



# CHEVRON'S IMPACT IN WEST CONTRA COSTA COUNTY

DECEMBER 2024



## ABOUT OXFORD ECONOMICS

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modeling to UK companies and financial institutions expanding abroad. Since then, we have become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on more than 200 countries, 100 industries, and 8,000 cities and regions. Our best-in-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social and business impact.

Headquartered in Oxford, England, with regional centers in New York, London, Frankfurt, and Singapore, Oxford Economics has offices across the globe in Belfast, Boston, Cape Town, Chicago, Dubai, Dublin, Hong Kong, Los Angeles, Mexico City, Milan, Paris, Philadelphia, Stockholm, Sydney, Tokyo, and Toronto. We employ 700 staff, including more than 450 professional economists, industry experts, and business editors—one of the largest teams of macroeconomists and thought leadership specialists. Our global team is highly skilled in a full range of research techniques and thought leadership capabilities from econometric modeling, scenario framing, and economic impact analysis to market surveys, case studies, expert panels, and web analytics.

Oxford Economics is a key adviser to corporate, financial and government decision-makers and thought leaders. Our worldwide client base now

comprises over 2,500 international organizations, including leading multinational companies and financial institutions; key government bodies and trade associations; and top universities, consultancies, and think tanks.

### DECEMBER 2024

All data shown in tables and charts are Oxford Economics' own data, except where otherwise stated and cited in footnotes, and are copyright © Oxford Economics Ltd.

**This report is confidential to Chevron and may not be published or distributed without their prior written permission.**

The modeling and results presented here are based on information provided by third parties, upon which Oxford Economics has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

To discuss the report further please contact:

**Alice Gambarin**  
[agambarin@oxfordeconomics.com](mailto:agambarin@oxfordeconomics.com)

**Valentyna Katsalap**  
[vkatsalap@oxfordeconomics.com](mailto:vkatsalap@oxfordeconomics.com)

Oxford Economics  
5 Hanover Sq, 8th Floor  
New York, NY 10004  
Tel: +1 646-786-1879

# CONTENTS

<b>Executive summary</b>	4
<b>1. Introduction</b>	6
1.1 Chevron’s Richmond facilities overview	6
1.2 West Contra Costa County overview	7
<b>2. Chevron’s economic impact in West Contra Costa County</b>	9
2.1 Chevron’s economic impact on the West Contra Costa County economy	9
2.2 Chevron’s impact on jobs and wages	11
<b>3. Chevron’s social impact in West Contra Costa County</b>	14
3.1 Chevron’s social investment	14
3.2 Causes supported by Chevron	15
3.3 Environmental and Community Investment Agreement	18
<b>4. Appendix: Methodology</b>	19



# EXECUTIVE SUMMARY

Founded in 1902, the Chevron Richmond Refinery is the largest refinery in the San Francisco Bay Area in California.<sup>1</sup> It supplies approximately 60 percent of the jet fuel used by the Bay Area airports, 20 percent of the gasoline used to power vehicles in the region, and 100 percent of the lubricating oils on the West Coast.<sup>2</sup> Chevron's Richmond Technology Center, located on the same Richmond campus, is the birthplace of many innovations that have accelerated the quality, durability, and efficiency of the oil and fuel additive industries, including the development of Techron, a patented fuel additive. Together, the Refinery and Technology Center represent the bulk of Chevron's operations in West Contra Costa County.

This report, commissioned by Chevron, shows how the company's Richmond operations had a significant positive impact on the West Contra Costa County economy in 2022 in terms of value-added contributions, jobs, wages, and tax revenue.

The total impact of Chevron's Richmond facilities amounted to \$1.1 billion in gross value-added (GVA) contribution to West Contra Costa County's gross domestic product (GDP) and 3,830 jobs. This was equivalent to 5 percent of local GDP and 3 percent of all jobs in West Contra Costa County in 2022.

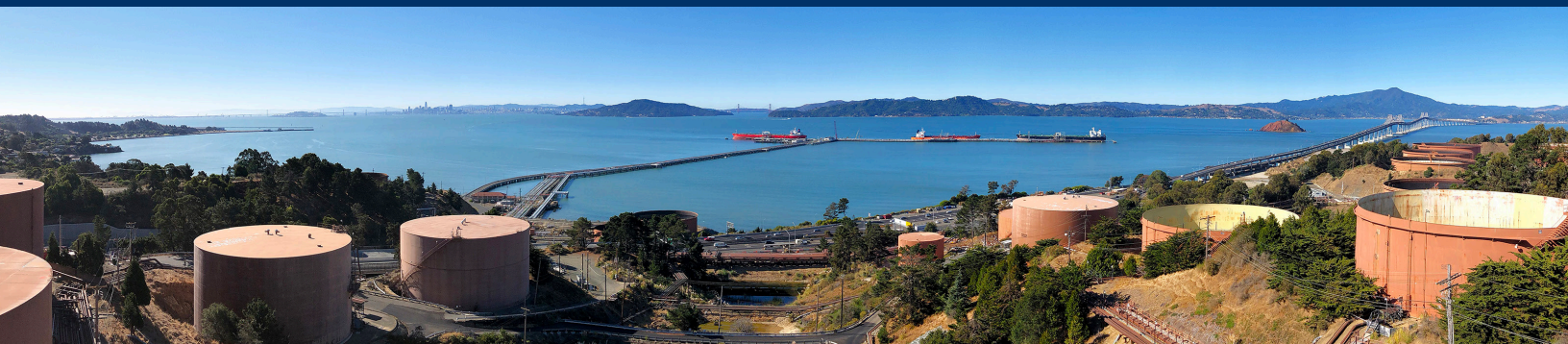
## \$1.1 billion

**Chevron's total GVA contribution  
in West Contra Costa County**



## 3,830 jobs

**Supported by Chevron's Richmond  
facilities in 2022, with 2,570 workers  
employed directly by the company**



<sup>1</sup> California Energy Commission, October 2024.

