EXHIBIT 1: Economic Impact Analysis



EXHIBIT 1 MEMORANDUM

To: City of Davis

From: David Zehnder and Ryan Sharp

Subject: Davis Innovation Centers Economic Impact Analysis;

EPS #152006

Date: September 8, 2015

This exhibit evaluates the potential one-time and ongoing economic impacts of the two active proposed Innovation Centers in Davis, Mace Ranch Innovation Center (MRIC) and Nishi Gateway Innovation District (Nishi), on a cumulative and individual basis consistent with buildout conditions. The economic impact analysis estimates the direct economic contributions of the projects, as well as the associated multiplier or "ripple" effect that could be generated through demand on suppliers of goods and services and employee spending in the economy. While the projects likely would generate regional economic impacts, the analysis focuses exclusively on the Davis and Yolo County economies.

Summary of Results

Table 1 summarizes the total estimated economic impact for the one-time and ongoing activities associated with the MRIC and Nishi projects. Results are presented for the proposed land uses in the two projects, labeled as the Base Development Program, as well as three sensitivity analyses that are intended to demonstrate the differences in economic outcomes if 850 housing units are included in the MRIC project (MRIC Housing), the 160,000-square-foot hotel component is removed from the MRIC project (No MRIC Hotel), or a 70,000-square-foot hotel is integrated into the Nishi project (Nishi Hotel). Because of differing land uses, the resulting economic impact varies under each of these scenarios.

The estimated one-time economic impact resulting from residential, nonresidential, and backbone infrastructure construction activities through buildout of the two projects equates to approximately 3,400 jobs (full- and part-time), \$605 million of output (market value of goods and services), and \$271 million of labor income (earnings and benefits) in the Davis economy. Expanding the analysis to the Yolo

The Economics of Land Use



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Table 1
Davis Innovation Centers - Economic Impact
Total Economic Impact

	Base Development		Sensitivity Analysis	
Study Area/Measure	Program	MRIC Housing [1]	No MRIC Hotel [2]	Nishi Hotel [3]
Davis Economy				
One-Time Activities [4]				
Employment	3,374	4,178	3,380	3,373
Output (2015\$)	\$605,080,147	\$750,000,043	\$606,111,350	\$604,893,422
Labor Income (2015\$)	\$270,878,269	\$324,819,908	. , ,	\$270,792,785
Ongoing Activities [5]				
Employment	11,414	11,414	12,056	11,125
Output (2015\$)	\$2,865,781,531	\$2,865,781,531	\$3,042,792,854	\$2,795,791,309
Labor Income (2015\$)	\$703,816,560	\$703,816,560	\$745,520,933	\$685,054,049
Yolo County Economy				
One-Time Activities [4]				
Employment	5,879	7,349	5,871	5,877
Output (2015\$)	\$1,055,376,953	\$1,317,824,388	\$1,053,821,100	\$1,055,054,980
Labor Income (2015\$)	\$462,247,906	\$559,076,240	\$461,551,584	\$462,103,807
Ongoing Activities [5]				
Employment	12,575	12,575	13,288	12,260
Output (2015\$)	\$3,059,030,888	\$3,059,030,888	\$3,248,251,764	\$2,984,665,239
Labor Income (2015\$)	\$765,862,948	\$765,862,948	\$811,324,525	\$745,862,574

impact_summary

Source: IMPLAN, 2013 Data and EPS.

^[1] Includes 850 housing units with no additional changes to other uses.

^[2] Removes the 160,000 square foot hotel and reallocates the space among other nonresidential uses.

^[3] Adds a 70,000 square foot hotel and reduces most other nonresidential uses.

^[4] One-time activities include backbone infrastructure, residential, and nonresidential construction. See Table 5.

^[5] Ongoing activites include household spending and establishment operations. See Table 7.

County economy increases the estimated one-time economic impact of the construction activities to roughly 5,900 jobs, \$1.1 billion of output, and \$462 million of labor income. These estimated economic impacts account for the direct construction activities and contribution of suppliers of goods and services, as well as the amount of construction and supplier demand the local economy can support.

Because the MRIC Housing sensitivity analysis increases the total amount of residential construction activity, while nonresidential and basic infrastructure assumptions are not changed, the greatest one-time economic impacts are generated under this scenario. The other two sensitivity analyses, No MRIC Hotel and Nishi Hotel, are fairly close to the Base Development Program because of a reallocation of land uses that support relatively similar construction activities.

The establishments operating in the nonresidential space and residents occupying the housing units in the proposed projects will generate an ongoing economic impact, which is estimated at about 11,000 jobs, \$2.9 billion output, and \$704 million of labor income on an annual basis in the Davis economy. In the larger Yolo County economy that is able to capture a greater amount of supplier and household spending activities, the total estimated ongoing economic impact expands to approximately 13,000 jobs, \$3.1 billion of output, and \$766 million of labor income. The economic impact analysis for the ongoing activities is based on buildout conditions for the two projects and includes economic activities related to establishment operations, demand on suppliers of goods and services, and household spending.

The largest estimated ongoing economic impact is generated by the No MRIC Hotel scenario because the hotel land use generally supports fewer employees and less output compared to the types of industries that could occupy the office and flex/research and development (R&D) space that are assumed to capture the reallocation of the hotel land use in the project. While the MRIC Housing sensitivity analysis supports and economic impact that is equivalent to the Base Development Program, the Nishi Hotel sensitivity analysis represents a notably lower ongoing economic impact because of the higher employment densities supported by the other nonresidential uses.

Project Framework

The economic impact analysis applies a project framework that includes a Base Development Program and three sensitivity analyses that are used to demonstrate the differences in outcomes with changes to certain key factors. **Table 2** summarizes the four elements of the project framework. The Base Development Program relies on the applicant proposals and a more detailed allocation of nonresidential space based on the 2nd Street/Interland University Research Park mix evaluated in Phase I. The three sensitivity analyses modify the Base Development Program and reflect changes associated with residential and hotel land use assumptions:

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Table 2 **Davis Innovation Centers - Economic Impact Project Framework**

		Base Development Program: 2nd Street/Interland URP Mix			Sensitivity Analysis: MRIC Housing			Sensitivity Analysis: No MRIC Hotel			Sensitivity Analysis: Nishi Hotel		
Item	MRIC [1]	Nishi [2]	Total	MRIC [1]	Nishi [2]	Total	MRIC [1]	Nishi [2]	Total	MRIC [1]	Nishi [2]	Total	
Dwelling Units [3]													
Renter Occupied	0	440	440	510	440	950	0	440	440	0	440	440	
Owner-Occupied	0	210	210	340	210	550	0	210	210	0	210	210	
Total Dwelling Units	0	650	650	850	650	1,500	0	650	650	0	650	650	
Nonresidential Square Feet [4]													
Office	846,468	172,387	1,018,855	846,468	172,387	1,018,855	926,468	172,387	1,098,855	846,468	131,781	978,249	
Flex: R&D/Office	513,011	72,162	585,173	513,011	72,162	585,173	593,011	72,162	665,173	513,011	57,676	570,687	
Manufacturing	952,169	28,221	980,390	952,169	28,221	980,390	952,169	28,221	980,390	952,169	28,221	980,390	
Industrial Commercial	62,578	10,000	72,578	62,578	10,000	72,578	62,578	10,000	72,578	62,578	5,188	67,766	
Ancillary Retail	62,578	37,950	100,528	62,578	37,950	100,528	62,578	37,950	100,528	62,578	37,950	100,528	
Hotel	160,000	0	160,000	160,000	0	160,000	0	0	0	160,000	70,000	230,000	
Public/Non-Profit	128,253	80,180	208,433	128,253	80,180	208,433	128,253	80,180	208,433	128,253	70,084	198,337	
Total Square Feet	2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	
Parking Spaces [4]													
Parking Garage	0	843	843	0	843	843	0	843	843	0	843	843	
Acres [5]	229	47	276	229	47	276	229	47	276	229	47	276	

Source: EPS.

Prepared by EPS 9/4/2015

framework

^[1] Includes Mace Triangle.

^[2] Development numbers includes Nishi Gateway and West Olive Drive area. Acreage numbers only include Nishi Gateway.
[3] See Table B-1.

^[4] See Table A-2. [5] See Table A-3.

- 1. **MRIC Housing** includes 850 housing units with no additional changes to other uses based on increased density and a modified site design reflected in the Draft Environmental Impact Report (DEIR) Mixed-Use Alternative.
- 2. **No MRIC Hotel** removes the 160,000-square-foot hotel and reallocates the space equally among the Office and Flex: R&D/Office uses.
- 3. **Nishi Hotel** adds a 70,000-square-foot hotel and reduces most other nonresidential uses based on the DEIR Alternative Land Use Mix.

Economic Activities

Developing the two Innovation Centers through buildout will support temporary, one-time economic activities associated with on-site backbone infrastructure, nonresidential, and residential construction. The estimated construction costs over the entire period of project development are shown in **Table 3**. Total cumulative construction costs across the Base Development Program and the three sensitivity analyses range from approximately \$925 million to \$1.1 billion. **Appendix A** provides details on the construction cost assumptions.

The establishments and residents occupying the nonresidential and residential space developed in the two Innovation Centers will support ongoing economic activities. These ongoing activities will take two distinct forms. First, the private- and public-sector establishment operating in the Innovation Centers will support jobs to produce goods and provide services. **Table 4** shows the estimated number of jobs support by establishment operations in the Innovation Centers. Total cumulative job counts range from roughly 6,400 to 6,900 across the Base Development Program and the three sensitivity analyses. The supporting tables in **Appendix B** show the assumptions used to derive employment counts and the related industry allocation. Second, the residents living in the Innovation Centers will support household expenditures that flow to establishments throughout the community.¹ The total pool of potential household spending equates to roughly \$10 million in the Base Development Program and three sensitivity analyses.² The assumptions regarding the amount of household spending also are summarized in **Appendix B**.

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¹ Household expenditures of residents that are employed in the local economy are captured in the induced impacts of jobs (refer to page 8 for a description of induced impacts). To avoid double-counting, adjustments were made to account for residents that are drawn to the housing products in the Innovation Centers and are employed outside the local economy. Further conservative adjustments were made to account only for non-student renter-occupied households in the Nishi project as students are primarily drawn to the area for the university and, in the absence of the Innovation Centers, related households could be distributed elsewhere in the local economy. Because the proposed Innovation Centers are nonresidential-oriented projects, it is assumed that the bulk of the household expenditures will occur outside the project areas.

² The DEIR for MRIC assumes that all residents occupying the housing units considered in the Mixed Use Alternative will work in the local economy; therefore, the potential pool of household spending is not included in the economic impact analysis as a conservative measure to avoid double-counting in the induced impacts of jobs (refer to page 8 for a description of induced impacts). If the resident spending pool assumptions used for Nishi are applied to the MRIC Housing sensitivity analysis, then the cumulative household spending would be approximately \$39 million.

Table 3 **Davis Innovation Centers - Economic Impact Construction Cost Summary**

	Base Development Program: 2nd Street/Interland URP Mix			Sensitivity Analysis: MRIC Housing			Sensitivity Analysis: No MRIC Hotel			Sensitivity Analysis: Nishi Hotel		
One-Time Construction Costs	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total
Residential Construction Costs [1]	\$0	\$139,272,000	\$139,272,000	\$203,592,000	\$139,272,000	\$342,864,000	\$0	\$139,272,000	\$139,272,000	\$0	\$139,272,000	\$139,272,000
Nonresidential Construction Costs [2]	\$583,836,490	\$105,230,870	\$689,067,360	\$583,836,490	\$105,230,870	\$689,067,360	\$585,436,490	\$105,230,870	\$690,667,360	\$583,836,490	\$104,941,150	\$688,777,640
Infrastructure Construction Costs [3]	\$68,700,000	\$28,576,000	\$97,276,000	\$68,700,000	\$28,576,000	\$97,276,000	\$68,700,000	\$28,576,000	\$97,276,000	\$68,700,000	\$28,576,000	\$97,276,000
Total Construction Costs	\$652,536,490	\$273,078,870	\$925,615,360	\$856,128,490	\$273,078,870	\$1,129,207,360	\$654,136,490	\$273,078,870	\$927,215,360	\$652,536,490	\$272,789,150	\$925,325,640

construct_sum

Source: EPS.

[1] See Table A-1.[2] See Table A-2.[3] See Table A-3.

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Table 4 **Davis Innovation Centers - Economic Impact** Employment and Household Income Summary

	Base Development Program: 2nd Street/Interland URP Mix		Sensitivity Analysis: MRIC Housing		Sensitivity Analysis: No MRIC Hotel			Sensitivity Analysis: Nishi Hotel				
Ongoing Activities	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total
Aggregate Income of New Household Spending Pool [1]	\$0	\$10,328,229	\$10,328,229	\$0	\$10,328,229	\$10,328,229	\$0	\$10,328,229	\$10,328,229	\$0	\$10,328,229	\$10,328,229
Employment [2]	5,479	1,043	6,522	5,479	1,043	6,522	5,812	1,043	6,856	5,479	883	6,361
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Source: EPS.

