

NORTH CAROLINA
Department of Transportation



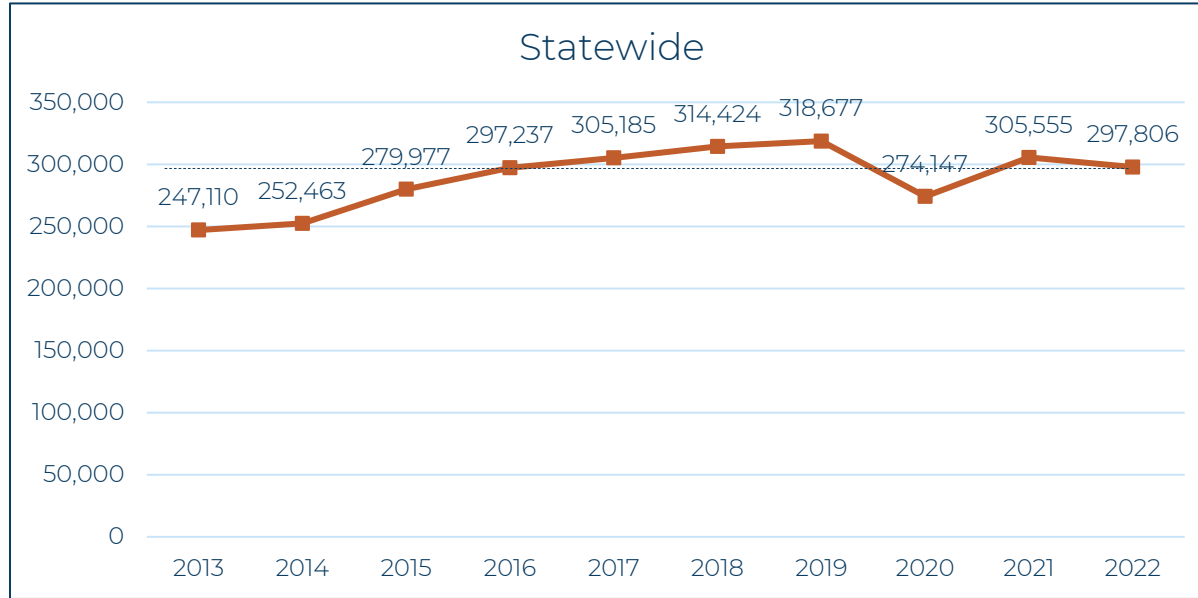
Robeson County Vision Zero Meeting

Carrie Simpson, Safety Evaluation Engineer

January 26, 2023

Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

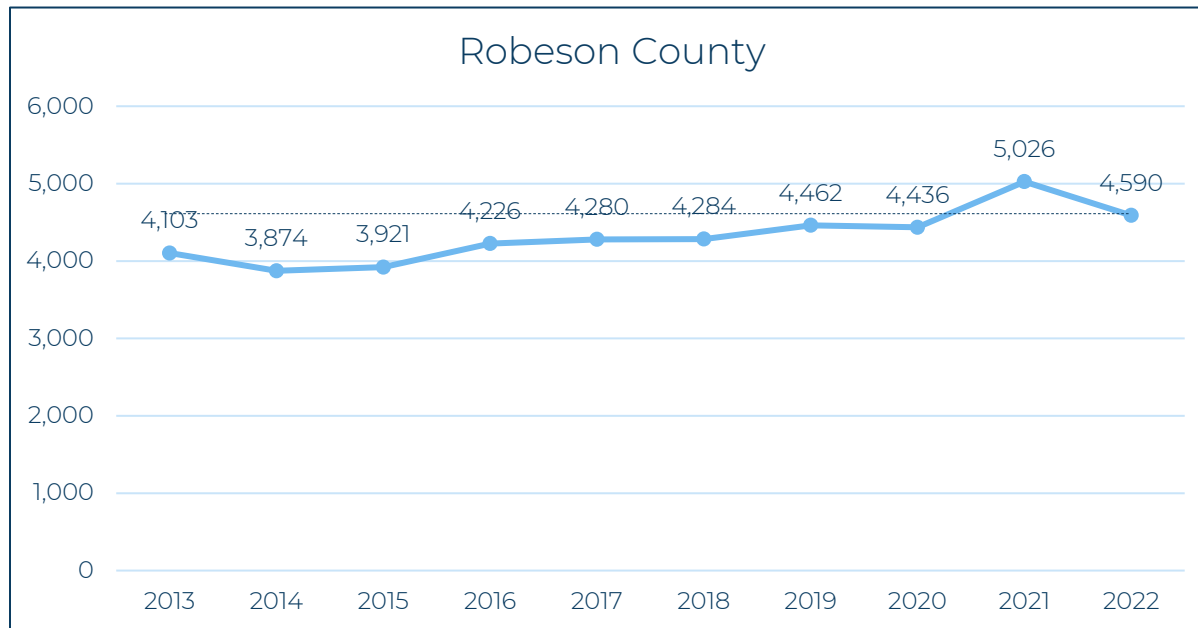
Total Crash Trends



Statewide

2020 to 2021: + 11%

2021 to 2022: - 3%

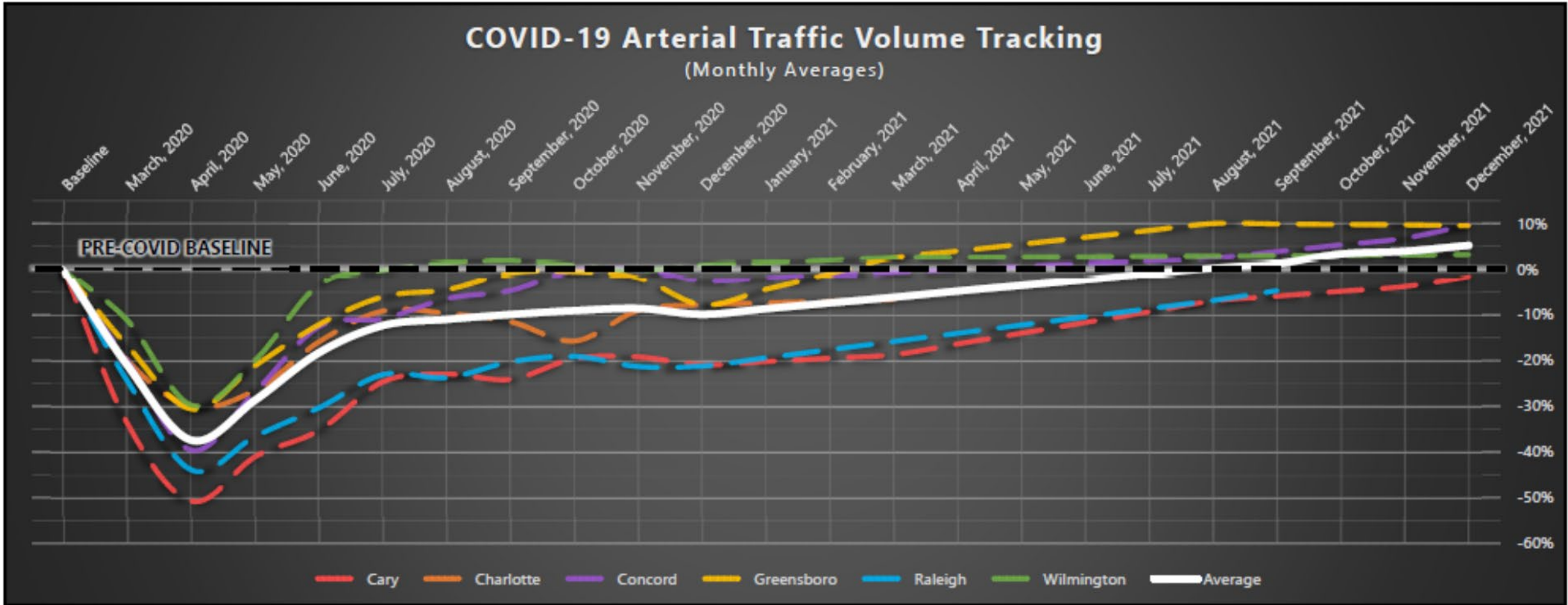


