CORRESPONDENCE
ARD DATE: 8/8/23 ITEM: 28

ROMINA YAMASHIRO

Ladies and Gentlemen of the Orange County Board of Supervisors,

I stand before you today, not merely as an advocate for animal welfare and shelter reform but as a voice for those who cannot speak for themselves. The recent Grand Jury report concerning OC Animal Care (OCAC) has highlighted a series of issues that we cannot simply acknowledge and move past. We must examine and address them carefully.

I urge you not to approve OCAC's response to the Grand Jury report, as several key areas warrant further analysis and consideration.

To name a few:

***FINDING 5* – OCAC's operating policies and procedures manual is out of date**

Response: ***Disagrees partially with the finding*** *– noting that "RECENTLY" a significant amount of resources has been focused on litigation response and unprecedented levels of PRAs which has diverted staff resources from the importance of a current P&P Manual*

To this point, I would like to bring your attention Strategic Priority 3 – Goal 4d of the OCAC Strategic Plan dated January 22, 2018 – Said goal was to create a comprehensive customer service training program and policy and procedure for all staff BY fall of 2018. This should have been done in 2018.... Not 2023.

***FINDING 11* – The Termination of TNR is correlated with an increase in adult cat euthanasia rate at the shelter.**

Response: ***Disagrees wholly with the finding*** *- ..."TNR reduces reproduction in adult cats but has not been demonstrated to directly correlate to adult cat euthanasia"*

To this point I would like to bring to your attention a study, published in Frontiers of veterinary Science in 2019 titled: "Integrated Return-to-field and targeted Trap-Neuter-Vaccinate-Return Programs Results in Reduction of Feline Intake and Euthanasia at Six Municipal Animal Shelters"
Researchers documented median reductions of 32% in feline intake and 83% in shelter killing. Furthermore, the study documented a reduction of 40% in kitten intake and 41% in the intake of newborn kittens. Suggesting the programs were having population-level impact.
In conclusion, having successful programs like TNR NOT ONLY reduces the level of cat euthanasia But also reduces the shelter intake.

***RECOMMENDATION 5* – OCAC should review and update policies, procedures, guidelines and practices.**

Response: *will be implemented in the future by "contracting with an independent consultant"*
To this point, I would like to bring your attention Amendment two to contract CT-012-16010713 – where the county had authorized $434,250.00 to JVR Shelter Strategies for their consulting services resulting on the JVR Strategic Plan to which a copy of the Executive summary is included on my handouts. We already spent almost ½ million dollars on this – WHY WOULD YOU AUTHORIZE MORE TAX-MONEY is spent on something we already have?

In light of these contradictions and ongoing issues, I advocate for an external financial and performance audit, similar to what Anaheim underwent. It is my sincere hope that the county will take this matter into their own hands, showing initiative to perform these preemptive audits and investigations. The well-being of the animals, the integrity of our institutions, and the trust of our community are at stake.

The issues at hand are neither simple nor straightforward. They pertain to the well-being of our fellow living creatures and the integrity of the very system entrusted with their care.

In the face of the compelling evidence presented, simply accepting OCAC's response would be an oversight that could lead to the perpetuation of the problems we are all striving to resolve.

I acknowledge and appreciate the efforts that have been made so far. But I believe, with all due respect, that we need to go further. We must not rush to close the chapter on this investigation but take the time to delve deeper into these challenges, ensuring that our decisions are grounded in fact, compassion, and a commitment to genuine reform.

In closing, I implore you to consider the gravity of the choices we make in this chamber. The way we respond to this Grand Jury report is a reflection of our collective values and our dedication to the welfare of all beings in our community.

Let us not take the easy path. Let us choose the right one.

Thank you for your attention and consideration.

AMENDMENT TWO
TO CONTRACT CT-012-16010713
BETWEEN
THE COUNTY OF ORANGE
AND
JVR SHELTER STRATEGIES, LLC
FOR
VETERINARY CONSULTING SERVICES

This Amendment to Contract CT-012-16010713, herein referred to as "Amendment Two" is made and entered into upon execution of all necessary signatures between the County of Orange, OC Community Resources, a political subdivision of the State of California, hereinafter referred to as "County" and JVR Shelter Strategies, LLC, with a place of business at 1025 Alameda de las Pulgas, #333, Belmont, CA 94002, hereinafter referred to as "Contractor", with County and Contractor, sometimes individually referred to as "Party" or collectively referred to as "Parties".

RECITALS

WHEREAS, County and Contractor entered into Contract CT-012-16010713, herein referred to as "Original Contract", for Veterinary Consulting Services, commencing on February 23, 2016 and expiring on August 22, 2017 in the amount of $150,000.00, Minute Order dated February 23, 2016, ASR #15-001566; and

WHEREAS, on June 20, 2016, CT-012-16010713 was unencumbered for $105,000.00 and re- encumbered on July 6, 2016 on CT-012-17010011; and

WHEREAS, on January 10, 2017, the Board approved Amendment One to Contract CT-012-16010713 to expand the Scope of Work and to increase the Contract amount by $200,000.00 to be effective through May 31, 2018 under the new Contract Number MA-012-17011025, ASR # 16-001563; and

WHEREAS, the County now desires to amend the Contract for additional Scope of Work, to increase the Contract amount by $84,250.00 for a new cumulative amount of $434,250.00 to be effective through May 31, 2019; and

NOW, THEREFORE, in consideration of the mutual obligations set forth herein, both Parties agree as follows:

1. Contract CT-012-16010713 (now known as MA-012-17011025) new cumulative total amount shall not exceed $434,250.00.
2. Article 2 "Term of Contract" of the Contract shall be amended in its entirety to read as follows:

   Term of Contract: Initial term of the Contract was effective February 23, 2016, through and including May 31, 2019.
3. Attachment A-1 Scope of Work is replaced with Attachment A-2.

Except as otherwise expressly set forth herein, all terms and conditions contained in the Original Contract, including any amendments/modifications, are hereby incorporated herein by this reference as if fully set forth herein and shall remain in full force and effect.

SIGNATURE PAGE

IN WITNESS WHEREOF, the Parties hereto have executed this Fourth Amendment on the dates with their respective signatures:

JVR SHELTER STRATEGIES, LLC*

Print Name Title

Signature Date

Print Name Title

Signature Date

*** If the Contractor is a corporation, signatures of two specific corporate officers are required as further set forth.**

The first corporate officer signature must be one of the following:!) the Chairman of the Board; 2) the President; 3) any Vice President.

The second corporate officer signature must be one of the following: a) Secretary; b) Assistant Secretary; c) Chief Financial Officer; d) Assistant Treasurer.

In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signature to bind the company.

****

County of Orange, a political subdivision of the state of California

Print Name Title

Signature Date

****

APPROVED AS TO FORM
Deputy County Counsel

By: Carolyn S. Frost
Deputy Name

Carolyn S. Frost
Deputy Signature

Date: 4/23/18

ATTACHMENT A-2
ADDITIONAL SCOPE OF WORK

I. JVR Shelter Strategies provides consulting services on an extended basis to animal welfare organizations requesting assistance beyond an initial evaluation. The following services would be provided to OC Animal Care:

A. Statistics Review

A.1 Quarterly review of existing statistics to validate numbers and ensure compliance with Shelter Animals Counts (SAC) matrix guidelines as follows:

A.1.1 Intake data for adult and juvenile cats and dogs

A.1.2 Outcome data for adult and juvenile cats and dogs

A.1.3 Live release rates calculated the three separate ways (save rate, LRR, including owner requested euthanasia)

A.1.4 Euthanasia percentage

A.1.5 All data above is calculated using Mathematica and Python programs to utilize all raw data from the year and compared with previous years

A.2 Annual review of C4C (capacity for care) calculations and LOS (length-of-stay) calculations with staff to serve as metric for program determinations. This would be based on past statistics and serve as baseline for future comparison.

A.2.1 Staffing for daily care

A.2.2 Staffing for intake

A.2.3 LOS to all outcomes for adult and juvenile cats and dogs

A.3 Creation of new statistics to serve as a baseline for determining success of new programs. New statistics include:

A.3.1 Data specific to kitten programs

A.3.2 Data related to RTF (Return to Field) and community cats

A.3.3 Ways to track enrichment goals

A.3.4 Other specific areas as determined in meetings with staff

B. Operations Assistance

B.1 Review and offer recommendations on existing and revised SOP's (Standard Operating Procedures) associated with OC Animal Care's new shelter and programmatic changes including but not limited to the following:

B.1.1 Pathway planning

B.1.2 Cleaning

B.1.3 Feeding

B.1.4 Intake

B.1.5 Adoptions process

B.2 Assistance with the creation and evaluation of new SOP's for new facility such as:

B.2.1 Housing choices

B.2.2 Enrichment

B.2.3 Daily monitoring

B.3 Four onsite visits to assist with implementation of programs at new facility

B.4 Dr. Robertson will additionally serve as an advisor to the shelter on an as- needed basis to answer questions related to operations, programs, and metrics

II. Deliverables:

1. Four site visits to review processes and meet with shelter leadership
2. Review of statistics quarterly
3. Strategic plan metrics meeting with shelter leadership to determine baseline metrics for new programs (to be conducted during one of the four site visits)
4. Editing of SOP's that are provided by staff and input on creating new SOP's as requested
5. Ongoing phone and email communications with a minimum of two phone/online Zoom one-hour meetings, monthly for a minimum of 24 meetings

III. Timeline:

1. Duration of services is one calendar year starting June 1, 2018, to be completed May 31, 2019.

IV. Fee for Service:

The services outlined above would be provided at a flat fee of $84,250.00.

Breakdown of fees as follows:

Statistics and associated meetings/phone calls: $39,000
Operations and associated on-site meetings: $45,250

Fees are inclusive of site visits and travel expenses.

F5

From: Bernard, Andi
To: Fulton, Sean; monica.schmidt@occr.ocgov.com
Subject: FW: A Review - Working With Rescue Partners
Date: Tuesday, November 17, 2020 1:04:00 PM
Attachments: OCAC Rescuestats_2019.pdf
OCAC Rescuestats_2017.pdf
OCAC Rescuestats_2018.pdf

FYI

From: Lin, Shaw <shaw.lin@occr.ocgov.com>
Sent: Wednesday, February 5, 2020 9:17 AM
To: Bernard, Andi <andi.bernard@occr.ocgov.com>
Subject: A Review - Working With Rescue Partners

Hi Andi,

You have forwarded to me recently emails related to interactions between OCAC and our rescue partners, and asked me to review. Some of these emails included complaints about the challenges and frustration for them working with OCAC. In reviewing these emails and complaints, I searched and review the followings:

- Information posted at OCAC website
- Reports available from Chameleon
- Input from Customer Service staff
- Websites of other animal care operations

I also discussed with Jessica about their process interacting with the rescue partners, and had a discussion with Tammy on the NFF and touched on her working with the rescue groups. I did not discussed the specific email complaints with Jessica and Tammy.

Please note that I did not find any specific approved policies or procedures related to working with the rescue groups in the current OCAC PnPs folders in the shared Z drive.

