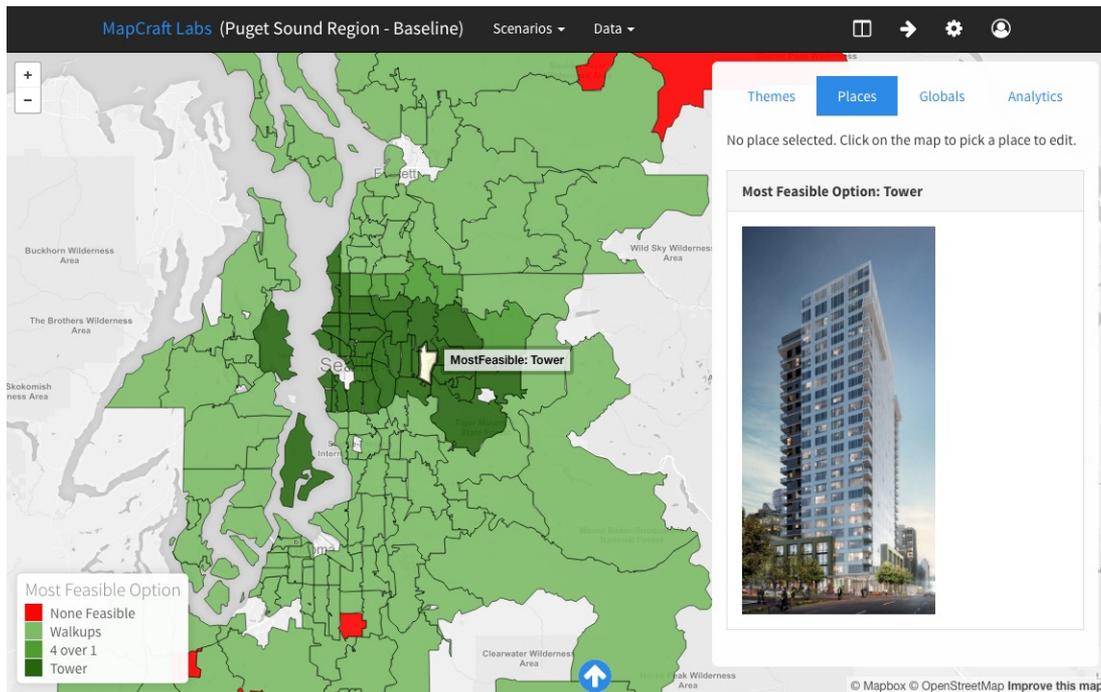


# Effective Strategies for Housing Production

**ECONorthwest**  
ECONOMICS • FINANCE • PLANNING

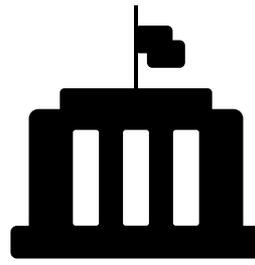
21 Elements Site Evaluation  
October 13th, 2020

# Real estate economics with MapCraft

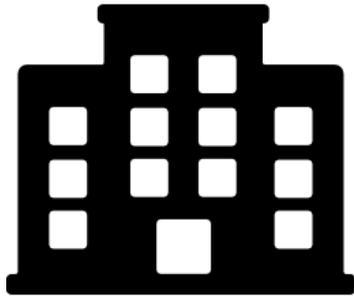


- Urban form explained through developers' ability to pay for land
- Run thousands of pro formas to test financial feasibility of policy options
- Appreciate opportunities for housing production

