

# Dallas Animal Shelter

Setting KPI Benchmarks from FY2020 data

Dec 2020 | Tom © ph[0]ton

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## **Objective:**

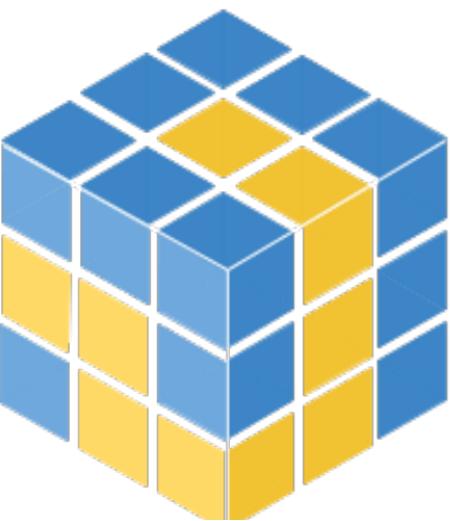
- Dallas Animal Shelter is looking to establish KPI benchmarks for FY 2020
- This presentation covers 5 proposed KPI's for the Dallas Shelter to utilize in FY 2021
- Time worked: 8 Hours
- This is Ginger Rogers. She is a rescue

## Data :

- Dataset obtained from [Dallas Open Data](#)
- Range of data: OCT 2019-SEP 2020
- Number of Observations: 26,744
- 20 Features
- Rows consisted of animal data related to shelter visit
- Features consisted of animal information such as type, breed, intake status, and outcome status

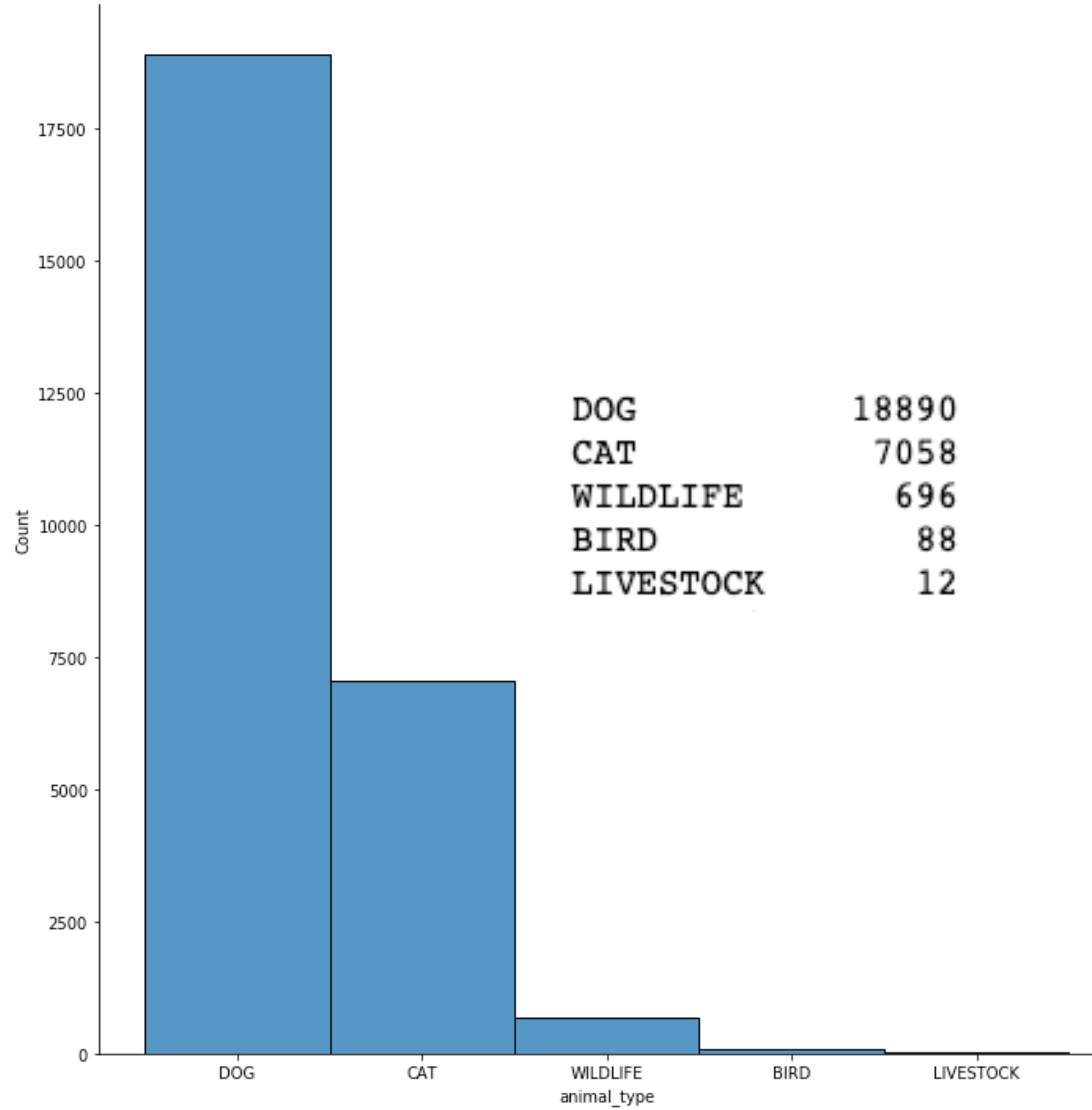
## Methodology:

