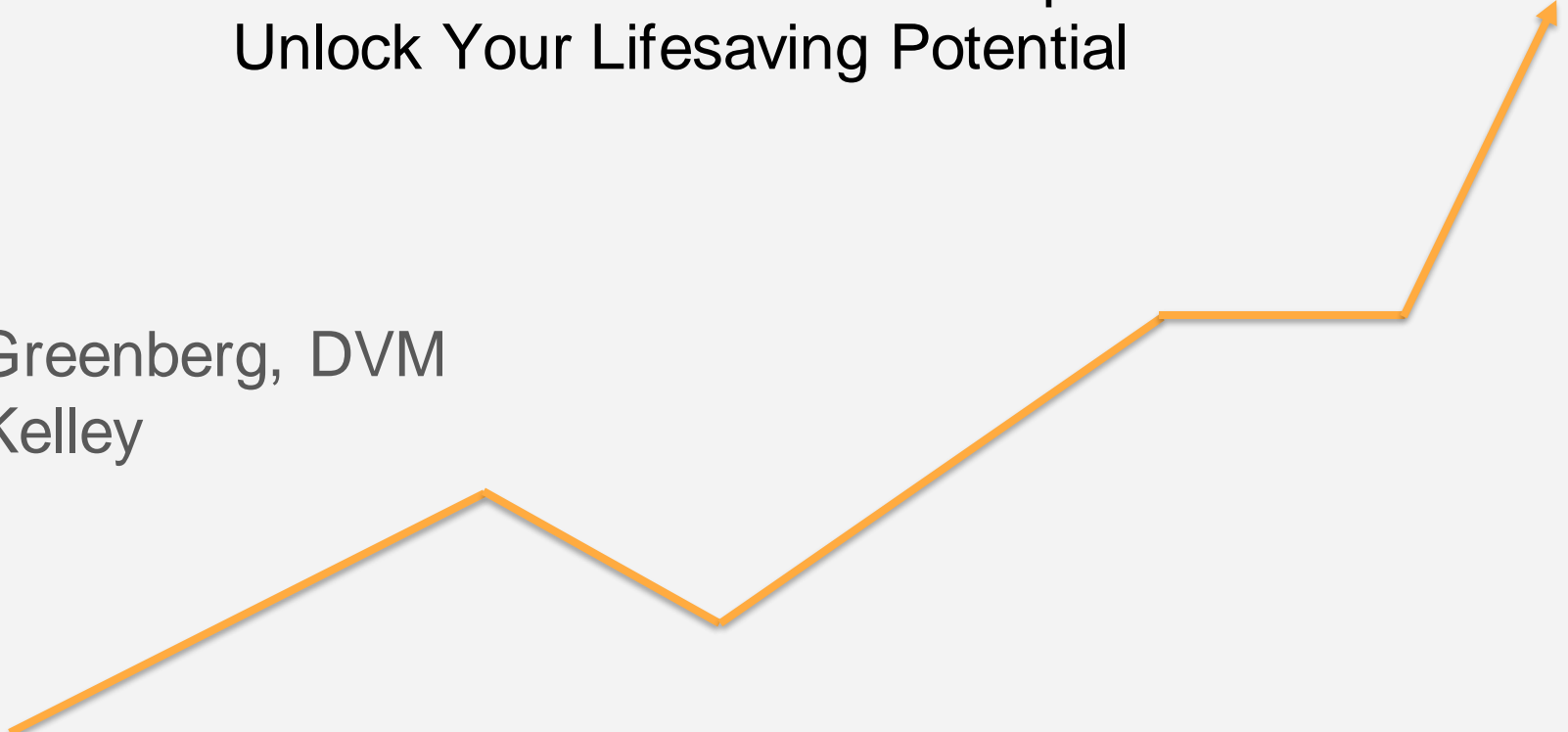


# Visualize It

How Data Visualization Can Help You  
Unlock Your Lifesaving Potential

Mike Greenberg, DVM  
Nikki Kelley



# Mike Greenberg

Program Director, Target Zero

Consultant, Maddie's Fund

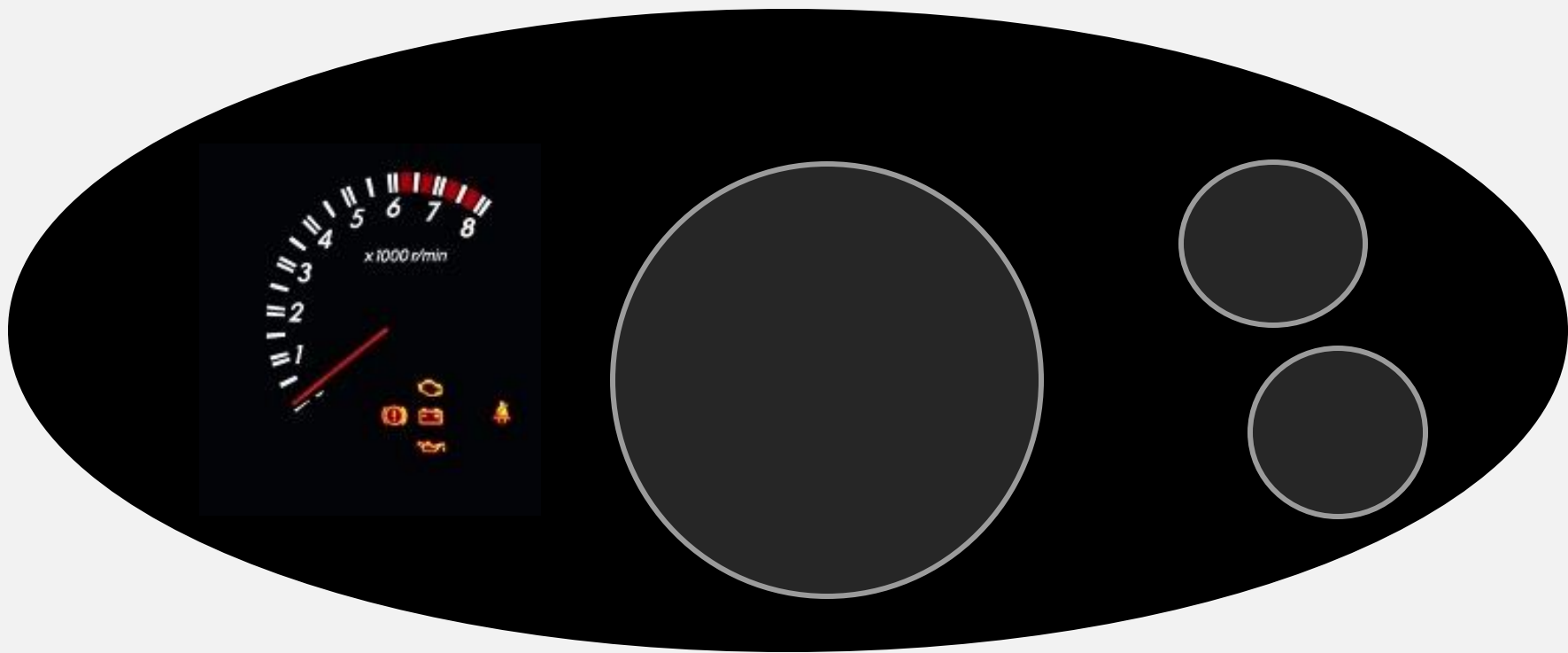
# Nikki Kelley

Manager of network strategy, Best Friends Animal Society

Board advisor, Shelter Animals County



<b>Item/Animal</b>	<b>Size</b>	<b>Color (Main)</b>	<b>Color (Secondary)</b>	<b>Weight</b>	<b>Order</b>	<b>Genus</b>
Tree	62 ft	Green	Brown	3000 lbs	Fagales	Quercus
Bluebird	8 in	Blue	White	1.1 oz	Passerines	Sialia
Apple	3.5 in	Red	Brown	0.33 lbs	Rosales	Malus



# Objectives

- Appreciate
  - Status of national animal sheltering
  - Best Friends data visuals
  - Shelter Animals Count dashboards
- Learn
  - The “core metrics” – Sheltering is an “engineering problem”
  - Difference between data, metrics, and interpretation
  - The importance of *visualizing* your data
- Do
  - Perform a foundational interpretation of *your* shelter’s data and metrics
  - Use this interpretation to establish measurable goals
  - Go home with one realization, one question, one goal