<sup>2</sup> Chevron Richmond, *Community Report 2023*.



**Our key findings for 2022 include:**

- Chevron's Richmond facilities directly generated \$920.2 million in GVA. Additionally, they supported \$153.6 million in gross value-added contributions in other industries in the region through the indirect and induced channels, with construction, real estate, and industrial equipment rental and leasing benefitting the most from the company's local operations.
- Chevron directly employed approximately 2,570 workers across the Richmond Refinery, Richmond Technology Center, and other business units embedded in the Refinery, such as IT, HR, and finance.
- Chevron's Richmond-based employees contributed 86 percent more GVA per worker than the average worker in the region, allowing the company to offer a high level of compensation to its employees. Chevron employees received 56 percent higher compensation than the regional average.
- Chevron's operations in the region supported over 1,250 jobs in other industries, with the greatest impact in construction (32.2 percent of all jobs), restaurants (6.5 percent of all jobs), and individual and family services (6.0 percent).<sup>3</sup>
- For every 10 workers Chevron employed at its Richmond facilities, its economic activities supported five additional jobs in the region—a jobs multiplier of 1.5, one of the highest in West Contra Costa County.
- Across all jobs supported by Chevron's operations in West Contra Costa County, including direct, indirect and induced, the workers received a total of \$492.5 million in labor income.
- Chevron and its employees donated \$2.1 million to over 70 local charities and non-profit organizations that focused on education, civic and community causes, youth and public safety, economic development, and other causes.
- Chevron's Richmond-based employees donated 4,100 hours through volunteering events, valued at \$0.3 million in additional charitable contributions.

**\$2.1 million  
+ 4,100 hrs**

**Donations from  
Chevron and  
its employees**



<sup>3</sup> Numbers may not sum due to rounding.

# 1. Introduction

## 1.1 CHEVRON'S RICHMOND FACILITIES OVERVIEW

Operational since 1902, the Chevron Richmond Refinery is the largest refinery in the Bay Area, with an operational capacity of 257,000 barrels of crude oil per day.<sup>4</sup> It mostly produces transportation fuels, such as gasoline, diesel, and jet fuel, as well as lubricating base oils.<sup>5</sup> The Refinery covers 60 percent of the jet fuel needs of major airports in the Bay Area and provides about one-fifth of the fuel used by vehicles on Northern California roads.<sup>6</sup>



<sup>4</sup> Chevron, [2023 supplement to the annual report](#), 2024.

<sup>5</sup> Chevron Richmond, [About](#).

<sup>6</sup> Chevron Richmond, [Community Report 2023](#) and Lundberg Survey.

Adjacent to the Refinery is the Richmond Technology Center (RTC), a hub for Chevron's energy research and development, with a focus on both upstream and downstream technology services used by Chevron and many other companies around the world. RTC employs over 170 Ph.D. scientists and is responsible for filing approximately 125 patents annually. The most notable invention from RTC is Techron, a fuel additive that enhances engine performance, reduces emissions, and keeps engines clean.<sup>7</sup>

## 1.2 WEST CONTRA COSTA COUNTY OVERVIEW

Both facilities are located in Contra Costa County in California, where Chevron is featured among the top 20 largest employers (including other Chevron facilities in San Ramon).<sup>8</sup> Contra Costa County is highly diverse in terms of social and physical characteristics and is often divided into three relatively homogenous parts: West County, Central County, and East County. The Richmond facilities are located in the City of Richmond in West Contra Costa County, which we define as the area that stretches across 14 zip codes<sup>9</sup> and includes the cities of Richmond, San Pablo, and El Cerrito, as well as the unincorporated communities of North Richmond, El Sobrante, and Kensington.

The City of Richmond is the second largest city in Contra Costa County, with a population of approximately 110,000. Its major industries are education, health care, social services, professional, management and administrative services, and retail trade.<sup>10</sup> Chevron Richmond is the largest employer in the City of Richmond.<sup>11</sup> The company also invests in the community in a number of ways. Its approximately \$1 billion Modernization Project made the Refinery newer, safer, and cleaner, with an approximate 36 percent reduction in particulate matter emissions since 2018.<sup>12,13</sup> Additionally, Chevron and its employees regularly donate to West Contra Costa charities and non-profit organizations.

In this report, commissioned by Chevron, Oxford Economics calculates the full economic impact of Chevron's Richmond facilities on the economy of West Contra Costa County in terms of GDP, employment, wages, and tax revenues supported. The reference year throughout this study is 2022—the most recent available year of data at the time of writing. The full economic impact, presented in Chapter 2, includes the sum of the activities taking place at Chevron's local facilities (the direct impact), the economic activity supported in their supply chain (the indirect impact), and activity supported by the spending of workers' wages (the induced impact). Chapter 3 of the report discusses the social impacts of Chevron's Richmond facilities.

---

<sup>7</sup> *Business & Industry Connection Magazine*, [Richmond Technology Center acts as a research home for Chevron](#), June 2015.

<sup>8</sup> Contra Costa Conservation & Development, [Largest employers](#), 2021–2022.