Overall, according to the data from Chameleon (report attached), in 2019, a total of 2,708 animals went to 87 rescue groups. For 2018 and 2017, the numbers were similar: 2,533/92 and 2,545/85, respectively. Note that, out of the 2,708 total for 2019, 1,501 were cats released to Stray Cat Alliance under the RTF program ("Feral Free 2" in the report). Based on these numbers, the interaction with rescue groups seems to be relatively stable for the last three years, with a slightly higher total animal count for 2019. I did not find comparable data from other animal shelters available on their websites.

The process, procedures and documents for interfacing with the rescue groups are mostly presented in these web pages:

- Adoption Partner Program: http://www.ocpetinfo.com/involve/partner
- Adoption Partner Manual: http://www.ocpetinfo.com/civicax/filebank/blobdload.aspx?BlobID=29821

- Rescue Track: http://petadoption.ocpetinfo.com/rescuetrackportal/#/home

The information in the above web pages outline the overall process, procedures and requirements related to the interfacing between OCAC and the rescue groups. The Rescue Track is a good tool. The Adoption Partner Manual is somewhat outdated, e.g. the "Window 1" designated for the transactions with rescue groups was the practice at the old shelter. The file name of the Adoption Partners Manual suggests that it may be created in 2012. Please note that the Customer Service staff started recently using "Window 8" to provide service to rescue group, as needed and appropriate.

I also checked with the Customer Service counter staff about their experience interacting with the rescue groups. They found no particular overall issues, except that, during the busy spring/summer season, the rescue groups have to wait longer just like the public. And, sometimes, the challenges of coordination between the COT, Clinic and the Customer Service cause some frustration for our staff and the rescue groups.

On the requirement for Adoption Partner to be a 501(c)(3) organization, it seems to be a common practice for animal shelters. To include an IRS Letter of Determination as part of the application and registration as a rescue partner is typical and appropriate. When in crunch time, however, it seems to be acceptable to verify first their 501(c)(3) status at the IRS official website: https://www.irs.gov/charities-non-profits/tax-exempt-organization-search. If valid as shown on the IRS website, then, allow them the time to receive and submit the IRS Determination Letter, without holding up the process of moving animal to the rescue group. Adoption Partners are qualified for a discount or free adoption fees for animals designated as "Special Needs" or LIFE.

Based the above, my conclusions and recommendations for this review are:

1. The specific complaints received from [redacted] of OC Shelter Partners (1/17/20) and [redacted] (1/22/20) appear to be isolated incidences. The COT staff needs to review these cases, and do their best to avoid similar situation from happening again. Nevertheless, it is understandable that certain adoption partners may be more sensitive and react to issues differently.
2. The Adoption Partner Manual needs to be updated.
3. A PnP be created on the subject of Rescue/Adoption Partners.
4. Consider system workflow or collaboration tools to support the coordination between COT, Clinic and Customer Services teams.
5. Review OCAC's current partnership with OC Shelter Partners and NFF and explore options to enhance and strengthen these programs.

I tried to keep this email succinct while covering all the key aspects of this review. Also, I did not speak with the individuals who made the complaints and other COT staff involved with the rescue groups. Please let me know if this report and the level of review meets your need, or if you would like a report in different format or additional review on this subject. And, let me know if you want to meet to discuss this review.

Thank you,

OCAC Strategic Plan Executive Summary

January 22, 2018

Vision: A safe, compassionate community for all.

Mission: To provide refuge and care for animals, foster the human-animal bond and promote safety in our community.

Strategic Priority 1: Animal Care, Enrichment, and Placement

Goals:	Success Measures:
1. **Every animal in the shelter receives daily, varied enrichment.**	a) One hundred percent of all dogs qualified (retention met, healthy, friendly) are in daily playgroups. (Small dogs by February 2018; large dogs by Summer 2018 with occasional playgroups before then, as staffing permits). b) 100% of dogs are provided in-kennel enrichment tailored for their needs daily by June 2018. c) Every adoptable cat is taken out of his or her housing unit for enrichment at least three times per week by Summer 2018. d) 100% of cats receive appropriate enrichment tailored for their needs daily and are housed in portalized or large cages by Fall 2018.
2. **Every animal's care and status is tracked in order to demonstrate ongoing, daily care and comfort during their stay.**	a) Every "must" outlined in ASV Guidelines for Standards of Care in Animal Shelters is implemented and occurring at OCAC by Spring 2019. b) 100% of "should and ideally" ASV Guidelines for Standards of Care in Animal Shelters practices are implemented by Summer 2021. c) 100% of animal enrichment activities are tracked by Fall 2018.
3. **Options for moving animals quickly through the system to live outcomes are maximized.**	a) Average length of stay (LOS) of 8 days for most "Fast Track" animals and 15 days for most "Slow Track" animals by January 2019. Animals may stay beyond this LOS but all efforts are made to decrease roadblocks to movement of animals to live release. b) 75% of medical animals (any animal under veterinary care at OCAC) placed for public adoption while undergoing treatment. c) Increase number of fosters able to house animals with medical conditions by 50% by Summer 2018. d) Length of stay for cats with upper respiratory infections is reduced by 20%, as cats recover quicker through targeted medical fosters.
4. **More animals that enter OCAC are saved annually.**	a) Live release rate for dogs will remain over 90%. b) Underage kitten transfers will increase by 10% by December 2018. c) Live release for cats will increase by at least 5% each year with a target of 85% or higher by December 2020. d) Live release rates for kittens will increase to at least 70% by the beginning of 2019. Staff will evaluate annually and adjust up as needed. e) Owner requested euthanasia for dogs and cats decreases to 2% of intake by 2019 (and is monitored).

R3
R4

	f) Owner surrenders for dogs and cats are increasingly referred to our diversion program instead of shelter intake. A baseline for this metric will be recorded at the end of 2018 and shall increase by 10%. This metric will be evaluated annually to determine next target.
5. **Reunite more lost pets with their owners.**	a) Increase RTO (Return to Owner) rate for dogs to 45% and RTO for cats to 5% by December 2019. b) Licensing compliance of 60% or greater by 2019. c) Increase TNR (Trap-Neuter-Return) rate for cats to 20% by 2019. (Numbers will be evaluated at the end of 2018; if we have significantly increased our TNR cats by that time, this metric may be increased.)

Strategic Priority 2: Stakeholder Engagement and Marketing

Goals:	Success Measures:
1. **Make the adoption process customer-friendly, easy and efficient.**	a) Adopter satisfaction of at least 85% as captured in post-adoption surveys. b) Streamline adoption process so that it only takes 10 minutes at the window to complete a customer's transaction by Summer 2018, as measured by periodic time studies, or by using potential new technology. c) Assess the visitation process and implement a new, more customer-friendly process by Summer 2018, as captured in feedback from customer surveys. d) 80% of requested visits with adoptable animals are accommodated within 15 minutes of request, as measured by periodic time studies, or by using potential new technology.
2. **Adoption Partners are engaged and relationships enhanced.**	a) Conduct yearly survey showing a 10% increase in satisfaction annually by adoption partners to at least 85% by 2020. Utilize the survey conducted by JVR in Fall 2016 as the baseline for rate of satisfaction.
3. **Volunteers are engaged in almost every aspect of shelter operations to provide needed support to achieve OCAC goals.**	a) Increase volunteer engagement by 50% by February 2019. b) Increase training provided for all key areas of volunteer involvement by 25% by February 2019 c) Create a tiered infrastructure for volunteer engagement whereby current volunteers have written position descriptions and schedules by February 2018. d) Expand volunteer program to include additional responsibilities and duties to support staff and animals by Summer 2018.
4. **Public feels welcome at the shelter, has a positive experience, and clear ways to help.**	a) All staff receives comprehensive customer service training – refresher for current staff, onboarding for new staff by Spring 2019. b) 75% of enrichment items are received through direct donations or the Amazon Wishlist by Summer 2019. c) A fund specifically devoted to helping owners reclaim their lost pets is created by 2019, with at least $50,000 annually to help shelter animals be reunited with their families.

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5. The Community has access to increased information sharing and transparency to increase understanding and support for OCAC.	a) Proactive, consistent social media messaging increases followers on Facebook page by 10% by December 2018. b) New feature (i.e. before and after story, adoption happy ending, highlighted program, etc.) on social media every month by June 2018. c) Transparency to the public is offered through sharing and posting of monthly animal outcomes as well as progress towards goals on OCAC website by Summer 2018.
6. Contracting cities recognize the great service provided by OCAC and want to be part of it.	a) OC Animal Care retains all current contract cities and these cities report a satisfaction rate of 75% or higher with services by January 2019. b) Non-Contract cities recognize the positive impact OC Animal Care has on the community and request to join our program by January 2020.
7. Engage the veterinary community to encourage the relationship between vets and shelter animals.	a) Partnership with veterinary hospital groups implemented by Fall 2018 to ensure veterinary aftercare of animals following adoption, decreasing returns by 5% at the end of 2019. b) Continue engagement at Veterinary Medical Association forums for sharing ideas and increased partnership between private veterinarians and the shelter, as demonstrated by more veterinarians represented at shelter events.

OCAC Strategic Plan Executive Summary

January 22, 2018

Strategic Priority 3: Culture and Organizational Development

Goals:	Success Measures:
1. **OCAC departments communicate consistently and understand each other's goals.**	a) Roundtable meetings between the sections are held every month by October 2017.
2. **Goals are defined within departments and each person understands their role in the goals.**	a) 90% of staff report that they are informed and understand their role by Fall 2018.
3. **Staff are highly trained and report that are informed and understand their roles.**	a) 90% of staff report they are informed and understand their roles and demonstrate that they consistently follow policies and procedures by Spring 2019. b) Each staff member has a defined job description with measurable goals. c) Performance reviews conducted annually to determine that staff follow written SOP's, and progress meetings held every 6 months. d) Annually review program protocols and written SOP's, with staff training by Fall 2018.
4. **Visitors and customers of OCAC have professional and respectful interactions with all staff.**	a) All staff is trained on excellent customer service and are given the tools to succeed by Summer 2018 b) Customer complaints decrease 25% and positive reviews on Yelp, Google increase by 50% by January 2019. c) By Fall 2018, staff create a system to respond and attempt to resolve any complaints or negative reviews on Google and Yelp. d) Create a comprehensive Customer Service training program and Policy & Procedure (P&P) for all staff, with specifics for each area by Fall 2018.
5. **Create a positive organizational culture, which encourages cooperation and customer service for staff and volunteers.**	a) Create cultural agreement for all staff and volunteers by March 2018. b) All staff and volunteers sign a cultural agreement that guides their service at the shelter by Fall 2018.

F5

Strategic Priority 4: Fiscal Stewardship and Sustainability

Goals:	Success Measures:
1. Increase revenues from dog licensing in OCAC's service areas	a) Licensing compliance of 60% or greater by 2019.
2. Increase volunteer engagement to assist with daily shelter duties and events	a) Enhance volunteer engagement by providing more structure and resources to support volunteers in their work through elevation of volunteer leaders by July 2018. b) Increase number of active volunteers by 50% in 2019.
3. Engage in fundraising campaign to increase donor base, and an increase of donations to the shelter	a) Establish a fundraising initiative by 2019 that generates funds to enable OCAC to support and expand current operations.
4. Complete fee study to gather a more accurate estimate of costs for program services	a) Bring recommendations from the A/C fee study to Board of Supervisors in early 2018 for implementation in 2018.
5. Investigate alternative dog license tag programs to lower costs and encourage increased compliance	a) Investigate and if appropriate bring to the Board for consideration a revenue-based dog tag system to reduce calls to reunite animals with their owners by 25%.

