SalesPoint Retail Expansion Analysis

Identifying High-Growth Potential in U.S. Counties

OVERVIEW

SalesPoint is a medium-sized retail chain specializing in quality everyday goods, from groceries to household items. The chain operates at a regional level in Canada, but wishes to expand into the USA following its success in recent years.

The analyst's responsibility for this case study is to use the "Income and Urban VS Rural For Each County in USA" dataset to achieve the following aims:

1. **Regional Trends**: Which regions of the U.S. show the highest potential for profitable store openings?
2. **Evaluate Market Potential**: Identify counties with the best income and population profiles for new stores.
3. **Optimize Expansion Strategy**: Recommend high-potential counties for new store openings based on data-driven insights.

DATA & METHODS

SalesPoint is a fictional retailer made for the purposes of this case study.

Data for this case study was obtained from [this Kaggle link](), and was originally sourced by the US Census Bureau. All analysis and graph creation was conducted using a copy of the original data in Excel, barring a few visualisation adjustments made in Canva.

A number of formatting actions were taken to make the data more presentable. This includes renaming columns, ensuring all data existed in the appropriate format.

For cleaning the data, duplicate rows were deleted, and erroneous rows were removed. For example, two counties had unreported *Median Income* information, and as such they were deleted from the dataset to avoid skewed analysis and results.

Modifications made to assist analysis were as follows:

- Added a *Regions* Column. This column takes states and classifies them into a US Census Bureau region per the following divisions (Note - Puerto Rico does not fall into any US Census Bureau region, so was analysed outside these classifications):
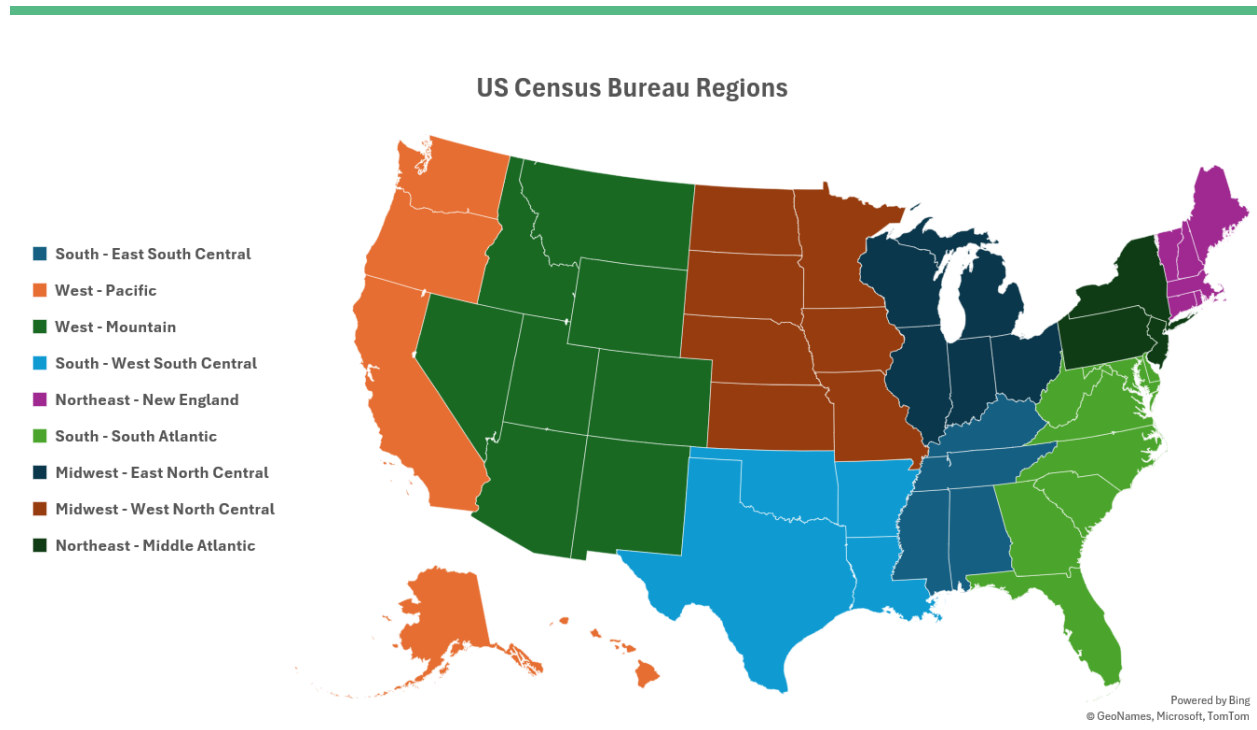
Figure 1 - US Census Bureau Regions

