3. The raw data from the cases listed is contained in Appendix A. An analysis summary sheet for each case analyzed is contained in Appendix B, and a explanation of the summary sheets is contained in Section 4. A summary of this analysis is in Section 5.

SECTION 2
SELECTION CRITERIA

The case selection criteria described in the Plan for Further Analysis listed the following primary selection criteria:

- Rear-end collision
- No vehicular problems
- Delta-V available for both vehicles
- Travel speed available for both vehicles
- Two and only two vehicles involved

Vehicular problems which cause collisions were eliminated from this study because it is not a goal of this effort to resolve vehicular problems. Delta-V and travel speed were selected as filters because cases having this information usually have enough detail to allow extraction of the information needed. In addition, this information allows a determination to be made of some of the parameters of the event. Only cases involving two vehicles were selected since these cases were thought to have a more accurate determination of the Delta-V for both vehicles.

A search of the 1991 NASS CDS database using the above criteria found 28 cases of two-vehicle, rear-end collisions with reported travel speed that were listed with Delta-V calculated. This set of 28 was considered too small, so another search was performed that found 111 cases of two-vehicle, rear-end collisions that were listed with Delta-V calculated. Of these 111 cases, 65 were selected. The hard copy files on the 65 cases were ordered from Zimmerman Associates.

Of the 65 cases delivered, one could not be located and five cases were considered unusable:

- Two involved vehicular problems (striking vehicle brake failure)
- Two were head-on collisions caused by encroachment and spin-out of a vehicle from another traffic lane but were coded as rear-end collisions
- One was a rear-end collision that was also due to lane encroachment and spin-out

The 59 cases left were analyzed as described in the following sections. Table 2-l is a listing of the cases analyzed.

Table 2-1 1991 NASS CDS Cases Analyzed

Case Number	Case Number	Case Number	Case Number
41-014D	48-133C	75-073E	81-072F
41-029C	48-141D	75-089E	81-103D
41-066D	48-162G	75-094G	81-107F
41-116E	48-178C	75-104E	81-131F
43-022D	48-233C	75-130G	81-135D
43-040D†	49-101D	75-134G	81-177B
43-046G†	72-019C	75-160E	82-019F
43-083E	72-179D	76-004B	82-060G
43-094J	72-193C	76-171F	82-102G
43-097H	73-068D	78-003F	82-121E
45-060H†	73-083E	78-118A	82-162F
45-179F	73-097D	79-005E	
48-024D	73-115E	79-053D	
48-081E	73-501A	81-012F	
48-105E	74-161G	81-019F	
48-115E	75-067C	81-070D	

* These cases were also analyzed by the referenced NHTSA reports.

SECTION 3
SUMMARY OFRESULTS

Cases from the 1991 NASS CDS do not include the five pre-crash variables that are coded in the 1992 NASS CDS, except for Attempted Avoidance Maneuver (GV14). The remaining four pre-crash variables were estimated from the hardcopy case files. Unfortunately the 1991 NASS-CDS hard copy data did not include enough detail, due to sanitation of the driver interview and police report, to make a more detailed identification of the accident causal factor than that presented within this report. Also because of the sanitization of the driver interview and police report, a determination of the time line of pre-crash events was unobtainable. The hard copy cases contained information about the type of accident and the result of the accident with little or no information regarding the events leading to the accident.

In order to make a determination of the dynamic situation, it was necessary to first estimate the pre-crash variables for both the struck (lead) and striking (following) vehicles. This along with the accident type and scene diagram were used to estimate the dynamic situation.

A dynamic situation refers to the motion of the two vehicles with respect to each other prior to either driver recognizing a potential collision problem. Consequently, those collisions that involved striking drivers that "panic braked" were included in the constant velocity category instead of the decelerating category. A distinction had to be made between lead vehicle stopped and lead vehicle decelerating and stopped. If a lead vehicle was decelerating to a stop due to a traffic control device or in order to make a turn on a straight roadway, the dynamic situation was listed as lead vehicle decelerating and stopped. This is because it is believed that a forward looking sensor would have the lead vehicle within plain view. On the other hand, if the same conditions occured on a curved roadway it was coded as lead vehicle stopped because it is believed that a forward looking sensor would not have the lead vehicle in view until the lead vehicle came to a complete stop. There were no occurances of either the lead or following vehicle accelerating dynamic situations. Table 3-1 shows the weighted and unweighted distributions of the dynamic situation from the 1991 NASS CDS.

All of the data presented within this report has been derived from the 59 cases studied in detail.

Table 3-l Percent of Rear-End Collisions vs. Dynamic Situations, Weighted/Unweighted (91 CDS)

Lead Vehicle	Following Vehicle		
	Accelerating	Constant Velocity	Decelerating
Stopped	0.0% / 0.0%	23.80% / 25.42%	0.0% / 0.0%
Constant Velocity	0.0% / 0.0%	4.59% / 11.86%	0.0% / 0.0%
Decelerating	0.0% / 0.0%	9.03% / 16.95%	4.59% / 1.69%
Accelerating	0.0% / 0.0%	0.0% / 0.0%	0.0% / 0.0%
Decel & Stopped	0.0% / 0.0%	58.24% / 44.07%	0.0% / 0.0%

Figure 3-l shows the distribution of rear-end collisions versus accident type for the 1991 NASS CDS. The 1991 NASS CDS cases reviewed have lead vehicle stopped slightly over represented, in the weighted case, compared to the NHTSA reports cited. Refer to "Rear-End Crashes: Problem Size Assessment and Statistical Description", May 1993, Figure 4-8, page 4-9. Figure 3-2 shows the same data differently as lead vehicle moving or stationary.

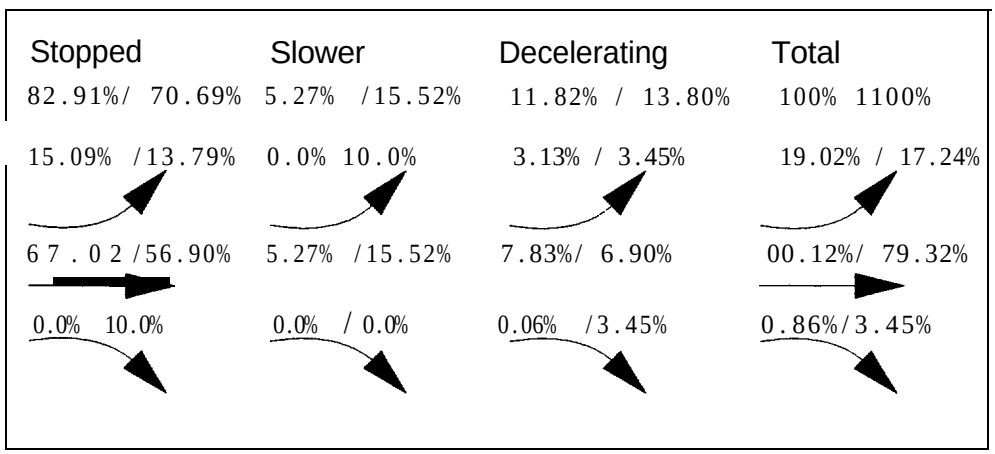

Figure 3-1 Percent of Rear-End Collisions vs. Lead Vehicle Accident Type, Weighted/Unweighted (91 CDS)

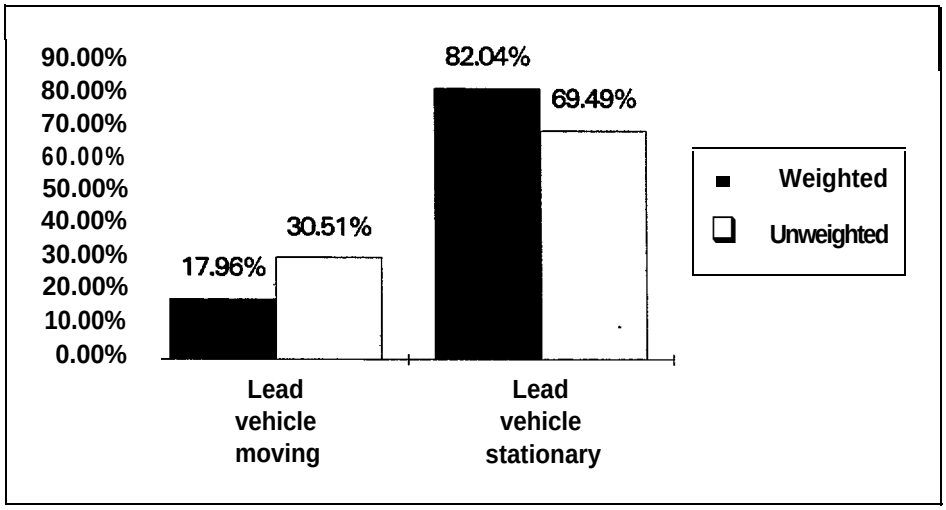

Figure 3-2 Percent of Rear-End Collisions vs. Lead Vehicle Moving or Stationary, Weighted and Unweighted (91 CDS)

The estimated travel speed matrix shown in Figure 3-3. As can be seen there were no lead vehicle estimated travel speeds above 55 mph and there were no lead vehicle estimated travel speeds below 20 or above 70 mph.

Lead Vehicle					Following Vehicle Velocity (MPH)											
Velocity(MPH)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	Unknown	Total
0	0	0	0	314	14754	2624	2127	767	840	113	548	0	58	0	6871	29017
5	0	0	0	0	0	0	259	0	0	0	100	0	0	0	0	359
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	660	0	0	0	0	0	0	0	660
20	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	30
25	0	0	0	0	0	1648	0	0	0	569	0	0	0	0	0	2217
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	404	0	0	0	0	0	0	0	404
40	0	0	0	0	0	0	0	0	0	125	0	0	0	0	0	125
45	0	0	0	0	0	0	0	0	0	0	464	0	0	0	0	464
50	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	34
55	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	27
Unknown	0	0	0	0	0	0	1013	0	0	0	0	0	0	0	1543	2556
Total	01	0	0	314	14754	4272	3399	1831	870	808	1112	0	86	34	8414	35894

Figure 3-3 Occurance of Rear-End Collisions vs. Estimated Travel Speed, Weighted (91 CDS)

As can be seen in Figure 3-4 the most common striking (following) vehicle pre-event movement is going straight. There was one case where the striking vehicle was slowing or stopping and one case where the striking vehicle was changing lanes. The most commonly coded dynamic situation is with the following vehicle constant velocity instead of accelerating or decelerating.

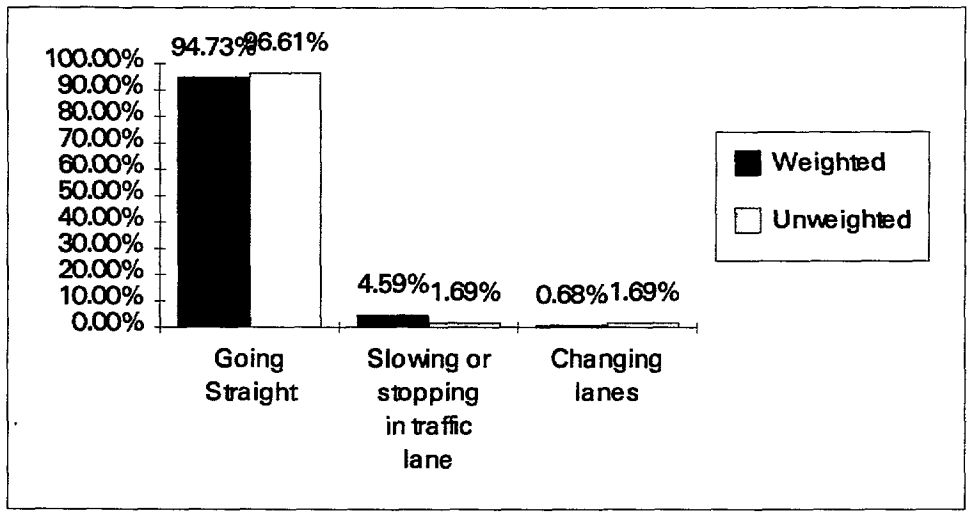

Figure 3-4 Percent of Rear-End Collisions vs. Striking Vehicle Pre-Event Movement (GV64), Weighted and Unweighted (91 CDS)

As a side note, in a comparison of the 1992 NASS GES with the 1992 NASS CDS, the striking vehicle critical pre-crash event was typically coded as lead vehicle stopped in the traffic lane or going slower in the traffic lane in the 1992 NASS CDS. The 1992 NASS GES typically coded this event as striking (following) vehicle traveling in same direction with higher speed. These two codings appear to be equivalent. The 1992 NASS CDS coding of the five pre-crash variables does not allow for coding of the critical pre-crash event as "This vehicle traveling in same direction with higher speed". For the purpose of this report, the coding of the 1991 NASS CDS is based on the coding for the 1992 NASS CDS not the GES.

Figure 3-5 shows the percentages for the striking vehicle critical pre-crash event (GV65). As can be seen the two codings used were struck (lead) vehicle stopped in the traffic lane and struck (lead) vehicle slower in the traffic lane.

