



Valero's Economic and Revenue Impacts on the City of Benicia &
the San Francisco Bay Area

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Our understanding of the situation

- Valero is the City of Benicia's largest employer. With nearly 500 employees in skilled, administrative and management roles Valero has been providing quality middle class manufacturing jobs in the area since it acquired the plant in 2000. The refinery's construction in 1969 helped to revive an economy that was shrinking due to the relocation of U.S. Army operations. Between its hundreds of employees, hundreds of millions of dollars of vendor spending, taxes and charitable contributions, Valero is a critical aspect of the local economy and source of revenue for the City of Benicia
- The refinery is permitted to process up to 165,000 barrels per day, producing gasoline that meets California's high air quality standards, diesel, jet fuel and other fuels, and asphalt. It provides the Bay Area with 25% of its gasoline and 10% of the state's consumption. It has invested billions ensuring it meets the highest standards of environmental protection
- The refinery is positioned on the north shore of the Carquinez Strait, providing access to crude oil feedstock by ship or pipeline. The refinery's primary crude sources come from the San Joaquin Valley, Alaska and foreign sources. In order to improve its competitive position, Valero is seeking to build a rail offloading rack to the refinery, which would allow it access additional crude oil from North American sources available by rail
- Andrew Chang & Company has been retained to measure the economic impacts of Valero's operations in Benicia and the surrounding area and the revenue it generates for the City's budgets

Benicia's economy is heavily reliant on manufacturing

Manufacturing



- Manufacturers in Benicia employ over 2,600 people and support its 1,400 wholesale and nearly 500 transportation employees
- Large manufacturing employers include Valero (450+ employees), Dunlop (250), Cytosport (220) and Bio-Rad Laboratories (210)
- Manufacturing is among the higher paying industries, with average annual earnings of \$58k in California, nearly 10% higher than the average private employer. Manufacturing remains one of the few paths to the middle class for workers without a college education
- In addition to its direct employment, manufacturing industries bring thousands of customers into Benicia each day

Commercial



- Benicia has four commercial areas in its residential section as well as commercial developments in its historic downtown
- These developments include 3,800 employed in professional and business services and 1,600 in retail, some of which are shared with the tourism industry
- The retail sector is considerably smaller than typical with more than 40% less per capita retail activity, despite above average earnings of residents
- Benicia has high levels of leakage in general merchandise, restaurants and apparel.

Tourist



- Benicia has a small, but active tourist industry centered around its historic downtown.
- The sector includes specialty retail, services and restaurants.
- Although these are typically lower paying sectors, a large portion of the businesses are locally owned and owner-operated.

Valero contributes to the local economy in four primary ways

Employs local workers



- Valero directly employs over 450 local workers with over 250 contractors working on-site, daily
- In total, Valero's activities create or support 3,900 jobs in the region, generating \$1.6 billion in employee compensation

Supports local businesses



- Since 2006, Valero has paid over \$3 billion to contractors, over 2/3 to businesses in the region, generating \$4.3 billion in economic activity
- Approximately \$400 million was paid to local businesses within Benicia

Pays taxes



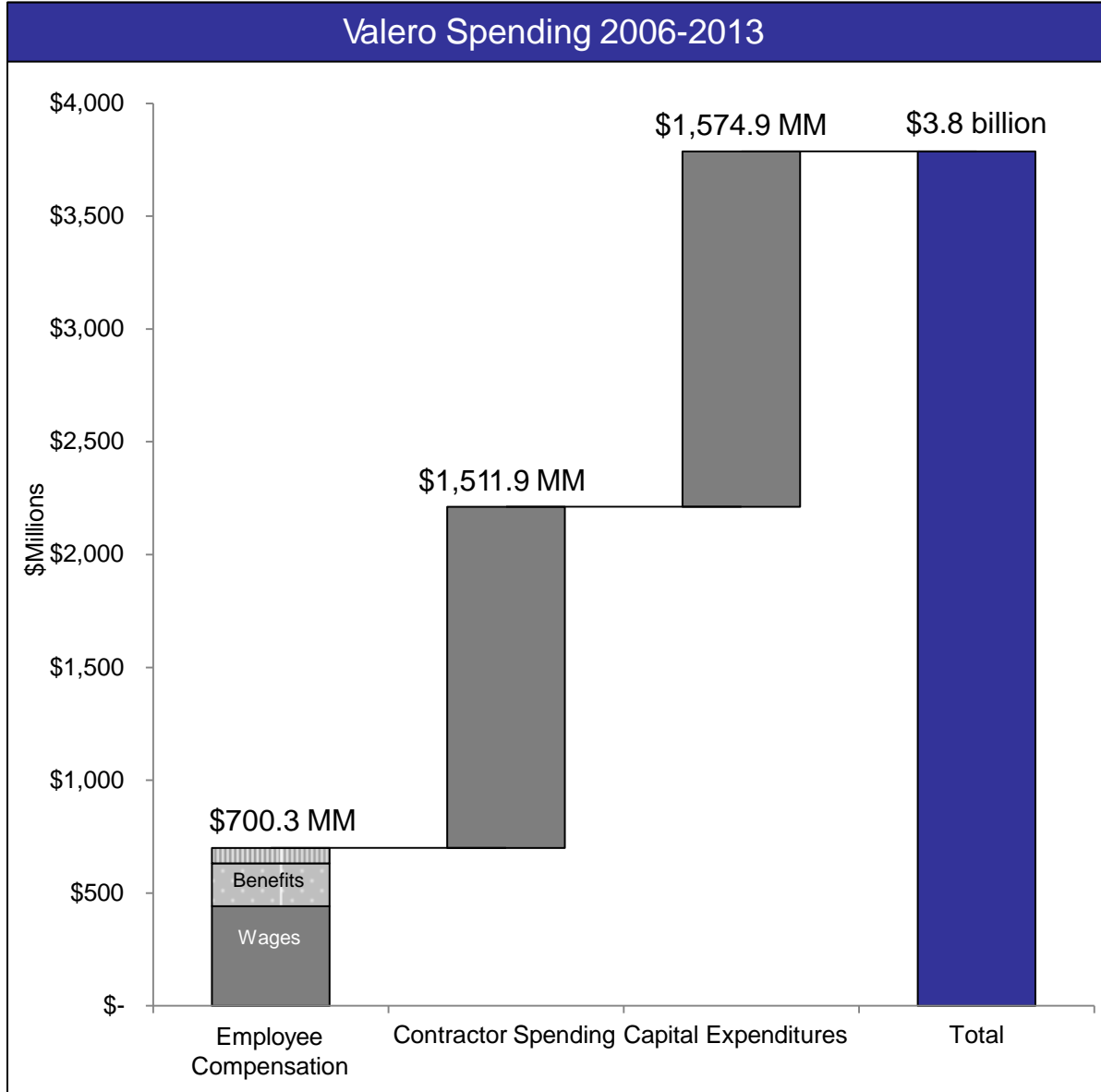
- Valero owns nearly 900 acres of industrial land in Benicia, housing its refinery and other operations, leading to over \$3 million annually in property taxes paid to the city
- Valero spends over \$4 million additionally on other City taxes

