# mental Concurrence .

# SUBMITTAL TO THE BOARD OF DIRECTORS OF THE REDEVELOPMENT AGENCY COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SUBMITTAL DATE:
July 5, 2011

FROM: Redevelopment Agency

SUBJECT: Evaluation of Assembly Bills x1-26 and x1-27

**RECOMMENDED MOTION:** That the Board of Directors receive and file the attached reports on the Redevelopment Agency for the County of Riverside.

**BACKGROUND:** On June 29, 2011, Governor Brown signed Assembly Bills x1-26 and x1-27 (ABx1 26 and ABx1 27), which pertains to redevelopment agencies throughout the state. ABx1 26 eliminates redevelopment agencies and ABx1 27 creates an alternative redevelopment program. Under the approved legislation, the Redevelopment Agency for the County of Riverside (RCRDA) will have to pay approximately \$31.7 million in FY 11/12 and \$7.5 million in FY 12/13 to the State of California to be allowed to continue to function as a redevelopment agency.

Under the direction of its Board of Directors, RCRDA has completed many worthwhile projects in every supervisorial district. These projects have improved the quality of life for many residents throughout the county; current examples include the ongoing Mecca revitalization project, the Mission Palms and Mission Village senior housing projects in Rubidoux, the Thermal Sheriff's Station and Fire Station, and the recently approved Mead Valley community center and library projects.

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-	500,400,41	Current F.Y. Total Cost:	\$ 0	In Current Year B	udget:	N/A
	FINANCIAL	Current F.Y. Net County Cost:	<b>\$</b> O	Budget Adjustme	nt:	N/A
	DATA	Annual Net County Cost:	<b>\$</b> O	For Fiscal Year:		2011/12
CC	MPANION IT	EM ON BOARD OF SUPERVISOR	RS AGENDA	: No		
SC	URCE OF FU	NDS: Redevelopment			Positions To Deleted Per A	. 1 1
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C.I	E.O. RECOMN	IENDATION: APPROVE	K/ /k	/		
yolloy Co	ounty Executiv	ve Office Signature By: Jennifer	L. Sargent			
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Prev. Agn. Ref.:

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Redevelopment Agency Evaluation of Assembly Bills x1-26 and x1-27 July 5, 2011 Page 2

# **BACKGROUND:** (continued)

Completed public facility projects include the Perret Park Improvement Project, the Eddie Dee Smith Senior Center Rehabilitation Project, the Rubidoux Library, the Jurupa Sheriff's Station, the Valle Vista Sheriff's Station, the Murrieta Senior Center, the Roy Wilson Fire Station and Training Center, the Mecca Clinic and Farmworker Service Center, the Nuevo Dental Clinic, the Romoland Community Center, Eller Park, and many others. Other projects have constructed sidewalk improvements, storm drains, road improvements, and road and street improvements. A listing of representative projects from various categories is included as Attachment A. Other RCRDA-funded activities include façade improvements, graffiti abatement, homebuyer assistance, home improvement programs, mobile home tenant loans, demolition grants, and senior home repair.

The needlest residents of the county will have far fewer options available for affordable housing, as the 1,200 units of low income housing currently planned to be built with RCRDA housing funds will have to be delayed until funding becomes available. Over 6,500 affordable housing units have been built with RCRDA housing funds since the inception of the agency, but the need for affordable housing continues to soar as a result of the state of the economy, and the effect of ABx1 26 and ABx1 27 will only exacerbate the problem.

RCRDA will be able to make the required payments to the state, but doing so will limit the number and type of projects that can be initiated. This will have repercussions throughout the region, as these projects employ many different private sector firms and who collectively employ thousands of local residents, from professionals to members of the numerous trade unions that are active in the region. The economic impact from reducing the number of projects contracted for by RCRDA will have a sustained ripple effect on the county's economy.

A report prepared by the Rose Institute of State and Local Government at Claremont McKenna College notes that RCRDA generated \$678 million in economic activity within the county over the past five years. In addition, RCRDA activity has resulted in \$172 million in earnings for county residents over the same period, and generated 4,156 jobs and \$5.8 million in sales tax for County of Riverside. The Rose Institute's report is included as Attachment B.

The Redevelopment Agency for the County of Riverside has been extremely active and will continue perform its core mission of improving conditions and opportunities in the most disadvantaged communities in the county, albeit in a more limited capacity. RCRDA staff will keep the Board of Directors apprised as to the agency's status on a regular basis through the duration of the period during which Bx1 26 and ABx1 27 impact RCRDA operations.

# Project Name/Type

#### **Fire Stations**

Mead Valley Fire Station Project

Home Gardens Fire Station, Library and Community Center

RCSD/Rubidoux Fire Station

Mecca Fire Station

North Shore Fire Station

Thermal Fire Station

Roy Wilson Fire Station and Roy Wilson Training Center

**Oasis Fire Station** 

Highgrove Fire Station & Norton Younglove Community Center

# **Sheriff Stations**

Jurupa Valley Sheriff Station

Valle Vista Sheriff Station

Mecca Library / Sheriff's Substation Project

Thermal Sheriff Station, Forensics Laboratory and Evidence Storage Facility

### **Clinics**

Don Schroeder Family Health Clinic

Mecca Social Services Center

Mecca Family Service Center and Community Health Clinic

**Nuevo Dental Clinic** 

# **Community Centers and Parks**

Wildomar Parks Project

Mead Valley Community Center

Pinewood Park

Lakeland Village/Wildomar Trails Project

Perret Park Phase II Improvement Project

**Temescal Valley Sports Park** 

Home Gardens Fire Station, Library and Community Center

Home Gardens Library and Community Center Expansion

**El Cerrito Sports Park** 

Eddie Dee Smith Senior Center Rehabilitation

Jurupa Valley Aquatic Center

Vernola Basin & Park Improvements

Big League Dreams Ball Field Conversion

Jurupa Self Sufficiency Center

Rubidoux Youth Opportunity Center and Boxing Club

Rubidoux Child Development Center

Memorial Park Community Center and Baseball Field Rehabilitation

Murrieta Senior Center

Rancho Ramona Park

**Rummonds Center Renovation - Thermal** 

Thermal Library and Community Center

Bermuda Dunes Park Project Mecca Boys and Girls Club

Mecca Senior Center

**Ripley Migrant Center Renovation** 

**Thousand Palms Community Park Improvements** 

North Shore Community Center

Ripley Community Center and Park

Highgrove Fire Station & Norton Younglove Community Center

**Highgrove Community Park** 

Eller Park Project

**Mauel Park Project** 

Marion V. Ashley Community Center

Mead Valley Community Center

Cabazon Civic Center

Cabazon Ball Field Project

## **Libraries**

Home Gardens Fire Station, Library and Community Center
Home Gardens Library and Community Center Expansion
Rubidoux Community Library
Sun City Library
Valle Vista Library Expansion
Thermal Library and Community Center
Mecca Library / Sheriff's Substation Project
Art Samson Community Library
Highgrove Library
Mead Valley Library

# **Economic Development**

**Corona Crossings** 

Big League Dreams Sports Park (Jurupa Valley)

Mission Plaza

**Butchko Animal Hospital** 

**Emerald Meadows Ranch** 

Trumble Road Exclusive Negotiating Agreement

Big League Dreams Sports Park (Perris Valley)

# **Other**

Mead Valley Code Enforcement Building Project
Jurupa Valley High School Stadium
Rubidoux Building and Safety Office
YMCA Childcare Expansion Glen Avon
County of Riverside Fleet Services
Rubidoux Community Resource Center Parking Lot
Mecca and Thermal Playground Improvements Project
Bermuda Dunes Public Safety Office
Mecca Post Office

Thermal Aviation Education Center Ripley Migrant Center Renovation Trumble Road Site Remediation Cabazon Fueling Station

### **Infill Housing Projects**

37th and Wallace
Mira Loma (Bellegrave)
Mustang Lane, Rubidoux - ENA and acquisition - 22 units
Canal Street Park - Rubidoux
5580 Molino Way, Rubidoux - Single Family new construction
Pontiac Street, Rubidoux - 2 single-family new construction
Single Family Rehab/New Constr MOU - JVPA Habitat

