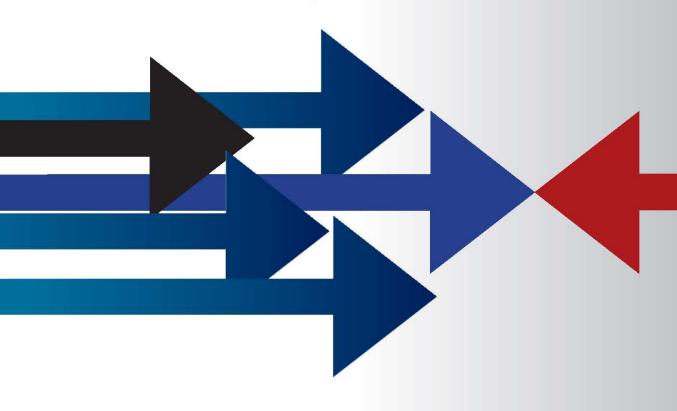
# WRONG-WAY CRASH STUDY

INTERSTATES AND FREEWAYS | CALENDAR YEAR 2015





#### **Table of Contents**

		Page
Wrong-Way C	Crash Study, Calendar Year 2015	1
	List of Figures	
Figure 1. Mini	mum required signs and markings from the MUTCD	2
Figure 2. Wro Figure 3. Wro	mum required signs and markings from the MUTCD	3 5
	List of Tables	
Table 1. Sum	mary of Wrong-Way Crash Analysis in Calendar Year 2015	2
Table 2. Wror Table 3. List of	mary of Wrong-Way Crash Analysis in Calendar Year 2015	4 6
	List of Appendices	
Appendix A	Act 641	
Appendix B Appendix C	Minute Order 2009-035 Crash Location Maps, Photos of Interchanges	

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This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

#### Wrong-Way Crash Study Calendar Year 2015

Act 641 of the 87<sup>th</sup> Arkansas General Assembly requires the Arkansas Department of Transportation (Department) to analyze all wrong-way crashes on the Interstates and other freeways with full control of access and to prepare an annual report. Furthermore, the Act requires that based on the findings in the report, the Department is to implement appropriate countermeasures when warranted to reduce the possibility of wrong-way crashes. Accordingly, Minute Order 2009-035 was adopted by the Arkansas State Highway Commission on February 25, 2009. This Minute Order authorized an annual analysis of wrong-way crashes on these routes to determine if additional traffic control devices are warranted. Copies of Act 641 and Minute Order 2009-035 are shown in Appendices A and B respectively.

An annual analysis of wrong-way crashes identifies the locations to be investigated. The investigation consists of reviewing the signing and striping for compliance with the minimum requirements of the <u>Manual on Uniform Traffic Control Devices</u> (MUTCD) as well as compliance with the current Department signing practices. The minimum requirements as specified in Section 2B.41 of the MUTCD 2009 Edition include the following:

- 1. At least one "ONE WAY" sign for each direction of travel on the crossroad shall be placed where the exit ramp intersects the crossroad.
- 2. At least one "DO NOT ENTER" sign shall be conspicuously placed near the downstream end of the exit ramp in positions appropriate for full view of a road user starting to enter wrongly from the crossroad.
- 3. At least one "WRONG WAY" sign shall be placed on the exit ramp facing a road user traveling in the wrong direction.

The current Department practice is to install the minimum required signs and markings from the MUTCD plus additional optional signs and markings (see Figure 1). If necessary, the oversized signs as shown in Table 2B-1 in the MUTCD are installed. This practice enhances the conspicuity of the signage and provides added protection to ensure that the minimum required signage is in place should one of the sign assemblies be damaged or destroyed.

The analysis of 2015 crash data showed that 15 wrong-way crashes occurred on the Interstates and other freeways with full control of access (see Figure 2). The crash analysis was conducted on those crashes that involved a vehicle entering or traveling in the wrong direction on the controlled access facility; crossover crashes were not included. These crashes are summarized in Table 1. Table 2 shows a comparison of the 2015 wrong-way crashes with 2013 and 2014 and Figure 3 provides an overview of wrong-way crash history since Calendar Year 2008.

Following the crash analysis, an investigation of the locations where the wrong-way crashes occurred was completed in May 2017.

Figure 2B-18. Example of Application of Regulatory Signing and Pavement Markings at an Exit Ramp Termination to Deter Wrong-Way Entry Legend → Direction of Travel Wrong-Way Arrows Lane-Use Arrows Use stop line if STOP sign \* Optional is installed Exit Ramp Entrance Ramp Notes: Modify as appropriate for multi-lane crossroads

Figure 1. Minimum required signs and markings from the MUTCD

Source: Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 Edition

Table 1 Summary of Wrong-Way Crash Analysis in Calendar Year 2015.

I .	able 1. Summary of v		iy Ciasi	i Alialysis ii	i Calelluai Teal 20	713					
	5 Fatal Crashes (8 fatalities)										
				2 Incapacitating Injury Crashes							
Crash Severity	3 Non-fatal Injury Crashes	that include	9:	0 Non-Incapacitating Injury Crash							
				1 Possible In	jury Crash						
	7 Property Damage Only Crashes (PDO)										
	Head On	6			Dry	15					
Crash Type	Angle	2	Roa	d Surface	Wet						
Crasii i ype	Sideswipe	2	Co	ndition		0					
	Single Vehicle	5									
	Dark	12			Alcohol	6					
	Daylight	3	Con	tributing	Drugs	0					
Light Conditions				actors	*None	5					
	Dark but Lighted	0			**Unknown	3					
					Illness or Fatigue	1					
* Driver was not imp	paired driver was impaired										

