

**GUADALUPE QUARRY**   
**REDEVELOPMENT PROJECT**

# Advanced Manufacturing 101

October 14, 2025

# WELCOME

**GUADALUPE QUARRY**   
**REDEVELOPMENT PROJECT**

**1. Why we created tonight's webinar**

**2. Agenda**

**3. Ground Rules**

- Asking questions during the webinar
- Asking questions after the webinar
- Continuing the conversation

# How We Use Information You Provide

- Our team is committed to respecting the privacy of all Brisbane residents, businesses and others who engage with our project.
- Information we collect, e.g., your name, email address, zip code and/or messages exchanged between us, is used to inform you about project updates and events or to answer questions you ask.
- We never sell your information or share it with third parties unrelated to this specific project in Brisbane.
- **We require attendees to register on Zoom to help prevent spamming and as a layer of protection for all attendees from inappropriate material.**

# Asking Questions During the Webinar

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## **DURING the webinar:**

Please put your question in the CHAT. Justin is monitoring the chat and will do his best to get your question asked.

## **AFTER the webinar:**

Send your questions to:

Justin ([justin@heysalty.com](mailto:justin@heysalty.com)) or Kit ([kit@kitcoleconsulting.com](mailto:kit@kitcoleconsulting.com) or 818-822-6378) and we will do our best to get an answer for you.

## **ALSO:**

We've been having Zoom Open Office Hours since August. Upcoming office hours are October 22, November 12 and December 10. Please join us for open discussion about all topics!

# Agenda

| Time           | Description                                                                           | Presenter                                                           | Length |
|----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------|
| <b>5:30 PM</b> | Welcome and Panelist Introductions                                                    | Kit Cole                                                            | 0:05   |
| <b>5:35 PM</b> | Advanced Manufacturing and the Bay Area –<br>A Regional Perspective                   | Adrian Covert<br>SVP of Public Policy, Bay<br>Area Council          | 0:15   |
| <b>5:50 PM</b> | Facility Needs for Advanced Manufacturing –<br>what is happening inside the building? | Greg Matter<br>Vice Chair, Industrials, JLL                         | 0:15   |
| <b>6:05 PM</b> | Advanced Manufacturing Case Study:<br>City of Fremont                                 | Donovan Lazaro Economic<br>Development Director, City<br>of Fremont | 0:15   |
| <b>6:20 PM</b> | Question and Answers                                                                  | Kit Cole                                                            | 0:08   |
| <b>6:28 PM</b> | Wrap-Up                                                                               | Kit Cole                                                            | 0:02   |

# Today's Recording

- Today's meeting is being recorded.
- We are recording this webinar so people who can't attend can watch it later.
- Recordings will be posted to YouTube and on our website at [www.brisbanequarry.com](http://www.brisbanequarry.com)

# Advanced Manufacturing and the Bay Area

## A Regional Perspective

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### **Speaker:**

**Adrian Covert,**

SVP of Public Policy,  
Bay Area Council

### **Topic:**

Advanced Manufacturing and  
the Bay Area – A Regional  
Perspective

The Bay Area Council has been at the intersection of business and civic leadership, shaping the future of the Bay Area since 1945.

Today, the Council's vision is to make the Bay Area the best place to live and work. More than 330 of the largest employers in the region are members of the Bay Area Council and are committed to working with public and community leaders to keep the Bay Area the most innovative, globally competitive, inclusive, and sustainable region in the world.

