
# Airport Economic Impact Analysis

## McClellan Palomar Airport

Prepared by ICF

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# Tables and Figures

# Table of Acronyms/Glossary

| Term | Definition |
|---|---|
| **CAPEX** | Capital Expenditures |
| **Direct Impacts** | Impacts in the primary industries where spending by the Airport and its visitors are focused, such as operations, airport employment, lodging, and restaurant/food purchases. |
| **EMAS** | Engineered Materials Arresting System |
| **Employment** | Represents the jobs created in each industry, based on the output per worker for each industry. |
| **IMPLAN** | Impact Analysis for Planning – economic modeling tool |
| **Indirect Impacts** | Impacts in the industries that supply or interact with the primary industries, for example when Airport capital projects require the purchase of construction-related building materials. |
| **Induced Impacts** | The increased spending by workers who earn money due to the proposed projects, such as when laborers use their wages at local restaurants. |
| **Industry Activity** | Represents the total value of industry activity generated by the direct spending. |
| **Labor Income** | Includes all forms of employment income generated by the direct input, including employee compensation (wages and benefits) and proprietor income. |
| **Multiplier** | Coefficients that describe the response of the economy to a stimulus (a change in demand or production). |
| **Off Airport Activity** | Activity related to the tenants of the County Airport owned off airport business park, including tenants in the Palomar Commons, and Weston Solutions, Inc., along with off-airport spending by both leisure and business travelers on transportation, lodging, food, attractions, and other retail items. For example, hotels near the airport, taxi companies, wholesalers, or shipping services. |
| **On Airport Activity** | Activity related to the Airport's annual operational expenditure and capital expenditures along with the total employment, average annual capital expenditures, and annual fuel expenditures of all on-airport tenants |
| **Regions of Analysis** | Base Regions:<br>• San Diego County<br>• San Diego Region (Five-county region of San Diego, Riverside, Los Angeles, Orange, and San Bernardino counties)<br>• North County (Zip Codes in North of San Diego County)<br>Additional Regions:<br>• City of Carlsbad |
| **TOPI** | Taxes on Production and Imports, less Subsidies |
| **Visitor Spending** | Purchases made by visitors to the San Diego region in categories such as ground transportation, lodging, or retail expenditures. |

# Executive Summary

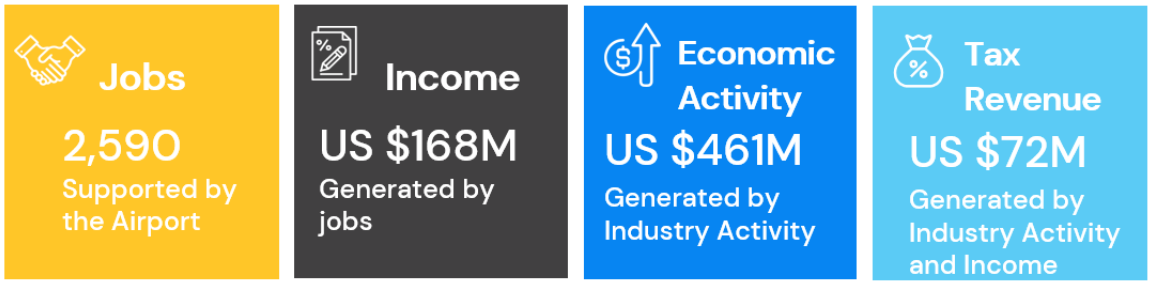
McClellan-Palomar Airport (Airport) acts as a significant contributor of economic activity in the North County and the broader San Diego region.[1] Airport-related capital investment, operational employment, visitor spending and airport-owned business park activity contribute directly to regional employment, industry activity and tax revenues. Moreover, this direct spending creates additional secondary (indirect and induced) impacts across the broader economy as direct spending drives purchases in related industry sectors. Economic impact analysis quantifies the "multiplier effect" of economic activity, calculating the total (direct and secondary) impact created by multiple rounds of spending across a regional economy. This analysis uses the modeling software IMPLAN (2019 data) to calculate these inter-industry impacts. IMPLAN is an economic input-output model that combines a set of extensive databases related to economic factors, economic multipliers, and demographic statistics with a refined and detailed system of modeling software. As the community considers future airport facility improvements, it is valuable to understand both its current economic contribution as well as the potential benefit to the region under various growth scenarios and timeframes as discussed in the 2018 McClellan-Palomar Airport Master Plan Update.[2] To that effect, this study analyzed the Airport's impact under three scenarios:

- **2019 Baseline**: represents current economic impact
- **No Development Scenario**: forecasted economic impact in 2026 and 2036 without further development and no additional commercial air service. This represents the most constrained economic scenario[3]
- **Full Development Scenario**: forecasted economic impact in 2026 and 2036 under the development recommended by the Airport Master Plan to facilitate current and forecasted aviation activity and accommodate commercial air service. This represents the least constrained economic scenario.[4]

The analysis reports economic impacts in terms of jobs, labor income, total industry activity and tax impact. As seen in Figure 1 below, the impact of McClellan-Palomar Airport to the San Diego Region is significant. The Airport's operational and capital expenditure, tenant activity, and passenger spending supports 2,594 jobs, drives $460.6 million in industry activity, and generates $72.2 million in federal, state, and local tax revenue. These findings do not include the economic impact generated from off-airport business park activity, which was modeled separately to allow for an accurate comparison across scenarios. In 2019, this off-airport business park activity generated an additional 622 jobs, $82.6 million in industry activity and $14.9 million in tax revenue.

[1] The San Diego Region includes the five-county area of San Diego, Riverside, Los Angeles, Orange, and San Bernardino counties.
[2] County of San Diego. (2018). McClellan-Palomar Airport Master Plan Update
[3] The No Development Scenario accounts for no change in airport classification, no runway extension, and no additional commercial service.
[4] The Full Development Scenario is the Preferred Airport Alternative as described in the Master Plan Update (including but not limited to D-III design standards, shifting the runway 123 feet to the north, extending it 800 feet, and installing Emergency Material Arresting System-EMAS) to facilitate current based aircraft and forecasted Planning Activity Level 2 commercial air service demand, as also described in the Master Plan Update.

*Figure 1: 2019 Baseline Impact - San Diego Region*

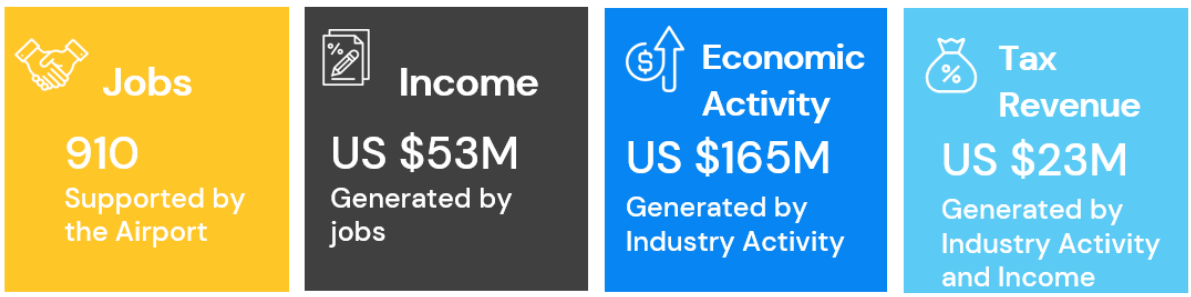



Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs and rounded to the nearest tenth. All labor income and industry and tax values are in 2021 dollars and rounded to the nearest million.

A significant portion of the Airport's economic impact on the San Diego region is felt in the North County. Of the total regional impact for the 2019 Baseline, 63% of the total employment impact (1,642 jobs), and 52% of total industry activity impact ($241.6 million) occurs in North County. The North County employment impact is primarily driven by direct employment in aviation and tourism-related sectors, which include sightseeing transportation and support activities for transportation (21% of jobs created), hotels, motels, and other accommodation (18% of jobs created), and air transportation (12% of jobs created). Additionally, induced employment impacts – which stem from the change in earnings of those employed in sectors of direct and indirect employment growth – are primarily felt in the retail and health services sectors. On-airport Air Transportation occupations which include airline pilots, flight engineers, aircraft mechanics and service technicians, and flight attendants have an average annual compensation of $74,972, which is above the North County average of $66,698. Similarly, on-airport occupations in the Sightseeing Transportation and Support Activities for Transportation sector like air traffic control, hangar rental, and parking have an average annual employee compensation of $64,507 which is on par with the average compensation in North County.

Moreover, of the 2019 Baseline regional impact, 35% of the total employment (910 jobs), and 36% of total industry activity ($165.3 million) occurs in the City of Carlsbad. Figure 2 below provides an overview of the Airport's 2019 Baseline impact in the City of Carlsbad. These findings do not include the economic impact generated from off-airport business park activity.

*Figure 2: 2019 Baseline Impact - City of Carlsbad*

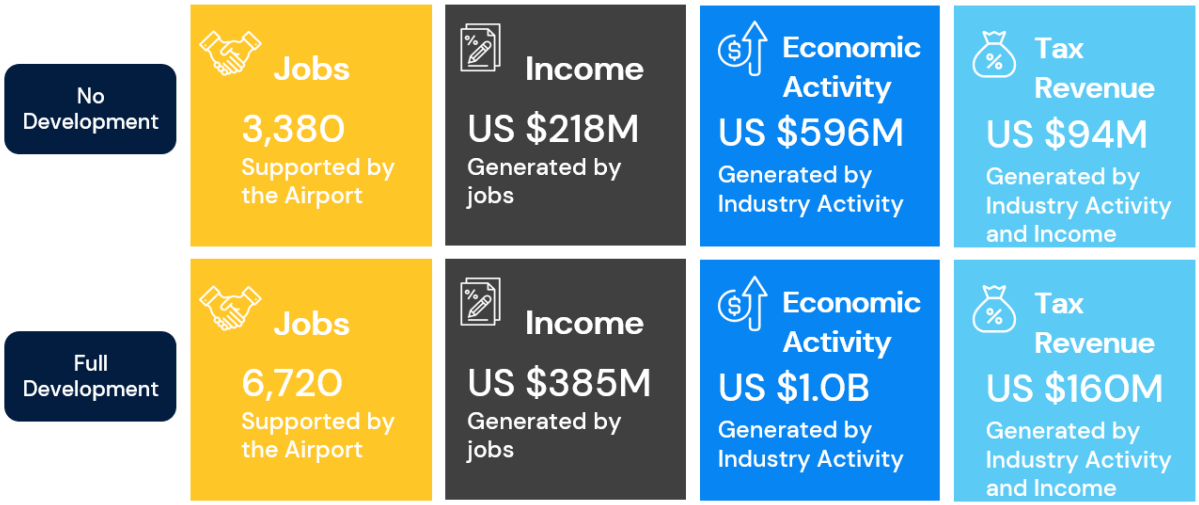



Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs and rounded to the nearest tenth. All labor income and industry and tax values are in 2021 dollars and rounded to the nearest million.

As seen in Figure 3 below, the difference between the 2036 No Development and Full Development Scenarios is significant. Under the 2036 Full Development Scenario, the Airport's operational and capital expenditure, tenant activity, and passenger spending supports 6,724 jobs, drives

approximately $1.0 billion in industry activity, and generates $159.8 million in federal, state, and local tax revenue.

*Figure 3: 2036 No and Full Development Scenarios - San Diego Region*




Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs and rounded to the nearest tenth. All labor income and industry and tax values are in 2021 dollars and rounded to the nearest million.

Based on the analysis, the Airport's total impact is estimated to increase 19% by 2026 under the No Development Scenario and as much as 92% under the Full Development Scenario. Similarly, in 2036 the total economic impact of the Airport is estimated to increase 29% under the No Development Scenario, or up to 121% under the Full Development scenario. Again, the majority of the airport's economic impact under the Full Development Scenarios in 2026 and 2036 is felt locally in North County; 69% of the total employment impact and 55% of the total industry activity. Table 1 below presents the total economic impact across the scenarios for the San Diego Region.

*Table 1: Summary of Economic Impact by Scenario*

| Impact Category | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Employment (Jobs) | 2,594 | 3,083 | 5,756 | 3,377 | 6,724 |
| Labor Income ($Millions) | $168.1 | $200.0 | $334.2 | $218.0 | $385.4 |
| Industry Activity ($Millions) | $460.6 | $547.5 | $886.1 | $595.5 | $1,017.5 |
| Federal, State & Local Tax ($Millions) | $72.2 | $85.9 | $139.1 | $93.5 | $159.8 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars.

In addition to the ongoing annual activity, there are short-term construction expenditures related to capital improvements associated with the reclassification of the airport to a D-III design standard, shifting the runway to the north, and a runway extension that could have significant economic impact. The impact of this construction activity is not included in the annualized 2026

or 2036 Scenarios because of its multi-year duration and thus should be considered additive to the annualized impacts. Table 2 below presents these impacts over the construction periods.

*Table 2: Economic Impact of Full Development Scenario*

| Impact Category | 2019 – 2026 | 2026 – 2036 |
|---|---|---|
| Employment (Jobs) | 483 | 831 |
| Labor Income ($Millions) | $33.9 | $58.4 |
| Industry Activity ($Millions) | $89.9 | $154.7 |
| Federal, State & Local Tax ($Millions) | $11.4 | $19.6 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars.

