



## TECHNICAL MEMORANDUM #3

#### CONTRA COSTA COUNTY NORTHERN WATERFRONT INITIATIVE MARKET ASSESSMENT

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Subject: Opportunities and Constraints Analysis (Task 3)

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This Memorandum incorporates information from Task 3 and Task 1 of the Market Assessment for the Northern Waterfront. The purpose of this task was to identify and analyze opportunities and constraints related to industrial development along the Northern Waterfront. In summary, given its waterfront setting, with deep-water channels and marine terminals, proximity to two Class I railroad lines, electric generating capacity, industrial zoned land, and other assets, the Northern Waterfront offers a number of important advantages for industrial development. However, due to economic changes, general neglect, and the lack of investment in facilities and infrastructure, there are a number of constraints that must be addressed in order for the Northern Waterfront to capitalize on emerging opportunities. The Northern Waterfront's competitive profile is highlighted in the following strengths, weaknesses, opportunities, and threats (SWOT) analysis. The assessment is based on a survey of employers within the Northern Waterfront and the consultant team's analysis.

## I. ASSESSMENT OF EMERGING MARKET OPPORTUNITIES

A number of trends are converging that will present opportunities for economic development along the Northern Waterfront, provided that local jurisdictions collaborate on a regional basis to address the challenges and jointly pursue the attraction of new industries and support the expansion of existing companies.

For more than one hundred years, companies have been attracted to the Northern Waterfront. The industries currently located along the shoreline - oil refineries, petro-chemical manufacturing, steel fabrication, food processing, recycling facilities, wastewater treatment plants, biotechnology firms, and electric power generating facilities – represent a critical strength and the foundation from which to build a more vibrant regional economy that is positioned to attract innovative and emerging industries such as advanced manufacturing, clean technology, alternative energy, recycled materials, food processing, green building products, electronic components, precision instruments, machinery, and transportation equipment companies along with their vendors and suppliers looking to relocate or expand.

Global and regional economic growth and the trend toward reshoring of manufacturing jobs back to the U.S. from overseas will lead to a general expansion of the manufacturing sector nationally. Companies will select strategic locations in the U.S. that offer lower operating and transportation costs by locating closer to their end user markets and skilled labor. To capitalize on this emerging opportunity, local governments must be prepared to provide a skilled workforce, facilitate the development of modern buildings, and invest in needed transportation and utility infrastructure. Economic developers should seize the moment and address the challenges outlined in the following

sections in order to improve the Northern Waterfront's chances of capturing firms that are relocating or expanding their manufacturing operations. These include:

## A. Expansion and Growth of Existing Manufacturers

The Northern Waterfront includes approximately 112 manufacturing firms spread across various industry subsectors. Many of these firms are expected to grow by adding jobs, increasing output, and expanding their facilities. A survey of 48 manufacturing firms in the Northern Waterfront during August and September 2013 found that 44.8% of the manufacturers had plans to grow their business over the next 3-5 years by expanding into new markets, adding equipment, or hiring new employees. Figure 1 shows a breakdown of the respondents' expansion plans. Of those firms with growth plans, 41.4% planned on expanding into new or remodeled space due to employment growth or the need for modern facilities. Others were looking to add new equipment or expand into new markets.

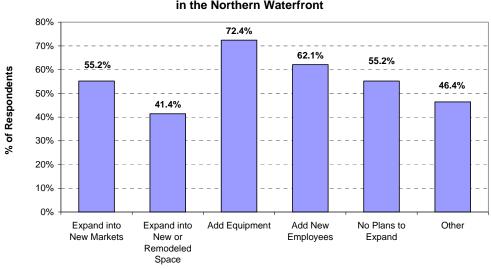


Figure 1: Expansion Plans of Existing Manufacturing Firms in the Northern Waterfront

Source: Survey of Manufacturing Firms in the Northern Waterfront, Aug/Sept 2013

A workforce survey of 131 advanced manufacturing firms with 10 or more employees conducted for the Contra Costa Workforce Development Board between December 2012 and February 2013 found that most manufacturers anticipated expanding their workforce over the next 3-5 years. When asked about how many employees they expected to hire over the next 3-5 years, staffing levels were up about 2.5%. Compared to manufacturing firms in general which are experiencing little if any growth, advanced manufacturing firms in Contra Costa County are growing and hiring new employees. The advanced manufacturing sector is considered a key growth sector nationally. With the right strategies, the Northern Waterfront could leverage its strengths to attract new businesses in this sector and benefit from the increase in production and goods movement at the companies already located in the region.

