

# Pandemic Pets

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August 20, 2021

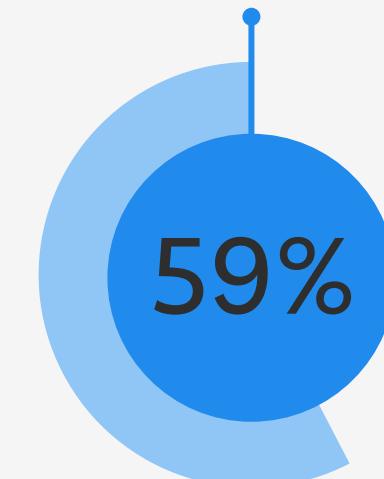
chevy





# PAW-PULATION STATISTICS

In 2016, ~59% of households in the US owned one or more pets

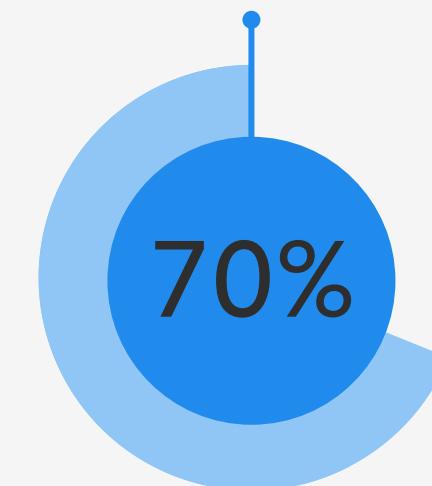


(American Veterinary Medical Association)



# PAW-PULATION STATISTICS

Now, in 2021, that fraction has increased to nearly 70%



(American Pet Products Association)

# OPPORTUNITY



ASPCA

“Pet Boom”

~20% of households in the US have acquired a pet since the beginning of the pandemic



chewy

Fulfillment Disruption

Chewy reported an extra \$20 million in fulfillment spend in 2020 Q1



COVID-19

Extended work-from-home

Increased rate of pet adoptions and pet supply spending will likely continue

# GOAL

Determine an ideal location for a new Chewy fulfillment center, using:

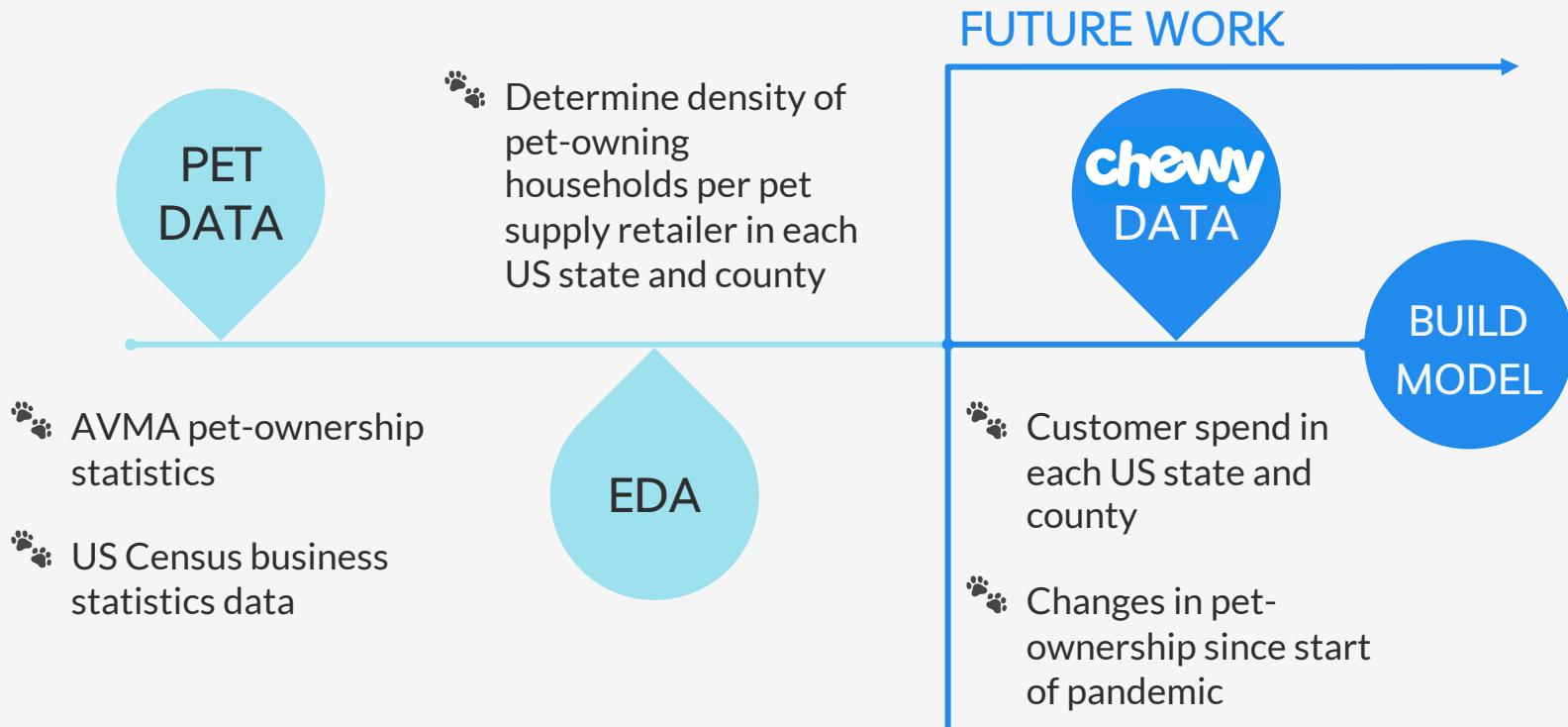
- 🐾 Pet-owning households
- 🐾 Options for in-person purchase of pet supplies
- 🐾 Past spending on Chewy products