Supports charitable causes



- Valero and its employees have donated \$13.7 million over the last decade to local charities, including children's charities and the local food bank

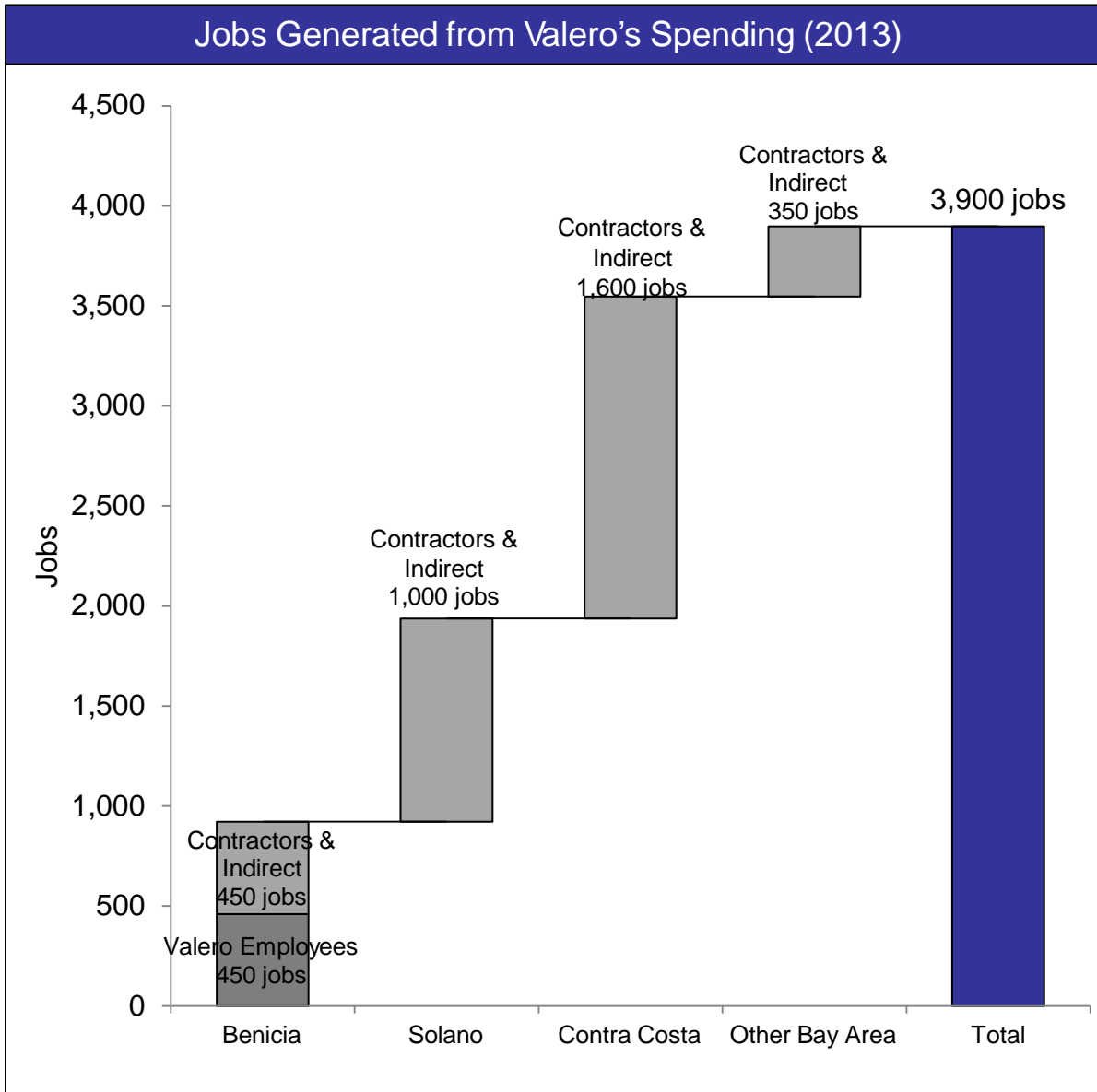
Valero spent nearly \$3.8 billion on operations, maintenance and capital improvement for its Benicia facility over the last eight years



Key Observations

- Since 2006, Valero has spent \$3.8 billion to fund its operations, maintenance and capital investments
- This includes:
 - Over \$700 million on compensation and benefits to its employees
 - Over \$1.5 billion on contractor spending for maintenance and operations
 - Over \$1.5 billion on contractor spending for capital improvements
- This is the equivalent of building the recent Carquinez Bridge upgrade fifteen times over

