

# ALY 6980 CAPSTONE PROJECT

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## INTRODUCTION

- This is a great exercise to have an open opportunity to see what we find
- Areas to improve to pave the way for increased future successes
- Allows Big Sky to focus on the most important factors bringing new clients

# KEY QUESTIONS

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## ■ FOCUS AREAS FOR CLIENT ACQUISITION

Our analysis will highlight key areas to focus on for landing more clients

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## ■ STATE/REGION IMPACT

Do certain states or regions influence the number of inquiries and probabilities in the dataset?

# BLUE SKY FRANCHISE/OTHER FRANCHISES

- Blue Sky has used blogs since 2016 as well as having a steady YouTube and podcast presence online.
- Emphasis on these digital tools could impact future leads and deals.
- Digital presence can also affect regional and national sales.
- Other Franchises like Franchise Creator focus on faster timelines, lower costs, more locations regionally and nationally.
- Another franchise called Franchise Maker offers pay as you go programs, no hidden agendas, and like Blue Sky a three-step program to its clients.

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# DATA PREPARATION

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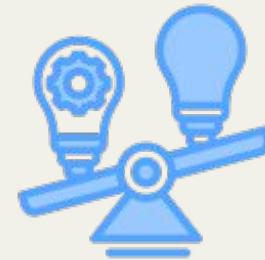
■ Data Cleanup



■ Dashboarding



■ Analysis



# DATA CLEANUP PROCESS

- Duplicate Columns: Identify and distinguish 14% duplicate columns.
- Removed 33% of columns (id, pipeline) due to redundancy or repetitive patterns.
- Handle Missing values improving completeness by 28%.

