



Red Planet Consulting

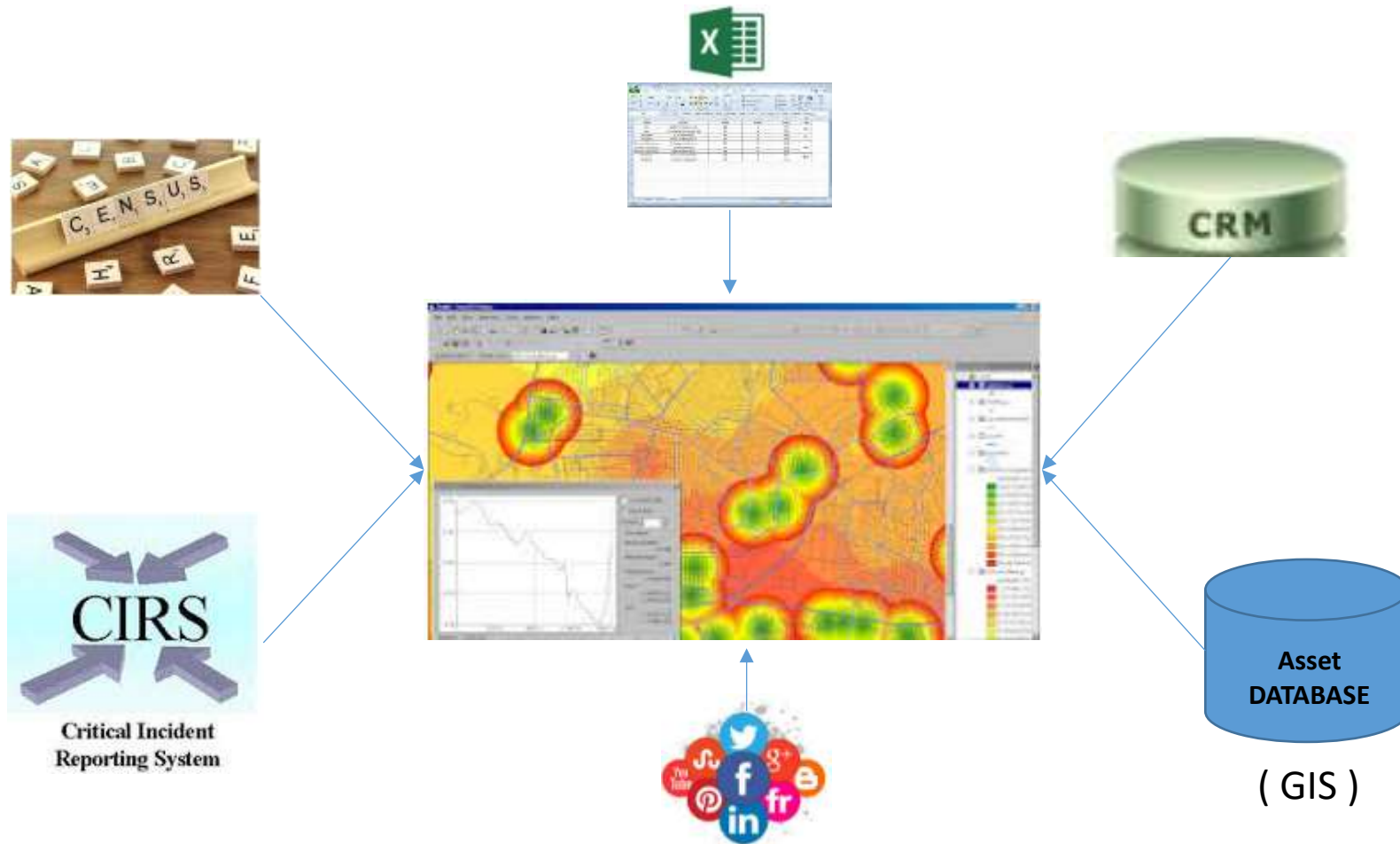
GIS Consulting Services

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Spatial Analytics in Utilities

WHAT

Viewing and Analyzing a utilities Enterprise Data within a Spatial Context.



