

Pandemic Pets

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August 20, 2021

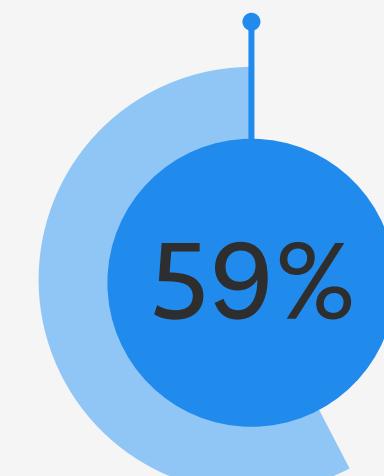
chevy



A close-up photograph of a black French Bulldog's face. The dog has a wrinkled forehead, large dark eyes, and a pink tongue slightly hanging out. It is looking directly at the camera. The background is white.

PET POPULATION STATISTICS

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

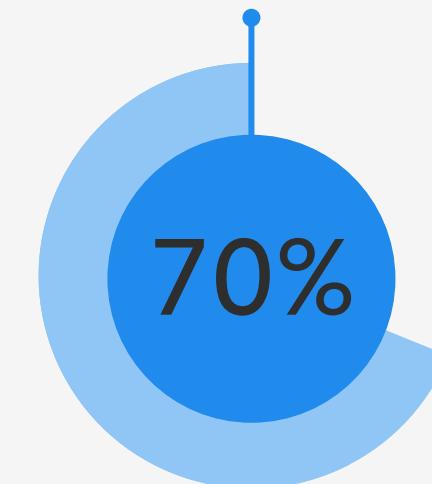


(American Veterinary Medical Association)



PET POPULATION 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:

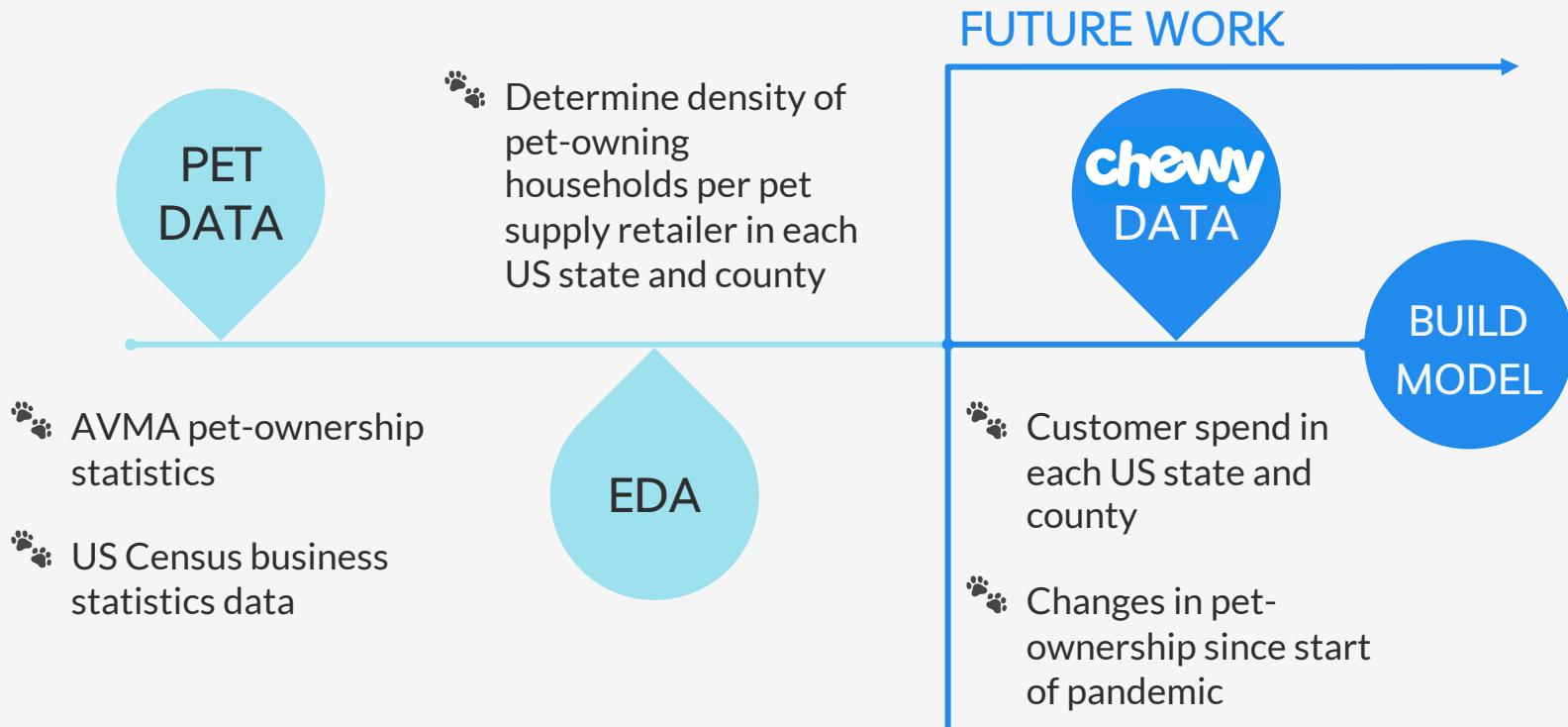
- 🐾 Pet-owning households
- 🐾 Options for in-person purchase of pet supplies
- 🐾 Past spending on Chewy products