#### **New Housing Construction**

Crestmore Family Apts (former Cottonwood MHP) - MOU- 63 units
Vista Rio Apts, Rubidoux (Mission Plaza)
Mission Village Single Family Housing, Glen Avon - ENA- 45 units
Middleton Crossings - ENA Predevelopment Loan- 180 units
Middleton Crossings Phase I
Sierra Avenue& 30th
Vineyards at Menifee
North Hemet - Specific Plan - Master Planned housing and commercial
100 Palms ENA - 80 units
Desert Meadows Apts
Operation Safe House - rental supportive housing
Legacy Apartments
Paseo de los Heroes III
Highgrove Family Apts. ENA/DDA - 89 units

# Acquisition, Relocation, Rehabilitation, Resale for Housing

RDA-1 - S.L. Imperial - Acquisition, Rehab and Resale
Orange Blossom Ln (Marine Dr) (24+17 Units) - Acq & Rehab
Middleton Crossings - Acquisition & Relocation
Acquisition and resale (2) single family homes
Romoland acquisition - 27972 Washington Ave - 329-192-007
North Hemet - Specific Plan - Acquisition & Relocation

#### Mobile Home Program

Villalobos Acquisition & Relocation
Hernandez Acquisition & Relocation
St. Anthony
Los Vinedos -Ave 68 - Resolution. Exp. 1/30/2012
Espinoza Date Garden
Mountain View Estates- Phase 1: 181;
Rehab Polanco Park

### **Other Housing Programs**

Mobile Home Tenant Loan
Housing Rehabilitation
Senior Home Repair
Redevelopment Home Ownership
Emergency Housing Response
Demolition

# **Infrastructure**

Temescal Canyon Road Widening
Bryant Street Storm Drain
Grand Avenue Beautification Project
Mission Trail/Lemon Street Storm Drain Project
Lakeland Village/Wildomar Signal, Sidewalk

Lakeland Village/Wildomar Signal, Sidewalk and Drainage Project

Marna O'Brien Park and Bio-Swale Improvement

Palomar Street and Sewer Improvement Project

Cajalco Widening Project

Markham Street and Carroll Street Imporvement Project

Mead Valley Road Improvement Project Phase I and II

Mead Valley Road Improvement Project Phase III

El Cerrito Road Beautification

Mission Boulevard Revitalization Project

Streetscape Improvements - Limonite Avenue

**Etiwanda Avenue Improvements** 

Sky Country improvements

Limonite Avenue Beautification Phase 3 Streetscape Improvements

Reconstruction of Clay and Galena Streets

**Rubidoux Sidewalk Improvements** 

Agate Block Sidewalk Project

**Etiwanda Avenue Street Improvements** 

Interstate 15 and Limonite Avenue Improvements

Limonite Avenue Improvements

Opal Street, Pacific Street, 45<sup>th</sup> Street, Rustic Lane Improvements

Rubidoux Area 1 Street Improvement Project

Valley Way Road Widening Project

Van Buren Boulevard Median Beautification Phase I and II

Rubidoux Area 2 Street Improvements Project

Rubidoux Area 3 Street Improvements Project

La Rue Street Improvements

**Pyrite Street Improvements** 

Rubidoux Boulevard Street Improvements Phase I, II, III

**Bellegrave Avenue Street Improvements** 

Poinsettia Place Road Resurfacing

Etiwanda, Homestead, Pedley & Sky Country Street Improvements

Rubidoux Boulevard and Market Street Improvements

Armstrong Road and Sierra Avenue Beautification Project

Murrieta Street Improvements

Valle Vista Sewer Line

Interstate 10/Apache Trail Improvement

Ripley Lift Station Improvement Project

CVAG - Monterey, Cook, Washington Streets Interchange Improvements

La Canada Way Street Improvement Project - Thousand Palms

Mecca Relocation of Irrigation Line

**42nd Avenue Improvement Project** 

**Rosa Avenue Street Improvements** 

Thermal Sewer and Water Improvements

Thermal Street Improvements

Thousand Palms Beautification/ Street Improvements

Coachella Valley Water District Pump Station

Mecca Relocation of Irrigation Line

Mecca Downtown Street Revitalization

Mecca Roundabout

**Ripley Water System Improvements** 

Jacqueline Cochran Airport Infrastructure Project

French Valley Airport Entryway Improvements

Hemet Ryan Hangar 5 Rehabilitation

Center Street/Iowa Avenue Beautification Project

Ethanac Road, Highway 74 and Palomar Road Improvements

Highway 74/Sultanas Avenue Flashing Beacon

Garfield Avenue Sidewalk Project

Highgrove Backbone Sewer Project Phase I

**Romoland Beautification Project** 

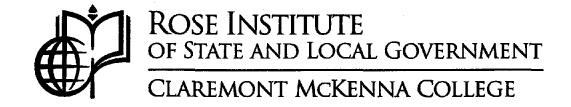
Cabazon Main Street

Cabazon Sewer

Esparanza Bridge

The Economic Impact of
Riverside County
Economic Development Agency
Spending on the Local Economy

April 2011



# 1. Overview

This study provides estimates of the impact of projects undertaken by the Riverside County Economic Development Agency (RCEDA) on the local economy. We use data on recent and ongoing RCEDA projects in conjunction with economic multipliers estimated by the Bureau of Economic Analysis (a department of the United States Department of Commerce) to project impacts on the value of output and jobs in Riverside County. These estimates additionally provide the basis for estimates of tax revenues indirectly generated by these projects. The impacts are provided overall and broken down by geographical areas, industry classifications, and legislative districts.

RCEDA projects generally are enhancements to infrastructure. Over the past five years, RCEDA has funded a total of 146 projects. Of these, based on current project descriptions at least 26 are public facilities (such as libraries) and parks, and 28 are related to roads, trails and sewers. Many of the remaining projects are for similar types of public works, schools, and facilities related to public services such as public safety offices, public area restoration and beautification, and similar. Going farther back, over the past 15 years, RCEDA has financed nine fire stations and five sheriff's stations. Total spending for fiscal years 2005-2006 to 2009-2010 was about \$256.6 million, with an additional \$121.9 million forecast for fiscal year 2010-2011 ending in June 2011.

As these projects generally are primarily related to construction, employing local labor and other local services (architectural/engineering/design, licensing, pre-construction local improvements such as sewer) we estimate economic impacts mainly by using local spending multipliers based on construction costs. The multipliers supplied to us by the Bureau of Economic Analysis (BEA) are well suited to estimation of the local effects we seek, and are specific to Riverside County (for the primary set of estimates) and to California (for additional analysis). Though we do not have precise information on the breakdown of costs apart from construction, we use rough estimates of other types of costs (primarily architecture and engineering costs) for sensitivity analysis. We also review the literature and conclude that the BEA multipliers are well within the normal range established in the economics literature on such multipliers.

Anecdotal evidence provides support for the use of multipliers in assessing the local impacts of RCEDA spending on projects. We note that the documentation provided by the BEA specifically includes an example of the impacts of construction on the local economy. In addition, sample projects provide some insight into how RCEDA spending translates into local jobs, business income, and individual earnings. The specific examples include:

- 1) Mira Loma Industrial Center The Mira Loma area in northwestern Riverside County at the confluence of the Interstate 15 and State Highway 60 is almost entirely within the Jurupa Valley Project Area. The RDA has invested millions of dollars in street and flood control improvements that has facilitated millions of square feet of commercial and industrial development. Additionally, early in the development of the Center, funds were provided to numerous businesses to offset permit and development costs. To date, there are approximately 10,060 jobs in the area.
- 2) Wildrose Business Park The Park is located in the Temescal Canyon area, which is located south of Corona. The RDA contributed funds for street improvements that helped facilitate the development of the Park. It consists of office, commercial, and industrial uses. To date, there are approximately 1,500 jobs in the business park.
- 3) University Research Park/Hunter Park Industrial Area In the late 90s, the Highgrove sub-area was overlaid onto several hundred acres of industrial land in the Hunter Park area within the city of Riverside. It is a unique partnership between the City and County that was originated in order to facilitate the acquisition and development of land for the 56-acre University Research Park (URP). The URP was designed for high-tech businesses to locate there and provides amenities such as redundant fiber capacity and view lots. Additionally, the development of an incubator facility is imminent that will allow access to wet lab space for entrepreneurs. The Park itself has approximately 200 to 300 jobs while the larger industrial area should have close to 3,000 jobs.