NOT A NEW CONCEPT



WHY SPATIAL ANALYTICS IN UTILITIES

REGULATORY CHANGES

ASSET SAFETY

PROACTIVE ASSET RISK AND INTEGRITY MANAGEMENT

RISK MITIGATION

USAGE PATTERNS

FINANCIAL IMPACT

COST STRUCTURE

CHARACTERISTICS OF A SPATIAL ANALYTICS APPLICATION

IS MAP DRIVEN

LIGHTWEIGHT

ABLE TO PULL DATA FROM DISPARATE SYSTEMS

ABLE TO GENERATE STATISTICAL INFORMATION

EMBED STATISTICAL INFORMATION ON A MAP

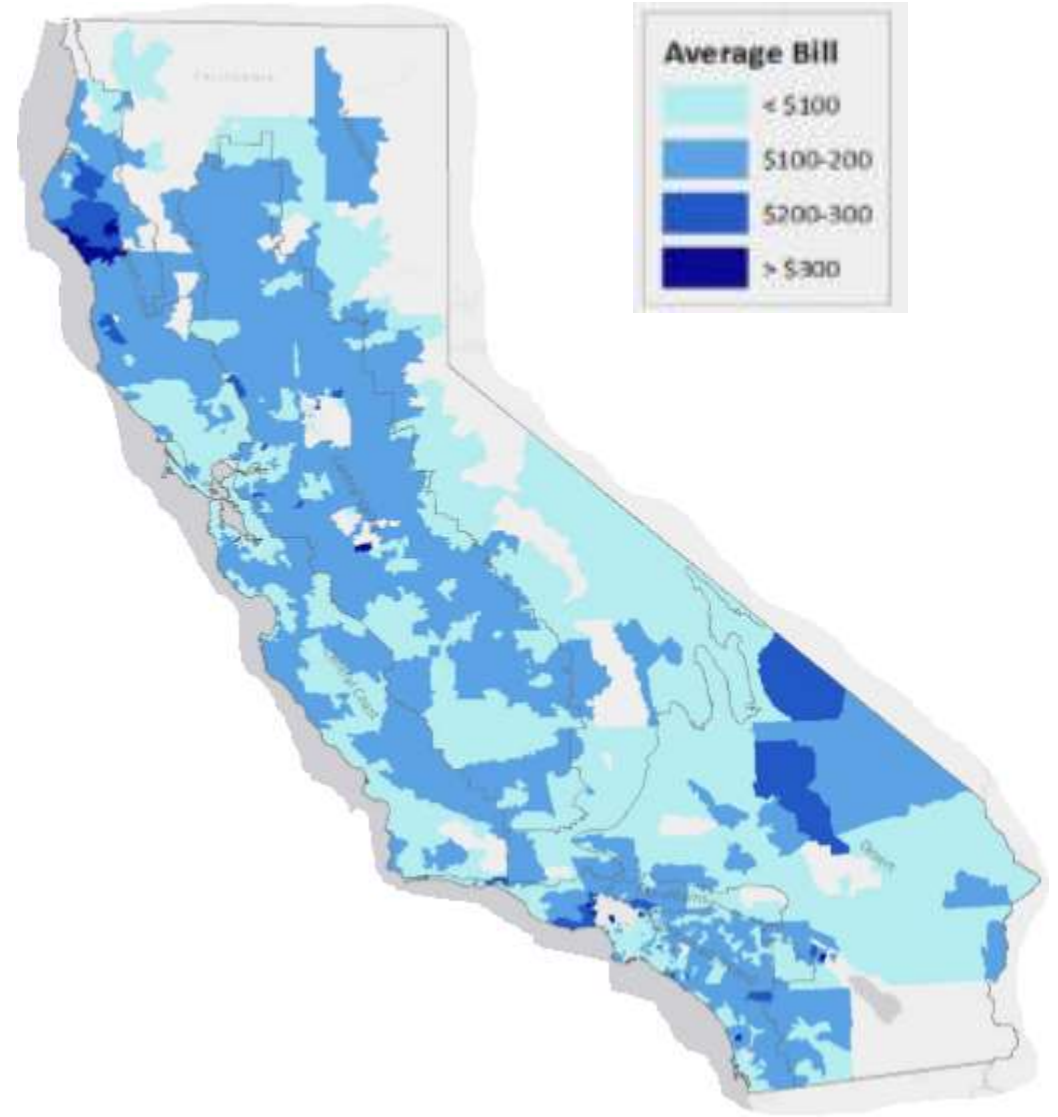
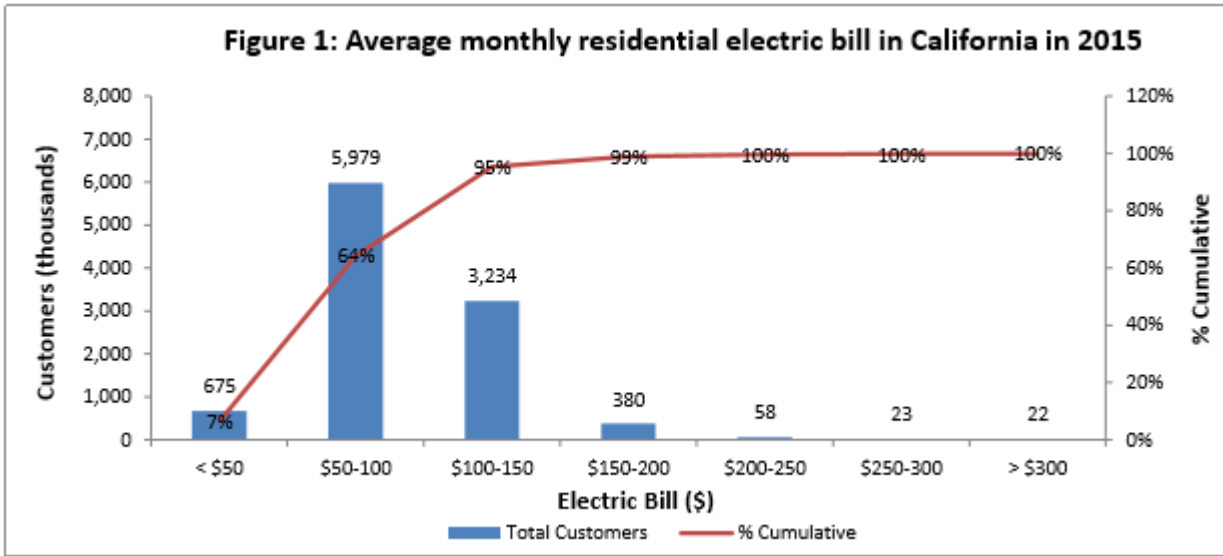
PUSH ANALYSIS RESULTS OVER WEB

