May 20, 2025

Mr. Tom Burns
Executive Director
Governor's Office of Economic Development
555 E. Washington Ave, Suite 5400
Las Vegas, NV 89101

Dear Tom,

This letter documents Applied Economics' review of the fiscal and economic impact assessment for Summerlin Studios prepared by PFM Consulting Group in 2024, and subsequent tax estimates submitted in April 2025 . The analysis includes the economic and tax impacts of construction and operations for a mixed-use development that would include a large film studio as well as office, retail, hotel, education and health care uses. The purpose is to quantify the potential economic and tax benefits to the state, relative to the film tax credits requested by Sony, and to estimate the economic and fiscal return on investment (ROI). The analysis covers a 15-year period, consistent with the term of the proposed credits.

Applied Economics has extensive experience conducting economic and fiscal impact analyses for a wide range of different projects including tourism attractions, film industry, mixed-use development and various types of commercial and industrial development. Applied Economics created an economic and tax impact model for the Governor's Office of Economic Development that utilizes economic multipliers from IMPLAN and is used regularly to evaluate incentive requests. This review focuses on the economic impact results in the Summerlin Studios report that were prepared using IMPLAN, and the tax estimates prepared by PFM Consulting. We will also comment on the approach and various assumptions used in the report, including the fiscal economic ROI calculations.

Economic impacts measure the change in a state or regional economy, in this case the State of Nevada, stemming from an increase in spending or demand. These changes can be quantified in terms of jobs, labor income, output and value added. For each of those variables there are the direct impacts of the project, indirect impacts of local supplier purchases, and induced impacts of employee spending. Using economic multipliers for Nevada limits the indirect and induced impacts to local spending based on the type of industry creating new demand, and the types of goods and services available in the state. Applied Economics attempted to replicate the economic impacts in the Summerlin Studios report. While both analyses utilize the IMPLAN model, it is important to note that there multiple options for specifying projects in IMPLAN that can result in somewhat different output. In addition, the IMPLAN model allows users to modify the underlying industry assumptions that are used to create the multipliers, for example, modifying average wages in a particular industry to match the project assumptions more closely. Applied Economics did not make any modifications to the IMPLAN industry assumptions for Nevada for this analysis.

Project Description

Details of the proposed mixed-use development are not included in the Summerlin Studios report, but the applicant provided the assumptions to Applied Economics for use in this analysis. The development would include a 503,000 square foot production studio, 141,000 square feet of retail space, two hotels with a total of 1,923 rooms and 842,000 square feet, 808,000 square feet of office space, a 13,000 square foot urgent care facility, an 18,000 square foot training facility. The development would be built in phases over a period of nine years. The timing is particularly important in terms of the ROI given that both the economic and tax impacts are cumulative over time. Because timing may change as the project develops, the impact results could also change significantly, even if the mix of development stays the same.

SUMMERLIN STUDIOS SQUARE FEET ADDED BY YEAR COMPLETED

Year	Studio	Retail	Office	Hotel	Urgent Care	Training
2025	0	0	0	0	12,888	0
2026	0	0	0	0	0	0
2027	0	0	0	0	0	17,915
2028	0	0	0	0	0	0
2029	503,375	140,782	0	0	0	0
2030	0	0	404,290	455,517	0	0
2031	0	0	0	0	0	0
2032	0	0	0	0	0	0
2033	0	0	0	0	0	0
2034	0	0	404,290	386,033	0	0
Total	**503,375**	**140,782**	**808,580**	**841,550**	**12,888**	**17,915**

Construction Impacts

Total construction costs (excluding land) are estimated at $2.0 billion over nine years, including $1.0 billion in materials costs, $511.2 million in local labor costs and $420.0 million in non-local labor based on the most recent data provided by the applicant. The construction impacts from Summerlin Studios are different from Applied Economics calculations in terms of employment and labor income, and are from the previous report which was based on the original construction costs.