Strategic Priority 5: New Shelter Preparation

Please note: This strategic priority will be completed in the next few months.

Goals:	Success Measures:
1. OCAC staff prepare and execute a smooth transition from the old shelter to the new shelter.	a) Regular meetings set with roles and responsibilities identified by October 2017 Completed. b) Comprehensive move plan developed by November 2017. Completed. c) Move accomplished by (one month post construction completion – Estimated March 2018).
2. OCAC staff develops new protocols and work flows for new shelter.	a) Work flows developed based on blue prints by (3 months before move) Ongoing. b) Protocols drafted for new shelter by (2 months before move), finalized by 3 months after move in, revised as needed after move in. In process
3. OCAC staff plays an active role in planning and participating in the new shelter grand opening.	a) Awesome grand opening for volunteers, contract cities, community and Board members. b) Clear the old shelter adoption event held prior to move to extensively reduce the number of animals needing to be moved to new facility 1 week prior to scheduled move. c) Tours planned and conducted at and after opening
4. OCAC staff plans tour of new shelter to engage stakeholders	a) Tailored tours developed and scheduled by two months before move for following groups: grand opening, media, vet community, contract cities, volunteers, ACCOC, rescue partners.

F11

2 min read

Results of integrated TNR/RTF programs on shelter intake and killing

Study

"Integrated Return-To-Field and Targeted Trap-Neuter-Vaccinate-Return Programs Result in Reductions of Feline Intake and Euthanasia at Six Municipal Animal Shelters," published in *Frontiers of Veterinary Science*, 2019. Complete article available (open access) online here.

Overview

Return-to-field (RTF) is a relatively new twist on trap-neuter-return (TNR). Cats brought to shelters (either by residents or animal control officers) are sterilized and vaccinated, then returned to their original location.

This study presents the results of six three-year, shelter-based programs integrating RTF with targeted TNR efforts. In total, nearly 73,000 cats were treated though these programs, resulting in dramatic reductions in feline intake and shelter killing, and equally dramatic increases in live-release rate (i.e., live outcomes divided by intake).

Key points

This study [1] builds on the work of a previous study [2] documenting reductions in feline intake and shelter killing upon the implementation of an integrated RTF and targeted TNR program. Across the six programs, researchers documented median reductions of 32% in feline intake and 83% in shelter killing, with a median increase of 53% in live-release rate.

> *Researchers documented median reductions of 32% in feline intake and 83% in shelter killing.*

More than 8 in 10 cats (83%) treated through these programs were returned to their original location (after having been sterilized and vaccinated), while another 15% were adopted (either directly through the shelter or via local rescue groups). Roughly 0.6% were returned to their owners, 0.5% were euthanized due to serious health concerns, 0.3% were relocated, and 0.2% died during or following surgery.

Although such studies cannot directly assess possible population reductions in a shelter's service area, reductions in the intake of young kittens offer an interesting proxy metric; the six shelters contributing to this study documented median reductions of 40% in kitten intake (i.e., cats under 6 months of age) and 41% in the intake of newborn kittens (i.e., under 8 weeks of age). This suggests that the programs were having population-level impacts in their respective communities.

Results of this study suggest that cats entering RTF and TNR programs are generally healthy; only 0.5% were euthanized due to serious health concerns, and the number of cats brought to the shelter dead (e.g., hit by car) typically decreased following the implementation of integrated RTF/TNR programs.

References

1. Spehar, D.D.; Wolf, P.J. Integrated Return-to-Field and Targeted Trap-Neuter-Vaccinate-Return Programs Result in Reductions of Feline Intake and Euthanasia at Six Municipal Animal Shelters. *Frontiers in Veterinary Science* 2019, *6*.
2. Spehar, D.D.; Wolf, P.J. The Impact of an Integrated Program of Return-to-Field and Targeted Trap-Neuter-Return on Feline Intake and Euthanasia at a Municipal Animal Shelter. *Animals* 2018, *8*.

frontiers in Veterinary Science

F11

ORIGINAL RESEARCH
published: 21 March 2019
doi: 10.3389/fvets.2019.00077

Integrated Return-To-Field and Targeted Trap-Neuter-Vaccinate-Return Programs Result in Reductions of Feline Intake and Euthanasia at Six Municipal Animal Shelters

Daniel D. Spehar[1] *and Peter J. Wolf*[2]*

[1] *Independent Researcher, Cleveland, OH, United States,* [2] *Best Friends Animal Society, Kanab, UT, United States*

For decades, animal shelters in the U.S. have sought to reduce the number of cats that are impounded and euthanized. Since the 1990s, low-cost sterilization campaigns aimed at owned cats have achieved varying levels of success in meeting these objectives. Over a similar time period, the use of trap-neuter-vaccinate-return (TNVR), as a humane alternative to the lethal management of stray and feral cats, has proliferated. Because of the limited scope of many TNVR programs, the impacts of such efforts on shelter metrics have often proven difficult to measure. In the past decade, two new variants of TNVR, return-to-field (RTF) and high-impact targeting, have exhibited the capacity to contribute to significant reductions in shelter intake and euthanasia. The present study examines changes in feline intake and euthanasia, as well as impacts on associated metrics, at municipal shelters located in six diverse U.S. communities after integrated programs of RTF and targeted TNVR (collectively termed "community cat programs," CCPs) were implemented. A total of 72,970 cats were enrolled in six 3-year CCPs, 71,311 of whom (98%) were sterilized, vaccinated, and returned to their location of capture or adopted. A median reduction of 32% in feline intake, as well as a median decline of 83% in feline euthanasia occurred across the six CCPs; median feline live-release rate increased by 53% as a result of these simultaneous declines in cat admissions and euthanasia. The integration of RTF and targeted TNVR protocols appears to result in greater feline intake and euthanasia reductions than programs lacking such an integrated approach.

Keywords: return-to-field (RTF), trap-neuter-vaccinate-return (TNVR), targeted TNVR, unowned free-roaming cats, community cat program (CCP), feline intake, feline euthanasia, animal sheltering

OPEN ACCESS

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INTRODUCTION

Unlike some countries (e.g., Italy), the U.S. has no national laws governing the management of free-roaming domestic cats; relevant local and state laws vary considerably. In addition, each animal shelter typically has its own relevant policies and guidelines. The focus of the present study is the impact of relevant policy changes—not the laws—regarding the admission and disposition of community cats following the implementation of innovative programs intended to humanely

manage the population of unowned, free-roaming cats (often referred to as "stray" or "feral," terms typically used interchangeably in the U.S. and Canada, but referred to as "community cats" throughout this paper). The legal aspects of such programs have recently been taken up by others, including the American Bar Association (1, 2).

Open-admission shelters, facilities that generally accept any animal in need, including those with little chance of being rehomed due to issues of age, health, or temperament (3), are often either operated directly by municipalities or by private organizations under government contract. In recent decades, municipalities across the United States have expended substantial resources aimed at reducing the number of cats admitted to and euthanized at such shelters. Government-funded low-cost (or no-cost) sterilization campaigns, often focused on owned cats in underserved communities, have been associated with reductions in feline intake and euthanasia (4–6). Nevertheless, data going back to the 1990s from a number of states have revealed varying trends in these shelter metrics (7–9). A proliferation in the use of trap-neuter-vaccinate-return (TNVR) as a method of managing community cats has occurred over a similar time period. Declines in colony size associated with such programs (10–12), including the elimination of individual colonies (13, 14), and reduction (15) or elimination (16) of kitten births, have been documented. Nevertheless, because TNVR has been historically conducted on a limited scale, often at the colony level, the impact of such programs on the intake and euthanasia of cats at municipal shelters is unclear.

Two new, scaled-up variants of TNVR, high-impact targeting and return-to-field (RTF), have been developed over the past decade and appear to have transformative potential for reducing the intake and euthanasia of cats at municipal shelters. Targeted TNVR is a systematic approach whereby efforts to trap, sterilize, vaccinate, and return cats are concentrated in areas known to have a high-density of community cats; these targeted areas are also often a source of high feline intake at municipal shelters. RTF programs (sometimes called Feral Freedom or shelter-neuter-return, SNR) are similar in that they involve the sterilization, vaccination, and return of cats. However, these programs are shelter-based rather than community-based; RTF programs are essentially TNVR programs for cats designated as "strays" upon admission to the shelter (either brought by residents or impounded by enforcement staff). RTF programs are, like TNVR programs, implemented with the 2-fold aim of reducing (i) the number of cats who, either due to temperament or lack of shelter space, would otherwise likely be euthanized, and (ii) community cat populations (**Figure 1**). Significant reductions in the intake and euthanasia of cats from targeted areas have been observed at municipal shelters where high-impact targeted TNVR has been implemented (17, 18); shelters employing RTF programs have witnessed sharp, yet comparatively smaller, declines in both measures (19, 20).

In 2012, Best Friends Animal Society received more than $1.6 million in grant funding from PetSmart Charities®, Inc. to begin partnering with municipal shelters across the country to initiate 3-year community cat programs (CCPs), which integrate both RTF and targeted TNVR (Total PetSmart Charities® funding for the six CCPs described in this article was $3.7 million; Best Friends funding was $2.2 million). The CCPs have been generally modeled after the Feral Freedom program, the first large-scale RTF initiative in the U.S., established in 2008 in Jacksonville, Florida, where feline euthanasia was reduced by 92% over 6 years. An important distinction, however, is that the CCPs incorporate both RTF and targeted TNVR components from the onset, whereas in Jacksonville targeted TNVR was not added to RTF efforts until almost 3 years after program inception (20). In the case of the CCPs, targeted TNVR efforts were coordinated (and in large part executed) by Best Friends staff in collaboration with the partner shelters. An examination of one of the inaugural CCPs, in Albuquerque, New Mexico, revealed significant reductions in feline intake and euthanasia over the course of the program, as well as improvements in other associated metrics at the municipal shelter (21). Six CCPs had run to their scheduled conclusions as of year-end 2017. The present study, using various shelter metrics (e.g., feline intake, euthanasia, live-release rate [live outcomes divided by intake (22)], and dead cat collections) summarizes the results of these six CCPs and presents an analysis of the data.

MATERIALS AND METHODS

The first two CCPs were initiated at municipal shelters in Albuquerque and San Antonio, Texas, in 2012, followed by the launching of programs at municipal shelters or facilities with municipal sheltering contracts in Baltimore, Maryland, in 2013 and Philadelphia, Pennsylvania, Tucson, Arizona, and Columbus, Georgia in 2014 (**Table 1**). Programs at each of these open-admission shelters were scheduled to run for 36 months; however, Baltimore, Philadelphia, Tucson, and Columbus were each extended for as many as 3 months because of surplus funds. For the purposes of this investigation, results from only the originally scheduled 3-year program period for each CCP was examined, whether or not the program was extended. In Albuquerque, as described elsewhere (21), a stepwise movement toward the adoption of TNVR as the preferred method of community cat management, including a year-long pilot RTF program at the municipal shelter, preceded the CCP. No formal shelter-based RTF or targeted TNVR initiatives took place prior to the initiation of the CCPs at the other locations.