PROVIDE INSIGHTFUL VISUALIZATIONS

CASE STUDY

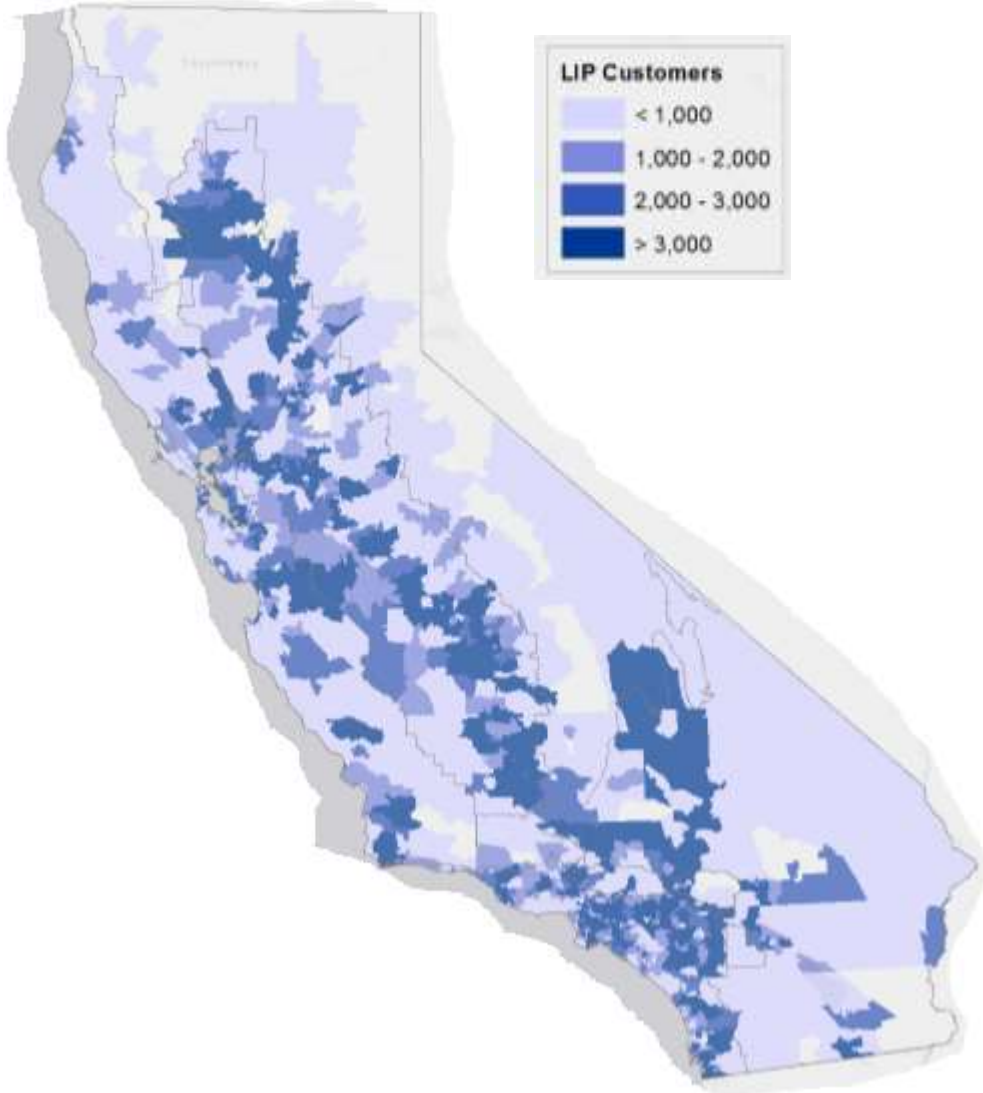
CALIFORNIA'S AVERAGE MONTHLY ELECTRIC BILL BY ZIP CODE