Robeson County

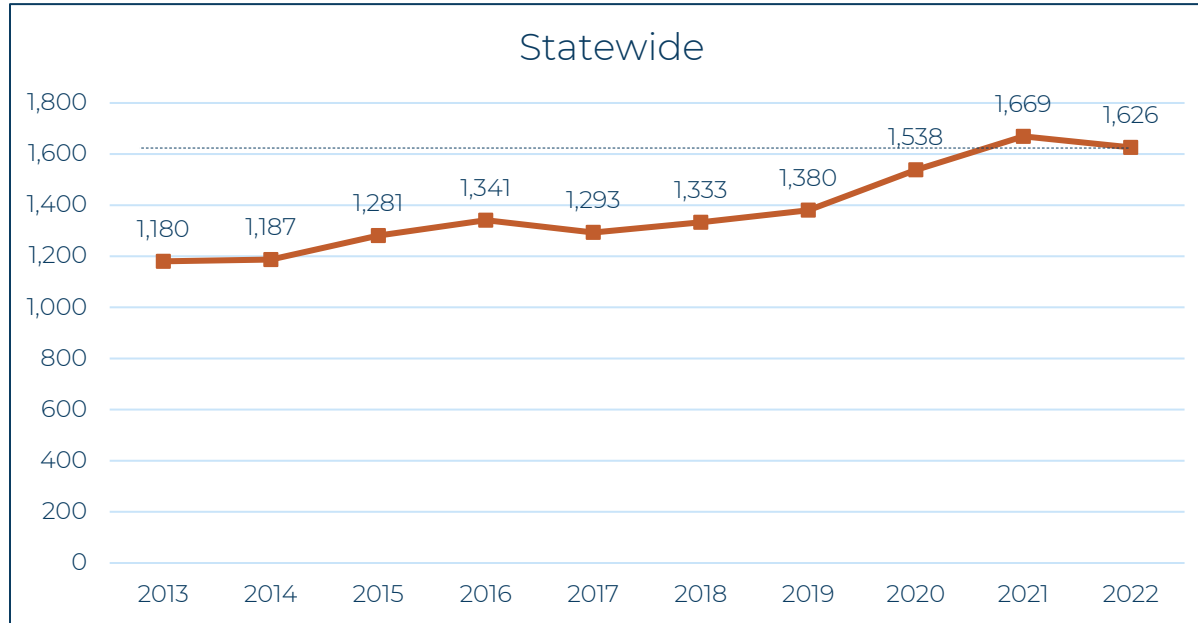
2020 to 2021: + 13%

2021 to 2022: - 9%

2020 COVID Volume Trends - Statewide



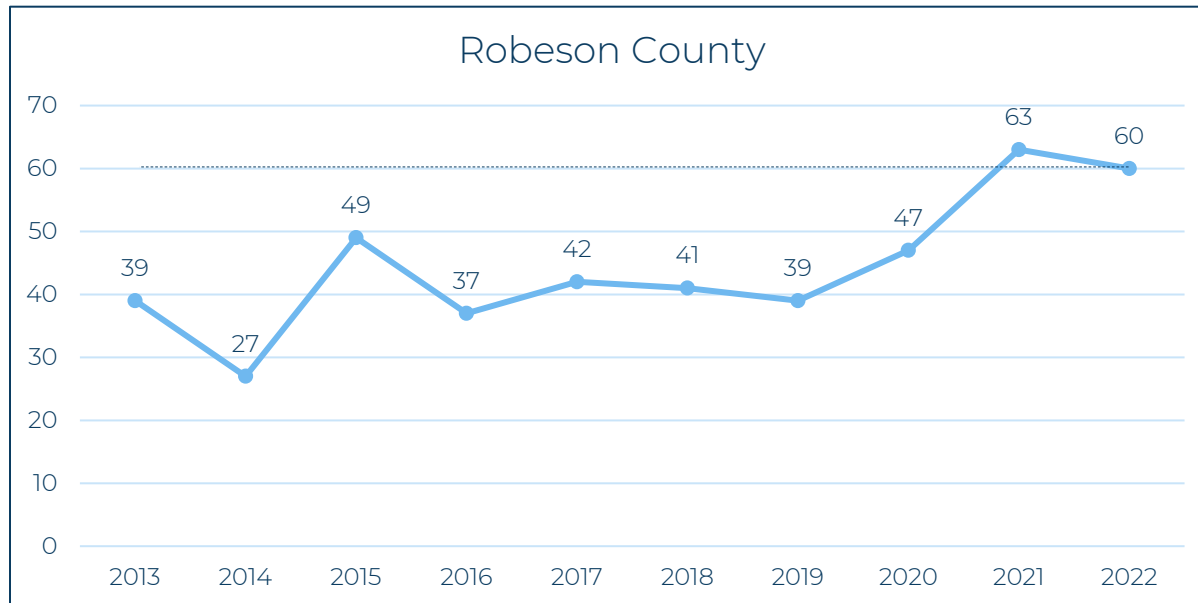
Fatal Crash Trends



Statewide

2020 to 2021: + 9%

2021 to 2022: - 3%

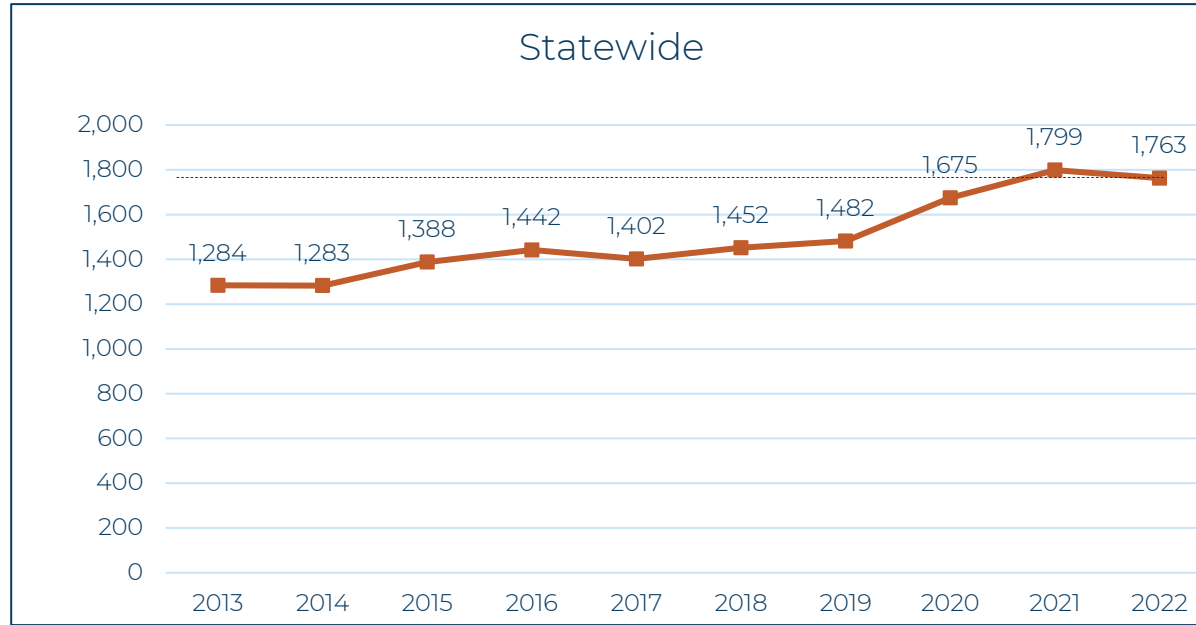


Robeson County

2020 to 2021: + 34%

2021 to 2022: - 5%

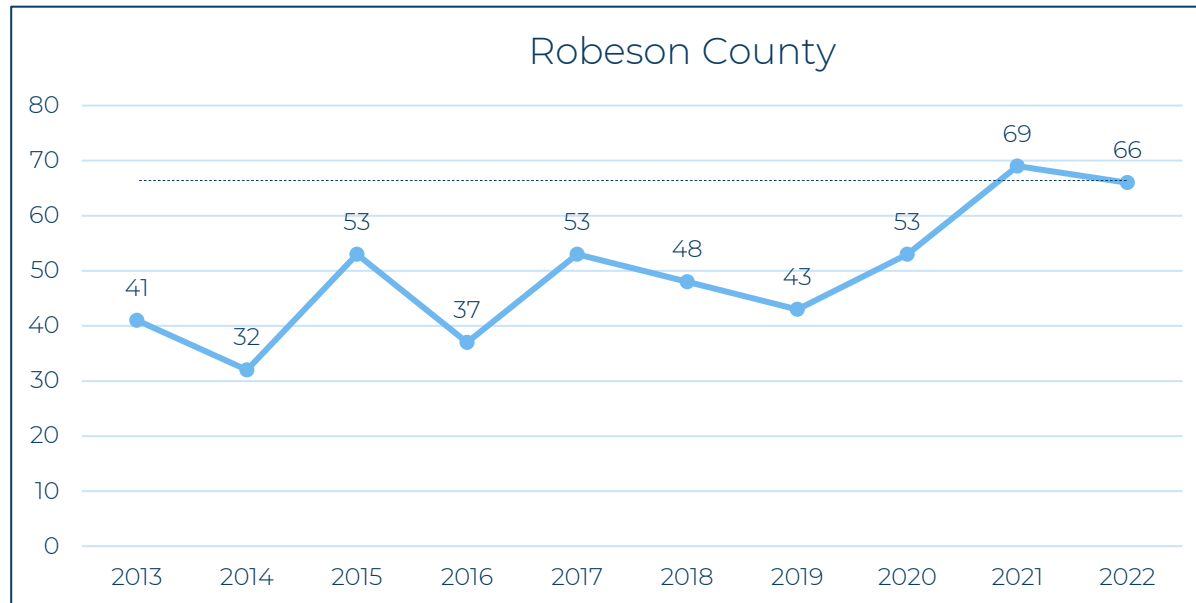
Fatality Trends