Applied Economics assumed that direct labor income would be equal to the estimates of labor cost as a component of construction cost, and used IMPLAN to estimate future inflation based on construction costs by year in 2024 dollars. The results from the Summerlin Studios report show approximately 12,600 direct jobs, versus 11,700 direct jobs in the Applied Economics estimate. Direct output, which is essentially a proxy for local construction costs and is equal to materials plus local labor, is slightly lower in the Applied Economic estimate. Average wages (labor income per job) are approximately $71,400 in the Summerlin Studios report versus $79,900 in the Applied Economics analysis and are a function of the multipliers. Indirect impacts (local supplier purchases related to construction) are somewhat higher in the Summerlin Studios analysis, but induced impacts are higher despite direct labor income being lower. Total value added is 28% different for construction. The economic impact of construction is not included in the economic ROI calculations, but sales tax on construction materials is included in the fiscal ROI, which is a reasonable approach.

CONSTRUCTION IMPACTS
SUMMERLIN STUDIOS

	Direct	Indirect	Induced	Total	Difference
Summerlin Studios Analysis					
Output (millions)	$1,599.8	$425.2	$848.8	$2,873.8	
Employment	12,643	1,836	4,517	18,996	
Labor Income (millions)	$903.0	$125.7	$254.2	$1,282.9	
Value Added (millions)	$935.5	$217.7	$517.7	$1,670.9	
Applied Economics					
Output (millions)	$1,542.2	$360.7	$445.7	$2,348.6	22%
Employment	11,652	2,623	4,325	18,601	2%
Labor Income (millions)	$931.2	$109.2	$138.5	$1,178.9	9%
Value Added (millions)	$866.5	$189.1	$250.5	$1,306.1	28%

Film and TV Production Studio

A large portion of the economic impacts generated by the proposed development come from the 503,000 square foot studio. The studio would be built in the first phase of the development. The Summerlin Studios analysis does not provide estimates of employment or wages associated with the studio, nor does it make explicit assumptions about the breakdown of Above the Line (ATL) expenditures, which are largely out-of-state, versus Below the Line (BTL) expenditures that are typically local. For the comparison, Applied Economics subtracted office, retail, hotel and other impacts from the reported total impacts to estimate jobs and labor income associated with the studio. Employment and labor income for the studio are split between three industries – film and TV production (98.5%), food and beverage (1%) and building services (0.5%) to approximate the distribution in the Summerlin Studios impacts.

The results shown in the table represent stabilized annual impacts as of 2034. Although the studio could open in 2029, some other components of the mixed-use development would not be completed until 2034, and so “stabilized annual impacts” represent 2034 results for all components of the development. The assumptions about future inflation are imbedded in the IMPLAN model. The film and television production industry is the only industry in this analysis for which IMPLAN shows declining direct output, labor income and value added over time. This may be due to the potential impacts of AI on future production.

The economic impact results for the studio from the Summerlin Studio analysis are similar to the Applied Economics estimates, with only an 11% to 13% difference in total output and employment. This could be due to differences in future inflation assumptions, or to differences in the assumed breakdown of direct jobs and labor income by industry. Average wages for 3,781 studio jobs are estimated at $89,000 based on the assumptions from the IMPLAN. The Summerlin Studios report does not break out labor income impacts by development type (studio, office, retail, etc.)

FILM AND TV PRODUCTION STUDIO
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	$463.0	$344.0	$227.0	$1,034.0	
Employment	3,781	1,539	1,205	6,525	
Labor Income (millions)	na	na	na	na	
Value Added (millions)	na	na	na	na	
Applied Economics					
Output (millions)	$459.2	$159.2	$309.0	$927.4	11%
Employment	3,781	623	1,379	5,783	13%
Labor Income (millions)	$337.5	$36.3	$93.1	$466.9	na
Value Added (millions)	$337.5	$80.2	$195.0	$612.7	na

Office

The largest component of the impacts come from the 808,000 square feet of office space in the mixed-use development, which could be built in two phases opening in 2030 and 2034. According to the Summerlin Studio report, the office space could support an estimated 2,310 jobs, which is a conservative estimate at 350 square feet per employee. The office space could be occupied by multiple tenants in different industries, which makes it difficult to estimate the economic impacts given that the results could vary significantly based on the mix of industries. The Summerlin Studios report appears to assign all the jobs to the office administrative services industry. If a portion of the jobs are in higher wage professional occupations, this could increase the economic impacts.

