

MEMORANDUM

To: Justin Derby, MLC Holdings, Inc.
From: Economic & Planning Systems, Inc.
Subject: Fiscal and Economic Impact Analysis of the Proposed MLC Hayward Project; EPS #161072
Date: April 11, 2017

The Economics of Land Use



MLC Holdings, Inc. (MLC) retained Economic & Planning Systems, Inc. (EPS) to prepare a fiscal and economic impact analysis of a proposed mixed-use project in the City of Hayward. The project would be developed on a 7.76-acre site located on Mission Boulevard and would consist of a 93-room hotel, 140 residential units, and 7,355 square feet of retail space.

The EPS analysis assesses the effects of the proposed development on the City of Hayward's General Fund and the local economy. This includes quantifying whether the proposed project will generate adequate revenues to cover the costs of providing ongoing services to associated new residents and employees.¹ The analysis evaluates the impact of the proposed project at buildout and is based on the City's 2016 Adopted General Fund budget. In addition, EPS evaluates the potential annual economic impacts of the project in the local economy through metrics of employment, employee compensation, value added, and economic output. Findings are presented in constant 2016 dollars.

Table 1 and **Table 2** provide summaries of the fiscal and economic impact estimates attributable to the proposed project. Actual fiscal and economic impacts will depend on a number of factors that cannot be predicted with certainty, including the market performance of the project, future changes in City or State budgeting practices, and the efficiency of various City departments in providing services. Key analytical inputs and assumptions used in this analysis are from the development applicant, City and County documents, and EPS industry knowledge.

*Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612
510 841 9190 tel
510 740 2080 fax*

*Oakland
Sacramento
Denver
Los Angeles*

www.epsys.com

¹ The analysis does not consider the impact of the proposal on potential capital facilities cost requirements or other one-time costs.

Summary of Findings

1. The proposed mixed-use project will result in an annual net fiscal benefit of \$672,000 to the City of Hayward General Fund.

This analysis estimates that the net annual fiscal impact of the proposed project on the City's General Fund is positive and significant, as shown in **Table 1**. This net impact is based on annual additional General Fund revenues of an estimated \$926,000 and annual expenditures of approximately \$254,000 associated with the project at completion. The net additional funds will accrue to the General Fund and will be available to support other City services.

Table 1 Fiscal Impact Summary (2016\$)

Item	Fiscal Impact at Project Buildout¹
General Fund Revenues	\$926,000
General Fund Expenditures	<u>\$254,000</u>
Net Impact on General Fund	\$672,000

2. At project buildout, Transient Occupancy Tax will account for the largest revenue source to the City.

The City of Hayward currently levies an 8.5 percent transient occupancy tax (TOT) on room revenue generated by hotels in the City. The proposed 93 hotel rooms are projected to generate over \$4.7 million in annual room revenue, providing the City's General Fund with an estimated \$400,000 in annual TOT revenue. If the average room rate is higher than the anticipated \$165 per night, TOT revenue will be higher. For example, an average room rate of \$170 per night would generate an estimate \$4.84 million in annual room revenue and \$413,000 in TOT revenue. Under this scenario, the project's annual net impact on the General fund would increase from \$672,000 to \$686,000.²

3. The project's operating activities will generate demand for goods and services, thereby providing stimulus for new or existing jobs in the City's economy.

In addition to revenue generation for the City, development of the project will generate employment at the site, as well as additional jobs through multiplier effects in other areas of the City, from hotel operations and on-site retail businesses. As currently programmed, the hotel portion of the project will directly support about 45 jobs, while the retail program will directly support roughly 19 jobs annually. In addition to direct jobs, another 19 jobs will be supported through economic ripple effects.

² Room rate increases positively affect TOT and emergency facilities services tax revenue.

4. The proposed project is expected to generate approximately \$9.4 million in new spending in the local economy each year.

These economic impacts reflect the total of direct, indirect, and induced economic impacts that will result from project-related operations generated by the hotel and retail portion of the development. In total, the project will support approximately 83 jobs, with an employee compensation of approximately \$3.1 million, and a total annual output of about \$9.4 million, as shown in **Table 2**.