<sup>9</sup> West Contra Costa County is defined by the following zip codes: 94801, 94802, 94803, 94804, 94805, 94806, 94807, 94808, 94820, 94850, 94706, 94707, 94708, 94530.

<sup>10</sup> City of Richmond Community Development Department, [City Facts](#), 2024.

<sup>11</sup> Ibid.

<sup>12</sup> Chevron Richmond, [Refinery Modernization](#).

<sup>13</sup> Chevron Richmond, [Community Report 2023](#).



## ECONOMIC IMPACT MODELING

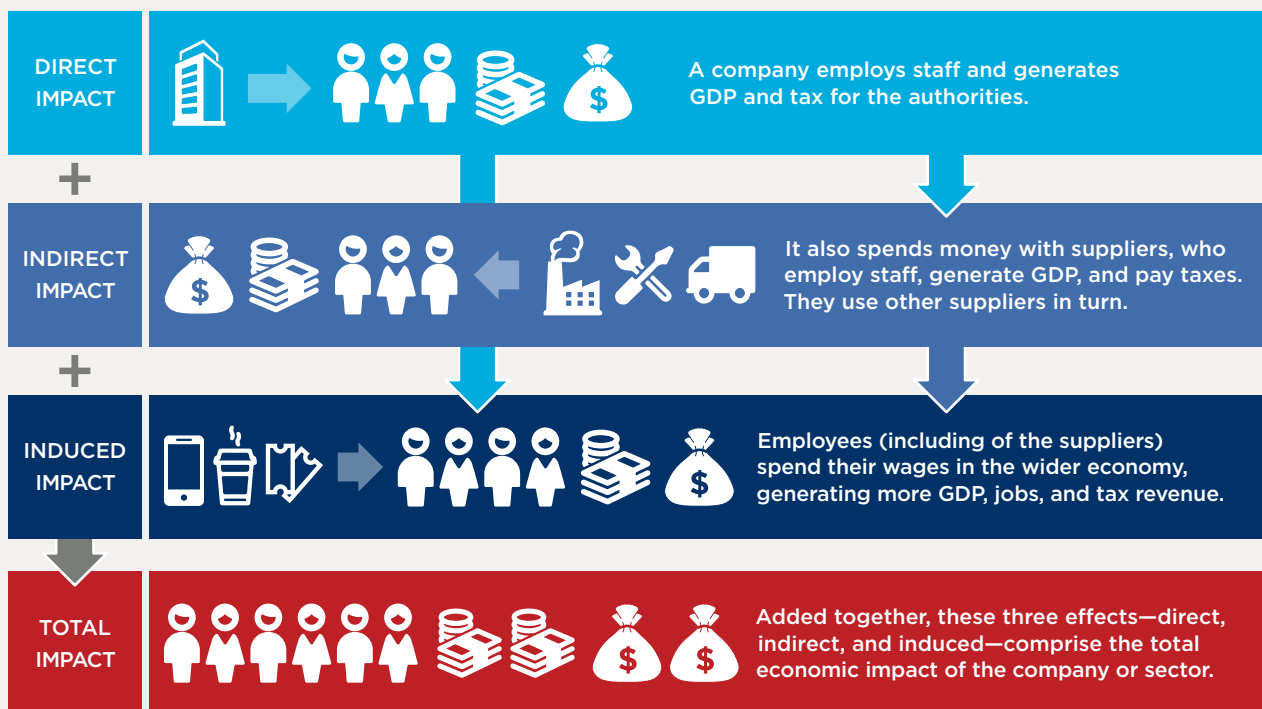
Economic impact modeling is a standard tool used to quantify the economic contribution of a company or an industry in a region. Impact analysis traces the economic contribution of a company through three separate channels:

- **Direct impacts** refer to activity conducted directly by Chevron's Richmond facilities in West Contra Costa County.
- **Indirect impacts** consist of activity that is supported as a result of the purchase of local goods and services by Chevron, purchases by those companies in turn, and so on.
- **Induced impacts** reflect activity supported by the spending of wage income by direct and indirect employees.

The model captures the inter-industry relationships, consumer spending, and ripple effects that result from the company's economic activity in West Contra Costa County. The economic impact is measured in terms of:

- **GVA:** value-added economic activity.
- **Employment:** total jobs, measured on a headcount basis.
- **Labor income:** total compensation (including benefits for these workers).
- **Taxes:** total taxes generated by direct, indirect, and induced economic activity.

**Fig. 1.** Channels of economic impact



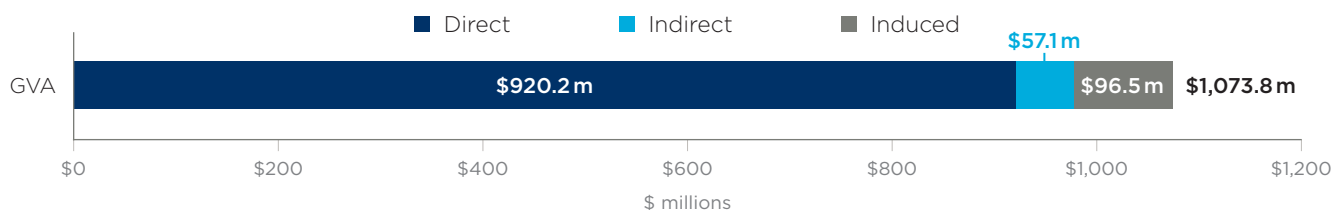
## 2. CHEVRON'S ECONOMIC IMPACT IN WEST CONTRA COSTA COUNTY



### 2.1 CHEVRON'S ECONOMIC IMPACT ON THE WEST CONTRA COSTA COUNTY ECONOMY

In 2022, across all three channels of impact (direct, indirect, and induced), Chevron's Richmond facilities contributed \$1.1 billion (Fig. 2) in gross value-added to West Contra Costa County's economy, which was equal to approximately 5 percent of all value-added contributions in the region.