[1] See Table B-1. [2] See Table B-2.

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Economic Impact Modeling

The economic impact analysis uses an input/output (I/O) modeling framework to estimate the full range of economic effects associated with the one-time and ongoing economic activities of the proposed Innovation Centers in Davis.³ Economic impacts are derived through an I/O model by taking a direct activity and adding multipliers to account for the chain of spending and respending that is set in motion by the initial activity. For example, a R&D entity operating in one of the Innovation Centers will purchase goods and services to support its own economic activities. The demand for goods and services will stimulate additional economic activities at other supplier businesses. The impacts expand further when employees of these businesses spend their income and stimulate economic activities at businesses receiving the spending. These various economic effects multiply throughout the economy and, when added to the direct activity, yield the total estimated economic impact.

The I/O modeling framework is premised on the concept that industries in a geographic region are interdependent in the sense that they purchase output from and supply input to other industries. This analysis relies on the framework established through IMPLAN (Impact Analysis for Planning) software, an I/O model that draws on data collected by the IMPLAN Group, LLC, from several government sources, including the Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), and the Census Bureau. The model is used widely for estimating economic impacts across a wide array of industries and economic settings.

The total gross economic impacts reflect the sum of direct, indirect, and induced effects. Indirect and induced effects are derived through multipliers that measure the impact of the direct activity as it "ripples" throughout the economy:

- The **direct** effect represents the change in output or employment attributable to the specific economic activity being analyzed. In this case, the effect captures construction reflected in estimated costs and establishment operations measured through estimated employment.
- The **indirect** effect reflects the economic activities that result from the response to demand on suppliers of goods and services from the direct economic activity. For this analysis, the effect measures the interindustry purchases from the construction activities and establishment operations.
- The induced effect captures household purchases of goods and services in the economy tied
 to employee income supported by the direct and indirect activities.⁴ This effect also accounts
 for estimated household spending from the project housing units.⁵

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³ The economic impacts of each project are measured individually and aggregated to reflect the cumulative results. While there is potential for incremental economic activity to arise from the interplay between the two projects, it is not feasible to quantify those impacts using the standard approaches employed in this analysis.

⁴ Induced effects are not measured for the one-time construction activities because temporary increases to economic activity are not anticipated to generate new resident employees and related induced expenditures in the local economy. IMPLAN suggests that exclusion of these induced effects

For this analysis, the three effects are estimated for both the Davis and Yolo County economies. IMPLAN generates a model of the industrial structure and household profile for the defined economies for the specific data year, which, in turn, determines the extent to which spending is captured and recirculated in the economy rather than being allowed to leak outside the geographic area. Larger geographic areas generally produce greater economic impacts as spending is recirculated among a larger base of establishments and industries.

The economic impact analysis presents results using three economic measures, which are defined for an annual period:

- **Employment (Jobs)** represents the number of full- and part-time jobs supported by the affected industries.
- **Output** reflects the total market value of goods and services generated by affected industries.
- Labor Income accounts for total compensation (i.e., salaries/wages and benefits) associated with the employment.⁷

Two important caveats are relevant to the interpretation of the IMPLAN model estimates. First, economic impact estimates are derived based on the most recent available data sets from IMPLAN (2013 at the time of this analysis), which reflect key factors such as interindustry relationships, industry size and structure, and industry production functions. Any significant changes to these static factors could significantly alter the resulting economic impacts. Because the cumulative absorption timeframe of these projects could be as long as 30 years, it is likely these factors will change. However, these potential changes cannot be modeled based on available data.

Second, the I/O methodology is based on the assumption that new industry demand for goods and services results in a corresponding increase in supply and therefore employment. This implies that key industry suppliers can increase output rather than shift output from one set of consumers or products to another. This assumption may not hold in areas with tight labor or capital markets because companies may find it difficult to obtain these inputs or other resources necessary to expand production. In these cases, accommodating an establishment's demand for

prevents overestimation of economic impacts associated with temporary increases in economic activity.

⁷ It is important to note that labor income is a component of output and is not an additive economic impact.

⁵ Consistent with the definition, IMPLAN software applies all household spending changes to induced effects. This methodology uses income-level spending patterns and adjustments for taxes and savings.

⁶ The IMPLAN software uses postal ZIP codes to build models for a local economy; therefore, the proxy for the Davis economy is defined by the following postal ZIP codes: 95616, 95917, and 95618. Because the IMPLAN ZIP code models use an econometric regional purchase coefficient calibration, the same methodology was used for the Yolo County model. Based on IMPLAN guidance, EPS also adjusted the Yolo County model industry data to create appropriate alignment between the local and county models.

labor and other inputs may come at the expense of other establishments in the same or related sectors or may need to be satisfied by increased imports from outside the study area (i.e., increased imports). This phenomenon is often referred to as "crowding out" because the sector being stimulated tends to crowd out other sectors, which can reduce the net economic gain.

Economic Impact Analysis Results

The MRIC and Nishi projects make significantly different contributions to the cumulative one-time and ongoing economic impacts because of differing sizes and proposed land uses. At 229 acres, the MRIC project is almost 5 times bigger than the Nishi project and could support larger building prototypes. In each of the projects, the different components of the one-time and ongoing activities also support a considerable variation in resulting economic impacts. Nonresidential space is the largest segment in both projects, making it the predominant contributor to overall construction activity and the resulting establishment operations housed in the built space.

One-Time Impacts

Table 5 presents the estimated economic impacts for the residential, nonresidential, and backbone infrastructure construction components of the one-time economic activities by project and for the Base Development Program and the three sensitivity analyses.⁸ Additional details on the one-time impacts are provided in the supporting tables in **Appendix C**.

For the MRIC project, the one-time economic impact in the Davis economy is estimated to total between about 2,400 and 3,200 jobs, \$419 million and \$564 million of output, and \$196 million and \$250 million of labor income with the Base Development Program at the lower end and MRIC Housing sensitivity analysis at the upper end. The same scenarios produce the low and high estimates in the Yolo County economy with the one-time impact ranging from 4,100 to 5,500 jobs, \$726 million to \$988 million of output, and \$332 million to \$429 million of labor income. With the addition of residential construction in the MRIC Housing sensitivity analysis, the MRIC project's contribution to the cumulative one-time economic impact shifts from approximately 71 percent to 76 percent in both the Davis and Yolo County estimates.

Estimates of the one-time economic impact associated with the Nishi project are roughly the same in the Base Development Program and Nishi Hotel sensitivity analysis because of the reallocation of land uses that support similar construction activities. The total one-time impact in the Davis economy is estimated at 1,000 jobs, \$186 million of output, and \$75 million of labor income, while estimates for the Yolo County economy show 1,800 jobs, \$329 million of output, and \$130 million of labor income. The Nishi project accounts for about 29 percent of the total one-time economic impact in the Davis and Yolo County economies for all scenarios with the exception of the MRIC Housing sensitivity analysis. In this instance, the Nishi project share drops to just under one-quarter as overall construction activity is increased in the MRIC project.

⁸ In all cases, neither the Davis nor Yolo County economy is able to supply enough construction activity to meet all of the demand generated by the two projects through buildout as reflected in the estimated project construction costs (i.e., construction activity will need to be imported into the local economy). The economic impact analysis accounts for the estimated proportion of total activity demand that can captured in the local economy (local purchasing percentages).

Table 5 **Davis Innovation Centers - Economic Impact** One-Time Activities - Total Economic Impact

		evelopment Progreet/Interland URP			nsitivity Analysis: MRIC Housing			nsitivity Analysis: No MRIC Hotel		Se	nsitivity Analysis: Nishi Hotel	
Study Area/Measure	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total
Davis Economy												
Residential Construction [1]												
Employment	0	550	550	804	550	1,354	0	550	550	0	550	550
Output (2015\$)	\$0	\$99,135,937	\$99,135,937	\$144,919,896	\$99,135,937	\$244,055,833	\$0	\$99,135,937	\$99,135,937	\$0	\$99,135,937	\$99,135,937
Labor Income (2015\$)	\$0	\$36,900,074	\$36,900,074	\$53,941,639	\$36,900,074	\$90,841,713	\$0	\$36,900,074	\$36,900,074	\$0	\$36,900,074	\$36,900,074
Nonresidential Construction [2]												
Employment	2,177	384	2,562	2,177	384	2,562	2,183	384	2,567	2,177	383	2,561
Output (2015\$)	\$374,525,116	\$67,769,412	\$442,294,528	\$374,525,116	\$67,769,412	\$442,294,528	\$375,556,319	\$67,769,412	\$443,325,731	\$374,525,116	\$67,582,687	\$442,107,803
Labor Income (2015\$)	\$180,978,532	\$31,307,702	\$212,286,234	\$180,978,532	\$31,307,702	\$212,286,234	\$181,450,629	\$31,307,702	\$212,758,331	\$180,978,532	\$31,222,218	\$212,200,750
Backbone Infrastructure Construction [3]												
Employment	185	77	262	185	77	262	185	77	262	185	77	262
Output (2015\$)	\$44,951,819	\$18.697.863	\$63,649,682	\$44.951.819	\$18.697.863	\$63.649.682	\$44,951,819	\$18,697,863	\$63.649.682	\$44,951,819	\$18,697,863	\$63,649,682
Labor Income (2015\$)	\$15,319,685	\$6,372,276	\$21,691,961	\$15,319,685	\$6,372,276	\$21,691,961	\$15,319,685	\$6,372,276	\$21,691,961	\$15,319,685	\$6,372,276	\$21,691,961
Total One-Time Activities												
Employment	2,362	1,011	3,374	3,166	1.011	4,178	2,368	1,011	3,380	2,362	1.010	3.373
Output (2015\$)	\$419,476,935	\$185,603,212	\$605,080,147	\$564,396,831	\$185,603,212	\$750,000,043	\$420,508,138	\$185,603,212	\$606,111,350	\$419,476,935	\$185,416,487	\$604,893,422
Labor Income (2015\$)	\$196,298,217	\$74,580,052	\$270,878,269	\$250,239,856	\$74,580,052	\$324,819,908	\$196,770,314	\$74,580,052	\$271,350,366	\$196,298,217	\$74,494,568	\$270,792,785
Yolo County Economy												
Residential Construction [4]												
Employment	0	1,005	1,005	1,469	1,005	2,475	0	1,005	1,005	0	1,005	1,005
Output (2015\$)	\$0	\$179,533,475	\$179,533,475	\$262,447,435	\$179,533,475	\$441,980,910	\$0	\$179,533,475	\$179,533,475	\$0	\$179,533,475	\$179,533,475
Labor Income (2015\$)	\$0	\$66,237,748	\$66,237,748	\$96,828,334	\$66,237,748	\$163,066,082	\$0	\$66,237,748	\$66,237,748	\$0	\$66,237,748	\$66,237,748
Nonresidential Construction [5]												
Employment	3,736	659	4,395	3,736	659	4,395	3,728	659	4,387	3,736	657	4,394
Output (2015\$)	\$646,552,869	\$116,779,195	\$763,332,064	\$646,552,869	\$116,779,195	\$763,332,064	\$644,997,016	\$116,779,195	\$761,776,211	\$646,552,869	\$116,457,222	\$763,010,091
Labor Income (2015\$)	\$304,880,512	\$52,724,460	\$357,604,972	\$304,880,512	\$52,724,460	\$357,604,972	\$304,184,190	\$52,724,460	\$356,908,650	\$304,880,512	\$52,580,361	\$357,460,873
Backbone Infrastructure Construction [6]												
Employment	338	141	479	338	141	479	338	141	479	338	141	479
Output (2015\$)	\$79,459,827	\$33,051,587	\$112,511,414	\$79,459,827	\$33,051,587	\$112,511,414	\$79,459,827	\$33,051,587	\$112,511,414	\$79,459,827	\$33,051,587	\$112,511,414
Labor Income (2015\$)	\$27,123,199	\$11,281,987	\$38,405,186	\$27,123,199	\$11,281,987	\$38,405,186	\$27,123,199	\$11,281,987	\$38,405,186	\$27,123,199	\$11,281,987	\$38,405,186
Total One-Time Activities												
Employment	4,074	1,805	5,879	5,544	1,805	7,349	4,066	1,805	5,871	4,074	1,803	5,877
Output (2015\$)	\$726,012,696	\$329,364,257	\$1,055,376,953	\$988,460,131	\$329,364,257	\$1,317,824,388	\$724,456,843	\$329,364,257	\$1,053,821,100	\$726,012,696	\$329,042,284	\$1,055,054,980
Labor Income (2015\$)	\$332,003,711	\$130,244,195	\$462,247,906	\$428,832,045	\$130,244,195	\$559,076,240	\$331,307,389	\$130,244,195	\$461,551,584	\$332,003,711	\$130,100,096	\$462,103,807
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Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

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^[1] See Tables C-1 through C-3.
[2] See Tables C-7 through C-9.
[3] See Tables C-13 through C-15.
[4] See Tables C-4 through C-6.
[5] See Tables C-10 through C-12.

^[6] See Tables C-16 through C-18.