Statewide

2020 to 2021: + 7%

2021 to 2022: - 2%



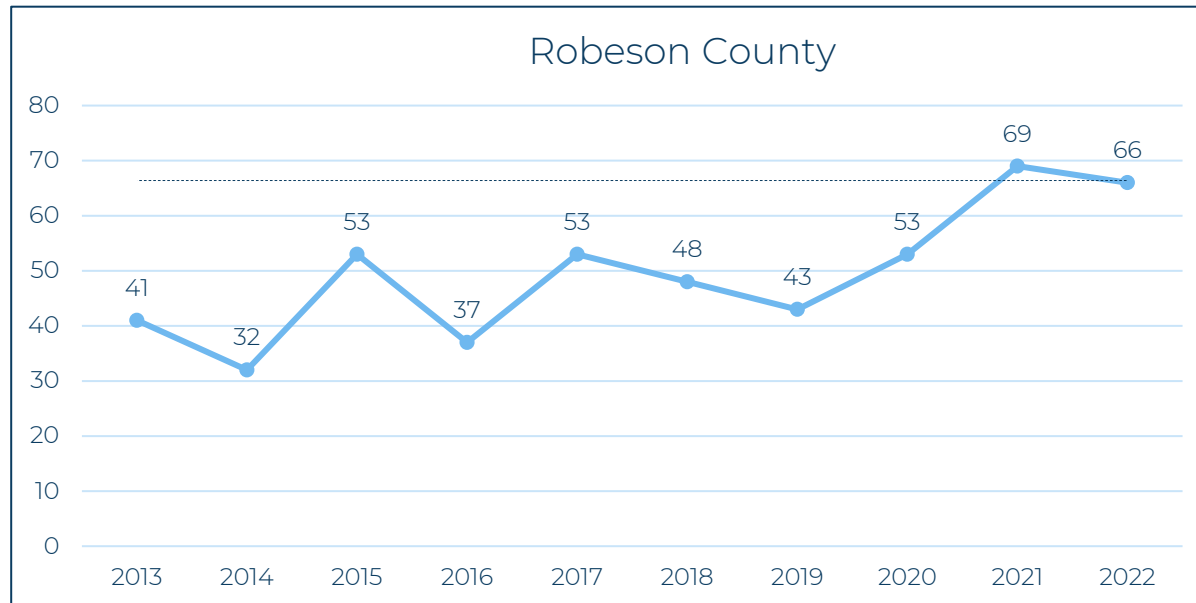
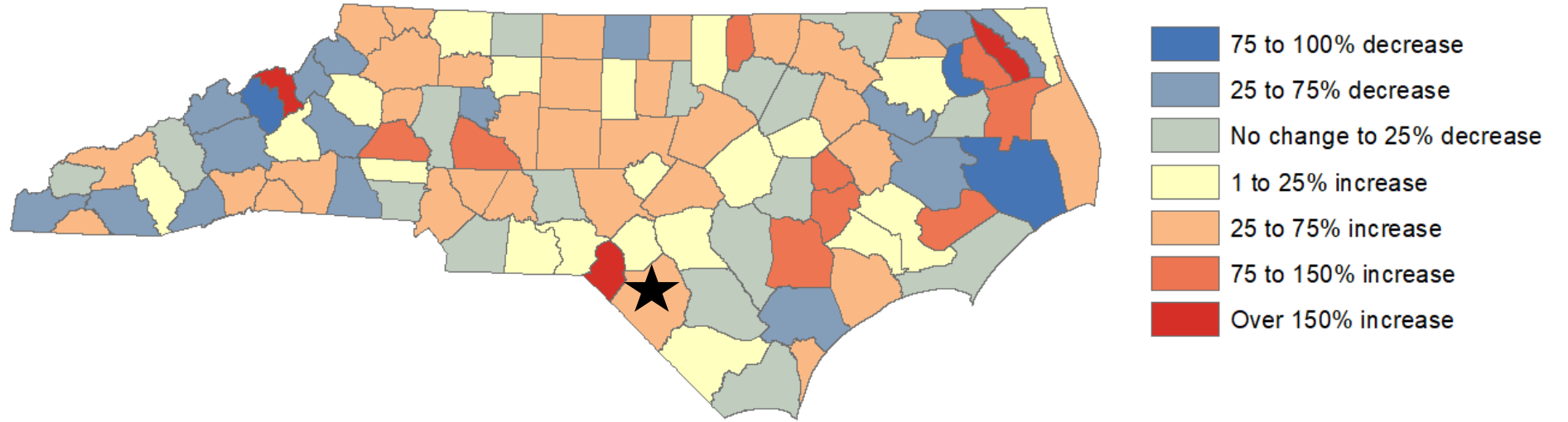
Robeson County

2020 to 2021: + 30%

2021 to 2022: - 4%

Fatality Trends

Change in Fatalities by County (2021 Compared to Pre-Pandemic 5-Year Annual Average)



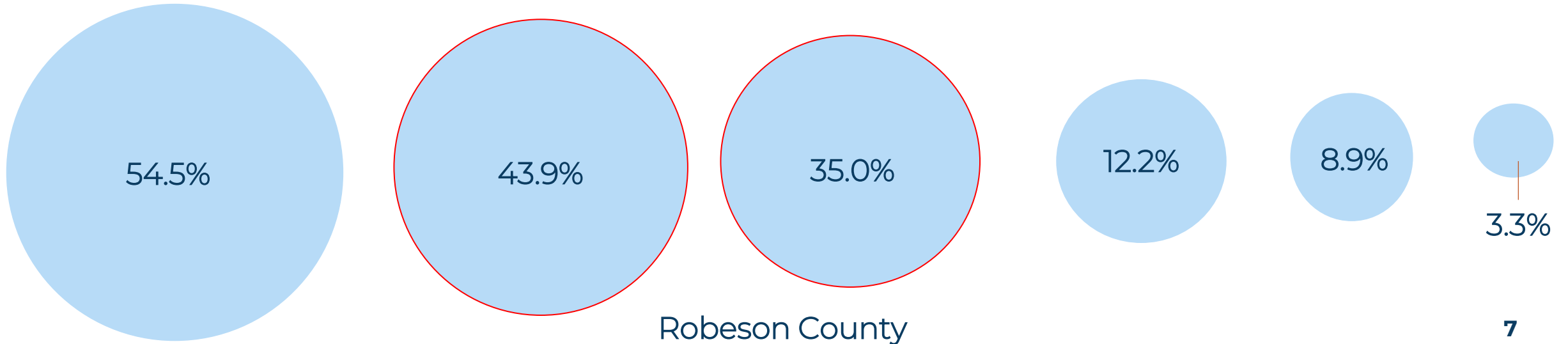
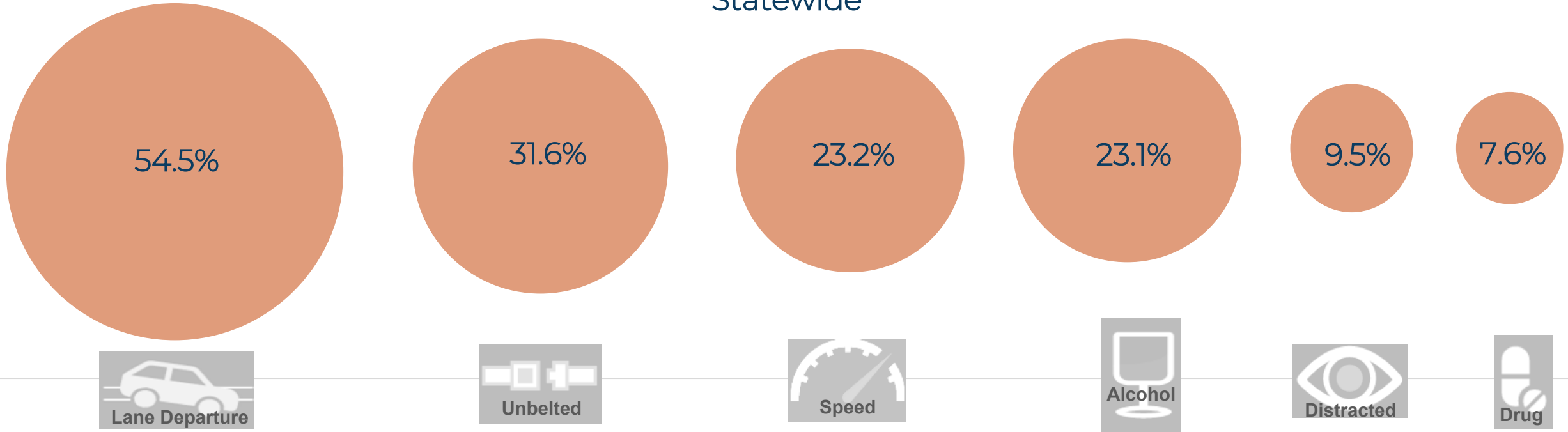
Robeson County

