Greening the City with Better Lighting
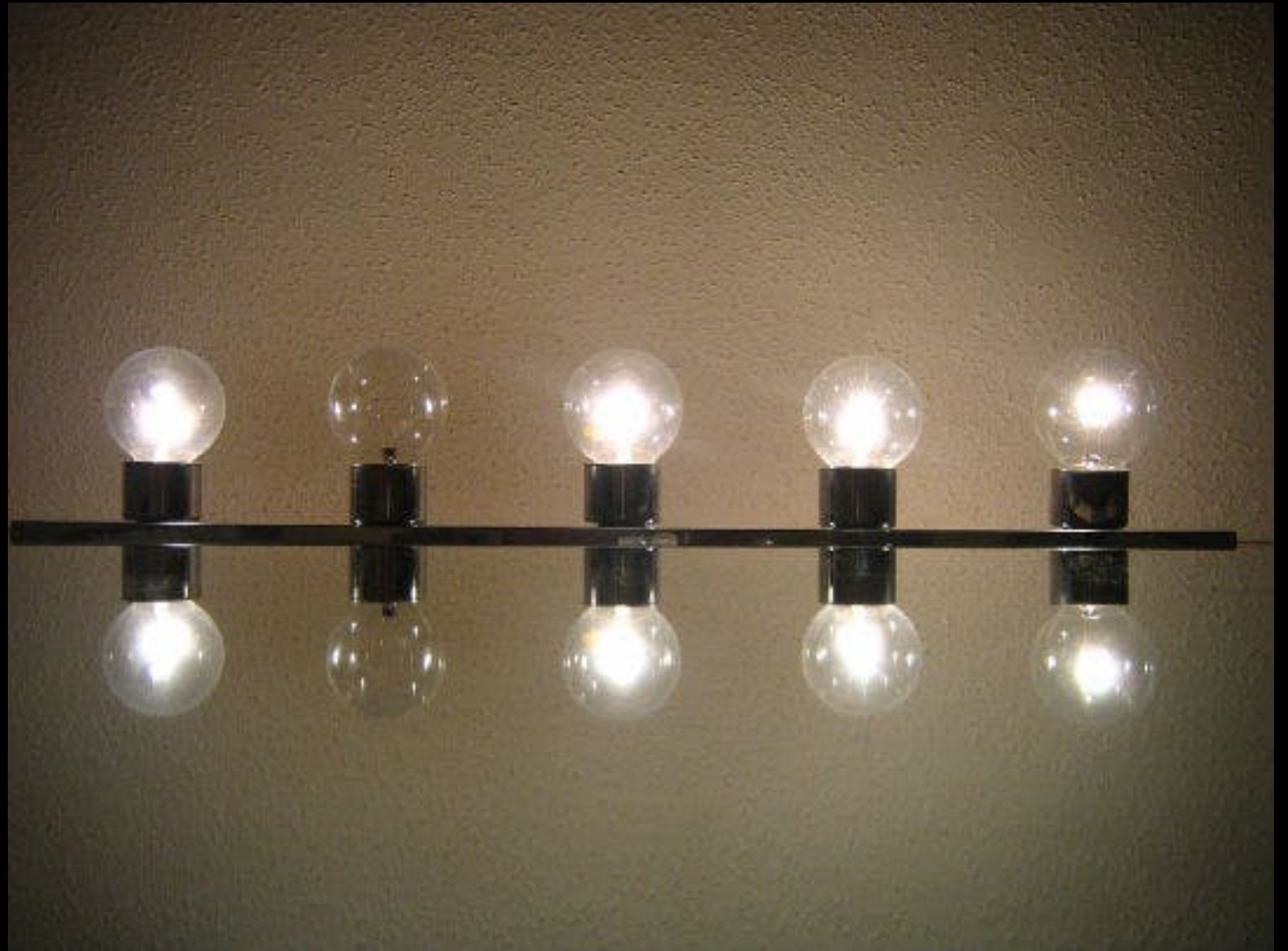
DataScienceSF

SF Environment
Our home. Our city. Our planet.

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Department of Environment

You probably only think about your lightbulbs when they burn out

But if you own a large building, you may see lightbulbs as a cost driver

X 1000s =

When we see San Francisco's lights illuminated together, we also think of **Greenhouse Gas emissions**

And our Climate Action goals include "Roots," Zero Waste, 50% sustainable transit and 100% renewable energy

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

SAN FRANCISCO CLIMATE ACTION

0 50 100

Which is why the Department of Environment helps property owners migrate to newer, more efficient lighting

Energy Watch, in partnership with PG&E helps businesses and multifamily buildings reduce energy by installing more efficient lighting