Figure 2. Wrong-Way Crash Locations in Calendar Year 2015

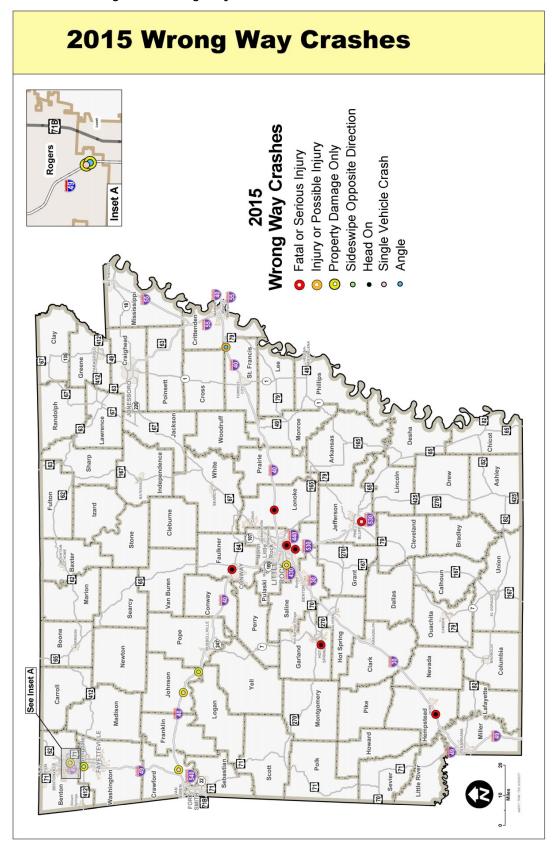
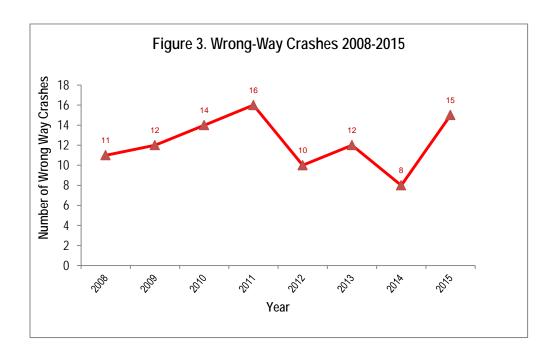


Table 2. Wrong-Way Crashes 2013-2015

Year	Total Wrong Way Crashes	Fatal Crashes	Fatalities	Serious Injury Crashes	Number of Dark Crashes	Driver Impaired Drugs or Alcohol	Fatal Crashes Driver Impaired on Drugs or Alcohol		
2013	12	2	2	3	8	4	0		
2014	8	0	0	2	7	5	0		
2015	15	5	8	2	12	6	1		



Consequently, a total of 31 interchange off-ramps were reviewed that resulted in the following findings:

- 1. Thirteen off-ramps were in compliance with the MUTCD minimum requirements as well as the Department standards. Six of the ramps (Exits 124, 127, and 173 on I-40, Exit 4 and 5B on Hwy 270, and Exit 1 on I-430) had the correct type of signs to be in compliance with the MUTCD and the Department standards; however, some of the signs will be replaced with larger signs to increase visibility. Eight ramps (Exits 13, 55, and 78 on I-40, Exit 21 on I-40, Exit 5A on Hwy 270, and Exits 141B, 142, and 153 on I-530) were in compliance with MUTCD standards but were not in compliance with the Department standards. Two of the ramps (Exit 76 on I-49 and Exit 31 on I-30) failed to comply with MUTCD or the Department signing requirements. Two of the ramps (Exit 73 on I-49 and Exit 260 on I-40) were under construction and had temporary signing in place.
- 2. All of the sign corrections are scheduled to be implemented by statewide signing crews as soon as possible.

Findings of this investigation are also summarized in Table 3. Crash location maps, along with diagrams of the interchanges, investigation reports and crash reports are included in Appendix C.

In January of 2017, the Department let a \$3.1 million contract for safety improvements (Job 012260), in an effort to reduce wrong-way incursions on Arkansas' freeways. Low-cost countermeasures, primarily signs and pavement markings, were chosen, but applied on a statewide basis to maximize effectiveness. "WRONG WAY" and "DO NOT ENTER" signs were lowered with brighter sheeting and reflective post panels to increase the conspicuity of these important signs. Thermoplastic wrong-way pavement arrows were added to every exit ramp, and lane use arrows were applied to two-way frontage roads that intersected an exit ramp. Other pavement markings included stop and yield lines at every exit ramp, as well as "cat track" pavement markings to guide left-turning motorists to the correct ramp at side-by side-ramps. Lastly, red delineators were installed at every exit ramp to give potential wrong-way drivers more visual cues they were traveling the wrong direction. To further curtail wrong-way driving, the Department has adopted these countermeasures as standard practice when building new ramps or rehabilitating existing ones. This project is projected to be completed in May 2018.

Table 3. List of Wrong-Way Crashes on Interstates and Other Freeways in Calendar Year 2015