It should be noted that the economic multipliers are larger for the broader San Diego region than for San Diego County, North County, and the City of Carlsbad because the regional economy has larger supply-chains and labor markets, and thus secondary (indirect and induced) effects are more significant. For example, a dollar of direct spending supports $1.15 of impact in North County compared to $1.91 at the regional level. These trends are consistent for the employment and labor income impacts as well. The multipliers for airport activity and tenant activity are generally higher than those for visitor spending and business park activity because retail sectors have a higher portion of initial spending that "leaks" out of the study area.

As part of the analysis, ICF also assessed how the Airport's services affect the competitiveness of industries in North County. ICF conducted stakeholder interviews with businesses in the leisure and business market segments to get a better understanding of how local industries benefit from the Airport's presence. ICF reached out to a total of 14 identified contacts and conducted interviews with 10 total stakeholders. Beyond its impacts in terms of employment and spending, the Airport provides value to the region's economy by connecting local firms with strategic partners, and critical markets. The Airport provides large regional firms with a local airport from which to efficiently travel to business meetings and access markets across the country and overseas. The Airport plays an important role in the North County's growing leisure industry, enabling visitors to conveniently fly into the region to attend conferences, sports events, theme parks, and other recreational activities which drives subsequent economic spending in the region. Interview feedback confirmed that there is considerable demand for commercial passenger service that would support local technology and life sciences corporate travel and leisure tourism. A catchment study conducted last year for the Airport showed that there were approximately 7,000 airline passengers per day each way, or 14,000 total passengers, that reside or were visiting a destination within 15 miles of the Airport.[5] New commercial air service at the Airport would not only provide a more convenient option for many of these travelers but would also stimulate additional air service demand. In addition to business and leisure market benefits, the Airport is a valuable potential asset for the emergency service providers in the region.

[5] Zip Code Market Study 2019 conducted by ASM Global Route Development for Carlsbad McClellan-Palomar Airport.

## Notes on Methodology

Regional economic modeling is founded on the principle that industry sectors are interdependent: one industry purchases inputs from other industries and households (e.g., labor) and then sells outputs to other industries, households, and government entities. Therefore, economic activity in one sector causes an increased flow of money throughout the economy.

This analysis uses the modeling software IMPLAN (2019 data) to calculate these inter-industry impacts. IMPLAN is an economic input-output model that combines a set of extensive databases related to economic factors, economic multipliers, and demographic statistics with a refined and detailed system of modeling software. There are three primary types of impacts in IMPLAN:

- **Direct** – refers to the impacts on the industries that the Airport, its operators, and visitors directly interact with, such as aviation services, food and beverage establishments, retail stores, etc.
- **Indirect** – refers to the impacts in inter-industry purchases resulting from direct spending on materials, equipment, and labor. These results represent the upstream supply chain impacts that are created due to the industry linkages caused by project-related industries purchasing from other industries such as raw materials sectors supplying the directly impacted industry.
- **Induced** – refers to the downstream impacts created in all local industries due to consumers' consumption expenditures arising from changes in personal income caused by the direct and indirect effects.

IMPLAN is widely used by municipalities and other entities throughout North America and thus the results of this analysis are comparable to other assessments. Results are reported using four commonly used metrics, consistent with best practices across economic impact analysis. A summary of each metric is provided below:

- **Employment**: Represents the jobs created in each industry, based on the output per worker for each industry.
- **Labor Income**: Includes all forms of employment income generated by the direct input, including employee compensation (wages and benefits) and proprietor income.
- **Industry Activity**: Represents the total value of industry activity generated by the direct spending.
- **Tax Impact**: Represents the total value of the region's share of federal, state and local taxes.

In addition to the modeled quantitative economic impacts, ICF examined how access to the Airport provides a benefit to local businesses, residents, and the broader economy in terms of connectivity. To capture these impacts, ICF conducted stakeholder interviews with businesses in the leisure and business market segments to get a better understanding of how local industries benefit from the Airport's presence. Based on the information obtained during the interviews, ICF constructed short vignettes that demonstrate qualitatively the broader impacts of the airport on regional competitiveness.

# Introduction

McClellan-Palomar Airport (Airport) acts as a significant contributor of economic activity in the North County and the broader San Diego region. The Airport employs hundreds of workers every year, and generates millions in income, industry activity and tax revenue for the region. As the community considers future airport facility improvements, it is valuable to understand both the Airport's current economic contribution and the potential benefits to the region under various growth scenarios and timeframes as discussed in the 2018 McClellan-Palomar Airport Master Plan Update.[6]

The Airport not only generates direct economic benefits for employees, visitors, and business travelers, but it is also indirectly involved in generating regional employment and revenue through spending on Airport-related capital investment, operational employment, visitor spending and airport-owned business park activity. Impacts are measured in terms of employment (jobs), labor income (employee compensation), industry activity (economic activity) and taxes across the five-county region of San Diego, Riverside, Los Angeles, Orange, and San Bernardino counties, as well as specifically in San Diego County, North County, and the City of Carlsbad.

North County has thriving life sciences, communication and information technology, defense and transportation, healthcare, and tourism clusters. The Airport provides value to the region's economy by allowing businesses in these sectors to connect with strategic partners and critical markets. The Airport provides regional firms with a local airport from which to efficiently travel to business meetings and access markets across the country and overseas. These businesses engage with a range of supplier industries, subcontractors, and small businesses in the area, creating jobs and driving downstream economic activity in secondary markets across the San Diego Region.

While company executives already use the Airport as a primary hub, the demand for additional commercial service from industries in the region as well as the tightening of operational capacity at San Diego International Airport, suggests that there could be an opportunity to expand commercial passenger service. This scenario would further increase the Airport's importance in terms of job creation, economic growth, and connectivity.

With knowledge of its economic impact under various growth scenarios, the Airport will be able to raise awareness about its crucial role in the regional economy and utilize relevant information to make informed decisions related to its long-term development plan.

## Study Methodology

### Economic Impact Modeling

Airport spending generates economic impacts not only through the direct purchase of goods and services in the surrounding economy but also through employment, infrastructure development, and tourism activity. Direct spending by the Airport and its visitors is the most straightforward economic impact. However, this direct spending represents only a portion of the Airport-generated impact. The full economic impact of the Airport on the regional economy, including secondary impacts in sectors beyond the initial spending categories, can be assessed through economic impact modeling.

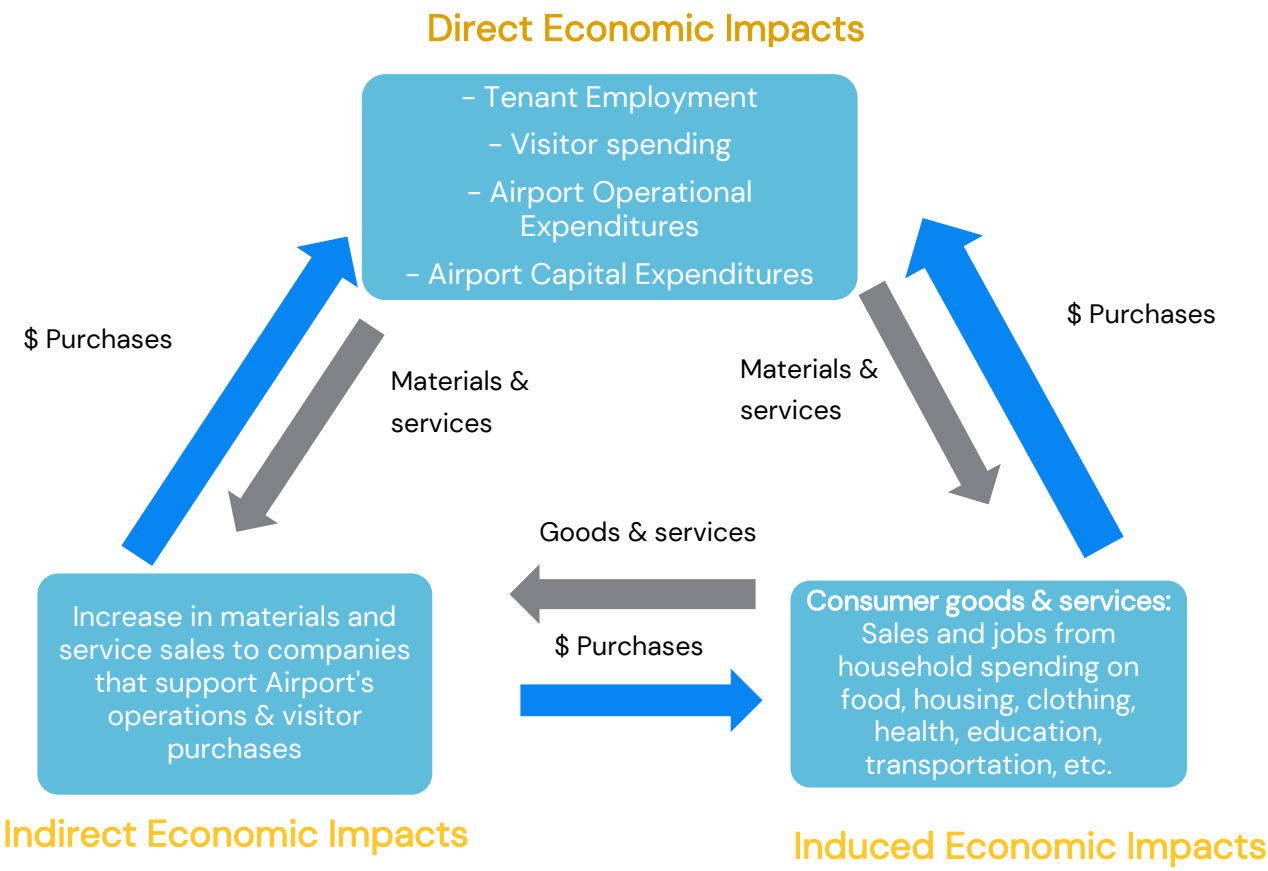
Regional economic modeling is founded on the principle that industry sectors are interdependent: one industry purchases inputs from other industries and households (e.g., labor) and then sells outputs to other industries, households, and government entities. Therefore, economic activity in one sector causes an increased flow of money throughout the economy. This analysis uses the

[6] County of San Diego. (2018). McClellan-Palomar Airport Master Plan Update

modeling tool IMPLAN to calculate these impacts. Municipalities across North America regularly use IMPLAN for a variety of applications, including assessing the impact of transportation policies and development. The IMPLAN model is a static input-output framework used to analyze the effects of an economic stimulus on pre-specified economic regions; in this case both the five-county San Diego Region, as well as the more localized regions of San Diego County and zip codes that make up North County, and the City of Carlsbad. The model includes 546 sectors based on the North American Industry Classification System (NAICS). ICF developed spending and employment inputs that are then mapped to specific IMPLAN industry sectors and run through the model. As depicted in Figure 4, the model uses location-specific multipliers to trace and calculate the flow of dollars from the industries that originate the impact to supplier industries. These multipliers are thus coefficients that describe the response of the economy to a stimulus (a change in demand or production). IMPLAN's outputs include three types of impacts:

- **Direct impacts**, which are impacts in the primary industries where spending by the Airport and its visitors are focused, such as aviation services, lodging, and restaurant/food purchases.
- **Indirect impacts**, which are impacts in the industries that supply or interact with the primary industries, for example when Airport capital projects require the purchase of construction-related building materials.
- **Induced impacts**, which refers to the downstream impacts created in all local industries due to consumers' consumption expenditures arising from changes in personal income caused by the direct and indirect effects.

*Figure 4: McClellan-Palomar Airport's Economic Impact Under the IMPLAN Model*



The total impact is the sum of the multiple rounds of secondary indirect and induced impacts that remain in the region (as opposed to "leaking out" to other regions). IMPLAN then uses this total impact to calculate subsequent impacts such as total jobs created, and labor income and taxes generated.

**Spending Vectors.** The Airport's baseline impact is driven by four key input spending vectors. These vectors account for both the on- and off-airport activity supported by the Airport:

- **Airport Activity** – On Airport Operations and Capital Expenditures
- **Tenant Activity** – On Airport Tenant Operations, Capital Expenditures, and Fuel Expenditures
- **Business Park Activity** – Off Airport Business Park Employment
- **Visitor Spending** – Off Airport Visitor Spending

ICF relied on multiple data sources to determine the model inputs for each spending category. On-airport activity is characterized by the Airport's annual operations (OPEX) and capital expenditures (CAPEX), along with the total employment, average annual capital expenditures, and annual fuel expenditures of all on-airport tenants including fixed-base operators like Carlsbad Jet Center, and flight schools like Fun Flights or Civic Helicopters among others. Off-airport activity includes the employment supported by business park tenants in the Palomar Commons and businesses like Weston Solutions, Inc., along with off-airport spending by both leisure and business visitors on ground transportation, lodging, food, attractions, and other retail items. The methodology used to develop the model inputs is described in further detail in **Appendix A**.

**Regions of Analysis**. The analysis was conducted at four regional levels:

- Five-county San Diego Region which includes San Diego, Riverside, Los Angeles, Orange, and San Bernardino Counties,
- San Diego County,
- North County region, and,
- City of Carlsbad.

**Scenarios.** As the County of San Diego continues to plan for the future while enhancing operations and safety at the Airport, it is valuable to understand both the current and potential economic contribution of the Airport under various growth scenarios and timeframes as discussed in the 2018 McClellan-Palomar Airport Master Plan Update.[7] This study analyzed the Airport's impact under three scenarios:

- **2019 Baseline**: represents current economic impact
- **No Development Scenario**: forecasted economic impact in 2026 and 2036 without further development and no additional commercial air service. This represents the most constrained scenario[8]
- **Full Development Scenario**: forecasted economic impact in 2026 and 2036 under the development recommended by the Airport Mater Plan to facilitate current and forecasted aviation activity and accommodate commercial air service. This represents the least constrained scenario.[9]

[7] County of San Diego. (2018). McClellan-Palomar Airport Master Plan Update

[8] The No Development Scenario accounts for no change in airport classification, no runway extension, and no additional commercial service.