SAN FRANCISCO energy watch
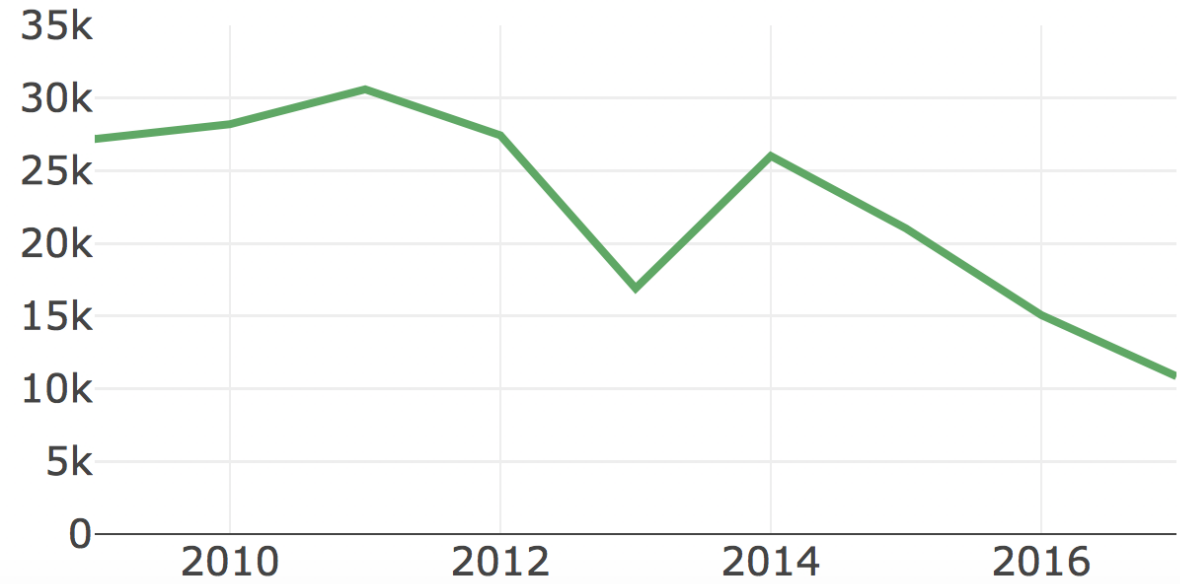
$25 million

7,500 Projects

10,704 cars off the road
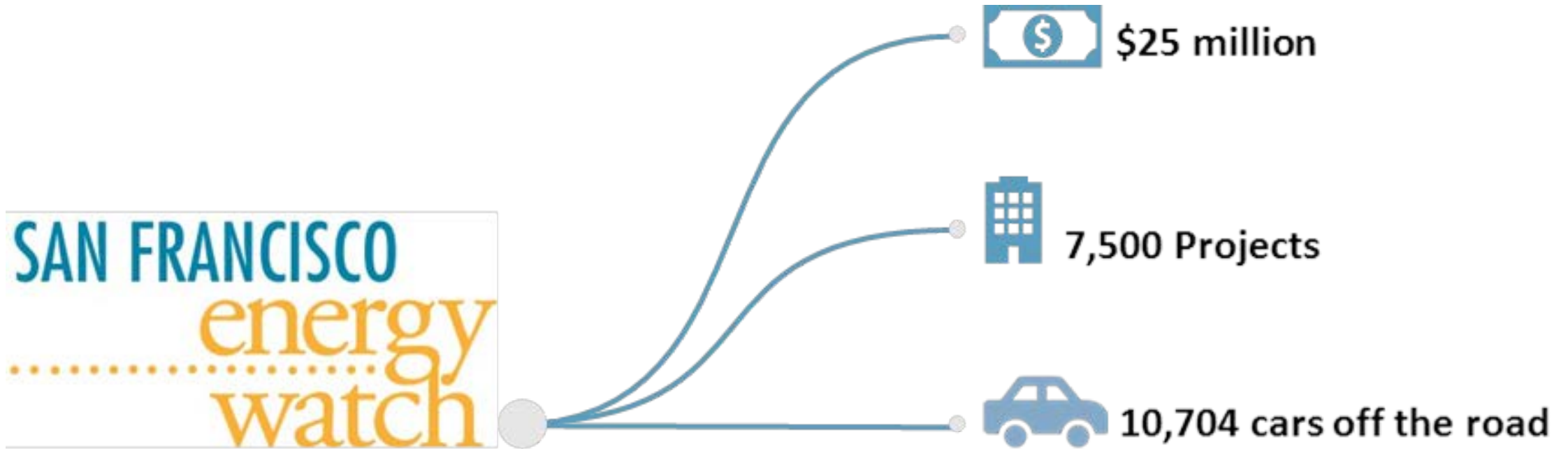
But both the number of projects & energy savings have decreased in recent years