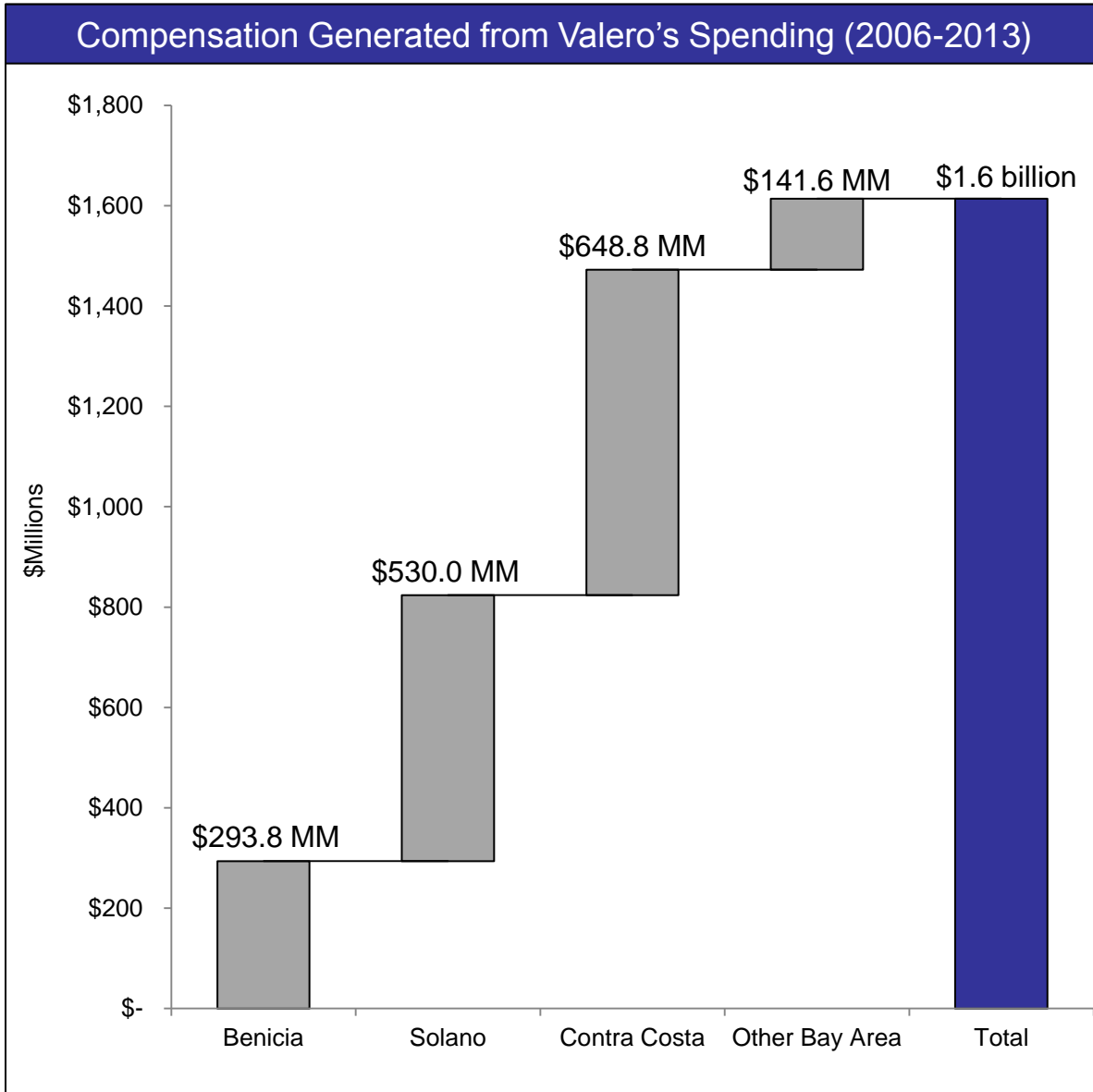
Valero's operations, maintenance and capital improvements created over 900 jobs in Benicia and an additional 3,000 jobs in the region



- ### Key Observations
- Valero's economic activity leads to 3,900 additional FTE jobs in the Bay Area
 - Approximately 450 of these jobs are Valero employees and an additional 250 are contractors that work on-site
 - At least 900 total jobs are created in Benicia itself, although this may understate the true impact, because standard multipliers don't account for Valero's strong impact as a "magnet", with numerous suppliers locating in the industrial facility surrounding it
 - 3,000 additional jobs are generated in the Bay Area, with the great majority in the surrounding communities of Solano and Contra Costa Counties
 - This estimate is conservative, because we assume that all contractor spending with non-local firms is lost to leakage (or otherwise not recirculated in the local economy)

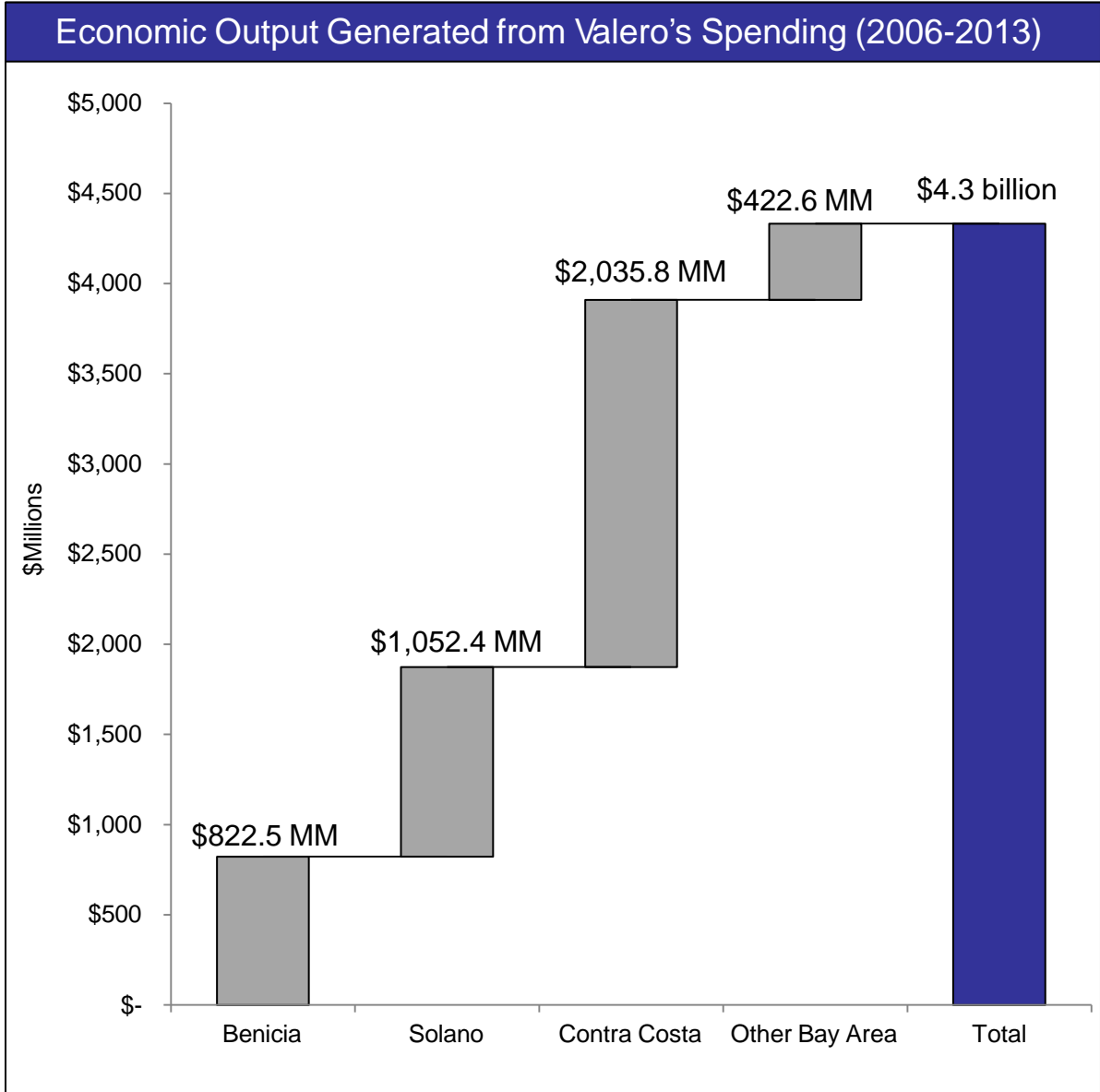
Source: Valero Internal Data and ACC Calculations