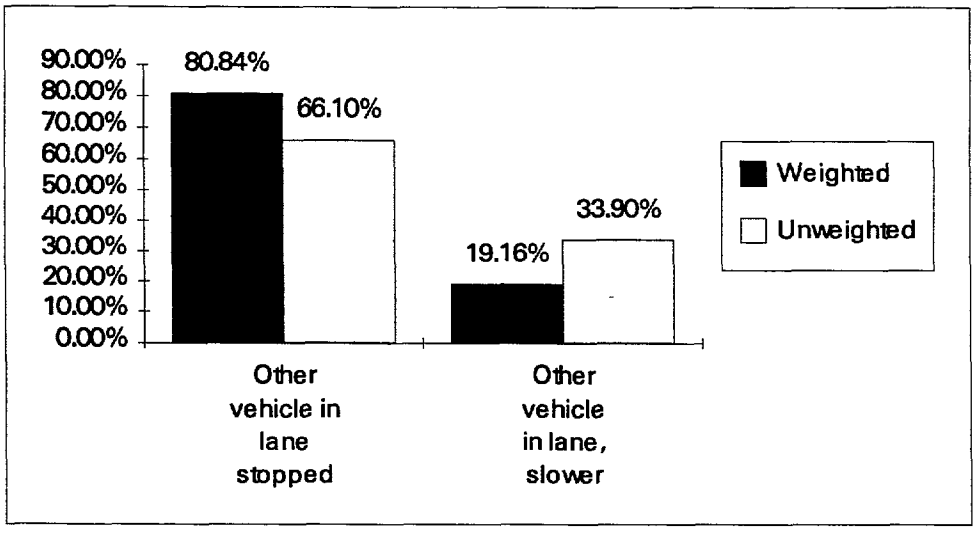

Figure 3-5 Percent of Rear-End Collisions vs. Striking Vehicle Critical Precrash Event (GV65), Weighted and Unweighted (91 CDS)

The 1991 NASS CDS clinical analysis found that eighty percent of the striking (following) vehicle drivers had some type of avoidance maneuver, typically either braking or steering. In comparison the 1992 NASS GES had over sixty percent of the rear-end collisions coded as no corrective action attemped. Over forty percent of the accidents analyzed in the 1991 NASS CDS involved panic braking. From this information it is believed that the "no avoidance actions" by the striking (following) driver is over-represented in the GES database. Figure 3-6 shows the distribution of attempted avoidance maneuver (GV14) for the striking (following) vehicle.

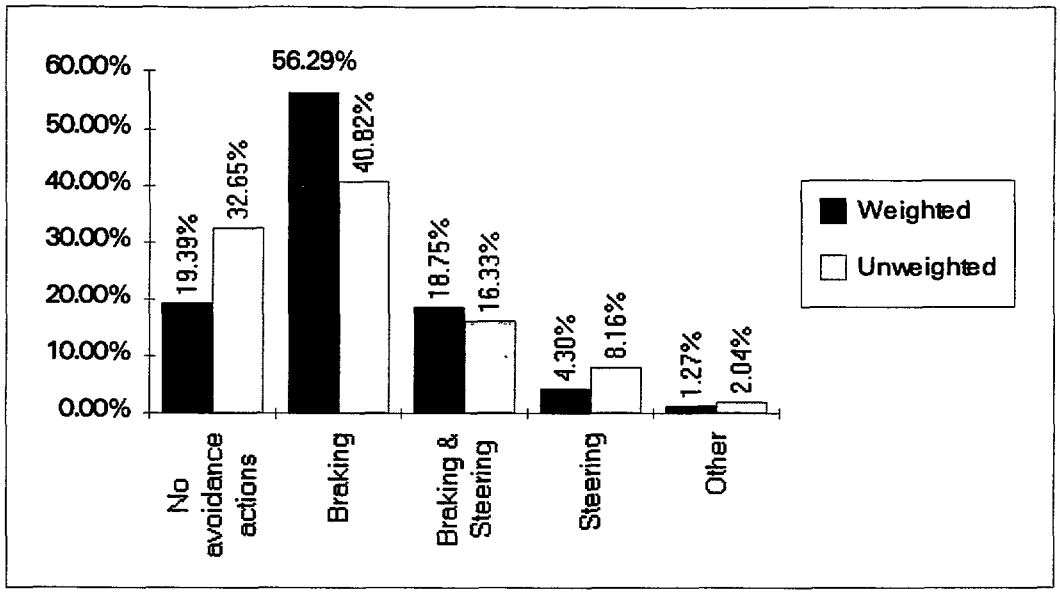

Figure 3-6 Percent of Rear-End Collisions vs. Striking Vehicle Attempted Avoidance Maneuver (GV14), Weighted and Unweighted (91 CDS)

Figure 3-7 shows the distribution of the struck (lead) vehicle versus movement prior to critical event (GV64). The lead vehicle was typically stopped, as previously reported in the NHTSA reports cited.

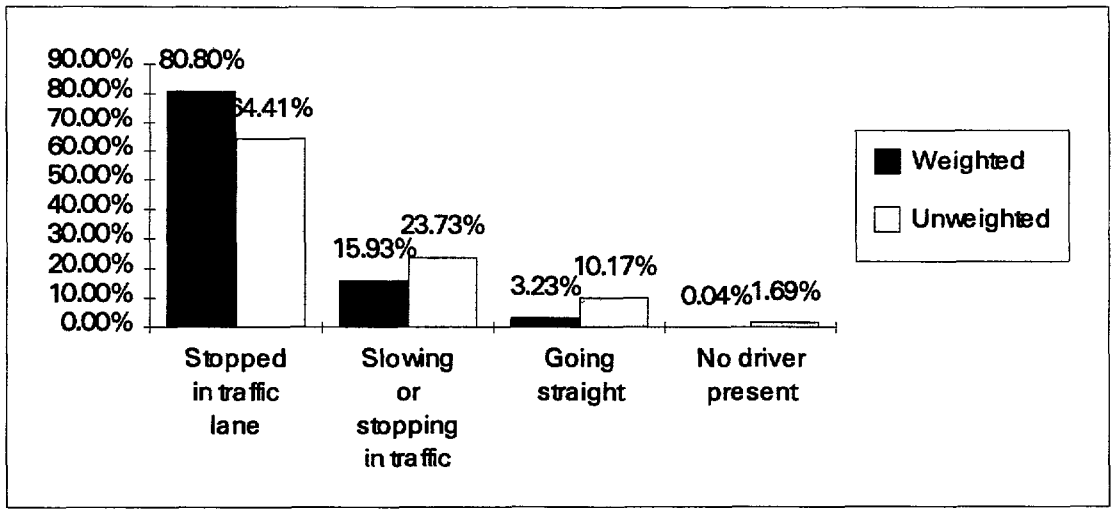

Figure 3-7 Percent of Rear-End Collisions vs. Struck Vehicle Movement Prior to Critical Event (GV64), Weighted and Unweighted (91 CDS)

For the 1991 NASS CDS clinical analysis, ninety-nine percent of the accidents reviewed coded the struck (lead) vehicle critical pre-crash event (GV65) as "Other motor vehicle in lane traveling in same direction with higher speed". Over ninety-seven percent of the accidents reviewed in the 1991 NASS CDS had attempted avoidance maneuver (GV14) coded as struck (lead) vehicle no avoidance action. As a result, the coding of the pre-crash stability after avoidance maneuver (GV66) and the pre-crash directional consequences of avoidance maneuver (GV67) were "No avoidance maneuver".

SECTION 4
CASE ANALYSIS

4.1 RAW DATA SHEETS

Appendix A contains the raw data sheets from the 1991 NASS CDS case review. Each case is a row in the sheet, and all of the data that was obtained during the analysis is contained in Appendix A.

4.2 CASE SUMMARY SHEETS

The summary sheets contained in Appendix B outline the 1991 NASS CDS cases that were reviewed. Unfortunately due to the sanitation of the driver interviews and police reports from the 1991 NASS CDS, further detail into the accident causal factor was unavailable. The Attempted Avoidance Maneuver (GV14) is the only coded pre-crash . variable; all other pre-crash variables were estimated as part of this analysis. The dynamic situation was estimated from the precrash variables, accident type and scene diagrams. The information listed on the case summary sheets in Appendix B is as follows:

- Case number
- Lead Vehicle Stationary or Moving
- Dynamic Situation
- Number of lanes
- Intersection status
- Horizontal alignment of road
- Vertical alignment of road
- Road surface type
- Road surface condition
- The 1992 NASS CDS five pre-crash variables (estimated for four of the five variables)
- Each vehicle year, make and model
- Each vehicle's weight
- Each vehicle's estimated travel speed
- Each vehicle's delta-V's
- Each vehicle's impact speed
- An estimate of the causal factor

SECTION 5
SUMMARY

Fifty-nine hard-copy rear-end accident case files from the 1991 NASS CDS were analyzed in detail. The following paragraphs summarize the results of the analysis.

An important classification within the rear-end crash category is the dynamic situation. The dynamic situation further defines the events leading to a rear-end collision. For the purpose of this analysis, a dynamic situation is defined as refering to the motion of the two vehicles with respect to each other prior to either driver recognizing a potential collision problem and prior to the critical pre-crash event. Consequently, those collisions that involved striking drivers that "panic braked" were included in the constant velocity category instead of the decelerating category.

There were no detailed cases involving either the lead or following vehicle accelerating. Although these types of cases may be rare, it should be noted that these conditions may occur when a vehicle is merging into traffic and traffic is slowing for some reason. A reason that may cause these cases to be rare is that collisions involving accelerating vehicles may be occuring at overall lower speeds and as a result neither vehicle is being towed from the scene and the case is not eligible for inclusion in the CDS.

A distinction had to be made between lead vehicle stopped and lead vehicle decelerating and stopped. There are no variables in either the CDS or GES that allow complete separation of these two dynamic situations. For the 1991 NASS CDS clinical analysis, if a lead vehicle was decelerated to a stop due to a traffic control device or in order to make a turn on a straight roadway, the dynamic situation was coded as lead vehicle decelerating and stopped. This is because it is believed that a forward looking sensor would have the lead vehicle within its view. On the other hand, if the same conditions occured on a curved roadway it was coded as lead vehicle stopped because it is believed that a forward looking sensor would not have the lead vehicle in its view until the lead vehicle came to a complete stop. This deter&nation could only be made by review of the scene diagram.

By classifying the rear-end collisions into dynamic situations, more insight can be gained into the nature of rear-end collisions. By combining the common dynamic situations with the type of rear-end collision avoidance systems, functional goals can be established as they relate to a dynamic situation occurring for a specific system type. This will be done as the part of defining the functional goals (Task 2).

Table 5-l again shows the breakdown of the 1991 NASS CDS cases reviewed by dynamic situation.

Table 5-l Percent of Rear-End Collisions vs. Dynamic Situations, Weighted/Unweighted (91 CDS)

Lead Vehicle	Following Vehicle		
	Accelerating	Constant Velocity	Decelerating
Stopped	0.0% / 0.0%	23.80% 125.42%	0.0% / 0.0%
Constant Velocity	0.0% / 0.0%	4.59% / 11.86%	0.0%/ 0.0%
Decelerating	0.0% / 0.0%	9.03% / 16.95%	4.59% / 1.69%
Accelerating	0.0% / 0.0%	0.0% / 0.0%	0.0% / 0.0%
Decel & Stopped	0.0% / 0.0%	58.24% / 44.07%	0.0% / 0.0%

In conjunction of the review of the 1991 CDS to determine the dynamic situations, an estimation of the accident causal factor was performed and the results are shown in Table 5-2. Unfortunately due to the sanitation of the driver interviews and police reports from the 1991 NASS CDS hardcopy case files, further detail into the accident causal factor was unavailable. The results of this analysis indicate that most rear-end collisions are not due to some external factor such as something wrong with the road, but are due to inattention by the striking (following) vehicle's driver. This confirms the results of the NHTSA reports cited previously. The only major difference between the findings of the NHTSA report and this report is that this report found a much higher incidence of alcohol involvement. From the 1991 NASS CDS database alcohol involvement was coded as unknown in each of the 59 cases reviewed, but the hardcopy case files had occurances of the coding of Police Reported Alcohol Presence (GVl1) as "Yes (alcohol present)" (refer to cases 75-134G and 75-160E as examples).

Table 5-2 Percent of Rear-End Collisions vs. Estimated Accident Causal Factor, Weighted and Unweighted (91 CDS)

Accident Causal Factor	Weighted	Unweighted	NHTSA†
Inattention	69.32%	65.52%	66.30%
Inattention/following too close	20.63%	13.79%	19.40%
Alcohol/Drug Involvement	8.36%	13.79%	2.1%
Poor Judgement	1.37%	3.45%	0.40%
Poor/Degraded Roadways	0.30%	1.72%	2.4%
Encroachment of another vehicle	0.01%	1.72%	1.1%

*Based on the total findings from "Assessment of IVHS Countermeasures for Collision Avoidance REAR-END CRASHES", May 1993. Table 3-1: Rear-End Crash Causal Factor Analysis, pp3-7.

Again this report confirms the accident causal factor that was presented in the NHTSA report cited previously. This report also presents a good estimation of the dynamic situations except for possibly situations where the lead or following vehicles are accelerating.