On average, across all measures, nonresidential construction activity accounts for roughly 76 percent of the total one-time economic impact, with MRIC contributing about 85 percent of the related impact. This is the case for the Base Development Program and the No MRIC Hotel and Nishi Hotel sensitivity analyses. In the MRIC Housing sensitivity analysis, nonresidential construction decreases to about 62 percent of the total one-time economic impact as residential construction increases from roughly 15 percent to close to one-third of the total impact. Approximately 60 percent of the residential construction impact is generated by the MRIC project in this sensitivity analysis.

Backbone infrastructure construction supports an average of between 7 and 9 percent of the total one-time impact across the Base Development Program and three sensitivity analyses. Because the Nishi project includes some major incremental infrastructure investments in the Olive Drive extension and grade-separated undercrossing, this project accounts for around 29 percent of the related economic impact, despite representing only about 17 percent of the cumulative gross acreage.

DEIR Alternatives

The MRIC Housing and Nishi Hotel sensitivity analyses capture two of the alternatives evaluated in the DEIRs, specifically the Mixed-Use Alternative for MRIC and the Alternative Land Use Mix for Nishi. Several other alternatives are presented in the DEIR analysis for both projects.

Table 6 shows the potential qualitative effects these alternatives could have on the one-time economic impacts associated with the two proposed projects.

Six of the alternatives identified for the MRIC and Nishi projects could result in a decreased onetime economic impact. Most apparent, the No Project alternative for both the MRIC and Nishi projects would eliminate all of the measured one-time economic activities, leading to a decreased economic impact.

The Reduced Project alternative for the MRIC project also would generate a decreased economic impact related to one-time activities as only a portion of the site would be developed with less demand for nonresidential and infrastructure construction. Compared to the proposed project, both the acreage and nonresidential square footage are reduced in the Off-Site Option A alternative (Davis Innovation Center site) for MRIC, which could require less infrastructure and nonresidential construction activity with a decreased economic impact. The MRIC Off-Site Option B alternative (Covell Property) accounts for larger acreage but a smaller amount of

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⁹ It is important to note that this analysis only accounts for on-site infrastructure in the MRIC project. The DEIR analysis identifies potential off-site infrastructure improvements as mitigation measures in the Transportation and Circulation component that could increase the infrastructure investment and related construction activity. As a general guide to understanding the economic implications for these potential mitigation measures, accounting for local purchasing percentages, every \$1 million of infrastructure construction generates an estimated total impact of roughly 3 jobs, \$654,000 of output, and \$223,000 of labor income in the Davis economy.

¹⁰ The August 2015 MRIC DEIR and September 2015 Nishi DEIR are available on the following Web site: http://cityofdavis.org/city-hall/community-development-and-sustainability/development-projects.

Table 6
Davis Innovation Centers - Economic Impact
DEIR Alternatives Potential Effect on One-Time Economic Impact

Project/Alternative	Nonresidential Square Feet	Dwelling Units	Gross Acres	Potential Effect
MRIC [1]				
Proposed	2,725,056	0	229	-
No Project Reduced Site Size Reduced Project Off-Site Option A (Davis IC) Off-Site Option B (Covell)	0 2,725,056 611,056 2,654,000 2,654,000	0 0 0 0	0 123 66 208 247	Decrease Similar or Decrease [3] Decrease Decrease Decrease
Nishi [2]				
Proposed	400,900	650	47	-
No Project R&D Only Offsite Option (5th Street)	0 1,275,000 345,000	0 0 650	0 47 47	Decrease Increase Decrease

one-time_alt

Source: Raney Planning and Management; Ascent; EPS.

^[1] Because it was treated as a quantitative sensitivity analysis, the Mixed-Use alternative is not included in the table. The Infill alternative is also not included in the table because it was dismissed in the DEIR.

^[2] Because it was treated as a quantitative sensitivity analysis, the Alternative Land Use Mix is not included in the table. The Recreation-Only and Reduced Intensity alternatives area also not in the table because they were dismissed in the DEIR.

^[3] Effect depends on size of required parking structure.

nonresidential square feet. Because of the magnitude of the differences in acres and square feet and related backbone infrastructure and nonresidential building costs, this alternative could lead to less construction activity with a decreased one-time economic impact.

For the Nishi project, the Off-Site option (5th Street Corridor) could produce a decreased one-time economic impact as the major incremental infrastructure investments likely are not needed for the 5th Street Corridor site, resulting in a reduced demand for backbone infrastructure construction. In addition, under this alternative, the rezoning and redesignation of the West Olive Drive area would not occur, leading to a reduction in commercial development and related construction activity.

The Reduced Site Size alternative for MRIC is based on the same assumed nonresidential square footage and, while the site size is smaller, any related reductions in backbone infrastructure construction could be negated by the stated need for a parking structure. Depending on the size of the parking structure, this could result in a similar or decreased one-time economic impact.

Only one alternative likely has the potential to generate an increased one-time economic impact. Under the Research and Development Only alternative for Nishi, the one-time economic impact could be increased because the residential uses that would be eliminated tend to support slightly lower construction costs and associated economic activity.

Ongoing Impacts

The estimated gross economic impacts associated with ongoing household spending and establishment operations in the MRIC and Nishi projects are presented in **Table 7**. Additional information on the household spending and establishment operations economic impacts is provided in **Appendix D**.

The gross ongoing economic impact generated from the MRIC project in the Davis economy is estimated at between approximately 9,600 and 10,300 jobs, \$2.5 billion and \$2.7 billion of output, and \$596 million and \$638 million of labor income. When extended to the Yolo County economy, the estimated ongoing economic impact range for MRIC is between roughly 10,700 and 11,400 jobs, \$2.6 billion and \$2.8 billion of output, and \$651 million and \$697 million of labor income. Because the office and flex uses that are assumed to be developed in place of the hotel space support greater levels of employment, the No MRIC Hotel sensitivity analysis produces the largest economic impact in both the Davis and Yolo County economies. The Base Development Program, which is equivalent to the two other sensitivity analyses, represents the low end of the economic impact range for MRIC.¹¹ The ongoing economic

¹¹ Because the DEIR for MRIC assumes that all residents occupying the housing units considered in the Mixed Use Alternative will work in the local economy, the potential pool of household spending is not included in the economic impact analysis as a conservative measure to avoid double-counting in the induced impacts of jobs (refer to page 8 for a description of induced impacts). If the resident spending pool assumptions used for Nishi are applied to the MRIC Housing sensitivity analysis, then the cumulative ongoing economic impact would equate to approximately 11,500 jobs, \$2.9 billion of output, and \$709 million labor income for the Davis economy and 12,700 jobs, \$3.1 billion of output, and \$787 million of labor income for the Yolo County economy.

Table 7
Davis Innovation Centers - Economic Impact
Ongoing Activities - Total Economic Impact

		evelopment Progra			nsitivity Analysis: MRIC Housing			nsitivity Analysis: No MRIC Hotel		Se	nsitivity Analysis: Nishi Hotel	
Study Area / Measure	MRIC	Nishi	Total	MRIC [5]	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total
Davis Economy												
Household Spending [1]												
Employment	0	41	41	0	41	41	0	41	41	0	41	41
Output (2015\$)	\$0	\$5,444,856	\$5,444,856	\$0	\$5,444,856	\$5,444,856	\$0	\$5,444,856	\$5,444,856	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$1,682,279	\$1,682,279	\$0	\$1,682,279	\$1,682,279	\$0	\$1,682,279	\$1,682,279	\$0	\$1,682,279	\$1,682,279
Establishment Operations [2]												
Employment	9,644	1,729	11,373	9,644	1,729	11,373	10,286	1,729	12,015	9,644	1,440	11,084
Output (2015\$)	\$2,480,310,458	\$380,026,217	\$2,860,336,675	\$2,480,310,458	\$380,026,217	\$2,860,336,675	\$2,657,321,781	\$380,026,217	\$3,037,347,998	\$2,480,310,458	\$310,035,995	\$2,790,346,453
Labor Income (2015\$)	\$596,346,492	\$105,787,789	\$702,134,281	\$596,346,492	\$105,787,789	\$702,134,281	\$638,050,865	\$105,787,789	\$743,838,654	\$596,346,492	\$87,025,278	\$683,371,770
Total Ongoing Activities												
Employment	9,644	1,770	11,414	9,644	1,770	11,414	10,286	1,770	12,056	9,644	1,481	11,125
Output (2015\$)	\$2,480,310,458	\$385,471,073	\$2,865,781,531	\$2,480,310,458	\$385,471,073	\$2,865,781,531	\$2,657,321,781	\$385,471,073	\$3,042,792,854	\$2,480,310,458	\$315,480,851	\$2,795,791,309
Labor Income (2015\$)	\$596,346,492	\$107,470,068	\$703,816,560	\$596,346,492	\$107,470,068	\$703,816,560	\$638,050,865	\$107,470,068	\$745,520,933	\$596,346,492	\$88,707,557	\$685,054,049
Yolo County Economy												
Household Spending [3]												
Employment	0	49	49	0	49	49	0	49	49	0	49	49
Output (2015\$)	\$0	\$6,699,489	\$6,699,489	\$0	\$6,699,489	\$6,699,489	\$0	\$6,699,489	\$6,699,489	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$2,046,050	\$2,046,050	\$0	\$2,046,050	\$2,046,050	\$0	\$2,046,050	\$2,046,050	\$0	\$2,046,050	\$2,046,050
Establishment Operations [4]												
Employment	10,662	1,864	12,526	10,662	1,864	12,526	11,376	1,864	13,239	10,662	1,549	12,211
Output (2015\$)	\$2,649,621,863	\$402,709,536	\$3,052,331,399	\$2,649,621,863	\$402,709,536	\$3,052,331,399	\$2,838,842,739	\$402,709,536	\$3,241,552,275	\$2,649,621,863	\$328,343,887	\$2,977,965,750
Labor Income (2015\$)	\$651,392,495	\$112,424,403	\$763,816,898	\$651,392,495	\$112,424,403	\$763,816,898	\$696,854,072	\$112,424,403	\$809,278,475	\$651,392,495	\$92,424,029	\$743,816,524
Total Ongoing Activities												
Employment	10,662	1,913	12,575	10,662	1,913	12,575	11,376	1,913	13,288	10,662	1,598	12,260
Output (2015\$)	\$2,649,621,863	\$409,409,025	\$3,059,030,888	\$2,649,621,863	\$409,409,025	\$3,059,030,888	\$2,838,842,739	\$409,409,025	\$3,248,251,764	\$2,649,621,863	\$335,043,376	\$2,984,665,239
Labor Income (2015\$)	\$651,392,495	\$114,470,453	\$765,862,948	\$651,392,495	\$114,470,453	\$765,862,948	\$696,854,072	\$114,470,453	\$811,324,525	\$651,392,495	\$94,470,079	\$745,862,574
												ongoing_summary

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

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^[1] See Tables D-1 through D-3

^[2] See Tables D-7 through D-10.

^[3] See Tables D-4 through D-6.

^[4] See Tables D-11 through D-1

^[5] Because the MRIC DEIR assumes all residents will work in the local economy, a conservative adjustment was made to avoid double-counting in the induced impact of jobs (see Table B-1). If the same non-student household spending pool assumptions used for Nishi are applied, then the total cumulative ongoing economic impact for the MRIC Housing Sensitivity Analysis would show approximately 11,500 jobs, \$2.9 billion of output, and \$709 million labor income for the Davis economy and 12,700 jobs, \$3.1 billion of output, and \$787 million of labor income for the Yolo County economy.

activities associated with the MRIC project are responsible for an average of about 85 percent of the cumulative economic impact for the Base Development Program. This average contribution increases slightly to 86 percent under the No MRIC Hotel sensitivity analysis.

The Nishi project is estimated to produce an ongoing economic impact in the Davis economy that totals between 1,500 and 1,800 jobs, \$315 million and \$385 million of output, and \$89 million and \$107 million of labor income. Like in the case of the MRIC project, the hotel space supports a smaller amount of jobs than the other proposed nonresidential uses, making the economic impact associated with the Nishi Hotel sensitivity analysis lower than the Base Development Program. This also holds true for the Yolo County economy, where the Base Development Program shows an ongoing economic impact of about 1,900 jobs, \$409 million of output, and \$114 million of labor income, and the Nishi Hotel sensitivity analysis produces an impact of approximately 1,600 jobs, \$335 million of output, and \$94 million of labor income. The Nishi project's share of the total ongoing economic impact in the Davis and Yolo County economies drops from an average of around 15 percent in the Base Development Program to 13 percent in the Nishi Hotel sensitivity analysis.

Household spending represents less than 1 percent of the total ongoing economic impact in Davis and Yolo County for the Base Development Program and three sensitivity analyses. Establishment operations are the primary driver of the estimated ongoing economic impact generated from the proposed Innovation Center projects. With a greater amount of nonresidential square footage to support establishment operations, the MRIC project produces about 86 percent of the related local and countywide economic impact for the Base Development Program and MRIC Housing and No MRIC Hotel sensitivity analyses. When Nishi employment-generating nonresidential space is reallocated to the hotel use in the Nishi Hotel sensitivity analysis, the MRIC project contribution to the total establishment operations impact jumps to an average of close to 88 percent.