All of the CCPs included integrated implementation of RTF and targeted TNVR components. In general, the RTF component of each CCP was structured so that the vast majority of healthy community cats brought to the shelter from anywhere within their respective service areas, including individuals who could be easily treated for minor injuries or illnesses, were enrolled in the program. Best Friends staff (the number of whom varied by program, but ranged between one and three), arranged for the cats to be sterilized either in-house (when a clinic was present on site) or at a local private high-quality, high-volume spay-neuter clinic. Best Friends personnel, or less frequently, trained volunteers, then returned the cats to the locations where they were trapped. Funding for San Antonio was limited to 14 zip codes; nonetheless, eligible cats brought to the shelter from outside of those zip codes were enrolled into the RTF program

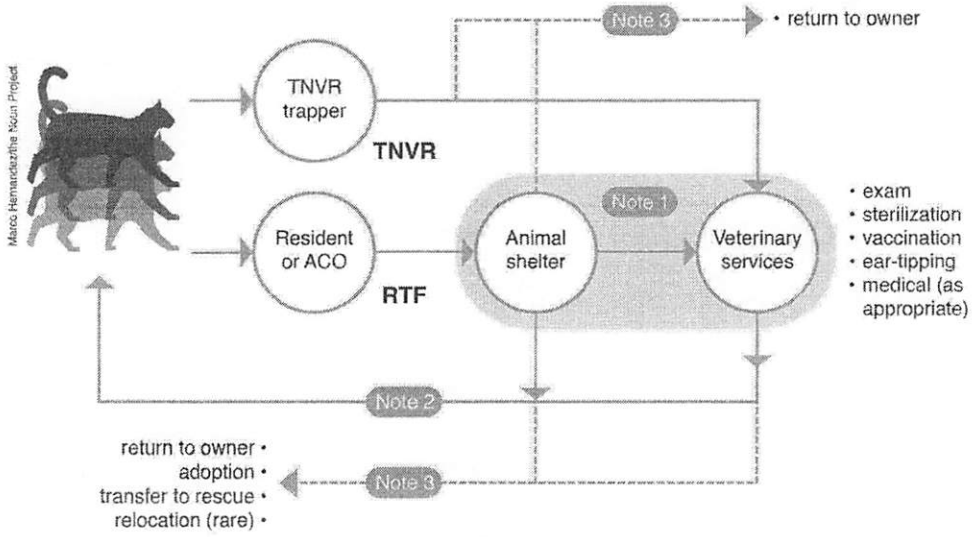


FIGURE 1 | Visual representations of TNVR and RTF programs.

and returned to locations of origin by Best Friends staff or volunteers until Program Year 2 when the city began paying for sterilization surgeries and assigning field services staff (often called animal control officers) the task of returning such cats. In Philadelphia, cats were returned to their location of capture by field services staff for the duration of the program.

Before being returned to the field, in addition to being sterilized, all CCP cats were ear-tipped and received vaccinations against rabies and rhinotracheitis/calciviris/panleukopenia (FVRCP), as well as flea treatment and an antibiotic injection (cefovecin sodium, sold under the brand name Convenia®), as appropriate. General protocol called for all free-roaming cats without serious illness or injury to be returned to locations of capture after recovery from sterilization surgery; however, over time, as feline intake declined and more shelter space became available at a number of the CCP locations, some sociable cats were made available for adoption or transferred to private rescue groups (organizations, typically of non-profit tax status, that specialize in the rehoming of adoptable cats). Microchipping was not part of CCP protocol. Relocation (the release of cats at outdoor sites other than location of origin) was not done unless their home environments were deemed too dangerous for safe return (e.g., demolition of a building)—a situation that occurred only rarely.

Targeted TNVR was performed in parts of CCP shelter service areas that were determined to be sources of high feline intake. The methods behind this strategy varied by program inasmuch as each CCP shelter determined how best to allocate and prioritize program resources. For example, Baltimore and San Antonio focused on areas from which the highest frequency or most serious resident complaints were generated, while Philadelphia used admission data to determine locations from which the most cats had been brought to the shelter by residents. Columbus utilized the personal field experience of the program coordinator (who had previously served as the community's animal control officer) to target areas known to be populated by large numbers of community cats until such time that sufficient data was available from the shelter to identify "hot spots" based upon intake numbers alone; targeting hot spots based upon shelter stray cat intake data was also the practice followed by Albuquerque. Tucson concentrated trapping efforts on areas that were identified as sources of high kitten intake. Cats trapped, neutered, and vaccinated as part of targeted trapping efforts were returned to their locations of capture without being admitted to CCP shelters and therefore did not contribute to feline intake totals.

Moreover, in order to make full use of information obtained about the locations of origin of RTF cats, targeted trapping also was performed at RTF release sites when circumstances allowed. Such sites were targeted based upon a hypothesis, known as the "red-flag cat model" which supposes that locations within a community capable of sufficiently supporting one free-roaming cat are likely home to additional unsterilized cats (20, 21). Thus, the initial cat trapped and returned to a new location acts as an indicator, or red flag, alerting program staff to the potential presence of other cats. The red-flag cat model was utilized to varying degrees by all six CCPs. Cats originating from red-flag cat model sites were not separately tracked by the CCPs; however, the number of cats enrolled at each site were tracked by program component (RTF or TNVR) and program year (calendar year for

TABLE 1 | Community Cat Program (CCP) locations, shelter name, service areas and size, and program periods.

CCP location	Shelter operator	Service area	Service area size (human population)*	Program period
Albuquerque, New Mexico	Albuquerque Animal Welfare Department	Bernalillo County	674,000	April, 2012–March, 2015
San Antonio, Texas	San Antonio Animal Care Services	Bexar County	1,826,000	April, 2012–March, 2015
Baltimore, Maryland	Baltimore Animal Rescue and Care Shelter	City of Baltimore	621,000	July, 2013–June, 2016
Philadelphia, Pennsylvania	Animal Care and Control Team of Philadelphia	City of Philadelphia	1,566,000	July, 2014–June, 2017
Tucson, Arizona	Pima County Animal Care Center	Pima County	1,010,000	July, 2014–June, 2017
Columbus, Georgia	Columbus Consolidated Animal Care and Control	Muscogee County	199,000	July, 2014–June, 2017

Human population data obtained from U.S. Census Bureau QuickFacts.

Albuquerque). Therefore, for the purposes of this study, locations at which both RTF and targeted TNVR activity occurred during the same year were categorized as red-flag cat model sites.

Programs of concentrated community outreach were used in the neighborhoods where targeted TNVR took place, including some or all of the following tactics: door-to-door canvassing (a.k.a. block walking), the distribution of door hangers, targeted mass mailings, the hosting of educational events, and the use of cargo vans, wrapped with program-specific messaging, for transport of the cats.

Data Collection

All CCP-related data were obtained from Best Friends. Procedural details about individual CCPs were obtained via telephone interviews and email correspondence with program coordinators. Dead cat collection data were acquired from individual municipalities or CCP shelters.

CCP staff entered relevant program data (e.g., number of surgeries, sex, age, etc.) into a database built and maintained by Best Friends. Ongoing results were assessed monthly to evaluate the progress of each CCP toward overall sterilization surgery goals. Chameleon software was used to track shelter metrics for Albuquerque, Tucson, and San Antonio; PetPoint software was utilized for Baltimore and Philadelphia; a Lotus Notes program was employed for Columbus. All shelters entered data in real time or on a daily basis.

Shelter metrics tracked specifically as part of the CCPs included live intakes, live outcomes [adoption, transfer to private rescue, return-to-owner (RTO)], and other outcomes (euthanasia, died in care). Intake and euthanasia data were recorded by age: adult and kitten (the age threshold distinguishing kittens from adults varied by CCP, as follows: Albuquerque: $\leq$ 5 mos.; Baltimore: $\leq$ 4 mos.; Philadelphia, Tucson, Columbus, and San Antonio: $\leq$ 6 mos.); admissions of kittens $\leq$2 months of age was tracked separately for Albuquerque, Philadelphia, Tucson, and San Antonio; euthanasia of kittens $\leq$2 months of age was tracked separately for Philadelphia, Tucson, and San Antonio. The number of cats sterilized, whether as part of the RTF or targeted TNVR component of the CCP, as well as the number of cats returned to their trapping sites, adopted, or transferred to private rescue groups were documented. The tracking of welfare outcomes for cats returned to trapping sites was not part of CCP protocol.

Data Analysis

Shelter cat intake and euthanasia results for 12-month periods matching CCP program dates were compared to a baseline of shelter results for a corresponding 12-month period immediately preceding the initiation of the Albuquerque and San Antonio CCPs, and for the calendar year immediately preceding the Baltimore, Philadelphia, Tucson, and Columbus programs. A similar process was employed to assess results for other shelter metrics (i.e., live-release rate, adoptions, and RTO) as well, except for Albuquerque, for which other metrics were tracked on a calendar-year basis. The number of cats enrolled in the RTF component of each CCP was compared to the number enrolled in the targeted TNVR component for each program year; red-flag cat model results were calculated by matching the number of RTF cats returned to specific sites with the number of cats discovered as a result of targeted TNVR efforts at those same sites and during the same program or calendar year (depending on the available data). Due to the small sample size involved (e.g., 3 program years), varied effort (e.g., returning nearly all RTF cats in the early days of the program while relatively fewer RTF cats were returned later in the program) over the course of the CCP, and inherent year-to-year variation in shelter metrics, no statistical analysis was attempted. Each CCP shelter determined the manner in which to track its data. This was driven largely by the system (e.g., fiscal year, calendar year) used by the municipality itself. The authors acknowledge that uniformity in the tracking of shelter data would have allowed for more straightforward comparisons of some of the results among the various programs.

RESULTS

Enrollment and Surgeries

A total of 72,970 cats were enrolled in the six 3-year CCPs. Sterilization surgery was performed on 69,091 (95%) of the enrolled cats. Targeted TNVR conducted as part of the six programs resulted in 54,653 (79%) of the sterilizations, while RTF

TABLE 2 | Number of RTF and TNVR surgeries performed annually in each of six 3-year CCPs and percentage of surgery total (in parentheses).