Table 2 Economic Impact Summary (2016\$)

Impact Type	Jobs	Employee Compensation	Value Added ¹	Total Output
Direct Effect	64	\$2,124,000	\$3,976,000	\$6,525,000
Indirect Effect	9	\$526,000	\$831,000	\$1,417,000
Induced Effect	<u>9</u>	<u>\$496,000</u>	<u>\$900,000</u>	<u>\$1,435,000</u>
Total Effect	83	\$3,146,000	\$5,707,000	\$9,377,000

¹ Comparable to gross domestic product (GDP).

Source: IMPLAN and EPS

Fiscal Impact on the General Fund

This section describes the methodology and key assumptions used to estimate the fiscal impacts of the proposed project. The analysis is based on information from the following sources:

- development applicant
- City and County documents
- existing EPS industry knowledge

EPS has developed a fiscal impact framework based on its in-house methodology and Hayward-specific factors obtained from the sources above. EPS has not conducted an independent audit of the City's budget, performed in-depth interviews with service-providing City departments, or conducted detailed market analysis.

Project Description

MLC is proposing a mixed-use project to be developed on a 7.76-acre site located on Mission Boulevard. The proposed development envisions a 93-room hotel, 140 residential units, and 7,355 square feet of retail space. **Table 3** details the proposed development program identified by the applicant. The table also presents EPS assumptions concerning the population and employment that would be generated by the project at buildout. A variety of revenues and costs included in this fiscal analysis are based on the anticipated "service population" shown in **Table 3**, which weights a local employee's service burden at 50 percent of a resident's burden.

Table 3 Development Program and Service Population

Item	Development Program¹	Resident or Worker Density Assumptions²	Population	FTE³ Employment	Service Population
<u>Commercial Uses</u>					
Retail	7,355 Square Feet	400 SF per Employee	0	18	9
Hotel	93 Rooms	3.0 Rooms per Employee	0	31	16
<u>Residential</u>					
Project Households	140 Dwelling Units	3.24 Residents per HH ⁴	<u>453</u>	<u>0</u>	<u>453</u>
Total			453	49	478

¹ Development program provided by MLC Holdings, Inc.

² Household and employment densities may vary based on specific tenant and space size/configuration.

³ Full-Time Equivalent.

⁴ City average based on the State of California.

Sources: Department of Finance, US Census, MLC Holdings, Inc. and EPS

General Fund Revenues

New General Fund tax proceeds attributable to the proposed development will include sales tax, property tax, property tax in lieu of vehicle license fee (VLF), property transfer tax, TOT, utility user tax, franchise fees, and business licenses. **Table 4** provides a summary of the Hayward Fiscal Year 2016 Adopted General Fund revenue budget and a description of the forecasting method relied upon for each relevant revenue source.

Table 4 FY2016 Revenue Budget Summary and Fiscal Impact Estimating Factors

Revenue Source	FY2016 Citywide Revenue Budget	Factors Applied to Estimate Project Revenue
Sales Tax	\$34,064,000	1.0% of estimated taxable sales
Property Tax		
City Property Tax	\$30,780,000	15.8% of base property tax rate (1%)
Property Tax in-Lieu of VLF	\$12,741,000	proportional to change in Citywide AV
Transient Occupancy Tax	\$1,996,000	8.5% of total hotel room revenue
Utility Users Tax	\$16,411,000	5.5% of utility bills
Franchise Fees	\$9,585,000	\$50.57 per service population
Other Taxes		
Emergency Facilities Tax	\$1,831,000	rates vary by land use category
Business License	\$2,721,000	\$37.11 per employee
Property Transfer Tax	\$6,500,000	\$4.50 per \$1,000 in value
Fines & Forfeitures	\$1,767,000	- not estimated
Interest and Rents	\$555,000	- not estimated
Intergovernmental	\$7,262,000	- not estimated
Charges for Services	\$9,924,000	- not estimated
Other Revenue	<u>\$431,000</u>	- not estimated
Total Revenue in FY2016¹	\$136,568,000	

¹ Total Revenue for FY2016 is \$140,422,000. Transfers-in of \$3,855,000 not shown here.

Sources: City of Hayward FY2016 Adopted Budget and EPS

Retail Sales Tax Revenue

The proposed project is expected to generate retail sales tax revenue accruing to the City of Hayward, from households, visitor spending, and additional on-site sources. Project household/hotel guest spending on retail in the City and on-site retail sales will generate revenue for the General Fund. This local sales tax revenue is 1.0 percent of total retail sales. **Table 5** outlines sales tax revenue projections at buildout.

