May 10, 2023

Professor Hilda Ollmann

Austin Community College

3401 Weberville Road

Austin, Texas 78702

Dear Professor Ollmann:

As per our email communication on Wednesday, March 1, 2023, I am submitting the approved technical background report on the topic of "How Texas Animal Euthanization Rates Compare Nationally and How We Can Improve."

The purpose of this report is to analyze worldwide and nationwide shelter animal euthanization data, animal welfare reports, and peer-reviewed articles to break the data down into three common problems and practical solutions. The report would then be useful to Texas animal rescue volunteers and workers as a resource in their fight to keep animals out of Texas' high-kill shelter systems and begin to lower the overpopulation of unwanted animals and euthanization rates. Additionally, the report includes an appendix of Texas contacts and resources outside of the shelter system that animal welfare volunteers and workers can use to divert animals away from the shelters in hopes of more live animal outcomes.

I am happy to present this report to you for your feedback.

Kindest regards,

Julia Lilly

Julia Lilly, Student and Rescue Group President

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Encl.: Technical background report on the topic of How Texas Animal Euthanization Rates Compare Nationally and How We Can Improve.

Report On

How Texas Animal Euthanization Rates Compare Nationally and How We Can Improve

Submitted

to

Professor Hilda Ollmann

Austin Community College

by

Julia Lilly, Student and Rescue Group President

May 7, 2023

This report provides animal rescue volunteers and workers in the state of Texas with current worldwide, nationwide, and local statistical data pertaining to the state of animal overpopulation and animal euthanization to use in the fight to improve live outcome rates in the state of Texas. This report includes three common causes for animal euthanization, three solutions that animal rescues volunteers and workers can implement, and an appendix of resources.

How Texas Animal Euthanization Rates Compare Nationally and How We Can Improve

I.   Introduction

The American Humane Organization, founded in 1877, is one of the United States' first animal welfare organizations to bring a unified voice on animal rights to government legislation. Today, 144 years later, they report that there are more animals in the United States than there are responsible owners to care for them and that despite their efforts, euthanization of unwanted animals is at an all-time high at over a million deaths annually. [1]

The Best Friends Organization, founded in Utah in 1984, provides a comprehensive and reputable annual report on the state of animal welfare in the United States titled "The State of U.S. Animal Sheltering." In 2022, they report that the progress made in animal welfare throughout previous years is in decline to the point of a crisis mode. As of January 2022, United States animal shelters have over 100,000 more unwanted animals at risk of euthanization over the prior years. [2]

The numbers reported by both organizations not only express what is going on in shelters across the United States, but they both highlight Texas as a problem state. For example, in the Best Friends Organization Figure 1 graphic below, Texas ranks as a "Top Priority" focus area to meet its no-kill goals by 2025. Furthermore, the Houston Chronicle, a leading Texas newspaper, backs up this information with their recent article "Texas now ranks No. 2 in the country for shelter euthanasia, down from No. 1 spot," which reports Texas to have the second highest in animal euthanization rate nationwide [3].

Data for the national and state level is formulated using a blend of known and estimated numbers from 2021, 2020 or 2019 sources, whichever is most recent.

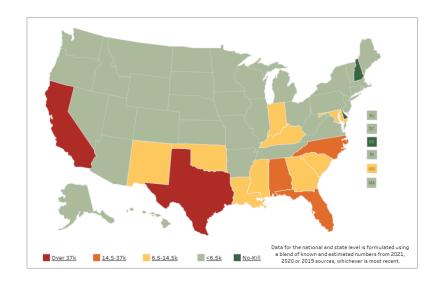Over 37k   14.5-37k   6.5-14.5k   <6.5k   No-Kill

Fig 1. "National Dashboard." Best Friends, bestfriends.org/no-kill-2025/animal-shelter-statistics.

Due to the crisis Texas is experiencing in the area of animal overpopulation and the extreme number of animal euthanizations, this report strives to shed light on the three top causes and most likely solutions that animal rescue volunteers and workers can use to begin making improvements, thus saving more animal lives in the state of Texas.