In brief, the results show that: (1) over the past five years RCEDA spending has generated approximately \$663 to \$678 million in economic activity (value of purchased goods and services) in Riverside County for the six fiscal years ending in 2011 (including the current year forecast). This figure includes the \$378 million in direct spending done by the RCEDA, but also the additional economic activity due to multiplier effects. For example, demand for construction stimulates demand for inputs to the construction process, and payments to construction workers creates demand for products consumed by the construction workers; (2) the RCEDA spending resulted in earnings of about \$172 million by residents of Riverside County during the same six fiscal years, including both direct payroll on projects funded by RCEDA and multiplier effects; (3) over the same six fiscal years, RCEDA spending generated between 3,357 and 4,156 jobs in Riverside County; (4) over the six years, RCEDA spending generated approximately \$2.3 million in California business taxes, \$7.6 million in California personal income tax, and about \$5.8 million in sales tax in Riverside County. Finally, (5) spending on low- to moderate-income housing generated output value of approximately \$97.3 million, income of about \$24.7 million,

and 598 jobs during the period from 2000 to early 2011. This spending assisted a total of 3,093 households with construction, rehabilitation, and homeownership assistance. The main results are briefly summarized here, based on our more conservative estimates:

Type of Spending	Output (millions)	Earnings (millions)	Employment	Households
Project Spending, 2005-201	1 \$663	\$172	3,357	
Housing Spending, 2000-20	)11 \$97	\$25	598	3,093

Additional results show that the beneficial effects of RCEDA spending extend beyond Riverside County to other areas of California. In particular, using the multiplier for the entire state of California based on the RCEDA spending yields total economic activity of approximately \$892 million, or roughly \$214 to \$229 million greater for Riverside County alone, suggesting an external benefit to other areas of the state. Similarly, overall job creation for California is approximately 6,914, suggesting up to 3,600 jobs are created elsewhere in the state due to RCEDA projects.

The remainder of this report is organized as follows: Section 2 discusses data and methods used in this analysis, Section 3 reviews related economics literature dealing with multiplier effects, Section 4 summarizes the results, and Section 5 concludes the study.

#### 2. Data and Methods

RCEDA supplied us with information of project level expenditures from fiscal year 2005-2006 to present. For current projects, they additionally provided a breakdown into pre-construction, construction, and post-construction phase expenditures. Project level information also includes zip code and project district. We used zip code to identify legislative district or districts affected by each project. We note that, in general, geographical breakdowns of economic effects within Riverside County are necessarily crude approximations, as construction employees and other service providers receiving payments (and subsequent induced demand effects) are not restricted to the immediate area of a given project.

In a separate file, RCEDA supplied us with data on Redevelopment Low- and Moderate-Income Housing set-aside funds spent between January 1, 2000 and today. Such spending is a requirement in California for redevelopment agencies, thus ensuring that some funds are spent of critical housing needs. RDEDA indicates that they spent a total of \$54.3 million assisting 3,093 households during this period. RCEDA further indicates a further 2,497 housing units underway with total projected spending of \$100 million. Because the housing data are not conformable with the other projects data supplied to us, we analyze them separately. I

We use multipliers supplied by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce as the basis for projecting the local economic effects of RCEDA projects. These multipliers are known as the Regional Input-Output Modeling System II (RIMS II) multipliers. As described in the RIMS II handbook<sup>2</sup>, these multipliers are based on a framework of inputs purchased and outputs sold for nearly 500 U.S. industries collected at the regional level. Hence RIMS II multipliers are available at many levels of aggregation. For this study, we obtained the matrix of multipliers showing relationships between input and outputs by industry within Riverside County, and also the impact of construction spending on other industries overall for the entire state of California. Although our main focus is on Riverside County effects, by contrasting basic results for construction between just Riverside County and the state of

<sup>&</sup>lt;sup>1</sup> We note that RCEDA indicates their spending on housing served as the basis for leveraging \$92.4 million in funds obtained through other sources. We note this but do not include this figure in the base for multiplier results as this would likely introduce some double counting.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Commerce, Bureau of Economic Analysis, *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II)*, Third Edition, U.S. Government Printing Office: Washington, D.C. March 1997.

California, we are able to back out estimates of spending within Riverside on the rest of California generally.

RIMS II multipliers provide several types of relationships. Those appropriate for this study provide estimates of the value of output generated across sectors of the economy by final demand spending in a given industry, earnings generated across sectors by final demand spending in a given industry, and employment generated across sectors by final demand spending in a given industry. Additionally, RIMS II provides two types of multipliers, one of which (Type I) excludes induced economic activity created when project employees subsequently spend income earned as part of the original project, and another type (Type II) that includes this induced demand. We rely on Type II multipliers in this study, as they are more likely to capture all paths by which project spending impacts the local economy directly and indirectly.

In order to estimate tax effects, we link industry level multiplier results to industry level profit margin estimated from a broad based data set that covers financial accounting values for all publicly traded firms in the United States.<sup>3</sup> These profit margins allow us to project from the output values by industry to the business profits generated by those industries, and thus to business taxes. We estimate personal income at the individual level by industry by dividing industry level earnings by industry level employees. This provides the basis for estimating personal taxes paid to California, which we calculate by applying California individual tax table rates to the estimated personal income taxes. Finally, sales taxes are estimated for sectors that make taxable sales in Riverside County, using the 8.75% sales tax rate applicable in Riverside County.

#### 3. Literature Survey

A collection of recent papers examines the effects of government spending on local economies. Although these papers look at different industries and use different data than we do here, Table 1 below shows that the estimated multipliers fall in the same range as the RIMS II multipliers obtained from the BEA. For example, the RIMS II California Type I and Type II Construction

<sup>&</sup>lt;sup>3</sup> This database is Standard & Poors COMPUSTAT, a standard source for corporate accounting information.

Final Demand Multipliers sum to approximately 1.56 and 2.36, respectively, across 20 economic sectors used by the BEA. These values are well within the ranges summarized in Table 1.

Moretti (2010) looked at the effect of an exogenous increase in employment in tradable industries on tradable and non-tradable jobs. In both instances, he found an increase in local jobs, with multipliers ranging from 0.29 for the effect on tradable jobs to a high of 1.89 on non-tradable jobs. Looking at more specific industries, Bergstrom et al. (1990) and Doeksen et al. (1998) found employment multipliers in the same range.

Like Frechtling and Horvath (1999) for tourism, Bergstrom et al. (1990) and Doeksen et al. (1998) also estimate earnings and output multipliers for state parks and rural hospitals, respectively. The earnings and output multipliers found for the effects of state parks on other local industries are slightly higher than those found for both tourism and the healthcare industry, but all three show multipliers in the range seen in the RIMS II multipliers used in this report.

Type I and Type II multipliers are estimated for the effects of the availability of childcare on the regional economy in Liu et al. (2004). The Type I multiplier of 1.49 estimates the change in spending between industries, while the Type 2 multiplier of 1.91 measures the effect on household spending and wages. In Olfert and Stabler (1994), local expenditures multipliers range from 1.09 to 1.43.

Another set of literature estimates these multipliers at larger government levels. Using an instrumental variables approach, Shoag finds earnings multipliers as high as 3. Blanchard and Perotti (2002) and Ramey (2009) estimate output multipliers at the federal level, looking at changes in GDP as a result of federal spending.

The main conclusion from this survey of recent multiplier research is that RIMS II multipliers supplied by BEA are consistent in magnitude with multipliers estimated in current economics research.

Table 1. Survey of multiplier studies

Multipliers

<u>-</u>						
Study	Earnings Multiplier	Jobs Multiplier	Output Multiplier	Type I (regional economy)*	Type II (households)*	Expenditures Multiplier
Moretti (2010)**		0.26 - 1.89				
Doeksen et al. (1998) Health sector**	1.31 - 1.55	1.44 - 1.68	1.39 - 1.99			
Bergstrom et al. (1990) State parks***	2.01 - 2.83	1.36 - 1.81	1.80 - 2.46		<del></del>	<del></del>
Frechtling & Horvath (1999) Tourism expenditures**	0.35	18.00	1.18			
Liu et al. (2004) Childcare				1.49	1.91	
Olfert & Stabler (1994) Rural government funding**						1.09 - 1.43
Shoag (working paper) State spending	up to 3					
Blanchard & Perotti (2002) Postwar federal spending			~1			
Ramey (2009) Federal spending			0.6 - 1.1			

<sup>\*</sup>The Type I multiplier estimates the change in spending between industries, while the Type 2 multiplier measures the effect on household spending and wages.

