

East Bay Industrial Land

Industrial Market Insights & Subarea Profiles

Resilient East Bay:
Industrial Land Use Analysis &
Implementation Toolkit Part I

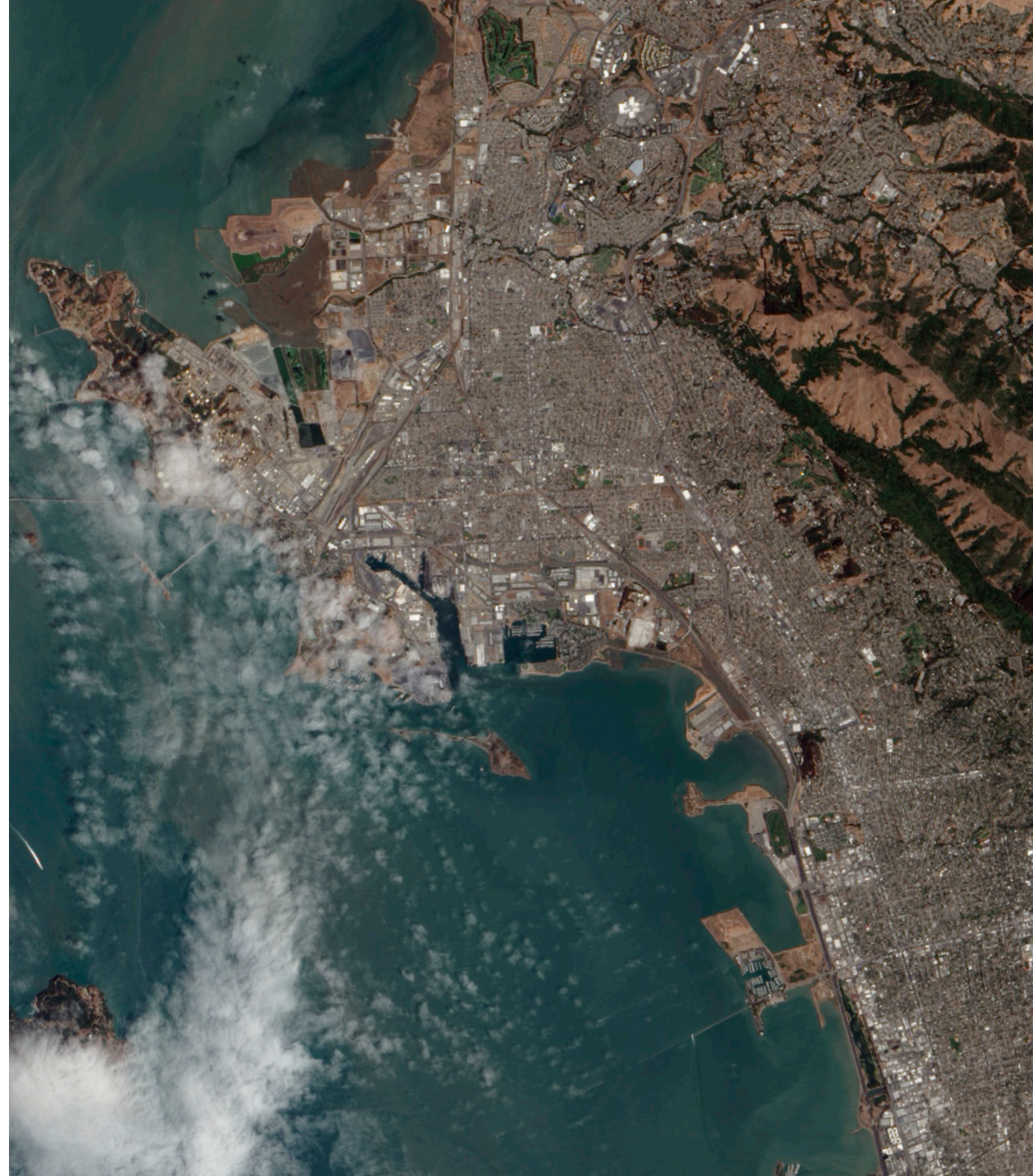


MAY 2023

Purpose of This Report

The purpose of this report is to provide a “snapshot” overview of industrial activity in the East Bay over the past ten years. The results indicate that the East Bay has robust job growth in key industry groups that utilize land and buildings in areas with industrial related zoning. These findings can inform cities within the East Bay as to the importance of their industrial land supply and will provide the foundation for preparing the Industrial Land Use Implementation Toolkit. The toolkit will assist cities in finding approaches to support ongoing economic innovation and investment in their industrial zoned areas. Implementation related topics, including addressing ongoing challenges with electrical supply, will be addressed in the toolkit document.

Report Section	Contents
Job Growth	Employment by sector and subarea with changes from 2011-2021
Industrial Buildings	Inventory and tenant information with changes from 2011-2023 YTD
Market Statistics by Building Type	Inventory, rent, and vacancy statistics by building type from 2013- 2023 YTD
Subarea Profiles	Jobs, building inventory and market statistics, and qualitative findings by subarea
Appendix	CoStar definitions and NAICS codes used
Upcoming Report	<i>The Industrial Lands Implementation Toolkit will be available in fall 2023.</i>



Acknowledgements

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East Bay Subareas

Each East Bay city is unique, but there are also some industrial land characteristics shared among neighboring cities. We used these shared characteristics to define six subareas within the East Bay.

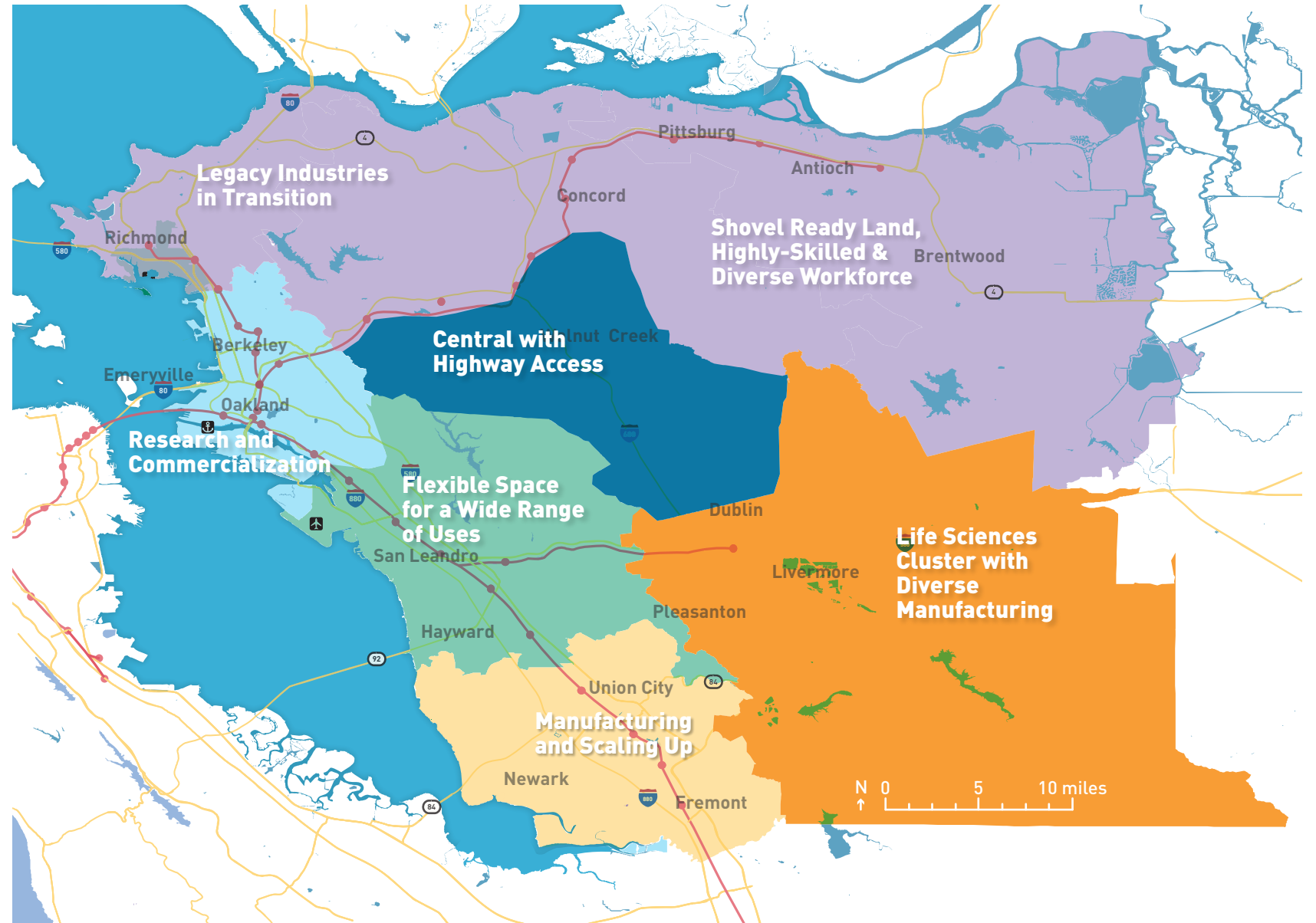
Note: See appendix for list of cities by subarea.



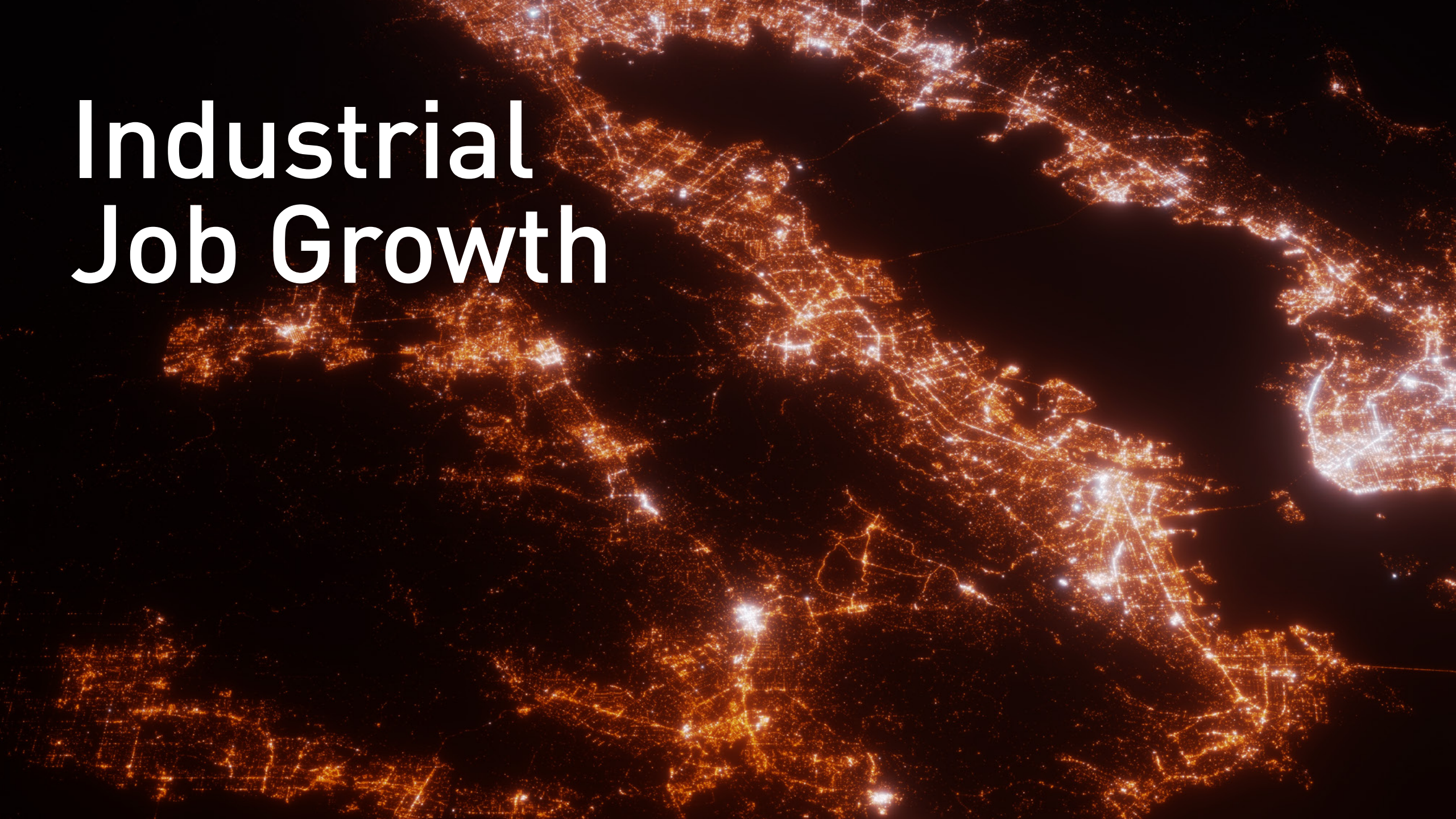
The East Bay Is An Industrial Ecosystem

Data analysis and stakeholder interviews show that rather than standing alone, East Bay cities have complementary assets and opportunities that can support all stages of the industrial life cycle.

Cooperatively building on these assets and opportunities will make each city's local economy stronger.



Industrial Job Growth



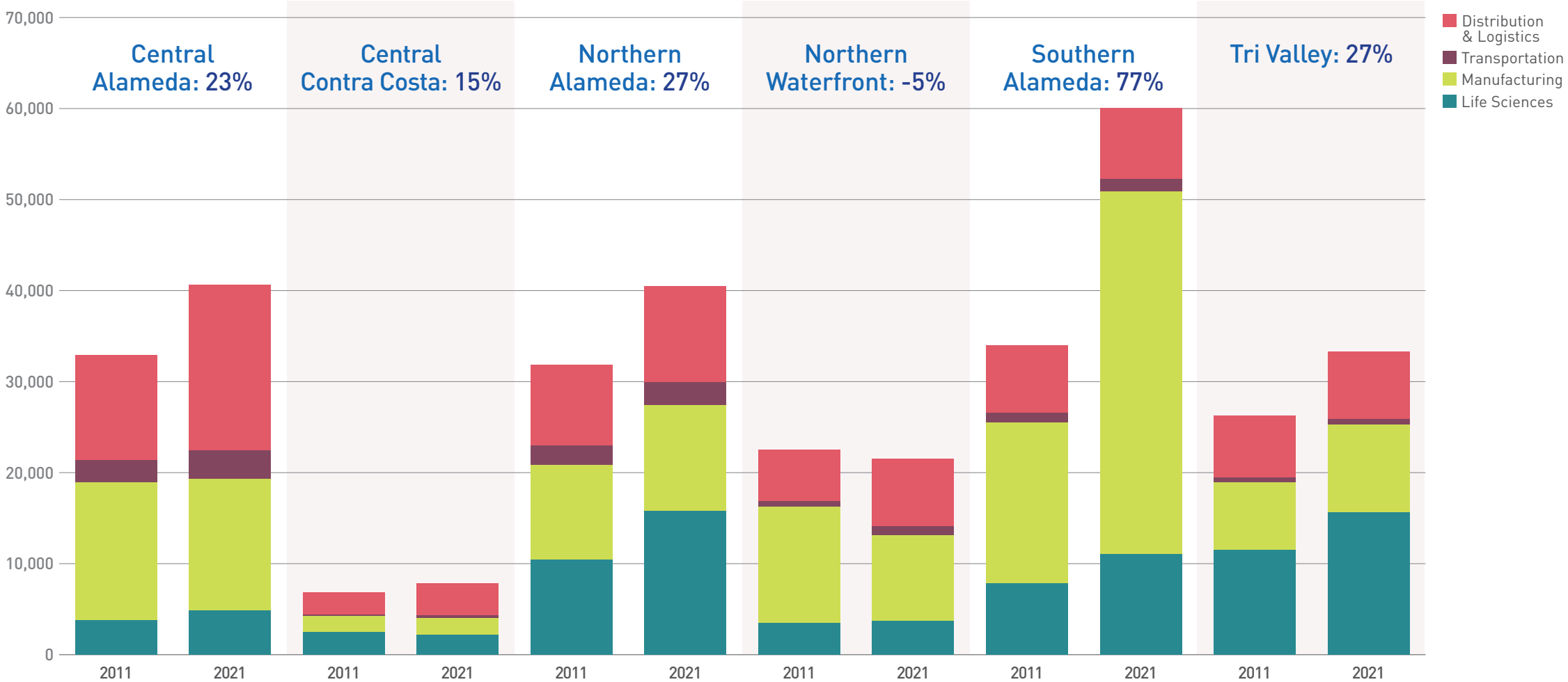
Industrial Job Growth in the East Bay

- This analysis focuses on four industry groups: Life Sciences, Manufacturing, Transportation, and Distribution/Logistics
- These four industry groups drove job growth in the East Bay, adding over 49,000 jobs from 2011-2021
- This growth also represents an increasing share of the region’s jobs between 2011 and 2021, accounting for 18% of total regional jobs in 2021, a 2 percent increase over 2011
- The rate of job growth change in the four industry groups was double that of total regional job rate of change from 2011 to 2021
- Of the four industry groups, Manufacturing represents the largest number of jobs and had the largest job growth over the ten-year period
- Life Sciences jobs are also rapidly increasing and in 2021 had almost as many jobs as Distribution and Logistics

Industry	2011 Jobs	2021 Jobs	Job Change 2011-2021	% Change 2011-2021
Life Sciences	39,684	53,304	13,620	34%
Manufacturing	64,956	86,566	21,610	33%
Transportation	7,061	9,107	2,046	29%
Distribution and Logistics	42,668	54,789	12,121	28%
East Bay Industrial Jobs Total	154,369	203,766	49,397	32%
East Bay Total Regional Jobs	949,286	1,104,887	155,601	16%
Industrial Jobs as Share of Regional Jobs	16%	18%		2%

Source: Lightcast, 2023; Strategic Economics, 2023.
 Note: All categories are exclusive to prevent double counting of jobs. More detailed data is available by request from EBEDA. See Appendix for full list of NAICS codes considered in these figures

Industrial Job Growth in East Bay Subareas



Sources: Lightcast, 2023; Strategic Economics, 2023.