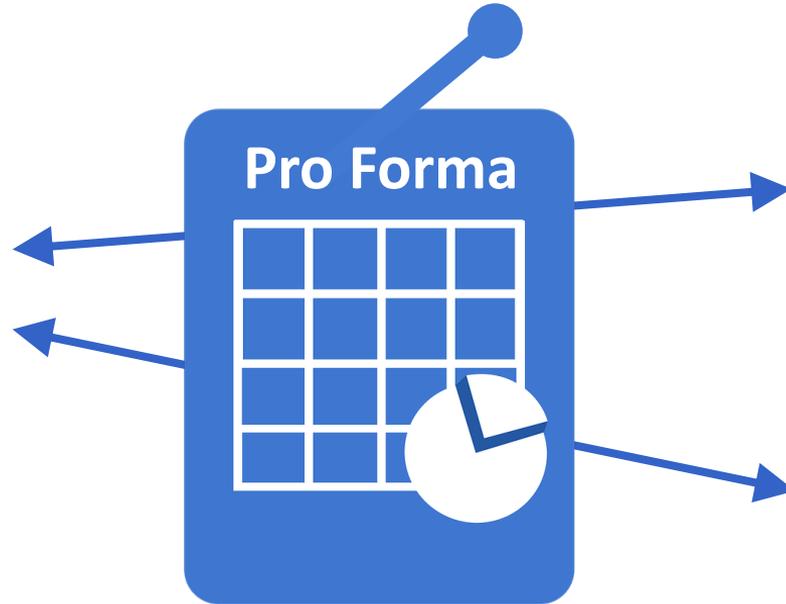
**MAPCRAFT.io**



**Policy**



**Developer**  
(for-profit or non-profit)



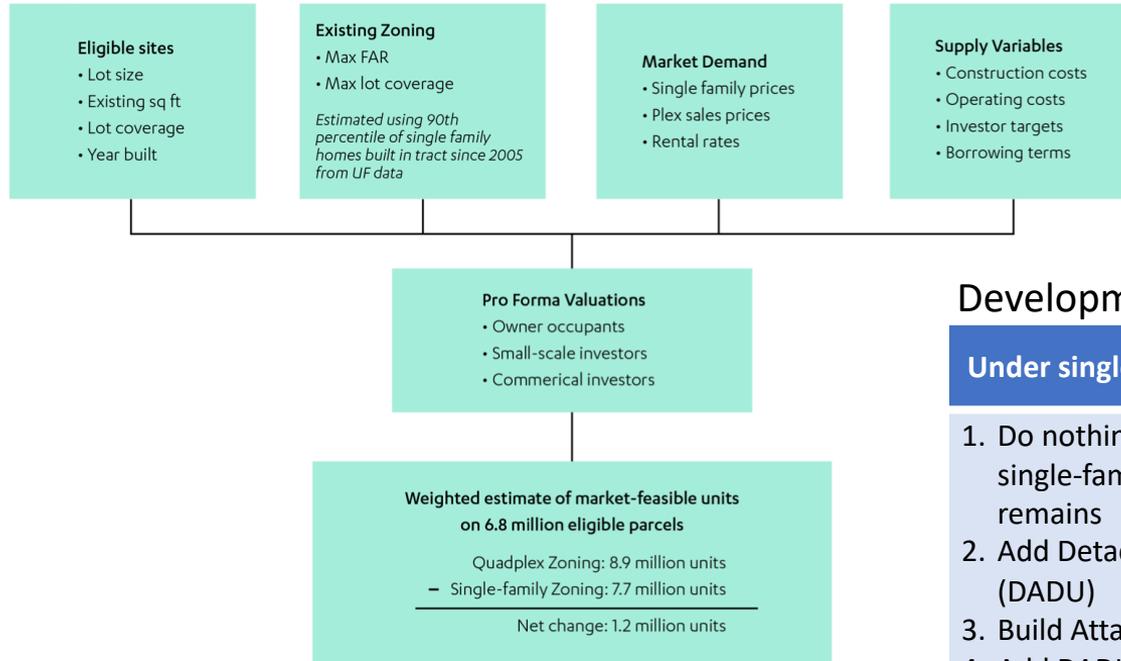
**Investors**



**Bank**

# Example MapCraft Analysis – CA AB3040

## MapCraft Evaluation Process

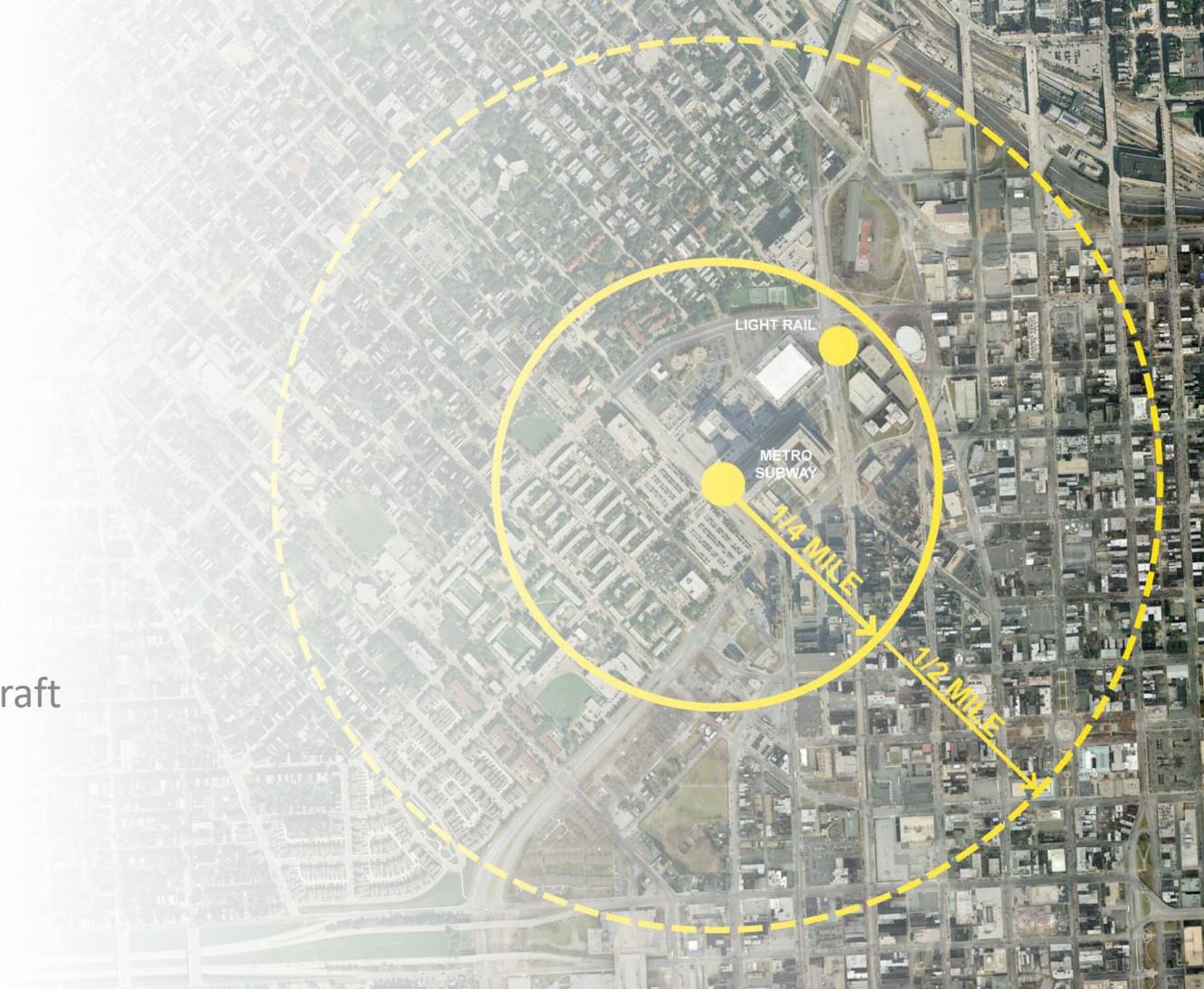


## Development Options Tested

Under single-family zoning	Under fourplex zoning
<ol style="list-style-type: none"> <li>1. Do nothing — Existing single-family structure remains</li> <li>2. Add Detached ADU (DADU)</li> <li>3. Build Attached ADU</li> <li>4. Add DADU + Junior ADU</li> <li>5. Tear down and build new SFR (i.e., McMansion)</li> </ol>	<p>All options available under single-family zoning, plus:</p> <ol style="list-style-type: none"> <li>6. Convert existing house to 2-, 3-, or 4-plex</li> <li>7. Add DADU and convert existing house to 2-, 3-, or 4-plex</li> <li>8. Add addition, then convert house to 2-, 3-, or 4-plex</li> <li>9. Tear down and build new 2-, 3-, or 4-plex</li> </ol>