# History of Manufacturing

## Bay Area

- 1899-1940: Number of manufacturers increased 230%
- 1940-1950: Total manufacturing jobs nearly double
- 1950-1970: California becomes largest manufacturing state
- 1980-2020: Decline; rising land costs, global competition

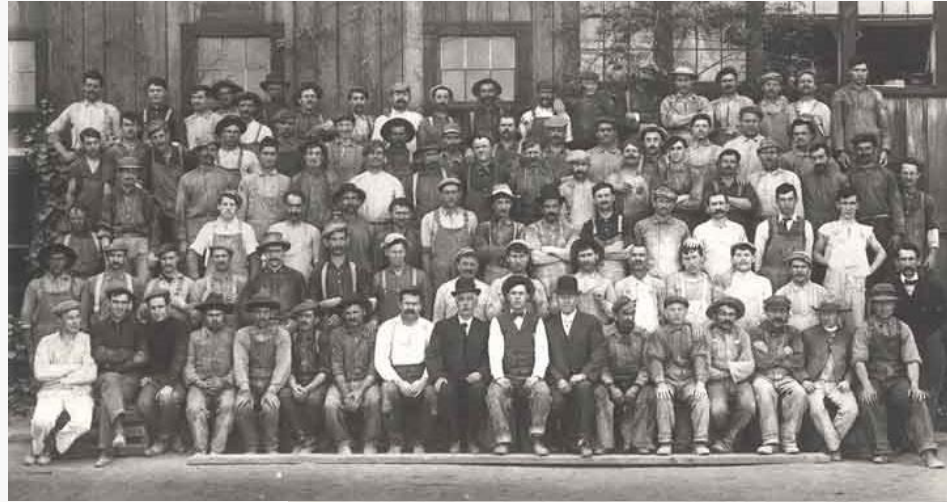


Columbia Steel Mill in Pittsburgh, 1930s

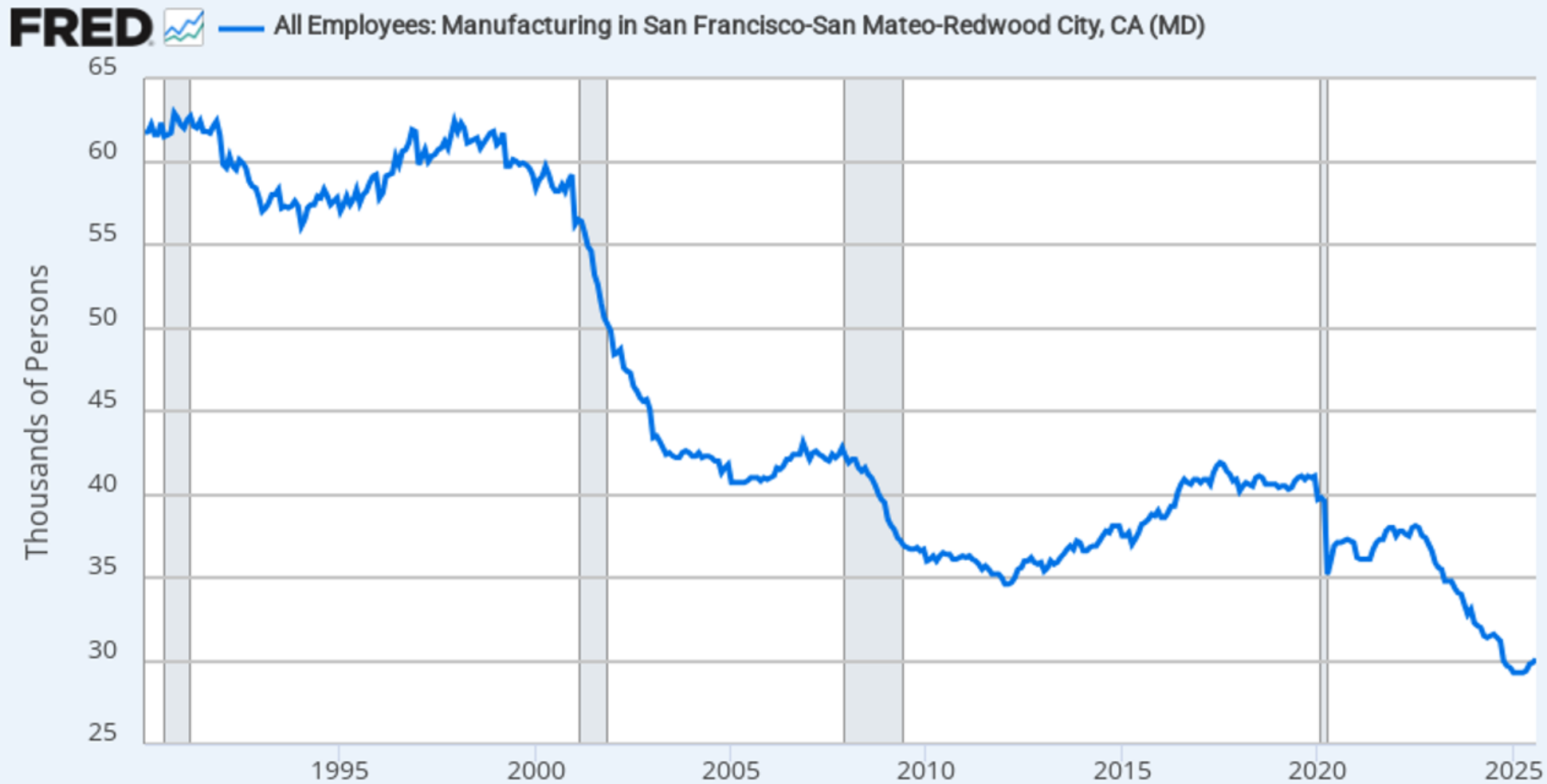
# History of Manufacturing

## San Mateo County

- Stieger Terra Cotta & Pottery
- Whittier-Fuller Paint Factory
- Columbia/U.S. Steel piping and sheet metal fabrication
- Redwood City Shipbuilding



# SF/SM County Lost ~50% manufacturing jobs since 1990 (pop. +200k)



Sources: Federal Reserve Bank of St. Louis; U.S. Bureau of Labor Statistics via FRED®

*Shaded areas indicate U.S. recessions.*

[myf.red/g/1MVPX](https://myf.red/g/1MVPX)

# Revival?

## Advanced Manufacturing

- Bipartisan support for re-industrialization policies: New federal funding and tax incentives for investments in domestic manufacturing.
- CA focus on Advanced Manufacturing: microelectronics, nanotechnology, biotechnology
- California has much cleaner grid and stronger environmental standards than it once did or than other states do today



Nikon metal additive manufacturing and R&D center in Long Beach

# Facility Needs for Advanced Manufacturing

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## **Speaker:**

**Greg Matter,**

Vice Chairman

Greg has more than 20 years of experience in commercial real estate and co-leads the Northern California industrial team and Advanced Manufacturing practice at JLL.

## **Topic:**

Facility Needs for Advanced Manufacturing – What is Happening inside the Building?

JLL is a leading global commercial real estate and investment management company. Over the last 200 years, JLL has helped clients buy, build, occupy, manage and invest in a variety of commercial, industrial, hotel, residential and retail properties.

JLL is a Fortune 500 company with operations in over 80 countries around the world and more than 112,000 employees worldwide.

# Building for flexibility



|                          | Innovation                                             | Advanced manufacturing                                                     | Warehouse/distribution                                                                                                     |
