

INFO 498 PIT Project:

Incentivizing Middle-Housing Development in Seattle WA

Task:

Create a Data Dashboard to encourage development of Middle-Housing in Seattle, WA

Policy:

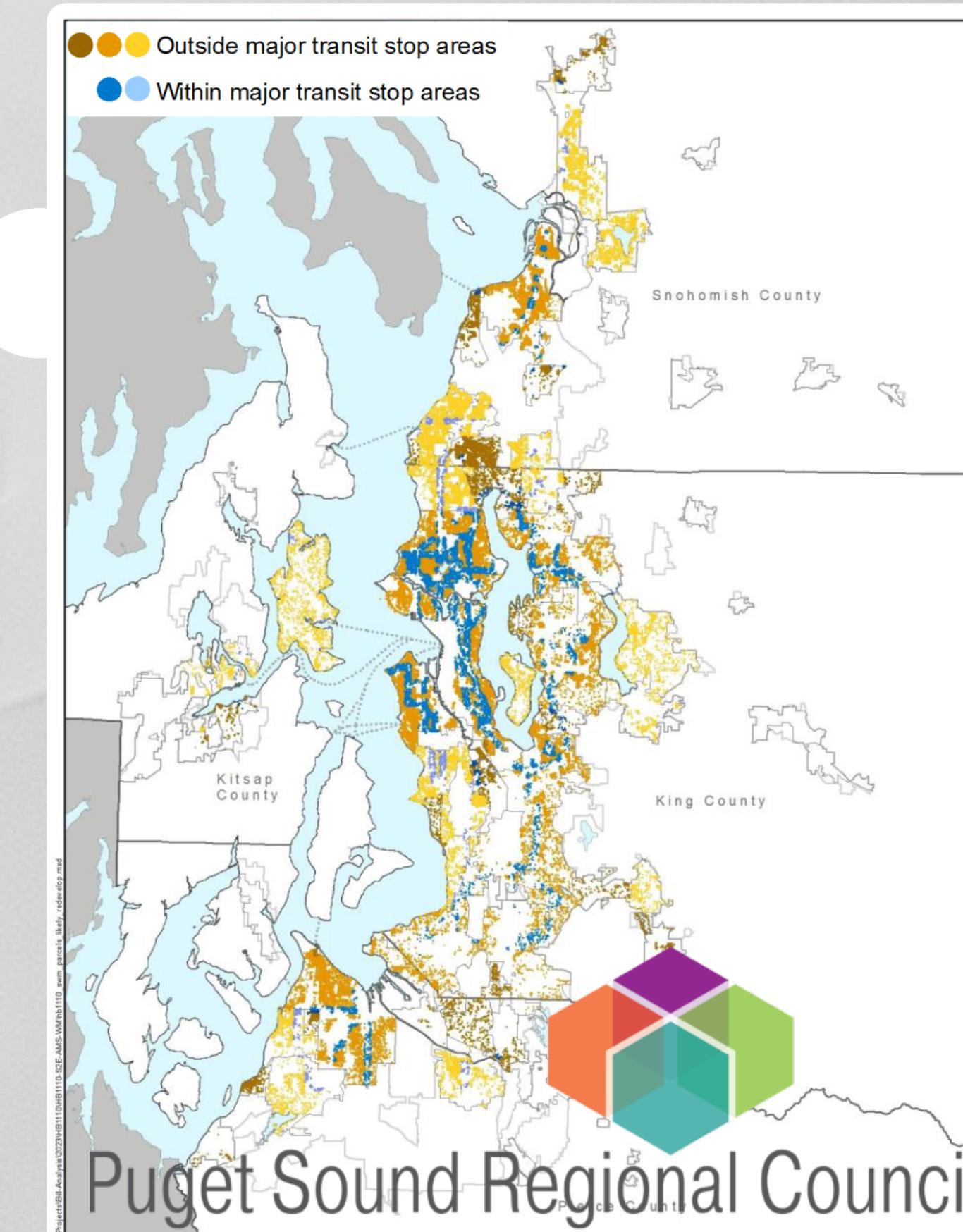
WA House Bill 1110 (2023) was passed, mandating expansion of Middle-Housing Developments in all urban-centers.