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

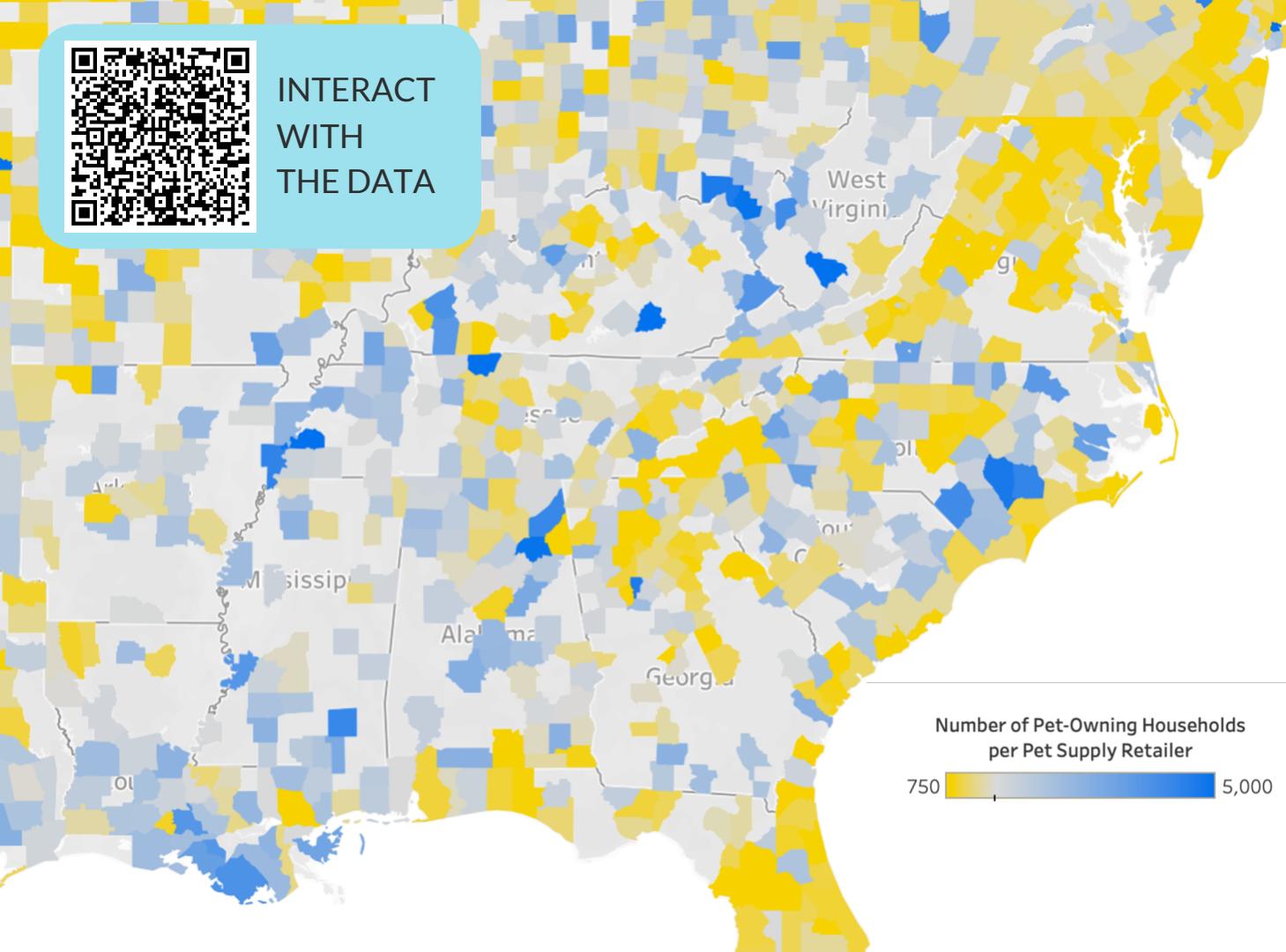
In the states most “underserved” by pet supply retailers, that number increases to