Importing Data

Merging Datasets

Rebuilding Missing Data

Deduplication

Standardization

# DATA ANALYSIS

## Identify Trends and Patterns

Focus on key attributes to target potential clients

## Comparison with External Datasets

Evaluate similar external datasets for added insights

## Examine Variable Relationships

Examine correlations for business insights and addressing concerns

# **DATA GOVERNANCE**

**Data Quality**

**Data Stewardship**

**Data Protection**

**Data Management**

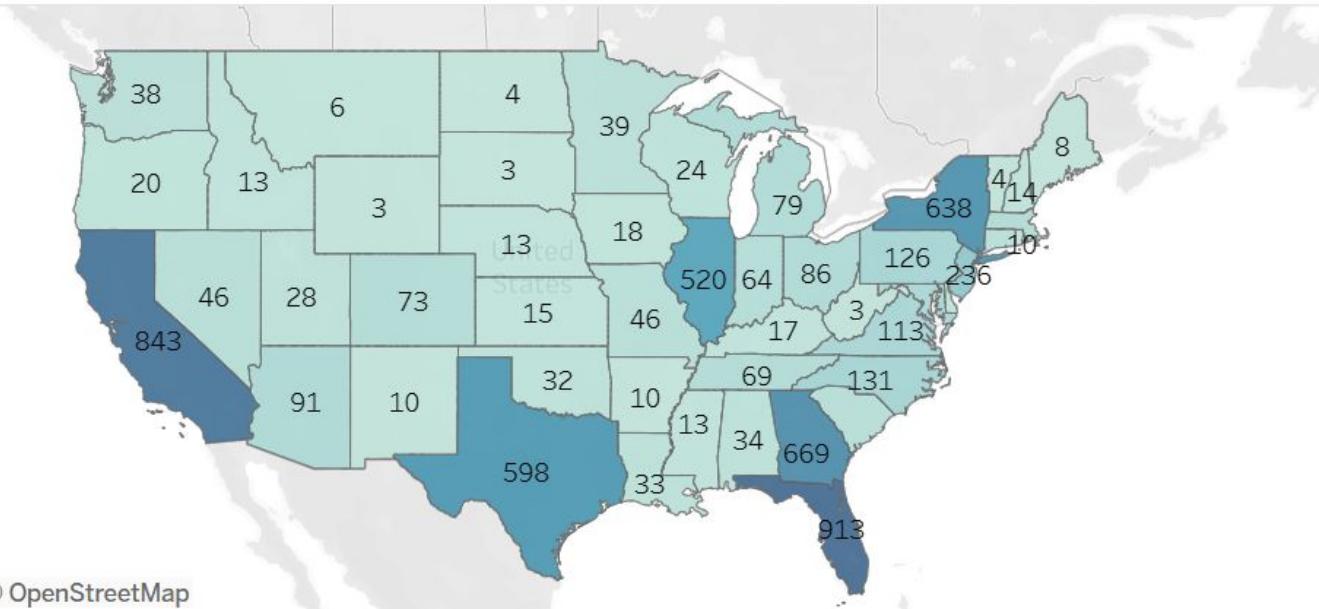


CRU

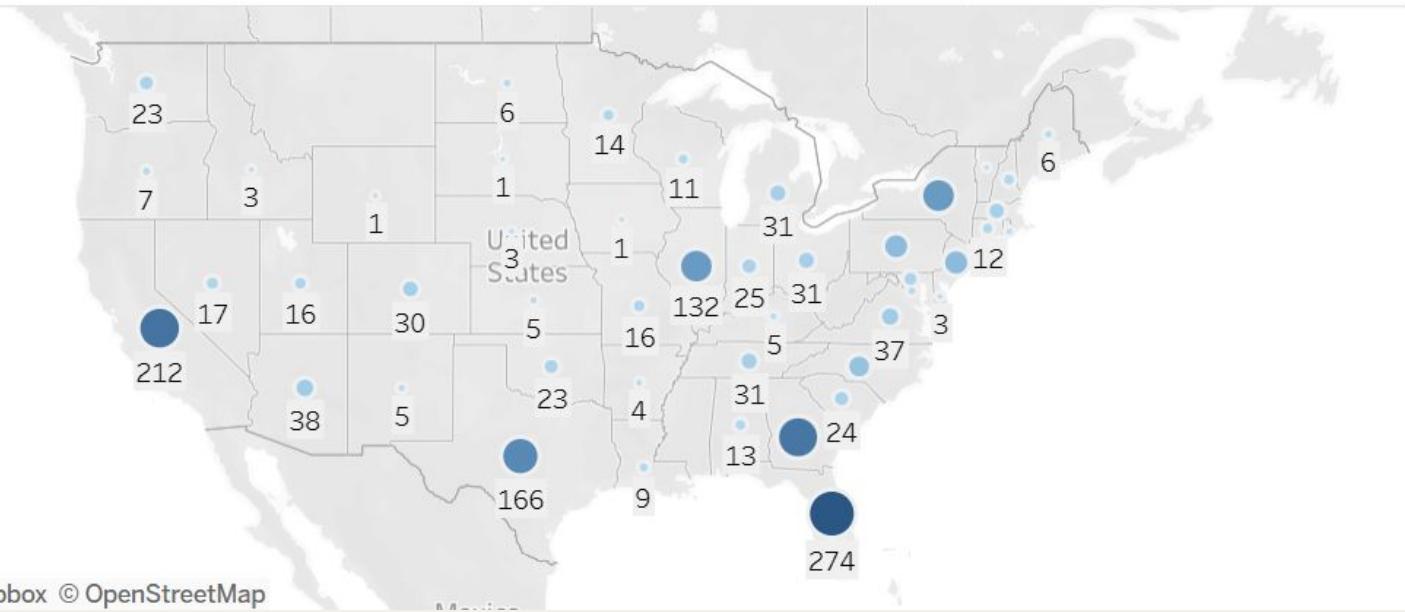
Royal  
Restrooms

WRAP CITY  
ESTD SANDWICH COMPANY 2015

## Geographic Spread Of Accounts Dataset - US Map



## Geographic Spread Of Deals Dataset - US Map



Count of Record Id

- 1
- 50
- 100
- 150
- 200
- 274

Count of Record Id

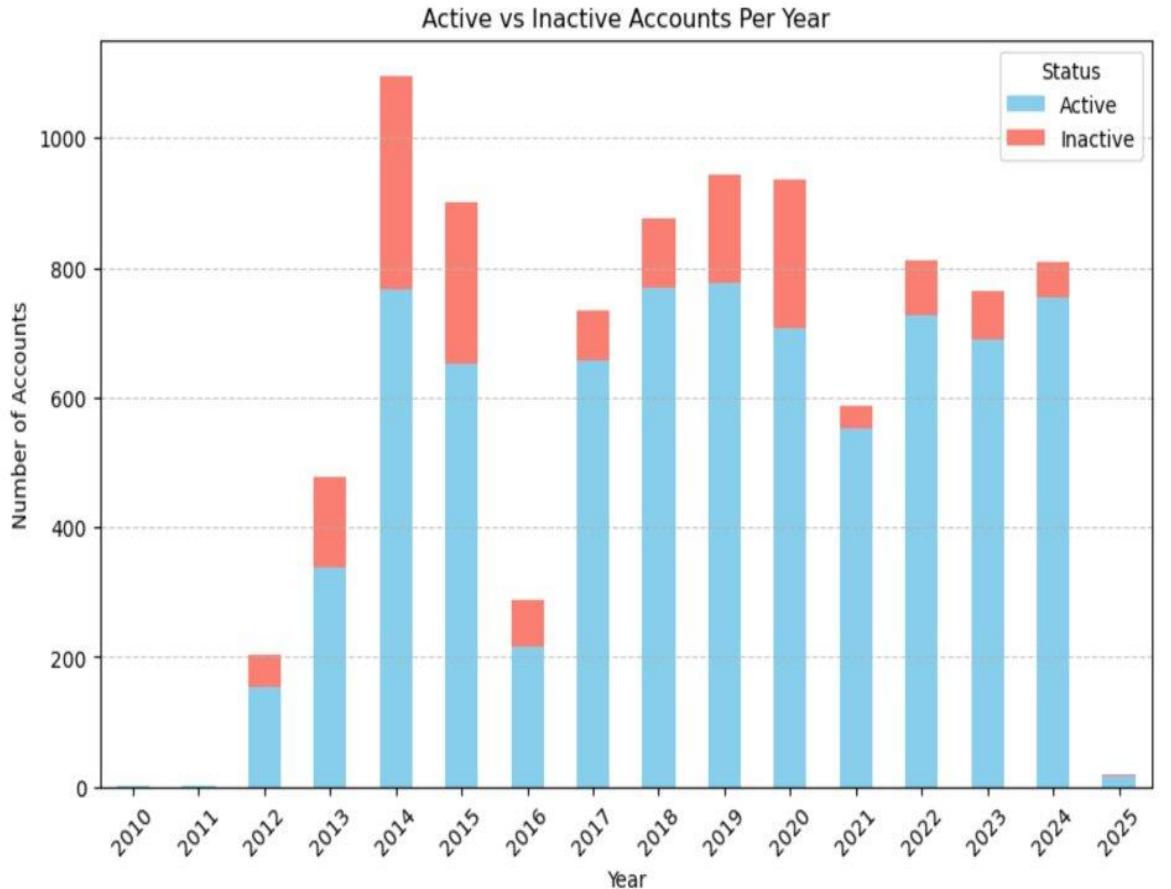


# Account Status

To preparing the data for analyzing,

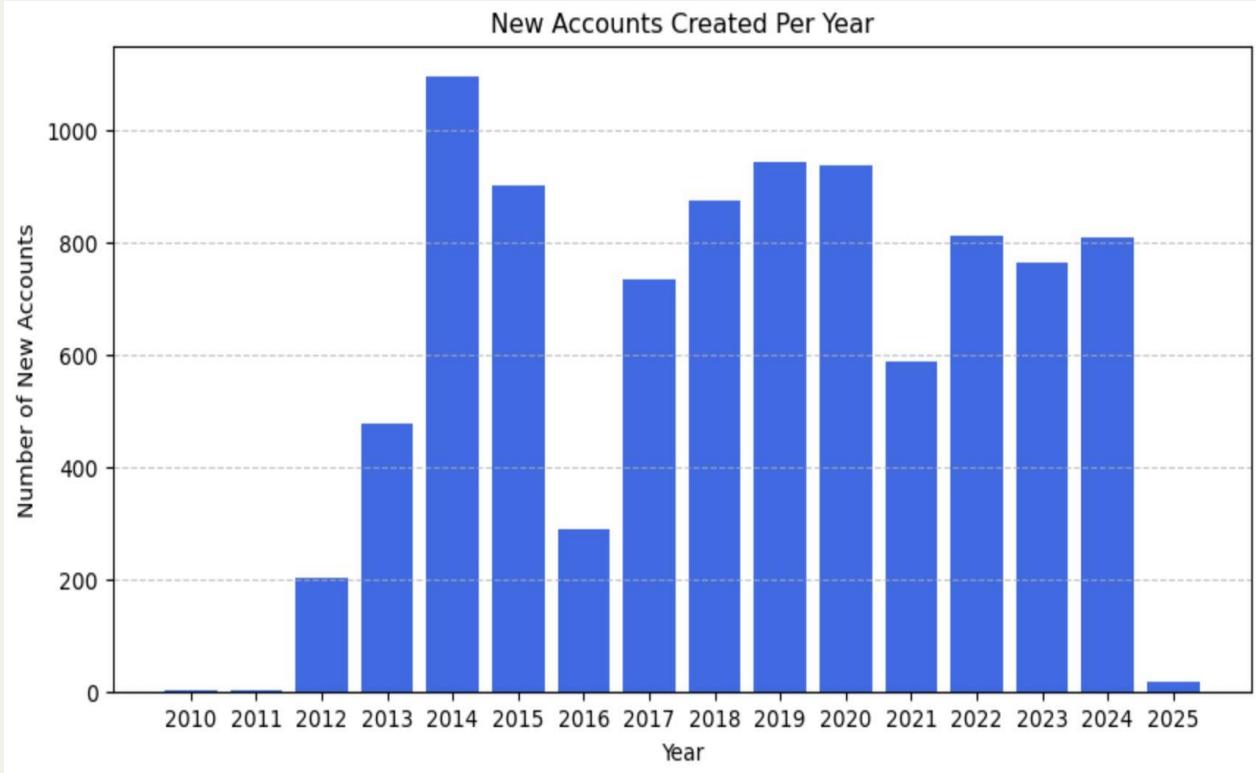
- Define Active and Inactive categories; for example, dead stage of the accounts label as inactive; client - active stage label as active.
- Find the actual year from lead\_recived column
- Group by 'created\_year' and 'status\_category' and count the occurrences

Answer: How many accounts staying and leaving each year?



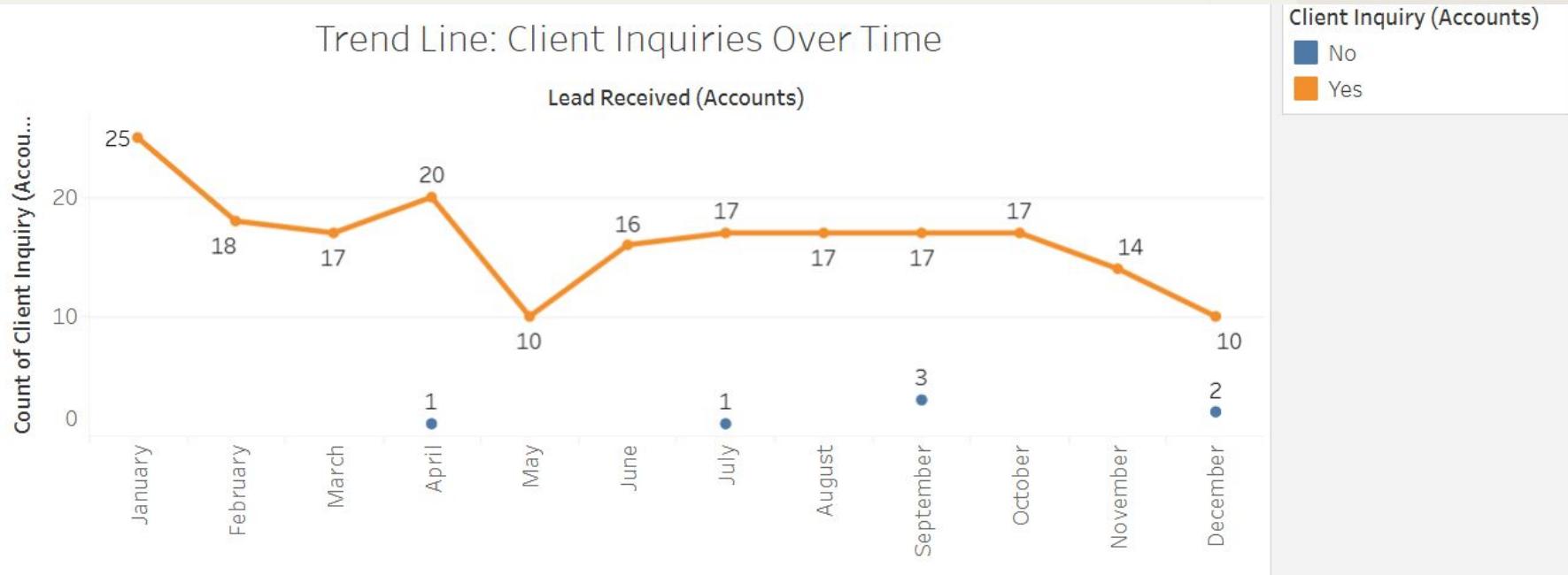
# New Accounts

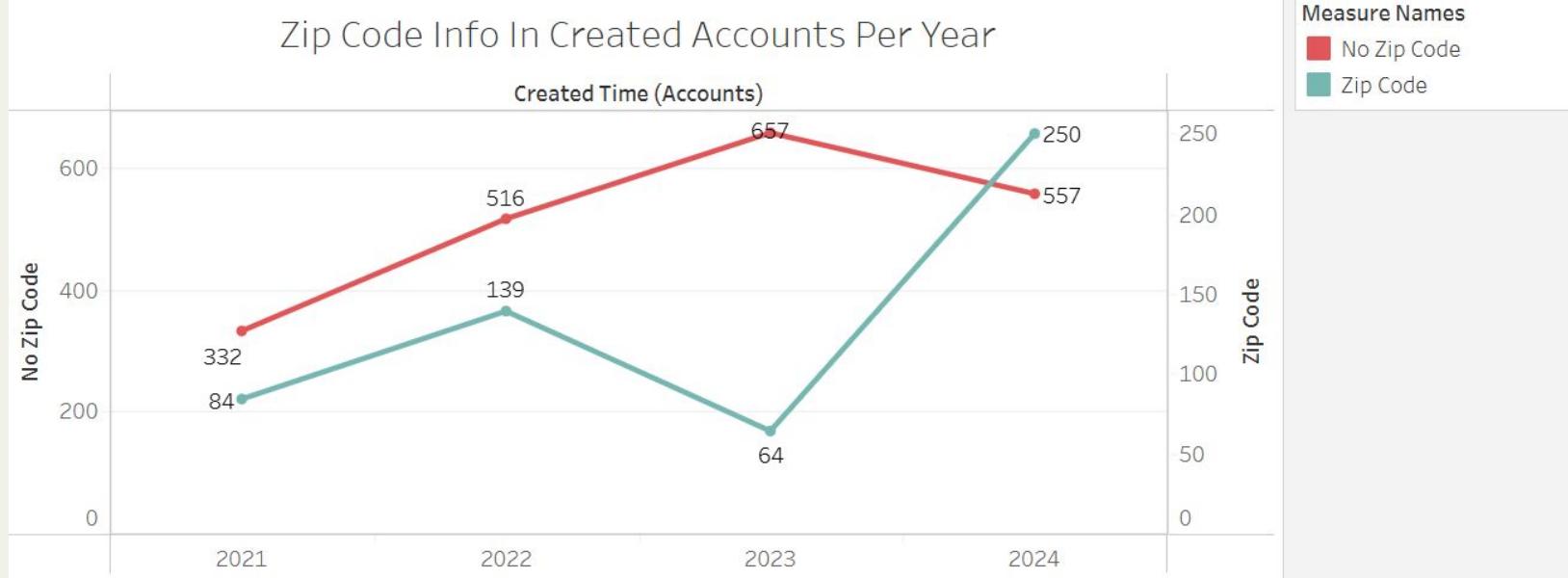
- This chart showing how many new customers added into big sky CRM database each year
- Many will have the same date due to an import date from a previous CRM system. Find the actual year for new accounts created date from lead\_recived column
- Before 2016, the data went up and down significantly; however the data were getting stable since 2017 to 2024, big sky has about 600 to 800 new accounts each year



## Trend Line: Client Inquiries Over Time

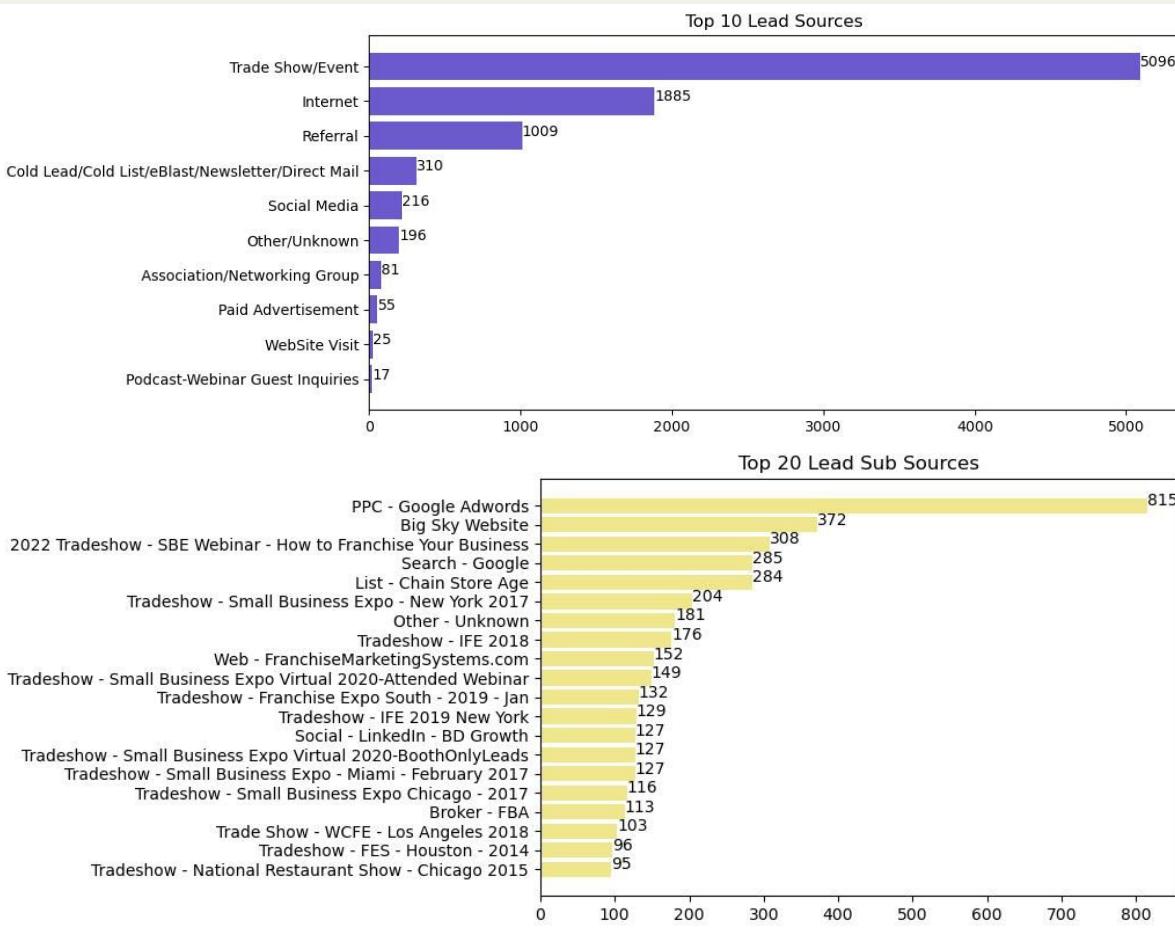
Lead Received (Accounts)