#### B. Manufacturing Growth Due to Resurgence and Reshoring

After seeing American jobs moved overseas for the past several decades, the U.S. manufacturing sector has recorded significant increases in employment in recent years fueled by rising labor costs in other countries, particularly China, and rising transportation costs, both of which are contributing to a more competitive domestic manufacturing sector. Since 2009, U.S. manufacturing industries have recorded increases in both total production output and employment. Over the next decade, it is expected that more American companies will be evaluating whether to bring some of their

manufacturing operations back from overseas. Rising wages in other countries, increasing global transportation costs, political instability abroad, and a desire to manufacture closer to consumer markets are all factors affecting the decision to remain [in] or return to the U.S. Industries most likely to reshore are those which manufacture products that are less labor intensive and more capital intensive. Boston Consulting Group projects that the "sectors most likely to return [to the U.S.] are transportation, electrical equipment and appliances, furniture, plastics, rubber products, machinery, fabricated metal products, and computers/electronics." <sup>1</sup>

In the past, products requiring less labor to produce have remained in the U.S., while more labor intensive products were produced elsewhere. These trends are expected to continue during the next decade according to a study conducted by the Regional Plan Association for the NAIOP Research Foundation. Manufacturing employment overall was forecast to stabilize between 2010 and 2020 with job growth occurring in fabricated metals, plastics and rubber, nonmetallic mineral, wood, and furniture product industries. Factors contributing to a U.S. manufacturing resurgence include:

- Declining Wages of American workers in real terms over the past decade relative to other countries including China which is experiencing significant wage inflation.
- *Higher productivity levels of American workers* with productivity in output per employee at an all-time high.
- Weaker dollar which makes imports more expensive and American goods more competitive.
- **Higher fuel prices** which will increase the price of imports for products with transportation costs comprising a significant portion of the total cost of imported goods.
- Delivery and Flexibility Pressures will drive component producers [suppliers] to co-locate near
  U.S. assembly operations for products requiring flexibility in the face of fickleness in consumer
  tastes or assembly operations that require components to be shipped within a few days to
  accommodate production and distribution schedules.
- Global supply chain disruptions due to natural disasters have temporarily idled assembly plants
  in the U.S. and Europe because parts from affected regions could not be shipped in a timely
  manner (e.g. 2011 Tsunami in Japan that impacted American electronics and auto manufacturers).

Manufacturers that adjust their location strategies to grow or expand in the U.S. as a result of the above factors are potential targets for business attraction programs along the Northern Waterfront.

#### C. Attraction of New and Emerging Industries

Emerging industries arise from and are created by changes in technology, regulations, markets, or society. Emerging industries include, but are not limited to:

- Alternative energy
- New materials
- Energy conservation
- Electric and alternative fuel vehicles
- Biomedicine
- Advanced telecommunications
- High-end manufacturing
- Clean technology

The Bay Area is a hot bed for innovation. New industries emerging from these innovations that are in the early stages of development often desire to manufacture close to their R&D and product development headquarters. Such innovators that have not yet committed to a production location may be good candidates for the Northern Waterfront because of its proximity to the Bay Area.

<sup>&</sup>lt;sup>1</sup> Boston Consulting Group, "Made in America, Again: Why Manufacturing Will Return to the U.S.", August 2011

Clean technology industries focused on renewable energy generation, energy efficiency, energy storage, water purification, recycling, waste processing and treatment, emission controls, and other segments that are developing innovative technology to address the environmental challenges or reduce resource consumption are potential target industries for the Northern Waterfront.

Proximity to both the Montezuma Hills wind farms in Solano County and the Altamont Pass Wind farms in Alameda and Contra Costa counties along with good access to water, rail, and highway make the Northern Waterfront an ideal location for the fabrication, repair, maintenance, and refurbishment of wind turbines and blades.

Public policies that encourage the production of advanced biofuels are driving the demand for and growth of biodiesel in the state. A recent case study<sup>2</sup> by the Environmental Defense Fund and Environmental Entrepreneurs found that the federal Renewable Fuels Standard and California's Low Carbon Fuel Standard, which calls for lower emissions from transportation fuels, are encouraging the production of biofuels from waste oils and other sources. The case study profiled six biofuel manufacturers - Biodico, North Star Biofuels, Yokayo Biofuels, Crimson Renewable Energy, Imperial Western Products, and Propel Fuels – that are expanding the commercialization of low-carbon fuels with production capacities up to 20 million gallons a year. These and other biofuel companies are working to supply the U.S. Navy and oil refineries with lower carbon fuels. If biodiesel manufacturers continue to expand in California as planned, the advanced biofuels industry will have the ability to produce up to nearly 3 billion gallons of low-carbon fuel by 2015. According to the report, the biofuels market has the potential to be worth more than \$60 billion within the next decade, creating over 18,000 jobs from the nearly 30 bio-refineries expected to open by 2015 in the US. To capitalize on the domestic trade linkages with California's Central Valley, biofuel feed stocks could be grown in the Central Valley and processed into biofuels in the Northern Waterfront.

New start-up companies using technology development at research labs and universities in the Bay Area are also potential targets. For example, Lawrence Livermore National Laboratory (LLNL) scientists have developed a technology known as ultrapermeable carbon nanotube membranes, or simply nanotube membranes that could play an important role in producing clean water. The technology has been licensed to a Hayward-based company, Porifera, Inc. Nanotube membranes can serve as an excellent filtration tool for separating salt and other ionic compounds from seawater or brackish water and for reclaiming waste water for use in crop irrigation and manufacturing processes. LLNL also has developed an innovative technology known as flow-through electrode capacitive desalination (FTE-CD) that promises to unlock an almost inexhaustible water source for U.S. and global population markets. FTE-CD represents a robust and low-maintenance path for efficiently and cost-effectively producing clean drinking water from seawater and brackish water. LLNL also has developed an electromechanical battery with a highly efficient solution for alternative energy systems without the need for electrical power. The Northern Waterfront could serve as a manufacturing location for early-stage companies using technology developed at local research centers in the Bay Area.