The economic impact results for office jobs from the Summerlin Studios report are different than Applied Economics estimates. Direct output per job in the Summerlin Studios report is $329,000 versus $83,500 for the Applied Economics estimates. The assumptions regarding output per worker at $329,000 are well above the national average. Applied Economics used default average wages for the office administrative services industry in Nevada from the IMPLAN model at $74,800, which is likely lower than direct labor income in the Summerlin impacts. The difference in direct output (and likely direct labor income) results in indirect and induced impacts that are two to six times higher than the Applied Economics' estimates. This is important because the office development makes up the largest share of total output impacts in the Summerlin Studios results.

OFFICE DEVELOPMENT
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	$760.0	$515.0	$375.0	$1,650.0	
Employment	2,310	2,757	1,997	7,064	
Labor Income (millions)	na	na	na	na	
Value Added (millions)	na	na	na	na	
Applied Economics					
Output (millions)	$192.9	$85.1	$165.9	$444.0	272%
Employment	2,310	411	741	3,462	104%
Labor Income (millions)	$172.8	$30.6	$50.0	$253.4	na
Value Added (millions)	$118.5	$48.9	$104.6	$272.1	na

Retail

The development plan includes approximately 141,000 square feet of retail as part of the first phase opening in 2029. The retail space includes a mix of general merchandise stores, restaurants and fitness/recreation uses. According to the Summerlin Studios report, the retail space could employ an estimated 163 people, which is a conservative estimate at 864 square feet per employee. Employment density tends to be much lower for fitness centers and larger general merchandise retailers than for restaurants and smaller retail stores. To account for the mix of uses, the retail jobs are assigned to three different industry types in the IMPLAN model. The Applied Economics estimates show somewhat higher direct output impacts, but very similar direct and total jobs impacts compared to the results in the Summerlin Studios report.

RETAIL DEVELOPMENT
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	$10.0	$4.0	$6.0	$20.0	
Employment	163	23	34	220	
Labor Income (millions)	na	na	na	na	
Value Added (millions)	na	na	na	na	
Applied Economics					
Output (millions)	$15.6	$5.6	$6.2	$27.4	-27%
Employment	163	25	28	216	2%
Labor Income (millions)	$5.9	$1.8	$1.9	$9.6	na
Value Added (millions)	$10.7	$3.1	$3.9	$17.6	na

Hotel

The development plan includes approximately 842,000 square feet of hotel space with a 1,041-room hotel opening in 2030 and an 882-room hotel opening in 2034. Note that the number of rooms is estimated and is not included in the assumptions presented in the Summerlin Studios report. The hotels could employ an estimated 842 people, or 0.44 employees per room. All hotel jobs are assigned to the accommodations industry in the IMPLAN model. The Applied Economics estimates show somewhat higher direct output impacts, a similar level of indirect impacts, and a lower level of induced impacts. This results in total output impacts for hotels that are 12% lower in the Summerlin Studios report. This could be due to different assumptions about average wages for hotel workers, or different rates of projected inflation.

HOTEL DEVELOPMENT
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	$70.0	$19.0	$46.0	$135.0	
Employment	842	93	243	1,178	
Labor Income (millions)	na	na	na	na	
Value Added (millions)	na	na	na	na	
Applied Economics					
Output (millions)	$103.0	$21.1	$29.3	$153.4	-12%
Employment	842	89	131	1,062	11%
Labor Income (millions)	$36.3	$7.0	$8.8	$52.2	na
Value Added (millions)	$71.9	$12.2	$18.5	$102.6	na

Other Development

The development plan includes an urgent care facility of approximately 13,000 square feet constructed in the first year, and an approximately 18,000 square foot training facility opening in 2028. According to the Summerlin Studios report the training facility and urgent care combined could employ an estimated 36 people. The Summerlin Studios report does not include a breakdown of direct, indirect and induced impacts for other development, but the total impacts are very similar to the Applied Economics estimates.