# SOLUTION

Build a geospatial clustering model to predict future customer spend.



# METHODOLOGY



# INSIGHTS

**1200**

Median number of pet-owning households served by each pet supply retailer in the US

In the states most “underserved” by pet supply retailers, that number increases to

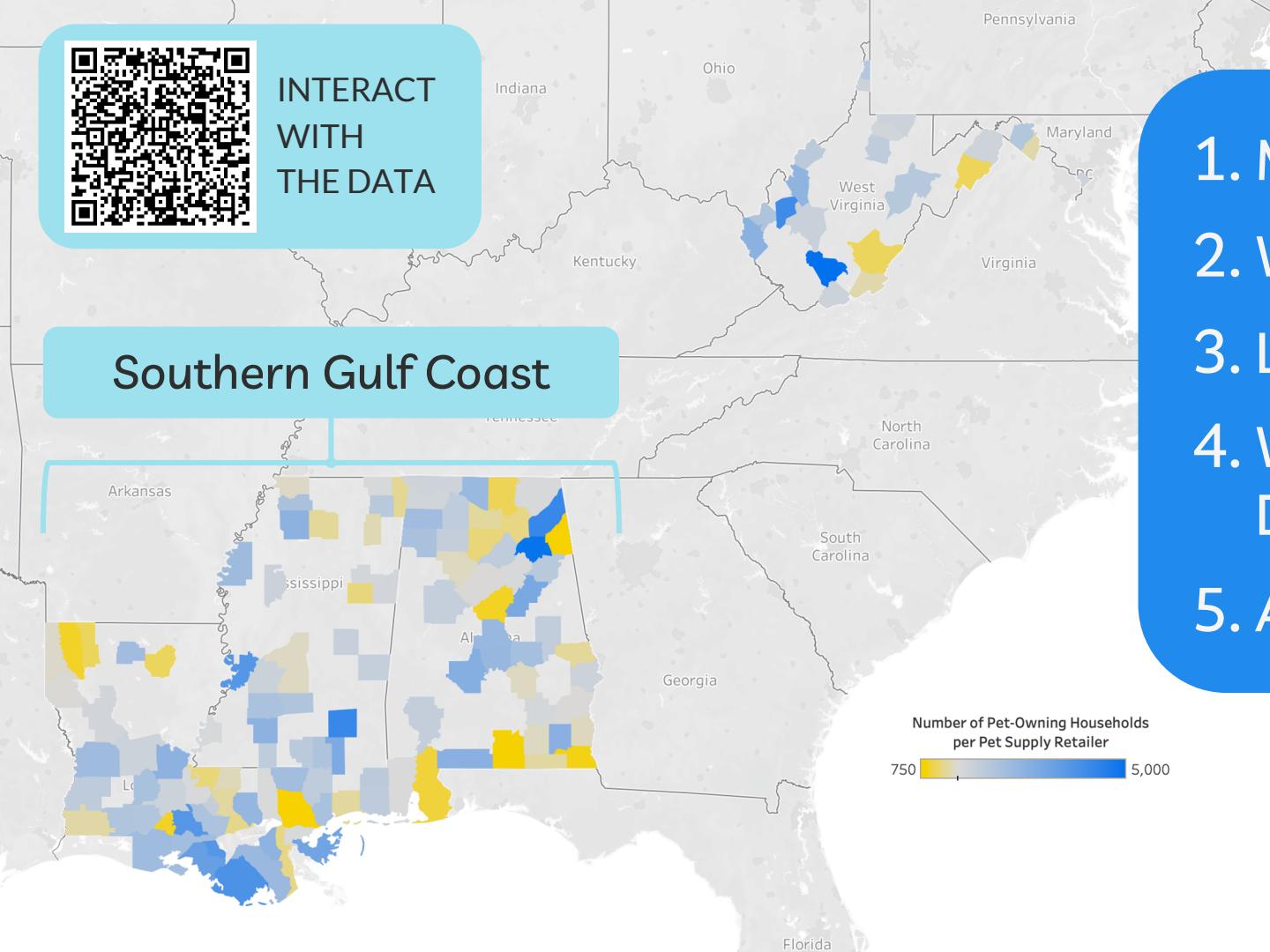
**1900**





INTERACT  
WITH  
THE DATA

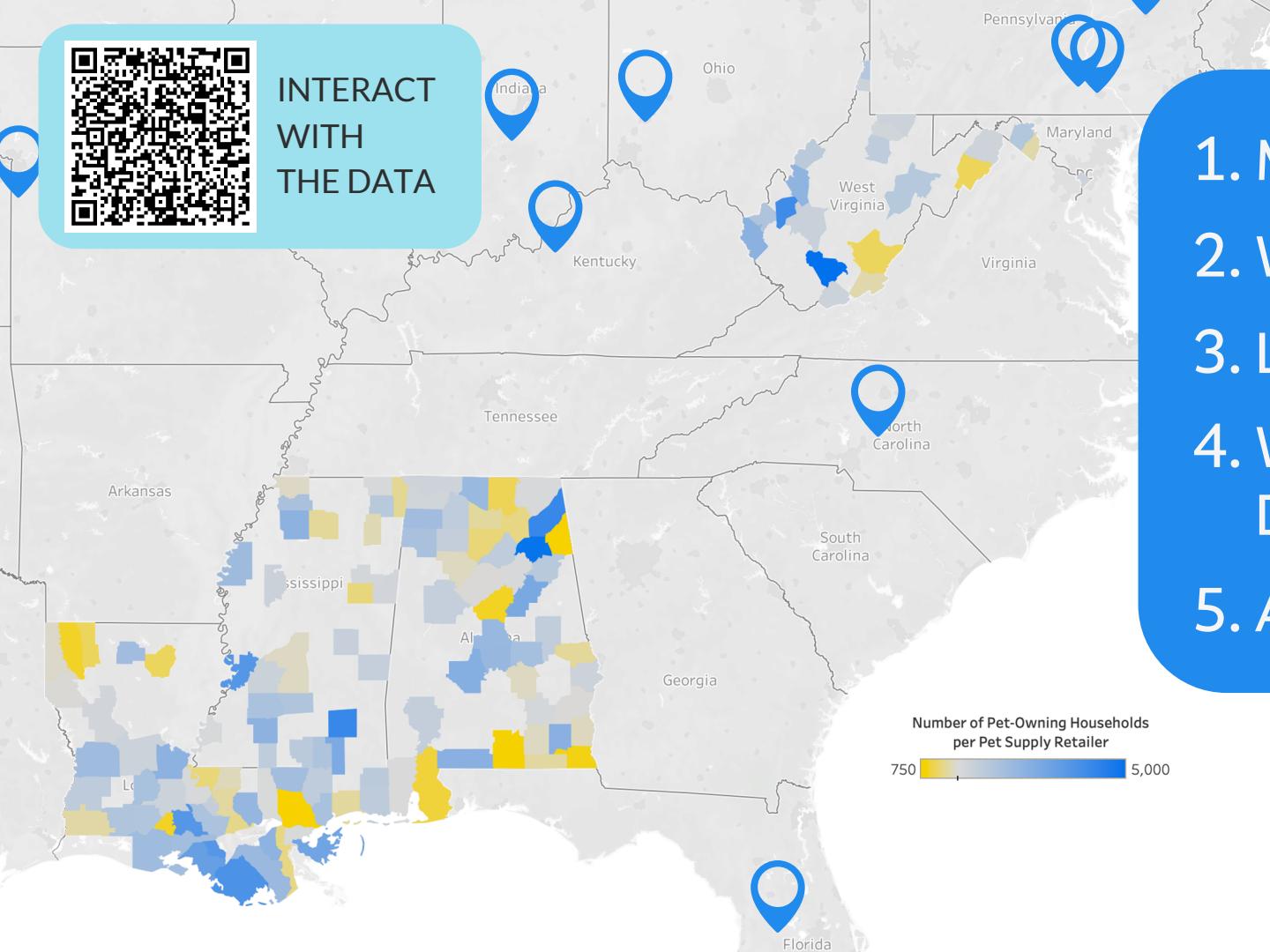
Southern Gulf Coast