Context:

Washington State just released Middle Housing Ordinances for developers and city-planners

Value:

New Development Opportunities are available to Developers and Homeowners, but no programs exist to incentivize development



Design:

Stakeholders and Value Assessments

Stakeholders:

Renters

Homeowners

Small Landlords

Corp. Landlords

Developers

Policy-Makers

Nature

Indigenous Peoples

Values:

Access

Walkability

Affordability

Quality

Family

Health

Transportation

Equity

Climate Change

Opportunity

Design Process:

I used Envisioning Cards created by the *Value Sensitive Design Lab* at the University of Washington to push my domain of thinking on this issue.

Definition:

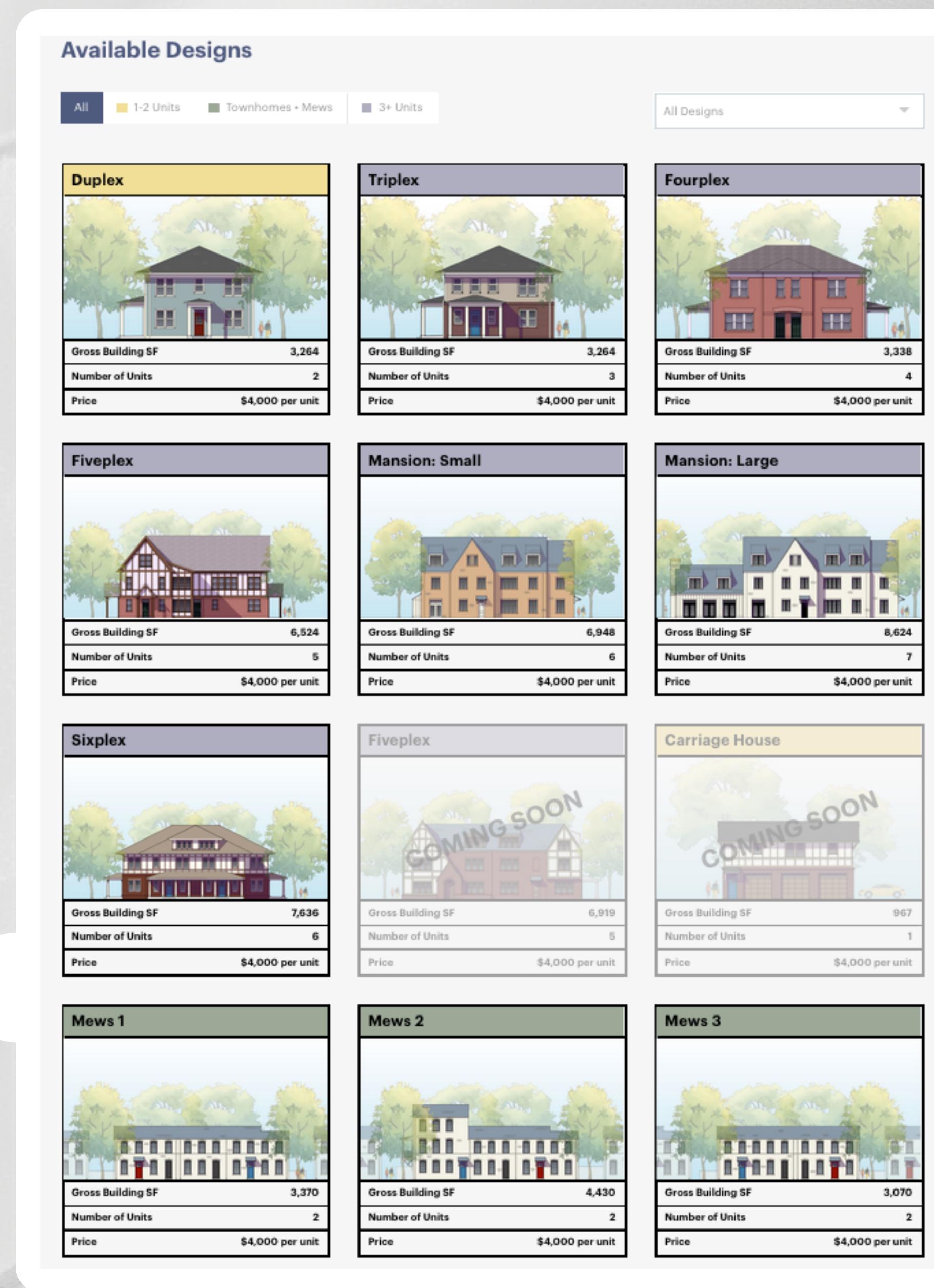
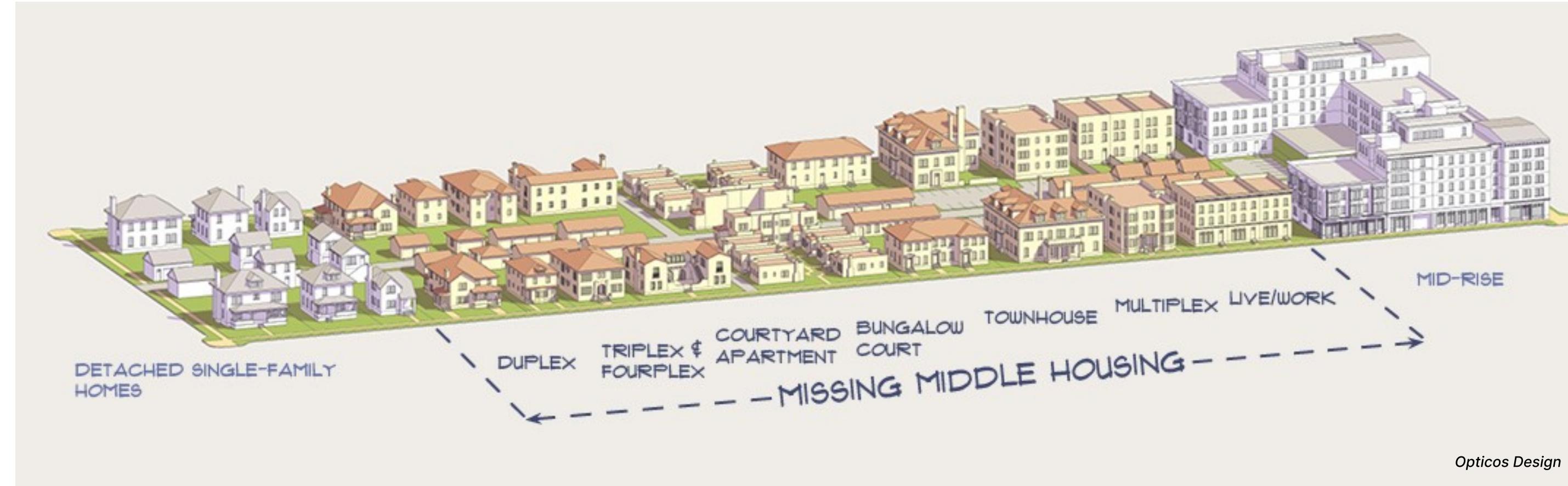
What is Middle-Housing?