Employment

Manufacturing

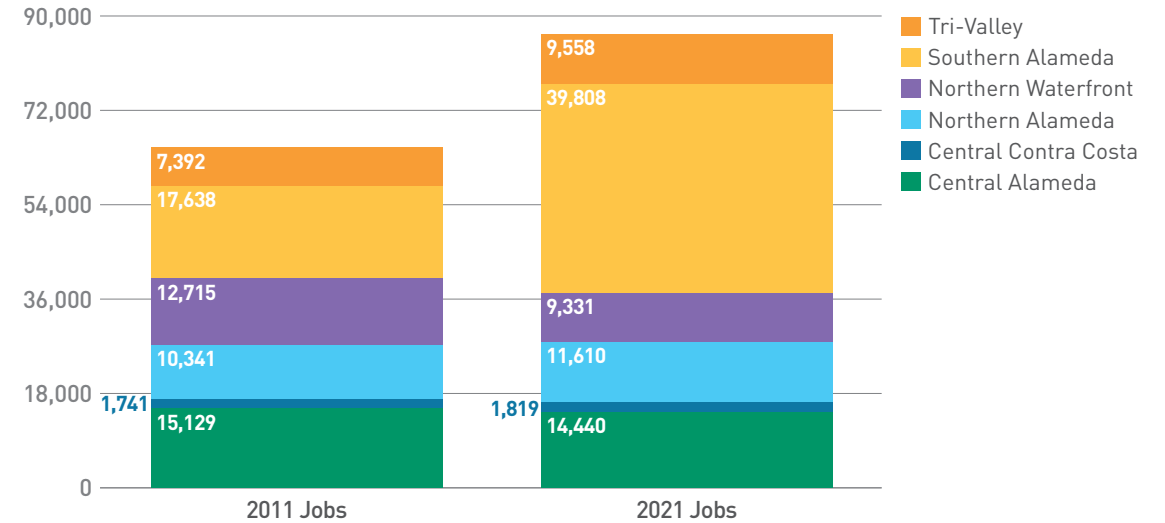
- The majority of manufacturing job growth was in Southern Alameda, reflecting the area’s easy access to the region’s workforce, its technology-driven industry mix, and available land supply
- Most subareas added some manufacturing jobs demonstrating that this activity can thrive in most places in the region
- The Northern Waterfront experienced a decline in manufacturing jobs, largely due to the region’s ongoing transition from its legacy industries related to petroleum refining, but it is anticipated that this trend will reverse in future years

- In today’s world, all “manufacturing” is “advanced” in that significant technology and investment is required and the jobs that are created offer similar wages for similar skills

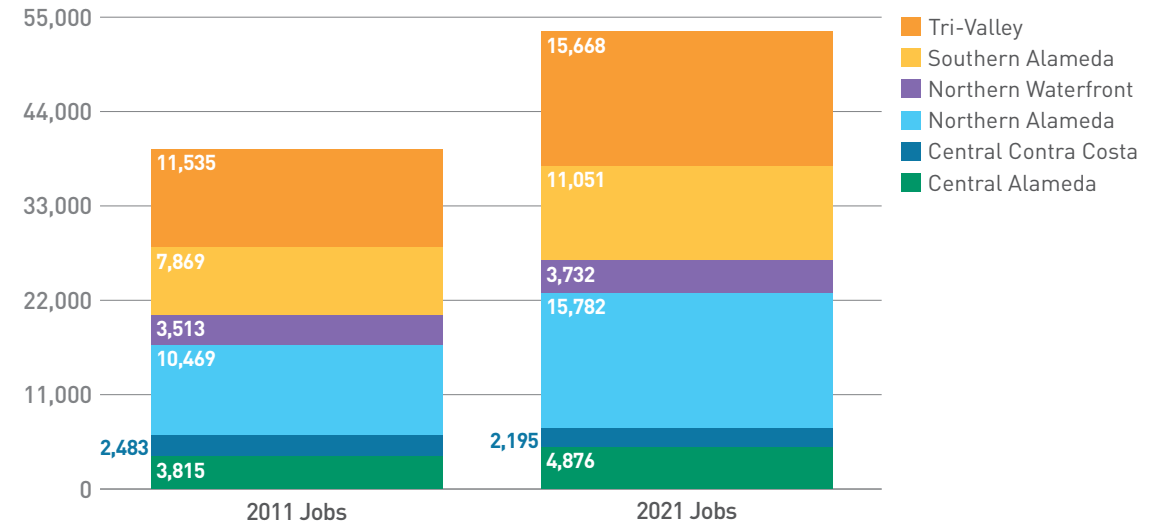
Life Sciences

- Industrial life sciences jobs are emerging as an East Bay strength
- Most subareas added some life sciences jobs with the most significant growth in Northern Alameda, Tri-Valley, and Southern Alameda
- Access to a highly skilled work force and proximity to academic research labs are key location drivers for this industry

Total Manufacturing Jobs in the East Bay



Total Life Science Jobs in the East Bay



Sources: Lightcast, 2023; Strategic Economics, 2023.

Employment

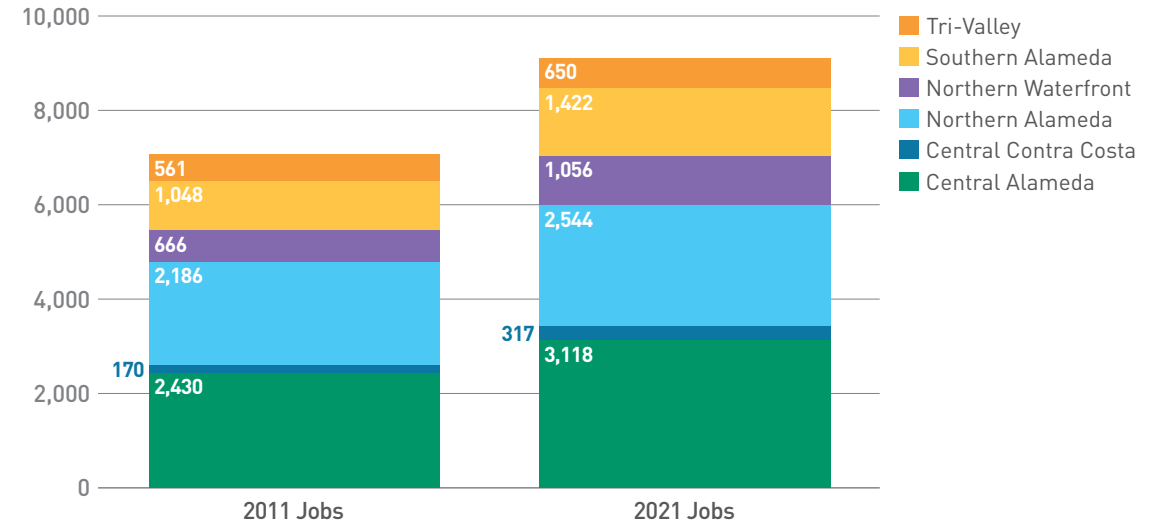
Transportation

- Job growth in transportation is primarily in “other support services for transportation”, which includes jobs in packing goods for shipment, pipeline terminal facilities, and more
- Majority of transportation job growth is in Central Alameda, with most of its growth in other support services for transportation, followed by the Northern Waterfront, with most of its growth in general freight trucking
- All subareas added some transportation jobs
- This constitutes the smallest industrial sector in the East Bay in number of jobs

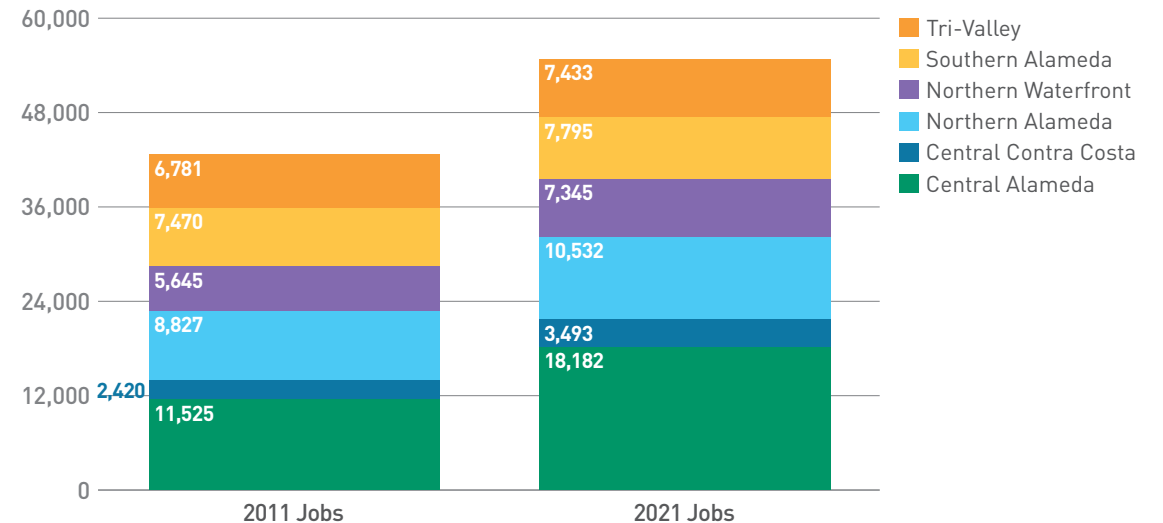
Distribution and Logistics

- Majority of distribution and logistics job growth is in Central Alameda, followed by the Northern Waterfront
- All subareas added some distribution and logistics jobs
- This is the second largest industrial sector in the East Bay but is not growing as quickly as others
- Distribution and logistics jobs are now growing more quickly further east than the East Bay region due to lower costs of land, labor, and housing
- Most industrial businesses require some distribution and logistics activities, some of which may be managed by the individual company and some that may be outsourced to a Distribution and Logistics company likely to be located in the East Bay

Total Transportation Jobs in the East Bay



Total Distribution and Logistics Jobs in the East Bay



Sources: Lightcast, 2023; Strategic Economics, 2023.

Industrial Buildings



Industrial Inventory in the East Bay

- The East Bay had a net loss of 33 industrial buildings from 2013-2023 despite new construction
- The square footage of the total industrial inventory has increased 4.2% despite net building losses
- The vast majority of building losses were demolitions, not adaptive reuse
- Demolitions resulted in mixed outcomes with some conversions to other uses, such as residential, and some new industrial buildings with different sizes and configurations than the demolished, obsolete buildings
- Majority of the inventory loss was in Northern Alameda
- Warehouse and distribution style buildings represent the greatest percentage increase in the industrial building inventory, but many types of businesses and jobs are present in these buildings

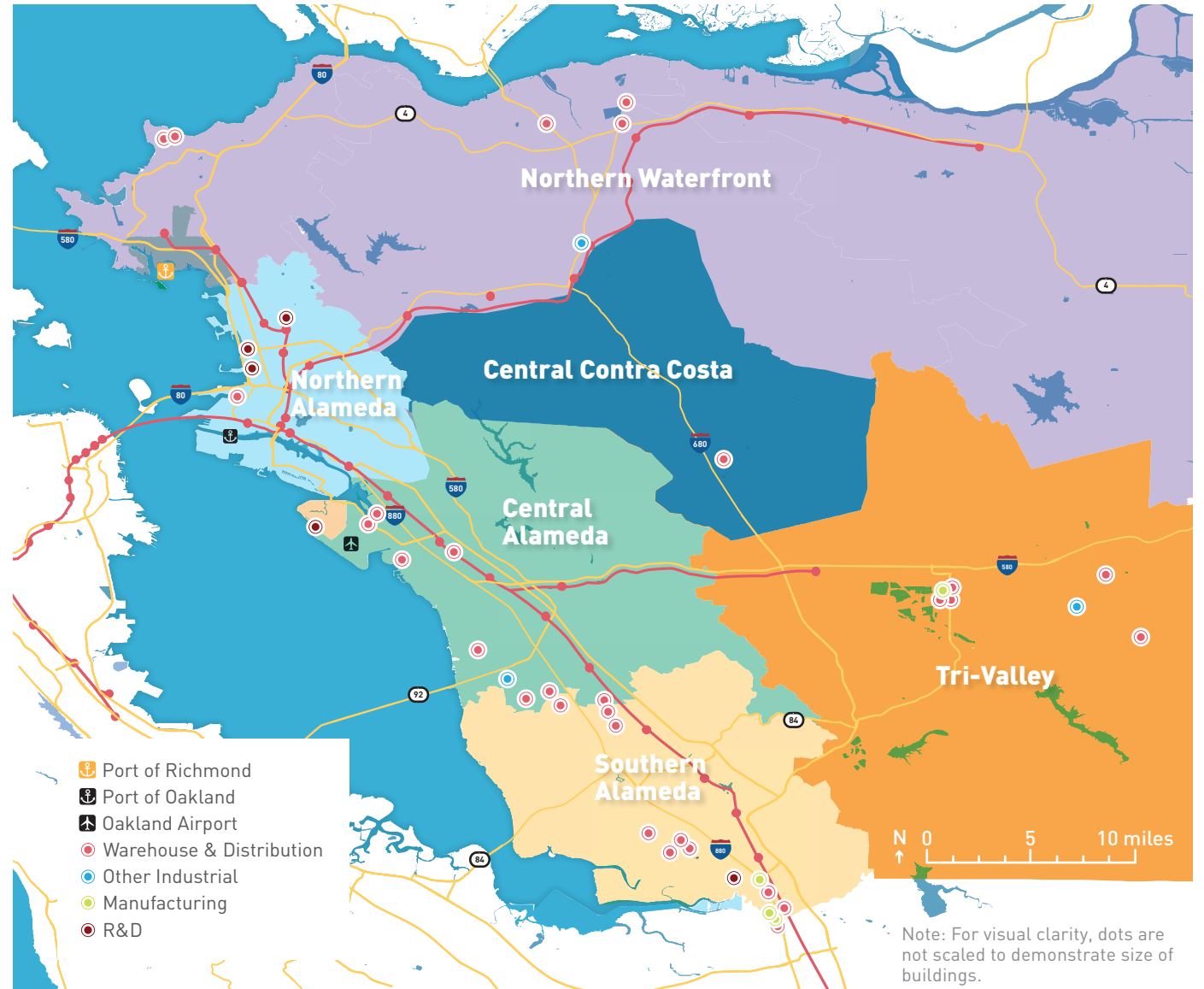
East Bay	NUMBER OF BUILDINGS			SQUARE FEET			
	2013	2023 YTD	Net Change	2013	2023 YTD	Net Change	% Change
Manufacturing	1,419	1,405	-14	58,848,599	59,250,574	401,975	0.7%
R&D	718	719	1	28,136,532	28,497,006	360,474	1.3%
Other Industrial	273	267	-6	3,189,706	3,090,994	(98,712)	-3.1%
Warehouse & Distribution	4,920	4,906	-14	140,671,440	149,771,095	9,099,655	6.5%
Total	7,330	7,297	-33	230,846,277	240,609,669	9,763,392	4.2%

Sources: CoStar2023; Strategic Economics, 2023.
 Note: For additional information on building classifications and definitions, see appendix.