Taxable Household Spending

This fiscal analysis relies on data from the U.S. Bureau of Labor Statistic Consumer Expenditure Survey to establish the retail spending pattern of households. The spending patterns reflect household consumer behavior observed nationally for households with specific levels of annual income. This analysis uses anticipated residential rents to estimate household income. Then, to identify taxable retail expenditures made by project households, the analysis identifies and isolates taxable retail spending from total household spending. The analysis estimates that for market-rate units, households spend approximately 21 percent of gross household income on taxable retail purchases and that 60 percent of that spending occurs locally. Local taxable spending in Hayward is multiplied by project households to determine average annual taxable sales.

Hotel Guest Retail Spending

The hotel guest retail spending is based on an assumption that a typical visitor has a per-diem rate of approximately \$68 for meals and incidentals. EPS assumes each room night generates one person-day of spending and adjusts the total taxable retail sales to reflect occupancy at the hotel. The analysis also assumes that hotel guests spend 80 percent of their total retail spending in the City.

On-Site Retail Sales

On-site retail sales are based on a taxable sales factor of \$400 per square foot of retail space. The analysis assumes that approximately 80 percent of these on-site sales will be net new in the City. Also, to avoid double counting, EPS assumes project resident and guest spending accounts for 25 percent of net new on-site taxable sales.

Table 5 Retail Sales Tax Revenue

Item	Assumptions	Annual Total at Buildout
<u>Project Households Retail Purchases in Hayward</u>		
Estimated Annual Household Income	Based on Home Price ¹	\$144,000
Household Taxable Retail Spending	21% of Income ²	\$30,873
Household Retail Spending in Hayward	60% of Retail Expenditures	\$18,524
Project Households		140
Taxable Retail Sales Captured in Hayward		\$2,593,323
<u>Hotel Guest Retail Purchases in Hayward</u>		
Room-Nights	84% Occupancy ³	28,514
Taxable Retail Sales	\$68 per Day ⁴	\$1,938,938
Taxable Retail Sales Captured in Hayward	80% of Retail Expenditures	\$1,551,151
<u>On-Site Retail Sales</u>		
Gross Taxable Retail Sales	\$400 per SF ⁵	\$2,942,000
Retail Sales Net of Redistributed Sales in City	80% of Total Taxable Sales ⁶	\$2,353,600
Net New On-Site Taxable Sales	75% of Net Taxable Sales ⁷	\$1,765,200
Net New Taxable Retail Sales		\$5,909,674
Total Retail Sales Tax Revenue	1.0% of Taxable Sales	\$59,097

¹ Income reflects typical financing and the assumption that housing costs represent 35 percent of gross household income.

² Based on the Bureau of Labor Statistics Consumer Expenditure Survey, 2014.

³ Occupancy rate provided by MLC Holdings, Inc.

⁴ FY2016 GSA per diem rate for meals and incidentals in Alameda County.

⁵ Retail sales productivity estimate provided by MLC Holdings, Inc.

⁶ Assumes 20 percent sales shift from existing retailers in the City.

⁷ Assumes project resident and hotel guest spending accounts for 25 percent of net new on-site taxable sales.

Sources: State Board of Equalization, ICSC Research Survey, U.S. Bureau of Labor Statistics, and MLC Holdings, Inc.

Property Tax Revenue

Property tax revenue is based on the estimated assessed value of the proposed project. Relying on the applicant's proposed development program, EPS estimates the project's assessed value at about \$131.9 million at buildout, as shown in **Table 6**. The City's General Fund captures 15.8 percent of the base 1.0 percent property tax rate, totaling annual net revenue of approximately \$185,400 after accounting for the current tax bill.³ This tax rate factor is specific to the tax rate area that covers the project location.⁴

Property Tax In-Lieu of Vehicle License Fees

In 2004, the State of California adjusted the method for sharing vehicle license fees (VLF) with local jurisdictions. Recent State budget changes replaced the VLF with property tax, which grows proportionately with increases in assessed value of the City. The proposed project will add about 0.64 percent to the current assessed value in Hayward (assuming no other assessed value growth for simplification purposes) and will generate a proportional increase in in-lieu VLF revenues (see **Table 6**).