II.   Decline of Spay and Neuter (Cause 1)

During the height of the Covid-19 pandemic, the Shelter Medicine Program of the College of Veterinary Medicine reports a sharp decline in animal spay and neuters as shown in the Figure 2 graphic below. In their article, "Decrease in spay-neuter surgeries during pandemic may undermine pet welfare," [4] they estimate over three million unspayed and unneutered animals nationwide today as a result. When compared to the previous five decades of statistics, when animal sterilization numbers were on the rise and the unwanted animal population was on the decline, spay and neuter is shown to be the most effective tool in the reduction of unwanted animals that enter the shelter system and euthanized.
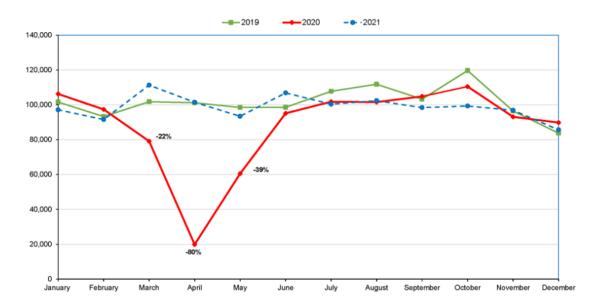

Fig 2. Decrease in Spay-Neuter Surgeries during Pandemic May Undermine Pet Welfare» Shelter Medicine Program» College of Veterinary Medicine» University of Florida. sheltermedicine.vetmed.ufl.edu/2022/09/13/impact-on-spay-neuter-surgeries-due-to-covid-19-pandemic-threatens-pet-overpopulation/.

In 2021, Veterinarians.org explores the data further and releases the Figure 3 graphic below which shows Texas to have the highest number of animal euthanizations nationwide, which is "10 times the national average and represents nearly 20% of the total kills for the entire nation." [5] This data shows that unsterilized animals in Texas are the most common candidates for euthanization should they enter the shelter system.

The U.S. States with the Highest Number of Animal Shelter Kills

	STATE	NUMBER OF ANIMALS KILLED IN GIVEN YEAR
1	Texas	61,245
2	California	37,021
3	North Carolina	28,790
4	Florida	22,616
5	Alabama	14,690
6	Georgia	14,118
7	Louisiana	12,401
8	Mississippi	11,983
9	Oklahoma	9,094
10	Kentucky	7,471

Fig. 3 "Animal Shelter Statistics." Www.veterinarians.org, 14 Apr. 2022, www.veterinarians.org/animal-shelter-statistics/.

For the state of Texas to rejoin the decline of animal euthanization, animal rescuers will need to make low-cost spay and neuter their "Top Priority" as it shows to be the most effective way to reduce animal overpopulation and decrease animal euthanization. To do this they should regularly promote low-cost spay and neuter services in their area. A list is provided in the attached Appendix A: Texas Low-Cost Spay and Neuter Services.

III. Increase in Owner Surrenders Due to Behavior and Health Issues (Cause 2)

While spay and neuter decreases the number of unwanted animals and lowers animal euthanization rates, it also curbs unwanted animal behaviors and health issues that can cause owner surrender issues after adoption. According to the American Society for the Prevention of Cruelty to Animals (ASPCA), a leading organization in the fight for animal welfare, the 47% of dog owner surrenders and the 42% of cat owner surrenders are due to animal behavior issues. [6]

Additionally, Best Friends Organization reports in their "Owner Surrender and Acquisition Source Analysis" that 7.2% of overall owner surrenders are related to medical issues the owner cannot financially afford. [7] Petmd.com backs up the data in their article "Spaying and Neutering Dogs 101: Everything You Need to Know" when they report that common health issues that arise in animals later in life due to failure to spay or neuter directly contribute to the owner surrender rate. [8]

The city of Fort Worth Texas Animal Care and Control Office supports the above national statistics in their most recent report: "March 2023" which shows that 14% of pets that come to their shelter will be euthanized at the request of the owner due to untreatable health and behavior issues as shown in the Figure 4 graphic.