Definition:

Middle-Housing is the range of buildings that exist between single-family homes and large apartments.

Benefits:

Middle housing provides a balance of privacy, density and affordability



Why?:

Middle Housing provides all stakeholders involved the flexibility in urban planning, given significant planning, financial, and cultural barriers to addressing the Housing Crisis. It addresses concerns of Homeowners, by minimally changing urban fabric, while significantly increasing housing supply for others.

Definition:

What are Strategies for development?



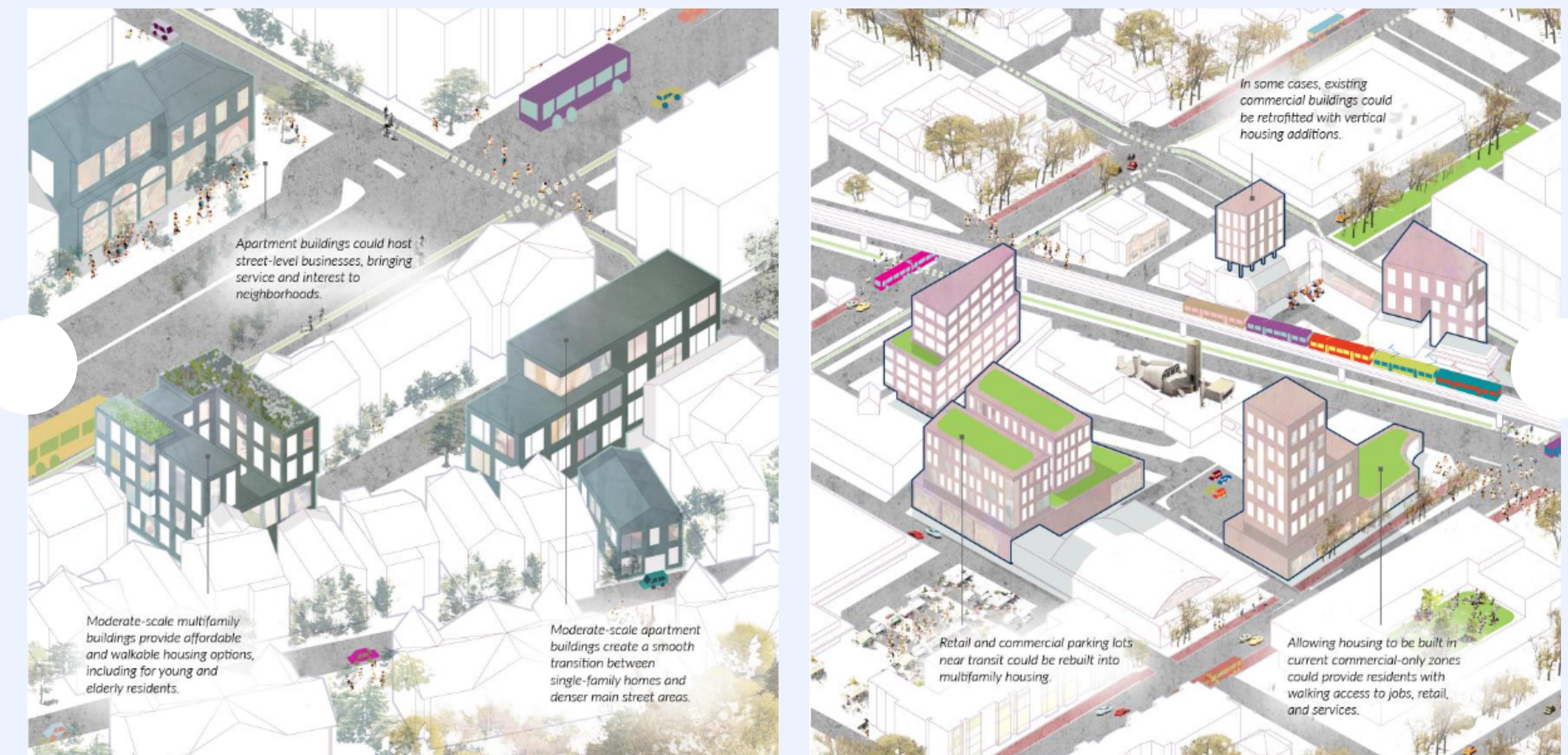
Plexify:

Allow for 2-4 unit buildings in single-family home zones, without minimum lot reqs.



Missing-Middle:

Allow for 12 unit buildings on parcels zoned for 3-11 units, and increasing % lot coverage.



Multiply:

Double the amount of units allowed for development near transit-hubs.

Legalize:

Allow for middle-housing on non-housing zoned parcels, and increase maximum units per acre.

Public Interest Technology: Building a Data-Dashboard to accelerate change

Why a Data- Dashboard?

By aggregating information, a data-dashboard can serve a dual-role in helping people identify parcels to develop, and assist in bridging across the financial and regulatory barriers to do so.

What is P.I.T?