<sup>\*\*</sup>See paper for multipliers estimated by industry/sector.

<sup>\*\*\*</sup>See paper for multipliers estimated by state.

# 4. Results

This section tabulates findings based on our analysis of the data supplied to us by RCEDA and other data information we applied as described above. First, we briefly summarize the RCEDA data. Next, we show the impacts on local output, earnings, and jobs. In each case, we tabulate results across economic sectors and geographic areas. Finally, we present estimates of consequent tax effects.

# 4.a. RCEDA data summary

Tables 2 – 4 summarize spending by the RCEDA over the past five years across several dimensions. Overall spending was about \$256.6 million over the five fiscal years ended June 2010. In addition, spending for the current fiscal year (ending June 2011) is forecast to total approximately \$121.9 million. Forecast figures were not supplied in the same format as past spending figures, and therefore are not included in the three tables below.

Table 2. RCEDA Spending by year and supervisory district

	Year					
<u>District</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	<u>2010</u>	<u>Total</u>
1	25,500	8,284,786	2,563,054	2,354,764	1,991,923	15,220,027
2	28,791,108	24,537,372	15,586,937	21,792,404	34,127,405	124,835,226
3	0	4,150	452,7 <b>5</b> 1	395,542	3,329,281	4,181,724
4	4,922,592	6,086,503	10,614,266	26,268,010	39,565,090	87,456,461
5	1,372,073	1,106,885	4,715,785	5,581,211	12,141,095	24,917,049
TOTAL	35,111,273	40,019,696	33,932,793	56,391,931	91,154,794	256,610,487

Table 3. RCEDA Spending by year and zip code.

	Year					
Zip code	<u>2006</u>	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	<u>Total</u>
91752	5,236,705	2,926,487	225,000	6,089,624	2,829,490	17,307,306
92203	0	0	152,153	914,245	916,774	<b>1,983,</b> 172
92225	0	0	0	0	0	0
92230	145,615	123,550	496,853	1,673,585	176,832	2,616,435
92254	2,682,566	4,445,076	5,405,78 <b>6</b>	3,852,797	4,793,939	21,180,164
92274	572,513	789,442	1,777,392	8,920,623	27,746,643	39,806,613
92276	1,581,968	757,985	3,184,935	12,486,345	6,013,734	24,024,967
92507	0	68,201	1,601,108	413,928	2,084,220	4,167,457
92509	21,114,126	20,801,587	8,751,001	10,289,893	21,513,386	82,469,993
92530	0	0	286,474	0	152,870	439,344
92544	0	О	o	0	0	0
92545	53,545	0	0	0	0	53,545
92548	0	0	0	0	0	0
92562	0	0	452,391	317,931	0	770,322
92567	0	694,046	190,428	385,796	24,416	1,294,686
92570	0	1,033,264	146,317	1,475,781	1,437,136	4,092,498
92585	1,226,458	221,088	2,427,396	3,162,341	10,642,085	17,679,368
92586	0	4,150	360	23,172	2,542,823	2,570,505
92595	25,500	7,251,522	2,130,263	878,983	365,017	10,651,285
92879	2,256,459	512,149	32,124	736,931	0	3,537,663
92881	183,818	297,149	6,578,8 <b>1</b> 2	4,675,956	9,784,529	21,520,264
92883	0	0	0	0	36,900	36,900
Total	35,079,273	39,925,696	33,838,793	56,297,931	91,060,794	256,202,487

Table 4. RCEDA Spending by year and legislative district.

Year	<u>2006</u>	2007	2008	<u>5008</u>	2010	Total
Assembly District 61	\$5,236,705	\$2,926,487	\$225,000	\$6,089,624	\$2,829,490	\$17,307,306
Assembly District 62	\$26,350,831	\$23,796,275	\$10,577,109	\$16,793,445	\$26,427,096	\$103,944,756
Assembly District 63	0\$	\$68,201	\$1,601,108	\$413,928	\$2,084,220	\$4,167,457
Assembly District 64	\$24,757,928	\$31,224,388	\$27,488,602	\$43,559,198	\$83,236,117	\$210,266,233
Assembly District 65	\$1,425,618	\$2,076,098	\$3,261,354	\$6,720,675	\$14,823,292	\$28,307,037
Assembly District 66	\$28,816,608	\$32,822,158	\$18,602,382	\$24,465,099	\$36,119,328	\$140,825,575
Assembly District 71	\$28,791,108	\$24,537,372	\$16,325,802	\$22,110,335	\$34,317,175	\$126,081,792
Assembly District 73	\$0	\$0	\$738,865	\$317,931	\$152,870	\$1,209,666
Assembly District 77	\$572,513	\$789,442	\$1,777,392	\$8,920,623	\$27,746,643	\$39,806,613
Assembly District 80	\$4,982,662	\$6,116,053	\$11,017,119	\$27,847,595	\$39,647,922	\$89,611,351
Senate District 31	\$28,607,290	\$24,308,424	\$10,609,233	\$17,530,376	\$26,427,096	\$107,482,419
Senate District 32	\$26,350,831	\$23,796,275	\$10,577,109	\$16,793,445	\$26,427,096	\$103,944,756
Senate District 33	0\$	0\$	\$738,865	\$317,931	\$189,770	\$1,246,566
Senate District 36	\$598,013	\$8,045,114	\$4,646,880	\$10,140,709	\$30,807,353	\$54,238,069
Senate District 37	\$32,396,707	\$35,480,620	\$27,980,616	\$52,127,203	\$86,266,855	\$234,252,001
Senate District 38	\$0	0\$	\$452,391	\$317,931	\$0	\$770,322
Senate District 40	\$4,837,047	\$5,992,503	\$10,520,266	\$26,174,010	\$39,471,090	\$86,994,916

The tables are included primarily to provide background on the pattern of spending across time and geographical areas. It is very important to note that in Table 4, there can be significant double- and triple-counting. This occurs when spending for any zip code is fully attributed to all assembly and senate districts that fall within the zip code, and spending for all zip codes that overlap a given assembly or senate district are attributed to the senate or assembly district. We believe it is inappropriate to try to parcel out spending strictly into small districts as spending at a particular project address is likely to actually go to vendors not necessarily in that same immediate location, and subsequent multiplier effects typically will fan out even farther. Hence, these numbers are suggestive of impact in legislative districts rather than being precise values spent in the districts.<sup>4</sup>

# 4.b. Output, earnings, jobs and tax effects.

This section summarizes the effects of RCEDA spending on the value of output, earnings, and jobs during the five fiscal years ending June 2010. These are estimated using the RIMS II Type II multipliers as described above applied to the RCEDA spending figures summarized in section 4.a. above. The tables below are split into four groups. The first two groups show output, earnings, and jobs split out by industry sector and year based on the assumption that all project cost is related to construction, and uses Riverside County specific multipliers. This includes Tables 5 - 7. Overall, these three tables include point estimates for total value of output created by the project spending and multiplier effects of about \$678 million, along with about \$172 in earnings, and 4,166 jobs.

The second group is the same as the first except that not all cost is assumed to go to construction. As noted above, we do not have precise figures regarding other types of project costs, but RCEDA personnel indicate that it is reasonable to assume that approximately 10% on average goes to architects' fees, 10% to engineering fees, and another 5% to costs that could reasonably be characterized as NAICS code 541610 – "Management, scientific, and technical consulting

<sup>&</sup>lt;sup>4</sup> This caution actually applies to breakdowns presented by zip code within Riverside County as well as the legislative district in terms of how likely it is that all multiplier effects remain within the immediate area of the initial spending. However, this concern lessens as the geographical area in question increases.

services" for tasks such as compliance and technical documentation preparation. Hence, Tables 8-10 provide a rough estimate of the impact on the basic results if we assume these fractions are spent on costs other than construction in applying the RIMS II multipliers to obtain output, earnings and employment results for Riverside County. Differences in the multiplier impacts across input industry segments generate slightly smaller estimates than the overall figures using just construction. Here, estimated output is \$662 million, along with \$172 million in earnings and 3,145 jobs. Note that there are fewer but higher paying secondary effect jobs in this scenario.