- Used Numpy and Pandas for data manipulation
- Used Seaborn for data visualizations



**NumPy**



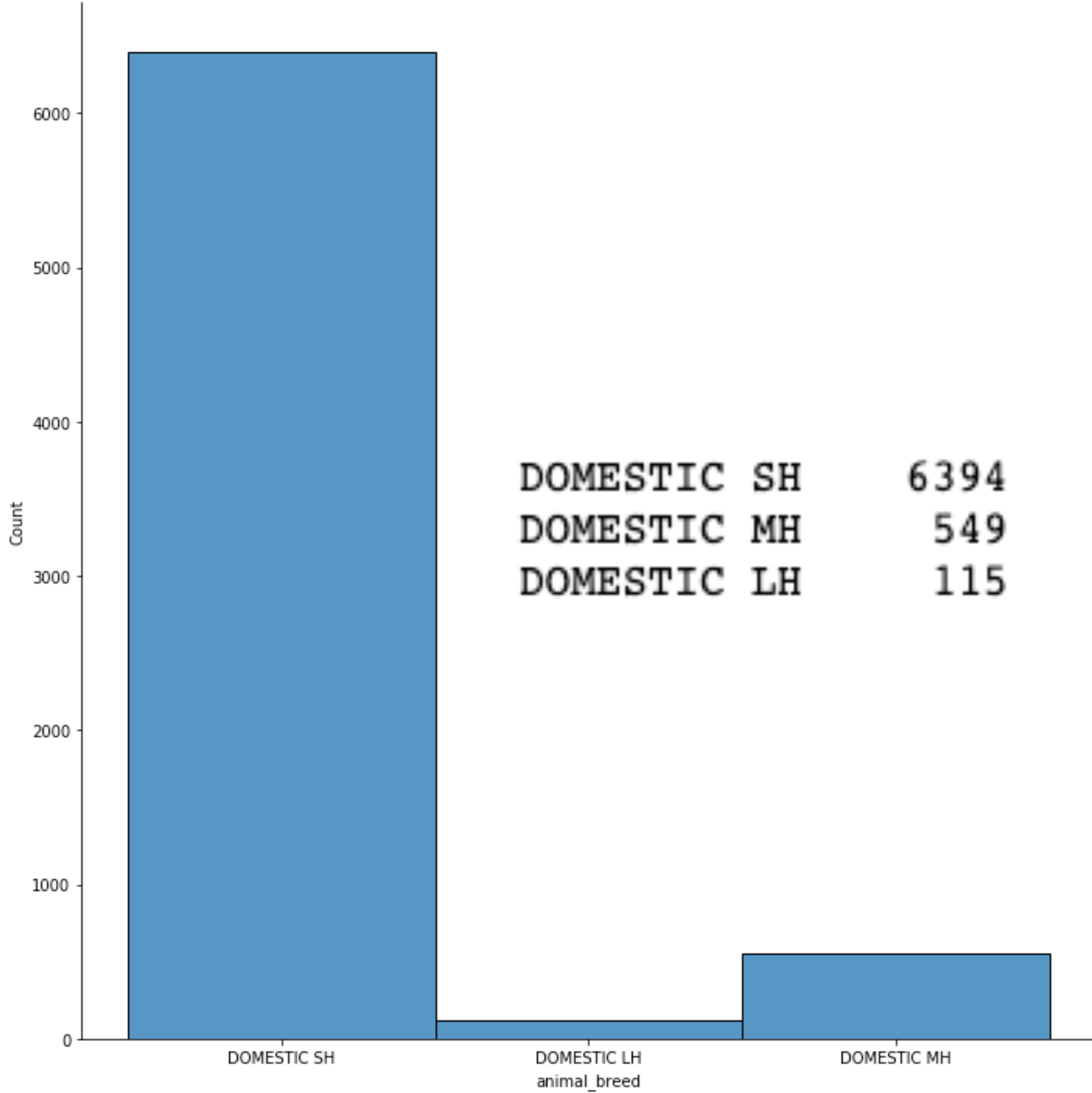


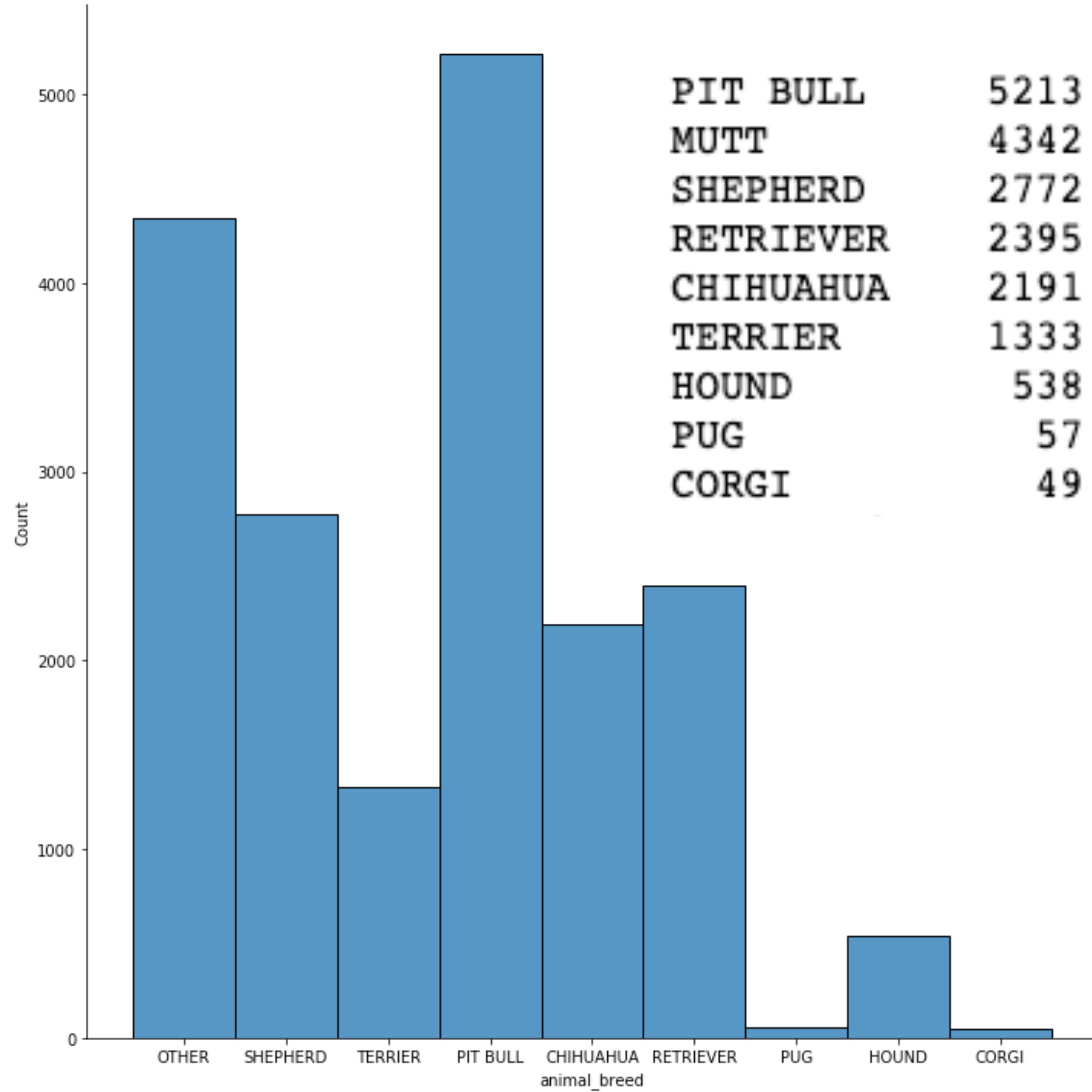
## Data cont:

- Breakdown of animal types seen in FY 2020
- Focus will be on cats and dogs
- Resource for cleaning: [https://github.com/UncelSoogar/Dallas\\_Shelters](https://github.com/UncelSoogar/Dallas_Shelters)

## Data(cats):

- All breeds have been filtered down to Short Hair, Medium Hair, Long Hair
- Short Hair breeds are the most common in the shelter





## Data (dogs) :

- All breeds have been filtered into the categories on the left
- Pit Bull and Mutt are the most commonly seen at the shelter