|--------------------------|--------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Typical build-out</b> | 33% Warehouse / Manufacturing<br>33% Office<br>33% Lab | 60% Manufacturing<br>30% Warehouse<br>10% Office                           | 95-97% Warehouse<br>3-5% Office                                                                                            |
| <b>Power</b>             | At least 800 amps per 20,000 SF<br>More is better      | Minimum 4,000 amps per 100,000 SF<br>More is better                        | Minimal amps<br>More is better                                                                                             |
| <b>Auto parking</b>      | 1.0/1000 SF                                            | 1.5/1000 SF<br>As much as possible – ability to super park in truck courts | 1/1000 s.f for Warehouse<br>1.2/1000 SF for Office                                                                         |
| <b>Trailer parking</b>   | None                                                   | None<br>Assigned trailer parking would be redesignated as auto parking     | 1 space per 2 dock doors<br>Highly dependent on geometry of site, coverage, and building and truck court depth limitations |
| <b>Clear height</b>      | 18'-32'                                                | 32'-36'                                                                    | 36'-40'                                                                                                                    |
| <b>Sprinklers</b>        | Wet                                                    | ESFR                                                                       | ESFR                                                                                                                       |
| <b>Level of finish</b>   | Spec                                                   | Warm Shell – Base light package, spec office                               | Warm Shell – Base light package, full dock package on every other door, spec office                                        |
| <b>Term</b>              | 5-7 years                                              | 10 years                                                                   | 3-7 years                                                                                                                  |

