

**Alabama Department of Transportation
Highway Safety Improvement Program (HSIP)
Introduction to the HSIP Project Application Form**

10/2/2015



The Alabama Department of Transportation (ALDOT) is pleased to provide this Highway Safety Improvement Program (HSIP) Project Application Form to assist your agencies in applying for funding for much needed highway safety projects across the State. Counties, cities, and various ALDOT offices may propose projects at any time during the year. **In order for HSIP projects to be selected for funding, ALDOT must confirm that the project application is complete and based on sound engineering principles.** All project applicants MUST coordinate their applications with their ALDOT Region Office. **Once the Region Office reviews the application for completeness, it is forwarded to the ALDOT Office of Safety Operations (OSO) for final approval. The application is then forwarded to the Federal Highway Administration (FHWA) for coordination and funding approval.**

Please note that one HSIP project application is REQUIRED for each type of project. Proposed project cannot include intersection(s) and road segment(s). If proposed project includes both, two (2) separate forms will need to be completed and submitted separately. However, up to three (3) highway safety countermeasures may be proposed for EACH project. For the purposes of this application, the term "countermeasure" means a proposed implementation action or safety-related improvement. If you have any questions about the HSIP Project Application Form, please contact your ALDOT Region Office.

The following items should be included in the HSIP Project Application to be considered "complete" by ALDOT.

- Cover letter from Project Sponsor Agency stating that the designated Contact Person is authorized to work with ALDOT on the project application and that non-federal matching funds will be made available for the HSIP project if it is selected for federal funding.
- HSIP Project Application Form - Worksheet 1 & Worksheet 2 (two pages) - signed by authorized representative of the sponsoring agency.
- Completed Questions Form
- For proposed intersection improvement projects - Drawing or map of intersection showing key features, safety problems and proposed countermeasures.
- For proposed road segment improvement projects - Drawing or map of project area showing key features, safety problems and proposed countermeasures.
- Labeled photos of project area with photo key showing location and orientation of photo
- Traffic data and traffic growth rate calculations
- For proposed intersection improvement projects - Intersection turning movement counts (OPTIONAL)
- Crash Summary Form and collision diagram
- For proposed traffic signal projects - submit traffic signal warrant worksheets
- If proposing a countermeasure that is not in the Improvement Table and spreadsheet, the applicant must provide information to support the service life and crash reduction factors (CRF) for the proposed countermeasure
- Preliminary project cost estimate with any supporting documentation for each proposed countermeasure. Also provide supporting documentation for estimated maintenance costs for each countermeasure.
- Engineering study for the proposed HSIP project signed by a Licensed Engineer in the State of Alabama
- Other data or information that supports the need for the proposed HSIP project (i.e. news articles, local government resolutions, etc.)

The HSIP Project Application Form requires data and information related to the location of the proposed project, the project sponsor agency and contact information, detailed description of the nature and location of proposed improvements, annual average traffic data (either for the intersection(s) or road segment(s)); detailed crash data (by type), detailed data on the potential reductions of crashes (by fatality, injury, and property damage categories), and other data. **Please refer to the "Guidance" tab for assistance. See also "Roadway Segment Example" and "Intersection Example" tabs for examples of completed worksheets.**

Please note: All crash data included in the ALDOT HSIP Project Application should be obtained from the CARE System (Critical Analysis Reporting Environment), where possible. For more information about the CARE system, please contact Waymon Benifield, (334)353-6404 or benifieldw@dot.state.al.us of the Safety Section of ALDOT's Modal Programs Office. CARE website - <http://care.cs.ua.edu>

For more information about the HSIP Program, please contact:

Sonya Baker
ALDOT Safety Engineering Manager
Office of Safety Operations
1110 John Overton Drive
Montgomery, Alabama 36110