DEIR Alternatives

Table 8 lists the potential quantitative effects of the various DEIR alternatives not analyzed in the economic impact analysis for the MRIC and Nishi projects. The ongoing economic impacts could be decreased under six of the identified alternatives. The No Project Alternative for both the MRIC and Nishi project would leave the sites under current conditions, and the ongoing economic impact could be decreased by the net of the expected economic activity in the agriculture uses and the potential uses in the proposed projects. Considering the relative magnitude of the economic contribution of the existing uses, this decrease could be significant, equating to a large share of the estimated ongoing economic impact.

With less nonresidential space for establishments to occupy to produce goods or provide services, the Reduced Project and both Off-Site Option alternatives for MRIC also could generate a decreased ongoing economic impact. Similarly, the Off-Site alternative for Nishi does not include the nonresidential space associated with the rezoning and redesignation of the West

¹² In the case of the MRIC Off-Site Option alternatives, some variation could arise as the Covell Property and Davis Innovation Center sites are not directly aligned with the Interstate 80 corridor, which could lead to a somewhat different land use and industry mix with reduced emphasis on the manufacturing building type and increased orientation toward the office and flex uses.

Table 8
Davis Innovation Centers - Economic Impact
DEIR Alternatives Potential Effect on Ongoing Economic Impact

Project/Alternative	Nonresidential Square Feet	Dwelling Units	Gross Acres	Potential Effect
MRIC [1]				
Proposed	2,725,056	0	229	-
No Project Reduced Site Size Reduced Project Off-Site Option A (Davis IC) Off-Site Option B (Covell)	0 2,725,056 611,056 2,654,000 2,654,000	0 0 0 0	0 123 66 208 247	Decrease Similar Decrease Decrease Decrease
Nishi [2]				
Proposed	400,900	650	47	-
No Project R&D Only Offsite Option (5th Street)	0 1,275,000 345,000	0 0 650	0 47 47	Decrease Increase Decrease

ongoing_alt

Source: Raney Planning and Management; Ascent; EPS.

^[1] Because it was treated as a quantitative sensitivity analysis, the Mixed-Use alternative is not included in the table. The Infill alternative is also not included in the table because it was dismissed in the DEIR.

^[2] Because it was treated as a quantitative sensitivity analysis, the Alternative Land Use Mix is not included in the table. The Recreation-Only and Reduced Intensity alternatives are also not in the table because they were dismissed in the DEIR.

Olive Drive area, resulting in an overall decreased ongoing economic impact. It is important to note that, unlike the proposed MRIC off-site options, this Nishi site option is developed and contains commercial, office, light industrial, and utility facilities that are themselves generating an economic impact in the local economy. Consideration of the net ongoing economic impact could be appropriate in this case.

The Reduced Site Size alternative for MRIC is based on the same assumed buildout square footage; therefore, the ongoing economic impact could be similar to the proposed project.

The Research and Development Only alternative for Nishi could produce an increased ongoing economic impact because the residential uses that would be removed generally support less employment through household spending than establishment operations based in the nonresidential uses. The majority of the estimated ongoing impacts are generated by the establishment operations, and further orientation toward these nonresidential uses would incrementally increase these activities.

Market Absorption Considerations

Estimates developed for this analysis show the buildout conditions reflected in the proposed MRIC and Nishi projects could support close to 7,000 jobs on an ongoing basis. The economic impact analysis reveals the indirect and induced effects generated by these on-site jobs could equate to an additional 5,000 jobs in the Davis economy. As discussed in the economic impact modeling assumptions, the analysis is based on the assumption that any new demand will be met with a corresponding increase in supply, which is calibrated based on the size and structure of the local economy. Because the Innovation Centers are major projects that could stimulate significant economic activity, the indirect and induced effects represent new market demand in the local economy that will require commercial real estate. Assuming an average of 300 square feet per employee, this could translate to incremental off-site demand of roughly 1.5 million square feet. There are several key considerations related to accommodating this incremental demand over the absorption period of the Innovation Center projects:

- Market response among existing buildings—Although vacancy rates in Davis historically have been lower than in the rest of the region and close to market equilibrium in some segments, existing buildings can be expected to absorb a portion of the new off-site demand. Some vacancy in the Davis market is a result of underutilized properties where building improvements and tenant turnover could accommodate additional demand. A distinct segment of this demand also could be addressed through existing residential properties in the form of home-based businesses.
- Increased density in existing development areas—Recent development projects around the downtown area have indicated an opportunity for increased density. Gradual densification of the downtown and other key development areas in the community would introduce net new space in the market that can address a segment of the incremental demand. This is consistent with the City's adopted Dispersed Innovation Strategy objective to maximize use of existing land and building inventory.
- New development on vacant sites—City of Davis information shows approximately
 153 net acres of undeveloped land zoned for nonresidential uses. New development on this
 land will provide space that can accommodate a portion of the incremental demand from the
 Innovation Centers, as well as other general market demand. This absorption potential could

be reduced in the case of the Off-Site DEIR alternatives that would remove some of this vacant acreage for the Innovation Centers themselves. It is important to note that many of the existing sites are held for future planned expansion or are not sufficient in size to accommodate larger users.¹⁴

• Leakage to surrounding communities—Any of the incremental off-site demand that cannot be absorbed in Davis through existing or new development likely will shift to surrounding communities. This would reduce the estimated ongoing economic impact in Davis and could increase the Yolo County impact to the extent the excess demand is absorbed in the countywide economy.

Cluster Opportunities

In the Phase I study, several cluster opportunities were identified based on alignment with regional economic development priorities, university research strengths, and local industry and labor force concentrations. These groupings of economic activities represent the types of establishments that might display a stronger fit for the local economy in general and specifically for the nonresidential space in the proposed Innovation Centers. Creating the conditions for these types of establishments to locate and succeed in the Davis economy will facilitate direct, indirect, and induced effects.

Table 9 provides examples that demonstrate the magnitude of the potential economic impact associated with each of the identified cluster opportunities. These estimated economic impacts account for the direct effects of various establishment types using an increment of 100 jobs as the basis and include the indirect effects generated in suppliers of goods and services and induced effects produced through employee spending. The types of establishments provided align with the possible concentration of economic activities in the Innovation Centers identified as part of the Phase I effort. Overall, every 100 jobs in the various establishment types could support a total of between approximately 170 and 210 jobs, \$27 million and \$69 million of output, and \$10 million and \$15 million of labor income in the Davis economy. The variation in outcomes is driven by the type and value of economic activities, as well as the magnitude of interindustry relationships in the Davis economy. It is important to note that these estimates are provided for example purposes only—the operational structure of each specific establishment that locates in the proposed Innovation Centers could generate a significantly different economic impact.

¹⁴ As part of the discussion related to the Infill alternative that was considered but dismissed, the MRIC DEIR states that only 82 of the 153 acres are currently available for office or industrial development with most of the available acreage configured in parcels that are four acres or less.

¹⁵ The distribution of detailed economic activities in each cluster was estimated based on data from the Next Economy Capital Region Prosperity Plan and establishment data for innovation district case studies and the City of Davis from ESRI Business Analyst Online and Hoover's.

Table 9
Davis Innovation Centers - Economic Impact
Cluster Opportunity Examples - Total Economic Impact of Every 100 Jobs in Davis Economy

Establishment Type	Employment	Compensation	Output
Agriculture & Food Production	204	\$14,491,923	\$68,838,386
Advanced Manufacturing	194	\$13,130,055	\$61,366,773
Clean Energy Technology	186	\$12,660,721	\$68,137,241
Information & Communications Technology	206	\$11,965,038	\$62,016,803
Knowledge-Intensive Services	165	\$9,496,387	\$26,520,526
Life Sciences & Health Services	167	\$10,221,469	\$40,049,403

estab_impacts

Source: IMPLAN, 2013 Data and EPS.

APPENDICES:

Appendix A: Construction Cost Assumption Tables

Appendix B: Household Income and

Employment Assumption Tables

Appendix C: One-Time Economic Impact Tables

Appendix D: Ongoing Economic Impact Tables



APPENDIX A:

Construction Cost Assumption Tables

Table A-1	Residential Construction Costs	1
Table A-2	Nonresidential Construction Costs	2
Table A-3	Infrastructure Costs	3



Table A-1
Davis Innovation Centers - Economic Impact
Residential Construction Costs

			Development Pr reet/Interland U	•	Sensitivity Analysis: MRIC Housing			
Item	Assumptions	MRIC	Nishi	Total	MRIC	Nishi	Total	
Renter-Occupied								
Number of Units		0	440	440	340	440	780	
Unit Sale Price	\$308,000	-	-	-	-	-	-	
Unit Construction Cost [1]	\$184,800	-	-	-	-	-	-	
Total Renter-Occupied Construction Costs		\$0	\$81,312,000	\$81,312,000	\$62,832,000	\$81,312,000	\$144,144,000	
Owner-Occupied								
Number of Units		0	210	210	510	210	720	
Unit Sale Price	\$460,000	-	-	-	-	-	-	
Unit Construction Cost [1]	\$276,000	-	-	-	-	-	-	
Total Owner-Occupied Construction Costs		\$0	\$57,960,000	\$57,960,000	\$140,760,000	\$57,960,000	\$198,720,000	
Total Residential Construction Costs		\$0	\$139,272,000	\$139,272,000	\$203,592,000	\$139,272,000	\$342,864,000	

construct_res

Source: National Association of Home Builders; A. Plescia & Co.; Goodwin Consulting Group; EPS.

[1] According to NAHB, the cost of construction accounts for about 60 percent of the final sales price of the average home.

Table A-2
Davis Innovation Centers - Economic Impact
Nonresidential Construction Costs

			evelopment Pr reet/Interland U	•	Se	ensitivity Analys No MRIC Hotel		Sensitivity Analysis: Nishi Hotel			
Item	Cost	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total	
Square Feet	Per Sq. Ft. [1]										
Office	\$200	846,468	172,387	1,018,855	926,468	172,387	1,098,855	846,468	131,781	978,249	
Flex: R&D/Office	\$220	513,011	72,162	585,173	593,011	72,162	665,173	513,011	57,676	570,687	
Manufacturing	\$230	952,169	28,221	980,390	952,169	28,221	980,390	952,169	28,221	980,390	
Industrial Commercial	\$200	62,578	10,000	72,578	62,578	10,000	72,578	62,578	5,188	67,766	
Ancillary Retail	\$200	62,578	37,950	100,528	62,578	37,950	100,528	62,578	37,950	100,528	
Hotel	\$200	160,000	0	160,000	0	0	0	160,000	70,000	230,000	
Public/Non-Profit	\$200	128,253	80,180	208,433	128,253	80,180	208,433	128,253	70,084	198,337	
Total		2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	
Parking Spaces	<u>Per Space</u>										
Parking Garage	\$27,000	0	843	843	0	843	843	0	843	843	
Total Construction Cost											
Office		\$169,293,600	\$34,477,400	\$203,771,000	\$185,293,600	\$34,477,400	\$219,771,000	\$169,293,600	\$26,356,200	\$195,649,800	
Flex: R&D/Office		\$112,862,420	\$15,875,640	\$128,738,060	\$130,462,420	\$15,875,640	\$146,338,060	\$112,862,420	\$12,688,720	\$125,551,140	
Manufacturing		\$218,998,870	\$6,490,830	\$225,489,700	\$218,998,870	\$6,490,830	\$225,489,700	\$218,998,870	\$6,490,830	\$225,489,700	
Industrial Commercial		\$12,515,500	\$2,000,000	\$14,515,500	\$12,515,500	\$2,000,000	\$14,515,500	\$12,515,500	\$1,037,600	\$13,553,100	
Ancillary Retail		\$12,515,500	\$7,590,000	\$20,105,500	\$12,515,500	\$7,590,000	\$20,105,500	\$12,515,500	\$7,590,000	\$20,105,500	
Hotel		\$32,000,000	\$0	\$32,000,000	\$0	\$0	\$0	\$32,000,000	\$14,000,000	\$46,000,000	
Public/Non-Profit		\$25,650,600	\$16,036,000	\$41,686,600	\$25,650,600	\$16,036,000	\$41,686,600	\$25,650,600	\$14,016,800	\$39,667,400	
Parking Garage		\$0	\$22,761,000	\$22,761,000	\$0	\$22,761,000	\$22,761,000	\$0	\$22,761,000	\$22,761,000	
Total		\$583,836,490	\$105,230,870	\$689,067,360	\$585,436,490	\$105,230,870	\$690,667,360	\$583,836,490	\$104,941,150	\$688,777,640	

construct_nonres

Source: PKF Consulting; RSMeans; Yolo County Assessor's Office; City of Davis; Smith Travel Research; A. Plescia & Co.; Goodwin Consulting Group; EPS.

^[1] Based on 90% of Phase I assessed value midpoints and additional case study analysis.