## D. Capturing Supply Chain Vendors Serving Local Industries

Supply chain management and optimization is becoming increasingly important to companies looking to gain a competitive advantage. The location of company's suppliers and vendors is of growing concern for a number of reasons including the:

 need to mitigate supply chain disruptions from natural disasters and other uncontrollable and unforeseeable events;

<sup>2</sup> Environmental Defense Fund and Environmental Entrepreneurs, "Biodiesel in California: Companies Fueling Positive Change", August 2013

- desire to have more sustainable, green supply chains;
- need for speed-to-market and flexibility to respond to dynamic market demands especially for products with high fashion content; and the
- desire to shorten complex product life cycles and enable smaller production runs.

Many modern factories are really just assembly operations, with much of the actual manufacturing done by suppliers. When deciding where to locate an assembly plant, proximity to one's suppliers is an important factor.

Highly developed and complex supply chains use multimodal infrastructure including interstate highways, railroad network, ports and airports. Regional manufacturing and distribution give companies greater flexibility and make it easier for them to respond to local customer requirements. Since the mid-1960s, U.S. companies have been slicing up their supply chains in search of low-cost suppliers offshore. Today, sophisticated companies are switching from low-cost country sourcing to best-cost country sourcing and this can often mean manufacturing in the U.S.

As depicted in Figure 2, when asked where their major vendors/suppliers were located, approximately 55% of the manufacturers in the Northern Waterfront responding to the survey indicated that they sourced some or all of their inputs from suppliers located in the Bay Area. Less than 10% used suppliers located outside the U.S. This indicates that opportunities exist to capture more vendors in the manufacturing supply chain locally within the Northern Waterfront.

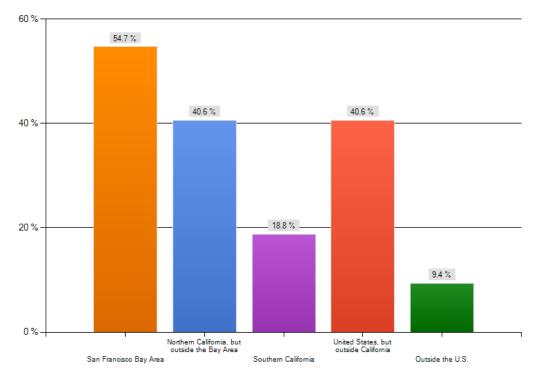


Figure 2: Location of Major Vendors/Suppliers in Supply Chain

## **Limited Industrial Land for Expansion**

Very few large land parcels zoned for heavy industrial use with rail and water access exist in the Bay Area. Various studies have documented the loss of industrial lands in other parts of the Bay Area creating an opportunity for the Northern Waterfront to preserve and modernize its industrial real estate in order to have development sites available for relocating and expanding industries.

#### II. CONSTRAINTS EVALUATION

According to a survey of local manufacturers in the Northern Waterfront, the biggest barrier to expansion is the economy followed by financial constraints (see Figure 3 below). Most of the firms need some type of external assistance with financing and/or marketing in order to grow. When asked "what are the two biggest issues facing your business," the overwhelming response was - adjusting to current economic conditions and changes, followed by the lack of trained workers, high utility costs, and deterioration of surrounding neighborhoods.

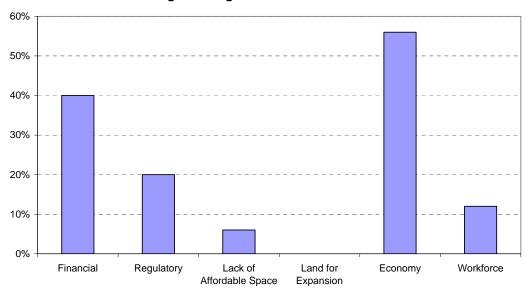


Figure 3: Significant Barriers to Growth

Source: Survey of Manufacturing Firms in the Northern Waterfront, Aug/Sept 2013

#### **Adjacent and Surrounding Land Uses**

When residential land and public facilities such as schools and hospitals are located adjacent to or in proximity to industrial land and manufacturing facilities conflicts arise such as truck traffic, noise, glare, noxious odors, and other environmental issues. One manufacturer surveyed complained about the conflict with a proposed housing project adjacent to his property and a public school located on the other side.

## **Capturing Emerging Opportunities**

Critical factors for industrial site selection involve more than just the availability of appropriately zoned parcels, competitively priced real estate, or an expedited permit process. Local governments must act expeditiously to address the challenges faced by the Northern Waterfront that will make it a competitive location. Local government programs that will make the Northern Waterfront a competitive location include investing in critical transportation; installing advanced communication and utility infrastructure; development of a skilled workforce with advanced manufacturing skills; reviewing and updating existing general plans and industrial zoning to encourage the development of advanced manufacturing facilities and industrial parks; accelerating the issuance of building permits and project approvals; establishing loan programs and investment incentives; and actively marketing the Northern Waterfront as a center for advanced manufacturing.