# Study Examples

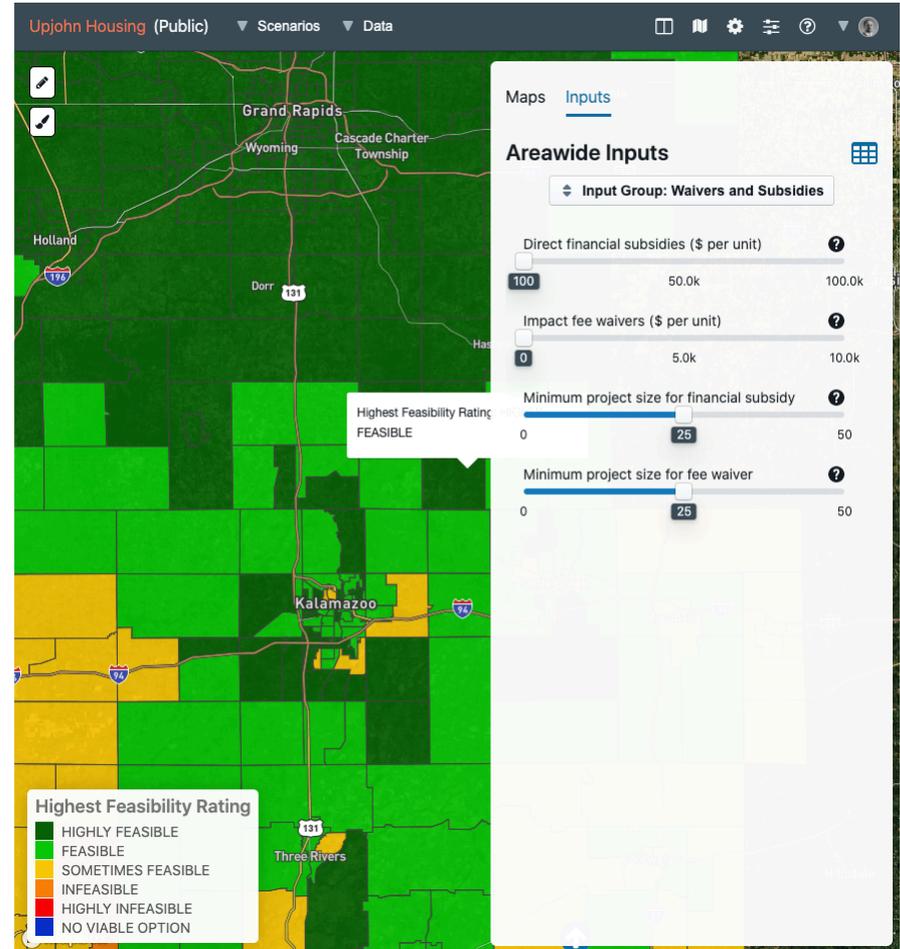
ECONorthwest + MapCraft  
Project Case Studies





# Making housing feasible

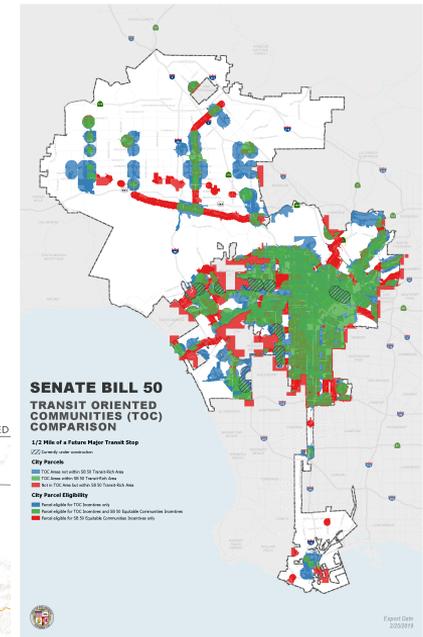
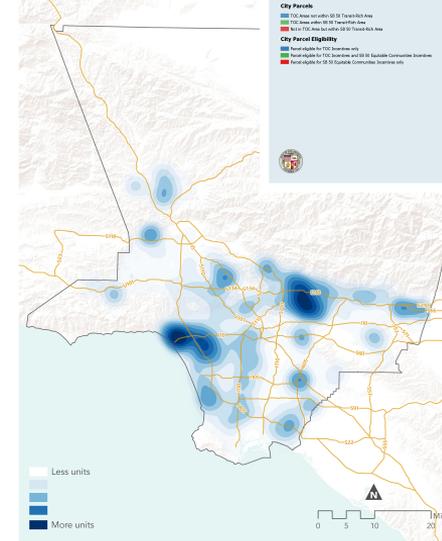
- Evaluate strategies for making multifamily development more feasible in SW Michigan
- Consider the market viability of development with TIF, subsidies, waivers, tax abatements, and inclusionary housing