**Fig. 2. Chevron's total GVA impact in West Contra Costa County, 2022**

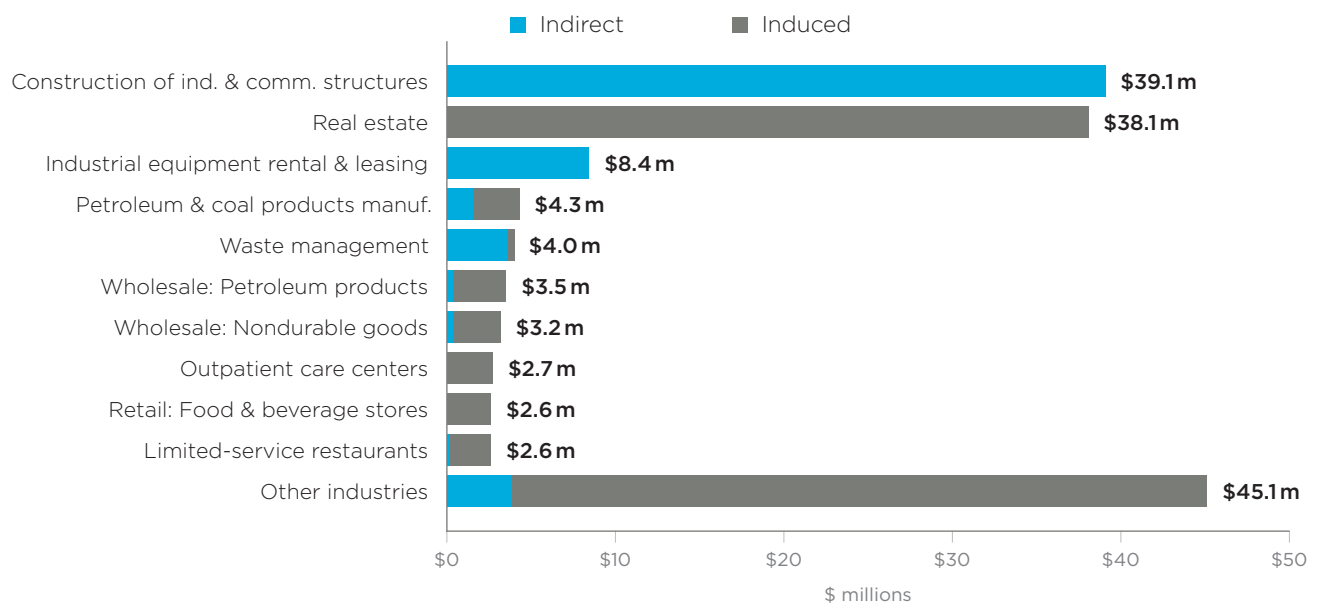


Source: Chevron, Oxford Economics, IMPLAN

The direct GVA impact accounted for \$920.2 million, or about 86 percent of the total. This number represented the economic activity of Chevron's Richmond facilities. The indirect channel added \$57.1 million in gross value-added, or 5 percent of the total GVA impact, representing spending along Chevron's supply chain. This resulted from the \$100.0 million spent with some 180 local suppliers during 2022. The induced impact amounted to \$96.5 million, or 9 percent of the total value-added contribution. This number reflects wage spending of Chevron's employees and supply chain employees.

Chevron's operations in West Contra Costa County benefitted multiple industries in the region. Construction of new industrial and commercial structures accounted for 25.4 percent of the total indirect and induced GVA contribution (Fig. 3). This was a result of expenditure at Chevron's Refinery, which devoted the majority of its local spending to construction (indirect channel). Real estate was in second place, with 24.8 percent of the indirect and induced GVA fueled by household spending (induced channel).<sup>14</sup> The industrial equipment rental and leasing industry got 5.5 percent of the indirect and induced GVA, supported by Chevron's substantial local spending with the industry (over 11 percent of the Refinery's direct local spending). Other significantly impacted industries were petroleum & coal products manufacturing, waste management, wholesale trade, outpatient care centers, food stores, and restaurants.

**Fig. 3. Chevron's indirect and induced GVA impact by industry, 2022**



Source: Chevron, Oxford Economics, IMPLAN

Also included in Chevron's overall economic impact on West Contra Costa County is their substantial tax contributions to local and county governments. These taxes include property tax (which support public schools), utility users tax, business license tax, and sales tax.

<sup>14</sup> This includes impacts stemming from both owner-occupied dwellings and tenant-occupied housing.



