

# No Kill Colorado (NKC) Project

[No Kill Colorado](#) is a nonprofit animal welfare advocacy organization dedicated to creating a compassionate future for all pets in the state. Unlike a shelter or rescue, the organization focuses on systemic change through advocacy, education, and data-driven reform. Its mission is to promote the No Kill Equation, a proven framework of humane, lifesaving strategies, and to advocate for solutions that ensure every healthy and treatable homeless pet in Colorado has the opportunity to live.

For general context information about No Kill Colorado, refer to the [public project page](#).

## Key contacts from Data ChangeMakers

- **Tech leads:** Adrian Zinovei, Chris McClellan
- **Project Manager:** Valerie Compaore

## Kickoff event recording

youtu.be

<https://youtu.be/bsCfieTWm4U?feature=shared&t=289>

**General project discussion, project announcements** in Slack [#project-nokillcolorado](#)

## Team Formation Process

- Go to this Google Sheet <https://docs.google.com/spreadsheets/d/1DMCaB7iMu5COgWASnXoTNQSYyMhWenDVWCbWFGCZk9s/edit?gid=617303666#gid=617303666>
- Duplicate this sheet to create your team. Enter your details, but please remember all details and publicly visible
- Change the yellow cells as required
- When you're ready to submit, ensure all the artefacts (inc your video) is saved to a Google Drive that is publicly accessible and [submit your solution](#)

## Collaboration

- You can communicate and coordinate with your group in the **Slack channel** [#project-nokillcolorado](#)
- **Ask** @Davyd Smith questions in Slack to clarify requirements

## Solution submission 26 Sept

- Submit in the below form, it **MUST** to be a **Google Drive link**, and it has to be publicly accessible.
- That link has to include **all artefacts** that you've created: documentation, workflows, code.

- Plus a **5 min (max) video that explains the solution** and shows what you've done. The video can include a screen recording, presentation, etc - basically anything that showcases and explains your solution.
- It doesn't have to be overly professional.

<https://www.datachangemakers.org/solution-submission>

Adrian/Chris will review and rank the submissions and submit them to NKC

## Available data

- *Where does the data come from (e.g. internal systems, surveys, government sources)? - Data comes from internal systems, through a data collection process followed by the teams and volunteers.*
  - *The core [shelter statistics data](#) is published for public consumption by the State of Colorado Department of Agriculture from the Pet Animal Care Facilities Act (PACFA) Division.*
  - *We hope to enhance that data with the addition of information where possible with publicly available data (such as [licensee information](#)) mapped to the core Shelter statistics*
  - *Manual entry of additional data as needed from scouring websites to add contact information, or other pertinent data.*
- *Is the dataset static (a one-time snapshot) or regularly updated? -*
  - *The data is updated annually with new sheets. The updates are additional years rather than changes to existing data. Sometimes an update is brought up if they found bad data but that would only affect 2024 at this point and probably already viewed enough that no one has challenged the data. We want to keep the existing data as the annual trending is a goal of the project.*
- *Are there known data quality issues or gaps we should be aware of? -*
  - *Data quality issues revolve more around data that is absent or not captured. Data that is captured is generally of decent quality. Possible issues are incomplete rows and other information provided above in data cleanup for the first key goal mentioned above in the **Key Goals** section.*

## Key tasks:

- Merge separate yearly **Animal Shelter and Rescue Individual statistics** from [shelter statistics data](#) files into a unified google sheet/database
- Augment/add facilities data from <https://ag.colorado.gov/animal-welfare/pet-animal-care-facilities-act-pacfa/active-pacfa-facilities> -
- Nice to have, scrape web to include Business names emails to this new database/sheet (so these people can be contacted when an animal can be rehomed)

## Data Dictionary

*Please attach or describe definitions for key terms, columns, or acronyms in your dataset(s).*

[Dimensions and measures](#)

## Additional information:

PACFA document for [Shelter and Rescue Definitions](#)

This [document](#) from No Kill Colorado explains how NKC use and view the data in the past.

