Moreno Valley Logistics Center Economic and Fiscal Impact Report

June 2016

ANDREW CHANG & CO, LLC

1107 9th Street, Suite 501, Sacramento ■ CA 95814 ■ 916-538-6091

About Andrew Chang & Company, LLC:

The professionals at Andrew Chang & Company work with our clients to achieve tangible results by combining our best-in-class research and analyses with unique insights into public policy and business and government strategy and operations. Using advanced economic, statistical and business administration techniques, we provide strategy and operations consulting to Fortune 1000 firms and provide policy, economic, fiscal and operations consulting for public sector agencies and non-profit organizations to improve operations.

Moreno Valley Logistics Center Economic and Fiscal Impact Report
(Table of Contents)

Moreno Valley Logistics Center Economic and Fiscal Impact Report
(Key Findings)

- Construction of the proposed Logistics Center is estimated to cost $50.6 – $54.6 million, with an additional $6.8 – $7.5 million in tenant improvements in the first three years of operations.
- Total operations revenue generated from the Center over ten years is projected to be $915 million – $1.1 billion.
- Combined with construction and tenant improvement costs, the Project could generate $970 million – $1.14 billion in direct spend.
- Net fiscal revenue for the City of Moreno is estimated to be up to $830,000 – $960,000 by 2020 annually with an 11-year cumulative total of $8.0 – $9.2 million.
- General Fund revenue is generated from eight impacted tax categories with a total amount of roughly $9.2 – $10.1 million in new tax revenues.
- General Fund expenditures are generated through three recurring costs with a total of $920,000 – $1.6 million.
- Center operations is estimated to create and sustain 340 – 620 new direct and indirect jobs in the City of Moreno Valley.
- The Center is projected to create a cumulative total of $238 – $288 million in new household earnings over 11 years, an average increase of $21.6 – $26.2 million annually.
- The Center is projected to create a cumulative total of $1.1 – $1.2 billion in increased economic output for the City over 11 years, an average increase of $92.6 – $110.3 million annually.

1. Introduction

The City of Moreno Valley is located in the northwest portion of Riverside County, California. Prologis, an international developer and manager of logistics and distribution facilities, has submitted its application to the City to develop a logistics complex totaling 1.7 million square feet on approximately 90 acres of currently undeveloped land. The complex consists of four buildings and would be utilized for warehousing and logistics and potentially light manufacturing.

In order to inform the discussion regarding the development, Prologis has retained Andrew Chang & Company, LLC to conduct an economic and fiscal impact analysis of the proposed development on the City. This study analyzes the one-time impact on the City resulting from the construction of the development, the ongoing impact on the City as a result of facility operations on the City's General Fund budget, and also characterizes the general economic impacts on the City in terms of employment, household earnings, and economic output creation for City residents and workers. Key questions addressed include the following:

- What is the impact on City General Fund revenues on a one-time and ongoing basis?
- What is the impact on City General Fund expenditures on an ongoing basis?
- What is the net fiscal General Fund impact on a one-time and ongoing basis?
- What are the direct and indirect impacts (multiplier effect) of the initiative on employment in the local area on a one-time and ongoing basis?
- What are the direct and indirect impacts (multiplier effects) of the initiative on regional economic output on a one-time and ongoing basis?
- What are the direct and indirect impacts (multiplier effects) of the initiative on regional personal earnings on a one-time and ongoing basis?

It should be noted that there may be other impacts, such as the effects on adjacent property values that were not assessed within the scope of this study due to the high degree of uncertainty. Depending on how the property will ultimately be used and how the market reacts, property values could marginally increase, decrease, or remain unaffected.

In conducting this analysis, the study team has applied generally accepted principles of public policy analysis, finances, economics, and mathematics. In addition to reporting findings, this study documents the approach, data sources, and assumptions for our assessment.

2. Background

Current & Proposed Land Use

The site for the proposed Prologis Logistics Center is an 89.4 acre property that is currently empty of other buildings or permanent structures/facilities. The terrain is flat and dirt-covered with elevations ranging from approximately 1,497 feet above mean sea level (AMSL) at its northern boundary to approximately 1,468 AMSL at the southeast corner of the property. An ephemeral stream bed transected the Project site from the northwest corner to the southeast until it was channelized as part of the man-made Perris Valley Storm Drain Channel (PVSD), a concrete lined drain channel that bisects the land. See Figure 2.1 below for an aerial photo.

Figure 2.1

Current Land Use

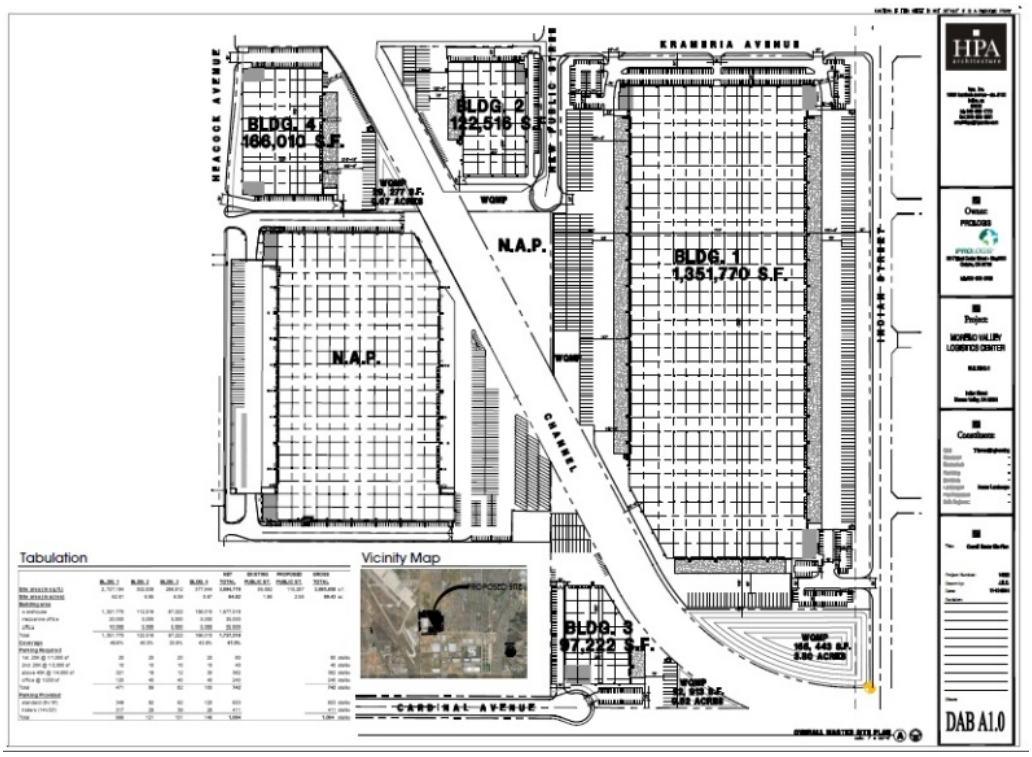
Prologis proposes to construct a Logistics Center made up of four buildings totaling 1,736,180 square feet with the following break down between the four buildings:

- Building 1 – 1,351,753 square feet;
- Building 2 – 122,275 square feet;
- Building 3 – 97,222 square feet; and
- Building 4 – 164,920 square feet.

Building 1, the main anchor of the Project, is specifically designated for high-cube warehousing operations. Buildings 2-4 have yet to be specifically designated an industry type but it is expected they will be used for manufacturing, warehousing, or similar operations. The lot for Building 2 may be used for trailer parking and storage rather than being built out. Of the 1,736,180 square foot Project total, a maximum of 174,000 square feet will be designated for cold storage. See Figure 2.2 below for a diagram of the proposed land use.

Figure 2.2

Proposed Land Use



Study Scope & Approach

The purpose of this study is to ascertain the economic and fiscal impact of the proposed Logistics Center. Specifically this report seeks to answer the following questions:

- What is the impact to the City's General Fund?
  - What are the one-time and ongoing impacts to the City's General Fund revenues?
  - What are the one-time and ongoing impacts to the City's General Fund expenditures?
  - What is the net gain/loss to the City from the Project?
- What is the one-time and ongoing effect of the Project on job creation within the City?
- What is the one-time and ongoing impact of the project on economic output within the City?
- What is the one-time and ongoing effect of the Project on household earnings within the City?

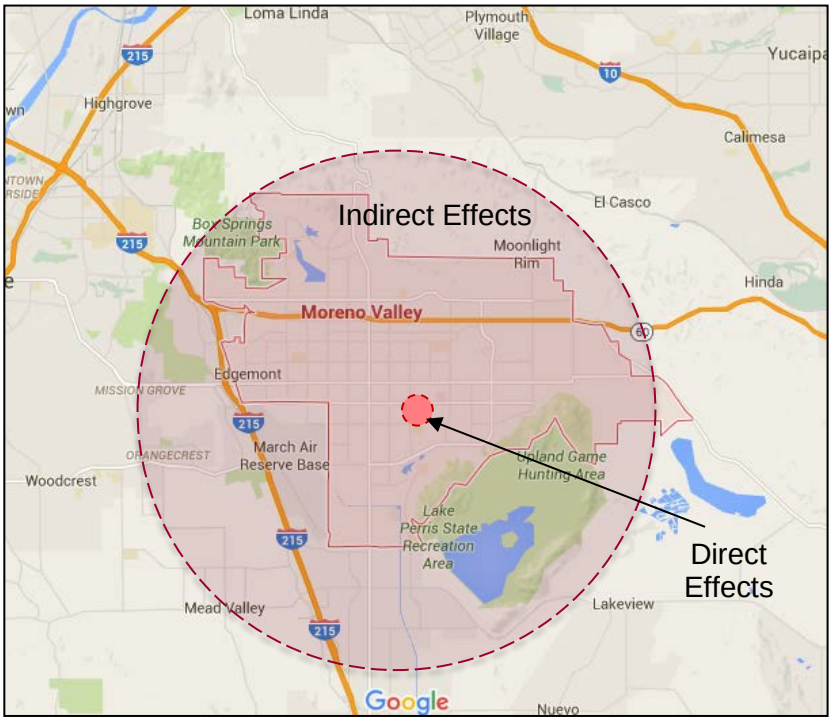
In addressing these questions the study approach relies on generally accepted principles of public policy analysis, finances, economics, and mathematics to construct cash-flow/direct spend and economic models specific to the project. The models rely upon information provided by the applicant and publicly available sources. In the instance where data and/or necessary information was unavailable, assumptions were made according to industry standards and are well documented within the body and Appendixes this report.

The direct and indirect impact of the construction and the business operations on the site are measured to account for the holistic impact of the project development and business operations on the site. The term "Direct Effect" represents the economic effect produced by the

infusion of new monies into the local economy from construction and operation spend. The term "Indirect Effect" represents the economic effects of local inter-industry spending for goods and services to support construction and operations of the facilities. Both the direct and indirect impacts for each measured impact are summed to provide the "Total Impact" on the City of Moreno Valley. See Figure 2.3 below for a graphical representation of these discussed differences.

Figure 2.3

Direct & Indirect Effects



3. Scenario Analysis

Two scenarios for potential building usage were developed to best represent the uncertainty regarding the industry type yet to be designated for Buildings 2-4. The two scenarios are designed to encapsulate the full-range of potential economic and fiscal impacts and are listed below in Table 3.1.

Table 3.1

Scenario Analysis

Mix Manufacturing	Industry Type	Revenue / sq. ft.
Building 1	Warehousing	$89.49
Building 2	Trailer Storage	$1.20
Building 3	Manufacturing	$38.19
Building 4	Manufacturing	$38.19

Warehousing	Industry Type	Revenue / sq. ft.
Building 1	Warehousing	$89.49
Building 2	Warehousing	$89.49
Building 3	Warehousing	$89.49
Building 4	Warehousing	$89.49

In each scenario Building 1 is classified as warehousing as it is the only building with a decided designation. In the Mix Manufacturing scenario the plot for Building 2 is used only for trailer storage and Buildings 3 and 4 are purposed for manufacturing with an expected $38.19 operating revenue per square foot. In the Warehousing scenario all four buildings are purposed for warehousing with an expected $89.49 operating revenue per square foot. See Appendix A – Direct Spend Methodology for details as to how the expected revenues per square foot for each industry were calculated. This approach effectively represents the respective low and high range of possible Project utilization.

The Mix Manufacturing scenario for construction differs from the Warehousing scenario as it does not include the cost of constructing Building 2 but only the cost for pavement.

4. Construction & Project Operations Phasing

Construction of the Project is expected to be completed in one year for an estimated total of $50.6 –$54.6 million in construction (as provided by the applicant with the variance dependent on whether the plot for Building 2 is developed or utilized as trailer storage). Construction will include the four buildings within the Project as well as work on five streets as listed below in Table 4.1. Of the construction spend, 40% ($20.3 – $21.8 million) is assumed to be for materials per industry standards.[1] [2]

Table 4.1

Construction Cost Estimates

Project Component	Mix Manufacturing Estimate	Warehousing Estimate
Building 1	$32.0 million	$32.0 million
Building 2	$800,000	$4.7 million
Building 3	$4.1 million	$4.1 million
Building 4	$5.6 million	$5.6 million
Indian Street	$3.4 million	$3.4 million
Krameria Avenue	$1.0 million	$1.0 million
Private Street	$0.7 million	$0.7 million
Heacock Street	$2.1 million	$2.1 million
Mariposa Avenue	$1.0 million	$1.0 million
Total	**$50.6 million**	**$54.6 million**
Materials Total	**$20.3 million**	**$21.8 million**

After construction it is estimated that building tenants will spend an additional $6.8 – $7.5 million in building improvements to suit tenant needs. This study assumes a three-year phasing

[1] Construction Labor Market Analyzer, "CLMA Project Labor Cost Allocation," (2016), accessed May 11, 2016, http://myclma.com/wp-content/uploads/2015/02/CLMA-Allocation-of-Project-Cost-2014Oct27.pdf.

[2] George Hedley, "Construction Labor Costs – 5 Percent Factor," Construction Business Owner, accessed May 11, 2016, http://www.constructionbusinessowner.com/topics/accounting/accounting-finance/construction-labor-costs-5-percent-factor.

period for Project operations and that tenant improvements will follow this timeline as shown below in Table 4.2.