The third group assumes all costs are construction costs, and hence is comparable to the first group in this dimension, but uses California (statewide) multipliers rather than those just for Riverside County. Hence comparing the results in Tables 11 - 13 to Tables 5 - 7 allows us to infer the impacts of spending within Riverside County on output, earnings, and jobs within California but external to Riverside County. The results for the construction-only analysis show statewide output value at \$892 million, \$295 million in income and 6,914 jobs. Hence, relative to the results in Tables 5 - 7, we can infer roughly \$224 million in value created outside of Riverside County as multiplier effects from the Riverside projects, along with \$123 million in income and 2,748 jobs.

The fourth group (Tables 14 - 16) presents the same information as the first group (Tables 5 - 7 using Riverside County multipliers and assuming all costs are construction), but presents the figures split out by zip code rather than industry, allowing a tighter interpretation of where the benefits are going. It is worth noting again that these results should be interpreted bearing in mind that multiplier effects are likely to cross zip code boundaries within Riverside County even if they are quite accurate for the county as a whole, so caution should be applied when using these figures. The fifth group (Tables 17 - 19) similarly present the same information as the second group but again by zip code rather than industry.

Finally, Table 20 summarizes the three sources of tax revenues based on the assumptions described in the data section above. In particular, using profit margins estimated from a large data set of accounting information, and applying these margins to output value predicted in the multipliers given in Table 5, we estimate total Business Tax revenues in Riverside County associated with RCEDA spending of roughly \$2.3 million over the six fiscal years in question. Applying the sales tax rate for just industries likely to making taxable sales to consumer of goods

and services, we find sales tax revenues collected in Riverside County and spurred by multiplier effects on the Riverside projects as about \$5.8 million. Finally, California personal income taxes paid due to the direct spending on projects and multiplier effects creating other jobs based on the Riverside RIMS are about \$7.6 million. Collectively, over the six fiscal years we examined, the three types of taxes revenues total about \$15.6 million.

Table 5. Output Based on Riverside County Type II Multipliers (Construction Only)

	Year						
Industry	2006	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$238,757	\$272,134	\$230,743	\$383,465	\$619,853	\$828,707	\$2,573,658
Mining	\$393,246	\$448,221	\$380,047	\$631,590	\$1,020,934	\$1,364,929	\$4,238,967
Utilities	\$733,826	\$836,412	\$709,195	\$1,178,591	\$1,905,135	\$2,547,056	\$7,910,215
Construction	\$35,328,963	\$40,267,818	\$34,143,176	\$56,741,561	\$91,719,954	\$122,624,285	\$380,825,757
Manufacturing	\$6,611,453	\$7,535,709	\$6,389,545	\$10,618,601	\$17,164,448	\$22,947,876	\$71,267,631
Wholesale trade	\$1,580,007	\$1,800,886	\$1,526,976	\$2,537,637	\$4,101,966	\$5,484,091	\$17,031,563
Retail trade	\$3,440,905	\$3,921,930	\$3,325,414	\$5,526,409	\$8,933,170	\$11,943,132	\$37,090,960
Transportation and warehousing	\$1,299,117	\$1,480,729	\$1,255,513	\$2,086,501	\$3,372,727	\$4,509,142	\$14,003,730
Information	\$835,648	\$952,469	\$807,600	\$1,342,128	\$2,169,484	\$2,900,475	\$9,007,805
Finance and insurance	\$1,246,450	\$1,420,699	\$1,204,614	\$2,001,914	\$3,235,995	\$4,326,339	\$13,436,011
Real estate and rental and leasing	\$3,683,173	\$4,198,066	\$3,559,550	\$5,915,514	\$9,562,138	\$12,784,027	\$39,702,467
Professional, scientific, and technical services	\$2,004,854	\$2,285,125	\$1,937,562	\$3,219,979	\$5,204,939	\$6,958,703	\$21,611,162
Management of companies and enterprises	\$158,001	\$180,089	\$152,698	\$253,764	\$410,197	\$548,409	\$1,703,156
Administrative and waste management services	\$965,560	\$1,100,542	\$933,152	\$1,550,778	\$2,506,757	\$3,351,389	\$10,408,178
Educational services	\$196,623	\$224,110	\$190,024	\$315,795	\$510,467	\$682,465	\$2,119,483
Health care and social assistance	\$1,716,941	\$1,956,963	\$1,659,314	\$2,757,565	\$4,457,469	\$5,959,379	\$18,507,632
Arts, entertainment, and recreation	\$189,601	\$216,106	\$183,237	\$304,516	\$492,236	\$658,091	\$2,043,788
Accommodation	\$298,446	\$340,167	\$288,429	\$479,331	\$774,816	\$1,035,884	\$3,217,073
Food services and drinking places	\$758,403	\$864,425	\$732,948	\$1,218,066	\$1,968,944	\$2,632,364	\$8,175,150
Other services	\$1,218,361	\$1,388,683	\$1,177,468	\$1,956,800	\$3,163,071	\$4,228,844	\$13,133,228
Total	\$62,898,334	\$71,691,283	\$60,787,205	\$101,020,505	\$163,294,698	\$218,315,587	\$678,007,614

Table 6. Earnings Based on Riverside County Type II Multipliers (Construction Only)

<b>3</b> A	Year					***************************************	
Industry	2006	2002	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$42,134	\$48,024	\$40,719	\$67,670	\$109,386	\$146,242	\$454,175
Mining	\$80,756	\$92,045	\$78,045	\$129,701	\$209,656	\$280,298	\$870,502
Utilities	\$122,889	\$140,069	\$118,765	\$197,372	\$319,042	\$426,540	\$1,324,677
Construction	\$9,813,601	\$11,185,505	\$9,484,216	\$15,761,545	\$25,477,765	\$34,062,301	\$105,784,932
Manufacturing	\$1,046,316	\$1,192,587	\$1,011,197	\$1,680,480	\$2,716,413	\$3,631,687	\$11,278,680
Wholesale trade	\$372,179	\$424,209	\$359,688	\$597,754	\$966,241	\$1,291,808	\$4,011,879
Retail trade	\$1,011,205	\$1,152,567	\$977,264	\$1,624,088	\$2,625,258	\$3,509,819	\$10,900,201
Transportation and warehousing	\$277,379	\$316,156	\$268,069	\$445,496	\$720,123	\$962,763	\$2,989,986
Information	\$136,934	\$156,077	\$132,338	\$219,929	\$355,504	\$475,288	\$1,476,069
Finance and insurance	\$266,846	\$304,150	\$257,889	\$428,579	\$692,776	\$926,202	\$2,876,442
Real estate and rental and leasing	\$273,868	\$312,154	\$264,676	\$439,857	\$711,007	\$950,576	\$2,952,138
Professional, scientific, and technical services	\$639,025	\$728,358	\$617,577	\$1,026,333	\$1,659,017	\$2,218,010	\$6,888,321
Management of companies and enterprises	\$52,667	\$60,030	\$50,899	\$84,588	\$136,732	\$182,803	\$567,719
Administrative and waste management services	\$368,668	\$420,207	\$356,294	\$592,115	\$957,125	\$1,279,621	\$3,974,031
Educational services	\$70,223	\$80,039	\$67,866	\$112,784	\$182,310	\$243,737	\$756,958
Health care and social assistance	\$688,181	\$784,386	\$665,083	\$1,105,282	\$1,786,634	\$2,388,626	\$7,418,192
Arts, entertainment, and recreation	\$63,200	\$72,035	\$61,079	\$101,505	\$164,079	\$219,364	\$681,263
Accommodation	\$84,267	\$96,047	\$81,439	\$135,341	\$218,772	\$292,485	\$908,350
Food services and drinking places	\$224,712	\$256,126	\$217,170	\$360,908	\$583,391	\$779,960	\$2,422,267
Other services	\$319,513	\$364,179	\$308,788	\$513,167	\$829,509	\$1,109,005	\$3,444,161
Total	\$15,954,562	\$18,184,950	\$15,419,061	\$25,624,493	\$41,420,738	\$55,377,137	\$171,980,942

Table 7. Employment Based on Riverside County Type II Multipliers (Construction Only)