2020 to 2021: + 30%

2021 to 2022: - 4%

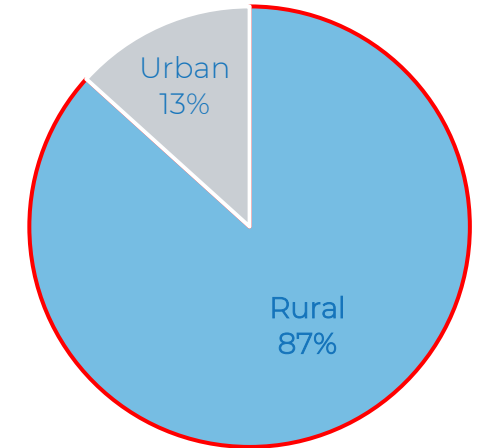
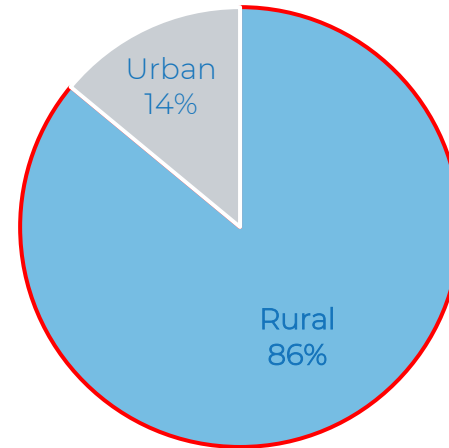
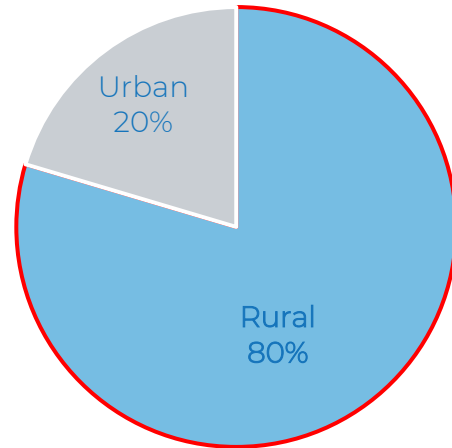
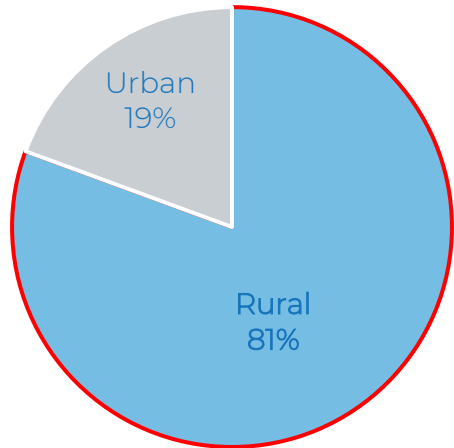
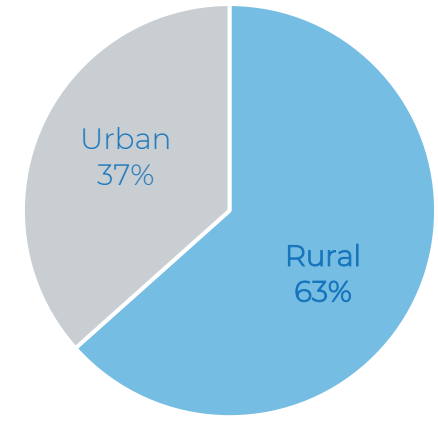
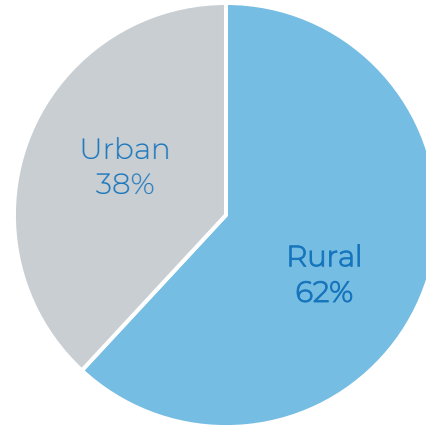
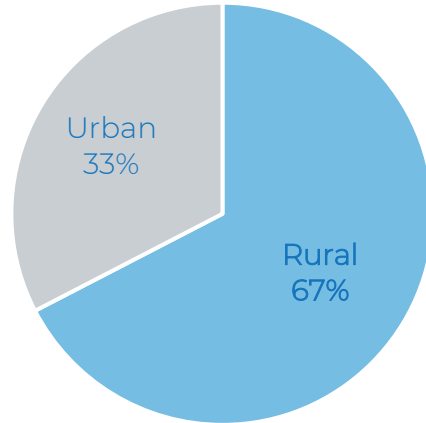
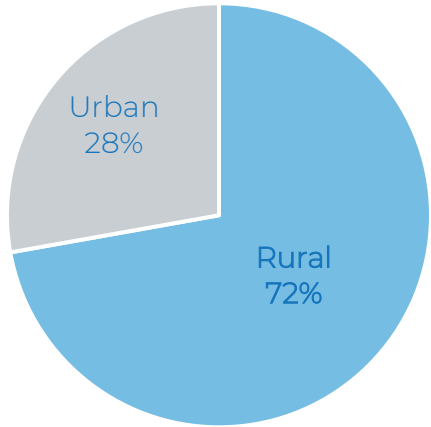
ncdot.gov Fatal Crashes - 2021 and 2022 – Percent Share (Contributing Factors)