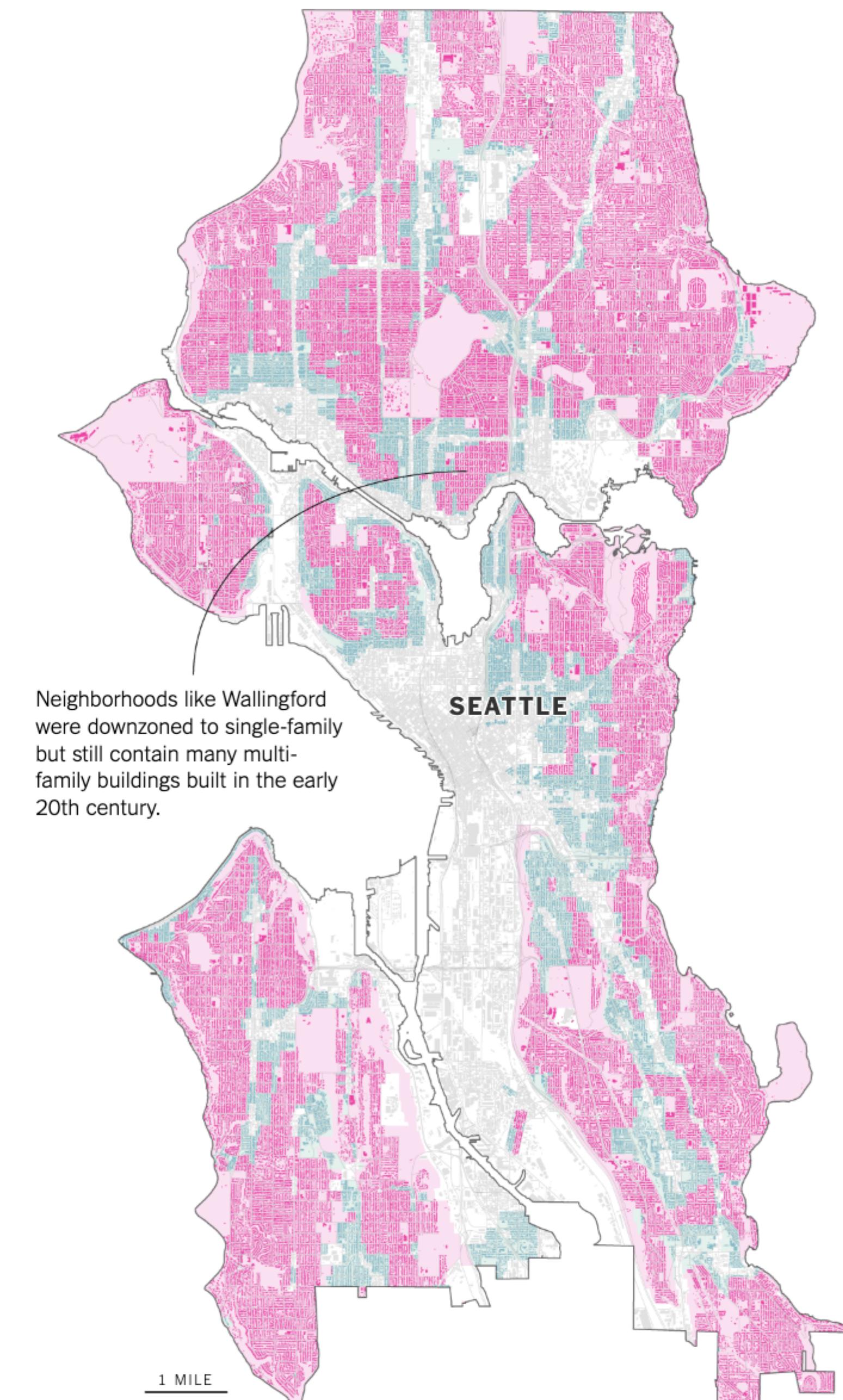
A Public Interest Technology seeks to apply a technology solution to a social challenges and improve the public good.

What is the issue?

Designs and Policies are readily available, but the supply of housing is not keeping pace with demand, or embodying the change that people are asking for (Badger & Bui, 2019).

Seattle

81% of residential land is zoned for detached single-family homes



Note: Most city parks and schools are zoned as single-family residential.