APPENDIX A
1991 NASS CDS RAW DATA

Number	Case	National Inflation Factor	Accident Month	Accident Day of Week	Accident Time	Lead Vehicle Moving or Stationary	Dynamic Situation	Striking Driver Panic Deceleration	Accident Causal Factor	Roadway Alignment (horizontal)	Roadway Alignment (vertical)	Roadway Grade	Roadway Surface Type
1	41-014D	130 552	JAN	MON	2030	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
2	41-029C	29 963	MAR	SAT	1655	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
3	41-066D	33 797	AUG	THU	700	Moving	Lead vehicle constant velocity following vehicle constant velocity	No	Alcohol/Drug Involvement	Straight	Unknown	Unknown	Asphalt
4	41-116E	125 355	OCT	SAT	1155	Moving	Lead vehicle constant velocity following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
5	43-022D	113 173	MAY	SAT	936	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
6	43-040D	156 122	JUL	SAT	1110	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Grade	3 60%	Asphalt
7	43-046G	1551 016	AUG	SUN	1931	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
8	43-083E	464 3	OCT	FRI	2037	Moving	Lead vehicle constant velocity following vehicle constant velocity	No	Inattention/following too close	Straight	Level	0 00%	Asphalt
9	43-094J	57 535	OCT	WED	1810	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
10	43-097H	1263 942	NOV	SAT	702	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Inattention	Straight	Grade	2 00%	Asphalt
11	45-060H	3725 187	APR	MON	1500	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention/following too close	Straight	Level	0 00%	Asphalt
12	45-179F	661 508	NOV	WED	1520	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention/following too close	Straight	Level	0 00%	Asphalt
13	48-024D	450 574	FEB	THU	455	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Alcohol/Drug Involvement	Curve	Unknown	Unknown	Asphalt
14	48-081E	1648 225	APR	SAT	45	Moving	Lead vehicle decelerating following vehicle decelerating	No	Inattention/following too close	Straight	Grade	3 30%	Asphalt
15	48-105E	742 364	MAY	WED	1745	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Grade	6 00%	Asphalt
16	48-115E	287 224	MAY	WED	1655	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Inattention	Straight	Unknown	Unknown	Unknown
17	48-133C	605 233	JUN	SUN	1439	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
18	48-141D	569 146	JUL	MON	1945	Moving	Lead vehicle constant velocity following vehicle constant velocity	Yes	Alcohol/Drug Involvement	Straight	Grade	52 00%	Asphalt
19	48-162G	12086 61	JUL	TUE	1535	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Unknown	Unknown	Unknown
20	48-178C	327 877	AUG	WED	1508	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Grade	-5 70%	Asphalt
21	48-233C	379 43	NOV	FRI	1150	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Inattention	Straight	Unknown	Unknown	Unknown
22	49-101D	45 176	SEP	FRI	1805	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Curve	Level	0 00%	Concrete
23	72-019C	14 329	JAN	MON	840	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
24	72-179D	12 883	JUL	SUN	2249	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
25	72-193C	5 144	AUG	SUN	530	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Encroachment of another vehicle	Straight	Level	0 00%	Asphalt
26	73-068D	99 738	AUG	SAT	1215	Moving	Lead vehicle decelerating following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
27	73-083E	368 804	SEP	THU	1539	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
28	73-097D	71 917	SEP	SUN	245	Moving	Lead vehicle constant velocity following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
29	73-115E	423 823	OCT	MON	1550	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
30	73-501A	0	SEP	THU	2015	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Alcohol/Drug Involvement	Straight	Level	0 00%	Asphalt
31	74-161G	482 798	OCT	THU	805	Moving	Lead vehicle decelerating following vehicle constant velocity	Yes	Inattention	Straight	Grade	10 40%	Asphalt
32	75-067C	61 246	MAY	WED	1700	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
33	75-073E	372 648	MAY	SAT	1430	Moving	Lead vehicle decelerating following vehicle constant velocity	Yes	Inattention	Straight	Grade	5 21%	Asphalt
34	75-089E	404 03	JUN	WED	2100	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Grade	-3 60%	Asphalt
35	75-094G	1012 741	JUN	TUE	1440	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Inattention	Straight	Grade	7 80%	Asphalt
36	75-104E	569 972	JUL	SUN	1725	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Grade	-2 60%	Asphalt
37	75-130G	1312 78	SEP	WED	1550	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Grade	2 60%	Asphalt
38	75-134G	1400 577	SEP	SAT	210	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Alcohol/Drug Involvement	Straight	Level	0 00%	Asphalt
39	75-160E	439 413	OCT	SUN	135	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Alcohol/Drug Involvement	Straight	Grade	2 00%	Asphalt
40	76-004B	104 254	JAN	THU	1827	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
41	76-171F	432 752	DEC	SAT	1417	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
42	78-003F	313 518	JAN	WED	1815	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
43	78-118A	58 329	JUN	SUN	1727	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Alcohol/Drug Involvement	Straight	Level	0 00%	Asphalt
44	79-005E	45 651	JAN	WED	740	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
45	79-053D	27 222	JUL	FRI	1830	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention/following too close	Straight	Level	0 00%	Concrete
46	81-012F	208 572	JAN	MON	1557	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention/following too close	Straight	Level	0 00%	Asphalt
47	81-019F	242 289	JAN	THU	1440	Stationary	Lead vehicle stopped following vehicle constant velocity	No	Poor Judgement	Straight	Grade	Unknown	Concrete
48	81-070D	34 599	MAY	SUN	1320	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
49	81-072F	259 489	MAY	WED	1250	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Inattention	Straight	Grade	6 70%	Asphalt
50	81-103D	56 825	JUL	TUE	1625	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
51	81-107F	282 521	JUL	SUN	2105	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	Yes	Inattention	Straight	Level	0 00%	Asphalt
52	81-131F	166 706	AUG	SAT	1520	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Grade	2 60%	Asphalt
53	81-135D	90 889	SEP	TUE	650	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Inattention	Straight	Level	0 00%	Asphalt
54	81-177B	19 467	NOV	FRI	2224	Stationary	Lead vehicle decelerating and stopped following vehicle constant velocity	No	Alcohol/Drug Involvement	Straight	Grade	-6 30%	Asphalt
55	82-019F	104 985	FEB	SUN	2030	Moving	Lead vehicle constant velocity following vehicle constant velocity	No	Poor/Degraded Roadways	Straight	Unknown	Unknown	Unknown
56	82-060G	406 446	APR	FRI	1445	Moving	Lead vehicle decelerating following vehicle constant velocity	Yes	Inattention/following too close	Straight	Unknown	Unknown	Unknown
57	82-102G	244 542	JUN	THU	1830	Moving	Lead vehicle decelerating following vehicle constant velocity	No	Poor Judgement	Straight	Unknown	Unknown	Unknown
58	82-121E	100 949	AUG	SAT	1814	Stationary	Lead vehicle stopped following vehicle constant velocity	Yes	Inattention	Straight	Unknown	Unknown	Unknown
59	82-162F	186 78	OCT	TUE	2215	Moving	Lead vehicle constant velocity following vehicle constant velocity	Yes	Inattention/following too close	Curve	Unknown	Unknown	Unknown

Number	Case	Roadway Surface Condition	Relation to Junction	Travel Lane Width (feet)	Number of Travel Lanes	Crash Severity	Alcohol Involvement (hardcopy)	Drug Involvement (hardcopy)	Speed Limit	Striking Vehicle Model Year	Striking Vehicle Make	Striking Vehicle Model	Striking Vehicle Body Type	Striking Vehicle Travel Speed	Striking Vehicle Pre-Event Movement
1	41-014D	Dry	Non-junction	Unknown	14	Injury	NO	NO	45	85	Chrysler	New Yorker	4-door sedan, hardtop	45	Going Straight
2	41-029C	Wet	Non-junction	12	6	Injury	NO	NO	55	90	Mitsubishi	Pickup	Compact pickup	45	Going Straight
3	41-066D	Dry	Non-junction	Unknown	10	Injury	YES	NO	55	86	Toyota	Pickup	Compact pickup	70	Going Straight
4	41-116E	Dry	Non-junction	Unknown	6	Property Damage	NO	NO	40	87	Nissan	Sentra	2-door sedan hardtop coupe	50	Going Straight
5	43-022D	Dry	Four leg intersection	10	6	Injury	NO	NO	45	82	Ford	F-series Pickup	Standard pickup	50	Going Straight
6	43-040D	Dry	Four leg intersection	12	6	Injury	NO	NO	35	83	Buick	LeSabre	4-door sedan hardtop	35	Going Straight
7	43-046G	Dry	Non-junction	10 4	2	Property Damage	NO	NO	55	89	Chevrolet	Camero	3-door/2-door hatchback	30	Going Straight
8	43-083E	Dry	Non-junction	10 7	2	Injury	Unknown	NO	45	66	Chevrolet	Malibu	2-door sedan hardtop coupe	55	Going Straight
9	43-094J	Dry	Driveway alley access related	11 7	2	Injury	NO	NO	55	87	Chevrolet	S-10 Pickup	Compact pickup	55	Going Straight
10	43-097H	Wet	Four leg intersection	Unknown	5	Injury	NO	NO	45	77	Chevrolet	K-series Pickup	Standard pickup	25	Going Straight
11	45-060H	Dry	Channel	Unknown	4	Property Damage	NO	NO	55	82	Buick	Regal	2-door sedan hardtop, coupe	Unknown	Going Straight
12	45-179F	Dry	Non-junction	Unknown	12	Injury	NO	NO	45	89	Chevrolet	Van Derivative	Standard van	Unknown	Going Straight
13	48-024D	Dry	Four leg intersection	Unknown	5	Property Damage	YES	NO	45	88	Ford	Ranger	Compact pickup	Unknown	Going Straight
14	48-081E	Dry	Railroad grade crossing	13 3	2	Injury	YES	NO	25	90	Ford	Thunderbird	2-door sedan, hardtop, coupe	30	Slowing or stopping in traffic lane
15	48-105E	Wet	Intersection related	10 2	2	Injury	NO	NO	40	90	Isuzu	Impulse	3-door/2-door hatchback	Unknown	Going Straight
16	48-115E	Unknown	Intersection related	Unknown	3	Property Damage	NO	NO	50	90	Chevrolet	Blazer	Truck based utility	40	Going Straight
17	48-133C	Dry	Four leg intersection	Unknown	4	Injury	NO	NO	45	87	Oldsmobile	Celais	4-door sedan, hardtop	45	Going Straight
18	48-141D	Dry	Four leg intersection	12	4	Injury	YES	NO	35	77	Cadillac	Deville	4-door sedan, hardtop	50	Going Straight
19	48-162G	Unknown	Intersection related	10	3	Property Damage	NO	NO	25	90	Oldsmobile	Regency	4-door sedan hardtop	25	Going Straight
20	48-178C	Wet	Intersection related	11 6	2	Injury	NO	NO	55	91	Buick	Skylark	2-door sedan hardtop coupe	40	Going Straight
21	48-233C	Unknown	Intersection related	Unknown	4	Injury	NO	NO	35	89	Dodge	RAM 150	Standard pickup	30	Going Straight
22	49-101D	Dry	Non-junction	Unknown	6	Injury	NO	NO	55	77	Toyota	Corolla	2-door sedan, hardtop coupe	55	Going Straight
23	72-019C	Dry	Four leg intersection	12	12	Injury	NO	NO	35	88	Chevrolet	Celebrity	4-door sedan, hardtop	Unknown	Going Straight
24	72-179D	Dry	Non-junction	12	10	Injury	NO	NO	55	85	Honda	Civic/CRX	4-door sedan hardtop	55	Going Straight
25	72-193C	Dry	Non-junction	12	8	Injury	YES	NO	55	88	Chevrolet	Celebrity	4-door sedan hardtop	Unknown	Going Straight
26	73-068D	Dry	Three leg intersection	12	4	Injury	NO	NO	55	86	Toyota	Corolla	4-door sedan, hardtop	55	Going Straight
27	73-083E	Dry	Three leg intersection	Unknown	4	Injury	NO	NO	35	84	Oldsmobile	Ciera	4-door sedan, hardtop	Unknown	Going Straight
28	73-097D	Dry	Non-junction	11 4	2	Injury	NO	NO	65	87	Chevrolet	Camero	3-door/2-door hatchback	Unknown	Going Straight
29	73-115E	Wet	Three leg intersection	Unknown	4	Injury	NO	NO	30	90	Volkswagen	Golf	2-door sedan hardtop, coupe	30	Going Straight
30	73-501A	Dry	Four leg intersection	Unknown	4	Fatality	YES	Not Coded	55	88	Ford	Escort	5-door/4-door hatchback	Unknown	Going Straight
31	74-161G	Dry	Four leg intersection	12	4	Injury	NO	NO	35	91	Ford	Aerostar	Minivan	Unknown	Going Straight
32	75-067C	Dry	Intersection related	Unknown	2	Injury	NO	NO	30	91	Chevrolet	Lumina APV	Minivan	30	Going Straight
33	75-073E	Dry	Intersection related	Unknown	4	Injury	NO	NO	40	87	Audi	5000S	4-door sedan hardtop	40	Going Straight
34	75-089E	Dry	Intersection related	Unknown	4	Injury	NO	NO	40	87	Hyundai	Excel	3-door/2-door hatchback	40	Going Straight
35	75-094G	Dry	Three leg intersection	Unknown	2	Injury	Unknown	Not Coded	30	87	Toyota	Corolla	4-door sedan, hardtop	35	Going Straight
36	75-104E	Dry	Intersection related	Unknown	4	Injury	NO	NO	40	87	Plymouth	Voyager	Minivan	35	Going Straight
37	75-130G	Dry	Non-junction	Unknown	2	Injury	NO	NO	30	91	Hyundai	Scoupe	2-door sedan, hardtop, coupe	25	Going Straight
38	75-134G	Dry	Four leg intersection	Unknown	4	Property Damage	YES	NO	30	89	Toyota	Pickup	Compact pickup	35	Going Straight
39	75-160E	Dry	Four leg intersection	Unknown	6	Injury	YES	NO	45	89	Hyundai	Excel	3-door/2-door hatchback	40	Going Straight
40	76-004B	Dry	Intersection related	10 1	5	Injury	NO	NO	45	88	Ford	F-series Pickup	Standard pickup	45	Going Straight
41	76-171F	Unknown	Intersection related	Unknown	2	Property Damage	NO	NO	55	84	Chevrolet	K-series Pickup	Standard pickup	55	Going Straight
42	78-003F	Wet	Intersection related	12 8	2	Injury	NO	NO	25	78	Dodge	Aspen	2-door sedan hardtop, coupe	20	Going Straight
43	78-118A	Dry	Non-junction	13 1	4	Fatality	Unknown	Not Coded	65	90	Plymouth	Voyager	Minivan	65	Going Straight
44	79-005E	Unknown	Intersection related	Unknown	4	Property Damage	NO	NO	35	87	Toyota	Pickup	Compact pickup	Unknown	Going Straight
45	79-053D	Unknown	Non-junction	0	12	Injury	NO	NO	55	81	Nissan	310	3-door/2-door hatchback	65	Going Straight
46	81-012F	Dry	Non-junction	0	4	Injury	NO	NO	55	86	Hyundai	Excel	4-door sedan, hardtop	30	Going Straight
47	81-019F	Wet	Non-junction	Unknown	6	Injury	NO	NO	55	87	GMC	K-series Pickup	Standard pickup	Unknown	Changing lanes
48	81-070D	Unknown	Intersection related	11 9	2	Injury	NO	NO	40	85	Buick	Century	4-door sedan hardtop	Unknown	Going Straight
49	81-072F	Unknown	Intersection related	Unknown	4	Injury	NO	NO	35	82	Chevrolet	S-10 Pickup	Compact pickup	35	Going Straight
50	81-103D	Dry	Intersection related	11	2	Injury	NO	NO	45	84	Mercury	Cougar	2-door sedan, hardtop coupe	Unknown	Going Straight
51	81-107F	Dry	Intersection related	Unknown	2	Injury	NO	NO	55	76	Pontiac	Grand Prix	2-door sedan hardtop, coupe	Unknown	Going Straight
52	81-131F	Wet	Intersection related	Unknown	2	Injury	NO	NO	50	88	Plymouth	Sundance	5-door/4-door hatchback	Unknown	Going Straight
53	81-135D	Dry	Intersection related	Unknown	3	Injury	NO	NO	35	87	Nissan	Pathfinder	Short utility-not truck based	25	Going Straight
54	81-177B	Dry	Four leg intersection	Unknown	5	Fatality	YES	NO	35	78	Chevrolet	Camero	2-door sedan, hardtop coupe	Unknown	Going Straight
55	82-019F	Wet	Three leg intersection	Unknown	6	Injury	NO	NO	30	72	Chevrolet	Impala	2-door sedan, hardtop, coupe	Unknown	Going Straight
56	82-060G	Unknown	Non-junction	Unknown	8	Injury	NO	NO	55	75	Ford	Granada	4-door sedan hardtop	Unknown	Going Straight
57	82-102G	Unknown	Non-junction	Unknown	6	Property Damage	NO	NO	55	88	Toyota	Cressida	4-door sedan hardtop	Unknown	Going Straight
58	82-121E	Unknown	Intersection related	Unknown	2	Injury	NO	NO	30	91	Isuzu	Pickup	Compact pickup	Unknown	Going Straight
59	82-162F	Unknown	Non-junction	Unknown	8	Injury	NO	NO	55	89	Plymouth	Colt	3-door/2-door hatchback	Unknown	Going Straight