DOGS & CATS EUTHANIZED			
Healthy (Includes Owner/Guardian Requested Euthanasia)	0	0	0
Treatable – Rehabilitable (Includes Owner/Guardian Requested Euthanasia)	0	0	0
Treatable – Manageable (Includes Owner/Guardian Requested Euthanasia)	0	0	0
Unhealthy & Untreatable (Includes Owner/Guardian Requested Euthanasia)	373	38	411
Total Euthanasia (M + N + O + P)	373	38	411
Owner/Guardian Requested Euthanasia (Unhealthy & Untreatable Only)	46	5	51
ADJUSTED TOTAL EUTHANASIA (Q – R)	327	33	360

Fig 4. Monthly Shelter Report, www.fortworthtexas.gov, March 2023, https://www.fortworthtexas.gov/files/assets/public/code-compliance/animals/documents/code-report-animal-control-march-2023.pdf

This report does not analyze every city shelter's monthly report. Instead, it asks the reader to use the national statistic and its relationship to the Fort Worth report, one of Texas' largest cities, to estimate a clear picture of how unwanted behaviors and related medical issues affect all shelters in the state of Texas.

For the state of Texas to reduce their intake rate due to behavior and health issues, animal rescuers will need to reduce owner surrenders as it shows to be a common cause of release and subsequent euthanization. To do this they should provide animal owners with information about free pet behavioral modification programs and animal medical financial aid programs. A list is provided in the attached Appendix B: Texas Animal Behavior and Animal Medical Financial Aid Programs.

IV. Lack of Owner Education (Cause 3)

While owner surrenders and increases in euthanization rates are highest in the United States shelter systems, research on the topic is worldwide. For example, in Lauren Powell's peer-reviewed article "Expectations for dog ownership: Perceived physical, mental and psychosocial health consequences among prospective adopters," [9] she explores how expectations and the realities of dog ownership affect owner surrender rates. In the paper, she publishes data pulled from a questionnaire study by a respected Australian Animal Adoption website, www.petrescue.com.au which analyzes answers provided by adopters on their applications in relation to known characteristics of satisfied pet owners. [10] The results were varied but she does find a strong correlation between less satisfaction as an animal owner and people who failed to consider finances and lifestyle prior to adoption as shown in the Figure 5 below.

Table 3. Multiple logistic regression describing the associations between dog ownership status and the expected challenges of dog ownership.

Variable	Cases/n*	Model 1		Model 2	
		OR (95% CI)	P	OR (95% CI)	P
Excessive financial costs					
Never owned a dog	77/200	1	.005	1	.051
Previous dog owner	538/1903	0.63 (0.46,0.85)	.002	0.72 (0.53,0.98)	.034
Current dog owner	375/1362	0.60 (0.44,0.82)	.001	0.68 (0.49,0.93)	.015
Upsetting neighbours					
Never owned a dog	39/200	1	.083	1	.190
Previous dog owner	297/1903	0.76 (0.53,1.11)	.156	0.85 (0.58,1.24)	.391
Current dog owner	192/1362	0.66 (0.45,0.97)	.036	0.74 (0.50,1.08)	.121
Dog Behavioural issues					
Never owned a dog	120/200	1	.002	1	.024
Previous dog owner	906/1903	0.60 (0.45,0.81)	.001	0.69 (0.51,0.93)	.015
Current dog owner	692/1362	0.68 (0.50,0.92)	.013	0.78 (0.57,1.05)	.105
Increased responsibility					
Never owned a dog	158/200	1	<0.001	1	<0.001
Previous dog owner	1292/1903	0.57 (0.40,0.81)	.002	0.68 (0.48,0.98)	.037
Current dog owner	777/1362	0.36 (0.25,0.51)	<0.001	0.42 (0.29,0.60)	<0.001
Dog training and disciplining					
Never owned a dog	153/200	1	<0.001	1	<0.001
Previous dog owner	1195/1903	0.53 (0.37,0.74)	<0.001	0.63 (0.45,0.89)	.008
Current dog owner	795/1362	0.44 (0.31,0.62)	<0.001	0.51 (0.36,0.73)	<0.001
Compromised sleep quality					
Never owned a dog	39/200	1	<0.001	1	.002
Previous dog owner	217/1903	0.53 (0.36,0.77)	.001	0.59 (0.40,0.87)	.007
Current dog owner	205/1362	0.73 (0.50,1.06)	.100	0.81 (0.55,1.19)	.272

*Cases; number of participants that expect the benefit or challenge, n; number of participants in sample
Model 1 is unadjusted
Model 2 is adjusted for age, sex and education level
OR; Odds ratio, CI; Confidence interval

Fig 5. Powell, Lauren, et al. "Expectations for Dog Ownership: Perceived Physical, Mental and Psychosocial Health Consequences among Prospective Adopters." PLOS ONE, edited by Avi Besser, vol. 13, no. 7, July 2018, p. e0200276, https://doi.org/10.1371/journal.pone.0200276.