#### III. SWOT ANALYSIS

## **Site or Facility Conditions and Characteristics**

Companies select strategic locations for production, processing, and handling of cargo that offer competitive transportation costs and are in close proximity to sources of raw materials, production inputs, end user markets, and skilled labor. Industrial sites (land parcels and buildings) need to have the optimal physical characteristics to ensure cost-effective and efficient operations. The Northern Waterfront has a large supply of industrial zoned parcels and buildings from which companies can choose. However, some sites may require environmental remediation and the cost to remediate may be cost-prohibitive, thereby reducing the available supply for business recruitment and expansion.

## Regional Transportation Infrastructure (rail, water, highways, and access roads)

The Northern Waterfront is fortunate to have good access to water, rail and the road network. To remain competitive, channels and berths will require periodic dredging to maintain adequate depths.

Some new manufacturers in the Northern Waterfront will likely have the requirement for rail, although the Class I rail system is fairly robust in the Bay Area, it is unknown whether the railroads will offer access and service to these businesses.

The Northern Waterfront is connected to the interstate highway system through State Route (SR)-4, but SR-4 and the neighboring highways are highly congested, which impedes freight mobility. Road bottlenecks and hazardous conditions are present and stretches of SR-4 are in disrepair. Freight stakeholders have reported that SR-4 seems to be under a constant state of construction and freight velocity is compromised. If more businesses locate in the Northern Waterfront, congestion will increase in the absence of sufficient investment in highway capacity improvements.

A number of road infrastructure projects are either planned or underway that will improve speed-to-production and speed-to-market for companies doing business in the Northern Waterfront. For example, item 21205 on the Regional Transportation Improvement Plan (RTIP) calls for improving the I-680/SR-4 interchange (connecting northbound I-680 to westbound SR- 4, connecting eastbound SR- 4 to southbound I-680, and widening SR-4 between Morello and SR-242). Item 22350 will improve the I-680/SR-4 interchange, which includes connecting southbound I-680 to eastbound SR-4, connecting westbound SR-4 to northbound I-680, and constructing high occupancy vehicle (HOV) flyover ramps from westbound SR-4 to I-680 southbound from I-680 northbound to eastbound SR-4. If planned road projects do not move forward in a timely manner or not at all, freight mobility will be further compromised, making the Northern Waterfront a less desirable location for industry.

#### **Utility Infrastructure and Public Services**

Industrial parcels must have all necessary utilities including water, sewer, electrical power, natural gas, waste disposal, and advanced telecommunications. Sites requiring off-site utility extensions may be considered "ready to build," but are less competitive. In addition to the availability of key utility infrastructure, manufacturers are also concerned about the quality and cost of public services. Survey respondents complained that the cost of utilities in the Northern Waterfront is too high and that utility companies are not cooperative.

## **Electric Power**

PG&E provides gas and electric service to industrial customers in most communities within the Northern Waterfront. Several survey respondents complained about frequent power outages affecting their business. However, it is not known whether these power outages are due to inadequate system capacity, weather, or other causes.

#### Water and Wastewater Service

Industrial sites must be served by a reliable water supply, as well as storm water collection and sanitary sewer systems that are adequate to meet industrial needs. Nearly every industrial plant uses water as part of its operation and manufacturing process. Industrial water is needed for:

- Cooling towers
- Steam production
- On-site fire suppression systems
- Landscape irrigation

- Wash water applications
- Industrial processes
- Products
- Sanitation needs

Figures 5 and 6 in the Appendix show the service district boundaries for each of the water and wastewater treatment districts serving the Northern Waterfront. However, there are individual sites and pockets of land that are inadequately or currently not served. While distribution lines may be nearby, necessary lateral connections may not serve all industrial parcels. Line extensions and connection fees are added costs that will negatively impact expanding or relocating firms.

Industrial water users are also concerned about water quality, since it can cause problems for manufacturing processes. Turbidity, hardness, high or low pH, and dissolved solids (minerals) can cause deposition, scaling, abrasion and corrosion, particularly for hot water and steam applications. Although these conditions can generally be dealt with through conventional treatment technology, costs increase considerably and optimal results are more difficult to achieve when intake water is of poor quality.

## **Sewage Treatment**

The City of Pittsburg operates a wastewater collection system only. Treatment and disposal for the Northern Waterfront are provided by the Delta Diablo Sanitation District (DDSD).

## **Storm Water**

Survey respondents felt that the cost of attaching to storm water pipes was too high.

## Recycled Water

While recycled water is available within the Northern Waterfront it may not be useable for industrial purposes without further treatment. 27.8% of the survey respondents stated that they would use advanced treated recycled water if available. Delta Diablo Sanitation District is planning to expand its recycled water treatment capacity and make advanced treated recycled water available to more industrial customers.

## **Advanced Telecommunications**

Advanced telecommunications infrastructure is increasingly more important as high speed communications are becoming a requirement for reliable and efficient handling of goods movement and logistics. Business practices like just-in-time production and, more recently, demand-side inventory management, that allow customer orders to be placed over the Internet, are contributing to a new business model in which warehouse storage plays a lesser role and rapid replenishment and mobile inventories are the norm. <sup>3</sup> Survey respondents commented that there are no high speed broadband lines available in certain areas that can transmit data at T-I speeds (1.544 megabits per second) or faster.