[9] The Full Development Scenario is the Preferred Airport Alternative as described in the Master Plan Update (including but not limited to D-III design standards, shifting the runway 123 feet to the north, and extending it 800 feet, and installing

**Results.** The results of this analysis are reported using four commonly used metrics, consistent with best practices across the field of economic impact analysis. A summary of each metric is provided below:

- **Employment:** Represents the jobs created in each industry, based on the output per worker for each industry.
- **Labor Income:** Includes all forms of employment income generated by the direct input, including employee compensation (wages and benefits) and proprietor income.
- **Industry Activity:** Represents the total value of industry activity generated by the direct spending.
- **Tax Impact:** Federal, state, and local tax revenue generated by activity related to airport operations.

## Competitiveness Assessment

In addition to economic impact modeling, ICF also assessed how the Airport's services provide a benefit to local businesses, residents, and the broader economy in terms of connectivity. These impacts, which cannot be modeled well, are real and should be recognized. To capture these impacts, ICF conducted interviews with stakeholders in both the business and leisure market segments to gain an understanding of how North County industries and the broader economy benefit from the Airport's presence. The stakeholders that informed ICF's analysis are listed below.

EMAS) necessary to facilitate current based aircraft and forecasted Planning Activity Level 2 commercial air service demand, as also described in the Master Plan Update.

*Table 3: Stakeholders Interviewed*

| Association | Brief Description |
|---|---|
| Viasat | A global communications and wireless technology company headquartered in Carlsbad, CA. Viasat has over 5,800 employees globally, over half of which work out of the headquarters office. |
| San Diego North EDC | Economic development agency working to grow the economic base of the Northern San Diego County region. |
| BioCom | Life sciences advocacy agency with a membership base of over 1,500 companies. San Diego location supports the life science ecosystem in San Diego. |
| San Diego Regional EDC / Innovate 78 | A multi-city partnership between Carlsbad, Escondido, Oceanside, San Marcos, and Vista that supports the business ecosystem of the 78 Corridor by elevating North County San Diego's reputation and assisting businesses as they evolve. The initiative is executed by the San Diego Regional EDC with financial and programmatic support from the five cities. |
| Qualcomm | A global communications and wireless technology company headquartered in San Diego and employing over 11,000 residents. Qualcomm has historically been one of the key economic drivers in the region. |
| Legoland | A theme park, miniature park, and aquarium located in Carlsbad, California, based on the Lego toy brand. Legoland is a main tourist attraction and one of the largest employers in the North County. |
| Atlantic Aviation | On-airport fixed base operator at the Airport offering a variety of services ranging from hangar services, commercial and cargo aircraft support, services for military aircraft, international operations, aircraft maintenance, and concierge services. |
| Carlsbad Jet Center | On-airport fixed base operator at the Airport offering a variety of services ranging from fueling, ground handling, aircraft parking and hangaring, offices, and concierge services. |
| CAL FIRE | Department of Forestry and Fire Protection (CAL FIRE) serves and safeguards the people and protects the property and resources of California. CAL FIRE may stage or preposition firefighting helicopters or fixed wing aircraft at the Airport. |
| Mercy Air | Mercy Air has provided critical care air transport service throughout California and Nevada for over 30 years. |

Note: The full stakeholder outreach list was vetted and approved by the County Airports on August 4th, 2021.

Additionally, ICF reached out to representatives at Calloway Golf, Mellano & Company, the San Diego Tourism Authority, Kaiser Hospital, and Tri-City Hospital.

This remainder of this report includes an analysis of the economic impact modeling results followed by a discussion of the competitiveness impacts.

# Findings

This discussion focuses on the results of the San Diego regional analysis, as this is the most appropriate geographic level to discuss the impacts of the Airport. Additionally, discussion specific to the North County and City of Carlsbad is included to inform stakeholder discussions and provide a more localized context for the findings. Full results for San Diego County, North County and the City of Carlsbad can be found in **Appendix B**.

## Summary of Regional Results

The summary of regional results presented in Table 4 indicates the magnitude of impact generated by the Airport across the scenarios over the modeling timeframe. Based on the analysis, the Airport's total impact is estimated to increase 19% over the Baseline by 2026 under the No Development Scenario and as much as 92% under the Full Development Scenario. Similarly, in 2036 the total economic impact of the Airport is estimated to increase 29% over the Baseline under the No Development Scenario, or up to 121% under the Full Development Scenario. Under the 2026 Full Development Scenario, the Airport is estimated to employ 5,756 people and generate roughly $886.1 million in industry activity and $139.1 million in total tax revenue. Under the 2036 Full Development Scenario, the Airport is estimated to employ 6,724 people and generate more than $1.0 billion in industry activity and $159.8 million in tax revenue.

*Table 4: Summary of Economic Impact in San Diego Region*

| Impact Category | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Employment (Jobs) | 2,594 | 3,083 | 5,756 | 3,377 | 6,724 |
| Labor Income ($Millions) | $168.1 | $200.0 | $334.2 | $218.0 | $385.4 |
| Industry Activity ($Millions) | $460.6 | $547.5 | $886.1 | $595.5 | $1,017.5 |
| Federal, State & Local Tax ($Millions) | $72.2 | $85.9 | $139.1 | $93.5 | $159.8 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars

In the Baseline, 79% of the total industry activity impact occurs in San Diego County ($363.5 million), and 52% of the activity is felt locally in the North County ($241.6 million). Additionally, an estimated 36% of the total industry activity occurs in the City of Carlsbad ($165.3 million). Even more significant, 92% of the total regional employment occurs in San Diego County (2,390 jobs), approximately 63% is supported locally in North County (1,642 jobs) and estimated 35% is supported in the City of Carlsbad (910 jobs).

## Detailed Discussion of Baseline Results

The sections below include detailed discussions of the impacts associated with each spending vector, industry-specific impacts, and effects on employment, wages, and tax revenue in the San Diego Region as well as the City of Carlsbad.

### Economic Impacts by Spending Vector

Table 5 represents the total economic impact of each spending vector within the San Diego Region. Findings indicate that the on-airport activity, which includes the Airport Activity and Tenant Activity spending vectors combined, supports an estimated 1,514 jobs, $116.5 million in labor income and approximately $332.5 million in industry activity across the San Diego Region. In addition, on-airport activity generates approximately $52 million in local, state, and federal tax revenue. On-airport activity is primarily driven by tenant employment.

Off-airport activity is primarily driven by visitor spending by leisure and business travelers on ground transportation, lodging, food, attractions, and other retail. Economic modeling results indicate that off-airport visitor activity supports an estimated 1,081 jobs, $51.6 million in labor

income and approximately $128.0 million in total industry activity across the San Diego Region. Visitor activity generates approximately $20.1 million in local, state, and federal tax revenue.

*Table 5: San Diego Region Baseline Results by Spending Impact Vector*

| Spending Vector | Employment | Labor Income ($Millions) | Industry Activity ($Millions) | Tax Revenue ($Millions) |
|---|---|---|---|---|
| Airport Activity | 78 | $5.7 | $13.7 | $1.8 |
| Tenant Activity | 1,436 | $110.9 | $318.9 | $50.2 |
| Business Park Activity | 622 | $33.9 | $82.6 | $14.9 |
| Visitor Activity | 1,081 | $51.6 | $128.0 | $20.1 |
| Total | 3,217 | $202.1 | $543.2 | $87.0 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars.

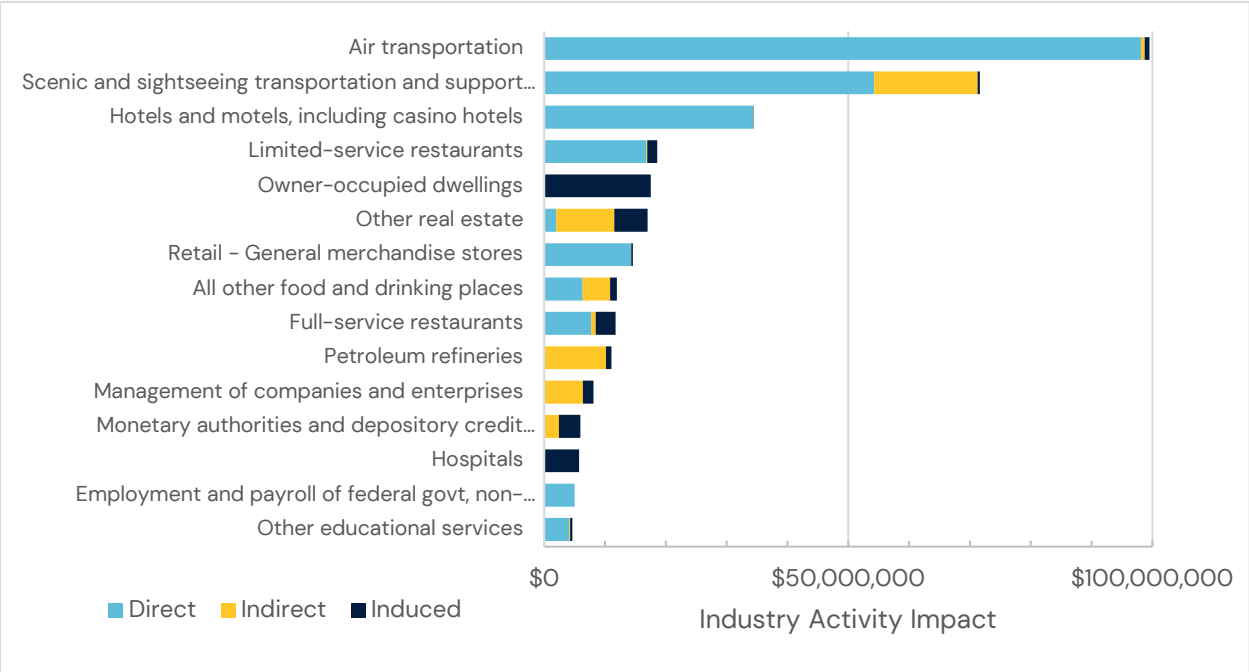
Overall, the Tenant Activity and Visitor Spending vectors are the main drivers of the Airport's economic impact. Tenant activity makes up approximately 55% of the total regional labor income impact and 59% of the total regional industry activity impact in the San Diego Region.

## Industry-Specific Impacts

The previous discussion presents economy-wide impacts by spending type, however, it is also important to consider the fact that the bulk of the impacts are felt in a concentrated number of industries. The top fifteen industry sectors shown in Figure 5 account for nearly 70% of the Airport's total industry impact in the San Diego Region. Unsurprisingly, the four largest impact sectors are driven by direct effects. Apart from general merchandise stores and restaurants, the remaining 11 top industries are most affected by indirect and induced affects.

The two largest impact sectors — air transportation and scenic sightseeing transportation and support activities for transportation — are driven entirely by on-airport activity. Off-airport business park activity and visitor activity drive the economic impact in the accommodation, food and beverage, and retail sectors. On-airport activity drives approximately 61% of the industry activity in the region while off-airport activity drives approximately 39% of the total activity.

*Figure 5: Top 15 Industries by Industry Activity – 2019 Baseline, San Diego Region*

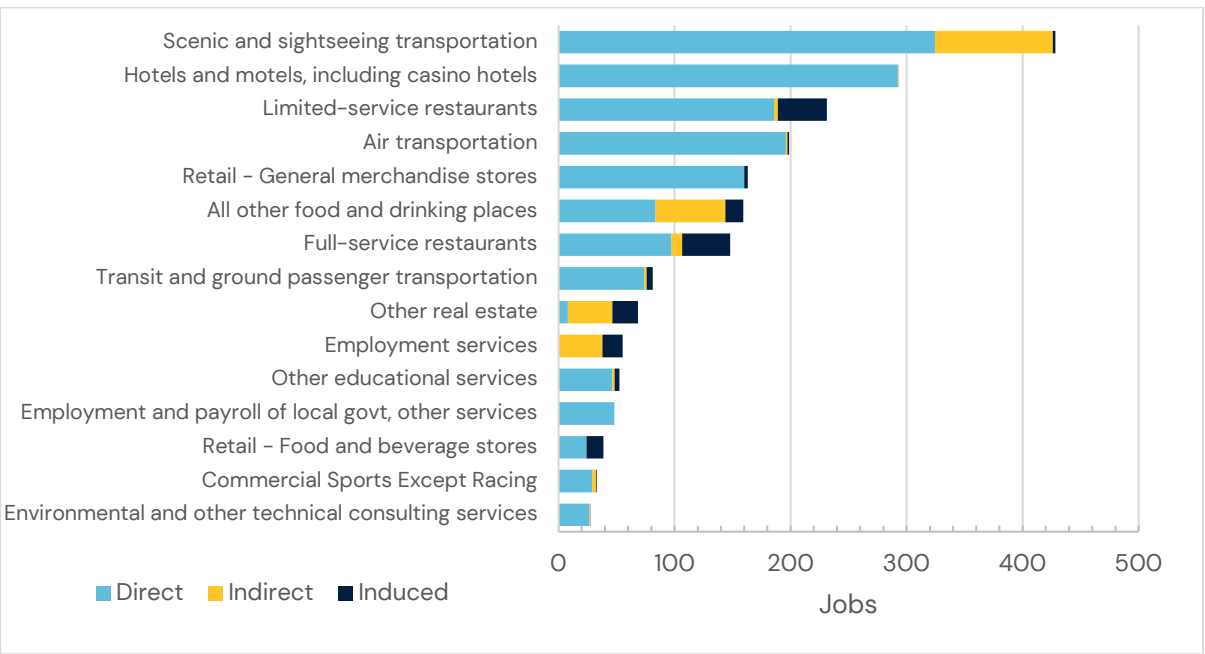



Source: ICF IMPLAN analysis.