³ Current tax bill is \$23,000 annually.

⁴ Tax Rate Area (TRA) for the site is 25-223.

Table 6 Property Tax Revenue

Item	Assumptions	Total at Buildout
<u>Property Tax¹</u>		
Retail Value	\$500 per SF	\$3,677,500
Residential Unit Value	\$700,000 per Unit	\$98,000,000
Hotel Value	\$325,000 per Room	<u>\$30,225,000</u>
Total Assessed Value		\$131,902,500
Property Tax Revenue	1.0% Base Property Tax Rate	\$1,319,025
Hayward General Fund Revenue ²	15.8% Allocation to General Fund	\$208,406
Net General Fund Revenue	-\$23,000 Current Tax Bill	\$185,406
Property Tax In-Lieu of VLF		
Existing Citywide Property Tax in-Lieu of VLF		\$12,741,000
Citywide Assessed Value ³		\$18,403,234,391
Project Net Assessed Value Increase ⁴		0.64%
Property Tax in-Lieu of VLF Revenue⁵		\$81,325

¹ Property valuations provided by MLC Holdings, Inc.

² Per Alameda County Tax Collector AB8 factor (post-ERAF).

³ FY2016 value based on the Alameda County Assessor Annual Assessor's Report.

⁴ Calculated by dividing the new assessed value by citywide assessed value.

⁵ Calculated by multiplying existing property tax in-lieu of VLF by project net assessed value increase.

Sources: MLC Holdings, Inc. and Alameda County Assessor's Office

Property Transfer Tax

The project will generate real estate transfer tax revenue associated with future turnover in ownership. This analysis assumes that ownership of retail and hotel properties will turnover every 25 years, an annual turnover rate of 4.0 percent. Residential units are assumed to turnover every 12.5 years, an annual turnover rate of 8.0 percent. The property transfer tax rate accruing to the City General Fund is \$4.50 per \$1,000 of the property value, as shown in **Table 7**.

Table 7 Property Transfer Tax Revenue

Item	Assumptions	Annual Total at Buildout
<u>Property Value¹</u>		
Retail	\$500 per Sq.Ft.	\$3,677,500
Residential Units	\$700,000 per Unit	\$98,000,000
Hotel	\$325,000 per Room	<u>\$30,225,000</u>
Total Property Value		\$131,902,500
<u>Average Annual Turnover</u>		
Retail	4.0% Turnover Rate	\$147,100
Residential Units	8.0% Turnover Rate	\$7,840,000
Hotel	4.0% Turnover Rate	<u>\$1,209,000</u>
Total		\$9,196,100
Property Transfer Tax Revenue	\$4.50 per \$1,000 in Value	\$41,382

¹ Property valuations provided by MLC Holdings, Inc.

Transient Occupancy Tax

The hotel component of the project is expected to help satisfy the strong lodging demand in the local market. This analysis assumes the 93 hotel rooms planned for the project achieves an average daily room rate of \$165 and that the hotel stabilizes at 84 percent occupancy. The estimate of TOT is calculated by applying the current rate of 8.5 percent to the total room revenue generated by new hotel, as shown in **Table 8**.

Table 8 Transient Occupancy Tax Revenue

Item	Assumptions	Annual Total at Buildout
Hotel Rooms		93
Average Daily Room Charge ¹	\$165	
Average Occupancy ¹	84%	
Annual Revenue ¹		\$4,704,777
Transient Occupancy Tax Revenue	8.5%	\$399,906
<i>% of Total Citywide FY2016 TOT Revenue</i>		<i>20.0%</i>

¹ Estimates provided by MLC Holdings, Inc.

Utility Tax

The City of Hayward collects tax revenue on utility charges for services provided in the City. New residents and employees will increase utility usage in Hayward. The analytical assumptions reflect average annual utility usage in Hayward, in combination with project-specific data from the applicant. This analysis estimates an average monthly utility expense per resident is \$85. Employees are assumed to use a total of \$190 per month. The City of Hayward collects 5.5 percent of utility charges. **Table 9** presents utility user tax revenue attributable to the proposed project at buildout.