# Advanced manufacturing activities within the walls

Despite a modern industrial building resembling a concrete tilt-up structure with a glass-line office in the corners and dock doors lining the side, there are a diverse array of functions that occur within the walls. In general, an industrial building can be split into three main functions:



Warehousing



Transportation



Manufacturing

## Research and development

The initial phase of the prototyping process, where investigation and the tinkering of new products begins. Versatile space, consisting of minimal office and the ability to receive/send varying sizes of materials.

## Pilot line manufacturing facility

A small-scale manufacturing facility for the purpose of prototyping new products or processes before implementing a full-scale production line. The purpose is to replicate the production process in a controlled environment where engineers can identify possible issues and inefficiencies and make adjustments quickly to minimize risks once scaled for mass production.

## Full-scale advanced manufacturing facility

A full-scale facility where goods are produced. These buildings contain a high degree of specialized and cutting-edge equipment and machinery to improve the efficiency and productivity of the production process. In many cases, tall clear heights and spans are necessary to accommodate bulking equipment such as cranes, presses, extruders, pullers, cutting machines, and vats. Equipment could require complex foundations, pits, cranes, special fire protection requirements and extensive utility demands.

## cGMP facility

Standing for Current Good Manufacturing Practices, a facility that is designed and operates to FDA regulatory guidelines to ensure pharmaceuticals, foods, and other healthcare products are manufactured for cleanliness, hygiene, quality, and safety.

# Advanced manufacturing activities within the walls

Despite a modern industrial building resembling a concrete tilt-up structure with a glass-line office in the corners and dock doors lining the side, there are a diverse array of functions that occur within the walls. In general, an industrial building can be split into three main functions:

-  Warehousing
-  Transportation
-  Manufacturing

## Research and development

 **Footprint:**  
5,000 SF to 50,000 SF

 **Dock:**  
Yes

 **Jobs:**  
1/250 SF

 **Clear Height:**  
18-24'

 **CapEx:**  
\$50-\$100 per SF

## Pilot line manufacturing facility

 **Footprint:**  
20,000 SF to 100,000 SF

 **Dock:**  
Yes

 **Jobs:**  
1/400 SF to 1/1,500 SF

 **Clear Height:**  
18 - 36'

 **CapEx:**  
\$75-\$150 per SF

## Full-scale advanced manufacturing facility

 **Footprint:**  
100,000 SF to 1,000,000+ SF

 **Dock:**  
Yes

 **Jobs:**  
1/250 SF

 **Clear Height:**  
36'

 **CapEx:**  
\$50-\$100 per SF

## cGMP facility

 **Footprint:**  
100,000 SF to 500,000+ SF

 **Dock:**  
Yes

 **Jobs:**  
1/500 SF to 1/1,600 SF

 **Clear Height:**  
Varying

 **CapEx:**  
\$200-\$1,000 per SF

# Advanced Manufacturing 101

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## Speaker:

**Donovan Lazaro,**

Economic Development  
Director, City of Fremont

## Topic:

Advanced Manufacturing  
Case Study: City of Fremont

Fremont is the leading city in California for manufacturing and has played an integral role in “reshoring” (bringing back to the US) critical industries and supply chains.