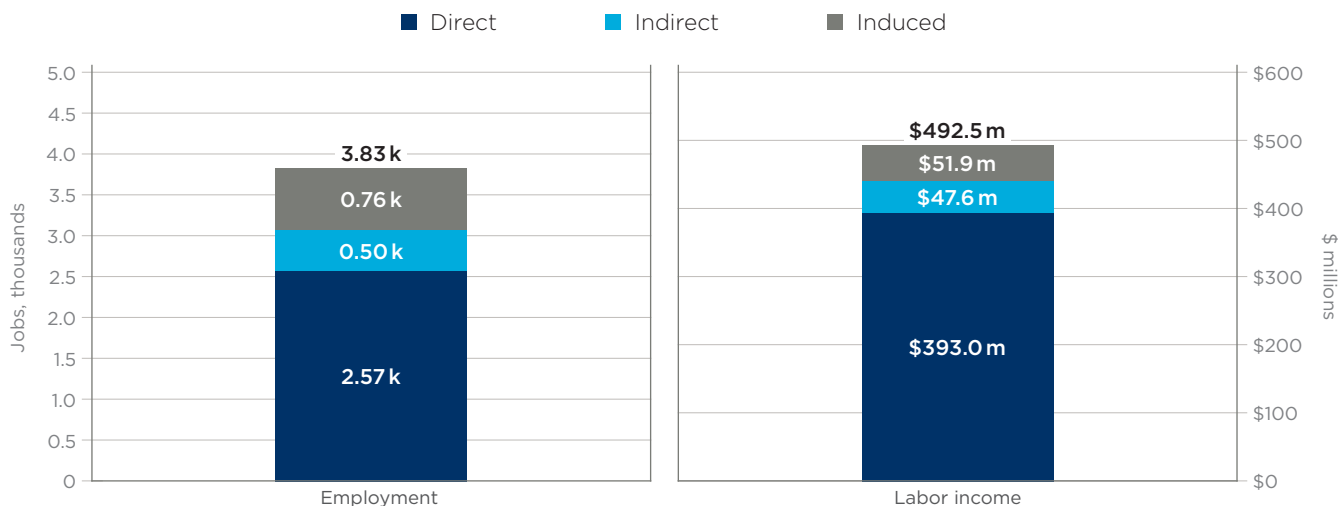
## 2.2 CHEVRON'S IMPACT ON JOBS AND WAGES

In 2022, Chevron employed 2,570 workers at its Richmond locations (Fig. 4). The Refinery employed approximately 70 percent of this workforce and Richmond Technology Center the remaining 30 percent.

The company also supported an estimated 500 local jobs through its procurement spending with local vendors (indirect impact) and 760 jobs through its employees' wage spending (induced channel).

The total employment impact, combining direct, indirect, and induced channels, was 3,830 jobs, or about one in every 29 jobs in West Contra Costa County. These workers received about \$492.5 million in labor income in total.

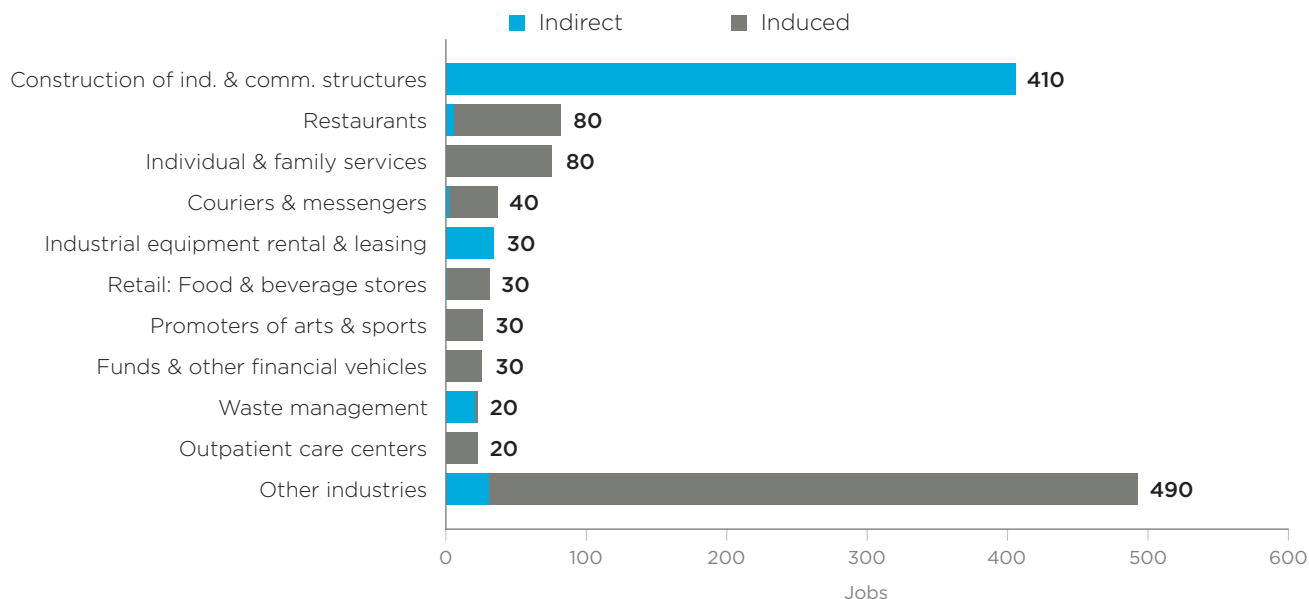
**Fig. 4. Chevron's total impact on jobs and wages in West Contra Costa County, 2022<sup>15</sup>**