Figure 1: Average monthly residential electric bill in California in 2015

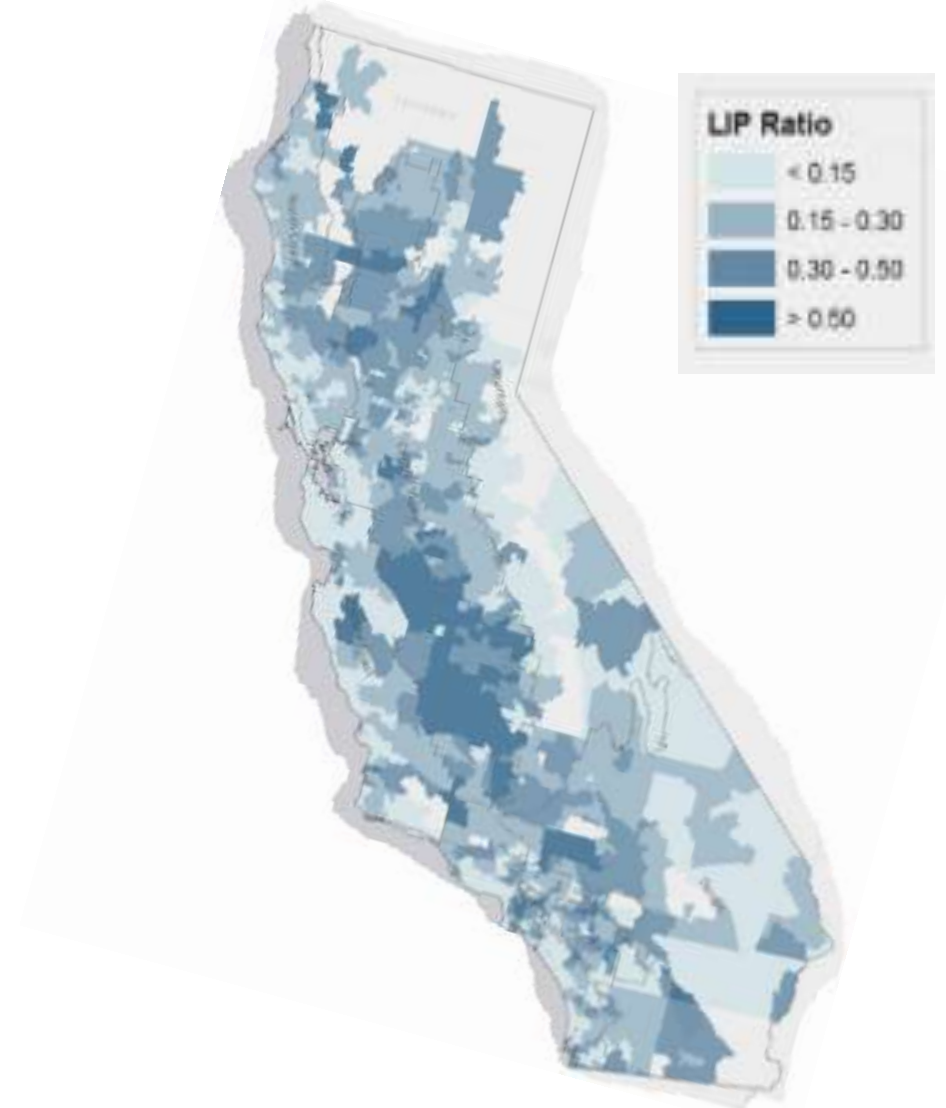


