San Francisco Community Resilience

Final Present

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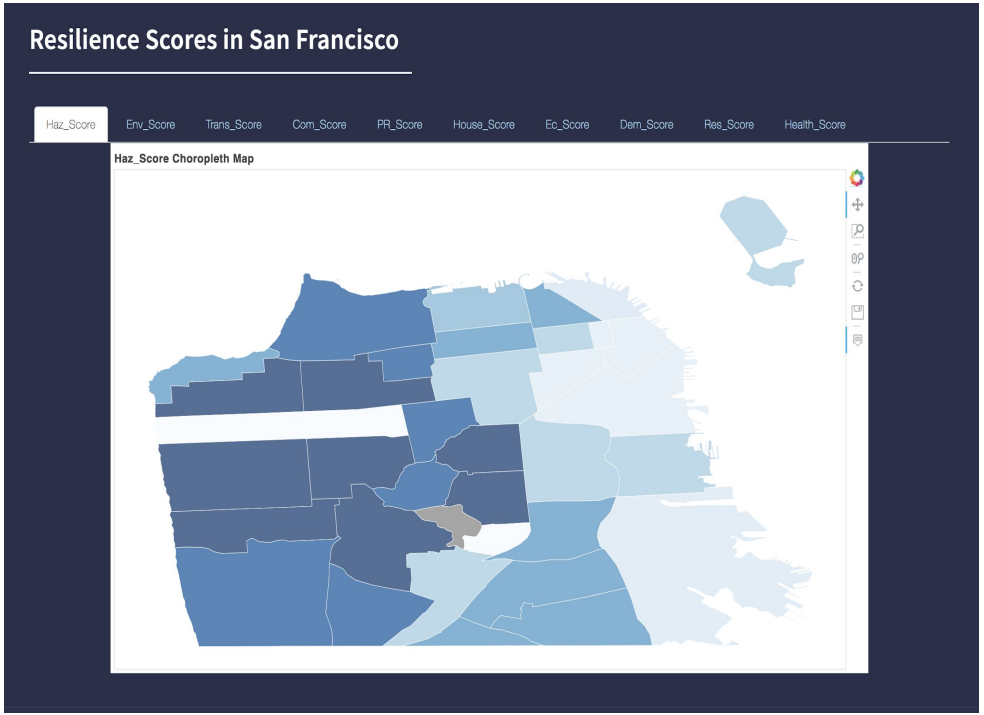
BACKGROUND - DATASET

Neighborhood	Flood_Per	Heat_Per	Liq_Per	Haz_Score	Imp_Per	Tree_Per	PM_Con	Tox_Per	Env_Score
Bayview	0.0683688	0.586532	0.557273	1	0.693209	0.0674749	8.71243	0.269811	1
Bernal Heights	0	0.104888	0.12912	3	0.656492	0.121011	8.75023	0.115277	2
Castro/Upper Market	0	0.00268633	0.119483	5	0.655799	0.145122	8.446	0.000597061	4
Chinatown	0	0.999761	0.312332	1	0.875325	0.0500452	8.81237	0.00116048	1
Crocker Amazon	0	0.218043	0.0192769	3	0.705708	0.0521826	8.25316	0.00133914	3
Diamond Heights/Glen Park	0	0.000279492	0.19802	4	0.433316	0.240678	8.31805	0.00608127	5
Downtown/Civic Center	0	0.999767	0.153798	1	0.867658	0.0407454	9.18731	0.00221848	1
Excelsior	0	0.345133	0.022647	3	0.681602	0.103498	8.66289	0.0593634	3
Financial District	0.0264466	0.674863	0.802687	1	0.746288	0.0927255	9.16533	0.0260546	1

https://data.sfgov.org/Health-and-Social-Services/Community-Resiliency-Indicator-System/banc-xdvr

VISUALIZATION PROTOTYPE

Website: https://sf-community-resiliency-map.github.io/



Choropleth Map:

- 10 dimensions of the data
- Hazard risk, env, transportation, community, public realm, housing, economy, health, demographic and final resiliency score)