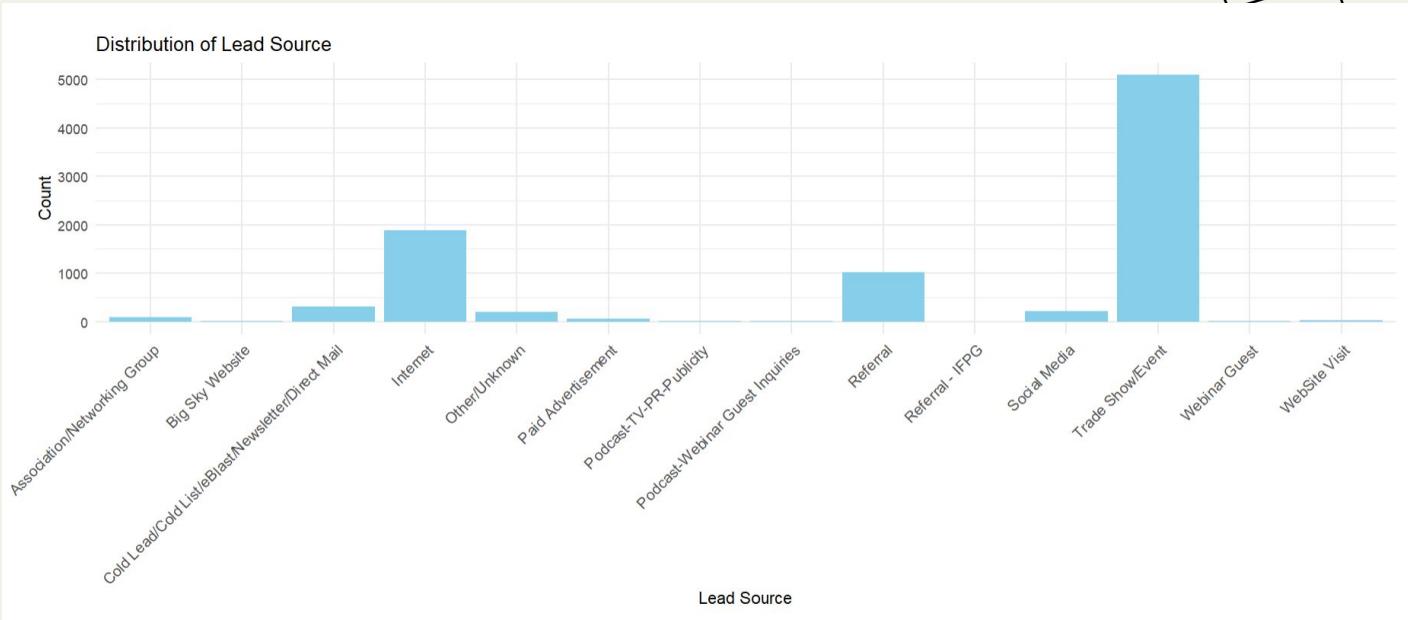




- Improvements in obtaining zip code information from 2023 to 2024.
- Important for account follow-ups as well as parts of the country to consider in terms of sales?

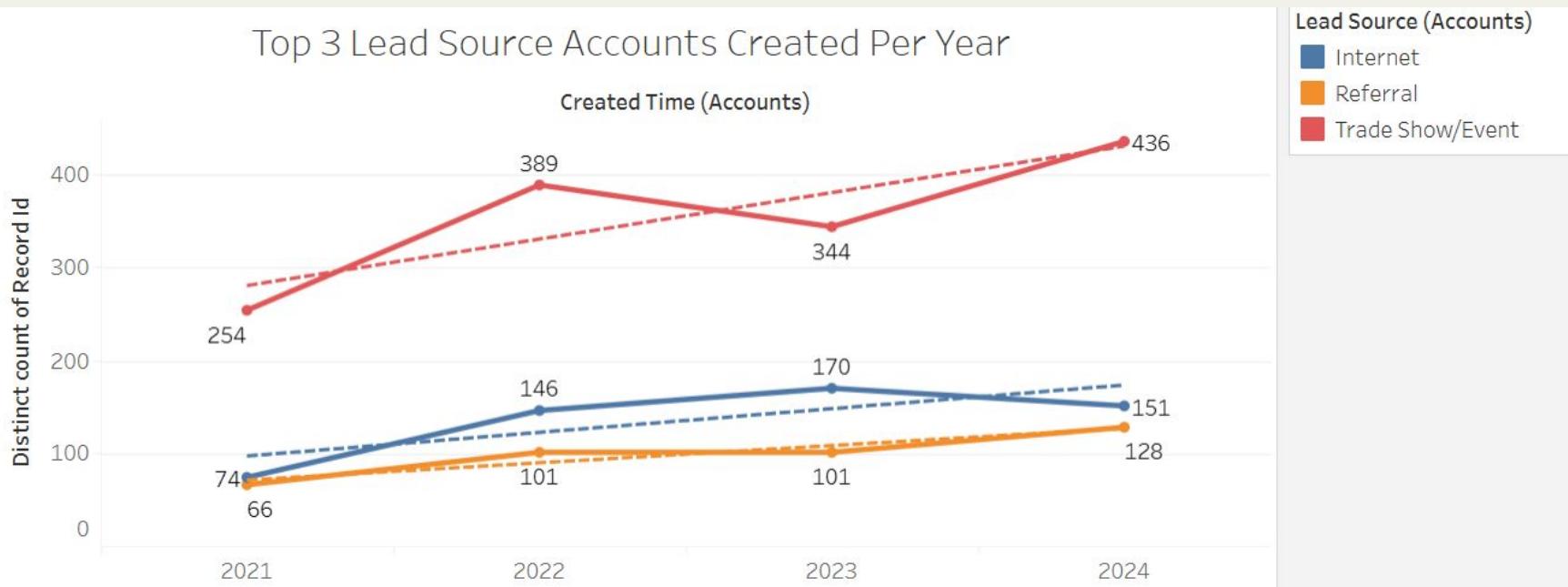
# Lead Sources





- **Most common lead sources are trade show/event, internet, and referrals.**
- **Paid advertisements have the highest suspension probability rates.**

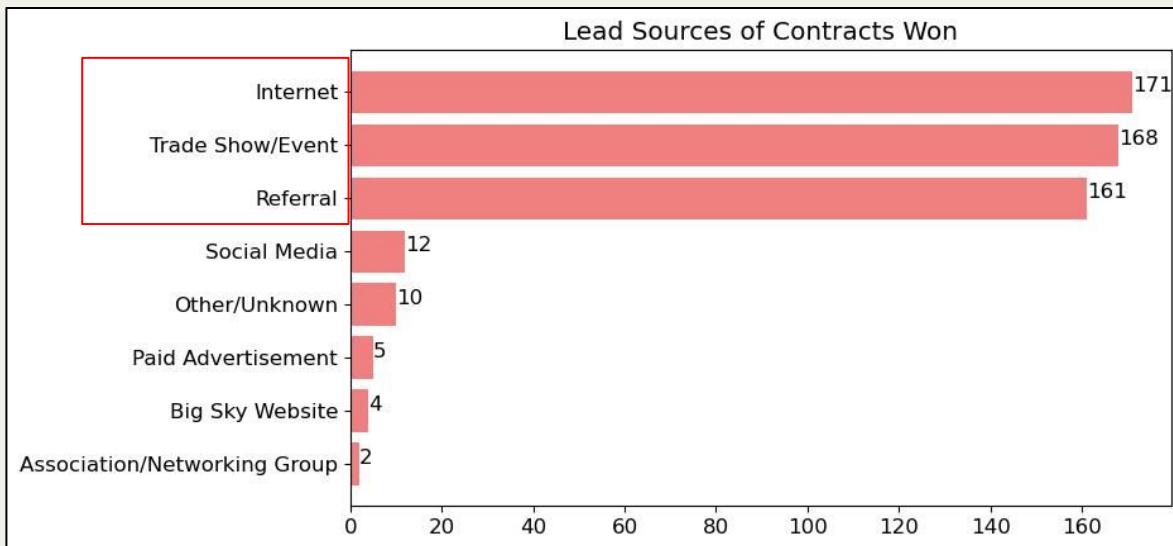
## Top 3 Lead Source Accounts Created Per Year



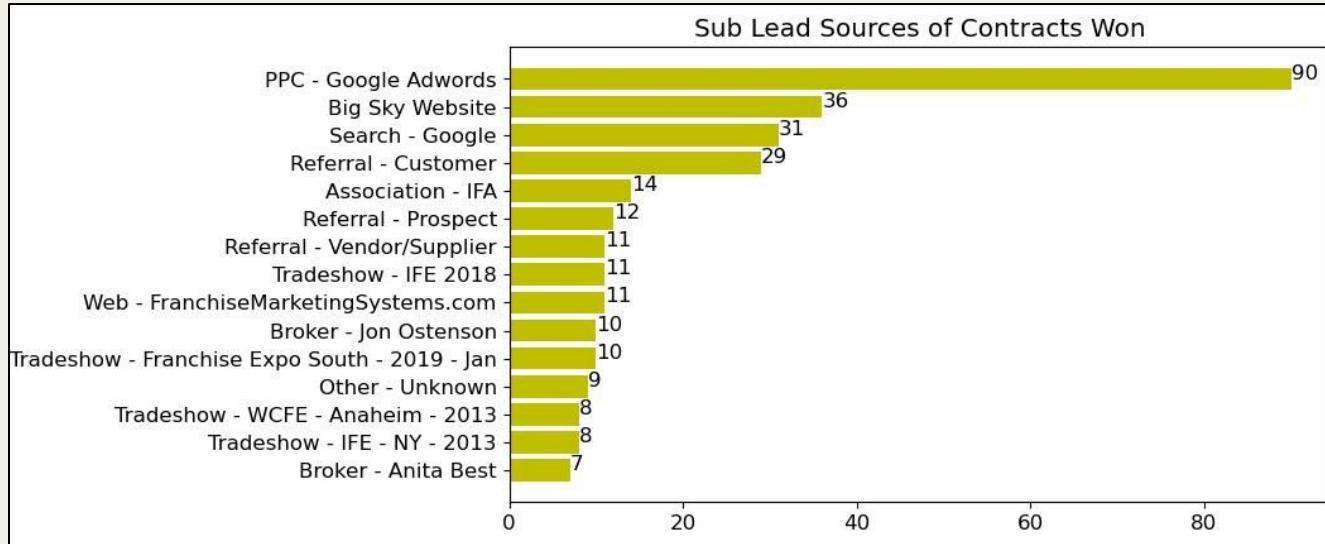
# Focus on the Success

We are going to start from focus on Big Sky's success, about which lead source has the most customers who have successful transactions with Big Sky?

