



**BUILDING  
ON A  
CULTURE  
OF VISION**



This is an **extraordinary** project that requires an **extraordinary** approach.

Today is a **Working Session**.

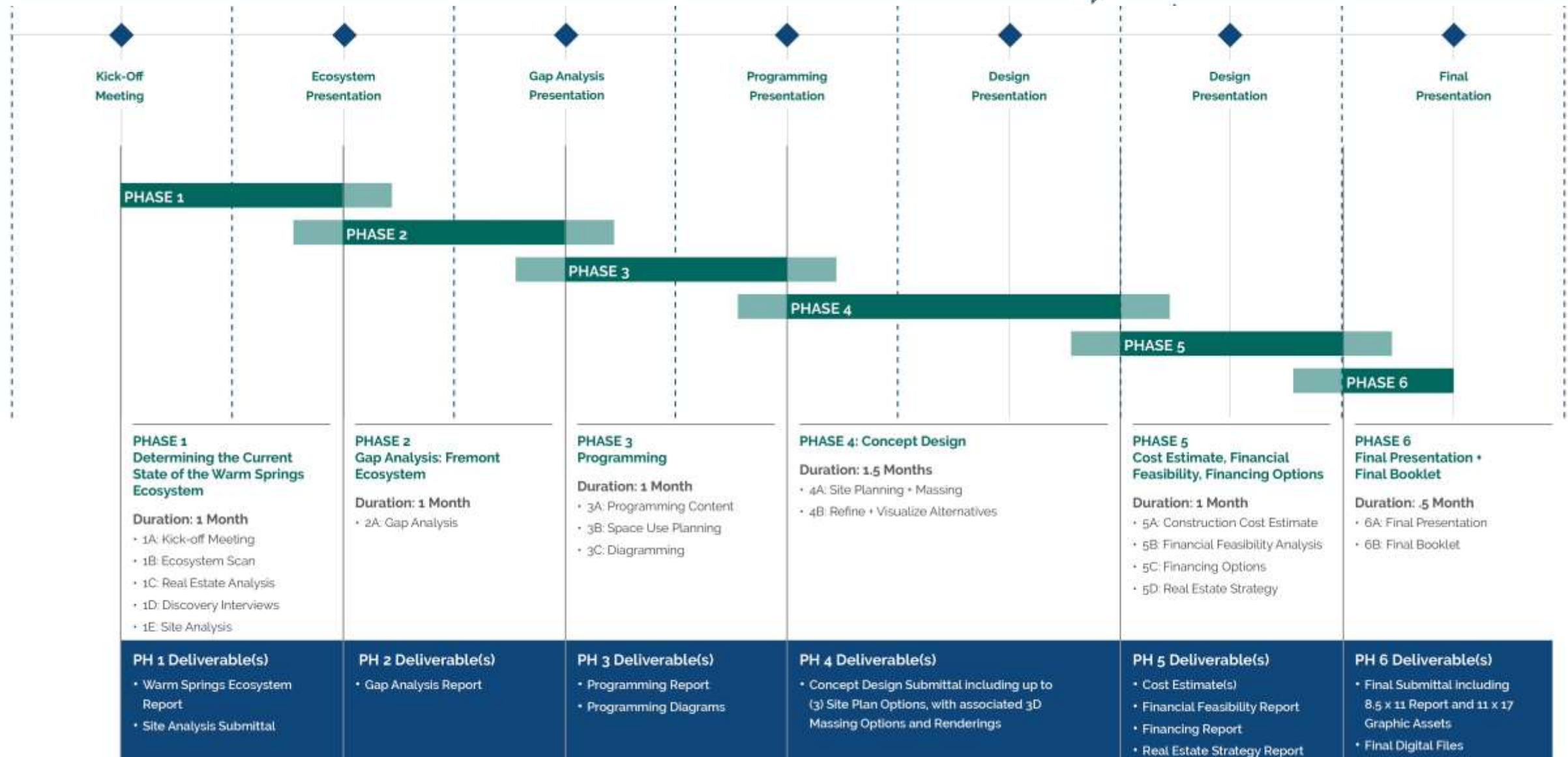
We will **provide an update** on the progress, the **process** and **perceptions** that are leading to **framing/putting boundaries** on a direction for the rest of the project.

# agenda



- Where we are
- What we're finding out
  - Ecosystem Elements - Kevin
  - Innovators & Cultivators - Jetta
  - Area Demography and Real Estate Analysis - BAE
  - Site Analysis - JFAK

# PROPOSED TIMELINE



# Phase I



## **Determining the Current State of the Warm Springs Ecosystem**

- 1A: Kick-off Meeting
- 1B: Ecosystem Scan
- 1C: Real Estate Analysis
- 1D: Discovery Interviews
- 1E: Site Analysis

### **Deliverables:**

- Warm Springs Ecosystem Report
- Site Analysis Submittal

### **Next Step:**

- Agreed upon goals and objectives for the Warm Springs Innovation Campus (WSIC) to perform Phase 2 – Gap Analysis





*Innovation districts constitute the ultimate mash-up of entrepreneurs and educational institutions, startups and schools, mixed-use development and medical innovations, bike-sharing and bankable investments—all connected by transit, powered by clean energy, wired for digital technology, and fueled by caffeine.*



**- Bruce Katz and Julie Wagner,  
*The Rise of Innovation Districts***



# INNOVATION ECOSYSTEM MODEL





## Completed Interviews (59)

- Sources of Ideas – 9
- Innovation & Entrepreneur Support – 14
- Source of Funding – 7
- Stakeholder Engagement – 17
- Policy Support – 4
- World Market Connections – 2
- BAE Real Estate – 6





## **Ecosystem Element Comments**

- Sources of Ideas – 16
- Innovation & Entrepreneur Support – 30
- Source of Funding –19
- Stakeholder Engagement – 23
- Policy Support – 12
- World Market Connections – 9



# Company Evolution Comments

- Genesis – 9
- Acceleration – 13
- Incubation – 11
- Growth – 15
- Expansion - 7



## Industry Sector Comments

- Manufacturing – 32
- Cleantech – 9
- Biotech – 6
- Software – 13
- Social Value – 30
- Education – 30
- Other - 7





## Caveats

- Respondent Bias
- Sample Bias
- Qualitative not Quantitative



# Emerging Indications

- Three industry sectors emerging:
  - Manufacturing
  - Cleantech
  - Biotech
- Bay Area has great support for early stage companies. Later stage companies are not as well supported.
- Indications that social good might be a Fremont differential.
- Strong interest in CSUEB establishing a presence.
- No major gaps in the ecosystem.



## Emerging Indications (cont.)

- Interest in building an iconic symbol for Fremont. Building height, traffic, parking all mentioned as issues.
- Housing and its related elements (cost, traffic, schools) mentioned.
- Event space and the programming to fill the space might be a something to start.
- Potential major gap in Fremont branding
- Fremont has a reputation as a bedroom community. The 'cool' factor needs proper prior planning.





# **Ecosystem Scan: Innovation Cultivators**

29 November 2017

“Ecosystem comprising more than 3000 Silicon Valley firms had evolved to provide businesses with startup expertise. These venture capitalists, chip designers, glass blowers, fabrication houses, dye cutters, equipment suppliers, and specialized law, recruiting, and public relations firms were themselves entrepreneurial ventures. They helped launch a new generation of entrepreneurs many of whom built on the breakthroughs and precedents set by the troublemakers who had come before.”

– Leslie Berlin, *Troublemakers: Silicon Valley's Coming of Age*

# Ecosystem Scan: Innovation Cultivators

## Methodology

1. Identified 50 relevant cultivators, active in the Bay Area (including Elemental from Hawaii), based on:
  - Definition and Innovation Cultivators identified in RFP
  - Organizations identified in interviews
  - Network of organizations known by LACI
2. Considered various dimensions of programming, site, focus, structure and other relevant dimensions identified in the Team LACI Ecosystem Framework
3. Analysis focused on identifying existing landscape of activities
4. Additional analysis will focus on some academic institutions and a deeper dive on specific Innovation Cultivators based on a narrowed scope of Innovation Center. (Phase 2)

**Innovation cultivators** are companies, organizations or groups that support the growth of individuals, firms and their ideas. They include incubators, accelerators, proof-of-concept centers, tech transfer offices, shared working spaces, community colleges and universities advancing specific skill sets for the innovation-driven economy.\*

\*Warm Springs Innovation Center Feasibility Study RFP #17-006  
Did not include California Green Technology Center due to lack of information  
Includes 6 co-working only spaces



# Ecosystem Scan: 50 Innovation Cultivators

500Startups

AngelPad

Autodesk Pier 9

Batchery

BioCube

Bolt

BootUp

BriteLab

CalCharge

Circuit Launch

Citris at Foundry

Critosphere Cowork Space

Cyclotron Road/Activate

Energy

DevLabs

Elemental

Factory 510 at The Gate 510

Flextronix Innovation Labs

Founders Space

Gateway

Hanhai

Hax

Highway 1

ImpactHub

IndieBio

Kapor Center

Lemnos Labs

Matter.

Oakland Startup Network

OtherLab

Parisoma

Playground

Plug and Play

Port Workspaces

Powerhouse

Prospect Silicon Valley

QB3

River Ecosystems

RocketSpace

Second Workspace

SF Made (Manufacturing

Foundry at 150 Hooper)

