Economic Impact of
The San Gorgonio Crossing
County of Riverside, California

Final

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Project Description and Location. San Gorgonio Crossing complex will have 1,823,760 square feet of industrial space comprised of two high cube logistics facilities. The project is located on approximately 228 acres near the intersection of Cherry Valley Blvd. and Roberts Street (a dirt road) in unincorporated Riverside County adjacent to the City of Calimesa. The site is 0.4 miles from access to the I-10 freeway along Cherry Valley Blvd. (see map: front cover). The size of the project has been reduced by -27% from the original 2.56 million square foot proposal.

There is already a precedent for high volume economic activity in the immediate area:

- Directly south of the project site along Cherry Valley Blvd. is the now defunct Sunny-Cal Egg & Poultry Company. According to Images of Cherry Valley, “the processing plant at this facility was capable of processing 500 cases of eggs per hour, each containing 30 dozen eggs … The ranch originally contained 100 chicken houses, which were 400 feet long, and contained 15,000 birds each”\(^1\) The operation was on a 200 acre site.

- Truck repair activity is located very near the project site:
  - Luther’s Truck and Equipment is roughly 500 yards away along Cherry Valley Blvd. on the short route from the proposed center to the I-10 freeway. It was established in 1995 and incorporated in California. According to the Manta website “current estimates show this company has an annual revenue of $440,000 and employs a staff of nine.”\(^2\)

- Rancho Calimesa Mobile Home Park:
  - The only residential property of any size currently developed the proposed site is the Rancho Calimesa Mobile Home Park located on Calimesa Blvd. directly across the road from the I-10 freeway. It is 0.4 miles northwest of Cherry Valley Blvd. It has approximately 204 units.

Economic Context. To truly understand the importance of projects like the San Gorgonio Crossing project, it is necessary to consider the operation within the context of the economies of the Inland Empire and Riverside County where it is located. This starts with unemployment trends. From 2001-2007, the inland area’s unemployment rate closely tracked the national level. However starting in 2008, while the U.S. rate rose rapidly to as high as 10.6%, the Inland Empire’s unemployment rate deviate substantially, exploding to 15.0%. Since these peaks, the

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\(^1\) Images of Cherry Valley, Kenneth Holtzclaw and Tom Chong, 2008, pgs. 23-24
\(^2\) https://www.manta.com/c/mm4g4jl/luther-s-truck-equipment
inland area’s unadjusted unemployment has remained above the national level (July 2017: 6.1% to 4.6%), even as the economy has improved at the national and local levels (Exhibit 1).
In July 2017, there were 50 metropolitan areas within the U.S. with one million or more people. Of those, the second highest unemployment rate was in the Inland Empire at 6.1%. Riverside County had the highest rate of the two local counties at 6.5%. For the Calimesa through Cabazon area, unemployment is particularly significant to the project. Its rate was 5.7%. Job creation is thus very important for the inland area, the county and the Pass Area where the San Gorgonio Crossing project is proposed (Exhibit 2).
**Stages of Growth.** Given this context, an important goal for the Pass Area of Riverside County is the creation of good paying jobs close to where people are living. The difficulty in maintaining good jobs close to housing arises because of where this area of the market falls within the three “stages of growth.” To be precise, the Pass Area is going through **Stage #1** of the three stage growth process that affects the edge communities of Southern California. In this stage, the density of residential development elsewhere forces home builders into the next area with undeveloped land. This phenomenon reached the Pass Area in the last decade, and is evidenced by the fact that the population of the area’s three cities has gone from 42,085 in 2000 to 85,884 in 2017, a gain of 43,799 people or 104.1%. That was almost twice the 54.3% speed of growth of Riverside County in this period. This stage inevitably brings a lot of people as well as the growth of lower paying population-serving jobs, such as those in retailing and consumer services. This, in turn, means long commutes for the primary wage earners in most families.

- This difficulty maintaining a healthy jobs to housing ratio is seen in the **0.57 jobs:housing ratio** for the Pass Area in January 2017 (*Exhibit 3*). The ratio is a measure of the availability of local jobs for each occupied home in a community. For Southern California, a measure of 1.30 in 2017 constitutes a balance between occupied homes and jobs. The Pass Area’s extremely low figure is typical of an area in Stage #1 of the growth cycle and indicates that employed persons within the area must overwhelmingly commute away for jobs. The area’s ratio is nearly half the already low 0.98 that still exists for Riverside County.