# Assessing overlapping ETOD policies

- Examine interaction of two TOD upzoning policies, the City of Los Angeles's TOC program and California's Senate Bill 50 proposal
- Understand if local TOC program is better calibrated than statewide legislation for the LA context
- Identify aspects of SB 50 that could be additive to TOC program

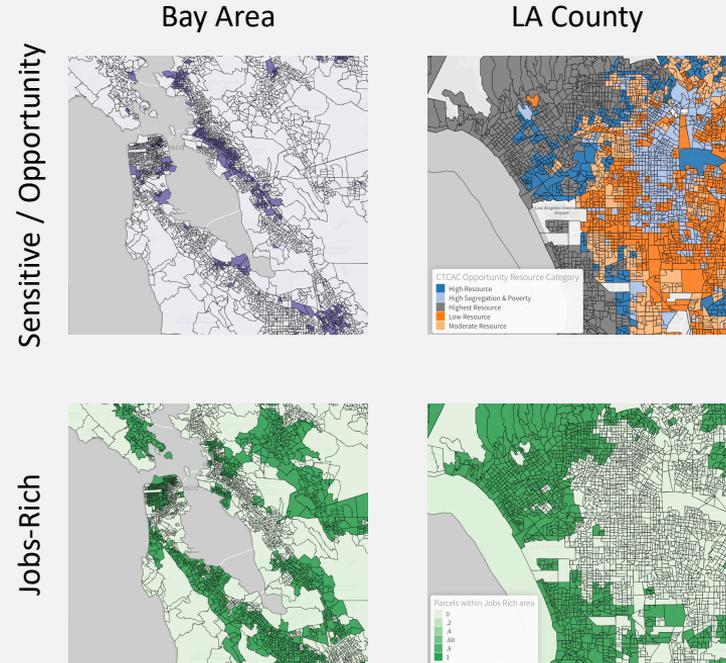
ADDITIONAL MARKET-FEASIBLE UNITS ENABLED  
Data sources: MapCraft Analysis



## Evaluating equity of upzoning

- Quantify housing capacity enabled by proposed Senate Bill 50 legislation
- Evaluate viability of inclusionary affordable housing production
- Consider access to opportunity and potential for displacement in geographies with SB 50-enabled housing capacity