Silicon Climate Accelerator

SkyDeck

StartX

Sudo Room

TechShop

The Cleantech Open

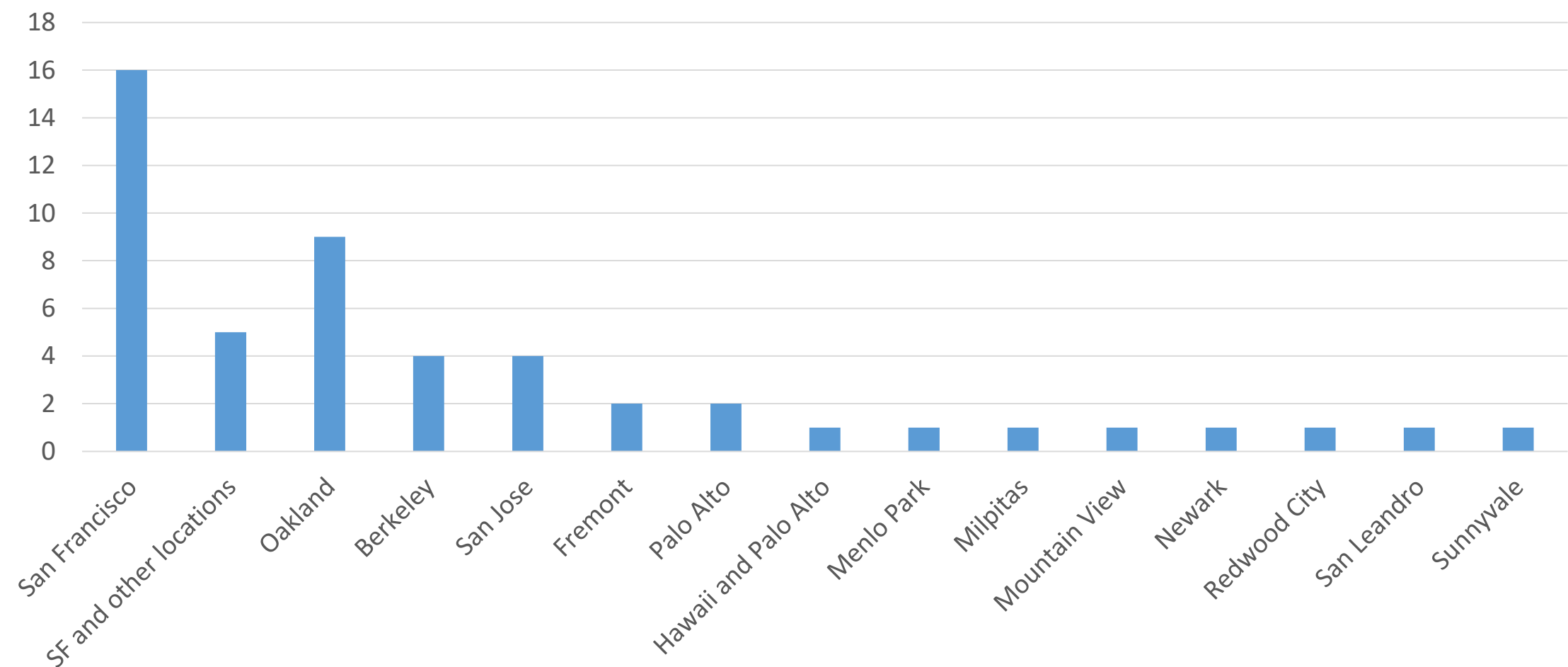
The Foundry

Triple Ring Labs

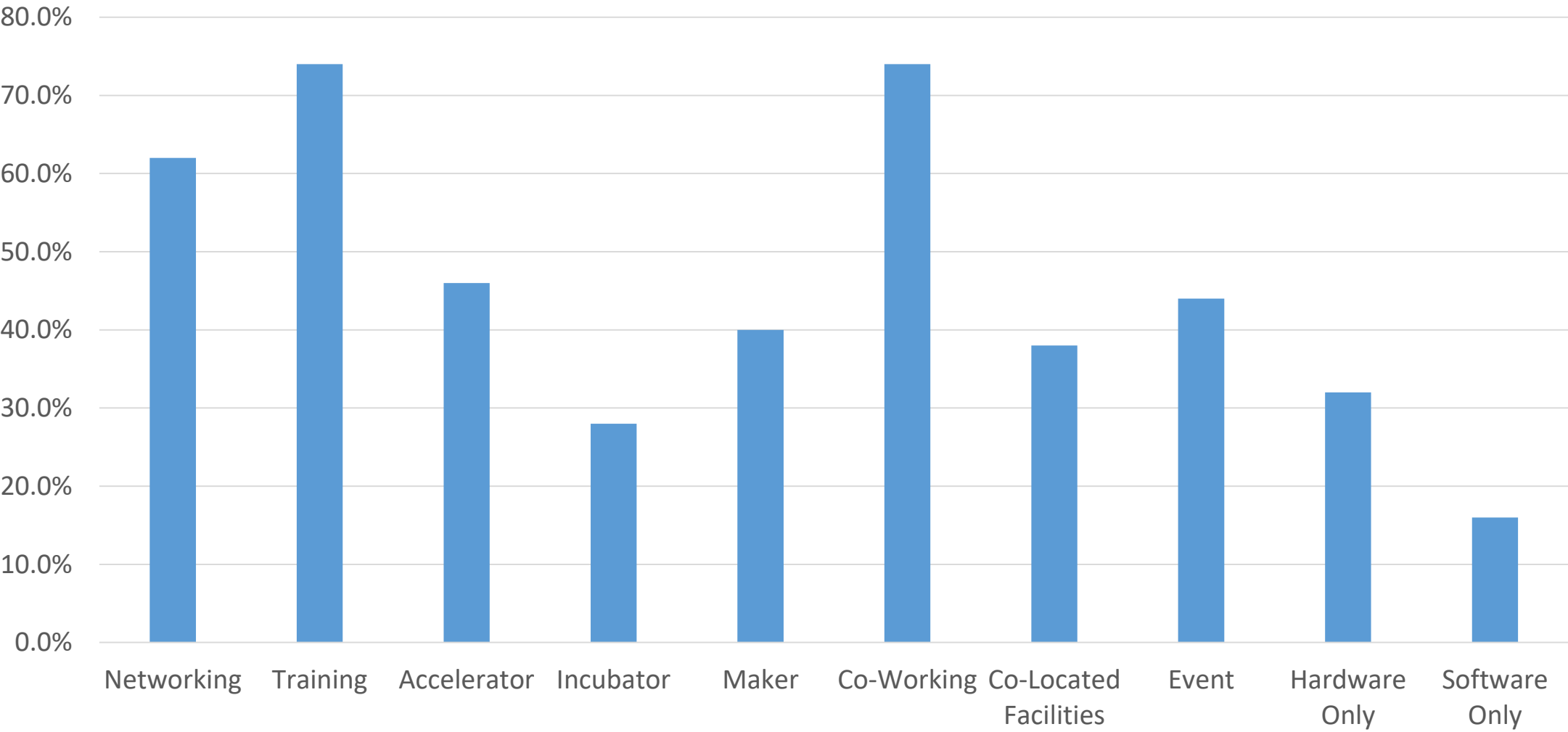
WeWork

Y Combinator

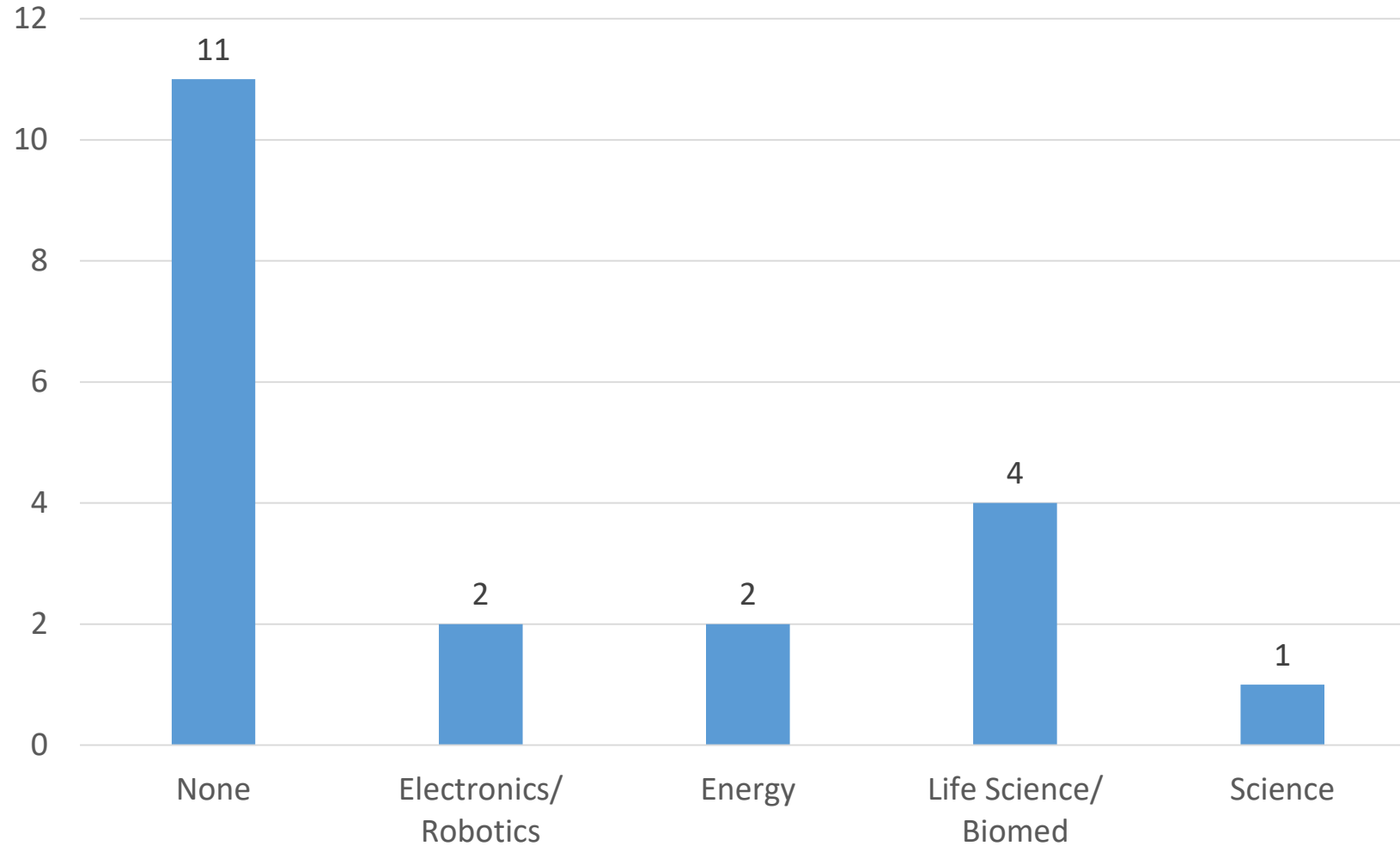
# Ecosystem Scan: Innovation Cultivators Locations



# Ecosystem Scan: Innovation Cultivators Attributes

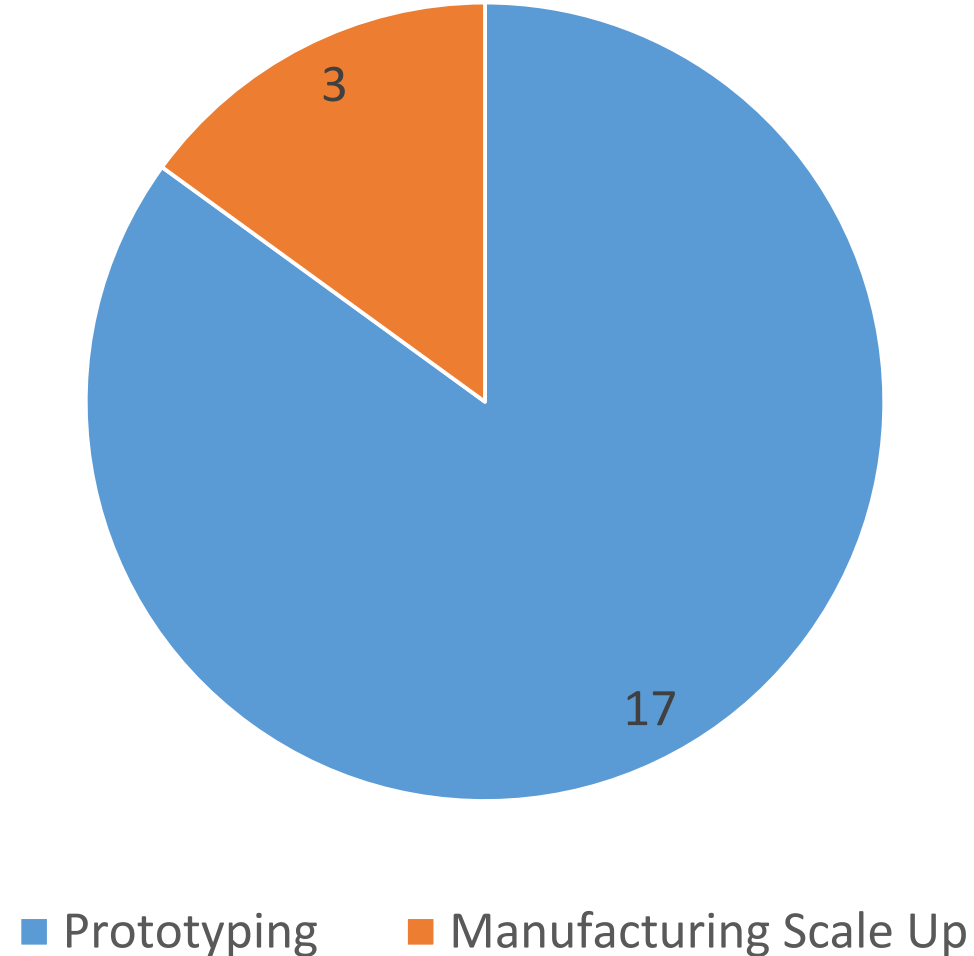


# Ecosystem Scan: Innovation Cultivators Maker Space Focus Areas





# Ecosystem Scan: Innovation Cultivators Product Development Stages of Maker Spaces



# Ecosystem Scan: Innovation Cultivators Energy Related

Name	City	Networking	Training	Accelerator	Incubator	Maker	Co-working	Co-Located Facilities	Event	Hardware only	Software only	Focus
Cyclotron Road/Activate Energy	Berkeley	Y	Y	Y	N	Y	Y	Y	N	Y	N	Energy
Powerhouse	Oakland	Y	Y	Y	Y	N	Y	N	Y	N	N	Energy
Prospect Silicon Valley	San Jose	Y	Y	N	Y	Y	Y	Y	Y	N	N	Energy, Smart Cities
Elemental	Hawaii, Palo Alto	Y	Y	Y	N	N	N	N	N	N	N	Energy, Water, Ag, Transportation
Silicon Climate Accelerator	SF	Y	Y	Y	N	N	Y	N	N	N	N	Climate
CalCharge	Oakland	Y	Y	N	N	N	N	N	Y	Y	N	Energy Storage

# Ecosystem Scan: Innovation Cultivators Bio-Related

Name	City	Networking	Training	Accelerator	Incubator	Maker	Co-working	Co-Located Facilities	Event	Hardware only	Software only	Focus
The Foundry	Redwood City	N	Y	N	Y	Y	Y	Y	N	Y	N	Life Science/ Biomed
QB3	San Francisco	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Life Science/ Biotech/ Biomed
IndieBio	SF	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Life Science/ Biotech
BioCube	San Jose	N	N	N	N	Y	Y	Y	N	Y	N	Life Science/ Biotech / Cleantech

