

Center for Community Innovation
INDUSTRIAL LAND AND JOBS STUDY FOR THE SAN FRANCISCO BAY AREA

WHAT DO BUSINESSES WANT?

***FINDINGS FROM SURVEYS AND INTERVIEWS OF BUSINESSES
LOCATED ON INDUSTRIAL LAND***

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Key Support

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Report prepared for the Association of Bay Area Governments/Metropolitan Transportation Commission.

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INTRODUCTION

As part of the Industrial Land and Jobs Study of the San Francisco Bay Area, we conducted a survey and interviews of local businesses in order to better understand why businesses want to locate on industrial land, what role their business plays within the regional economy, and the challenges they experience.

RESPONDENT PROFILE

Our sample consists of 94 respondents; for most questions, 35 to 60 responses were usable. As shown in Figure A, over half of survey respondents are located in the East Bay (Oakland, San Leandro and West Berkeley); 12% in the North Bay; and 7-10% in each of the remaining subregions (Northern Contra Costa, San Francisco, and the Peninsula).

ECONOMIC LINKAGES FROM BUSINESSES LOCATED ON INDUSTRIAL LAND

Markets

While exporting globally, firms located on industrial land act as a key support to other private firms in the local and regional economy by supplying them with necessary goods or services (Figure B).

Suppliers

Firms located on industrial land possess multiple regional suppliers from across the Bay Area (shown on Figure C with dots color coded to the location of the firm to which they provide supplies), as well as very local suppliers – often even within the same city.

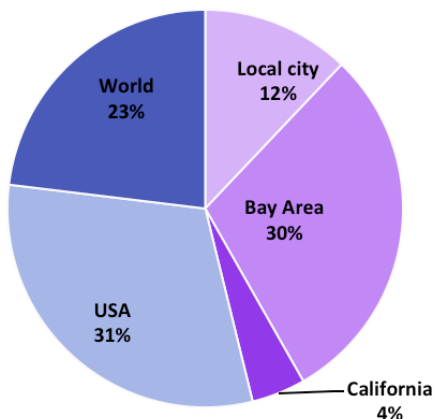


Figure A. Market linkages of business respondents:
Location of primary and secondary markets

We would love to find a facility that [...] could allow us to grow over the next 10-15 years. Unfortunately space is so limited and at such a premium that is not possible for us at this time.
- San Francisco business

It is highly advantageous to have close at hand machine shops for fabrication of our custom parts. It is also highly advantageous to be so close to UC Berkeley, with whom we have several on-going collaborations. In the past we have also collaborated with LBL. The work we do could not be done in an office building. Because of our laboratory we require some sort of industrial zoning.
- West Berkeley business

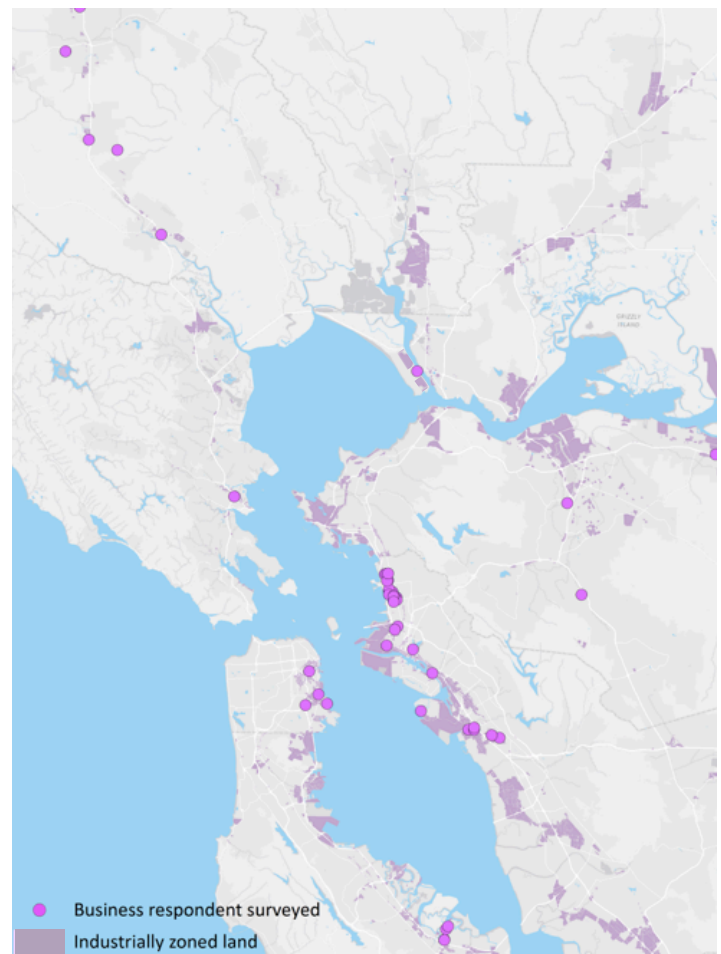


Figure B. Location of survey respondents across the region

EXECUTIVE SUMMARY

INFRASTRUCTURE NEEDS

Businesses' most pressing infrastructure needs are summarized in Figure D: Out of 71 needs cited by 56 unique respondents (survey takers were asked to select up to two options), road maintenance was the most named. Transit access/improvements and higher-speed internet access came in second and third place, and improved port/rail access came in fourth place.