Source: Chevron, Oxford Economics, IMPLAN

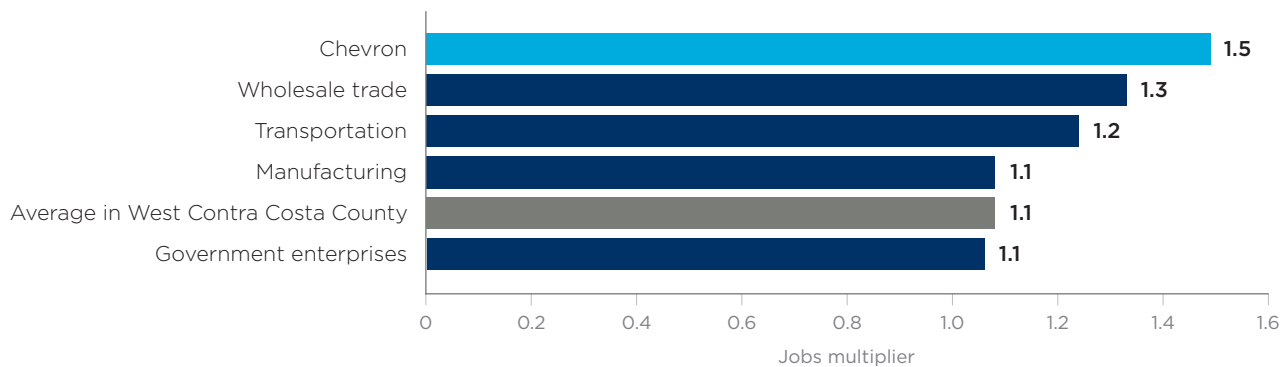
Looking at the breakdown of indirect and induced employment by industry sector, the greatest impact was on the construction of new industrial and commercial structures (32.2 percent of indirect and induced jobs), once again stimulated by the Refinery's substantial spending with local construction companies. This was followed by the restaurant industry with 6.5 percent of indirect and induced jobs, and the individual and family services industry (e.g., community centers, senior citizens centers) with 6.0 percent of jobs, both primarily induced impacts, meaning they are supported by household spending (Fig. 5).

<sup>15</sup> Numbers may not sum due to rounding.

**Fig. 5. Chevron's indirect and induced impact on jobs by industry, 2022**

Source: Chevron, Oxford Economics, IMPLAN

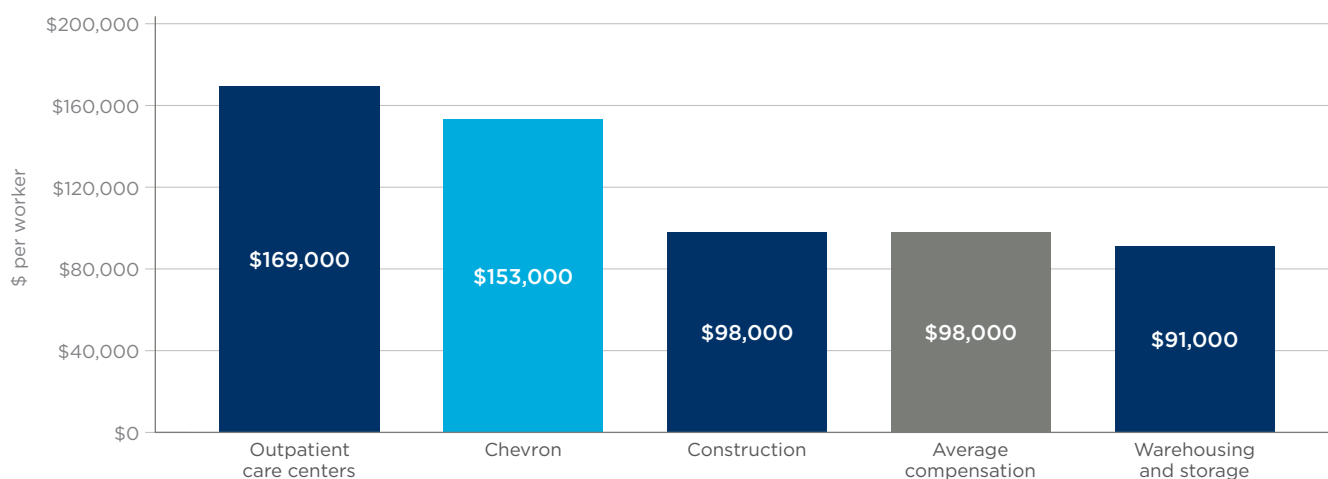
Chevron's Richmond facilities had a jobs multiplier of 1.5 (Fig. 6), one of the highest in the region. This meant that every 10 Chevron jobs supported five jobs in other industries across the wider local economy. This put Chevron ahead of many other industries in West Contra Costa County, such as wholesale trade, transportation, manufacturing, and government enterprises (e.g., postal office, electric utilities).

**Fig. 6. Jobs multiplier in select industries in West Contra Costa County, 2022**

Source: Oxford Economics, IMPLAN

Chevron's 2,570 Richmond-based employees each produced an average of \$357,000 in direct GVA in 2022.<sup>16</sup> This is a measure of productivity, which demonstrates how much value added the average Chevron employee produces. By this measure, Chevron's workers were 86 percent more productive than the average worker in the region. The company's Richmond-based workers had an average compensation of \$153,000, which was 56 percent higher than the average compensation in the region (\$98,000). Fig. 7 compares Chevron's average compensation to the average compensation in selected industries with some of the highest employment in West Contra Costa County.

**Fig. 7. Comparison of average labor income by industry in West Contra Costa County, 2022**



Source: Chevron, Oxford Economics, IMPLAN



<sup>16</sup> We measure labor productivity as value added per worker or net output per worker (net output is calculated as output minus intermediate inputs).