# Ecosystem Scan: Patent Data

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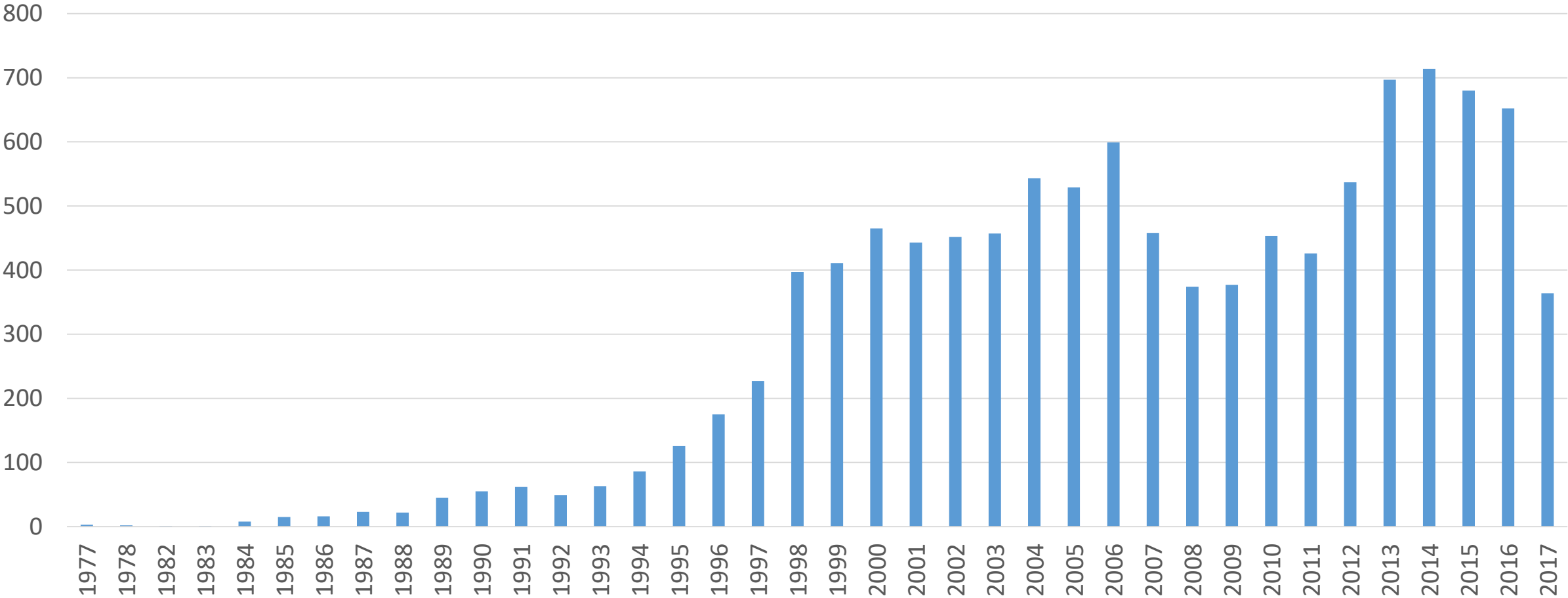


## Methodology

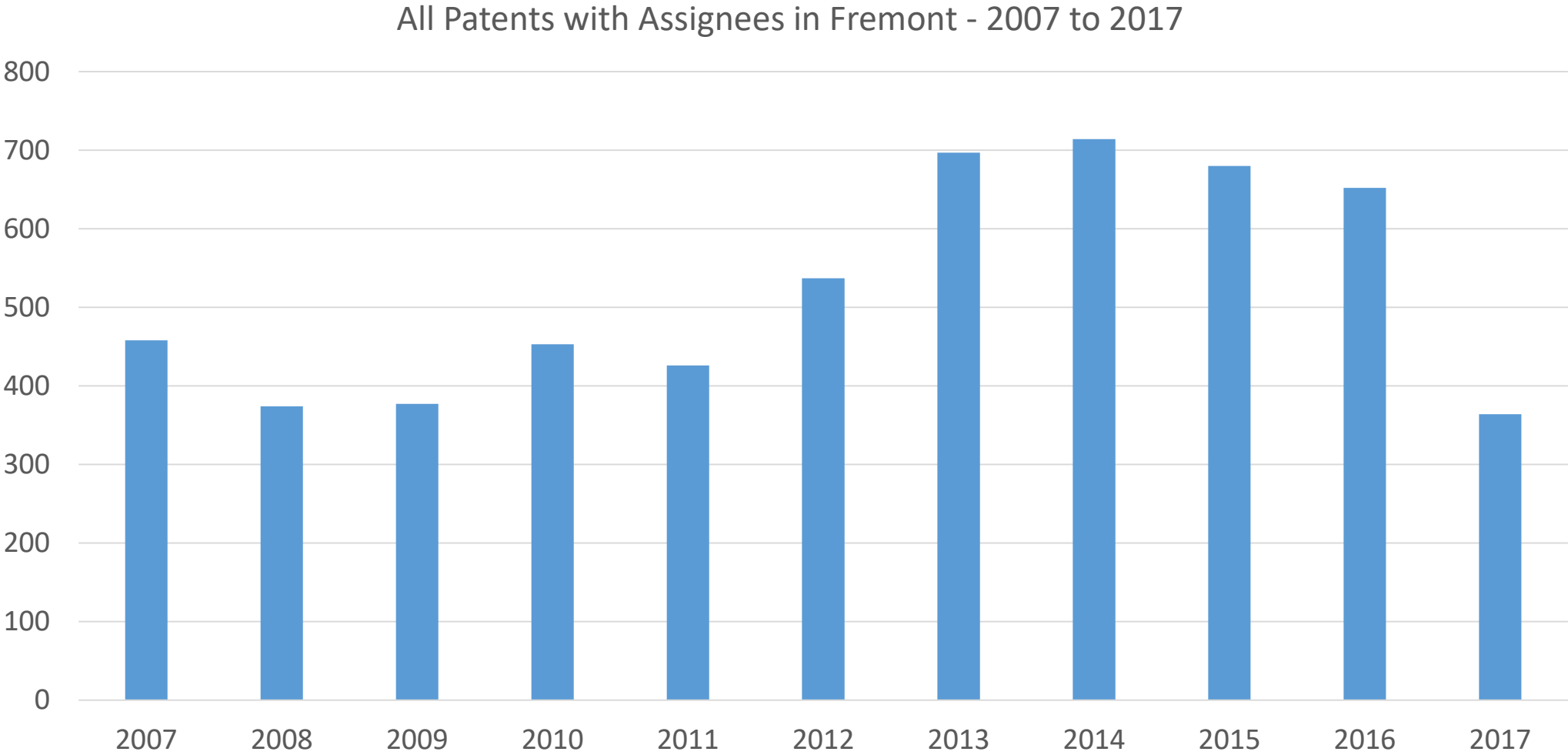
1. Data was pulled from <http://www.patentsview.org/web/> using the "Data query" method at the bottom of the page, this is the method by which data is currently organized by USPTO
2. CPC Section/Subsection is a method of classification used in patents, the definitions for these can be found at <https://www.uspto.gov/web/patents/classification/cpc.html>

Note: Tesla (307 patents for all years) and Apple (2138 patents for all years) not included in data, these patents assignee locations are Palo Alto and Cupertino respectively.

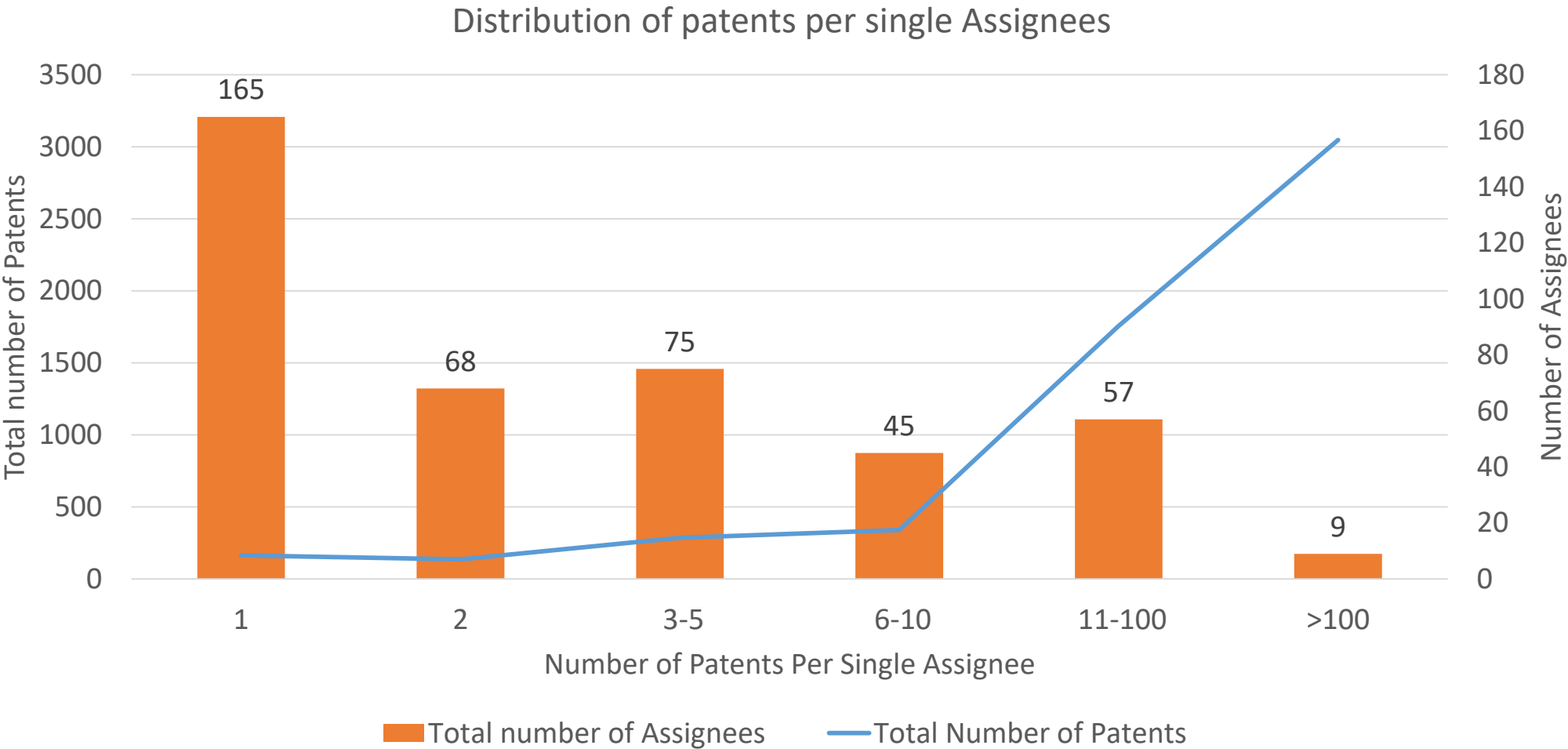
# Ecosystem Scan: Patent Data All Patents w/ Assignee in Fremont



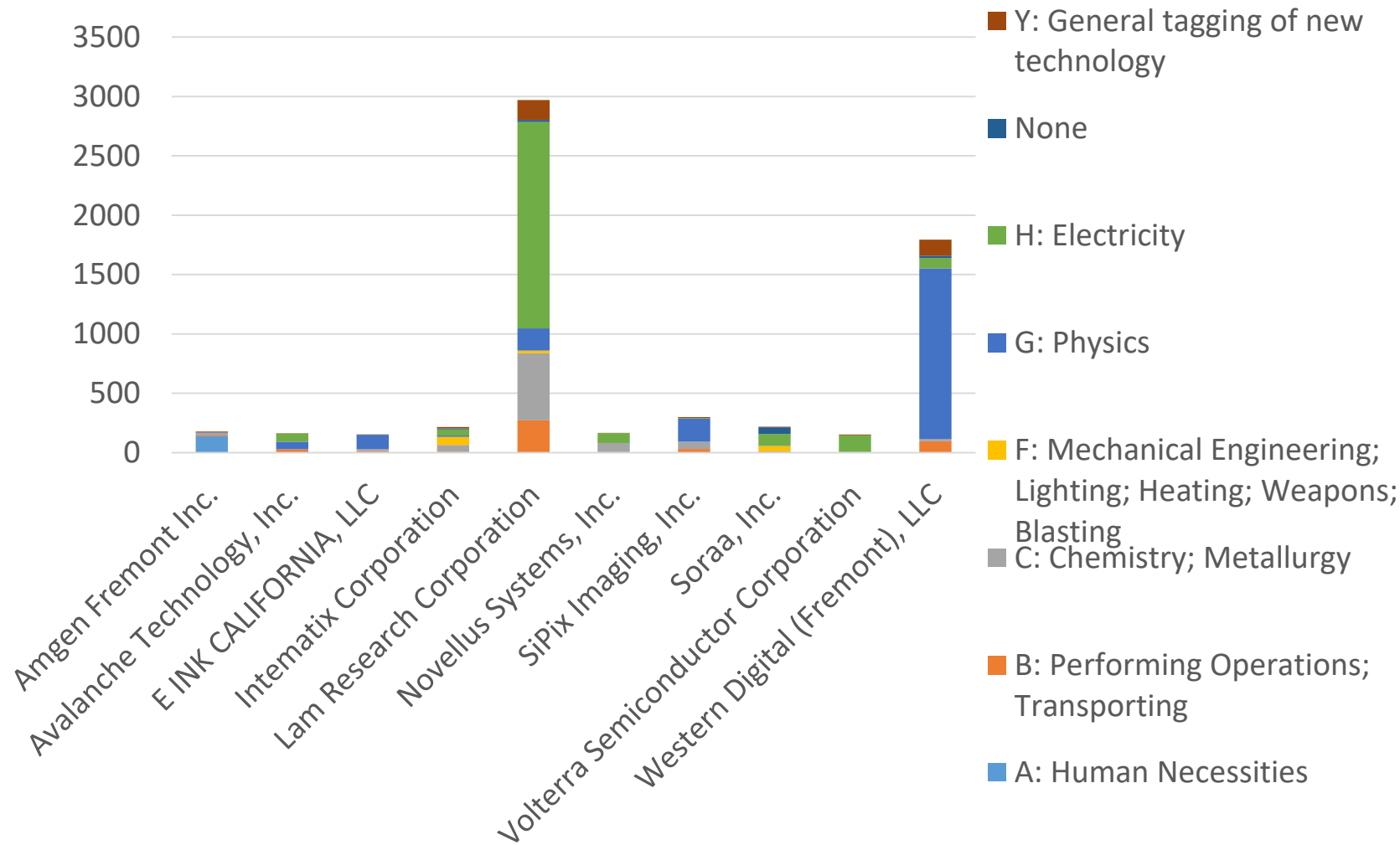
# Ecosystem Scan: Patent Data All Patents w/ Assignee in Fremont