# National data visualizations

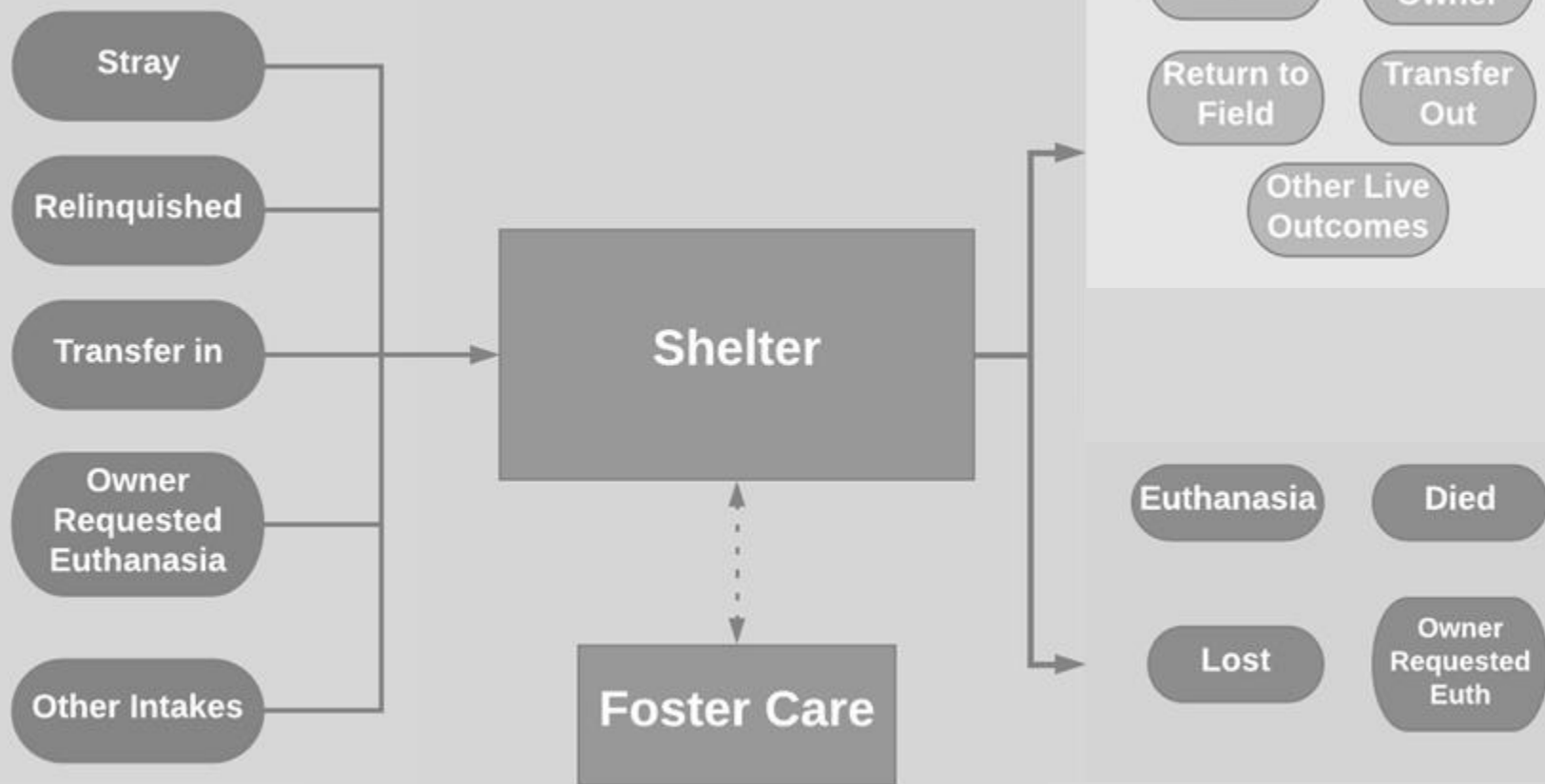
Best Friends Data Visuals

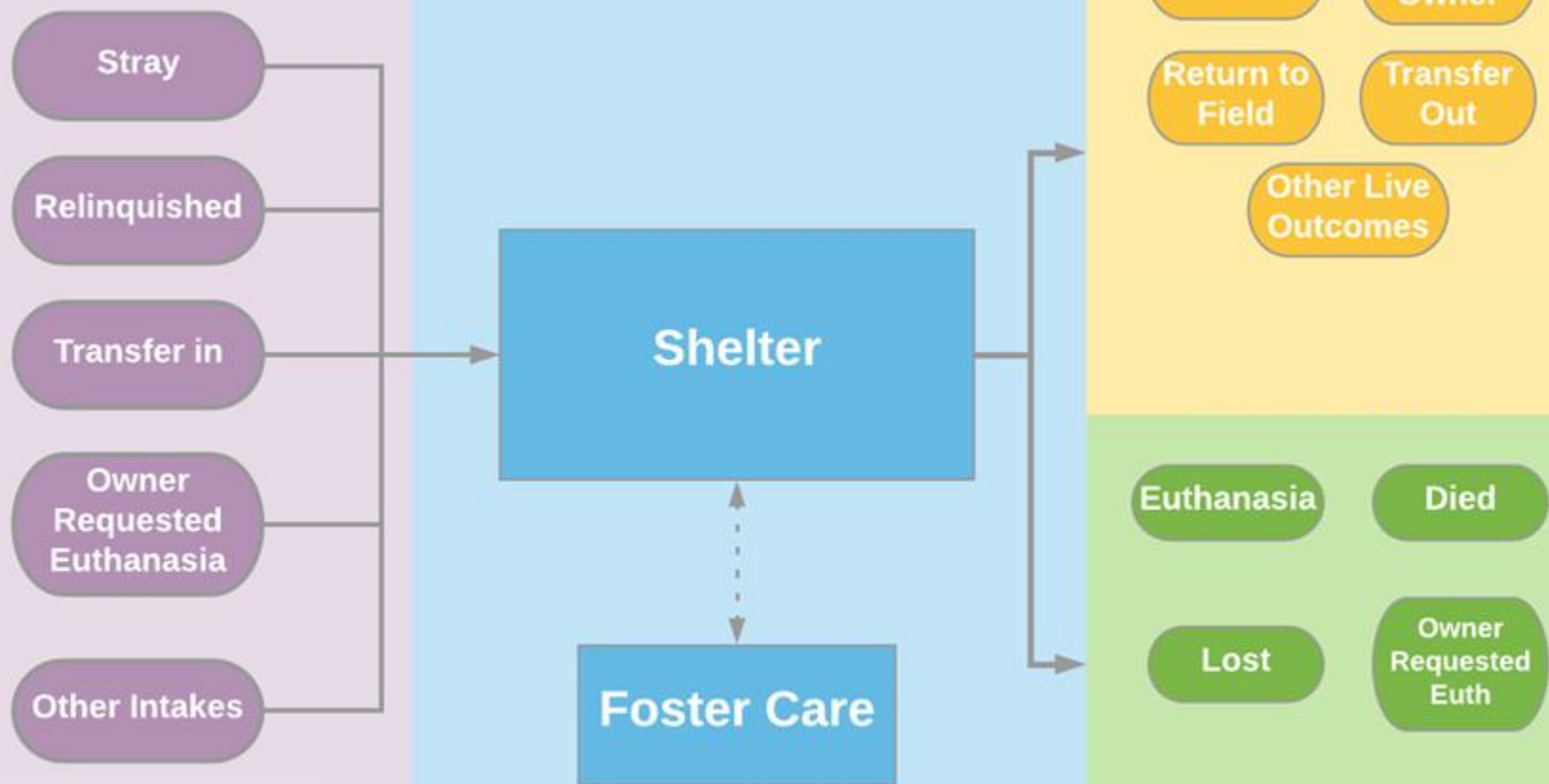
Shelter Animals Count Video

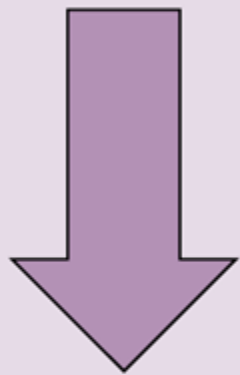
Shelter Animals Count data dashboards

“It’s an Engineering Problem...”









**Proactive  
Intake  
Reduction**



**Minimize LOS**

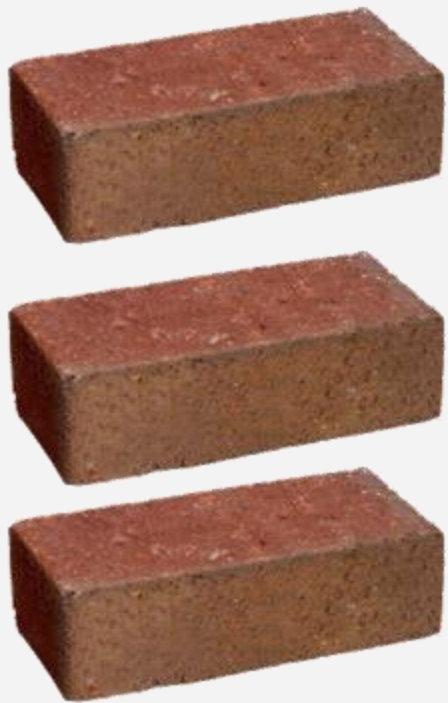
**Shelter only  
those who *need*  
to be there**