VISUALIZATION PROTOTYPE

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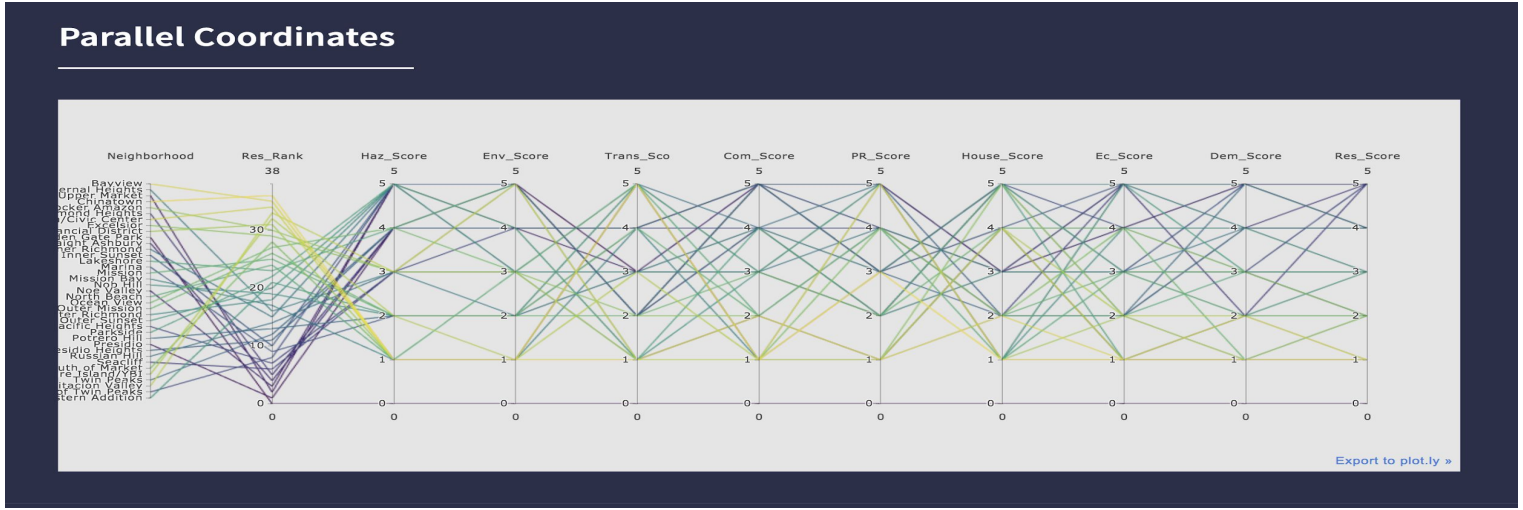
Parallel Coordinate:

- 37 communities
- Line of the community will be highlighted once clicked



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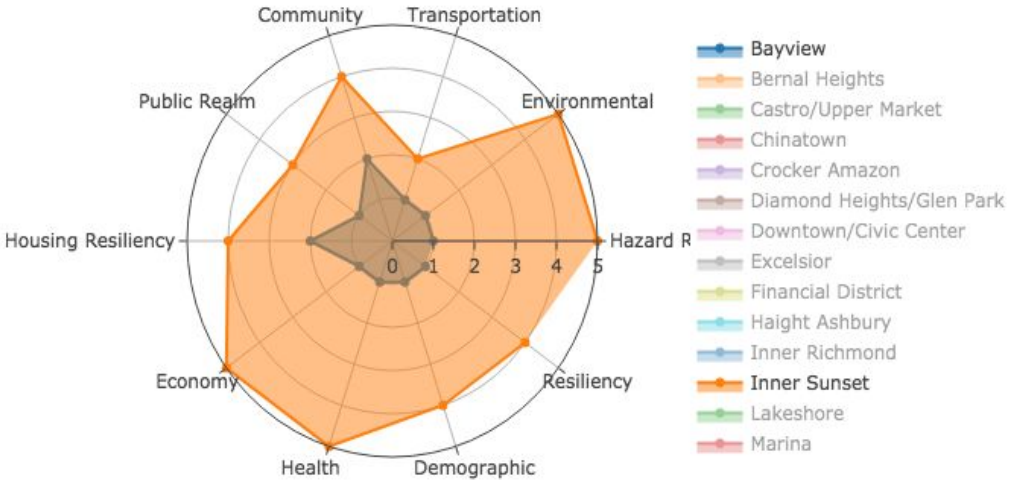


Radar Chart:

- Outstanding features for each observation
- Another aspect to display the data

DEMO

Choropleth Map:

- **Overall**
  - Color each neighborhood by the metric's density.
  - A tooltip to show details so that the user can see the value for each neighborhood.

- **One issue**
  - Discrepancy between the data and json file of the map.
  - Increases the lie factor.

- **Pros**
  - Identifies clusters of neighborhoods with similar values.
  - Providing overall context of the data.

DEMO

Parallel Coordinates:

- **Overall**
  - Plotly
  - Display resiliency rank and the corresponding district.