Statewide



Fatal Crashes - 2021 and 2022 – Percent Rural

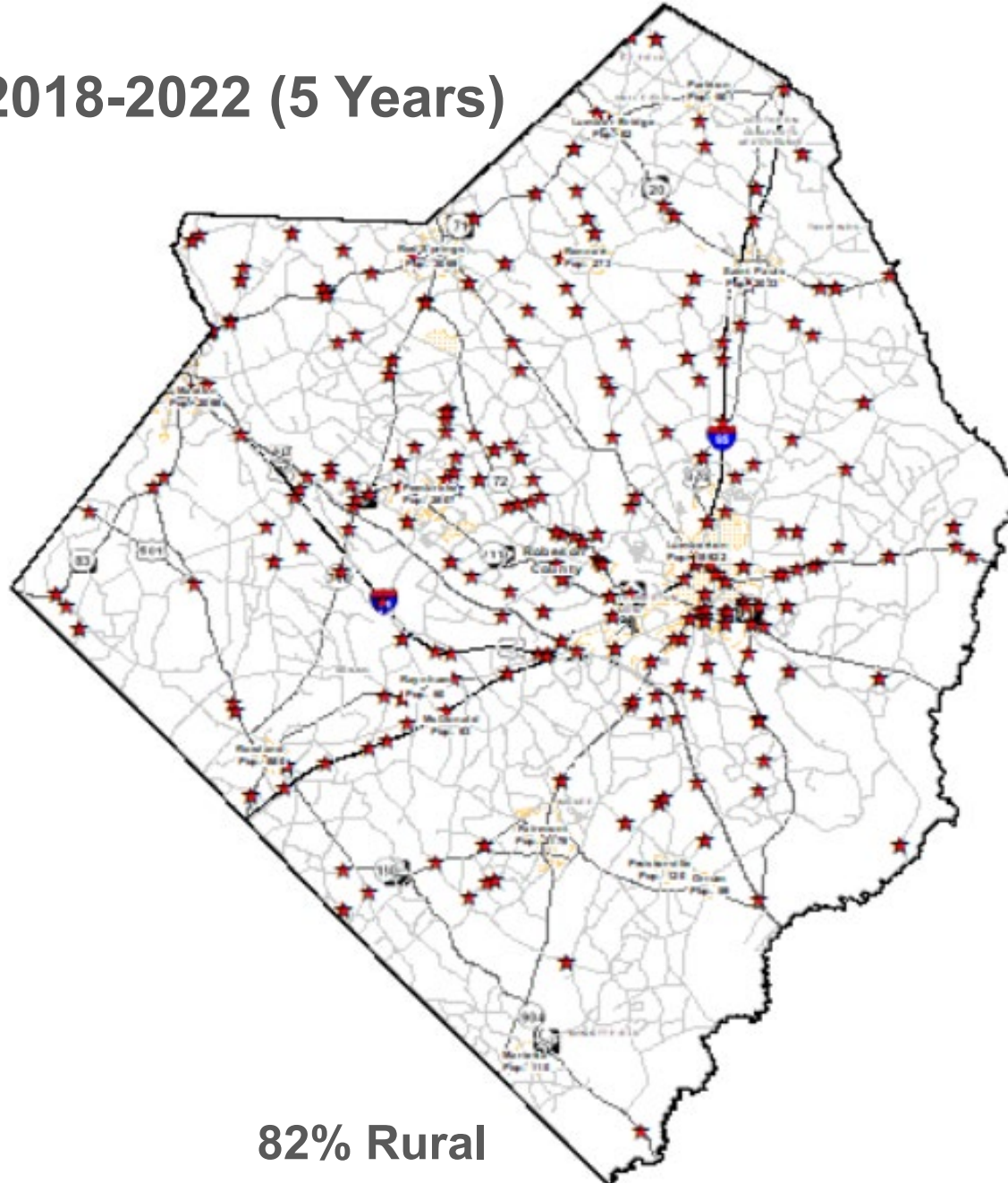
Statewide



Robeson County

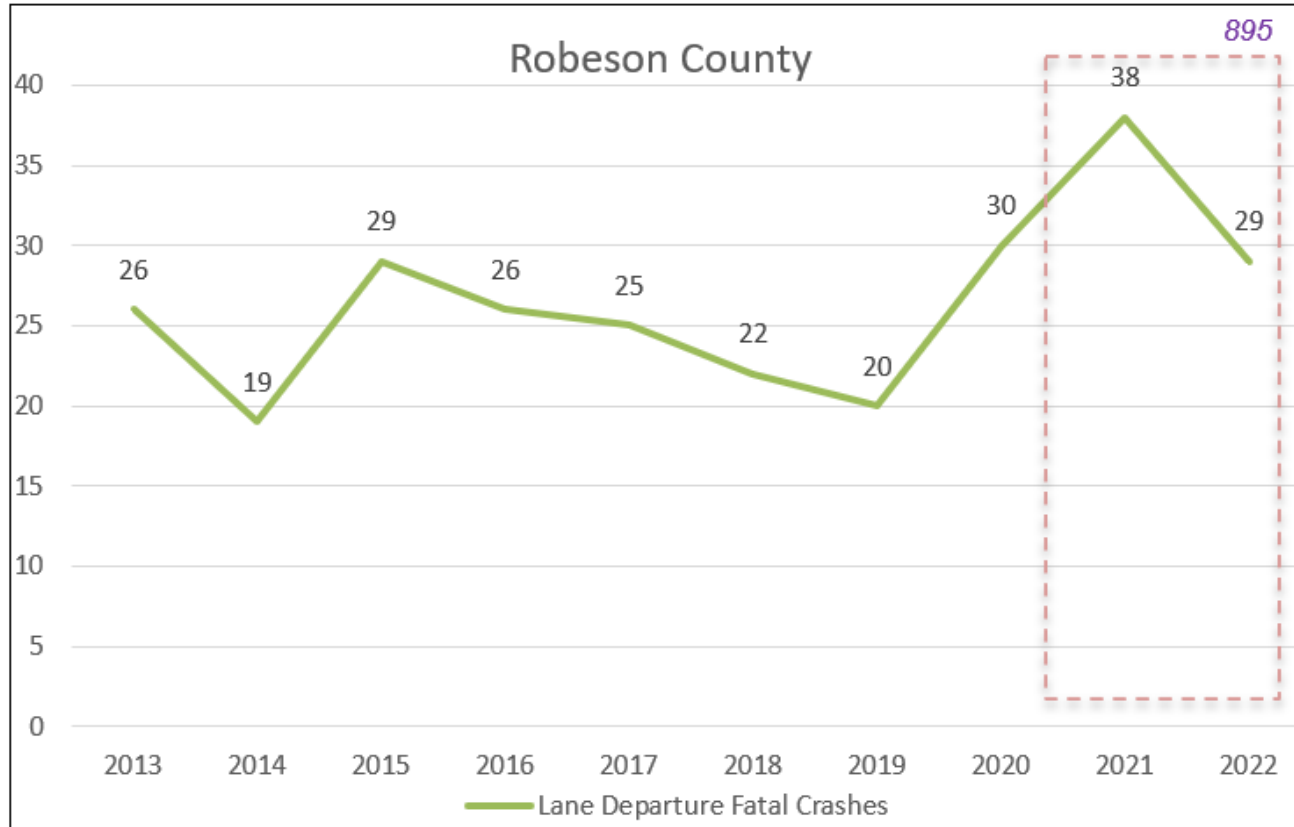
Robeson County – Fatal Crashes Mapped

2018-2022 (5 Years)



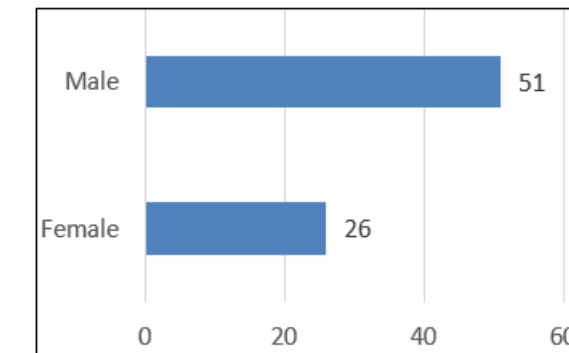
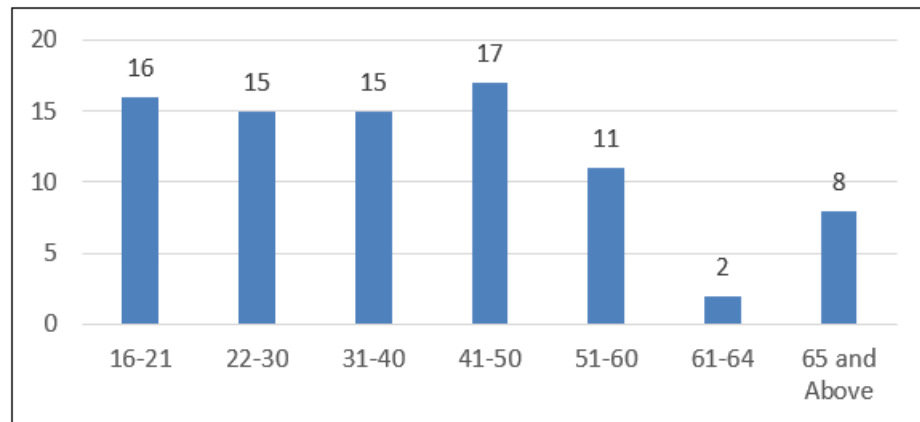
82% Rural

Robeson County – Lane Departure Fatal Crashes



Route Class	Crashes	% of Total
INTERSTATE	4	6.0
US	7	10.4
NC	25	37.3
SR	28	41.8
LCL	3	4.5
Total	67	

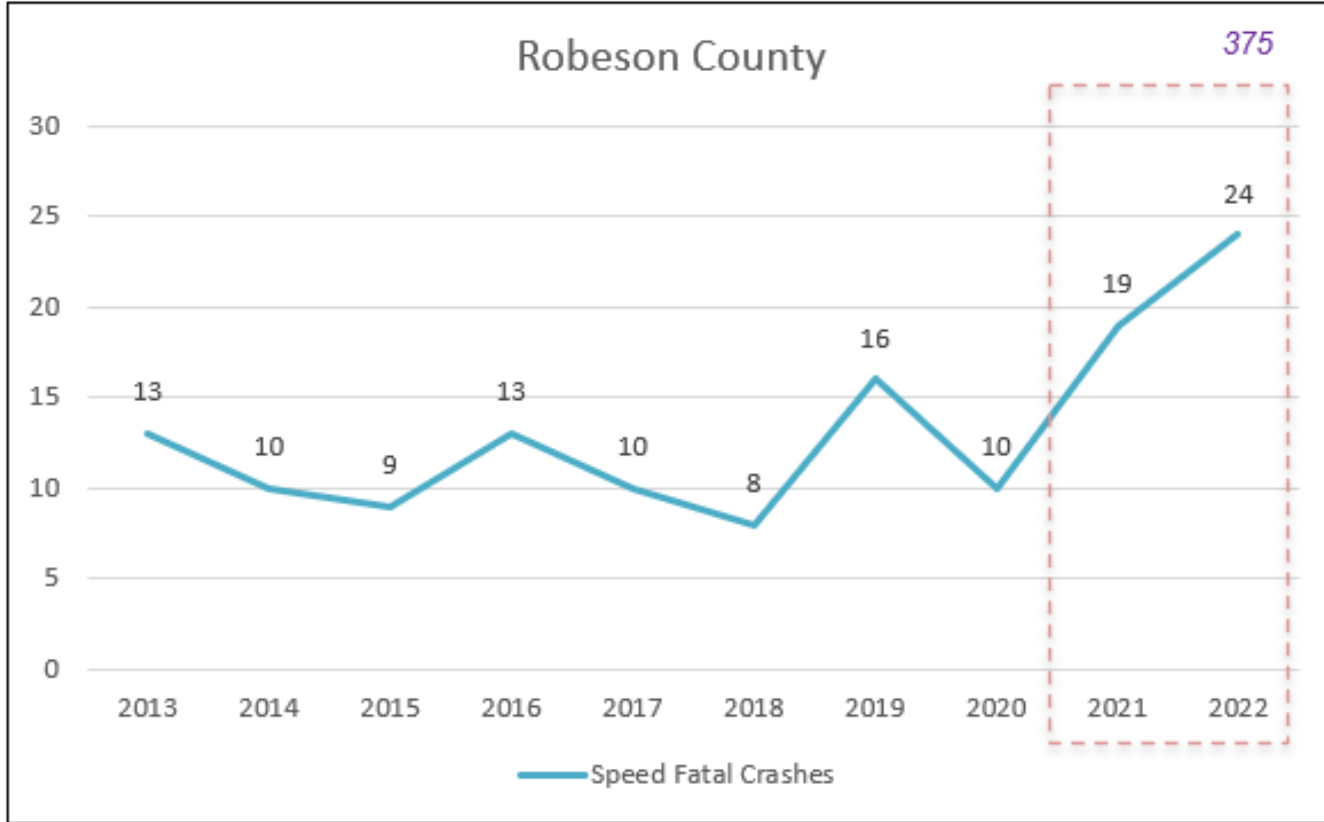
Speed Limit	Crashes	% of Total
70	2	3.0
65	5	7.5
55	46	68.7
45	8	11.9
35	5	7.5
25	1	1.5
20	0	0.0
Total	67	