East Bay Flex & Industrial Buildings Built from 2012-2017

New Industrial Buildings: Built 2012-2017

- New buildings from 2012-2017 demonstrate disbursed investment among subareas
- Many of the new buildings were along major corridors
- Warehouse & Distribution buildings were the most common additions and were built in all subareas



Building Type	Total Buildings Added	Total Square Feet Added	Average Size of Buildings (sf)
Manufacturing	4	1,210,901	302,725
Other Industrial	3	174,409	58,136
R&D	5	403,259	80,652
Warehouse & Distribution	36	6,729,592	186,933

Note: For additional information on building classifications and definitions, see appendix.
Sources: CoStar 2023; Strategic Economics, 2023.

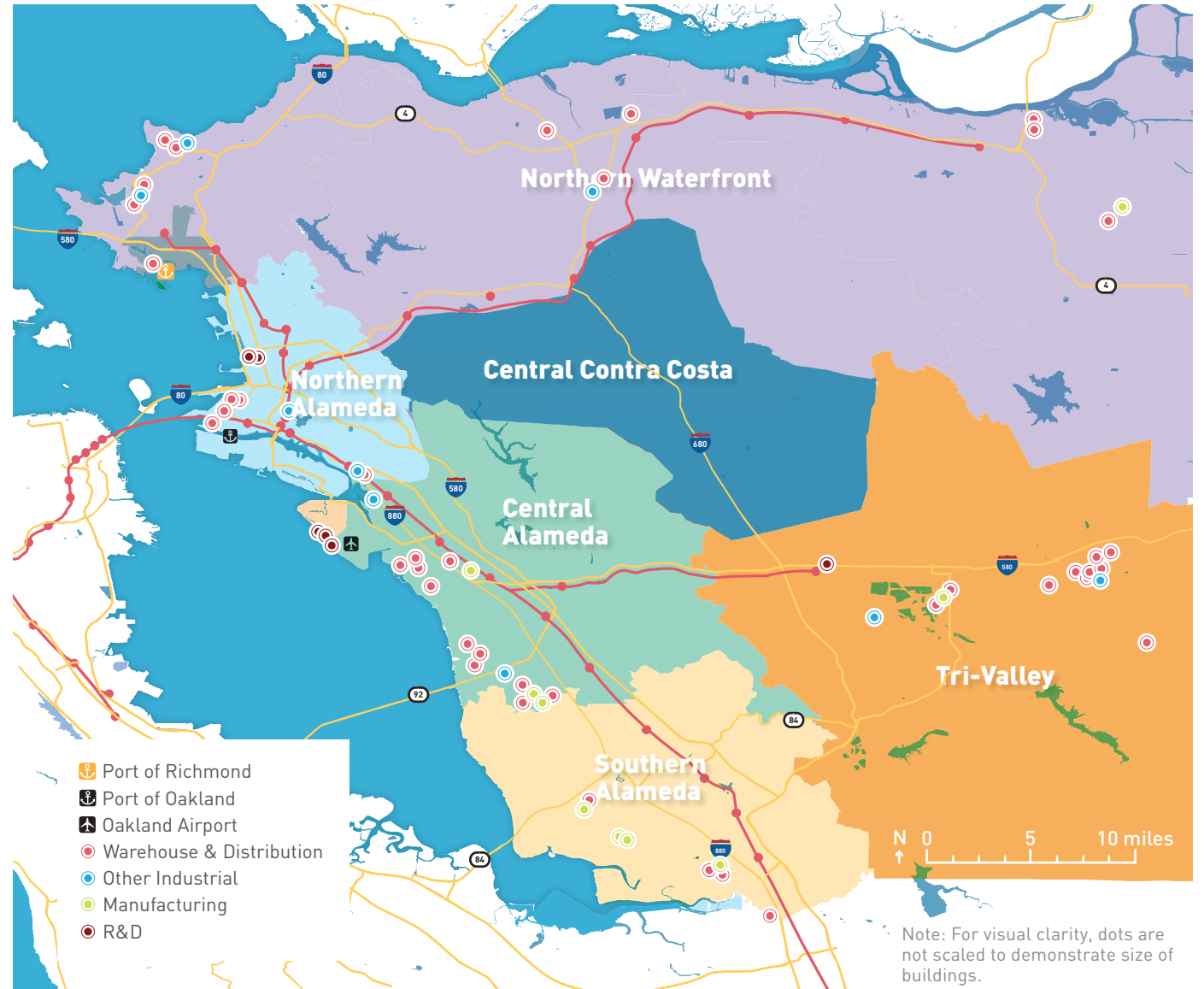
East Bay Flex & Industrial Buildings Built in the Last 5 Years

New Industrial Buildings: Built 2018-2022

- The number of buildings built from 2018-2022 far surpassed those built in 2012-2017 indicating ongoing development interest
- The diversity of building types increased but warehouse & distribution remained dominant
- Based on feedback from developers and brokers, majority of new buildings are not spec development

Building Type	Total Buildings Added	Total Square Feet Added	Average Size of Buildings (sf)
Manufacturing	15	1,798,583	119,906
Other Industrial	10	349,356	34,936
R&D	11	833,206	75,746
Warehouse & Distribution	43	8,517,620	198,084

Note: For additional information on building classifications and definitions, see appendix. Sources: CoStar 2023; Strategic Economics, 2023.



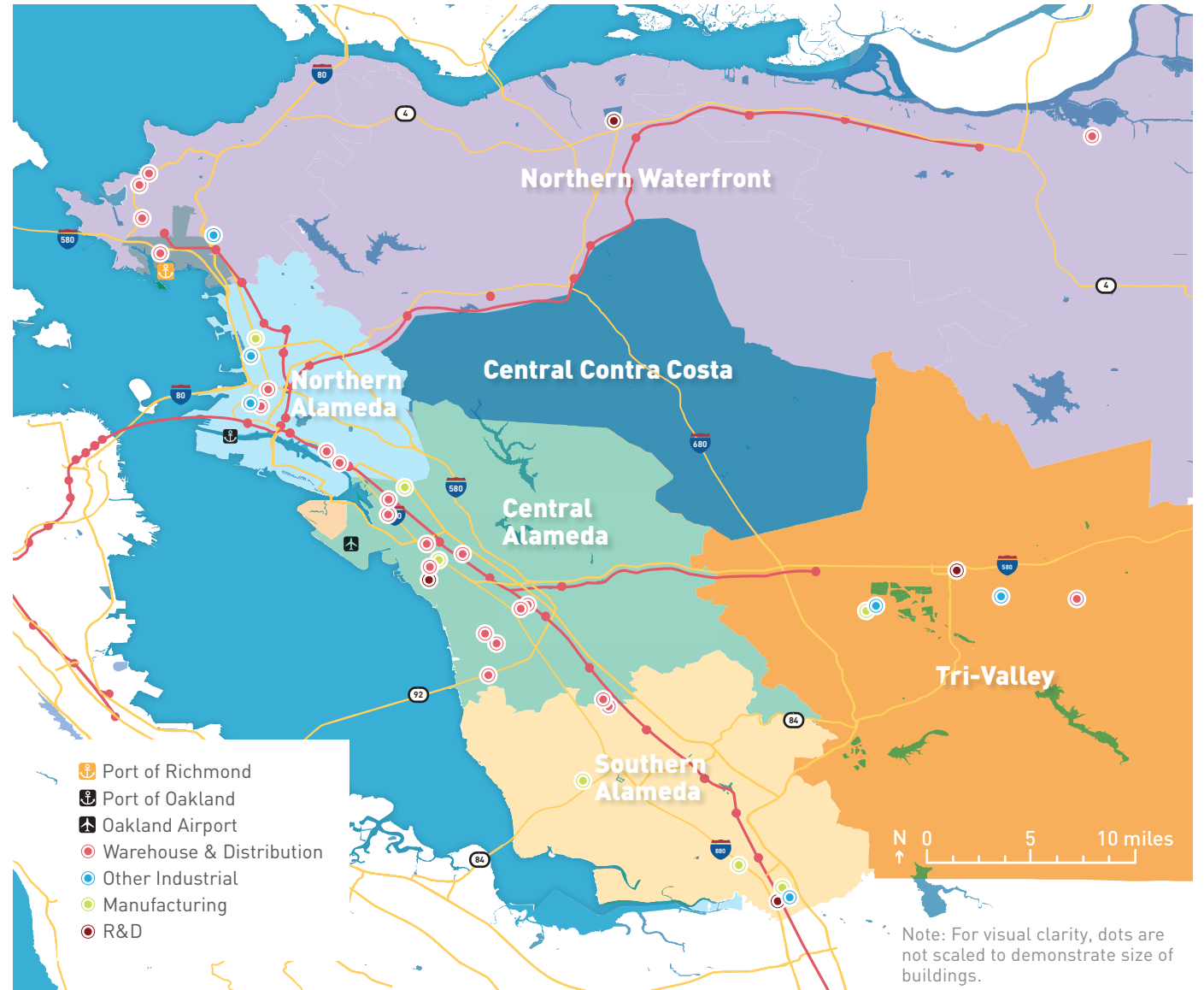
East Bay Flex & Industrial Buildings Renovated from 2012-2017

Renovated Industrial Buildings: 2012-2017

- Renovations were less common than new development from 2012-2017
- Renovations followed similar patterns to new development in location and diversity of building types

Building Type	Total Buildings Added	Total Square Feet Added	Average Size of Buildings (sf)
Manufacturing	8	431,552	53,944
Other Industrial	6	245,718	40,953
R&D	6	406,264	67,711
Warehouse & Distribution	22	1,222,969	55,590

Note: For additional information on building classifications and definitions, see appendix.
Sources: CoStar 2023; Strategic Economics, 2023.



East Bay Flex & Industrial Buildings Renovated in the Last 5 Years

Renovated Industrial Buildings: 2018-2022

- Renovations increased in number from 2018-2022, compared to 2012-2017, and became concentrated in Northern Alameda based on number of buildings
- Renovations, based on square footage, mostly occurred in Southern Alameda, which is likely due to the strong market for industrial spaces, driven by the workforce proximity and bridge access
- Renovations to modernize buildings may be quicker and less expensive than developing new buildings



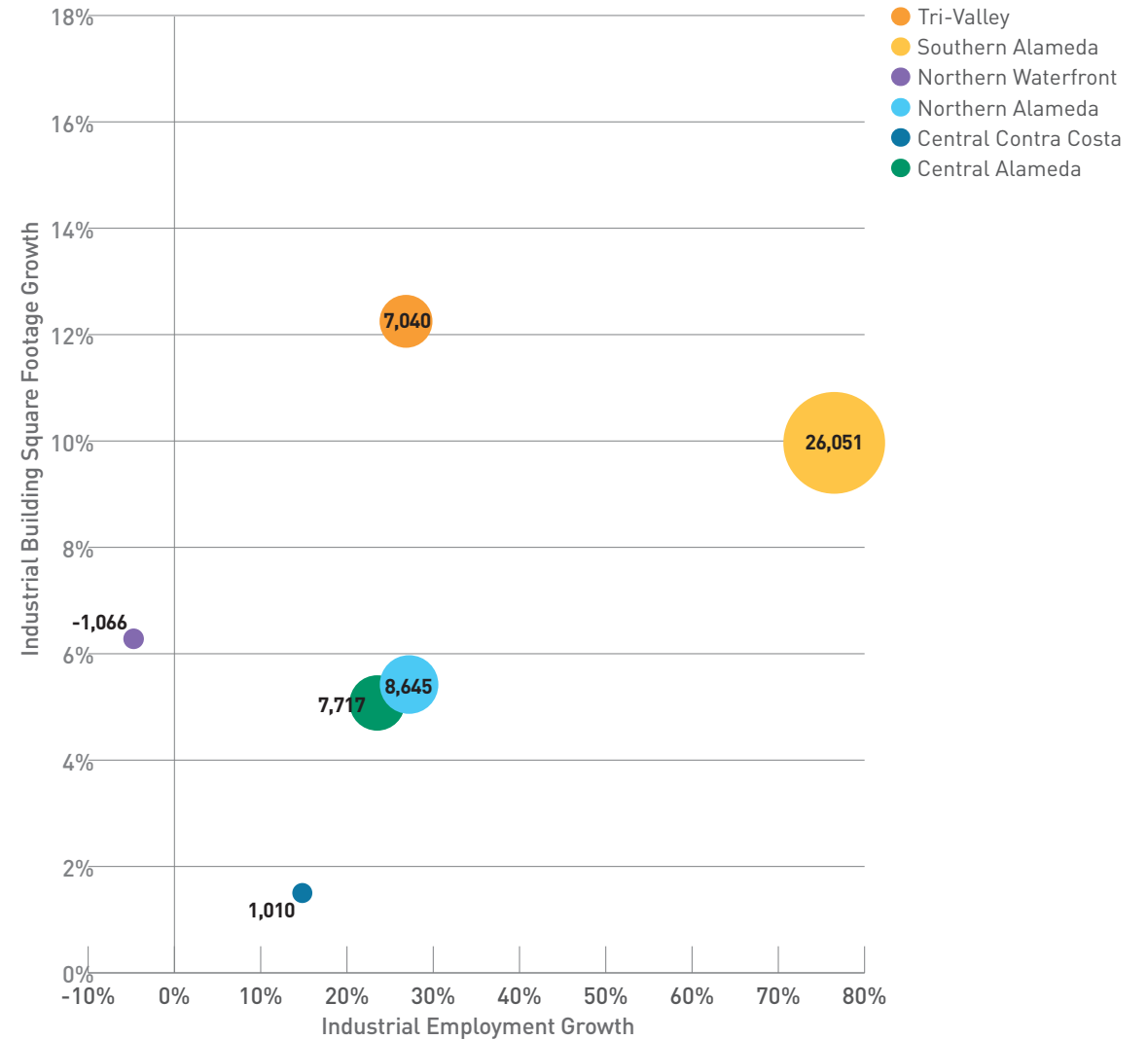
Building Type	Total Buildings Added	Total Square Feet Added	Average Size of Buildings (sf)
Manufacturing	10	370,844	37,084
Other Industrial	10	107,725	10,773
R&D	11	475,542	43,231
Warehouse & Distribution	22	1,222,969	43,687

Note: For additional information on building classifications and definitions, see appendix.
Sources: CoStar 2023; Strategic Economics, 2023.