Table 9 Utility User Tax Revenue

Item	Assumptions	Annual Total at Buildout
<u>Residential</u>		
Total Residential Population	453 Residents	
Monthly Utility Cost	\$85 per Resident/Mo.	
Annual Total		\$461,958
<u>Commercial Uses</u>		
Total Employees	64 Jobs (PT+FT)	
Monthly Utility Cost	\$190 per job/mo.	
Annual Total		\$146,644
Total Annual Utility Expenses		\$608,602
Utility User Tax Revenue	5.5% of Utility Bill	\$33,473

Emergency Services Facilities Tax

The City's Emergency Services Facilities (ESF) Tax is a General Fund revenue source adopted by the City Council to generate funds to retrofit or strengthen the City's facilities against earthquake damage. The tax is imposed per household, per business, and on hotel room revenue (similar to the TOT). As shown in **Table 10**, the project is estimated to generate about \$99,300 annually in ESF tax revenues.

Table 10 Emergency Tax Revenue

Land Use	Assumptions	Annual Total at Buildout
<u>Retail</u>		
Businesses	4.00 Business	
Retail Tax Rate ¹	\$35 per Business	
Annual Revenue from Retail		\$140
<u>Hotel</u>		
Revenue	\$4,704,777 Room Revenue	
Hotel Tax Rate	2.0% of Room Revenue	
Annual Revenue from Hotel		\$94,096
<u>Townhomes</u>		
Townhomes	140 Dwelling Units	
Residential Tax Rate	\$36 Per Unit	
Annual Revenue from Residential		\$5,040
Annual Emergency Facilities Tax Revenue		\$99,276

¹ Rate assumes 4-15 employees per business.

Revenues from Other Taxes and Fees

In addition to the revenues described above, other taxes and fees are estimated to be generated by the project. Specifically, EPS forecasts new franchise fees and new business license revenues generated by commercial activity associated with the project. This analysis uses an average revenue approach derived from City budget documents (see **Table 4**). **Table 11** presents forecasting assumptions and revenue estimates.

Table 11 Revenue from Other Taxes and Fees

Item	Allocation Factor	Project Characteristic	Annual Total at Buildout
Franchise Fees ¹	\$50.57 per service population	478 Service Pop.	\$24,151
Business License ¹	\$37.11 per employee	49 Employees	<u>\$1,833</u>
Other Tax Revenue			\$25,984

¹ Franchise fees and Business License allocation factors are based on existing General Fund averages.

General Fund Expenditures

This fiscal analysis estimates the costs attributable to population and employment growth by characterizing how expenses will change for each City department. For some departments, population and employment growth in the City will not dramatically alter operations. For example, administrative functions in the City are not likely to scale up significantly to accommodate new projects. Alternatively, departments that provide services directly to residents and businesses likely will increase their operations and costs to accommodate new population.

It is important to note that a range of external factors may influence responses to growth and cost effects in the future. Examples of factors that are beyond the control of the City and its departments that may act to magnify or reduce department costs over time include:

- regional growth;
- technology;
- state and federal policies; and
- environmental factors.

This study does not speculate regarding the potential effects of such exogenous influences on the general fund expense budget. It focuses only on those factors attributable directly to the population growth, employment growth, and land use changes generated by the proposed project.

The fiscal analysis model relies on a categorization of the likely budgetary response to population and employment growth for each department. The anticipated response to growth is expressed for fiscal modeling purposes in terms of “fixed expenses” and “variable expenses” within the department budget.

The fixed expenses are the portion of a City department's budget which is not affected by population and employment growth. Even a department which is anticipated to grow largely in step with the City's service population likely would have some fixed cost. For example, in most cases each department has only one director position, which is a fixed expense for the department. While the department may increase staffing to accommodate growth, the department will not add another director.

The variable expenses of a department are those that increase with growth. As the City grows, increased demand for services requires some departments to scale up operations to meet new demand. The analysis identifies the portion of a department's budget that scales up as the variable share of the budget.

EPS uses a per-capita cost approach to estimate department costs attributable to new residents and workers. The variable portion of each department budget is used to determine the per-capita cost, as shown in **Table 12**. Then, to determine the new General Fund expenditures generated by the proposed project, the per-capita factors are multiplied by the projected increase in service population or resident population attributable to the project, as appropriate. The project is not expected to generate non-departmental expenditures.