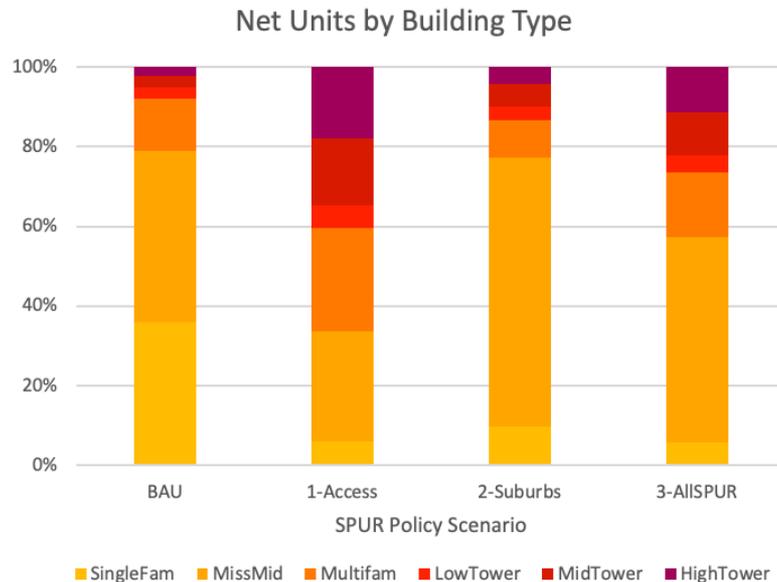
## California SB 50 Geographies





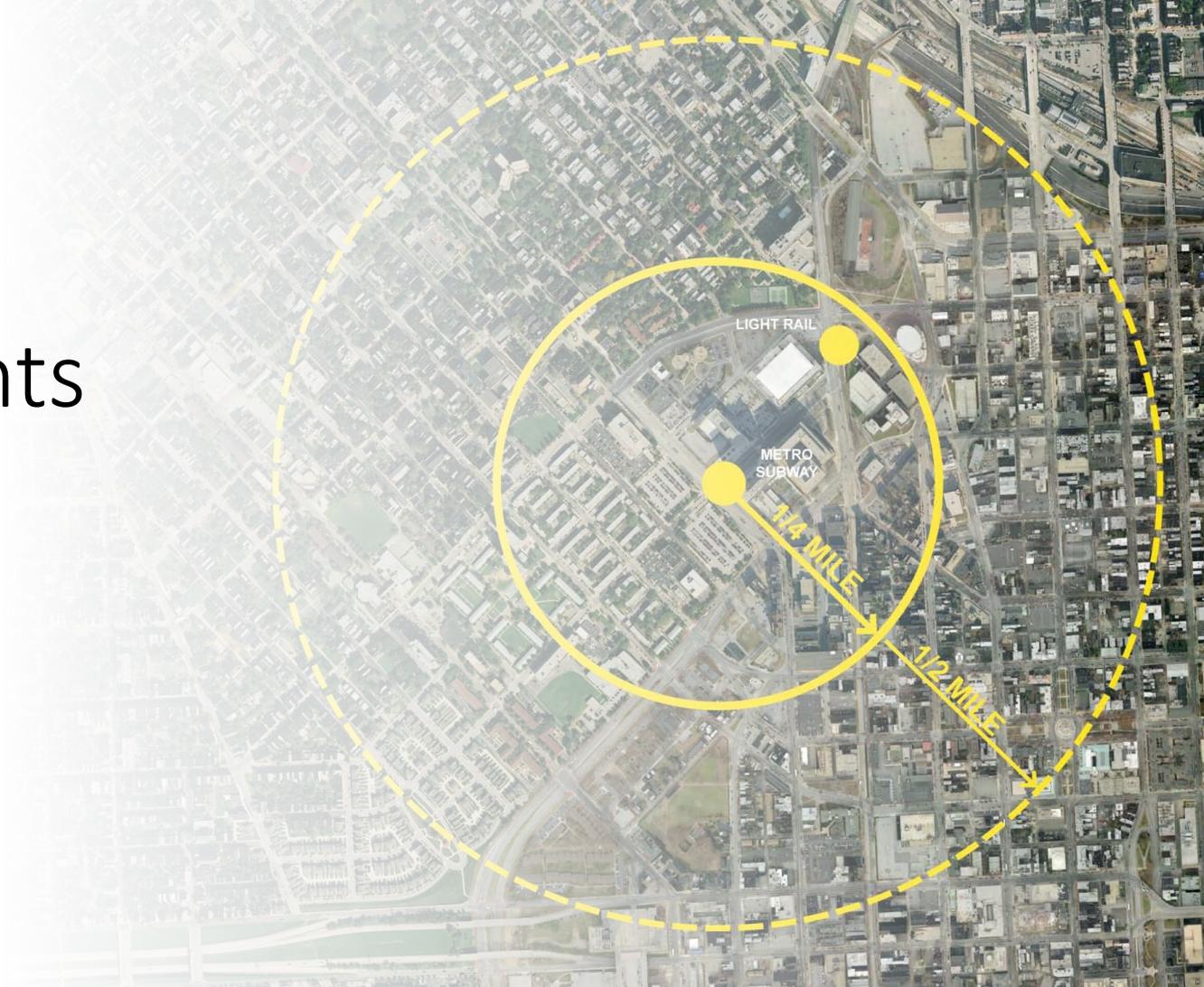
## Shaping sustainable growth

- Quantify housing capacity informed by a variety of policies as part of SPUR's 2070 Regional Strategy
- Test outcomes to see if policies:
  - Concentrate change in resilient locations
  - Avoid sensitive lands
  - Foster transit-supportive urban forms
  - Yield sufficient housing