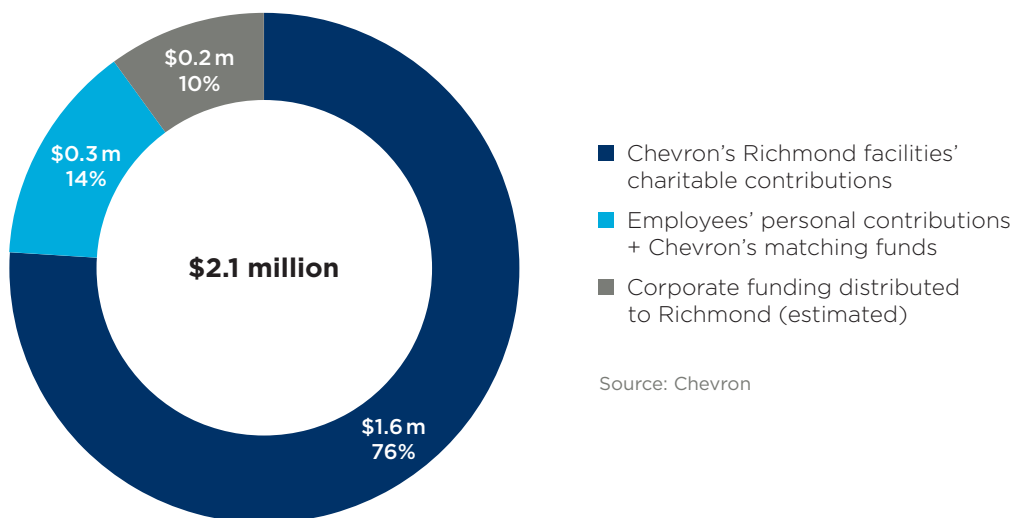


## 3. CHEVRON'S SOCIAL IMPACT IN WEST CONTRA COSTA COUNTY

### 3.1 CHEVRON'S SOCIAL INVESTMENT

Chevron supports a host of local charities and non-profit organizations through its social investment programs. In 2022, Chevron and its employees donated a total of \$2.1 million to over 70 different charities and non-profit organizations benefitting the West Contra Costa community (Fig. 8). This included \$1.6 million given by the company's Richmond facilities to charitable and non-profit organizations operating in the region, an estimated \$0.2 million donated from corporate funding and distributed to Richmond organizations, and \$0.3 million donated through employees' personal contributions and Chevron's matching funds.

**Fig. 8. Chevron's charitable contributions by source, 2022**



Chevron also encourages its employees to serve the community by offering volunteer opportunities and grants correlating with volunteer hours. In 2022, Chevron's Richmond-based employees donated 4,100 hours through individual and team volunteering events, equivalent to another \$0.3 million in charitable contributions.

**4,100**

Volunteer hours donated by Chevron's  
Richmond-based employees, equivalent  
to \$0.3 million in charitable contributions



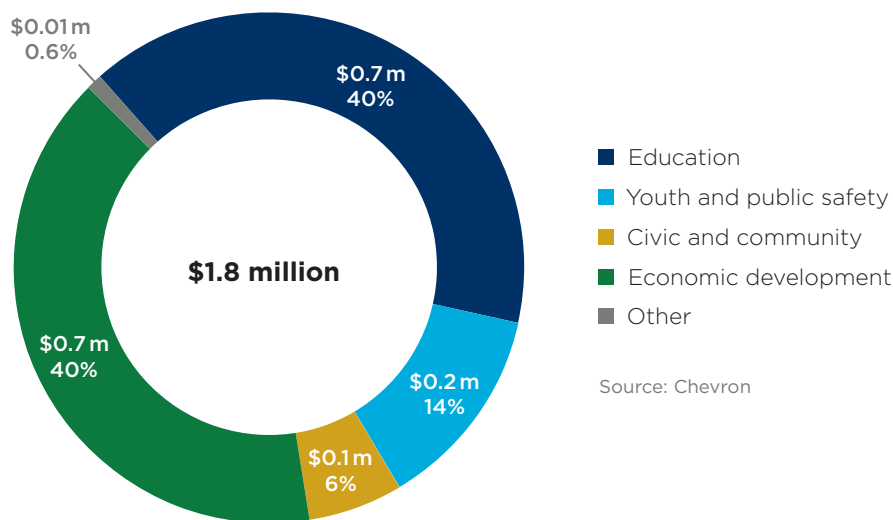
### 3.2 CAUSES SUPPORTED BY CHEVRON

A substantial portion of Chevron's charitable funds went towards educational causes (about \$0.7 million, or 40 percent of the total) supporting various initiatives offering scholarships and other services, such as student counseling (Fig. 9). Improving educational prospects for local children benefits individual families and communities as a whole. Better educational prospects support social mobility by enabling beneficiaries to obtain better jobs and earn higher incomes. Later, these individuals often choose to give back to the community by taking part in projects that help solve local problems and improve neighborhoods. An example of an education-focused charitable organization that benefitted from Chevron's donations was the West Contra Costa Public Education Fund, which has awarded \$1.6 million in scholarships to over 550 recipients over its 19 years of operation.<sup>17</sup>

<sup>17</sup> West Contra Costa Public Education Fund.

Project SEED was another beneficiary of Chevron's donations. The program provides STEM research and learning opportunities for high school students through internships at the Richmond Technology Center.<sup>18</sup>

**Fig. 9. Chevron's charitable contributions by cause, 2022<sup>19</sup>**



Another \$0.7 million, or 40 percent of the total donations, went to economic development causes. These included donations to entrepreneurship programs, job placement programs, and career fair sponsorships. An example of such a program was the West Contra Costa Business Development Center, a non-profit that supports entrepreneurship and small business by helping them to secure capital and by providing business support. Chevron and its employees also donated money and volunteer hours to help fight homelessness with Bay Area Rescue Mission, an established non-profit organization that has been helping the homeless with basic necessities since 1965.<sup>20</sup> Another example is the Latina Center, a community-based organization that supports leadership development and economic empowerment of Latinos and their families.<sup>21</sup>

<sup>18</sup> American Chemical Society, [Project SEED](#).

