## Final report:

# Texas Bridge assessment using NBI Data and Logistic Regression

#### Submitted to:

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Course:

GIS Applications in Engineering (CVEN-5370-01)

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### **Acknowledgement:**

I would like to extend my sincere gratitude to Dr. Venkatesh Uddameri for his invaluable guidance and support throughout this project

I would like to express our appreciation to NBI data.

Lastly, I am very elated with the computational power and understanding of ChatGPT. Without its help it would have been cumbersome task to complete all the coding.

# Bridge survey in 2023 not in 2022 Bridges 36 34 Latitude (WGS 84) 32 30 28 26 -106 -102 -100 -104 -98 -96 -94Longitude (WGS 84)

Figure 1 Bridges surveyed in 2023 but not in 2022 in Texas.

# Bridge survey in 2023 not in 2022 Based on Deck Condition

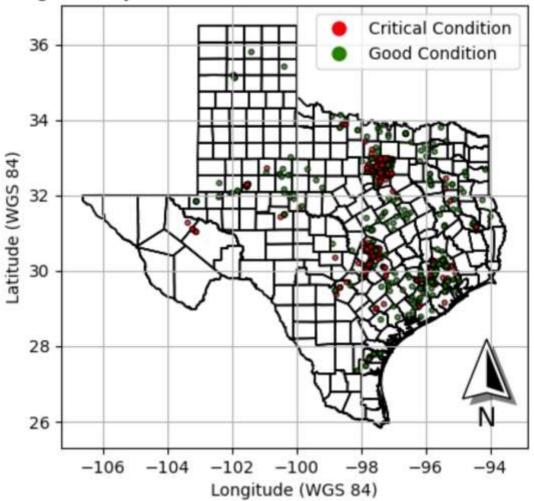


Figure 2 Prediction of bridges surveyed in 2023 not in 2022 based on deck condition in Texas.

## Bridge survey in 2023 not in 2022 Based on Superstructure Condition

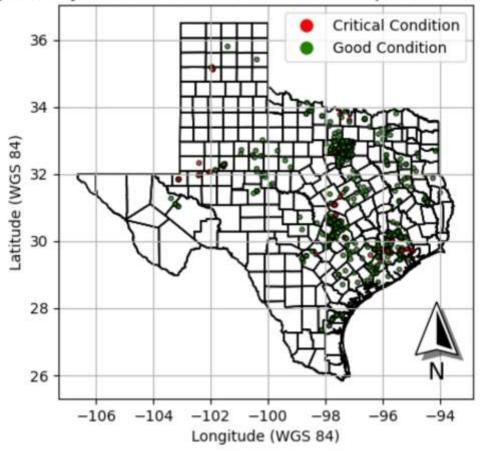


Figure 3 Prediction of bridges surveyed in 2023 not in 2022 based on superstructure condition in Texas.

# Bridge survey in 2023 not in 2022 Based on Channel Condition

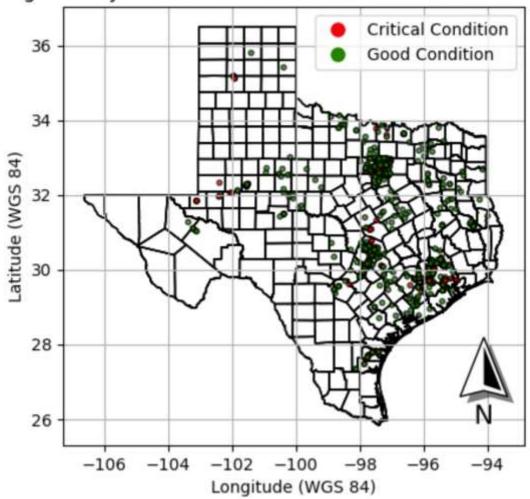


Figure 4 Prediction of bridges surveyed in 2023 not in 2022 based on channel condition in Texas.