I have a background in building and construction and so I was immediately drawn to the datasets involving these topics. I'm also interested in social justice, so it's interesting to see how these things overlap with things like crime data.

# 1 - Vacant Buildings Dataset

Exploring the abandoned buildings dataset.

### Audience

Business leaders, entrepreneurs, tax auditors, real estate developers, social justice intitiatives

## Learnings

Looking at the data on abandoned buildings in St. Paul, we might attempt to correlate it with several other datasets that are available on the data portal, for example, crime incidence, voter turnout, traffic stops, perhaps other demographic info. See what areas of the city are in need of development and might present opportunities for startup businesses looking for inexpensive real estate. The data does show that the vast majority of abandoned buildings are single-family homes, which might present an opportunity for housing the homeless, women's shelters, halfway houses.

This dataset could also be used as an example of the stark realities of income inequality, show the history of the sub-prime mortgage crisis, and hopefully give insight into how to move forward.

#### **Solutions**

The obvious display format is a map accompanied by line graphs showing abandoned buildings over time. This could be made interactive by having a time slider showing when houses became abandoned. It could also be animated, but I think the slider gives the audience more control over how they experience the data. Already present in some of the visualizations on the portal involve being able to click on certain districts and see how the line graphs change.

Overlaying the abandoned buildings data with crime data and perhaps election turnout data might give further insight into what caused these neighborhoods to decline and suggest paths forward for redeveloping these areas.

# 2 - Approved Building Permits

#### Audience

Businesses, entrepreneurs, tax auditors, real estate developers, small business startups

## Learnings

Where are people actively working to develop? These data can also be correlated with the vacant buildings data. But it can also be interesting to see how it might be overlaid with the other interesting datasets I've already suggested (crime, election turnout, even the Resident Service Requests dataset). Many of these data are simply permits for renovations, but that's exactly what we're interested in. We want to see to what extent people are actively working to redevelop some of these areas that have been hit hard by the recession. To what extent are people looking to build new homes versus renew old properties? To what extent are permits granted to businesses vs residential buildings? Solutions

Again, a map overlay with a time slider would be interesting. The data for permits only includes 2015-2018, so we wouldn't be able to look at it since 2008. But we can definitely use it to locate hotspots of real estate development and see to what extent these match up with areas of large numbers of vacant buildings. Pie charts or other breakdowns by what kind of construction or renovation is being performed would give further insight into what exactly is going on in the real estate world of St. Paul.

## 3 - Pedestrian and Bike Crash Data

#### Audience

Law Enforcement, city planners, street planners, infrastructure programs

### Learnings

After a cursory exploration of the bike and pedestrian crash data, it is interesting to note that there are, in fact, hot spots where many crashes occur. Often at intersections, but there are certain roads where they are especially common. Perhaps somewhat surprisingly, University Ave. (especially at the intersection with Snelling) has a lot of these and perhaps there are some conjectures that could be formed from this. Also, downtown St. Paul has it's share, though that is also not particularly surprising. It would be interesting to see what other

datasets can be combined with this. Perhaps infrastructure development projects that are designed to reduce the incidences of bike and pedestrian collisions.

### **Solutions**

Obviously, a map would be useful, but that's already been done. Instead, it could be useful to combine the data with other overlays, such as infrastructure improvements, construction projects, perhaps the building permits data, and others. In an effort to see where there is some overlap or to see what efforts are underway to reduce or eliminate the interface between bike/pedestrian traffic and that of motor vehicles. I have a background in building and construction and so I was immediately drawn to the datasets involving these topics. I'm also interested in social justice, so it's interesting to see how these things overlap with things like crime data.