CHALLENGES, OPPORTUNITIES, AND SUGGESTIONS FOR LOCATION ON INDUSTRIAL LAND

Most businesses on industrially zoned land expect stable or positive growth in the next five years, and few wish to move from their current location. At the same time, several concerns emerged from interviews and surveys with businesses. One is the lack of industrial space, the inability to find suitable expansion space, or the inappropriateness of available space for business needs. In some industrial zones, businesses also report concerns with the ineffectiveness of zoning to protect against encroachment by other uses; in particular market pressure from residential demand was a particular concern. Some champion zoning that permits concentrations of production-related businesses, while others prefer the special advantages of mixed-locations. Yet, above all, businesses voice concern about dealing with land use conflicts and suggest the need for buffer zones, exclusive zoning, or more effective mixed-use zones.

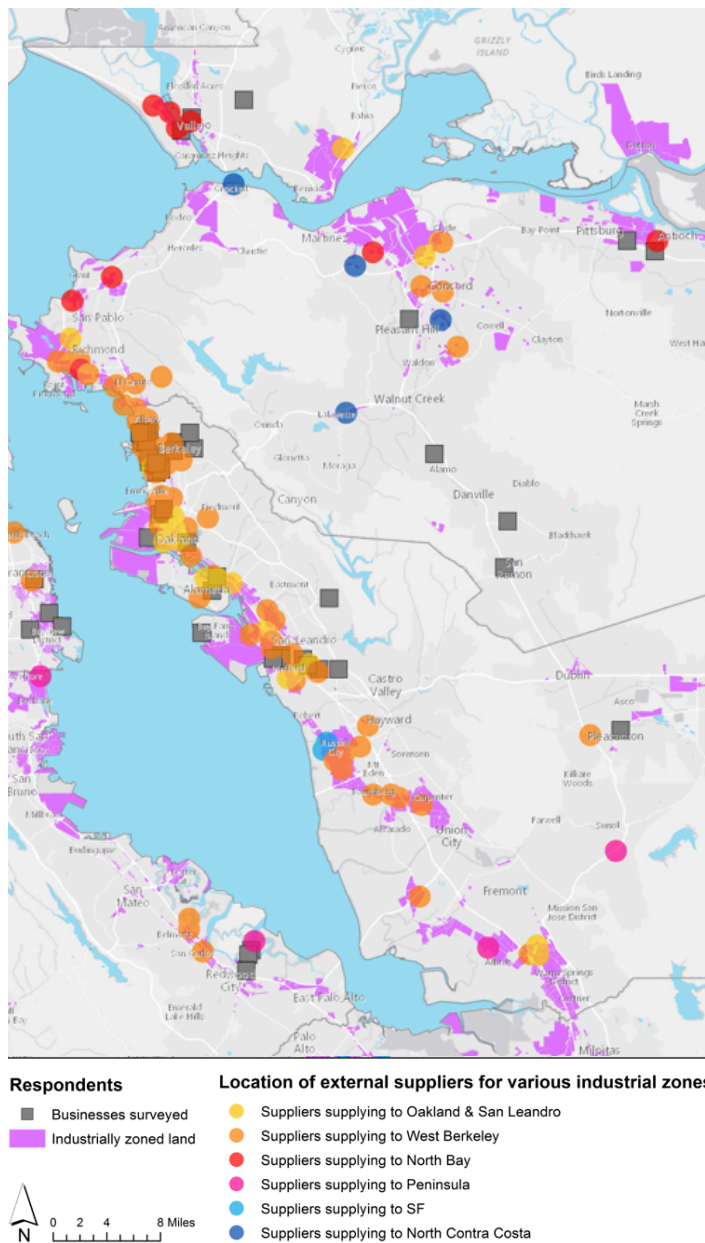


Figure C. Location of respondents' suppliers across the region

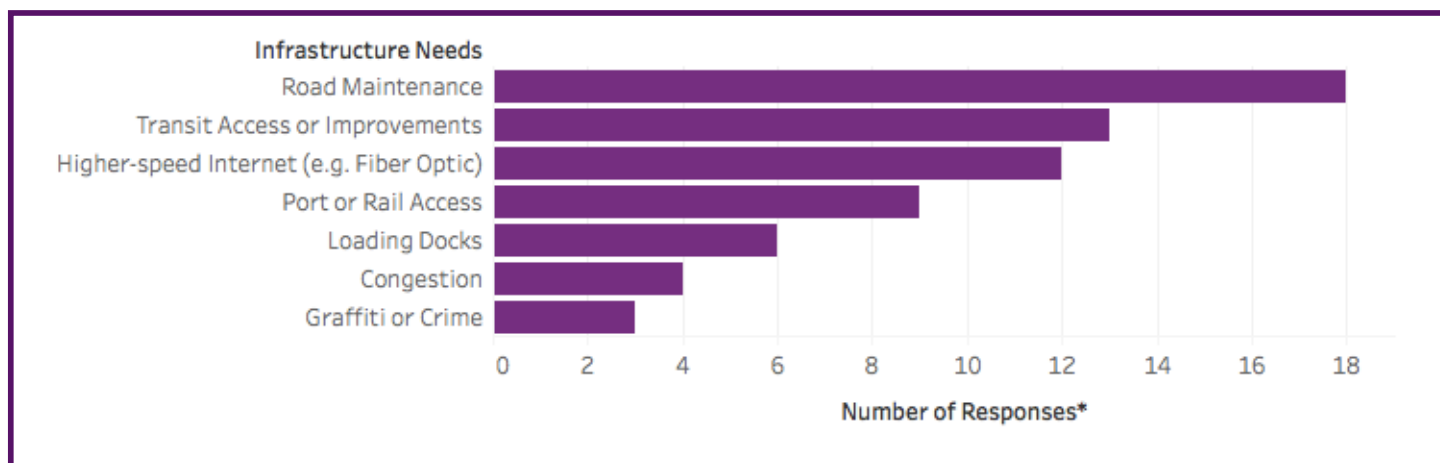


Figure D. Frequency of infrastructure needs, according to businesses located on industrial land