Job Growth Must Be Accommodated In Both New and Existing Spaces

- All subareas have added industrial square footage over the last decade
- Tri-Valley had the largest growth rate in square footage with a net increase of 12% but a job growth rate similar to that of other subareas
- The Northern Waterfront lost industrial jobs, despite adding space, due to major shifts in its industrial economic base primarily the transition from legacy industries such as petroleum refining
- Central and Northern Alameda had similar rates of employment growth and industrial building growth
- Southern Alameda is an outlier from the typical relationship seen in other subareas; this area had exceptional job growth, despite a slower rate of industrial square footage growth than Tri-Valley, but Fremont's active relationship with major employers such as Tesla is what is driving job growth in this region
- Preservation of industrial lands and adapting existing spaces also provided opportunities for industrial job growth regionally
- Other factors besides new development also impact job growth such as job density, automation, industry clusters, and more

Employment Growth and Building Growth (sf) by Subarea 2011-2021

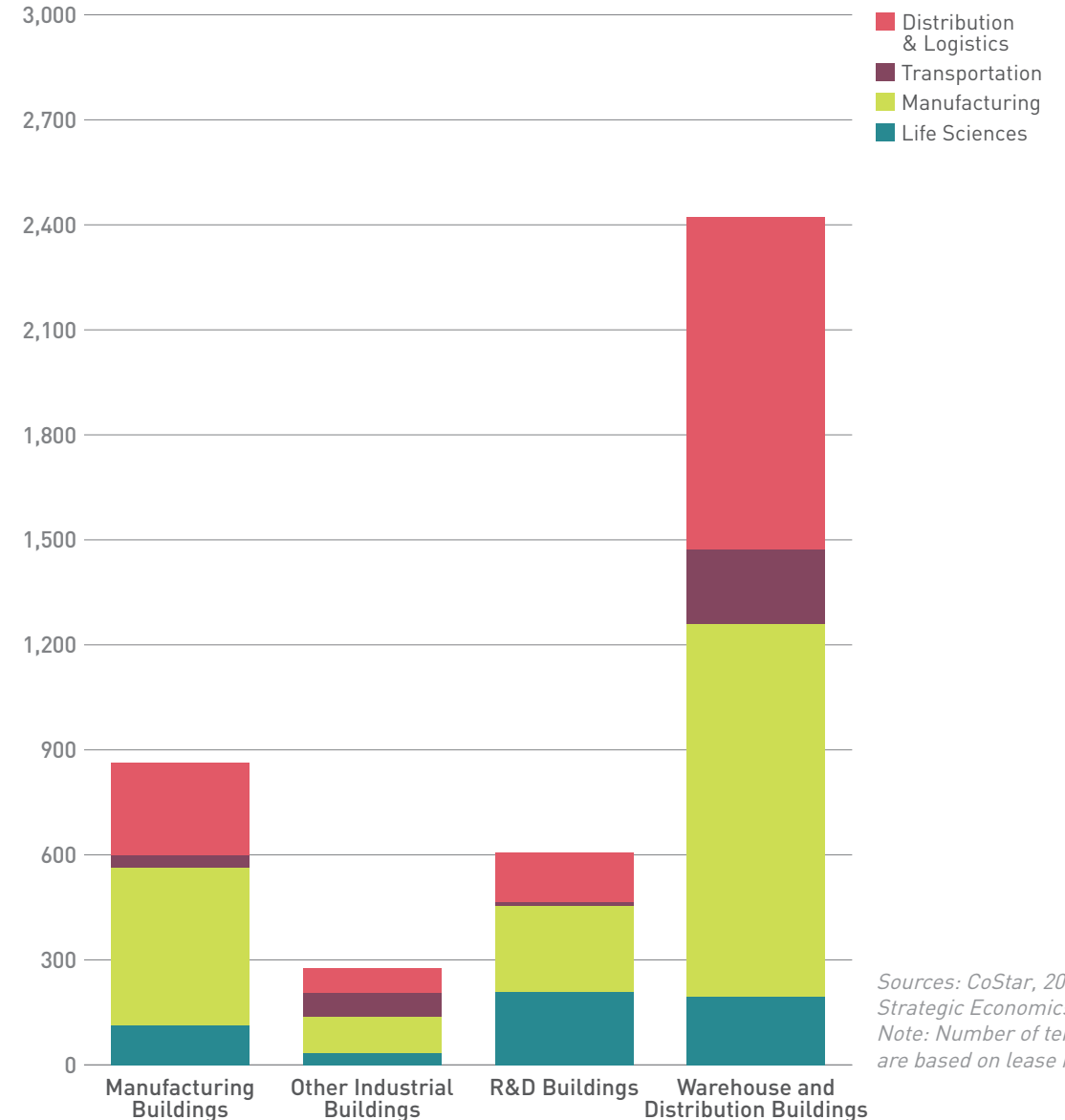


Note: Size of bubble corresponds to numerical job growth.
 Source: Costar, 2023; Lightcast, 2023; Strategic Economics, 2023.

Industrial Users Need a Wide Variety of Spaces

- Industrial developers and brokers are considering the viability of new trends for the East Bay
 - » 20' clear heights spaces
 - » Better building configurations for accommodating flexible and changing uses
- Parcel sizes, city infrastructure, and availability of land impact the types of spaces users can seek
- Business needs, such as access, work force size, job densities, and proximity to suppliers and customers influence what types of spaces businesses seek, and many industrial buildings can accommodate a wide variety of tenants
- Most industrial uses present in the East Bay can be accommodated in flexible building types
- Many tenants are seeking spaces that can accommodate multiple divisions of their businesses, such as R&D and prototyping located on the same campus
- Users change within single buildings over time. A building with a small distributor today may have a biotech research tenant the next year
- For further information and definitions on building types and industry types, see Appendix

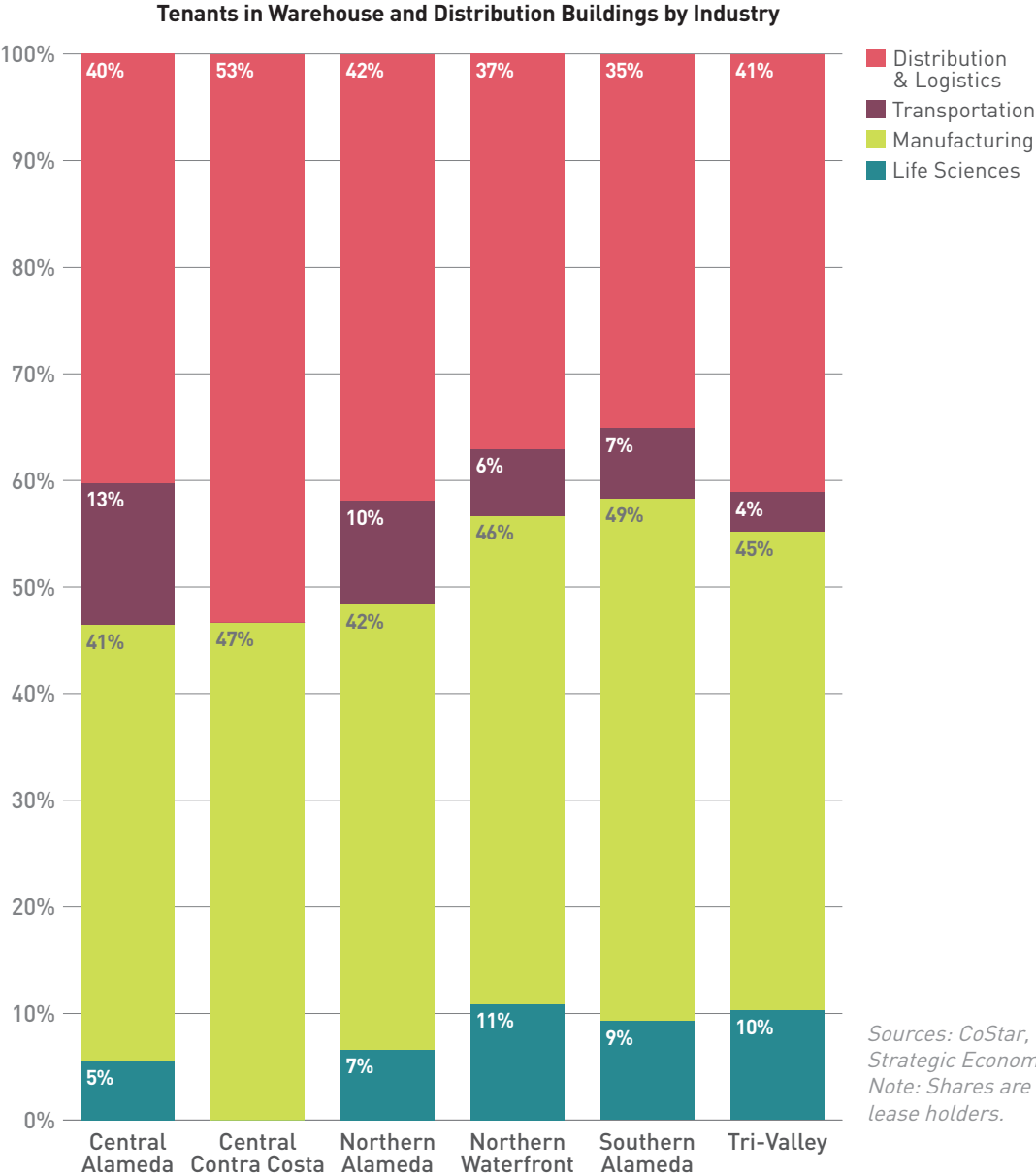
Number of Tenants by Industry in Building Types



Sources: CoStar, 2023; Strategic Economics, 2023. Note: Number of tenants are based on lease holders.

The East Bay Without Warehouse Buildings?

- Most communities are seeking to limit distribution and logistics uses, particularly for e-commerce, by limiting warehouse buildings
- Across the East Bay, a diverse group of businesses and industries are utilizing warehouse and distribution buildings
- Some tenants may be using these buildings for non-distribution uses
- Most life sciences or manufacturing businesses need some warehouse and distribution space to support their operations



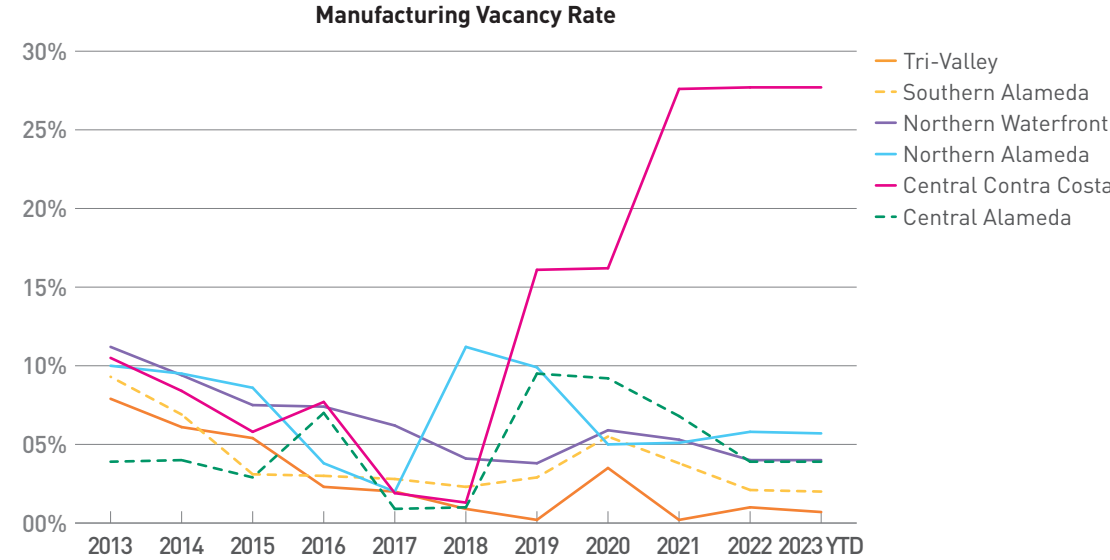
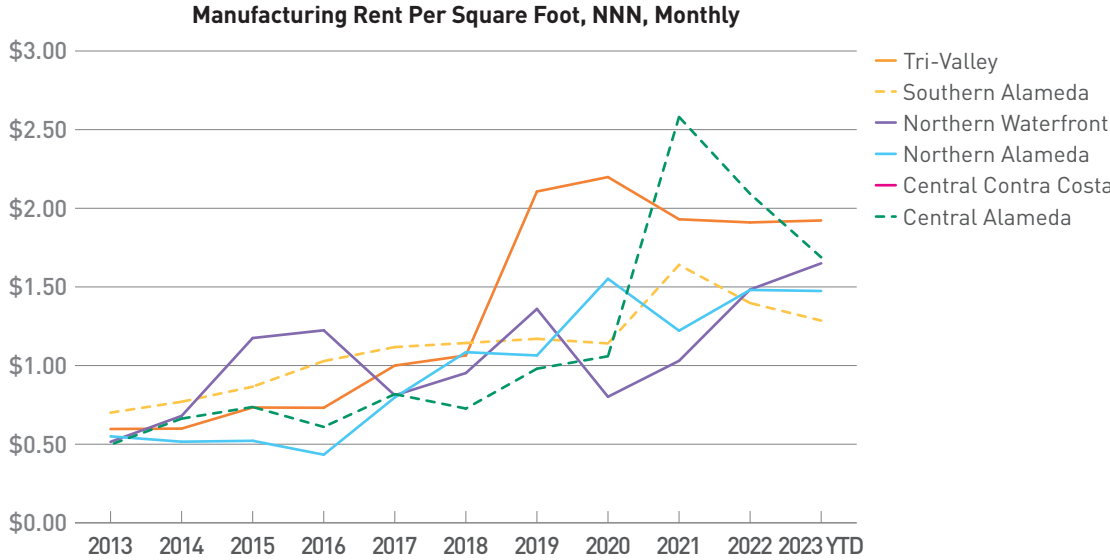
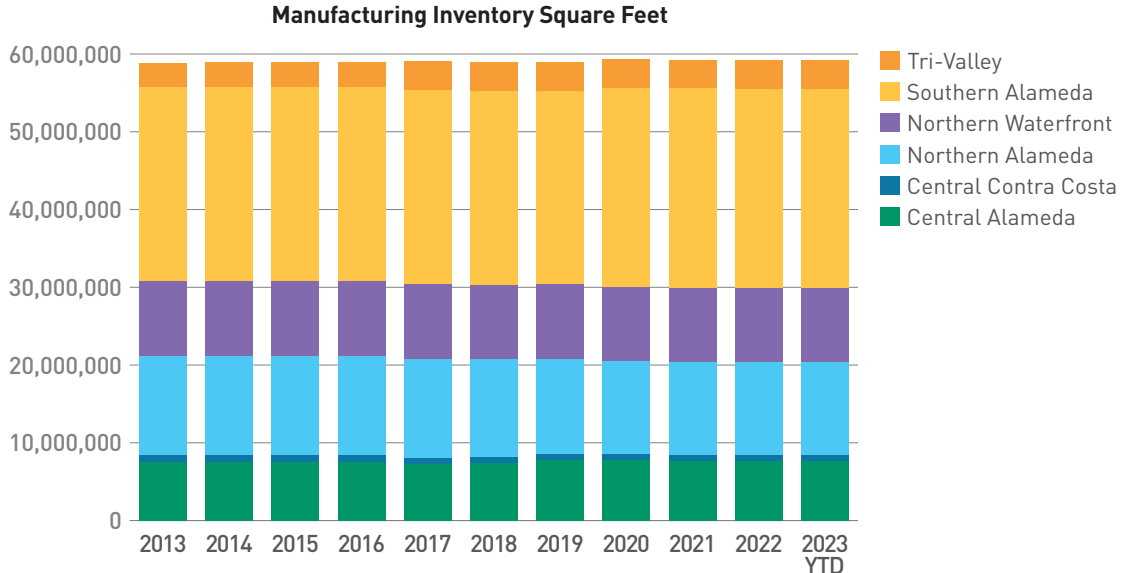
Sources: CoStar, 2023; Strategic Economics, 2023. Note: Shares are based on lease holders.

Market Statistics by Building Type

An aerial photograph of a city and industrial area. In the foreground, there are green, grassy hills with scattered trees. The middle ground shows a dense residential or commercial city area with many buildings and streets. In the background, there is a large industrial complex with many towers, pipes, and structures, and a prominent mountain range under a clear blue sky.

