Project 1:

Data mining for effective and efficient repair of bridge columns with medium to high-level damage. The project will focus on defining the damage indices (amount of repairs required), suggesting the cost and time effectiveness of repair – based on the past repair studies and final evaluation of a test column. Most of the training data can be obtained from UC Berkeley and UC Davis open data sources. This study can be beneficial for academic researchers and transit authorities like CalTrans.

Project 2:

Due to increase in cost of properties in San Francisco, food trucks are considered as way to save money while having multiple cuisines. Impact of restaurants on the housing market has been studied at different times. It would be interesting to study if the location of food trucks have any impact on decision of people to rent housing in San Francisco in a certain neigborhoods. Study can be done at specific neighborhood level or at the entire city level. The data for food truck permits and location is available at datasf.org. The new homebuyers and renters can benefit from this study especially given the cost of living in San Francisco has increased tremendously in the last decade.

Project 3:

To study the impact of housing prices of one city/county on the neighboring cities/counties. The study will be focused on San Francisco bay area. Due to high demand and relatively slower supply, the real estate prices in San Francisco bay area has increased tremendously. The affordability to buy and/or sell a house in the region has been a challenge in real estate industry for last two years. The study can help shed a light on how the housing prices of a city (or cities) will affect the housing prices of the neighboring city. The data can be obtained from US Census bureau and Zillow open data webpage.