*There were 56 unique respondents on this question, but 71 total needs cited, as respondents could pick up to two of their most pressing infrastructure needs.

REPORT

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A dimly lit industrial workshop or warehouse. In the foreground, a green Toyota forklift is partially visible, with a white propane tank mounted on its back. To the right, another forklift is parked. The background shows a large, open space with high ceilings and structural beams. Various tools and equipment are scattered on the floor, including a yellow level and a calculator. The overall atmosphere is industrial and somewhat gritty.

PART I: INTRODUCTION




The Industrial Land and Jobs Study complements the 2015 MTC Goods Movement Needs Assessment with an analysis of the demand for and supply of industrially zoned land in the nine-county region, both now and in the future. This study involved intensive data analysis of current and future land use patterns, real estate dynamics, employment growth, and transportation impacts.

To accompany the technical analysis components of this study, we undertook outreach to businesses across the Bay Area located on, or near, industrial land. The aim was to incorporate the voice of the business community into our findings. We conducted a survey and interviews of local businesses in order to better

understand why businesses want to locate on industrial land, what role their business plays within the regional economy, and the challenges they experience.

We review our methods (Section II) and provide a profile of survey respondents (Section III) below, then review in turn businesses' linkages to the region (Section IV), their infrastructure needs (Section V), and their location, land and real estate needs (Section VI).



PART II: METHODS

SURVEY OVERVIEW

Organized in five sections, the survey prompted business respondents on the following themes: (1) linkages to markets, suppliers, and partners, with a focus on understanding local linkages; (2) infrastructure needs; (3) expected growth and challenges/opportunities around industrial space and land; (4) background information about the firm; and (5) open-ended comments. The complete survey instrument is included in the Appendix. The survey was available online from July to November 2016. It targeted business proprietors or high-level staff familiar with the firm. Responses were kept anonymous.

SURVEY DISTRIBUTION AND SAMPLE

This survey was intended as an exploratory tool to surface new ideas and reveal patterns about opportunities and challenges of businesses located on industrial land. The aim of the survey was not to obtain a statistically representative picture or statistically significant results, and we did not seek an exact representation of businesses from across the region.

To get in touch with proprietors or high-level staff of firms located on industrial land, we leveraged “gatekeeper” informants from business/trade associations and from city economic development staff. We equipped them with promotional materials, which they used to distribute the survey to their personal business networks. In addition, we used local economic development events, such as those described in the “Interviews” section, to both publicize the survey and recruit more gatekeepers, such as elected officials, business consultants, and workforce development professionals. This “snowball sample” method not only helped us to identify respondents who are actively engaged in the business community, but also reassured respondents that the survey was

trustworthy. At the same time, it should be noted that the survey likely did not capture the voices of local businesses that do not engage in networking activities, or are not vested in the local community.

INTERVIEWS

To supplement the survey, we conducted informal intercept interviews with business owners while attending two different economic development events. These events were: (1) A workshop entitled “Real Estate Opportunities with Makers and Small-Scale Manufacturers,” organized by the City of Fremont Economic Development on August 17th, 2016, and (2) A conference entitled “Make it & Move it East Bay Manufacturing & Logistics Summit,” organized by the East Bay Advanced Manufacturing Partnership on September 16th, 2016. The questions we asked business owners at these events were very similar to those included in the survey.