They are mainly from internet, trade show/event, and referral



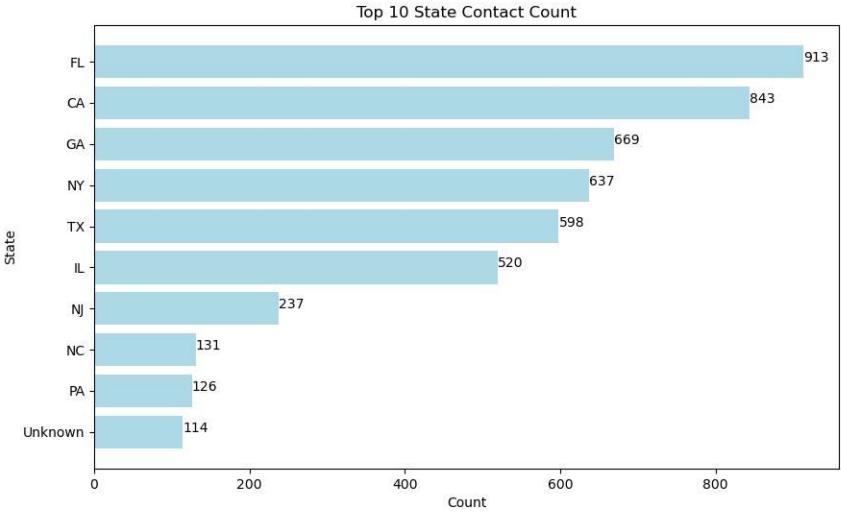
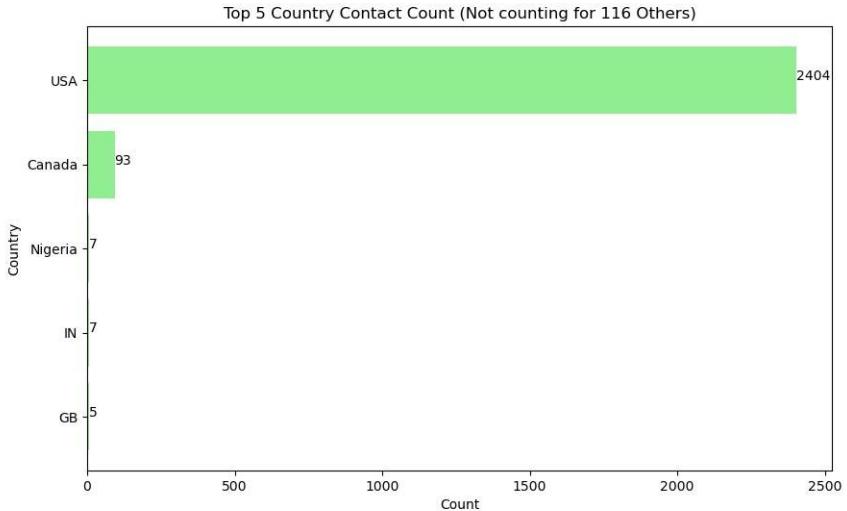
# Focus on the Success



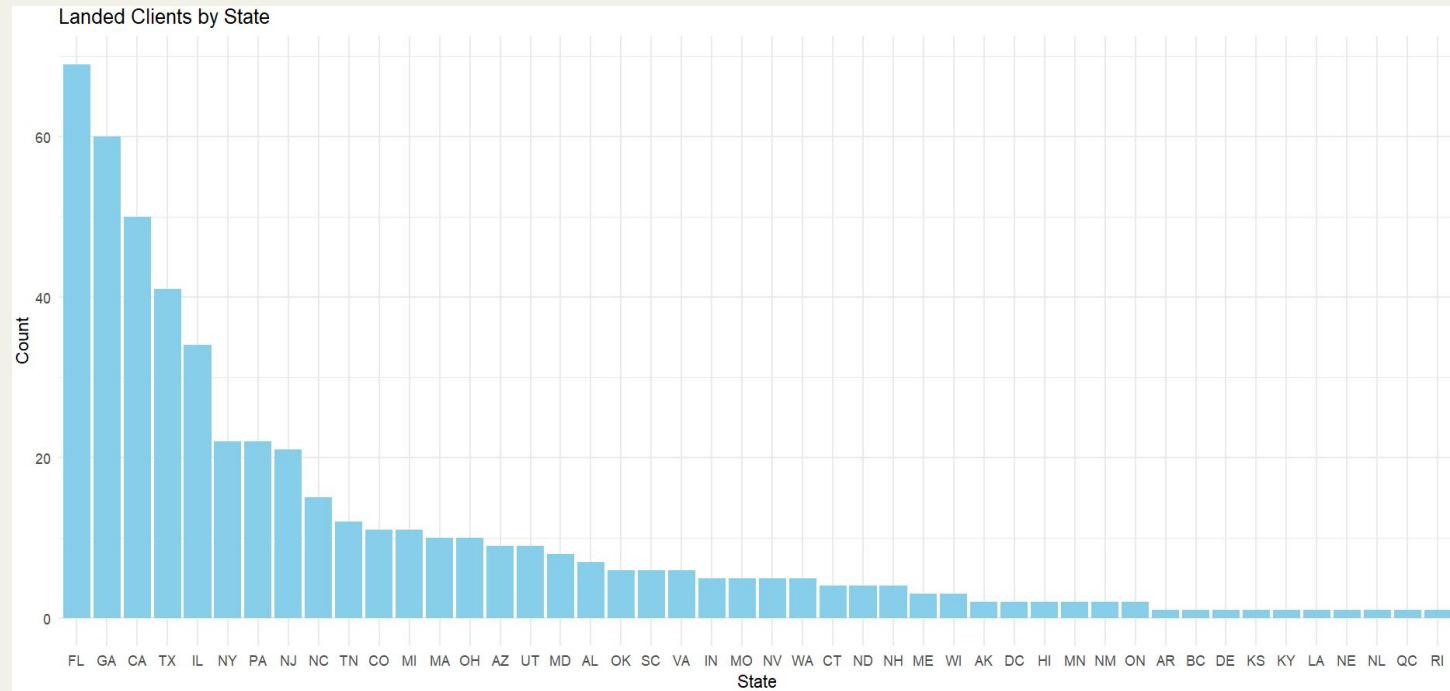
We also break down the details in the sub leads:

The top 5 events attract deals success customers are Google Adwords, Big Sky Website, Google Search, Referral - Customer, and International Franchise Association

# Leads and Contacts

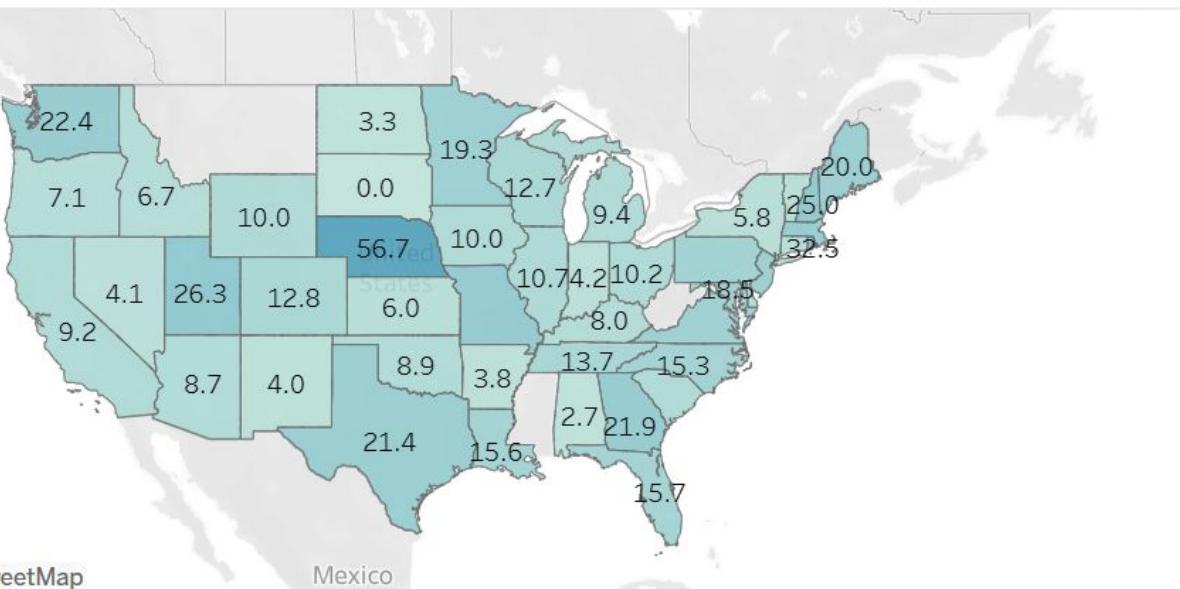


# MOST CLIENTS PER STATE FROM DEALS DATASET



# WHERE DEALS ARE MOST EFFECTIVE NATIONALLY

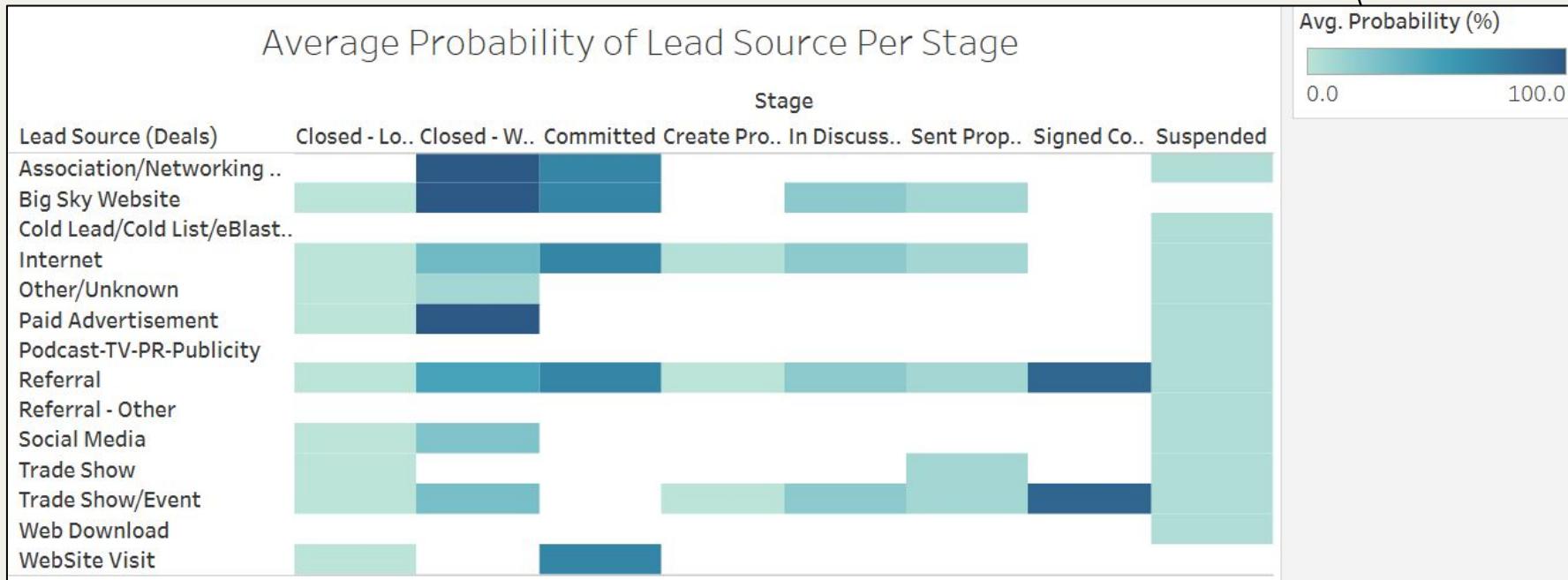
Average Deal Probability Per State



- Higher probability rates in Nebraska, Utah, and Washington.
- No regional clusters impacting deal rates.