Public Interest Technology: Features of the Data-Dashboard



Aggregate Parcel Data & Filter by Eligible Properties

Display Data on an interactive Dashboard for Developers, Policy-Makers and Homeowners

Provide Pathways for development, through policy and financial incentives

Solution:

Using the Puget Sound Regional Council's Data Portal, which contains ArcGIS map packages of parcels, growth estimates, Regional and Local zoning restrictions:

- Create a dashboard that is flexible in applying to Seattle, WA as well as King County
- Create multiple views to allow policy-makers to address systemic issues, and homeowners and developers to inspect their land.

Features:

With this easily accessible data, all stakeholders involved can engage in decision-making at parcel specific, as well as city-wide levels.

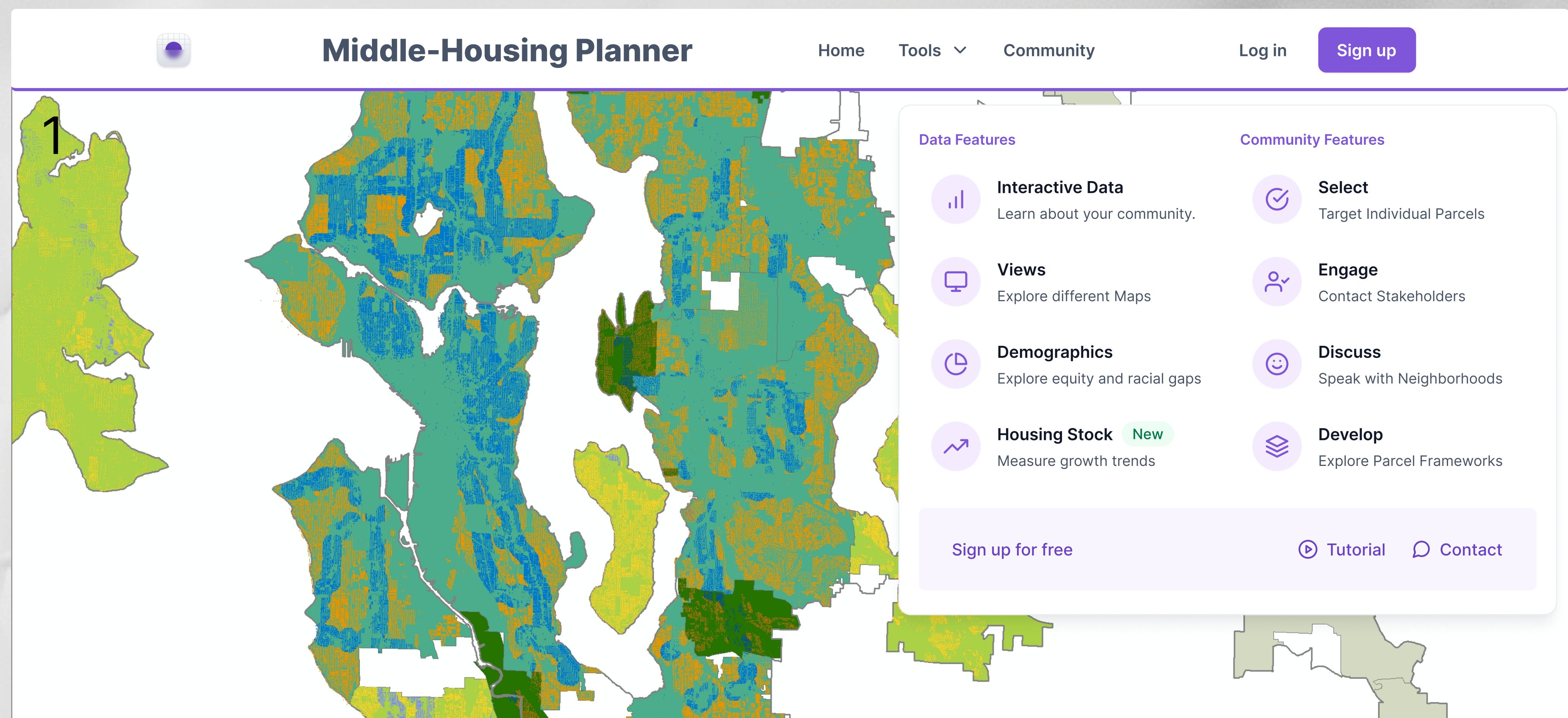
This information allows for nuanced financial and regulatory incentives, which can quickly be applied to a given area based off constituent feedback.