## Employment Impacts

Similarly, 63% of the total employment impacts are felt in the top 15 industries of impact. Sectors among the top 15 affected in terms of employment include scenic and sightseeing transportation and transportation support activities, hotels and motels, restaurants, air transportation, and retail industries. All but real estate and employment services are driven by direct employment. Figure 4 illustrates the top 15 industries impacted in terms of employment in the 2019 Baseline.

*Figure 6: Top 15 Industries by Employment - 2019 Baseline, San Diego Region*




Source: ICF IMPLAN analysis.

## Wage Impacts

In addition to identifying the industries that have the largest employment impacts, it is important to gain insight into the quality of employment from a wage perspective. Due to the nature of the direct spending activity, the on-airport spending vectors are expected to have higher average wages. This is primarily because the majority of on-airport employment and spending originates in the air transportation and scenic and sightseeing transportation industries, which have higher earnings on average. Off-airport business activity and visitor spending originates mostly in the retail, food, and accommodation sectors which are on average lower earning sectors. Because the Airport has less direct control over these off-airport jobs, the following wage analysis is centered around the on-airport employment and spending vectors. To that end, Table 6 includes the average employee compensation for the top five industries of on-airport employment in the San Diego Region.

*Table 6: Average Employee Compensation for Top 5 Industries of On-Airport Employment - 2019 Baseline, San Diego Region*

| Industry[10] | Jobs | Percentage of All On-Airport Jobs | Average Employee Compensation |
|---|---|---|---|
| Scenic and sightseeing transportation and support activities for transportation | 428 | 28% | $80,720 |
| Air transportation | 199 | 13% | $140,335 |
| All other food and drinking places | 53 | 4% | $38,123 |
| Other educational services | 52 | 3% | $46,377 |
| Full-service restaurants | 41 | 3% | $33,643 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. Compensation is reported in 2021 dollars

As expected, average employee compensation is much higher for the on-airport spending vectors. The weighted average employee compensation for the on-airport spending vectors in the 2019 Baseline is approximately $84,667, which is over $6,000 higher than the average employee compensation for the San Diego Region ($78,464).

## Tax Revenue Impact

The Airport generates substantial tax revenue for the surrounding region. In 2019, the Airport generated $87.1 million in local, state, and federal tax revenue across the San Diego Region ($42.2 million in state and local, 44.9 million in federal taxes). Table 7 and Table 8 outline the detailed local, state, and federal tax revenue by type. Sales and property tax are the most significant form of tax generation at the state and local level, accounting for over 70% of the total state and local tax revenue generated by the Airport.

[10] Industry names are based on IMPLAN's list of 546 industry sectors.

*Table 7: Total State and Local Tax Revenue - 2019 Baseline, San Diego Region*

| Tax Impact Description | County and Sub County | State | Total State and Local Tax Revenue |
|---|---|---|---|
| Social Insurance Tax- Employee Contribution | $0 | $392,277 | $392,277 |
| Social Insurance Tax- Employer Contribution | $0 | $600,074 | $600,074 |
| TOPI: Sales Tax | $4,434,330 | $12,052,423 | $16,486,753 |
| TOPI: Property Tax | $12,595,490 | $576,938 | $13,172,428 |
| TOPI: Motor Vehicle License | $2,685 | $357,607 | $360,292 |
| TOPI: Severance Tax | $792 | $23,280 | $24,072 |
| TOPI: Other Taxes | $1,147,577 | $1,073,830 | $2,221,406 |
| TOPI: Special Assessments | $408,736 | $0 | $408,736 |
| Corporate Profits Tax | $0 | $1,302,355 | $1,302,355 |
| Personal Tax: Income Tax | $0 | $6,852,992 | $6,852,992 |
| Personal Tax: Motor Vehicle License | $1,217 | $203,526 | $204,743 |
| Personal Tax: Property Taxes | $139,930 | $6,407 | $146,337 |
| Personal Tax: Other Tax (Fish/Hunt) | $0 | $31,508 | $31,508 |
| **Total** | **$18,730,757** | **$23,473,217** | **$42,203,973** |

Source: ICF IMPLAN analysis. All tax values are in 2021 dollars.

Income tax and social insurance tax have the most significant impact on federal tax revenue generated by Airport activity. Together, they make up 88% of the total federal tax revenue generated in the San Diego Region.

*Table 8: 2019 Federal Tax Revenue - San Diego Region*

| Tax Impact Description | Federal Tax Revenue ($Million) |
|---|---|
| Social Insurance Tax- Employee Contribution | $11.8 |
| Social Insurance Tax- Employer Contribution | $10.2 |
| TOPI: Excise Taxes | $1.4 |
| TOPI: Custom Duty | $1.2 |
| Corporate Profits Tax | $2.9 |
| Personal Tax: Income Tax | $17.4 |
| **Total** | **$44.9** |

Source: ICF IMPLAN analysis. All tax values are in 2021 dollars.

## Localized Economic Benefit

Based on these findings, a significant portion of the Airport's regional impact is felt locally in North County and, specifically, the City of Carlsbad. In the Baseline Scenario, inclusive of business park activity, 79% of the Airport's total industry activity impact occurs in San Diego County ($435.8 million), and over half of the activity is felt locally in the North County ($291 million). Additionally, an estimated 39% of the total industry activity and 41% of jobs occurs in the City of Carlsbad ($208.8 million, 1,323, respectively). Table 9 demonstrates the portion of the regional impact that is felt in the City of Carlsbad by spending vector. Based on the analysis, Airport activity supports

1,323 jobs, $73.3 million in labor income, $208.8 million in industry activity and $29.8 million in tax revenue in the City of Carlsbad, driven largely by tenant activity and visitor spending.

*Table 9: City of Carlsbad Baseline Results by Spending Impact Vector*

| Spending Vector | Employment in Carlsbad | Labor Income ($Millions) In Carlsbad | Industry Activity ($Millions) In Carlsbad | Tax Revenue ($Millions) In Carlsbad |
|---|---|---|---|---|
| Airport Activity | 42 | $2.7 | $6.4 | $0.4 |
| Tenant Activity | 661 | $42.7 | $141.0 | $20.1 |
| Business Park Activity | 413 | $20.2 | $43.4 | $7.2 |
| Visitor Activity | 207 | $7.7 | $18.0 | $2.1 |
| **Total** | 1,323 | $73.3 | $208.8 | $29.8 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars.

## Detailed Discussion of Scenarios

The results can also be analyzed to better understand the impacts of the No Development and Full Development Scenarios. Airport Activity employment in 2036 is 59% larger than the 2019 Baseline under the Full Development Scenario, while Tenant Activity employment is only 43% larger and Visitor Activity is a significant 321% larger. This indicates that the majority of growth is a result of increased visitor activity under the Full Development Scenario.

*Table 10: Scenario Employment Results by Spending Vector - San Diego Region*

| Spending Vector | 2019 Baseline | 2026 Employment (Jobs) | | 2036 Employment (Jobs) | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Airport Activity | 78 | 97 | 109 | 110 | 124 |
| Tenant Activity | 1,436 | 1,705 | 1,902 | 1,825 | 2,055 |
| Visitor Activity | 1,081 | 1,281 | 3,746 | 1,442 | 4,545 |
| **Total** | 2,594 | 3,083 | 5,756 | 3,377 | 6,724 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs.

A similar trend plays out for industry activity, where Visitor Activity is approximately $368.7 million larger in 2036 under the Full Development Scenario compared to the 2019 Baseline. Most of the anticipated growth under the Full Development Scenario occurs in the period from 2019 to 2026. Approximately 67% of the total Visitor Activity growth under the Full Development Scenario occurs between 2019 and 2026. While all spending vectors see an increase in industry activity under the Full Development Scenario, Visitor Activity is the vector driving the largest share of increased impact.

*Table 11: Scenario Industry Activity Results by Spending Vector - San Diego Region*

| Spending Vector | 2019 Baseline ($Millions) | 2026 Industry Activity Impact ($Millions) | | 2036 Industry Activity Impact ($Millions) | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Airport Activity | $13.7 | $17.1 | $19.0 | $19.3 | $21.7 |
| Tenant Activity | $318.9 | $378.3 | $422.2 | $404.9 | $455.8 |
| Visitor Activity | $128.0 | $152.1 | $444.9 | $171.4 | $540.0 |
| **Total** | $460.6 | $547.5 | $886.1 | $595.6 | $1,017.5 |

Source: ICF IMPLAN analysis. All industry activity values are in 2021 dollars.

Not surprisingly, tax impact trends follow a similar pattern. Airport Activity tax impacts are 59% larger in 2036 under the Full Development Scenario, while Tenant Activity industry tax impacts are only 43% larger and Visitor Activity tax impacts are 322% larger, indicating again that the majority of the difference is driven by visitor activity growth.

*Table 12: Scenario Tax Revenue Results by Spending Vector - San Diego Region*

| Spending Vector | 2019 Baseline ($Millions) | 2026 Tax Impact ($Millions) | | 2036 Tax Impact ($Millions) | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Airport Activity | $1.8 | $2.3 | $2.6 | $2.6 | $2.9 |
| Tenant Activity | $50.2 | $59.7 | $66.6 | $63.9 | $71.9 |
| Visitor Activity | $20.1 | $23.9 | $69.9 | $27.0 | $84.9 |
| **Total** | $72.2 | $85.9 | $139.1 | $93.5 | $159.7 |

Source: ICF IMPLAN analysis. All tax impact values are in 2021 dollars.

## Short-Term Construction Impact Related to Full Development Scenario

In addition to the ongoing annual activity, short-term construction expenditures related to capital improvements would be associated with the reclassification of the airport to a D-III design standard as described in the Master Plan Update. The impact of this construction activity is not included in the annualized 2026 or 2036 scenarios because of its multi-year duration and thus should be considered as additive to the annualized impacts.

Table 13 presents these impacts over the two construction periods from 2019 – 2026 and 2026 – 2026. The analysis indicates that short term construction expenditures related to the Full Development Scenario could support 483 annual jobs[11] from 2019 to 2026 along with $89.9 million in industry activity and $11.4 million in total tax revenue. Expenditures over the period from 2026 to 2036 could support approximately 831 annual jobs, $154.7 million in industry activity, and $19.6 million in total tax revenue across the San Diego Region.

[11] Note: the metric of "annual jobs" is defined as a job held for one year. Because the timeline of construction related expenditure is unknown, the total costs were entered into the model as a lump sum and the employment impact is reported in terms of annual jobs.

*Table 13: Economic Impact from Short-term Construction Expenditure Related to Full Development Scenario*

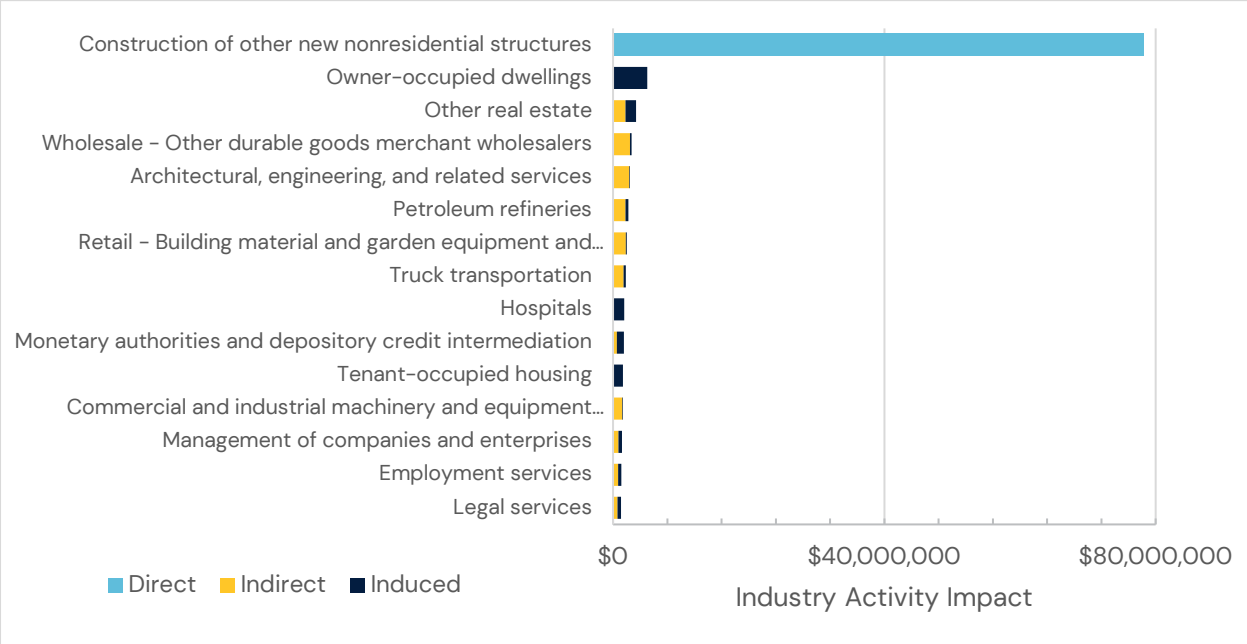
| Impact Category | 2019 – 2026 | 2026 – 2036 |
|---|---|---|
| Employment (Annual Jobs) | 483 | 831 |
| Labor Income ($Millions) | $33.9 | $58.4 |
| Industry Activity ($Millions) | $89.9 | $154.7 |
| Federal, State & Local Tax ($Millions) | $11.4 | $19.6 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual jobs. All labor income and industry and tax values are in 2021 dollars.