CCP location (human population)	PY1		PY2		PY3		Total surgeries
	RTF	TNVR	RTF	TNVR	RTF	TNVR	
Albuquerque, NM	964	2,759	759	3,222	464	2,870	11,038
(674,000)	(26)	(74)	(19)	(81)	(14)	(86)	–
San Antonio, TX	877	4,265	238	4,289	245	3,285	13,199
(1,826,000)	(17)	(83)	(5)	(95)	(7)	(93)	–
Baltimore, MD	724	2,803	332	3,299	305	2,804	10,267
(621,000)	(21)	(79)	(9)	(91)	(10)	(90)	–
Philadelphia, PA	1,474	3,299	1,428	2,802	1,152	3,635	13,790
(1,566,000)	(31)	(69)	(34)	(66)	(24)	(76)	–
Tucson, AZ	1,084	2,164	1,642	4,357	736	4,134	14,117
(1,010,000)	(33)	(67)	(27)	(73)	(15)	(85)	–
Columbus, GA	758	1,553	734	1,752	523	1,360	6680
(199,000)	(33)	(67)	(30)	(70)	(28)	(72)	–

TABLE 3 | Number of RTF and TNVR surgeries performed annually per 1,000 human residents in each of six 3-year CCPs.

CCP location (human population)	PY1		PY2		PY3		Mean	
	RTF	TNVR	RTF	TNVR	RTF	TNVR	RTF	TNVR
Albuquerque, NM (674,000)	1.4	4.1	1.1	4.8	0.7	4.3	1.1	4.4
San Antonio, TX (1,826,000)	0.5	2.3	0.1	2.3	0.1	1.8	0.2	2.1
Baltimore, MD (621,000)	1.2	4.5	0.5	5.3	0.5	4.5	0.7	4.8
Philadelphia, PA (1,566,000)	0.9	2.1	0.9	1.8	0.7	2.3	0.8	2.1
Tucson, AZ (1,010,000)	1.1	2.1	1.6	4.3	0.7	4.1	1.1	3.5
Columbus, GA (199,000)	3.8	7.8	3.7	8.8	2.6	6.8	3.4	7.8

efforts accounted for 14,439 (21%) of the total surgeries. The combined number of cats sterilized across the six CCPs fluctuated by program year: Year 1: 22,724; Year 2: 24,854; Year 3: 21,513. In aggregate, the percentage of cats sterilized as part of the RTF component of the CCPs decreased each program year: Year 1: 26% (5,881); Year 2: 21% (5,133); Year 3: 16% (3,425) (**Tables 2, 3**). Overall, the number of female cats sterilized exceeded males 36,184 (52%)−32,907 (48%), and significantly more adults were sterilized than kittens, 49,509 (72%)−19,582 (28%).

Disposition

In total, 60,613 cats (83%) were returned to their trapping sites as part of the six CCPs; 10,698 (15%) were adopted or transferred to private rescue; 459 (0.6%) were returned to owner or otherwise released without undergoing surgery; 349 (0.5%) were euthanized for serious health concerns; 204 (0.3%) were relocated because they could not be safely retuned to locations of capture; 140 (0.2%) died perioperatively (**Table 4**). Of the cats returned to trapping sites, 44,670 (74%) were adults, 13,986 (23%) were kittens and the age of 1957 (3%) was unknown. Cats originated from a total of 12,912 sites across the six programs with the median number of cats per site ranging from 2–5 (**Figure 2**).

Euthanasia and Intake

A median decline of 83% in overall feline euthanasia occurred at the six shelters when results from the end of the third year of each program are compared to baseline results (**Table 5** and **Figure 3**). Tucson observed the largest decline in euthanasia on a percentage basis (91%) while Philadelphia experienced the largest drop in absolute numbers (4,084 cats). Among the six CCPs, Baltimore experienced the smallest percentage decrease in the euthanasia of cats (59%); Columbus had the smallest decline in absolute terms (1,272 cats). Over the same periods, the euthanasia of kittens declined by a median of 87%; the euthanasia of "newborn" kittens ($\leq$ 2 months) fell by a median of 85% at the three shelters (Philadelphia, San Antonio, and Tucson) where such data were tracked. The largest decline in the euthanasia of kittens, both on a percentage basis and in absolute terms, was observed by Tucson (95% and 2,305 cats, respectively), while the smallest reduction, by either measure, occurred at Baltimore (64% and 364 cats, respectively). Euthanasia of cats per 1,000 residents in each of the respective shelter's service areas declined by a median of 84%; on the same basis, kitten euthanasia declined by a median of 87% (**Table 6**).

Overall feline intake dropped by a median of 32% at the six shelters; Columbus experienced the largest decline (45%) while the smallest decline (1%) in feline intake was observed at San Antonio (**Table 5** and **Figure 4**). Kitten intake declined by a median of 40% across the six shelters, while the admission of newborn kittens dropped by a median of 41%, at the four facilities (Albuquerque, Philadelphia, San Antonio, and Tucson) for which such data were available. Overall feline intake fell by a median of

TABLE 4 | Disposition of cats in each of the six 3-year CCPs, 3-year totals and percentage by category.

CCP (human population)	RTC (%)	Adopt or transfer to rescue (%)	RTO (%)	Released without surgery (%)	Euthanized (%)	Relocated (%)	Died (%)	Other (%)	Total (%)*
Albuquerque, NM	10,738	946	1	1	20	6	34	–	11,746
(674,000)	(91)	(8)	(0.01)	(0.01)	(0.2)	(0.1)	(0.3)	–	(100)
San Antonio, TX	11,904	1,060	0	16	38	75	22	507	13,622
(1,826,000)	(87)	(8)	(0)	(0.1)	(0.3)	(0.6)	(0.2)	(4)	(100)
Baltimore, MD	8,796	2,156	0	11	104	67	24	–	11,158
(621,000)	(79)	(19)	(0)	(0.1)	(0.9)	(0.6)	(0.2)	–	(100)
Philadelphia, PA	12,508	2,085	43	0	93	11	15	–	14,755
(1,566,000)	(85)	(14)	(0.3)	(0)	(0.6)	(0.1)	(0.1)	–	(100)
Tucson, AZ	10,639	3,557	330	4	53	8	32	–	14,623
(1,010,000)	(73)	(24)	(2)	(0.03)	(0.4)	(0.1)	(0.2)	–	(100)
Columbus, GA	6,028	894	22	31	41	37	13	–	7066
(199,000)	(85)	(13)	(0.3)	(0.4)	(0.6)	(0.5)	(0.2)	–	(100)
Total	60,613	10,698	396	63	349	204	140	507	72,970
	(83)	(15)	(0.5)	(0.1)	(0.5)	(0.3)	(0.2)	(0.7)	(100)

Some totals exceed 100% due to rounding; RTC, returned to colony; cats released without surgery had already been sterilized; Other, unspecified outcome.

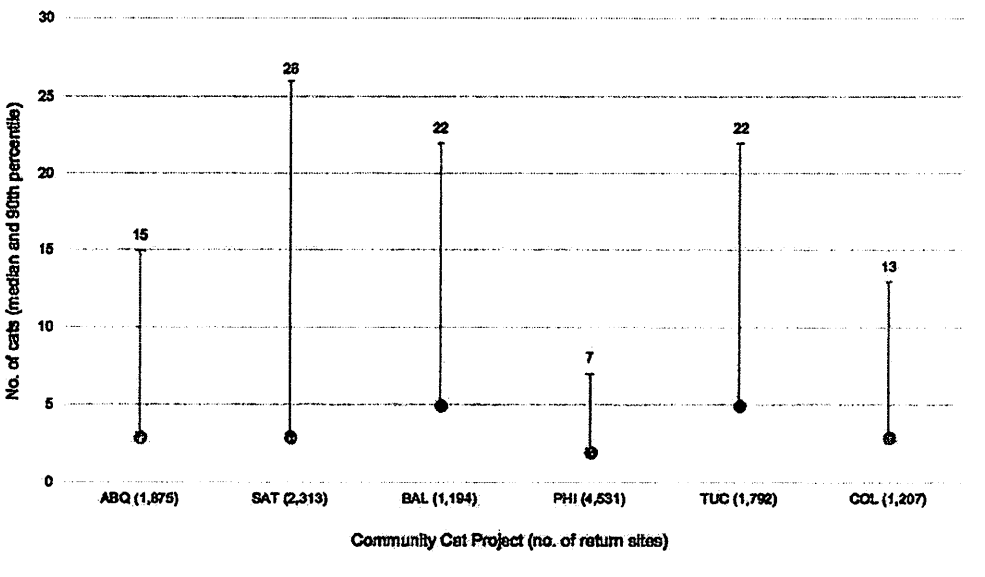


FIGURE 2 | Number of cats corresponding to source/return sites across six CCPs, with median figures (shown as solid dots) giving an approximation of median colony size.

33% per 1,000 residents across the six CCPs, while a 40% drop in the intake of kittens occurred (**Table 6**).

Live-Release Rate

The live-release rate for cats at the six CCP shelters increased by a median of 53% over the 3-years of the CCPs. The largest gain, 168%, was at San Antonio (from 31 to 83%). Philadelphia observed the smallest increase (17%, from 63 to 74%); however, the baseline live-release rate there was, by comparison, more than double that of San Antonio (**Table 5**).

Adoptions

Changes in the absolute number of cats adopted over the course of the six CCPs varied significantly (median of −8%), ranging from an increase of 118% for San Antonio to a decline of 82% for Columbus (**Table 5**). Measured as a proportion of feline intake, however, the adoption rate for cats increased (median of 45%) at all locations (in large part due to reductions in feline intake), except for Baltimore (−5%). When the number of cats transferred to private rescue groups for adoption are added to the adoptions originating directly from the shelters themselves, increases (median of 39%) were observed at all CCP locations.

TABLE 5 | Common shelter metrics before and after implementation of each 3-year CCP (absolute numbers and percentages by category).

Shelter metrics	CCP location											
	Albuquerque		San Antonio		Baltimore		Philadelphia		Tucson		Columbus	
	Before	After (% change)	Before	After (% change)	Before	After (% change)	Before	After (% change)	Before	After (% change)	Before	After (% change)
Feline intake	9,776	6,102 (−38)	6,661	6,581 (−1)	6,977	5,999 (−14)	19,017	12,791 (−33)	7,635	5,266 (−31)	3,329	1,842 (−45)
Per 1,000 residents	15	9 (−40)	4	4 (0)	11	10 (−9)	12	8 (−33)	8	5 (−38)	16	9 (−44)
Kittens*†	4,441	2,468 (−44)	3,810	4,283 (12)	2,978	1,823 (−39)	8,868	5,313 (−40)	5,072	2,903 (−43)	1,487	1,104 (−26)
≤ 2 mos. of age†	2,803	1,672 – (40)	2,706	4,241 (57)	–	–	5,729	3,347 (−42)	4,479	2,143 (−52)	–	–
Feline euthanasia	3,023	480 (−84)	4,167	763 (−82)	2,140	869 (−59)	6,055	1,971 (−67)	2,980	269 (−91)	1,493	221 (−85)
Per 1,000 residents	5	1 (−80)	2	0.4 (−80)	3	1 (−67)	4	1 (−75)	3	0.3 (−90)	7	1 (−86)
Kittens*†	1,462	149 (−90)	2,489	340 (−86)	568	204 (−64)	2,372	493 (−79)	2,424	119 (−95)	669	84 (−87)
≤ 2 mos. of age†	–	–	1,875	276 (−85)	–	–	1,965	360 (−82)	2,327	113 (−95)	–	–
Euthanasia rate (%)	31	8 (−74)	63	12 (−81)	32	15 (−53)	32	15 (−53)	39	5 (−87)	45	12 (−73)
Kittens*† (%)	33	6 (−82)	65	8 (−88)	19	11 (−42)	27	9 (−67)	48	4 (−92)	45	8 (−82)
Live release rate (%)	61	90 (48)	31	83 (168)	63	79 (25)	63	74 (17)	51	83 (63)	54	85 (57)
Adoptions	4,264	3,333 (−22)	893	1,947 (118)	3,228	2,648 (−18)	4,853	4,911 (1)	3,375	3,682 (9)	380	68 (−82)
RTO	297	277 (−7)	69	139 (101)	54	84 (56)	150	228 (52)	140	111 (−21)	43	45 (5)
DOA cats	2,220	1,689 (−24)	8,002	10,299 (29)	4,215‡	3,336‡ (−21)	712§	328§ (−54)	575	495 (−14)	N/A	N/A –

* *Kitten definitions varied by shelter: Albuquerque ≤ 5 mos.; Baltimore ≤ 4 mos.; San Antonio, Philadelphia, Tucson, Columbus ≤ 6 mos.* † *All kittens in Albuquerque, regardless of age, tracked by calendar year (year-end 2011 to year-end 2015), rather than program year.* ‡ *Cat and dog data combined (no further breakdown available).* § *Only DOA cats brought to the shelter by the public are included; data for those picked up by municipality were unavailable.*

RTO

In aggregate, the number of RTO cats increased by 17%, from 753 to 884 cats across the six CCPs, although Albuquerque (297–277) and Tucson (140–111) experienced declines. Median RTO as a percentage of shelter feline intake increased from 1.2% prior to CCP inception to 2% after completion of the respective programs.