Table A-3
Davis Innovation Centers - Economic Impact Infrastructure Costs

Item	MRIC [1]	Nishi [2]	Total
Infrastructure Cost per Acre (Gross)	\$300,000	\$608,000	
Total Acres	229	47	276
Total Infrastructure Cost	\$68,700,000	\$28,576,000	\$97,276,000

infra_cost

Source: A. Plescia & Co.; Goodwin Consulting Group; Buzz Oates; EPS.

- [1] Includes on-site backbone infrastructure. Does not include off-site infrastructure projects expected as mitigation measures in Transportation and Circulation components of EIR.
- [2] In addition to on-site backbone infrastructure, Nishi infrastructure costs also include the proposed Olive Drive extension and grade-separated undercrossing.

 Acreage only include Nishi Gateway.

APPENDIX B:

Household Income and Employment Assumption Tables



Table B-1	Aggregate Income of New HouseholdsB-1
Table B-2	Employees by Land UseB-2
Table B-3	Land Use Industry Employment MixB-3
Table B-4	Employment by Industry—Base Development Program: MRICB-4
Table B-5	Employment by Industry—Base Development Program: Nishi
Table B-6	Employment by Industry—Base Development Program: Total
Table B-7	Employment by Industry—No MRIC Hotel Sensitivity Analysis: MRICB-7
Table B-8	Employment by Industry—No MRIC Hotel Sensitivity Analysis: Total
Table B-9	Employment by Industry—Nishi Hotel Sensitivity Analysis: Nishi
Table B-10	Employment by Industry—Nishi Hotel Sensitivity Analysis: Total

Table B-1
Davis Innovation Centers - Economic Impact
Aggregate Income of New Households

			evelopment Pro eet/Interland UI		Sensitivity Analysis: MRIC Housing			
Item	Assumptions	MRIC	Nishi	Total	MRIC	Nishi	Total	
New Household Spending Pool [1]		-	45%	-	0%	45%	-	
Residential Vacancy Rate	5%	-	-	-	-	-	-	
Renter-Occupied								
Number of Units		0	440	440	510	440	950	
Unit Sale Price	\$308,000	-	-	-	-	-	-	
New Household Spending Pool		0	188	188	0	188	188	
New Non-Student Household Spending Pool [2]		0	28	28	0	28	28	
Total Annual Rent Payments [3]	\$27,600	-	-	-	-	-	-	
Median Household Income of Renter-Occupied Spending Pool [4]	\$79,000	-	-	-	-	-	-	
Aggregate Income of Renter-Occupied Spending Pool		\$0	\$2,228,985	\$2,228,985	\$0	\$2,228,985	\$2,228,985	
Owner-Occupied								
Number of Units		0	210	210	340	210	550	
Unit Sale Price	\$460,000	-	-	-	-	-	-	
New Household Spending Pool		0	90	90	0	90	90	
Total Annual Mortgage, Insurance, and Tax Payments [5]	\$36,000	-	-	-	-	-	-	
Median Household Income of Owner-Occupied Spending Pool [6]	\$103,000	-	-	-	-	-	-	
Aggregate Income of Owner-Occupied Spending Pool		\$0	\$9,246,825	\$9,246,825	\$0	\$9,246,825	\$9,246,825	
Total Aggregate Income of New Household Spending Pool		\$0	\$11,475,810	\$11,475,810	\$0	\$11,475,810	\$11,475,810	
Total Aggregate Income of New Household Spending Pool Outside Project [7]	90%	\$0	\$10,328,229	\$10,328,229	\$0	\$10,328,229	\$10,328,229	

income

Source: U.S. Census Bureau, OnTheMap, and LEHD Origin Destination Employment Statistics, 2007-2011 Average; A. Plescia & Co.; Goodwin Consulting Group; Raney Planning & Management; Ascent Environmental; EPS.

- [1] To avoid double-counting of household spending reflected in the induced impact of jobs, the household spending pool captures a conservative estimate of income only for those households working outside the local economy. The percentage has been adjusted from the five-year average OnTheMap labor force data point of 78% to 45% to align with Nishi DEIR assumptions and a greater likelihood of residents to work locally due to the housing units' proximity to the university as well as employers in the Innovation Centers and Downtown. The DEIR for MRIC assumes that all residents will work in the local economy; therefore, a conservative adjustment has been made to shift the percentage to 0%. If the adjusted Nishi percentage is applied to MRIC, the cumulative household spending pool for the MRIC Housing Sensitivity Analysis would be approximately \$39 million.
- [2] Because the UC Davis student population might otherwise be housed elsewhere in the community, a conservative adjustment has been applied to remove potential student spending from the household spending pool and related economic impact analysis. Assumes 15% of Nishi renter-occupied units are non-student based on DEIR information.
- [3] Assumes a monthly rent payment of \$2,300, based on high-level pro forma analysis.
- [4] Assumes renters paying 35% of their income in rent.
- [5] Based on a 6%, 30-year fixed rate mortgage with a 20% down payment and 2% for annual taxes and insurance. Values runded to the nearest thousand dollars.
- [6] Assumes mortgage lending guidelines allow around 35% of income dedicated to mortgage payments, taxes and, insurance.
- [7] Assumes most household spending will be outside the project, as proposed projects reflect primarily ancillary retail.

Table B-2
Davis Innovation Centers - Economic Impact
Employees by Land Use

	Square Feet per	Vacancy		velopment Prog et/Interland UR	•	Sensitivity Analysis: No MRIC Hotel			Sensitivity Analysis: Nishi Hotel		
Item	Employee [1]	Rate	MRIC	Nishi	Total	MRIC	Nishi	Total	MRIC	Nishi	Total
Square Feet											
Office	290	8%	846,468	172,387	1,018,855	926,468	172,387	1,098,855	846,468	131,781	978,249
Flex: R&D/Office	450	10%	513,011	72,162	585,173	593,011	72,162	665,173	513,011	57,676	570,687
Manufacturing	800	9%	952,169	28,221	980,390	952,169	28,221	980,390	952,169	28,221	980,390
Industrial Commercial	500	5%	62,578	10,000	72,578	62,578	10,000	72,578	62,578	5,188	67,766
Ancillary Retail	500	5%	62,578	37,950	100,528	62,578	37,950	100,528	62,578	37,950	100,528
Hotel	2,000	-	160,000	0	160,000	0	0	0	160,000	70,000	230,000
Public/Non-Profit	350	-	128,253	80,180	208,433	128,253	80,180	208,433	128,253	70,084	198,337
Total			2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956	2,725,056	400,900	3,125,956
Employees											
Office			2,685	547	3,232	2,939	547	3,486	2,685	418	3,103
Flex: R&D/Office			1,026	144	1,170	1,186	144	1,330	1,026	115	1,141
Manufacturing			1,083	32	1,115	1,083	32	1,115	1,083	32	1,115
Industrial Commercial			119	19	138	119	19	138	119	10	129
Ancillary Retail			119	72	191	119	72	191	119	72	191
Hotel			80	0	80	0	0	0	80	35	115
Public/Non-Profit			366	229	596	366	229	596	366	200	567
Total			5,479	1,043	6,522	5,812	1,043	6,856	5,479	883	6,361

Source: City of Davis; DTZ; Hoover's; BAE; Smith Travel Research; EPS.

lu_jobs

^[1] Based on Phase I employment density midpoints and additional case study analysis.

Table B-3
Davis Innovation Centers - Economic Impact
Land Use Industry Employment Mix

Major Industry (NAICS) [1]	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel
Agriculture, Forestry, Fishing and Hunting (11)	-	5%	5%	-	-	5%	_
Mining (21)	-	-	-	-	-	-	-
Utilities (22)	-	5%	5%	-	-	5%	-
Construction (23)	-	-	-	10%	-	-	-
Manufacturing (31-33)	-	40%	75%	5%	-	-	-
Wholesale Trade (42)	_	5%	10%	-	-	-	-
Retail Trade (44-45)	_	-	-	20%	60%	-	-
Transportation and Warehousing (48-49)	-	5%	5%	-	-	-	-
Information (51)	15%	5%	-	-	-	-	-
Finance and Insurance (52)	5%	-	-	-	-	-	-
Real Estate and Rental and Leasing (53)	5%	-	-	-	-	-	-
Professional, Scientific, and Technical Services (54)	40%	30%	-	-	-	10%	-
Management of Companies & Enterprises (55)	20%	-	-	-	-	-	-
Administrative and Waste Services (56)	5%	5%	-	5%	-	-	-
Educational Services (61)	-	-	-	20%	-	-	-
Health Care and Social Assistance (62)	10%	-	-	10%	-	5%	-
Arts, Entertainment, and Recreation (71)	_	-	_	10%	-	-	-
Accommodation and Food Services (72)	_	-	-	-	20%	-	100%
Other Services (81)	_	_	_	20%	20%	5%	-
Government	-	-	-	-	-	70%	-
Total	100%	100%	100%	100%	100%	100%	100%

RE_NAICS

Source: Center for Strategic Economic Research; ESRI Business Analyst Online; EPS.

[1] Allocation of sectors based on review of economic activities identified in Phase I, Next Economy Capital Region Prosperity Plan clusters, and case studies.

Table B-4
Davis Innovation Centers - Economic Impact
Employment by Industry - Base Development Program: MRIC

Base Development Program: MRIC

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	-	51	54	-	-	18	-	124
Mining (21)	-	-	-	-	-	-	-	-
Utilities (22)	_	51	54	-	-	18	-	124
Construction (23)	-	=	=	12	-	-	=	12
Manufacturing (31-33)	_	410	812	6	-	-	-	1,229
Wholesale Trade (42)	-	51	108	-	-	-	-	160
Retail Trade (44-45)	_	-	-	24	71	-	-	95
Transportation and Warehousing (48-49)	_	51	54	-	-	-	-	105
Information (51)	403	51	-	-	-	-	-	454
Finance and Insurance (52)	134	-	-	-	-	-	-	134
Real Estate and Rental and Leasing (53)	134	-	-	-	-	-	-	134
Professional, Scientific, and Technical Services (54)	1,074	308	-	-	-	37	-	1,419
Management of Companies & Enterprises (55)	537	=	-	-	-	-	-	537
Administrative and Waste Services (56)	134	51	-	6	-	-	-	192
Educational Services (61)	-	=	-	24	-	-	-	24
Health Care and Social Assistance (62)	269	=	-	12	-	18	-	299
Arts, Entertainment, and Recreation (71)	-	=	-	12	-	-	-	12
Accommodation and Food Services (72)	_	-	=	-	24	-	80	104
Other Services (81)	-	-	=	24	24	18	-	66
Government	-	-	-	-	-	257	-	257
Total	2,685	1,026	1,083	119	119	366	80	5,479

Source: EPS.

base_MRIC

Table B-5
Davis Innovation Centers - Economic Impact
Employment by Industry - Base Development Program: Nishi

Base Development Program: Nishi

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	_	7	2	_	-	11	_	20
Mining (21)	-	=	_	-	_	=	=	_
Utilities (22)	-	7	2	-	_	11	=	20
Construction (23)	-	-	_	2	_	-	_	2
Manufacturing (31-33)	-	58	24	1	_	_	=	83
Wholesale Trade (42)	-	7	3	- -	_	_	_	10
Retail Trade (44-45)	-	-	-	4	43	_	_	47
Transportation and Warehousing (48-49)	-	7	2	-	-	_	_	9
Information (51)	82	7	-	_	_	_	_	89
Finance and Insurance (52)	27	-	_	_	_	_	_	27
Real Estate and Rental and Leasing (53)	27	_	_	-	_	_	_	27
Professional, Scientific, and Technical Services (54)	219	43	_	-	_	23	_	285
Management of Companies & Enterprises (55)	109	 -	_	-	_	-	_	109
Administrative and Waste Services (56)	27	7	_	1	_	_	_	36
Educational Services (61)	·	· <u>-</u>	_	4	_	-	_	4
Health Care and Social Assistance (62)	55	_	_	2	_	11	_	68
Arts, Entertainment, and Recreation (71)	-	_	_	2	-	· · ·	_	2
Accommodation and Food Services (72)	_	_	_	_	14	_	_	14
Other Services (81)	_	_	_	4	14	11	_	30
Government	_	_	_	-	-	160	_	160
COVORTINION						100		100
Total	547	144	32	19	72	229	-	1,043

Source: EPS.

base_nishi

Table B-6
Davis Innovation Centers - Economic Impact
Employment by Industry - Base Development Program: Total