County	Crash#	Rte	Sec	LM	¹Crash Sev.	# Fat.	# Inj.	Туре	Date	Time	Urban/Rural	Light Condition	Surf. Cond.	Impaired	System	Exit Number Reviewed	<sup>2</sup> MUTCD	<sup>3</sup> ArDOT
Benton	2015501121	49	29	79.586	5	0	0	Single Vehicle Crash	8/2/2015	2:20 AM	Urban	Dark	Dry	Alcohol	Interstate	73, 76, 78	U,N,Y	U,N,Y
Benton	2015502708	49	29	79.434	5	0	0	Angle	9/9/2015	11:26 AM	Urban	Daylight	Dry	No	Interstate	81	Υ	Y
Crawford	2015502575	40	11	14.782	5	0	0	Single Vehicle Crash	9/6/2015	3:45 PM	Urban	Daylight	Dry	Sick or Fainted	Interstate	13, 21	Y,Y	N,N
Faulkner	2015067840	40	32	122.900	1	1	1	Head On	6/14/2015	5:50 AM	Urban	Daylight	Dry	Unknown	Interstate	124, 125, 127	Y,Y,Y	Y,Y,Y
Garland	2015030457	270	5	21.580	1	1	0	Head On	8/29/2015	1:28 AM	Urban	Dark	Dry	No	U.S. Highway	4, 5A, 5B	Y,Y,Y	Y,N,Y
Hempstead	2015066611	30	12	24.257	2	0	3	Head On	5/11/2015	9:05 PM	Rural	Dark	Dry	No	Interstate	30, 31	Y,N	Y,N
Jefferson	2015063033	530	5	41.684	2	0	1	Single Vehicle Crash	3/8/2015	2:55 AM	Urban	Dark	Dry	Alcohol	Interstate	42, 43	Y,Y	Y,Y
Johnson	2015008789	40	241	0.030	5	0	0	Single Vehicle Crash	3/15/2015	11:10 PM	Urban	Dark	Dry	Alcohol	Ramp	55	Υ	N
Johnson	2015068519	40	21	69.800	5	0	0	Sideswipe Opp. Direction	6/27/2015	3:41 AM	Rural	Dark	Dry	Alcohol	Interstate	67, 74, 78	Y,Y,Y	Y,Y,N
Lonoke	2015502361	40	561	0.190	1	2	0	Head On	8/28/2015	8:15 PM	Rural	Dark	Dry	Unknown	Ramp	173	Υ	Υ
Pulaski	2015062849	430	21	4.012	5	0	0	Single Vehicle Crash	2/28/2015	5:10 AM	Urban	Dark	Dry	Alcohol	Interstate	1, 4	Y,Y	Y,Y
Pulaski	2015507540	440	1	2.000	1	1	2	Head On	11/26/2015	6:48 PM	Urban	Dark	Dry	Alcohol	Interstate	3, 4, 5	Y,Y,Y	Y,Y,Y
Pulaski	2015502962	530	1	4.066	1	3	4	Head On	9/13/2015	2:19 AM	Urban	Dark	Dry	Unknown	Interstate	141B, 142, 153	Y,Y,Y	N,N,N
St. Francis	2015064720	40	703	0.019	4	0	1	Angle	4/9/2015	1:30 AM	Rural	Dark	Dry	No	Ramp	260	U	U
Washington	2015060784	49	28	71.802	5	0	0	Sideswipe Opp. Direction	1/22/2015	6:23 PM	Urban	Dark	Dry	No	Interstate	72	Υ	Υ

<sup>1</sup>Crash Severity = 1-fatal crash; 2-incapacitating injury crash; 3-non-incapacitating injury crash; 4-possible injury crash; and 5-property damage only. <sup>2</sup>Meets MUTCD Standard, Y=Yes, N=No, or U=Under construction temporary signing in place

Wrong-Way Crash Study 2015

<sup>&</sup>lt;sup>3</sup>Meets ARDOT Standard, Y=Yes, N=No, or U= Under construction temporary signing in place

### **APPENDIX A**

Act 641

### Stricken language would be deleted from and underlined language would be added to the law as it existed prior to this session of the General Assembly.

#### Act 641 of the Regular Session

1	State of Arkansas	A D'11		
2	87th General Assembly	A Bill		
3	Regular Session, 2009		HOUSE BILL	1961
4				
5	By: Representative Pyle			
6				
7				
8		For An Act To Be Entitled		
9	AN ACT	TO REQUIRE THE ARKANSAS STATE HIGHWAY	AND	
10	TRANSP	ORTATION DEPARTMENT TO ANALYZE WRONG-WA	Υ.	
11	CRASHE	S ON INTERSTATES AND OTHER FREEWAYS THA	Т	
12	ARE A	PART OF THE STATE HIGHWAY SYSTEM; TO		
13	IMPLEM	ENT WARRANTED AND FEASIBLE COUNTERMEASU	RES	
14	THAT M	AY REDUCE THE POSSIBILITY OF WRONG-WAY		
15	CRASHE	S; AND FOR OTHER PURPOSES.		
16				
17		Subtitle		
18	TO	REQUIRE THE ARKANSAS STATE HIGHWAY		
19	AND	TRANSPORTATION DEPARTMENT TO ANALYZE		
20	WRO	NG-WAY CRASHES ON INTERSTATES AND		
21	OTH	ER FREEWAYS THAT ARE A PART OF THE		
22	STA	TE HIGHWAY SYSTEM.		
23				
24				
25	BE IT ENACTED BY THE	GENERAL ASSEMBLY OF THE STATE OF ARKANS	SAS:	
26				
27	SECTION 1. Arl	kansas Code Title 27, Chapter 65, Subcha	apter l is ame	nded
28	to add an additional	section to read as follows:		
29	27-65-144. Add	ditional annual reporting.		
30	(a) The Arkans	sas State Highway and Transportation Dep	partment shall	
31	analyze all reported	wrong-way crashes on interstate highway	s and other	
32	freeways that are a p	part of the state highway system to dete	ermine whether	the
33	installation of addit	tional traffic control devices is warrar	nted and feasi	ble
34	in order to reduce the	he possibility of future wrong-way crash	nes.	
35	(b) Any addit:	ional traffic control devices installed	under subsect	ion