# KPI Proposal:

- The following resource was used to develop the KPI's for this presentation: <https://askwonder.com/research/provide-list-kpis-animal-services-departments-within-municipalities-9yyy09551>
- Focus for initial KPI's to focus around the highlighted section

**Provide a list of KPIs for animal services departments within municipalities.**

Delivered January 26th, 2017. Contributors: Roger G. and [1 other](#)

🕒 4 min read



**Provide a list of KPIs for animal services departments within municipalities.**

Hello! Thanks for your question about KPIs for animal services departments within municipalities. Based on my research, the list below provides 50 Key Performance Indicators (KPIs) for animal service operations by municipalities. The short version is that KPIs generally rotate around adoption, registration, or points of treatment regarding animals. However selections from this listing could be tailored as necessary to meet the needs of any municipal animal service operation. Below you will find a deep dive of my findings.

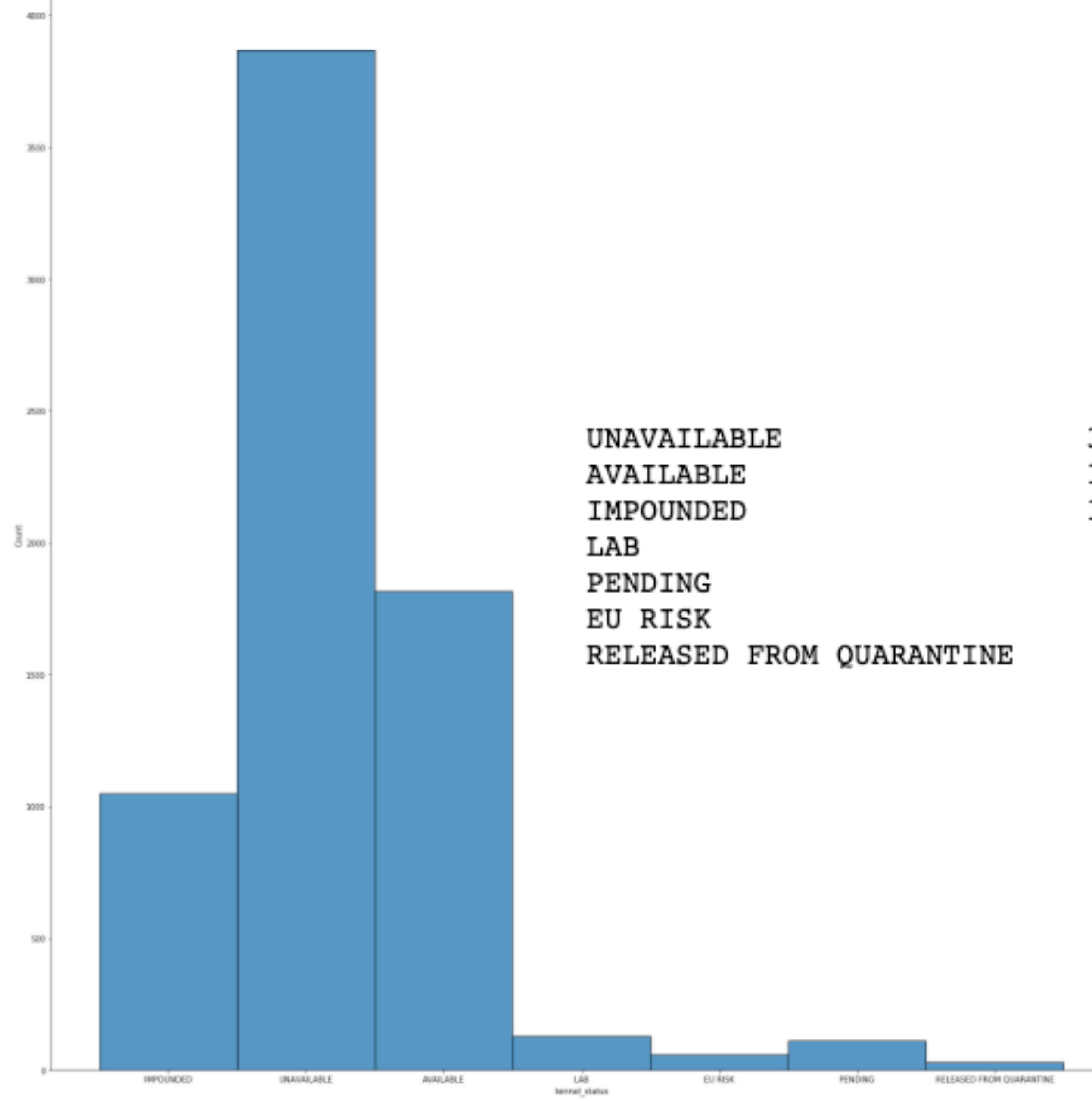
# KPI 1 :