* Includes all Drivers in Crash

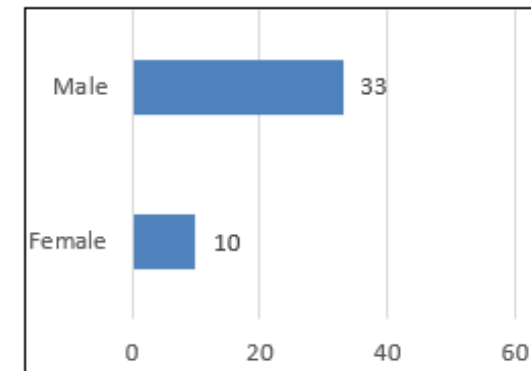
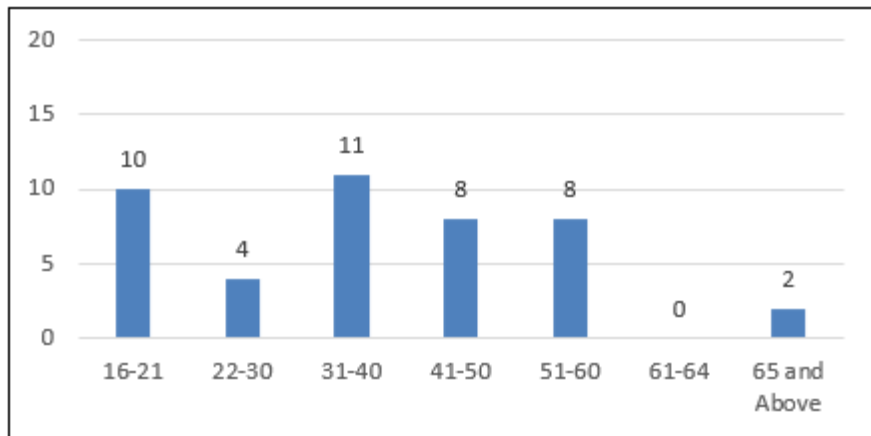
* Includes all Drivers in Crash

Robeson County – Speed Fatal Crashes

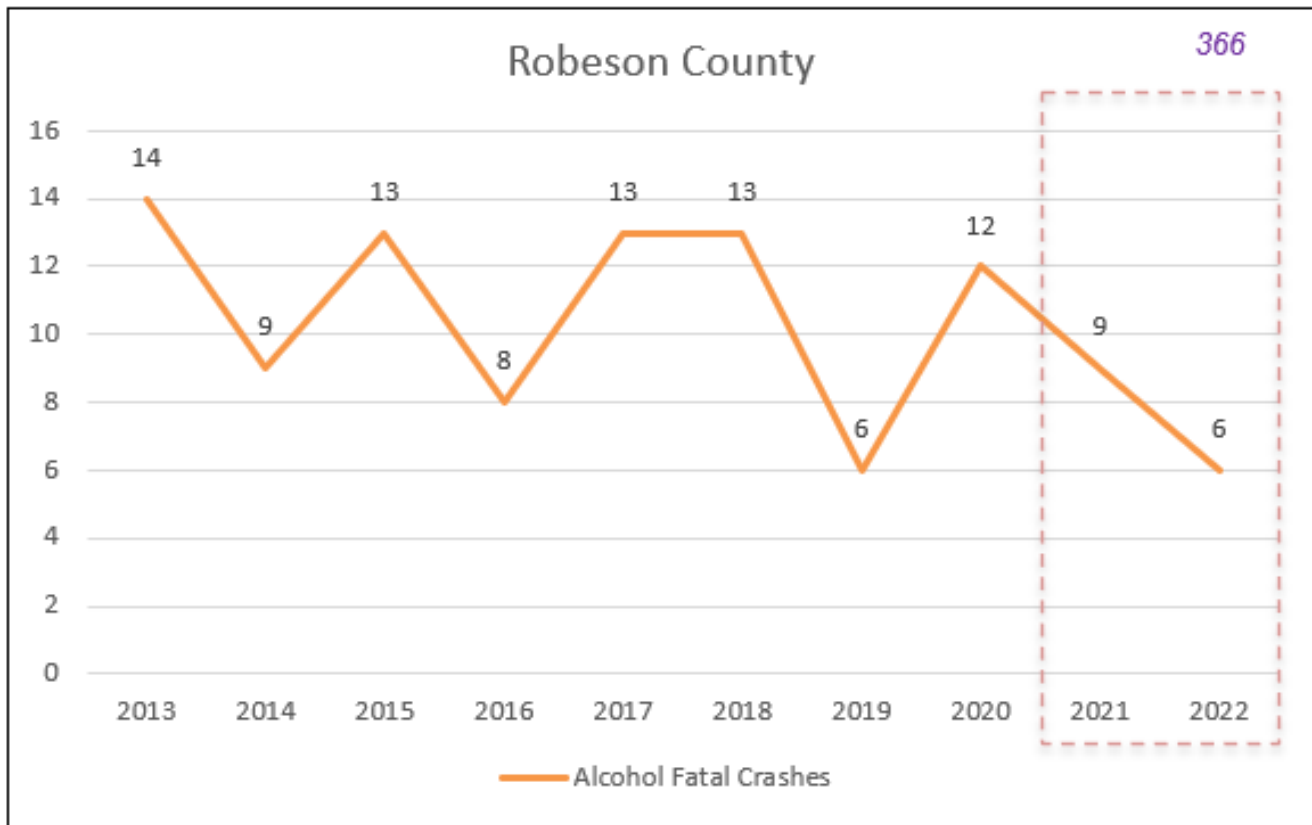


Route Class	Crashes	% of Total
INTERSTATE	2	4.7
US	4	9.3
NC	16	37.2
SR	21	48.8
LCL	0	0.0
Total	43	

Speed Limit	Crashes	% of Total
70	3	7.0
65	1	2.3
55	31	72.1
45	6	14.0
35	2	4.7
25	0	0.0
20	0	0.0
Total	43	

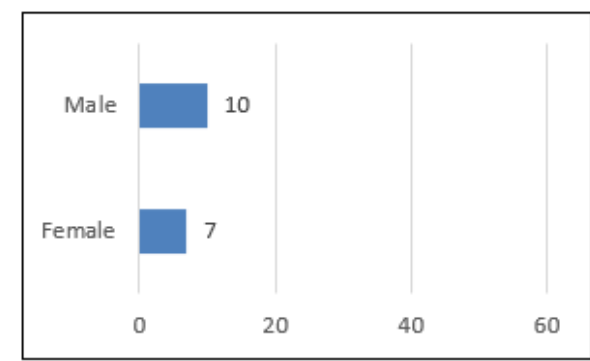
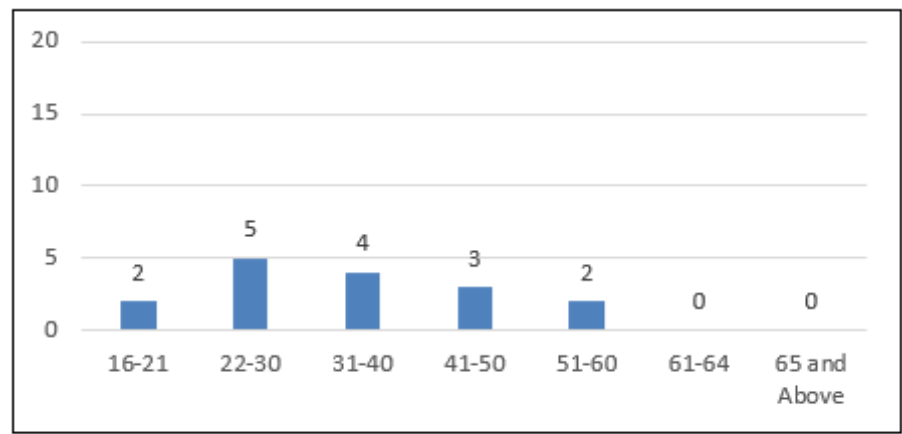


Robeson County – Alcohol Fatal Crashes



Route Class	Crashes	% of Total
INTERSTATE	2	13.3
US	1	6.7
NC	6	40.0
SR	6	40.0
LCL	0	0.0
Total	15	