## Waste Disposal

Survey respondents commented about the limited recycling options available for businesses and that recycling was preferred over waste disposal. Respondents also stated that the cost for waste disposal should be cheaper.

<sup>&</sup>lt;sup>3</sup> Hesse, Markus, Access, "Location Matters", Fall 2002

#### **Skilled Labor**

According to an annual survey conducted by *Area Development* Magazine, labor costs consistently rank as the #1 or #2 factor in industrial site selection. The shortage of skilled workers nationally is a pressing problem for manufacturers, and there is a renewed interest in developing the infrastructure and programs to respond to industry needs through training. Local manufacturing firms have expressed similar concerns.

## **Public Policy/Regulatory Environment**

Public policy can create both opportunities and constraints for industrial development. Governments across the globe have become more stringent about environmental clearances for new manufacturing plants. Many of these regulations are national, state, or regional. California greenhouse gas regulations, for example, affect industrial location statewide and not just in Contra Costa County. Labor and healthcare requirements also impact industry statewide and nationally. Streamlining the regulatory and permitting processes and removing financial disincentives on capital investment, among other reforms, could make California a more attractive destination for growing companies. Survey respondents commented on the need to streamline the permit process and make the timeframe for approval more consistent and reliable. There was concern about the increasing amount of regulatory compliance issues and the cost and amount of paperwork required by the new federal healthcare legislation and regulations, which is out of local government's control. One firm responded that unless changes are made to welcome small business, they won't survive. There was mention of the need for local government to focus on the benefits of maintaining a healthy industrial waterfront.

## **Changing Site Selection Priorities**

The criteria companies use when selecting sites for manufacturing and cargo handling activities are changing to reflect the new economic normal that focuses on the operational requirements and location costs of doing business. The most recent annual corporate site selection survey conducted by *Area Development* Magazine found that of those companies with relocation plans, a third cite high taxes and excessive government regulations as their reasons for moving, while a quarter need to be in closer proximity to suppliers and/or markets served, and about a fifth are concerned with healthcare costs and the quality of life at their present locations. Only 3% of the respondents expect to relocate a domestic operation from offshore or a foreign facility back to the U.S.

Historically, labor costs and highway accessibility are the top ranked factors and the 2012 survey found no exception, as depicted in Figure 4. Labor costs is ranked first among the site selection factors, considered "very important" or "important" by 90.8% of respondents, closely followed by highway accessibility, with a combined importance rating of 90.1%.

Availability of advanced information and communication technology (ICT) infrastructure took a major increase, moving from 11<sup>th</sup> to 4<sup>th</sup> place between 2006 and 2012. The availability of buildings moved up in ranking, while access to a maritime port or railroad service, which have both been added since 2006, are ranked near the bottom of the list of priorities. Occupancy and construction costs maintained their fifth place ranking among the site selection factors.

Sustainable development was ranked by 68% of respondents as being more important to their company now than in the past, with three-quarters of the companies making energy-saving modifications to their facilities, while two-thirds are recycling or re-using waste products. Nearly 70% of the respondents said that while sustainability is more important now than in the past, two-thirds noted that communities are not offering specific incentives for green initiatives. If local policy-makers were to offer such incentives, it could be an opportunity for the Northern Waterfront to attract businesses.

The corporate tax ranking has remained the same over the past six plus years, while financial incentives dropped in ranking. The drop may be due to the fact that companies are realizing that incentives can't make up for high labor costs, poor highway access, a lack of skilled labor, or high energy or occupancy costs. In other words, financial incentives can't make a bad location good.

The availability of unskilled labor has dropped in priority as the need for skilled labor has increased. About two-fifths of the respondents said the unskilled portion of the workforce lack basic reading and math skills; 75% noted that, most importantly, these workers are lacking the more advanced skills that the respondents require, such as advanced welding and machine tool programming. As a result, the availability of unskilled labor showed the largest percentage decrease in importance, dropping to 25th place and is now considered "very important or important" by fewer than half of the Corporate Survey respondents. Proximity to technical college/training and training programs are considered "very important" or "important" by more than half of the respondents, although these two requirements are still ranked toward the bottom of the list among the site selection factors.

Half of the respondents have no plans to expand their facilities while 35% said they expect to expand facilities over the next two years. Approximately 70% of the Corporate Survey respondents have no relocation plans, with only a fifth expecting to relocate within the next two years. By comparison 41.4% of the companies in the Northern Waterfront expect to expand in the next 3-5 years.