## Number of Impounds

## Overall:

- Animal impoundment is the taking or seizing of an animal by legally authorized people.
- Impound rates are difficult to fully establish due to the high number of “Unavailable” status
- This will need to be addressed within the data to produce a proper KPI
- The current impound rate for the shelter is: 23%

| animal_type | kennel_status            |       |
|-------------|--------------------------|-------|
| BIRD        | UNAVAILABLE              | 42    |
|             | IMPOUNDED                | 41    |
|             | LIVESTOCK                | 3     |
|             | LAB                      | 1     |
|             | WILDLIFE                 | 1     |
| CAT         | UNAVAILABLE              | 3868  |
|             | AVAILABLE                | 1817  |
|             | IMPOUNDED                | 1048  |
|             | LAB                      | 129   |
|             | PENDING                  | 110   |
|             | EU RISK                  | 57    |
|             | RELEASED FROM QUARANTINE | 29    |
| DOG         | UNAVAILABLE              | 10950 |
|             | IMPOUNDED                | 5106  |
|             | AVAILABLE                | 1576  |
|             | LAB                      | 761   |
|             | RELEASED FROM QUARANTINE | 326   |
|             | EU RISK                  | 147   |
|             | PRE-LAB                  | 14    |
|             | PENDING                  | 9     |
|             | EVALUATION               | 1     |
| LIVESTOCK   | IMPOUNDED                | 6     |
|             | UNAVAILABLE              | 5     |
|             | LAB                      | 1     |
| WILDLIFE    | UNAVAILABLE              | 370   |
|             | IMPOUNDED                | 213   |
|             | WILDLIFE                 | 58    |
|             | LAB                      | 36    |
|             | AVAILABLE                | 19    |