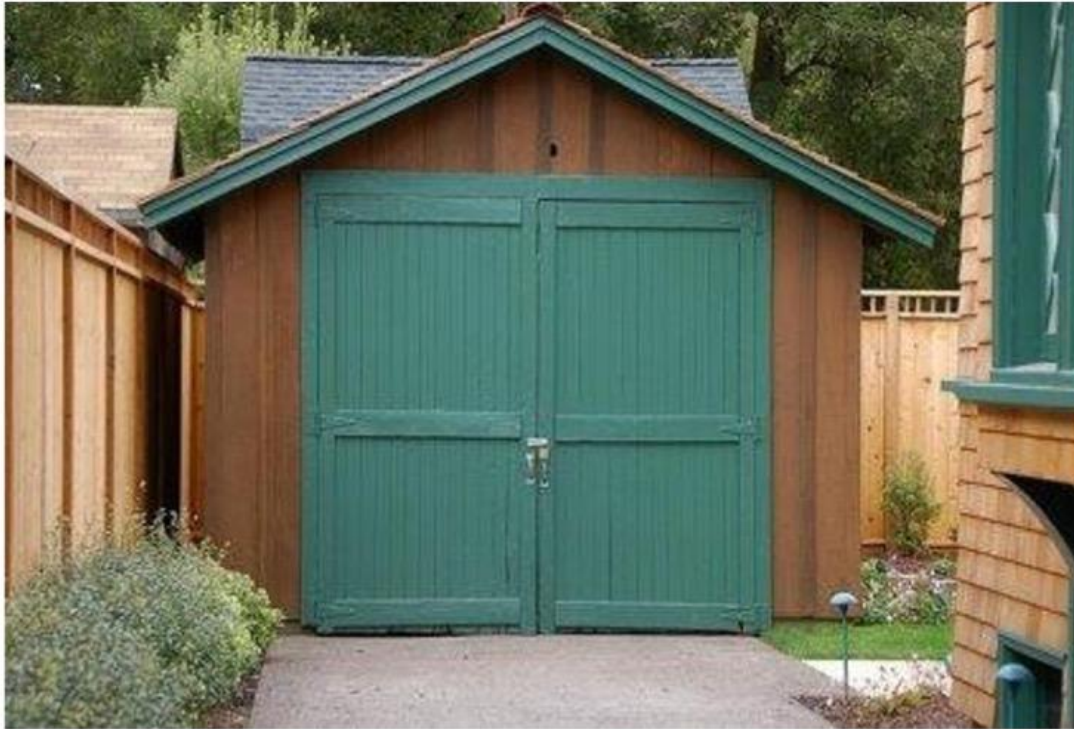
# Fremont, CA:

Leading Bay Area's  
Advanced Manufacturing  
Renaissance



# Where Innovation Takes Place in Silicon Valley, Then & Now

Silicon Valley 1.0



Hewlett-Packard Garage  
Historic Landmark

Today



Fremont Industrial Bldg.

# Fremont Economic Development Overview



## Our Mission

Foster business activity and investment to improve resident's quality of life by supporting the creation of good jobs, a thriving environment for businesses of all sizes, and a financially strong government to expand City services.