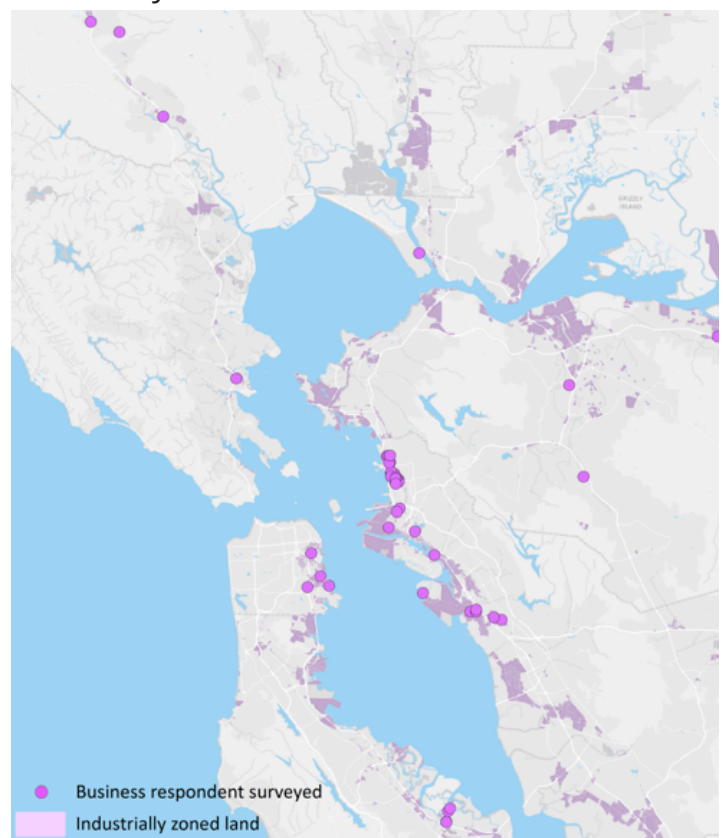


Figure 1. Location of survey respondents across the region



PART III: PROFILE OF BUSINESS RESPONDENTS

Our final sample consisted of 94 respondents; for most questions, 35 to 60 were usable responses. As shown in Figures 1 and 2, businesses we surveyed are located throughout the region and can be categorized into sub-regional industrial districts (Figure 2).¹ We obtained many responses from the inner East Bay (Oakland/San Leandro and West Berkeley), and a similar number of responses from other subregions (North Bay, Northern Contra Costa, San Francisco, and Peninsula)—with a notable lack of responses from the South Bay.² Given the disproportionate response from the East Bay, we focus mostly on these two counties, and we consider the report findings most reliable for that geography.

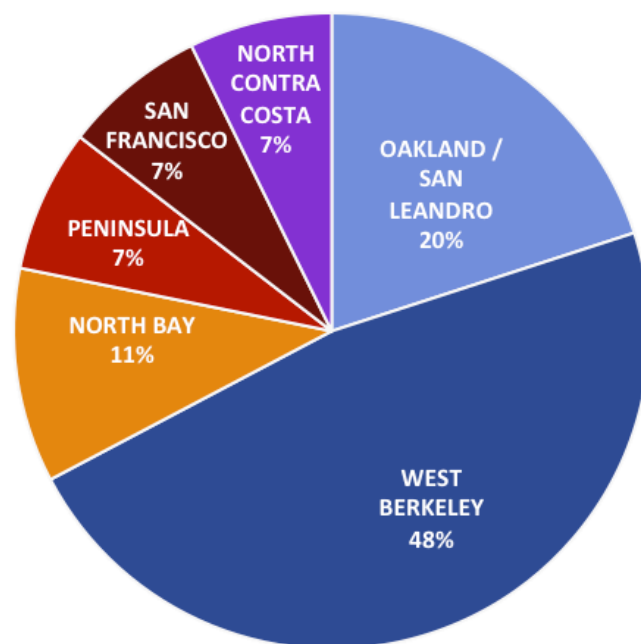


Figure 2. Business survey respondents classified by subregion.


Of 52 respondents that specified their industry, more than half of respondents (n=30) were part of the Manufacturing sector, including manufacturing of diverse products such as food (311), wood products (321), chemicals (325), plastics and rubber (326), fabricated metal (332), machinery (333), computers and electronics (334), and transportation equipment (336). Beyond this, about 12% of respondents (n=6) were in retail and wholesale trade, mainly of nondurable goods (424), motor vehicle parts (441), and building materials (444).

Other relevant industries in the sample were Fishing (n=1), Construction (n=2), and Mining industries (n=2), as well as Rail transportation (n=1), Waste management (n=1), and Repair and Maintenance (n=1). Other industries that typically are not considered industrial—such as Real Estate, Professional/ Scientific/ Technical Services, Management and Administration (n=3)—are represented as well, since they are working in related areas, such as Research & Development.

Firms' self-reported activities were in line with the results above: out of 53 respondents, a majority indicated their primary activity as Production and Repair (n=29) and Distribu-

tion (n=6), and many of these listed Research & Development as their secondary activity. In turn, a significant number of firms listed Office and Research & Development as their primary activity (n=13), and Production, Repair, or Distribution as their secondary activity.

On average, respondents were mid-sized firms, with a mean and median number of employees around 50 and 16 respectively; only a handful of firms had over 200 employees. Furthermore, firms varied greatly in tenure, anywhere from less than a year in their current location to up to over 100 years. The median tenure of the business surveyed was 24 years of existence in their current location.

A photograph of a modern, multi-story office building with a glass and metal facade. The building has a distinctive angular roofline. The word "SEAGATE" is visible on the side of the building, accompanied by a circular logo. In the foreground, there is a paved area, some low-lying vegetation, and a sidewalk. The entire image is overlaid with a semi-transparent purple filter.

PART IV: ECONOMIC LINKAGES FROM BUSINESSES LOCATED ON INDUSTRIAL LAND

MARKETS AND CUSTOMERS

More than the majority of respondents stated that their primary market type was private firms (n=31 out of 55), followed by private households (n=15) and public or non-profit agencies (n=9). Geographically, almost half of these primary markets were found locally, regionally or within state (n=24), and slightly more than half were national or international (n=31). For secondary markets, a large majority of businesses listed were public or non-profit agencies (n=15 out of 35) and private firms (n=14), and geographically, half sell within the state and half nationally or internationally. Figure 3 summarizes the location of both primary and secondary markets.

These numbers seem to suggest that while exporting globally, firms located on industrial land act as a key support to other private firms in the local and regional economy by supplying them with necessary goods or services. This is supported in the literature as a common benefit of industrial land³.

