

**RESEARCH PROBLEM STATEMENT**

<b>DATE:</b> 9/6/2018	<b>PROJECT AREA:</b> Planning
<b>TITLE:</b> Bicycle and Pedestrian Crash Data Analysis	
<b>PROBLEM STATEMENT:</b>	
<p>In 2014, 13% of all roadway fatalities and serious injuries in Arkansas were bicyclists and pedestrians, up from 7% in 2010. Because these statistics have not improved, even as ARDOT has invested \$185 million over the last 20 years in bicycle and pedestrian improvements, it is imperative that further research and analysis be conducted to determine how future investment should be spent. It is vital that pedestrian and bicyclist safety be considered in the design of highways since highways traverse so many Arkansas towns.</p> <p>ARDOT published the “Arkansas Bicycle and Pedestrian Transportation Plan” in January 2017. One of the primary goals of this plan is to further integrate bicycle and pedestrian safety into the Toward Zero Death campaign, a FHWA led national effort to reduce the deaths on US highways to zero. Arkansas’s 2017 Strategic Highway Safety Plan includes an Action Plan for Bicycle/Pedestrian concerns. An action item in this plan is for ARDOT to complete an analysis of crash data and identification of countermeasures. A context sensitive approach can be developed once crash data is appropriately studied and applied to highway design.</p>	
<b>OBJECTIVES:</b>	
<ul style="list-style-type: none"> <li>• Collect pedestrian and bicycle crash data.</li> <li>• Conduct analysis on this data for patterns and indicators regarding what is contributing to these accidents.</li> <li>• Identify design countermeasures that could address these problem areas.</li> </ul>	
<b>FORM OF RESEARCH IMPLEMENTATION AND RETURN ON INVESTMENT:</b>	
<ul style="list-style-type: none"> <li>• Complete an implementation plan that would outline how these design changes can be made most efficiently to existing infrastructure and how the design recommendations may be incorporated into future designs.</li> <li>• A report of safety countermeasures based on the crash data analysis which can then be incorporated into the Highway Safety Improvement Program.</li> </ul> <p>ROI: If implemented, these safety improvements could cut healthcare costs associated with accidents. It is estimated that the total combined injury and fatality crashes involving pedestrians and bicyclists is costing Arkansas about \$720 million a year.</p>	
<b>Estimated Project Duration:</b> 12 Months	
<b>PREPARED BY:</b> Bethany Stovall	
<b>AGENCY:</b> Arkansas Department of Transportation	
<b>PHONE:</b> (501) 569-2279	<b>REVIEWER:</b> Tymli Frierson

Standing Subcommittee  
Ranking

6/6

Advisory Council  
Ranking

19/37

Statement Combined with  
Statement Number(s)

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