Year						1	
Industry	<u>2006</u>	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	1	2	1	2	4	2	16
Mining	↔	2	1	2	4	5	15
Utilities	1	1	н	2	m	4	13
Construction	216	247	209	348	562	751	2,333
Manufacturing	22	25	21	36	57	77	238
Wholesale trade	9	7	9	10	16	21	92
Retail trade	40	45	38	64	103	137	427
Transportation and warehousing	7	œ	9	11	17	23	71
Information	7	2	2	ĸ	Ŋ	7	21
Finance and insurance	4	4	4	9	10	13	42
Real estate and rental and leasing	11	12	10	17	27	36	113
Professional, scientific, and technical services	11	12	10	17	27	37	114
Management of companies and enterprises	Н	1	1	1	2	7	7
Administrative and waste management services	16	18	16	26	42	56	174
Educational services	8	3	3	4	7	თ	59
Health care and social assistance	16	18	15	25	40	54	168
Arts, entertainment, and recreation	m	æ	e	5	7	10	31
Accommodation	m	٣	m	ī.	7	10	31
Food services and drinking places	13	15	13	21	35	46	144
Other services	11	12	10	17	28	37	116
Total	386	440	373	621	1,003	1,341	4,166

Table 8. Output Based on Riverside Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Yea	Year						
Industry	<u>2006</u>	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$214,003	\$243,920	\$206,820	\$343,709	\$555,588	\$742,790	\$2,306,831
Mining	\$298,972	\$340,768	\$288,938	\$480,177	\$776,183	\$1,037,712	\$3,222,750
Utilities	\$692,570	\$789,389	\$669,324	\$1,112,331	\$1,798,028	\$2,403,860	\$7,465,502
Construction	\$26,560,274	\$30,273,299	\$25,668,801	\$42,658,240	\$68,954,955	\$92,188,796	\$286,304,365
Manufacturing	\$5,425,394	\$6,183,843	\$5,243,295	\$8,713,681	\$14,085,239	\$18,831,151	\$58,482,604
Wholesale trade	\$1,376,537	\$1,568,972	\$1,330,335	\$2,210,846	\$3,573,724	\$4,777,862	\$14,838,276
Retail trade	\$3,020,974	\$3,443,295	\$2,919,578	\$4,851,962	\$7,842,958	\$10,485,583	\$32,564,349
Transportation and warehousing	\$1,184,830	\$1,350,465	\$1,145,062	\$1,902,946	\$3,076,019	\$4,112,459	\$12,771,780
Information	\$874,095	\$996,290	\$844,757	\$1,403,877	\$2,269,299	\$3,033,921	\$9,422,239
Finance and insurance	\$1,334,228	\$1,520,748	\$1,289,446	\$2,142,893	\$3,463,882	\$4,631,011	\$14,382,209
Real estate and rental and leasing	\$3,749,708	\$4,273,903	\$3,623,853	\$6,022,376	\$9,734,876	\$13,014,968	\$40,419,685
Professional, scientific, and technical services	\$10,832,530	\$12,346,877	\$10,468,945	\$17,398,039	\$28,123,077	\$37,598,931	\$116,768,398
Management of companies and enterprises	\$163,970	\$186,892	\$158,466	\$263,350	\$425,693	\$569,127	\$1,767,498
Administrative and waste management services	\$1,222,399	\$1,393,286	\$1,181,370	\$1,963,285	\$3,173,554	\$4,242,859	\$13,176,753
Educational services	\$198,554	\$226,311	\$191,890	\$318,896	\$515,480	\$689,167	\$2,140,300
Health care and social assistance	\$1,716,239	\$1,956,163	\$1,658,635	\$2,756,438	\$4,455,646	\$5,956,942	\$18,500,063
Arts, entertainment, and recreation	\$204,699	\$233,315	\$197,828	\$328,765	\$531,432	\$710,495	\$2,206,534
Accommodation	\$360,066	\$410,402	\$347,981	\$578,299	\$934,792	\$1,249,764	\$3,881,304
Food services and drinking places	\$890,773	\$1,015,300	\$860,875	\$1,430,663	\$2,312,597	\$3,091,809	\$9,602,017
Other services	\$1,178,510	\$1,343,261	\$1,138,954	\$1,892,795	\$3,059,611	\$4,090,523	\$12,703,654
	,						
Total	\$61,499,326	\$70,096,699	\$59,435,153	\$98,773,569	\$159,662,635	\$213,459,729	\$662,927,111

Table 9. Earnings Based on Riverside Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Yea	Year						
Industry	2006	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$37,920	\$43,221	\$36,647	\$60,903	\$98,447	\$131,618	\$408,758
Mining	\$61,445	\$70,034	\$59,382	\$98,686	\$159,521	\$213,270	\$662,339
Utilities	\$116,218	\$132,465	\$112,318	\$186,657	\$301,722	\$403,385	\$1,252,766
Construction	\$7,377,932	\$8,409,339	\$7,130,298	\$11,849,636	\$19,154,357	\$25,608,270	\$79,529,831
Manufacturing	\$850,922	\$969,877	\$822,361	\$1,366,658	\$2,209,136	\$2,953,488	\$9,172,443
Wholesale trade	\$324,077	\$369,382	\$313,200	\$520,498	\$841,359	\$1,124,848	\$3,493,363
Retail trade	\$887,437	\$1,011,498	\$857,651	\$1,425,306	\$2,303,937	\$3,080,231	\$9,566,061
Transportation and warehousing	\$267,548	\$304,950	\$258,568	\$429,707	\$694,600	\$928,639	\$2,884,011
Information	\$144,132	\$164,281	\$139,294	\$231,489	\$374,190	\$500,271	\$1,553,657
Finance and insurance	\$285,630	\$325,560	\$276,043	\$458,748	\$741,544	\$991,402	\$3,078,928
Real estate and rental and leasing	\$276,677	\$315,355	\$267,390	\$444,368	\$718,300	\$960,325	\$2,982,416
Professional, scientific, and technical services	\$3,318,718	\$3,782,662	\$3,207,328	\$5,330,165	\$8,615,951	\$11,519,029	\$35,773,853
Management of companies and enterprises	\$55,125	\$62,831	\$53,274	\$88,535	\$143,113	\$191,334	\$594,212
Administrative and waste management services	\$481,376	\$548,670	\$465,219	\$773,133	\$1,249,732	\$1,670,820	\$5,188,950
Educational services	\$70,925	\$80,840	\$68,544	\$113,912	\$184,133	\$246,175	\$764,528
Health care and social assistance	\$687,479	\$783,586	\$664,404	\$1,104,154	\$1,784,811	\$2,386,189	\$7,410,622
Arts, entertainment, and recreation	\$67,765	\$77,238	\$65,490	\$108,836	\$175,929	\$235,207	\$730,465
Accommodation	\$102,174	\$116,457	\$98,744	\$164,101	\$265,260	\$354,638	\$1,101,374
Food services and drinking places	\$264,563	\$301,548	\$255,684	\$424,913	\$686,851	\$918,281	\$2,851,841
Other services	\$308,277	\$351,373	\$297,930	\$495,121	\$800,339	\$1,070,007	\$3,323,047
7.00.1	¢15 095 239	619 221 169	¢15 440 770	\$ 57E 67E	644 500 100	ÇEE 107 470	234 676 6713
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Table 10. Employment Based on Riverside Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Year							
Industry	<u>3006</u>	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	1	1	0	1	Ħ	2	'n
Mining	1	1	1	2	ĸ	4	11
Utilities	c	1	0	1	Н	2	· w
Construction	162	185	156	260	420	562	1,745
Manufacturing	15	17	15	25	40	53	164
Wholesale trade	æ	4	æ	S	. <b>∞</b>	11	35
Retail trade	16	18	15	26	42	56	173
Transportation and warehousing	4	5	4	7	11	15	46
Information	Ţ.	1	1	2	e	т	11
Finance and insurance	2	2	2	m	ī,	7	70
Real estate and rental and leasing	2	9	ıΩ	8	13	18	55
Professional, scientific, and technical services	54	62		87	141	189	587
Management of companies and enterprises	0	1	0	1	<del></del> -	2	Ŋ
Administrative and waste management services	16	18	15	26	41	55	171
Educational services	0	0	0	0	0	0	1
Health care and social assistance	0	0	0	0	0	1	7
Arts, entertainment, and recreation	1	1	1	1	2	2	7
Accommodation	2	7	ì	2	4	5	16
Food services and drinking places	гo	ις.	4	7	12	16	20
Other services	m	4	m	Ŋ	80	11	34
Total	292	333	282	469	757	1,013	3,145