Manufacturing

- Southern Alameda has the largest amount of manufacturing square feet and has added the most square footage over the last 10 years
- Southern Alameda has some specific characteristics that could explain this growth, as discussed above
- Central Contra Costa’s vacancy rates and lack of rent data reflect its small inventory of manufacturing space
- Manufacturing rents and vacancy rates both indicate a competitive market
- Manufacturing continues to grow in the East Bay despite relatively higher costs than most other US markets due to the locational advantages of proximity to the necessary workforce, inputs, and customer base

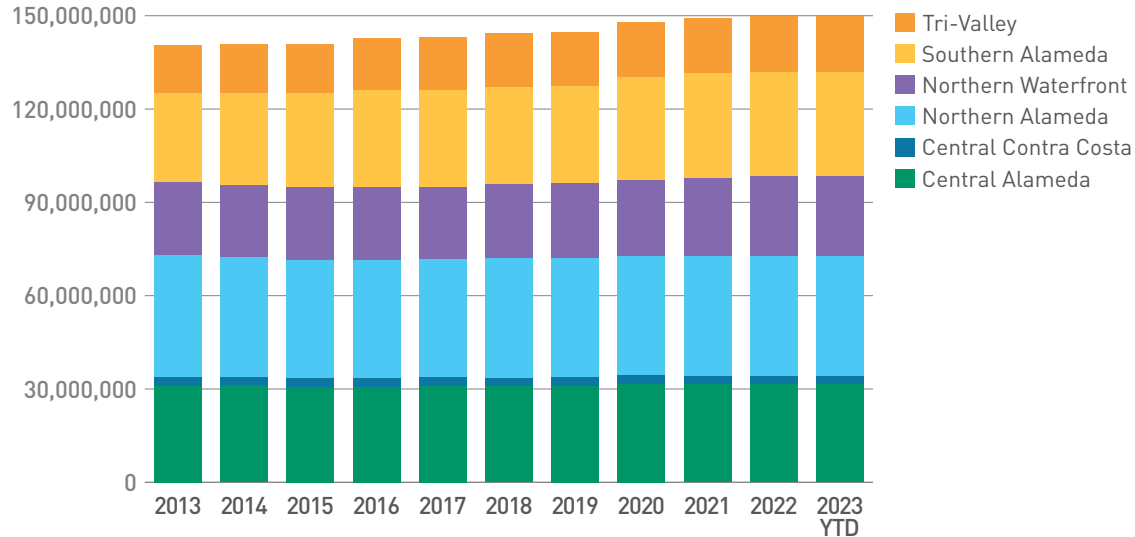


Sources: CoStar, 2023; Strategic Economics, 2023.

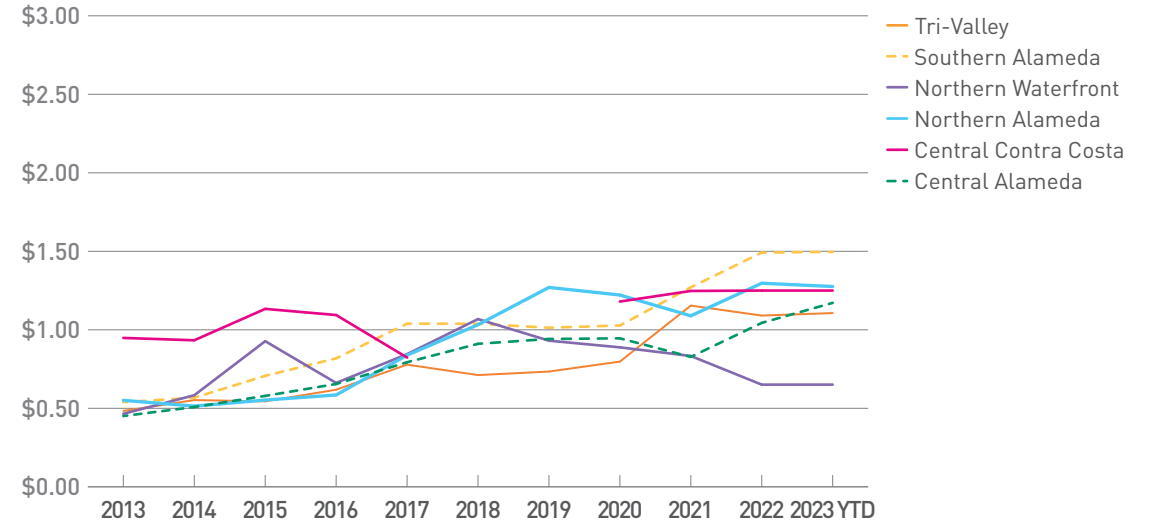
Warehouse & Distribution

- Warehouse and Distribution buildings have the lowest rents of all industrial spaces, but rents have remained mostly competitive across subareas over time
- Vacancy rates for these buildings are consistently low as demand remains high
- Southern Alameda has the largest and fastest growing inventory, but the Northern Waterfront and Tri-Valley are also quickly adding space

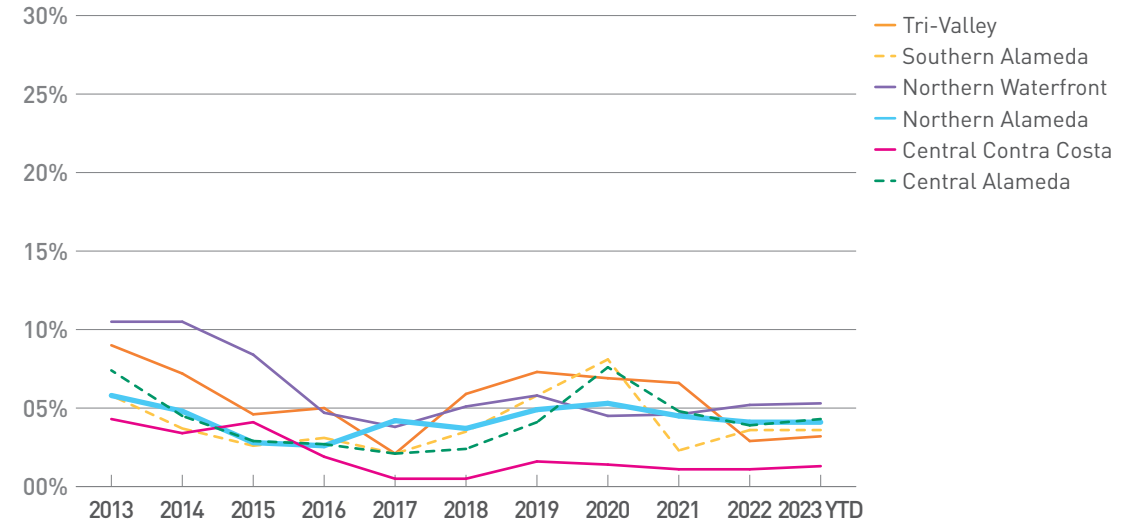
Warehouse & Distribution Inventory Square Feet



Warehouse & Distribution Rent Per Square Foot, NNN, Monthly



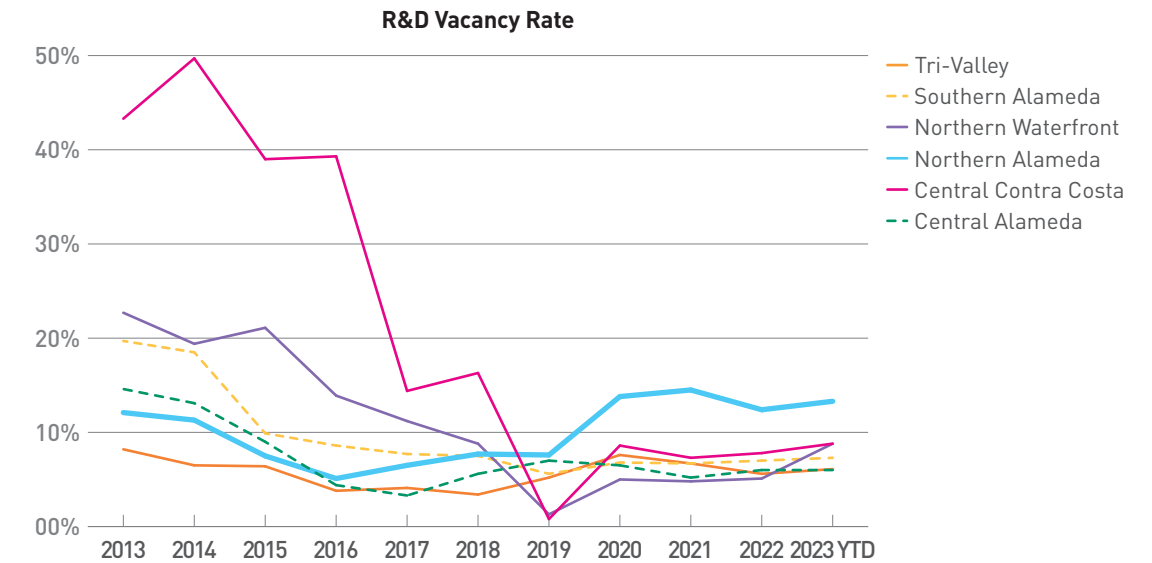
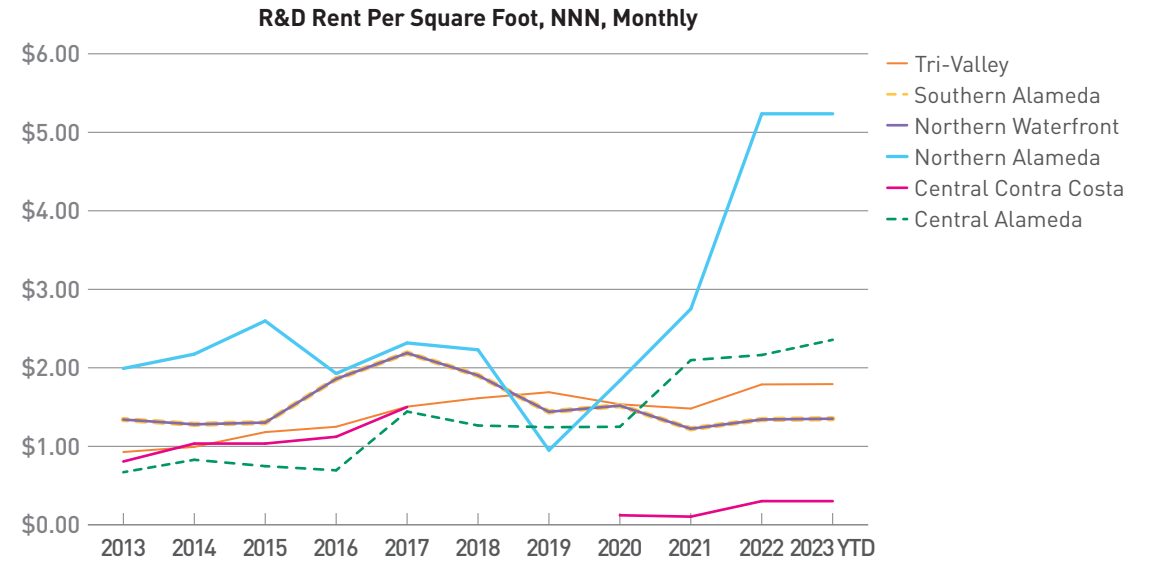
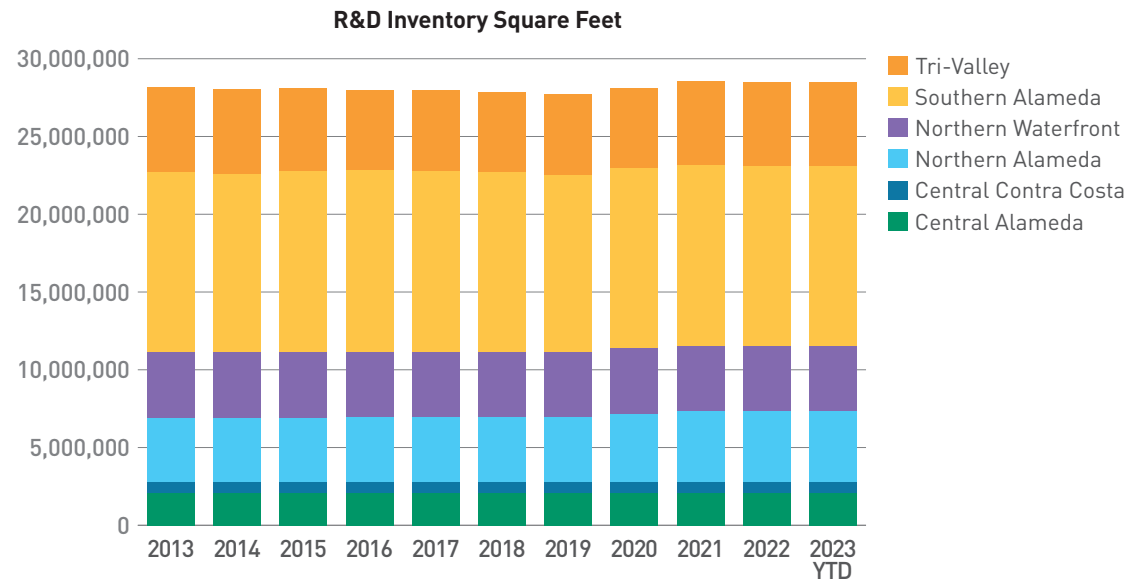
Warehouse & Distribution Vacancy Rate



Sources: CoStar, 2023; Strategic Economics, 2023.

R&D

- Flex and Industrial R&D is a small part of the industrial inventory in the East Bay
- These buildings are characterized by low ceiling heights and versatility, with at least half of the rentable building area used as office and the other half used for research & development uses such as prototyping
- Nearly all growth in the inventory has been in Northern Alameda, but Southern Alameda has the largest inventory
- Rents are much higher for these spaces in most geographies, particularly in Northern Alameda
- Vacancy rates have leveled out for these spaces in the last few years



Sources: CoStar, 2023; Strategic Economics, 2023.