Table 4.2

Tenant Improvements ($Thousands)

Mix Manufacturing Scenario				
Building	2018	2019	2020	Total
Building 1	$1,802.3	$1,802.3	$1,802.3	$5,407
Building 2	$0	$0	$0	$0
Building 3	$194.3	$194.3	$194.3	$583
Building 4	$275.0	$275.0	$275.0	$825
Total				$6,815

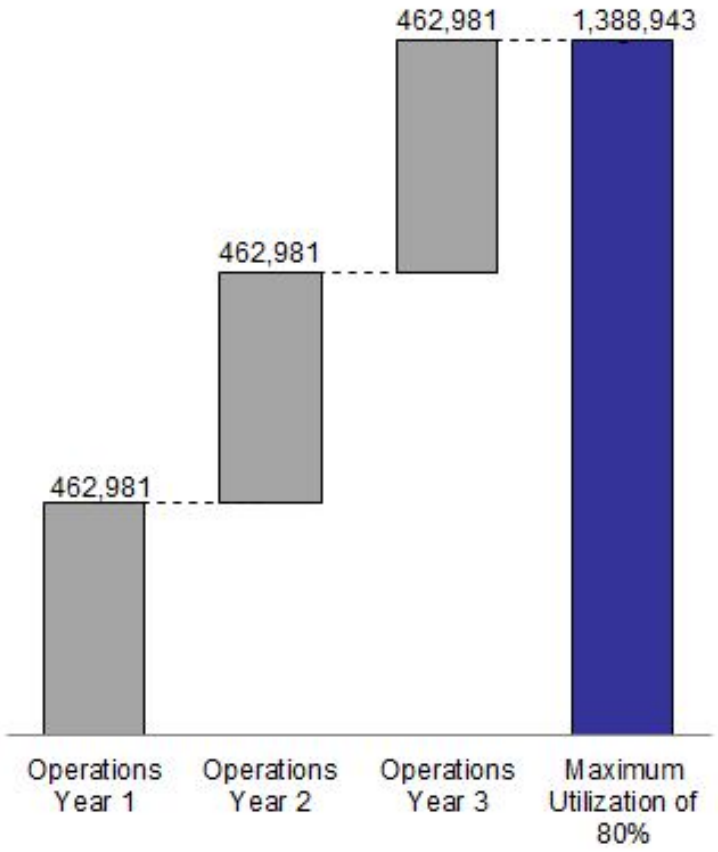
Warehousing Scenario				
Building	2018	2019	2020	Total
Building 1	$1,802.3	$1,802.3	$1,802.3	$5,407
Building 2	$244.7	$244.7	$244.7	$734
Building 3	$194.3	$194.3	$194.3	$583
Building 4	$275.0	$275.0	$275.0	$825
Total				$7,549

In addition to the three-year phasing period for Project operations to ramp up, this study also assumes that operations will reach a maximum utilization of 80% in order to preserve a conservative estimate. This is an especially conservative estimate as the total utilization rate for the area is roughly 95% currently.[3] Utilization is measured by the number of square feet activated as shown in Figure 4.1 below. As square footage activation increases in the initial three years of operations the economic and fiscal impact increase as well.

[3] CBRE, 2015 YTD is through the 2Q 2015.

Figure 4.1

Project Square Footage Activation



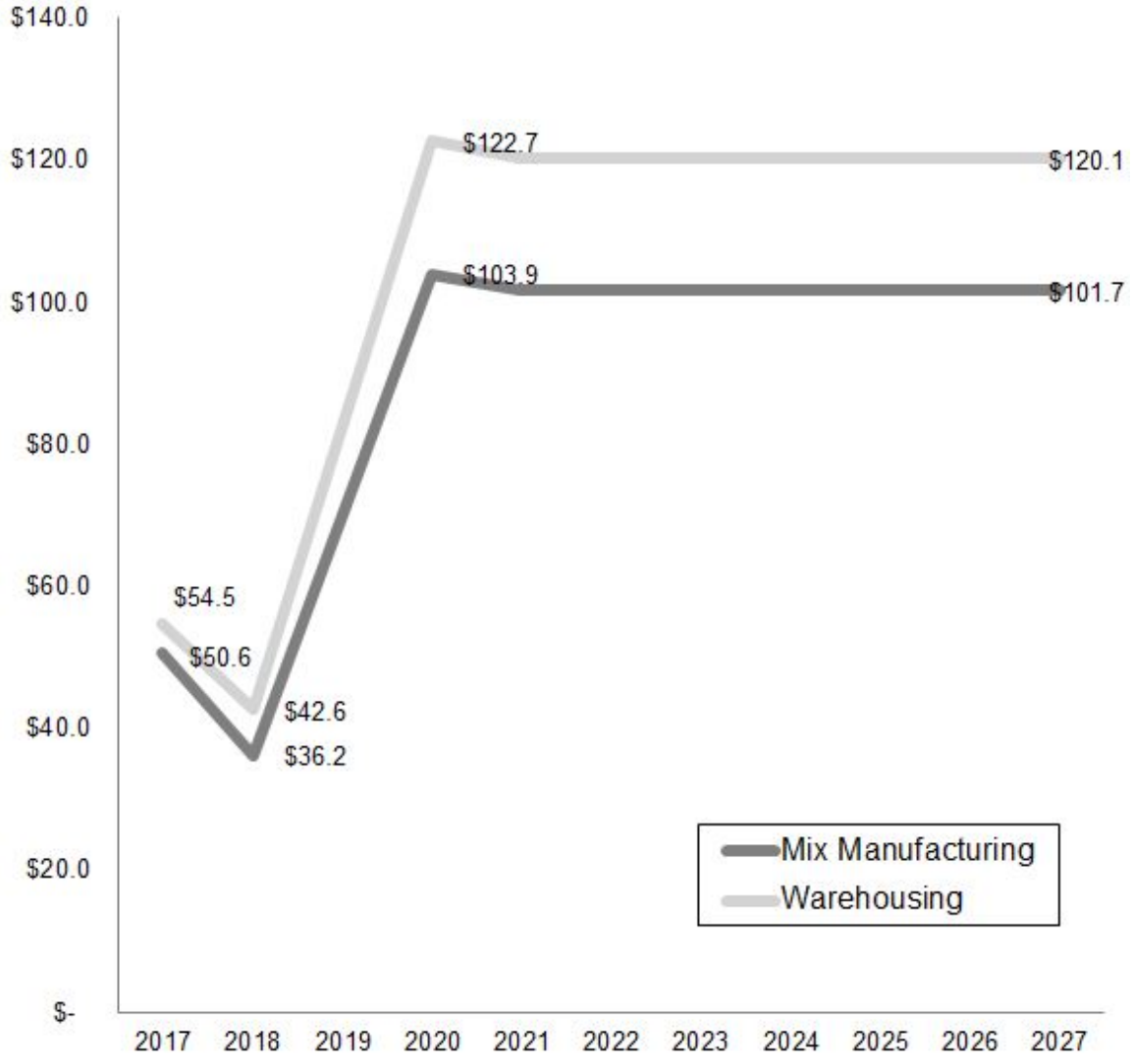
5. Direct Spend Analysis

Direct spend represents the influx of new cash as a result of the Project and is composed of three components as shown below in Figure 5.1 below:

- One-time construction spend in 2017;
- Three-year tenant improvement spend starting in 2018; and
- Center operations starting in 2018.

Figure 5.1

Direct Spend Analysis ($Millions)



The estimate for construction spend was provided by Prologis but varies due to change in cost for Building 2 and whether it will be used for trailer storage or for an additional building, which will be more expensive. As previously mentioned, in order to preserve a conservative estimate it is assumed that the maximum efficiency of the Project's operations will be no more than 80% and that it will have a three-year phasing period before achieving that level of efficiency. That phasing period is reflected in the high influx of direct spend seen in the graph from 2017 – 2020. The dip in direct spend in 2018 is due to the end of construction spend and early operations of the center. The second but smaller dip in 2021 is due to the end of tenant improvement spending but operations will have reached peak efficiency and maintain that level.

In total after ten years of operations it is expected the Logistics Center will generate between $915 million – $1.1 billion in revenue. Combined with the construction and tenant improvement spend, cumulative direct spend is projected to be $970 million – $1.14 billion. These direct spend levels have economic and fiscal impacts for the City of Moreno Valley as detailed in the following sections. For additional details regarding the direct spend analysis, see Appendix A – Direct Spend Methodology.

6. Tax Revenue Analysis

Net Fiscal Impact Analysis

The projected net fiscal impact to the City of Moreno Valley is estimated to be $830,000 - $960,000 by 2020 once operations have finished the initial three-year phasing period as show in Figures 6.1 and 6.2 below. At that time it is also expected that General Fund costs will level off. By 2027 net revenue is estimated to reach $850,000 - $980,000 due to the annual increase in property tax revenue. By that year, after the initial construction year and ten years of operations, the City stands to receive $8.0 - $9.2 million in total revenue.

In total the Mix Manufacturing scenario has higher costs and fewer revenues than the Warehousing scenario. This is due to the higher expected revenue per square foot for warehousing and the fact that warehousing is expected to hire fewer employees, which will produce fewer costs as will be discussed in the following sub-sections. For additional details regarding General Fund costs and revenues in each scenario see Appendix B – Tax Revenue Scope and Methodology and Appendix C – General Fund Cost Analysis Scope & Methodology.

Figure 6.1

Mix Manufacturing Scenario Net Fiscal Impact

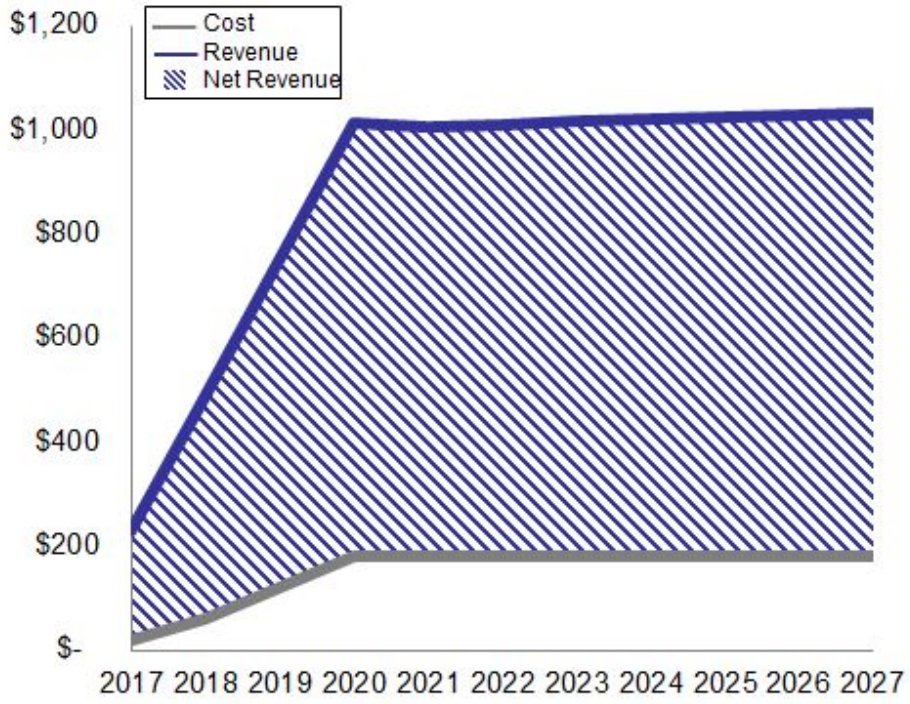
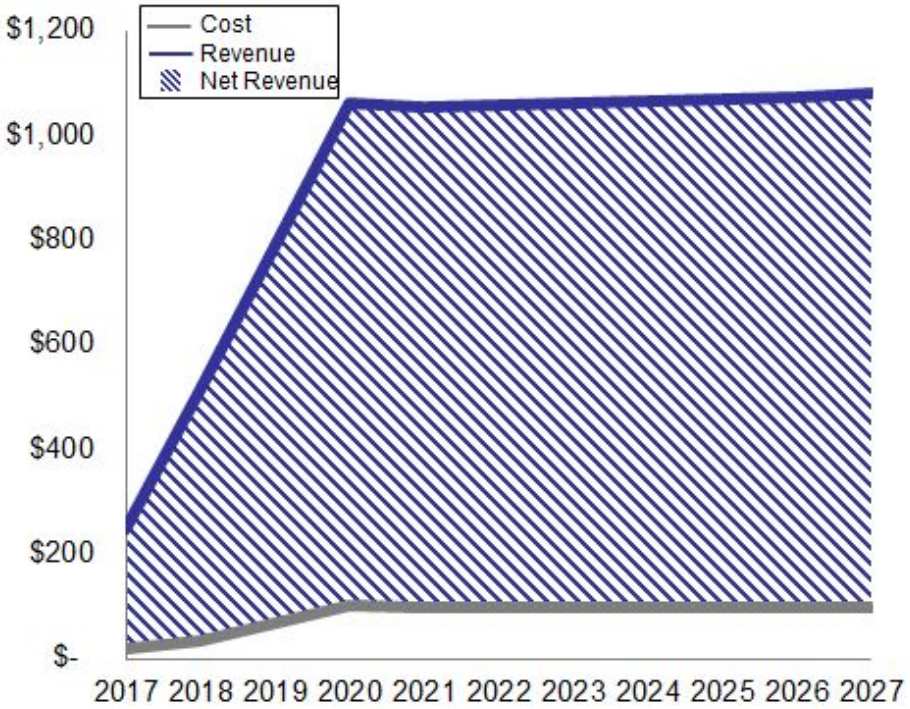


Figure 6.2

Warehousing Scenario Net Fiscal Impact



General Fund Revenue Analysis

This study reviewed the most recent Adopted Budget for the City of Moreno Valley and identified eight tax categories that will be impacted by the Prologis Logistics Center and provide General Fund revenue to the City as listed below (see Appendix B – Tax Revenue Scope & Methodology for additional details regarding the scope of expected tax revenue and its justification):

- One-time sales tax;
- On-going sales tax;
- Property tax;
- Property tax in-lieu;
- Utility tax;
- Franchise fee; and
- Business gross tax.