### Industry-Specific Impacts of Construction Expenditure

Figure 5 shows the top fifteen industry sectors of impact related to short-term construction expenditures for the 2036 Full Development Scenario. Over half of the total industry activity is driven by direct activity in the construction of other new nonresidential structures sector. The additional income from construction workers drives induced impacts in real estate and service sectors like owner-occupied dwellings, other real estate, tenant-occupied housing, hospitals, and banking.

*Figure 7: Top 15 Impact Industries Related to Short-Term Construction Expenditure in the 2036 Full Development Scenario – San Diego Region*




Source: ICF IMPLAN analysis.

### Employment and Wage Impacts of Construction Expenditure

Similar to the trend in industries of impact, the employment impact is primarily felt in construction related sectors such as construction of other new nonresidential structures, building material and garden equipment and supplies stores, architectural, engineering, and related services, truck transportation, and wholesale merchants.

The average compensation for employment and occupations related to the construction expenditure is on par with the regional average. The average employee compensation for activity related to the short-term construction costs is $75,907 which is just below the average employee compensation in the San Diego Region ($78,464). Management occupations, computer and

mathematical occupations, and architecture and engineering occupations are particularly high paying jobs within the impacted industries.

## Summary Results by Geography

Below is a discussion of results by geography of analysis. As can be seen in the tables below, the impacts get smaller as the geography becomes more localized. This is due to the fact that the regional economy has larger supply-chains and labor markets, and thus secondary (indirect and induced) effects are more significant. This relationship is quantified through economic multipliers, which are largest for the San Diego Region, then San Diego County, and North County and finally the City of Carlsbad. As displayed in Table 14, one dollar of direct spending supports $1.15 of industry activity impact in North County compared to $1.91 in the broader region. These trends are consistent for the employment and labor income impacts as well. The multipliers for airport activity and tenant activity are generally higher than those for visitor spending and business park activity because retail sectors have a higher portion of initial spending that "leaks" out of the study area.

*Table 14: Multipliers of McClellan-Palomar Airport Economic Activity*

| Study Geography | Employment | Labor Income | Industry Activity |
|---|---|---|---|
| San Diego Region | 1.77 | 1.79 | 1.91 |
| San Diego County | 1.60 | 1.70 | 1.73 |
| North County | 1.12 | 1.15 | 1.15 |
| City of Carlsbad | 1.03 | 1.03 | 1.03 |

Source: ICF IMPLAN analysis.

Of the total regional impact for the 2019 Baseline, 92% of the total employment impact (2,390 jobs), 79% of total industry activity impact ($363.5 million) and 80% of total tax impact ($57.4 million) occurs in San Diego County. Similar percentages play out for the development scenarios results as well.

*Table 15: Summary of Economic Impact in San Diego County*

| Impact Category | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Employment (Jobs) | 2,390 | 2,841 | 5,443 | 3,117 | 6,378 |
| Labor Income ($Millions) | $126.9 | $151.1 | $266.3 | $165.3 | $309.3 |
| Industry Activity ($Millions) | $363.5 | $432.4 | $728.4 | $471.6 | $841.1 |
| Federal, State & Local Tax ($Millions) | $57.4 | $68.3 | $114.5 | $74.5 | $132.2 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars

Since the majority of the direct spending originates in North County, it is not surprising that, despite a smaller multiplier, the majority of the impact is felt in that region. Of the total regional impact for the 2019 Baseline, 63% of the total employment impact (1,642 jobs), 53% of total industry activity impact ($241.6 million), and 49% of total tax impact (nearly $35.1 million) occurs in North County.

The North County employment impact is primarily driven by direct employment in aviation and tourism-related sectors, which include sightseeing transportation and support activities for

transportation (21% of jobs created), hotels, motels, and other accommodation (18% of jobs created), and air transportation (12% of jobs created). Additionally, induced employment impacts stem from the change in earnings of those employed in sectors of direct and indirect employment growth are primarily felt in the retail and health services sectors. On-airport air transportation occupations which include airline pilots, flight engineers, aircraft mechanics and service technicians, and flight attendants have an average annual compensation of $74,972, which is above the North County average of $66,698. Similarly, on-airport occupations in the sightseeing transportation and support activities for transportation sector have an average annual employee compensation of $64,507 which is on par with the average compensation in North County. Table 16 illustrates the economic impact across the scenarios in North County.

*Table 16: Summary of Economic Impact in North County*

| Impact Category | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Employment (Jobs) | 1,642 | 1,950 | 3,966 | 2,146 | 4,674 |
| Labor Income ($Millions) | $83.9 | $100.0 | $181.2 | $109.4 | $211.1 |
| Industry Activity ($Millions) | $241.6 | $287.3 | $485.8 | $313.3 | $561.0 |
| Federal, State & Local Tax ($Millions) | $35.1 | $41.8 | $69.2 | $45.5 | $79.8 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars

Finally, ICF modeled the impact of the Airport's activity on the City of Carlsbad. As can be seen in Table 17, the industry activity impact felt within the City is approximately 36% of the regional impact, however since most of the direct spending originates in the City, the impact is still substantial. Of the total regional impact for the 2019 Baseline, 35% of the total employment impact (910 jobs), 36% of total industry activity impact ($165.3 million), and 31% of total tax impact ($22.7 million) occurs in the City of Carlsbad.

*Table 17: Summary of Economic Impact in City of Carlsbad*

| Impact Category | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Employment (Jobs) | 910 | 1,083 | 1,651 | 1,176 | 1,884 |
| Labor Income ($Millions) | $53.1 | $63.3 | $87.2 | $68.5 | $97.9 |
| Industry Activity ($Millions) | $165.3 | $196.7 | $258.0 | $212.3 | $287.6 |
| Federal, State & Local Tax ($Millions) | $22.7 | $27.1 | $34.9 | $29.2 | $38.8 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs. All labor income and industry and tax values are in 2021 dollars

## Competitiveness Impacts

In addition to assessing the Airport's economic impact related to capital expenditures, operations, and visitor activity, ICF also assessed how the Airport's services impact the competitiveness of key industries in the North County region. ICF conducted stakeholder interviews with firms in the business market segment and leisure market segment to gain an understanding of how local industries benefit from the Airport's presence.

### Business Market Connectivity

McClellan-Palomar Airport provides value to the region's economy by connecting local firms with strategic partners and critical markets. The Airport provides important regional firms with a local airport from which to efficiently travel to business meetings and access markets across the country and overseas. Since these large firms regularly engage the marketing, accounting, legal, consulting, environmental and engineering industries based in San Diego, the continuing competitiveness of these firms helps drive downstream economic activity in secondary markets across the region.

**Key Factors in the Airport's Connectivity Benefits to the Region:**

- **Convenient Location** –Time savings, and quality of life benefit for employees living in North County
- **Extended Hours of Operation** – Less restrictive operational requirements compared to other regional airports
- **International Flights** – Businesses can charter flights to various international destinations
- **Less Congestion** – Less congested than other regional airports like San Diego International
- **Lower Cost** – Adequate hangaring facilities for mid-sized aircraft at a lower cost

**Qualcomm – Utilizing the Airport for Business Travel**

Headquartered in San Diego and employing over 11,000 residents, Qualcomm has historically been one of the key economic drivers in the region. Qualcomm's business to business activity generates more than $1.3 billion in sales each year. This spending supports economic activity in other downstream industries including real estate, legal services, scientific R&D, management and consulting, marketing, and much more.

The McClellan-Palomar airport provides a significant connectivity benefit to Qualcomm employees who frequently use the Airport for business travel. The company currently hangars two aircraft at the Airport. In 2019, these aircraft flew 138 times and traveled close to half a million nautical miles. Approximately 70 percent of the total trips were international business flights.

Source: San Diego Regional EDC. (2019). Qualcomm's Contribution to San Diego's Economy. Retrieved from: https://www.sandiegobusiness.org/sites/default/files/EDC-QUALCOMM-STUDY-FINAL%20-WEB2.pdf

### Current Business Travel Benefit

Recognized as one of the leading high-tech hubs in the U.S., San Diego County is anchored by established economic clusters in life sciences, communication and information technology, defense and transportation, healthcare services, and tourism.

Businesses with offices or headquarters in the North County benefit from the ability to quickly fly to both domestic and international destinations. The Airport is conveniently located between San

Diego International Airport (SAN), and John Wayne Airport (SNA). For travelers that live in North County, flying out of McClellan-Palomar Airport can lead to significant travel time savings and a convenience benefit, as they do not have to worry about overnight parking or traffic getting to and from the Airport.

The Airport's convenient location, extended hours of operation,[12] and the ability to cater to aircraft that can fly internationally provides businesses better access to their clients. One stakeholder mentioned that executives routinely fly as far as Asia to conduct business meetings, visit factories, oversee research and development and more. A different stakeholder also mentioned that the international connections at San Diego International are often limited, which makes flying out of McClellan-Palomar Airport the more efficient option.

**Viasat – Utilizing the Airport for Travel & Shipments**

Viasat is a global communications and wireless technology company headquartered in Carlsbad. Viasat uses air services for frequent in- and outbound business travel and time-sensitive shipment of products that are assembled at headquarters. Furthermore, Viasat develops software that can be loaded onto customer jets based at the Airport.

## Impacts on Regional Suppliers, Subcontractors, and Small Businesses

The connectivity benefit of the Airport goes beyond ease of travel for local businesses, it also brings in business travelers and suppliers from outside of the region. In addition to providing high paying jobs, employers in life sciences, technology, and innovation industries have an important economic impact on regional suppliers, subcontractors, and small businesses through indirect sales and the induced impact stemming from consumers' consumption expenditures. Additionally, the fixed-based operators at the Airport routinely refer flight staff and passengers to local restaurants and hotels in the City of Carlsbad which has an economic ripple effect on the larger North County Region. Executives flying in from outside the region to do business with local firms are likely to spend money on accommodations, recreation, and special events.

**BioCom – High Demand for Frequent Business Travel**

BioCom is a sciences advocacy agency that supports the life science ecosystem in San Diego. Bioscience companies particularly value convenient airport services due to their frequent travel to other biotech hubs. The North County is home to many bioscience workers and executives who would use potential commercial service at the Airport for frequent meetings in Northern California as well as weekly.

Biocom California

## Industry Demand for Increased Commercial Service

Interview feedback confirmed that there is considerable demand for commercial passenger service from regional employees working in life sciences, technology, and innovation sectors. The San Diego life sciences cluster is now considered the third largest in the country behind the San Francisco Bay Area and the Boston-Cambridge Area, employing some 68,063 employees county-

[12] Note: While flying after certain hours is discouraged, it is not prohibited, which is the case at other regional airports.

wide.[13,14] The industry is particularly important to the North County, where employment in the biotechnology and biomedical manufacturing subsectors has grown approximately 49% since 2010.[15] Based on feedback from one life sciences industry stakeholder, there would be considerable corporate travel demand from biotechnology employees who live in the North County and commute weekly to the San Francisco Bay Area.

ICF received similar feedback from communications and information technology companies in North County. For example, in 2017, employees from communications and wireless technology leader Viasat, Inc. took approximately 1,050 roundtrip domestic flights to regional airports. Because most of these employees live in the North County, the company would experience considerable cost savings if their staff was able to utilize commercial services at the Airport.

A catchment study conducted last year for the Airport showed that there are approximately 7,000 airline passengers per day each way, or 14,000 total passengers, that reside or were visiting a destination within 15 miles of the Airport.[16] New commercial air service at the Airport would not only provide a more convenient option for many of these existing travelers but would also stimulate additional air service demand.


**Legoland California Resort – Access for Families**

Legoland California Resort is a theme park, miniature park, and aquarium located in Carlsbad, California, based on the Lego toy brand. Legoland is a main tourist attraction and one of the largest employers in the North County.

The McClellan-Palomar airport makes it easier for families to get into and out of Carlsbad. For instance, it allows for one partner who might be travelling for business to bring the rest of the family, which stimulates spending on restaurants, hotels and other forms of entertainment.

## Leisure Market Connectivity

The Airport also plays an important role in the North County's leisure industry, enabling visitors to conveniently fly into the region to attend conferences, sporting events, theme parks, and other recreational activities which then drives subsequent economic spending in the region.

Large spectator events like the U.S. Open at Torrey Pines, the Breeders' Cup World Championships at the Del Mar Racetrack, or San Diego Comic Con, attract an array of affluent visitors from across the country. These visitors spur economic activity in the accommodation, retail, and sightseeing sectors. The North County is home to some of the largest hospitality sector employers in the region, including Legoland California, LLC, and the San Diego Zoo.