Number	Case	Striking Vehicle Critical Precrash Event	Striking Vehicle Attempted Avoidance Maneuver	Striking Vehicle Precrash Stability	Striking Vehicle Precrash Directional Consequences	Striking Vehicle Accident Type	Striking Vehicle Curb Weight (lbs)	Striking Vehicle Cargo Weight (lbs)	Striking Vehicle Total Weight (lbs)	Striking Vehicle Heading Angle (deg)	Striking Driver Age (years)	Striking Driver Sex
1	41-014D	Other vehicle in lane stopped	Braking (lockup unknown)	Tracking	Vehicle stayed in travel lane	Stopped	2800	0	2800	3	43	Female
2	41-029C	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	3000	0	3000	270	58	Male
3	41-066D	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	4800	100	4900	359	29	Male
4	41-116E	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	2200	0	2200	270	27	Male
5	43-022D	Other vehicle in lane stopped	Braking (lockup)	Tracking	Vehicle stayed in travel lane	Stopped	4000	Unknown	4000	40	Unknown	Unknown
6	43-040D	Other vehicle in lane stopped	Braking and steering left	Skidding laterally	Vehicle stayed in travel lane	Stopped	3700	Unknown	3700	92	Unknown	Unknown
7	43-046G	Other vehicle in lane stopped	Braking and steering right	Tracking	Vehicle stayed on roadway but left travel lane	Stopped	3100	0	3100	240	22	Male
8	43-083E	Other vehicle in lane traveling in same direction with lower speed	Steering left	Tracking	Vehicle stayed on roadway but left travel lane	Slower	3200	0	3200	160	31	Male
9	43-094J	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	2700	0	2700	280	33	Female
10	43-097H	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	3600	100	3700	210	34	Male
11	45-060H	Other vehicle in lane stopped	Braking (lockup)	Tracking	Vehicle stayed in travel lane	Stopped	3200	0	3200	180	63	Male
12	45-179F	Other vehicle in lane stopped	Braking (lockup)	Tracking	Vehicle stayed in travel lane	Stopped	3900	Unknown	3900	0	31	Male
13	46-024D	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	2700	100	2800	312	32	Male
14	48-081E	Other vehicle in lane traveling in same direction with lower speed	Unknown	Precrash stability unknown	Directional consequences unknown	Decelerating	3600	0	3600	170	33	Male
15	48-105E	Other vehicle in lane stopped	Braking and steering right	Tracking	Vehicle stayed in travel lane	Stopped	2400	0	2400	330	19	Female
16	48-115E	Other vehicle in lane traveling in same direction with lower speed	Unknown	Precrash stability unknown	Directional consequences unknown	Slower	3000	0	3000	0	Unknown	Unknown
17	48-133C	Other vehicle in lane stopped	Braking (lockup)	Skidding longitudinally	Vehicle stayed in travel lane	Stopped	2500	0	2500	174	50	Female
18	48-141D	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup)	Tracking	Vehicle stayed in travel lane	Slower	4300	0	4300	3	18	Male
19	48-162G	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	3300	0	3300	270	28	Female
20	48-178C	Other vehicle in lane stopped	Braking and steering left	Tracking	Vehicle stayed on roadway but left travel lane	Stopped	2700	0	2700	350	50	Female
21	48-233C	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	3600	0	3600	295	72	Male
22	49-101D	Other vehicle in lane stopped	Braking (lockup)	Tracking	Vehicle stayed in travel lane	Stopped	2000	0	2000	185	19	Male
23	72-019C	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	2800	0	2800	0	45	Female
24	72-179D	Other vehicle in lane stopped	Steering right	Tracking	Vehicle stayed in travel lane	Stopped	1900	0	1900	315	22	Male
25	72-193C	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	2800	0	2800	90	53	Female
26	73-068D	Other vehicle in lane traveling in same direction with lower speed	Braking and steering right	Tracking	Vehicle stayed in travel lane	Decelerating	2100	100	2200	190	22	Female
27	73-083E	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	2700	Unknown	2700	0	85	Female
28	73-097D	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	3400	0	3400	0	31	Male
29	73-115E	Other vehicle in lane stopped	Braking (lockup)	Skidding longitudinally	Vehicle stayed in travel lane	Stopped	2200	0	2200	90	36	Male
30	73-501A	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	2200	0	2200	0	27	Male
31	74-161G	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup unknown)	Tracking	Vehicle stayed in travel lane	Decelerating	3300	0	3300	85	27	Male
32	75-067C	Other vehicle in lane stopped	Braking and steering right	Tracking	Vehicle stayed in travel lane	Stopped	3200	0	3200	15	40	Female
33	75-073E	Other vehicle in lane traveling in same direction with lower speed	Braking (no lockup)	Skidding laterally	Vehicle stayed on roadway but left travel lane	Decelerating	2800	0	2800	354	66	Female
34	75-089E	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup)	Skidding longitudinally	Vehicle stayed in travel lane	Stopped	2200	0	2200	184	17	Male
35	75-094G	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Decelerating	2100	0	2100	180	34	Male
36	75-104E	Other vehicle in lane stopped	Braking and steering right	Tracking	Vehicle stayed in travel lane	Stopped	3100	0	3100	0	45	Male
37	75-130G	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	2100	0	2100	93	31	Male
38	75-134G	Other vehicle in lane stopped	Braking (no lockup)	Tracking	Vehicle stayed in travel lane	Stopped	3300	0	3300	0	40	Male
39	75-160E	Other vehicle in lane stopped	Braking (no lockup)	Tracking	Vehicle stayed in travel lane	Stopped	2200	0	2200	0	32	Unknown
40	76-004B	Other vehicle in lane stopped	Braking and steering right	Tracking	Vehicle stayed in travel lane	Stopped	5200	Unknown	5200	243	21	Female
41	76-171F	Other vehicle in lane stopped	Braking (no lockup)	Tracking	Vehicle stayed in travel lane	Stopped	3600	200	3800	271	38	Male
42	78-003F	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	3200	0	3200	180	Unknown	Unknown
43	78-118A	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	3200	0	3200	95	31	Male
44	79-005E	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	2700	0	2700	270	17	Male
45	79-053D	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup)	No avoidance maneuver	No avoidance maneuver	Stopped	2000	0	2000	270	22	Male
46	81-012F	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	2600	0	2600	270	27	Female
47	81-019F	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	4600	200	4800	10	Unknown	Unknown
48	81-070D	Other vehicle in lane stopped	Braking (lockup)	Skidding longitudinally	Vehicle stayed in travel lane	Stopped	2800	0	2800	270	40	Female
49	81-072F	Other vehicle in lane traveling in same direction with lower speed	Steering left	Tracking	Vehicle stayed in travel lane	Slower	2500	0	2500	110	24	Female
50	81-103D	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	3100	0	3100	15	46	Female
51	81-107F	Other vehicle in lane stopped	Braking (lockup unknown)	Precrash stability unknown	Vehicle stayed in travel lane	Stopped	3900	0	3900	270	39	Male
52	81-131F	Other vehicle in lane stopped	Unknown	Precrash stability unknown	Directional consequences unknown	Stopped	2500	0	2500	135	30	Female
53	81-135D	Other vehicle in lane stopped	Steering right	Tracking	Vehicle stayed in travel lane	Stopped	5000	0	5000	90	16	Female
54	81-177B	Other vehicle in lane stopped	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Stopped	3500	0	3500	350	21	Male
55	82-019F	Other vehicle in lane traveling in same direction with lower speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Slower	4200	0	4200	50	Unknown	Unknown
56	82-060G	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup unknown)	Tracking	Vehicle stayed in travel lane	Decelerating	3500	0	3500	180	17	Male
57	82-102G	Other vehicle in lane traveling in same direction with lower speed	Accelerated by mistake	No avoidance maneuver	No avoidance maneuver	Decelerating	3300	0	3300	0	54	Female
58	82-121E	Other vehicle in lane stopped	Braking (no lockup)	Tracking	Vehicle stayed in travel lane	Stopped	3100	0	3100	342	36	Female
59	82-162F	Other vehicle in lane traveling in same direction with lower speed	Braking (lockup unknown)	Tracking	Vehicle stayed in travel lane	Slower	2200	0	2200	3	21	Male