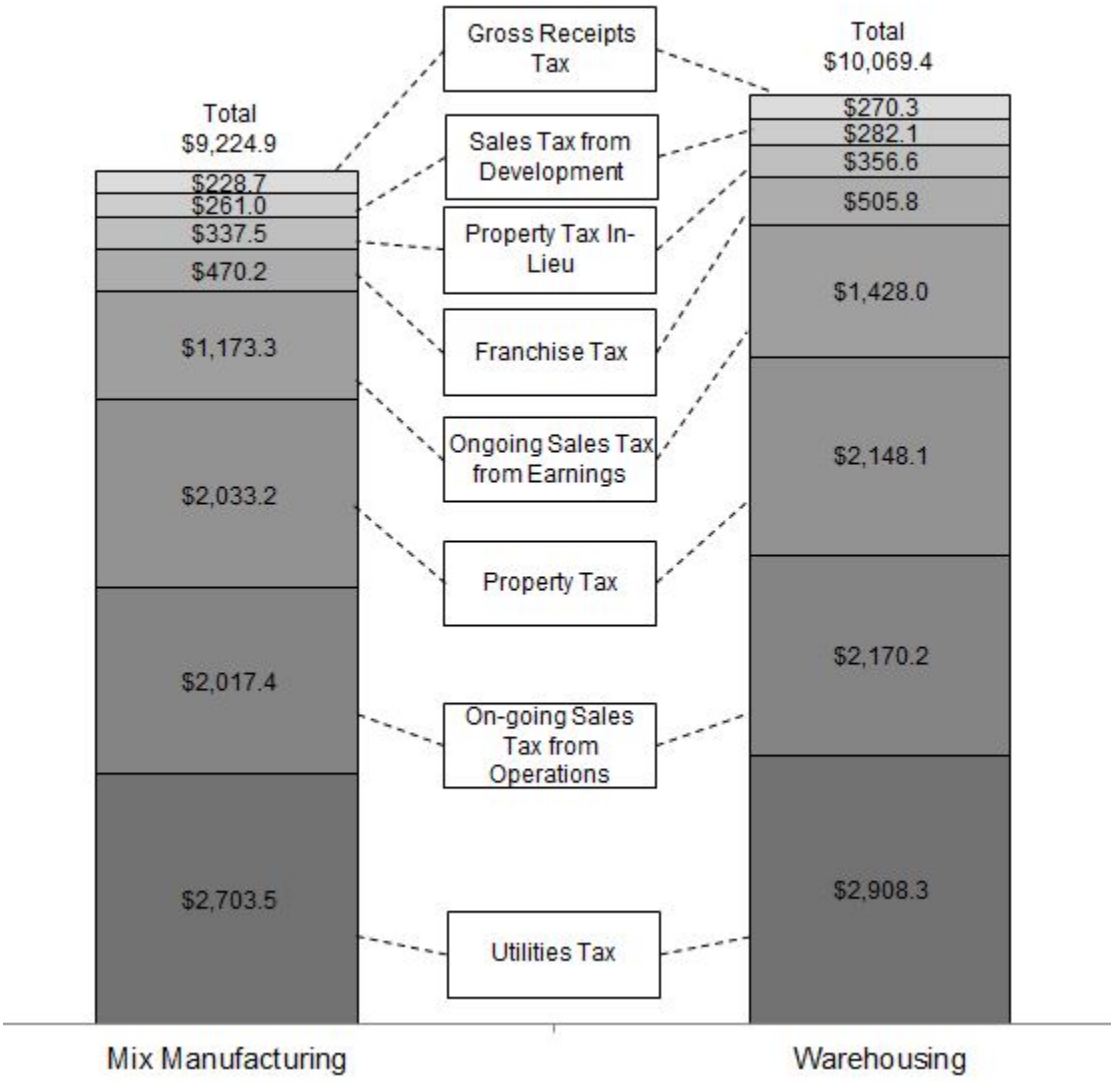
These taxes will produce a cumulative total of roughly $9.2 – $10.1 million in total tax revenue by 2027 for the City as shown in Figure 6.3 below. The largest portion of revenue is projected to come from utility tax (29%), on-going sales tax (22%), and property tax (21%) while the smallest three revenue sources only make up a rough cumulative 9% of the total.

Variance between the two scenarios is driven by the different uses for Buildings 2-4, most significantly whether or not the lot for Building 2 is developed into a warehouse or for trailer storage. On-going sales tax is only calculated for the supply spend of the Logistics Center. This is due to the fact that few goods in manufacturing and warehousing industries are taxable and so, in order to preserve a conservative estimate, this study assumes there will be no sales tax revenue on operations other than supply spend. All other impacted tax categories have little variance dependent on the different industries in each scenario. See Appendix B – Tax

Revenue Scope & Methodology for additional details regarding the approach to calculating each tax category total.

Figure 6.3

Cumulative Tax Revenue by Category – 2017-27 ($Thousands)



General Fund Expenditure Analysis

Cumulative costs to the General Fund resulting from the Logistics Center are estimated to be between $920,000 and $1.6 million by 2027. An analysis of the most recent Adopted Budget for the City of Moreno Valley identified three recurring expenditures potentially impacted by the Center as listed below (see Appendix C – General Fund Cost Analysis Scope & Methodology for additional details regarding the scope of expected expenditures and its justification):

- City Police services;
- Fire services; and
- Street-maintenance.

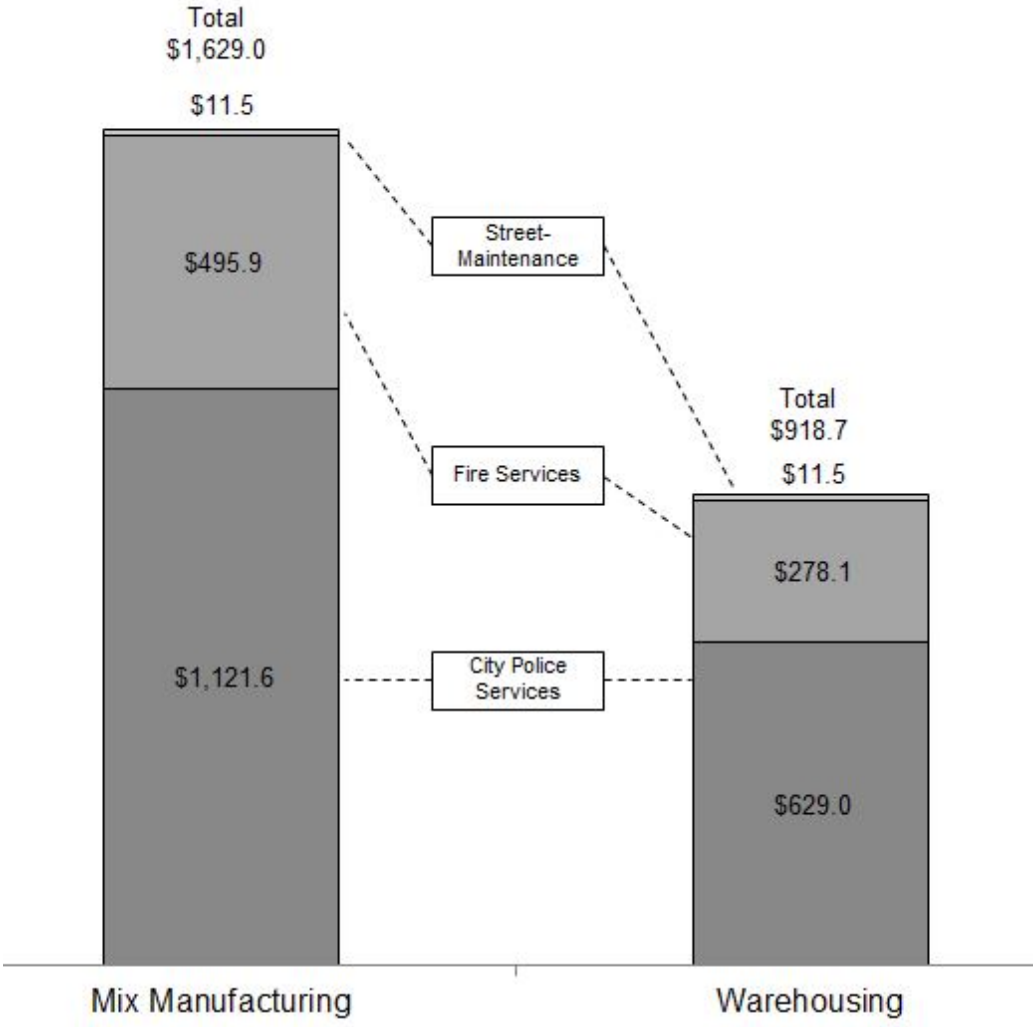
These costs were determined using a per capita multiplier method in the case of City Police and Fire services (where new employees are assumed to be a one for one added total capita) and a per lane mile multiplier method in the case of street-maintenance (see Appendix C – General Fund Cost Analysis Scope & Methodology for further details). As a result, the increased expected employment figures generated in the Mix Manufacturing scenario produce higher corresponding costs, and the Warehousing scenario, which is expected to generate fewer new jobs, produce lower costs (see the following section, Employment Analysis, for further detail regarding job creation).

City Police services make up roughly 68% of all identified costs while Fire Services make up the majority of the remainder and Street-Maintenance less than 1% in the Mix Manufacturing scenario and 1.2% in the Warehousing scenario as shown below in Figure 6.4.

Typically speaking these costs are paid for by the applicant through municipality development impact fees. However, in order to preserve a conservative estimate this approach assumes the cost will be absorbed by the City.

Figure 6.4

Cumulative General Fund Expenditures by Category – 2017-27 ($Thousands)

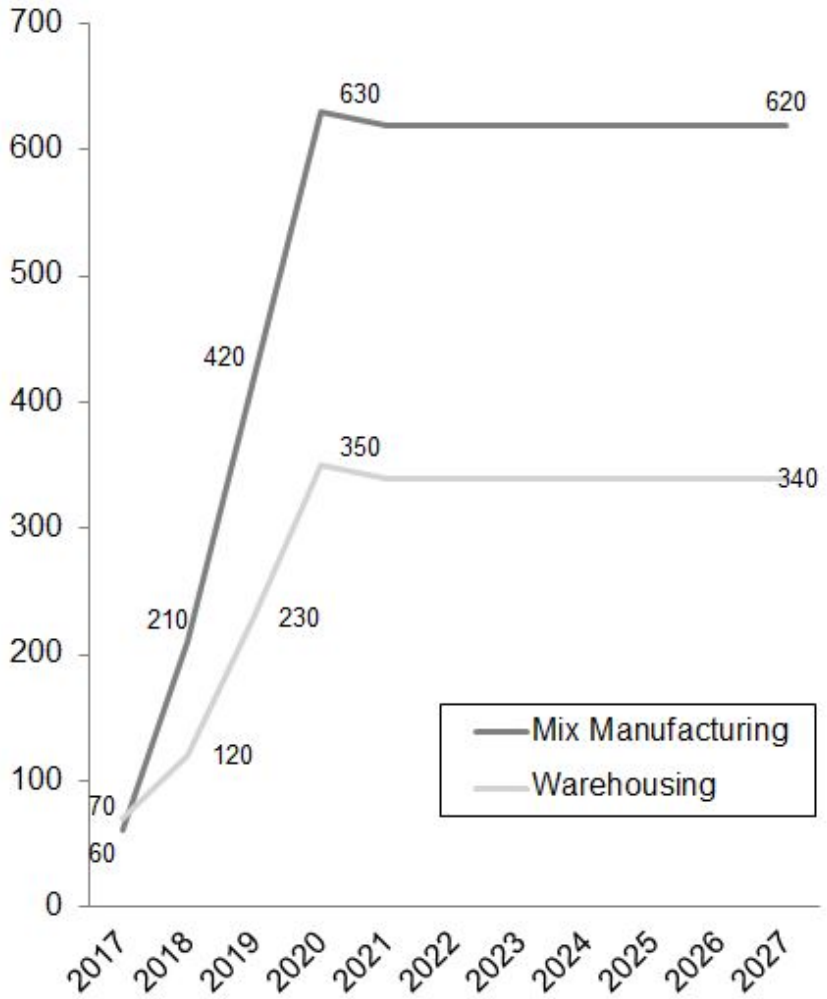


7. Employment Analysis

The proposed Logistics Center is projected to create between 340 – 620 ongoing jobs by 2020 once the Center has completed the assumed three-year phasing as shown below in Figure 7.1. The Mix Manufacturing scenario is expected to produce almost twice as many jobs as the Warehousing scenario despite the fewer number of operating buildings in the Mix Manufacturing scenario. This is due to the inherent higher demand for labor in manufacturing than in warehousing. See Appendix D – Employment Methodology for additional details.

Figure 7.1

Job Creation from Project Construction and Operations



Data from the California Employment Development Department's Labor Market Information Division[4] and housing information from the US Census[5] for the year 2014 provides a jobs-to-housing ratio for the City of Moreno Valley of 1.4518. Assuming this ratio remains consistent, by 2020 when job creation resulting from the Project levels off the jobs-to-housing ratio will grow to 1.4631 in the Mix Manufacturing scenario and 1.458 in the Warehousing scenario.

[4] Employment Development Department, Labor Market Information Division. "Monthly Labor Force Data for Cities and Census Designated Places (CDP)." (2014). Accessed May 6, 2016. http://www.labormarketinfo.edd.ca.gov.

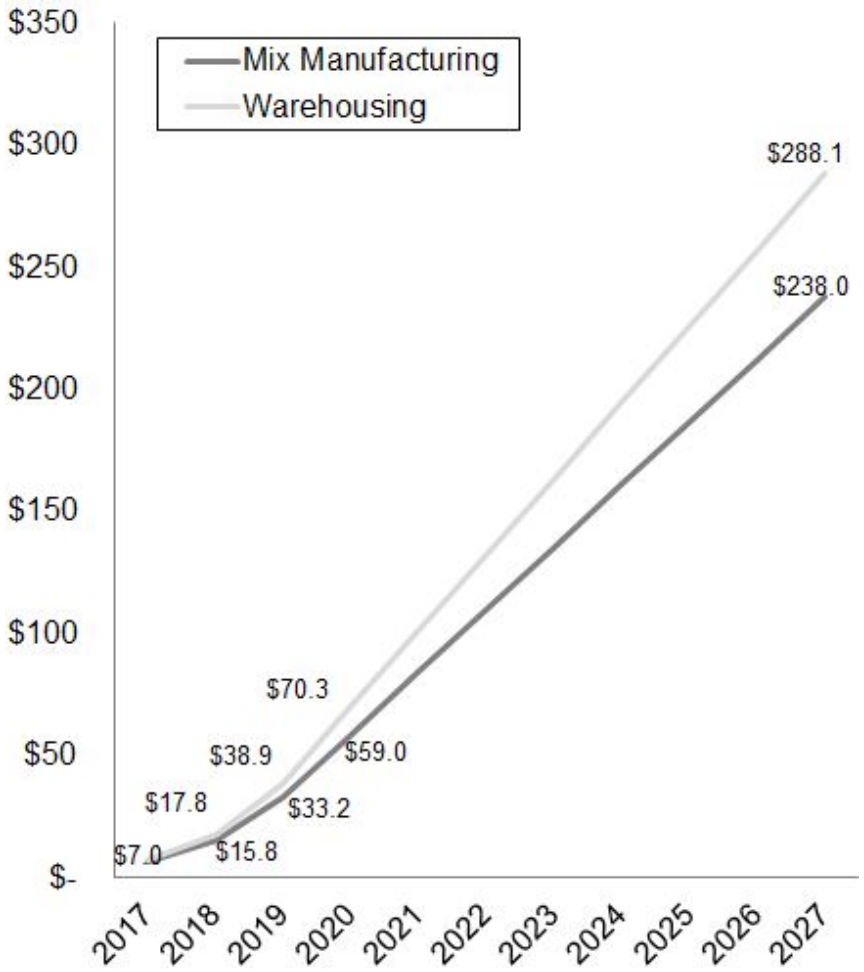
[5] US Census Bureau, Quick Facts, Riverside County, Moreno Valley City.