1900





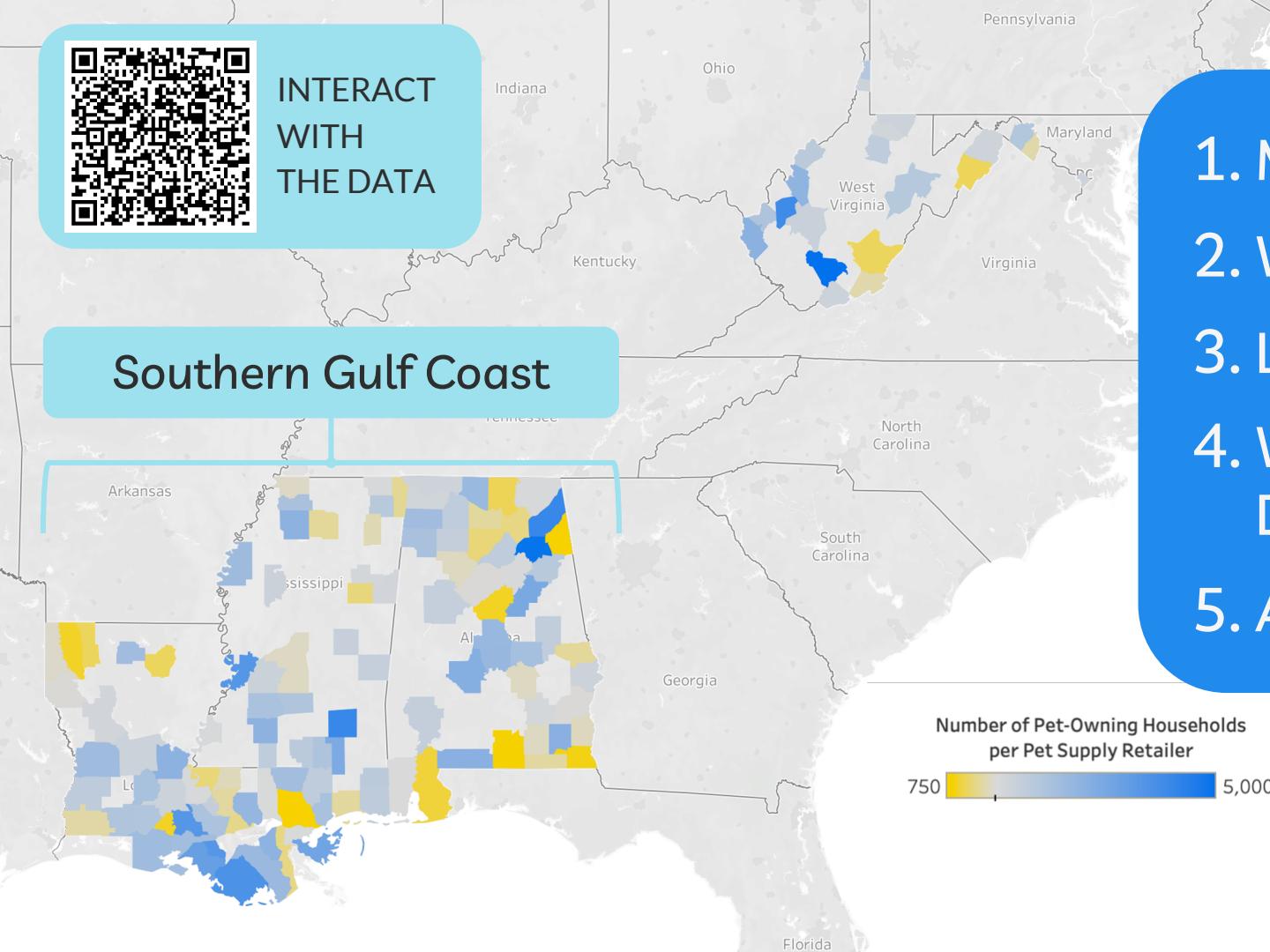
INTERACT
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