Here are some of the common acronyms:

- **PACFA:** (Pet Animal Care Facilities Act) This is an Act, but also the name of the division in the Dept of Agriculture that oversees shelter and rescue statistics in the state of Colorado.
- **ORE:** Owner Requested Euthanasia.
- **LRR:** Live Release Rate. *Positive Outcomes/ALL outcomes=LRR*
- **RTO:** Returned To Owner. An animal that enters the shelter and the owner is found, and the dog is returned home
- **TNR:** Trap-Neuter-Return (mentioned as an "Other live outcome"). Trap Neuter Return is catching community cats that are not social, spay or neuter them, vaccinating, and returning them to where they were found. This is generally done by TNR volunteer groups that do this without a shelter.
- **SNR:** Spay-Neuter-Return (mentioned as an "Other live outcome"). Like TNR but done by a shelter.

### Data Sensitivity or Privacy Considerations

*Does the data contain personal, sensitive, or confidential information? Are there any access or usage limitations?*

Sensitive data should not be used.

All information is publicly available and has no restrictions on use.

### Additional Information from Slack from Davyd Smith:

There was a really good question about intake and outcomes in the meeting and I remembered there was a study on the year before our date (leading into our data. I wish we had the data used. If I can get it I will. The study titled "*Descriptive epidemiology of canine and feline intake patterns at public animal shelters in Colorado, 2008-2018*" (published in the *Journal of the American Veterinary Medical Association*) presents critical insights that align with and reinforce key tenets of the No Kill movement.

Summary of Key Conclusions:

#### 1. Decline in Intake and Euthanasia Rates:

- a. The study found that overall intake of dogs and cats in Colorado shelters significantly declined between 2008 and 2018. Specifically, euthanasia rates plummeted—from 35.8% in 2008 to just 9.2% in 2018 for dogs, and from 61.2% to 14.9% for cats. This shows that lifesaving strategies are working.

#### 2. Increased Live Release Rates:

- a. Live release rates, which include adoptions, returns to owner, and transfers to other shelters or rescues, substantially increased during the same period. For cats, in particular, the shift toward more humane outcomes was dramatic.

#### 3. Reduced Owner Surrenders and Stray Intake:

- a. The decline in owner surrenders and stray intakes points to the effectiveness of pet retention programs, community support services, and public awareness initiatives—core components of the No Kill Equation.

#### 4. Impact of Community-Based Programs:

- a. The findings suggest that community-focused strategies, like Trap-Neuter-Return (TNR) for community cats and proactive rehoming programs, have had a meaningful impact on decreasing intake and euthanasia.

For context, how this supports the No Kill view:

This longitudinal study validates what No Kill advocates have long asserted: **progressive sheltering practices can lead to drastic reductions in killing without compromising public safety or animal welfare.** By embracing key elements of the No Kill Equation, such as robust adoption programs, targeted spay/neuter, TNR, medical/behavioral rehabilitation, and pet retention services Colorado communities demonstrated that high live release rates are achievable and sustainable.

The Colorado example also debunks the persistent myth that reducing euthanasia necessarily leads to overcrowding or poor outcomes. On the contrary, the study reveals that strategic, humane sheltering reforms correlate with both fewer animals entering shelters and more of them leaving alive.

This evidence gives the No Kill movement strong empirical backing, proving that compassion, data-driven policies, and community involvement are not just morally right. They are effective.

javma-javma.20.08.0426.pdf

If anyone has questions about the No Kill movement, you can ask me and I will answer, or if you like to use ChatGPT, I made a custom GPT just for questions about No Kill. You can find it here:

[chatgpt.com](https://chatgpt.com)

<https://chatgpt.com/g/g-679660c3beb48191a0d2ac21dd52966e-no-kill-animal-shelter-advocate>

Hello data geniuses! I tracked down the researches from the JAVMA study above and they HAD SEVERAL MORE YEARS OF DATA WE COULD USE! I have the shelter data going back to 2007. I have put it out on a google drive for anyone to get. Here it is:

[drive.google.com](https://drive.google.com)

<https://drive.google.com/drive/folders/1XnjuFs802PvoevB56MoHq0krSetd4WvA?usp=sharing>

Then the viz phase starts...