Table 12 FY2016 Expenditure Budget Summary and Fiscal Impact Estimating Factors

Item	General Fund Expenses (FY2016)	Percent Variable ¹	Annual Variable Expenses	Estimating Factors		Per Capita General Fund Expense	Project / Service Population	Annual Total at Buildout
General Government ²	\$18,280,326	10%	\$1,828,033	189,549	Service Pop	\$9.64	478	\$4,606
Police	\$65,994,933	90%	\$59,395,440	189,549	Service Pop	\$313.35	478	\$149,655
Fire	\$35,042,909	90%	\$31,538,618	189,549	Service Pop	\$166.39	478	\$79,466
Library and Community Services	\$5,344,696	75%	\$4,008,522	152,889	Resident Pop	\$26.22	453	\$11,874
Public Works, Utilities and Other Services	\$6,933,102	50%	\$3,466,551	189,549	Service Pop	\$18.29	478	\$8,734
Non-Departmental	<u>\$8,826,299</u>							<u>N/A</u>
Total Expenditures (rounded)	\$140,422,300							\$254,300

¹ Percentage of costs that are population-dependent, as opposed to fixed costs or costs recovered through fees or charges.

² Includes Mayor & Council, City Attorney, City Clerk, City Manager, Development Services, Finance, and Human Resources.

Sources: City of Hayward FY16 Adopted Budget and EPS

Fiscal Impact of Proposed Project

Table 13 details the fiscal impact of the proposed project on the City of Hayward's General Fund, with forecasted revenues and expenditure estimates based on the methodology described above. The analysis estimates that the proposed development will generate an annual net fiscal impact of about \$672,000.

Table 13 Summary of Fiscal Impact Analysis (2016\$)

Item	Annual Fiscal Impact at Buildout
<u>General Fund Revenues</u>	
Sales Tax	\$59,000
Property Tax	\$185,000
Property Tax in-Lieu of VLF	\$81,000
Property Transfer Tax	\$41,000
Transient Occupancy Tax	\$400,000
Utility Users Tax	\$33,000
Emergency Facilities Tax	\$99,000
Franchise Fees	\$24,000
Business Licenses	<u>\$2,000</u>
Total Revenues	\$926,000
<u>General Fund Expenditures</u>	
General Government	\$5,000
Police	\$150,000
Fire	\$79,000
Library and Community Services	\$12,000
Public Works, Utilities and Other Services	<u>\$9,000</u>
Total Expenditures	\$254,000
Net Impact on General Fund	\$672,000

Economic Impact Analysis

This section evaluates the proposed project's ongoing economic impact in the City of Hayward using the IMPLAN "Input/Output" model of the local economy.⁵ The economic impacts calculated here are those that can be directly linked to gross taxable retail sales and total annual hotel revenues, the primary economic drivers created by the proposed project.

Gross taxable retail sales for the 7,335 square feet of new retail space totals \$2.9 million (\$400 per square foot), as shown in **Table 5**. Estimated hotel revenue is \$4.7 million including annual room revenue and revenue from other services. Using IMPLAN, these revenues are then analyzed to determine associated economic metrics such as direct employment, employee compensation, value added and economic output supported by the project. The economic impact analysis also evaluates indirect and induced economic impacts, which are "multiplier" or "ripple" effects in the local economy.⁶

Framework and Approach

To measure these effects, this economic analysis relies on IMPLAN (Impact Analysis for Planning) software, an input-output (I/O) model that draws upon data collected by the IMPLAN Group from several state and federal sources, including the Bureau of Economic Analysis, Bureau of Labor Statistics, and the Census Bureau.

Input-Output Analysis

I/O analysis is premised on the concept that industries in a geographic region are interdependent and thus the total contribution of any one establishment's activity is larger than its individual (direct) output and/or employment. Consequently, an establishment's economic activity has a "multiplier" effect that generates successive rounds of spending and output in other economic sectors within a particular region. For example, consider the implications of operating expenditures by a hotel or retail establishment. Hotels and retail establishments purchase goods from producers, who in turn purchase raw materials from suppliers. Thus, an increase/decrease in the demand for hotel services will stimulate an increase/decrease in output and employment in the interdependent secondary industries.