# Ecosystem Scan: Patent Data



# Ecosystem Scan: Patent Data

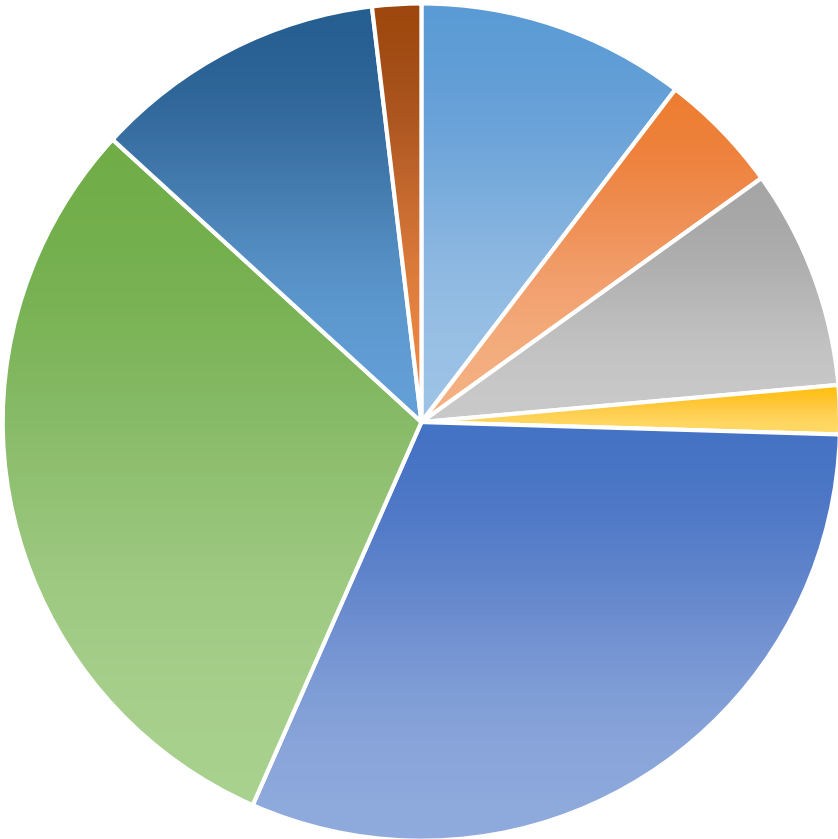


- H: Electricity
- Largest categories: Semiconductor Devices, Electric Solid State Devices and Electrical Discharge Tubes or Discharge Lamps
  - Smaller categories of note are Telephonic Communication and Processes or Means eg. Batteries, for the Direct Conversion of Chemical into Electrical Energy
- G: Physics
- Largest categories Information Storage Based on Relative Movement Between Record Carrier and Transducer, Electrical Digital Data Processing
  - Other categories of note are Optical Medium Elements, Optical to Electrical or Magnetic Elements Measuring Electrical/Magnetic Variables Information Storage/Static Stores

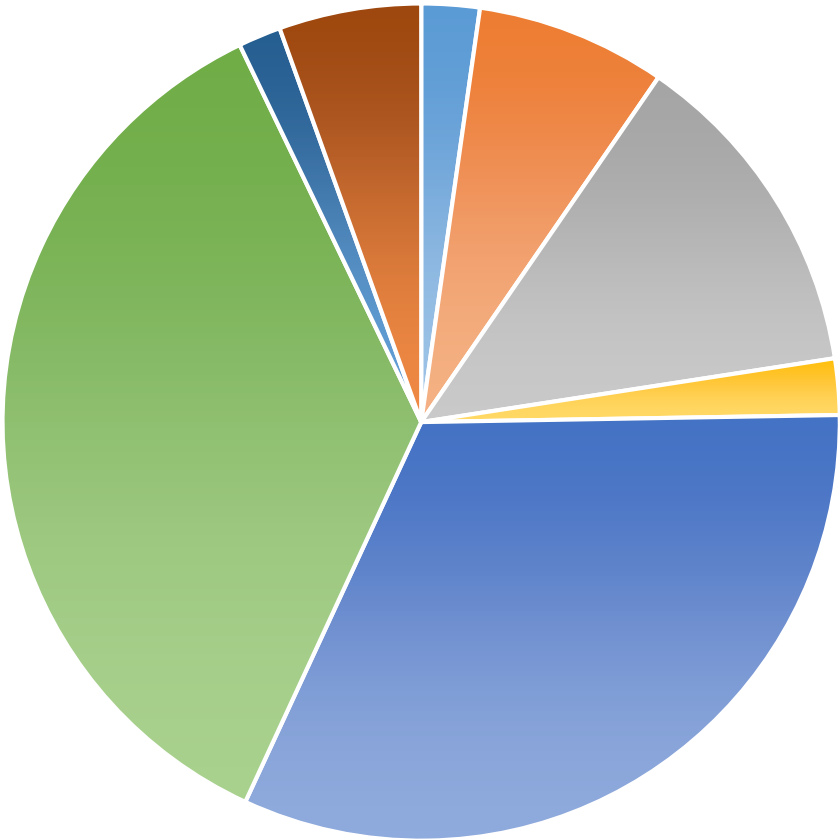


# Ecosystem Scan: Patent Data

Patents by section of small assignees (<=2 patents) from 2007-17



Patents by section of large assignees (>100 patents) from 2007-17



- A: Human Necessities
- B: Performing Operations, Transporting
- C: Chemistry; Metallurgy
- F: Mechanical Engineering; Lighting; Heating; Weapons; Blasting
- G: Physics
- H: Electricity
- None

## Summary

- No Innovation Cultivators in Fremont (only two co-working spaces)
- Most Innovation Cultivators do not have a specific focus area and there are only 6 that focus on energy and 4 that focus on bio-related activities, yet the patent data shows that there are patents in both of these areas, with companies that have fewer patents having more in the Human Necessities category (i.e bio-related)
- There are 20 organizations with some kind of Maker Space, but most of these spaces are focused on earlier stage prototyping activities with only three focused on manufacturing scale up.
- Most patents are held by a few companies with hundreds of patents (likely large companies).
- The profile of patents held by companies with fewer (likely smaller companies) patents reflects the same sector breakdown as patents held by companies with hundreds of patents.
- Patents in Fremont reflect the sector of some of the largest companies in the city (i.e. semi-conductors, and memory storage devices). Some bio-related patents.

## Takeaway

Opportunity for innovation cultivator to focus on energy and bio-related (likely bio-medical equipment) startups that already have a prototype but need to fund a way to manufacture and scale up their products.



# **Area Demography and Real Estate Analysis**

29 November 2017



# DRAFT MARKET ANALYSIS WARM SPRINGS INNOVATION CENTER

Fremont, California

NOVEMBER 29, 2017



# Site Analysis

29 November 2017



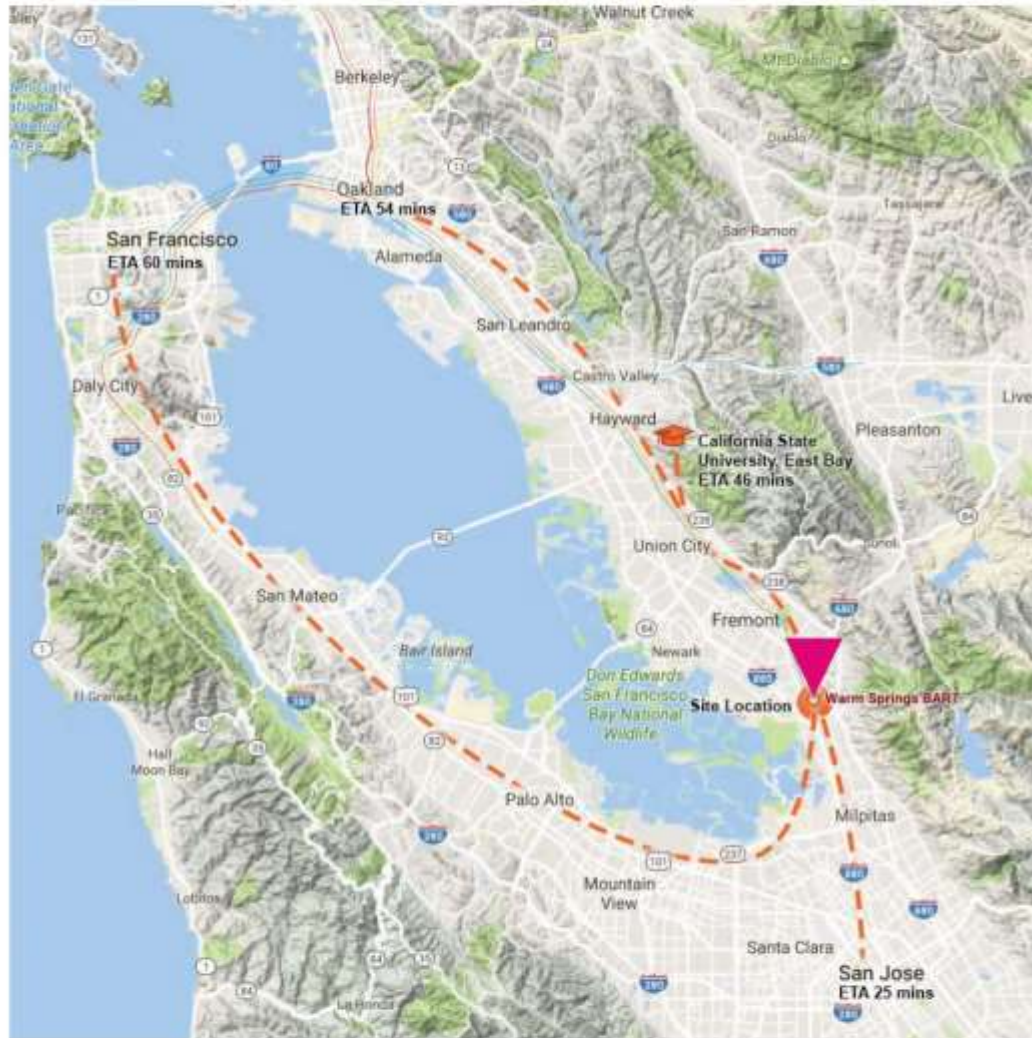
project  
story



existing  
conditions



# site location





# site location

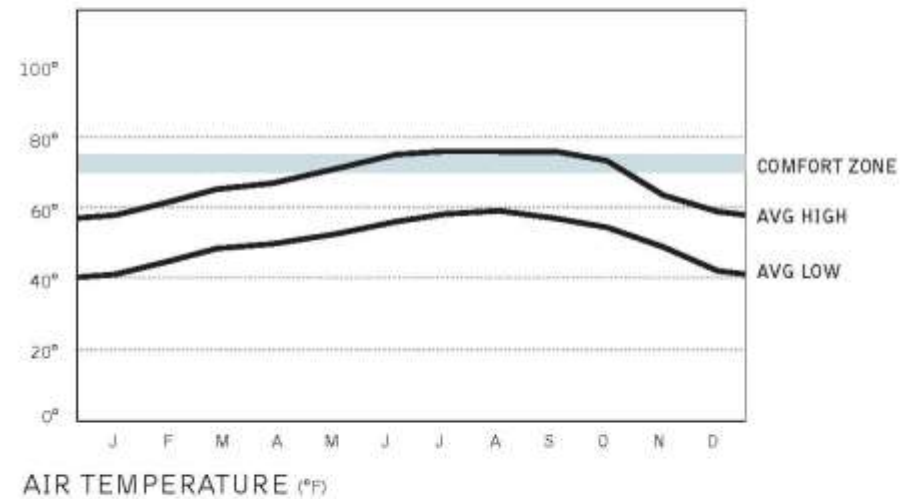
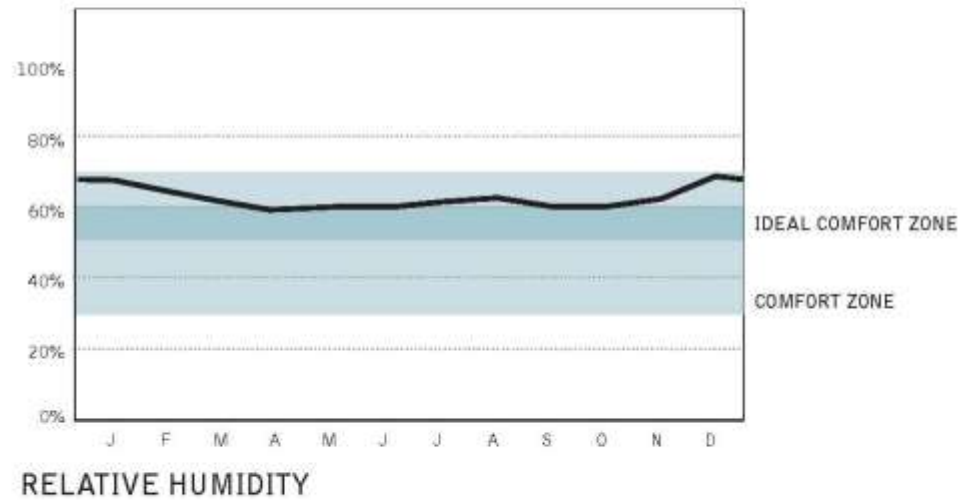
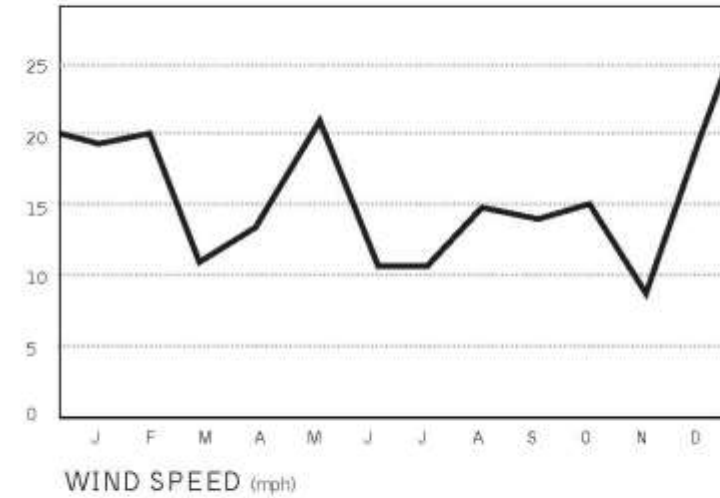
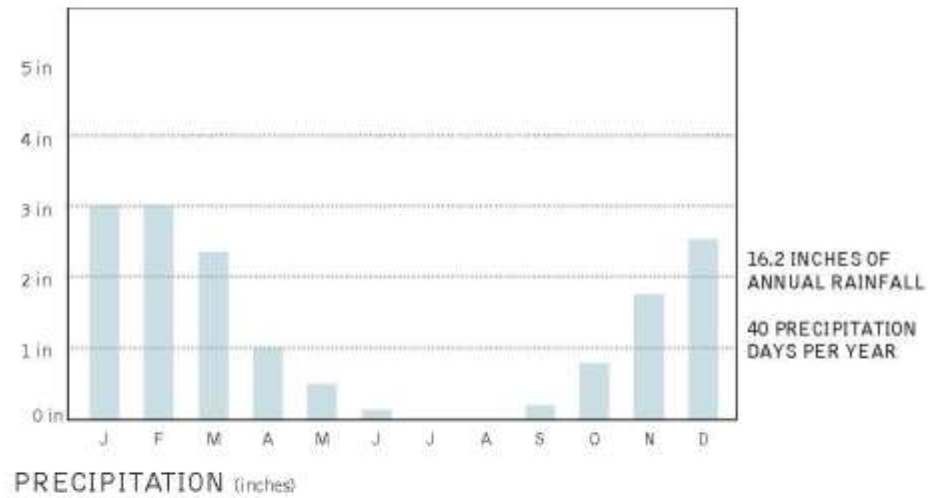


