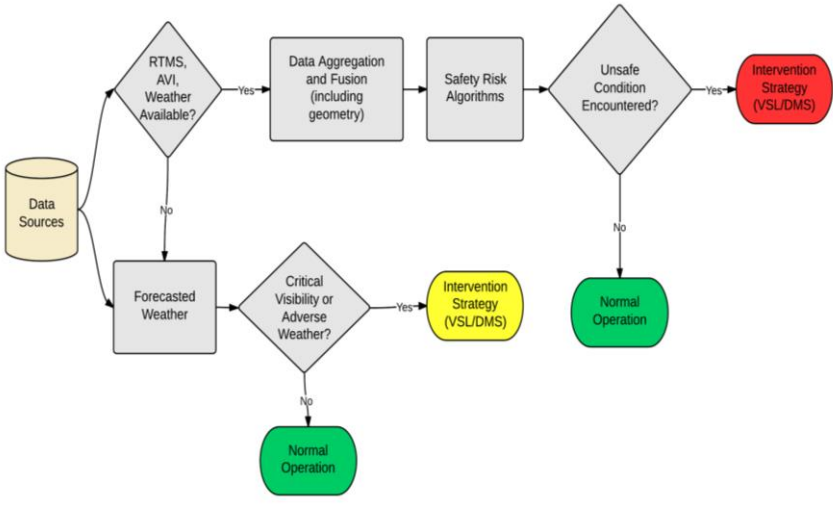




**Project Information Form**

Project Title	Integrating Safety in Developing a Variable Speed Limit System
University	University of Central Florida
Principal Investigator	Dr. Mohamed Abdel-Aty
PI Contact Information	M.Aty@ucf.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	NCTSPM UTC \$62,500 UCF \$39,509 Florida DOT \$36,627
Total Project Cost	\$125,000
Agency ID or Contract Number	RC614G3 1620-8095 1650-7073
Start and End Dates	01/01/2012 to 01/31/2014
Brief Description of Research Project	Integrating safety and operation in developing a Variable Speed Limit Algorithm
Describe Implementation of Research Outcomes (or why not implemented)  (Attach Any Photos)	<p>The image is an aerial satellite photograph of a road winding through a hilly, forested area. Overlaid on the map are several colored markers and labels. From left to right, there are four detector locations labeled 'Detector U4', 'Detector U3', 'Detector U2', and 'Detector U1'. Below these are three variable speed limit locations labeled 'VSL U3', 'VSL U2', and 'VSL U1'. Further to the right, there are two detector locations labeled 'Detector D1' and 'Detector D2'. The road is highlighted with a yellow and green line, and there are small icons of a car and a truck near the VSL U1 location.</p>

	<p>Figure 1. Study Corridor and locations of VSL</p>  <pre> graph TD     DS[(Data Sources)] --&gt; D1{RTMS, AVI, Weather Available?}     D1 -- Yes --&gt; A1[Data Aggregation and Fusion (including geometry)]     A1 --&gt; A2[Safety Risk Algorithms]     A2 --&gt; D2{Unsafe Condition Encountered?}     D2 -- Yes --&gt; I1[Intervention Strategy (VSL/DMS)]     D2 -- No --&gt; N1[Normal Operation]     D1 -- No --&gt; F[Forecasted Weather]     F --&gt; D3{Critical Visibility or Adverse Weather?}     D3 -- Yes --&gt; I2[Intervention Strategy (VSL/DMS)]     D3 -- No --&gt; N2[Normal Operation]     </pre> <p><b>Figure 1 Components of the Algorithm</b></p>
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>We developed a VSL algorithm that will minimize the risk of accidents while controlling for any negative effects on traffic operation. Variable Speed Limit proved effective to mitigate speed variation.</p>
<p>Web Links</p> <ul style="list-style-type: none"> <li>• Reports</li> <li>• Project website</li> </ul>	<p>Final report has been submitted</p>