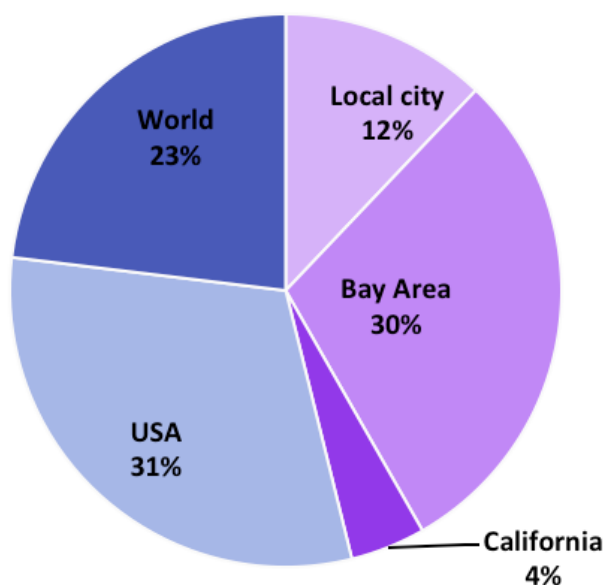


Figure 3. Market linkages of business respondents: Location of primary and secondary markets

SUPPLIER NETWORKS

We asked survey respondents to list their top seven suppliers (their location and their sector), including any local suppliers.

Similarly to the Back-Street Businesses Study conducted in San Francisco in 2007,⁴ our analysis found that firms located on industrial land possess local networks of customers and suppliers. Firms have multiple regional suppliers from across the Bay Area, as well as very local suppliers, sometimes even within the same city.

Firms located on industrial land act as a key support to other private firms in the local and regional economy

Figure 4 depicts the location of suppliers enumerated by respondents (shown with dots color coded to the location of the firm to which they provide supplies). Firms located on industrial land possess multiple regional suppliers from across the Bay Area, as well as very local suppliers—often even within the same city. Indeed, clusters of suppliers appear clearly around the subregions that they serve, for example, Berkeley, Oakland, and the East Bay. Figure 5, provided by Adams & Chittenden Scientific Glass in West Berkeley, illustrates the web of relationships between firms and customers in one industrial neighborhood.