- Added a *Desirability Score* Column. This serves as an additional way to assess the quality of counties/states for expansion. It is calculated by multiplying *Population* and *Median Household Income*, which is then divided by 1,000,000 (for presentation purposes), for each county.
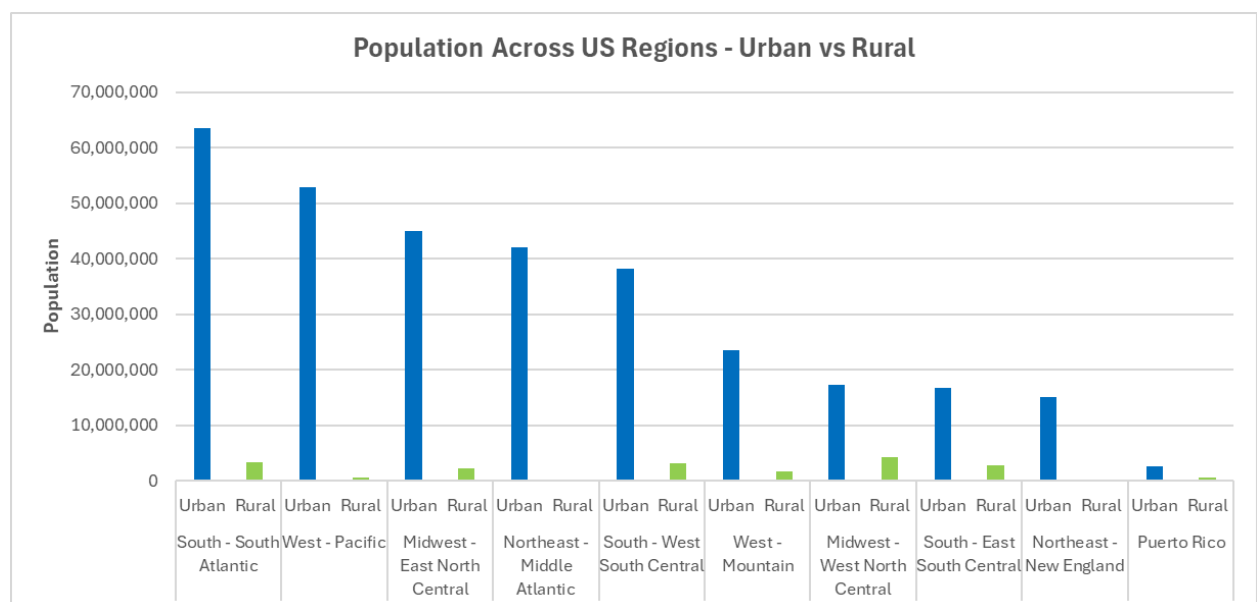
RESULTS

