



ALACHUA COUNTY COMPREHENSIVE PLAN: 2011-2030 EVALUATION AND APPRAISAL ISSUE SUMMARY

April 17, 2018

STATEMENT OF ISSUE

Review concerns regarding bicyclist safety and roadway design/speed standards, consider “Vision Zero” program, and expand bike safety education and outreach (BoCC, BPAB)

INTRODUCTION

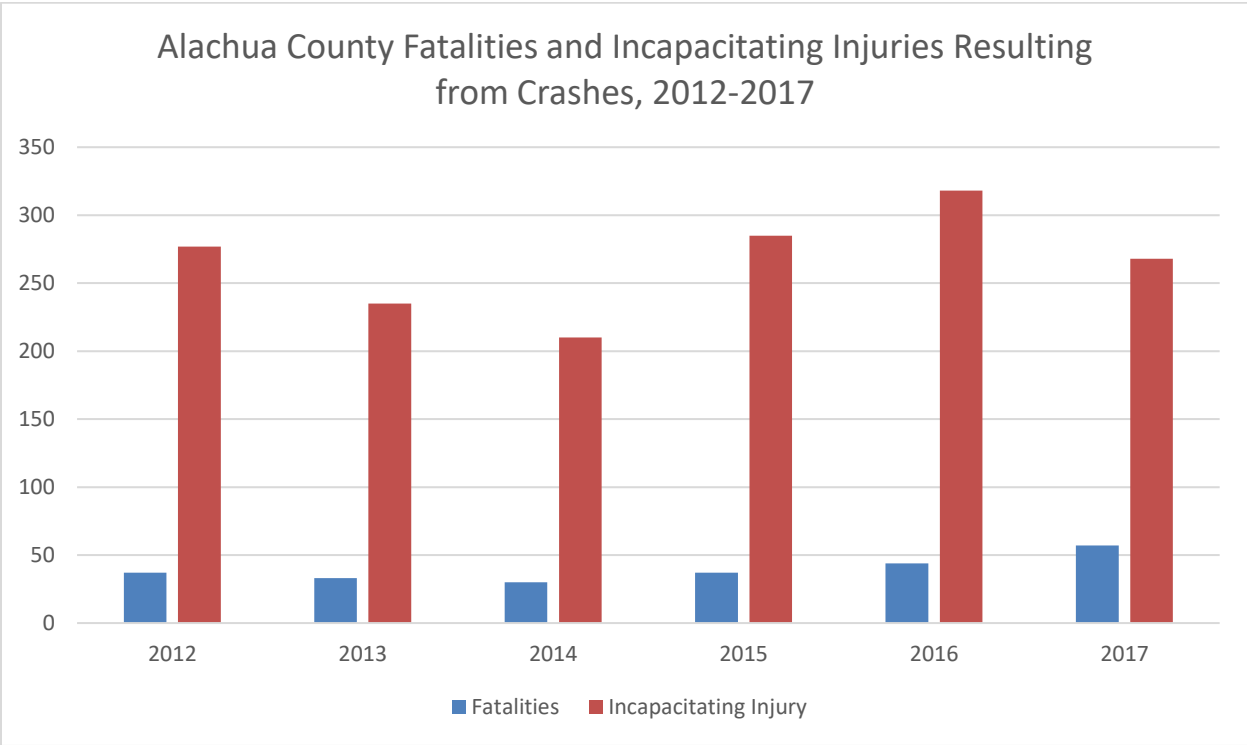
In many communities across the Country and world, there is an increasing emphasis on eliminating transportation-related fatalities and serious injuries while enhancing safe, equitable and healthy transportation for all. While there are many names for different specific programs in various places, the goal of eliminating transportation-related fatalities is generally referred to as “Vision Zero.” This paper will attempt to introduce Vision Zero, identify its applicability in Alachua County and provide some potential strategies for incorporation of the goals of Vision Zero into the Comprehensive Plan.

COMPREHENSIVE PLAN POLICIES RELATING TO ISSUE

Policies relevant to the issue should be included here, or attached at end of document

DATA AND ANALYSIS RELATING TO ISSUE

As can be seen in the chart, below, Alachua County experienced 57 traffic related fatalities in 2017. This represents a 33% increase over 2016. Additionally, from 2012 to 2017, Alachua County experienced more than 200 incapacitating injuries related to crashes each year. These fatalities and serious injuries include not only vehicle drivers, but also bicyclists and pedestrians.