environmental  
conditions



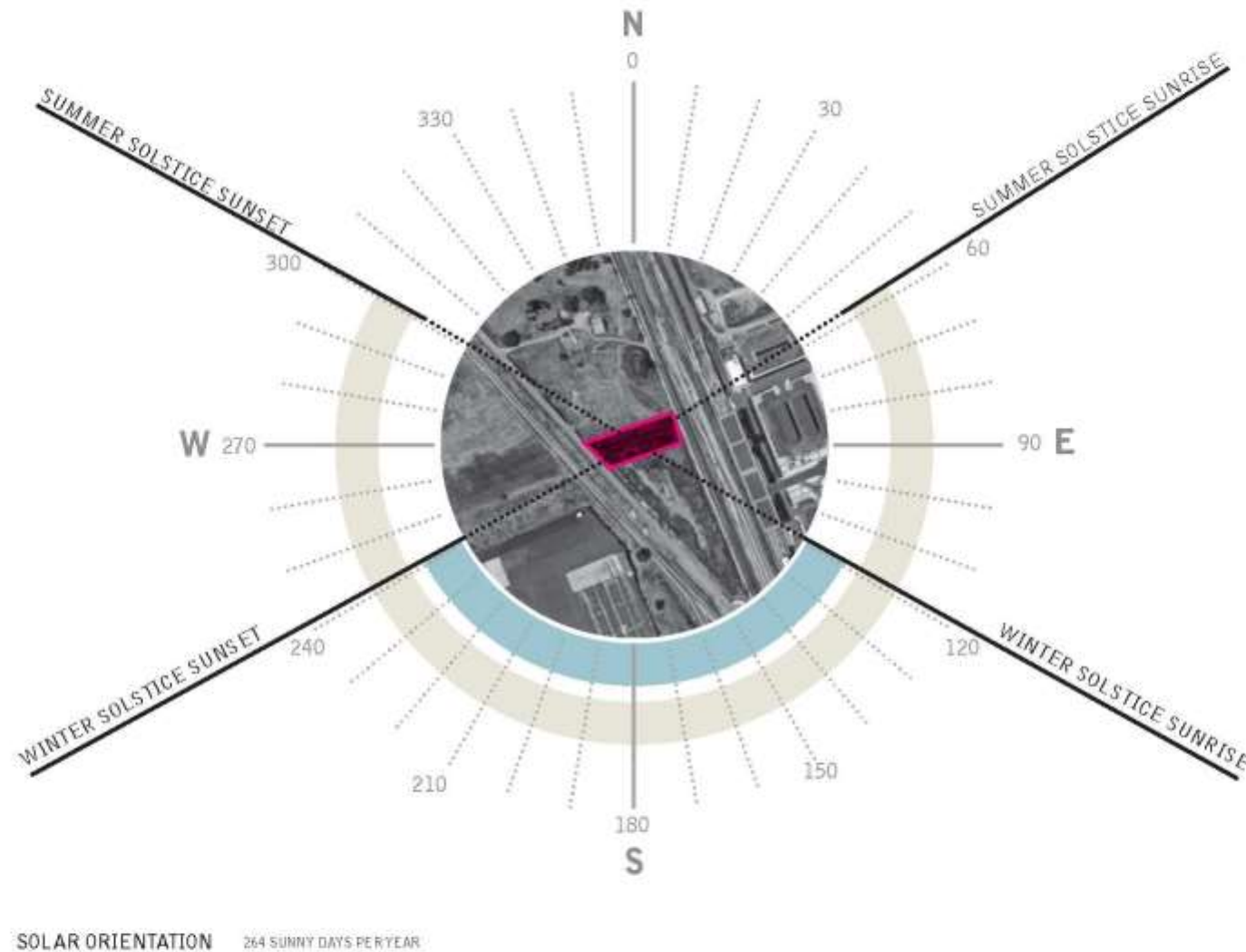


# local climate





# solar orientation



context + site  
adjacencies



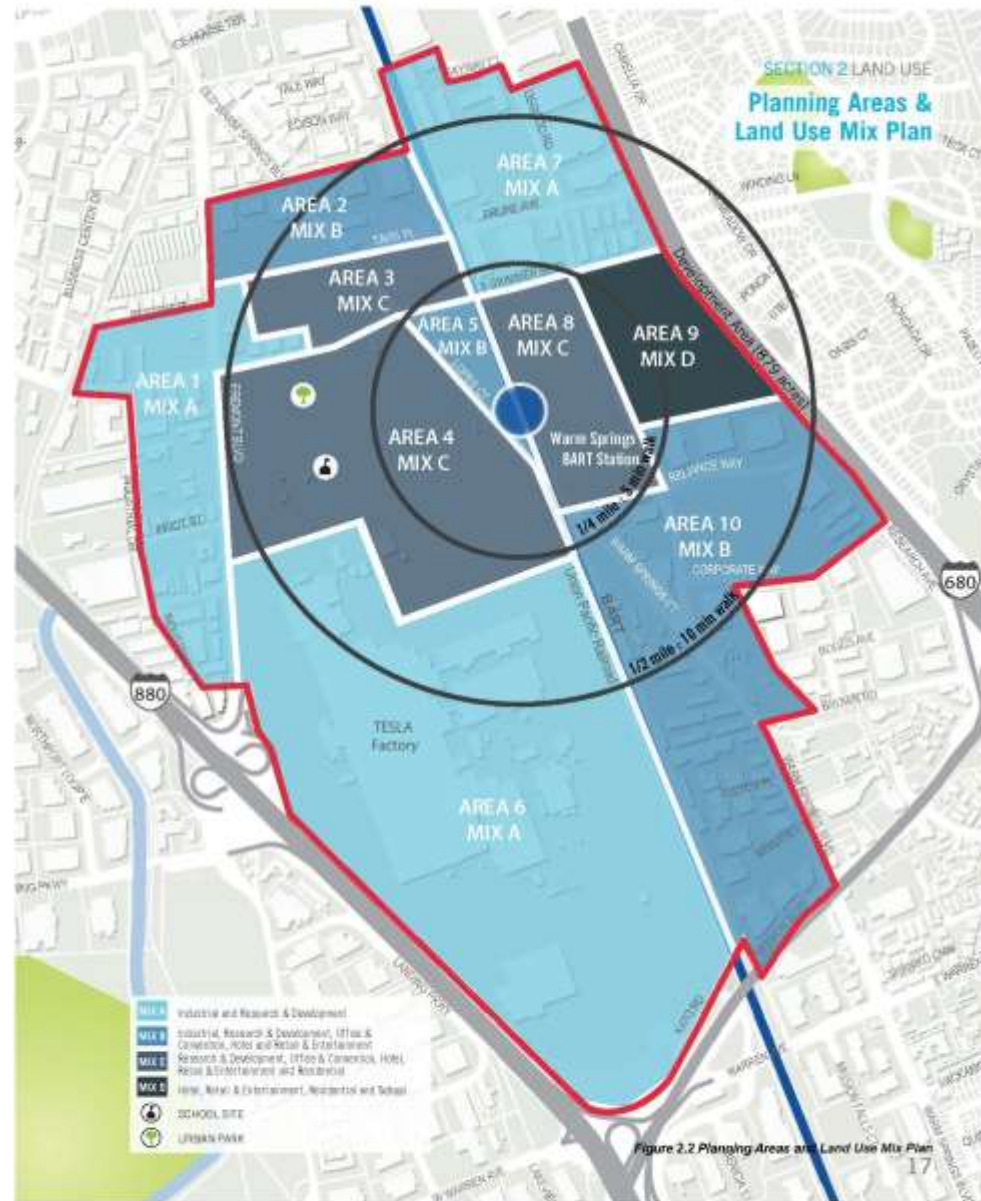


# overlay - adjacent planned developments





# warm springs community master plan



## Planning Areas

Planning areas define the locations and boundaries of various land use mixes and intensities within the Warm Springs / South Fremont District based on proximity to transit, adjoining uses and the desired type(s) of development at that location (Fig. 2.2 Planning Areas and Land Use Mix Plan). The Planning Areas are as follows:

1. Fremont Boulevard
2. Old Warm Springs Boulevard north
3. Old Warm Springs Boulevard south
4. Innovation Way
5. Lopes Court
6. Southwestern
7. Grimmer Boulevard north
8. BART area
9. Warm Springs Boulevard east
10. Warm Springs Court

## Land Use Mix

The Land Use Mix establishes the desired combination of land uses within each Planning Area. A wide variety of land uses are allowed to support the goal of creating an employment based, mixed-use district.

- **Mix A:** Industrial and Research & Development  
The lowest intensity jobs-related uses, Mix A provides an optimum setting for the ongoing process of advanced manufacturing, research, routine product testing and experimental production.
- **Mix B:** Industrial, Research & Development, Office & Convention, Hotel and Retail & Entertainment  
A combination of low and high intensity jobs-related uses, Mix B establishes an innovation zone where production, research, administration and the sharing of new discoveries can intermingle and overlap. Amenity and service uses are included in Mix B to support and enhance the functioning of this mix.
- **Mix C:** Research & Development, Office & Convention, Hotel, Retail & Entertainment and Residential  
A combination of the highest intensity jobs-related uses; residential and community oriented uses, Mix C is a mixed-use environment where people are encouraged to live, work, shop, play, stay and learn.
- **Mix D:** Hotel, Retail & Entertainment, Residential and School  
Residential and community oriented uses, Mix D establishes mixed-use, transit-oriented residential neighborhoods that offer high-quality living environments.