03-05-2009 11:39 JSE199

HB1961

```
(a) of this section shall conform to the Manual on Uniform Traffic Control
 1
 2
     Devices for Streets and Highways, approved by the Federal Highway
     Administration as the national standard in accordance with 23 U.S.C. 109(d),
     23 U.S.C. 114(a), 23 U.S.C. 217, 23 U.S.C. 315, and 23 U.S.C. 402(a), 23
     C.F.R. 655, and 49 C.F.R. 1.48(b)(8), 1.48(b)(33) and 1.48(c)(2), and is the
 6
     manual adopted by the State Highway Commission under § 27-52-104.
 7
           (c) A person may not file a legal action as a result of the
     implementation of any recommendations made from studies conducted under this
 9
     section.
10
           SECTION 2. DO NOT CODIFY. This act shall begin with a reporting
11
12
     period in 2009 and annually thereafter.
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                                  APPROVED: 3/27/2009
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03-05-2009 11:39 JSE199

### **APPENDIX B**

Minute Order 2009-035

#### MINUTE ORDER

District: Statewide

Page 1 of 1 Page

County:

Statewide

Category: Commission Policy

WHEREAS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005 (SAFETEA-LU) requires each state to develop and implement a Strategic Highway Safety Plan (SHSP) that involves a comprehensive and collaborative approach to highway safety; and

WHEREAS, Minute Order 2007-091 adopted Arkansas' SHSP as a planning guide for improving highway safety in the State; and

WHEREAS, one emphasis area identified in Arkansas' SHSP is to reduce the number of head-on crashes; and

WHEREAS, head-on crashes occur from time to time on Interstates and other freeways as a result of wrong-way travel on these fully access controlled routes.

**NOW THEREFORE,** the Director is authorized to conduct an annual analysis, beginning with the 2009 reporting period, of all reported wrong-way crashes on Interstate highways and other freeways that are a part of the state highway system to determine whether the installation of additional traffic control devices is warranted and feasible to reduce the possibility of future wrong-way crashes.

FURTHERMORE, any additional traffic control devices installed as a result of the annual analysis will conform to the Manual on Uniform Traffic Control Devices for Street and Highways, which is approved by the Federal Highway Administrator as the National Standard in accordance with Title 23 U.S. Code, Sections 109(d), 114(a), 217, 315, and 402(s), 23 CFR 655, and 49 CFR 1.48(b)(8), 1.48(b)(33), and 1.48(c)(2), and is the manual adopted by the Arkansas Highway Commission pursuant to Arkansas Code Annotated Section 27-52-104.

Submitted B

Minute Order No

Date Passed

Approved: Level Ling J Chairman

Vice-Chairman

Member

Member

Member

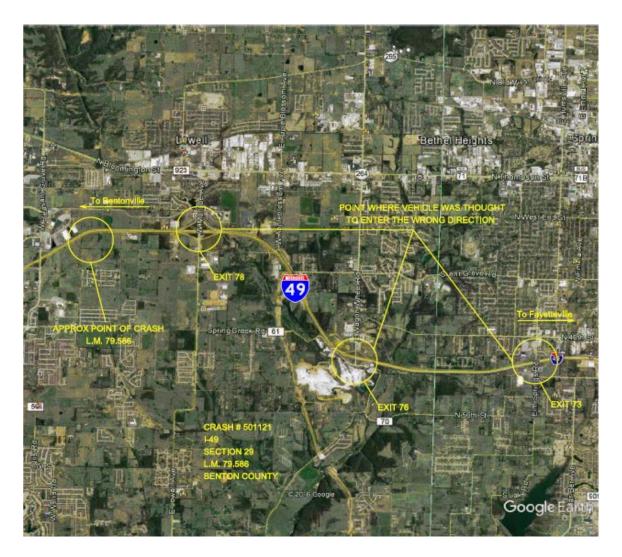
ACE-P

Form 19-456 Rev. 08/01/2007 FEB 2 5 2009

### **APPENDIX C**

Crash Location Maps, Photos of Interchanges, and Crash Reports