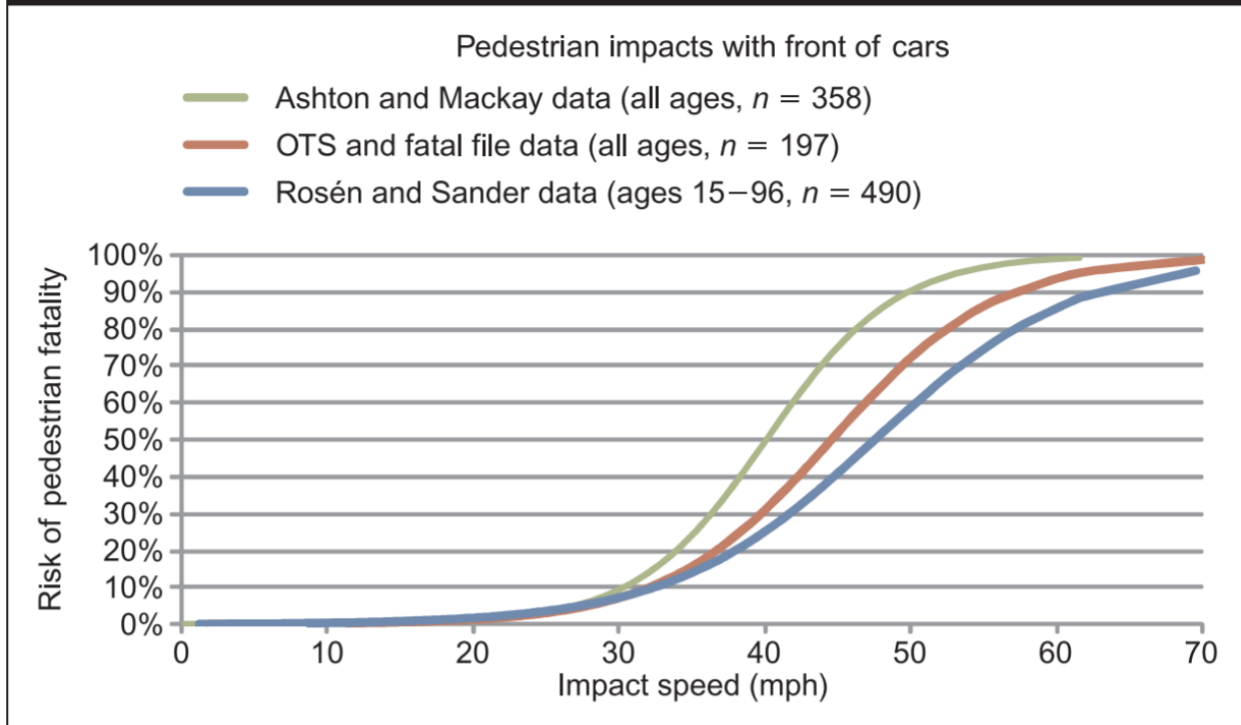
Source: Signal Four Analytics (<http://s4.geoplan.ufl.edu>). Data retrieved April 5, 2018.

The Federal Highway Administration and Florida Department of Transportation are both committing substantial resources towards investigating methods to reduce fatalities and serious injuries resulting from crashes on federal and State highways. This includes revised design standards, innovative technologies and increased funding for safety-related projects. In addition, the City of Gainesville is implementing Vision Zero goals within the City limits.

The main goal of Vision Zero is the eliminate fatalities and serious injuries for all transportation facility users. It is important to note that, while reducing the overall crash rate may help to achieve this goal, there will always be crashes on roadways. Thus, reducing the severity of crashes is the main focus of many Vision Zero policies related to automobiles.

Generally, many studies have found that for both pedestrians and car drivers, the risk of fatality increases with speed for almost all crashes. A study published in 2010 by the Department for Transport in the United Kingdom produced the following charts for pedestrians and drivers.