8. Earnings Analysis

Household earnings for City residents are estimated to increase by a cumulative total of $238 – $288 million by 2027 as a result of the Logistics Center as shown in Figure 8.1 below. Annual increases in household earnings vary from the initial low point in 2017 of roughly $7 million resulting from construction in each scenario to the sustained annual amount of $25.6 – $31.1 million in 2021. On average across the 11 years, City residents are projected to see an annual increase of $21.6 – $26.2 million in household earnings. See Appendix E – Earnings & Output Methodology for additional details regarding the approach utilized in this study.

Figure 8.1

Cumulative Increase in Household Earnings – 2017-27 ($Millions)

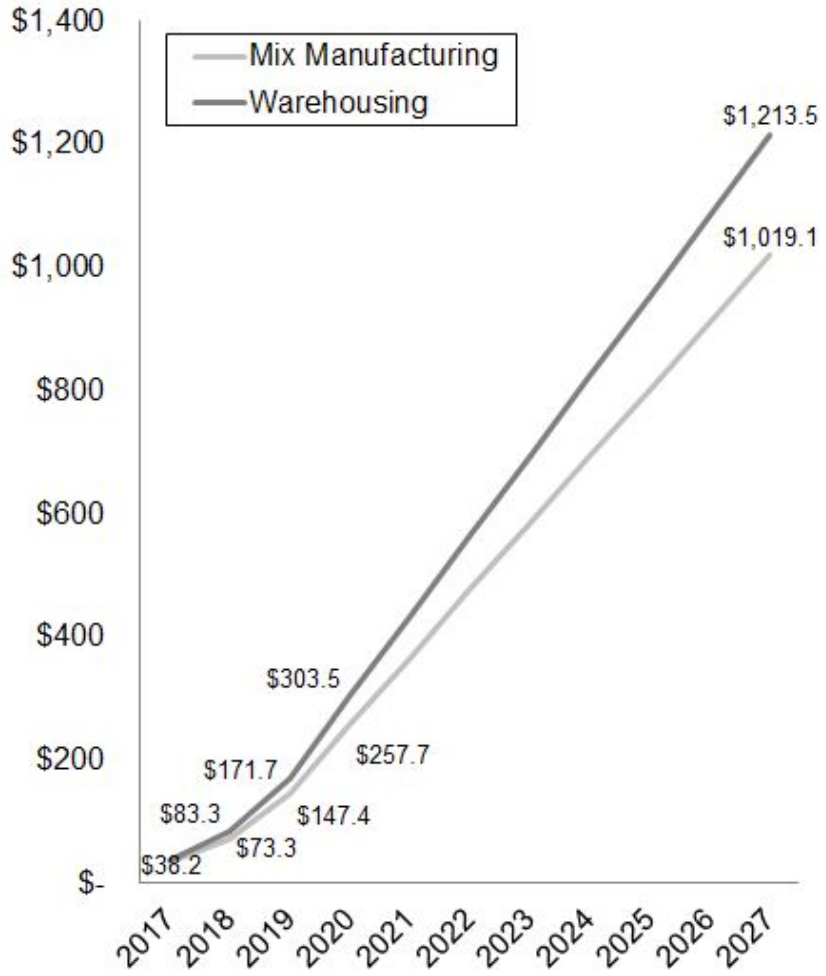


9. Output Analysis

Economic output for the City of Moreno Valley is estimated to increase by a cumulative total of $1.1 – $1.2 billion by 2027 as a result of the Logistics Center as shown in Figure 9.1 below. Annual increases in output vary from the initial low point in 2017 of $35.4 – $38.2 million resulting from construction to the sustained annual amount of $108.8 – $130.0 million in 2021. On average across the 11 years, the City is projected to see an annual increase of $92.6 – $110.3 million in economic output. See Appendix E – Earnings & Output Methodology for additional details regarding the approach utilized in this study.

Figure 9.1

Cumulative Increase in Economic Output – 2017-27 ($Millions)



10. Conclusion

Prologis, an international developer and manager of logistics and distribution facilities, has proposed to develop a Logistics Center in the City of Moreno Valley totaling 1.7 million square feet on approximately 90 acres of undeveloped land. The complex consists of four plots for up to four buildings (or three and a trailer storage lot) and would be utilized for warehousing, logistics, light manufacturing, or similar uses. The Center is estimated to cost $50.6 – $54.6 million to construct with an additional $6.8 – $7.5 million in tenant improvements during the first three years of operations. Over ten years of operations the Center could generate $915 million – $1.1 billion in revenue. When combined with the direct spend from construction and tenant improvements, the Center stands to generate $970 million – $1.14 billion in direct spend. This influx of funds will have economic and fiscal impacts on the City of Moreno Valley in the form of net fiscal revenue, job creation, household earnings, and economic output.

Net fiscal revenue for the City is estimated to be up to $830,000 – $960,000 annually by 2020 with an 11-year cumulative total of $8.0 – $9.2 million. This net fiscal revenue is the result of roughly $9.2 – $10.1 million in new tax revenue generated by the Project offset by $920,000 – $1.6 million in General Fund expenditures. Center operations can create and sustain 340 – 620 new jobs specific to the City. Additionally it is projected to increase household earnings by an 11-year total of $238 – $288 million, or an annual average of $21.6 – $26.2 million, as well as economic output by an 11-year total of $1.1 – $1.2 billion, or an annual average of $92.6 – $110.3 million.

Appendix A – Direct Spend Methodology

The direct spend for this project is comprised of three components:

- Applicant construction spend;
- Tenant improvements spend; and
- Revenue through operations of the Logistics Center.

Estimates for the applicant construction spend and tenant improvements spend were provided by the applicant. Typically speaking, estimates for revenue would be calculated by factoring the square footage of the project by the average revenue per square foot for that particular industry. This was done to estimate the total expected revenue for the trailer storage lot in the Mix Manufacturing scenario and the figure for expected revenue per square foot was provided by the applicant. Upon initial research no such estimates that were specific to the area for revenue per square foot for manufacturing and warehousing could be found.

An alternative approach was utilized where the total jobs for each industry (manufacturing and warehousing) was found for the Inland Empire (Riverside and San Bernardino Counties)[6] as well as the total activated square footage for each industry in the same counties[7] with both figures from the year 2015. Dividing the total number of jobs by the total square footage for each industry produced perspective average figures for number of employees per square feet. This ratio was factored by the total square footage of the project to find the expected number of direct jobs from the project assuming 100% operation capacity for each of the model's scenarios (mix manufacturing and warehousing). This figure was factored by the industry-specific direct effect multiplier as produced by the U.S. Bureau of Economic Analysis (BEA)[8] to find the

[6] Employment Development Department, Labor Market Information Division. "Riverside San Bernardino Ontario MSA." (2016). Accessed May 12, 2016. http://www.labormarketinfo.edd.ca.gov.

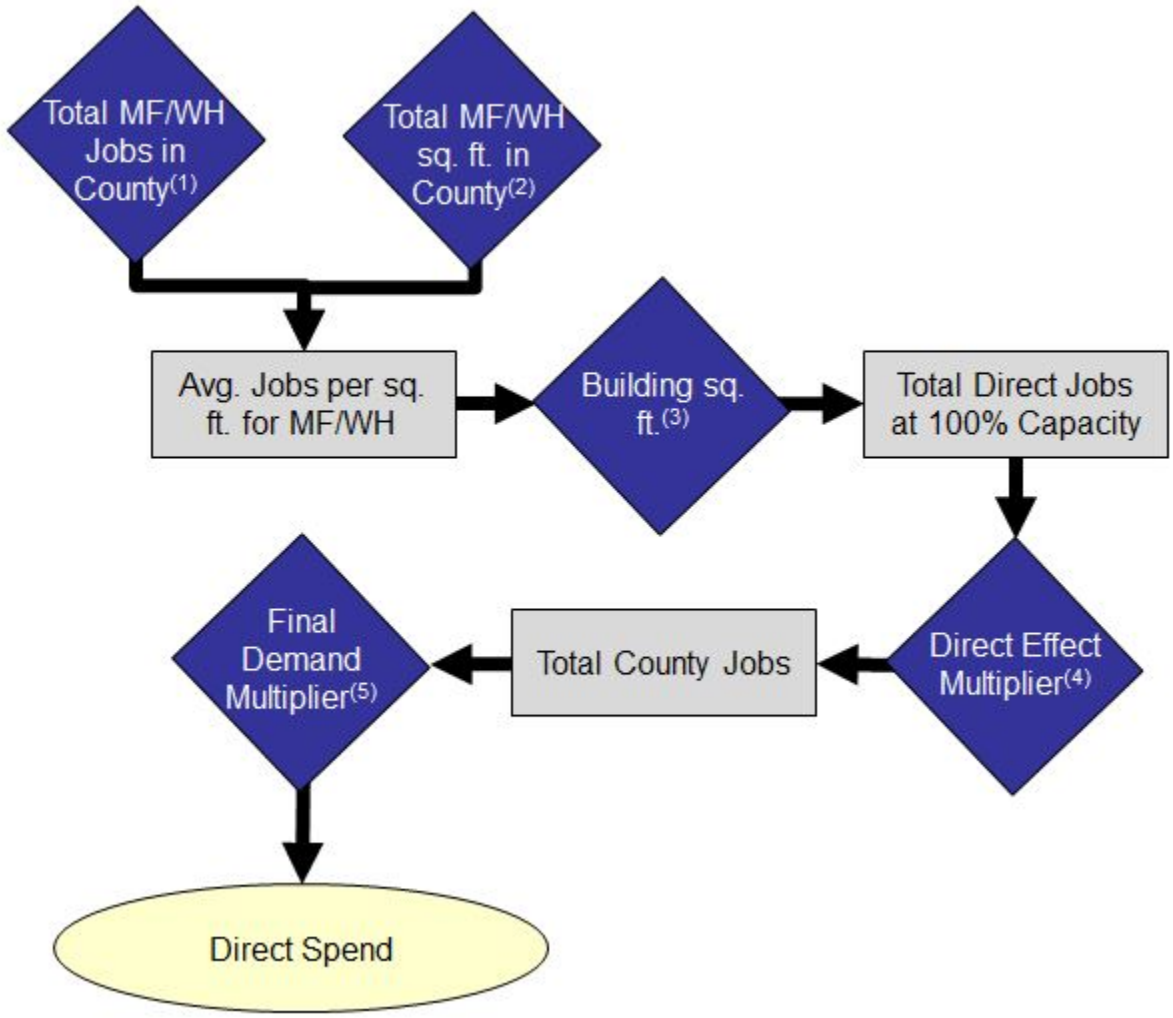
[7] Teresa Petrosyan. "Industrial Statistics: Inland Empire, Q4 2015." (2016). Accessed May 5, 2016. http://www.us.jll.com/united-states/en-us/research/6686/US-Inland-Empire-Industrial-Stats-Q4-2015-JLL.

[8] U.S. Bureau of Economic Analysis, Regional Multipliers. Series: 2013 U.S. Annual I-O Data and 2013 Regional Data. Region: Riverside.

expected total number of new jobs (direct and indirect) in Riverside County as a result of the project. The total number of new jobs in the county was then divided by the industry-specific final demand multiplier, also produced by the BEA,[9] to find the expected direct spend of the project. With the direct spend estimated for each industry type, each perspective total is divided by the total square footage for each industry type to find the expected revenue per square foot. See Flowchart A.1 below for a graphical representation of this approach.

Flowchart A.1

Direct Spend Methodology



[9] U.S. Bureau of Economic Analysis.

Notes

(1) Total manufacturing (MF) and warehousing (WH) jobs in Riverside and San Bernardino Counties for 2015 as listed in the California Employment Development Department's Labor Market Information Division database.[10]

(2) Total manufacturing (MF) and warehousing (WH) square footage in Riverside and San Bernardino Counties as listed in Jones Lang LaSalle's Industrial Statistics for the Inland Empire for Q4 2015.[11]

(3) Building square footage for Prologis Logistics Centers as provided by applicant.

(4) Direct effect regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[12]

(5) Final demand regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[13]

[10] Employment Development Department, "Riverside, San Bernardino, Ontario MSA."
[11] Petrosyan.
[12] U.S. Bureau of Economic Analysis.
[13] U.S. Bureau of Economic Analysis.

Appendix B – Tax Revenue Scope & Methodology

Scope

The 2016-17 Adopted Budget for the City of Moreno Valley[14] was analyzed to determine potential revenue to the City from the Logistics Center through taxes and fees. The budget is composed of seven major taxes and six major categories of fees and intergovernmental transfers. Based on the analysis of the City's budget it was concluded that the following recurring taxes may be impacted by the Project:

- Sales tax;
- Property taxes;
- Property tax in-lieu of vehicle license fee;
- Utility users tax;
- Franchise fee; and
- Business gross receipts tax.

This report's approach also includes the one-time potential sales tax gains for the materials involved in the development of the property.

This approach accounts for 98% of taxes and 77% of all General Funds, including fees, fines and government transfers. It is believed that the taxes, fees, fines and transfers excluded from the analysis are exogenous to the construction and operation of the facility. See Table B.1 below for more information.

[14] Financial & Management Services Department: City of Moreno Valley. "City of Moreno Valley Fiscal Year 2015/16 – 2016/17 Adopted Budget." 2015. Accessed May 6, 2016. http://www.moreno-valley.ca.us/city_hall/departments/fin-man-serv/fin-pdf/budg-15-16-16-17/adopt-budget15-16-16-17.pdf.