## Interstate 49, Exits 73, 76, and 78 in Benton County Crash Number 2015501121



#### Maintenance Review

The driver accessed I-49 southbound possibly at Exits 73, 76, or 78, and traveled northbound in the southbound lanes. The driver was involved in a single vehicle crash that resulted in property damage only at log mile 79.586.

#### Maintenance Review Results

The interchange at Exit 78 was reviewed. All Pavement markings and signs were in place and in conformance with MUTCD and ARDOT standards. The interchange at Exit 73 was reviewed and is currently under construction and has temporary signing in place. The interchange at Exit 76 was reviewed. Pavement markings and signs were in place but were not in conformance with MUTCD or ARDOT standards. The One Way signs and Do Not Enter signs were missing and will be installed to be in conformance with MUTCD and ARDOT standards. These modifications will be implemented by statewide forces as soon as possible.









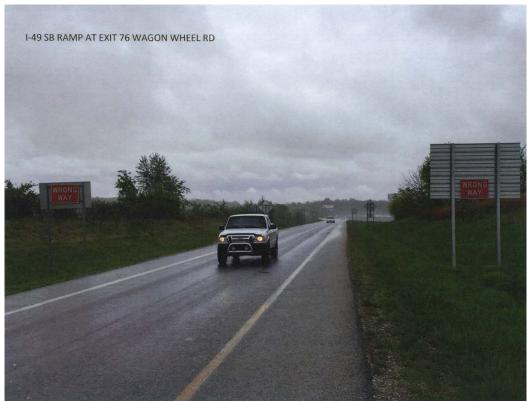




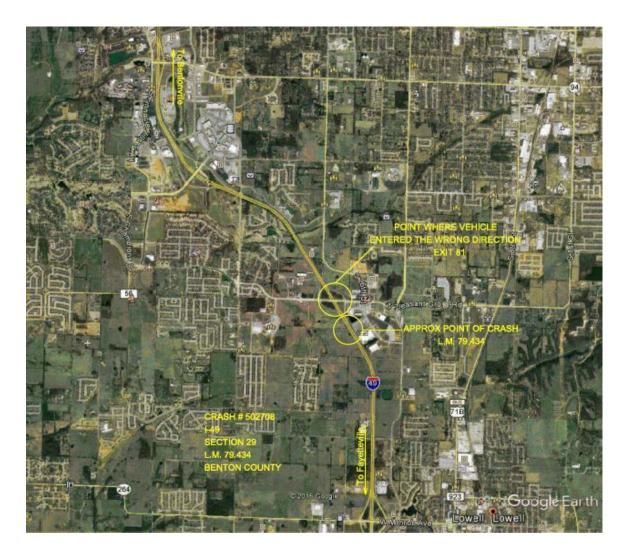








#### Interstate 49, Exit 81 in Benton County Crash Number 2015502708



#### Maintenance Review

The driver accessed I-49 northbound and traveled south at Exit 81. The driver was involved in a property damage only angle collision at log mile 79.434.

#### Maintenance Review Results

The interchange at Exit 81 was reviewed. All signs and pavement markings were in compliance with MUTCD and ARDOT standards.







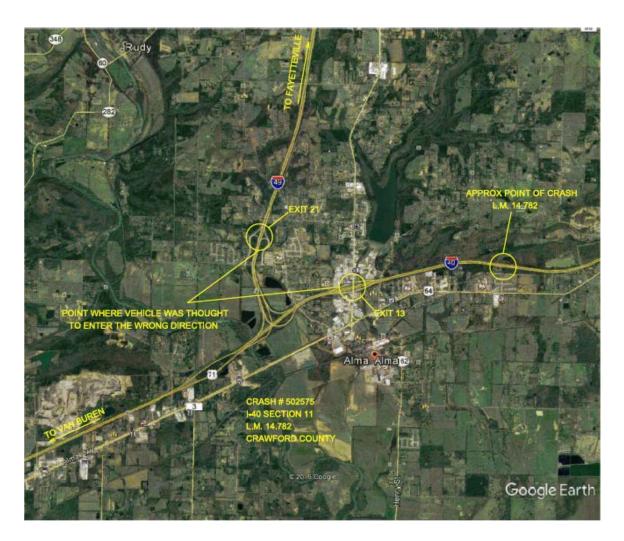








## Interstate 40, Exits 13 and 21 in Crawford County Crash Number 2015502575



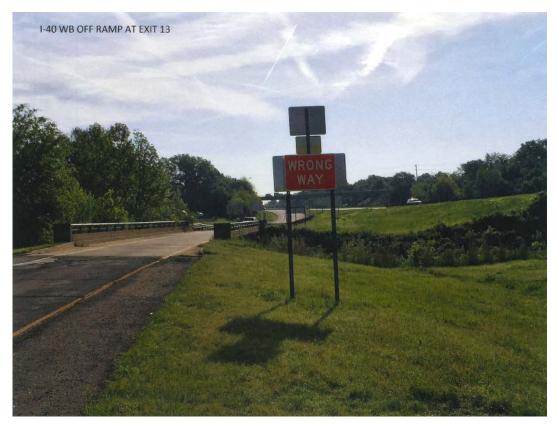
#### Maintenance Review

The driver accessed the I-40 westbound lanes possibly at Exit 13 or Exit 21 on I-49. The driver proceeded eastbound in the westbound lanes and was involved in a single vehicle crash with a westbound vehicle which resulted in property damage only at the 14.782 mile marker.

#### Maintenance Review Results

The westbound interchange at Exit 13 was reviewed. The pavement markings and signs were in place and in compliance with MUTCD, but not ARDOT standards. Additional One Way signs will be installed in order to be in compliance with ARDOT standards. Larger Do Not Enter signs will also be installed. The northbound interchange at Exit 21 on I-49 was reviewed. The pavement markings and signs were in place and in compliance with MUTCD, but not ARDOT standards. Larger Keep Right signs will be installed; and a Stop sign was missing and will be installed. These modifications will be implemented by statewide forces as soon as possible.



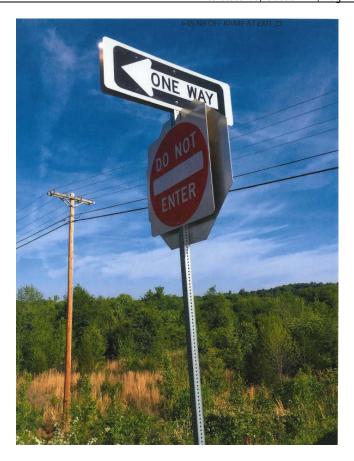


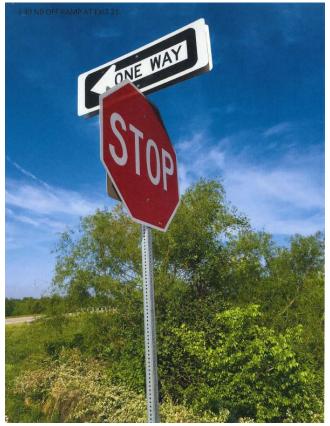








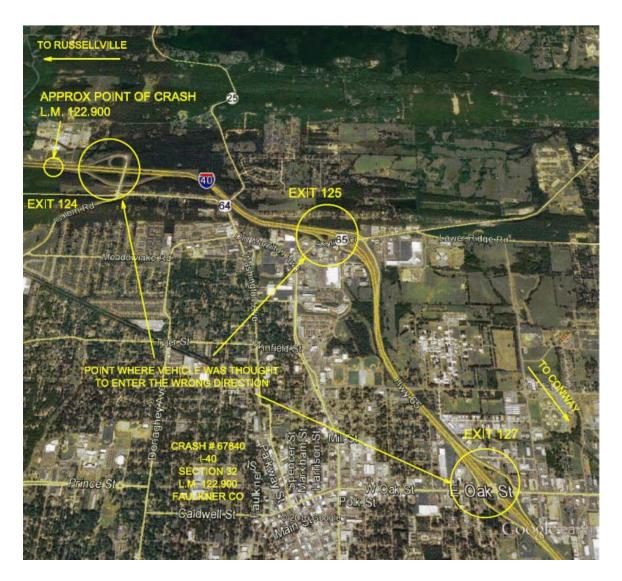








## Interstate 40, Exits 124, 125, and 127 in Faulkner County Crash Number 2015067840



#### Maintenance Review

The driver accessed I-40 eastbound possibly at Exit 124, 125, or 127 and traveled west in the eastbound lanes. The driver was involved in a head on crash that resulted in a fatality at the 122.900 log mile.