Creating a centralized space for exploring development zones allows for greater coordination of public and private interests.

Data-Dashboard Proof of Concept

Two-Views:

In Visualization 1, all affected areas of HB 1110 are shown in Blue and Orange. In Visualization 2, only “likely to develop” parcels of land are listed, as defined by PSRC Criteria.



Value:

This massive difference in affected vs. expected development is not easily explored, and by creating a dashboard, these cases can be examined closely, and their nuances understood.

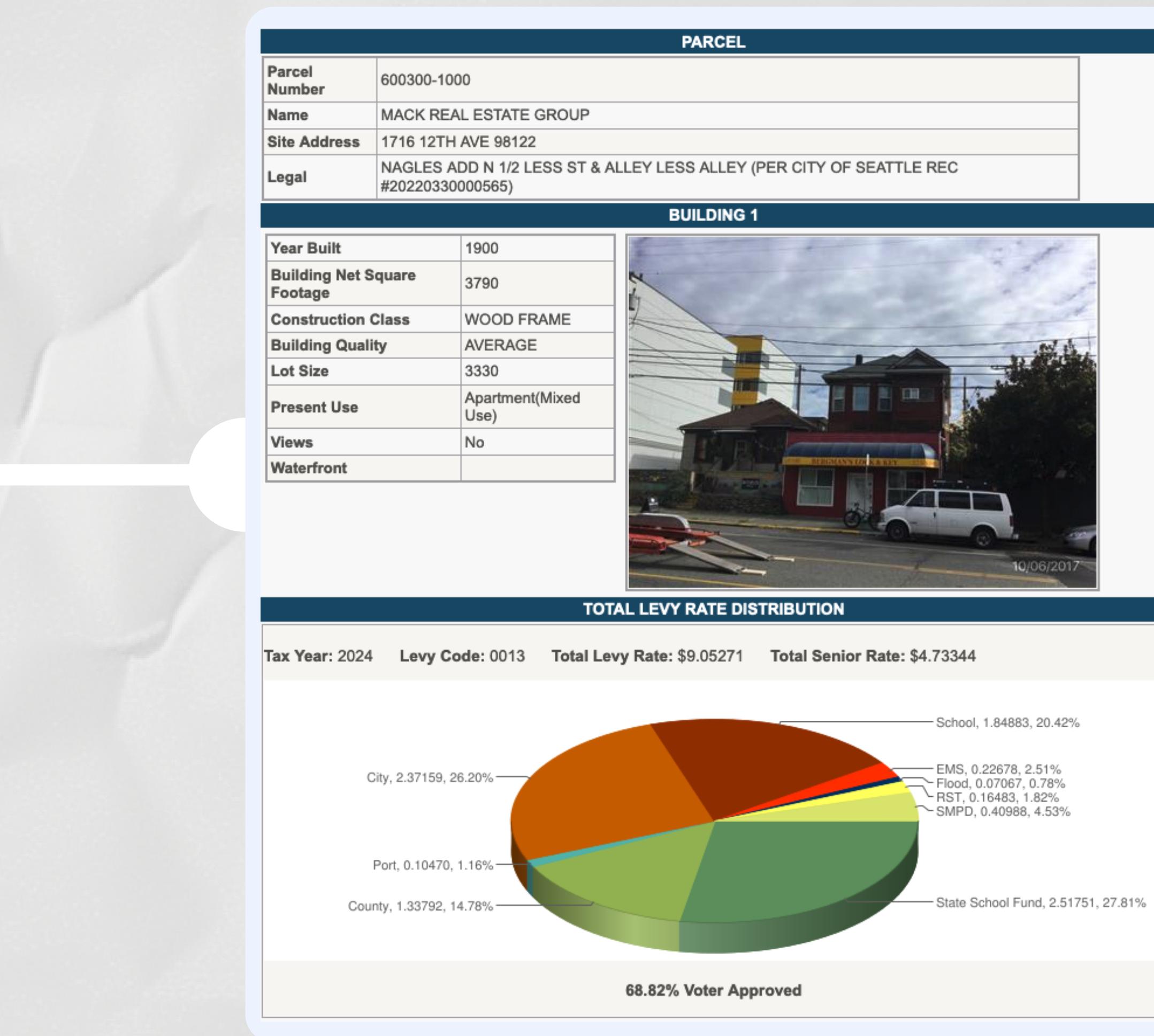


Deliverables

Data-Dashboard & Possible Policy Incentives

Selecting Property:

When selecting a desired property, one can see the relevant King County Dept. of Assessment information and gain a greater understanding of that parcel.