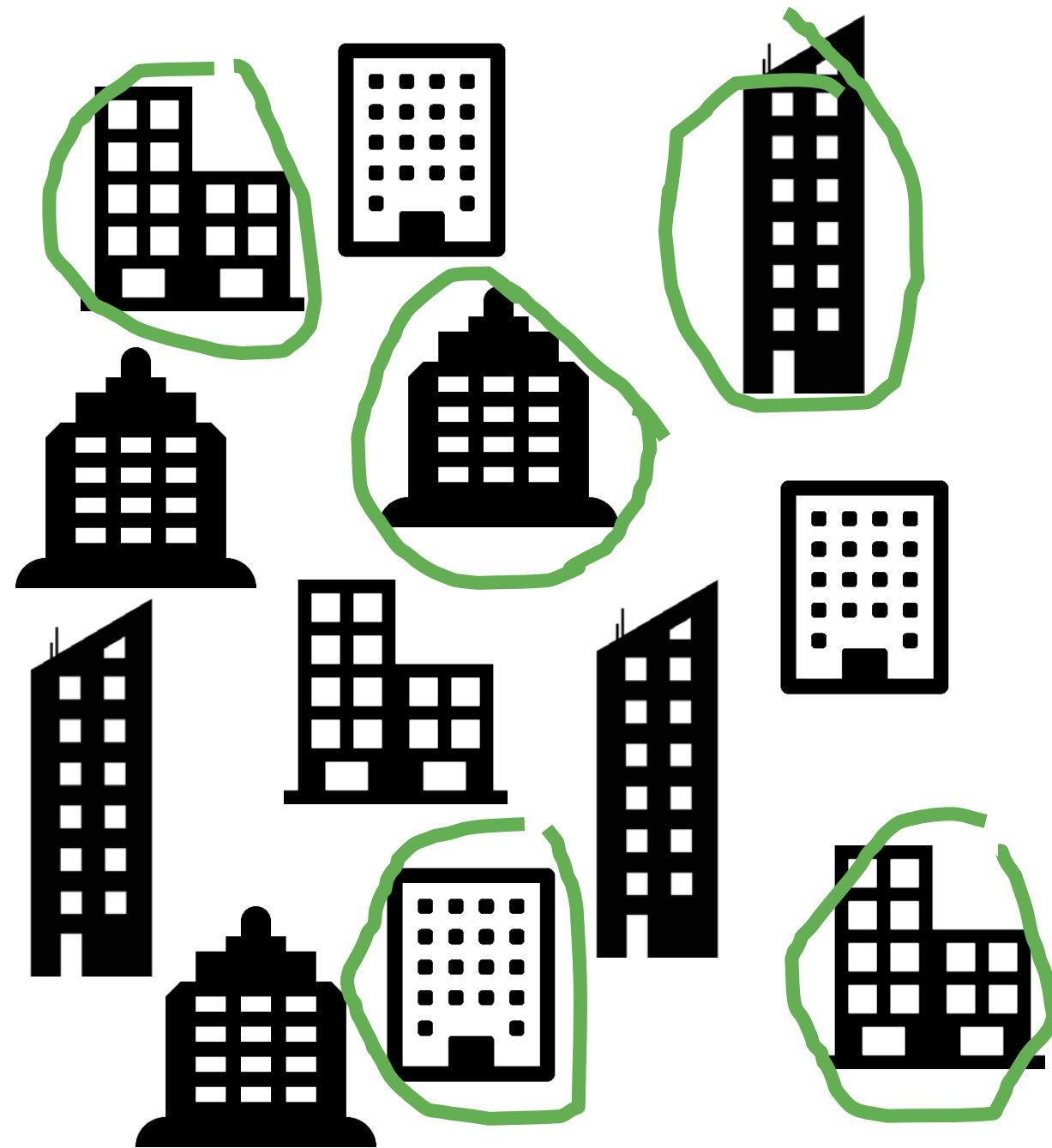
Average monthly projects by year
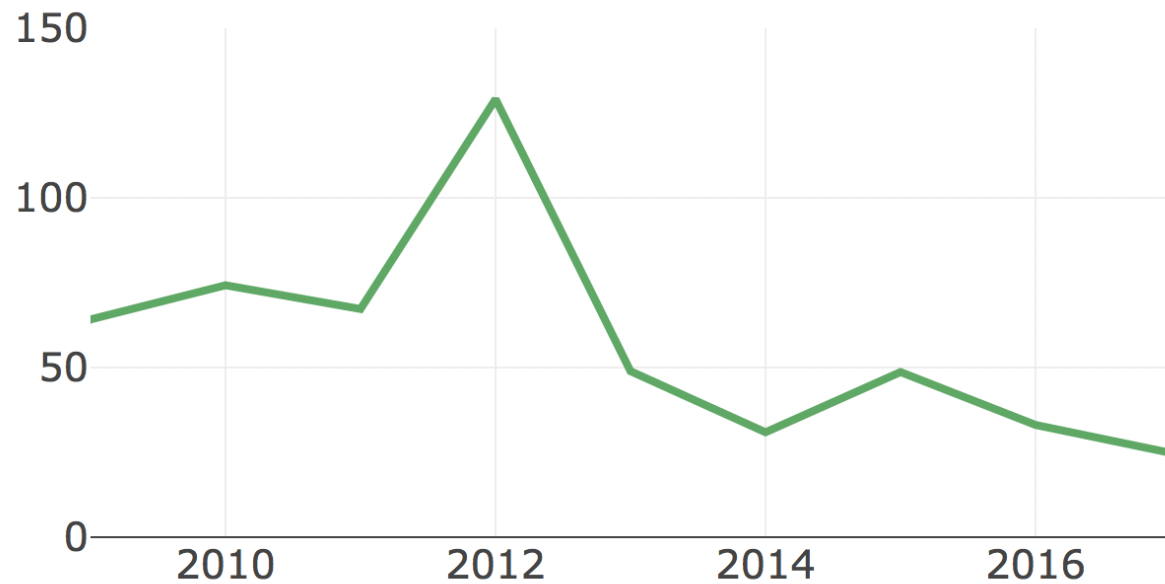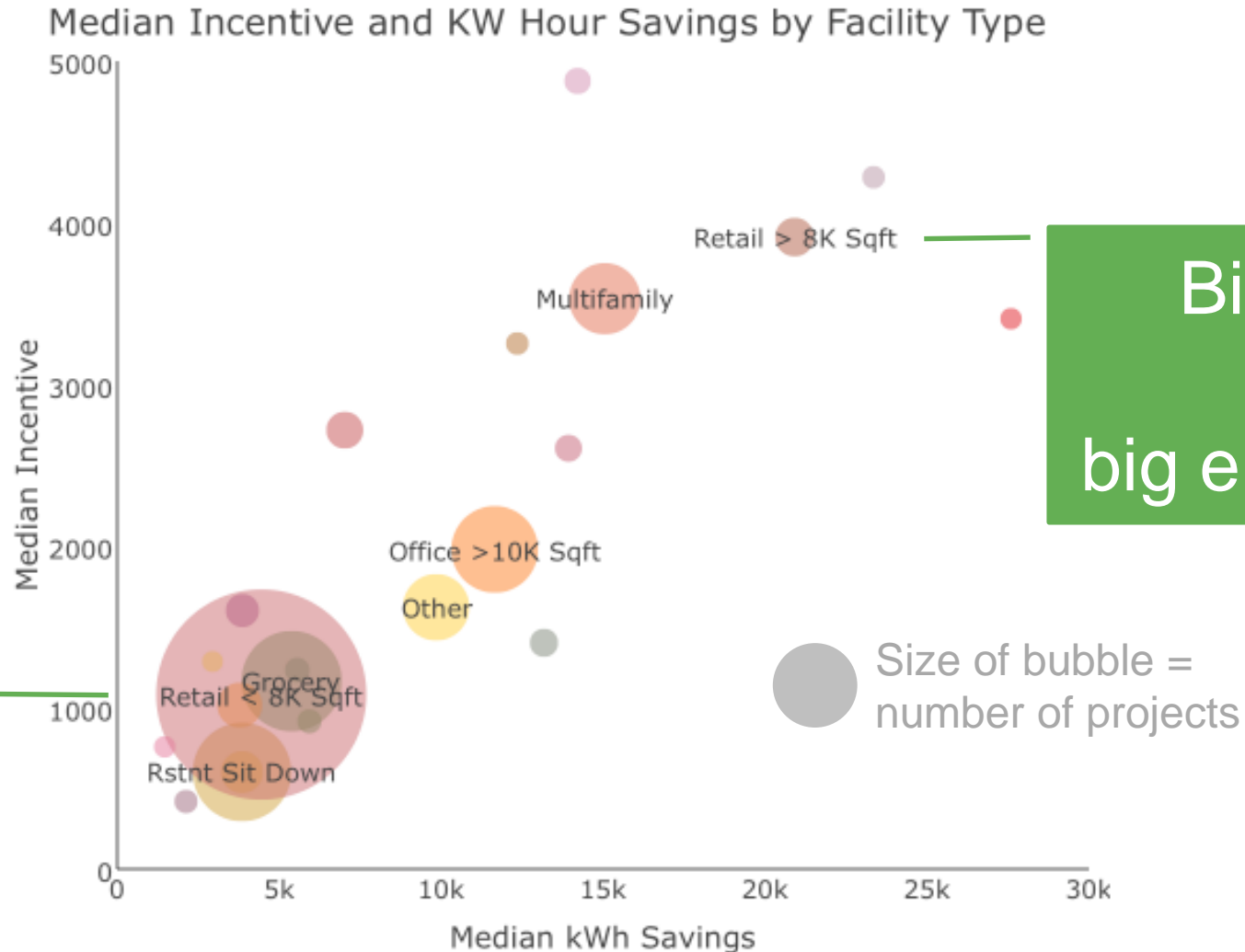
Average monthly energy savings by year