Number	Case	Striking Vehicle Basis for Total Delta-V	Striking Vehicle Total Delta-V	Striking Vehicle Longitudinal Delta-V	Striking Vehicle Lateral Delta-V	Striking Vehicle Confidence in Reconstruction	Struck Vehicle Model Year	Struck Vehicle Make	Struck Vehicle Model	Struck Vehicle Body Type	Struck Vehicle Travel Speed
1	41-014D	CRASH program - damage only routine	20	-20	-3	Collision fits model-results appear reasonable	85	Dodge	Caravan	Minivan	0
2	41-029C	CRASH program - damage only routine	19	-19	0	Collision fits model-results appear reasonable	85	Toyota	Pickup	Compact pickup	20
3	41-066D	CRASH program - damage only routine	10	-10	0	Collision fits model-results appear reasonable	78	Chevrolet	G-series Van	Standard van	50
4	41-116E	CRASH program - damage only routine	18	-16	9	Borderline reconstruction-results appear reasonable	81	Pontiac	Lemans	2-door sedan hardtop coupe	40
5	43-022D	CRASH program - damage routine only	12	-12	0	Collision fits model - results appear reasonable	84	Nissan	Pulsar	2-door sedan hardtop coupe	0
6	43-040D	CRASH program - damage routine only	10	-10	-2	Collision fits model - results appear reasonable	76	Plymouth	Volare	2-door sedan hardtop coupe	0
7	43-046G	CRASH program - damage routine only	16	-16	0	Collision fits model - results appear reasonable	89	Dodge	Daytona	3-door/2-door hatchback	0
8	43-083E	CRASH program - damage only routine	14	-14	-3	Collision fits model-results appear reasonable	87	Honda	Prelude	2-door sedan hardtop, coupe	45
9	43-094J	CRASH program - damage routine only	39	-39	-3	Collision fits model - results appear reasonable	76	American Motors	Pacer	3-door/2-door hatchback	0
10	43-097H	CRASH program - damage only routine	14	-14	-3	Collision fits model-results appear reasonable	86	Chevrolet	Monte Carlo	2-door sedan hardtop coupe	0
11	45-060H	CRASH program - damage only routine	7	-6	-2	Collision fits model-results appear reasonable	84	Chrysler	LeBaron	Station wagon	0
12	45-179F	CRASH program - damage only routine	11	-11	0	Collision fits model-results appear reasonable	83	Ford	F-series Pickup	Standard pickup	0
13	46-024D	CRASH program - damage only routine	20	-20	0	Collision fits model-results appear reasonable	84	Mazda	Pickup	Compact pickup	0
14	46-081E	CRASH program - damage only routine	9	-9	0	Collision fits model-results appear high	79	Chevrolet	Chevette	5-door/4-door hatchback	25
15	46-105E	CRASH program - damage only routine	16	-16	0	Collision fits model-results appear reasonable	84	Pontiac	Fiero	2-door sedan, hardtop coupe	0
16	46-115E	CRASH program - damage only routine	10	-10	0	Collision fits model-results appear reasonable	88	Chevrolet	Beretta	2-door sedan hardtop coupe	15
17	46-133C	CRASH program - damage routine only	20	-19	-3	Collision fits model - results appear reasonable	87	Honda	Civic/CRX	3-door/2-door hatchback	0
18	46-141D	CRASH program - damage only routine	27	-27	0	Collision fits model-results appear reasonable	81	Chevrolet	Malibu	4-door sedan hardtop	25
19	46-162G	CRASH program - damage only routine	10	-10	0	Collision fits model-results appear reasonable	90	Chevrolet	Lumina	4-door sedan hardtop	0
20	46-178C	CRASH program - damage routine only	13	-13	0	Collision fits model - results appear reasonable	91	Mazda	Protege'	4-door sedan, hardtop	0
21	48-233C	CRASH program - damage only routine	18	-18	0	Collision fits model-results appear reasonable	84	Pontiac	Grand Prix	2-door sedan hardtop coupe	0
22	49-101D	CRASH program - damage routine only	32	-31	6	Collision fits model - results appear reasonable	82	Mercedes Benz	380 SEL	4-door sedan hardtop	0
23	72-019C	CRASH program - damage only routine	20	-20	0	Borderline reconstruction-results appear reasonable	88	Ford	E-series Van	Standard van	0
24	72-179D	CRASH program - damage routine only	36	-36	0	Borderline reconstruction - results appear reasonable	88	Mercury	Topaz	4-door sedan hardtop	0
25	72-193C	CRASH program - damage only routine	29	-29	0	Collision fits model-results appear reasonable	85	Pontiac	Grand Am	2-door sedan hardtop coupe	0
26	73-068D	CRASH program - damage routine only	27	-27	2	Collision fits model - results appear reasonable	78	Mercury	Cougar	2-door sedan hardtop coupe	5
27	73-083E	CRASH program - damage only routine	24	-24	0	Collision fits model-results appear reasonable	88	Chevrolet	Beretta	2-door sedan hardtop coupe	0
28	73-097D	CRASH program - damage only routine	25	-25	0	Collision fits model-results appear reasonable	83	Mercedes Benz	300	4-door sedan, hardtop	Unknown
29	73-115E	CRASH program - damage only routine	13	-13	-2	Collision fits model-results appear reasonable	88	Subaru	GL	3-door/2-door hatchback	0
30	73-501A	CRASH program - damage only routine	69	-69	0	Collision fits model-results appear high	88	Ford	E-series Van	Standard van	0
31	74-161G	CRASH program - damage routine only	14	-14	-2	Collision fits model - results appear reasonable	85	Chevrolet	Celebrity	4-door sedan hardtop	Unknown
32	75-067C	CRASH program - damage only routine	6	-6	-1	Collision fits model-results appear low	70	Ford	E-series Van	Standard van	0
33	75-073E	CRASH program - damage only routine	9	-9	2	Collision fits model-results appear reasonable	78	Pontiac	Lemans	4-door sedan hardtop	15
34	75-089E	CRASH program - damage only routine	15	-15	-1	Collision fits model-results appear reasonable	83	Buick	Century	4-door sedan hardtop	35
35	75-094G	CRASH program - damage only routine	12	-12	2	Collision fits model-results appear reasonable	70	Cadillac	Deville	4-door sedan hardtop	Unknown
36	75-104E	CRASH program - damage only routine	15	-15	3	Collision fits model-results appear reasonable	81	Ford	LTD	4-door sedan hardtop	0
37	75-130G	CRASH program - damage only routine	16	-16	3	Collision fits model-results appear reasonable	76	Ford	Courier	Compact pickup	0
38	75-134G	CRASH program - damage only routine	22	-22	0	Collision fits model-results appear reasonable	85	Toyota	Pickup	Compact pickup	0
39	75-160E	CRASH program - damage only routine	10	-10	-2	Collision fits model-results appear reasonable	84	Volkswagen	Jetta	4-door sedan hardtop	0
40	76-004B	CRASH program - damage routine only	16	-16	-3	Collision fits model - results appear high	85	Plymouth	Horizon	5-door/4-door hatchback	0
41	76-171F	CRASH program - damage only routine	14	-14	0	Collision fits model-results appear reasonable	81	Oldsmobile	Cutlass	2-door sedan hardtop, coupe	0
42	78-003F	CRASH program - damage routine only	11	-11	2	Collision fits model - results appear reasonable	79	Dodge	Omni	3-door/2-door hatchback	0
43	78-118A	CRASH program - damage only routine	34	-34	3	Borderline reconstruction-results appear reasonable	91	Chevrolet	GEO Prism	4-door sedan hardtop	0
44	79-005E	CRASH program - damage only routine	19	-19	0	Collision fits model-results appear reasonable	78	Chevrolet	Nova	2-door sedan hardtop coupe	Unknown
45	79-053D	CRASH program - damage only routine	22	-22	0	Collision fits model-results appear reasonable	83	Lincoln	Lincoln Continental	4-door sedan hardtop	55
46	81-012F	CRASH program - damage only routine	9	-9	0	Collision fits model-results appear reasonable	86	Ford	E-series Van	Standard van	0
47	81-019F	CRASH program - damage only routine	8	-8	0	Collision fits model-results appear reasonable	84	Chevrolet	Celebrity	Station wagon	0
48	81-070D	CRASH program - damage only routine	13	-13	0	Collision fits model-results appear reasonable	89	Pontiac	Grand Am	4-door sedan hardtop	0
49	81-072F	CRASH program - damage only routine	19	-18	-3	Collision fits model-results appear reasonable	82	Oldsmobile	Ninety Eight	4-door sedan hardtop	5
50	81-103D	CRASH program - damage only routine	9	-9	2	Collision fits model-results appear reasonable	90	Honda	Accord	5-door/4-door hatchback	0
51	81-107F	CRASH program - damage routine only	15	-15	0	Collision fits model - results appear reasonable	80	Subaru	FE	4-door sedan hardtop	0
52	81-131F	CRASH program - damage only routine	13	-13	0	Collision fits model-results appear reasonable	79	Chevrolet	Chevette	5-door/4-door hatchback	0
53	81-135D	CRASH program - damage only routine	6	-6	0	Borderline reconstruction-results appear reasonable	65	Dodge	Dart	2-door sedan hardtop coupe	0
54	81-177B	CRASH program - damage only routine	33	-33	0	Collision fits model-results appear reasonable	79	Volkswagen	Rabbit	5-door/4-door hatchback	0
55	82-019F	CRASH program - damage only routine	7	-7	0	Collision fits model-results appear reasonable	86	Honda	Prelude	2-door sedan hardtop coupe	Unknown
56	82-060G	CRASH program - damage only routine	11	-11	0	Collision fits model-results appear reasonable	89	Mercury	Sable	4-door sedan hardtop	Unknown
57	82-102G	CRASH program - damage only routine	9	-9	0	Collision fits model-results appear reasonable	87	Toyota	Pickup	Compact pickup	Unknown
58	82-121E	CRASH program - damage only routine	16	-16	0	Collision fits model-results appear reasonable	90	Ford	Taurus	Station wagon	0
59	82-162F	CRASH program - damage only routine	15	-15	0	Collision fits model-results appear reasonable	84	Buick	Century	4-door sedan hardtop	Unknown

Number	Case	Struck Vehicle Pre-Event Movement	Struck Vehicle Critical Precrash Event	Struck Vehicle Attempted Avoidance Maneuver	Struck Vehicle Precrash Stability	Struck Vehicle Precrash Directional Consequences	Struck Vehicle Accident Type
1	41-014D	Stopped in traffic lane	Stalled engine	No driver present	No driver present	No driver present	Lead Vehicle Stopped
2	41-029C	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
3	41-066D	Going straight	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
4	41-116E	Going straight	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
5	43-022D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
6	43-040D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
7	43-046G	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
8	43-083E	Going straight	Other vehicle in lane traveling in same direction with higher speed	Accelerating and steering right	Tracking	Vehicle stayed in travel lane	Lead Vehicle Slower
9	43-094J	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
10	43-097H	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
11	45-060H	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
12	45-179F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
13	48-024D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
14	48-081E	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating
15	48-105E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
16	48-115E	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
17	48-133C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
18	48-141D	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
19	48-162G	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
20	48-178C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
21	48-233C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped, turning left
22	49-101D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
23	72-019C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
24	72-179D	No driver present	Other vehicle in lane traveling in same direction with higher speed	No driver present	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
25	72-193C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
26	73-068D	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating turning left
27	73-083E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
28	73-097D	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
29	73-115E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped, turning left
30	73-501A	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
31	74-161G	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating
32	75-067C	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
33	75-073E	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating turning right
34	75-089E	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
35	75-094G	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating turning left
36	75-104E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
37	75-130G	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
38	75-134G	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
39	75-160E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
40	76-004B	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
41	76-171F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
42	78-003F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped turning left
43	78-118A	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
44	79-005E	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating turning right
45	79-053D	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	Braking (no lockup)	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
46	81-012F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
47	81-019F	Stopped in traffic lane	Other vehicle encroaching into lane from adjacent lane over left lane line	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
48	81-070D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
49	81-072F	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating turning right
50	81-103D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
51	81-107F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	Steering left	Tracking	Vehicle stayed in travel lane	Lead Vehicle Stopped
52	81-131F	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
53	81-135D	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
54	81-177B	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	Unknown	Precrash stability unknown	Directional consequences unknown	Lead Vehicle Stopped
55	82-019F	Going straight	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower
56	82-060G	Slowing or stopping in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating
57	82-102G	Going straight	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Decelerating
58	82-121E	Stopped in traffic lane	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Stopped
59	82-162F	Going straight	Other vehicle in lane traveling in same direction with higher speed	No avoidance actions	No avoidance maneuver	No avoidance maneuver	Lead Vehicle Slower