Table 4: Ranking of Key Site Location Factors (Most Important and Fastest Growing): 2006-2012

|   | Ranking |      | Composite Score   |      | Change 2006-12 |        |        |
|---|---------|------|-------------------|------|----------------|--------|--------|
| Site Selection Factor                   | 2012    | 2006 | Change            | 2012 | 2006           | Amount | %      |
| Labor Costs                             | 1       | 2    | <b>↑</b>          | 90.8 | 95.0           | -4.20  | -4.4%  |
| Highway accessibility                   | 2       | 1    | $\downarrow$      | 90.1 | 90.9           | -0.80  | -0.9%  |
| Availability of skilled labor           | 3       | 4    | <b>↑</b>          | 89.4 | 85.1           | 4.30   | 5.1%   |
| Availability of advanced ICT services   | 4       | 11   | <b>↑</b>          | 85.1 | -              | 85.10  | 100.0% |
| Occupancy or construction costs         | 5       | 5    | $\leftrightarrow$ | 82.8 | 85.5           | -2.70  | -3.2%  |
| Energy availability and costs           | 6       | 3    | $\downarrow$      | 81.3 | 82.4           | -1.10  | -1.3%  |
| Corporate tax rate                      | 7       | 7    | $\leftrightarrow$ | 79.3 | 90.8           | -11.50 | -12.7% |
| Available buildings                     | 8       | 13   | <b>↑</b>          | 78.4 | -              | 78.40  | 100.0% |
| Tax exemptions                          | 9       | 10   | <b>↑</b>          | 75.4 | 86.7           | -11.30 | -13.0% |
| Low union profile                       | 10      | 12   | <b>↑</b>          | 73.5 | 78.4           | -4.90  | -6.3%  |
| Right-to-work state                     | 11      | 14   | <b>↑</b>          | 72.6 | 67.1           | 5.50   | 8.2%   |
| Proximity to major markets              | 12      | 10T  | $\downarrow$      | 72.2 | 76.9           | -4.70  | -6.1%  |
| State and local incentives              | 13.1    | 8    | <b>↓</b>          | 71.1 | 88.6           | -17.50 | -19.8% |
| Environmental regulations               | 13.2    | 9    | $\downarrow$      | 71.1 | 68.9           | 2.20   | 3.2%   |
| Expedited or "fast-track" permitting    | 15      | 16   | <b>↑</b>          | 67.2 | -              | 67.20  | 100.0% |
| Inbound/outbound shipping costs         | 16      | 0    | +                 | 63.7 | -              | 63.70  | 100.0% |
| Availability of long-term financing     | 17      | 18   | <b>↑</b>          | 63.1 | 64.1           | -1.00  | -1.6%  |
| Available land                          | 18      | 6    | $\downarrow$      | 59.0 | 73.3           | -14.30 | -19.5% |
| Proximity to suppliers                  | 19      | 15   | $\downarrow$      | 54.9 | 49.3           | 5.60   | 11.4%  |
| Training programs                       | 20      | 20   | $\leftrightarrow$ | 54.7 | 56.0           | -1.30  | -2.3%  |
| Accessibility to major airport          | 21      | 0    | +                 | 52.9 | -              | 52.90  | 100.0% |
| Proximity to technical college/training | 22      | 0    | +                 | 50.3 | -              | 50.30  | 100.0% |
| Raw materials availability              | 23      | 19   | $\downarrow$      | 49.7 | 64.1           | -14.40 | -22.5% |
| Railroad service                        | 24      | 0    | +                 | 43.6 | -              | 43.60  | 100.0% |
| Availability of unskilled labor         | 25      | 17   | $\downarrow$      | 42.9 | 65.3           | -22.40 | -34.3% |
| Waterway or oceanport accessibility     | 26      | 0    | +                 | 19.9 | -              | 19.90  | 100.0% |

Source: Area Development Magazine Annual Corporate Site Selection Survey

# Northern Waterfront Competitive Assessment Strengths, Weaknesses, Opportunities, and Threats

## **Major Industrial Site Location Factors**

| Indicator  | Strengths   | Weaknesses   |
|--|---|--|
| Location  Access to key inputs, raw materials and resources  Proximity to major markets  Proximity to major suppliers  | Centrally located in a growing regional economy, the Northern Waterfront is in close proximity, within a half-day transit, to major markets in the Bay Area and Sacramento and sources of raw materials and production inputs in the San Joaquin Valley and Southern California. This is within less than half-day or 2.5 hour drive time (approximately 100 miles) of 11.5 million population.  More than 55% of the manufacturers in the Northern Waterfront source their inputs from the Bay Area and Northern California suppliers and 12% from Southern California suppliers.  Altamont Pass and Montezuma Hills Wind Farms are in close proximity | Residential land uses are incompatible with the needs of industry.  Citizens in the area may protest more industry because their presence generally increases deleterious effects on the community such as traffic, noise, and air pollution.  |
|  | to the Northern Waterfront.  There is an existing concentration of industrial uses.   |  |
| Facilities/Land Available buildings Available land Occupancy costs   | Available buildings and industrial sites are plentiful. Approximately 1,283,151 square feet of industrial space is available for lease with a 9.3% vacancy rate.  Buildings currently on the market for lease include warehouse, manufacturing, R&D, and Flex Space.  Asking rental rates range from around \$0.28 to \$1.26 per square foot (depending on location and quality) with an average asking rate of \$0.43 per month triple net.  Out of 109 total vacant parcels, 85 parcels are unimproved and zoned for industrial development.  | Approximately 39.2% of the buildings in the Northern Waterfront are more than 50-years old. While exact figures are not available much of what remains vacant are older outdated properties bordering on obsolescence.  Industrial land use designations and regulations vary between jurisdictions. |
| Transportation Infrastructure Highway accessibility - road Water accessibility Railroad service Accessibility to major airport Inbound/outbound shipping costs | The Northern Waterfront is primarily served by SR-4 which connects with I-680 in central Contra Costa County and I-80 in west Contra Costa County. There is direct surface road access to SR-4 from the industrial areas, which connects the area to the interstate highway system.  Channel has a 35 foot depth, and there is water front access and several marine terminals. The Port of Oakland, Oakland International Airport, San Francisco International Airport and San Jose International Airport are in close proximity.  The area is served by two Class I railroads (UP and BNSF).  The pipeline system in the area is extensive.           | Traffic is extremely congested along SR-4 between Pittsburg and Brentwood. The benefits of the current expansion of SR-4 will be wiped out with planned additional residential development in Brentwood, Antioch, Pittsburg, and the Concord Naval Weapons Station.                                  |