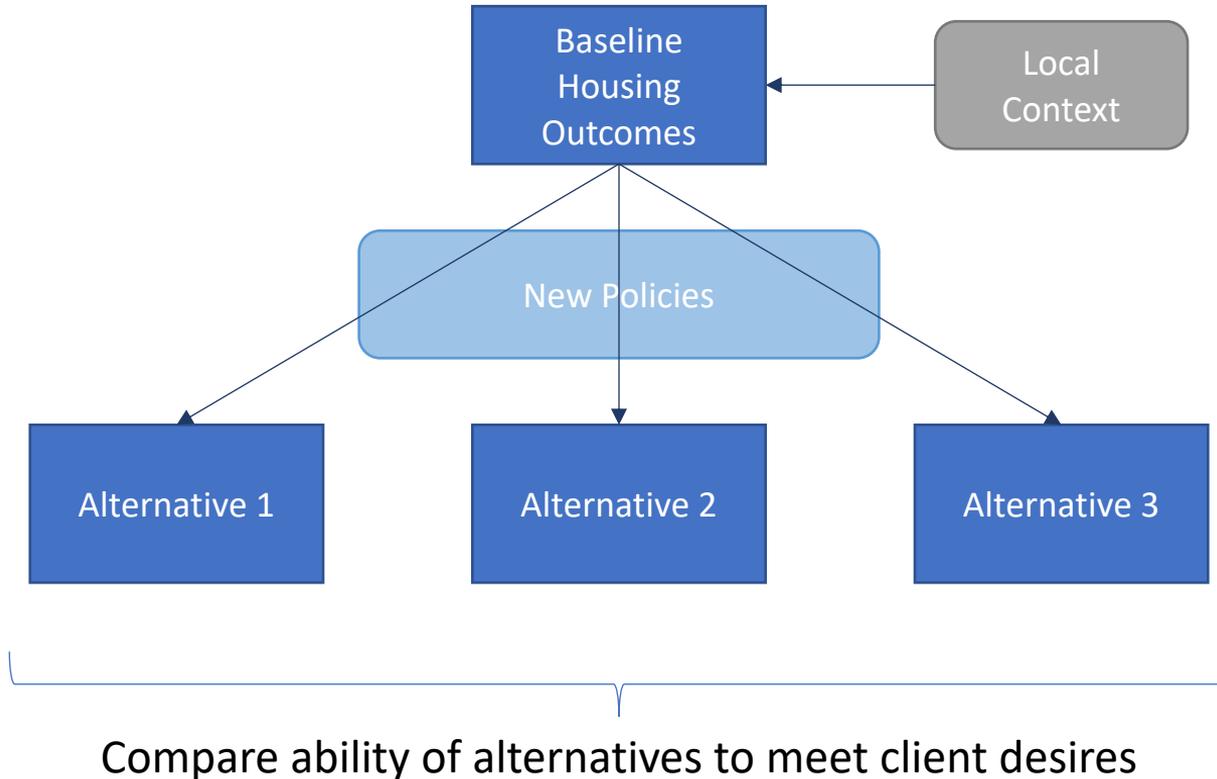


# 21 Elements Analysis Approach

Site Strategies

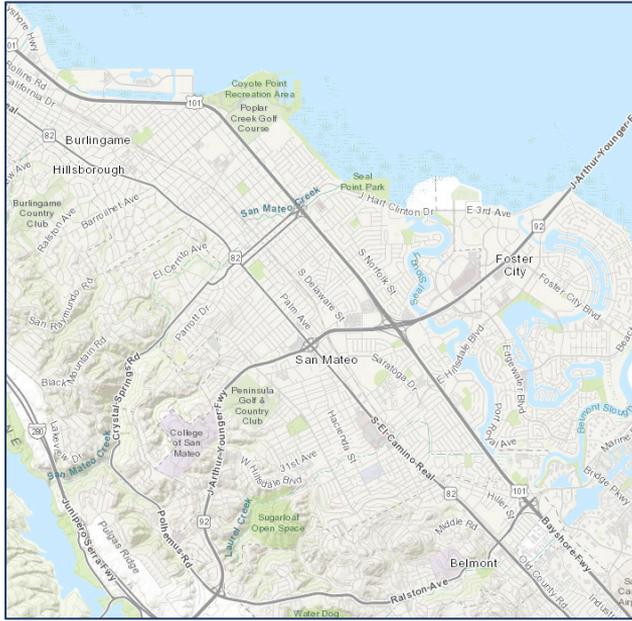


# Typical Housing Policy / Strategy Study



# Study Inputs from 21 Elements Cohort

## 1. Parcel shapfile with zoning



## 2. Zoning attributes

	A	B	D	E	F	G	H	I
1	<b>ZONING</b>							
2	NEED TO COMPLETE - YELLOW							
3								
4	Notes	Zone	Max Residential Base Height In Urban Village	Max Residential Base Height out of Urban Village	Max Non-Residential Base Height	Max Base FAR In Urban Village	Max Non-Mixed Use Base FAR out of Urban Village	Max Mixed Use Base FAR out of Urban Village
5	RSL		25	25	0	NA	NA	NA
6	RSL/T		18	18	0	NA	NA	NA
7	RSL/C		18	18	0	NA	NA	NA
8	RSL/TC		18	18	0	NA	NA	NA
9	SF 5000		30	30	0	NA	NA	NA
10	SF 7200		30	30	0	NA	NA	NA
11	SF 9600		30	30	0	NA	NA	NA
12	LR1		30	30	0	1.00	1.00	1.00
13	LR2		30	30	0	1.10	1.10	1.10
14	LR2 RC		40	30	30	1.10	1.10	1.10
15	LR3		50	30	0	1.50	1.30	1.30
16	LR3 (M)		50	50	0	2.30	1.80	1.80
17	LR3 RC		40	30	30	1.50	1.30	1.30
18	LR3 RC (M)		50	50	40	2.30	1.80	1.80
19	MR		60	60	0	3.20	3.20	3.20
20	MR (M)		80	80	0	4.50	4.50	4.50
21	MR-RC		60	60	60	3.20	3.20	3.20
22	HR		160	160	0	7.00	7.00	7.00