This spending created over \$1.6 billion of increased employee compensation in Benicia and the surrounding region



- ### Key Observations
- The economic activity generated in the Bay Area by Valero's work has led to an increase of \$1.6 billion in regional employee compensation
 - Nearly \$300 million of this compensation is concentrated in Benicia itself
 - Annually, Valero generates employee compensation comparable to Solano County's entire Professional, Scientific and Technical industries
 - This estimate is conservative, because we assume that all contractor spending with non-local firms is lost to leakage (or otherwise not recirculated in the local economy)

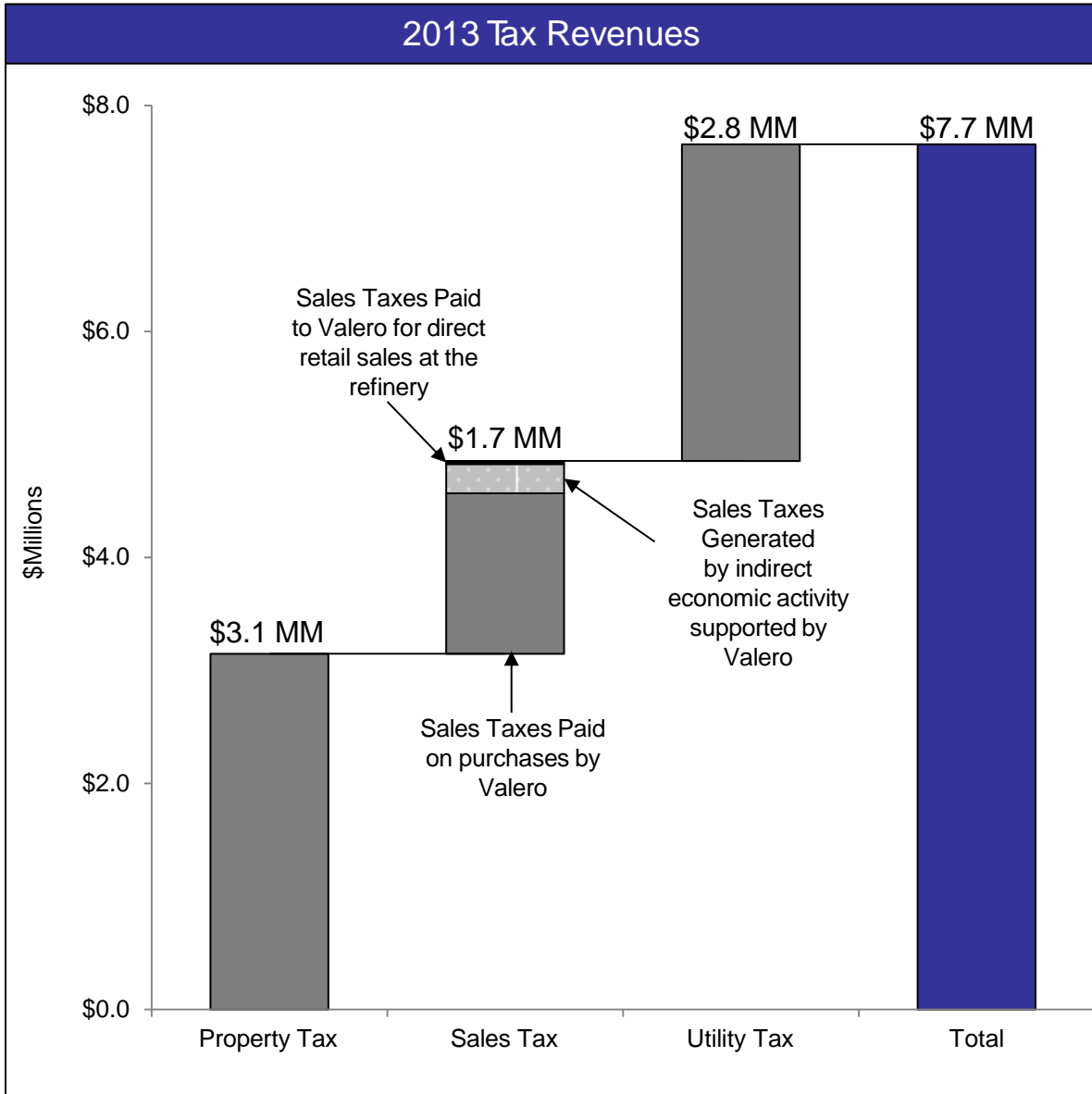
This spending created over \$4.3 billion of economic activity in Benicia and the surrounding region



- ### Key Observations
- Valero's spending and investments have generated \$4.3 billion in additional economic activity in the Bay Area
 - Over 20% of this economic activity, \$822.5 million was generated in Benicia itself
 - Annually, Valero generates more economic activity than Solano County's entire information technology industry and transportation industries combined
 - This estimate is conservative, because we assume that all contractor spending with non-local firms is lost to leakage (or otherwise not recirculated in the local economy)