Selecting Area:

When selecting a corridor of parcels, one can quickly query the demographics and land use of that area, and prepare it for possible policy interventions.



Deliverables

Data-Dashboard & Possible Policy Incentives

Incentives:

Using the Data-Dashboard, stakeholders can identify parcels to develop and explore available incentives and restrictions to do so. By democratizing this information, it allows for Homeowners, small Landlords, Developers and Policy-Makers to better coordinate to tackle part of the housing crisis, increasing housing supply in Seattle, WA

Policy Interventions:

Tax Credits

By creating tax credits for Middle Housing Projects, the upfront cost of these can be reduced by alleviating either property or income taxes.

Grants & Subsidies

Establishing flexible Grants and Subsidies allows for more Housing Projects to receive funding, given their nuanced situation and designs.

Low Interest Loans

For small Landlords and Homeowners, creating low-cost options for development is crucial for reducing impact on average rental rates.

Downpayment Assist.

Seattle Office of Housing Provides first-time homeowners with downpayment assistance, this can be expanded to include middle-housing development.

Land Banking & Trusts

Highlighting Land-Banking Parcels and Trusts, and possible areas where both can be applied will give policy-makers greater insights on how to develop land.

Green Building

Providing incentives for energy-efficient and sustainable developments aligns closely with Middle-Housing goals, and can incentivize growth.

Conclusion

Review of the Data-Dashboard

Benefits:

Within urban planning and advocacy spaces, lots of information currently exists on how to tackle the shortage of units available to rent, as well their qualities. Aggregating these discussions onto a single portal where data can be freely explored can simultaneously narrow and broaden discussions when it comes to policy planning.

At the low level, people can identify prime parcels for development, and realize these goals. At a high level, policy-makers can describe trends and communicate them to their community without the need to run a study or work directly with a single developer.

Drawbacks:

All of this information is available through various sources, and advocacy groups. Not only that, policy-makers have access to their planning groups recommendations and data, but fail to act upon it. A major assumption of this project is that it will be used in good-faith, where community actors engage in meaningful discussions on where to densify. This dashboard could easily be used for speculation, where developers seek out parcels, purchasing them, and building expensive units.

With that being said, an essential feature of this project is pairing data with meaningful policy interventions, empowering individuals to act.

Conclusion

Reflection of Project

Summary:

In working on this topic, I hoped to gain a granular understanding of the zoning restrictions that make it difficult to build middle-housing in Seattle. This turned out to be extremely difficult, as there are many factors influencing how and why a particular development gets approved, and funded.

I instead focused on obtaining data, was graciously provided with a arcGIS map-package from the Puget Sound Regional Council, but struggled greatly to convert that dataset into a CSV, or JSON object to build a dashboard off of.

However, in exploring available materials and publications, I have realized a great need for a project like this to come to fruition, with an emphasis on bridging the information gaps between planners, developers, policy-makers, and homeowners. I believe that a seamless presentation of zoning codes and policy incentives would be a powerful tool in this discourse, allowing individuals to make better informed decisions on a parcel and system-wide basis.

Next Steps:

I am going to continue developing this project, as I believe its value proposition is demonstrated, and there are several learning outcomes for me. The next steps I will take with this project are as follows:

- Learn how to use arcGIS to properly export the dataset for handling in javaScript & Python.
- Build a lightweight web-application with paired database to host relevant information.
 - Learn how to query large-datasets for optimal runtime, and usage.
- Identify key zoning restrictions, and ordinances that would enable a parcel to densify.
- Identify economic and social barriers for development, and tie these closer together with policy incentives.

Conclusion

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