## MIX A: TARGETS

Total Site Area:	472 Gross Acres
Total Estimated Floor Area:	2.1 to 2.6 million sf
Total Estimated Jobs:	2,000 to 5,000 Jobs

## MIX B: TARGETS

Total Site Area:	171 Gross Acres
Total Estimated Floor Area:	3.2 to 4.5 million sf
Total Estimated Jobs:	3,000 to 7,000 Jobs

## MIX C: TARGETS

Total Site Area:	200 Gross Acres
Total Estimated Floor Area:	3.2 to 4.5 million sf
Total Estimated Jobs:	5,000 to 8,000 Jobs
Total Estimated Dwelling Units:	2,000 to 3,000 du

## MIX D: TARGETS

Total Site Area:	36 Gross Acres
Total Estimated Floor Area:	5,000 to 6,000 sf
Total Estimated Jobs:	10 to 30 Jobs
Total Estimated Dwelling Units:	700 to 1,000 du

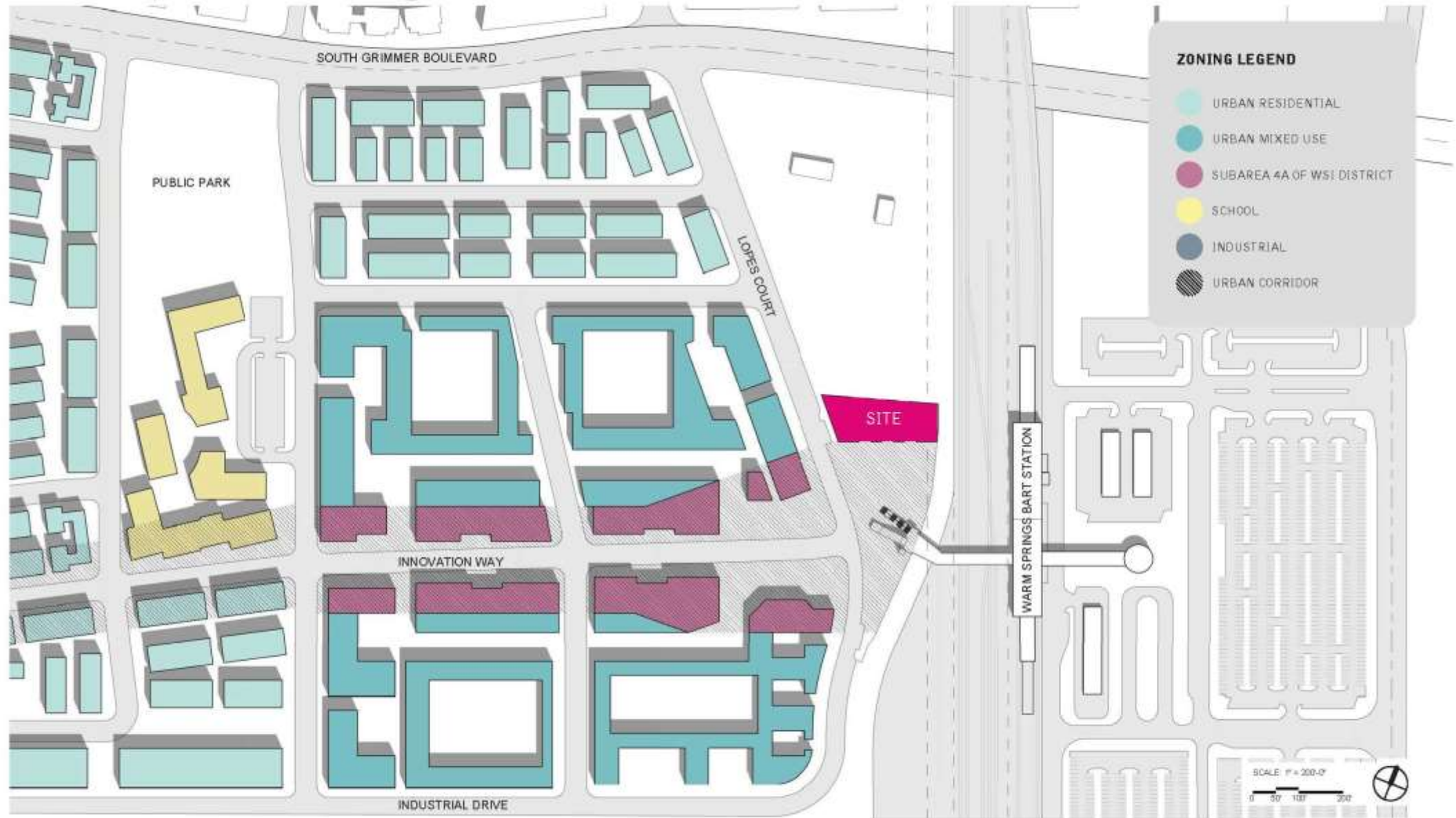
## TOTAL PROJECT TARGETS

Total Site Area:	879 Gross Acres
Total Estimated Floor Area:	8.5 to 11.6 million sf
Total Estimated Jobs:	10,000 to 20,000 Jobs
Total Estimated Dwelling Units:	2,700 to 4,000 du



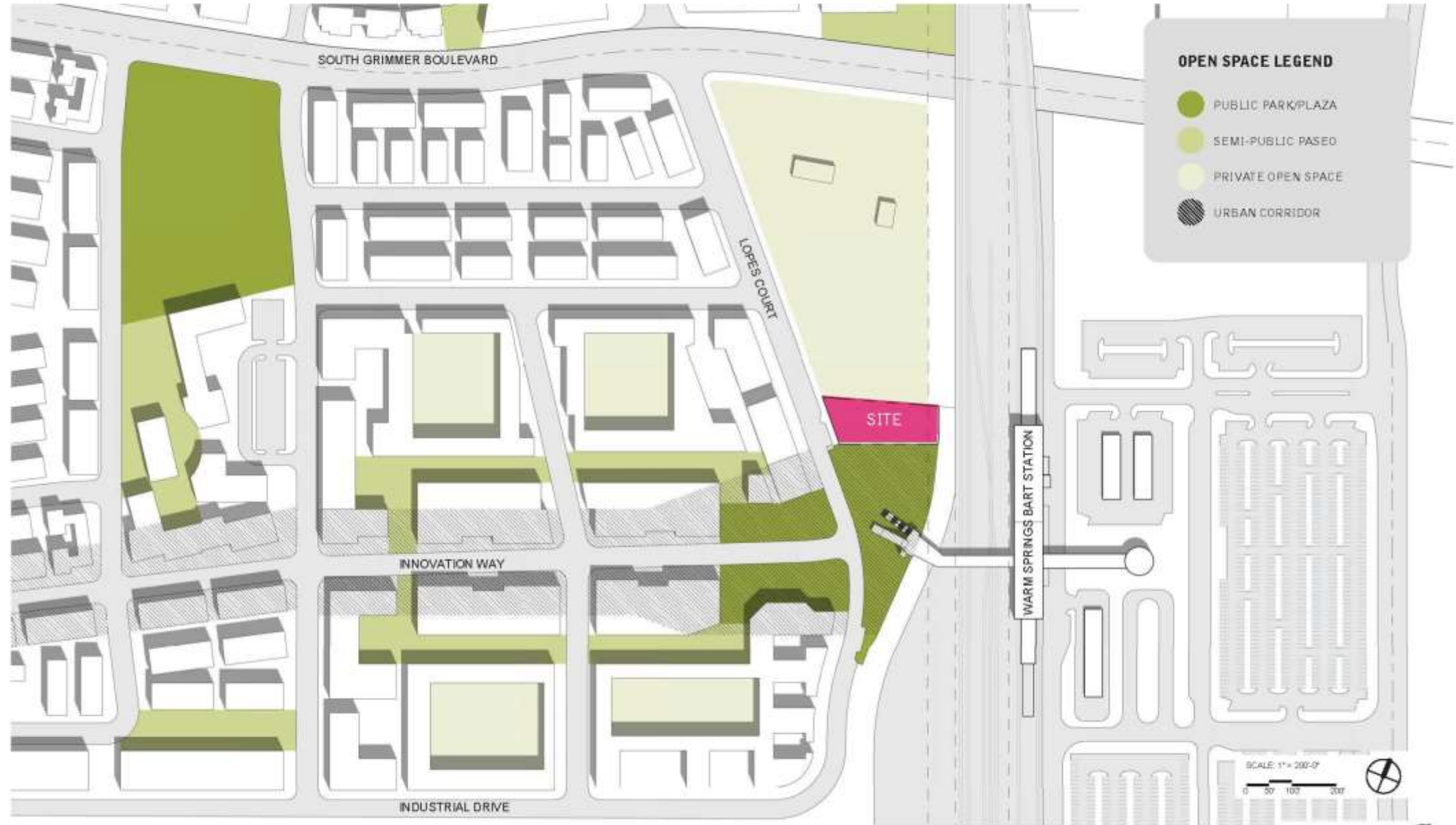
<b>MIX A</b>	Industrial and Research & Development
<b>MIX B</b>	Industrial, Research & Development, Office & Convention, Hotel and Retail & Entertainment
<b>MIX C</b>	Research & Development, Office & Convention, Hotel, Retail & Entertainment and Residential
<b>MIX D</b>	Hotel, Retail & Entertainment, Residential and School