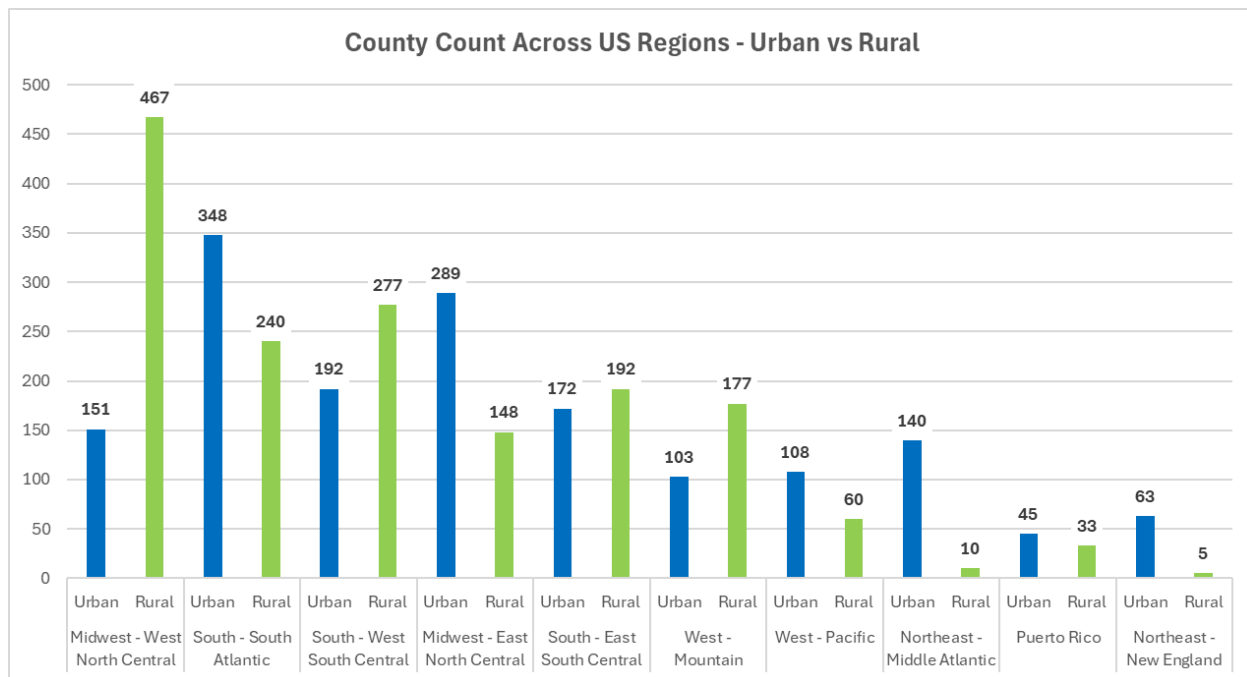*Figure 2 - Population Across US Regions - Urban vs Rural*

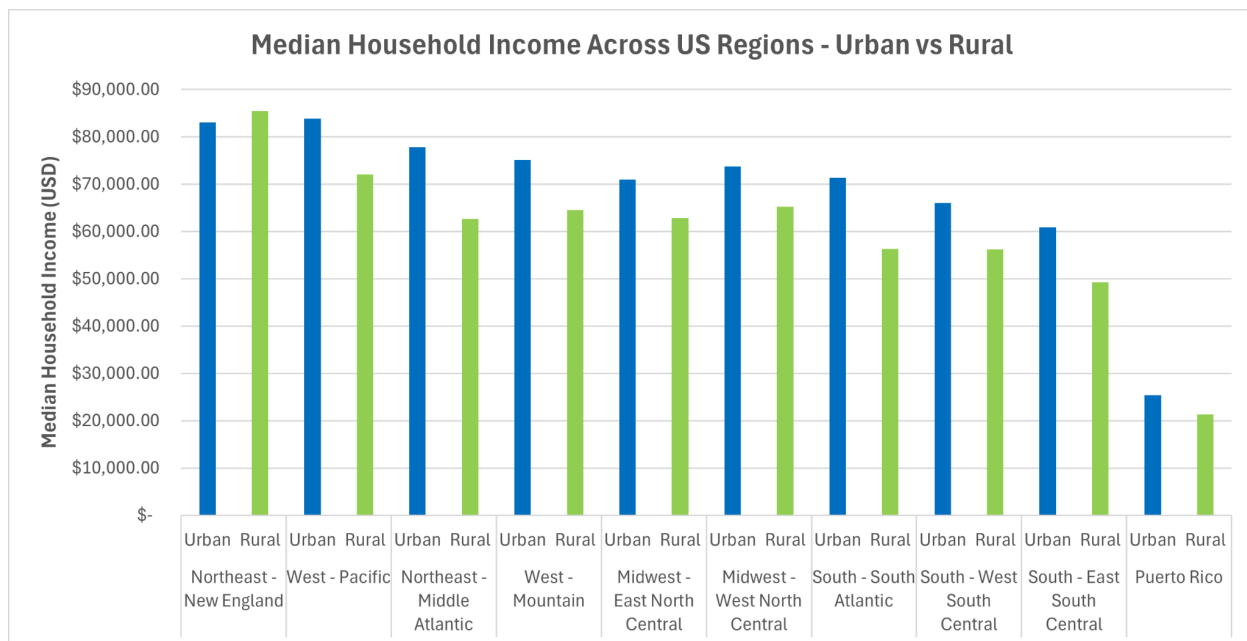*Figure 3 - County Count Across US Regions - Urban vs Rural*