Number	Case	Struck Vehicle Curb Weight (lbs)	Struck Vehicle Cargo Weight (lbs)	Struck Vehicle Total Weight (lbs)	Struck Vehicle Heading Angle (deg)	Struck Driver Age (years)	Struck Driver Sex	Struck Vehicle Basis for Total Delta-V	Struck Vehicle Total Delta-V	Struck Vehicle Longitudinal Delta-V	Struck Vehicle Lateral Delta-V	Struck Vehicle Confidence in Reconstruction	Striking Vehicle Impact Speed	Struck Vehicle Impact Speed	Striking Vehicle Travel Speed	Struck Vehicle Travel Speed
1	41-014D	2900	0	2900	0	43	Female	CRASH program - damage routine only	19	19	0	Collision fits model - results appear reasonable	39	0	39	0
2	41-029C	2700	0	2700	270	40	Male	CRASH program - damage routine only	23	23	0	Collision fits model - results appear reasonable	62	20	62	20
3	41-066D	4500	0	4500	359	75	Male	CRASH program - damage routine only	10	10	0	Collision fits model - results appear reasonable	70	50	70	50
4	41-116E	3100	0	3100	270	52	Female	CRASH program - damage routine only	13	13	0	Borderline reconstruction - results appear reasonable	71	40	71	40
5	43-022D	2000	0	2000	40	20	Male	CRASH program - damage only routine	24	24	0	Collision fits model-results appear reasonable	36	0	36	0
6	43-040D	3300	0	3300	103	70	Female	CRASH program - damage only routine	12	12	0	Collision fits model-results appear reasonable	22	0	22	0
7	43-046G	2800	0	2800	222	32	Male	CRASH program - damage only routine	18	18	0	Collision fits model-results appear reasonable	34	0	34	0
8	43-083E	2400	0	2400	220	24	Male	CRASH program - damage routine only	18	18	3	Collision fits model - results appear reasonable	77	45	77	45
9	43-094J	3200	0	3200	280	45	Female	CRASH program - damage only routine	32	32	3	Collision fits model-results appear reasonable	71	0	71	0
10	43-097H	3200	100	3300	195	29	Male	CRASH program - damage routine only	16	15	4	Collision fits model - results appear reasonable	30	0	30	0
11	45-060H	2700	0	2700	160	Unknown	Unknown	CRASH program - damage routine only	8	7	4	Collision fits model - results appear reasonable	15	0	15	0
12	45-179F	3400	0	3400	0	38	Male	CRASH program - damage routine only	13	13	0	Collision fits model - results appear reasonable	24	0	24	0
13	48-024D	2500	100	2600	312	38	Male	CRASH program - damage routine only	23	23	0	Collision fits model - results appear reasonable	43	0	43	0
14	48-081E	2100	0	2100	170	34	Male	CRASH program - damage routine only	15	15	3	Collision fits model - results appear high	49	25	49	25
15	48-105E	2500	0	2500	322	23	Female	CRASH program - damage routine only	16	16	3	Collision fits model - results appear reasonable	32	0	32	0
16	48-115E	3000	0	3000	0	45	Female	CRASH program - damage routine only	10	10	0	Collision fits model - results appear reasonable	35	15	35	15
17	48-133C	1900	0	1900	180	67	Male	CRASH program - damage only routine	24	24	-4	Collision fits model-results appear reasonable	44	0	44	0
18	48-141D	3300	0	3300	0	33	Female	CRASH program - damage routine only	35	35	0	Collision fits model - results appear reasonable	87	25	87	25
19	48-162G	3200	100	3300	270	35	Male	CRASH program - damage routine only	10	10	0	Collision fits model - results appear reasonable	20	0	20	0
20	48-178C	2400	0	2400	0	28	Male	CRASH program - damage only routine	14	14	-3	Collision fits model-results appear reasonable	27	0	27	0
21	48-233C	3200	0	3200	295	41	Female	CRASH program - damage routine only	21	21	0	Collision fits model - results appear reasonable	39	0	39	0
22	49-101D	3800	100	3900	185	37	Male	CRASH program - damage only routine	16	16	-3	Collision fits model-results appear reasonable	48	0	48	0
23	72-019C	4300	0	4300	0	36	Male	CRASH program - damage routine only	13	13	0	Borderline reconstruction - results appear reasonable	33	0	33	0
24	72-179D	2600	0	2600	310	Unknown	Unknown	CRASH program - damage only routine	30	30	0	Borderline reconstruction-results appear reasonable	66	0	66	0
25	72-193C	2500	0	2500	90	40	Male	CRASH program - damage routine only	32	32	0	Collision fits model - results appear reasonable	61	0	61	0
26	73-069D	4100	0	4100	180	29	Female	CRASH program - damage only routine	14	14	1	Collision fits model-results appear reasonable	46	5	46	5
27	73-083E	3000	0	3000	0	52	Female	CRASH program - damage routine only	22	22	0	Collision fits model - results appear reasonable	46	0	46	0
28	73-097D	3600	0	3600	0	54	Male	CRASH program - damage routine only	20	20	0	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
29	73-115E	2100	0	2100	90	39	Male	CRASH program - damage routine only	13	13	2	Collision fits model - results appear reasonable	26	0	26	0
30	73-501A	4600	Unknown	4600	0	44	Female	CRASH program - damage routine only	32	32	0	Collision fits model - results appear high	101	0	101	0
31	74-161G	2800	0	2800	90	63	Male	CRASH program - damage only routine	12	12	-2	Collision fits model-results appear reasonable	Unknown	Unknown	Unknown	Unknown
32	75-067C	3500	100	3600	0	29	Male	CRASH program - damage routine only	5	5	1	Collision fits model - results appear reasonable	11	0	11	0
33	75-073E	3100	0	3100	14	21	Female	CRASH program - damage routine only	8	8	-1	Collision fits model - results appear reasonable	32	15	32	15
34	75-089E	2800	100	2900	180	50	Male	CRASH program - damage routine only	11	11	1	Collision fits model - results appear reasonable	26	0	26	0
35	75-094G	4800	0	4800	166	Unknown	Unknown	CRASH program - damage routine only	6	5	2	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
36	75-104E	3600	0	3600	0	62	Female	CRASH program - damage routine only	15	15	-3	Collision fits model - results appear reasonable	30	0	30	0
37	75-130G	2500	200	2700	90	Unknown	Unknown	CRASH program - damage routine only	13	13	2	Collision fits model - results appear reasonable	29	0	29	0
38	75-134G	2500	0	2500	0	Unknown	Unknown	CRASH program - damage routine only	28	28	-5	Collision fits model - results appear reasonable	50	0	50	0
39	75-160E	2000	0	2000	0	Unknown	Female	CRASH program - damage routine only	11	11	0	Collision fits model - results appear reasonable	21	0	21	0
40	76-004B	2200	Unknown	2200	249	62	Male	CRASH program - damage only routine	33	32	6	Collision fits model-results appear high	49	0	49	0
41	76-171F	3300	Unknown	3300	269	22	Female	CRASH program - damage routine only	15	15	1	Collision fits model - results appear reasonable	29	0	29	0
42	78-003F	2200	0	2200	180	35	Female	CRASH program - damage only routine	15	15	-3	Collision fits model-results appear reasonable	26	0	26	0
43	78-118A	2400	Unknown	2400	90	32	Male	CRASH program - damage routine only	46	45	4	Borderline reconstruction - results appear reasonable	80	0	80	0
44	79-005E	3400	0	3400	290	64	Male	CRASH program - damage routine only	15	15	-3	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
45	79-053D	4000	0	4000	270	73	Male	CRASH program - damage routine only	12	12	0	Collision fits model - results appear reasonable	34	0	34	0
46	81-012F	4400	0	4400	270	44	Female	CRASH program - damage routine only	5	5	0	Collision fits model - results appear reasonable	14	0	14	0
47	81-019F	2800	0	2800	0	37	Female	CRASH program - damage routine only	13	13	2	Collision fits model - results appear reasonable	21	0	21	0
48	81-070D	2600	0	2600	270	25	Male	CRASH program - damage routine only	13	13	0	Collision fits model - results appear reasonable	26	0	26	0
49	81-072F	3800	0	3800	120	64	Female	CRASH program - damage routine only	11	11	-2	Collision fits model - results appear reasonable	35	5	35	5
50	81-103D	2700	0	2700	10	20	Male	CRASH program - damage routine only	9	9	0	Collision fits model - results appear reasonable	18	0	18	0
51	81-107F	2100	0	2100	270	18	Male	CRASH program - damage only routine	24	24	0	Collision fits model-results appear reasonable	39	0	39	0
52	81-131F	2100	0	2100	135	40	Male	CRASH program - damage routine only	14	14	0	Collision fits model - results appear reasonable	27	0	27	0
53	81-135D	2800	0	2800	90	39	Female	CRASH program - damage routine only	9	9	0	Borderline reconstruction - results appear reasonable	15	0	15	0
54	81-177B	1800	0	1800	350	19	Male	CRASH program - damage routine only	54	54	0	Collision fits model - results appear reasonable	87	0	87	0
55	82-019F	2400	0	2400	50	25	Male	CRASH program - damage routine only	13	13	0	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
56	82-060G	3100	0	3100	180	36	Female	CRASH program - damage routine only	12	12	0	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
57	82-102G	3700	0	3700	0	Unknown	Unknown	CRASH program - damage routine only	8	8	0	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown
58	82-121E	3200	0	3200	0	36	Male	CRASH program - damage routine only	15	14	-5	Collision fits model - results appear reasonable	31	0	31	0
59	82-162F	2800	0	2800	0	19	Female	CRASH program - damage routine only	11	11	0	Collision fits model - results appear reasonable	Unknown	Unknown	Unknown	Unknown

Number	Case	Striking Vehicle Post-Impact Speed	Struck Vehicle Post-Impact Speed
1	41-014D	19	19
2	41-029C	43	43
3	41-066D	60	60
4	41-116E	53	53
5	43-022D	24	24
6	43-040D	12	12
7	43-046G	18	18
8	43-083E	63	63
9	43-094J	32	32
10	43-097H	16	16
11	45-060H	8	8
12	45-179F	13	13
13	48-024D	23	23
14	48-081E	40	40
15	48-105E	16	16
16	48-115E	25	25
17	48-133C	24	24
18	48-141D	60	60
19	48-162G	10	10
20	48-178C	14	14
21	48-233C	21	21
22	49-101D	16	16
23	72-019C	13	13
24	72-179D	30	30
25	72-193C	32	32
26	73-068D	19	19
27	73-083E	22	22
28	73-097D	Unknown	Unknown
29	73-115E	13	13
30	73-501A	32	32
31	74-161G	Unknown	Unknown
32	75-067C	5	5
33	75-073E	23	23
34	75-089E	11	11
35	75-094G	Unknown	Unknown
36	75-104E	15	15
37	75-130G	13	13
38	75-134G	28	28
39	75-160E	11	11
40	76-004B	33	33
41	76-171F	15	15
42	78-003F	15	15
43	78-118A	46	46
44	79-005E	Unknown	Unknown
45	79-053D	12	12
46	81-012F	5	5
47	81-019F	13	13
48	81-070D	13	13
49	81-072F	16	16
50	81-103D	9	9
51	81-107F	24	24
52	81-131F	14	14
53	81-135D	9	9
54	81-177B	54	54
55	82-019F	Unknown	Unknown
56	82-060G	Unknown	Unknown
57	82-102G	Unknown	Unknown
58	82-121E	15	15
59	82-162F	Unknown	Unknown

APPENDIX B
1991 NASS CDS SUMMARY SHEETS

1991 NASS CDS Summary

Case Number:	41-014D
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	14
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Stalled engine	
GV14	Attempted Avoidance Maneuver:	Braking (lockup unknown)	No driver present	
GV66	Precrash Stability:	Tracking	No driver present	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No driver present	
	Vehicle Year:	65	65 .	
	Vehicle Make:	Chrysler	Dodge	
	Vehicle Model:	New Yorker	Caravan	
	Vehicle Curb Weight:	2600	2900	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2600	2900	Lbs.
	Vehicle Estimated Travel Velocity:	45	0	MPH
	Total Delta-V:	20	19	MPH
	Longitudinal Delta-V:	-20	19	MPH
	Lateral Delta-V	-3	0	MPH
	Impact Speed:	39	0	MPH
	Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	41-029C
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	90	65	
	Vehicle Make:	Mitsubishi	Toyota	
	Vehicle Model:	Pickup	Pickup	
	Vehicle Curb Weight:	3000	2700	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3000	2700	Lbs.
	Vehicle Estimaled Travel Velocity:	45	20	MPH
	Total Delta-V:	19	23	MPH
	Longitudinal Della-V:	-19	23	MPH
	Lateral Della-V	0	0	MPH
	Impact Speed:	62	20	MPH
	Accident Causal Factor:	Inattention		

Case Number:	41-066D
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	10
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Going straight	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	66	76	
	Vehicle Make:	Toyota	Chevrolet	
	Vehicle Model:	Pickup	G-series Van	
	Vehicle Curb Weight:	4600	4500	Lbs.
	Vehicle Cargo Weight:	100	0	Lbs.
	Vehicle Total Weight:	4900	4500	Lbs.
	Vehicle Estimated Travel Velocity:	70	50	MPH
	Total Delta-V:	10	10	MPH
	Longiludinal Delta-V:	-10	10	MPH
	Lateral Della-V	0	0	MPH
	Impact Speed:	70	50	MPH
	Accident Causal Factor:	Alcohol/Drug involvement		

Case Number:	41-116E
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Going straight	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	67	61	
	Vehicle Make:	Nissan	Pontiac	
	Vehicle Model:	Sentra	Lemans	
	Vehicle Curb Weight:	2200	3100	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2200	3100	Lbs.
	Vehicle Estimated Travel Velocity:	50	40	MPH
	Total Delta-V:	16	13	MPH
	Longitudinal Delta-V:	-16	13	MPH
	Lateral Delta-V	9	0	MPH
	Impact Speed:	71	40	MPH
	Accident Causal Factor:	Inattention		

Case Number:	43-022D
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	62	64	
	Vehicle Make:	Ford	Nissan	
	Vehicle Model:	F-series Pickup	Pulsar	
	Vehicle Curb Weight:	4000	2000	Lbs.
	Vehicle Cargo Weight:	Unknown	0	Lbs.
	Vehicle Total Weight:	4000	2000	Lbs.
	Vehicle Estimated Travel Velocity:	50	0	MPH
	Total Delta-V:	12	24	MPH
	Longitudinal Delta-V:	-12	24	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	36	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	43-040D
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking and steering left	No avoidance actions	
GV66	Precrash Stability:	Skidding laterally	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	63	76	
	Vehicle Make:	Buick	Plymouth	
	Vehicle Model:	LeSabre	Volare	
	Vehicle Curb Weight:	3700	3300	Lbs.
	Vehicle Cargo Weight:	Unknown	0	Lbs.
	Vehicle Total Weight:	3700	3300	Lbs.
	Vehicle Estimated Travel Velocity:	33	0	MPH
	Total Delta-V:	10	12	MPH
	Longitudinal Delta-V:	-10	12	MPH
	Lateral Delta-V	-2	0	MPH
	Impact Speed:	22	0	MPH
	Accident Causal Factor:	Inattention		

1991 NASS CDS Summary

Case Number:	43-046G
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed on roadway but lefl travel lane	No avoidance maneuver	
Vehicle Year:	69	89	
Vehicle Make:	Chevrolet	Dodge	
Vehicle Model:	Camero	Daytona	
Vehicle Curb Weight:	3100	2800	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	3100	2800	Lbs.
Vehicle Estimated Travel Velocity:	45	30	MPH
Total Delta-V:	16	18	MPH
Longitudinal Delta-V:	-16	18	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	34	0	MPH
Accident Causal Factor:	Inattention		

Case Number:	43-083E
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Goina straiaht	
GV65 Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Steering left	Accelerating and steering right	
GV66 Precrash Stability:	Tracking	Tracking	
GV67 Precrash Directional Consequences:	Vehicle stayed on roadway but lefl travel lane	Vehicle stayed in travel lane	
Vehicle Year:	66	87	
Vehicle Make:	Chevrolet	Honda	
Vehicle Model:	Malibu	Prelude	
Vehicle Curb Weight:	3200	2400	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	3200	2400	Lbs.
Vehicle Estimated Travel Velocity:	55	45	MPH
Total Delta-V:	14	18	MPH
Longitudinal Delta-V:	-14	18	MPH
Lateral Delta-V	-3	3	MPH
Impact Speed:	77	45	MPH
Accident Causal Factor:	Inattention/following too close		

Case Number:	43-094J
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Driveway, alley access related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	87	76	
	Vehicle Make:	Chevrolet	American Motors	
	Vehicle Model:	S-10 Pickup	Pacer	
	Vehicle Curb Weight:	2700	3200	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2700	3200	Lbs.
	Vehicle Estimated Travel Velocity:	55	0	MPH
	Total Delta-V:	39	32	MPH
	Longitudinal Delta-V:	-39	32	MPH
	Lateral Delta-V	-3	3	MPH
	Impact Speed:	71	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	43-097H
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	5
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	77	86	
	Vehicle Make:	Chevrolet	Chevrolet	
	Vehicle Model:	K-series Pickup	Monte Carlo	
	Vehicle Curb Weight:	3600	3200	Lbs.
	Vehicle Cargo Weight:	100	100	Lbs.
	Vehicle Total Weight:	3700	3300	Lbs.
	Vehicle Estimated Travel Velocity:	25	0	MPH
	Total Delta-V:	14	16	MPH
	Longitudinal Delta-V:	-14	15	MPH
	Lateral Delta-V	-3	4	MPH
	Impact Speed:	30	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	45-060H
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Channel
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
Vehicle Year:	82	84	
Vehicle Make:	Buick	Chrysler	
Vehicle Model:	Regal	LeBaron	
Vehicle Curb Weight:	3200	2700	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	3200	2700	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	7	8	MPH
Longitudinal Delta-V:	-6	7	MPH
Lateral Delta-V	-2	4	MPH
impact Speed:	15	0	MPH
Accident Causal Factor:	Inattention/following too close		