Source: Valero Internal Data and ACC Calculations

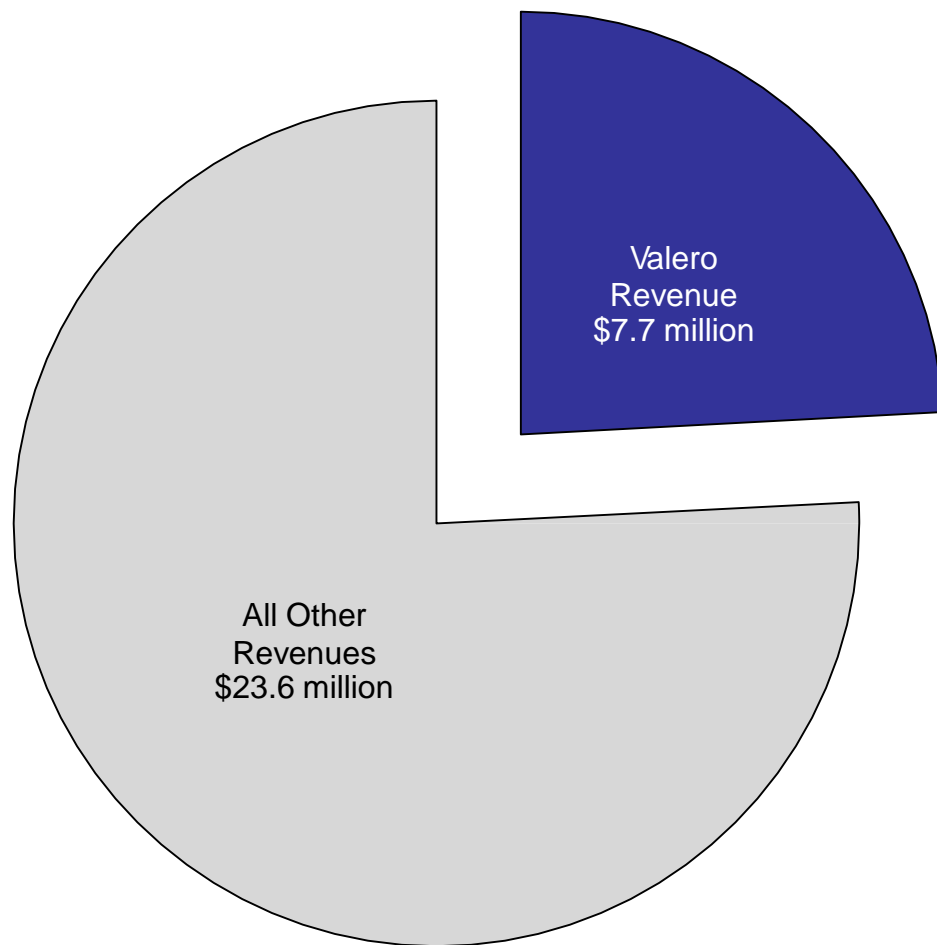
Direct and indirect economic activity related to Valero contributes \$7.7 million to the City of Benicia's tax revenues



- ### Key Observations
- We estimate that Benicia received \$7.7 million in taxes directly from Valero and in additional sales tax generated from indirect economic activity
 - Valero is responsible for three types of sales & use tax generation. The largest (dark gray) portion, is taxes directly paid for goods purchased by Valero. The second largest (light gray with spots) is from sales tax generated through indirect economic activity. The smallest is from direct retail sales at the refinery, primarily asphalt.
 - This estimate is conservative, because we assume that all contractor spending with non-local firms is lost to leakage
 - NOTE: These figures are based on current policy and property valuations. The property tax figure may change, based on an appeal before the County Assessor

Revenue from Valero's activities makes up one quarter of the City of Benicia's budget

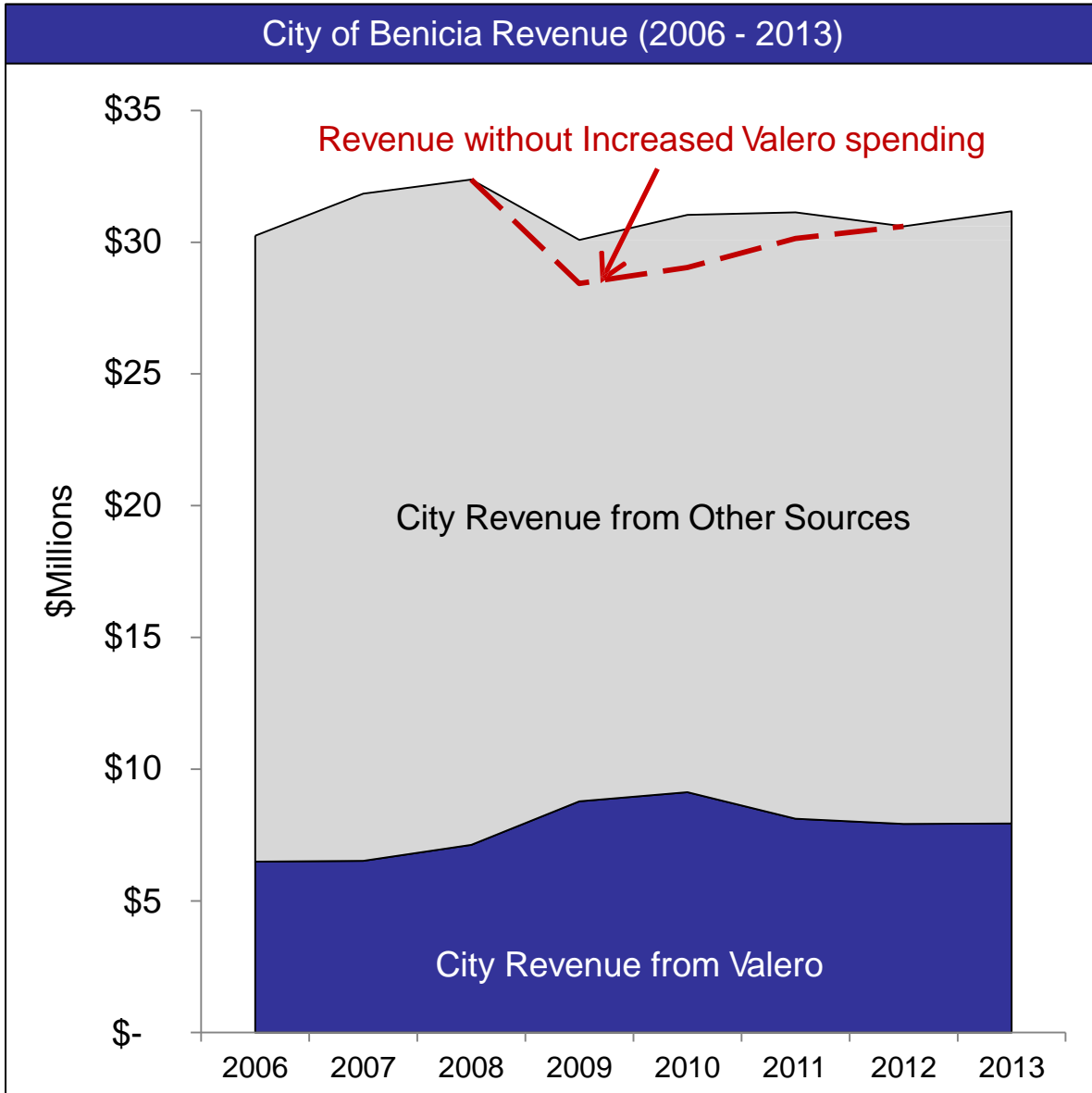
City of Benicia Revenue (2013)