Red-Flag Cat Model

A total of 15,658 cats (22% of the total cats enrolled in the six CCPs) originated from 1,817 red-flag cat model sites, where both RTF and targeted TNVR took place during the same 12-month period. Almost two thirds of these were TNVR cats (10,297), which amounts to 19% of all cats sterilized as part of targeted TNVR efforts. On average, 4 TNVR cats (median of 2) were enrolled in CCPs for each RTF cat returned to red-flag cat model locations.

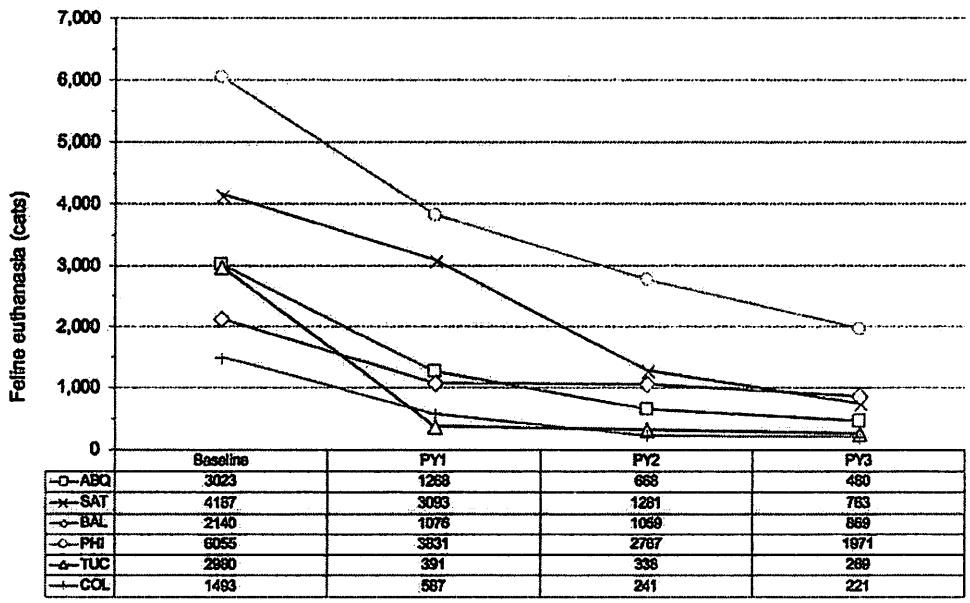
DOA

Data for cats classified as "dead on arrival" (DOA) were mixed across the six CCPs, and comparisons were made difficult due to uneven tracking and reporting (**Table 5**). Albuquerque and Tucson, for example, documented reductions of 24 and 14%, respectively. Baltimore observed a 21% reduction in the *total* number of dead animals picked up, but no breakdown by species was available. The most significant reduction (54%) was associated with Philadelphia; however, the only data available were for "stray" cats brought to the shelter by the public as DOA; no data for cats picked up by the municipality were available. As a result, the total number of DOA cats remains unknown for this CCP. San Antonio, by contrast, observed a significant increase (29%) in DOA cats over the course of the CCP. A year-by-year breakdown, however, shows an initial increase of 36% from 2011 to 2012 followed by a 17% decrease from 2012 to 2015, roughly mirroring the initial increase in feline intake and subsequent decline (**Figure 4**). No data were available for Columbus.

DISCUSSION

Impact of CCPs on Feline Euthanasia and Intake

As has been documented in other communities where RTF programs have been implemented at open-admission municipal shelters (19–21), significant reductions in feline euthanasia (median of 83%) were observed across all six CCPs (**Figure 3**). The declines in overall feline euthanasia at four of the six CCP shelters (Albuquerque, Tucson, San Antonio, and Columbus) exceeded 80% over 3 years, surpassing reductions witnessed over 4-year periods in Jacksonville and San José, where RTF programs resulted in reductions of approximately 70% (19, 20, 23). Even larger declines in the euthanasia of kittens (median of 87%) occurred at all CCP locations. Despite significant differences in the communities served by the six CCP shelters, both in terms of geography and population size, each experienced sharp declines in feline euthanasia, which strongly corroborates previous research (19, 21). Integration of targeted TNVR with RTF appears to be generally associated with more rapid declines in euthanasia. Results after 32 months (including an 8-month



	Baseline	PY1	PY2	PY3
ABQ	3023	1268	668	480
SAT	4187	3093	1281	763
BAL	2140	1076	1059	869
PHI	6055	3831	2767	1971
TUC	2980	391	338	289
COL	1493	587	241	221

FIGURE 3 | Changes in feline euthanasia at six CCP shelters, comparison of baseline level to euthanasia during each of three program years (PY).

pilot period) of an ongoing CCP in Las Vegas, Nevada, further support these findings (as with the other CCPs, data for the Las Vegas program was obtained from Best Friends), as feline euthanasia dropped by 80% (from 8,439 to 1,705) at the facility there, which provides municipal animal care and control services. RTF surgeries (5,748) represent 66% of total Las Vegas program sterilization surgeries (8,704 or 4 per 1,000 residents) over this period.

In addition, the feline euthanasia rate (calculated by dividing the number of cats euthanized for reasons other than owner request by the total number of live feline intakes) dropped by a median of 74% across CCP locations. A median euthanasia rate of 36% existed before integrated RTF and targeted TNVR programs began; the same measure at the conclusion of the respective CCPs was 12%. As a point of reference, Shelter Animals Count reported for 2016 a feline euthanasia rate of 25% (calculated by dividing the total number of cats euthanized, less owner-requested euthanasia, by the total number of outcomes minus owner-requested euthanasia) among its 627 participating organizations categorized as municipal shelters or organizations with municipal sheltering contracts. Shelter Animals Count functions as a national database of sheltered animals and follows the Base Data Matrix specified by the National Federation of Humane Societies; all data are contributed on a voluntary basis and were self-reported by 3,535 total participant organizations, which included municipal shelters and shelters with government contracts, as well as rescue groups with government contracts and shelters and rescues without such contracts, in 2016 (24).

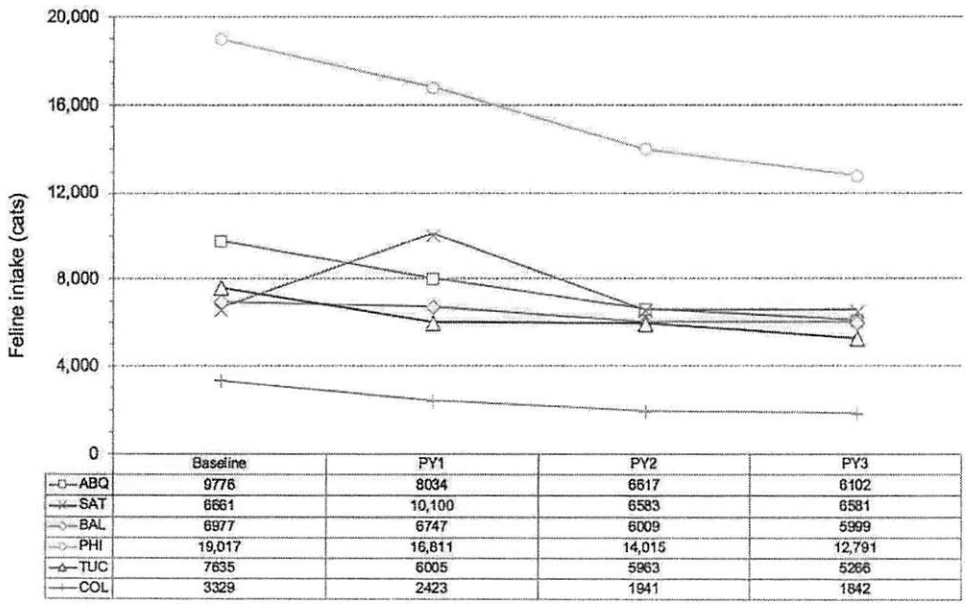
Reductions in feline intake (median of 32%) across the six CCP shelters (**Figure 4**) varied more than reductions in euthanasia. As stated above, the largest reduction occurred at Columbus (45%), while San Antonio experienced the smallest decline (1%) over the course of the 3-year program. A spike of 52% in feline intake during Year 1 at San Antonio was followed by a reduction in Year 2 (35%) that approximated the median decline (33%) experienced at the other CCP locations over the entirety of their programs; intake was virtually flat in Year 3 of the San Antonio program, declining by just 2 cats. Possible explanations for the anomalous increase in feline intake experienced during San Antonio's first year include a particularly sharp increase in awareness of community cats among the residents there and, a surge in the use of the municipal shelter as a resource for cats, due at least in part to new perceptions among residents of the shelter as a "cat-friendly" facility (20). Additional factors that might have contributed include the faster movement of cats in and out of the facility as cats returned to the field typically spent no more than 24 h in care at the shelter, rather than being kept for 4 days (prior to likely euthanasia) as was the practice before initiation of the CCP. Unfortunately, a definitive explanation for the increase in intake during the first program year of the San Antonio CCP was not readily apparent from the available evidence.

Notwithstanding the initial spike in intake witnessed by San Antonio, the median decline in overall feline intake among the six CCPs surpassed in 3 years the reductions in intake observed over 4-year periods in Jacksonville and San José (similar to the results for euthanasia noted above), where such declines were 30 and 27%, respectively. Again, implementation from the onset of concurrent RTF and targeted TNVR programs is the likely reason for these favorable results. The ongoing CCP in Las Vegas provides additional evidence in support of the strong association between such integrated community cat management programs and rapid reductions in feline intake: the Las Vegas shelter

TABLE 6 | Impact of CCPs on shelter feline intake and euthanasia per 1,000 human residents.