Subarea Profiles



East Bay Regional Strengths and Challenges

Feedback from Stakeholders

Strengths

- Strong industrial reputation
- Streamlined approvals processes
- Phased approvals processes
- Prevention of further industrial conversions by converting retail or office parcels to residential uses instead.
- Creation of additional industrial space by converting retail or office to industrial uses.
- By-right development of flexible industrial buildings
- Flexible buildings that can accommodate the natural progression of a business or which allow for co-location of business divisions at scale
- Industrial land protection policies
- Planning and support for green and electrified industrial uses
- Use of financing districts

Challenges

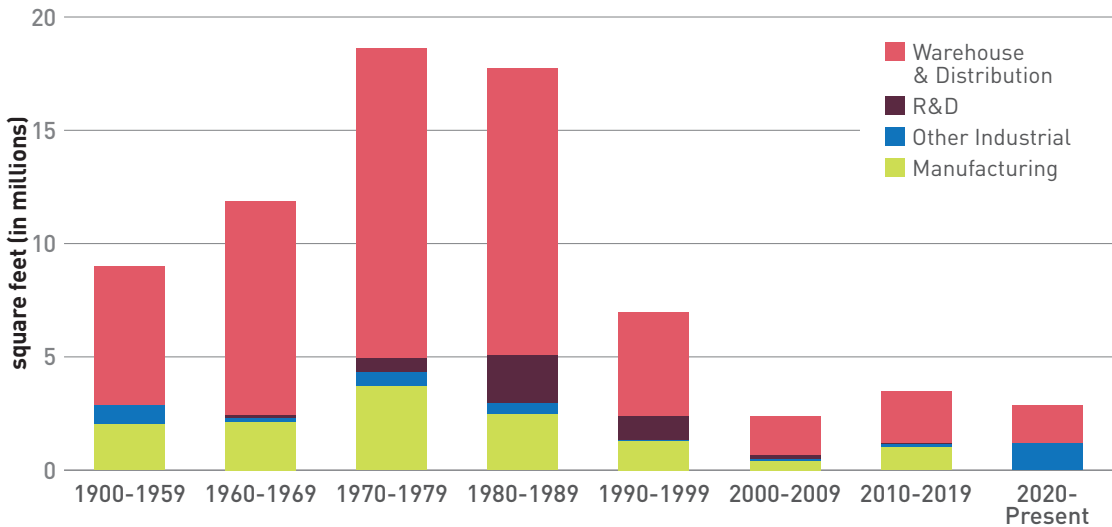
- Lack of certainty for development regarding zoning, permits, and fees
- Power issues
- Limited land availability and land that needs remediation
- Lack of small business financial support to compete for spaces and withstand approvals processes
- Impacts of trucking on local streets and traffic
- Disengaged property owners
- Pressure to convert industrial lands to non-industrial uses

Central Alameda

- Central Alameda has had a net loss of industrial buildings but has gained approximately 630,000 square feet in space
- The majority of added space is in warehouse and distribution type buildings
- Central Alameda added over 7,000 industrial jobs from 2011-2021, the majority of which are in distribution and logistics
- Issues raised by Central Alameda stakeholders include:
 - » Small parcels
 - » Land constrained
 - » Approvals processes
 - » Need to be more climate resilient with sustainable use of power and water
- Central Alameda has many strengths in the industrial ecosystem, including:
 - » Flexible building types
 - » Highway access
 - » Skilled local workforce
 - » Priority Production Area (PPA) designations, which provide regional support for key industrial clusters through policy direction and funding opportunities



Central Alameda Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Central Alameda

Central Alameda Industrial Inventory Change

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	241	240	-1	7,544,938	7,624,096	1.0%
R&D	61	61	0	2,064,550	2,064,550	0.0%
Other Industrial	46	44	-2	320,746	313,313	-2.3%
Warehouse & Distribution	882	879	-3	30,903,708	31,461,830	1.8%
Total	1,230	1,224	-6	40,883,942	41,463,789	1.5%

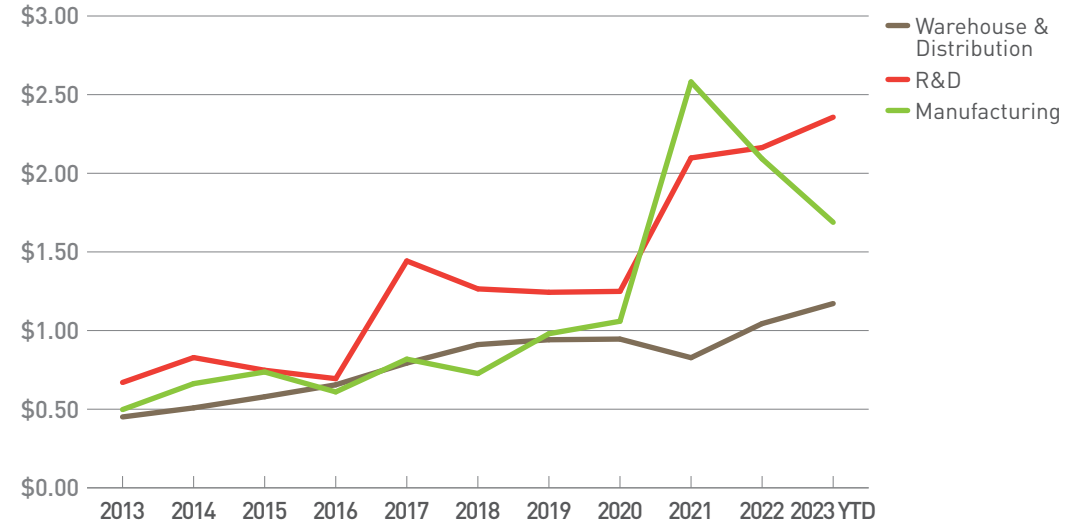
Sources: CoStar, 2023; Strategic Economics, 2023.

Central Alameda Industrial Job Change

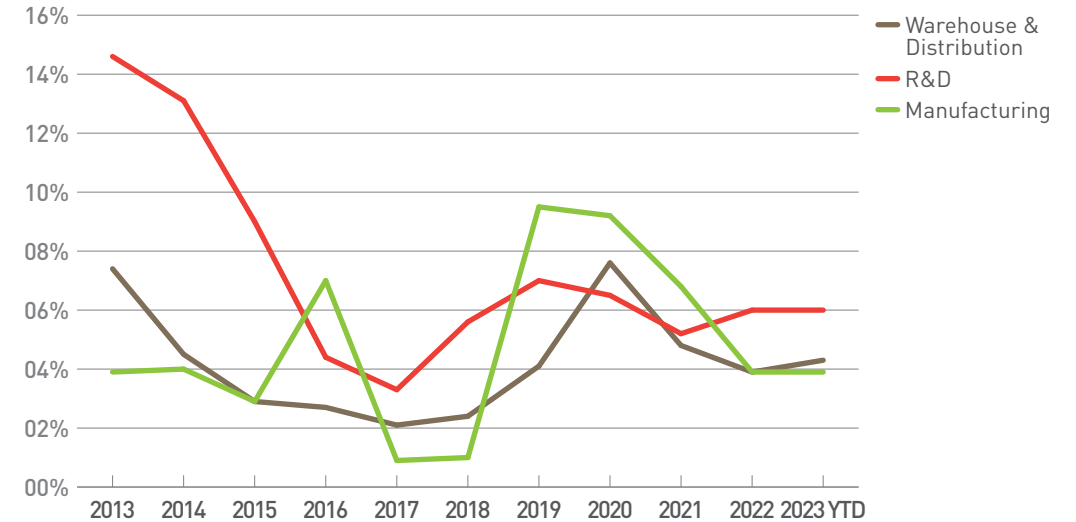
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	3,815	12%	4,876	12%	1,061	0%
Manufacturing	15,129	46%	14,440	36%	(689)	-10%
Transportation	2,430	7%	3,118	8%	688	0%
Distribution & Logistics	11,525	35%	18,182	45%	6,657	10%
Total Industrial Jobs	32,899	100%	40,616	100%	7,717	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Central Alameda Industrial Rents Per Square Foot, NNN, Monthly



Central Alameda Industrial Vacancy Rates by Building Type



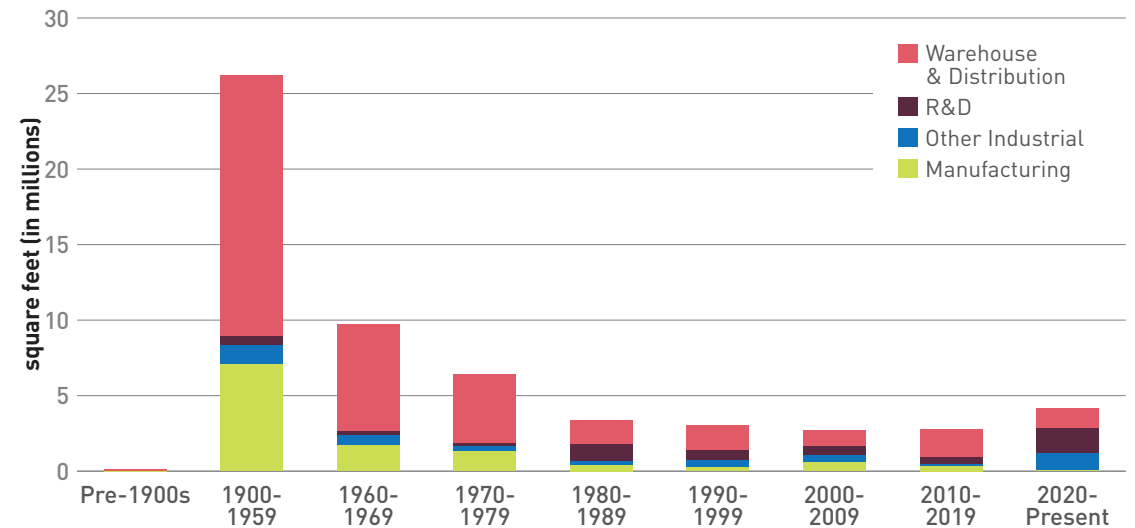
Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Northern Alameda

- Northern Alameda has had a net loss of industrial buildings and industrial square footage
- Only Flex/Industrial R&D saw a net gain in buildings and square footage, adding approximately 396,000 square feet from 2013-2023
- Northern Alameda added over 8,600 industrial jobs from 2011-2021, the majority of which are in life sciences
- Issues raised by Northern Alameda stakeholders include:
 - » Land constrained
 - » Approvals processes
 - » Conversion pressure
 - » Lack of space for companies to scale up
- Northern Alameda has many strengths in the industrial ecosystem, including:
 - » Early-stage companies
 - » Life sciences reputation
 - » Strong local talent pipeline and university access
 - » Priority Production Area (PPA) designations, which provide regional support for key industrial clusters through policy direction and funding opportunities
 - » Port and highway access



Northern Alameda Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Northern Alameda

Northern Alameda Industrial Inventory Change

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	430	419	-11	12,753,189	11,901,016	-6.7%
R&D	129	137	8	4,178,517	4,574,710	9.5%
Other Industrial	120	116	-4	1,460,116	1,373,232	-6.0%
Warehouse & Distribution	1,759	1,708	-51	39,418,862	38,364,385	-2.7%
Total	2,438	2,380	-58	57,810,684	56,213,343	-2.8%

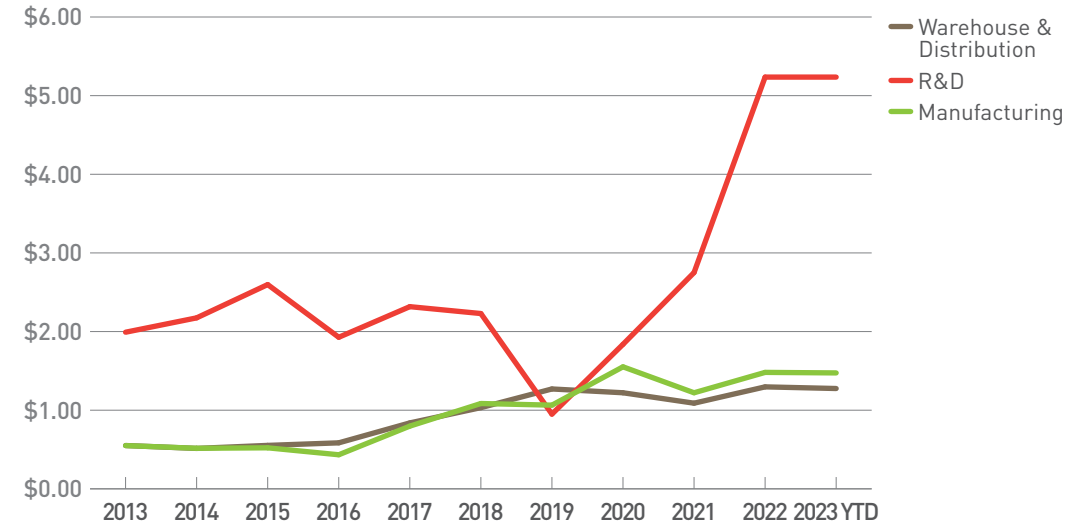
Sources: CoStar, 2023; Strategic Economics, 2023.

Northern Alameda Industrial Job Change

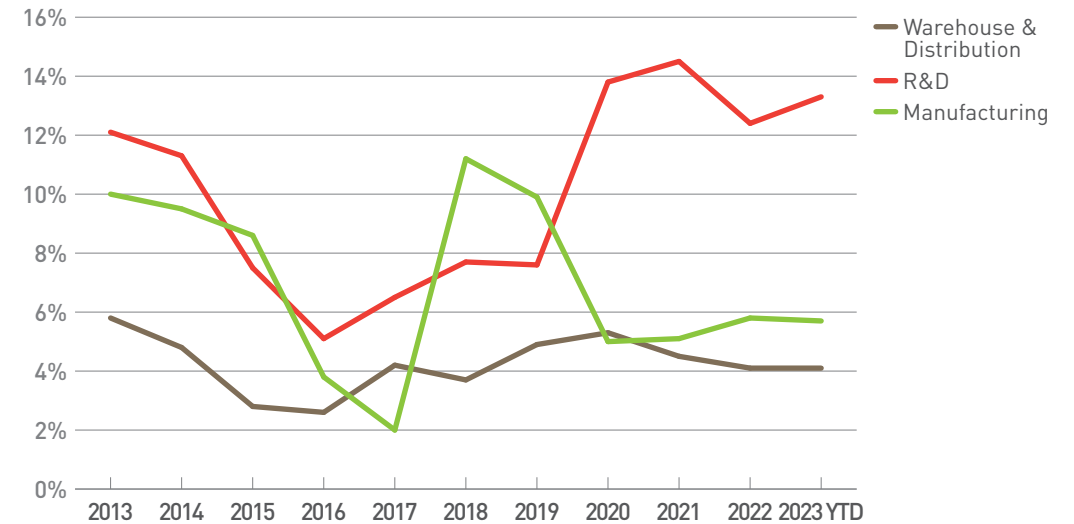
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	10,469	33%	15,782	39%	5,313	6%
Manufacturing	10,341	32%	11,610	29%	1,269	-4%
Transportation	2,186	7%	2,544	6%	358	-1%
Distribution & Logistics	8,827	28%	10,532	26%	1,705	-2%
Total Industrial Jobs	31,823	100%	40,468	100%	8,645	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Northern Alameda Industrial Rents Per Square Foot, NNN, Monthly



Northern Alameda Industrial Vacancy Rates by Building Type



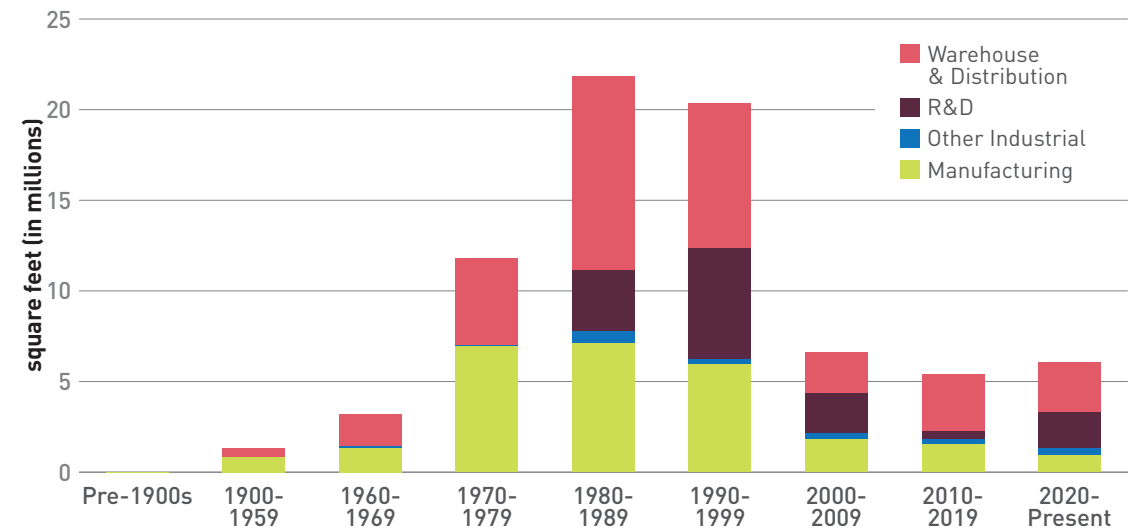
Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Southern Alameda

- Southern Alameda has had a net gain of industrial buildings and industrial square footage
- The majority of added space is in warehouse and distribution type buildings
- Southern Alameda added over 26,000 industrial jobs from 2011-2021, the majority of which are in manufacturing
- Issues raised by Southern Alameda stakeholders include:
 - » Power and electrification
 - » Smaller buildings and parcels being consolidated, risking a loss of spaces for small businesses
 - » Maintaining industrial affordability
- Southern Alameda has many strengths in the industrial ecosystem, including:
 - » Manufacturing reputation
 - » Bridge and highway access
 - » Easy access to workforce
 - » Reputation for streamlined and predictable approvals processes
 - » Priority Production Area (PPA) designations, which provide regional support for key industrial clusters through policy direction and funding opportunities
 - » Less land-constrained



Southern Alameda Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Southern Alameda

Southern Alameda Industrial Inventory Change

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	429	428	-1	34,957,340	25,679,464	2.9%
R&D	224	219	-5	11,613,710	11,587,025	-0.2%
Other Industrial	21	20	-1	433,212	427,817	-1.2%
Warehouse & Distribution	652	668	16	28,637,352	33,425,911	16.7%
Total	1,326	1,335	9	65,641,614	71,120,217	8.3%

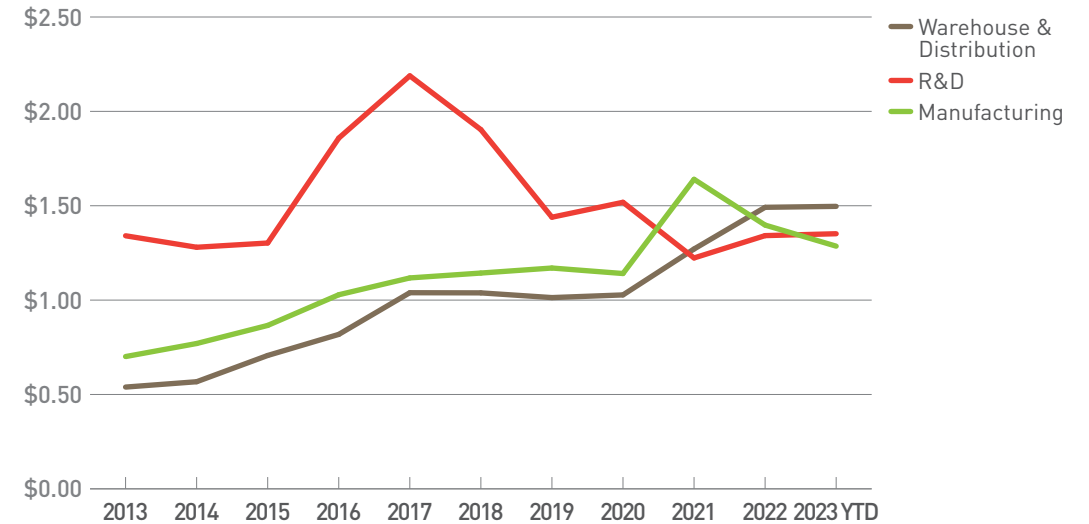
Sources: CoStar, 2023; Strategic Economics, 2023.