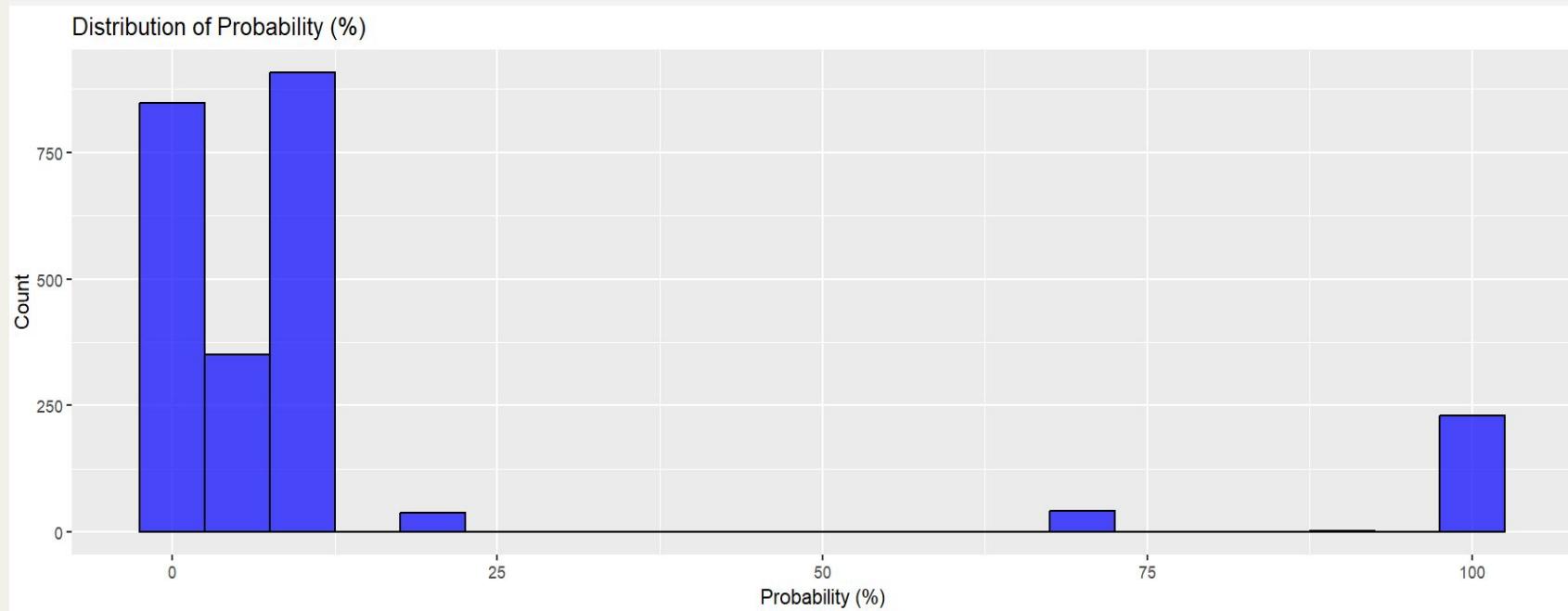
- Top 5 states by total clients (Florida, Georgia, Texas, California, and Illinois) have high to moderate deal probabilities.
- Some states have high deal probabilities but have small sample sizes.
- Clusters of high to moderate deal probabilities in the Midwest, South, and Northeast.

# WHICH LEAD SOURCES PROGRESS THE MOST?

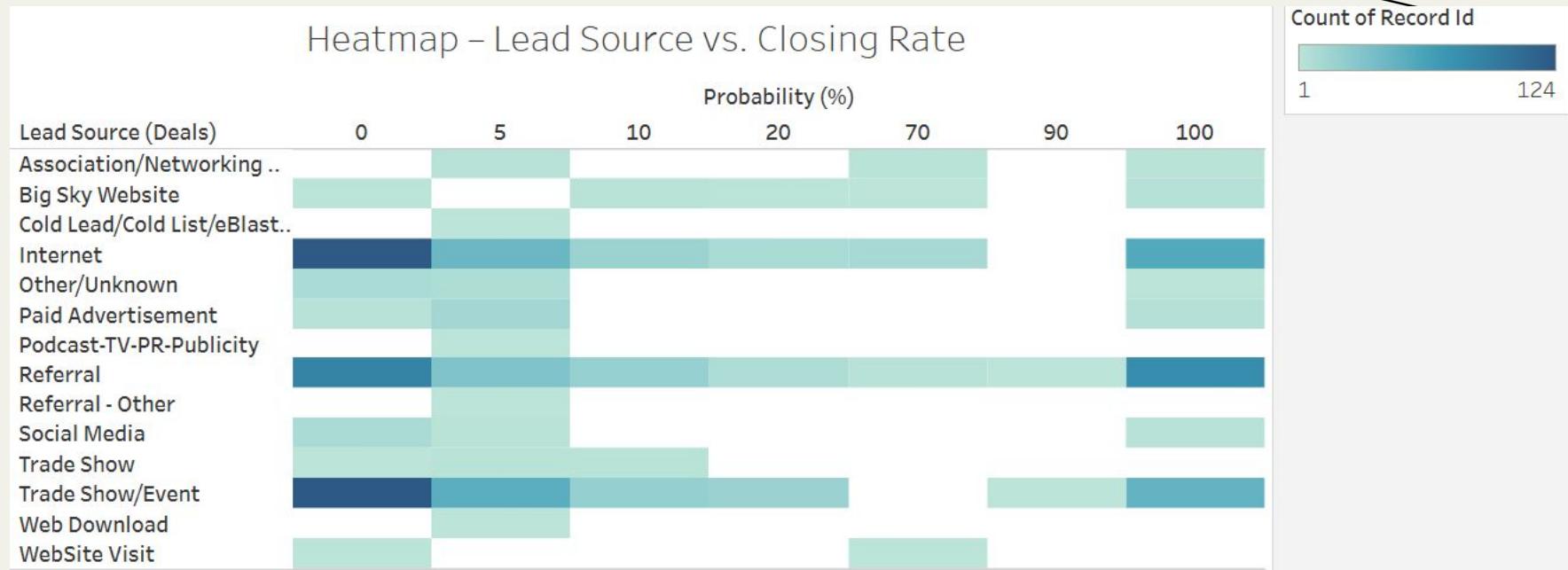


- Internet, Trade Shows, and Referral all go through each stage and have moderate to high closing probabilities.
- Big Sky Website has high commitment and closing rates.
- All podcasting and cold leads sources lead to suspensions.
- Other website visits have high commitment rates but don't lead to closing deals.

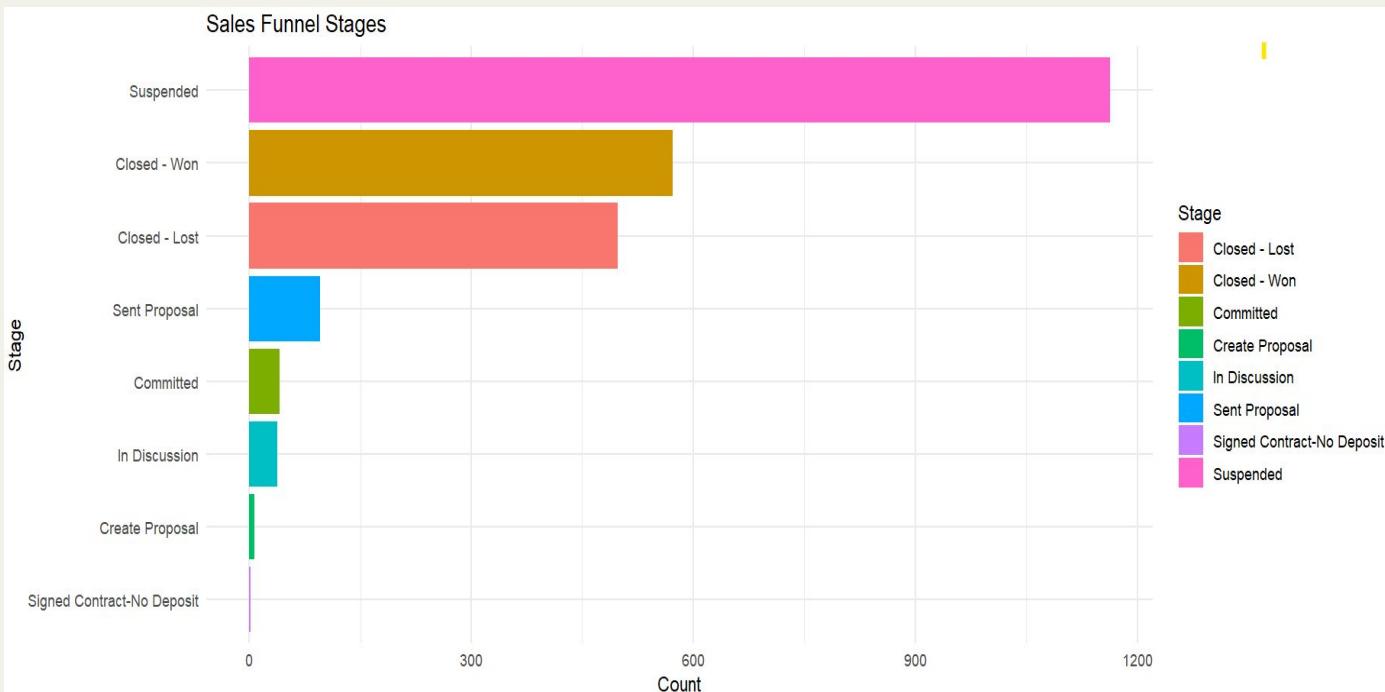
# DISTRIBUTION OF DEAL PROBABILITY PERCENTAGES