Common shelter metrics	CCP location					
	Albuquerque	**San Antonio**	**Baltimore**	**Philadelphia**	**Tucson**	**Columbus**
Mean annual sterilizations per 1,000 human residents	5	2	6	3	5	11
FELINE INTAKE Per 1,000 HUMAN RESIDENTS						
Before program	15	4	11	12	8	16
After program	9	4	10	8	5	9
Change (%)	−40	0	−9	−33	−38	−44
FELINE EUTHANASIA Per 1,000 HUMAN RESIDENTS						
Before program	5	2	4	4	3	7
After program	0.7	0.4	1	1	0.3	1
Change (%)	−86	−80	−75	−75	−90	−86
KITTEN* INTAKE Per 1,000 HUMAN RESIDENTS						
Before program	7	2	5	6	5	7
After program	4	2	3	3	3	6
Change (%)	−43	0	−40	−50	−40	−14
KITTEN* EUTHANASIA Per 1,000 HUMAN RESIDENTS						
Before program	2	2	0.9	2	2	3
After program	0.2	0.2	0.3	0.3	0.1	0.4
Change (%)	−90	−90	−67	−85	−95	−87
DEAD CATS COLLECTED Per 1,000 HUMAN RESIDENTS						
Before program	3.3	4.4	6.8†	0.4	0.6	N/A
After program	2.7	5.9	5.8†	0.2	0.5	N/A
Change (%)	−17	34	−15†	−50	−17	N/A

Kitten definitions varied by shelter: Albuquerque ≤ 5 mos.; Baltimore ≤ 4 mos.; San Antonio, Philadelphia, Tucson, Columbus ≤ 6 mos. Kitten data was tracked by program year for all CCPs, except Albuquerque, where it was tracked only by calendar year. †Reflects collection of all dead animals—no break down by species available. Before program = 12-month period immediately preceding program period for Albuquerque and San Antonio (except for Albuquerque kitten data); calendar year immediately preceding year of program initiation for Baltimore, Philadelphia, Tucson, and Columbus.



	Baseline	PY1	PY2	PY3
ABQ	9776	8034	6517	6102
SAT	6661	10,100	6583	6581
BAL	6977	6747	6009	5999
PHI	19,017	16,811	14,015	12,791
TUC	7635	6005	5963	5266
COL	3329	2423	1941	1842

FIGURE 4 | Changes in feline intake at six CCP shelters, comparison of baseline level to intake during each of three program years (PY).

observed a 39% decline (from 13,424 to 8,220) in feline intake 32 months after the implementation of CCP protocols.

The median reduction in the intake of kittens (40%) at the six CCP shelters exceeded the median drop in total feline intake (32%), with Albuquerque observing the largest decline (44%). San Antonio was the only program to see an overall increase in kitten intake (12%), which occurred in a fashion similar to what was previously described concerning total feline intake, whereby a surge in the admission of kittens (69%) happened in year one, followed by a combined decline of 33% during years 2 and 3 of the program. Significant reductions in feline intake associated with targeted TNVR efforts have been documented elsewhere and attributed to "several factors" (17). However, the dramatic reductions in kitten intake in particular, documented across all six CCPs, suggests an impact (the extent of which is, admittedly, unknown) on reproductive capacity in the CCP service areas, since any other programs that might account for the observed reductions (e.g., diverting kittens to private rescue groups without admission to the shelter) were implemented only on a small scale where they existed at all.

TABLE 7 | Annual reduction in feline intake for each of six 3-year CCPs per 1,000 human residents in each corresponding shelter service area, and comparison to similar programs in other communities.

Community/program (source)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Albuquerque	15	12	10	9	–	–
San Antonio	4	6	4	4	–	–
Baltimore	11	11	10	10	–	–
Philadelphia	12	11	9	8	–	–
Tucson	8	6	6	5	–	–
Columbus	16	12	10	9	–	–
San José (17)	10	9	8	7	8	7
Jacksonville (21)	16	15	15	11	11	11
Alachua, target (15)	13	9	4	–	–	–
Alachua, non-target (15)	16	15	14	–	–	–

Baseline = 12-month period immediately preceding program period for Albuquerque and San Antonio; calendar year immediately preceding year of program initiation for all others.

Impact of CCPs on Other Shelter Metrics

As stated above, live-release rate increased significantly (median of 53%) across all six CCPs. The median live-release rate at the six shelters increased from 57% prior to CCP inception to 83% after the completion of the respective programs; post-CCP live-release rates (range: 74–90%; **Table 5**) compare favorably to a live-release rate of 69% for municipal shelters and shelters with government contracts participating in the Shelter Animals Count database in 2016 (24).

Post-CCP RTO rates (2%) were below the average RTO rate for municipal shelters and shelters with government contracts participating in the Shelter Animals Count database in 2016 (3%) (25), but consistent with results from a national survey of U.S. households, which found that 2% of lost cats were recovered by contacting a local shelter (26). Multiple survey-based studies have indicated that the most common method by which lost cats are reunited with their owners is cats returning home on their own (26, 27). Consequently, it is likely that an unknown percentage of cats returned as part of RTF efforts were actually lost pets who, at some point after being returned, found their way back to their owners (and likely at a rate of reunification greater than would have occurred had these cats been admitted to the shelter).

Impact of CCPs Compared to Similar Programs in Other Communities

The size of the human population served by each of the six CCP shelters varied, from ~200,000 (Columbus) (28) to almost 1.9 million (San Antonio) (29), and fluctuations of up to 8% in population size took place over program periods at some sites (29). To account for these differences in population size, feline intake (**Table 7**) and euthanasia (**Table 8**) results were also examined on a normalized (per 1,000 human residents) basis. Median reductions in feline intake (33%) and euthanasia (84%) calculated in this manner varied little from median reductions (32 and 83%, respectively) derived from the absolute intake and euthanasia data reported above. A comparison of these results with those from Jacksonville and San José (**Tables 7, 8**) found that the median 3-year decline in intake at CCP shelters exceeded reductions over the same number of years in Jacksonville (30%) and San José (26%). The median reduction in euthanasia per 1,000 human residents at CCP sites also surpassed declines over the same period in both Jacksonville (71%) and San José (69%). Unlike the CCPs, which featured fully integrated RTF and targeted TNVR elements throughout, RTF was the primary focus of the programs in Jacksonville and San José; however, a formalized targeted TNVR component (as noted above) was added to the Jacksonville program in its third year, and an *ad hoc* targeting effort similar to the red-flag cat model utilized at CCP sites was operated concurrently with the RTF initiative in San José. The specific impact of targeted TNVR efforts on results produced by the RTF-based programs in Jacksonville and San José is difficult to quantify; however, based upon the greater median reductions in intake and euthanasia at CCP locations, the benefits of combining targeted TNVR and RTF are apparent. Results of a 2-year targeted TNVR campaign in Alachua County, Florida offer the clearest evidence of the impact of targeting on feline intake and euthanasia at a municipal shelter. A 69% reduction in intake and a 95% decline in euthanasia occurred in the targeted area (zip code 32601) vs. reductions of 13% in intake and 30% in euthanasia for the remainder of the county, where no targeting took place (17) (**Tables 7, 8**). The totality of these results suggests that the integration of targeted TNVR and RTF programs exhibits the greatest capacity for reducing the intake and euthanasia of cats on a community-wide scale.

Analysis of Source/Return Site Characteristics

Cats originated from a total of 12,912 unique sites across the six CCPs, with medians for individual CCPs ranging from 2 to 5 cats (**Figure 2**). These values are less than those documented by Nutter in rural North Carolina (median: 10 cats across 11 discrete

TABLE 8 | Annual reduction in feline euthanasia for each of six 3-year CCPs per 1,000 human residents in each corresponding shelter service area, and comparison to similar programs in other communities.

Community/Program (source)	Baseline	Year 1	Year 2	Year 3	Year 3	Year 5
Albuquerque	5	2	1	0.7	–	–
San Antonio	2	2	0.7	0.4	–	–
Baltimore	3	2	2	1	–	–
Philadelphia	4	3	2	1	–	–
Tucson	3	0.4	0.3	0.3	–	–
Columbus	7	3	1	1	–	–
San José (17)	7	6	3	2	2	2
Jacksonville (21)	13	11	7	4	4	3
Alachua, target (15)	8	2	0.4	–	–	–
Alachua, non-target (15)	10	7	7	–	–	–

Baseline = 12-month period immediately preceding program period for Albuquerque and San Antonio; calendar year immediately preceding year of program initiation for all others.

colonies) (13), Natoli et al. in Rome, Italy (median: 12 cats across 103 discrete colonies) (30), and Tan et al. in urban parts of Australia (median: 12 cats across 44 discrete colonies (31), but comparable to those documented in an urban Chicago, Illinois, neighborhood (median: 0–6 cats across 20 discrete colonies) (12). Data from the present study are not necessarily inconsistent since the median values from the previous studies refer to colony size prior to sterilization efforts and were based upon colony censuses. The CCP data, by contrast, reflect only the number of cats enrolled in the CCPs.

Examination of source/return site data reveals that the maximum number of cats returned to a single location can be deceiving. Data from Albuquerque, for example, show that 205 cats originated from one site: a mobile home community (approximately 0.33 km^2 in size) for which shelter staff used a common address when recording intake (and, as appropriate, return) information. Similar situations were observed in other CCP communities. For this reason, 90th percentile (as opposed to maximum) was chosen to represent the upper-end of the number of cats present at each source/return site. Results of this analysis correspond well with those of Natoli et al. who reported that colonies of 21 or more cats were uncommon in Rome, Italy (30).

Implications of the Red-Flag Cat Model

As stated above, on average, 4 TNVR cats (median of 2) were enrolled in CCPs for each RTF cat returned to red-flag cat model locations; these results are similar to what was previously documented by Albuquerque (where such information was tracked by calendar year) (21). It was not uncommon for a dozen or more cats to be enrolled at the same location as a result of targeted TNVR in response to a single cat being brought to the shelter; one site targeted by San Antonio had 116 cats enrolled in such a fashion, which is illustrative of the potential of the red-flag cat model (and integration of RTF and targeted TNVR programs in general). The red-flag cat model was employed as part of each CCP as staffing and circumstances on the ground allowed, which varied by program location; for example, Baltimore enrolled the most TNVR cats across the greatest number of red-flag cat model sites during Year 1, while Columbus experienced this peak in Year 2 and Philadelphia and Albuquerque in Year 3 (Tucson and San Antonio saw the number of red-flag cat model sites and total number of TNVR cats trapped at such sites peak in different program years).