#### Maintenance Review Results

The interchanges at Exits 124 and 127 were reviewed. All pavement markings and signs were in place and in conformance with MUTCD and ARDOT standards. However, Wrong Way signs and One Way signs will be replaced with larger signs and additional signs will be added to these interchanges. The stop signs at Exit 124 will also be replaced with larger signs to increase visibility. These modifications will be performed by statewide forces as soon as possible. The interchange at Exit 125 was reviewed. All pavement markings and signs were in place and in conformance with MUTCD and ARDOT standards.





























# Highway 270, Exits 4, 5A, and 5B in Garland County Crash Number 2015030457



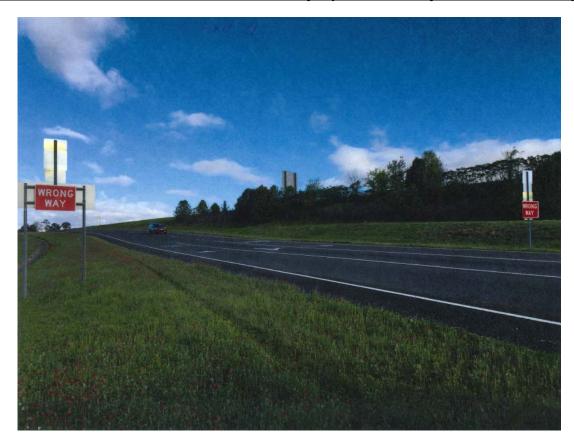
#### Maintenance Review

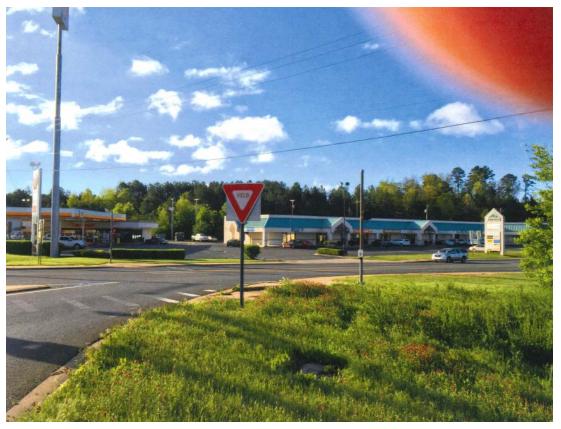
The driver possibly accessed Hwy. 270 eastbound at Exit 4, 5A, or 5B and traveled west on Hwy. 270 in the eastbound lanes. The driver was involved in a head on collision that resulted in a fatality at log mile 21.580.

### Maintenance Review Results

The interchanges at Exit 4 and 5B were reviewed and pavement markings and signs were in conformance with MUTCD and ARDOT standards. However, some signs will be replaced due to age and condition and larger One Way signs will be installed to increase visibility. These modifications will be implemented by statewide forces as soon as possible.

The interchange at Exit 5A was reviewed. Pavement markings and signs were in place and in conformance with MUTCD, but not ARDOT standards. Additional One Way signs will be installed at the exit ramp. These modifications will be implemented by statewide forces as soon as possible.































# Interstate 30, Exits 30 and 31 in Hempstead County Crash Number 2015066611



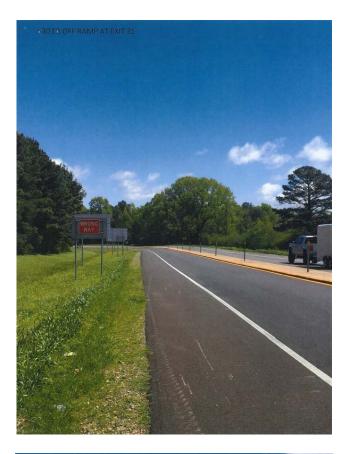
#### Maintenance Review

The driver accessed I-30 eastbound at Exit 30 or Exit 31 and traveled west on I-30 in the eastbound lanes. The driver was involved in a serious injury head on collision at log mile 24.257.

### Maintenance Review Results

The interchange at Exit 31 was reviewed and pavement markings and signs did not conform to MUTCD or ARDOT standards. One Way and Wrong Way signs were missing and will be installed. Stop signs, Do Not Enter signs, and Keep Right signs will be replaced with larger signs. These modifications will be implemented by statewide forces as soon as possible to be in compliance with MUTCD and ARDOT standards.

The interchange at Exit 30 was reviewed and pavement markings and signs were in place and in conformance with MUTCD and ARDOT standards.





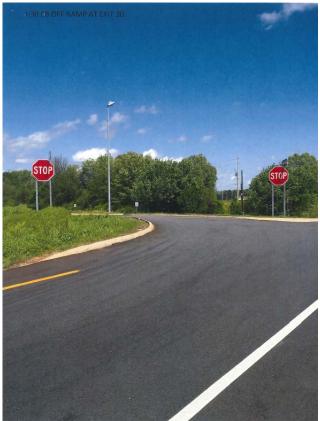










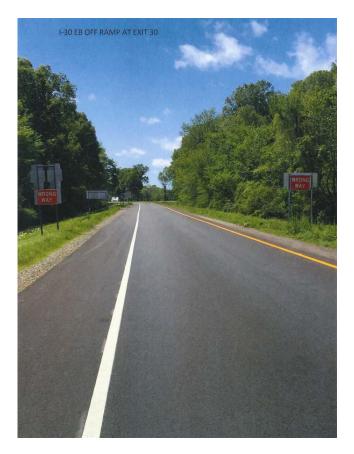
















# Interstate 530, Exits 42 and 43 in Jefferson County Crash Number 2015063033



# Maintenance Review

The driver accessed I-530 southbound possibly at Exit 42 or Exit 43 and traveled north in the southbound lanes. The driver was involved in a serious injury single vehicle crash with a bridge at log mile 41.684.

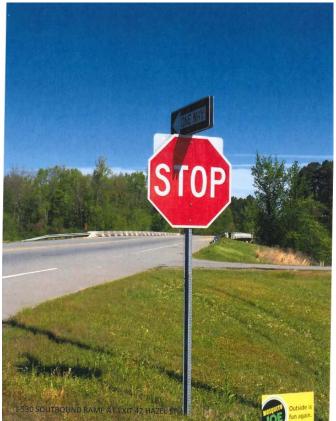
## Maintenance Review Results

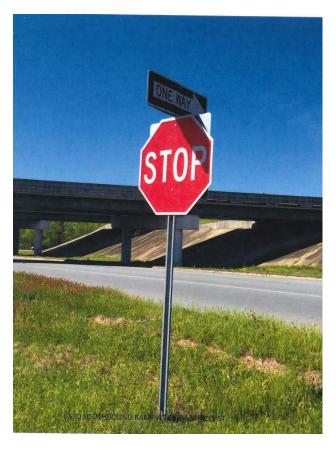
The interchanges at Exit 42 and Exit 43 were reviewed. Pavement markings and signs were in conformance with MUTCD and ARDOT standards.