# masterplan + zoning



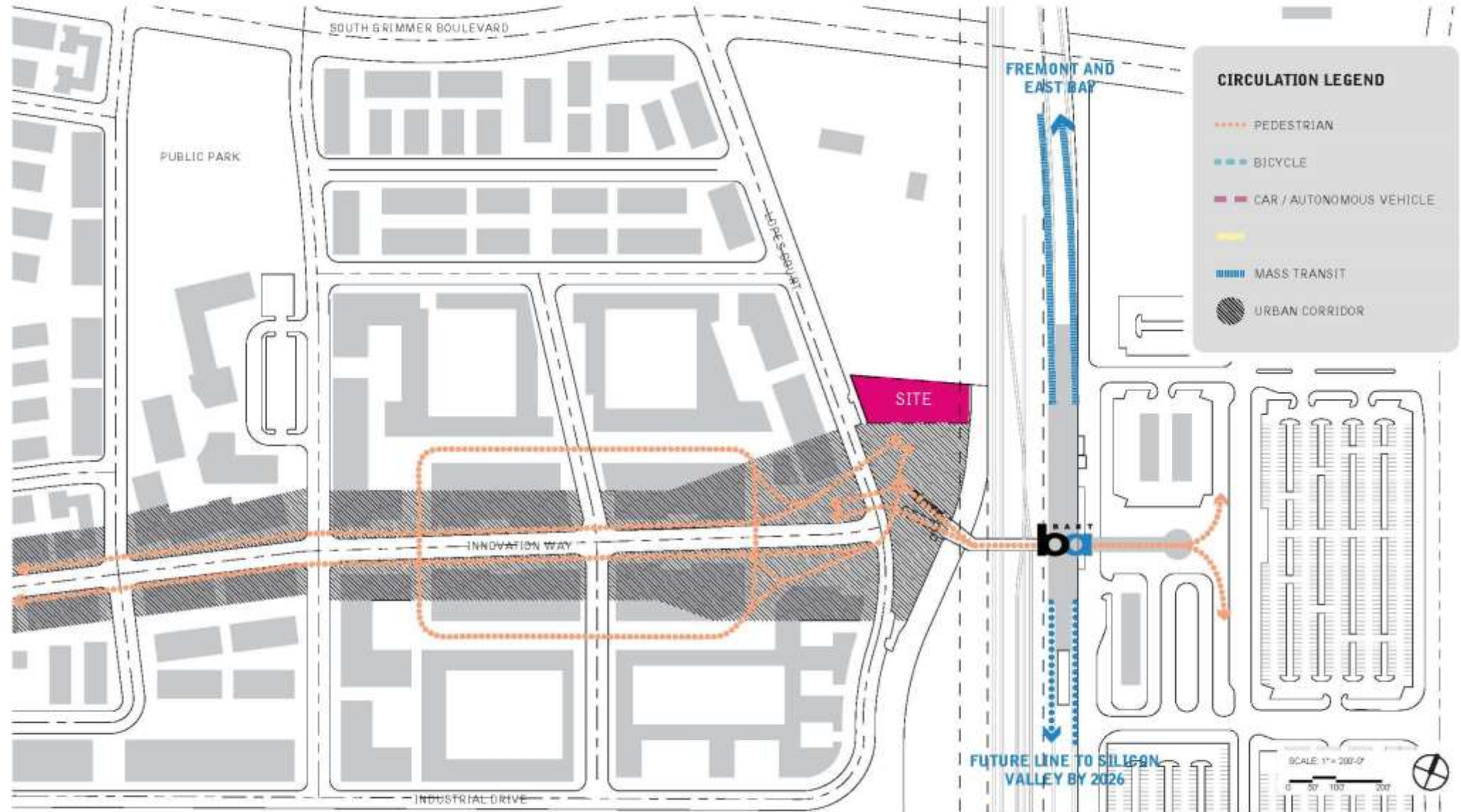


# open spaces

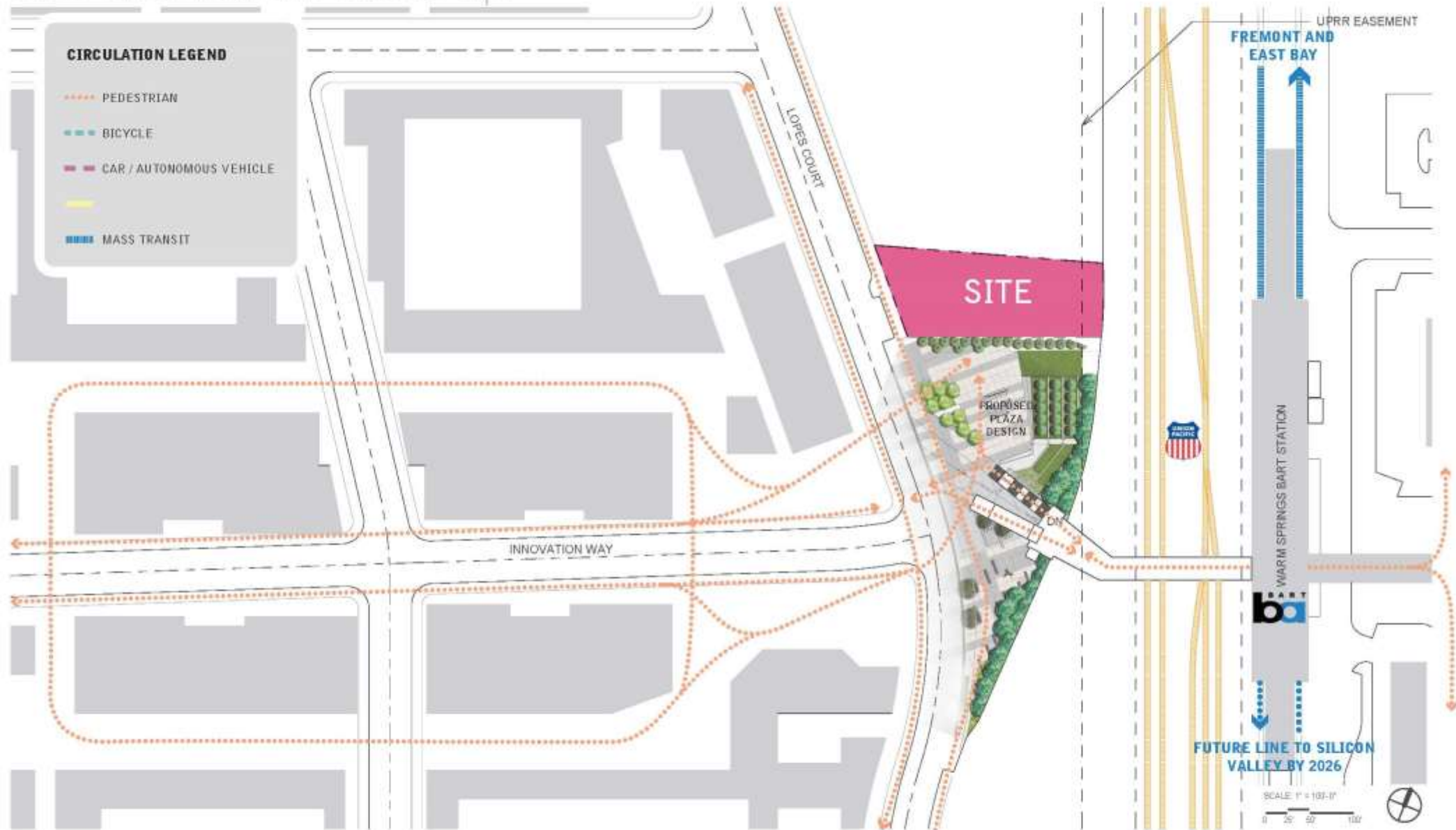




# site circulation



# site circulation: close up

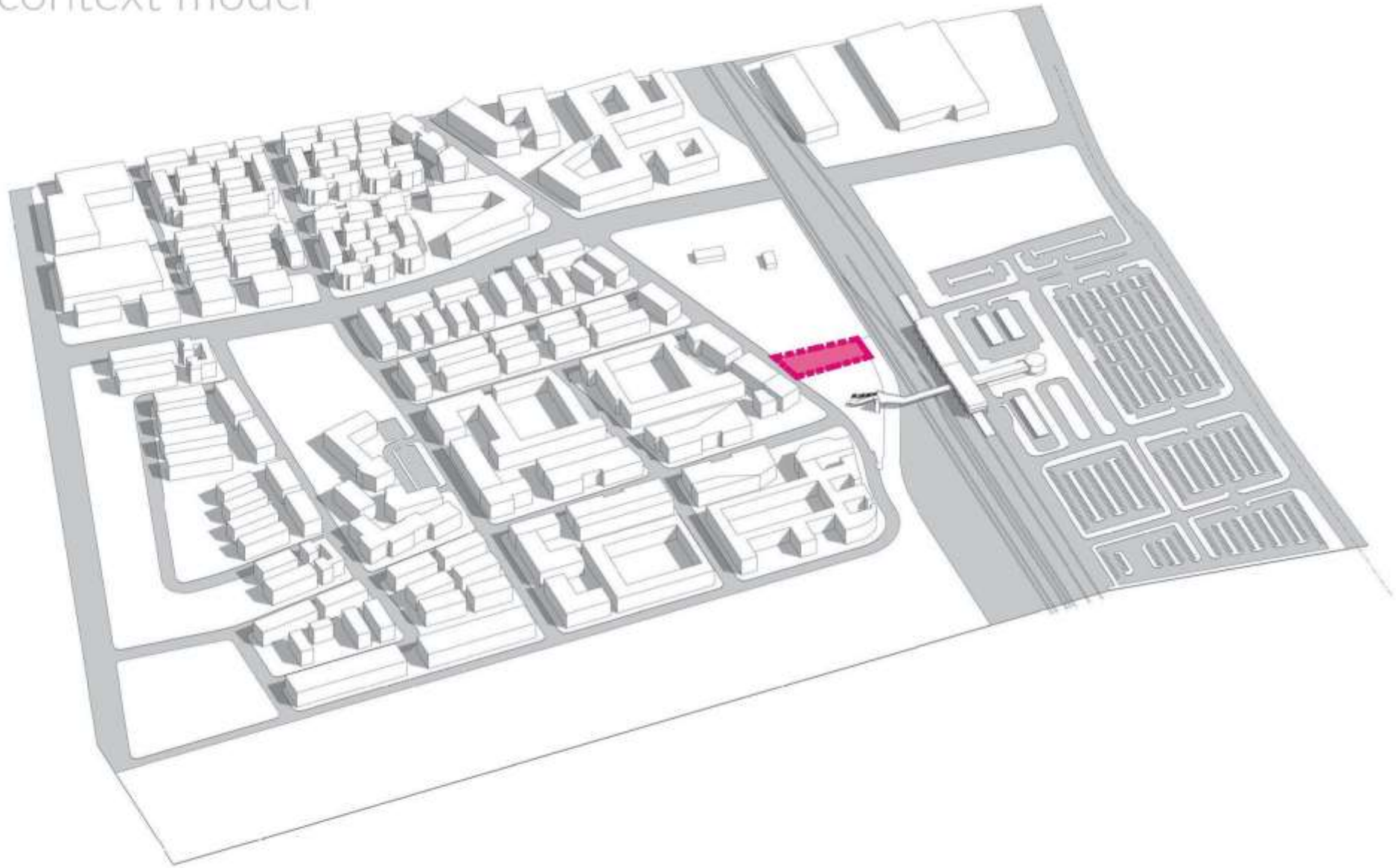


initial  
massing

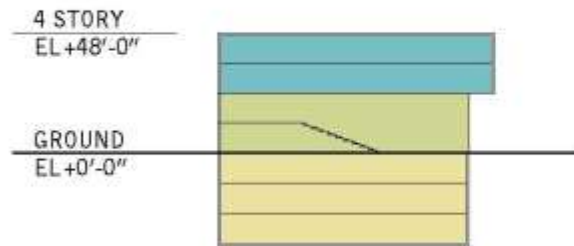




# 3D context model



# massing + zoning

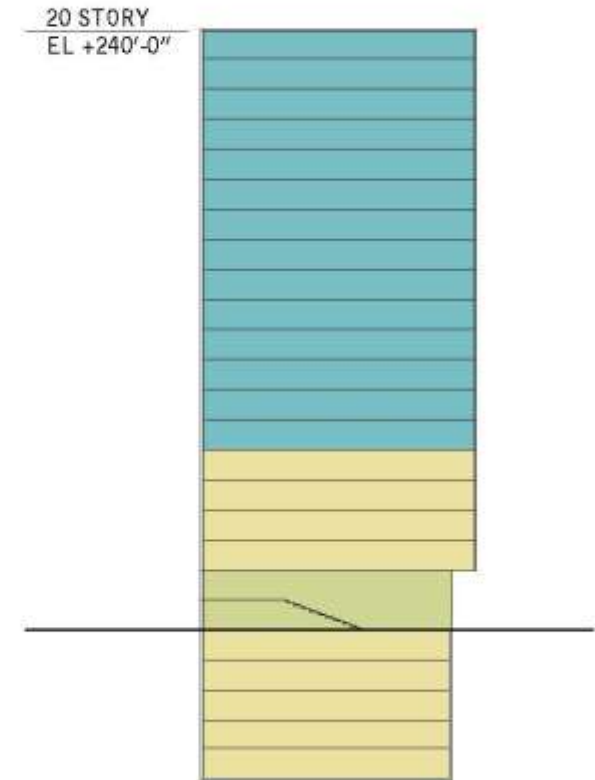


- COMMON SPACE - 18,000 SF
- MIXED USE - 50,000 SF
- VEHICLE PARKING - 54,000 SF  
126 SPACES

\* PARKING RATIO:  
COMMON SPACE - 1 SPACE / 500 SF  
MIXED USE - 1 SPACE / 1000 SF

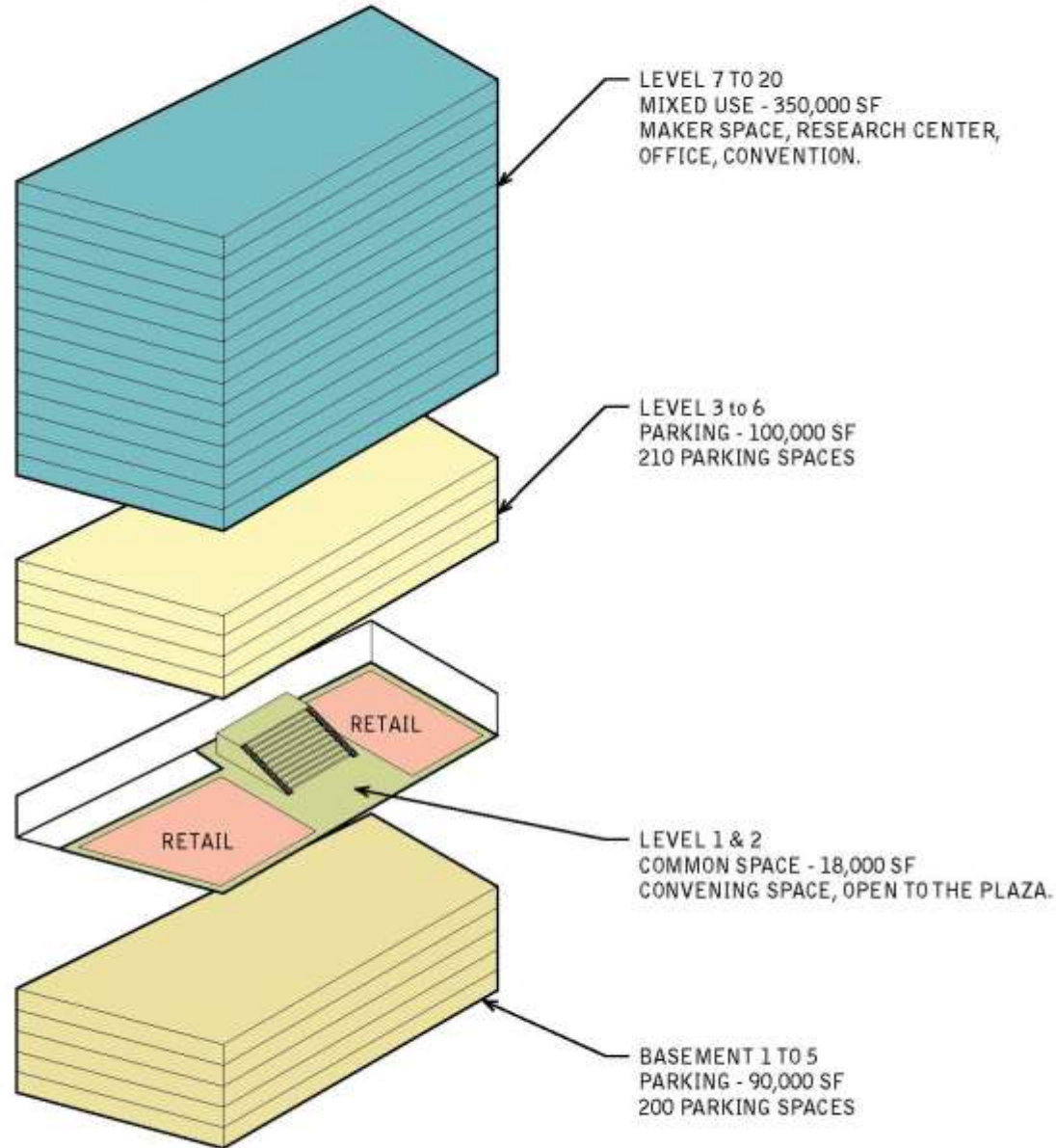


- COMMON SPACE - 18,000 SF
- MIXED USE - 200,000 SF
- VEHICLE PARKING - 100,000 SF  