## Our Four Economic Development Pillars:

Growing  
City's Tax  
Base

Increasing  
Commercial  
Vibrancy

Bolstering  
Workforce

Strategic  
Initiatives

# Why Fremont is “All-In” on Manufacturing...



1.  
People



2.  
Economy



3.  
Innovation

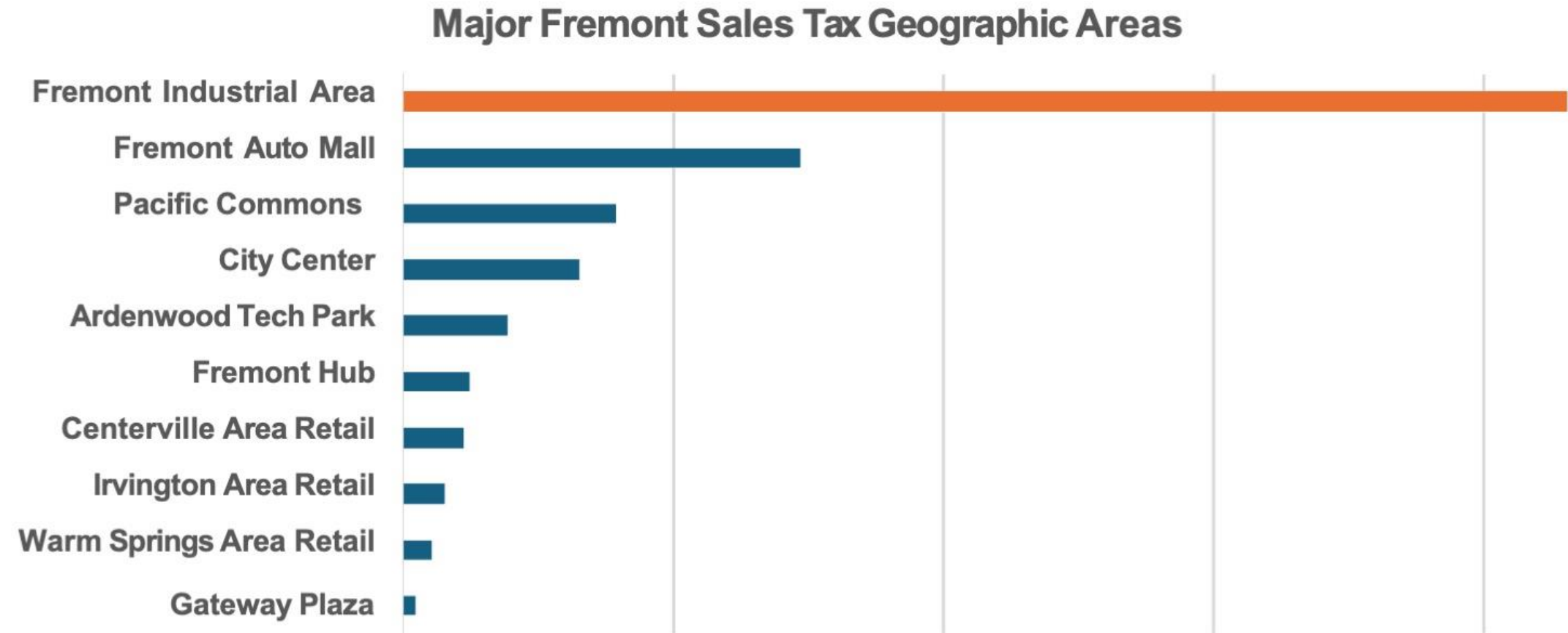


# Economic & Social Impacts of Manufacturing

- HIGH economic multiplier, with every dollar spent in manufacturing creating about \$2.64 in total economic activity. One job in manufacturing creates 3 jobs in other industries.
- Creates "missing middle" jobs, reducing inequality and providing employment opportunities for people of diverse backgrounds
- Promotes localism & regionalism & keeps more dollars in community
- Recurring reinvestments in facilities spur economic activity and can lead to additional local taxes
- Healthy manufacturing sector is associated with financially healthy governments



# Industrial Lands Contribute Significantly to Fremont's Tax Base





# Fremont's Leading Industries

- ❖ Cleantech
- ❖ Biomedical
- ❖ Semiconductor
- ❖ Electronics
- ❖ Emerging Industries

# Case Study:

## Pacific Commons South

- 1.7 million square feet of state-of-the-art flex industrial space
- Expansion of Bay Trail and green infrastructure
- New businesses include Meta, Quanta Manufacturing, Bloom Energy, Amazon, Jackery, HYC (7 of 10 buildings are manufacturing related)
- Prior Assessed Value of Land: ~\$50M. Final Value of Project ~\$500M
  - Over \$5M in recurring property tax revenue to City and school district
  - Meaningful tax revenue from point of sale & unsecured property tax resulting from manufacturing activities



# Partnering to Support Next Gen Workforce

## Ohlone Smart Manufacturing Technology (SMTech) Program



Industry-guided  
curriculum and job  
training for advanced  
manufacturing



Internet of Things (IoT),  
Additive Mfg., Robotics,  
& Lean Mfg./Sixth  
Sigma techniques