Case Number:	45-179F
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	12
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	89	83	
	Vehicle Make:	Chevrolet	Ford	
	Vehicle Model:	Van Derivative	F-series Pickup	
	Vehicle Curb Weight:	3900	3400	Lbs.
	Vehicle Cargo Weight:	Unknown	0	Lbs.
	Vehicle Total Weight:	3900	3400	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	11	13	MPH
	Longitudinal Delta-V:	-11	13	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	24	0	MPH
	Accident Causal Factor:	Inattention/following too close		

Case Number:	48-024D
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	5
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Curve
Vertical Alignment:	Unknown
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	88	64	
	Vehicle Make:	Ford	Mazda	
	Vehicle Model:	Ranger	Pickup	
	Vehicle Curb Weight:	2700	2500	Lbs.
	Vehicle Cargo Weight:	100	100	Lbs.
	Vehicle Total Weight:	2800	2600	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	20	23	MPH
	Longitudinal Delta-V:	-20	23	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	43	0	MPH
	Accident Causal Factor:	Alcohol/Drug Involvement		

, Case Number:	48-081E
Dynamic Situation:	Lead vehicle decelerating, following vehicle decelerating
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Railroad grade crossing
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV84	Pre-Event Movement:	Slowing or stopping in traffic lane	Slowing or stopping in traffic lane	
GV85	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV68	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	90	79	
	Vehicle Make:	Ford	Chevrolet	
	Vehicle Model:	Thunderbird	Chevette	
	Vehicle Curb Weight:	3600	2100	Lbs.
	Vehicle Cargo Weight:	0 .	0	Lbs.
	Vehicle Total Weight:	3600	2100	Lbs.
	Vehicle Estimated Travel Velocity:	30	25	MPH
	Total Delta-V	9	15	MPH
	Longitudinal Delta-V:	-9	15	MPH
	Lateral Delta-V	0	3	MPH
	Impact Speed:	49	25	MPH
	Accident Causal Factor:	Inattention/following too close		

1991 NASS CDS Summary

Case Number:	48-105E
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	90	84	
	Vehicle Make:	Isuzu	Pontiac	
	Vehicle Model:	Impulse	Fiero	
	Vehicle Curb Weight:	2400	2500	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs,
	Vehicle Total Weight:	2400	2500	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	16	16	MPH
	Longitudinal Delta-V:	-16	15	MPH
	Lateral Delta-V	0	3	MPH
	Impact Speed:	32	0	MPH
	Accident Causal Factor:	Inattention		

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Case Number:	48-115E
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	3
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	90	88	
	Vehicle Make:	Chevrolet	Chevrolet	
	Vehicle Model:	Blazer	Beretta	
	Vehicle Curb Weight:	3000	3000	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3000	3000	Lbs.
	Vehicle Estimated Travel Velocity:	40	15	MPH
	Total Delta-V:	10	10	MPH
	Longitudinal Delta-V:	-10	10	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	35	15	MPH
	Accident Causal Factor:	Inattention		

1991 NASS CDS Summary

Case Number:	48-133C
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junclian:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Skidding longitudinally	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	87	87	
	Vehicle Make:	Oldsmobile	Honda	
	Vehicle Model:	Calais	Civic/CRX	
	Vehicle Curb Weight:	2500	1900	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2500	1900	Lbs.
	Vehicle Estimated Travel Velocity:	45	0	MPH
	Total Delta-V:	20	24	MPH
	Longitudinal Delta-V:	-19	24	MPH
	Lateral Delta-V	-3	-4	MPH
	impact Speed:	44	0	MPH
	Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	48-141D
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	77	81	
	Vehicle Make:	Cadillac	Chevrolet	
	Vehicle Model:	Devilie	Malibu	
	Vehicle Curb Weight:	4300	3300	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	4300	3300	Lbs.
	Vehicle Estimated Travel Velocity:	50	25	MPH
	Total Delta-V:	27	35	MPH
	Longitudinal Delta-V:	-27	35	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	87	25	MPH
	Accident Causal Factor:	Alcohol/Drug Involvement		

1991 NASS CDS Summary

Case Number:	48-162G
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	3
Relation to Junction:	Intersection related
Horitontei Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66 Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
Vehicle Year:	90	90	
Vehicle Make:	Oldsmobile	Chevrolet	
Vehicle Model:	Regency	Lumina	
Vehicle Curb Weight:	3300	3200	Lbs.
Vehicle Cargo Weight:	0	100	Lbs.
Vehicle Total Weight:	3300	3300	Lbs.
Vehicle Estimated Travel Velocity:	25	0	MPH
Total Delta-V:	10	10	MPH
Longitudinal Della-V:	-10	10	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	20	0	MPH
Accident Causal Factor:	inattention		

Date 1/26/93

Case Number:	48-178C
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Wet

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking and steering lefl	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed on roadway but left travel lane	No avoidance maneuver	
Vehicle Year:	91	91	
Vehicle Make:	Buick	Mazda	
Vehicle Model:	Skylark	Protege	
Vehicle Curb Weight:	2700	2400	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2700	2400	Lbs.
Vehicle Estimated Travel Velocity:	40	0	MPH
Total Delta-V:	13	14	MPH
Longitudinal Delta-V:	-13	14	MPH
Lateral Delta-V	0	-3	MPH
Impact Speed:	27	0	MPH
Accident Causal Factor:	**Inattention**		

Case Number:	48-233C
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	89	84	
	Vehicle Make:	Dodge	Pontiac	
	Vehicle Model:	RAM 150	Grand Prix	
	Vehicle Curb Weight:	3600	3200	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3600	3200	Lbs.
	Vehicle Estimated Travel Velocity:	30	0	MPH
	Total Delta-V:	18	21	MPH
	Longitudinal Delta-V:	-18	21	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	39	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	49-101D
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Non-junction
Horizontal Alignment:	Curve
Vertical Alignment:	Level
Surface Type:	Concrete
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	77	82	
	Vehicle Make:	Toyota	Mercedes Benz	
	Vehicle Model:	Corolla	380 SEL	
	Vehicle Curb Weight:	2000	3800	Lbs.
	Vehicle Cargo Weight:	0	100	Lbs.
	Vehicle Total Weight:	2000	3900	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	32	16	MPH
	Longitudinal Delta-V:	-31	16	MPH
	Lateral Delta-V	6	-3	MPH
	Impact Speed:	48	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	72-019C
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	12
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	0ther vehicie in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV87 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	88	88	
Vehicle Make:	Chevrolet	Ford	
Vehicle Model:	Celebrity	E-series Van	
Vehicle Curb Weight:	2800	4300	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2800	4300	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	20	13	MPH
Longitudinal Delta-V:	-20	13	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	33	0	MPH
Accident Causal Factor:	Inattention		

Case Number:	72-179D
Dynamic Situation:	Lead vehicle slopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	10
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	No driver present	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Steering right	No driver present	
GV66	Prscrash Stability:	Tracking	No avoidance maneuver	
GV87	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	85	88	
	Vehicle Make:	Honda	Mercury	
	Vehicle Model:	Civic/CRX	Topaz	
	Vehicle Curb Weight:	1900	2600	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	1900	2609	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	36	30	MPH
	Longitudinal Delta-V:	-36	30	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	66	0	MPH
	Accident Causal Factor:	inattention		

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Case Number:	72-193c
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	8
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	88	65	
Vehicle Make:	Chevrolet	Pontiac	
Vehicle Model:	Celebrity	Grand Am	
Vehicle Curb Weight:	2600	2500	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2600	2500	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	29	32	MPH
Longitudinal Delta-V:	-29	32	MPH
Lateral Della-V	0	0	MPH
Impact Speed:	61	0	MPH
Accident Causal Factor:	Encroachment of another vehicle		

Date 1/26/93

Case Number:	73-068D
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Three leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	66	76	
	Vehicle Make:	Toyota	Mercury	
	Vehicle Model:	Corolla	Cougar	
	Vehicle Curb Weight:	2100	4100	Lbs.
	Vehicle Cargo Weight:	100	0	Lbs.
	Vehicle Total Weight:	2200	4100	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	27	14	MPH
	Longitudinal Delta-V:	-27	14	MPH
	Lateral Delta-V	2	1	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention		

Case Number:	73-083E
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Three leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66 Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
Vehicle Year:	64	66	
Vehicle Make:	Oldsmobile	Chevrolet	
Vehicle Model:	Ciera	Beretta	
Vehicle Curb Weight:	2700	3000	Lbs.
Vehicle Cargo Weight:	Unknown	0	Lbs.
Vehicle Total Weight:	2700	3000	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	24	22	MPH
Longitudinal Delta-V:	-24	22	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	46	0	MPH
Accident Causal Factor:	Inattention		

Case Number:	73-097D
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	67	63	
	Vehicle Make:	Chevrolet	Mercedes Benz	
	Vehicle Model:	Camero	300	
	Vehicle Curb Weight:	3400	3600	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3400	3600	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	25	20	MPH
	Longitudinal Delta-V:	-25	20	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	**Inattention**		

1991 NASS CDS Summary

Case Number:	73-115E
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Three leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Wet

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66 Precrash Stability:	Skidding longitudinally	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
Vehicle Year:	90	66	
Vehicle Make:	Volkswagen	Subaru	
Vehicle Model:	Golf	GL	
Vehicle Curb Weight:	2266	2100	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2296	2100	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	13	13	MPH
Longitudinal Delta-V:	-13	13	MPH
Lateral Delta-V	-2	2	MPH
Impact Speed:	26	0	MPH
Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	73-501A
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	88	68	
Vehicle Make:	Ford	Ford	
Vehicle Model:	Escort	E-series Van	
Vehicle Curb Weight:	2200	4600	Lbs.
Vehicle Cargo Weight:	0	Unknown	Lbs.
Vehicle Total Weight:	2200	4600	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	69	32	MPH
Longitudinal Delta-V:	-69	32	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	101	0	MPH
Accident Causal Factor:	Alcohol/Drug Involvement		

1991 NASS CDS Summary

Case Number:	74-161G
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup unknown)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	91	85	
	Vehicle Make:	Ford	Chevrolet	
	Vehicle Model:	Aerostar	Celebrity	
	Vehicle Curb Weight:	3300	2800	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3300	2800	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	14	12	MPH
	Longitudinal Delta-V:	-14	12	MPH
	Lateral Delta-V	-2	-2	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	75-067C
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Goina Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	91	70	
	Vehicle Make:	Chevrolet	Ford	
	Vehicle Model:	Lumina APV	E-series Van	
	Vehicle Curb Weight:	3200	3500	Lbs.
	Vehicle Cargo Weight:	0	100	Lbs.
	Vehicle Total Weight:	3200	3600	Lbs.
	Vehicle Estimated Travel Velocity:	30	0	MPH
	Total Delta-V:	6	5	MPH
	Longitudinal Delta-V:	-6	5	MPH
	Lateral Della-V	-1	1	MPH
	Impact Speed:	11	0	MPH
	Accident Causal Factor:	Inattention		

1991 NASS CDS Summary

Case Number:	75-089E
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	**4**
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	**Other vehicle in lane traveling in same direction with** lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Skidding longitudinally	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	97	**63**	
	Vehicle Make:	Hyundai	Buick	
	Vehicle Model:	Excel	Century	
	Vehicle Curb Weight:	**2200**	**2600**	Lbs.
	Vehicle Cargo Weight:	**0**	100	Lbs.
	Vehicle Total Weight:	**2200**	**2900**	Lbs.
	Vehicle Estimated Travel Velocity:	**30**	**32**	**MPH**
	Total Delta-V:	**15**	**11**	MPH
	Longitudinal Delta-V:	-15	11	MPH
	Lateral Delta-V	-1	1	MPH
	Impact Speed:	**26**	**0**	**MPH**
	Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	75-094G
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Three leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	67	70	
	Vehicle Make:	Toyota	Cadillac	
	Vehicle Model:	Corolla	Deville	
	Vehicle Curb Weight:	2100	4600	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2100	4600	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	12	6	MPH
	Longitudinal Delta-V:	-12	5	MPH
	Lateral Delta-V	2	2	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention		

Case Number:	75-104E
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	87	61	
	Vehicle Make:	Plymouth	Ford	
	Vehicle Model:	Voyager	LTD	
	Vehicle Curb Weight:	3100	3600	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3100	3600	Lbs.
	Vehicle Estimated Travel Velocity:	35	0	MPH
	Total Delta-V:	15	15	MPH
	Longitudinal Delta-V:	-15	15	MPH
	Lateral Delta-V	3	-3	MPH
	Impact Speed:	30	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	75-130G
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	91	76	
	Vehicle Make:	Hyundai	Ford	
	Vehicle Model:	Scoupe	Courier	
	Vehicle Curb Weight:	2100	2500	Lbs.
	Vehicle Cargo Weight:		200	Lbs.
	Vehicle Total Weight:	2100	2700	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	16	13	MPH
	Longitudinal Delta-V:	-16	13	MPH
	Lateral Delta-V	3	2	MPH
	Impact Speed:	29	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	75-134G
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking (no lockup)	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
Vehicle Year:	69	85	
Vehicle Make:	Toyota	Toyota	
Vehicle Model:	Pickup	Pickup	
Vehicle Curb Weight:	3300	2500	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	3300	2500	Lbs.
Vehicle Estimated Travel Velocity:	35	0	MPH
Total Delta-V:	22	26	MPH
Longitudinal Delta-V:	-22	28	MPH
Lateral Delta-V	0	-5	MPH
Impact Speed:	50	0	MPH
Accident Causal Factor:	Alcohol/Drug Involvement		