Regional economic impact analysis and I/O models in particular provide a means to quantify economic effects stemming from a particular industry or economic activity. Specifically, I/O models produce quantitative estimates of the magnitude of regional economic activity resulting from some initial activity (e.g., hotel or retail operations). I/O models rely on economic multipliers that mathematically represent the relationship between the initial change in one sector of the economy and the effect of that change on economic output, employment, and income in other industries. These economic data provide a quantitative estimate of the magnitude of shifts in jobs and revenues within a regional or state economy.

⁵ IMPLAN is an Input-Output modeling system (software and data) developed by the Minnesota IMPLAN Group, and is widely used in the U.S. for estimating economic impacts across a wide array of industries and economic settings.

⁶ IMPLAN data are available by ZIP code. The ZIP codes correlated with the City of Hayward and used for this study (94541, 94542, 94544, 94545, and 94587) contain some areas outside of the City.

Initial revenue injections from the project are referred to as the direct effect. Next the I/O model quantifies the impacts associated with the ripple or multiplier effects that result from project's initial injections. The ripple effects are categorized as indirect or induced effects. Indirect effects represent economic impacts on suppliers while induced effects represent economic impacts on household income and spending. In this report, direct, indirect, and induced effects are defined as follows:

- The **Direct Effect** is a measure of the economic value of the initial injection of spending into the economy, or in this case, the annual hotel revenue and gross taxable retail sales. This translates to employees working at the hotel/retailer and other direct operational transactions.
- The **Indirect Effect** is a measure of the economic value of "upstream" industry-to-industry transactions that supply inputs to the production of goods and services consumed by the new project (i.e., the linen industry).
- The **Induced Effect** is a measure of the economic value of labor income that re-circulates in the economy as a result of the initial revenue made by the project. This would relate to the spending of the project's employees.
- The **Total Impact** is the sum of the direct, indirect, and induced effects. The total impact measures the overall impact of the project's activities on the economy.

This report measures economic significance using common economic metrics, including employment, employee compensation, output, and value added, as defined below.

- **Employment** is equivalent to jobs, a headcount that includes part-time and full-time workers.
- **Employee Compensation** represents payments to labor in the form of both income and fringe benefits paid by the employer (e.g., health, retirement), as well as proprietor income.
- **Value Added** represents a contribution to gross regional product and equals the market value of the final goods and services produced within a particular region. Value added is equal to economic output, as defined below, less the value of intermediate goods and services.
- **Economic Output** represents a measure of economic activity, calculated as production value including intermediate inputs (i.e., the goods and services used in the production of final products). Output includes spending on employee compensation as well as the production value of each intermediate input, such as equipment, supplies, insurance, rents, utilities, communication

Table 14 reflects the economic effects of the project by both effect and program type. As shown, the overall economic impacts of both the hotel and retail programs of the project including the direct, indirect, and induced effects total approximately \$9.4 million annually for the local economy. IMPLAN estimates that the hotel would directly support 45 jobs, while the retail program would directly support an additional 19 jobs on an ongoing basis. In addition, 19 jobs are supported through the indirect and induced effects of the project, for a total of 83 jobs.

Table 14 Annual Economic Impact of MLC Hayward at Project Buildout

Project Program	Impact Type	Jobs	Employee Compensation	Value Added¹	Total Output
Hotel²	Direct Effect	45	\$1,606,687	\$2,845,179	\$4,747,493
	Indirect Effect	7	\$409,622	\$619,400	\$1,055,536
	Induced Effect	<u>7</u>	<u>\$377,658</u>	<u>\$684,471</u>	<u>\$1,091,708</u>
	Total Effect	60	\$2,393,967	\$4,149,051	\$6,894,737
Retail³	Direct Effect	19	\$517,273	\$1,131,230	\$1,777,365
	Indirect Effect	2	\$116,440	\$211,320	\$361,557
	Induced Effect	<u>2</u>	<u>\$118,662</u>	<u>\$215,069</u>	<u>\$343,029</u>
	Total Effect	23	\$752,375	\$1,557,620	\$2,481,951
Total Project		83	\$3,146,342	\$5,706,671	\$9,376,687

¹ Contribution to gross domestic product (GDP).

² Uses IMPLAN sector code 499 and is defined as "hotels, and motels, including casino hotels."

³ Uses IMPLAN sector code 405 and is defined as "general merchandise stores"; also uses sector code 502 defined as "limited-service restaurants."

Sources: IMPLAN and EPS