Table B.1

City Budget Taxes and Fees

City of Moreno Valley Budget	FY 2016/17 Adopted	Study Scope	
		One-Time	Recurring
Taxes:			
Sales Tax	$20,486,866	XX	XX
Property Tax	$12,736,197	--	XX
Property Tax In-Lieu of VLF	$16,597,580	--	XX
Utility Users Tax	$16,092,542	--	XX
Franchise Fees	$6,069,018	--	XX
Business Gross Receipts Tax	$1,778,000	--	XX
Transient Occupancy Tax	$1,105,650	--	--
Other Taxes	$500,000	--	--
Fees & Intergovernmental Transfers:			
Charges for Services	$10,971,363	--	--
Use of Money & Property	$3,469,962	--	--
Licenses & Permits	$2,126,877	--	--
Fines & Forfeitures	$629,073	--	--
Intergovernmental	$215,000	--	--
Transfers In	$2,547,650	--	--
Miscellaneous	$103,400	--	--
Total Revenue Budget	$95,429,178	--	--

One-Time Sales Tax

One-time sales tax revenue is composed of two components:

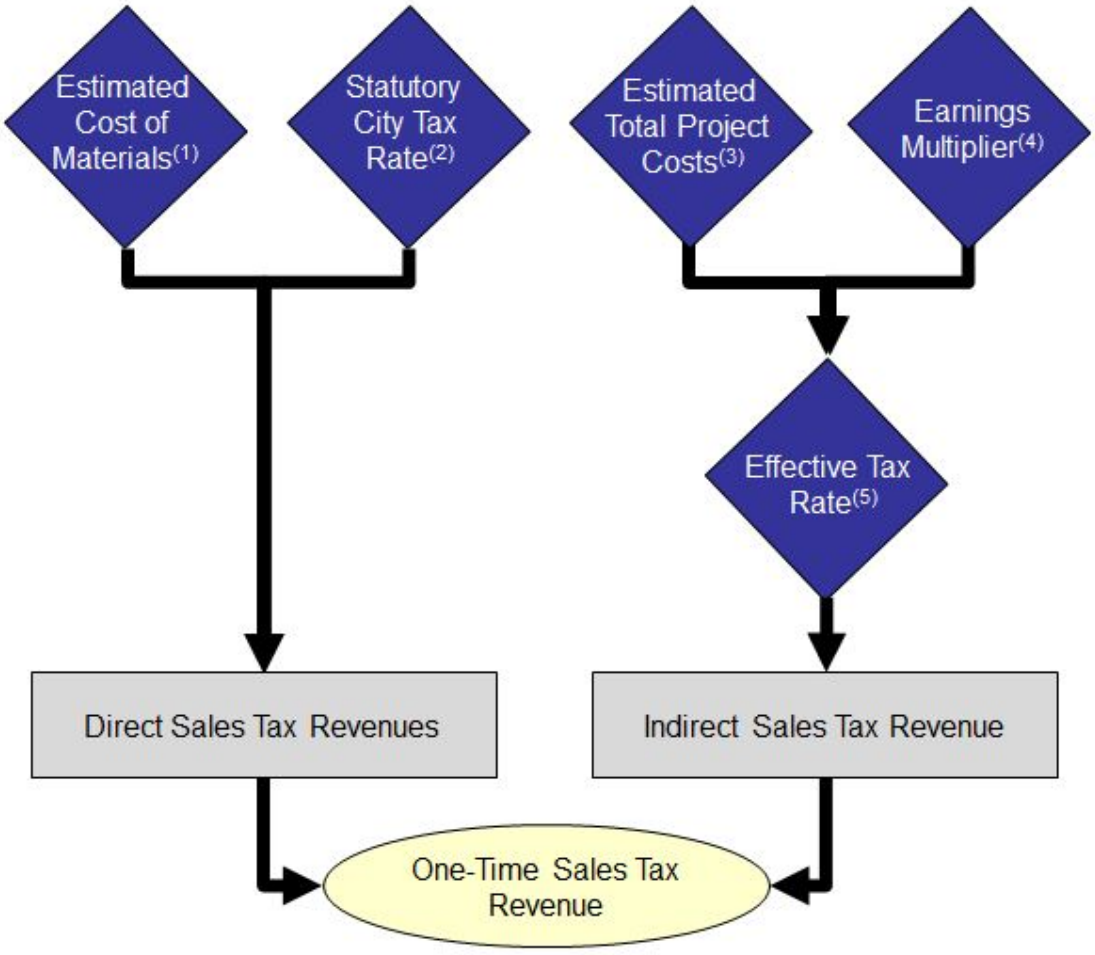
- Direct sales tax revenues from the cost of materials during construction; and
- Indirect sales tax revenue from the increase in household earnings.

Direct sales tax revenues are found by factoring the cost of materials estimated at 40% of the total construction cost, per industry standards,[15] [16] by the statutory city tax rate as listed in the Adopted Budget 2016-17.[17] The sales tax rate in Riverside County is 8.0%, of which Moreno Valley receives 1% from the California Board of Equalization (BOE) for transactions occurring within the City. Indirect sales tax revenue on earnings is found by first factoring the total construction costs as provided by the applicant with the earnings multiplier produced by the U.S. Bureau of Economic Analysis (BEA)[18] in order to find the increase in household earnings resulting from construction of the Project. Those earnings are then factored by the effective sales tax rate[19] to find the one-time indirect sales tax revenue. See Flowchart B.1 below for a graphical representation for this approach.

[15] Construction Labor Market Analyzer.
[16] Hedley.
[17] City Budget
[18] U.S. Bureau of Economic Analysis.
[19] See "Effective Sales Tax Calculation" at the end of this Appendix (Appendix B – Tax Revenue Scope and Methodology).

Flowchart B.1

Sales Tax Methodology



Notes

(1) Cost of materials estimated at 40% of total construction costs as provided by the applicant per industry standards.[20] [21]

(2) Statutory City tax rate is 1% based on information provided in City of Moreno Valley, Adopted Budget Fiscal Year 2015-16, Fiscal Year 2016-17.[22]

(3) Total construction costs estimated to be $54.6 million as provided by the applicant.

[20] Construction Labor Market Analyzer.
[21] Hedley.
[22] Financial & Management Services Department, "…Adopted Budget."

(4) Earnings regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[23]

(5) See “Effective Sales Tax Calculation” at the end of Appendix B – Tax Revenue Scope and Methodology for methodology.

[23] U.S. Bureau of Economic Analysis.

On-Going Sales Tax

On-going sales tax revenue is composed of two components:

- Local sales tax revenue from business operations; and
- Induced household earnings sales tax revenue.

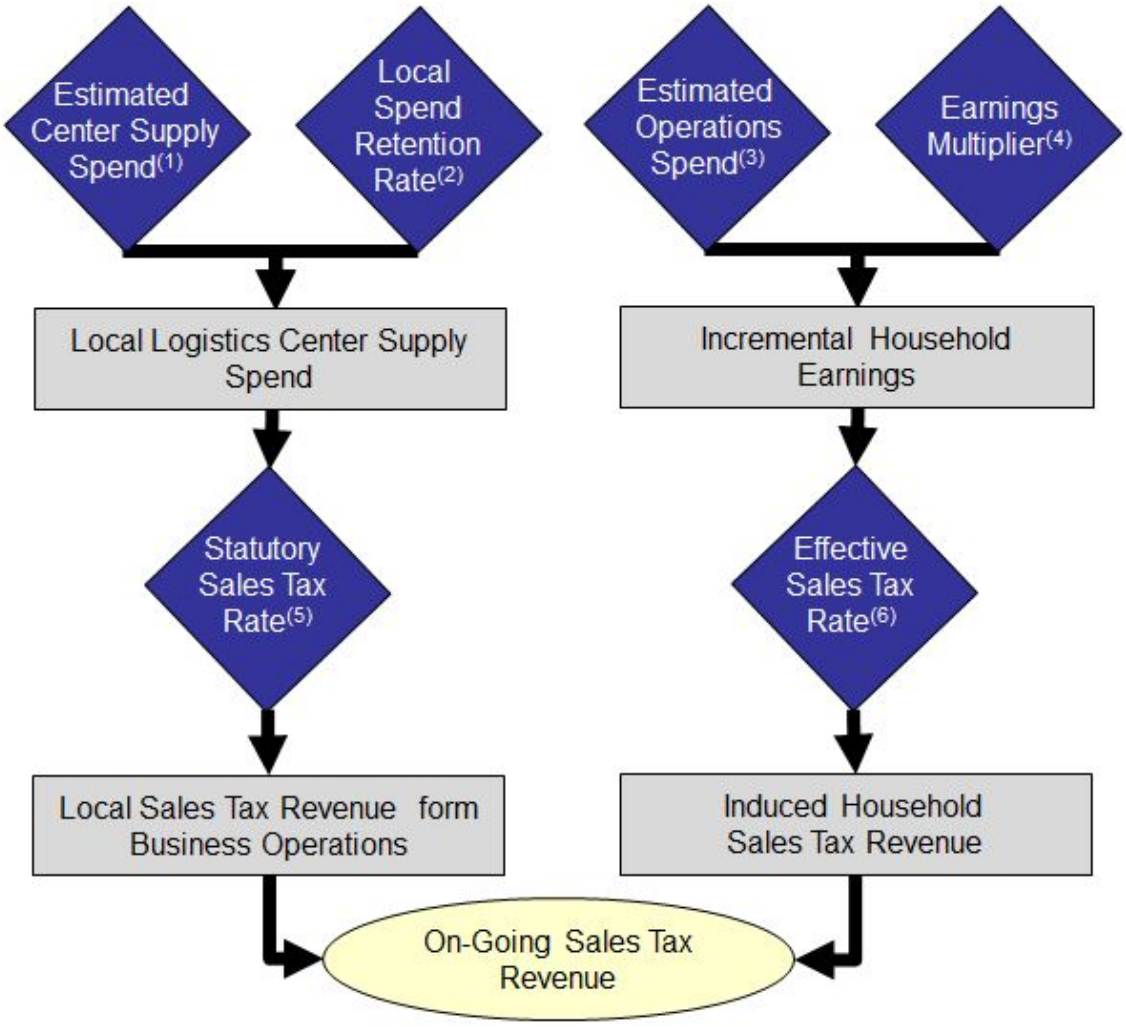
Local sales tax revenue from business operations represents the tax revenue collected from supply expenditures. Due to the business nature of manufacturing and warehousing it is assumed that no other sales tax will be collected outside of supply expenditures. This approach preserves a conservative estimate of City revenues. The local sales tax revenue is calculated by first factoring the estimated supply spend per square foot ($27.78), as found in the BizCost report, "Comparative Distribution Warehousing Operating Costs",[24] by the local spend retention rate, which is assumed at 50% as the actual rate will depend on what goods are sold and the tenant company policy which are both currently unknown. The result is the local supply spend, which is then factored by the statutory sales tax rate as listed in the Adopted Budget 2016-17[25] to find the local sales tax revenue.

Indirect household earnings sales tax revenue is found by first factoring the total operation revenue as earlier estimated (see "One-Time Sales Tax" in Appendix B – Tax Revenue Scope & Methodology) with the earnings multiplier produced by the U.S. Bureau of Economic Analysis (BEA)[26] in order to find the increase in household earnings resulting from the Project's operations. Those earnings are then factored by the effective sales tax rate[27] to find the induced household earnings sales tax revenue. See Flowchart B.2 below for a graphical representation for this approach.

[24] BizCosts. Comparative Distribution Warehousing Operating Costs. Princeton, NJ: The Boyd Company, 2012.
[25] Financial & Management Services Department, "…Adopted Budget."
[26] U.S. Bureau of Economic Analysis.
[27] See "Effective Sales Tax Calculation" at the end of this Appendix (Appendix B – Tax Revenue Scope and Methodology).

Flowchart B.2

On-Going Sales Tax Methodology



Notes

(1) Center supply spend estimated to be $27.78 per square foot.[28]

(2) Local spend retention rate assumed to be 50% of total spend.

(3) Operations spend as determined by estimated revenue of the Project. See "One-Time Sales Tax" in Appendix B – Tax revenue Scope & Methodology for methodology.

[28] BizCosts.

(4) Earnings regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[29]

(5) Statutory City tax rate is 1% based on information provided in City of Moreno Valley, Adopted Budget Fiscal Year 2015-16, Fiscal Year 2016-17.[30]

(6) See "Effective Sales Tax Calculation" at the end of Appendix B – Tax Revenue Scope and Methodology for methodology.

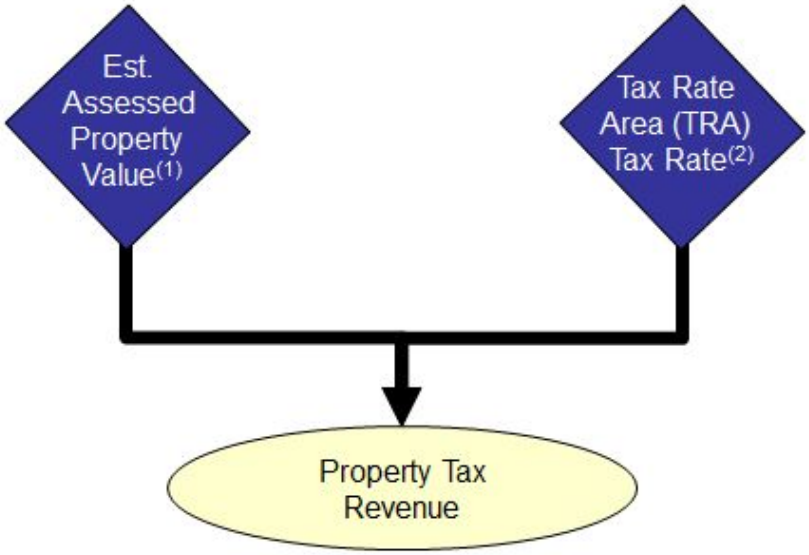
[29] U.S. Bureau of Economic Analysis.
[30] Financial & Management Services Department, "…Adopted Budget."

Property Tax

Moreno Valley property owners pay a basic tax equal to 1% of the assessed value of real property. Based on the Tax Rate Area (TRA) a property may be located in, the City's General Fund receives approximately 11% of these 1% tax payments, with the larger shares going to local schools, community colleges and Riverside County. Property tax revenue for the Project is found by factoring the assessed property value as provided by the applicant, taking into account the 2% growth in value per year, by the TRA tax rate of 1%[31] and again by 11% to represent the amount received by the City's General Fund.[32] See Flowchart B.3 below for a graphical representation of this approach.