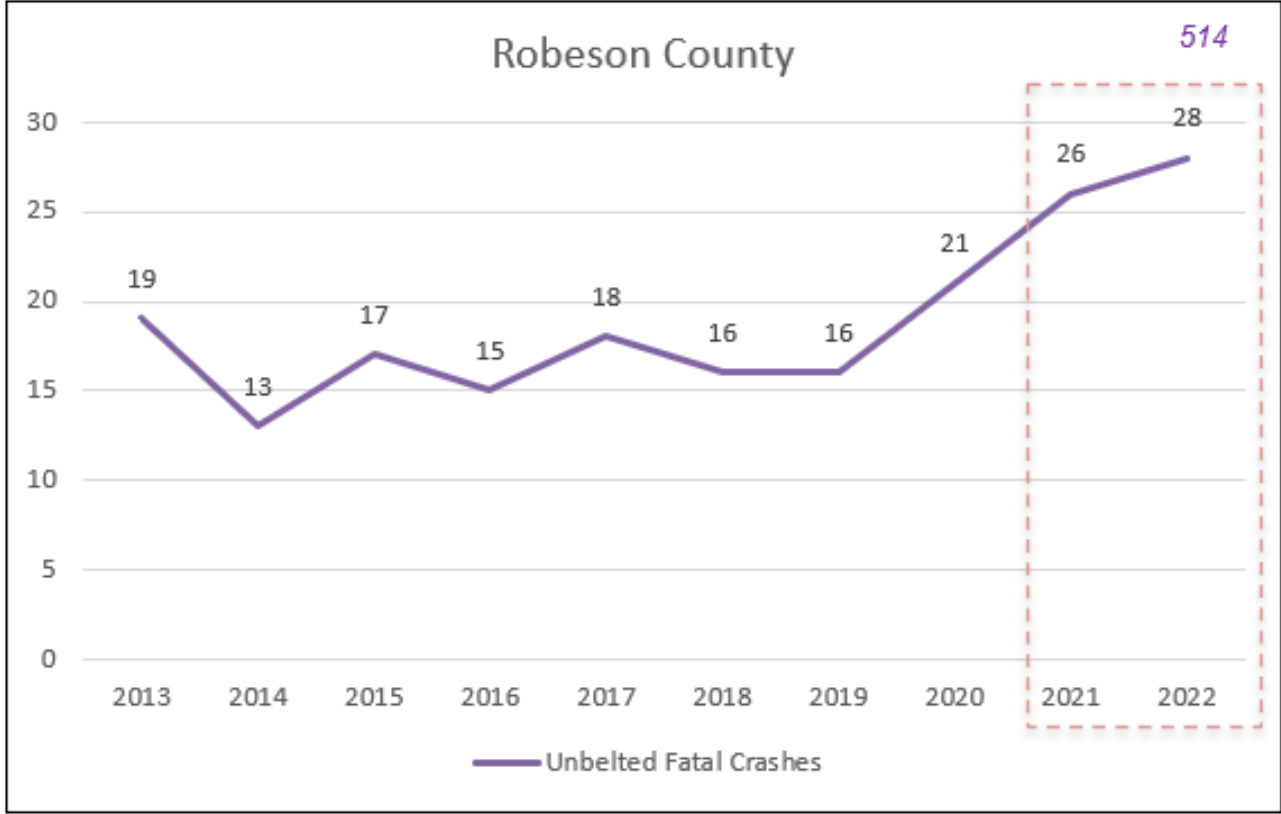
Speed Limit	Crashes	% of Total
70	2	13.3
65	1	6.7
55	10	66.7
45	0	0.0
35	2	13.3
25	0	0.0
20	0	0.0
Total	15	



* Includes all Drivers in Crash

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Robeson County – Unbelted Fatal Crashes



Route Class	Crashes	% of Total
INTERSTATE	5	9.3
US	1	1.9
NC	22	40.7
SR	23	42.6
LCL	3	5.6
Total	54	

Speed Limit	Crashes	% of Total
70	3	5.6
65	2	3.7
55	38	70.4
45	7	13.0
35	3	5.6
25	1	1.9
20	0	0.0
Total	54	

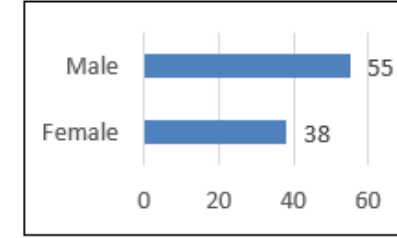
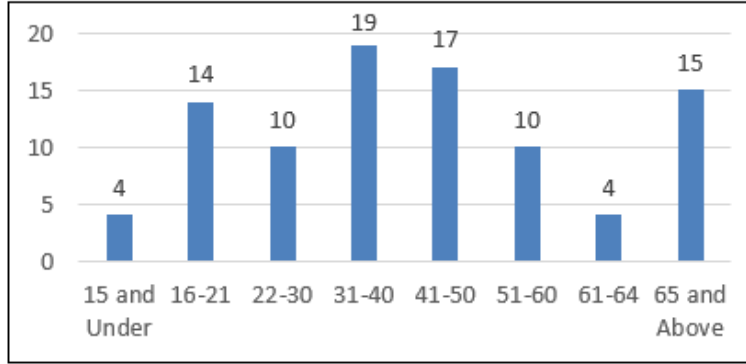


ncdot.gov Robeson County – Unbelted Fatal Crashes (2021-2022)

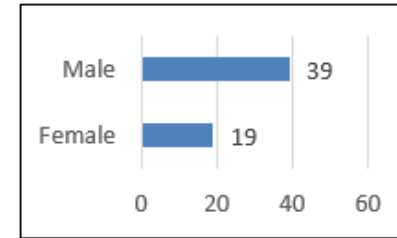
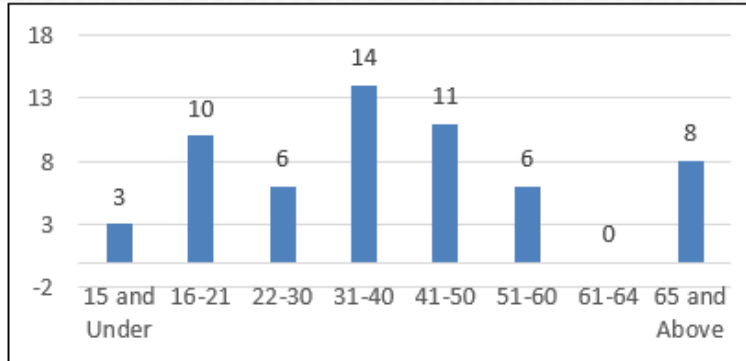
135 Fatalities



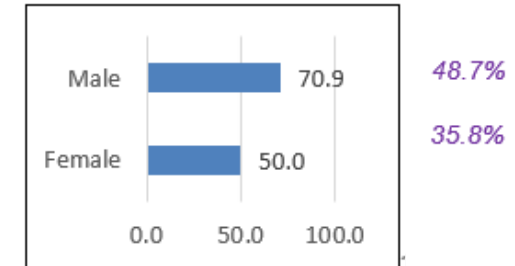
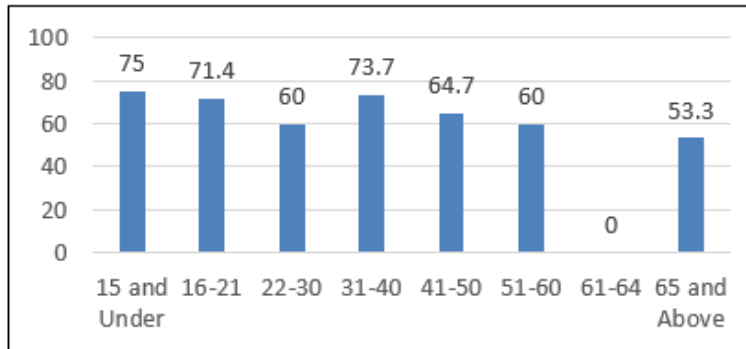
93 Fatalities in Vehicles/Seats with Belts



58 Fatalities that were Unbelted



% of Unbelted that had Opportunity for Belts



General comments for 2021 and 2022 fatal crashes

- Approximately 79% are in rural areas
- Approximately 77% occur on NC and SR roads
- Approximately 63% occur on 55 MPH roads

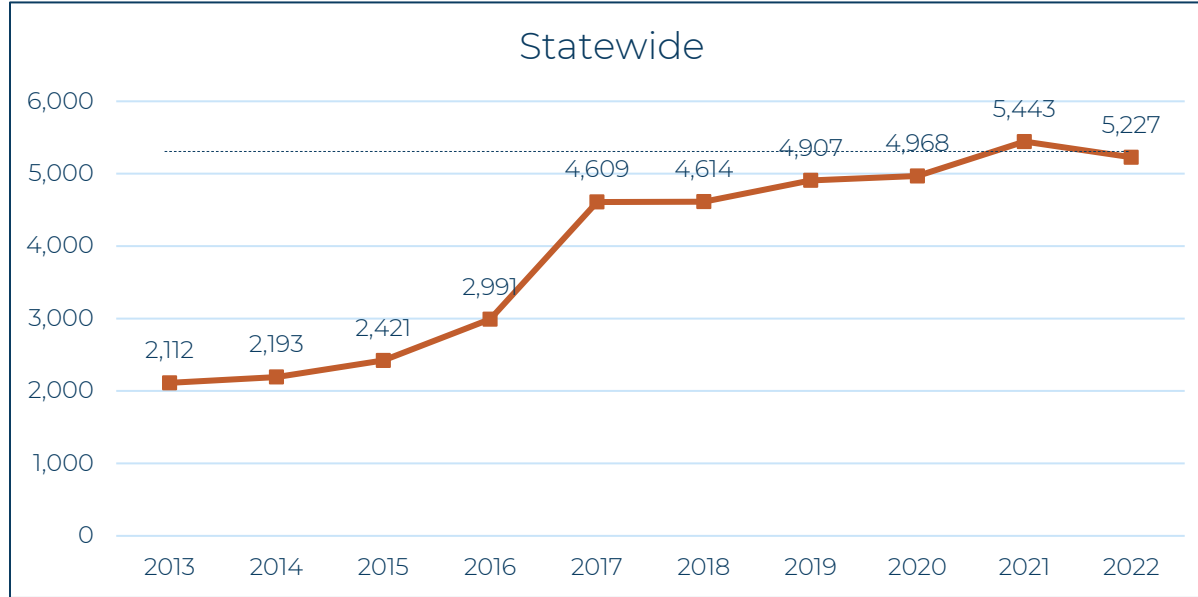
Unbelted occupants is an overrepresented contributing factor within fatal crashes