| Utility Infrastructure Availability and cost of utilities and public services Water Sewer Power Advanced ICT services  Labor Availability of Skilled Labor Training programs Labor costs Availability of unskilled labor Low union profile Right-to-work state Proximity to technical college/training | Most of the area is located with an existing service district or their sphere of influence including:  Water supply is provided by the City of Antioch, CCWD, DWD, and EBMUD.  Wastewater (DDSD, Central Sanitary District, Rodeo Sanitation District, and Hercules)  Power and gas are provided by PG&E.  Major trunk lines for high speed broadband are located within the area.  Contra Costa County has a relatively well educated workforce with 38.7% of the population over age 25 having a Bachelor's Degree or better. Contra Costa ranks well above the national average and ranks 5th in the State in terms of the percentage of its population over 25 years of age with a Bachelor's Degree or higher.  The Process Technology (PTEC) Program at Los Medanos College provides students with the training needed for jobs in local chemical and refining industries.  Contra Costa College developed a new Forklift, Logistics, Operations and Warehouse (FLOW) training program to meet the demands of a rapidly growing warehouse job market in the East Bay.  There is a strong concentration of skilled labor within the local East Bay labor market area. | Contra Costa labor costs are among the highest in the State. Mean hourly wages for production occupations are \$19.67 per hour versus a statewide average of \$16.72; Silicon Valley is \$19.09; southern California is \$17.27; and Fresno is \$14.53.  7.8% of the Contra Costa's workforce is employed in production, transportation, and material moving occupations compared to the statewide average of 11.1%.  There are a limited number of training programs targeting jobs in the manufacturing sector located in Contra Costa County. Companies with large manufacturing operations in Contra Costa have been going out of state to find the skilled entry-level workers they need. Many of these companies are facing a serious shortage of trained employees because a large number of workers are reaching retirement age.  Employment in the transportation and warehouse industry category has been in decline.  Industries that are looking to expand in or relocate to the Northern Waterfront require a skilled workforce, often with specialized skills. Local governments may not be willing to invest sufficiently in job training programs that raise the skill level |
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| Financial Incentives State and local incentives Corporate tax rate Tax exemptions Availability of long-term financing  | Recycling market development program encourages qualifying manufacturers to utilize recycled feedstock or incorporate waste reducing practices in (RMDZ) area. Low-interest loans, permitting assistance and business development assistance are available. The Contra Costa County Recycling Market Development Zone follows the Industrial Shoreline of the County.  A statewide Business Incentives Program managed through the Governor's Office of Business and Economic Development (GO-Biz) will replace enterprise zones including the Pittsburg-Bay Point Enterprise Zone. Statewide incentives include a sales and use tax exemption for manufacturing equipment and biotech R&D, a long-term unemployed tax credit for areas of high unemployment and poverty, and a recruitment and retention incentive will be available to attract new companies to California and expand existing companies.  | of the workforce to fulfill the demands of the various jobs.  Corporations looking to relocate or establish a business in the Northern Waterfront will pay among the highest state corporate tax rates in the country according to the Tax Foundation. Nationally, only eight states have a higher top corporate tax rate than California. The Tax Foundation's 2013 edition of the State Business Tax Climate Index ranked California 48 <sup>th</sup> overall.  The statewide business incentive program does not provide a local competitive advantage for the Northern Waterfront.   |