Base Development Program: Total

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	_	59	56	_	-	30	_	144
Mining (21)	_	-	=	-	_	=	-	_
Utilities (22)	=	59	56	-	-	30	=	144
Construction (23)	=	=	=	14	-	=	=	14
Manufacturing (31-33)	=	468	836	7	-	-	=	1,311
Wholesale Trade (42)	=	59	112	-	-	-	=	170
Retail Trade (44-45)	=	-	=	28	115	-	=	142
Transportation and Warehousing (48-49)	=	59	56	-	-	-	=	114
Information (51)	485	59	=	-	-	-	-	543
Finance and Insurance (52)	162	-	=	-	-	-	=	162
Real Estate and Rental and Leasing (53)	162	=	=	=	-	-	=	162
Professional, Scientific, and Technical Services (54)	1,293	351	=	-	-	60	-	1,704
Management of Companies & Enterprises (55)	646	-	=	-	-	-	-	646
Administrative and Waste Services (56)	162	59	=	7	-	-	-	227
Educational Services (61)	-	-	=	28	_	=	_	28
Health Care and Social Assistance (62)	323	-	=	14	-	30	-	367
Arts, Entertainment, and Recreation (71)	-	-	=	14	_	-	_	14
Accommodation and Food Services (72)	_	-	_	-	38	_	80	118
Other Services (81)	_	-	=	28	38	30	-	96
Government	-	-	-	-	-	417	-	417
Total	3,232	1,170	1,115	138	191	596	80	6,522

Source: EPS.

base_total

Table B-7
Davis Innovation Centers - Economic Impact
Employment by Industry - No MRIC Hotel Sensitivity Analysis: MRIC

No MRIC Hotel Sensitivity Analysis: MRIC

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	-	59	54	_	_	18	_	132
Mining (21)	=	-	- -	=	=	- -	=	-
Utilities (22)	-	59	54	=	-	18	-	132
Construction (23)	-	=	-	12	-	-	-	12
Manufacturing (31-33)	_	474	812	6	-	-	-	1,293
Wholesale Trade (42)	-	59	108	=	-	-	-	168
Retail Trade (44-45)	_	-	-	24	71	-	-	95
Transportation and Warehousing (48-49)	_	59	54	-	-	-	-	113
Information (51)	441	59	-	-	-	-	-	500
Finance and Insurance (52)	147	-	-	-	-	-	-	147
Real Estate and Rental and Leasing (53)	147	-	-	-	-	-	-	147
Professional, Scientific, and Technical Services (54)	1,176	356	-	-	-	37	-	1,568
Management of Companies & Enterprises (55)	588	-	-	-	-	-	-	588
Administrative and Waste Services (56)	147	59	-	6	-	-	-	212
Educational Services (61)	-	=	-	24	-	-	-	24
Health Care and Social Assistance (62)	294	-	-	12	-	18	-	324
Arts, Entertainment, and Recreation (71)	-	=	-	12	-	-	-	12
Accommodation and Food Services (72)	-	=	-	=	24	-	-	24
Other Services (81)	-	=	-	24	24	18	-	66
Government	-	-	-	-	-	257	-	257
Total	2,939	1,186	1,083	119	119	366	-	5,812

Source: EPS.

MRIC_nohotel_MRIC

Table B-8
Davis Innovation Centers - Economic Impact
Employment by Industry - No MRIC Hotel Sensitivity Analysis: Tota

No MRIC Hotel Sensitivity Analysis: Total

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	-	67	56	_	_	30	-	152
Mining (21)	-	-	-	-	-	=	-	-
Utilities (22)	-	67	56	-	-	30	-	152
Construction (23)	-	-	-	14	-	=	-	14
Manufacturing (31-33)	-	532	836	7	-	=	-	1,375
Wholesale Trade (42)	-	67	112	-	-	=	-	178
Retail Trade (44-45)	-	-	-	28	115	=	-	142
Transportation and Warehousing (48-49)	-	67	56	-	-	=	-	122
Information (51)	523	67	=	-	-	=	-	589
Finance and Insurance (52)	174	-	-	-	-	=	-	174
Real Estate and Rental and Leasing (53)	174	-	=	-	-	=	-	174
Professional, Scientific, and Technical Services (54)	1,394	399	=	-	-	60	-	1,853
Management of Companies & Enterprises (55)	697	-	=	-	-	=	-	697
Administrative and Waste Services (56)	174	67	=	7	-	=	-	248
Educational Services (61)	_	=	=	28	-	-	-	28
Health Care and Social Assistance (62)	349	_	_	14	_	30	_	392
Arts, Entertainment, and Recreation (71)	-	=	=	14	-	-	-	14
Accommodation and Food Services (72)	_	_	_	-	38	-	_	38
Other Services (81)	_	_	_	28	38	30	_	96
Government	-	-	-	-	-	417	-	417
Total	3,486	1,330	1,115	138	191	596	-	6,856

Source: EPS.

MRIC_nohotel_total

Table B-9
Davis Innovation Centers - Economic Impact
Employment by Industry - Nishi Hotel Sensitivity Analysis: Nish

Nishi Hotel Sensitivity Analysis: Nishi

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	-	6	2	-	_	10	-	17
Mining (21)	_	-	=	-	=	=	-	-
Utilities (22)	=	6	2	-	=	10	-	17
Construction (23)	_	-	-	1	=	=	-	1
Manufacturing (31-33)	=	46	24	0	=	=	=	71
Wholesale Trade (42)	=	6	3	-	=	=	-	9
Retail Trade (44-45)	=	- -	- -	2	43	=	-	45
Transportation and Warehousing (48-49)	=	6	2	-	=	=	=	7
Information (51)	63	6	-	-	=	=	-	68
Finance and Insurance (52)	21	-	-	-	-	-	-	21
Real Estate and Rental and Leasing (53)	21	-	-	-	-	-	-	21
Professional, Scientific, and Technical Services (54)	167	35	-	-	-	20	-	222
Management of Companies & Enterprises (55)	84	-	-	-	-	-	-	84
Administrative and Waste Services (56)	21	6	-	0	-	-	-	27
Educational Services (61)	-	-	-	2	-	-	-	2
Health Care and Social Assistance (62)	42	-	-	1	-	10	-	53
Arts, Entertainment, and Recreation (71)	-	-	-	1	-	-	-	1
Accommodation and Food Services (72)	-	-	-	-	14	-	35	49
Other Services (81)	-	-	-	2	14	10	-	26
Government	-	-	-	-	-	140	-	140
Total	418	115	32	10	72	200	35	883

Source: EPS.

nishi_hotel_nishi

Table B-10
Davis Innovation Centers - Economic Impact
Employment by Industry - Nishi Hotel Sensitivity Analysis: Tota

Nishi Hotel Sensitivity Analysis: Total

Major Industry (NAICS)	Office	Flex: R&D/Office	Industrial: Manufacturing	Industrial Commercial	Ancillary Retail	Public/ Non-Profit	Hotel	Total
Agriculture, Forestry, Fishing and Hunting (11)	-	57	56	-	-	28	-	141
Mining (21)	-	-	-	-	-	-	_	-
Utilities (22)	-	57	56	-	-	28	-	141
Construction (23)	-	-	-	13	-	-	-	13
Manufacturing (31-33)	-	457	836	6	-	-	-	1,299
Wholesale Trade (42)	-	57	112	-	-	-	-	169
Retail Trade (44-45)	-	-	-	26	115	-	-	140
Transportation and Warehousing (48-49)	-	57	56	-	-	-	-	113
Information (51)	466	57	-	-	-	-	-	523
Finance and Insurance (52)	155	-	-	-	-	-	-	155
Real Estate and Rental and Leasing (53)	155	-	-	-	-	-	-	155
Professional, Scientific, and Technical Services (54)	1,241	342	-	-	-	57	-	1,640
Management of Companies & Enterprises (55)	621	-	-	-	-	-	-	621
Administrative and Waste Services (56)	155	57	-	6	-	-	-	219
Educational Services (61)	-	-	-	26	-	-	-	26
Health Care and Social Assistance (62)	310	-	-	13	-	28	-	352
Arts, Entertainment, and Recreation (71)	-	-	-	13	-	-	-	13
Accommodation and Food Services (72)	-	-	-	-	38	-	115	153
Other Services (81)	-	-	-	26	38	28	-	92
Government	-	-	-	-	-	397	-	397
Total	3,103	1,141	1,115	129	191	567	115	6,361

Source: EPS.

nishi_hotel_total

APPENDIX C:

One-Time Activities Economic Impact Tables



Table C-1	MRIC Residential Construction, Davis Economy
Table C-2	Nishi Residential Construction, Davis Economy
Table C-3	Total Residential Construction, Davis Economy
Table C-4	MRIC Residential Construction, Yolo County Economy
Table C-5	Nishi Residential Construction, Yolo County Economy
Table C-6	Total Residential Construction, Yolo County Economy
Table C-7	MRIC Nonresidential Construction, Davis Economy
Table C-8	Nishi Nonresidential Construction, Davis Economy
Table C-9	Total Nonresidential Construction, Davis Economy
Table C-10	MRIC Nonresidential Construction, Yolo County EconomyC-10
Table C-11	Nishi Nonresidential Construction, Yolo County Economy C-11
Table C-12	Total Nonresidential Construction, Yolo County Economy C-12
Table C-13	MRIC Backbone Infrastructure Construction, Davis EconomyC-13
Table C-14	Nishi Backbone Infrastructure Construction, Davis Economy C-14
Table C-15	Total Backbone Infrastructure Construction, Davis Economy C-15
Table C-16	MRIC Backbone Infrastructure Construction, Yolo County Economy
Table C-17	Nishi Backbone Infrastructure Construction, Yolo County Economy
Table C-18	Total Backbone Infrastructure Construction, Yolo County Economy

Table C-1
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Residential Construction, Davis Economy

		Total		
Analysis/Measure	Direct [1]	Effect Indirect	Induced [2]	Impact
Base Development Program				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
MRIC Housing				
Employment	559	245	0	804
Output (2015\$)	\$120,119,279	\$24,800,617	\$0	\$144,919,896
Labor Income (2015\$)	\$45,718,574	\$8,223,065	\$0	\$53,941,639
No MRIC Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
Nishi Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0

mric_davis_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-2
Davis Innovation Centers - Economic Impact
One-Time Activities - Nishi Residential Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074
MRIC Housing				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074
No MRIC Hotel				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074
Nishi Hotel				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074

nishi_davis_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-3
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Residential Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074
MRIC Housing				
Employment	942	412	0	1,354
Output (2015\$)	\$202,289,758	\$41,766,075	\$0	\$244,055,833
Labor Income (2015\$)	\$76,993,463	\$13,848,250	\$0	\$90,841,713
No MRIC Hotel				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074
Nishi Hotel				
Employment	383	167	0	550
Output (2015\$)	\$82,170,479	\$16,965,458	\$0	\$99,135,937
Labor Income (2015\$)	\$31,274,889	\$5,625,185	\$0	\$36,900,074

total_davis_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-4
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Residential Construction, Yolo County Economy

		Total		
Analysis/Measure	Direct [1]	Effect Indirect	Induced [2]	Impact
Base Development Program				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
MRIC Housing				
Employment	924	546	0	1,469
Output (2015\$)	\$199,520,171	\$62,927,264	\$0	\$262,447,435
Labor Income (2015\$)	\$75,939,340	\$20,888,994	\$0	\$96,828,334
No MRIC Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
Nishi Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0

mric_yolo_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-5
Davis Innovation Centers - Economic Impact
One-Time Activities - Nishi Residential Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130	\$14,289,618	\$0	\$66,237,748
MRIC Housing				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130	\$14,289,618	\$0	\$66,237,748
No MRIC Hotel				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130	\$14,289,618	\$0	\$66,237,748
Nishi Hotel				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	
Labor Income (2015\$)	\$51,948,130			\$66,237,748

nishi_yolo_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-6
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Residential Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130	\$14,289,618	\$0	\$66,237,748
MRIC Housing				
Employment	1,555	919	0	2,475
Output (2015\$)	\$336,006,739	\$105,974,171	\$0	\$441,980,910
Labor Income (2015\$)	\$127,887,470	\$35,178,612	\$0	\$163,066,082
No MRIC Hotel				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130	\$14,289,618	\$0	\$66,237,748
Nishi Hotel				
Employment	632	373	0	1,005
Output (2015\$)	\$136,486,568	\$43,046,907	\$0	\$179,533,475
Labor Income (2015\$)	\$51,948,130		\$0	\$66,237,748

total_yolo_res

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-7
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Nonresidential Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	1,995	182	0	2,177
Output (2015\$)	\$346,610,409	\$27,914,707	\$0	\$374,525,116
Labor Income (2015\$)	\$171,926,902	\$9,051,630	\$0	\$180,978,532
MRIC Housing				
Employment	1,995	182	0	2,177
Output (2015\$)	\$346,610,409	\$27,914,707	\$0	\$374,525,116
Labor Income (2015\$)	\$171,926,902	\$9,051,630	\$0	\$180,978,532
No MRIC Hotel				
Employment	2,000	183	0	2,183
Output (2015\$)	\$347,558,988	\$27,997,331	\$0	\$375,556,319
Labor Income (2015\$)	\$172,371,218	\$9,079,411	\$0	\$181,450,629
Nishi Hotel				
Employment	1,995	182	0	2,177
Output (2015\$)	\$346,610,409	\$27,914,707	\$0	\$374,525,116
Labor Income (2015\$)	\$171,926,902		\$0	\$180,978,532