<sup>19</sup> This figure shows the breakout by cause of Chevron Richmond facilities charitable contributions and corporate funding distributed to Richmond (equivalent to the sum of the dark blue and grey sections of Fig. 8). Numbers may not sum due to rounding.

<sup>20</sup> [Bay Area Rescue Mission](#).

<sup>21</sup> [Latina Center](#).



Causes related to youth and public safety received another \$0.2 million, or about 14 percent of the total. These included Chevron's donations to non-profits and charitable organizations that help youth from underprivileged backgrounds receive the training and other support needed to achieve long-term success. For example, Chevron donated to the City of Richmond YouthWORKS program, which offers on-the-job training, apprenticeship training, life skills workshops, and other support services aimed at the young population aged 16–24, with the goal of equipping them with the skills and knowledge they need to succeed.<sup>22</sup> To help bring the community together, Chevron also donated to the Richmond Police Activities League, which offers various activities for local youth and works to build positive relationships between the police department and the community.<sup>23</sup>

Lastly, Chevron contributed 6 percent of its charitable funds (\$0.1 million) to civic and community causes to improve the quality of life in the community. This included support for community events, such as the annual Cinco De Mayo Festival, National Night Out, and the North Richmond Musical Festival. Chevron also supported Familias Unidas, a mental health and wellness organization for Latino and other communities.<sup>24</sup>



<sup>22</sup> City of Richmond, YouthWORKS.

<sup>23</sup> City of Richmond, RPAL.

<sup>24</sup> Familias Unidas.



### 3.3 ENVIRONMENTAL AND COMMUNITY INVESTMENT AGREEMENT

In 2014, the Richmond City Council approved an Environmental and Community Investment Agreement (ECIA) in parallel with the permitting of the Chevron Refinery Modernization Project. According to this agreement, Chevron agreed to pay the city \$80 million over 10 years to fund community-based greenhouse gas reduction programs and other community programs. In the two fiscal years (FY) spanning the scope of this report, the city distributed \$6.7 million in FY 2021-2022<sup>25</sup> and \$4.4 million in FY 2022-2023<sup>26</sup> to the community from this bucket of money.

Examples of programs supported by this funding include the Yellow Brick Road Iron Triangle Walkable Neighborhood Plan, which aims to create a safe, pleasant, and walkable network that connects key assets in the neighborhood, like elementary schools, parks, and transit stations, and Groundwork Richmond, an environmental and youth serving organization that aims to “Change Places & Lives” by planting trees and supporting Richmond residents to gain skills in green jobs.



<sup>25</sup> City of Richmond, FY 2021-2022 ECIA Annual Report.

<sup>26</sup> City of Richmond, FY 2022-2023 ECIA Annual Report.

## 4. APPENDIX: METHODOLOGY

### ECONOMIC IMPACT MODELING

Economic impact modeling is a standard tool used to quantify the economic contribution of an investment or a company. Impact analysis traces the economic contribution of an investment through three separate channels.

#### Direct impacts

Chevron provided data on its direct employment, total compensation, profits, and procurement spending. For the Refinery and business units embedded in the Refinery, the direct GVA was calculated as compensation of employees plus EBITDA, while for the Technology Center, the direct GVA was estimated by combining Chevron's employment data and the ratio of GVA per worker derived from IMPLAN for the scientific development and research services industry.

#### Indirect and induced impacts

Indirect and induced impacts for West Contra Costa County are estimated using IMPLAN economic impact software, an integrated input-output modeling platform based on BEA and other data sources. An input-output model gives a snapshot of an economy at any point in time. The inputs for the analysis included Chevron's procurement data and employee compensation statistics.



OXFORD  
ECONOMICS

**Global headquarters**

Oxford Economics Ltd  
Abbey House  
121 St Aldates  
Oxford, OX1 1HB  
UK

**Tel:** +44 (0)1865 268900

**London**

4 Millbank  
London, SW1P 3JA  
UK

**Tel:** +44 (0)203 910 8000

**Frankfurt**

Marienstr. 15  
60329 Frankfurt am Main  
Germany

**Tel:** +49 69 96 758 658

**New York**

5 Hanover Square, 8th Floor  
New York, NY 10004  
USA

**Tel:** +1 (646) 786 1879

**Singapore**

6 Battery Road  
#38-05  
Singapore 049909

**Tel:** +65 6850 0110

**Europe, Middle East  
and Africa**

Oxford  
London  
Belfast  
Dublin  
Frankfurt  
Paris  
Milan  
Stockholm  
Cape Town  
Dubai

**Americas**

New York  
Philadelphia  
Boston  
Chicago  
Los Angeles  
Toronto  
Mexico City

**Asia Pacific**

Singapore  
Hong Kong  
Tokyo  
Sydney

**Email:**

[mailbox@oxfordeconomics.com](mailto:mailbox@oxfordeconomics.com)

**Website:**

[www.oxfordeconomics.com](http://www.oxfordeconomics.com)

**Further contact details:**

[www.oxfordeconomics.com/  
about-us/worldwide-offices](http://www.oxfordeconomics.com/about-us/worldwide-offices)