Case Number:	75-160E
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (no lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	89	84	
	Vehicle Make:	Hyundai	Volkswagen	
	Vehicle Model:	Excel	Jetta	
	Vehicle Curb Weight:	2200	2000	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2200	2000	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	10	11	MPH
	Longitudinal Delta-V:	-10	11	MPH
	Lateral Delta-V	-2	0	MPH
	Impact Speed:	21	0	MPH
	Accident Causal Factor:	Alcohol/Drug Involvement		

Case Number:	76-004B
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	5
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Braking and steering right	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV67 Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
Vehicle Year:	88	65	
Vehicle Make:	Ford	Plymouth	
Vehicle Model:	F-series Pickup	Horizon	
Vehicle Curb Weight:	5200	2200	Lbs.
Vehicle Cargo Weight:	Unknown	Unknown	Lbs.
Vehicle Total Weight:	5200	2200	Lbs.
Vehicle Estimated Travel Velocity:	45	0	MPH
Total Delta-V:	16	33	MPH
Longitudinal Delta-V:	-16	32	MPH
Lateral Delta-V	-3	6	MPH
Impact Speed:	49	0	MPH
Accident Causal Factor:	Inattention		

Case Number:	76-171F
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (no lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	84	81	
	Vehicle Make:	Chevrolet	Oldsmobile	
	Vehicle Model:	K-series Pickup	Cutlass	
	Vehicle Curb Weight:	3600	3300	Lbs.
	Vehicle Cargo Weight:	200	Unknown	Lbs.
	Vehicle Total Weight:	3800	3300	Lbs.
	Vehicle Estimated Travel Velocity:	55	0	MPH
	Total Delta-V:	14	15	MPH
	Longitudinal Delta-V:	-14	15	MPH
	lateral Delta-V	0	1	MPH
	Impact Speed:	29	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	78-0037
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	78	79	
	Vehicle Make:	Dodge	Dodge	
	Vehicle Model:	Aspen	Omni	
	Vehicle Curb Weight:	3200	2200	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3200	2200	Lbs.
	Vehicle Estimated Travel Velocity:	20	0	MPH
	Total Delta-V:	11	15	MPH
	Longitudinal Delta-V:	-11	15	MPH
	Lateral Delta-V	2	-3	MPH
	Impact Speed:	26	0	MPH
	Accident Causal Factor:	Inattention		

1991 NASS CDS Summary

Case Number:	76-118A
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Mher vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	90	91	
	Vehicle Make:	Plymouth	Chevrolet	
	Vehicle Model:	Voyager	GE0 Prisim	
	Vehicle Curb Weight:	3200	2400	Lbs.
	Vehicle Cargo Weight:	0	Unknown	Lbs.
	Vehicle Total Weight:	3200	2400	Lbs.
	Vehicle Estimated Travel Velocity:	65	0	MPH
	Total Delta-V:	34	46	MPH
	Longitudinal Delta-V:	-34	45	MPH
	Lateral Delta-V	3	4	MPH
	Impact Speed:	80	0	MPH
	Accident Causal Factor:	Alcohol/Drug Involvement		

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1991 NASS CDS Summary

Case Number:	79-005E
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Unknown

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	87	78	
Vehicle Make:	Toyota	Chevrolet	
Vehicle Model:	Pickup	Nova	
Vehicle Curb Weight:	2700	3400	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2700	3400	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
Total Delta-V:	19	15	MPH
Longitudinal Delta-V:	-19	15	MPH
Lateral Delta-V	0	-3	MPH
Impact Speed:	Unknown	Unknown	MPH
Accident Causal Factor:	Inattention		

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Case Number:	79-053D
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	12
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Concrete
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	Braking (no lockup)	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	81	83	
	Vehicle Make:	Nissan	Lincoln	
	Vehicle Model:	310	Lincoln Continental	
	Vehicle Curb Weight:	2000	4000	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2000	4000	Lbs.
	Vehicle Estimated Travel Velocity:	55	62	MPH
	Total Delta-V:	22	12	MPH
	Longitudinal Delta-V:	-22	12	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	34	0	MPH
	Accident Causal Factor:	Inattention/following too close		

Case Number:	81-012F
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV84 Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV68 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	86	86	
Vehicle Make:	Hyundai	Ford	
Vehicle Model:	Excel	E-series Van	
Vehicle Curb Weight:	2600	4400	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	2600	4400	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	9	5	MPH
Longitudinal Delta-V:	-9	5	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	14	0	MPH
Accident Causal Factor:	Inattention/following too close		

Case Number:	81-019F
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Concrete
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Changing lanes	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Mher vehicle encroaching into lane from adjacent lane over left lane line	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	87	84	
	Vehicle Make:	GMC	Chevrolet	
	Vehicle Model:	K-series Pickup	Celebrity	
	Vehicle Curb Weight:	4600	2800	Lbs.
	Vehicle Cargo Weight:	206	0	Lbs.
	Vehicle Total Weight:	4800	2800	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	8	13	MPH
	Longitudinal Delta-V:	-8	13	MPH
	Lateral Delta-V	0	2	MPH
	Impact Speed:	21	0	MPH
	Accident Causal Factor:	Poor Judgement		

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1991 NASS CDS Summary

Case Number:	81-070D
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup)	No avoidance actions	
GV66	Precrash Stability:	Skidding longitudinally	No avoidance maneuver	
GV87	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	85	89	
	Vehicle Make:	Buick	Pontiac	
	Vehicle Model:	Century	Grand Am	
	Vehicle Curb Weight:	2800	2600	Lbs.
	Vehicle Cargo Weight:	**0**	**0**	Lbs.
	Vehicle Total Weight:	2800	2600	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	13	13	MPH
	Longitudinal Delta-V:	-13	13	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	26	0	MPH
	Accident Causal Factor:	Inattention		

Date 1/26/93

Case Number:	81-072F
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	4
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Steering lefl	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	62	62	
	Vehicle Make:	Chevrolet	Oldsmobile	
	Vehicle Model:	S-10 Pickup	Ninety Eight	
	Vehicle Curb Weight:	2500	3800	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2500	3600	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	19	11	MPH
	Longitudinal Delta-V:	-18	11	MPH
	Lateral Della-V	-3	-2	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention		

Case Number:	81-103D
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
Gv66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	84	90	
	Vehicle Make:	Mercury	Honda	
	Vehicle Model:	Cougar	Accord	
	Vehicle Curb Weight:	3100	2700	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3100	2700	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	9	9	MPH
	Longitudinal Delta-V:	-9	9	MPH
	Lateral Delta-V	2	0	MPH
	Impact Speed:	18	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	81-107F
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stooped in traffic lane	
GV65	Critical Precrash Event:	Other vehicie in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup unknown)	Steering lefl	
	Precrash Stability:	Precrash stability unknown	Tracking	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	Vehicle stayed in travel lane	
	Vehicle Year:	76	60	
	Vehicle Make:	Pontiac	Subaru	
	Vehicle Model:	Grand Prix	FE	
	Vehicle Curb Weight:	3900	2100	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3900	2100	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	15	24	MPH
	Longitudinal Delta-V:	-15	24	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	39	0	MPH
	Accident Causal Factor:	Inattention		

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Case Number:	81-131F
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Wet

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Unknown	No avoidance actions	
GV66	Precrash Stability:	Precrash stability unknown	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Directional consequences unknown	No avoidance maneuver	
	Vehicle Year:	88	79	
	Vehicle Make:	Plymouth	Chevrolet	
	Vehicle Model:	Sundance	Chevette	
	Vehicle Curb Weight:	2500	2100	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2500	2100	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	13	14	MPH
	Longitudinal Delta-V	-13	14	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	27	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	81-135D
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	3
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Level
Surface Type:	Asphalt
Surface Conditions:	Dry

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straiaht	Stoooed in traffic lane	
GV65 Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	Steering right	No avoidance actions	
GV66 Precrash Stability:	Tracking	No avoidance maneuver	
GV87 Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
Vehicle Year:	67	65	
Vehicle Make:	Nissan	Dodge	
Vehicle Model:	Pathfinder	Dart	
Vehicle Curb Weight:	5000	2800	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	5000	2800	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	0	MPH
Total Delta-V:	6	9	MPH
Longitudinal Delta-V:	-6	9	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	15	0	MPH
Accident Causal Factor:	Inattention		

Case Number:	81-177B
Dynamic Situation:	Lead vehicle decelerating and stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	5
Relation to Junction:	Four leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Grade
Surface Type:	Asphalt
Surface Conditions:	Dry

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	No avoidance actions	Unknown	
GV66	Precrash Stability:	No avoidance maneuver	Precrash stability unknown	
GV67	Precrash Directional Consequences:	No avoidance maneuver	Directional consequences unknown	
	Vehicle Year:	78	79	
	Vehicle Make:	Chevrolet	Volkswagen	
	Vehicle Model:	Camaro	Rabbit	
	Vehicle Curb Weight:	3500	1800	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3500	1800	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	33	54	MPH
	Longitudinal Delta-V:	-33	54	MPH
	Leteral Delta-V	0	0	MPH
	Impact Speed:	87	0	MPH
	Accident Causal Factor:	Alcohol/Drug Involvement		

Case Number:	82-019F
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Three leg intersection
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Wet

	Striking Vehicle	Struck Vehicle	
GV64 Pre-Event Movement:	Going Straight	Going straight	
GV65 Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14 Attempted Avoidance Maneuver:	No avoidance actions	No avoidance actions	
GV66 Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67 Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
Vehicle Year:	72	86	
Vehicle Make:	Chevrolet	Honda	
Vehicle Model:	Impala	Prelude	
Vehicle Curb Weight:	4200	2400	Lbs.
Vehicle Cargo Weight:	0	0	Lbs.
Vehicle Total Weight:	4200	2400	Lbs.
Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
Total Delta-V:	7	13	MPH
Longitudinal Delta-V:	-7	13	MPH
Lateral Delta-V	0	0	MPH
Impact Speed:	Unknown	Unknown	MPH
Accident Causal Factor:	Poor/Degraded Roadways		

Date 1/26/93

1991 NASS CDS Summary

Case Number:	82-060F
Dynamic Situation:	Lead vehicle decelerating, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	8
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Slowing or stopping in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup unknown)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	75	89	
	Vehicle Make:	Ford	Mercury	
	Vehicle Model:	Granada	Sable	
	Vehicle Curb Weight:	3500	3100	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3500	3100	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	11	12	MPH
	Longitudinal Delta-V:	-11	12	MPH
	Lateral Delta-V	0	0	MPH
	impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention/following too close		

Date 1/26/93

Case Number:	82-102G
Dynamic Situation:	Lead vehicle decelerating, following vehicle accelerating
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	6
Relation to Junction:	Non-junction
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Going straight	
GV85	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Accelerated by mistake	No avoidance actions	
GV66	Precrash Stability:	No avoidance maneuver	No avoidance maneuver	
GV67	Precrash Directional Consequences:	No avoidance maneuver	No avoidance maneuver	
	Vehicle Year:	68	87	
	Vehicle Make:	Toyota	Toyota	
	Vehicle Model:	Cressida	Pickup	
	Vehicle Curb Weight:	3300	3700	Lbs.
	Vehicle Cargo Weight:			Lbs.
	Vehicle Total Weight:	**3300**	**3700**	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	9	8	MPH
	Longitudinal Delta-V:	-9	8	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Poor Judgement		

Case Number:	82-121E
Dynamic Situation:	Lead vehicle stopped, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Stationary
Roadway Data:	
Number of Lanes:	2
Relation to Junction:	Intersection related
Horizontal Alignment:	Straight
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Stopped in traffic lane	
GV65	Critical Precrash Event:	Other vehicle in lane stopped	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (no lockup)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	91	80	
	Vehicle Make:	Isuzu	Ford	
	Vehicle Model:	Pickup	Taurus	
	Vehicle Curb Weight:	3100	3200	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	3100	3200	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	0	MPH
	Total Delta-V:	16	15	MPH
	Longitudinal Delta-V:	-16	14	MPH
	Lateral Delta-V	0	-5	MPH
	Impact Speed:	31	0	MPH
	Accident Causal Factor:	Inattention		

Case Number:	82-162F
Dynamic Situation:	Lead vehicle constant velocity, following vehicle constant velocity
Lead Vehicle Stationary or Moving:	Moving
Roadway Data:	
Number of Lanes:	8
Relation to Junction:	Non-junction
Horizontal Alignment:	Curve
Vertical Alignment:	Unknown
Surface Type:	Unknown
Surface Conditions:	Unknown

		Striking Vehicle	Struck Vehicle	
GV64	Pre-Event Movement:	Going Straight	Going straight	
GV65	Critical Precrash Event:	Other vehicle in lane traveling in same direction with lower speed	Other vehicle in lane traveling in same direction with higher speed	
GV14	Attempted Avoidance Maneuver:	Braking (lockup unknown)	No avoidance actions	
GV66	Precrash Stability:	Tracking	No avoidance maneuver	
GV67	Precrash Directional Consequences:	Vehicle stayed in travel lane	No avoidance maneuver	
	Vehicle Year:	89	84	
	Vehicle Make:	Plymouth	Buick	
	Vehicle Model:	Colt	Century	
	Vehicle Curb Weight:	2290	2800	Lbs.
	Vehicle Cargo Weight:	0	0	Lbs.
	Vehicle Total Weight:	2269	2800	Lbs.
	Vehicle Estimated Travel Velocity:	Unknown	Unknown	MPH
	Total Delta-V:	15	11	MPH
	Longitudinal Delta-V:	-15	11	MPH
	Lateral Delta-V	0	0	MPH
	Impact Speed:	Unknown	Unknown	MPH
	Accident Causal Factor:	Inattention/following too close		