mric_davis_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-8

Davis Innovation Centers - Economic Impact

One-Time Activities - Nishi Nonresidential Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	348	36	0	384
Output (2015\$)	\$62,401,483	\$5,367,929	\$0	\$67,769,412
Labor Income (2015\$)	\$29,512,696	\$1,795,006	\$0	\$31,307,702
MRIC Housing				
Employment	348	36	0	384
Output (2015\$)	\$62,401,483	\$5,367,929	\$0	\$67,769,412
Labor Income (2015\$)	\$29,512,696	\$1,795,006	\$0	\$31,307,702
No MRIC Hotel				
Employment	348	36	0	384
Output (2015\$)	\$62,401,483	\$5,367,929	\$0	\$67,769,412
Labor Income (2015\$)	\$29,512,696	\$1,795,006	\$0	\$31,307,702
Nishi Hotel				
Employment	347	36	0	383
Output (2015\$)	\$62,229,719	\$5,352,968	\$0	\$67,582,687
Labor Income (2015\$)	\$29,432,242	\$1,789,976	\$0	\$31,222,218

nishi_davis_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-9
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Nonresidential Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				_
Employment	2,343	219	0	2,562
Output (2015\$)	\$409,011,892	\$33,282,636	\$0	\$442,294,528
Labor Income (2015\$)	\$201,439,598	\$10,846,636	\$0	\$212,286,234
MRIC Housing				
Employment	2,343	219	0	2,562
Output (2015\$)	\$409,011,892	\$33,282,636	\$0	\$442,294,528
Labor Income (2015\$)	\$201,439,598	\$10,846,636	\$0	\$212,286,234
No MRIC Hotel				
Employment	2,348	219	0	2,567
Output (2015\$)	\$409,960,471	\$33,365,260	\$0	\$443,325,731
Labor Income (2015\$)	\$201,883,914	\$10,874,417	\$0	\$212,758,331
Nishi Hotel				
Employment	2,342	218	0	2,561
Output (2015\$)	\$408,840,128	\$33,267,675	\$0	\$442,107,803
Labor Income (2015\$)	\$201,359,144	\$10,841,606	\$0	\$212,200,750

total_davis_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-10
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Nonresidential Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	3,204	533	0	3,736
Output (2015\$)	\$557,494,679	\$89,058,190	\$0	\$646,552,869
Labor Income (2015\$)	\$276,416,728	\$28,463,784	\$0	\$304,880,512
MRIC Housing				
Employment	3,204	533	0	3,736
Output (2015\$)	\$557,494,679	\$89,058,190	\$0	\$646,552,869
Labor Income (2015\$)	\$276,416,728	\$28,463,784	\$0	\$304,880,512
No MRIC Hotel				
Employment	3,196	531	0	3,728
Output (2015\$)	\$556,164,679	\$88,832,337	\$0	\$644,997,016
Labor Income (2015\$)	\$275,793,755	\$28,390,435	\$0	\$304,184,190
Nishi Hotel				
Employment	3,204	533	0	3,736
Output (2015\$)	\$557,494,679	\$89,058,190	\$0	\$646,552,869
Labor Income (2015\$)	\$276,416,728		\$0	\$304,880,512

mric_yolo_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-11
Davis Innovation Centers - Economic Impact
One-Time Activities - Nishi Nonresidential Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	557	103	0	659
Output (2015\$)	\$99,969,329	\$16,809,866	\$0	\$116,779,195
Labor Income (2015\$)	\$47,278,802	\$5,445,658	\$0	\$52,724,460
MRIC Housing				
Employment	557	103	0	659
Output (2015\$)	\$99,969,329	\$16,809,866	\$0	\$116,779,195
Labor Income (2015\$)	\$47,278,802	\$5,445,658	\$0	\$52,724,460
No MRIC Hotel				
Employment	557	103	0	659
Output (2015\$)	\$99,969,329	\$16,809,866	\$0	\$116,779,195
Labor Income (2015\$)	\$47,278,802	\$5,445,658	\$0	\$52,724,460
Nishi Hotel				
Employment	555	102	0	657
Output (2015\$)	\$99,694,095	\$16,763,127	\$0	\$116,457,222
Labor Income (2015\$)	\$47,149,882		\$0	\$52,580,361

nishi_yolo_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-12
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Nonresidential Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	3,760	635	0	4,395
Output (2015\$)	\$657,464,008	\$105,868,056	\$0	\$763,332,064
Labor Income (2015\$)	\$323,695,530	\$33,909,442	\$0	\$357,604,972
MRIC Housing				
Employment	3,760	635	0	4,395
Output (2015\$)	\$657,464,008	\$105,868,056	\$0	\$763,332,064
Labor Income (2015\$)	\$323,695,530	\$33,909,442	\$0	\$357,604,972
No MRIC Hotel				
Employment	3,753	634	0	4,387
Output (2015\$)	\$656,134,008	\$105,642,203	\$0	\$761,776,211
Labor Income (2015\$)	\$323,072,557	\$33,836,093	\$0	\$356,908,650
Nishi Hotel				
Employment	3,759	635	0	4,394
Output (2015\$)	•	\$105,821,317	\$0	\$763,010,091
Labor Income (2015\$)	\$323,566,610		\$0	\$357,460,873

total_yolo_nonres

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-13
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Backbone Infrastructure Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	151	34	0	185
Output (2015\$)	\$39,994,762	\$4,957,057	\$0	\$44,951,819
Labor Income (2015\$)	\$13,718,050	\$1,601,635	\$0	\$15,319,685
MRIC Housing				
Employment	151	34	0	185
Output (2015\$)	\$39,994,762	\$4,957,057	\$0	\$44,951,819
Labor Income (2015\$)	\$13,718,050	\$1,601,635	\$0	\$15,319,685
No MRIC Hotel				
Employment	151	34	0	185
Output (2015\$)	\$39,994,762	\$4,957,057	\$0	\$44,951,819
Labor Income (2015\$)	\$13,718,050	\$1,601,635	\$0	\$15,319,685
Nishi Hotel				
Employment	151	34	0	185
Output (2015\$)	\$39,994,762	\$4,957,057	\$0	\$44,951,819
Labor Income (2015\$)	\$13,718,050	\$1,601,635	\$0	\$15,319,685

mric_davis_infra

Source: IMPLAN, 2013 Data and EPS.

- [1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages). Does not include offsite infrastructure projects expected as mitigation measures in Transportation and Circulation components of EIR. Accounting for local purchasing percentages, every \$1,000,000 of infrastructure construction generates a total impact of roughly 3 jobs, \$654,000 of output, and \$223,000 of labor income in the Davis economy.
- [2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-14
Davis Innovation Centers - Economic Impact
One-Time Activities - Nishi Backbone Infrastructure Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	63	14	0	77
Output (2015\$)	\$16,635,958	\$2,061,905	\$0	\$18,697,863
Labor Income (2015\$)	\$5,706,070	\$666,206	\$0	\$6,372,276
MRIC Housing				
Employment	63	14	0	77
Output (2015\$)	\$16,635,958	\$2,061,905	\$0	\$18,697,863
Labor Income (2015\$)	\$5,706,070	\$666,206	\$0	\$6,372,276
No MRIC Hotel				
Employment	63	14	0	77
Output (2015\$)	\$16,635,958	\$2,061,905	\$0	\$18,697,863
Labor Income (2015\$)	\$5,706,070	\$666,206	\$0	\$6,372,276
Nishi Hotel				
Employment	63	14	0	77
Output (2015\$)	\$16,635,958	\$2,061,905	\$0	\$18,697,863
Labor Income (2015\$)	\$5,706,070	\$666,206	\$0	\$6,372,276

nishi_davis_infra

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-15
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Backbone Infrastructure Construction, Davis Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Page Development Program				
Base Development Program Employment	214	48	0	262
Output (2015\$)	\$56,630,720	\$7,018,962	\$0	\$63,649,682
Labor Income (2015\$)	\$19,424,120	\$2,267,841	\$0 \$0	\$21,691,961
MRIC Housing				
Employment	214	48	0	262
Output (2015\$)	\$56,630,720	\$7,018,962	\$0	\$63,649,682
Labor Income (2015\$)	\$19,424,120	\$2,267,841	\$0	\$21,691,961
No MRIC Hotel				
Employment	214	48	0	262
Output (2015\$)	\$56,630,720	\$7,018,962	\$0	\$63,649,682
Labor Income (2015\$)	\$19,424,120	\$2,267,841	\$0	\$21,691,961
Nishi Hotel				
Employment	214	48	0	262
Output (2015\$)	\$56,630,720	\$7,018,962	\$0	\$63,649,682
Labor Income (2015\$)	\$19,424,120	\$2,267,841	\$0	\$21,691,961

total_davis_infra

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-16
Davis Innovation Centers - Economic Impact
One-Time Activities - MRIC Backbone Infrastructure Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	247	91	0	338
Output (2015\$)	\$65,265,002	\$14,194,825	\$0	\$79,459,827
Labor Income (2015\$)	\$22,385,644	\$4,737,555	\$0	\$27,123,199
MRIC Housing				
Employment	247	91	0	338
Output (2015\$)	\$65,265,002	\$14,194,825	\$0	\$79,459,827
Labor Income (2015\$)	\$22,385,644	\$4,737,555	\$0	\$27,123,199
No MRIC Hotel				
Employment	247	91	0	338
Output (2015\$)	\$65,265,002	\$14,194,825	\$0	\$79,459,827
Labor Income (2015\$)	\$22,385,644	\$4,737,555	\$0	\$27,123,199
Nishi Hotel				
Employment	247	91	0	338
Output (2015\$)	\$65,265,002	\$14,194,825	\$0	\$79,459,827
Labor Income (2015\$)	\$22,385,644	\$4,737,555	\$0	\$27,123,199

mric_yolo_infra

Source: IMPLAN, 2013 Data and EPS.

- [1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages). Does not include offsite infrastructure projects expected as mitigation measures in Transportation and Circulation components of EIR.
- [2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-17
Davis Innovation Centers - Economic Impact
One-Time Activities - Nishi Backbone Infrastructure Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	103	38	0	141
Output (2015\$)	\$27,147,201	\$5,904,386	\$0	\$33,051,587
Labor Income (2015\$)	\$9,311,385	\$1,970,602	\$0	\$11,281,987
MRIC Housing				
Employment	103	38	0	141
Output (2015\$)	\$27,147,201	\$5,904,386	\$0	\$33,051,587
Labor Income (2015\$)	\$9,311,385	\$1,970,602	\$0	\$11,281,987
No MRIC Hotel				
Employment	103	38	0	141
Output (2015\$)	\$27,147,201	\$5,904,386	\$0	\$33,051,587
Labor Income (2015\$)	\$9,311,385	\$1,970,602	\$0	\$11,281,987
Nishi Hotel				
Employment	103	38	0	141
Output (2015\$)	\$27,147,201	\$5,904,386	\$0	\$33,051,587
Labor Income (2015\$)	\$9,311,385	\$1,970,602	\$0	\$11,281,987

nishi_yolo_infra

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

Table C-18
Davis Innovation Centers - Economic Impact
One-Time Activities - Total Backbone Infrastructure Construction, Yolo County Economy

		Effect		Total
Analysis/Measure	Direct [1]	Indirect	Induced [2]	Impact
Base Development Program				
Employment	349	129	0	479
Output (2015\$)	\$92,412,203	\$20,099,211	\$0	\$112,511,414
Labor Income (2015\$)	\$31,697,029	\$6,708,157	\$0	\$38,405,186
MRIC Housing				
Employment	349	129	0	479
Output (2015\$)	\$92,412,203	\$20,099,211	\$0	\$112,511,414
Labor Income (2015\$)	\$31,697,029	\$6,708,157	\$0	\$38,405,186
No MRIC Hotel				
Employment	349	129	0	479
Output (2015\$)	\$92,412,203	\$20,099,211	\$0	\$112,511,414
Labor Income (2015\$)	\$31,697,029	\$6,708,157	\$0	\$38,405,186
Nishi Hotel				
Employment	349	129	0	479
Output (2015\$)	\$92,412,203	\$20,099,211	\$0	\$112,511,414
Labor Income (2015\$)	\$31,697,029	\$6,708,157	\$0	\$38,405,186

total_yolo_infra

Source: IMPLAN, 2013 Data and EPS.

^[1] Adjusts for estimated proportion of total activity demand that can captured within the local economy (local purchasing percentages).

^[2] Excluded because activities are temporary and not expected to generate net new household expenditures in the local economy.

APPENDIX D:

Ongoing Activities Economic Impact Tables



Table D-1	MRIC Household Spending, Davis Economy D-1
Table D-2	Nishi Household Spending, Davis Economy D-2
Table D-3	Total Household Spending, Davis Economy D-3
Table D-4	MRIC Household Spending, Yolo County Economy D-4
Table D-5	Nishi Household Spending, Yolo County Economy D-5
Table D-6	Total Household Spending, Yolo County Economy D-6
Table D-7	MRIC Establishment Operations, Davis Economy D-7
Table D-8	Nishi Establishment Operations, Davis Economy D-8
Table D-9	Total Establishment Operations, Davis Economy D-9
Table D-10	MRIC Establishment Operations, Yolo County EconomyD-10
Table D-11	Nishi Establishment Operations, Yolo County EconomyD-11
Table D-12	Total Establishment Operations, Yolo County EconomyD-12

Table D-1

Davis Innovation Centers - Economic Impact

Ongoing Activities - MRIC Household Spending, Davis Economy

		Effect		Total
Analysis/Measure	Direct	Indirect	Induced [1]	Impact
Base Development Program				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
MRIC Housing [2]				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
No MRIC Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
Nishi Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0

mric_davis_hh

Source: IMPLAN, 2013 Data and EPS.