## Heatmap – Lead Source vs. Closing Rate



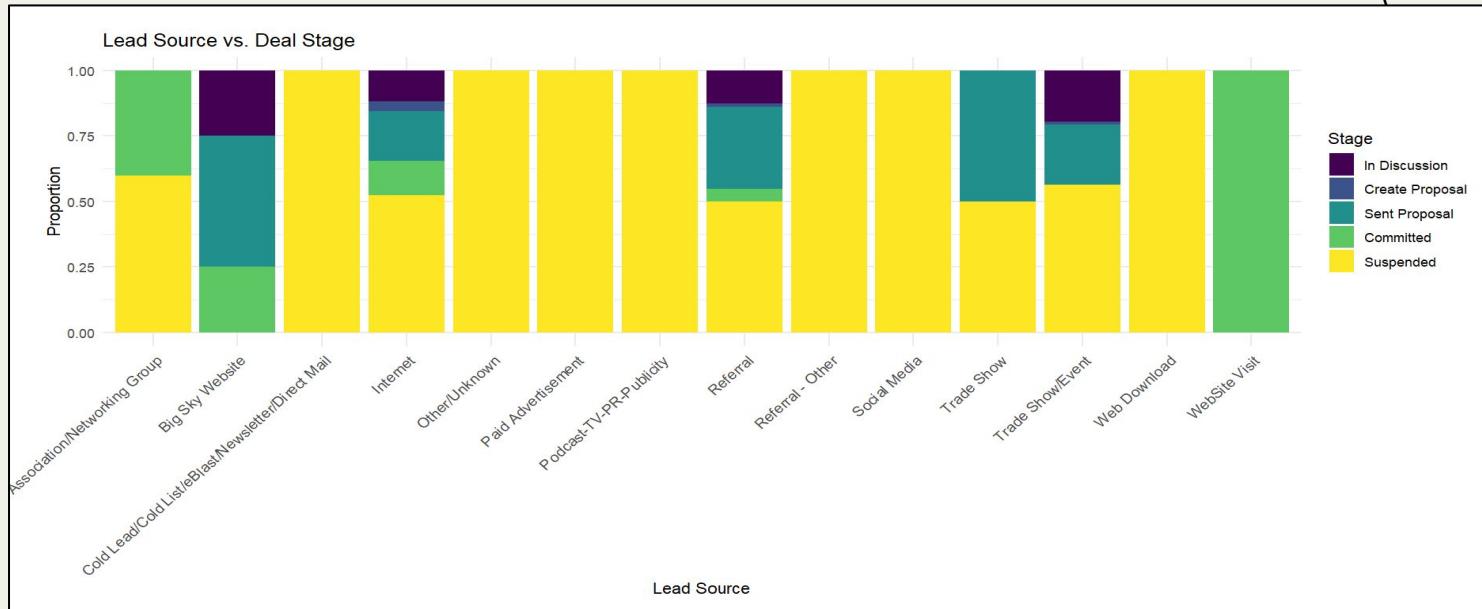
# SALES FUNNEL STAGES



## SALES FUNNEL STAGES (CONT.)

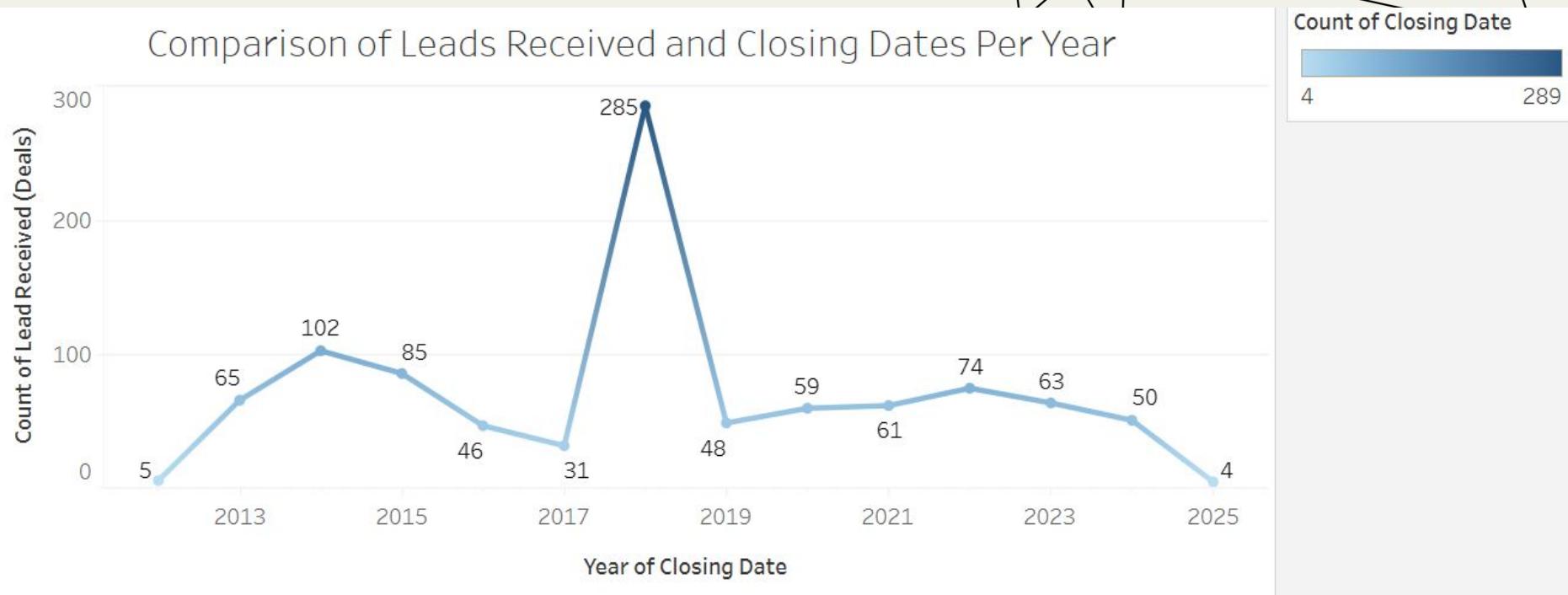
- Average sales cycle duration: 79.84 Days
- Top Lead Sources by average sales cycle:
  - Referral: 56 clients, 28.7 average sales cycle duration
  - Internet: 48 clients, 49.8 average sales cycle duration
  - Trade Show/Event: 38 clients, 45.8 average sales cycle duration
- Question to consider from graph: How can Big Sky prevent deals and proposals from being suspended?
- Average time between proposal sent and closing date is 53.85 days. Does time impact suspension rates?

# LEAD SOURCE VERSUS DEAL STAGES



- The Lead source effectiveness varies dramatically across Big Sky's sales pipeline
- The Big Sky website stands out as the most effective channel with No suspensions & high commitment rates
- Several lead sources have 100 % suspension rates, indicating these channels aren't progressing deals forward
- The priorities should be focus on lead sources that work in the future and how to improve closing rates for lead sources that are getting past suspensions.

## Comparison of Leads Received and Closing Dates Per Year



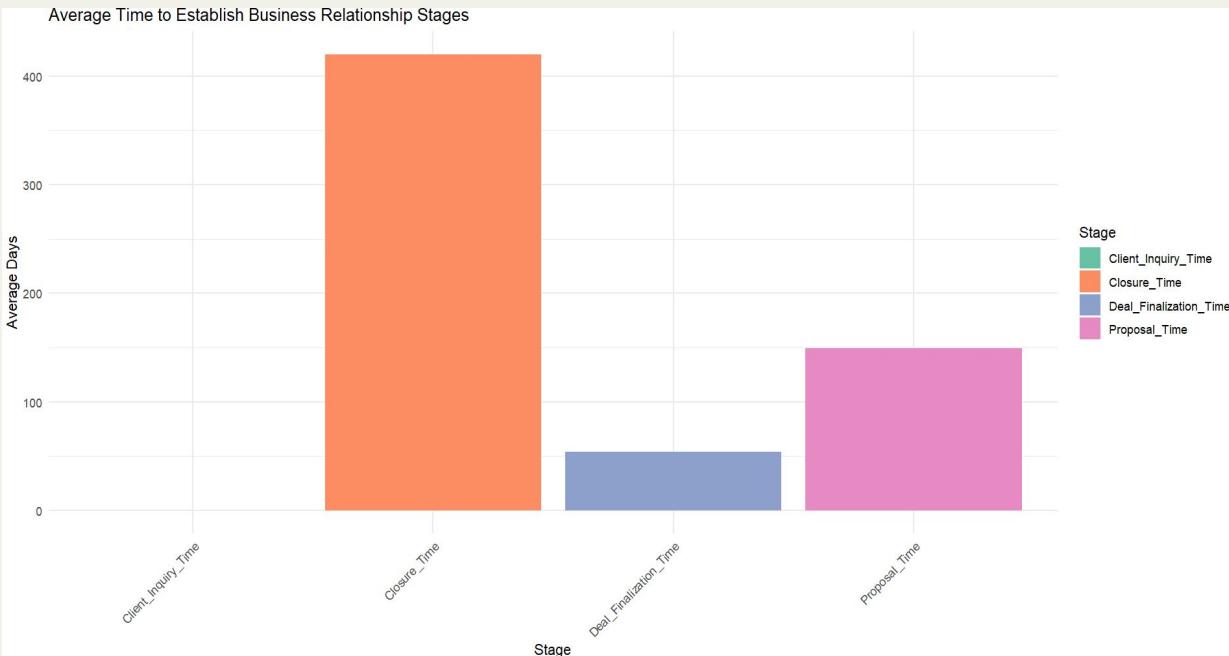
- What can we learn from 2018 in regard to leads being received followed by closing the deals?

# Deals Completed

- Filter for 'closed\_won' deals in the 'stage' column and find the actual date from lead\_received column
- 2014 reached the highest succeed deals in the history.
- The sales are growthing from 2018 to 2022. 2022 has more than 60 cases won.
- The overall trend keep growing in the last five year has more than 40 deals each year.



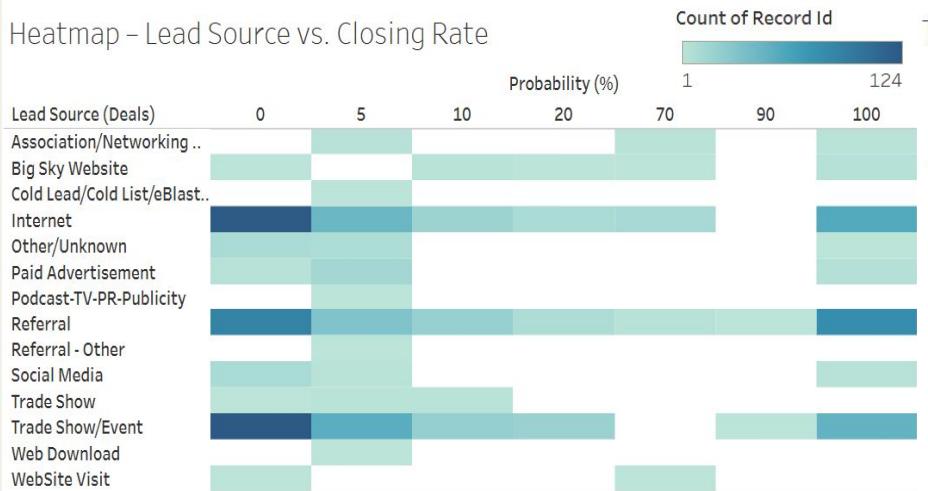
# HOW LONG DOES IT TAKE TO ESTABLISH RELATIONSHIPS?



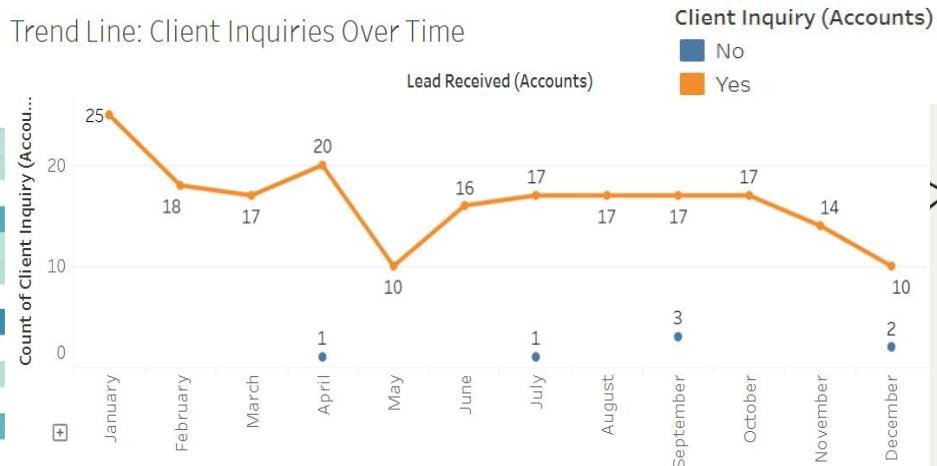
## DISTRIBUTION OF DEAL PROBABILITY PERCENTAGES (CONT.)

- Average response time from lead received to closing date is 420 days.
- Average time from the lead being received to the proposal sent date is 150 days.
- Average time from the proposal sent date to the closing date is 52 days.
- Question: Is there other steps in the deal process that make up for the other days not included in the averages between the three main stages?

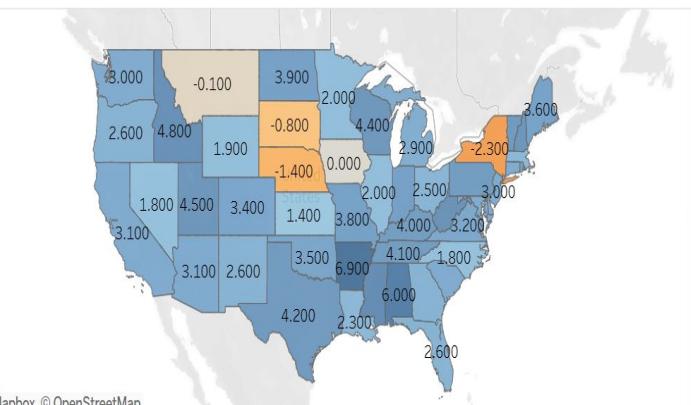
## Heatmap – Lead Source vs. Closing Rate



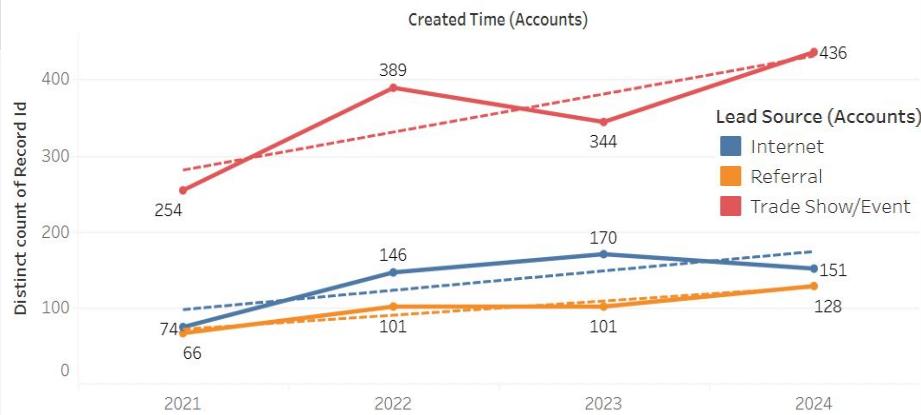
## Trend Line: Client Inquiries Over Time



## State GDP: Percent Change At Annual Rate, 2024:Q2 - 2024:Q3



## Top 3 Lead Source Accounts Created Per Year



# FRANCHISING OVERVIEW

- 2.2 % Overall Growth in franchising industry despite concerns over inflation and supply chain disruptions.
- 2024 Forecasted Growth shows overall increases in total establishments (1.9 %) and total franchise output (4.1 %).
- Key sectors in 2024 predictions that have been impacted by consumer behaviors include personal services, quick service restaurants, and commercial & residential services. (Barraan, J, 2024).