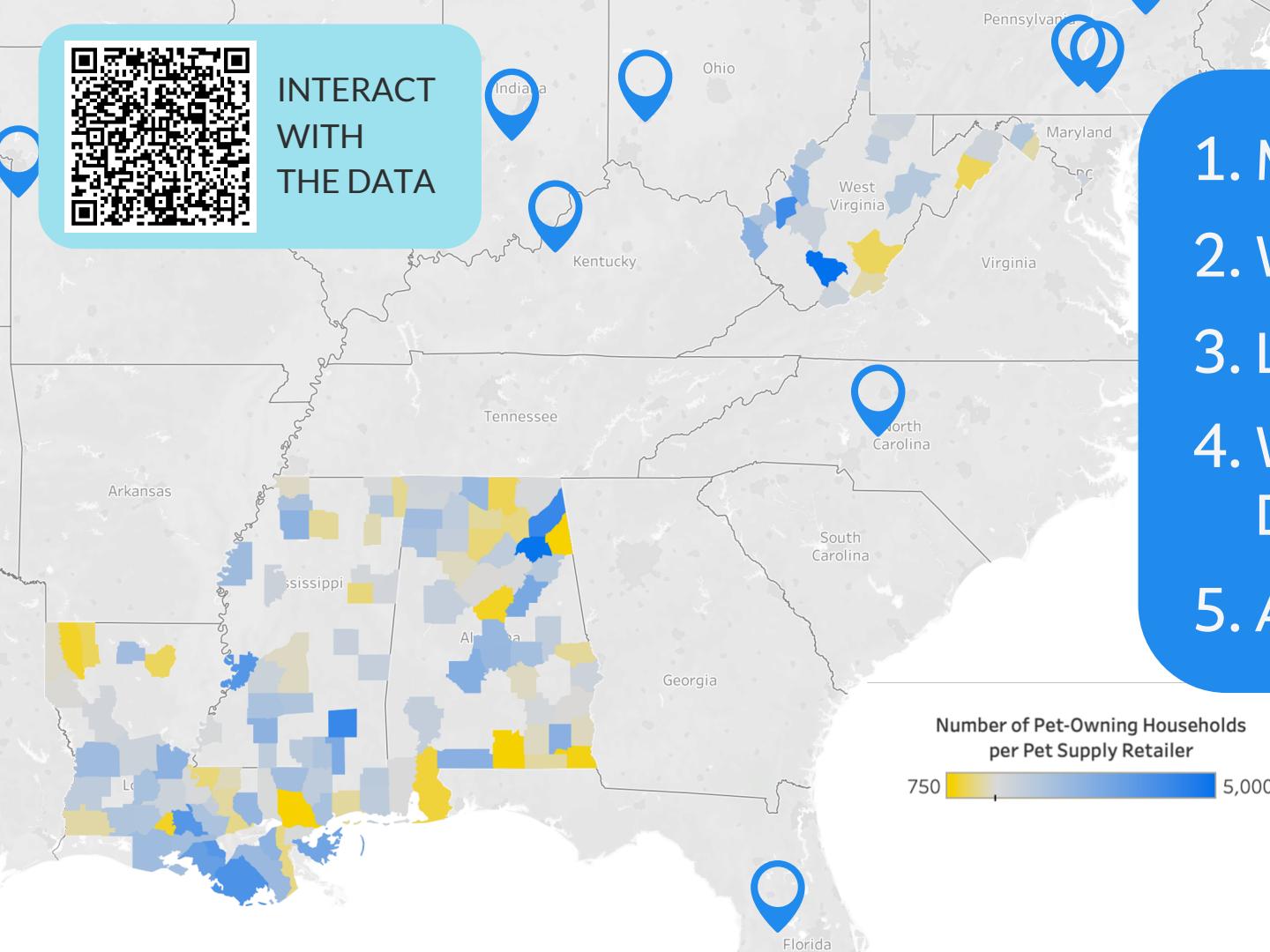
Southern Gulf Coast