General Health of Cats Enrolled in the CCPs

Consistent with what has been observed at other locations where RTF (19) and targeted TNVR (17) programs have been implemented, the cats enrolled in all of the CCPs were generally in good health, as was evidenced by the low incidence of cats requiring euthanasia due to serious health concerns (0.5%) or dying in care (0.2%). As mentioned above, the welfare outcomes for cats returned to locations of origin were not tracked as part of the CCPs; in fact, little research on this topic could be found. A single example was uncovered from a published report describing the RTF program in Jacksonville, where for more than a year at the beginning of the program cats were microchipped for the purpose of tracking the number that "would be hit by cars... starve to death, be attacked by dogs, and many other hypothetical tragedies that should nullify the program" (32). The report concluded: "After more than a year of such identification absolutely none of the more than 6,000 feral cats with a microchip were ever identified as falling into any of those theoretical situations" (32). Indeed, the microchipping of cats as part of the Jacksonville RTF program was discontinued when "no evidence of mistreatment of returned cats turned up" (20). Further research in to the welfare outcomes associated with cats of shelter origin returned to the field after sterilization and vaccination is warranted. Considerable data, however, including what has been reported above, have been published in support of the assertion that community cats are in generally good health upon enrollment in programs that revolve around TNVR and its variants (12, 17, 19, 21, 33).

Analysis of DOA Data

DOA data from Albuquerque and Tucson (reductions of 24 and 14%, respectively) were comparable to the 20% reduction (from 1,629 to 1,308) reported following 4 years of RTF in San José (19) (**Table 5**). San Antonio documented many more DOA cats than any other CCP (more than 20 times that of Tucson). Neither the initial increase (described previously) nor the greater overall DOA numbers could be explained by those who provided the data. The reductions observed by Albuquerque and Tucson—as well as those suggested by the "combined" data from Baltimore and incomplete data from Philadelphia—would seem to support the hypothesis that targeted sterilization efforts decreased the number of community cats in CCP service areas, and is consistent with evidence from elsewhere suggesting that neutered male cats "lose interest in mating with females which considerably reduces their inclination to roam" (19, 34–36). The data from San Antonio, however, are less consistent. Given the increasing popularity of TNVR (37) and RTF programs (25) and concerns for the welfare of cats being returned (38), this is an important area of investigation for future studies.

LIMITATIONS

As has been encountered elsewhere (12, 21, 39), the limitations of the present study include those commonly experienced when conducting a retrospective investigation, which is bound by the constraints of the available data. For instance, some types of data were tracked differently across the CCPs: overall feline intake, euthanasia, euthanasia rates, and surgery counts were tracked by program year for all six locations, but Albuquerque tracked other metrics (e.g., live-release rate, RTO, kitten results) only by calendar year; baseline results for Albuquerque and San Antonio reflect 12-month periods immediately preceding program initiation, whereas baselines presented for Baltimore, Philadelphia, Tucson, and Columbus reflect end-of-year results for the calendar year immediately preceding those programs. Cats originating from red-flag cat model sites were not separately tracked by the CCPs; however, the number of cats enrolled at each site were tracked by program component (RTF or TNVR) and program year (calendar year for Albuquerque). Therefore, for the purposes of this study, locations at which both RTF and targeted TNVR activity occurred during the same year were categorized as red-flag cat model sites. Moreover, shelter metrics were not formally tracked by zip code; therefore, an assessment of the impact of targeted TNR on intake and euthanasia for specific zip codes, as has been formulated elsewhere (17), was not attempted.

Community cats were enrolled in the CCPs as they were discovered and trapped or brought into the shelters. Return site information, including location and the surgery records of individual cats, was entered into an internal Best Friends database. Such information was updated throughout the program as cats were trapped, sterilized, and returned; however, records of the number of cats at each colony site upon entry into the CCP are incomplete. Therefore, assessment of changes in colony size over the course of the program was not possible. In addition, the welfare outcomes for cats returned to sites of origination were not specifically recorded, precluding analysis.

CONCLUSIONS

Significant and rapid reductions of feline euthanasia and intake occurred across all CCPs (the single anomaly being the largely unexplained rise in intake during Year 1 of the San Antonio program), highlighting the effectiveness of integrating RTF and targeted TNVR. Use of the red-flag cat model, which was employed as part of all CCPs, improved the efficiency of targeted TNVR efforts. It was found that cats enrolled via the RTF and targeted TNVR components of all CCPs were in good general health, corroborating prior research (17, 21, 33). In general, the number of cats found at source/return sites was small, which is consistent with results of previous research conducted on community cats residing in urban environments (12, 30). Although cat-specific DOA data were not obtainable for all locations, the available evidence generally supports the hypothesis that significant declines in dead cat collections suggest a combination of fewer community cats and reduced roaming on the part of sterilized individuals (19).

DATA AVAILABILITY

The raw data supporting the conclusions of this manuscript will be made available by the authors, without undue reservation, to any qualified researcher.

AUTHOR CONTRIBUTIONS

PW conceived of the research idea. DS collected and examined the data. Both authors wrote/edited the paper.

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Conflict of Interest Statement: In recognition of Frontiers policy and our ethical obligation as researchers, the authors acknowledge that the funding sponsors provided general guidance for the design of the study and were periodically apprised of project status during data collection, analysis, and interpretation; and the writing of the manuscript. We further acknowledge that one of the authors (PW) is employed by Best Friends Animal Society, advocating for the protection of domestic cats via public policy initiatives, and the other (DS) works under a contractual arrangement with Best Friends and Michelson Found Animals Foundation, Inc.

R10

From: Atkinson, Cymantha (OCCR)
To: Bernard, Andi
Subject: FW: TNR/RTF is Legal in California
Date: Tuesday, June 29, 2021 10:53:00 AM
Attachments: image002.png

Hi Andi –
Busy days! Can you or Monica draft a generic response that can be sent "reply all?" Additionally, it may be worth your while to share this with CoCo so they have a sample of the counter argument. I'm not suggesting that they change their opinion but this is a well organized overview that lays out counter arguments.

Thanks,

COMMUNITY RESOURCES

Cymantha Atkinson
Assistant Director
Office: 714-480-2729 Cell: 949-337-5014
601 N Ross St, 6th Floor, Santa Ana, CA 92701

From: No Kill Advocacy Center <info@nokilladvocacycenter.org>
Sent: Tuesday, June 29, 2021 7:14 AM
To: Bernard, Andi <Andi.Bernard@occr.ocgov.com>; Schmidt, Monica <monica.schmidt@occr.ocgov.com>
Cc: Wright, Dylan <Dylan.Wright@occr.ocgov.com>; Atkinson, Cymantha (OCCR) <Cymantha.Atkinson@occr.ocgov.com>; Bartlett, Lisa <Lisa.Bartlett@ocgov.com>; Wagner, Donald <donald.wagner@ocgov.com>; Chaffee, Doug <Doug.Chaffee@ocgov.com>; Do, Andrew <Andrew.Do@ocgov.com>; Foley, Katrina <katrina.foley@ocgov.com>
Subject: TNR/RTF is Legal in California

Andi Bernard
Director, Orange County Animal Care
1630 Victory Rd.
Tustin, CA 92782

Dear Mr. Bernard,

We are writing in response to an email sent to volunteers and rescuers that Orange County Animal Care has discontinued its community cat sterilization (i.e., TNR/RTF) because of the belief that it is illegal in California; namely, that it violates the cruelty law against abandonment. It does not.

California's Food & Ag Code Sec. 31105 mandates that counties shall provide for "The taking up and impounding of all dogs which are found running at large..." but there is no parallel provision for rounding up healthy community cats and agencies are not compelled by law to do so. CA Pen. Code Sec. 597.1 (c) (1) only requires cats to be taken in *if they are injured* and, even then, the statute mandates that they be taken *to a veterinarian* for "proper care and [to be] given emergency treatment." And given that custody of cats through trapping is only done while contemplating the cat's re-release, if the cats are healthy, re-releasing the cats as part of a community cat sterilization program lacks the kind of general or specific intent that the animal cruelty laws require.

As prosecutors across the state and country have noted, the abandonment statute is,

> [D]irected at those people who dump their pets and those individuals who move from an area and leave their pets behind. If an animal is returned to the area where it is being fed, it would be a greater injustice to find that these animals had been abandoned so that no action to spay/neuter the animals would be taken by anyone.

The reasons for this are obvious. First, community cat sterilization improves, rather than threatens, the health and safety of cats. This includes providing a physical exam, vaccination(s), and other medical services to improve the quality and longevity of their lives.

Second, these cats often have caregivers.

Third, most of these cats are not lost. They are outside, but they get lost when they are taken to a shelter. Returning them to where they were trapped merely returns them home.

Fourth, even if they were lost when they were picked up, the likelihood of being reunited with their families is greater for cats if they are allowed to remain where they are rather than being admitted to the shelter. In one study, cats were 13 times more likely to be returned home by non-shelter means (such as returning home on their own) than by a call or visit to a shelter. And another study found that people are up to three times more likely to adopt cats as neighborhood strays versus adopting from a shelter.

From a policy perspective, if the concern is harm to cats (which is what the animal cruelty laws, of which the abandonment statute is a part, contemplate), the risk of death is lower and the chance of adoption higher for cats when they are sterilized and returned than when cats are impounded in a municipal shelter facility, where they face the very real threat of harm (i.e., killing). As such, community cat sterilization increases reclaim by families or adoption into a new home better than impoundment does.

Given this, it is not surprising that the American Bar Association, the nation's largest association of legal professionals, has embraced community cat sterilization, finding the practice legal in jurisdictions which also have laws proscribing abandonment. This is also why municipal shelters across the state, and across the country, and the majority of companion animal humane organizations in the country, embrace community cat sterilization programs.

Mr. Bernard, aside from the legality of such programs, it should also be noted that community cat sterilization is good policy that:

- Improves the quality of life for community cats;
- Reduces intake and killing of community cats;
- Reduces complaint calls to animal control;
- Reduces illness in the shelter;
- Reduces spending (and waste of taxpayer money); and,
- Increases opportunities to expand lifesaving of other animals, such as dogs, too.

You can find more information about the benefits in our guide for shelter managers and policymakers: nokilladvocacycenter.org/community-cat-program.html.

In the interim, we hope that we have addressed any misgivings the agency has about the legality of community cat sterilization and the importance and benefit of retaining a program whose cancellation will result in unnecessarily increasing the killing of cats.

Thank you.

Very truly yours,
Nathan J. Winograd

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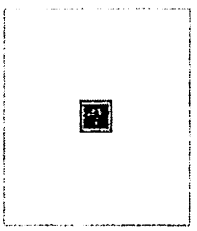

No Kill Advocacy Center

www.nokilladvocacycenter.org
6114 La Salle Ave. 837 Oakland CA 94611

Association of Shelter Veterinarians

POSITION STATEMENT

Trap-Neuter-Return of Free-roaming & Community Cats

Last reviewed: April 2015

The ASV supports and promotes trap-neuter-return (TNR) in the management of free-roaming and community cat populations as part of a comprehensive population control strategy.

TNR programs provide an effective alternative to euthanasia of otherwise healthy cats.[1,2] Such cats should be spayed or neutered, vaccinated, ear-tipped, and permanently identified as such with a tattoo and/or microchip prior to return to their original location.

TNR programs should be part of an overall management strategy that includes public education, the promotion of responsible cat ownership to reduce abandonment, as well as affordable and easily accessible spay-neuter and adoption programs.[3]

References

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