- A second measure showing the difficulty that the lack of jobs has for the primary workers in the Pass Area is the **59.7 minutes** required for the **average round trip commute time** for the area’s workers, according to the 2015 Census Bureau’s American Community Survey. This is up from 56.3 in 2012 and is the result of rapid population growth within the Pass Area while locally available jobs did not keep up. People have thus been forced to commute roughly an hour a day to work.
With the notable exceptions of the Morongo Casino complex and the Arrowhead Water plant, the jobs created in the Pass Area are largely in lower paying population-serving sectors, such as retailing and other consumer services. Again, this is typical of an area in Stage #1 of its growth process. As a result, the average annual pay in the Pass Area in first quarter 2016 was $34,485. That was -15.7% below the average annual pay of $40,896 for jobs located in Riverside County according to the CA Employment Development Department’s data.

Stage #2 of the process, by which outlying areas of Southern California move through the growth process once it reaches them, occurs when industrial builders and employers face the same dilemma that housing developers faced earlier. In this stage, the density of facilities located elsewhere reaches a point where regional, national and international firms must move outward to find space for their operations. As they develop within these outlying areas, the job base they bring leads to declining blue collar commute times, rising jobs:housing ratios and higher annual average pay levels. That is what projects like the San Gorgonio Crossing represent for the Pass Area.

Over time, Stage #2 activity raises the success of the local economy. For instance, this stage has largely been completed in San Bernardino County’s Westend. There, the jobs:housing ratio is 1.38 and the average annual pay is $45,800. In the Inland Empire, Stage #2 forces have moved into the area east of Fontana on the I-10 and Mira Loma on the SR-60. In this eastern part of the urban valleys, the square footage of facilities has exploded from 22.8 million in 2002 to 210.6 million in 2017 as the market moved east. From 2002-2017, this Rialto to Yucaipa area has seen its jobs:housing ratio increase from 1.04 to 1.29, indicating it is reaching a balanced economy. Now, the bulk of this area is starting to run out of sites for industrial development as well.

Stage #3 is the final stage in the maturing process for edge areas. It occurs when better educated workers move into a region and office jobs start to follow them. This has begun in the Westend market. There, increasing numbers of educated workers have moved into the market due to the availability of upscale housing, which is considered inexpensive when compared to the coastal counties. However, the jobs they need have not yet moved. As most of that area’s professionals and office workers commute to the coastal counties, the average commute time is 65.7 minutes.

**San Gorgonio Crossing & The Importance of Logistics Jobs.** Given this economic context, there are several aspects of the distribution and transportation sector (logistics) of which the San Gorgonio Crossing would be a part that are of importance to the economy:

1. With the Inland Empire in need of jobs, the logistics sector is playing a key role in creating local employment opportunities. According to the CA Employment Development Department, during the period of recovery and expansion from the Great Recession (2011 to 2017), the inland area added 292,530 jobs. Of these, 60,075 were in the logistics group. That represented 20.5% of all new jobs created (Exhibit 4). Put another way, in the major metropolitan area with the nation’s second highest
unemployment rate in 2017, the logistics sector has been responsible for 1 of every 5 new jobs directly created in the region.

2. Using CA Employment Development Department data on the 155 occupations in the logistics sector, weighted by the number of workers in each occupation, the median pay level was $46,708 in first quarter 2017 (Exhibit 5). If a person enters the sector and moves up to positions where half the workers in the industry earn more and half make less, this is the income they would earn. If a family had a second wage-earner at the median of $30,652, in the combined low paying sectors (e.g., restaurant, hotel, retail), that family would have a combined income of $77,360 and be part of the middle class.
Here, it should be noted that the median cost of shelter in the Inland Empire, as measured by the U.S. Census Bureau’s American Community Survey for rentals and homeownership weighted by the number of households in each, had a median cost of $1,526 a month. That was -16.5% less than the $1,828 for the rest of Southern California. According to the U.S. Bureau of Labor Statistics, shelter costs represent 36.3% of a typical household’s budget. If prices for all other items are the same, this would mean that the same income buys 6.0% more in Riverside County or San Bernardino County. The $65,303 median income in the inland counties would be the equivalent of $69,221 in the rest of Southern California.

3. An important difficulty for the Inland Empire is the very large share of its adult population that has a high school or less education (Exhibit 7). This makes it necessary to have job growth that can both put residents within reach of middle class incomes while not having serious education barriers to employment.