Figure 4 - Median Household Income Across US Regions - Urban vs Rural

Figures *2, 3* and *4* explore various variables and how they differ across regions and depending upon the 'Urban' or 'Rural' classification.

On the whole, we find the following to be true:
- Populations in every region are far more skewed towards urban counties than rural ones.
- Urban counties generally possess higher median incomes than rural ones. With this in mind, **SalesPoint** would benefit from moving into an urbanised area, where spending power is greater.

- *Figure 3* suggests that there is no correlation between 'County Count' and population in a given region.
- There appears to be a loose inverse correlation between 'County Count' and 'Median Household Income' from *Figure 3* and *Figure 4*. The greater the number of counties, the lower the median income in urban and rural areas.
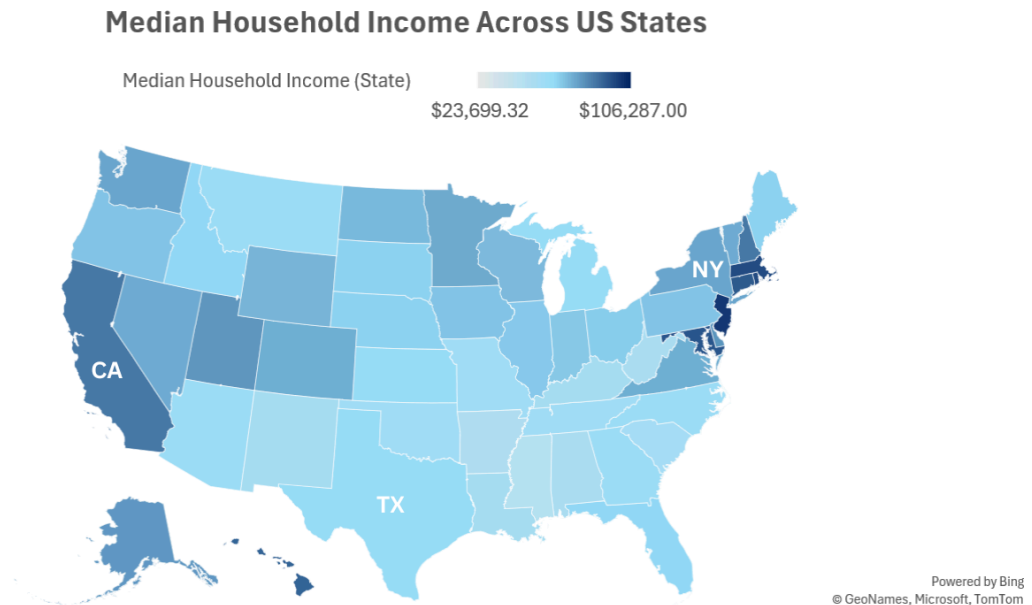
Median Household Income Across US States

Median Household Income (State)