OTHER DEVELOPMENT
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	na	na	na	$10.0	
Employment	na	na	na	63	
Labor Income (millions)	na	na	na	na	
Value Added (millions)	na	na	na	na	
Applied Economics					
Output (millions)	$5.7	$2.2	$2.8	$10.7	-6%
Employment	36	9	12	58	9%
Labor Income (millions)	$3.0	$0.7	$0.8	$4.5	na
Value Added (millions)	$2.9	$1.3	$1.8	$5.9	na

Summary of Economic Impacts

The figure below shows the direct and total economic impacts for all components of the proposed development. The differences between the Summerlin Studios results and the Applied Economics' estimates range from an 82% difference in output to a 29% difference in labor income on an annual basis. The difference in direct output is almost entirely due to the office impacts, although the differences in indirect output result from both the office and studio impacts. Total output in the Summerlin Studios analysis, which forms the basis for the economic ROI calculation is approximately double the estimates generated by Applied Economics. The reasons for these differences may be related to the way that each component of the development is specified in the IMPLAN model, or the project inflation rates, or other factors.

SUM OF DEVELOPMENT COMPONENTS
2034 STABILIZED ANNUAL IMPACTS

	Direct	Indirect	Induced	Total	% Difference
Summerlin Studios Analysis					
Output (millions)	$1,308.4	$884.6	$657.2	$2,850.2	
Employment	7,132	4,422	3,495	15,049	
Labor Income (millions)	$558.4	$257.5	$196.9	$1,012.8	
Value Added (millions)	$558.4	$463.7	$400.9	$1,423.0	
Applied Economics					
Output (millions)	$776.4	$273.3	$513.1	$1,562.9	82%
Employment	7,132	1,157	2,291	10,580	42%
Labor Income (millions)	$555.6	$76.4	$154.6	$786.6	29%
Value Added (millions)	$541.5	$145.7	$323.8	$1,010.9	41%

Fiscal Impacts

The Summerlin Studios report estimates state and local tax impacts of the proposed development including sales tax, transient lodging tax, commerce tax, modified business tax (MBT) and property tax. The revised figures submitted by the developer in April and May 2025 show $745.1 million in state and local taxes over 15 years. Applied Economics estimates total revenues of $706.0 million over 15 years. *The Summerlin Studios report does not include annual tax impacts, or a breakdown of tax revenues by type, however the applicant provided these detailed results to GOED and Applied Economics*.

Sales taxes include annual retail sales from the 141,000 square feet of retail development, and sales taxes on construction materials. The Summerlin Studios analysis assumes $660 in retail sales per square foot, which is typical for anchor retail and entertainment outlets nationally. Taxable sales are inflated at 2.6% annually. The retail occupancy rate is unclear, but the analysis does assume a 60% capture rate in terms of net new sales to provide a more conservative estimate. Based on a total state tax rate of 4.6% and a local tax rate of 3.775% state and local sales taxes are estimated at $197.0 million over 15 years in the Summerlin Studios analysis. Applied Economics estimates $167.2 million in state and local sales taxes, or about 18% less. The Summerlin Studios analysis increases taxable sales from $660 to $1,100 per square foot starting in 2034. The analysis references an original estimate of $1,100 per square foot from HHC that was lowered to $660, but it appears to increase in 2034.

Lodging taxes include 1,923 hotel rooms at an average room rate of $169.29 (in 2024 dollars), an occupancy rate of 74%, and a total lodging tax rate of 13%. These appear to be very conservative estimates given that the average ADR reported by the Las Vegas Convention and Visitors Authority for 2024 is $193 and the average occupancy rate is 83.6%. The Summerlin Studios report also assumes an annual growth of 5.8% for room rates, which seems aggressive over a 15 year period. Total state and local lodging taxes are estimated at $242.6 million over 15 years. Applied Economics was able to replicate the lodging tax calculations with only a 3% difference.

Property tax estimates include FF&E estimated at $30 million, 74.1 acres of land valued at $2.0 million per acre and $1.96 billion in improvements. Applied Economics allocated FF&E (personal property) in proportion to square feet added in each year and applied an 8-year depreciation schedule from the Nevada Department of Taxation. To convert construction costs into assessed value, the report appears to use a factor of 60%, which is conservative. Real property value is inflated by 7.5% per year, which seems relatively high on a long term basis compared to the projected rate of inflation used in other parts of the analysis. The analysis uses a state and local tax rate of 2.92% and includes a 35% assessment ratio. Total state and local property taxes are estimated at $215.5 million over 15 years. Applied Economics was able to replicate the property tax calculations with only a 1% difference.