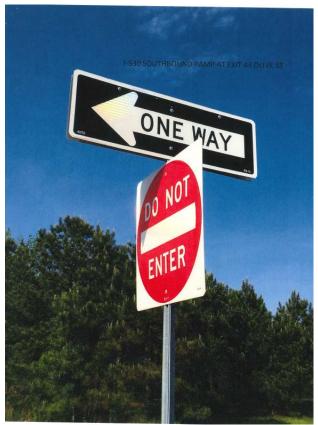














# Interstate 40 Ramp, Exit 55 in Johnson County Crash Number 2015008789



### Maintenance Review

The driver accessed the eastbound off ramp of I-40 at Exit 55 from Hwy. 64 and traveled westbound in the eastbound lane. The driver was involved in a single vehicle collision that resulted in property damage only at log mile 0.030.

## Maintenance Review Results

The interchange at Exit 55 was reviewed and pavement markings and signs were in conformance with MUTCD, but not ARDOT standards. One Way signs will be replaced with larger signs to be consistent with ARDOT standards. These modifications will be implemented by statewide forces as soon as possible.







4056









# Interstate 40, Exits 67, 74, and 78 in Johnson County Crash Number 2015068519

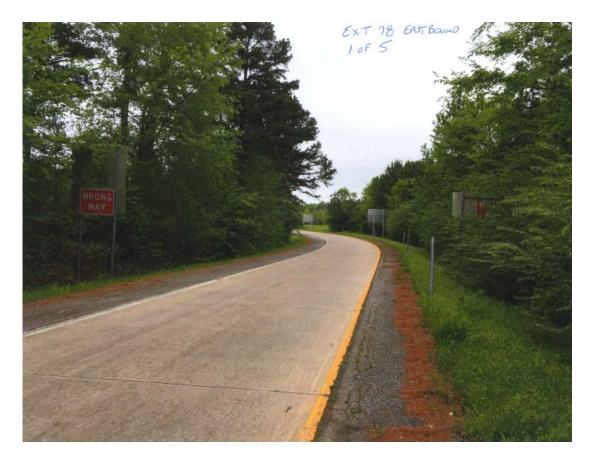
#### Maintenance Review

The driver accessed the eastbound lane of I-40 possibly at Exit 67, 74, or 78 and traveled westbound in the eastbound lane. The driver was involved in a property damage only sideswipe opposite direction collision at log mile 69.800.

## Maintenance Review Results

The interchange at Exit 78 was reviewed and pavement markings and signs were in conformance with MUTCD, but not ARDOT standards. One Way signs and Do Not Enter signs will be replaced with larger signs to be consistent with ARDOT standards. These modifications will be implemented by statewide forces as soon as possible.

The interchanges at Exit 67 and Exit 74 were reviewed. Pavement markings and signs were in place and in conformance with MUTCD and ARDOT standards.

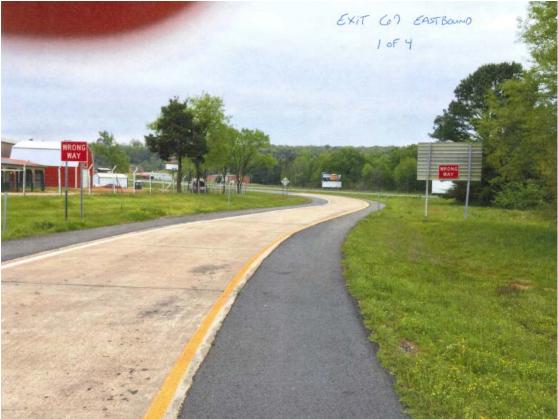






















3 OF 4





# Interstate 40 Ramp, Exit 173 in Lonoke County Crash Number 2015502361



## Maintenance Review

The driver accessed the westbound ramp of I-40 at Exit 173 and traveled eastbound in the westbound lane. The driver was involved in a head on collision that resulted in two fatalities at log mile 0.190.

## Maintenance Review Results

The interchange at Exit 173 was reviewed and pavement markings and signs were in conformance with MUTCD and ARDOT standards. One Way signs will be replaced with larger signs to increase visibility. These modifications will be implemented by statewide forces as soon as possible.





20F9

30F9











7 of 9







## Interstate 430, Exits 1 and 4 in Pulaski County Crash Number 2015062849



### Maintenance Review

The driver accessed the southbound lane of I-430 possibly at Exit 1 or Exit 4 and traveled northbound in the southbound lane. The driver was involved in a single vehicle collision which resulted in property damage only at log mile 4.012.

## Maintenance Review Results

The interchange at Exit 1 was reviewed and pavement markings and signs were in conformance with MUTCD and ARDOT standards. One Way signs and Do Not Enter signs will be replaced with larger signs to increase visibility. These modifications will be implemented by statewide forces as soon as possible. The interchange at Exit 4 was reviewed. Pavement markings and signs were in conformance with MUTCD and ARDOT standards. A Do Not Enter sign will be replaced with a larger sign to increase visibility. These modifications will be implemented by statewide forces as soon as possible.



















