(Introduction Paragraph) What is the project about? (The definition of the problem from the proposal with an expanded thesis.)

Our project is about an ambulance-like van that goes around neutering and helping hurt stray cats and dogs. They will provide neutering services for strays and homeless cats and dogs, as well as provide care for hurt cats and dogs. The van will drive around and take tips on where animals that need help are. Stopping euthanizing animals   will be a van that can go to where the hurt and unfixed cats and dogs are. We want to help get dogs and cats fixed so there are fewer reproducing cats and dogs on the streets with no home or help. It will have supplies, medication, and vacations.

(Paragraph 1, vision for your NetLogo model) How are you/do you plan to solve this problem computationally or by your app? Explain how it will look, what it will do?
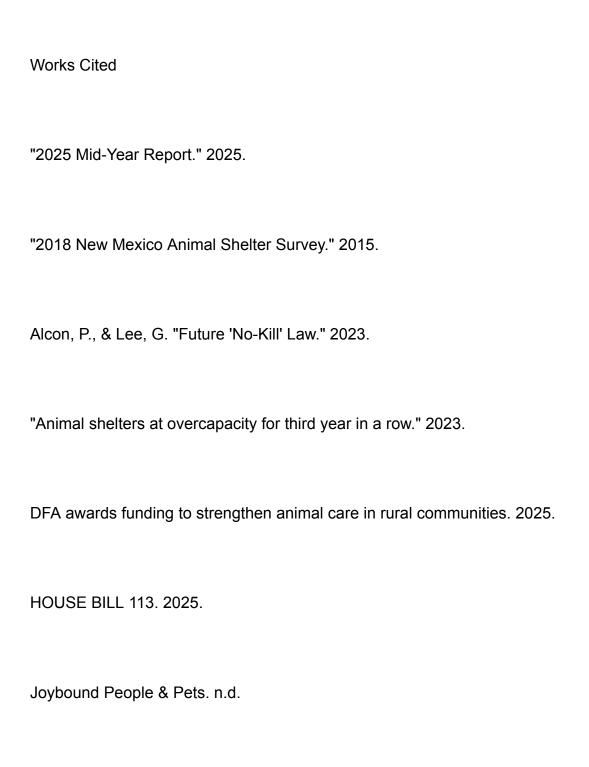
Our model shows our van going around to stray cats and dogs, neutering them, and leading to less repopulation than without a van. We will show one showing the van going around, neutering, showing less repopulation, and one with no van showing how much they repopulate.

(Paragraph 2, supporting information from readings and code you have learned) What progress have you made up to this point? (research, code, etc.)

Specific 2025 data for New Mexico are limited, but general U.S. shelter trends indicate that an estimated 2.8 million dogs and cats entered shelters in the first half of 2025, a 4% decrease from 2024. (2025 Mid-Year Report, 2025) New Mexico has historically faced a severe overpopulation crisis, with nearly half of the estimated 135,000 dogs and cats entering shelters annually being euthanized due to a lack of homes. (2018 New Mexico Animal Shelter Survey, 2015) In the first half of 2025, U.S. shelter intake for dogs was down 5%, while for cats it was down 3%. (2025 Mid-Year Report, 2025) Over 135,000 homeless dogs and cats in New Mexico. (HOUSE BILL 113, 2025) New Mexico has a large, ongoing stray population, evidenced by the high number of animals in shelters and reports of overflowing facilities. (Animal shelters at overcapacity for third year in a row, 2023) New Mexico helps homeless dogs and cats through statewide initiatives like the Animal Welfare Program Fund and specific legislation, such as a bill to ban euthanasia for all but the sickest animals, starting in 2028. (DFA awards funding to strengthen animal care in rural communities, 2025) Non-profits and rescue groups actively contribute by providing spay/neuter services to combat overpopulation, offering veterinary care, facilitating adoption and foster programs, and supporting animal relocation to other states. (Joybound People & Pets, n.d.) A key focus is on preventing overpopulation and providing a path to adoption for healthy animals. Future "no-kill" law: As of January 1, 2028, a new law prohibits shelters from euthanizing healthy, adoptable animals, just because they have no room; euthanasia is only permitted for animals with

severe, untreatable illnesses or dangerous animals that have caused serious injury.

(Alcon & Lee, 2023)

(Conclusion paragraph) What results are you expecting? The introduction of this mobile veterinary unit—an ambulance-style van dedicated to serving homeless animals- is projected to bring about substantial, quantifiable, and swift advancements in both animal welfare and public health. By offering easily accessible, large-scale Spay/Neuter (S/N) procedures, we foresee a notable decrease in the growth rate of the stray animal population over the upcoming 12 to 24 months, which will ultimately alleviate the strain on local shelters and reduce related expenditures. Moreover, the unit's ability to provide on-site emergency treatment, vaccinations, and essential preventive care will lead to healthier animals, significantly curbing the spread of infectious diseases like rabies and distemper among strays, and thereby protecting community health. Ultimately, this mobile medical service is far more than an emergency vehicle; it represents an innovative, empathetic, and economically efficient strategy that ensures a concrete transformation towards a more compassionate and sustainable system for managing homeless animals, shifting from reactive crisis control to holistic, community-wide animal wellbeing and population regulation.

Works Cited

"2025 Mid-Year Report." 2025.

"2018 New Mexico Animal Shelter Survey." 2015.

Alcon, P., & Lee, G. "Future 'No-Kill' Law." 2023.

"Animal shelters at overcapacity for third year in a row." 2023.

DFA awards funding to strengthen animal care in rural communities. 2025.

HOUSE BILL 113. 2025.

Joybound People & Pets. n.d.

Decide who will write which piece.  Use the resources below to help construct a thesis statement for your introduction, supporting details for your paragraphs, and a structure for your paragraphs.