Additionally, the peer-reviewed paper "Goodbye to a Good Friend: An Exploration of the Re-Homing of Cats and Dogs in the U.S.," [11] Emily Weiss, Shannon Gramann, C. Spain, and Margaret Slater of the ASPCA summarize a collection of research results on owner surrenders in the United States. These results were also varied but did show that youth and lack of education on pet ownership expectations versus actualities were among the number one causes of owner surrenders. For example, cat owner surrenders are most often due to lack of knowledge about common cat allergies and dog owner surrenders are most often due to behavior issues associated with lack of financial ability to support an animal's training and medical needs prior to adoption. Furthermore, the data showed that "services that might have helped pet retention were free or low-cost training or behavior help." [11]

While there were no similar reports on the topic associated with only the state of Texas, the conclusion of this report is that the worldwide and national statistics apply and are quite possibly more common in the state of Texas due to the exceedingly sizeable rate of owner surrenders and animal euthanasia rates.

In order for the state of Texas to reduce the owner surrender intake rate due to poor pet matches and lack of education on the reality of animal ownership, animal rescuers will need to learn how to analyze animal adoption applications to ensure that the applicant and adoptable animal are a proper match in all major areas which include financial, health and lifestyle. To do this they will need access to onsite pet adoption questionnaires that require ample data input on the applicant to match him or her to a suitable animal. Volunteers and workers will also need training that helps them counsel applicants on the full gravity of animal adoption and the risks to their animal's live outcome should they surrender it later. At the current time, there are no readily available resources like this available to animal rescue volunteers and workers. Until such time, the attached Appendix C: Choosing the Right Pet and Breed Matching includes links to trusted resources on how to pair animals to humans and their lifestyles.

V.   Conclusion

In conclusion, when comparing statistics worldwide and nationwide to the state of Texas' animal shelter system, Texas is in crisis mode. Texas' statistical data shows an extreme animal overpopulation issue and unprecedented animal euthanization rates. The data also shows the three principal areas for improvement are spay and neuter, owner surrender, and owner education. This report seeks to arm animal rescue volunteers and workers with statistical evidence, solutions, and resources that they can use to start the conversation for improvement in their cities. They may also present this report to local city government officials, shelter and company supervisors, and their local animal rescue group's board members as a starting point for creating an efficient and effective game plan to improve animal owner programs and animal welfare programs, thus reducing owner surrender and animal euthanizations. Every animal in the state of Texas deserves a live outcome. This report makes every effort to provide a starting point.

Appendix A: Texas Low Cost Spay and Neuter Services

Texas Litter Control
Harris and Montgomery County, Texas
www.texaslittercontrol.org
(281) 528-1238
reggie@texaslittercontrol.org

Texas Coalition for Animal Protection
Central and North Texas
www.texasforthem.org/
940-566-5551
info@texasforthem.org

Texas Humane Heroes
South and Central Texas
www. HumaneHeroes.org/
(512) 260-3602
info@texashumaneheroes.org

Additional resources:

www.spaytexas.org/find-a-low-cost-clinic

www.animalleague.org/get-involved/spay-usa/

Appendix B: Texas Animal Behavior and Animal Medical Financial Aid Programs

Cowtown Loves Animal Shelter Pets
Central and North Texas
www.cowtownpets.org
817-886-7300
cowtownpets@gmail.com

TNR Texas
State of Texas
www.//tnrtexas.com/
www.tnrtexas.com/financial-assistance
tnrtexasnetwork@gmail.com