Table 11. Output based on California Type II Multiplier

Year ---

Industry	<u>2006</u>	2007	2008	<u>2009</u>	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$407,291	\$464,228	\$393,620	\$654,146	\$1,057,396	\$1,413,677	\$4,390,359
Mining	\$459,958	\$524,258	\$444,520	\$738,734	\$1,194,128	\$1,596,480	\$4,958,077
Utilities	\$832,137	\$948,467	\$804,207	\$1,336,489	\$2,160,369	\$2,888,288	\$8,969,957
Construction	\$35,472,919	\$40,431,899	\$34,282,301	\$56,972,768	\$92,093,688	\$123,123,947	\$382,377,522
Manufacturing	\$9,034,131	\$10,297,068	\$8,730,908	\$14,509,644	\$23,454,128	\$31,356,816	\$97,382,695
Wholesale trade	\$2,728,146	\$3,109,530	\$2,636,578	\$4,381,653	\$7,082,727	\$9,469,198	\$29,407,833
Retail trade	\$4,592,555	\$5,234,576	\$4,438,409	\$7,376,065	\$11,923,047	\$15,940,426	\$49,505,078
Transportation and warehousing	\$1,601,074	\$1,824,898	\$1,547,335	\$2,571,472	\$4,156,659	\$5,557,213	\$17,258,651
Information	\$2,619,301	\$2,985,469	\$2,531,386	\$4,206,838	\$6,800,148	\$9,091,405	\$28,234,547
Finance and insurance	\$4,273,042	\$4,870,397	\$4,129,621	\$6,862,898	\$11,093,538	\$14,831,421	\$46,060,917
Real estate and rental and leasing	\$6,316,518	\$7,199,543	\$6,104,509	\$10,144,908	\$16,398,747	\$21,924,179	\$68,088,406
Professional, scientific, and technical services	\$4,522,332	\$5,154,537	\$4,370,544	\$7,263,281	\$11,740,737	\$15,696,688	\$48,748,119
Management of companies and enterprises	\$944,493	\$1,076,530	\$912,792	\$1,516,943	\$2,452,064	\$3,278,268	\$10,181,090
Administrative and waste management services	\$1,537,874	\$1,752,863	\$1,486,256	\$2,469,967	\$3,992,580	\$5,337,849	\$16,577,388
Educational services	\$435,380	\$496,244	\$420,767	\$699,260	\$1,130,319	\$1,511,172	\$4,693,142
Health care and social assistance	\$2,921,258	\$3,329,639	\$2,823,208	\$4,691,809	\$7,584,079	\$10,139,476	\$31,489,468
Arts, entertainment, and recreation	\$502,091	\$572,282	\$485,239	\$806,405	\$1,303,514	\$1,742,722	\$5,412,252
Accommodation	\$456,447	\$520,256	\$441,126	\$733,095	\$1,185,012	\$1,584,293	\$4,920,229
Food services and drinking places	\$1,256,984	\$1,432,705	\$1,214,794	\$2,018,831	\$3,263,342	\$4,362,899	\$13,549,555
Other services	\$1,857,386	\$2,117,042	\$1,795,045	\$2,983,133	\$4,822,089	\$6,446,854	\$20,021,549
Total	\$82,771,315	\$94,342,431	\$79,993,166	\$132,938,338	\$214,888,311	\$287,293,271	\$892,226,833

Table 12. Earnings based on California Type II Multiplier

Year

Industry	<u>3006</u>	2007	2008	2009	2010	2011	Total
Agriculture, forestry, fishing, and hunting	\$87,778	\$100,049	\$84,832	\$140,980	\$227,887	\$304,672	\$946,198
Mining	\$101,823	\$116,057	\$98,405	\$163,537	\$264,349	\$353,419	\$1,097,590
Utilities	\$143,956	\$164,081	\$139,124	\$231,207	\$373,735	\$499,662	\$1,551,765
Construction	\$13,802,241	\$15,731,742	\$13,338,981	\$22,167,668	\$35,832,950	\$47,906,586	\$148,780,168
Manufacturing	\$1,804,719	\$2,057,012	\$1,744,146	\$2,898,545	\$4,685,356	\$6,264,051	\$19,453,830
Wholesale trade	\$884,804	\$1,008,496	\$855,106	\$1,421,077	\$2,297,101	\$3,071,091	\$9,537,675
Retail trade	\$1,611,607	\$1,836,904	\$1,557,515	\$2,588,390	\$4,184,005	\$5,593,773	\$17,372,195
Transportation and warehousing	\$568,803	\$648,319	\$549,711	\$913,549	\$1,476,708	\$1,974,273	\$6,131,363
Information	\$603,914	\$688,339	\$583,644	\$969,941	\$1,567,862	\$2,096,142	\$6,509,842
Finance and insurance	\$1,253,472	\$1,428,703	\$1,211,401	\$2,013,192	\$3,254,226	\$4,350,713	\$13,511,707
Real estate and rental and leasing	\$533,691	\$608,299	\$515,778	\$857,157	\$1,385,553	\$1,852,404	\$5,752,884
Professional, scientific, and technical services	\$2,099,654	\$2,393,178	\$2,029,181	\$3,372,237	\$5,451,057	\$7,287,748	\$22,633,055
Management of companies and enterprises	\$386,224	\$440,217	\$373,261	\$620,311	\$1,002,703	\$1,340,556	\$4,163,271
Administrative and waste management services	\$698,714	\$796,392	\$675,263	\$1,122,199	\$1,813,980	\$2,425,187	\$7,531,736
Educational services	\$179,067	\$204,100	\$173,057	\$287,599	\$464,889	\$621,530	\$1,930,244
Health care and social assistance	\$1,386,895	\$1,580,778	\$1,340,345	\$2,227,481	\$3,600,614	\$4,813,814	\$14,949,928
Arts, entertainment, and recreation	\$172,045	\$196,097	\$166,271	\$276,320	\$446,658	\$597,157	\$1,854,548
Accommodation	\$140,445	\$160,079	\$135,731	\$225,568	\$364,619	\$487,475	\$1,513,917
Food services and drinking places	\$403,780	\$460,227	\$390,227	\$648,507	\$1,048,280	\$1,401,490	\$4,352,511
Other services	\$551,247	\$628,309	\$532,745	\$885,353	\$1,431,130	\$1,913,339	\$5,942,123
Total	\$27,414,882	\$31,247,379	\$26,494,725	\$44,030,820	\$71,173,663	\$95,155,080	\$295,516,548

Table 13. Employment Based on California Type II Multiplier

Year ---

<u>Industry</u>	2006 2	2007	2008	2009	2010	2011	Total
Agriculture, forestrγ, fishing, and hunting	4	4	æ	9	്	12	38
Mining	∺	П	1	2	ж	4	13
Utilities	Т	2	<b>L</b>	2	4	ις	15
Construction	304	347	294	489	790	1,056	3,280
Manufacturing	35	39	33	56	06	120	373
Wholesale trade	14	16	14	23	37	20	155
Retail trade	63	72	61	101	164	219	089
Transportation and warehousing	13	15	13	21	34	46	143
Information	œ	Ø	00	13	21	29	68
Finance and insurance	17	20	17	58	45	19	188
Real estate and rental and leasing		25	21	36	28	7.7	239
Professional, scientific, and technical services	31	36	30	51	82	109	339
Management of companies and enterprises	Σ	5	4	7	12	16	20
Administrative and waste management services	59	33	28	46	74	100	309
Educational services	7	∞	9	11	17	23	72
Health care and social assistance	31	36	30	50	82	109	339
Arts, entertainment, and recreation	7	8	7	12	19	25	78
Accommodation	2	5	2	<b>∞</b>	12	16	51
Food services and drinking places	24	27	23	38	62	83	258
Other services	19	22	18	31	20	99	506
Total	641	731	620	1,030	1,665	2,226	6,914

Table 14. Output Based on Riverside County Type II Multiplier (Construction Only)