As the North County increases in popularity as a leisure destination, more companies are hosting business conferences in the region. Hotels and resorts like the Park Hyatt Aviara Resort and the Omni La Costa Resort & Spa have completed large renovations to improve their ability to host business conferences. While most event attendees are likely to arrive via San Diego International

[13] CBRE, Inc. (2020). Leading Life Sciences Clusters – The Bio-Boom Intensifies. Retrieved from: http://cbre.vo.llnwd.net/grgservices/secure/US%202020%20Life%20Science%20Report.pdf?e=1630367223&h=26fe54ea1742d8f96e4cf5f49dcd058b

[14] Biocom. (2020). Biocom's 2020 California Economic Impact Report. Retrieved from: file:///C:/Users/41269/Downloads/Biocom_EIR_Databook_2020.pdf

[15] San Diego North EDC. (2021). 2021 Biotechnology and Biomedical Manufacturing in North County San Diego. Retrieved from: https://www.sdnedc.org/wp-content/uploads/2021/05/2021-biotech-and-biomed-fact-sheet-1.pdf

[16] Zip Code Market Study 2019 conducted by ASM Global Route Development for Carlsbad McClellan-Palomar Airport.

Airport, McClellan-Palomar Airport helps to attract high profile speakers that may drive broader attendance.


### Innovate 78 –Airport Service for Business & Leisure Travel

Innovate 78 is a multi-city partnership between Carlsbad, Escondido, Oceanside, San Marcos, and Vista that supports the business ecosystem of the 78 Corridor by elevating North County San Diego's reputation and assisting businesses as they evolve. The initiative is executed by the San Diego Regional EDC with financial and programmatic support from the five cities.

Innovate 78 sees the McClellan-Palomar airport as a valuable asset to the business community, as it is well positioned to support both executive travel and regional tourism. Connectivity that makes it easier for people to access to local companies and markets has ripple effects across the entire regional economy.

## Conclusions

McClellan-Palomar Airport is an integral part of the regional economy, generating $543 million in economic activity each year and supporting roughly 3,220 jobs in the San Diego Region. The Airport's capital expenditures and operational expenditures, on-airport and surrounding employment, and visitor spending each contribute a significant economic benefit to the region. The Airport's services also provide competitiveness benefits to key industries in the North County region. High value industries such as life sciences, communications and information technology, defense and transportation, healthcare services, and tourism all benefit from the connectivity provided by the Airport's current operations, and the Airport is expected to play an increasingly critical role in supporting the growth of economic activity in the region in the years to come.

# Appendix A: Input Methodology and Sources

Model inputs for each spending category were derived from multiple data sources, and therefore required different approaches for translating direct spending data into IMPLAN-ready inputs. This section describes the data source(s) for each input category and any relevant assumptions and calculations made to prepare inputs for the model.

The Airport's economic activity can be summarized using four main spending vectors. These vectors account for both the on- and off-airport activity related to the Airport's existence and are outlined below.

- **Airport Activity** – On Airport Operations and Capital Expenditures
- **Tenant Activity** – On Airport Tenant Operations, Capital Expenditures, and Fuel Expenditures
- **Business Park Activity** – Off Airport Business Park Employment
- **Visitor Spending** – Off Airport Visitor Spending

**Regions of Analysis**. The analysis was conducted at four regional levels:

- Five-county San Diego Region which includes San Diego, Riverside, Los Angeles, Orange, and San Bernardino Counties,
- San Diego County,
- North County region[17], and,
- City of Carlsbad.

Table 18 provides a summary of the modeling inputs for each spending vector. These modeling inputs were vetted and approved by the County prior to modeling.

*Table 18: Modeling Input Summary*

| Impact Category | 2019 Baseline | No Development Scenario | | Full Development Scenario | |
|---|---|---|---|---|---|
| | | 2026 | 2036 | 2026 | 2036 |
| Airport Activity | | | | | |
| OPEX | $5.4 million | $6.4 million | $6.8 million | $7.1 million | $7.6 million |
| CAPEX | $0.6 million | $0.7 million | $0.8 million | $0.8 million | $0.9 million |
| Short-Term Construction Costs | N/A | N/A | N/A | $42.7 million | $70.2 million |
| Tenant Activity | | | | | |
| Employment (FTE) | 550 | 650 | 700 | 730 | 780 |
| Fuel Expenditures | $29.1 million | $34.4 million | $36.6 million | $38.3 million | $41.2 million |
| CAPEX | $6.9 million | $8.2 million | $8.7 million | $9.1 million | $9.8 million |
| Business Park Activity | | | | | |
| Employment | 380 | Not Estimated | | | |
| CAPEX | $0.4 million | Not Estimated | | | |
| Visitor Spending | | | | | |
| Total Business and Leisure Spend | $72.6 million | $81.8 million | $87.0 million | $239.3 million | $274.1 million |

[17] For the purposes of analysis, ICF defined North County as the following zip codes:: 92003, 92004, 92007, 92008, 92009, 92010, 92011, 92014, 92024, 92025, 92026, 92027, 92028, 92029, 92036, 92037, 92054, 92055, 92056, 92057, 92058, 92059, 92060, 92061, 92065, 92066, 92067, 92069, 92070, 92075, 92078, 92081, 92082, 92083, 92084, 92086, 92091, 92096, 92121, 92126, 92127, 92128, 92129, 92130, 92536, 92672

## Airport Activity Inputs

The Airport Activity inputs are made up of the Airport's annual operational and capital expenditures (CAPEX). This spending also includes a line item associated with the short-term construction costs associate with a D-III design standard, shifting the runway to the north, and a runway extension modeled as part of the Full Development Scenario.

### Baseline Scenario

The input values for 2019 Baseline Scenario were provided by the Airport. The Airport's annual operational spending in 2019 was approximately $5.4 million dollars which was split between direct overhead and expenses, and expenses related to fixed assets, software, and other equipment. The capital expenditure input for the Baseline was developed using a 9-year average of capital improvements. The Annual capital expenditure at the airport was approximately $608,000.

### No Development Scenario

To determine the Airport Activity inputs for the No Development Scenario, the operational and capital expenditures from the Baseline were scaled based on the general aviation and air taxi aircraft operations growth rate provided in the Airport Master Plan.[18] The No Development Scenario does not include the capital expenditure associated with the reclassification of the airport to a D-III design standard, shifting the runway to the north, and/or a runway extension.

### Full Development Scenario

The operational expenditures for the Full Development scenario were scaled based on the general aviation and air taxi aircraft operations growth rate in the Airport Master Plan. The Full Development Scenario is the least economically constrained and assumes additional commercial airline services because of DIII designation and a runway extension. The capital expenditure estimates for the Full Development Scenario include both the scaled year-to-year capital expenditure estimates for maintenance and improvements, as well as the short-term construction costs associated with a D-III design standard, shifting the runway to the north, and a runway extension. The cumulative construction cost input for 2019 – 2026 is based on the near-term and intermediate-term expense totals in Table 6.7 of the Master Plan. The cumulative construction cost input for 2026 - 2036 is made up of the long-term expense total for the 800' runway extension and relocation listed in Table 6.7 of the Master Plan. The cumulative construction costs input for 2019 – 2026 is approximately $42.7 million, while the input for 2026 – 2036 is approximately $70.2 million.

## Tenant Activity Inputs

The on-airport Tenant Activity inputs are made up of tenant employment, capital expenditures, and fuel expenditures.

### Baseline Scenario

To develop inputs for the Baseline Scenario, ICF conducted email and phone outreach to all Airport master lessees to collect updated information on employment and capital expenditure. A response was received from 21 out of 22 master lessees. Where data was unavailable, ICF relied on Airport tenant employment estimates as of May 2021. Based on this outreach, ICF identified 521 full-time and 63 part-time airport tenant employees at the Airport as of 2019. 16 out of 22 master lessees responded to the CAPEX survey and spent an average of $6.9 million on improvements. Due to the lower response rate, the capital expenditure input represents a conservative estimate of economic activity. Airport staff provided statistics on the volume of fuel deliveries by suppliers to fixed-based operators at the Airport in 2019. ICF then used fuel price data form the U.S. Energy Information Administration (EIA) to monetize the total quantity of gallons delivered to estimate the

[18] County of San Diego. (2018). McClellan-Palomar Airport Master Plan Update. Table 4.3 and 3.15

total cost of wholesale fuel purchases. The fuel expenditure input for the Baseline Scenario was approximately $29.1 million.

### No Development Scenario

To develop the Tenant Activity inputs for the No Development Scenario, ICF scaled the Baseline inputs using the 118% and 125% growth rates for 2026 and 2036 outlined in the Airport Master Plan. There were approximately 654 and 696 tenant employees at the airport in 2026 and 2036, respectfully. Tenants spent an estimated $8.2 million and $8.7 million on capital improvements in 2026 and 2036 and approximately $34.4 million and $36.6 million on fuel.

### Full Development Scenario

To determine the Tenant Activity inputs for the No Development Scenario, ICF scaled the Baseline inputs using the 132% and 142% growth rates for 2026 and 2036 outlined in the Airport Master Plan. There were approximately 729 and 784 tenant employees at the airport in 2026 and 2036, respectfully. Tenants spent an estimated $9.1 million and $9.8 million on capital improvements in 2026 and 2036 and approximately $38.3 million and $41.2 million on fuel.

## Business Park Activity Inputs

The business park employment inputs were developed based on estimates for businesses in the Palomar Commons / Lowe's Development as well as off-airport businesses like Weston Solutions, Inc. and the Transfer Station. To develop the Baseline Scenario inputs for Business Park Activity, ICF conducted email and phone outreach to CSDI, LLC (master lessee for Palomar Commons) and Weston Solutions, Inc. to collect updated information on employment and CAPEX. ICF received employment estimates for the 15 Palomar Commons tenants as well as employment estimates for Weston Solutions, the Palomar Transfer Station, and the San Diego Department of Animal Services. Airport staff provided data on capital improvements by the Transfer Station as well as employment data for the County of San Diego Department of Animal Services. Based on this data provided ICF estimated approximately 354 full-time and 51 part-time employees working at these locations. An off-airport business capital expenditures estimate is composed of estimates from CSDI, LLC (approximately $50,000 from 2015 – 2019), the Palomar Transfer Station ($1,700,000 in 2019), and Weston Solutions, Inc ($260,600 from 2015 – 2019). As a result, the annual capital expenditures estimate is approximately $402,120.

## Passenger / Visitor Activity Inputs

The regional economy benefits from off-airport spending by both leisure and business visitors on ground transportation, lodging, food, attractions, retail items, and more. To calculate the direct spending by visitors, ICF first developed estimates of the total number of business and leisure travelers using enplanement and aircraft type data obtained from the Airport's Noise and Operations Monitoring System. ICF then estimated the total visitor spending using 2019 visitor data on average length of stay and average daily spend per visitor from the San Diego Tourism Authority.[19] The average length of stay varies form 2.7 days for leisure traveler to 3.3 days for business travelers. The average daily spend is much higher for business travelers ($319), compared to leisure travelers ($113).

### Baseline Scenario

Table 19 presents the visitor spending estimates for the Airport in 2019. Based on these data and assumptions, the total leisure visitor spend was approximately $8.7 million in 2019 compared to the business spend of $63.8 million.

[19] San Diego Tourism Authority. 2019. 2019 Overnight Visitor Profile Summary. Retrieved from: file:///C:/Users/41269/Downloads/2019%20Overnight%20Visitor%20Profile%20Summary%20(1).pdf

*Table 19: Visitor Estimates for McClellan-Palomar Airport in 2019*

| Metric | |
|---|---|
| Total Arriving Operations | 65,624 |
| Total Seats | 463,450 |
| Load Factor | 75% |
| Estimated Total Passengers | 347,587 |
| Estimated Total Visitors | 89,187 |
| Business Visitors | 60,647 |
| Leisure Visitors | 28,540 |

### No Development Scenario

ICF scaled the 2019 passenger estimates based the general operations growth rate outlined in the Airport Master Plan. The total visitor spend was approximately $81.8 million in 2026 compared to $87.0 million in 2036.

### Full Development Scenario

ICF scaled the 2019 passenger estimates based the general operations growth rate outlined in the Airport Master Plan under the PAL 2 scenario. The total visitor spend was approximately $239.3 million in 2026 compared to $274.1 million in 2036.

# Appendix B: Detailed Findings

The tables below provide a more granular look at the results by spending vector and impact category for each geography and scenario.