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



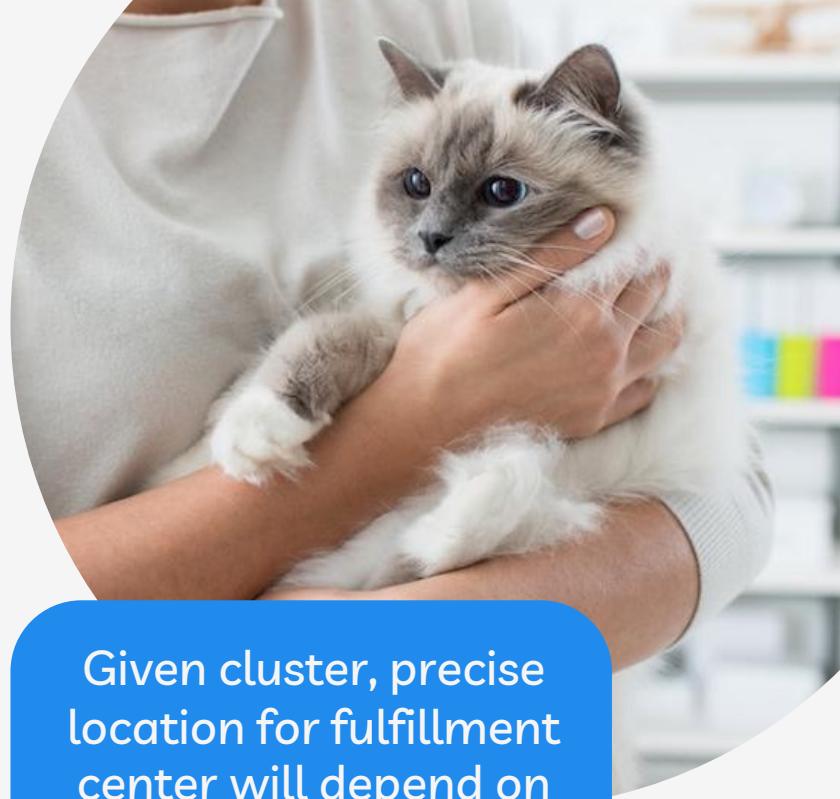
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1. Mississippi
2. West Virginia
3. Louisiana
4. Washington, DC
5. Alabama

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** “underserved” and high spending at Chewy?



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

BUILD NOW,
THRIVE
THROUGH THE
NEXT PET
BOOM!



THANKS

Questions?



INTERACT
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THE DATA

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