Flowchart B.3

Property Tax Methodology



Notes

[31] Auditor Controller, County of Riverside, "Tax Rates by Tax Rate Areas (2015-16)," accessed May 6, 2016, http://www.auditorcontroller.org/Portals/0/Documents/about_us/division/Proptax/AUCB940-DISTtax.pdf.

[32] Financial & Management Services Department, "…Adopted Budget."

(1) Estimated assessed property value provided by the applicant.

(2) Tax rate for the TRA is 1.09210% as provided by the Riverside County Tax Assessor's Office.[33]

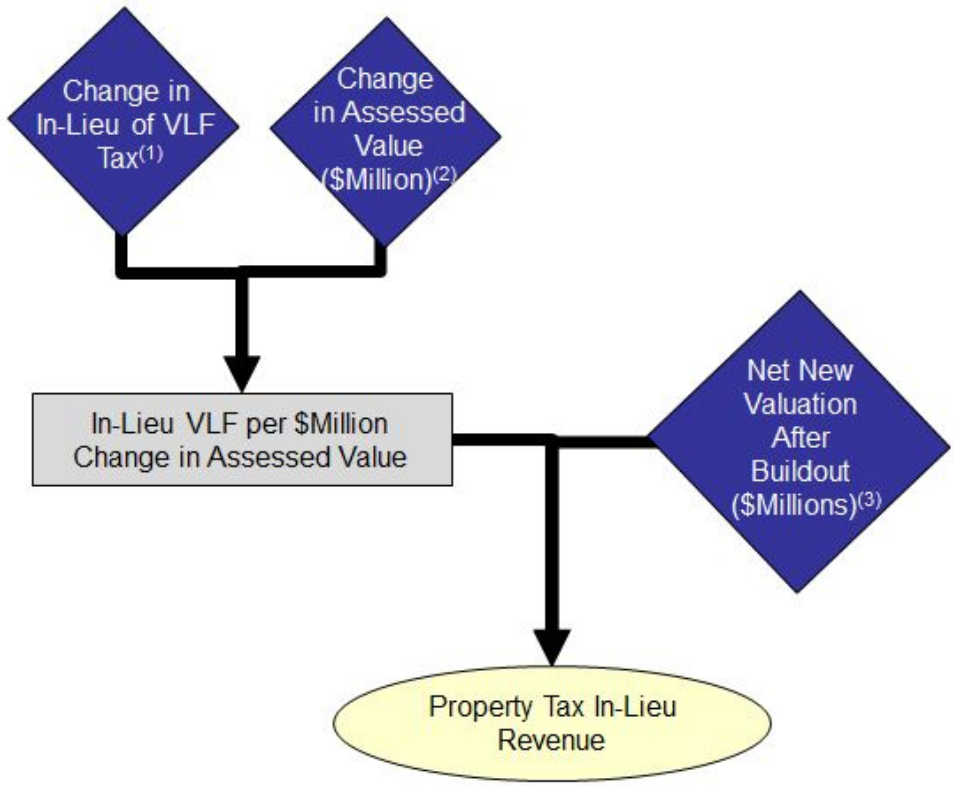
[33] Auditor Controller, "Tax Rates…"

Property Tax In-Lieu

Per California Tax and Revenue and Taxation Code 97.70, the City General Fund receives property tax in lieu of Vehicle License Fee based on the change in the City's gross assessed valuation of taxable property for new developments. See Flowchart B.4 below for a graphical representation of this approach.

Flowchart B.4

Property Tax In-Lieu Methodology



Notes

(1) Change in In-Lieu of VLF revenues between Fiscal Year (FY) 2004-05[34] and FY 2016-

[34] Finance Department, Moreno Valley City Hall. "City of Moreno Valley, California, Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2005." (2005). Accessed May 12, 2016. http://www.moreno-valley.ca.us/city_hall/departments/fin-man-serv/fin-pdf/mv2005cafr0605.pdf.

17.[35]

(2) Change in the City of Moreno Valley total assessed property value between FY 2004-05[36] and FY 2016-17.[37]

(3) New net valuation after buildout as provided by the applicant.

[35]Financial & Management Services Department, "…Adopted Budget."

[36] Gary L. Orso, "City of Riverside, Assessor-County Clerk-Recorder 2004-2005 Annual Report." (2005). Accessed May 11, 2016. www.asrclkrec.com.

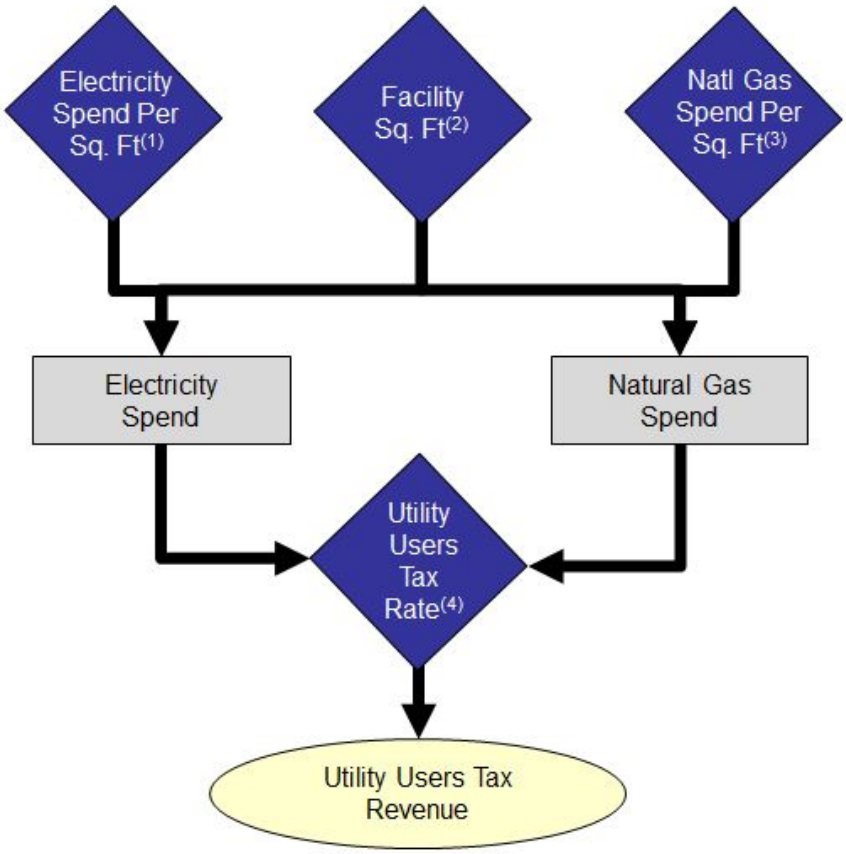
[37] Riverside County Assessor, "Assessed Value for Cities 2016/2018," accessed May 9, 2016, www.asrclkrec.com/.

Utility Users Tax

Utility users tax (UUT) is a 5.75% charge on all utility activity in the City of Moreno Valley. The tax is assessed on electricity, energy, water, cable, and wireless and telephone charges. In order to preserve a conservative approach only the electricity and natural gas components were included in this analysis. To find the UUT revenue the electricity and natural gas spend per square foot, as provided in the BizCost report,[38] is factored by the total square footage of the Project, as provided by the applicant. Then both the electricity and natural gas spend is factored by the UUT rate to find the total revenue. See Flowchart B.5 below for a graphical representation of this approach.

Flowchart B.5

Utility Tax Methodology



[38] BizCosts.

Notes

(1) Electricity costs per square foot for Riverside and San Bernardino warehouse facilities as provided by the BizCosts report.[39]

(2) Facility square footage as provided by the applicant.

(3) Natural gas costs per square foot for Riverside and San Bernardino warehouse facilities as provided by the BizCosts report.[40]

(4) Utility users tax rate as provided by the Adopted Budget 2016-17.[41]

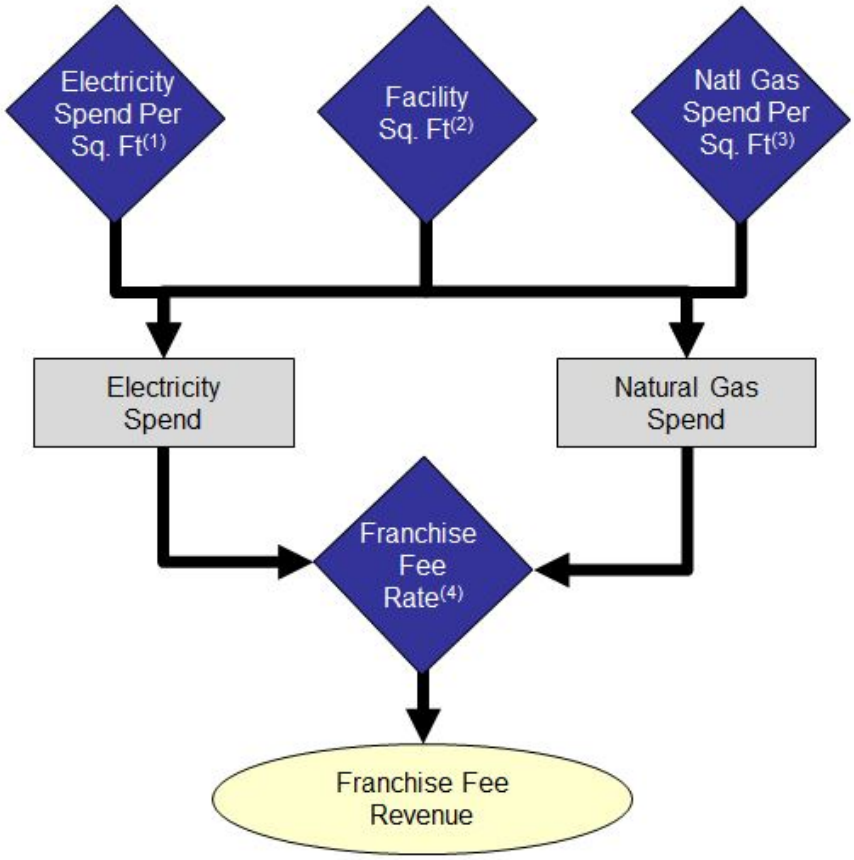
[39] BizCosts
[40] Ibid.
[41] Financial & Management Services Department, "…Adopted Budget."

Franchise Fee

Franchise fee revenue consists of a tax on four franchise operations in the City of Moreno Valley – electric, natural gas, cable, television, and refuse. In order to preserve a conservative approach only the electricity and natural gas components are included in this analysis. To find the franchise fee revenue the electricity and natural gas spend per square foot, as provided in the BizCosts report,[42] is factored by the total square footage of the Project, as provided by the applicant. Then both the electricity and natural gas spend is factored by the franchise fee rate to find the total revenue. See Flowchart B.5 below for a graphical representation of this approach.

Flowchart B.6

Franchise Fee Methodology



[42] BizCosts.

Notes

(1) Electricity costs per square foot for Riverside and San Bernardino warehouse facilities as provided by the BizCosts report.[43]

(2) Facility square footage as provided by the applicant.

(3) Natural gas costs per square foot for Riverside and San Bernardino warehouse facilities as provided by the BizCosts report.[44]

(4) The franchise fee rate for both electric and natural gas is equal to 1% of gross annual revenues.[45]

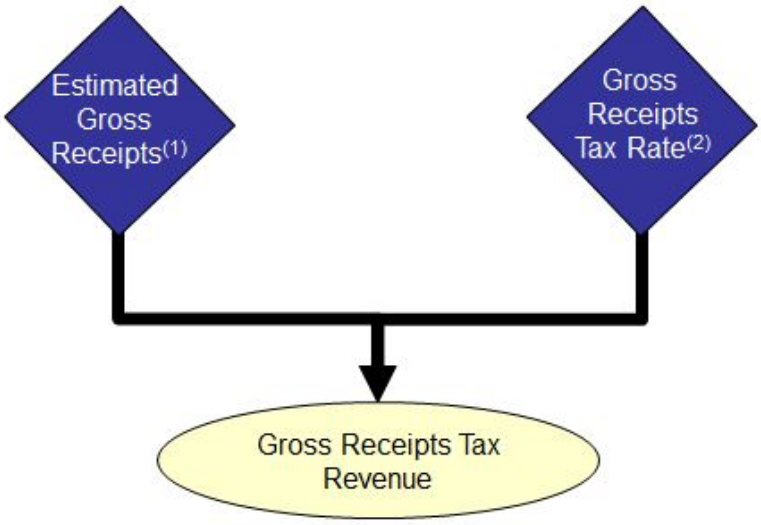
[43] BizCosts.
[44] Ibid.
[45] Financial & Management Services Department, "…Adopted Budget."

Business Gross Tax

The City of Moreno Valley imposes a gross receipts tax for warehousing and manufacturing establishments in the amount of $0.25 per $1,000 of gross receipts.[46] Gross receipts are assumed to be equivalent to the estimated revenue of the Logistics Center. To find the gross receipts tax revenue the estimated gross receipts is factored by the gross receipts tax rate. See Flowchart B.7 below for a graphical representation of this approach.

Flowchart B.7

Business Gross Tax Methodology



Notes

(1) Gross receipts are assumed to be equivalent to the estimated revenue of the Project.

(2) Gross receipts tax rate is $0.25 per $1,000, or 0.025%.[47]

[46] City of Moreno Valley. "Business License Categories and Application Fees." (2016). Accessed May 10, 2016. http://www.moreno-valley.ca.us/edd/pdfs/BusLicCategories-Fees.pdf.

[47] Ibid.

Effective Sales Tax Calculation

The effective sales tax represents the amount of additional sales taxes expected to be paid with any increase in household earnings. The effective tax rate is the ratio that can be factored by any increase in earnings to find that expected increase. The formula used to calculate the effective tax rate is the total City sales tax revenue for a particular year divided by the total income of City residents for the same year. The total income of City residents is calculated by factoring the average per capita income by the City population.