Again, EDD provides both the numbers of workers in each occupation in each sector and the educational requirements for those occupations. For the logistics sector of which the San Gorgonio Crossing would be a part, 78.4% of all current employees have jobs requiring a high school or less education (Exhibit 6).

| Exhibit 6 – Share of Jobs Available, High School or Less Schooling Inland Empire, 2017 |
|-----------------------------------|---------------------------------|-----------------|
| Tourism (Hotels, Theme Parks & Hotels) | 93.2%                          | 97.5%           |
| Farm, Retail, Cus & Bus Support, Ed & Drink | 97.5%                          | 92.2%           |
| Construction                          | 92.2%                          | 97.5%           |
| Logistics                             | 97.5%                          | 92.2%           |
| Mining, Oil & Gas                     | 92.2%                          | 97.5%           |
| Manufacturing                         | 97.5%                          | 92.2%           |
| Fin., Ins R. Est & Gov               | 92.2%                          | 97.5%           |
| Health Care                           | 97.5%                          | 92.2%           |
| Internet, Radio, TV, News Media, Com | 66.6%                          | 71.3%           |
| Film & Entertainment                  | 71.3%                          | 66.6%           |
| Professions, Minus, Higher Ed, Utilities | 66.6%                          | 71.3%           |
| K-12                                 | 71.3%                          | 66.6%           |

Given that the median income of $46,708 in logistics is the level with 50% of the workers earning more and 50% less, the fact that 78.4% of all workers in the sector are only required to have high school or less educations means that a significant share of those earning the median income or higher are not well educated. The sector has given them a chance to put their families within reach of the middle class.

Together, the relatively strong median incomes earned by workers in the logistics sector coupled with the fact that a huge percentage of workers in the sector needed high school
or less educations, means that these workers have had the chance to advance in income thanks to on-the-job learning and movement up skill ladders to increasing levels of responsibility, technical competence and income.

4. The importance of these attributes of the logistics sectors to the Pass Area from the San Gorgonio Crossing project may be seen in data from the U.S. Census Bureau’s 2015 American Community Survey. It showed that 44.9% of Pass Area adults had a high school or less education. This number was 46.4% in Riverside County. Among Southern California counties, only Imperial and San Bernardino had higher shares of adults with a high school or less education (Exhibit 5). A huge share of local adults thus need access to the types of jobs and the skill ladders that logistics offers.

To summarize, the logistic sector, of which San Gorgonio Crossing would be a part, would provide job opportunities of a kind needed by a very significant share of the adults in the Pass Area and Riverside County. That is the case given the Pass Area’s relatively high unemployment level (5.7%), significant commute times (59.7 minutes round trip), very low jobs:housing ratios (0.57 jobs per occupied residence), the educational levels of local workers (44.9% high school or less) and the low average pay levels ($34,485) of local firms. The logistics sector’s importance is seen in four facts:

- The sector is growing rapidly (20.5% of inland direct job growth).
- Logistics has a median income ($46,708) that puts families within reach of the middle class.
- Most logistics workers (78.4%) are in jobs that require a high school diploma or less.
- The sector provides workers on-the-job learning and skill ladders up which marginally educated employees can advance toward a higher median income level.

San Gorgonio Crossing – Direct Job Creation. Looking at the specific economic impact of the logistics sector, there are three separate scenarios concerning the level of direct job creation
from adding 1,823,760 square feet of logistics space. These depend upon the ultimate tenants that occupy the space.

- **Conventional Warehousing.** A conventional warehousing operation would receive international cargo from the ports of Los Angeles and Long Beach or domestic cargo originating in Southern California or elsewhere in the country. In 2017, imported cargo entering the U.S. through these harbors is on track to reach a record level of 8.5 million 20-foot equivalent containers. Once reaching a local facility and being processed, the cargo would ultimately leave for outlets in Southern California or regional distribution hubs throughout the U.S. Inside the facility, a variety of activities might take place, such as simply storing the goods or sorting them so specific combinations can be assembled to meet orders from stores or regional hubs. Items from various places in the world might be assembled into final products or boxed together in combined packages. Often such operations have small retail operations co-located on-site. Workers in conventional facilities would employ information technology in their work as the sites are becoming increasingly automated.