- **Pros:** The best overview of the data.
  - Allows the user insight into the overall trends across the main categories of the data, without bogging us down in the over 50 columns of data in the dataset.
  - Allows the user to brush to see patterns and trends in the data, such as the fact that neighborhoods that score high in transportation score low in housing.

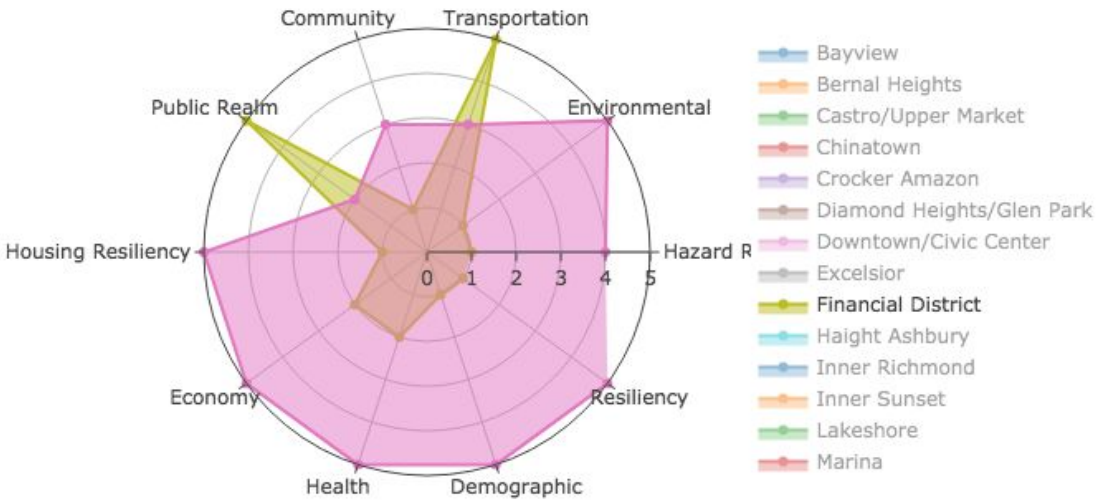
DEMO

Radar Chart:

- **Overall**
  - Bokeh
  - Display Outstanding features for each community.

- **Pros:** The best overview of the data.
  - Allows the user insight into the overall trends across the main categories of the data, without dropping down in the over 50 columns of data in the dataset.
  - Allows the user to brush to see patterns and trends in the data, such as the fact that neighborhoods that score high in transportation score low in housing.

VISUALIZATION INSIGHTS



- Want to make more informed decisions about which neighborhoods may be better to live in?

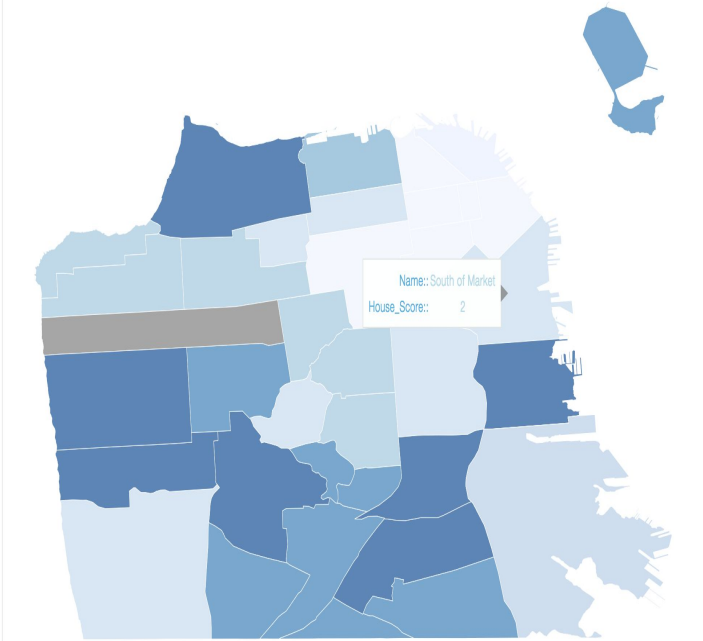
- Neighborhoods with higher transportation scores have lower housing scores.

- This means that if someone wants nicer living situations, they may sacrifice quicker access to transportation.

VISUALIZATION INSIGHTS

High Housing Vs. High Public Realm/Transportation: complementary relationship.

Housing Resiliency Score Choropleth Map



Public Realm Score Choropleth Map