CASE STUDY

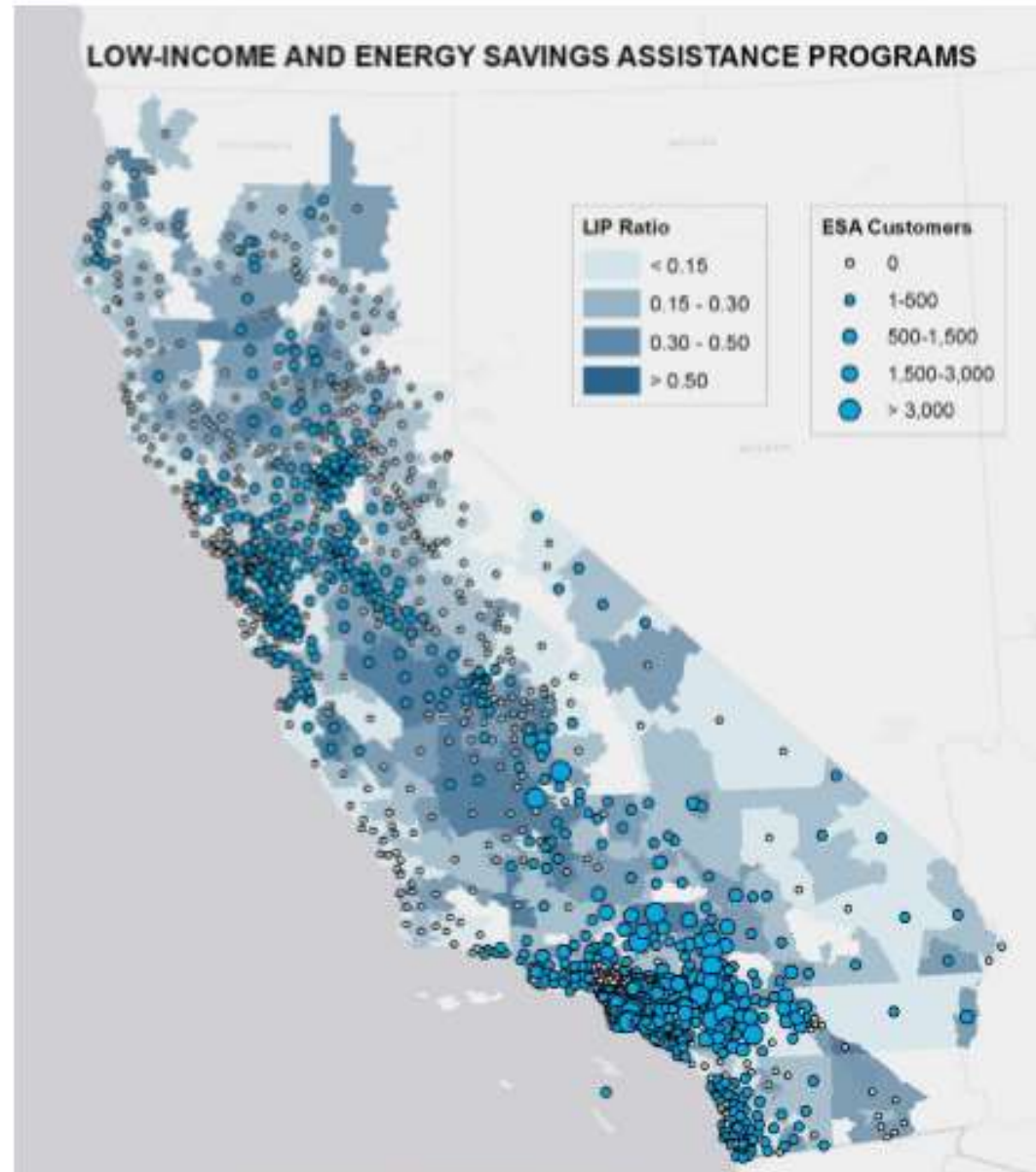
ENERGY LOW-INCOME PROGRAM (LIP) CUSTOMERS IN CALIFORNIA