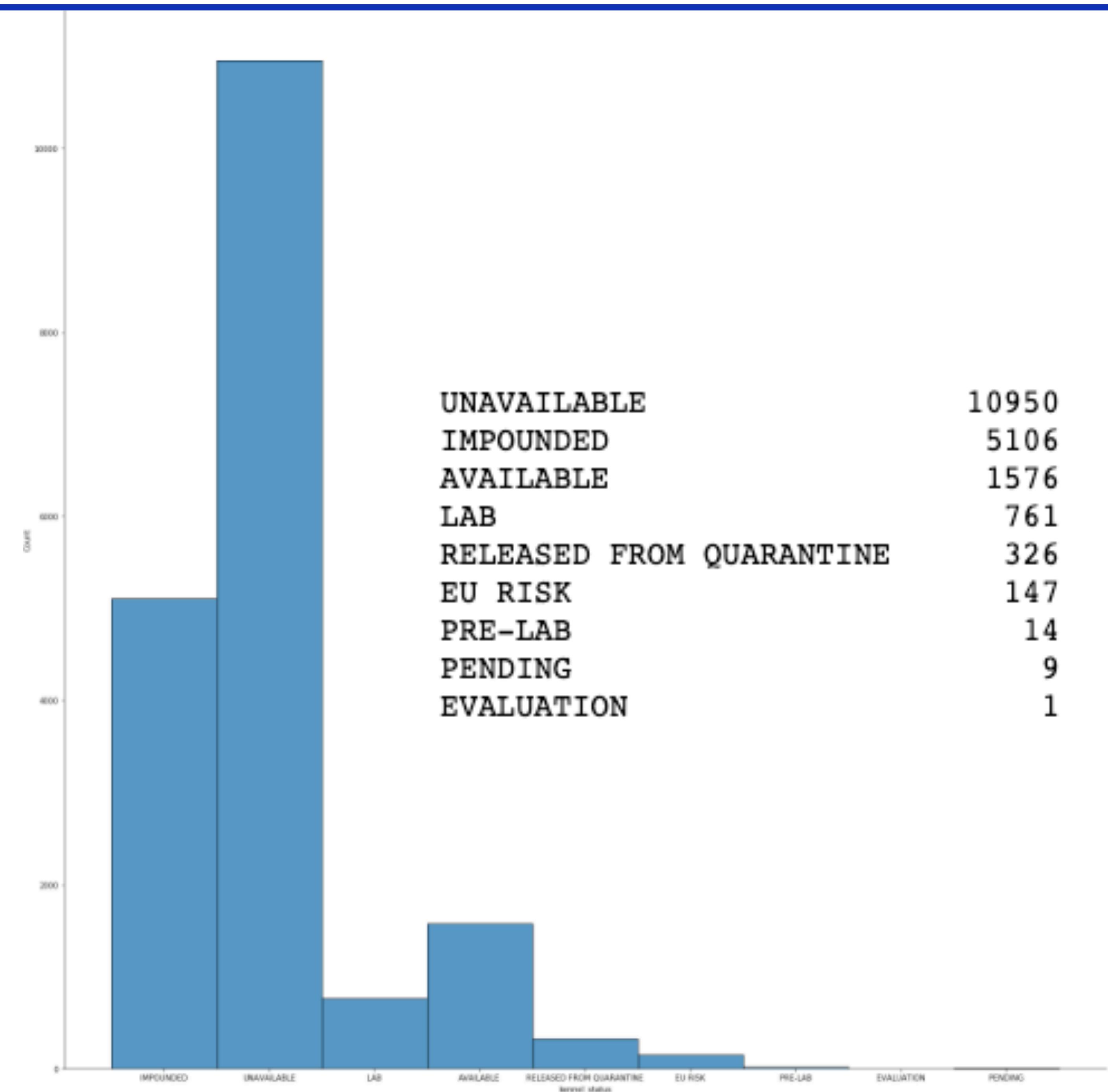


## Cats:

- The current impound rate based on the data available for cats is: 14%
- Rate determined by number of impounded / total number of cats (7058)

## Dogs:

- The current impound rate based on the data available for dogs is: 27%
- Rate determined by number of impounded / total number of dogs (7058)



# KPI 2:

## Live Release Rate

## Overall:

- Live release rate is animals leaving the shelter
- The overall shelter release rate is: 91%
- Cat release rate: 90%
- Dog release rate: 94%

| animal_type | outcome_type      |      |
|-------------|-------------------|------|
| BIRD        | TRANSFER          | 55   |
|             | EUTHANIZED        | 23   |
|             | ADOPTION          | 6    |
|             | RETURNED TO OWNER | 4    |
| CAT         | TRANSFER          | 3641 |
|             | ADOPTION          | 2586 |
|             | EUTHANIZED        | 678  |
|             | RETURNED TO OWNER | 153  |
| DOG         | ADOPTION          | 7371 |
|             | RETURNED TO OWNER | 6325 |
|             | TRANSFER          | 4053 |
|             | EUTHANIZED        | 1141 |
| LIVESTOCK   | TRANSFER          | 6    |
|             | ADOPTION          | 2    |
|             | EUTHANIZED        | 2    |
|             | RETURNED TO OWNER | 2    |
| WILDLIFE    | EUTHANIZED        | 509  |
|             | ADOPTION          | 107  |
|             | TRANSFER          | 69   |
|             | RETURNED TO OWNER | 11   |

# KPI 3 :

**Percentage of animals adopted or returned to owner**

## Overall:

- Percentage of shelter overall of adoption or returned to owner: 62%
- Percentage for cats: 61%
- Percentage for dogs: 73%

| outcome_type      | animal_type |      |
|-------------------|-------------|------|
| ADOPTION          | DOG         | 7371 |
|                   | CAT         | 2586 |
|                   | WILDLIFE    | 107  |
|                   | BIRD        | 6    |
|                   | LIVESTOCK   | 2    |
| EUTHANIZED        | DOG         | 1141 |
|                   | CAT         | 678  |
|                   | WILDLIFE    | 509  |
|                   | BIRD        | 23   |
|                   | LIVESTOCK   | 2    |
| RETURNED TO OWNER | DOG         | 6325 |
|                   | CAT         | 153  |
|                   | WILDLIFE    | 11   |
|                   | BIRD        | 4    |
|                   | LIVESTOCK   | 2    |
| TRANSFER          | DOG         | 4053 |
|                   | CAT         | 3641 |
|                   | WILDLIFE    | 69   |
|                   | BIRD        | 55   |
|                   | LIVESTOCK   | 6    |