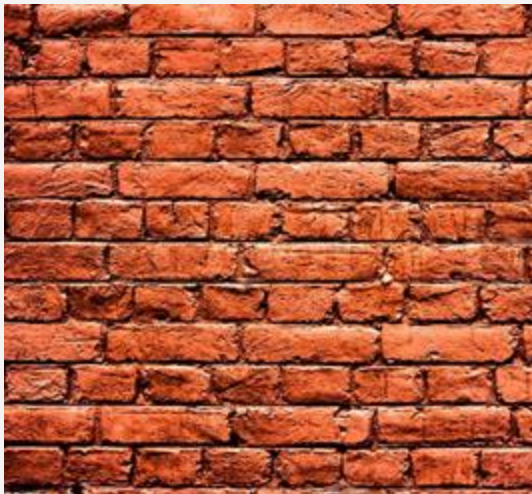
**Live  
Outcomes**



**Other  
Outcomes**



**Data**



**Metrics**



These houses  
are crap!!



**Interpretation**

So Which Metrics *SHOULD We Use???*

	Metric(s)	Subsets	Frequency
<b>INTAKE</b>	<b>Total Intake</b>	<b>Time Frame</b> <b>Species</b> <b>Age Group</b> <b>Intake Type</b>	<b>Monthly, quarterly and annually.</b> Consider weekly or daily depending on goals
<b>IN-SHELTER</b>	<b>Average Length of Stay</b>  <b>Average daily census</b>	<b>Time Frame</b> <b>Species</b> <b>Age Group</b> <b>Intake Type</b> <b>Outcome Type</b>	<b>Monthly, quarterly, and annually</b>
<b>OUTCOMES</b>	<b>Outcomes</b>	<b>Time Frame</b> <b>Species</b> <b>Age Group</b> <b>Intake Type</b>	<b>Monthly, quarterly and annually.</b> Consider weekly or daily depending on goals

	<b>DEPENDING on GOALS</b> also consider...
<b>INTAKE</b>	<b>Jurisdiction</b> <b>Health/behavioral status</b> <b>Spay-neuter Status</b> <b>Breed</b> <b>Intake Location</b> ??? ???
<b>IN-SHELTER</b>	<b>Health/behavior status</b> <b>Housing location in shelter</b> <b>Spay-neuter status</b> <b>Breed</b> ??? ???
<b>OUTCOMES</b>	<b>Health/behavioral status</b> <b>Reasons for euthanasia</b> <b>Breed</b> ???? ???

Perform a Basic Data Analysis



# Basic Data Interpretation Overview

	Data Summary	Interpretation	Possible Strategies
<b>Outcomes</b>	Approximately 25% of both dogs and cats experienced a live outcome in 2017	Despite dogs contributing more to intake than cats, both groups are euthanized at the same rate.	
	In absolute terms, adult dogs are, by far, the most commonly euthanized group of animals.	Given that ~¾ of the dogs entering are stray, efforts to reduce stray intake and control its flow should be top priorities.	Revisit existing contracts with other municipalities to be sure officers are using the shelter as a “last resort.” Implement a strong “finder to foster” program.
<b>In-Shelter</b>	For both dogs and cats, average length of stay is relatively low.	Animals are moving through the shelter efficiently, but the shelter is still frequently overcrowded.	
	Average daily census for both dogs and cats routinely exceeds housing capacity by a large margin.	As ALOS is relatively low, the excessive number of animals is more the result of unmitigated intake than inefficient flow.	Strong focus on intake mitigation efforts, and possible public policy changes are necessary.
<b>Intake</b>	Dogs represent ~60% of intake and cats, 40%.	Strong efforts need to be made for reducing intake of both dogs and cats.	
	While only ~8% of intake is owner surrenders, this is still a large number of animals.	Taking in owner surrenders in the midst of an overcrowded shelter does not contribute to public health or animals safety.	A stronger intake prevention program is needed, ideally in partnership with another organization.



# Example

Public open admission shelter  
1,000,000 people served  
Private humane society -- good relationship  
Provide service to outlying towns as well

Military town  
Relatively supportive local government  
22% in poverty (national avg = 13.5%)

## Dogs

	Adult	Up to 5 Months	Unknown	Total
Stray	10948	2694	706	14348
Relinquished	872	203	15	1090
Owner Intended Euthanasia	239	10	2	251
Transferred In	26	2	0	28
Other Intakes	367	261	0	628
Total	12452	3170	723	16345

## Cats

	Adult	Up to 5 Months	Unknown	Total
Stray	3575	4465	693	8733
Relinquished	307	123	3	433
Owner Intended Euthanasia	32	1	0	33
Transferred In	16	13	0	29
Other Intakes	887	242	24	1153
Total	4817	4844	720	10381