Commerce tax is based on Nevada gross revenues and is more difficult to estimate given that there could be many individual tenants in the office space. The Summerlin Studios report provides a conservative estimate of commerce taxes based on retail sales and office lease revenues. Office leases are estimated at $50 per square foot (in 2024 dollars) with an 89% occupancy rate, which is reasonable based on market rates for Class A office. The commerce tax estimate excludes any taxable revenues from the office tenants, or from the studio. Based on just these factors, commerce taxes are estimated at $3.7 million over 15 years. Applied Economics commerce tax estimates using these assumptions are 26% lower, primary due to differences in projected retail sales, but overall commerce taxes are underestimated due to lack of taxable revenue information for the studio and offices.

Modified business taxes (MBT) are based on estimated wages for employees in the development inflated at 2.6% per year. Average wages by industry used in the Summerlin Studios analysis come from the IMPLAN model. The MBT estimates assume a 50% commerce tax deduction. Modified business taxes are estimated at $65.8 million over 15 years in the original PFM report, but increased to $86.4 million in the revised tax estimates based on the increased labor costs associated with studio production spending. Applied Economics was able to replicate the modified business tax calculations within a 1% difference.

Total state and local taxes from the Summerlin Studios mixed-use development are estimated at $745.1 million over 15 years based on the April 2025 estimates, including $329.6 million in state taxes and $415.5 million in local taxes. Applied Economics estimates total taxes over 15 years of $706.0 million, including $310.3 million in state taxes and $395.7 million in local taxes, or about 6% lower. The assumptions used in the fiscal analysis are generally reasonable based on the information available at this time.

STATE AND LOCAL TAX IMPACTS
15 YEAR TOTAL

	Sales	Lodging	Property	Commerce	MBT	Total	Difference
Summerlin Studios Analysis							
State (millions)	$108.2	$63.0	$68.3	$3.7	$86.4	$329.6	
Local (millions)	$88.8	$179.6	$147.1	$0.0	$0.0	$415.5	
Applied Economics							
State (millions)	$91.8	$61.1	$67.1	$2.9	$87.4	$310.3	6%
Local (millions)	$75.4	$174.2	$146.1	$0.0	$0.0	$395.7	5%

Return on Investment

State and local governments will recover 52 cents of every dollar in tax credits based on the Summerlin Studios analysis. The ROI calculation includes a net film tax credit of $1.425 billion over 15 years. The value of this tax credit can be compared to state and local tax revenues of $745.1 million, yielding an ROI of $0.52. If only state taxes are included, the ROI would be $0.23. Applied Economics agrees with the approach used in this calculation and the types of tax revenues included in the fiscal impact.

The report also presents an economic ROI that is much higher because it compares the net film tax credit to direct output and total output over 15 years. Direct output over 15 years is estimated at $17.5 billion, yielding an economic ROI of $12.30, versus total output of $38.2 billion yielding an economic ROI of $26.79.

Setting aside differences in Applied Economics' estimates of the economic impacts, the concept of economic ROI is entirely different than fiscal ROI. While the studio development will directly and indirectly stimulate new economic activity in the state, which is the goal of economic development, comparing the estimated total increase in production value in the private sector to the amount of tax credits does not ensure that sufficient new tax revenue will be generated for this type of incentive to be sustainable. Total economic impacts include not only the businesses in the development, but also a myriad of other businesses in the state that could benefit from new demand for suppliers, or that could benefit from employee spending. The amount of new state and local taxes that could be generated relative to the increase in output will vary widely by industry type, and there is no way to verify that the indirect and induced impacts are happening in Nevada in response to this specific development.

The overall methodology presented in this report is sound. The fiscal ROI calculation is a reasonable approach to evaluate the amount of incentives, but it could be argued that the economic ROI would be very difficult to verify. Should you have any questions regarding the results of our review, please do not hesitate to contact me.

Sincerely,

Sarah E Murley

Sarah E. Murley
Principal