In December 2016, the U.S. Energy Information Agency released its latest research on building activity. Among other metrics, Table B-1 released the mean square feet per worker for varying uses of space.\(^3\) It found that warehousing had a mean of 1,851 square feet of space for each worker. Raising that to 2,000 square feet to be conservative, 1,823,760 square feet of new space would generate 912 direct new logistics jobs at the San Gorgonio Crossing complex.

- **High Technology Warehousing.** The difference between conventional warehousing and a high technology warehousing is the enormous amount of capital equipment and information technology installed to handle operations. This can be seen in the value of the trade fixtures in different facilities. For example, the Walgreen’s distribution center in Moreno Valley is regarded as a high technology facility. It has trade fixtures valued at $47.38 per square foot. That is 67.7% more than the $28.25 per square foot for trade fixtures at the more conventional Ross distribution center in nearby Perris.

Operations of this type are relatively new and can have a wide range of estimates for square feet per workers. Kosmont Companies uses 3,600 square feet per job based upon work from the Southern California Association of Governments. This analyst has analyzed facilities of this type at 3,250 square feet per job.

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Using the Kosmont assumption, 1,823,760 square feet of new space with a high technology tenant would generate 507 direct new logistics jobs at the San Gorgonio Crossing complex.\(^4\)

A second characteristic of such facilities is that they pay more than other forms of warehousing because the workers need to be able to work with and/or maintain much more sophisticated equipment. A 25% premium is thus applied to labor force earnings.

- **Fulfillment Center.** The newest trend in logistics operations are fulfillment centers. These facilities receive a huge variety of consumer goods from around the country and around the world. They are then sorted and stored. They are sent to customers who largely order them on-line. The goal of these centers is 24 hour delivery. The work in them is more labor intensive than in other forms of warehousing.

In the Inland Empire, the most highly publicized fulfillment centers have been the several Amazon.com facilities of 750,000 to 1,000,000 square foot operation that have been located through the area. Altogether, they are on track to hire 17,000 full time employees, with a 25% increase of part time workers during the holidays. Interestingly, of the 17 logistics facilities looking for locations in the Inland Empire in first quarter 2013, Jones LaSalle found that seven were fulfillment operations from firms as diverse as Nordstrom, Dollar Tree, Best Buy and Kohl’s.\(^5\)

Looking at the square feet per permanent worker in these types of facilities, several are publicly known:

- Amazon’s Redlands 750,000 square foot operation employs 1,000 workers or 750 square feet per worker
- Amazon’s Eastvale 1,000,000 square foot facility employees 1,000 workers or 1,000 square feet per worker.
- Macy’s is building a 1,300,00 square foot facility in Oklahoma with 1,500 workers or 867 square feet per worker.
- Macy’s has a 1,300,00 square foot facility in West Virginia with 1,200 workers or 1,083 square feet per worker.

Interestingly, the square footage per worker in fulfillment centers is equal to or less than the 1,039 square feet per job found in manufacturing.

Based upon these operations, a conservative assumption of 1,100 square feet per permanent fulfillment center job would appear reasonable. Seasonal workers are omitted from the calculation. Using that assumption, a San Gorgonio Crossing complex with

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\(^4\) San Gorgonio Crossing Project, Gross Fiscal Impact and Economic Benefit Analysis, September 2015

\(^5\) Marketing Activity on the Move, Jones LaSalle, Ontario, 2012-2013
1,823,760 square foot of fulfillment tenants would generate **1,658 direct new logistics jobs**.

**San Gorgonio Crossing Distribution Center – Secondary & Total Job Creation.** When a logistics operation opens in local market, it supplies direct jobs at the facility as discussed above. When the money spent by the business and its employees circulates through the local economy, it creates additional economic activity and employment. This is analogous to a gold mining town in the Old West. There, the miners dug up gold and sent it away bringing fresh money into the town. That supported the miners who represented the direct jobs. When the mining companies or mine workers spent those same dollars at the local general store or saloon, those operations and their workers were also supported. They represent a secondary tier of economic impact also set off by the gold mine activity.

To estimate the secondary tier of employment and total employment of the three different scenarios for the San Gorgonio Crossing complex, the standard approach is to use an econometric model called IMPLAN designed to provide that information. The market area used for the analysis was Riverside County:

- **Conventional Warehousing.** The 912 direct jobs led to another 612 secondary jobs for a total permanent employment impact of **1,524**.
- **High Technology Warehousing.** The 507 direct jobs led to another 535 secondary jobs for a total permanent employment impact of **1,042**.
- **Fulfillment Center.** The 1,658 direct jobs led to another 1,112 secondary jobs for a total permanent employment impact of **2,770**.