Telephone: (334) 353-6468
E-Mail Address: bakers@dot.state.al.us

Alabama Department of Transportation Highway Safety Improvement Program (HSIP) Project Application Form (10/2/2015) Page 1 of 2										FOR ALDOT USE ONLY													
										Logged in: _____ Project Mgr. _____ HSIP Ref. #: _____													
1. Project Type:	Intersection	No	Road Segment	Yes	2. Sponsoring Agency:	City of Foley				Review Date:	_____	(for ALDOT use only)											
3. Project to be Administered By:	City of Foley			4. Contact Person:	Chad Christian	5. Phone Number:	251-970-1104		6. E-Mail Address:	cchristian@cityoffoley.org													
7. Street Address:	PO Box 1750			8. Fax: (optional)		9. ALDOT Region:	Southwest		10. MPO/RPO Area:	South Alabama RPO													
11. City, State, Zip :	Foley, AL 36536			12. Priority # (if submitting 2 or more forms):			1		13. Application submitted before?		No												
Note to Applicants: Each project must have a separate application form. Up to three (3) safety improvement actions may be included per application.		14. County	15. Route (including local name)		16. On State Hwy System?	17. Traffic Control	18. From (Cross Street, Milepost, Etc.):		19. To (Cross Street, Milepost, Etc.):														
		Baldwin	W Pride Boulevard		No		S Pine Street		SR-59 (S McKenzie Street)														
20. Functional Class Name (Federal):		J - Urban Local			21. Omitted		Omitted		22. Omitted		Omitted												
23. Risk Narrative - describe the safety problem(s) and the proposed project to address it.		The current road segment being considered by this project is a 4-lane divided city street that provides access from a 5-lane state highway to multiple businesses, a high school, and local streets connecting to residential areas. There is a median opening along this segment that provides four-way access to large commercial developments on both sides of the road that generate a significant volume of left turning vehicles. There is also an undivided 5-lane section along this segment near a signalized intersection with the 5-lane state highway. There are no left turn lanes present at the median opening and it is only stop controlled in 2 directions. There are also large trees in the median creating problems with sight distance at the median opening. The proposed countermeasures would (1) remove direct left turns from the commercial developments and replace them with right turns followed by u-turns using access management and installing a roundabout, (2) install left turn lanes into both commercial developments to address sight distance issues created by the trees and to provide storage for left turning vehicles separate from through lanes, (3) install raised median strips in the 5-lane section to remove direct lefts and to better channelize turning vehicles at the intersection.																					
Crash Data (Items 24 - 34) - collision diagram is required for each application form	Crash Type		24.	25.	26.	27.	28.	29.	30.	31.	32. Total Related Crashes	33. Total Unrelated Crashes	34. Total Crashes										
	Severity		Angle	Head On	Sideswipe - Same Dir																		
	Personal Injury (PI)	Fatal	K									0	0	0									
			A									0	0	0									
			B	3								3	1	4									
			C	2								2	0	2									
		PDO	PDO	16	1	1						18	9	27									
Total			21	1	1						23	10	33										
Traffic Data (Intersection Project)	36. Total ADT Entering Intersection		37. NB Entering ADT	38. SB Entering ADT	39. EB Entering ADT	40. WB Entering ADT	41. Other Leg Enter ADT	42. # of Approaches	43. ALDOT Node No.	44. Traffic Annual Growth Rate	35. Number of Years of Crash Data Used:		3										
			0	0	0	0	0	0	0	3.0%													
Traffic Data (Road Segment Project)			Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Total/Average	Worksheet Color Legend: <table border="1"> <tr> <td>Blue</td> <td>Information to be input by Applicant</td> </tr> <tr> <td>Green</td> <td>Data Automatically Generated</td> </tr> <tr> <td>Yellow</td> <td>Drop-Down List (Choose Item)</td> </tr> <tr> <td>Orange</td> <td>For ALDOT's Use</td> </tr> <tr> <td>Gray or White</td> <td>No Information Required</td> </tr> </table>					Blue	Information to be input by Applicant	Green	Data Automatically Generated	Yellow	Drop-Down List (Choose Item)	Orange	For ALDOT's Use	Gray or White	No Information Required
	Blue	Information to be input by Applicant																					
	Green	Data Automatically Generated																					
	Yellow	Drop-Down List (Choose Item)																					
	Orange	For ALDOT's Use																					
	Gray or White	No Information Required																					
45. Seg. Length (mi)		0.250					0.250																
46. Speed Limit		20					20.00																
47. Average AADT		5305					5305.00																
48. No. of Lanes		4					4.00																
49. Lane Width		10					10.00																

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50. No. of Countermeasures or Improvement Actions	1	51. Discount Rate (X.X%)	3.0%
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Items 52 - 58: Potential Reduction of Crashes (by type) and Total

Proposed Countermeasures or Improvement Actions	Action No.	52. Proposed Countermeasure or Improvement Action	53. Service Life (in yrs)	54. Crash Reduction Factors (CRF)			55. K Crashes Reduced	56. A Crashes Reduced	57. B Crashes Reduced	58. C Crashes Reduced	59. PDO Crashes Reduced	60. Total Potentially Reduced Crashes	61. Annual Reduced Crashes by Countermeasure
				K	A, B, & C	PDO							
	1	Channelization Improvements - Replace direct left with right turn and u-turn	20	0.51	0.51	0.51	0.00	0.00	1.53	1.02	9.18	11.73	3.91
	2	No Improvement	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	No Improvement	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			20	0.51	0.51	0.51	0.00	0.00	1.53	1.02	9.18	11.73	3.91
			Max Service Life	Combined CRF			Potentially Reduced Crashes						