Key Observations

- Valero, its employees, and taxes generated by its contractors from business generated by Valero contributed about \$7.7 million to the City of Benicia's General Fund in 2013
- This accounts for 25% of all General Fund revenue the City generated that year
- Over the last eight years, this has varied from as low as 20% to as high as 29%, depending on broader economic conditions and Valero's capital investments
- \$7.7 million is enough to fund the Fire Department, the City Council, City Attorney, City Clerk and City Treasurer with a quarter million dollars left over

During the recession, when the City's revenue fell, Valero's contributions increased, staving off further cuts



- ### Key Observations
- As the Great Recession hit most local governments, it also hit Benicia, causing a decrease of 7.1% in General Fund revenues
 - The drop could have been much worse. During this period, Valero invested heavily in capital infrastructure for its Benicia facility
 - Without this increase in spending, Benicia would have lost about \$2 million per year in revenue over a three year period, resulting in a 12% reduction, which presumably would have forced additional cuts to City services

Valero has consistently invested in safety and environmental upgrades

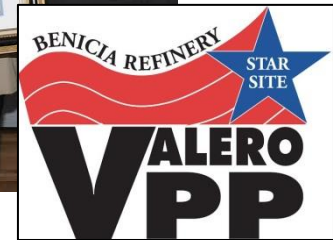
Valero Scrubber Upgrade



- Over the course of 2009 and 2010, Valero spent \$750 million building and installing a new Flue Gas Scrubber. The project employed 1,900 workers daily
- The state-of-the-art Scrubber is one of the world's largest. The purpose of the Scrubber is to reduce emissions produced from the refining process
- This installation lowered sulfur dioxide emissions by 95 percent and nitrogen oxide emissions by 55 percent
- Valero has invested millions more on technologies to reduce flare events and the resulting emissions, wastewater discharge and energy consumption

Source: Valero Internal Data

Valero OSHA VSP Start



- Valero has held a VPP Star Site designation from the California Occupational Safety and Health Administration since 2006; the highest safety recognition a refinery can receive
- Only two refineries in California hold the designation, Valero's refinery in Benicia and Wilmington
- In addition, at Valero's urging, two of its key on-site contractors, Guarantee Electrical and Safeway Services have achieved VPP designation

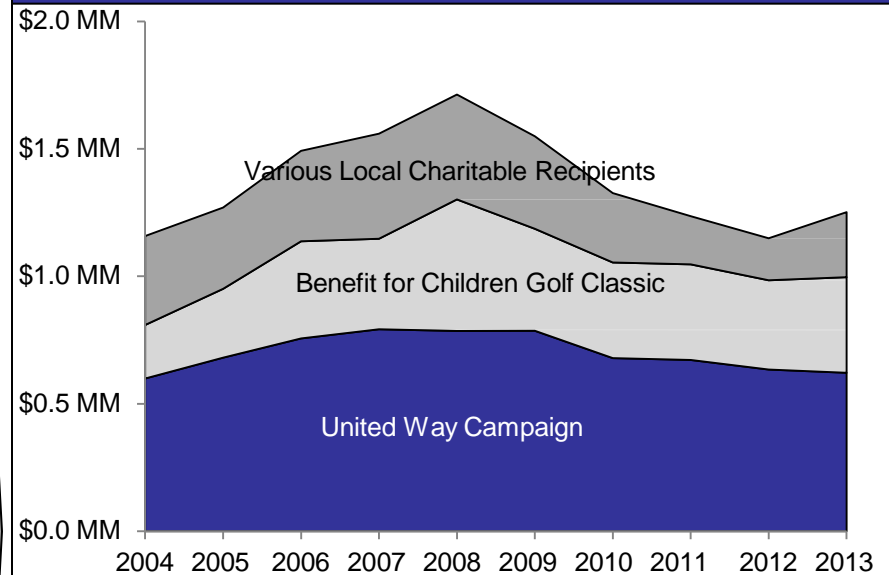
Valero has donated nearly \$14 million to local charities over the last decade

Benicia Education Foundation



- The Benicia Education Foundation was established by parents to fill a growing need for private funding of Benicia's public schools to sustain educational excellence
- Valero has been its leading financial supporter, providing about 10% of its annual funding
- Valero also provides volunteers at BEF's large events and Valero engineers provide twice weekly tutoring sessions in math and science at the high school and middle school
- BEF has been on a substantial growth path since 2004 restructuring, led by a Valero executive and then BEF Board Member:
"It was a moment of faith. They essentially said, we endorse your funding model. We would like to give you the check and let you figure out the greatest need through your relationship with the district." Lisa Koenen, BEF President

Valero's Charitable Donations (2004 - 2013)



- Over the last decade, Valero has donated \$13.7 million to local charities
- This includes an average of \$700,000 annually to the United Way Campaign, which is funded by employee contributions and a corporate matching donation; \$360,000 from the Benefit for Children Golf Classic, which is held each March and funds local children's organizations; and \$300,000 of other donations to numerous local non-profits