23	HR-PUD		160	160	0	7.00	7.00	7.00
24	C1-30		30	30	30	3.00	2.25	2.50
25	C1-40		40	40	40	4.00	3.00	3.25
26	C1-65		65	65	65	5.75	4.25	4.75
27	C2-40		40	40	40	4.00	3.00	3.25
28	C2-55 (M)		55	55	55	3.75	3.75	3.75
29	C2-65		65	65	65	5.75	4.25	4.75
30	NC1-30		30	30	30	3.00	2.25	2.50
31	NC1-40		40	40	40	4.00	3.00	3.25
32	NC2-30		30	30	30	3.00	2.25	2.50
33	NC2-40		40	40	40	4.00	3.00	3.25
34	NC2P-40		40	40	40	4.00	3.00	3.25
35	NC2-65		65	65	65	5.75	4.25	4.75
36	NC2P-65		65	65	65	5.75	4.25	4.75
37	NC3-40		40	40	40	4.00	3.00	3.25

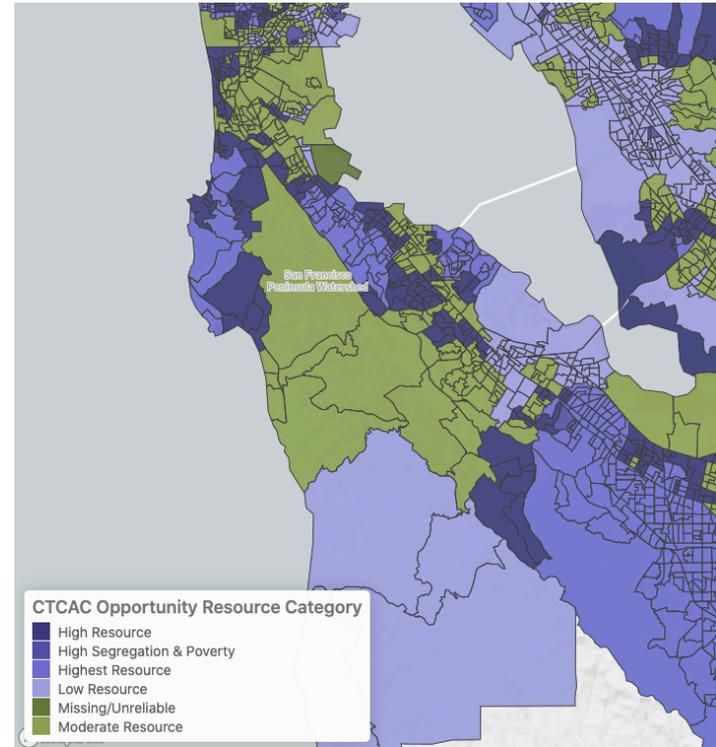
## 3. Other data

- Inclusionary table
- Policy geos
- Other data TBD

# MapCraft TOD Outputs

- Net new market-feasible units
  - Market rate
  - Inclusionary affordable
- Potential displaced units
- Extrapolation of production potential

Data outputs by census block group



# Deliverable: Slide Deck

- Analysis description
- Tables of estimated policy impacts for your jurisdiction
- Maps of estimated policy impacts for your jurisdiction
- Policies prioritized based on market-feasible capacity potential and high-level fiscal impacts

## RHNA 6 Site Strategies Analysis

### Policy Options