## San Diego Region Results

*Table 20: 2019 Baseline Results*

| Spending Vector | Employment | Labor Income | Output |
|---|---|---|---|
| **Airport Activity** | | | |
| Direct | 36 | $2,954,371 | $6,170,688 |
| Indirect & Induced | 42 | $2,698,477 | $7,506,369 |
| Total | 78 | $5,652,848 | $13,677,057 |
| Multiplier | 2.18 | 1.91 | 2.22 |
| **Tenant Activity** | | | |
| Direct | 633 | $59,724,430 | $168,922,772 |
| Indirect & Induced | 803 | $51,147,580 | $149,947,375 |
| Total | 1,436 | $110,872,010 | $318,870,147 |
| Multiplier | 2.27 | 1.86 | 1.89 |
| **Business Park Activity** | | | |
| Direct | 407 | $20,227,739 | $42,778,402 |
| Indirect & Induced | 215 | $13,683,811 | $39,813,850 |
| Total | 622 | $33,911,550 | $82,592,252 |
| Multiplier | 1.53 | 1.68 | 1.93 |
| **Visitor Spending** | | | |
| Direct | 744 | $30,170,328 | $66,316,568 |
| Indirect & Induced | 337 | $21,398,226 | $61,715,531 |
| Total | 1,081 | $51,568,555 | $128,032,099 |
| Multiplier | 1.45 | 1.71 | 1.93 |
| **Total** | 3,217 | $202,004,962 | $543,171,556 |
| **Total (Excluding Off-Airport)** | 2,594 | $168,093,412 | $460,579,303 |
| Total Multiplier | 1.77 | 1.79 | 1.91 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 21: 2026 Midpoint Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 45 | 50 | $3,682,117 | $4,102,354 | $7,716,511 | $8,597,191 |
| Indirect & Induced | 53 | 59 | $3,371,544 | $3,756,336 | $9,378,084 | $10,448,397 |
| Total | 97 | 109 | $7,053,661 | $7,858,690 | $17,094,595 | $19,045,588 |
| Multiplier | 2.18 | 2.18 | 1.92 | 1.92 | 2.22 | 2.22 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 261 | Not Estimated | 19,378,451 | Not Estimated | $45,423,878 |
| Indirect & Induced | Not Estimated | 221 | Not Estimated | 14,544,688 | Not Estimated | $44,495,164 |
| Total | Not Estimated | 483 | Not Estimated | $33,923,139 | Not Estimated | $89,919,042 |
| Multiplier | Not Estimated | 1.85 | Not Estimated | 1.75 | Not Estimated | 1.98 |
| **Tenant Activity** | | | | | | |
| Direct | 752 | 838 | $70,925,772 | $79,123,491 | $200,381,973 | $223,625,088 |
| Indirect & Induced | 953 | 1,064 | $60,701,742 | $67,761,496 | $177,936,211 | $198,608,621 |
| Total | 1705 | 1,902 | $131,627,513 | $146,884,987 | $378,318,184 | $422,233,709 |
| Multiplier | 2.27 | 2.27 | 1.86 | 1.86 | 1.89 | 1.89 |
| **Visitor Spending** | | | | | | |
| Direct | 880 | 2,572 | $35,901,069 | $105,003,217 | $78,748,955 | $230,324,442 |
| Indirect & Induced | 401 | 1,173 | $25,442,953 | $74,415,387 | $73,353,014 | $214,542,427 |
| Total | 1281 | 3,746 | $61,344,023 | $179,418,605 | $152,101,969 | $444,866,869 |
| Multiplier | 1.46 | 1.46 | 1.71 | 1.71 | 1.93 | 1.93 |
| Airport Total (Excluding Runway) | 3083 | 5,756 | $200,025,197 | $334,162,282 | $547,514,749 | $886,146,167 |
| Total Multiplier | 1.84 | 1.66 | 1.81 | 1.78 | 1.91 | 1.92 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 22: 2036 Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 50 | 57 | $4,147,556 | $4,676,560 | $8,692,129 | $9,800,776 |
| Indirect & Induced | 60 | 67 | $3,798,553 | $4,283,043 | $10,564,581 | $11,912,051 |
| Total | 110 | 124 | $7,946,109 | $8,959,603 | $19,256,710 | $21,712,827 |
| Multiplier | 2 | 2 | 1.92 | 1.92 | 2.22 | 2.22 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 450 | Not Estimated | $33,346,328 | Not Estimated | $78,165,151 |
| Indirect & Induced | Not Estimated | 381 | Not Estimated | $25,028,417 | Not Estimated | $76,567,026 |
| Total | Not Estimated | 831 | Not Estimated | $58,374,745 | Not Estimated | $154,732,177 |
| Multiplier | Not Estimated | 2 | Not Estimated | 1.75 | Not Estimated | 1.98 |
| **Tenant Activity** | | | | | | |
| Direct | 805 | 906 | $75,887,865 | $85,311,890 | $214,394,012 | $241,295,348 |
| Indirect & Induced | 1,020 | 1,149 | $64,990,978 | $73,178,699 | $190,456,558 | $214,458,945 |
| Total | 1,825 | 2,055 | $140,878,844 | $158,490,589 | $404,850,571 | $455,754,293 |
| Multiplier | 2 | 2 | 1.86 | 1.86 | 1.89 | 1.89 |
| **Visitor Spending** | | | | | | |
| Direct | 990 | 3,119 | $40,491,390 | $127,591,085 | $88,699,083 | $279,496,758 |
| Indirect & Induced | 452 | 1,425 | $28,683,804 | $90,384,589 | $82,683,707 | $260,541,905 |
| Total | 1,442 | 4,545 | $69,175,193 | $217,975,674 | $171,382,790 | $540,038,662 |
| Multiplier | 1 | 1 | 1.71 | 1.71 | 1.93 | 1.93 |
| Airport Total (Excluding Runway) | 3,377 | 6,724 | $218,000,145 | $385,425,866 | $595,490,071 | $1,017,505,782 |
| Total Multiplier | 1.83 | 1.65 | 1.81 | 1.77 | 1.91 | 1.92 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 23: 2019 Baseline Tax Impacts*

| Tax Revenue | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Local | $15,343,592 | $18,262,808 | $28,339,887 | $19,818,640 | $32,378,609 |
| State | $19,402,096 | $23,087,374 | $36,816,235 | $25,090,897 | $42,209,690 |
| Federal | $37,454,285 | $44,562,261 | $73,932,745 | $48,542,011 | $85,191,229 |
| Subtotal: State & Local | $34,745,688 | $41,350,182 | $65,156,122 | $44,909,537 | $74,588,298 |
| Total | $72,199,973 | $85,912,443 | $139,088,867 | $93,451,548 | $159,779,528 |
| | | | | | |
| Business Park Activity - Total | $14,934,459 | Not Estimated | Not Estimated | Not Estimated | Not Estimated |
| Short Term Construction Expenditure Related to the Full Development Scenario - Total | N/A | N/A | $11,394,395 | N/A | $19,607,410 |

Source: ICF IMPLAN analysis. Tax values are in 2021 dollars

## San Diego County Results

*Table 24: 2019 Baseline Results*

| Spending Vector | Employment (Jobs) | Labor Income ($) | Output ($) |
|---|---|---|---|
| **Airport Activity** | | | |
| Direct | 41 | $2,584,220 | $6,170,688 |
| Indirect & Induced | 37 | $2,174,951 | $6,031,781 |
| Total | 78 | $4,759,171 | $12,202,470 |
| Multiplier | 1.92 | 1.84 | 1.98 |
| **Tenant Activity** | | | |
| Direct | 637 | $41,273,825 | $136,992,419 |
| Indirect & Induced | 614 | $35,406,069 | $99,923,910 |
| Total | 1,251 | $76,679,895 | $236,916,329 |
| Multiplier | 1.96 | 1.86 | 1.73 |
| **Business Park Activity** | | | |
| Direct | 407 | $19,819,267 | $42,270,096 |
| Indirect & Induced | 171 | $10,143,211 | $29,975,486 |
| Total | 578 | $29,962,479 | $72,245,582 |
| Multiplier | 1.42 | 1.51 | 1.71 |
| **Visitor Spending** | | | |
| Direct | 775 | $28,587,946 | $66,316,568 |
| Indirect & Induced | 285 | $16,852,771 | $48,107,556 |
| Total | 1,061 | $45,440,717 | $114,424,124 |
| Multiplier | 1.37 | 1.59 | 1.73 |
| **Total** | 2,968 | $156,842,261 | $435,788,505 |
| **Total (Excluding Off-Airport)** | 2,390 | $126,879,782 | $363,542,923 |
| Total Multiplier | 1.60 | 1.70 | 1.73 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 25: 2026 Midpoint Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 51 | 56 | $3,220,296 | $3,587,826 | $7,716,511 | $8,597,191 |
| Indirect & Induced | 47 | 52 | $2,718,200 | $3,028,426 | $7,538,205 | $8,398,535 |
| Total | 97 | 108 | $5,938,496 | $6,616,252 | $15,254,716 | $16,995,726 |
| Multiplier | 1.92 | 1.92 | 1.84 | 1.84 | 1.98 | 1.98 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 263 | Not Estimated | $18,320,519 | Not Estimated | $45,423,878 |
| Indirect & Induced | Not Estimated | 166 | Not Estimated | $10,043,705 | Not Estimated | $30,322,785 |
| Total | Not Estimated | 429 | Not Estimated | $28,364,224 | Not Estimated | $75,746,662 |
| Multiplier | Not Estimated | 1.63 | Not Estimated | 1.55 | Not Estimated | 1.67 |
| **Tenant Activity** | | | | | | |
| Direct | 758 | 844 | $49,068,275 | $54,725,464 | $162,603,763 | $181,452,287 |
| Indirect & Induced | 729 | 814 | $42,040,745 | $46,931,255 | $118,648,216 | $132,424,470 |
| Total | 1487 | 1,658 | $91,109,020 | $101,656,719 | $281,251,979 | $313,876,757 |
| Multiplier | 1.96 | 1.96 | 1.86 | 1.86 | 1.73 | 1.73 |
| **Visitor Spending** | | | | | | |
| Direct | 917 | 2,683 | $33,996,788 | $99,433,589 | $78,748,955 | $230,324,442 |
| Indirect & Induced | 340 | 993 | $20,040,488 | $58,614,290 | $57,173,725 | $167,221,344 |
| Total | 1257 | 3,677 | $54,037,276 | $158,047,879 | $135,922,680 | $397,545,787 |
| Multiplier | 1.37 | 1.37 | 1.59 | 1.59 | 1.73 | 1.73 |
| Airport Total (Excluding Runway) | 2841 | 5,443 | $151,084,792 | $266,320,850 | $432,429,375 | $728,418,270 |
| Total Multiplier | 1.65 | 1.52 | 1.75 | 1.69 | 1.74 | 1.73 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 26: 2036 Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 57 | 64 | $3,628,572 | $4,091,382 | $8,692,129 | $9,800,776 |
| Indirect & Induced | 53 | 59 | $3,062,165 | $3,452,732 | $8,491,526 | $9,574,586 |
| Total | 109 | 123 | $6,690,738 | $7,544,115 | $17,183,655 | $19,375,362 |
| Multiplier | 1.92 | 1.92 | 1.84 | 1.84 | 1.98 | 1.98 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 453 | Not Estimated | $31,525,845 | Not Estimated | $78,165,151 |
| Indirect & Induced | Not Estimated | 285 | Not Estimated | $17,283,150 | Not Estimated | $52,179,276 |
| Total | Not Estimated | 738 | Not Estimated | $48,808,996 | Not Estimated | $130,344,427 |
| Multiplier | Not Estimated | 1.63 | Not Estimated | 1.55 | Not Estimated | 1.67 |
| **Tenant Activity** | | | | | | |
| Direct | 811 | 914 | $52,594,910 | $59,066,880 | $174,173,368 | $195,986,226 |
| Indirect & Induced | 781 | 879 | $45,050,891 | $50,721,705 | $127,129,055 | $143,143,004 |
| Total | 1592 | 1793 | $97,645,801 | $109,788,585 | $301,302,423 | $339,129,230 |
| Multiplier | 1.96 | 1.96 | 1.86 | 1.86 | 1.73 | 1.73 |
| **Visitor Spending** | | | | | | |
| Direct | 1033 | 3254 | $38,327,546 | $120,772,669 | $88,699,083 | $279,496,758 |
| Indirect & Induced | 383 | 1207 | $22,591,579 | $71,187,579 | $64,438,681 | $203,050,606 |
| Total | 1416 | 4461 | $60,919,125 | $191,960,248 | $153,137,764 | $482,547,364 |
| Multiplier | 1.37 | 1.37 | 1.59 | 1.59 | 1.73 | 1.73 |
| Airport Total (Excluding Runway) | 3117 | 6378 | $165,255,663 | $309,292,948 | $471,623,843 | $841,051,956 |
| Total Multiplier | 1.64 | 1.51 | 1.75 | 1.68 | 1.74 | 1.73 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 27: 2019 Baseline Tax Impacts*

| Tax Revenue | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Local | $13,781,025 | $16,408,597 | $25,845,728 | $17,823,287 | $29,595,548 |
| State | $16,036,590 | $19,092,243 | $31,284,800 | $20,785,738 | $36,006,391 |
| Federal | $27,580,784 | $32,837,060 | $57,415,046 | $35,895,167 | $66,609,567 |
| Subtotal: State & Local | $29,817,615 | $35,500,840 | $57,130,527 | $38,609,024 | $65,601,939 |
| Total | $57,398,399 | $68,337,900 | $114,545,573 | $74,504,191 | $132,211,506 |
| | | | | | |
| Business Park Activity - Total | $13,317,928 | Not Estimated | Not Estimated | Not Estimated | Not Estimated |
| Short Term Construction Expenditure Related to the Full Development Scenario - Total | N/A | N/A | $9,243,159 | N/A | $15,905,575 |