Southern Alameda Industrial Job Change

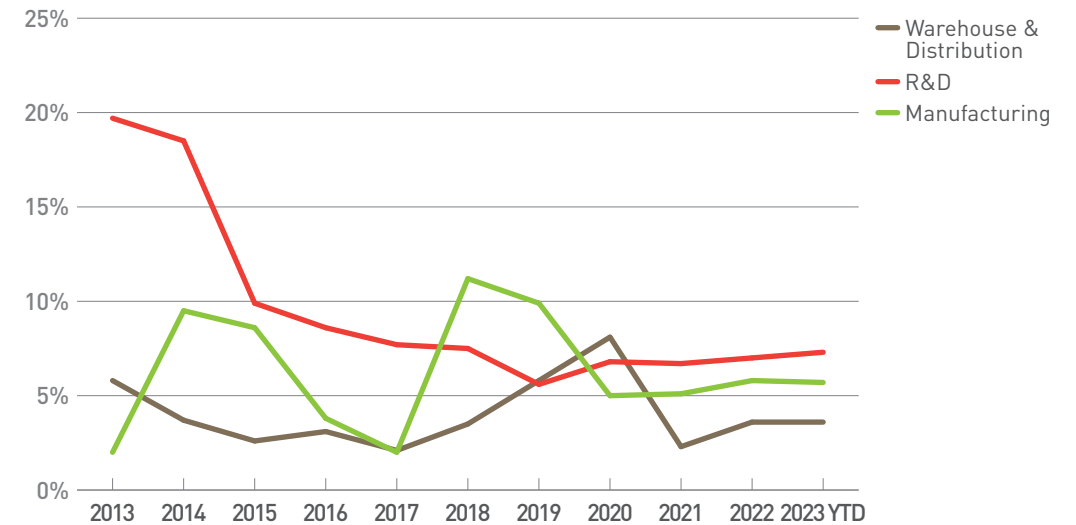
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	7,869	23%	11,051	18%	18%	-5%
Manufacturing	17,638	52%	39,808	66%	22,170	14%
Transportation	1,048	3%	1,422	2%	374	-1%
Warehouse & Logistics	7,470	22%	7,795	13%	325	-9%
Total Industrial Jobs	34,025	100%	60,076	100%	26,051	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Southern Alameda Industrial Rents Per Square Foot, NNN, Monthly



Southern Alameda Industrial Vacancy Rates by Building Type



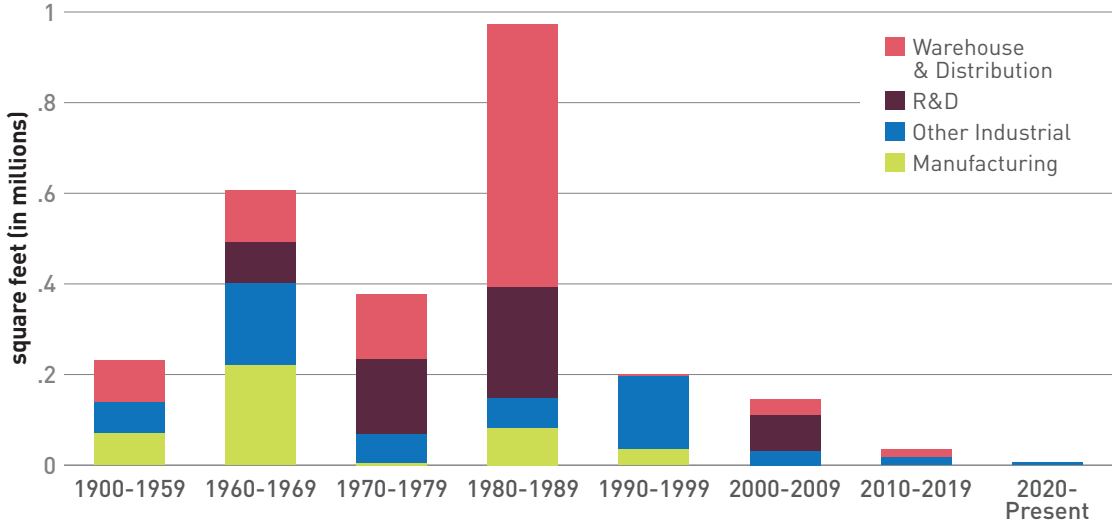
Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Central Contra Costa

- Central Contra Costa has a very small industrial inventory that has seen little change over time
 - Central Contra Costa’s land is generally deemed more valuable for residential and commercial uses due to its urbanized character
 - Central Contra Costa’s industrial inventory is primarily smaller sites suitable for local serving uses such as auto repair and construction
 - The most likely industrial sectors to grow in Contra Costa County are life sciences and biotechnology uses, but stakeholders indicate that changes to zoning and approvals processes are necessary to make the area competitive for these tenants
- Central Contra Costa added over 1,000 industrial jobs from 2011-2021, the majority of which are in distribution and logistics
 - Central Contra Costa’s primary strength in the industrial ecosystem is its central access



Central Contra Costa Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Central Contra Costa

Central Contra Costa Industrial Inventory Change

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	33	33	0	776,190	776,190	0.0%
R&D	14	14	0	670,542	670,542	0.0%
Other Industrial	18	18	0	196,900	196,900	0.0%
Warehouse & Distribution	171	171	0	2,710,698	2,710,106	0.0%
Total	236	236	0	4,354,330	4,353,738	0.0%

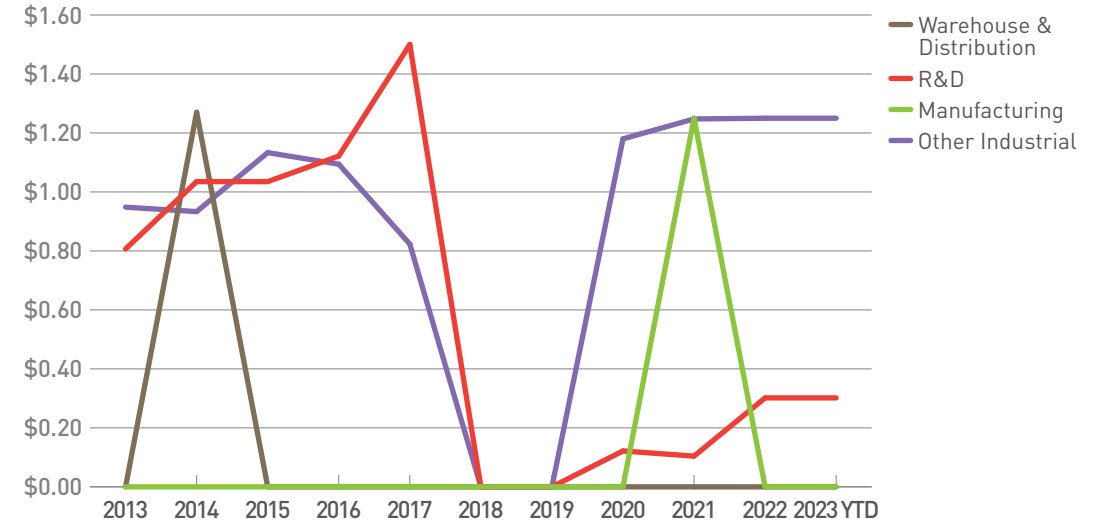
Sources: CoStar, 2023; Strategic Economics, 2023.

Central Contra Costa Industrial Job Change

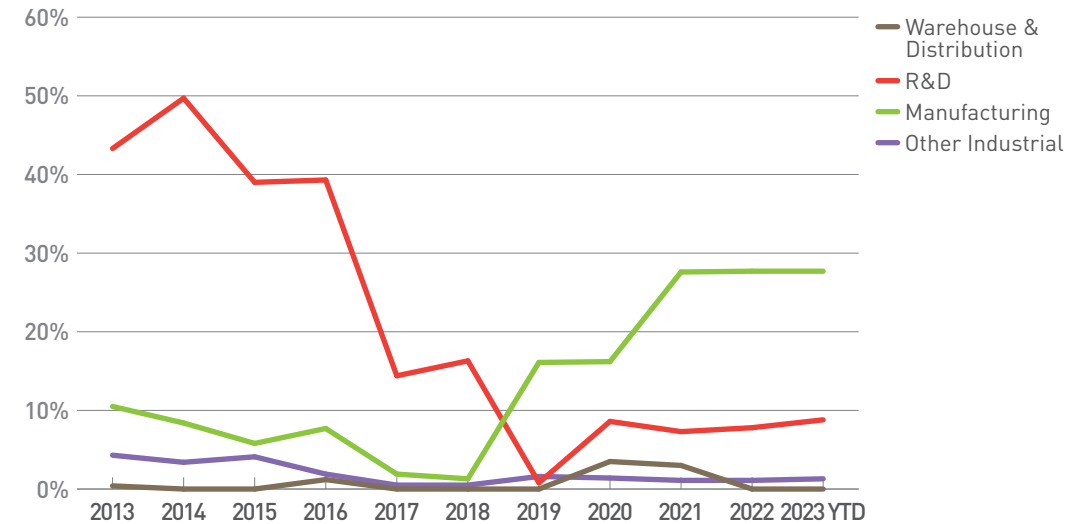
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	2,483	36%	2,195	28%	(288)	-8%
Manufacturing	1,741	26%	1,819	23%	78	-2%
Transportation	170	2%	317	4%	147	2%
Distribution & Logistics	2,420	36%	3,493	45%	1,073	9%
Total Industrial Jobs	6,814	100%	7,824	100%	1,010	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Central Contra Costa Industrial Rents Per Square Foot, NNN, Monthly



Central Contra Costa Industrial Vacancy Rates by Building Type



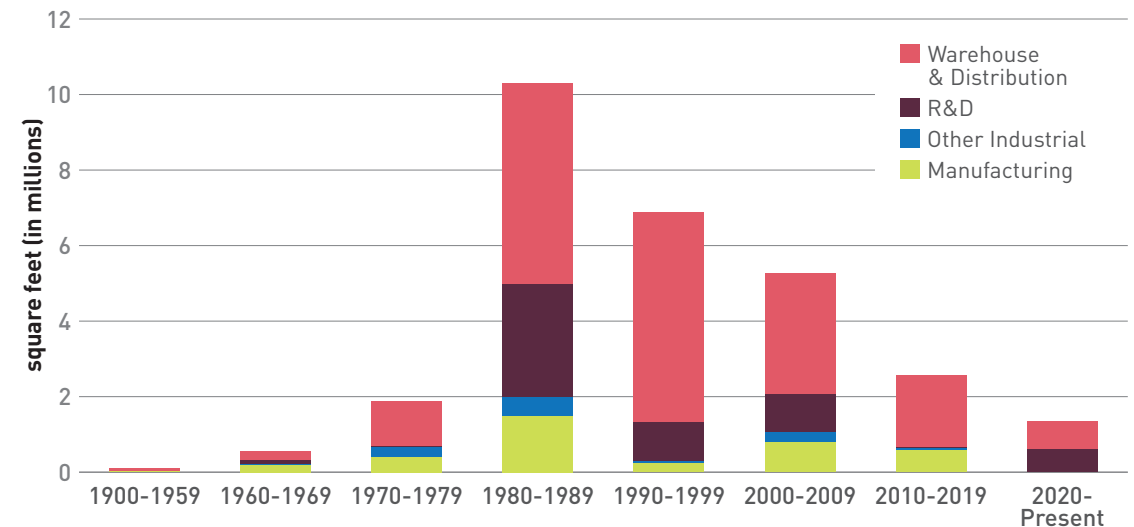
Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Tri-Valley

- Tri-Valley has had a net gain of industrial buildings and industrial square footage
- The majority of added space is in warehouse and distribution type buildings
- Tri-Valley added over 7,000 industrial jobs from 2011- 2021, the majority of which are in life sciences
- Issues raised by Tri-Valley stakeholders include:
 - » Approvals processes
 - » Conversion pressure
 - » Truck traffic and impacts on local infrastructure
 - » Viability of small businesses
 - » Land constraints
- Tri-Valley has many strengths in the industrial ecosystem, including:
 - » Growing Life Sciences companies
 - » Priority Production Area (PPA) designations, which provide regional support for key industrial clusters through policy direction and funding opportunities
 - » Highway access
 - » Two National Laboratories
 - » Proximity to inland distribution centers and Central Valley’s agricultural exports



Tri-Valley Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Tri-Valley

Tri-Valley Industrial Inventory Change

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	104	105	1	3,165,605	3,722,161	17.6%
R&D	170	168	-2	5,421,659	5,412,625	-0.2%
Other Industrial	14	14	0	199,683	199,683	0.0%
Warehouse & Distribution	470	482	12	15,605,266	17,948,336	15.0%
Total	758	769	11	24,392,213	27,282,805	11.9%

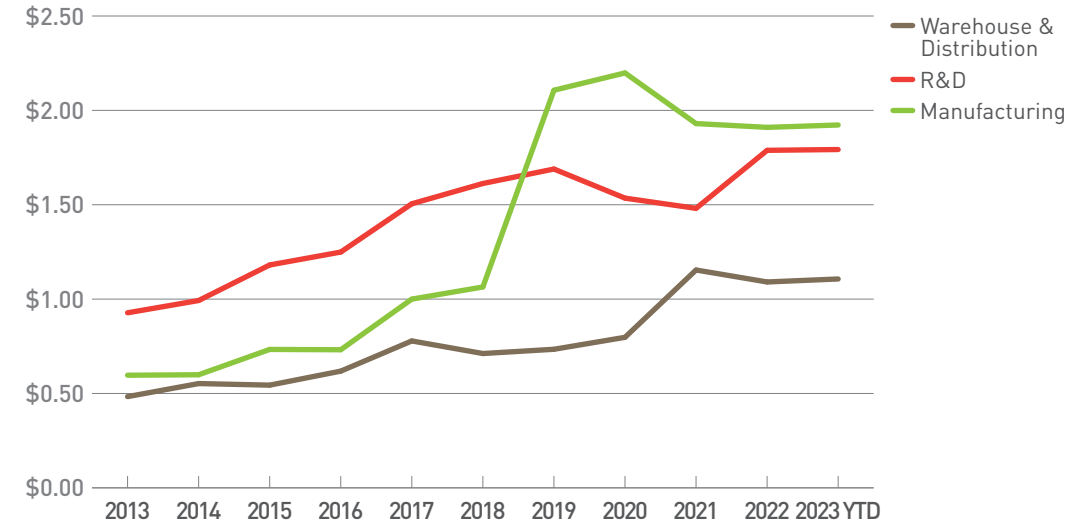
Sources: CoStar, 2023; Strategic Economics, 2023.