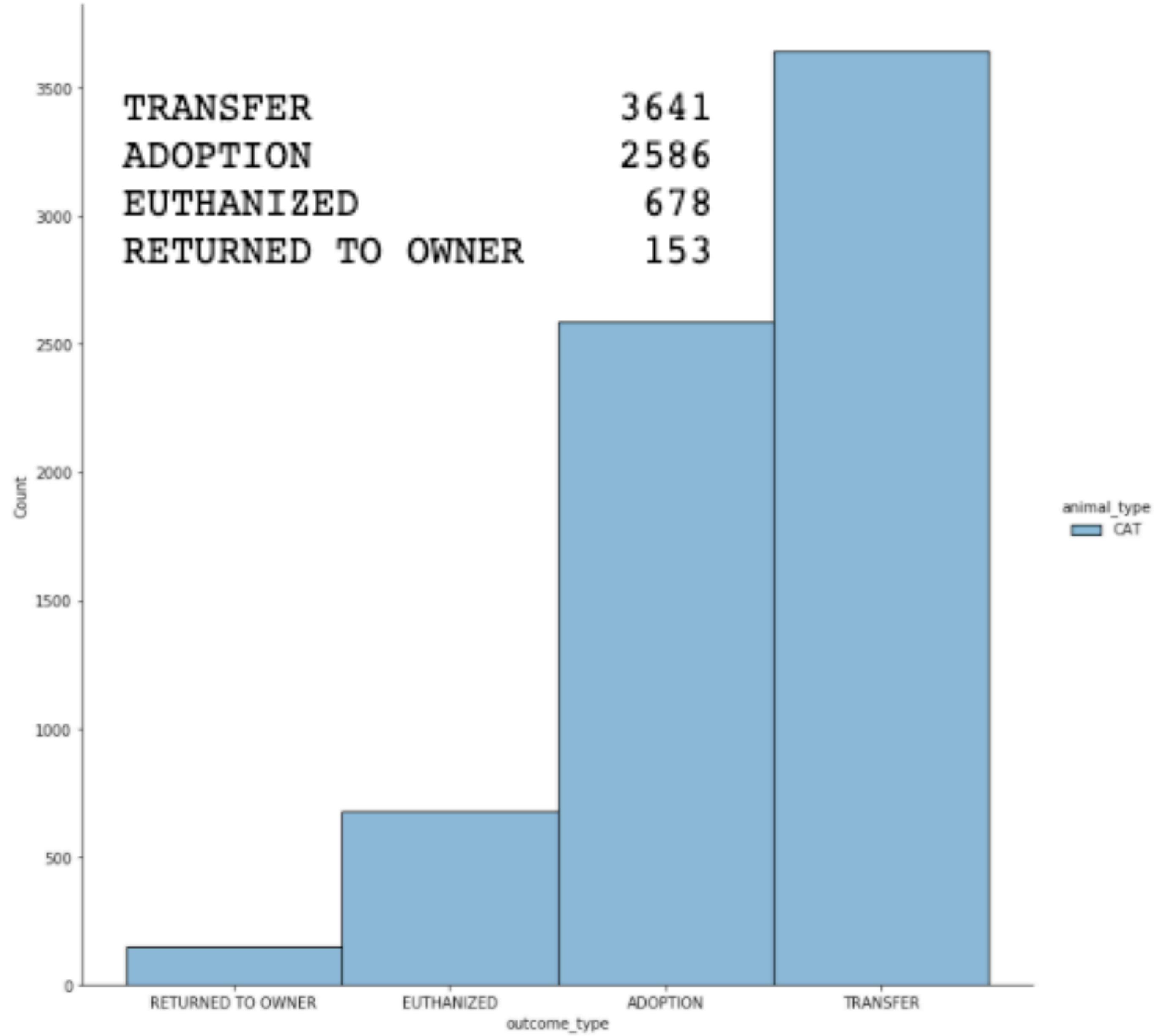
# KPI 4:

**Number of animals euthanized**

## Overall:

- Overall Euthanasia rate: 9%
- Cat rate: 10%
- Dog rate: 6%

| outcome_type      | animal_type |      |
|-------------------|-------------|------|
| ADOPTION          | DOG         | 7371 |
|                   | CAT         | 2586 |
|                   | WILDLIFE    | 107  |
|                   | BIRD        | 6    |
|                   | LIVESTOCK   | 2    |
| EUTHANIZED        | DOG         | 1141 |
|                   | CAT         | 678  |
|                   | WILDLIFE    | 509  |
|                   | BIRD        | 23   |
|                   | LIVESTOCK   | 2    |
| RETURNED TO OWNER | DOG         | 6325 |
|                   | CAT         | 153  |
|                   | WILDLIFE    | 11   |
|                   | BIRD        | 4    |
|                   | LIVESTOCK   | 2    |
| TRANSFER          | DOG         | 4053 |
|                   | CAT         | 3641 |
|                   | WILDLIFE    | 69   |
|                   | BIRD        | 55   |
|                   | LIVESTOCK   | 6    |