$23,699.32 $106,287.00

Figure 5 - Median Household Income Across US States

Desirability Score =

Median Household Income x Total Population

1,000,000

Desirability Score Across US States

Average of Desirability Score
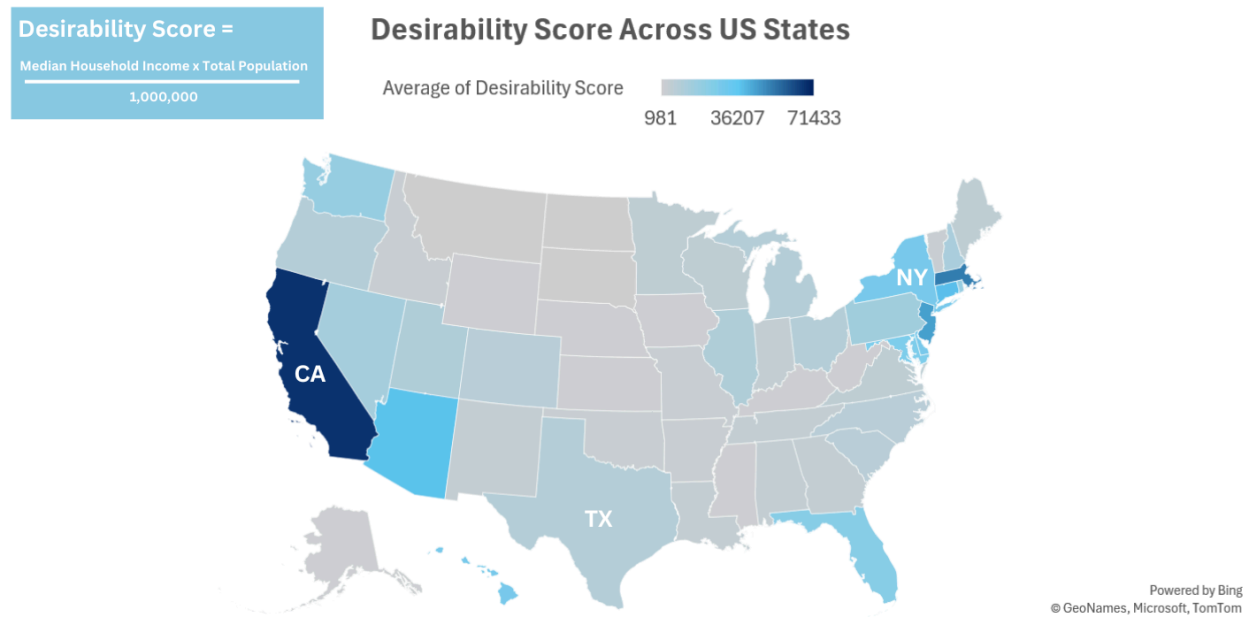
981   36207   71433

Figure 6 - Desirability Score Across US States

Figures *5* and *6* map the variables of *Median Income* and *Desirability Score* to visualise trends across the USA.

From this, we can concur that:
- The standout regions in the assessed metrics appear to be those towards the west and northeast of the United States. When assessed alongside *Figure 4*, we find that the region graph supports this notion.
- The state of California, in particular, stands out in *Figure 6*, suggesting that it has a large, high-earning population. This would be an optimal location for expansion.
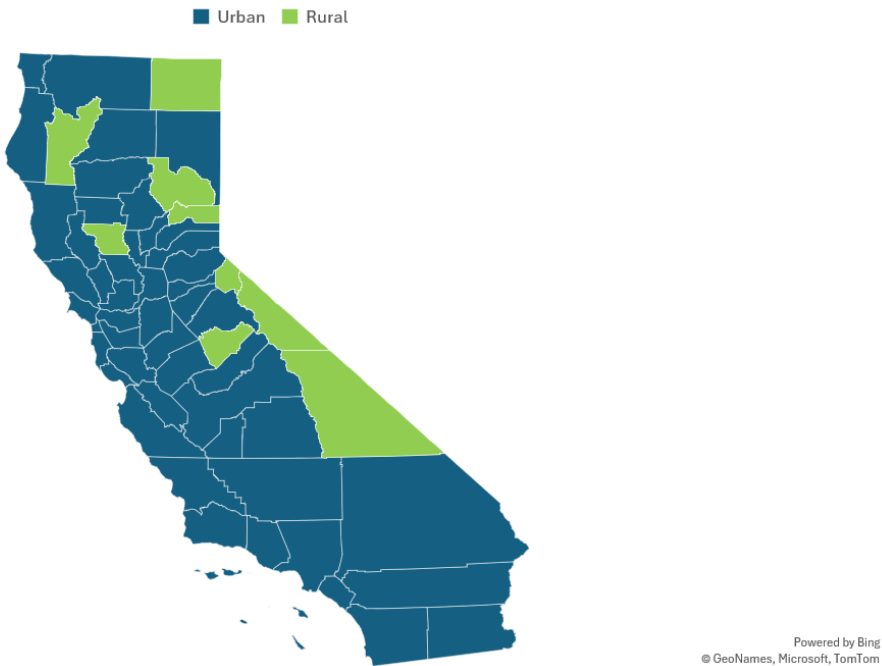
Urban-Rural Classification of California Counties