^[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

^[2] Because the MRIC DEIR assumes all residents will work in the local economy, a conservative adjustment was made to avoid double-counting in the induced impact of jobs (see Table B-1). If the same non-student household spending pool assumptions used for Nishi are applied, then the total economic impact would show approximately 114 jobs, \$15.3 million of output, and \$4.7 million of labor income.

Table D-2
Davis Innovation Centers - Economic Impact
Ongoing Activities - Nishi Household Spending, Davis Economy

		Effect		Total
Analysis/Measure	Direct	Indirect	Induced [1]	Impact
Base Development Program				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
MRIC Housing				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
No MRIC Hotel				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
Nishi Hotel				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279

nishi_davis_hh

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

Table D-3

Davis Innovation Centers - Economic Impact

Ongoing Activities - Total Household Spending, Davis Economy

		Effect		Total
Analysis/Measure	Direct	Indirect	Induced [1]	Impact
Base Development Program				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
MRIC Housing [2]				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
No MRIC Hotel				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279
Nishi Hotel				
Employment	0	0	41	41
Output (2015\$)	\$0	\$0	\$5,444,856	\$5,444,856
Labor Income (2015\$)	\$0	\$0	\$1,682,279	\$1,682,279

total_davis_hh

Source: IMPLAN, 2013 Data and EPS.

^[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

^[2] Because the MRIC DEIR assumes all residents will work in the local economy, a conservative adjustment was made to avoid double-counting in the induced impact of jobs (see Table B-1). If the same non-student household spending pool assumptions used for Nishi are applied, then the total economic impact would show approximately 154 jobs, \$20.7 million of output, and \$6.4 million of labor income.

Table D-4
Davis Innovation Centers - Economic Impact
Ongoing Activities - MRIC Household Spending, Yolo County Economy

		Total		
Analysis/Measure	Direct	Effect Indirect	Induced [1]	Impact
Base Development Program				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
MRIC Housing [2]				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
No MRIC Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0
Nishi Hotel				
Employment	0	0	0	0
Output (2015\$)	\$0	\$0	\$0	\$0
Labor Income (2015\$)	\$0	\$0	\$0	\$0

mric_yolo_hh

Source: IMPLAN, 2013 Data and EPS.

^[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

^[2] Because the MRIC DEIR assumes all residents will work in the local economy, a conservative adjustment was made to avoid double-counting in the induced impact of jobs (see Table B-1). If the same non-student household spending pool assumptions used for Nishi are applied, then the total economic impact would show approximately 137 jobs, \$18.8 million of output, and \$5.7 million of labor income.

Table D-5
Davis Innovation Centers - Economic Impact
Ongoing Activities - Nishi Household Spending, Yolo County Economy

		Total		
Analysis/Measure	Direct	Indirect	Induced [1]	Impact
Base Development Program				
Employment .	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
MRIC Housing				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
No MRIC Hotel				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
Nishi Hotel				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050

nishi_yolo_hh

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

Table D-6
Davis Innovation Centers - Economic Impact
Ongoing Activities - Total Household Spending, Yolo County Economy

		Total		
Analysis/Measure	Direct	Effect Indirect	Induced [1]	Impact
Base Development Program				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
MRIC Housing [2]				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
No MRIC Hotel				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050
Nishi Hotel				
Employment	0	0	49	49
Output (2015\$)	\$0	\$0	\$6,699,489	\$6,699,489
Labor Income (2015\$)	\$0	\$0	\$2,046,050	\$2,046,050

total_yolo_hh

Source: IMPLAN, 2013 Data and EPS.

^[1] IMPLAN definition applies all household spending changes to induced effects. Adjusts for spending patterns, taxes, savings, and estimated leakage.

^[2] Because the MRIC DEIR assumes all residents will work in the local economy, a conservative adjustment was made to avoid double-counting in the induced impact of jobs (see Table B-1). If the same non-student household spending pool assumptions used for Nishi are applied, then the total economic impact would show approximately 186 jobs, \$25.5 million of output, and \$7.8 million of labor income.

Table D-7
Davis Innovation Centers - Economic Impact
Ongoing Activities - MRIC Establishment Operations, Davis Economy

		Effect	Total	Multiplier	
Analysis/Measure	Direct	Indirect	Induced	Impact	Effect [1]
Base Development Program					
Employment	5,479	2,240	1,925	9,644	1.8
Output (2015\$)	\$1,819,886,520	\$419,493,110	\$240,930,828	\$2,480,310,458	1.4
Labor Income (2015\$)	\$390,408,083	\$123,300,298	\$82,638,111	\$596,346,492	1.5
MRIC Housing					
Employment	5,479	2,240	1,925	9,644	1.8
Output (2015\$)	\$1,819,886,520	\$419,493,110	\$240,930,828	\$2,480,310,458	1.4
Labor Income (2015\$)	\$390,408,083	\$123,300,298	\$82,638,111	\$596,346,492	1.5
No MRIC Hotel					
Employment	5,812	2,414	2,060	10,286	1.8
Output (2015\$)	\$1,948,485,631	\$451,062,684	\$257,773,466	\$2,657,321,781	1.4
Labor Income (2015\$)	\$416,980,962	\$132,654,649	\$88,415,254	\$638,050,865	1.5
Nishi Hotel					
Employment	5,479	2,240	1,925	9,644	1.8
Output (2015\$)	•		,	\$2,480,310,458	1.4
Labor Income (2015\$)		\$123,300,298			1.5

mric_davis_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

Table D-8
Davis Innovation Centers - Economic Impact
Ongoing Activities - Nishi Establishment Operations, Davis Economy

		Effect		Total	Multiplier
Analysis/Measure	Direct	Indirect	Induced	Impact	Effect [1]
Base Development Program					
Employment	1,043	345	342	1,729	1.7
Output (2015\$)	\$275,636,913	\$61,623,680	\$42,765,624	\$380,026,217	1.4
Labor Income (2015\$)	\$72,870,293	\$18,249,891	\$14,667,605	\$105,787,789	1.5
MRIC Housing					
Employment	1,043	345	342	1,729	1.7
Output (2015\$)	\$275,636,913	\$61,623,680	\$42,765,624	\$380,026,217	1.4
Labor Income (2015\$)	\$72,870,293	\$18,249,891	\$14,667,605	\$105,787,789	1.5
No MRIC Hotel					
Employment	1,043	345	342	1,729	1.7
Output (2015\$)	\$275,636,913	\$61,623,680	\$42,765,624	\$380,026,217	1.4
Labor Income (2015\$)				\$105,787,789	1.5
Nishi Hotel					
Employment	883	276	281	1,440	1.6
Output (2015\$)	\$225,331,660	\$49,521,070	\$35,183,265	\$310,035,995	1.4
Labor Income (2015\$)		\$14,646,748			1.4

nishi_davis_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

Table D-9
Davis Innovation Centers - Economic Impact
Ongoing Activities - Total Establishment Operations, Davis Economy

		Total	Multiplier		
Analysis/Measure	Direct	Indirect	Induced	Impact	Effect [1]
Base Development Program					
Employment	6,522	2,585	2,267	11,373	1.7
Output (2015\$)	\$2,095,523,433	\$481,116,790	\$283,696,452	\$2,860,336,675	1.4
Labor Income (2015\$)	\$463,278,376	\$141,550,189	\$97,305,716	\$702,134,281	1.5
MRIC Housing					
Employment	6,522	2,585	2,267	11,373	1.7
Output (2015\$)	\$2,095,523,433	\$481,116,790	\$283,696,452	\$2,860,336,675	1.4
Labor Income (2015\$)	\$463,278,376	\$141,550,189	\$97,305,716	\$702,134,281	1.5
No MRIC Hotel					
Employment	6,855	2,759	2,401	12,015	1.8
Output (2015\$)	\$2,224,122,544	\$512,686,364	\$300,539,090	\$3,037,347,998	1.4
Labor Income (2015\$)	\$489,851,255	\$150,904,540	\$103,082,859	\$743,838,654	1.5
Nishi Hotel					
Employment	6,362	2,516	2,206	11,084	1.7
Output (2015\$)	•	•	•	\$2,790,346,453	
Labor Income (2015\$)		\$137,947,046			

total_davis_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

Table D-10
Davis Innovation Centers - Economic Impact
Ongoing Activities - MRIC Establishment Operations, Yolo County Economy

		Effect	Total	Multiplier	
Analysis/Measure	Direct	Indirect	Induced	Impact	Effect [1]
Base Development Program					
Employment	5,479	3,248	1,935	10,662	1.9
Output (2015\$)	\$1,819,886,520	\$583,163,084	\$246,572,259	\$2,649,621,863	1.5
Labor Income (2015\$)	\$390,408,083	\$175,497,174	\$85,487,238	\$651,392,495	1.7
MRIC Housing					
Employment	5,479	3,248	1,935	10,662	1.9
Output (2015\$)	\$1,819,886,520	\$583,163,084	\$246,572,259	\$2,649,621,863	1.5
Labor Income (2015\$)	\$390,408,083	\$175,497,174	\$85,487,238	\$651,392,495	1.7
No MRIC Hotel					
Employment	5,812	3,493	2,071	11,376	2.0
Output (2015\$)	\$1,948,485,631	\$626,391,674	\$263,965,433	\$2,838,842,739	1.5
Labor Income (2015\$)	\$416,980,962	\$188,410,384	\$91,462,726	\$696,854,072	1.7
Nishi Hotel					
Employment	5,479	3,248	1,935	10,662	1.9
Output (2015\$)	•	•	•	\$2,649,621,863	
Labor Income (2015\$)		\$175,497,174			

mric_yolo_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

Table D-11
Davis Innovation Centers - Economic Impact
Ongoing Activities - Nishi Establishment Operations, Yolo County Economy

Analysis/Measure	Direct	Effect Indirect	Induced	Total Impact	Multiplier Effect [1]
Allalysis/Measure	Direct	manect	muuceu	iiiipact	Lilect[i]
Base Development Program					
Employment	1,043	477	344	1,864	1.8
Output (2015\$)	\$275,636,913	\$83,885,750	\$43,186,873	\$402,709,536	1.5
Labor Income (2015\$)				\$112,424,403	
MRIC Housing					
Employment	1,043	477	344	1,864	1.8
Output (2015\$)	\$275,636,913	\$83,885,750	\$43,186,873	\$402,709,536	1.5
Labor Income (2015\$)	\$72,870,293	\$24,847,994	\$14,706,116	\$112,424,403	1.5
No MRIC Hotel					
Employment	1,043	477	344	1,864	1.8
Output (2015\$)	\$275,636,913	\$83,885,750	\$43,186,873	\$402,709,536	1.5
Labor Income (2015\$)	\$72,870,293	\$24,847,994	\$14,706,116	\$112,424,403	1.5
Nishi Hotel					
Employment	883	383	283	1,549	1.8
Output (2015\$)	\$225,331,660	\$67,549,639	\$35,462,588	\$328,343,887	1.5
Labor Income (2015\$)		\$20,026,600			1.5

nishi_yolo_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.

Table D-12
Davis Innovation Centers - Economic Impact
Ongoing Activities - Total Establishment Operations, Yolo County Economy

		Total	Multiplier		
Analysis/Measure	Direct	Indirect	Induced	Impact	Effect [1]
Base Development Program					
Employment	6,522	3,725	2,279	12,526	1.9
Output (2015\$)	\$2,095,523,433	\$667,048,834	\$289,759,132	\$3,052,331,399	1.5
Labor Income (2015\$)	\$463,278,376	\$200,345,169	\$100,193,354	\$763,816,898	1.6
MRIC Housing					
Employment	6,522	3,725	2,279	12,526	1.9
Output (2015\$)	\$2,095,523,433	\$667,048,834	\$289,759,132	\$3,052,331,399	1.5
Labor Income (2015\$)	\$463,278,376	\$200,345,169	\$100,193,354	\$763,816,898	1.6
No MRIC Hotel					
Employment	6,855	3,970	2,414	13,239	1.9
Output (2015\$)	\$2,224,122,544	\$710,277,425	\$307,152,306	\$3,241,552,275	1.5
Labor Income (2015\$)	\$489,851,255	\$213,258,378	\$106,168,842	\$809,278,475	1.7
Nishi Hotel					
Employment	6,362	3,631	2,218	12,211	1.9
Output (2015\$)	•	•	\$282,034,847	\$2,977,965,750	1.5
Labor Income (2015\$)		\$195,523,774			1.7

total_yolo_ind

Source: IMPLAN, 2013 Data and EPS.

Note: Because the sensitivity analyses focus on changes to specific factors within an individual project, some measures and related results remain constant across projects and scenarios.