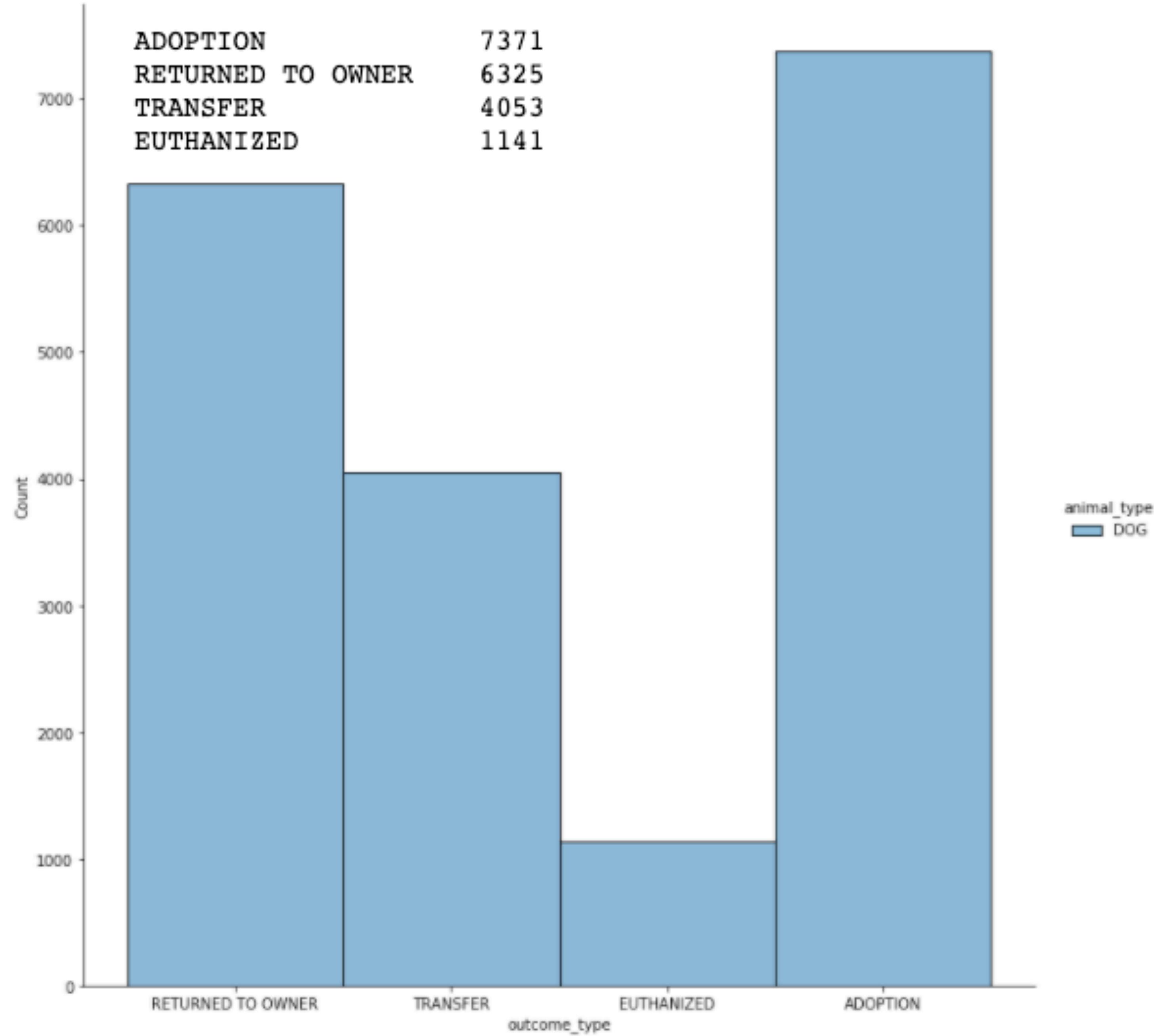


## Cats:

- 10% of cats are Euthanized
- Very few are returned to their owner

## Dogs:

- Dog rate: 6%
- Far more returned to owner



# KPI 5:

**Percentage of Microchipped animals**

## Overall:

- 57% of animals do NOT have a chip
- 72% of cats do NOT have a chip
- 53% of dogs do NOT have a chip

| chip_status    | animal_type |       |
|----------------|-------------|-------|
| CHIP           | DOG         | 7301  |
|                | CAT         | 1366  |
|                | WILDLIFE    | 6     |
| NO CHIP        | DOG         | 10022 |
|                | CAT         | 5076  |
|                | WILDLIFE    | 230   |
|                | BIRD        | 35    |
|                | LIVESTOCK   | 7     |
| UNABLE TO SCAN | DOG         | 1567  |
|                | CAT         | 616   |
|                | WILDLIFE    | 460   |
|                | BIRD        | 53    |
|                | LIVESTOCK   | 5     |

## **Next steps:**

- Obtain previous FY data for other years
- Determine how performance changes YOY
- Explore other KPI's
- Get cats tagged!



A golden retriever puppy is lying on a red and white textured rug. The puppy is looking towards the left. In the background, there is a window with a view of a city skyline at night, and a guitar is leaning against the wall on the left.

thanks

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