Source: ICF IMPLAN analysis. Tax values are in 2021 dollars

## North County Results

*Table 28: 2019 Baseline Results*

| Spending Vector | Employment (Jobs) | Labor Income ($) | Output ($) |
|---|---|---|---|
| **Airport Activity** | | | |
| Direct | 41 | $2,584,220 | $6,170,688 |
| Indirect & Induced | 7 | $450,623 | $1,220,407 |
| Total | 48 | $3,034,843 | $7,391,096 |
| Multiplier | 1.18 | 1.17 | 1.20 |
| **Tenant Activity** | | | |
| Direct | 637 | $41,273,825 | $136,992,419 |
| Indirect & Induced | 120 | $7,221,200 | $20,322,847 |
| Total | 758 | $48,495,025 | $157,315,266 |
| Multiplier | 1.19 | 1.17 | 1.15 |
| **Business Park Activity** | | | |
| Direct | 407 | $19,819,267 | $42,270,096 |
| Indirect & Induced | 36 | $2,382,649 | $6,792,932 |
| Total | 443 | $22,201,916 | $49,063,028 |
| Multiplier | 1.09 | 1.12 | 1.16 |
| **Visitor Spending** | | | |
| Direct | 775 | $28,587,946 | $66,316,568 |
| Indirect & Induced | 61 | $3,828,321 | $10,604,881 |
| Total | 836 | $32,416,267 | $76,921,449 |
| Multiplier | 1.08 | 1.13 | 1.16 |
| **Total** | 2,085 | $106,148,051 | $290,690,839 |
| **Total (Excluding Off-Airport)** | 1,642 | $83,946,135 | $241,627,811 |
| Total Multiplier | 1.12 | 1.15 | 1.15 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 29: 2026 Midpoint Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 51 | 56 | $3,220,296 | $3,587,826 | $7,716,511 | $8,597,191 |
| Indirect & Induced | 9 | 10 | $562,957 | $627,206 | $1,524,852 | $1,698,882 |
| Total | 60 | 67 | $3,783,252 | $4,215,032 | $9,241,364 | $10,296,074 |
| Multiplier | 1.18 | 1.18 | 1.17 | 1.17 | 1.20 | 1.20 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 263 | Not Estimated | 18,320,519 | Not Estimated | $45,423,878 |
| Indirect & Induced | Not Estimated | 38 | Not Estimated | 2,527,917 | Not Estimated | $7,694,609 |
| Total | Not Estimated | 301 | Not Estimated | $20,848,436 | Not Estimated | $53,118,486 |
| Multiplier | Not Estimated | 1.14 | Not Estimated | 1.14 | Not Estimated | 1.17 |
| **Tenant Activity** | | | | | | |
| Direct | 758 | 844 | $49,068,275 | $54,725,464 | $162,603,763 | $181,452,287 |
| Indirect & Induced | 143 | 159 | $8,568,233 | $9,573,999 | $24,115,703 | $26,930,780 |
| Total | 901 | 1,004 | $57,636,507 | $64,299,463 | $186,719,466 | $208,383,067 |
| Multiplier | 1.19 | 1.19 | 1.17 | 1.17 | 1.15 | 1.15 |
| **Visitor Spending** | | | | | | |
| Direct | 917 | 2,683 | $33,996,788 | $99,433,589 | $78,748,955 | $230,324,442 |
| Indirect & Induced | 73 | 213 | $4,541,684 | $13,283,488 | $12,578,469 | $36,789,425 |
| Total | 990 | 2,896 | $38,538,472 | $112,717,077 | $91,327,424 | $267,113,867 |
| Multiplier | 1.08 | 1.08 | 1.13 | 1.13 | 1.16 | 1.16 |
| Airport Total (Excluding Runway) | 1950 | 3,966 | $99,958,232 | $181,231,572 | $287,288,254 | $485,793,008 |
| Total Multiplier | 1.13 | 1.11 | 1.16 | 1.15 | 1.15 | 1.16 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 30: 2036 Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 57 | 64 | $3,628,572 | $4,091,382 | $8,692,129 | $9,800,776 |
| Indirect & Induced | 10 | 12 | $562,957 | $715,231 | $1,717,798 | $1,936,897 |
| Total | 67 | 76 | $4,191,529 | $4,806,614 | $10,409,928 | $11,737,672 |
| Multiplier | 1.18 | 1.18 | 1.16 | 1.17 | 1.20 | 1.20 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 453 | Not Estimated | $31,525,845 | Not Estimated | $78,165,151 |
| Indirect & Induced | Not Estimated | 65 | Not Estimated | $4,350,025 | Not Estimated | $13,240,839 |
| Total | Not Estimated | 518 | Not Estimated | $35,875,870 | Not Estimated | $91,405,989 |
| Multiplier | Not Estimated | 1.14 | Not Estimated | 1.14 | Not Estimated | 1.17 |
| **Tenant Activity** | | | | | | |
| Direct | 811 | 914 | $52,594,910 | $59,066,880 | $174,173,368 | $195,986,226 |
| Indirect & Induced | 153 | 173 | $9,195,951 | $10,353,224 | $25,866,589 | $29,131,787 |
| Total | 964 | 1,086 | $61,790,861 | $69,420,104 | $200,039,958 | $225,118,013 |
| Multiplier | 1.19 | 1.19 | 1.17 | 1.18 | 1.15 | 1.15 |
| **Visitor Spending** | | | | | | |
| Direct | 1,033 | 3,254 | $38,327,546 | $120,772,669 | $88,699,083 | $279,496,758 |
| Indirect & Induced | 82 | 258 | $5,115,173 | $16,118,253 | $14,168,180 | $44,644,885 |
| Total | 1,115 | 3,512 | $43,442,719 | $136,890,922 | $102,867,263 | $324,141,643 |
| Multiplier | 1 | 1.08 | 1.13 | 1.13 | 1.16 | 1.16 |
| Airport Total (Excluding Runway) | 2,146 | 4,674 | $109,425,109 | $211,117,640 | $313,317,148 | $560,997,328 |
| Total Multiplier | 1.13 | 1.10 | 1.16 | 1.15 | 1.15 | 1.16 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 31: 2019 Baseline Tax Impacts*

| Tax Revenue | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Local | $10,571,102 | $12,587,754 | $19,439,167 | $13,656,927 | $22,200,870 |
| State | $10,180,854 | $12,120,723 | $19,355,952 | $13,173,792 | $22,201,701 |
| Federal | $14,359,363 | $17,094,005 | $30,441,440 | $18,701,144 | $35,384,497 |
| Subtotal: State & Local | $20,751,956 | $24,708,477 | $38,795,119 | $26,830,719 | $44,402,571 |
| Total | $35,111,318 | $41,802,482 | $69,236,559 | $45,531,863 | $79,787,068 |
| | | | | | |
| Business Park Activity - Total | $8,691,600 | Not Estimated | Not Estimated | Not Estimated | Not Estimated |
| Short Term Construction Expenditure Related to the Full Development Scenario - Total | N/A | N/A | $4,508,088 | N/A | $7,757,492 |

Source: ICF IMPLAN analysis. Tax values are in 2021 dollars

## City of Carlsbad Results

*Table 32: 2019 Baseline Results*

| Spending Vector | Employment (Jobs) | Labor Income ($) | Output ($) |
|---|---|---|---|
| **Airport Activity** | | | |
| Direct | 41 | $2,584,220 | $6,170,688 |
| Indirect & Induced | 1 | $93,141 | $245,204 |
| Total | 42 | $2,677,361 | $6,415,892 |
| Multiplier | 1.04 | 1.04 | 1.04 |
| **Tenant Activity** | | | |
| Direct | 637 | $41,273,825 | $136,992,419 |
| Indirect & Induced | 24 | $1,427,204 | $3,969,660 |
| Total | 661 | $42,701,029 | $140,962,079 |
| Multiplier | 1.04 | 1.03 | 1.03 |
| **Business Park Activity** | | | |
| Direct | 407 | $19,819,267 | $42,270,096 |
| Indirect & Induced | 6 | $406,745 | $1,136,351 |
| Total | 413 | $20,226,012 | $43,406,447 |
| Multiplier | 1.01 | 1.02 | 1.03 |
| **Visitor Spending** | | | |
| Direct | 204 | $7,534,456 | $17,477,969 |
| Indirect & Induced | 3 | $180,712 | $488,351 |
| Total | 207 | $7,715,168 | $17,966,320 |
| Multiplier | 1.01 | 1.02 | 1.03 |
| **Total** | 1,323 | $73,319,570 | $208,750,738 |
| **Total (Excluding Off-Airport)** | 910 | $53,093,558 | $165,344,291 |
| Total Multiplier | 1.03 | 1.03 | 1.03 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 33: 2026 Midpoint Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 51 | 56 | $3,220,296 | $3,587,826 | $7,716,511 | $8,597,191 |
| Indirect & Induced | 2 | 2 | $116,437 | $129,726 | $306,592 | $341,583 |
| Total | 52 | 58 | $3,336,733 | $3,717,552 | $8,023,104 | $8,938,775 |
| Multiplier | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| **Short-Term Construction Expenditures** | | | | | | |
| Direct | Not Estimated | 263 | Not Estimated | 18,320,519 | Not Estimated | $45,423,878 |
| Indirect & Induced | Not Estimated | 7 | Not Estimated | 507,043 | Not Estimated | $1,558,038 |
| Total | Not Estimated | 270 | Not Estimated | $18,827,563 | Not Estimated | $46,981,915 |
| Multiplier | Not Estimated | 1.03 | Not Estimated | 1.03 | Not Estimated | 1.03 |
| **Tenant Activity** | | | | | | |
| Direct | 758 | 844 | $49,068,275 | $54,725,464 | $162,603,763 | $181,452,287 |
| Indirect & Induced | 28 | 31 | $1,693,802 | $1,892,130 | $4,710,699 | $5,259,875 |
| Total | 786 | 876 | $50,762,077 | $56,617,593 | $167,314,462 | $186,712,161 |
| Multiplier | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 |
| **Visitor Spending** | | | | | | |
| Direct | 242 | 707 | $8,959,975 | $26,206,079 | $20,754,568 | $60,702,833 |
| Indirect & Induced | 3 | 10 | $214,545 | $627,500 | $579,365 | $1,694,524 |
| Total | 245 | 717 | $9,174,520 | $26,833,579 | $21,333,934 | $62,397,357 |
| Multiplier | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | 1.03 |
| Airport Total (Excluding Runway) | 1083 | 1,651 | $63,273,330 | $87,168,724 | $196,671,499 | $258,048,293 |
| Total Multiplier | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 34: 2036 Scenario Results*

| Spending Vector | No Development Employment | Full Development Employment | No Development Labor Income ($) | Full Development Labor Income ($) | No Build Industry Activity ($) | Full Development Industry Activity ($) |
|---|---|---|---|---|---|---|
| **Airport Activity** | | | | | | |
| Direct | 57 | 64 | $3,628,572 | $4,091,382 | $8,692,129 | $9,800,776 |
| Indirect & Induced | 2 | 2 | $131,179 | $147,910 | $345,308 | $389,351 |
| Total | 59 | 66 | $3,759,751 | $4,239,292 | $9,037,437 | $10,190,126 |
| Multiplier | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| **Short-Term Construction Expenditures** | 57 | 64 | $3,628,572 | $4,091,382 | $8,692,129 | $9,800,776 |
| Direct | Not Estimated | 453 | Not Estimated | $31,525,845 | Not Estimated | $78,165,151 |
| Indirect & Induced | Not Estimated | 12 | Not Estimated | $872,517 | Not Estimated | $2,681,063 |
| Total | Not Estimated | 465 | Not Estimated | $32,398,363 | Not Estimated | $80,846,213 |
| Multiplier | Not Estimated | 1.03 | Not Estimated | 1.03 | Not Estimated | 1.03 |
| **Tenant Activity** | | | | | | |
| Direct | 811 | 914 | $52,594,910 | $59,066,880 | $174,173,368 | $195,986,226 |
| Indirect & Induced | 30 | 34 | $1,817,371 | $2,047,062 | $5,051,439 | $5,691,740 |
| Total | 841 | 948 | $54,412,281 | $61,113,943 | $179,224,808 | $201,677,966 |
| Multiplier | 1.04 | 1.04 | 1.03 | 1.03 | 1.03 | 1.03 |
| **Visitor Spending** | | | | | | |
| Direct | 272 | 858 | $10,101,363 | $31,830,070 | $23,376,962 | $73,662,372 |
| Indirect & Induced | 4 | 12 | $241,680 | $761,550 | $652,624 | $2,056,463 |
| Total | 276 | 870 | $10,343,043 | $32,591,620 | $24,029,586 | $75,718,835 |
| Multiplier | 1 | 1.01 | 1.02 | 1.02 | 1.03 | 1.03 |
| Airport Total (Excluding Runway) | 1,176 | 1,884 | $68,515,075 | $97,944,855 | $212,291,831 | $287,586,926 |
| Total Multiplier | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 | 1.03 |

Source: ICF IMPLAN analysis. Employment is reported in terms of annual number of jobs All labor income and industry values are in 2021 dollars

*Table 35: 2019 Baseline Tax Impacts*

| Tax Revenue | 2019 Baseline | 2026 | | 2036 | |
|---|---|---|---|---|---|
| | | No Development | Full Development | No Development | Full Development |
| Local | $8,157,423 | $9,721,495 | $12,145,209 | $10,457,150 | $13,426,607 |
| State | $6,903,754 | $8,225,561 | $10,367,213 | $8,852,256 | $11,477,665 |
| Federal | $7,666,019 | $9,131,892 | $12,376,902 | $9,875,435 | $13,869,059 |
| Subtotal: State & Local | $15,061,176 | $17,947,056 | $22,512,422 | $19,309,405 | $24,904,271 |
| Total | $22,727,196 | $27,078,948 | $34,889,323 | $29,184,840 | $38,773,330 |
| | | | | | |
| Business Park Activity - Total | $7,215,865 | Not Estimated | Not Estimated | Not Estimated | Not Estimated |
| Short Term Construction Expenditure Related to the Full Development Scenario - Total | N/A | N/A | $2,864,868 | N/A | $4,929,848 |

Source: ICF IMPLAN analysis. Tax values are in 2021 dollars