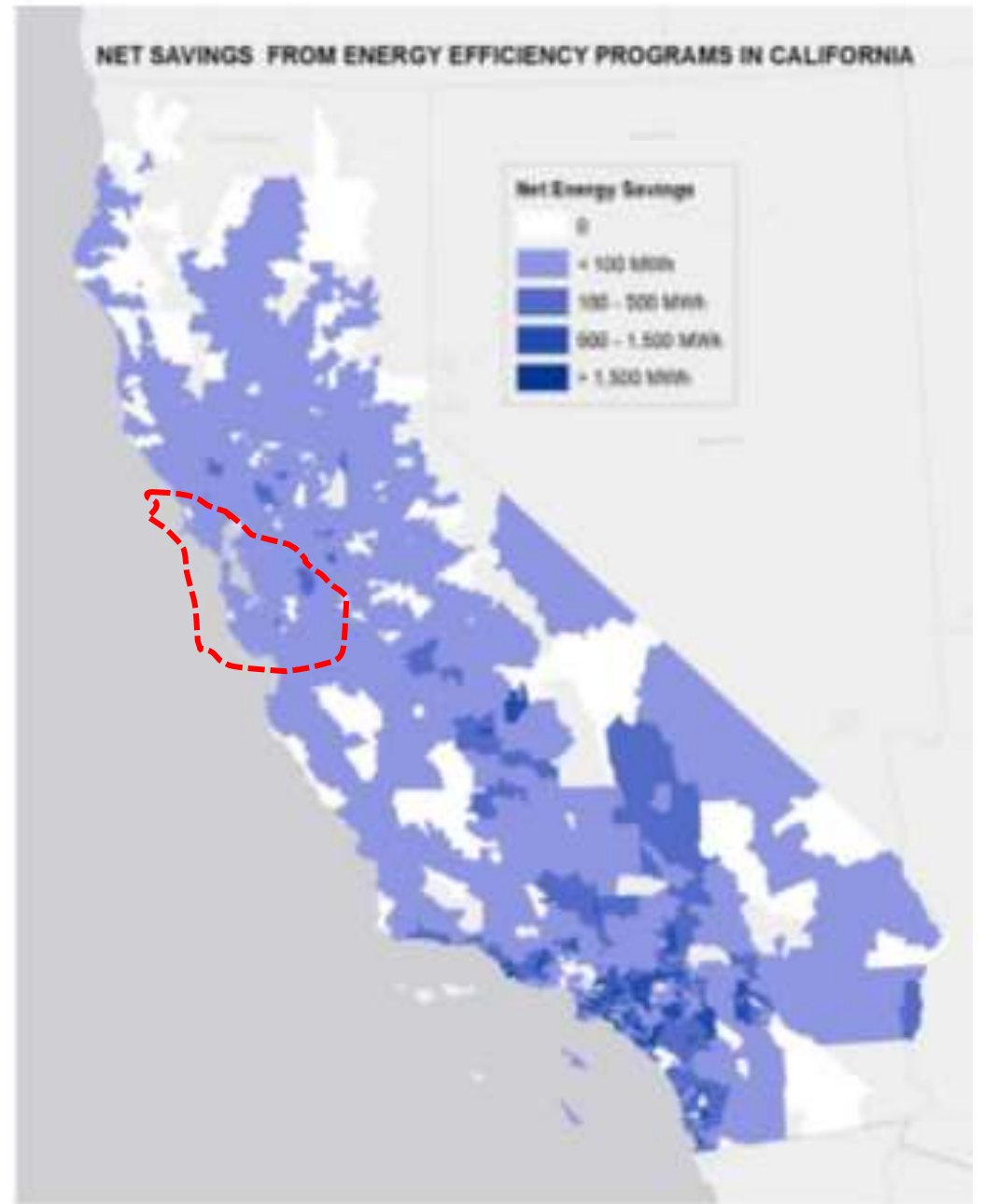