Select Year: 2017 ▼

## Annual Intake Profile

Total Intakes 26726

### Dogs

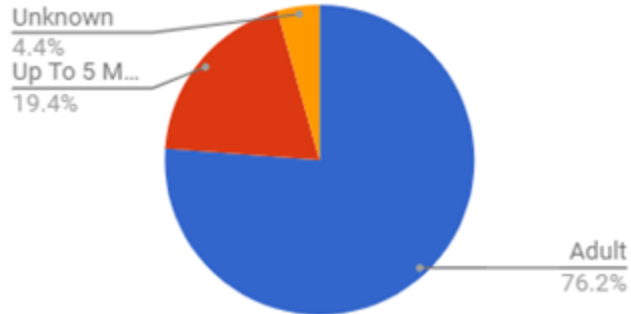
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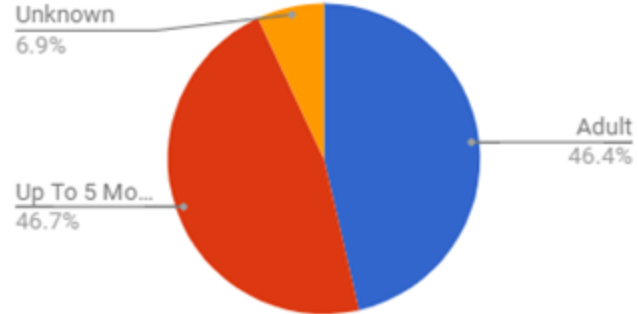
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Need To Add Total Intake By Species