Texas Veterinary Foundation
Austin and the State of Texas
www.tvmf.org/programs/rusk-veterinary-assistance-grants/
(512) 452-4224
ltibbitts@tvma.org

Meals on Wheels Texas
State of Texas
www. mealsonwheelstexas.org
(512) 571-4075
info@mealsonwheelstexas.org

Additional resources:

https://www.bestiepaws.com/nearby/pet-financial-assistance-for-low-income-families-near-me/

https://www.animalhumanesociety.org/resource/pet-helpline

https://resources.bestfriends.org/article/financial-aid-pets

Appendix C: Choosing the Right Pet and Breed Matching

ASPCA Quiz: www.aspcapetinsurance.com/resources/which-pet-is-your-ideal-match/

Purina Dog Breed Selector: www.purina.co.uk/find-a-pet/dog-breeds/breed-selector

Purina Cat Breed Selector: www.purina.com/cat-breed-selector

American Kennel Club Breed Selector Tool: https://www.akc.org/breed-selector-tool/

Best Friends Organization How To: www.resources.bestfriends.org/article/choosing-pet

The Humane Society How To: www.thehumanesociety.org/choosing-the-right-pet/

Chewy: Should I Get A Pet Quiz: www.be.chewy.com/what-pet-should-i-get-take-our-quiz-and-find-out/

Petfinder New Pet Adoption Checklist: www.petfinder.com/adopt-or-get-involved/adopting-pets/how-to/adoption-checklist/

Spruce Pets How To: www.thesprucepets.com/best-dog-breed-for-you-4842749

Works Cited

1. American Humane. "Animal Population Control." Americanhumane.org, 2016, www.americanhumane.org/position-statement/animal-population-control/.

2. "Animal Shelter Crisis 2022: 100,000 More Shelter Pets At-Risk of Being Killed Now than This Time Last Year due to Pandemic Problem." Best Friends Animal Society - Save Them All, 26 Jan. 2022, bestfriends.org/about/media/shelter-crisis-2022.

3. Hennes, Rebecca. "Texas Now Ranks No. 2 in the Country for Shelter Euthanasia, down from No. 1 Spot." Houston Chronicle, 30 July 2020, www.chron.com/life/pets/article/Texas-now-ranks-No-2-in-the-country-for-shelter-15445967.php.

4. Decrease in Spay-Neuter Surgeries during Pandemic May Undermine Pet Welfare» Shelter Medicine Program» College of Veterinary Medicine» University of Florida. sheltermedicine.vetmed.ufl.edu/2022/09/13/impact-on-spay-neuter-surgeries-due-to-covid-19-pandemic-threatens-pet-overpopulation/.

5. "Animal Shelter Statistics." Www.veterinarians.org, 14 Apr. 2022, www.veterinarians.org/animal-shelter-statistics/.

6. ASPCA. "Pet Statistics." ASPCA, American Society for the Prevention of Cruelty to Animals, 2022, www.aspca.org/helping-people-pets/shelter-intake-and-surrender/pet-statistics.

7. "Owner Surrender & Acquisition Source Analysis | Network Partners." Best Friends Animal Society, network.bestfriends.org/research-data/research/owner-surrender-acquisition-source-analysis.

8. PetMD. "Spaying and Neutering Dogs 101: Everything You Need to Know." Petmd.com, 22 Apr. 2016, www.petmd.com/dog/care/spay-and-neutering-dogs-101-everything-you-need-know.

9. Powell, Lauren, et al. "Expectations for Dog Ownership: Perceived Physical, Mental and Psychosocial Health Consequences among Prospective Adopters." PLOS ONE, edited by Avi Besser, vol. 13, no. 7, July 2018, p. e0200276, https://doi.org/10.1371/journal.pone.0200276.

10. "Animal Welfare Strategy 2019 - 2024." PetRescue, www.petrescue.com.au/animal-welfare-strategy. Accessed 7 May 2023.

11. Weiss, Emily, et al. "Goodbye to a Good Friend: An Exploration of the Re-Homing of Cats and Dogs in the U.S." Open Journal of Animal Sciences, vol. 05, no. 04, 2015, pp. 435–56, https://doi.org/10.4236/ojas.2015.54046. Accessed 28 Oct. 2019.