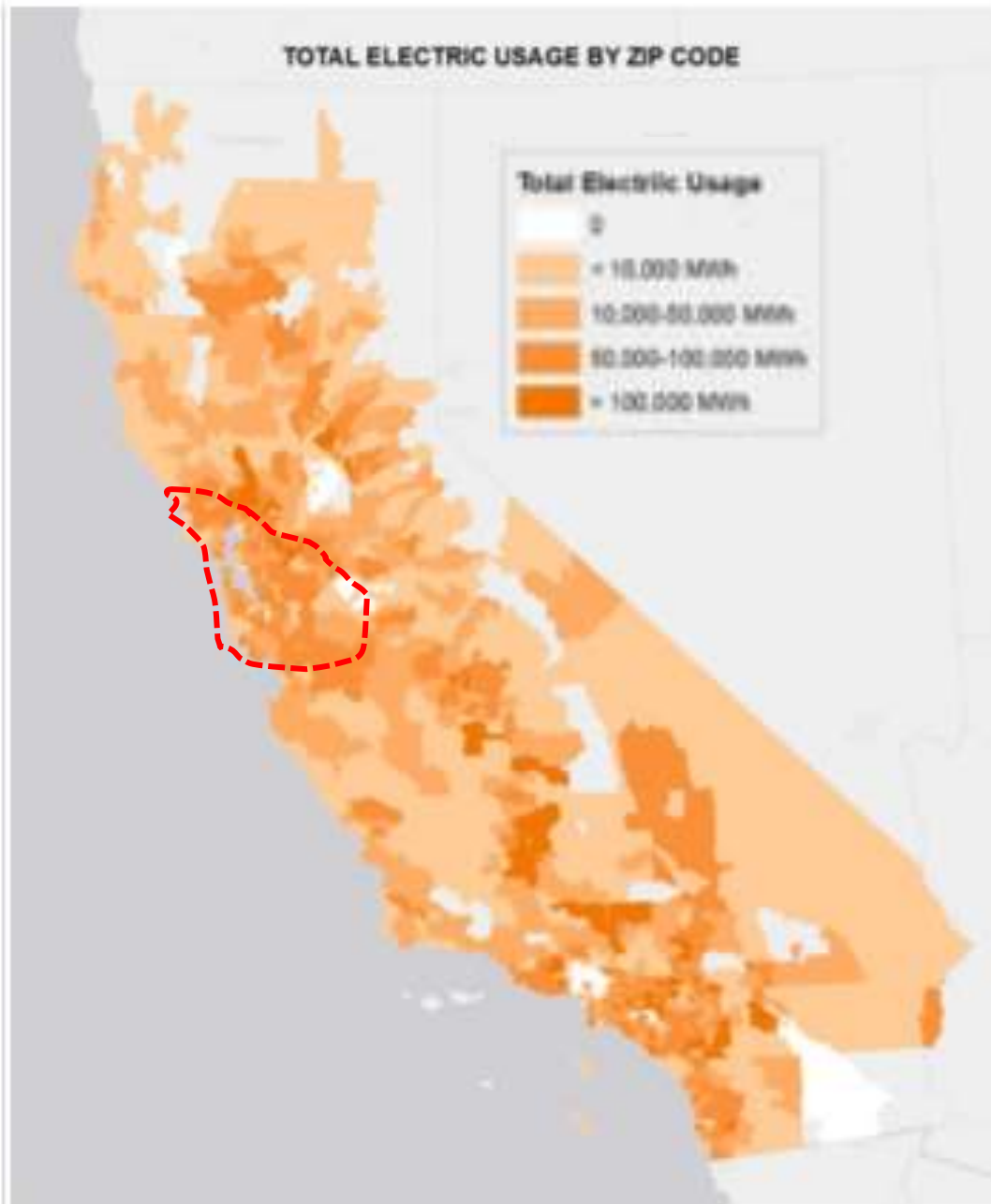