Project Schedule (After STIP Approval)	62. Begin PE Date (MM/YYYY)	10/2018	63. Target Ad Date (MM/YYYY)	04/2019	64. Begin Construction Date (MM/YYYY)	05/2019	65. Estimated Project Complete Date (MM/YYYY)	08/2019
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Estimated Project Costs

	66. Design & Engineering Cost	67. R/W & Utility Cost	68. Construction and CE&I Cost	69. Maint. cost for service life of project	70. Total Project Cost	71. Annual Project Cost
Action No.						
1	\$ 118,900.00	\$ 72,500.00	\$ 1,076,600.00	\$ 150,000.00	\$ 1,418,000	\$ 95,312
2	\$ -	\$ -	\$ -	\$ -	\$ -	
3	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$ 118,900	\$ 72,500	\$ 1,076,600	\$ 150,000	\$ 1,418,000	\$ 95,312

Estimated Project Benefits

Type of Crash	72. Annual Reduced Crashes by Type	73.* Cost per Crash (2017 \$)	74. Annual Benefit
K	0.00	\$ 196,100	\$ -
A	0.00	\$ 196,100	\$ -
B	0.51	\$ 196,100	\$ 100,011
C	0.34	\$ 55,700	\$ 18,938
PDO	3.06	\$ 9,200	\$ 28,152
75. Total Annual Reduction in Crashes	3.91	76. Total Annualized Benefit	\$ 147,101

Calculation of Benefit/Cost (B/C) Ratio	Benefit	76. Total Annualized Benefit	\$147,101	77. Traffic Growth Factor	1.38	78. Total Annual Benefit	\$203,562
	Cost	79. Annual Project Cost					
		\$ 95,312					
	80. Benefit/Cost Ratio:		2.14				

* Cost data from the North Carolina Department of Transportation (NCDOT) adjusted by the Consumer Price Index (CPI)

Signature of Sponsor with Authority to Expend 10% Non-Federal Matching Funds

Name _____ Signature: _____ Date: _____
 (Print): _____

Alabama Department of Transportation
Highway Safety Improvement Program (HSIP) Project Application - Questions Form (10/2/2015)
Add additional sheets as necessary



1. Please describe in detail the specific location of the proposed HSIP project. Please identify whether project relates to an INTERSECTION or a ROAD SEGMENT. Please attach at least ONE sketch or map of the project area and at least ONE labeled photo describing the project area.

The proposed project is a ROAD SEGMENT located on W Pride Blvd between S Pine St and SR-59 in the City of Foley in Baldwin County. The road segment within the project is a 4-lane divided street for most of the project length, with a 5-lane section where it intersects SR-59 at a signalized intersection. There are two intersections along the project, one being a 4-way stop and one being a full access median opening that's stop controlled only from the sides.

2. Please describe in detail the identified safety problems at this location and the need for the proposed improvement(s).

The safety problems that have been identified on this road segment are arising from high volumes of left turning movements from commercial drives along the road segment and from sight distance issues with the divided median and a lack of dedicated left turn lanes in the median. This road segment provides access to multiple commercial developments, a high school, and to other local streets that connect to residential areas. The high volume of through traffic conflicting with left turning vehicles originating from multiple points along the road segment create the need for the proposed improvements.

3. Please describe the proposed improvement action(s) or countermeasure(s) and document proposed improvements that do NOT have known crash reduction factors (CRFs), but are expected to reduce the risk of crashes.

The proposed countermeasures would remove the left turning movements from commercial accesses that have a history of these types of crashes and would replace them with right turns followed by u-turns using access management techniques along W Pride Blvd and a roundabout at the intersection of W Pride Blvd at S Pine St to provide for the u-turn movement. The project also proposes to install left turn lanes in the median into both commercial developments to address sight distance issues created by the trees and to create adequate intersection geometry to discourage inappropriate left turns from the commercial accesses after the countermeasures are implemented. Additional access management techniques included installing raised median strips in the 5-lane section to properly remove direct lefts and to better channelize turning vehicles at the intersection.