In order to produce an effective sales tax rate for this study, Andrew Chang & Company first calculated an estimated population for the City of Moreno Valley for 2017 based on average population growth between 2010 and 2014. Next an estimated per capita income for 2017 is calculated based on the California Price Index (CPI) growth between 2014 and 2016. This figure is factored with the estimated population to find the total income of City residents for 2017. The City sales tax revenue, as provided by the Adopted Budget 2016-17,[48] is divided by the total income of City residents to produce an effective sales tax rate for 2017. See the equation below and the following Table B.2 for data sources and additional information.

$$\frac{\text{City Sales Tax Revenue Projections FY 2016/17}}{\text{Est. 2017 Per Capita Income X Est. 2017 City Population}} = \frac{\$20,486,866}{\$3,982,312,116} = 0.51\%$$

[48] Financial & Management Services Department, "…Adopted Budget."

Table B.2

Effective Sales Tax Calculation

Element	Value	Source/Notes
City of Moreno Valley population census (April 2010)	193,365	http://www.census.gov/quickfacts/table/POP010210/0649270, extracted on May 5, 2016
City of Moreno Valley population estimate (July 2014)	202,976	http://www.census.gov/quickfacts/table/POP010210/0649270, extracted on May 5, 2016
City of Moreno Valley population estimate (July 2017)	210,637	Andrew Chang & Company estimate based on average population growth between 2010 and 2014
Consumer Price Index (2014)	246.055	California Department of Finance
Consumer Price Index (2016)	255.408	California Department of Finance
Per capita income ($2014)	$17,874	http://www.census.gov/quickfacts/table/POP010210/0649270, extracted on May 5, 2016
Estimated per capita income ($2017)	$18,906	Andrew Chang & Company estimate based on CPI growth between 2014 and 2016
City of Moreno Valley Sales Tax Revenue Projections FY 2016/17	$20,486,866	City of Moreno Valley, Adopted Budget Fiscal Year 2015-16, Fiscal Year 2016-17, p. xvii

Appendix C – General Fund Cost Analysis Scope & Methodology

Scope

The 2016-17 Adopted Budget for the City of Moreno Valley[49] was analyzed to determine potential costs to the City from the Logistics Center. The City is projected to spend $94 million in General Fund expenses during the current fiscal year. The budget is composed of 62 expense items grouped here (see Table C.1 below) into nine categories:

- Fire;
- City Police;
- Mall Police & Emergency/Volunteer Services;
- Public Works – Street Maintenance;
- Public Works – All Other;
- Finance and Administration;
- Development;
- Communication; and
- Other.

All expenses appear to be recurring expenses rather than one-time. The scope for the Project includes all expense items directly impacted by the Logistics Center, namely Fire, City Police, and Street Maintenance. All other expense items are considered to be not directly impacted or not impacted at all by the Project. Typically speaking these costs come from the applicant. However, in order to preserve a conservative figure, the approach assumes the costs will be absorbed by the City. This approach accounts for 64% of all General Fund expenses. See Table C.1 below for more information.

[49] Financial & Management Services Department, "…Adopted Budget."

Table C.1

City Budget Expenses

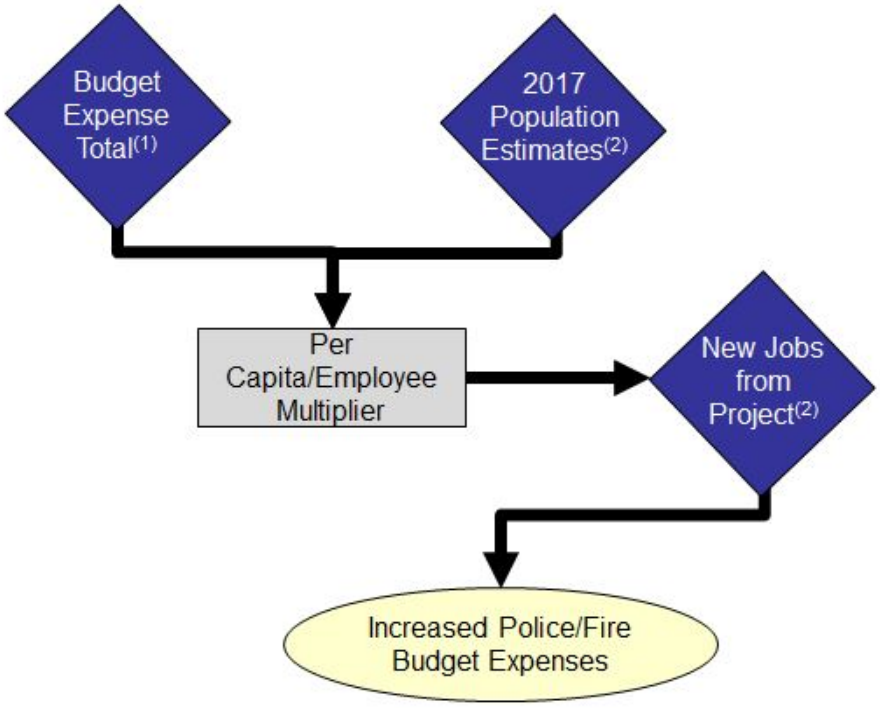
City of Moreno Valley Budget	FY 2016/17 Adopted	Study Scope	
		One-Time	Recurring
City Police	$41,567,317	--	XX
Fire	$18,378,935	--	XX
Mall Police & Emergency/Volunteer Services	$828,136	--	--
Public Works – Street Maintenance	$697,822	--	XX
Public Works – All Other	$2,508,707	--	--
Finance and Administration	$9,282,318	--	--
Development	$8,054,890	--	--
Communication	$2,004,847	--	--
Other	$11,088,061	--	--
Total Expense Budget	$94,411,033	--	--

City Police & Fire

Increased General Fund expenses for City Police and Fire are calculated using the same methodology. The total budget expense for each, as provided by the Adopted Budget 2016-17,[50] is divided by the 2017 population estimates produced by Andrew Chang & Company[51] to find the per capita/employee multiplier, i.e. the cost of City Police and Fire services per person. The per capita/employee multiplier for both City Police and Fire is then factored by the total new jobs (direct and indirect) created by the Project to find the total increase in City Police and Fire services resulting from the Project. This approach assumes a 1:1 ratio for capita to employee, which avoids additional assumptions and leaves the least room for error. See Flowchart C.1 below for a graphical representation of this approach.

Flowchart C.1

City Police & Fire Methodology



[50] Financial & Management Services Department, "…Adopted Budget."

[51] See "Effective Sales Tax Calculation" in Appendix B – Tax Revenue Scope & Methodology for methodology.

Notes

(1) Budget expense for City Police and Fire services as provided by the Adopted Budget 2016-17.[52]

(2) 2017 population estimate as produced by Andrew Chang & Company.[53]

(3) Total jobs created by the Project in the City of Moreno Valley, including direct and indirect jobs.

[52] Financial & Management Services Department, "…Adopted Budget."

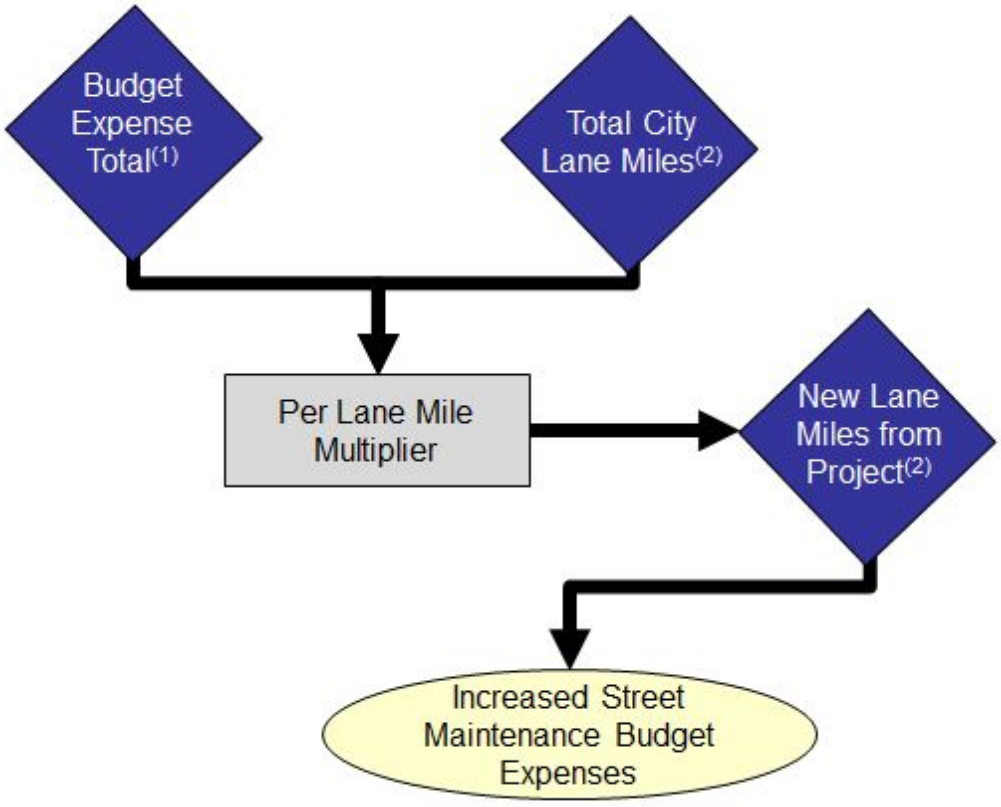
[53] See "Effective Sales Tax Calculation" in Appendix B – Tax Revenue Scope & Methodology for methodology.

Street Maintenance

Increase in General Fund expenses for street maintenance is calculated first by dividing the current total expense for street maintenance, as provided by the Adopted Budget 2016-17,[54] by the total number of lane miles maintained by the City (1,080 lane miles) as provided by the City of Moreno Valley's Maintenance and Operations Division Office to find the per lane mile multiplier, i.e. the cost of street maintenance per lane mile. The per lane mile multiplier is then factored by the total lane miles from the Project, as provided by the applicant, to provide the increase street maintenance General Fund expenses.

Flowchart C.2

Street Maintenance Methodology



[54] Financial & Management Services Department, "…Adopted Budget."

Notes

(1) Budget expense for street maintenance as provided by the Adopted Budget 2016-17.[55]

(2) Total lane miles (1,080) as provided by the City of Moreno Valley's Maintenance and Operations Division Office.

(3) New lane miles as provided by the applicant. Construction plans include linear feet of all street work. These were summed and converted into lane miles.

[55] Financial & Management Services Department, "…Adopted Budget."

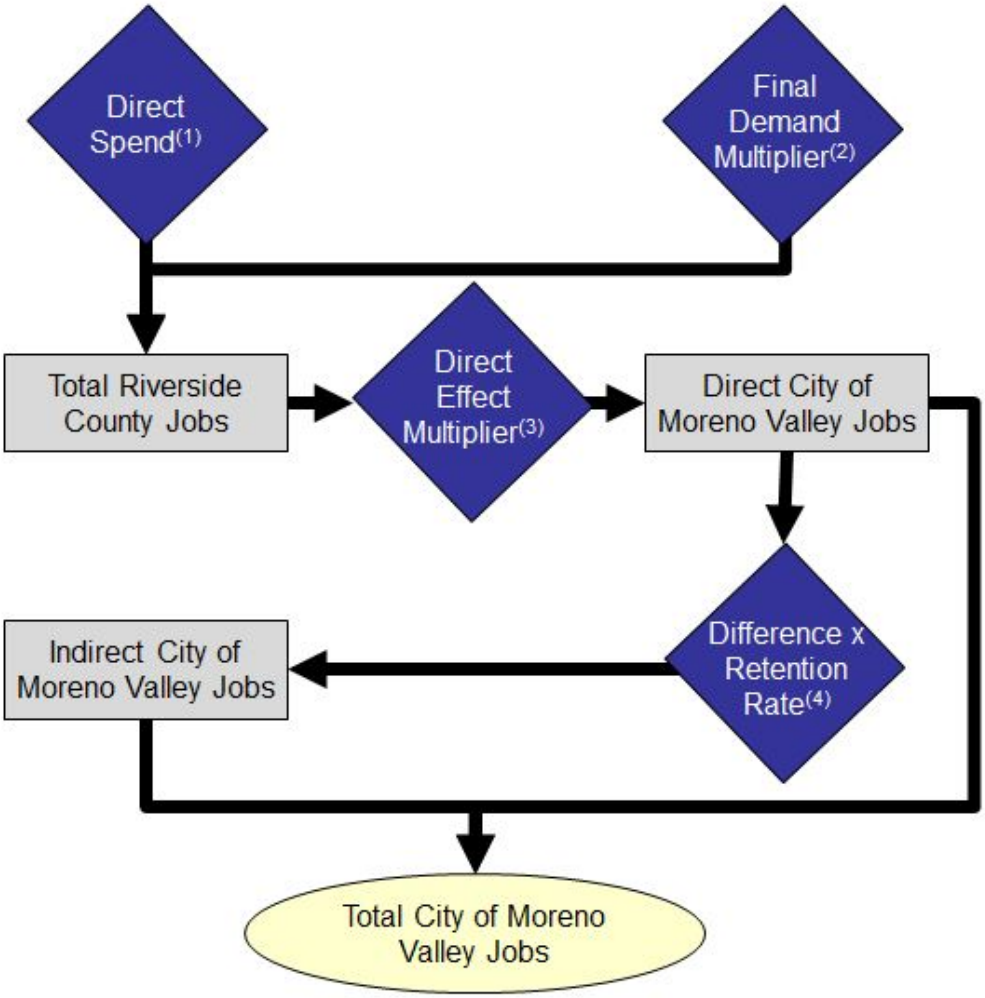
Appendix D – Employment Methodology

The employment model calculates all jobs (direct and indirect) created in the City of Moreno Valley as a result of the Project. The approach utilized in this study first calculates the total Riverside County jobs by factoring the direct spend[56] with the appropriate industry-specific final demand multiplier, as produced by the U.S. BEA.[57] The total jobs are then divided by the industry-specific direct effect multiplier[58] to find the direct jobs created in the Logistics Center. Next the indirect jobs within the City are found by factoring the difference in the total county jobs and the direct jobs (representing the indirect jobs to the entire county) by the City of Moreno Valley's retention rate (the ratio of employed labor force in the City over the employed labor force in the county as provided by California's Employment Development Department's Labor Market Information Division database).[59] The direct jobs and indirect jobs specific to the City are summed to provide the total jobs specific to the City of Moreno Valley. See Flowchart D.1 below for a graphical representation of this approach.

[56] See Appendix A – Direct Spend Methodology.
[57] U.S. Bureau of Economic Analysis.
[58] Ibid.
[59] Employment Development Department, "Riverside, San Bernardino, Ontario MSA."