Figure 7 - Urban-Rural Classification of California Counties

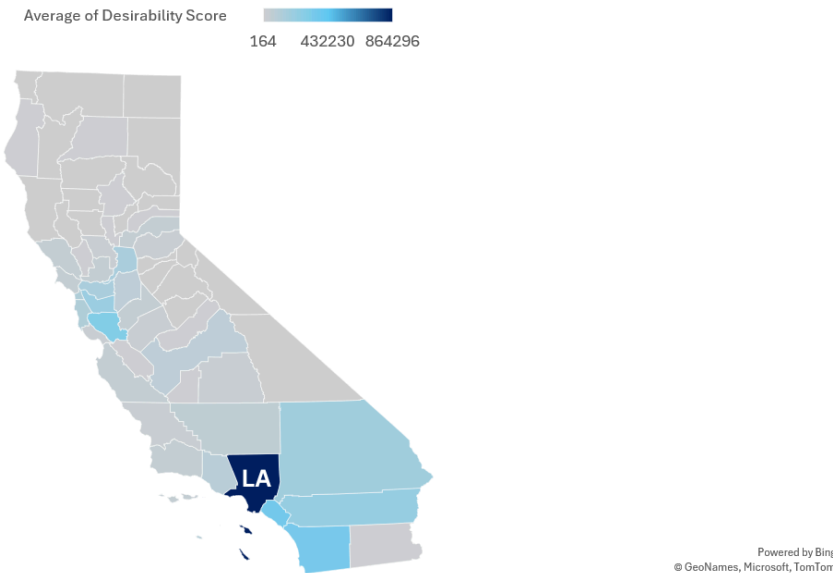**Desirability Score Across California Counties**

Figure 8 - Desirability Score Across California Counties

Figures *7* and *8* move into the individual state level, exploring data values in California to see what can be uncovered by mapping information on counties.

In this instance, we can say that:

- *Figure 7* implies that Highly urbanised states such as California, which stood out in *Figure 5* and *Figure 6*, appear to be the best for initial expansion.
- *Desirability Score* values suggest that high-population urban areas, such as Los Angeles County in *Figure 8*, are the best counties to break into for access to their large, well-paid populous. Such regions also present the best places to build transport and distribution chains for further expansion into nearby counties/states.

CONCLUSION

Having conducted a thorough analysis of the data, **SalesPoint** is now in a far better position to make an informed decision on their expansion options.

The following recommendations are given based on the assessed visualisations:

1. **Priorise Expansion Into the 'West - Pacific' Region**
    a. *Figure 2* - Second-highest population of assessed regions
    b. *Figure 4* - Second-highest median income of assessed regions
    c. *Figure 6* - States on the Western Seaboard all stand out for their Desirability Scores
2. **Prioritise Expansion Into Urban Counties**
    a. Access to a larger, better-paid population
    b. Greater connectivity and scope for transport/distribution chains
3. **Priorise Expansion Into 'Los Angeles County'**
    a. Urban county with a large population and a stand-out Desirability Score (*Figure 8*) within the state of California
    b. Surrounded by counties with relatively high Desirability Scores (*Figure 8*), suggesting scope for further expansion in the near future