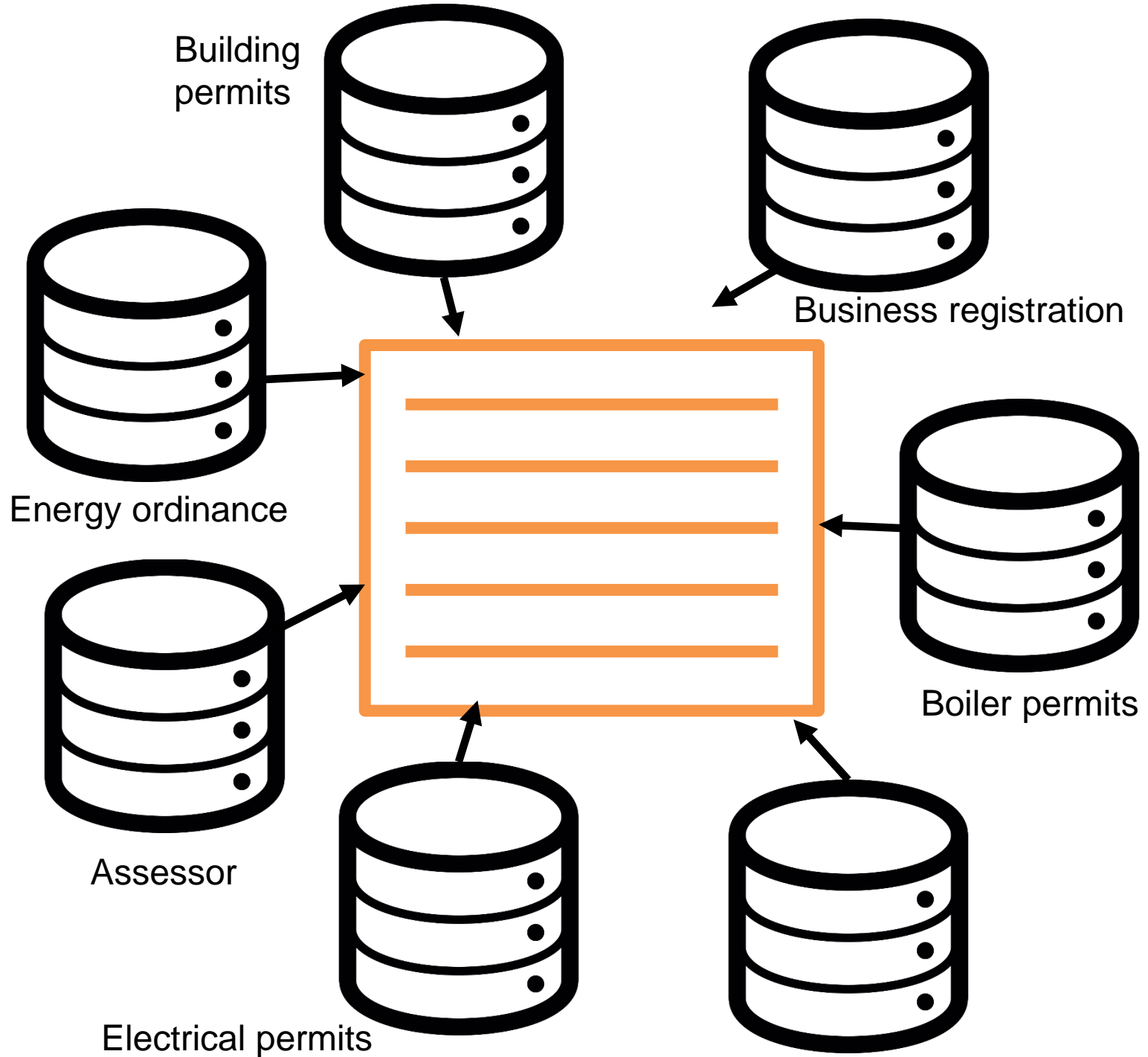Can we find new leads and identify which leads are good candidates?

?