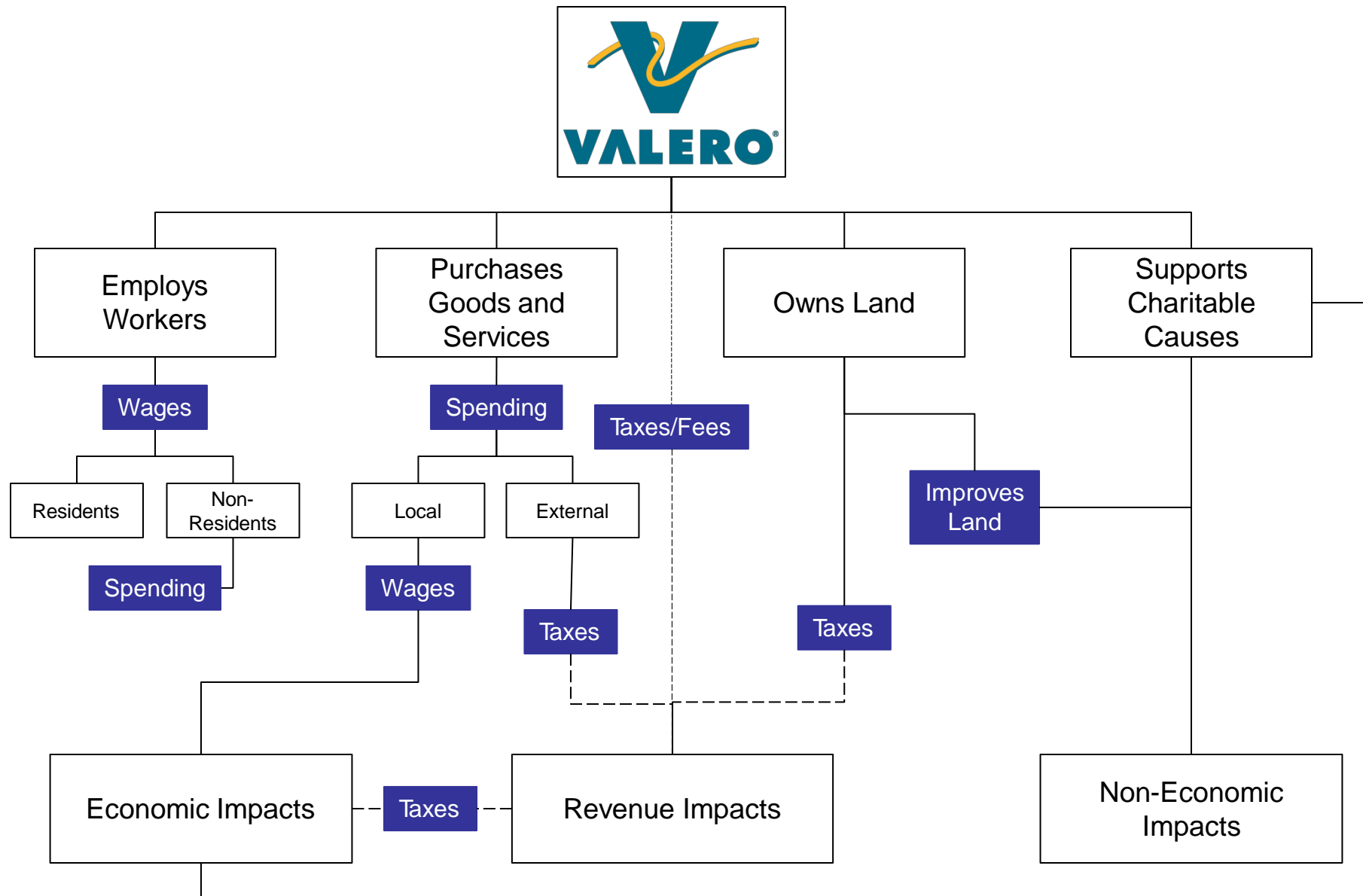
Conclusion

- Valero is an essential member of Benicia's economy and a valuable source of government revenue
- Valero and its suppliers create over 900 FTE jobs in Benicia, paying nearly \$300 million over the last eight years
- They generate \$7.7 million annually in city taxes, supporting 25% of the city's budget and an increase due to capital investment helped buttress the city's budget during the recession
- Benicia relies on Valero to support its local economy, employ its citizens, fund the city's budget and support local non-profits

Appendices

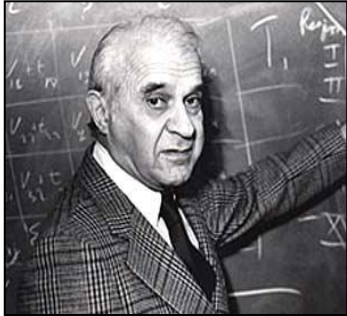
- Overview of Model
- RIMS Multipliers
- Case Studies
- Capital Expenditures

Appendix: Overview of model



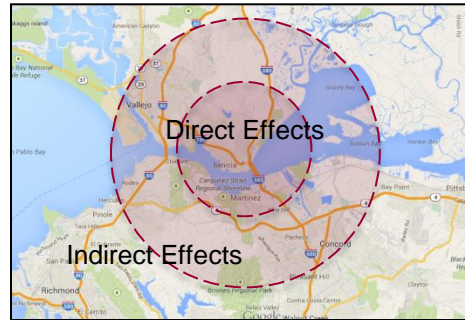
Appendix: RIMS Multipliers

History



- The input-output analysis was ostensibly developed as an effective economic framework by Wassily Leontief (1906-1999), a Soviet economist who emigrated to the United States and joined the faculty at Harvard University in 1931
- Leontief adapted input-output analysis to the U.S. economy and by the 1960s economists were widely using them to assess impact of policies and events on the economy
- Leontief received the 1973 Nobel Prize in Economic Sciences for his pioneering efforts in developing this method
- Today, input-output models are used regularly as a national and regional economic impact and forecasting tool. Probably its most visible and publicized use includes projecting the economic impacts of sports facilities, military bases and tourism.