| Business Climate  Public policy/regulatory environment  Environmental regulations  Expedited or fast-track permitting | The East Contra Costa County Habitat Conservation Plan provides a framework to protect natural resources in eastern Contra Costa County, while improving and streamlining the environmental permitting process for impacts on endangered species. The Plan will allow participating jurisdictions to control endangered species permitting for activities and projects in the region over which they have approval authority. The Plan avoids project-by-project permitting that is generally costly and time consuming for applicants and often results in uncoordinated and biologically ineffective mitigation. | According to a California Manufacturers and Technology Association survey, 82% percent of the companies, when expanding or opening a new facility, do not consider California due to state policies that highly impacted their business. These include a costly and complicated tax system, poor regulatory environment, high labor costs, and a lack of financial incentives and tax credits.  There is lack of consensus or vision for future development of the Northern Waterfront among regional policy-makers.  Reduced city staffing due to budgetary constraints results in longer timeframes for approval and a poor attitude within staff.  Increasing amounts of regulatory compliance issues negatively impact companies. |
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| Indicator                                     | Opportunities   | Threats  |                  |  |
|---|---|--|------------------|--|
| Underutilized/Vacant Land                     | Industrial real estate market has been slowly improving since the 2007 recession with available space and low rental rates.   | Rental rates and demand are weak with competitive locations throughout the Bay Area.   |                  |  |
| Relatively Affordable<br>Space                | Available space with low rents which provide opportunities in advanced manufacturing, warehousing and storage, and logistics and distribution.  | Current rent levels do not support new development.  |                  |  |
| Presence of Other<br>Industrial Users         | Industry clusters with a variety of companies in several manufacturing subsectors exist in the area. Critical mass is a powerful force and provides synergies between businesses. As more companies locate in the Northern Waterfront, it will become more attractive to others.  Manufacturing is a core component of the local economy. Building upon existing strengths in products such as fabricated metals, printing and business forms will provide synergies to advanced manufacturing firms looking to expand or relocate. These synergies include economies of scale and industry cluster effects that can substantially reduce a company's costs and improve its productivity. |  | External Factors |  |
| Competitive Development<br>Projects/Locations | The Northern Waterfront with its deep-water channels and marine terminals, proximity to two Class 1 railroad lines, electric generating capacity, industrial zoned land, and existing cluster of industrial firms provides opportunities to attract manufacturing firms that need these features.   | There are other competitive sites and locations can be found around the Bay Area. Competitive development locations include Mare Island in Vallejo; Alameda Naval Air Station in Alameda; and the former Oakland Army Base in Oakland currently being redeveloped.  Global competition for industrial attraction. Economic development organizations in Contra Costa County have not taken a lead role in addressing the long-term opportunities for industrial development. |                  |  |

| Government Policies                    |  | Regional Smart Growth policies intensify development pressures on goods movement industries. These forces are affecting the efficiency of the freight transportation system in the Bay Area and raising important economic, transportation, and land use policy issues. Industrial lands in the Northern Waterfront face similar pressures. As industrial lands get converted to other uses, the remaining sites become more valuable.  |
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| Traffic and Roadway<br>Conditions      |  | Congestion on regional roads and highways will likely increase in the future without substantial state and local investment in existing infrastructure and/or construction of new facilities.  The State's financial problems could have a long-term impact on local finances and public investment.  |
| Goods Movement<br>Infrastructure       | Congestion on area roads and highways will favor industries in the Northern Waterfront that can move raw materials, production inputs, and finished goods by water or rail.  | Railroads may not desire to provide access and services to new facilities.  The channel depth of the Northern Waterfront will not be able to accommodate the increasingly larger mega vessels. The Army Corps of Engineers may not support dredging to deeper depths and the funding may not be appropriated by Congress.  Transportation facilities in neighboring communities are more developed. Neighboring San Joaquin County has a direct link to the Bay Area along Interstate 580, which has led to a higher concentration of distribution and logistics activity there. The county also has facilities for intermodal truck-to-rail container transfers, and an airport capable of handling large cargo planes and commercial flights. |
| Global and Regional<br>Economic Trends | The reshoring trend of manufacturing industries returning from offshore to the U.S. could bring some businesses to the area.   | Trends such as globalization of the supply chain, mass customization, shortening of product lifecycles, low inventory, and quick response requirements makes industry more dependent on efficient goods movement infrastructure and services.  Manufacturing innovations will displace many of today's traditional manufacturing processes, replacing labor-intensive manufacturing processes with automated processes. Businesses in the area may not be sufficiently prepared.  Economic development organizations in the County have not taken a lead role in addressing the long-term opportunities. If neighboring regions are aggressive, these areas may attract a greater share of new business.  |
| Foreign Trade Zone (FTZ)<br>#3         | Goods brought into a FTZ or sub-zone may be stored, manipulated or mixed with domestic or foreign materials used in manufacturing processes or exhibited for sale. Anything shipped out of a FTZ into the U.S. customs territory is then subject to duties. Goods reshipped to foreign nations are never subject to U.S. customs duties. Use of the FTZ #3 could benefit importers in the Northern Waterfront. |   |

## **APPENDIX**

Water Districts in Contra Costa County Figure 1.1 CSA M-28 Pittsburg Diablo Water Contra Costa Martinez Water District Antioch Concord East Contra Costa East Bay Irrigation Municipal Walnut Greek Brentwood Utility District Discovery Bay CSD Orinda Lafayette Contra Costa Water District Danville Legend City Water Service Areas Dublin/ Ramon San Ramon Antioch CSD Brentwood Martinez Pittsburg **Water Districts** Other Districts Providing Water Services Contra Costa Water District County Service Area M-28 - Willow Mobile Home Park Diablo Water District **Dublin San Ramon Services District** East Bay Municipal Utility District Discovery Bay Community Services District East Contra Costa Irrigation District

**Figure 5: Water District Service Boundaries** 

**Figure 6: Wastewater District Service Boundaries** 