# Data Wrangling

**Project Kickoff - Data wrangling EOI:** all volunteers are invited - 5 September 1 PM MDT

**Audience:** Small team of interested volunteers

**Leads:** Adrian Zinovei, Chris McClellan

A small team of data-savvy volunteers will work closely with Adrian and Chris to clean, structure, and enrich the raw shelter data. This foundational phase ensures the dataset is ready for impactful and accurate visual storytelling in the next stage.

- **Focus:** Cleaning, formatting, and enriching the data for usability
- **Format:** Collaborative sessions with guidance and review from Adrian
- **Workshop:** Date TBC (early-mid September)

**Output:** Finalized dataset to be shared with all participating volunteers, process documentation and repeatable process for No Kill Colorado to follow.

## Q&A from Slack

### Gena Falzon

Hi team! I am also digging into the data and making a wrangling plan.

[@Davyd Smith](#) My first question is about the PACFA ID and License numbers. From 2007-2012, shelters are uniquely identified by 'PACFA ID'. Starting in 2013, a 'PACFA License Number' is added, along with a 'PACFA ID', and for subsequent years, only the 'PACFA License Number' is used.

Is there a separate table matching 'PACFA ID' to 'PACFA License Number'? Or will the 2013 dataset be sufficient to map all shelters' ID and License Number, so that one can be used as the unique identifier throughout the data?

### Davyd Smith

Nice catch. The changed the system and unique identifier. I forgot about that. Only way to match will be by name or other field that makes sense.

I should also point out that licenses are BY ADDRESS, so there could be duplicate organizations names with multiple licenses. generally the name is off such as in the case of Dumb Friends League that has their main location in Denver, A second in Castle Rock called teh Buddy Center and a third in Alamosa. To add to that, Alamosa was recently acquired by DDFL and used to be called Alamosa animal shelter. Another important one off is NOCO, which used to be Weld County and Larimer County, they merged under one name last year.

### Gena Falzon

Thanks for this info, [@Davyd Smith](#) !

If either the Pacfa ID or Pacfa License Number are unique for a specific shelter name/address combo, then I think we should be able to use these data to uniquely identify observations, if we can get a comprehensive list

of shelters and ID and/or License Number for each? Does such a list exist?

## Davyd Smith

Well, we have all the active licensees here:

[ag.colorado.gov](https://ag.colorado.gov)

<https://ag.colorado.gov/animal-welfare/pet-animal-care-facilities-act-pacfa/active-pacfa-facilities>

To be clear, these are CURRENT licensed orgs and they change each year, new ones are created and some old ones shut down. so we have that data issue. There is not mapping from the old numbers to the new ones. Wish there was, but they were simply assigned new numbers as I understand and there was not map of that made.

[ag.colorado.gov](https://ag.colorado.gov)

### [Active PACFA Facilities | Department of Agriculture](#)

The PACFA Active Facilities List is published in a Google Sheet format. The data in the spreadsheet is protected but can be filtered, sorted and/or downloaded. Please see the screenshots below for more information on how to filter, sort and/or download the PACFA Active Facilities List. And on the PACFA active licenses it shows multiple licenses we are not considering in this such as groomers, boarding, training etc. Only shelters, rescues and sanctuaries are for our purposes.

## Submissions

# Phase 1 Data wrangling

- 7 submissions
- Each selected team will have 5–7 minutes to present their solution via screen share:
  - Nicholas Migneault
  - Steve Kelley
  - Aliaksandra Kaliuzhnaya (via video)
  - Michael Amos (team)

# Data Visualization

**Audience:** Open to all interested volunteers

Once the cleaned dataset is released, all volunteers are invited to create visualizations that tell compelling, data-driven stories about animal shelter performance, challenges, and opportunities across Colorado.

- **Start Date:** 26 September
- **Deadline to Submit:** 24 October
- **Format:** Individual or team-based visualizations using any tools (Tableau, Flourish, etc.)
- **Live volunteer showcase:** TBC