Tri-Valley Industrial Job Change

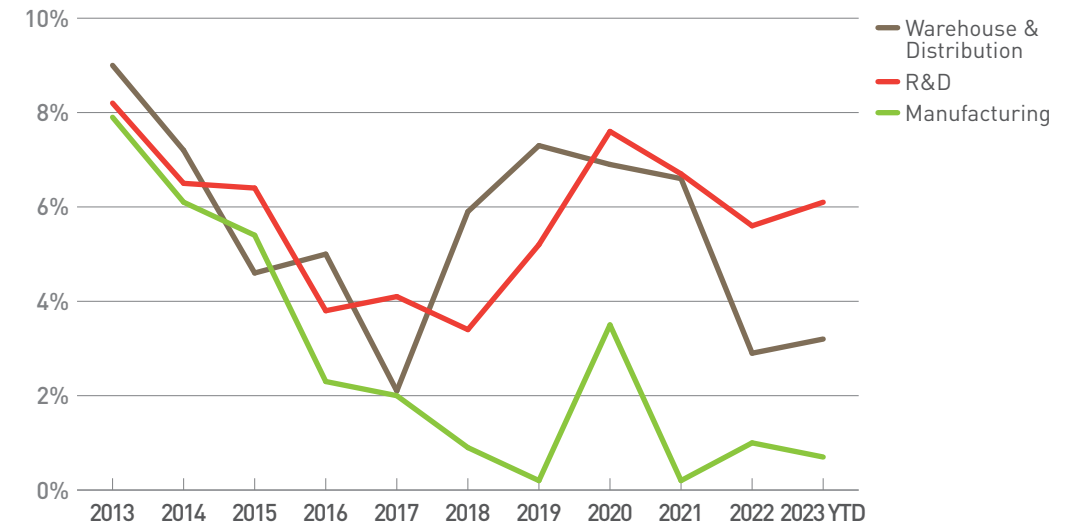
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	11,535	44%	15,668	47%	4,133	3%
Manufacturing	7,392	28%	9,558	29%	2,166	1%
Transportation	561	2%	650	2%	89	0%
Distribution & Logistics	6,781	26%	7,433	22%	652	-3%
Total Industrial Jobs	26,269	100%	33,309	100%	7,040	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Tri-Valley Industrial Rents Per Square Foot, NNN, Monthly



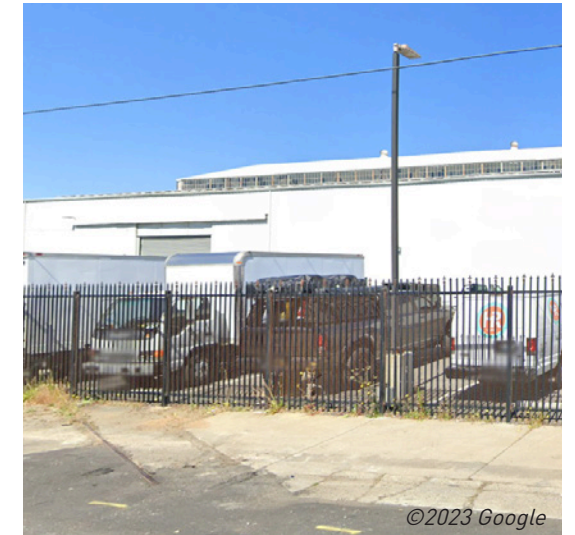
Tri-Valley Vacancy Rates by Building Type



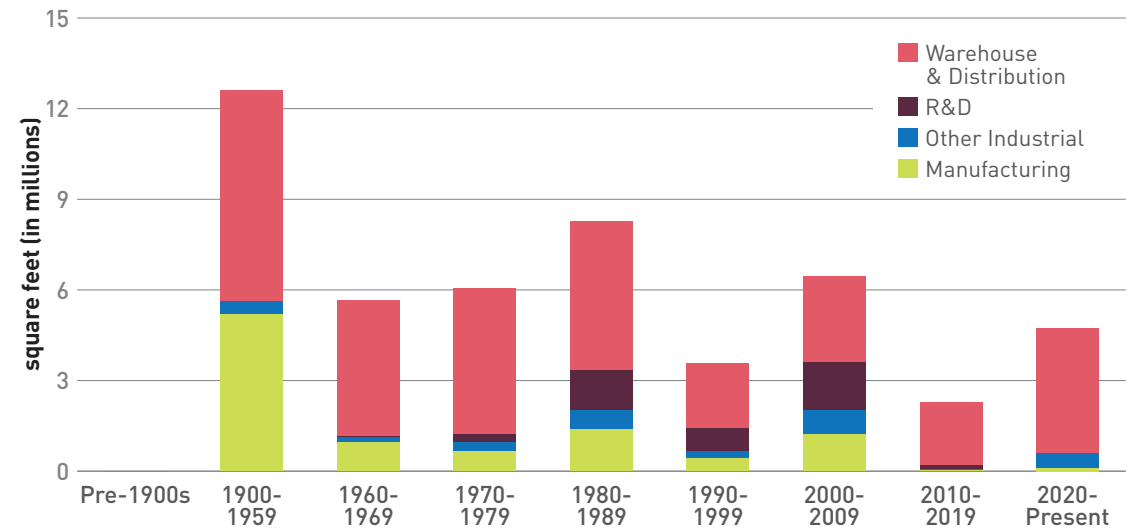
Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Northern Waterfront

- Northern Waterfront has had a net gain of industrial buildings and industrial square footage
- The majority of added space is in warehouse and distribution type buildings
- Northern Waterfront has many strengths in the industrial ecosystem, including:
 - » Priority Production Area (PPA) designations, which provide regional support for key industrial clusters through policy direction and funding opportunities
 - » Highway access
 - » Housing-rich
 - » Shovel ready land
 - » Business-friendly environment for all types of industrial businesses
 - » Direct water access to Port of Stockton and the Sacramento Delta
- Northern Waterfront lost approximately 1,000 industrial jobs from 2011-2021, the majority of which were in manufacturing
- Northern Waterfront gained jobs in all other industrial sectors, primarily in distribution and logistics
- Issues raised by Northern Waterfront stakeholders include:
 - » Recruitment and marketing
 - » Lack of incentives
 - » Limited available workforce
 - » Business license taxation
 - » Preparing workforce for transition to clean energy
 - » Available spaces do not accommodate all stages of the industrial business life-cycle



Northern Waterfront Industrial Building Square Feet by Decade Built or Renovated



Sources: CoStar, 2023; Strategic Economics, 2023.

Northern Waterfront

Northern Waterfront Industrial Inventory

Building Type	NUMBER OF BUILDINGS			SQUARE FEET		
	2013	2023 YTD	Net Change	2013	2023 YTD	% Change
Manufacturing	182	180	-2	9,651,337	9,547,647	-1.1%
R&D	120	120	0	4,187,554	4,187,554	0.0%
Other Industrial	54	55	1	579,049	580,049	0.2%
Warehouse & Distribution	986	998	12	23,395,554	25,860,527	10.5%
Total	1,342	1,353	11	37,813,494	40,175,777	6.2%

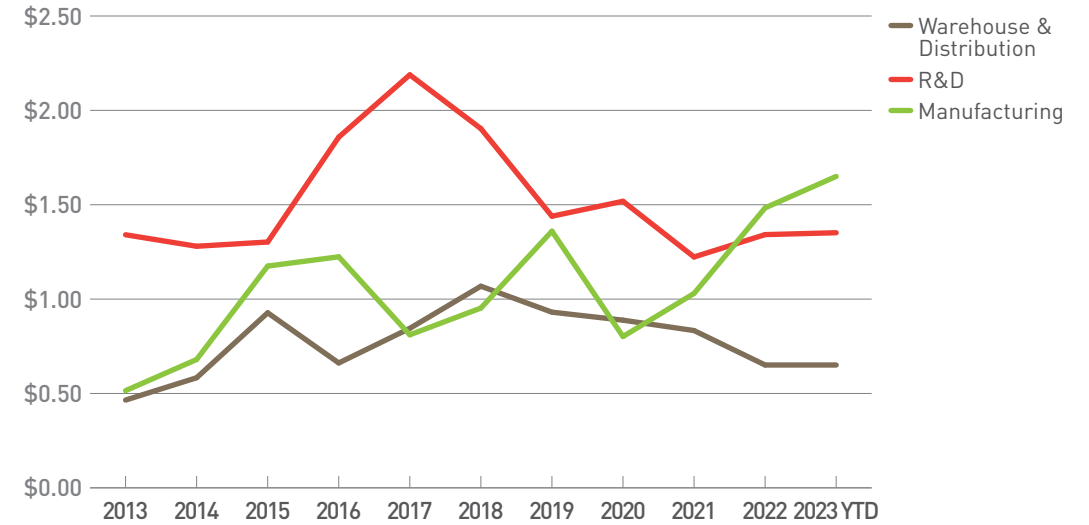
Sources: CoStar, 2023; Strategic Economics, 2023.

Northern Waterfront Industrial Job Change

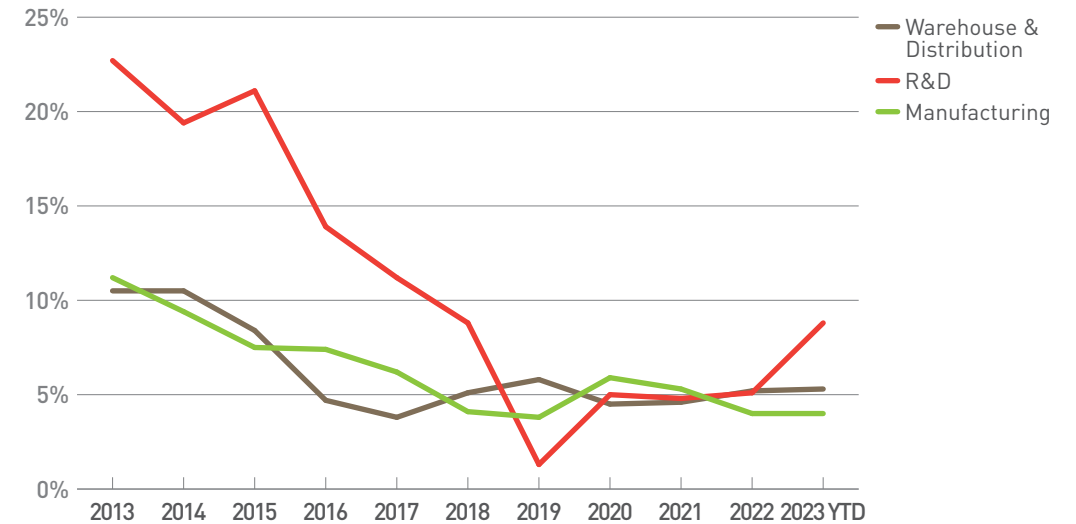
Industry	2011 Jobs	2011 Job Share	2021 Jobs	2021 Job Share	Job Change 2011-2021	Job Share Change 2011-2021
Life Sciences	3,513	16%	3,732	17%	219	2%
Manufacturing	12,715	56%	9,331	43%	(3,384)	-13%
Transportation	666	3%	1,056	5%	390	2%
Distribution & Logistics	5,645	25%	7,354	34%	1,709	9%
Total Industrial Jobs	22,539	100%	21,473	100%	(1,066)	N/A

Note: Job share indicates the percentage of total industrial jobs in the subarea that each industry type comprises.
Sources: Lightcast, 2023; Strategic Economics, 2023.

Northern Waterfront Industrial Rents Per Square Foot, NNN, Monthly



Northern Waterfront Industrial Vacancy Rates by Building Type



Sources: CoStar, 2023; Strategic Economics, 2023.
Note: Flattened lines indicate insufficient data for that year.

Appendix



East Bay Subareas and Cities

Northern Alameda

- Alameda
- Albany
- Berkeley
- Emeryville
- Oakland

Central Alameda

- Ashland
- Castro Valley
- Hayward
- San Leandro
- San Lorenzo

Southern Alameda

- Fremont
- Newark
- Union City

Tri-Valley

- Dublin
- Livermore
- Pleasanton
- Sunol

Central Contra Costa

- Danville
- Lafayette
- Moraga
- Orinda
- San Ramon
- Walnut Creek

Northern Waterfront

- Antioch
- Bay Point
- Bethel Island
- Brentwood Byron
- Clayton
- Concord
- Crockett
- Discovery Bay
- El Cerrito
- El Sobrante
- Hercules
- Martinez
- Oakley
- Pacheco
- Pinole
- Pittsburg
- Pleasant Hill
- Port Costa
- Richmond
- Rodeo
- San Pablo

CoStar Building Type Classification

- Strategic Economics reclassified CoStar properties using the following binning method in order to better match broker reports and building form considerations
- For more information on CoStar’s classifications, see the [CoStar Glossary, www.costar.com/about/costar-glossary](http://www.costar.com/about/costar-glossary)

Strategic Economics Building Classification	CoStar Primary PropertyTypes	CoStar Secondary Property Types
Warehouse & Distribution	<ul style="list-style-type: none"> • Industrial • Flex 	<ul style="list-style-type: none"> • Warehouse • Distribution • Light Distribution • Refrigeration and Cold Storage • TruckTerminal
Manufacturing	<ul style="list-style-type: none"> • Industrial • Flex 	<ul style="list-style-type: none"> • Manufacturing • Light Manufacturing • Food Processing
R&D	<ul style="list-style-type: none"> • Flex 	<ul style="list-style-type: none"> • R&D
Other Industrial	<ul style="list-style-type: none"> • Industrial • Flex 	<ul style="list-style-type: none"> • Showroom • Service • TelecomHotel and Data Hosting • Freestanding • Other

CoStar Building Status Definitions

- Strategic Economics utilized CoStar’s building status definitions to determine change in industrial inventory

Building Status	Definition
Abandoned	Project has been terminated or building is obsolete and unusable
Converted	Building has changed to a new property type
Demolished	Building has been destroyed
Existing	Building is complete and a certificate of occupancy has been received
Final Planning	Project will begin construction in the next 12 months and building permits have typically been issued
Proposed	A building has been announced but is not expected to begin construction within the next 12 months and building permits have likely not been issued
Under Construction	Construction has started and no certificate of occupancy has been received
Under Renovation	Building is unoccupied and renovations are underway; renovations make the space “new” and do not include minor or partial rehabilitations

NAICS Codes Used For Industry Analysis

Industry Category	NAICS Codes and Definitions
Life Sciences	<ul style="list-style-type: none"> • 3254-Pharmaceutical and Medicine Manufacturing • 3345-Navigational, Measuring, Electromedical, and Control Instruments Manufacturing • 3391-Medical Equipment and Supplies Manufacturing • 4234-Professional and Commercial Equipment and Supplies Merchant Wholesalers • 4242-Drugs and Druggists' Sundries Merchant Wholesalers • 4246-Chemical and Allied Products Merchant Wholesalers • 5417-Scientific Research and Development Services • 6215-Medical and Diagnostic Laboratories
Transportation	<ul style="list-style-type: none"> • 4841-General Freight Trucking • 4842-Specialized Freight trucking • 4885-Freight Transportation Arrangement • 4889-Other Support Activities for Transportation
Distribution & Logistics	<ul style="list-style-type: none"> • All 4-Digit Codes under NAICS 42 and 49, less those included in life sciences
Manufacturing	<ul style="list-style-type: none"> • All 4-Digit Codes under NAICS 31-33, less those included in life sciences