DataScienceSF

From their pool of completed projects we learned that an opportunity exists to target bigger buildings with greater potential energy savings
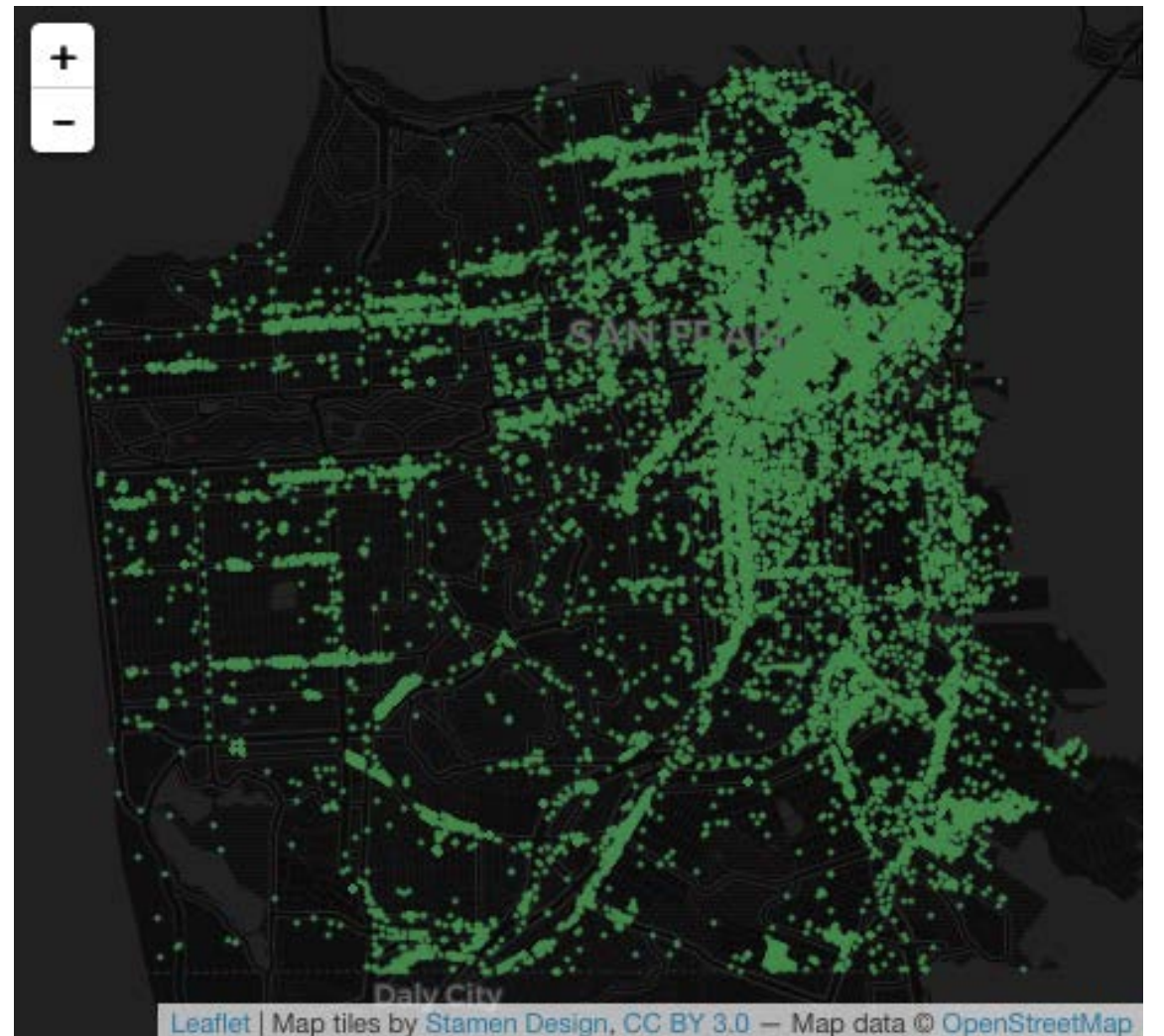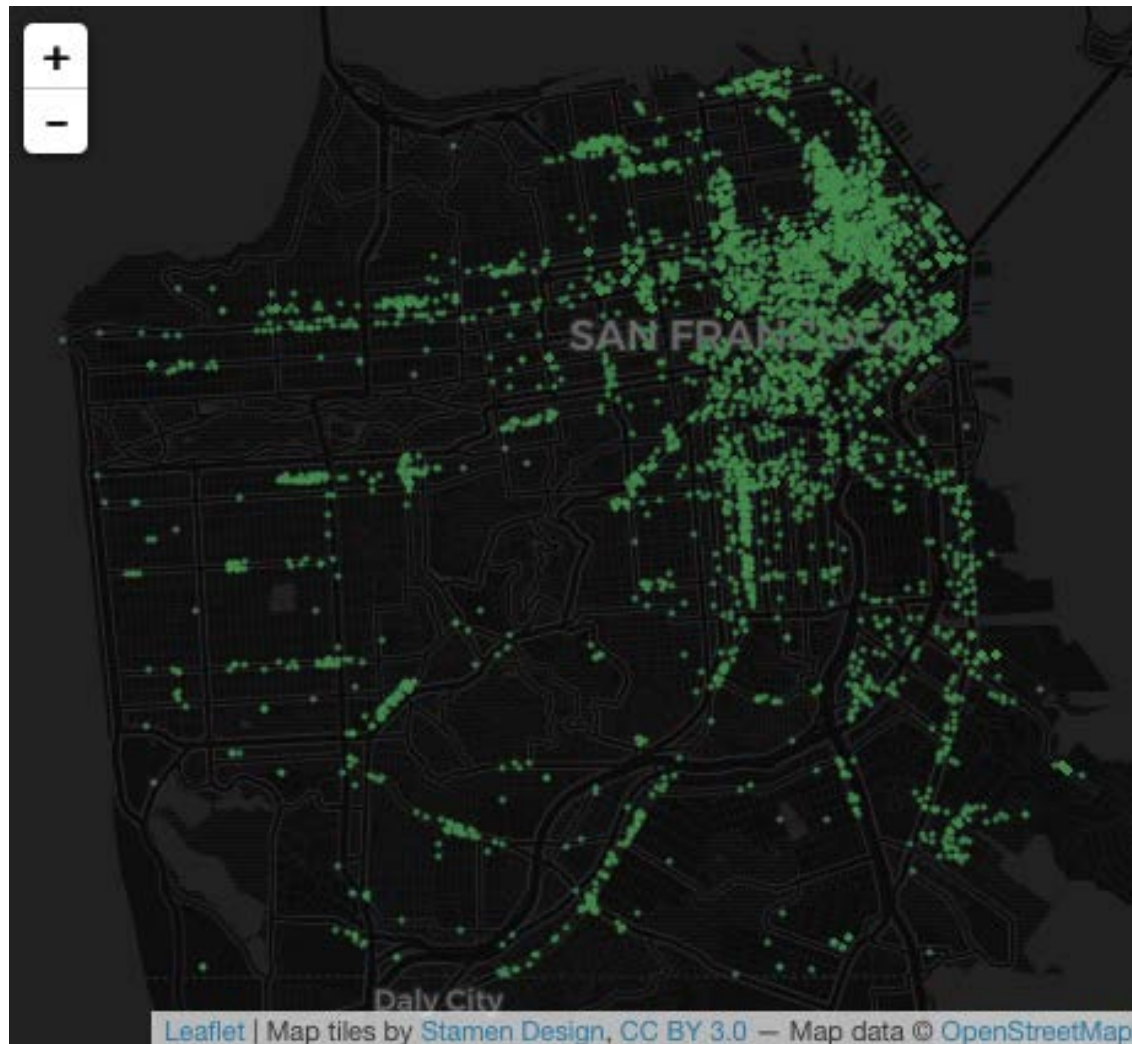