**San Gorgonio Crossing – Direct, Secondary & Total Income Creation.** IMPLAN modeling also shows the direct, secondary and total labor income generated by the operation of the three types of uses for the San Gorgonio Crossing:

- **Conventional Warehousing.** $60.8 million in direct labor income would be created leading to another $29.7 million in secondary labor income for a total labor income impact of **$90.6 million**.
- **High Technology Warehousing.** $51.8 million in direct labor income would be created leading to another $26.1 million in secondary labor income for a total labor income impact of **$77.8 million**.
- **Fulfillment Center.** $110.7 million in direct labor income would be created leading to another $54.0 million in secondary labor income for a total labor income impact of **$164.7 million**.

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*IMpacts for PLANning, version 3.1.1001.12 copyright 2013, IMPLAN Group LLC*
San Gorgonio Crossing – Direct, Secondary & Total Economy Activity Creation. IMPLAN modeling also shows the direct, secondary and total economic activity generated by the operation of the three types of uses for the San Gorgonio Crossing:

- **Conventional Warehousing.** $93.3 million in net new economic activity (value added) would be generated leading to another $52.6 million in secondary economic activity for a total increase in economic activity of $146.0 million.

- **High Technology Warehousing.** $81.8 million in net new economic activity (value added) would be generated leading to another $46.0 million in secondary economic activity for a total increase in economic activity of $127.8 million.

- **Fulfillment Center.** $169.7 million in net new economic activity (value added) would be generated leading to another $95.7 million in secondary economic activity for a total increase in economic activity of $265.4 million.

San Gorgonio Crossing – Direct, Secondary & Total Sales Activity Creation. IMPLAN modeling also shows the direct, secondary and total sales activity generated by the operation of the three types of uses for the San Gorgonio Crossing. Sales activity differs from economic activity in that it does not eliminate the fact that sales from one local firm to another double counts the amount of economic activity created. Thus, if one firm is a flour mill and it sells to a baker, sales activity counts both transactions. This inflates or double counts the true impact of economic activity, because the price of the baked goods also includes the price of the flour. In effect, the flour is counted twice. Still, local leaders are often interested in the total value of sales:

- **Conventional Warehousing.** $133.3 million in sales in the local economy would generated another $88.0 million in secondary local sales for a total increase in sales activity of $221.3 million.

- **High Technology Warehousing.** $115.2 million in sales would cause another $76.9 million in secondary sales activity for a total increase in sales activity of $192.1 million.

- **Fulfillment Center.** $242.4 million in new sales activity generate another $159.9 million in secondary sales for a total increase in sales activity of $402.3 million.

**Summary of Economic Impacts.** Altogether, the direct and secondary impacts of the San Gorgonio Grossing complex on job creation, increased labor income and growth in the Riverside County economy are summarized in Exhibit 8.

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<thead>
<tr>
<th>Exhibit 8-Economic Impact of San Gorgonio Crossing, By Type of Tenant</th>
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<tbody>
<tr>
<td><strong>Conventional Warehouse</strong></td>
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<tr>
<td>Direct Impact</td>
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### Secondary Impact

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<tbody>
<tr>
<td><strong>Total Impact</strong></td>
<td>1,524</td>
<td>$90.6 million</td>
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#### High Tech Warehouse

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<tbody>
<tr>
<td><strong>Direct Impact</strong></td>
<td>507</td>
<td>$51.8 million</td>
<td>$81.8 million</td>
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<tr>
<td><strong>Secondary Impact</strong></td>
<td>535</td>
<td>$26.1 million</td>
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<td><strong>Total Impact</strong></td>
<td>1,042</td>
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#### Fulfillment Center

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<tbody>
<tr>
<td><strong>Direct Impact</strong></td>
<td>1,658</td>
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<td><strong>Secondary Impact</strong></td>
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<td>$265.4 million</td>
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Source: IMPLAN Calculations by Economics & Politics, Inc.

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**San Gorgonio Crossing – Other.** Two other impacts of the San Gorgonio Crossing project are of importance. Specifically, these are the economic impact during the construction of the project, and the impact of the facility on the tax revenues of local governments. In both case, Kosmont Companies has done a thorough analysis of these impacts and its September 2015 report should be referenced:

**San Gorgonio Crossing Complex**

**Gross Fiscal Impact and Economic Benefits Analysis**