Flowchart D.1

Employment Methodology



Notes

(1) Direct spend as calculated in Appendix A – Direct Spend Methodology.

(2) Final Demand employment regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[60]

(3) Direct Effect employment regional multipliers (RIMS II) for Riverside County produced by the U.S. Bureau of Economic Analysis.[61]

[60] U.S. Bureau of Economic Analysis.
[61] Ibid.

(4) The difference between the total jobs and the direct jobs is factored by the retention rate, which is the total number of employees in the City of Moreno Valley over the total number of employees in Riverside County as provided by California's Employment Development Department's Labor Market Information Division database).[62]

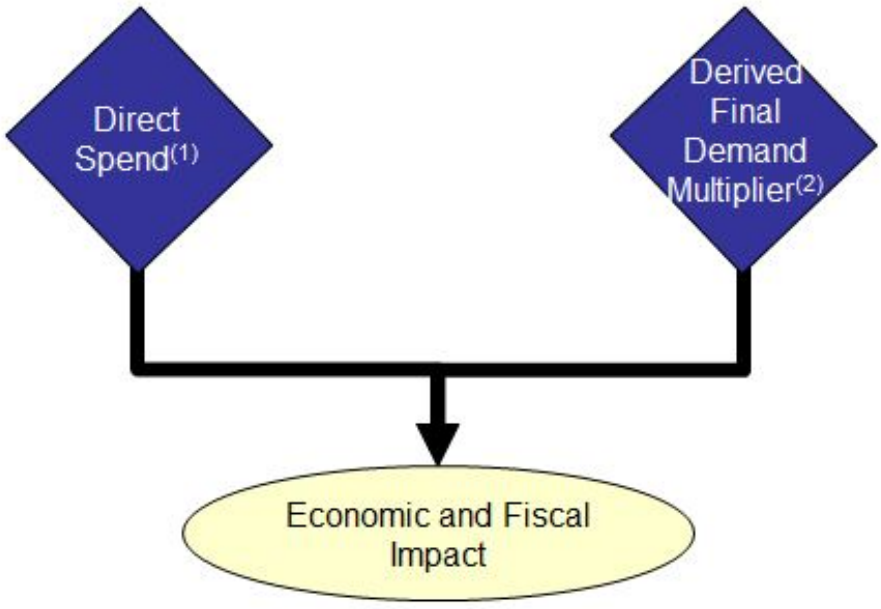
[62] Employment Development Department, "Monthly Labor Force Data…"

Appendix E – Earnings & Output Methodology

The economic and fiscal impact includes the total (direct and indirect) impact in increased household earnings and economic output to the City of Moreno Valley. The approach utilized in this study factored the direct spend[63] of the project with the correlating derived final demand multiplier (i.e. industry specific multipliers for construction, warehousing, and manufacturing) for earnings and output to find the economic and fiscal impact. Each derived final demand multiplier is calculated by dividing the total number (direct and indirect) of new jobs created in the City of Moreno Valley by the total number of new jobs created in Riverside County for all utilized industries[64] with the assumption that the amount of jobs retained in the City will reflect the amount of earnings and output retained in the City.

Flowchart E.1

Earnings & Output Methodology



[63] See Appendix A – Direct Spend Methodology.
[64] See Appendix D – Employment Methodology.

Notes

(1) Direct spend as calculated in Appendix A – Direct Spend Methodology.

(2) The derived final demand multipliers are calculated by dividing the total number of jobs created by in the City of Moreno Valley as a result of the Project by the total number of jobs created in Riverside County as a result of the Project.

Appendix F – Multipliers

This study utilizes the most recent regional RIMS II multipliers produced by the U.S. Bureau of Economic Analysis for Riverside County in order to determine the change in output, earnings, and employment as a result of the proposed Prologis Logistics Center. The industry-specific multipliers utilized for this study are listed below in Table F.1. The manufacturing multipliers are customized to account for the uncertainty of the potential manufacturing type in prospective tenant companies. The customized manufacturing multiplier is the median of 17 different manufacturing industry multipliers, representing an average manufacturing multiplier.

Derived final demand multipliers were created for the City of Moreno Valley in order to calculate the total impact (direct and indirect) specific to the City. These multipliers are calculated by dividing the total number of direct and indirect jobs created in the City of Moreno Valley by the total number of jobs created in Riverside County with the assumption that the portion of jobs generated within the City would reflect the portion of output and earnings generated within the City. See Table F.1 below for additional detail.

Table F.1

Multipliers

	Riverside County					City of Moreno Valley	
	Final Demand			Direct Effect		Derived Final Demand	
Industry	Output / Dollars	Earnings / Dollars	Employment / Jobs	Earnings / Dollars	Employment / Jobs	Output / Dollars	Earnings / Dollars
Construction	1.1860	0.1803	2.2069	1.3471	1.8175	0.6935	0.106346944
Warehousing	1.389	0.3366	8.7441	1.3386	1.3197	0.77909	0.262241848
Manufacturing	1.3379	0.2285	3.9039	1.4404	1.5063	0.589833	0.158462649

Appendix G – Data Tables

Table G.1

Tax Revenue ($Thousands)

Mix Manufacturing	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Sales Tax from Development	$230.1	$10.3	$10.3	$10.3	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$261.0
Ongoing Sales Tax (Operations)	$0.0	$74.7	$149.4	$224.2	$224.2	$224.2	$224.2	$224.2	$224.2	$224.2	$224.2	$2,017.4
Ongoing Sales Tax (Earnings)	$0.0	$43.5	$86.9	$130.4	$130.4	$130.4	$130.4	$130.4	$130.4	$130.4	$130.4	$1,173.3
Property Tax	$0.0	$185.7	$189.4	$193.2	$197.1	$201.0	$205.0	$209.1	$213.3	$217.6	$221.9	$2,033.2
Property Tax In-Lieu	$0.0	$33.8	$33.8	$33.8	$33.8	$33.8	$33.8	$33.8	$33.8	$33.8	$33.8	$337.5
Utilities Tax	$0.0	$100.1	$200.3	$300.4	$300.4	$300.4	$300.4	$300.4	$300.4	$300.4	$300.4	$2,703.5
Franchise Tax	$0.0	$17.4	$34.8	$52.2	$52.2	$52.2	$52.2	$52.2	$52.2	$52.2	$52.2	$470.2
Gross Receipts Tax	$0.0	$8.5	$16.9	$25.4	$25.4	$25.4	$25.4	$25.4	$25.4	$25.4	$25.4	$228.7
Total	$230.1	$473.9	$721.9	$969.8	$963.4	$967.3	$971.3	$975.4	$979.6	$983.9	$988.2	$9,224.9

Warehousing	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Sales Tax from Development	$247.8	$11.4	$11.4	$11.4	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$282.1
Ongoing Sales Tax (Operations)	$0.0	$80.4	$160.8	$241.1	$241.1	$241.1	$241.1	$241.1	$241.1	$241.1	$241.1	$2,170.2
Ongoing Sales Tax (Earnings)	$0.0	$52.9	$105.8	$158.7	$158.7	$158.7	$158.7	$158.7	$158.7	$158.7	$158.7	$1,428.0
Property Tax	$0.0	$196.2	$200.1	$204.1	$208.2	$212.3	$216.6	$220.9	$225.3	$229.9	$234.4	$2,148.1
Property Tax In-Lieu	$0.0	$35.7	$35.7	$35.7	$35.7	$35.7	$35.7	$35.7	$35.7	$35.7	$35.7	$356.6
Utilities Tax	$0.0	$107.7	$215.4	$323.1	$323.1	$323.1	$323.1	$323.1	$323.1	$323.1	$323.1	$2,908.3
Franchise Tax	$0.0	$18.7	$37.5	$56.2	$56.2	$56.2	$56.2	$56.2	$56.2	$56.2	$56.2	$505.8
Gross Receipts Tax	$0.0	$10.0	$20.0	$30.0	$30.0	$30.0	$30.0	$30.0	$30.0	$30.0	$30.0	$270.3
Total	$247.8	$513.0	$786.6	$1,060.4	$1,053.0	$1,057.2	$1,061.4	$1,065.8	$1,070.2	$1,074.7	$1,079.3	$10,069.4

Table G.2

General Fund Cost Analysis ($Thousands)

Mix Manufacturing	2016/17 Adopted Budget	Per Unit Cost[(1)]	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Police Services	$41,567	$197	$12.3	$41.6	$82.6	$123.6	$123.1	$123.1	$123.1	$123.1	$123.1	$123.1	$123.1
Moreno Valley Fire	$18,379	$87	$5.4	$18.4	$36.5	$54.7	$54.4	$54.4	$54.4	$54.4	$54.4	$54.4	$54.4
Public Works - Street Maintenance	$698	$646	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0
Total	N/A	N/A	$18.8	$61.0	$120.2	$179.3	$178.5	$178.5	$178.5	$178.5	$178.5	$178.5	$178.5

Warehousing	2016/17 Adopted Budget	Per Unit Cost[(1)]	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Police Services	$41,567	$197	$13.3	$23.3	$46.1	$68.8	$68.2	$68.2	$68.2	$68.2	$68.2	$68.2	$68.2
Moreno Valley Fire	$18,379	$87	$5.9	$10.3	$20.4	$30.4	$30.2	$30.2	$30.2	$30.2	$30.2	$30.2	$30.2
Public Works - Street Maintenance	$698	$646	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0	$1.0
Total	N/A	N/A	$20.2	$34.7	$67.5	$100.3	$99.4	$99.4	$99.4	$99.4	$99.4	$99.4	$99.4

Notes

(1) Per Unit Cost is in real dollars, not thousands.

Table G.3

Direct Spend and Economic and Fiscal Impact

Mix Manufacturing	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Direct Spend ($Millions)	$50.6	$36.2	$70.0	$103.9	$101.7	$101.7	$101.7	$101.7	$101.7	$101.7	$101.7	$972.4
Jobs	60	210	420	630	620	620	620	620	620	620	620	N/A
Earnings ($Millions)	$7.0	$8.8	$17.4	$25.9	$25.6	$25.6	$25.6	$25.6	$25.6	$25.6	$25.6	$238.0
Output ($Millions)	$35.4	$37.8	$74.1	$110.4	$108.8	$108.8	$108.8	$108.8	$108.8	$108.8	$108.8	$1,019.1

Warehousing	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Direct Spend ($Millions)	$54.6	$42.6	$82.6	$122.7	$120.1	$120.1	$120.1	$120.1	$120.1	$120.1	$120.1	$1,143.3
Jobs	70	120	230	350	340	340	340	340	340	340	340	N/A
Earnings ($Millions)	$7.5	$10.7	$21.1	$31.5	$31.1	$31.1	$31.1	$31.1	$31.1	$31.1	$31.1	$288.1
Output ($Millions)	$38.2	$45.1	$88.4	$131.8	$130.0	$130.0	$130.0	$130.0	$130.0	$130.0	$130.0	$1,213.5

Appendix H – Bibliography

Auditor Controller, County of Riverside. “Countywide Funds Assessed Valuations and Tax Rates 2015-16.” Accessed May 6, 2016. http://www.auditorcontroller.org/.

Auditor Controller, County of Riverside. “Tax Rates by Tax Rate Areas (2015-16).” Accessed May 6, 2016. http://www.auditorcontroller.org/Portals/0/Documents/about_us/division/Proptax/AUCB940-DISTtax.pdf.

BizCosts. Comparative Distribution Warehousing Operating Costs. Princeton, NJ: The Boyd Company, 2012.

California Department of Finance. “Consumer Prices Indices, United States and California Calendar Year Averages.” (2015). Accessed May 6, 2016. http://www.dof.ca.gov/HTML/FS_DATA/LatestEconData/FS_Price.htm.

Construction Labor Market Analyzer. ”CLMA Project Labor Cost Allocation.” (2016). Accessed May 11, 2016. http://myclma.com/wp-content/uploads/2015/02/CLMA-Allocation-of-Project-Cost-2014Oct27.pdf.

City of Moreno Valley. “Business License Categories and Application Fees.” (2016). Accessed May 10, 2016. http://www.moreno-valley.ca.us/edd/pdfs/BusLicCategories-Fees.pdf.

Employment Development Department, Labor Market Information Division. “Monthly Labor Force Data for Cities and Census Designated Places (CDP).” (2016). Accessed May 6, 2016. http://www.labormarketinfo.edd.ca.gov.

Employment Development Department, Labor Market Information Division. “Riverside San Bernardino Ontario MSA.” (2016). Accessed May 12, 2016. http://www.labormarketinfo.edd.ca.gov.

Finance Department, Moreno Valley City Hall. “City of Moreno Valley, California, Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2005." (2005). Accessed May 12, 2016. http://www.moreno-valley.ca.us/city_hall/departments/fin-man-serv/fin-pdf/mv2005cafr0605.pdf.

Financial & Management Services Department: City of Moreno Valley. “City of Moreno Valley Fiscal Year 2015/16 – 2016/17 Adopted Budget.” 2015. Accessed May 6, 2016.

http://www.moreno-valley.ca.us/city_hall/departments/fin-man-serv/fin-pdf/budg-15-16-16-17/adopt-budget15-16-16-17.pdf.

Hedley, George. “Construction Labor Costs – 5 Percent Factor.” Construction Business Owner. Accessed May 11, 2016. http://www.constructionbusinessowner.com/topics/accounting/accounting-finance/construction-labor-costs-5-percent-factor.

Lead Agency: City of Moreno Valley, Prologis LP, and T&B Planning. Environmental Impact Report: Moreno Valley Logistics Center.2016.

Orso, Gary L.. “City of Riverside, Assessor-County Clerk-Recorder 2004-2005 Annual Report.” (2005). Accessed May 11, 2016. www.asrclkrec.com.

Petrosyan, Teresa. “Industrial Statistics: Inland Empire, Q4 2015.” (2016). Accessed May 5, 2016. http://www.us.jll.com/united-states/en-us/research/6686/US-Inland-Empire-Industrial-Stats-Q4-2015-JLL.

Riverside County Assessor. “Assessed Value for Cities 2016/2018.” Accessed May 9, 2016. www.asrclkrec.com/.

U.S. Bureau of Economic Analysis, Regional Multipliers. Series: 2013 U.S. Annual I-O Data and 2013 Regional Data. Region: Riverside.

Ward, Larry W.. “City of Riverside, Assessor-County Clerk-Recorder 2014-2015 Annual Report.” (2015). Accessed May 11, 2016. http://www.asrclkrec.com/Portals/1/Documents/Reports/Annual%20Reports/2014%20-%202015.pdf.