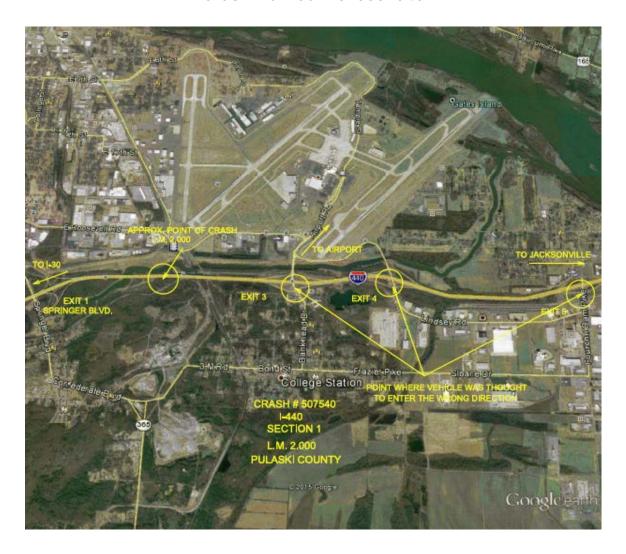








# Interstate 440, Exits 3, 4, and 5 in Pulaski County Crash Number 2015507540



### Maintenance Review

The driver accessed the eastbound lane of I-440 possibly at Exit 3, 4, or 5 and traveled westbound in the eastbound lane. The driver was involved in a head on collision that resulted in a fatality at log mile 2.000.

### Maintenance Review Results

The interchange at Exit 3 was reviewed and pavement markings and signs were in conformance with MUTCD and ARDOT standards. However, One Way signs will need to be remounted. These modifications will be implemented by statewide forces as soon as possible.

The interchanges at Exit 4 and Exit 5 were reviewed. Pavement markings and signs were in conformance with MUTCD and ARDOT standards.



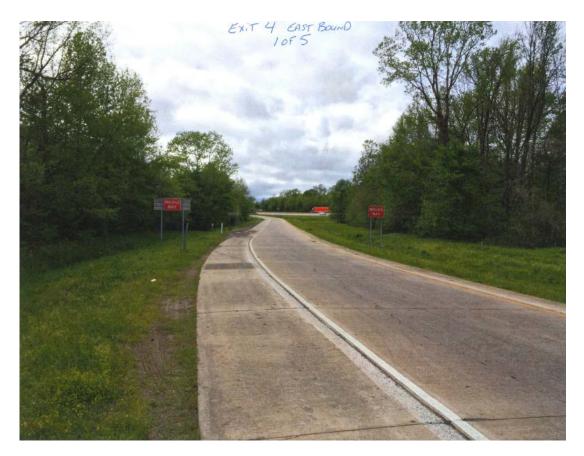
































# Interstate 530, Exits 141B, 142, and 153 in Pulaski County Crash Number 2015502962



#### Maintenance Review

The driver accessed the eastbound lane of I-30 possibly at Exit 141B, 142, or 153 and traveled westbound in the eastbound lane. The driver then continued to travel southbound in the northbound lanes of I-530. The driver was involved in a head on collision that resulted in three fatalities at log mile 4.066.

### Maintenance Review Results

The interchanges at Exit 141B and Exit 153 were reviewed. Pavement markings and signs were in conformance with MUTCD but not ARDOT standards. Larger Do Not Enter signs and One Way signs will be installed to be in conformance with ARDOT standards. These modifications will be implemented by statewide forces as soon as possible.

The interchange at Exit 142 was reviewed. Pavement markings and signs were in conformance with MUTCD but not ARDOT standards. Larger Wrong Way signs and Do Not Enter signs will be installed in order to be in conformance with ARDOT standards. These modifications will be implemented by statewide forces as soon as possible.





















# Interstate 40 Ramp, Exit 260 in St. Francis County Crash Number 2015064720



### Maintenance Review

The driver accessed the eastbound lane of I-40 at Exit 260 and traveled westbound in the eastbound lane of the exit ramp. The driver was involved in an angle collision that resulted in a possible injury at log mile 0.019 on the exit ramp.

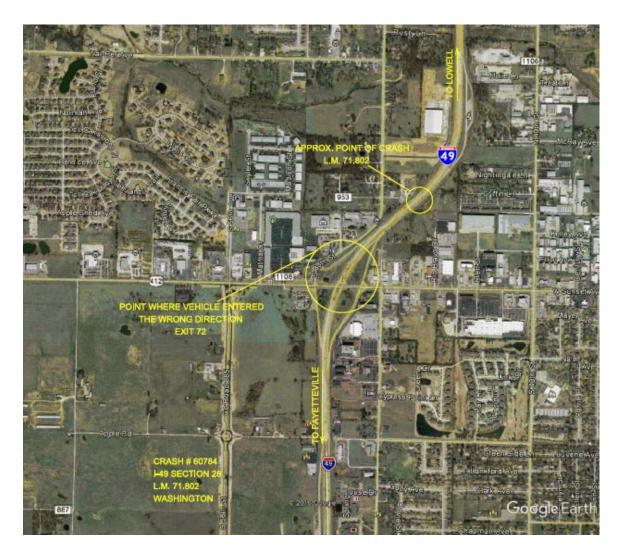
### Maintenance Review Results

The interchange at Exit 260 is currently under construction and temporary signage was in place.





# Interstate 49, Exit 72 in Washington County Crash Number 2015060784



### Maintenance Review

The driver accessed the southbound lane of I-49 at Exit 72 and traveled northbound in the southbound lane. The driver was involved in a property damage only sideswipe opposite direction collision at log mile 71.802.

## Maintenance Review Results

The interchange at Exit 72 was reviewed. Pavement markings and signs were in conformance with MUTCD and ARDOT standards.