- All age groups are over 50% unbelted except 61-64
- 31-40 and <22 may have most opportunity for improvement based on % unbelted
- 71% of males are unbelted and 50% of females are unbelted, both more than statewide percentages

Speed is an overrepresented contributing factor within fatal crashes

- Speed plays a role in lane departure crashes; and with alcohol use and/or being unbelted.....these can make crash survivability outcomes worse

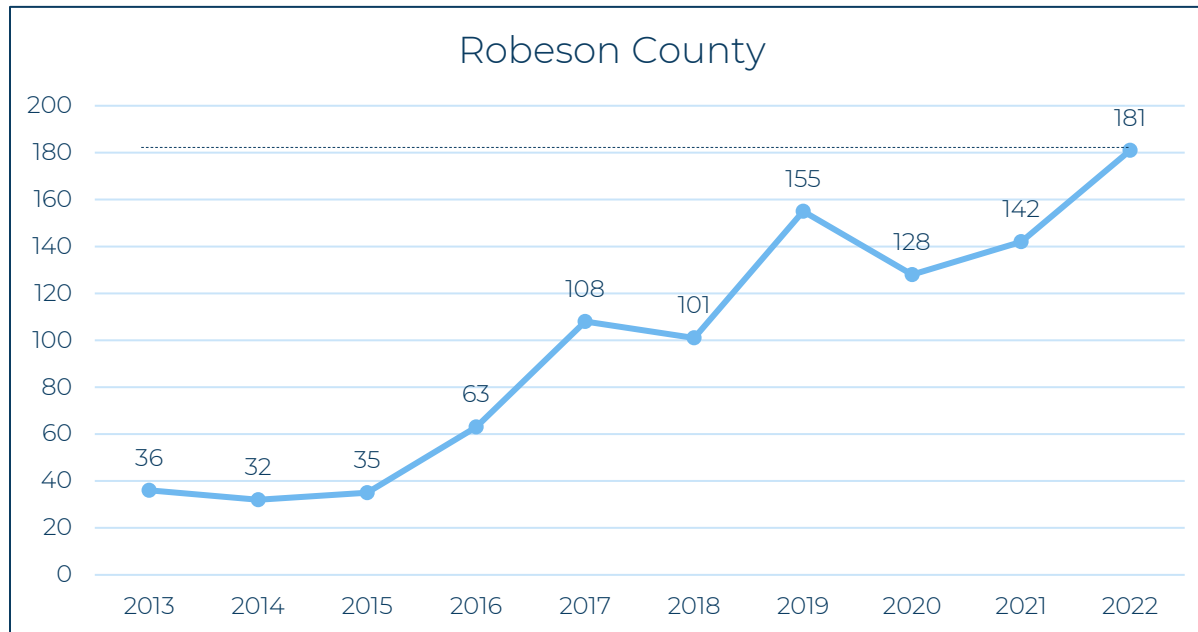
Serious Injury Crash Trends



Statewide

2020 to 2021: + 10%

2021 to 2022: - 4%



Robeson County

2020 to 2021: + 11%

2021 to 2022: + 27%

Note: 2016 Crash Reporting Change

Recent Traffic Safety Efforts

Systemically Targeting Rural 2-Lane Roads

- Long life pavement markings, Statutory speed limit review program, Curve chevron signing

Spot Safety Projects (Next Slide)

- Including: All way stop, left turn lane, signal, signal revision, roundabout, flasher, RCI, curve superelevation improvements, guardrail, rumble stripes, ped enhancements

Pedestrian safety studies for Lumberton and Pembroke

Other great maintenance efforts from Division 6 team are not summarized

Continue Efforts in the 4 E's

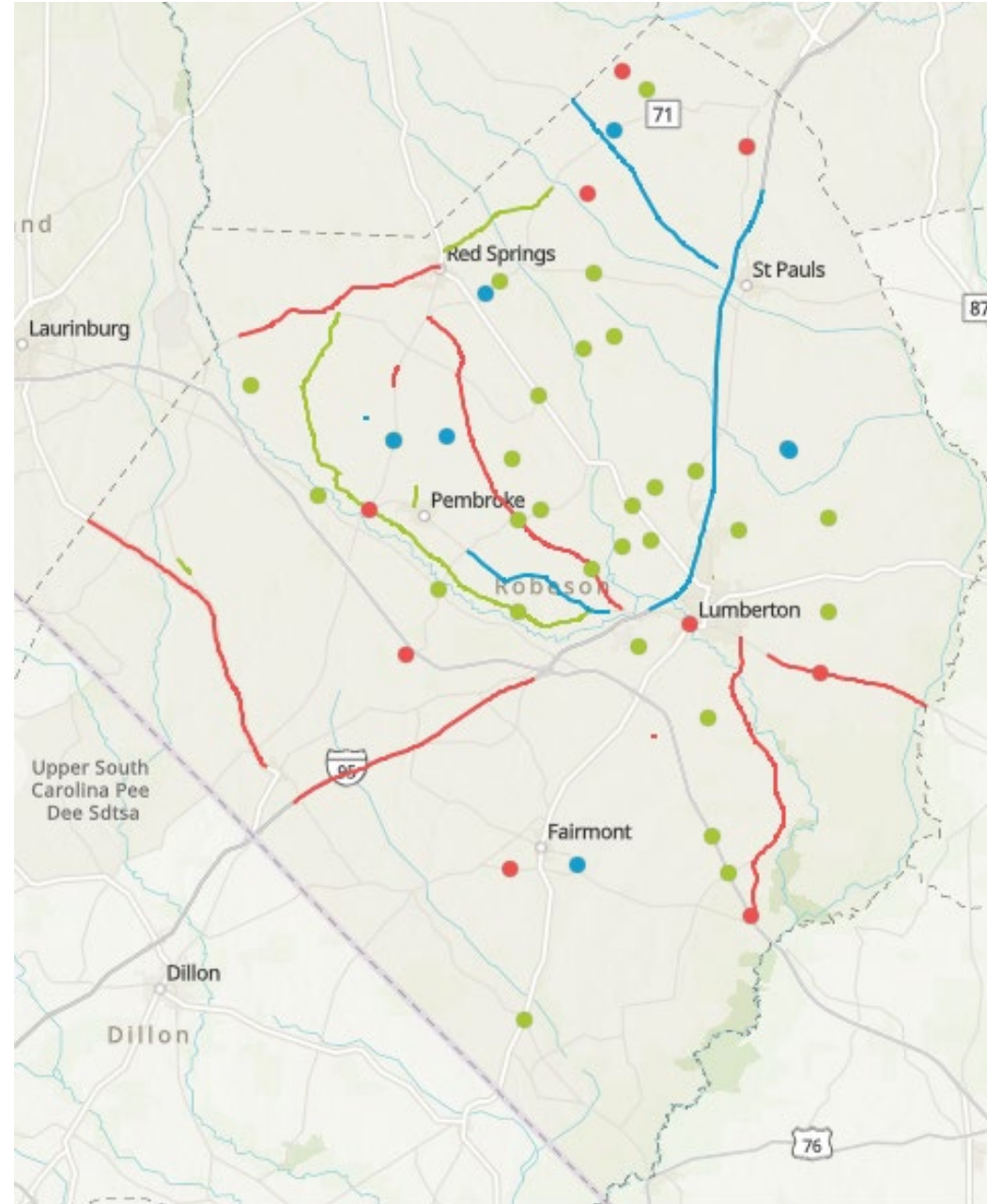
- Engineering, Enforcement, Education, and Emergency Response
- Every person plays a role: slow down, drive defensively, never drive distracted or impaired, and always buckle up in every seat of the vehicle

Spot Safety Projects

69 locations for safety improvement projects in progress or completed since 2019

Reflects safety project selection through 6/2022

- Complete
- Funded - In Design
- Funded - Design Finished; Not Yet in Construction
- Funded - Under Construction
- Not Funded



All Way Stops in Robeson County (Preliminary Dataset)

- 31 AWS studied (installed 2002 - 2022, majority in 2021)

Safety Improvement:

- Total Crashes = 37% reduction
- Frontal Impact Crashes = 50% reduction
- > 80% sites = total/frontal impact crashes reduced

Crash Severity:

- Fatal and Severe injury crashes = 93% reduction
- 8 fatal crashes in before time periods and no fatal crashes in after time periods



Glenn Rd @ Barlow Rd near Parkton (2021)

Contact Us

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