240 SPACES

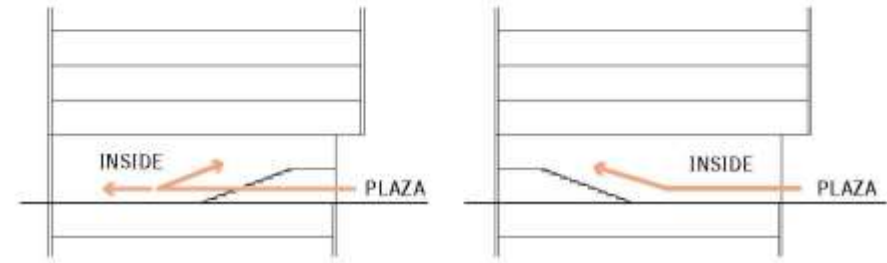


- COMMON SPACE - 18,000 SF
- MIXED USE - 350,000 SF
- VEHICLE PARKING - 190,000 SF  
410 SPACES

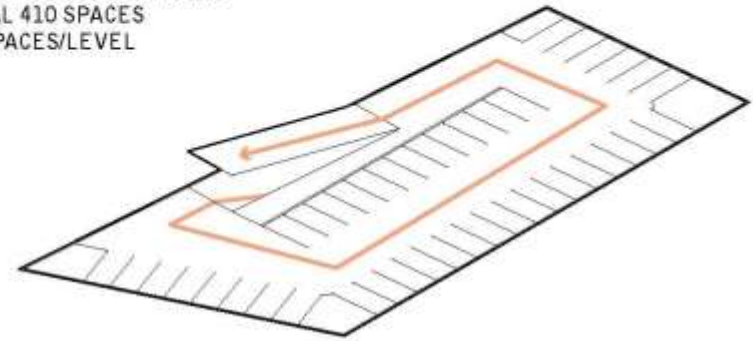
# massing + zoning



## LEVEL 1 & 2 - CONVENING SPACE STUDY



AUTO PARKING PROVIDED  
TOTAL 410 SPACES  
42 SPACES/LEVEL

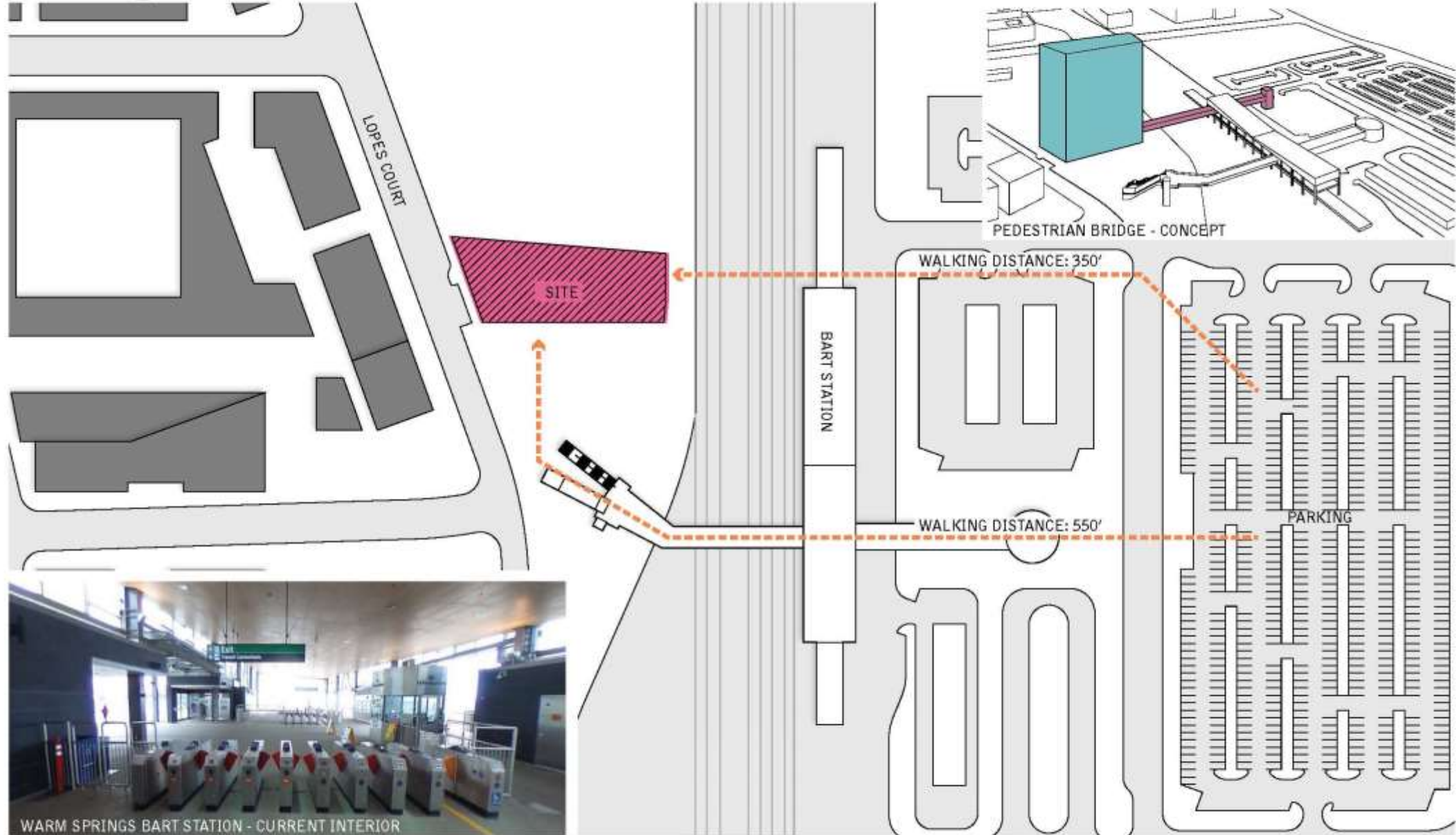


## PROGRAM LEGEND

- RETAIL
- COMMON SPACE - 18,000 SF
- MIXED USE - 350,000 SF
- VEHICLE PARKING - 190,000 SF, 410 SPACES

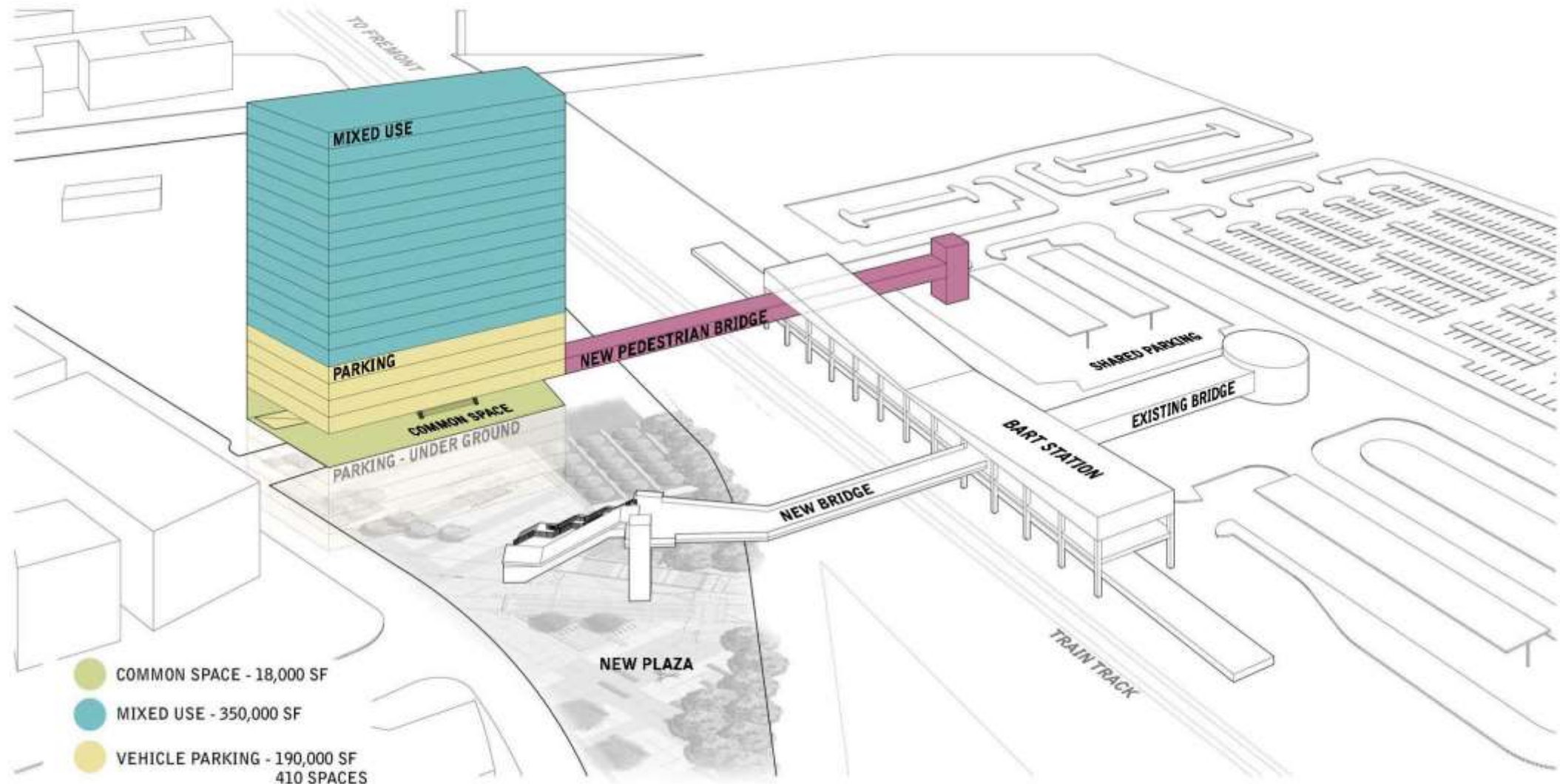


# parking + access

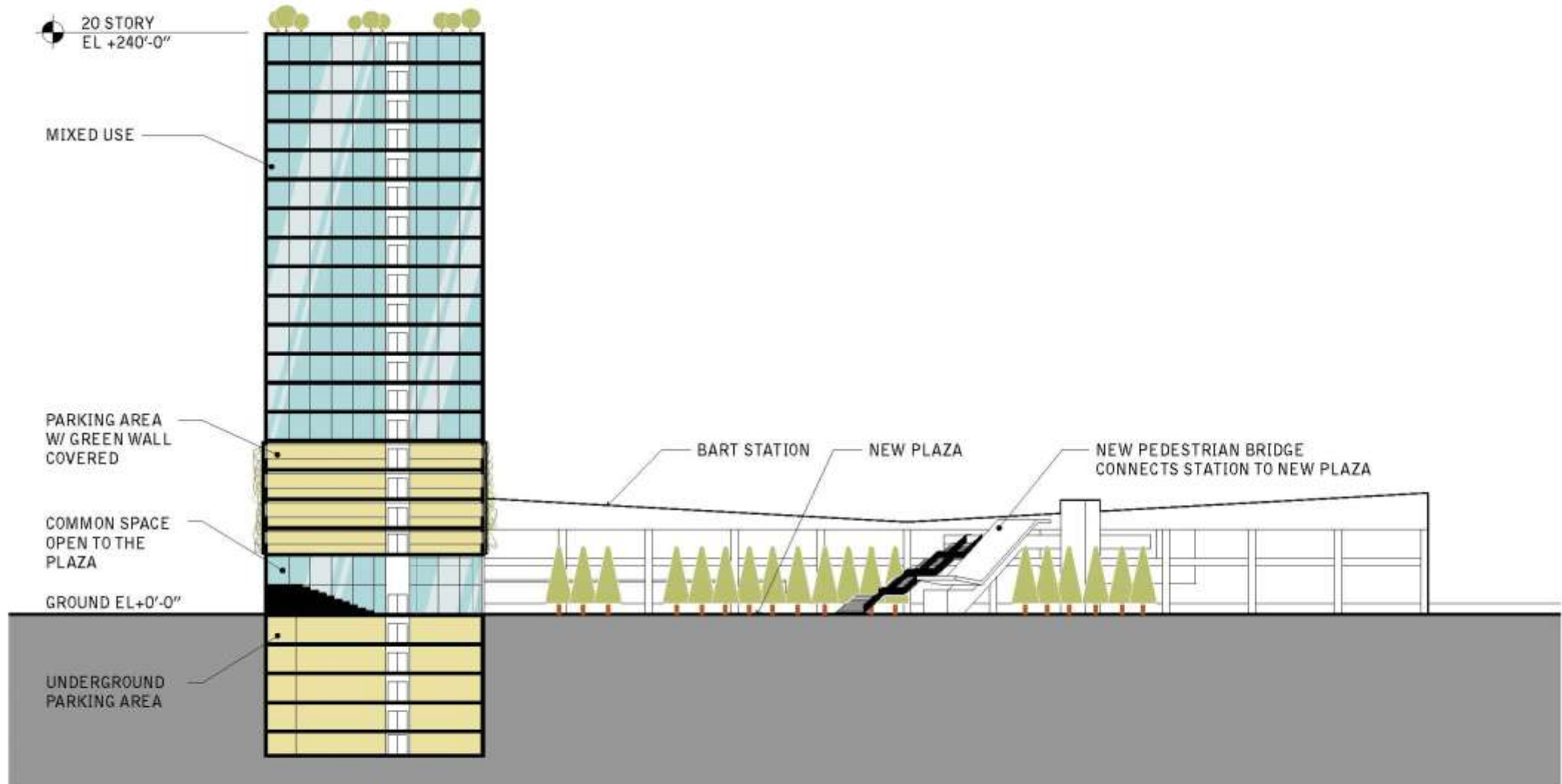




# parking + access



# site adjacencies



# site adjacencies