Sector	2023 Establishments	2024 Forecasted Growth	2023 Output (\$ Billion)	2024 Forecasted Growth
Business Services	102, 540	1.8 %	\$103.6	3.8 %
Commercial & Residential Services	79, 249	2.0 %	\$57.2	4.6%
Lodging	35, 850	0.9 %	\$93.0	4.5 %
Personal Services	120, 882	3.0 %	\$42.3	7.3 %
QSR's	195, 507	2.2 %	\$287.6	4.7 %
Real Estate	69, 083	0.7 %	\$63.0	2.8 %
Retail Food Products & Services	168, 446	2.1 %	\$133.6	3.1 %

Source: *FRANdata, 2024 Franchising Economic Outlook*

# GLOBAL FRANCHISE MARKET: 2023-2027

- Increases in year-to-year growth rates and compound annual growth rate (CAGR) over the next few years.
- Main driver of the franchising sector is an increase in construction activities.
- Enhancements in in-store retailing has become popular in franchising markets.
- Challenges include brand quality, operational costs, and employee turnover rates. (Technavio, 2023).



# FRANCHISE INTEREST SHARE SHIFTS PER STATE FROM Q3 TO Q4: 2024

- Highest rate changes among the states are Texas, Illinois, and New Jersey while California has the biggest loss.
- Metrics based off franchisee searches which is usually where they reside.
- Weather events like Hurricane Helene and regional wildfires could have potentially impacted certain states performance in Georgia, North Carolina, and California. (Franchise Insights, 2024).

## States with the largest CHANGES in Franchise Interest

Percentage Change from Q3 2023 to Q3 2024

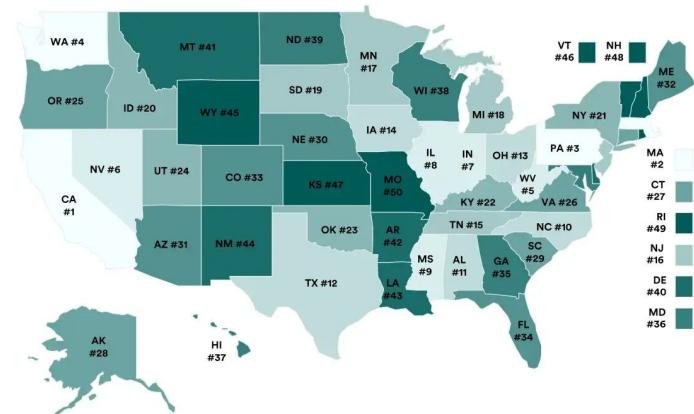
©FranchiseInsights.com, November 2024



# TOP FAILURE RATES OF SMALL BUSINESSES BY INDUSTRY

## States with the Best Business Survival Rates (2023)

Rankings are based on a composite score of business survival factors: surviving establishments per capita, survival rates since first year of formation, survival rates of previous year's survivors, and average employment of survivors.

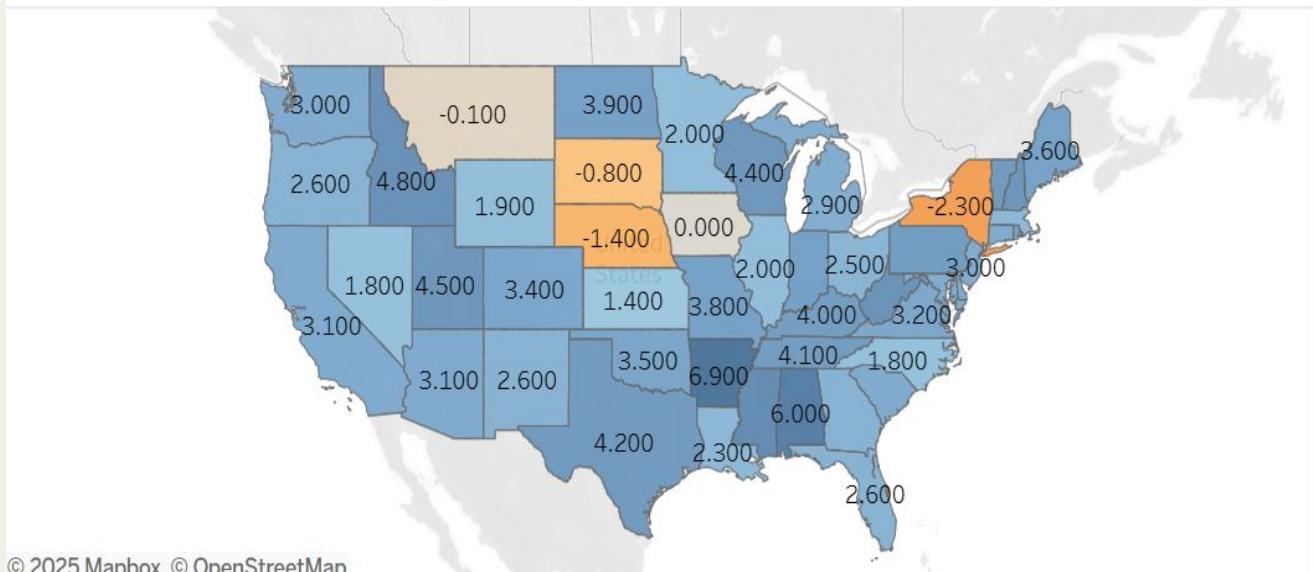
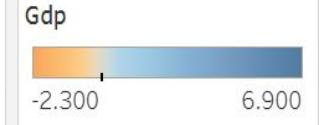


Reference: Bawden-Davis, Trademark Engine (2023).

Industry	1-Year Survival Rate	5-Year Survival Rate	10-Year Survival Rate
All businesses (Total private sector)	79.60%	50.60%	34.70%
Agriculture, forestry, fishing, and hunting	87.50%	66.20%	50.50%
Utilities	80.70%	56.60%	45.70%
Manufacturing	82.60%	57.70%	43.60%
Real estate and rental and leasing	83.90%	58.70%	42.20%

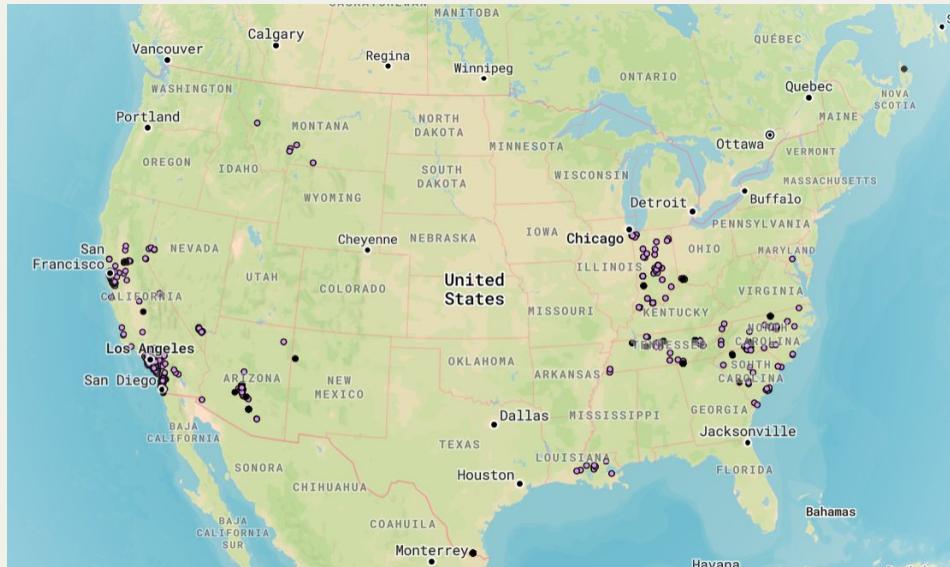
Reference: Commerce Institute (2024).

## State GDP: Percent Change At Annual Rate, 2024:Q2 - 2024:Q3



- Stronger regions in the southeast, especially in Alabama, Arkansas, and Tennessee.
  - Parts of the Midwest and New York show negative returns for the quarter.
  - How can these recent numbers affect approaches toward franchising deals in the future?
    - In economics, Gross Domestic Product (GDP) is the total monetary value of all final goods and services produced within a country's borders during a specific period, typically a year, and is a key indicator of a nation's economic health.
    - Franchising significantly impacts the economy by supporting GDP through billions in products, services, and payroll, creating jobs, and contributing to local economies through tax revenue and community involvement.

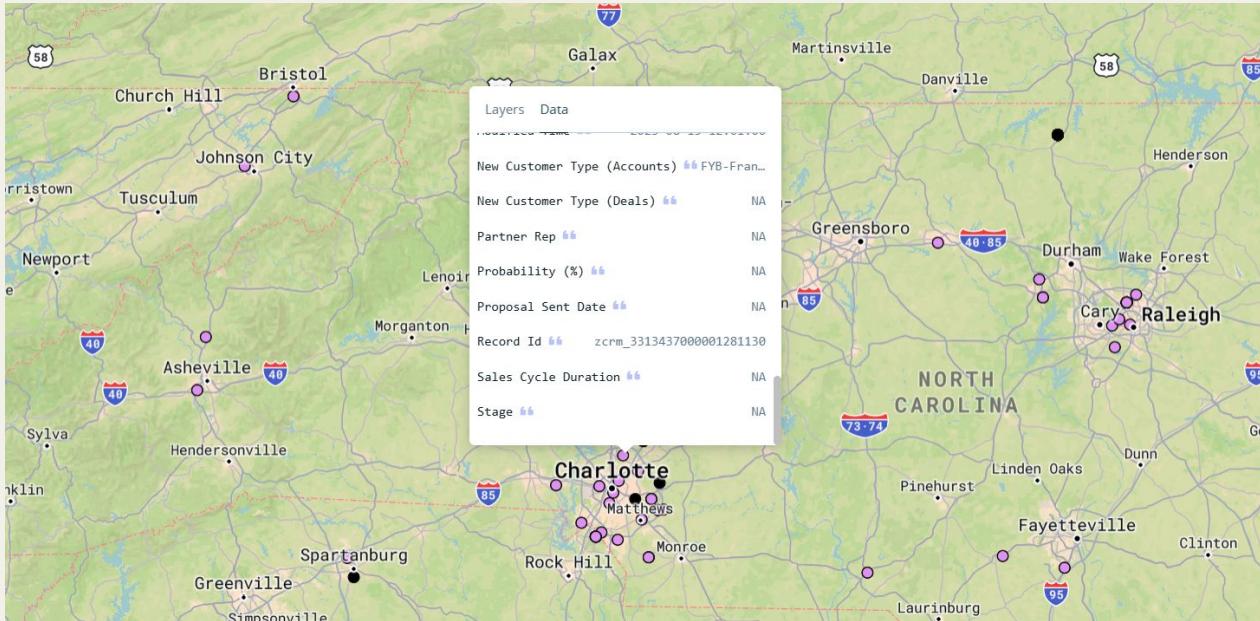
# NEW CUSTOMER TYPES IN ACCOUNTS BY STATE USING MAPBOX PROGRAM



- Black points show accounts with no new customer types and purple points contain a new customer type.
- Map shows clusters of the accounts in California and Arizona, Indiana, and the Carolina's in the southeast.
- Bigger markets with new customer types presence include San Francisco, Los Angeles, and Charlotte.

