

Justin Mateo

CSCE 580

12/7/2025

CSCE580 Final

Q1a:

- a) Towards Enhancing Road Safety in South Carolina Using Insights from Traffic & Driver-Education Data. Sai Teja Paladi
- b) The paper concludes that two way divided roads with barriers should be increased in urban counties and that educational programs such as Alive at 25 should be more widespread in rural counties. An example for the first action would be to consider an urban county in SC, such as Richland which the paper states has one of the highest collision rates. A certain road in it may have frequent head-on collisions and fender-benders due to it being a two way road that is non-divided. After implementing a barrier converting it to a two-way divided road, the number of collisions decreases over the following year.

At the same time a rural county such as Aiken, which on the collision heatmap has a moderate number of collisions, is seeing a continued rise in teen and young adult car collision incidents. Participation in the Alive@25 program has also been decreasing along the same timeline, which may correlate with the increase in collisions. Expanding awareness of the Alive@25 program in an attempt to boost participation could result in lower collision rates for the county following an increase in participation.

- c) The conclusion of the paper is supported in my examples because it shows that the infrastructure improvements such as installing barriers on non-divided roads, could directly reduce collision risks in urban areas. Similarly, an increase in awareness and promotion of the Alive@25 program in rural areas could lead to fewer collisions in those communities, supporting the paper's observation that driver education participation is declining in these areas.