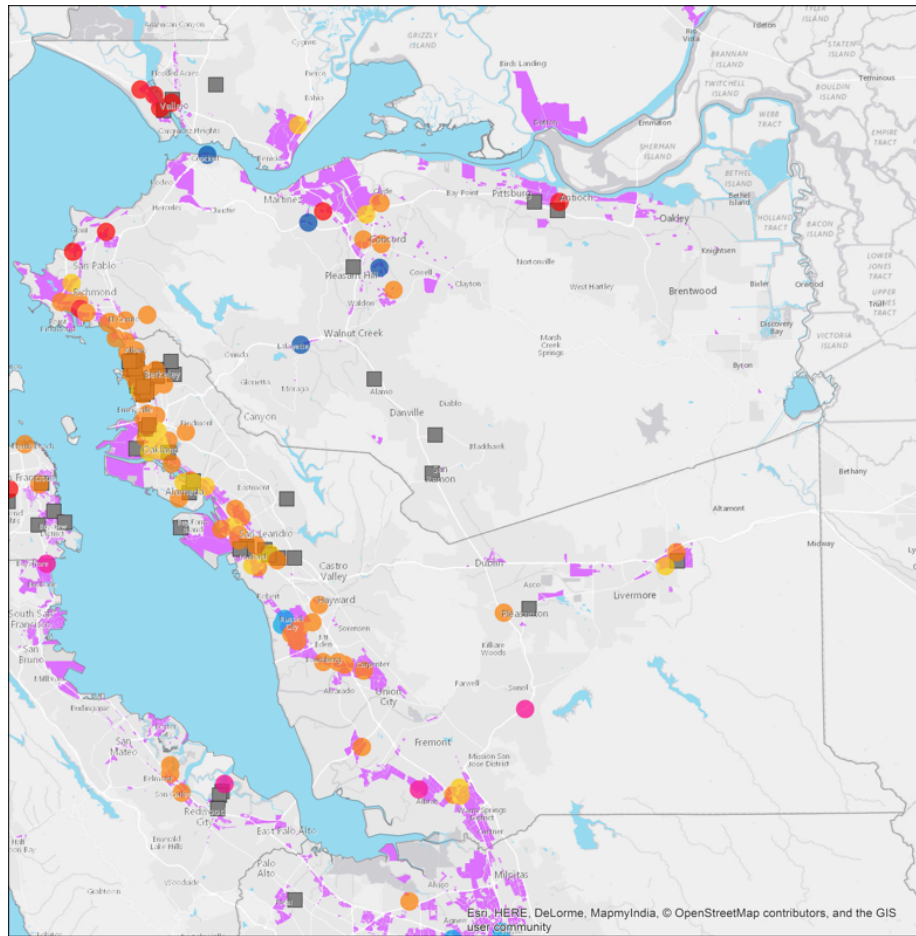


Figure 4. Location of respondents' suppliers across the region

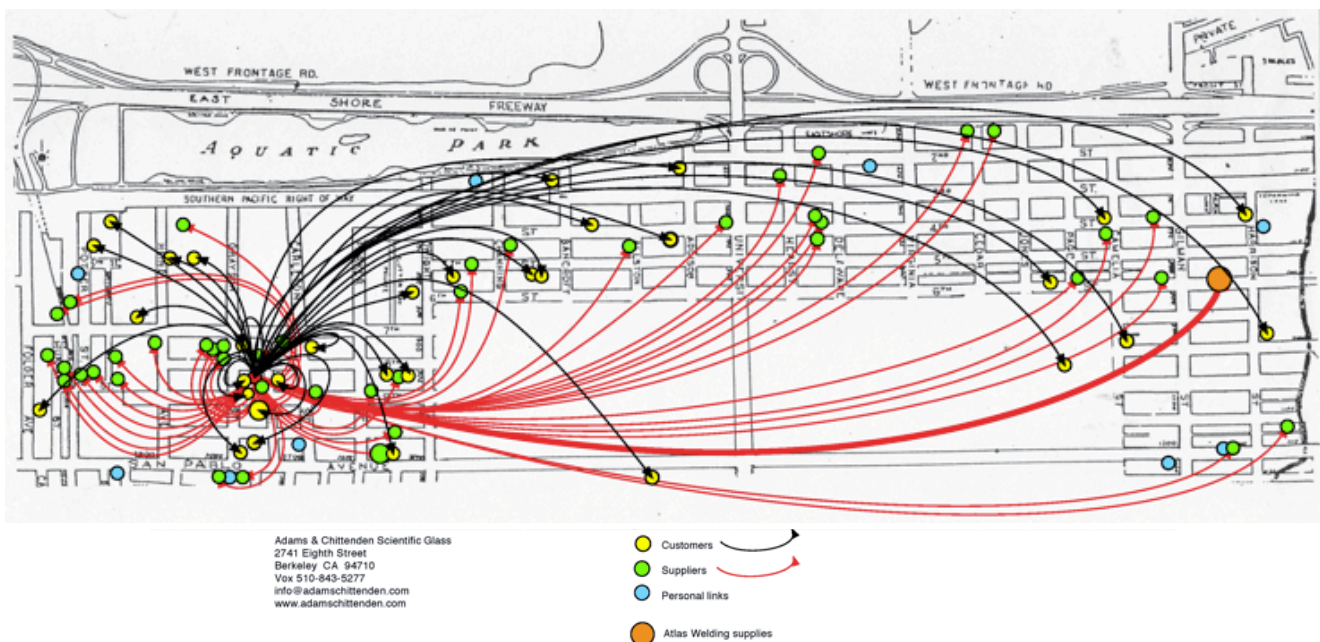


Figure 5. Customers and suppliers of Adams & Chittenden Scientific Glass, Berkeley.
 Source: Adams & Chittenden Scientific Glass, Inc.

PART V: INFRASTRUCTURE NEEDS



The most pressing infrastructure needs, as perceived by business located on industrial land, are summarized in Figure 6. Out of 71 needs cited by 56 unique respondents (survey takers were asked to select up to two options), road maintenance was the most named. Transit access/improvements and higher-speed internet access came in second and third place, and improved port/rail access came in fourth place. Loading docks for trucks, traffic congestion, and graffiti/crime were also mentioned a few times. Finally, other needs that were ascertained from speaking more informally with businesses included reliable electrical supply in Berkeley, storm water management in Fremont, and utilities (gas line) expansion in Fremont.

Although our sample size is too small to conclude with certainty whether any needs emerged more specifically to a given subregion, certain patterns might be present. Road maintenance was cited across all subregions. Transit access and improvements was also mentioned across all subregions, except for businesses in the North Bay, as they are probably too isolated from transit to begin with. Similarly, higher-speed Internet (e.g. fiber op-



tic) was mentioned in all subregions, except in the Peninsula—perhaps because of the subregion’s specialization in the tech industry. Port/rail access was cited in all subregions, except San Francisco—perhaps because it is already well connected in terms of infrastructure, and is closer to its central city customers. Finally, it is worth noting that congestion was brought up several times during conversations and in the survey—especially in the North Bay, in San Leandro, and in West Berkeley.