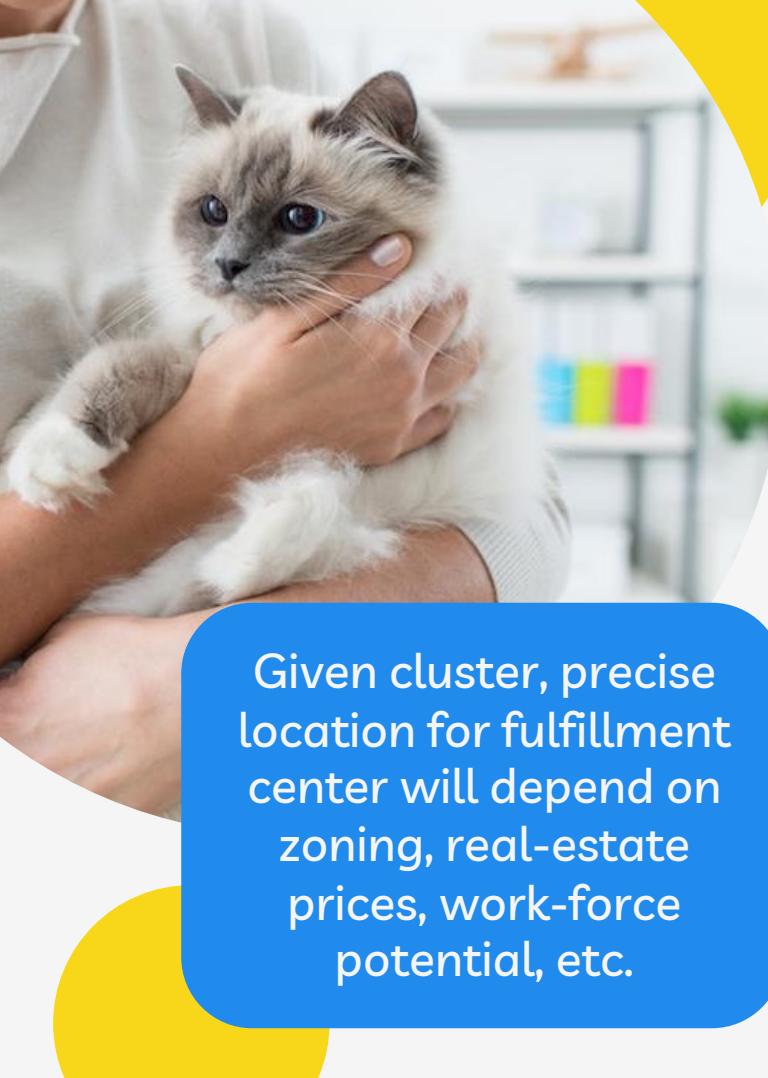
1. Mississippi
2. West Virginia
3. Louisiana
4. Washington, DC
5. Alabama



INTERACT  
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THE DATA



1. Mississippi
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Given cluster, precise location for fulfillment center will depend on zoning, real-estate prices, work-force potential, etc.

# MODELING

- 🐾 Requires data from Chewy on historical customer spend for each US county
- 🐾 K-means clustering with location, number of pet-owning households per pet supply retailer, customer spend
- 🐾 Compare clustering results with EDA
- 🐾 Does cluster containing Gulf Coast counties stand out as **both** “under-served” and high spending at Chewy?

BUILD NOW,  
THRIVE  
THROUGH THE  
NEXT PET  
BOOM!



# THANKS

Questions?



INTERACT  
WITH  
THE DATA

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