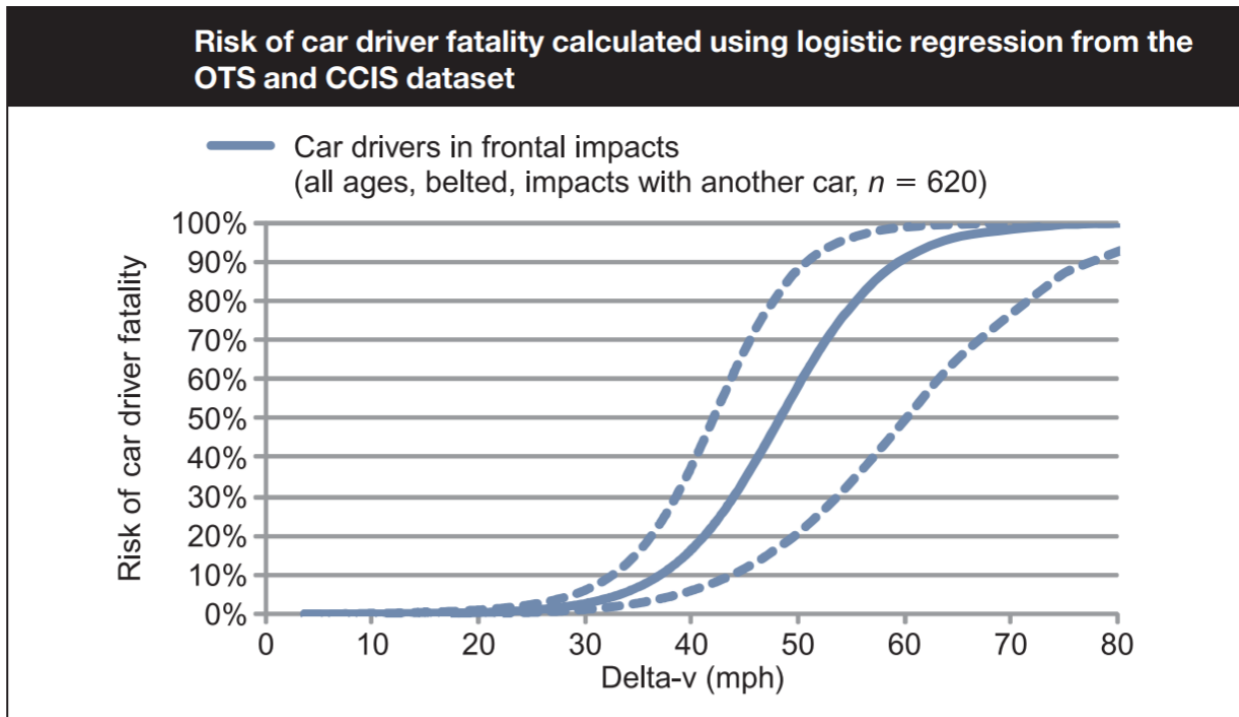
Risk of pedestrian fatality calculated using logistic regression from the Ashton and Mackay, OTS and police fatal file, and Rosen and Sander datasets



Source: Department for Transport: London, [Road Safety Web Publication No. 16: Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants](#). Table 4.1, September 2010.

For pedestrians, the risk of pedestrian fatality in crashes increases from a few percent when a vehicle is travelling 20 mph to between 28% and 55% at 40 mph. Even at 30 mph, the risk of fatality for a pedestrian is ranged from 7 to 10%. For head-on collisions between two vehicles, the risk of a fatality for a driver at 20 mph is nearly 20% (both vehicles travelling at 20 mph produces a delta-v of 40 mph). When both vehicles are travelling 30 mph, the risk increase to approximately 90%. Side impacts and single-vehicle crashes also have risks for fatalities that increase with speed.

Regardless of mode of transport, this study, and other similar studies, indicates that one of the most significant contributions to fatalities and serious injury in roadway crashes is speed. Both for pedestrians and for drivers, reduced speeds of as little as 5 mph on roadways would significantly reduce the risk of fatalities and serious injury.



Source: Department for Transport: London, Road Safety Web Publication No. 16: Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants. Table 3.3, September 2010.

There are additional strategies that can be used to reduce the severity of crashes and to provide protection to vulnerable roadway users. However, the main goal of Vision Zero is to actively work to eliminate fatalities and serious injury. This requires a commitment to understand each fatality that occurs and try to find innovative solutions. With this in mind, following are some potential strategies for addressing Vision Zero in the Comprehensive Plan.

POTENTIAL STRATEGIES FOR ADDRESSING ISSUE

1. Identify a timeframe within which the County aims to achieve zero traffic fatalities and sever injuries among all transportation users;
2. Identify safety as a primary design goal for all Alachua County transportation facilities;
3. Develop policies to provide information and updates to the Board about the status of transportation-related fatalities on a regular basis;

REFERENCE MATERIALS

The Vision Zero Network (<http://www.visionzeronetwork.org>)

Toward Zero Deaths: National Strategy on Highway Safety (<http://www.towardzerodeaths.org>)