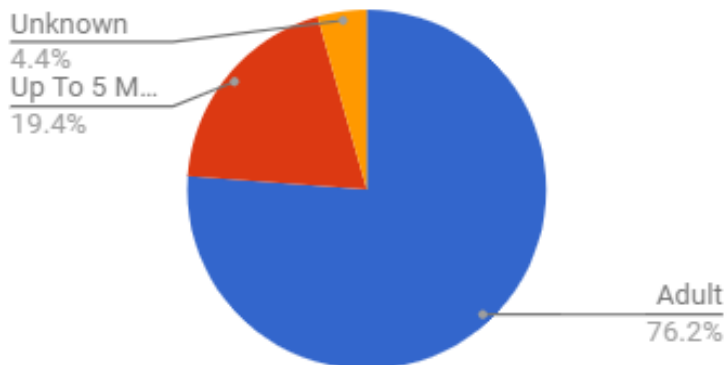
### Canine Intake by Age Group



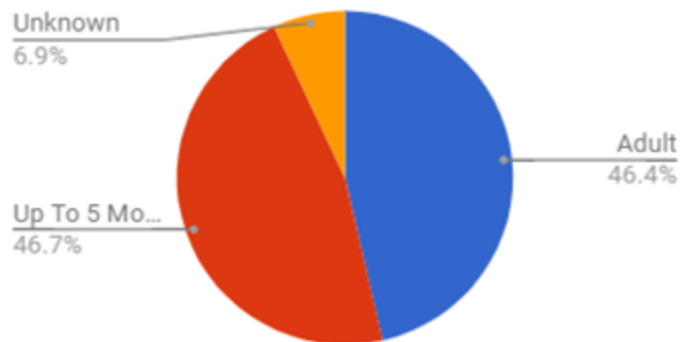
### Feline Intake by Age Group



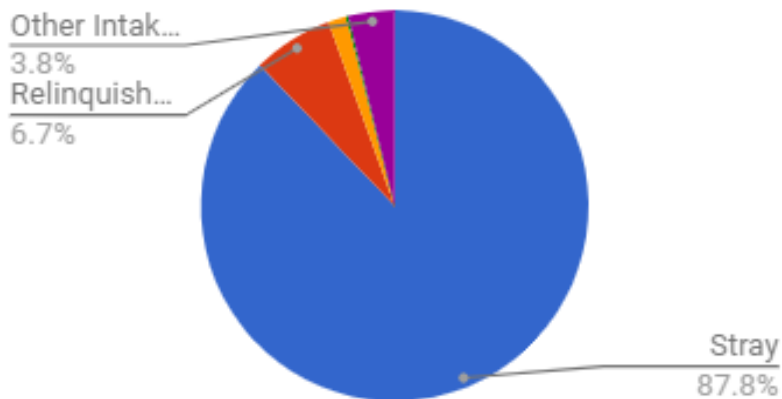
## Canine Intake by Age Group



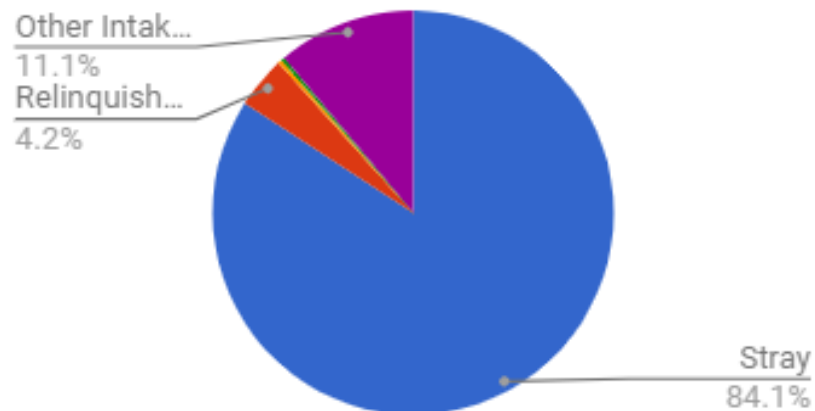
## Feline Intake by Age Group



## Canine Intake by Intake Type



## Feline Intake by Intake Type

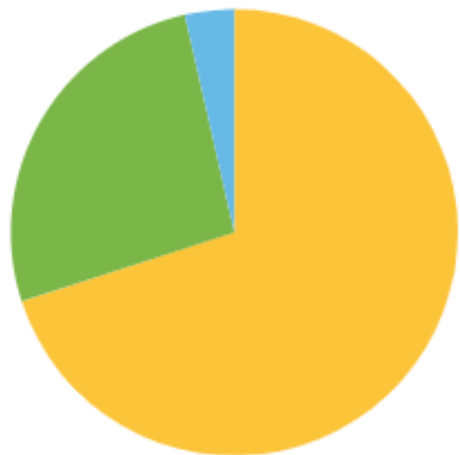




- Go to your Humane Dash account
- Download 12 months of data from SAC and upload to Humane Dash if you haven't already
- Start at the "Intake" Section
- What do you see?
  - Does anything strike you that you haven't noticed before?
  - Does anything confirm a suspicion?
  - Do you have any questions? Things you'd like to explore more deeply?
  - Are there *any* intake-related goals you can start to see forming?

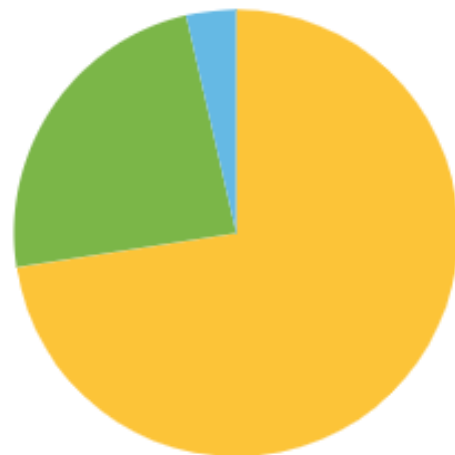
2017	Annual Outcome Profile				Total Outcomes	26,086			
	Dogs					Cats			
Live Outcomes	Adult	≤ 5 Mos.	Unknown	Total		Adult	≤ 5 Mos.	Unknown	Total
Adoption	3,439	1,724	10	5,173		610	2,005	1	2,616
Return to Owner	3,269	115	108	3,492		76	8	6	90
Transfer Out	2,182	646	134	2,962		235	485	38	758
Return to Field	0	0	0	0		3,416	604	94	4,114
Other Live Out	0	0	0	0		6	0	0	6
<b>Total</b>	<b>8,890</b>	<b>2,485</b>	<b>252</b>	<b>11,627</b>		<b>4,343</b>	<b>3,102</b>	<b>139</b>	<b>7,584</b>
<b>Other Outcomes</b>									
Shelter Euth	3,093	453	271	3,817		418	1,099	258	1,775
Died in Care	99	149	44	292		52	482	96	630
Lost in Care	26	1	21	48		17	15	18	50
OIE	218	9	3	230		32	0	1	33
<b>Total</b>	<b>3,436</b>	<b>612</b>	<b>339</b>	<b>4,387</b>		<b>519</b>	<b>1,596</b>	<b>373</b>	<b>2,488</b>
<b>Still In Shelter</b>				<b>592</b>					<b>379</b>