Median Incentive and KW Hour Savings by Facility Type

Retail > 8K Sqft

Multifamily

Office >10K Sqft

Other

Grocery

Retail < 8K Sqft

Rstnt Sit Down

Size of bubble = number of projects

Median Incentive

Median kWh Savings

Big buildings = big energy savings

Small buildings = smaller energy savings

We combined multiple open data sources to generate a list of leads that can be prioritized by various characteristics

Building permits

Business registration

Energy ordinance

Boiler permits

Assessor

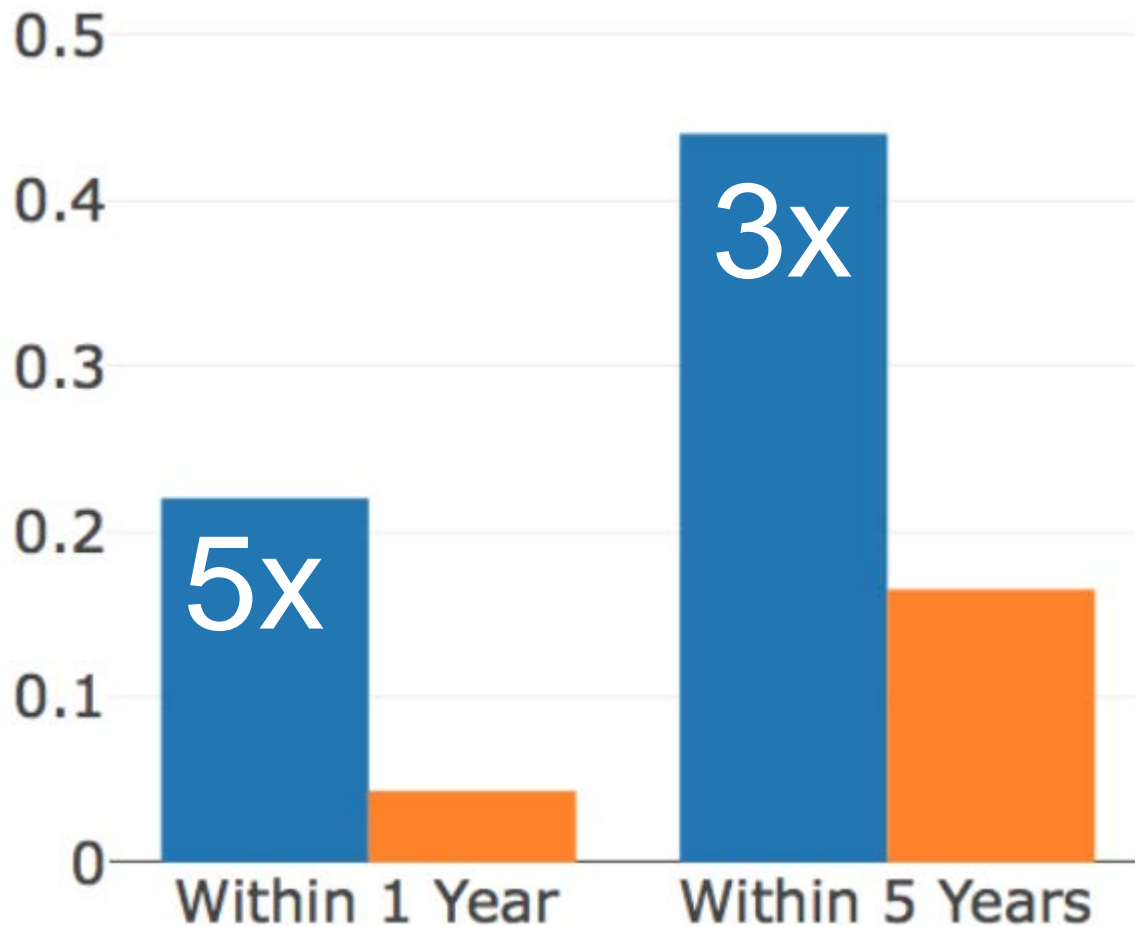Electrical permits

Commercial leads: Before and After **+250%**
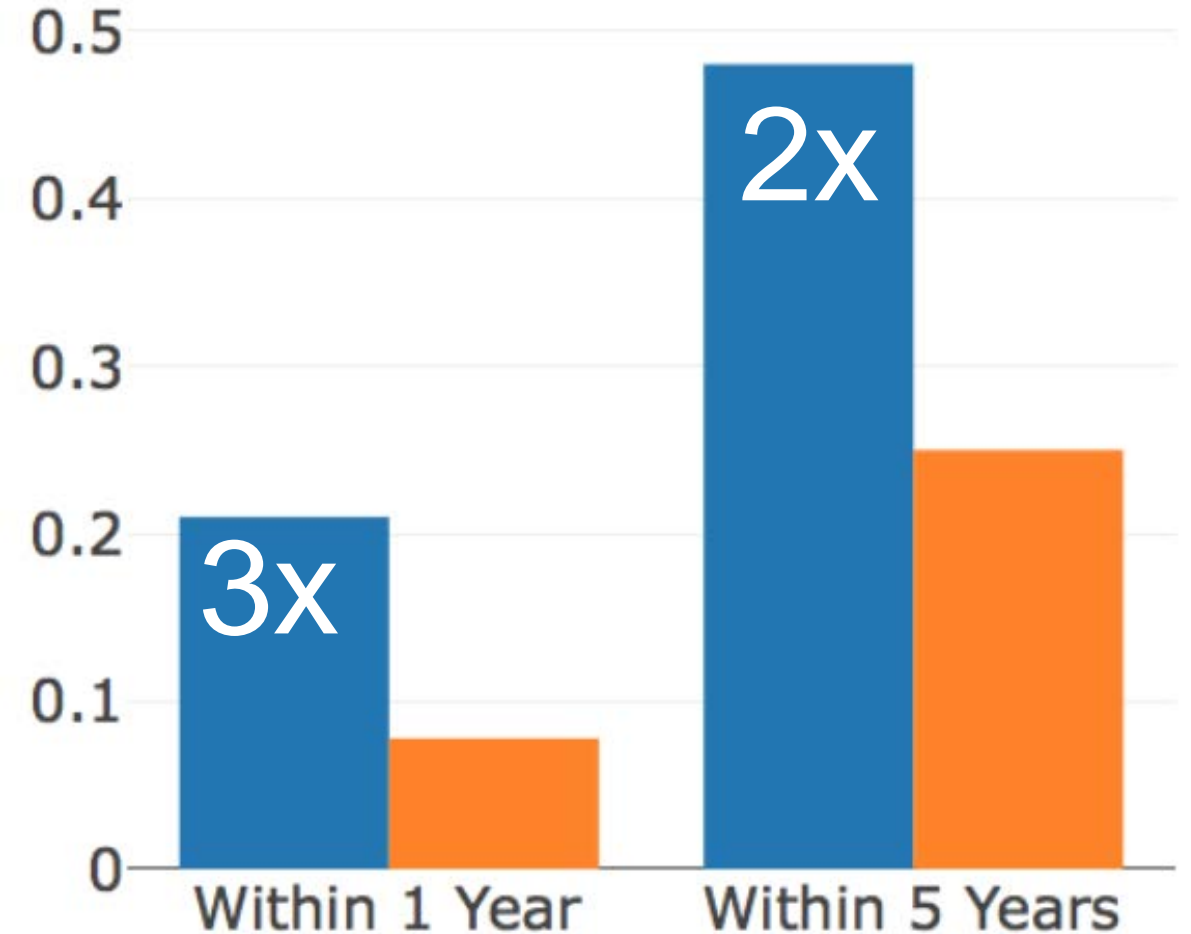
Multifamily leads: Before and After   +1000%
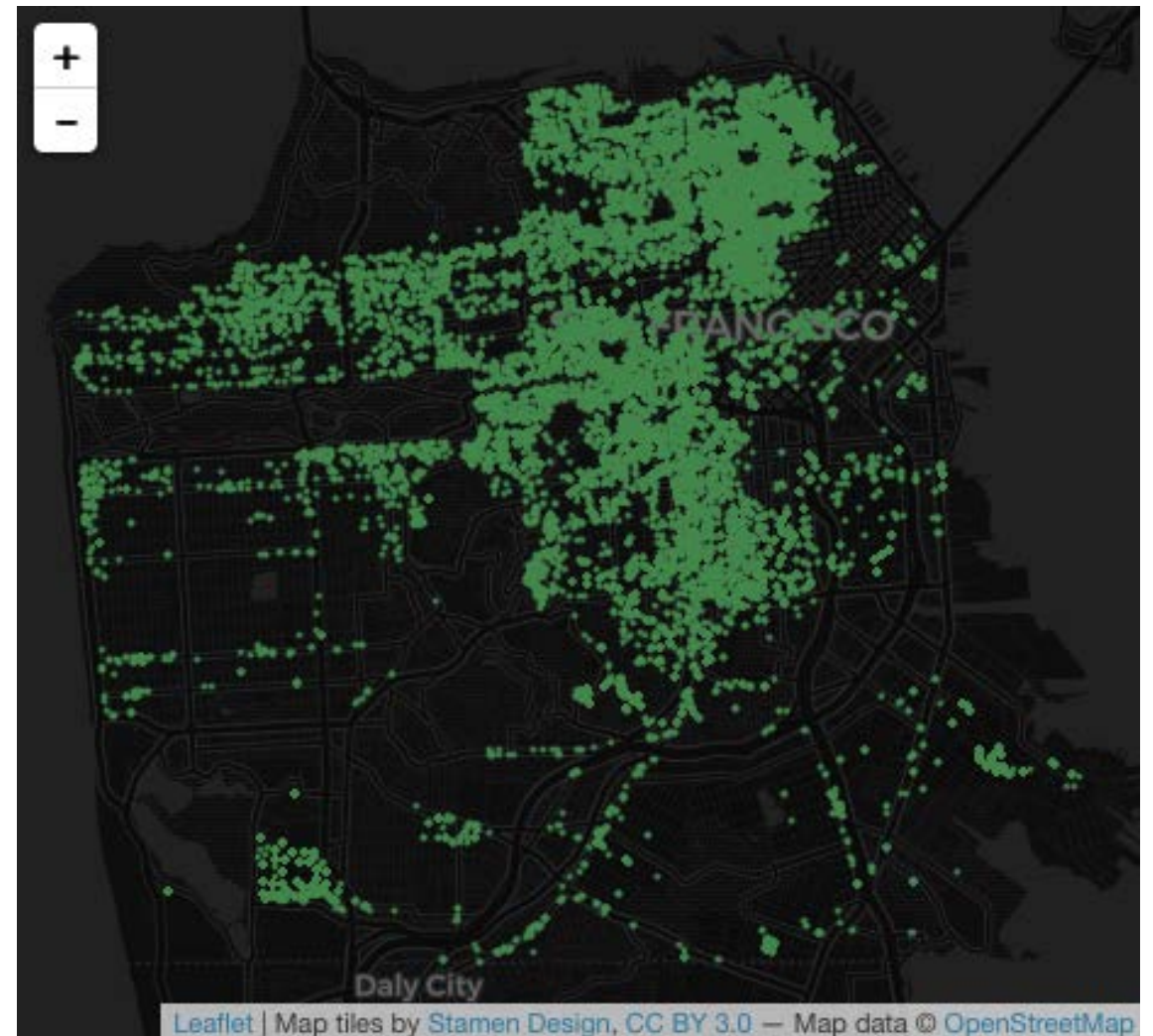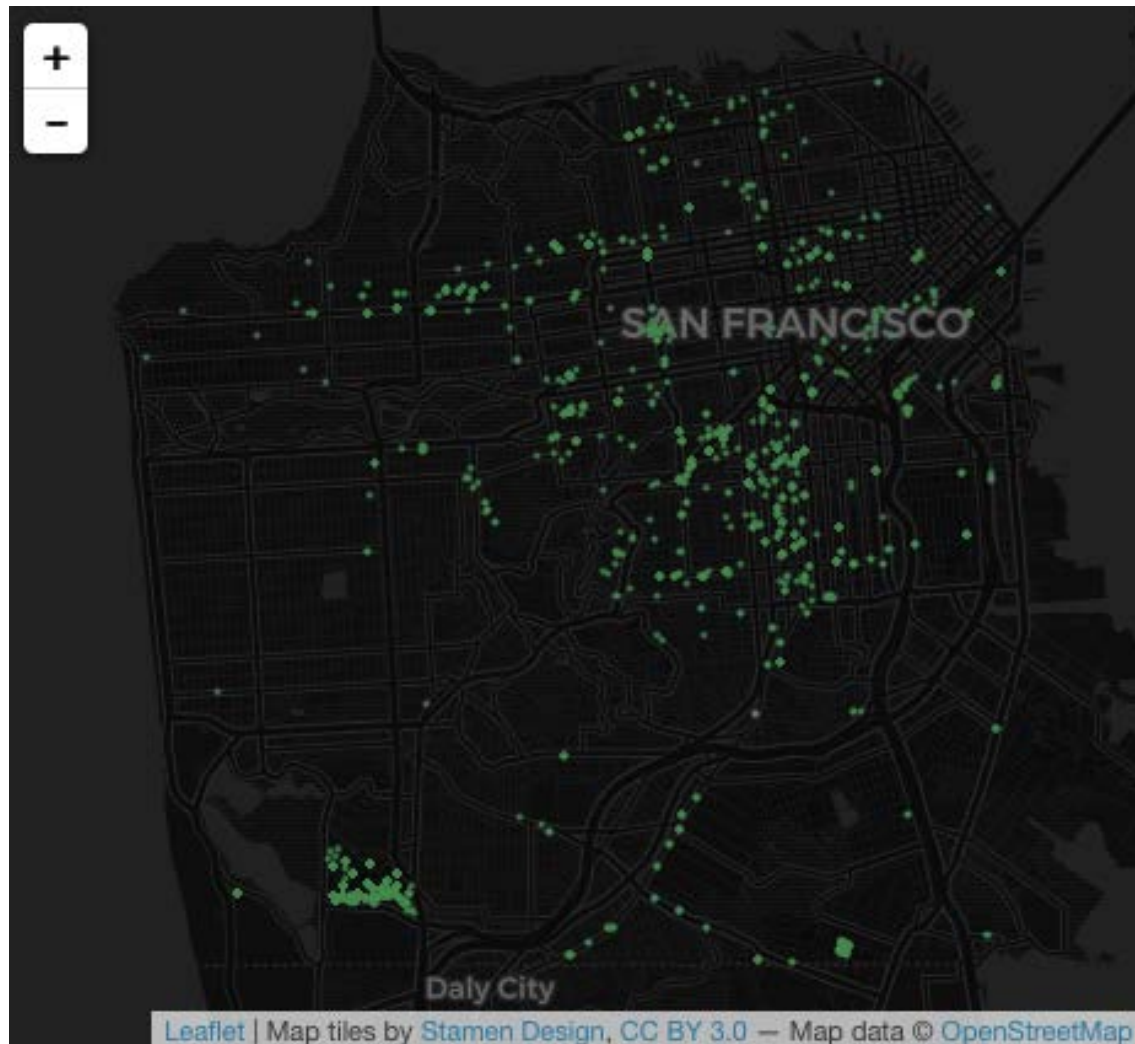
Buildings with completed projects were much more likely to have applied for various permits