4. Please describe the other alternative solutions that were considered, implemented, or eliminated at this location.

Other alternatives considered for this location include converting the two-way stop-controlled intersection to a four-way stop-controlled intersection on W Pride Blvd at the commercial accesses that are generating the high volumes of left turning traffic. This alternative is less desirable due to its proximity to a signalized intersection and the potential for vehicles to queue back into the signalized intersection, especially during peak hours of high school traffic. To date, no other alternative solutions have been implemented or eliminated at this location.

5. Please describe how the project cost was calculated and how you can ensure the project can be completed within the proposed budget and schedule.

The project cost was calculated based on an estimated pavement buildup and an engineer's estimate of the pay items required to construct the project. The City of Foley has a depth of relevant experience managing multi-million dollar grants projects and has the expertise and staff to ensure the project is completed within the proposed budget and schedule. In the case of any unexpected time delays or overruns in the project budget, the City will agree to authorize and pay for such additional unforeseen costs and will do so in a timely manner to ensure any funds awarded to this project are appropriately utilized towards completing the proposed countermeasures.



Summary of Crashes at Proposed Improvement Location (Related, Unrelated, and Total Crashes)

10/2/2015)

RELATED CRASHES										
	AL Crash Report Number (DPS Case No.)	Date	Crash Severity (Check the most severe one)					DUI? (Y or N)	Crash Type	Comments
			Fatal (K)	Injury (A)	Injury (B)	Injury (C)	PDO			
1	5631314	3/25/2015					1	N	Angle	
2	5631451	3/25/2015					1	N	Angle	
3	5684264	8/7/2015					1	N	Angle	
4	5695622	9/4/2015					1	N	Angle	
5	6606147	1/18/2016					1	N	Angle	
6	6620613	2/22/2016			1			N	Angle	
7	6641233	4/8/2016					1	N	Sideswipe - Same Dir	
8	6660257	4/21/2016					1	N	Angle	
9	6683418	7/20/2016				1		N	Angle	
10	6705812	9/9/2016					1	N	Head On	
11	7610495	1/27/2017					1	N	Angle	
12	7622231	2/25/2017					1	N	Angle	
13	7627379	3/9/2017					1	N	Angle	
14	7630019	3/15/2017					1	N	Angle	
15	7639881	4/7/2017					1	N	Angle	
16	7670726	6/13/2017					1	N	Angle	
17	7691999	8/4/2017					1	N	Angle	
18	7699333	8/22/2017			1			N	Angle	
19	7727866	10/27/2017					1	N	Angle	
20	7732438	11/2/2017			1			N	Angle	
21	7736836	11/16/2017					1	N	Angle	
22	7750306	12/15/2017					1	N	Angle	
23	7755859	12/22/2017				1		N	Angle	
24										
25										
26										
27										
28										
29										
30										
UNRELATED CRASHES										
	AL Crash Report Number (DPS Case No.)	Date	Crash Severity (Check the most severe one)					DUI? (Y or N)	Crash Type	Comments
			Fatal (K)	Injury (A)	Injury (B)	Injury (C)	PDO			
31	7708215	9/11/2017					1		Sideswipe - Same Dir	
32	7699593	8/18/2017					1		Rear End	
33	7647813	4/24/2017			1				Rear End	
34	6752614	12/22/2016					1		Sideswipe - Same Dir	
35	6726140	10/24/2016					1		Sideswipe - Same Dir	
36	6708448	9/17/2016					1		Sideswipe - Same Dir	
37	6705761	9/6/2016					1		Sideswipe - Same Dir	
38	6656279	5/14/2016					1		Rear End	
39	6612269	1/28/2016					1		Backed Into	
40	5692299	8/27/2015					1		Rear End	
TOTAL CRASH SUMMARY										
			Fatal	Injury A	Injury B	Injury C	PDO	Total	Legend:	
Total RELATED Crashes:			0	0	3	2	18	23	PDO - Property Damage Only	
Total UNRELATED Crashes:			0	0	1	0	9	10	DUI - Driving Under the Influence	
Total Crashes:			0	0	4	2	27	33		
Definitions: "Related Crashes" are those that can be addressed by the proposed safety countermeasures or improvement actions.										
"Unrelated Crashes" refer to crashes occurring at the proposed project location that cannot be addressed by the proposed countermeasure.										
"Total Crashes" is the sum of related and unrelated crashes at a specific location.										
Collision diagrams or maps should include all pertinent data related to the related crashes.										
Worksheet Color Legend:										
Blue - Information to be input by Applicant										
Green - Data Automatically Generated										
Yellow - Drop-Down List (Choose One)										