Canine Outcome & Still-in-Shelter Distribution



● Live Outcomes ● Euth/Died/Lost ● Still-in-Shelter

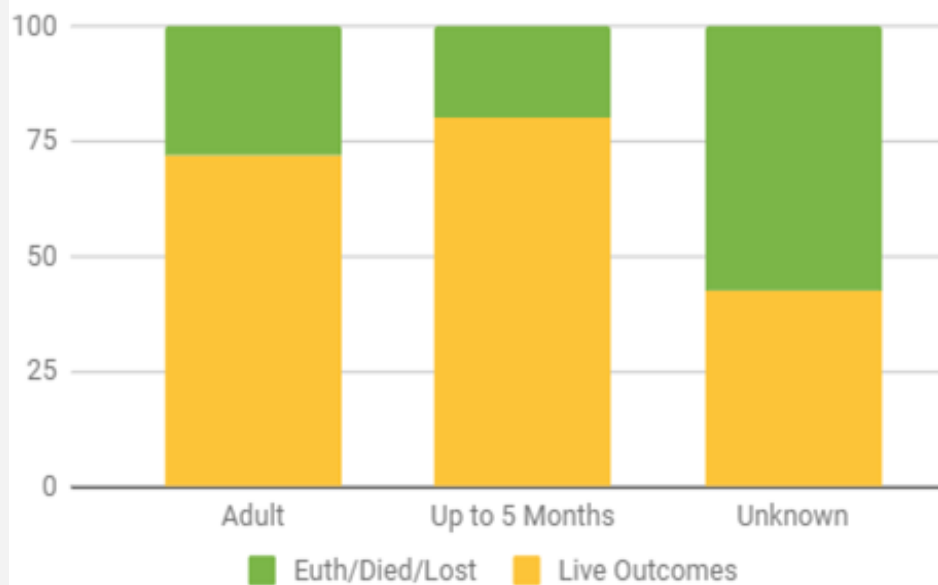
Feline Outcome & Still-in-Shelter Distribution



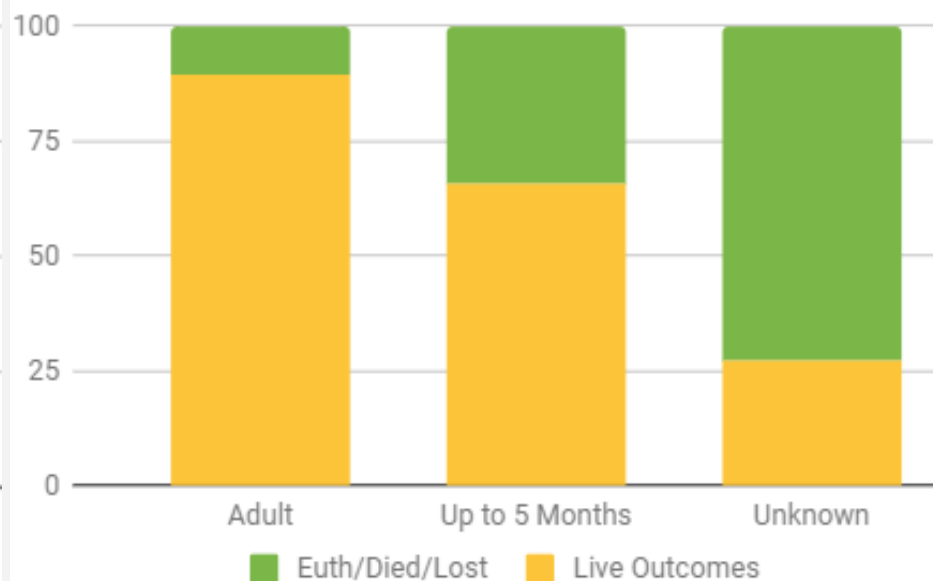
● Live Outcomes ● Euth/Died/Lost ● Still-in-Shelter



% Canine Live Release vs. Euth/Died/Lost % by Age Group



% Feline Live Outcomes vs. Euth/Died/Lost by Age Group



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Where does intake need to be?

		Max Annual Total Intake	Annual Reduction	Monthly Avg Reduction	Daily Avg Reduction
Dogs	Adult	9,878	2,574	215	7
	Up to 5 Mo	2,761	409	34	1
	Unknown	280	443	37	1
Cats	Adult	4,826	0	0	0
	Up to 5 Mo	3,447	1,397	116	4
	Unknown	154	566	47	2

2017	Annual Outcome Profile				Total Outcomes	26,086			
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# Key Takeaways

- Appreciate
  - Status of national animal sheltering
  - Best Friends data visuals
  - Shelter Animals Count dashboards
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  - The “core metrics” – Sheltering is an “engineering problem”
  - Difference between data, metrics, and interpretation
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# Thank You

Mike@target-zero.org

NikkiK@bestfriends.org