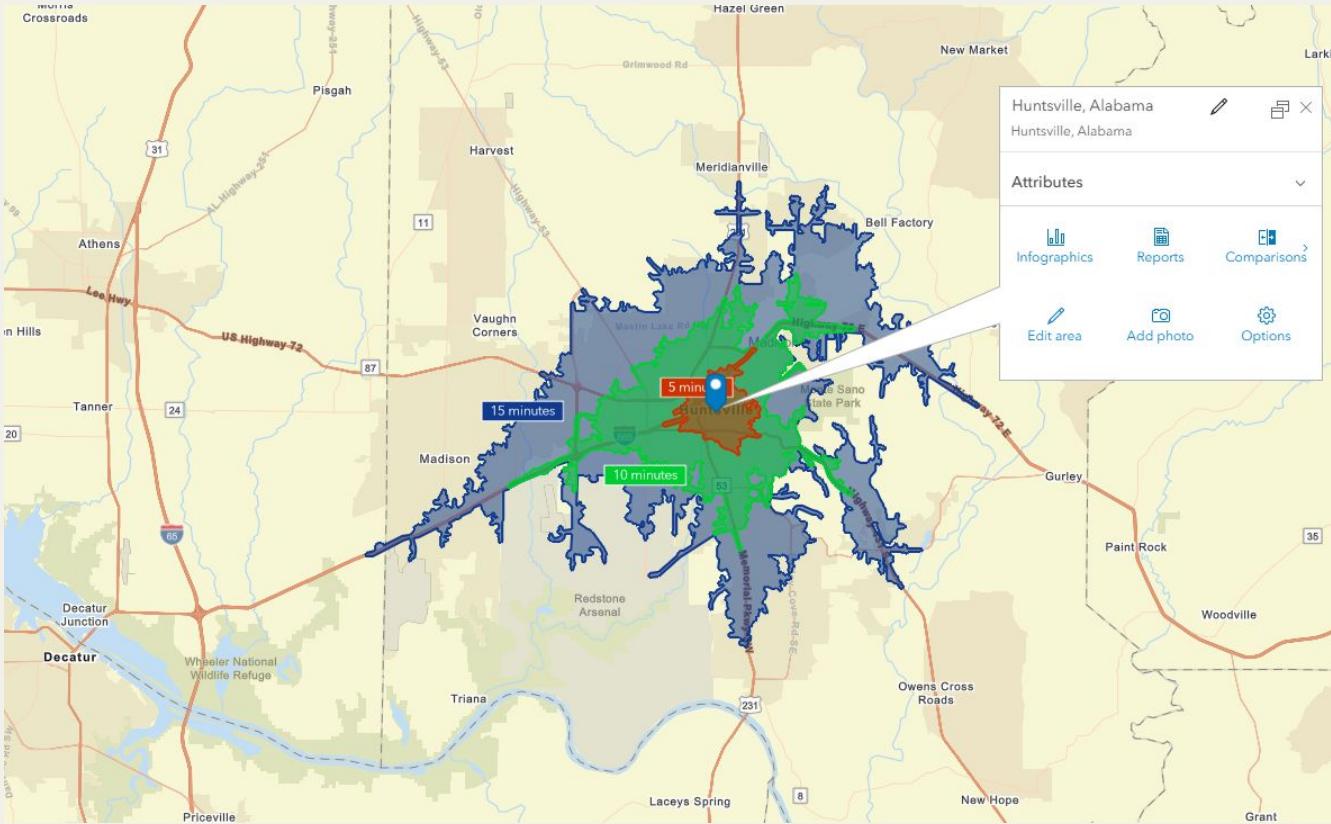
# NEW CUSTOMER TYPES IN ACCOUNTS BY STATE USING MAPBOX PROGRAM (CONT.)

- Program features include dataset information on each point on map that is selected.
- Tool for franchises to find potential markets and client trends from utilizing past data.



# Huntsville, AL

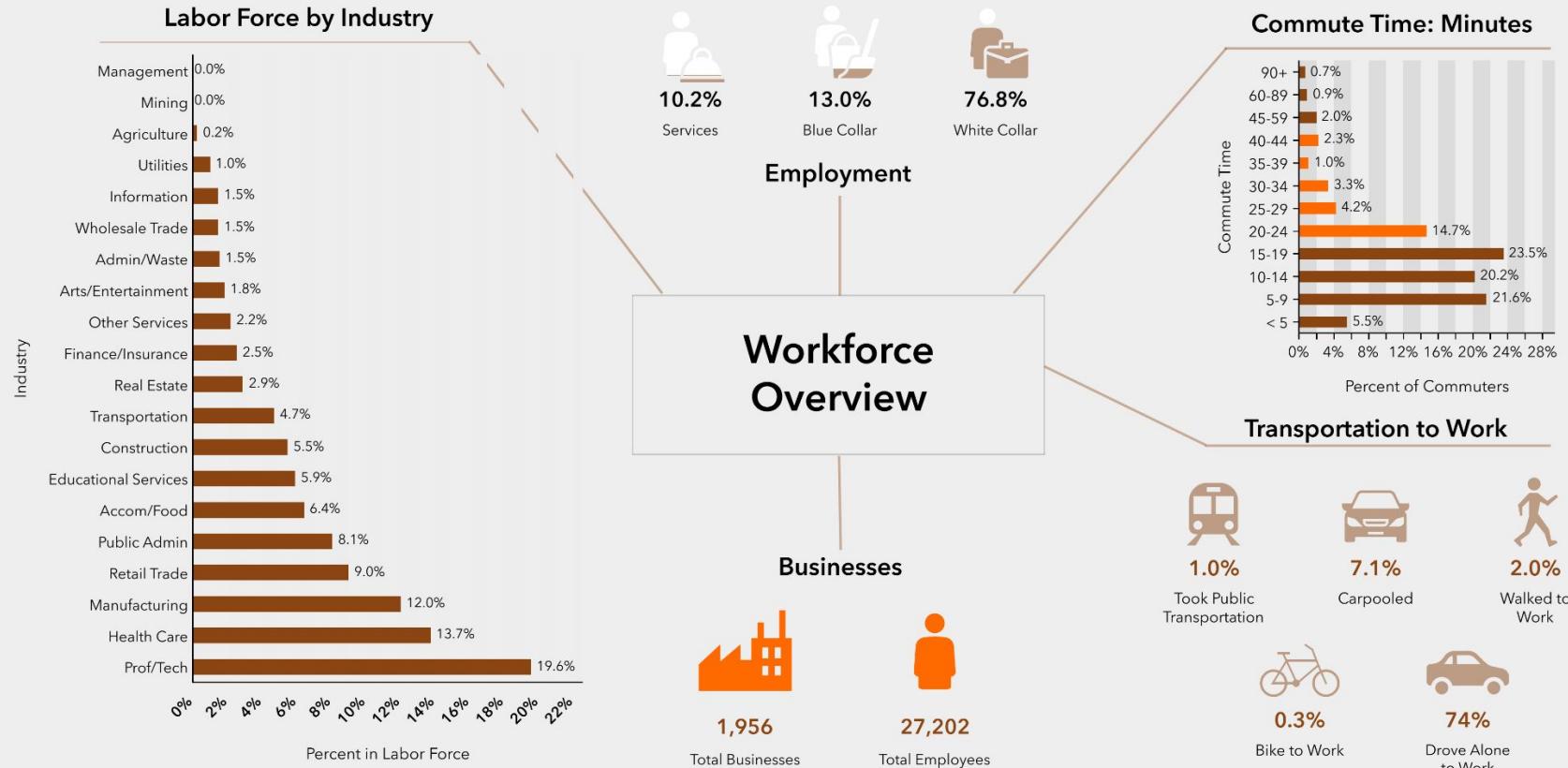
This slide and the following slides are from the Business Analyst app which is an additional feature available on ArcGIS.



# Economic Development Profile

Huntsville, Alabama

Drive time of 5 minutes



## Home Ownership



### Home Value

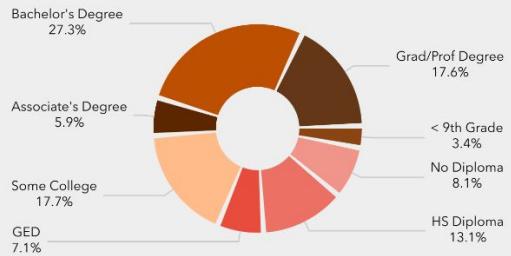


### Household Income



## Community Overview

### Educational Attainment



### Tapestry segments

1E	<b>Exurbanites</b> 1,183 households	20.5% of Households	▼
8B	<b>Emerald City</b> 943 households	16.3% of Households	▼
9F	<b>Social Security Set</b> 747 households	12.9% of Households	▼

### Key Facts

<b>6,625</b>	<b>78</b>	<b>1,035</b>
Total Housing Units	Housing Affordability Index	Households Below the Poverty Level
<b>40.7</b>	<b>\$58,557</b>	<b>12,858</b>
Median Age	Median Disposable Income	Total Population
<b>102</b>	<b>55</b>	<b>233</b>
Wealth Index	Diversity Index	Total Crime Index

# NEXT STEPS/RECOMMENDATIONS

- Look at how the most effective lead sources can impact client inquiries.
- Evaluate how different regions and states can affect long-term growth.
- Opportunity to improve internal processes.
- Implementation of Data Governance.
- The rise of new leads.





## NEXT STEPS



- 01** Designing Customer Management Accounts
- 02** Data Collection methods to gain important metrics
- 03** Creating interactive dashboards for data insights
- 04** Presenting a plan and solution for long term growth

# CONCLUDING THOUGHTS

Opportunity to  
improve  
internal  
processes

+

Implementation  
of Data  
Governance

+

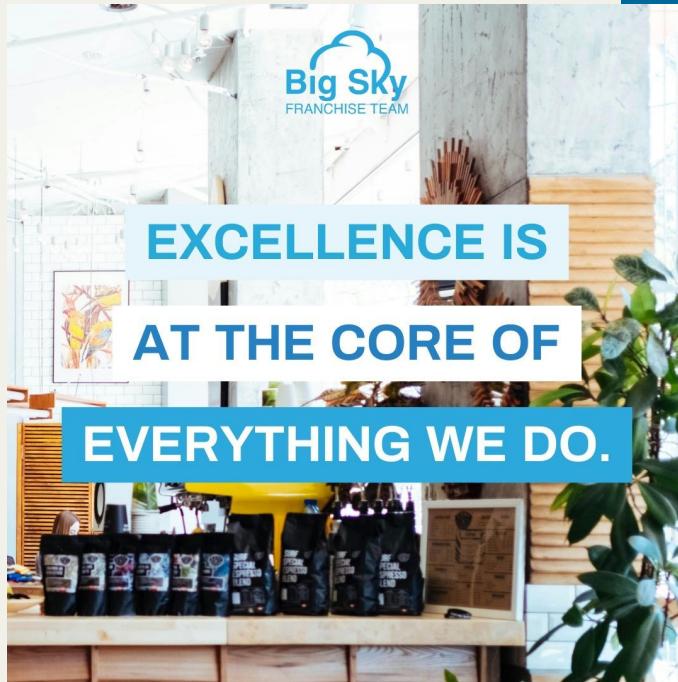
Forward-focus

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The rise of new  
leads



# Thank You!



# REFERENCES

- Barraan, J. (2024, Apr. 18th). *U.S Franchising Statistics Report: 2023 Recap and 2024 Forecast*. Franchise Clues. <https://www.franchiseclues.com/statistics>
- Technavio (2023, Oct. 12th). *Franchising Market size to increase by USD 1,634.71 billion during 2022-2027, Increasing construction activities to drive the growth – Technavio*. Technavio. <https://www.prnewswire.com/news-releases/franchise-market-size-to-increase-by-usd-1-634-71-billion-during-2022-2027--increasing-construction-activities-to-drive-the-growth---technavio-301953871.html>
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- Commerce Institute. (2024). *What Percentage of Small Businesses Fail? 2024 Data Reveals the Answer*. Commerce Institute. <https://www.commerceinstitute.com/business-failure-rate/>
- *Demographic Mapping & Site Selection Software | ArcGIS Business Analyst*. (n.d.). <https://www.esri.com/en-us/arcgis/products/arcgis-business-analyst/overview>