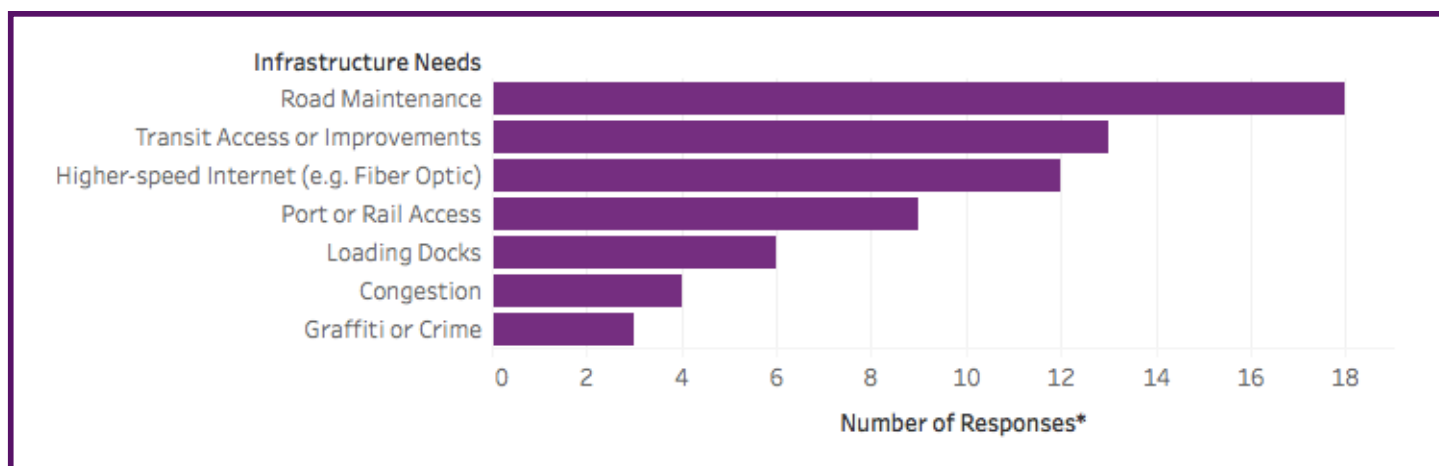


Figure 6. Frequency of infrastructure needs, according to businesses located on industrial land

*There were 56 unique responses on this question, but 71 total needs cited, as respondents could pick up to two of their most pressing infrastructure needs.

A photograph of an industrial site, possibly a construction or manufacturing area. In the background, a tall crane stands against a cloudy sky. Below it, there are several large industrial buildings with corrugated metal roofs. One building has a green corrugated metal wall. In the foreground, there is a parking lot with several cars, including a silver pickup truck and a dark sedan. A white arrow on the ground points towards the right. The entire image has a purple tint.

PART VI: LOCATION, LAND & REAL ESTATE

To understand challenges and opportunities faced by the Bay Area industrial business community, we asked survey respondents to comment on their expected location and growth in the next five years, and on the problems and advantages of their current location. Respondents were also given the chance to provide open-ended comments at the end of the survey. Interview respondents were prompted with similar questions to those included in the survey.



Most businesses expressed that they expected stable or positive growth in the next five years. And, out of 42 responses, 36 businesses stated that they predicted being in the same location five years from today. This is not surprising: other studies have found that businesses rarely move.³ Six businesses stated that they expected to move; however, most of them expected to move to a nearby city within the Bay Area. For a couple of businesses in San Leandro and Berkeley, the cause of the move was a desire for growth (due to lack of space in their current location), and for one business located in the Peninsula, “encroaching office development” was stated as the cause of the move. A couple of businesses expected to leave the region entirely due to the rising cost of living.

Below we reclassify what we heard from the interviewees and surveys into key themes, organized into opportunities, concerns, and suggestions:

Opportunity #1: A first recurring theme was the importance of retaining industrial land to facilitate goods movement and to maintain locational advantages, such as proximity to key markets and suppliers. Several businesses also celebrated their location due to other advantages, like proximity to Silicon Valley or to academic and institutional partners.

- “Ports-related waterborne commerce and rail-borne commerce, and related industrial companies, need to be kept in place in order to keep product prices low and minimize truck trips on the freeways.” – Redwood City business
- “The opportunity to [...] reach suppliers and materials [...] where we work is unmatched.” – Vallejo business
- “The overall cost remains higher but carries the advantage of proximity to so much talent and technical expertise associated with Silicon Valley.” – San Leandro business
- “The big opportunity is that our location puts us centrally located to our prime market area.” – Oakland business
- “We value the multi-use, manufacturing and small business industry character of West Berkeley. It is highly advantageous to have close at hand machine shops for fabrication of our custom parts. It is also highly advantageous to be so close to UC Berkeley, with whom we have several on-going collaborations. In the past we have also collaborated with LBL. The work we do could not be done in an office building. Because of our laboratory we require some sort of industrial zoning” – West Berkeley business

Concern #1: *However, a major concern that was frequently cited was the lack of industrial space, the inability to find suitable expansion space, or the inappropriateness of available space for business needs. This seemed to be a problem especially for businesses located in urban core areas.*

- “We need to be by major highway entrances. We need enough warehouse space to store pallets of refrigerated fruits and vegetables. We need dock space to back 48’ trailers into. This is a challenge in an urban center, especially where PDR spaces are limited. [...] We would love to find a facility that [...] could allow us to grow over the next 10-15 years. Unfortunately space is so limited and at such a premium that is not possible for us at this time. San Francisco must preserve its limited PDR space and incentivize food businesses to remain in San Francisco.” – San Francisco business
- “But development is proceeding and the already-high price pressure is increasing. It could well force many nearby enterprises out of business or out of the area. If we wanted to expand here, our options would be slim to none.” – Berkeley business
- “We need space to grow but can’t here, so we are thinking about moving perhaps in the next five to ten years. Of course, buildings would be cheaper in Livermore or Modesto, but not as practical given their location...” – Fremont business
- “If you do a simple remodel on your parking lot, you trigger a process of storm water management from the state water board that can make it impossible...” – Fremont business



Concern #2: *Businesses also reported concerns with the ineffectiveness of zoning to protect against encroachment by other uses. Some businesses cited encroachment as a problem because of the market pressure from residential demand.*

- “Once an industrial property goes to residential, it will never produce even one good job. It is like building homes on fertile cropland—you will never get another harvest” – Oakland business
- “We need to preserve our city’s PDR space. More and more residential and mixed-use facilities are encroaching on these areas.” – San Francisco business
- “Due to the lower concentration of industrial businesses there is less synergy between companies in our area, higher transportation costs, and shortage of workers.” – West Berkeley business
- “I agree that industrial uses can have a wide scope, but office not ancillary to manufacturing, retail and residential are not what should be here. Luckily, we own our building so the pricing impact is not significant. However, it would be nice not to have to worry about becoming an island.” – Berkeley business

Concern #3: Above all, businesses spoke of the need to deal with land use conflicts, through buffer zones, exclusive zoning, or more effective mixed-use zones. Many brought up concerns over the encroachment of non-industrial uses such as residential, commercial and offices uses. These uses may drive them out not only because of increasing land costs as described above, but also because of the potential incompatibility of these uses.