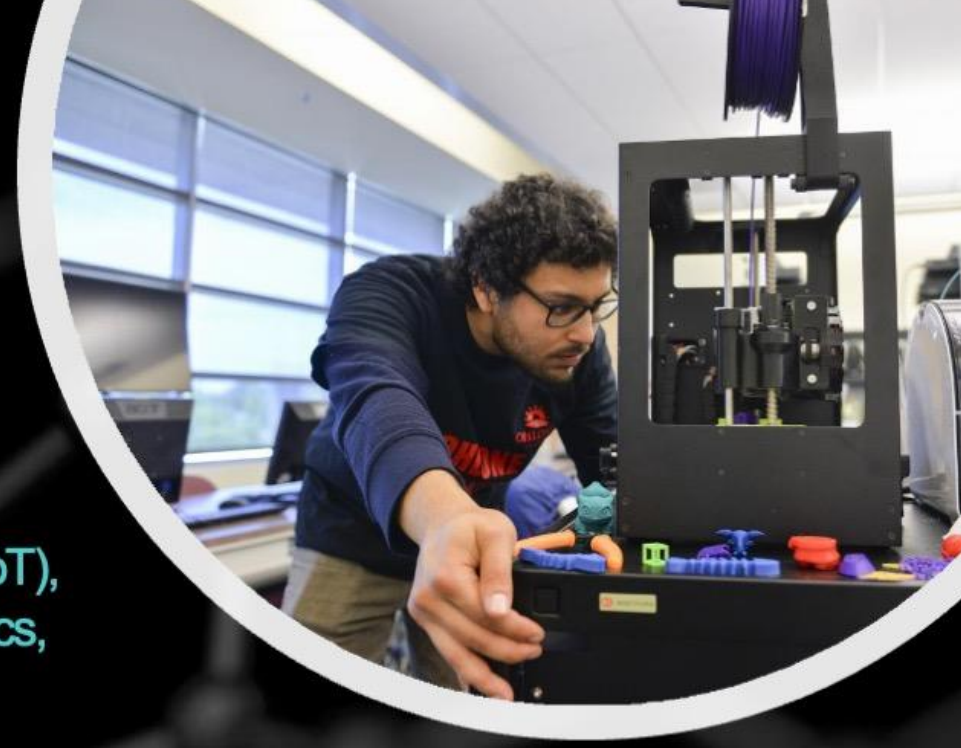
Center of Excellence  
Maker Lab with with  
modern factory &  
robotic equipment



AS Degrees and  
certificates in Smart  
Mfg. & Engineering  
Fundamentals



Serves both transfer-  
bound engineering  
and vocational  
students





# Providing Career Pathways for Working Families

- Cohort of hospitality workers impacted by pandemic closures
- Placed in positions at Evolve Manufacturing assembling COVID-19 test kits & ventilators
- 8-week paid on-the-job training with onsite college instruction from Ohlone
- Industry-recognized certificates in advanced manufacturing technologies
- Program has been expanded to serve hundreds of job seekers

# We love feedback!

- **Scan the code** to the right to take a 2-minute feedback survey.
- All responses are **anonymous**.
- We'll also send a follow-up email to everyone who registered with a link to our feedback survey.
- **Kit and Justin** are also available to connect!

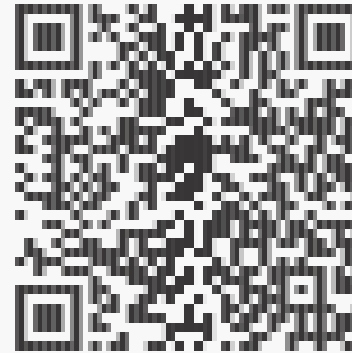


# Upcoming Office Hours

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- ~~August 27~~
- ~~September 10~~
- ~~September 24~~
- ~~October 8~~
- October 22
- November 12
- December 10

Register for the 2<sup>nd</sup> Wednesday



Register for the 4th Wednesday