How Multipliers Work



- Economic multipliers are tied to specific industries and estimate the additional jobs, economic output, and personal earnings generated from an additional dollar spent in a given area
- An input-output model divides the national or regional economy into various industrial sectors and tracks how much each industry must purchase from every other industry to produce one unit of output. The model contains feedback loops that force most industries to produce more than the “direct output requirements” would seem to imply
- Through a matrix inversion, all of these feedback loops collapse into one step and calculates the extra (“indirect”) output requirements they create. The ratio of the total requirements to the direct requirements is called the input-output multiplier

How We Applied Them



- We obtained appropriate corresponding industry multipliers (e.g. retail trade, ambulatory health care services, construction, warehousing & storage, nursing & residential care facilities and households). We acquired three sets of multipliers, one for Solano County, one combining Solano and Contra Costa Counties and a third for the nine-county Bay Area. Additionally, we estimated a fourth set of multipliers for Benicia
- Our final product of calculations is broken down into the total economic output, earnings, and employment impact to the City of Benicia and surrounding areas
- Our economic output impact measures the change in the total value of all of the goods and services coming from Benicia
- Our earnings impact measures the total dollar change in yearly earnings of all households in Benicia
- Our employment impact measures the total change in the number of jobs in Benicia

Appendix: Case Studies

Guarantee Electrical / MRC



- Valero acts as a powerful magnet, causing large national corporations to open operations in Benicia. MRC and Guarantee Electrical are two such examples of this, with national footprints and midwestern corporate headquarters, neither company has other ties to Benicia
- Both companies have chosen to locate in the Benicia industrial park largely due to its proximity to Valero
- Companies like these employ dozens of skilled tradesmen, providing quality, middle class employment opportunities for hard working locals without a college education
- “We look at it as, we’re a subsidiary or an arm of Valero.” Gary Bruce, MRC

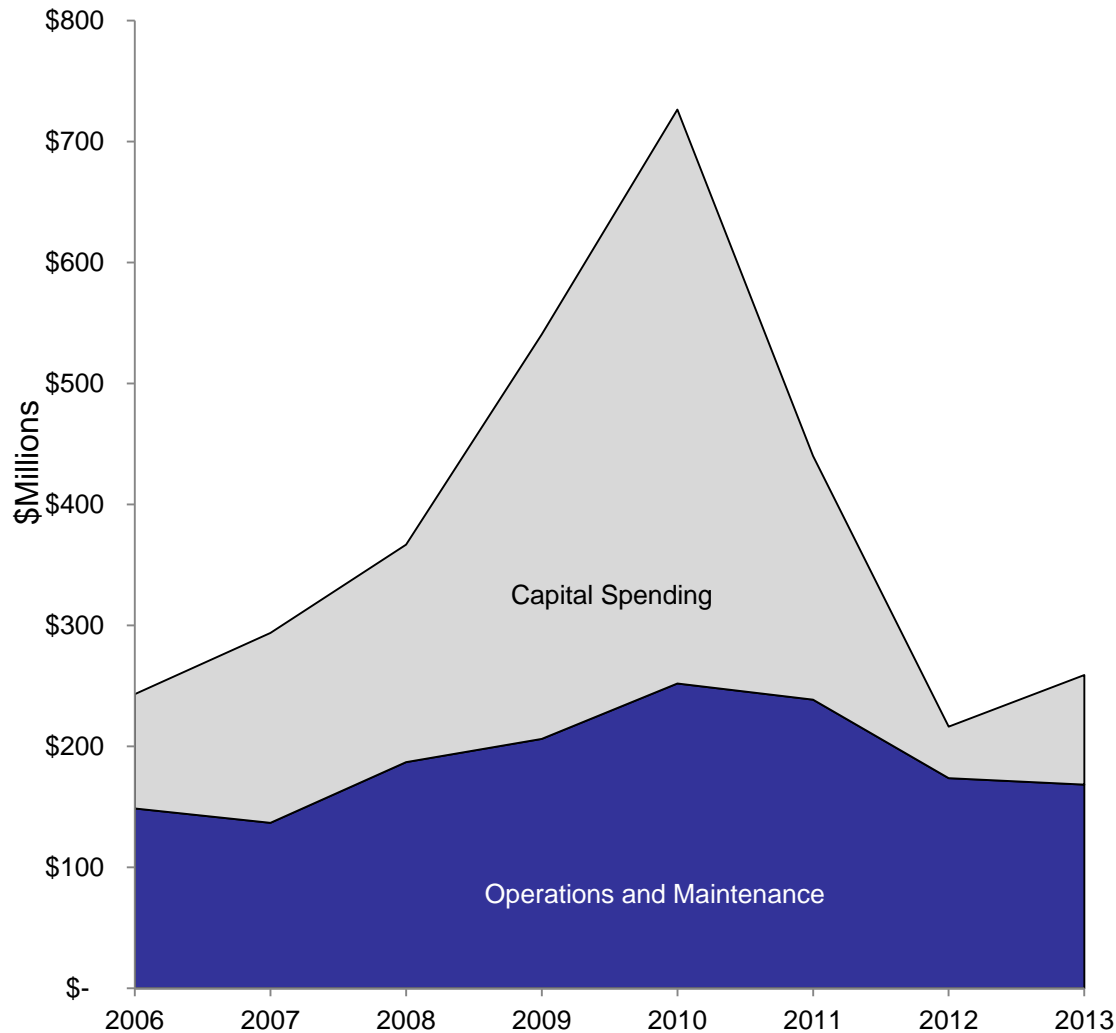
Sandoval's / Best Western Heritage Hotels



- Valero also supports local service businesses, both directly, purchasing catering and other similar services and indirectly, by bringing hundreds and sometimes thousands of workers into town each day
- “Without Valero, Benicia would be a ghost town.” Deanne Sandoval-Ponder, Sandoval's

Appendix: Capital Expenditures

Valero Contractor Spending (2006 - 2013)



Key Observations

- Spending on operations and maintenance is relatively consistent, though it is generally growing over time, as improvements to the facility require additional work
- In addition to this ongoing work, Valero makes capital investments to improve the facility, ensure its ongoing economic viability and improve its environmental footprint
- Valero has spent nearly \$1.6 billion over the last eight years on capital improvements, most of this on projects to improve environmental performance
- The largest share of this work occurred during the recession, creating badly needed jobs and providing a valuable backstop to the City's budget

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