- “We are in an industrial zone, but all around this zone are residences that built up after we were here, and this poses problems for noise and light in the area” – East Oakland business
- “We have industrial uses adjacent to our complex, and we have parkland. There have been lots of fights between the parkland users and the industrial users. The commercial users didn’t feel impacted and supported the industrial uses continuing where they are.” – Petaluma business
- “Industries [...] they need the locations and infrastructure close to transportation corridors that industrially zoned areas have. But even clean industries may be incompatible with the intruding condominiums and retail hot spots.” – Berkeley business
- “Encroachment of retail spaces makes it harder to conduct business due to increased vehicle traffic, less tolerance by new retail businesses to industrial companies like ours.” – Berkeley business

Opportunity #2/Concern #4: The case of mixed-use industrial land generated a variety of comments about both the special advantages and complications of businesses being located in mixed-use districts:

- “We need a mix of truck access, large production space, and office/R&D in one location. Zoning rules and development trends mean it is becoming very hard to operate a small high tech manufacturing and R&D company like ours in the Bay Area which also depends on proximity to retail, transit, restaurants, food markets and other amenities in order to attract and retain highly educated and talented staff.” – Berkeley business
- “Incursion of residential to our mixed-use area discourages trucking, which we rely on for our business.” – Oakland business
- “It’s good that we have the downtown and the BART coming up, but how is the cost, developers going to play out. My neighbor is moving out this month because the landlord raised the rent fifty percent; the next move may be to Nevada because the market pressure is coming up, and he is a solar innovator.” – Fremont business



Suggestion #1: On the topic of land use controls, some respondents championed zoning that permits concentrations of production-related businesses and districts:

- “We know that even with suburban office parks, these spaces can create community and energy.” – Fremont business
- “It is very important to protect industrial land, where existing light manufacturing and other industrial uses can continue to thrive as they have for many decades. Protecting the existing industrial zones needs to be a priority to maintain a successful local and regional economy.” – Berkeley business

Suggestion #2: Finally, businesses pushed for a balanced consideration of the various needs currently faced by the Bay Area—and thus suggested strategically retaining industrial uses in the most optimal locations:

- “Encourage new development that better utilizes its land inventory while also reserving the most valuable commercial and industrial corridors for businesses and industries likely to locate here given [the] opportunity.” – Vallejo business
- “It’s a challenge, in this area that there is a need for housing... demand for building housing wherever you can, versus industrial. How can that demand for housing pay for some of this [industrial space]?” – Fremont business
- “The lack of affordable housing is now putting even more pressure on East Bay industrial acreage. Unfortunately, everyone seems to forget that [...] facilitating business growth [...] creates higher paying jobs.” – Oakland business



PART VII: CONCLUSION

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The industrially zoned land in the San Francisco Bay Area houses a variety of businesses, primarily in production, distribution, and repair. Local firms export nationally and internationally, but also act as a key support to other companies in the local and regional economy by supplying them with necessary goods or services. Our analysis found local networks of customers and suppliers clustered in subregions; though we focus on the East Bay, such clusters exist throughout the region.

At present, businesses seek improvements to transportation—roads and transit—as well as higher-speed internet access. Most expect stable or positive growth in the next five years, and few wish to move from their current location.

At the same time, several concerns emerged from interviews and surveys with businesses.

One is the lack of industrial space, the inability to find suitable expansion space, or the inappropriateness of available space for business needs. In some industrial zones, businesses also report concerns with the ineffectiveness of zoning to protect against encroachment by other uses; market pressure from residential demand was a particular concern. Some champion zoning that permits concentrations of production-related businesses, while others benefit from mixed-use locations. Yet, above all, businesses voice concern about dealing with land use conflicts and point to the need for buffer zones, exclusive zoning, or more effective mixed-use zones.

NOTES



1. Four respondents reported locations in residential or commercial districts; these were excluded from the analysis.
2. The lack of responses from the South Bay was due to the difficulty of getting “gatekeepers” to help with survey distribution.
3. Karen Chapple, *Planning Sustainable Cities and Regions: Towards More Equitable Development* (London, United Kingdom: Routledge, 2014).
4. Back Streets Businesses Advisory Board, *Made in San Francisco*, (San Francisco, CA: 2007), http://sfgov.org/sfc/bsbab/Modules/BStrRepor07_fbb0.pdf.
5. Karen Chapple and Carrie Makarewicz, "Restricting New Infrastructure: Bad for Business in California?" *ACCESS Magazine* no. 36 (2010), <http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/01/access-36restrictingnewinfras.pdf> and Jed Kolko and David Neumark, *Business Location Decisions and Employment Dynamics in California*, (San Francisco, CA: Public Policy Institute of California, 2007).