RATIO OF LIP CUSTOMERS TO ALL CUSTOMERS



CASE STUDY



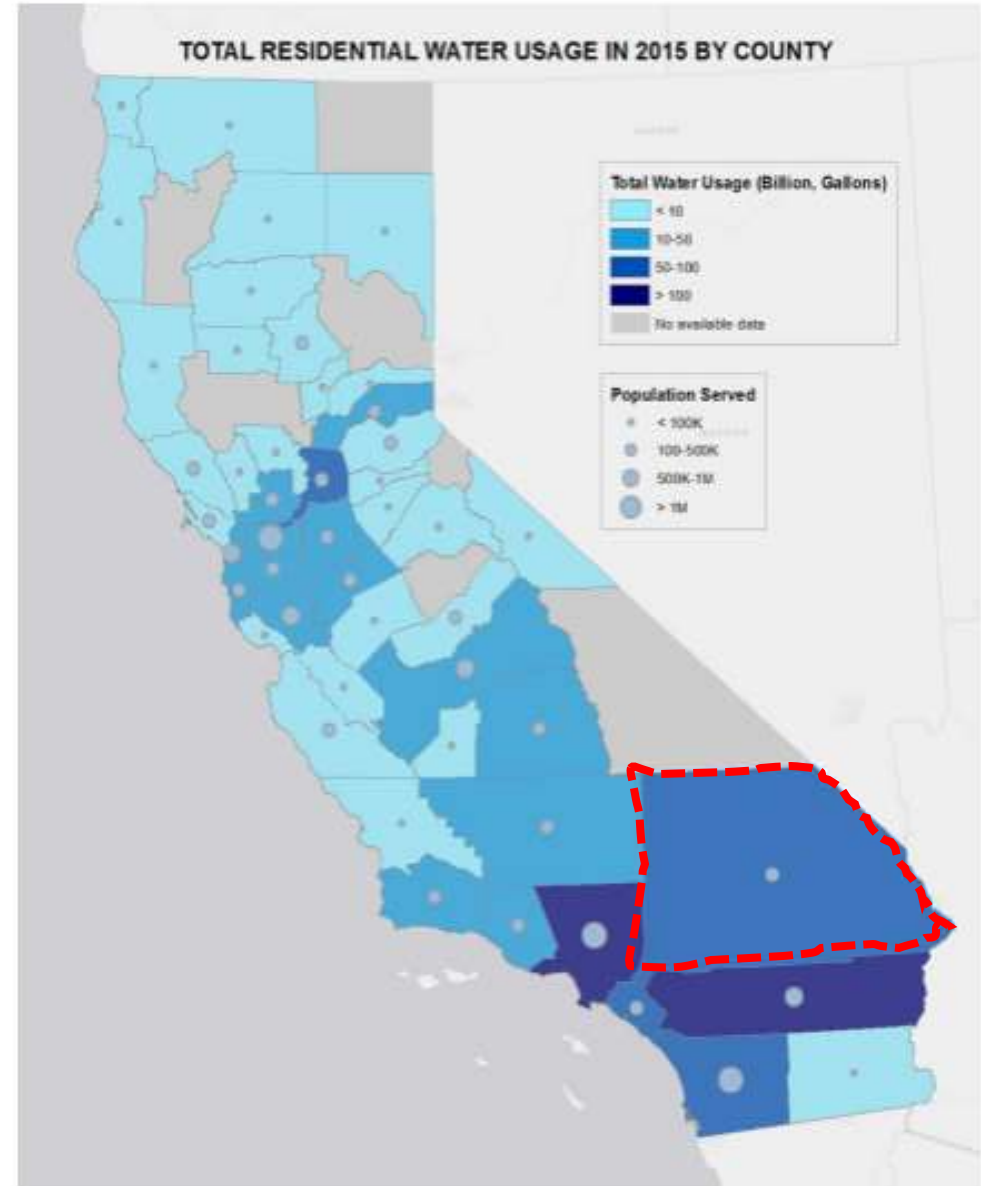


Map 10

U.S. Drought Monitor California



Map 11



CASE STUDY

WHAT WAS GATHERED

Monthly electric and Gas Bill amounts, Usage data, Data from various Energy Saving Programs.

Energy Statistics from State and Federal organizations.

Water Consumption and Conservation Data.

WHAT WAS ANSWERED

How is the spatial distribution of average residential electricity and gas bill by Zip code.?

Where are the high-consumption areas for electricity , gas and water?
Energy Statistics from State and Federal organizations.?

How do income and regional climate affect usage of utility services?

Where are the low-income customers located in the state.?

Which areas are the most in need of low-income and conservation programs?

CONCLUSIONS

Not a Complementary but a very Crucial tool for Utilities.

Very useful in arriving contextual based educated decisions.

Plays a very important roles in Regulatory and Compliance requirements.

Need not be complicated.

Allows Dissimilar and Disparate data to be viewed under one context.

Sources:

California Public Utilities Commission

THANK YOU