■ Buildings with project   ■ Other buildings

% of buildings applying for an **electrical** permit

% of buildings applying for a **building** permit

Service Change

Use list to filter and prioritize outreach
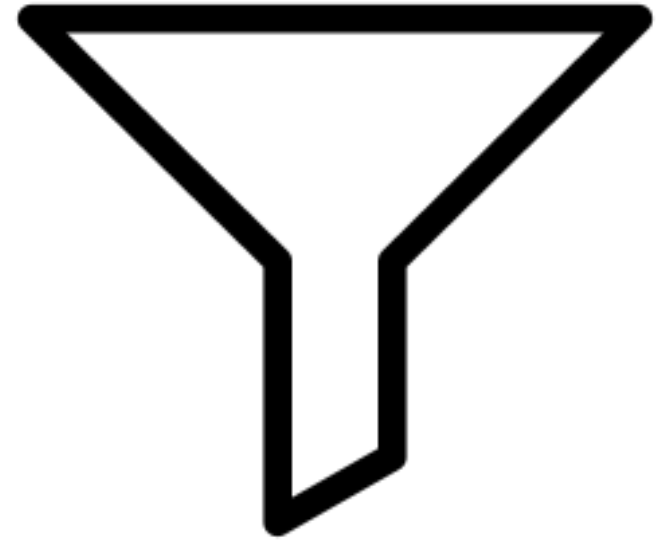
Two SFE staffers will use this list to develop a "Customer Dashboard" after taking the PowerBI Course via Data Academy in February

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&

Data, for the love of the City

THANK YOU

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