Year -----

Total	\$31,049,775	\$3,557,841	\$	\$4,695,646	\$38,012,567	\$71,400,668	\$43,108,425	\$7,478,930	\$147,973,091	\$788,749	\$0	\$96,008	0\$	\$1,383,157	\$2,324,374	\$7,343,459	\$31,714,974	\$4,609,594	\$19,125,243	\$6,345,581	\$38,617,773	\$66,171	110 000	\$6/8,00/,614
2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/N	A/N	7.00	\$218,315,587
2010	\$5,073,981	\$1,644,004	\$0	\$317,104	\$8,596,727	\$49,756,646	\$10,784,124	\$3,737,526	\$38,578,863	\$274,134	\$0	\$0	\$0	\$0	\$43,784	\$2,577,143	\$19,083,911	\$4,559,915	\$654,566	\$0	\$17,546,099	\$66,171	000 000	\$163,294,698
2009	\$10,927,167	\$1,640,513	\$0	\$3,003,066	\$6,913,425	\$16,007,086	\$22,405,386	\$742,749	\$18,464,092	\$0	\$0	\$0	\$0	\$570,493	\$692,269	\$2,648,128	\$5,674,476	\$41,580	\$1,577,239	\$1,322,342	\$8,390,494	\$0	7070	\$101,020,505
<u>2008</u>	\$404,185	\$273,324	\$0	\$892,535	\$9,710,826	\$3,192,865	\$5,721,342	\$2,876,192	\$15,720,091	\$514,615	\$0	\$0	\$0	\$812,664	\$342,080	\$262,840	\$4,360,517	\$647	\$3,826,754	\$57,707	\$11,818,022	0\$	1000	\$60,787,205
2007	\$5,254,852	\$0	\$0	\$221,849	\$7,981,657	\$1,417,536	\$1,361,051	\$122,463	\$37,351,696	\$0	\$0	\$0	\$0	\$0	\$1,246,241	\$1,855,347	\$396,990	\$7,452	\$13,020,961	\$919,624	\$533,566	\$0	717	\$/1,691,283
<u>2006</u>	\$9,389,591	\$0	\$0	\$261,093	\$4,809,932	\$1,026,535	\$2,836,523	\$0	\$37,858,349	\$0	0\$	\$96,008	\$0	\$0	\$0	\$0	\$2,199,081	\$0	\$45,722	\$4,045,908	\$329,592	\$0		\$62,898,334
Zip Code	91752	92203	92225	92230	92254	92274	92276	92507	92509	92530	92544	92545	92548	92562	92567	92570	92585	92586	92595	92879	92881	92883		otal

onstruction Only) Table 15.

رق	
Multiplier (	earear
Type II	
ounty	
Riverside (	
Based on 1	
Earnings	Year
15.	
able	

<u>Total</u>	\$7,875,973	\$902,469	0\$	\$1,191,080	\$9,642,129	\$18,111,234	\$10,934,726	\$1,897,078	\$37,534,315	\$200,071	\$0	\$24,353	\$0	\$350,847	\$589,592	\$1,862,715	\$8,044,705	\$1,169,253	\$4,851,239	\$1,609,597	\$9,795,644	\$16,785	\$171,980,942
2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$55,377,137
<u>2010</u>	\$1,287,047	\$417,012	\$0	\$80,435	\$2,180,615	\$12,621,090	\$2,735,462	\$948,047	\$9,785,774	\$69,536	\$0	\$0	\$0	\$0	\$11,106	\$653,709	\$4,840,755	\$1,156,652	\$166,035	\$0	\$4,450,680	\$16,785	\$41,420,738
2009	\$2,771,745	\$416,127	\$0	\$761,747	\$1,753,634	\$4,060,299	\$5,683,269	\$188,403	\$4,683,534	\$0	\$0	\$0	\$0	\$144,709	\$175,598	\$671,715	\$1,439,367	\$10,547	\$400,077	\$335,421	\$2,128,302	0\$	\$25,624,493
2008	\$102,524	\$69,330	\$0	\$226,397	\$2,463,213	\$809,890	\$1,451,255	\$729,565	\$3,987,501	\$130,535	\$0	0\$	\$0	\$206,138	\$86,771	\$66,671	\$1,106,073	\$164	\$970,680	\$14,638	\$2,997,716	\$0	\$15,419,061
2007	\$1,332,927	\$0	\$0	\$56,273	\$2,024,598	\$359,567	\$345,239	\$31,063	\$9,474,495	\$0	\$0	\$0	\$0	\$0	\$316,117	\$470,621	\$100,699	\$1,890	\$3,302,849	\$233,268	\$135,342	0\$	\$18,184,950
<u>2006</u>	\$2,381,729	\$0	\$0	\$66,228	\$1,220,070	\$260,387	\$719,502	\$0	\$9,603,011	\$0	\$0	\$24,353	\$0	\$0	\$0	\$0	\$557,811	\$	\$11,598	\$1,026,270	\$83,603	0\$	\$15,954,562
Zip Code	91752	92203	92225	92230	92254	92274	92276	92507	92509	92530	92544	92545	92548	92562	92567	92570	92585	92586	92595	92879	92881	92883	Total

Table 16. Employment Based on Riverside County Type II Multiplier (Construction Only)

	Total	191	22	0	29	234	439	265	46	606	ī.	0	П	0	00	14	45	195	28	118	39	237	0	4166
	2011	N/A	1341																					
	<u>2010</u>	31	10	0	2	53	306	99	23	237	2	0	0	0	0	0	16	117	28	4	0	108	0	1003
	<u>2009</u>	29	10	0	18	42	98	138	5	113	0	0	0	0	4	4	16	35	0	10	80	52	0	621
	<u>2008</u>	2	2	0	5	09	20	35	18	26	m	0	0	0	ស	2	2	27	0	24	0	73	0	373
	2007	32	0	0	1	49	6	80	П	229	0	0	0	0	0	œ	11	2	0	80	9	m	0	440
Year	<u>2006</u>	58	0	0	2	30	9	17	0	233	0	0	1	0	0	0	0	14	0	0	25	2	0	386
¥	Zip Code	91752	92203	92225	92230	92254	92274	92276	92507	92509	92530	92544	92545	92548	92562	92567	92570	92585	92586	92595	92879	92881	92883	Total

Table 17. Output Based on Riverside County Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Year --

2007	<u>3008</u>		2010	2011	Total
137,971	\$395,195 \$10,68	\$10,684,121	\$4,961,123	N/A	\$30,359,154
\$0	\$267,245 \$1,60	\$1,604,024	\$1,607,438	N/A	\$3,478,707
\$0	0\$	\$0	\$0	A/N	\$0
\$216,914	\$872,683 \$2,93	\$2,936,271	\$310,051	A/N	\$4,591,204
\$7,804,126	\$9,494,834 \$6,75	\$6,759,654	\$8,405,516	N/A	\$37,167,077
86,007		\$15,651,051	\$48,649,940	N/A	\$69,812,548
30,778	\$5,594,085 \$21,90	\$21,907,037	\$10,544,259	N/A	\$42,149,591
\$119,739	\$2,812,219 \$72	\$726,228	\$3,654,394	N/A	\$7,312,581
\$36,520,906	\$15,370,438 \$18,05	\$18,053,407	\$37,720,777	N/A	\$144,681,817
\$0	\$503,169	\$	\$268,037	N/A	\$771,205
\$0	\$0	\$0	\$0	N/A	0\$
\$0	\$0	\$0	\$0	N/A	\$93,873
\$0		\$0	0\$	N/A	0\$
\$0		\$557,803	\$0	N/A	\$1,352,392
18,522		\$676,871	\$42,810	A/N	\$2,272,675
\$1,814,080	\$256,994 \$2,58	\$2,589,228	\$2,519,821	N/A	\$7,180,123
88,160	\$4,263,528 \$5,54	\$5,548,263	\$18,659,439	A/N	\$31,009,558
\$7,286		\$40,655	\$4,458,492	N/A	\$4,507,065
\$12,731,344		\$1,542,158	\$640,007	N/A	\$18,699,852
\$899,169	\$56,423 \$1,29	\$1,292,930	\$0	N/A	\$6,204,440
21,698	\$11,555,161 \$8,20	\$8,203,869	\$17,155,832	N/A	\$37,758,821
\$0	0\$	\$0	\$64,699	N/A	\$64,699
\$70,096,699		\$98,773,569	\$159,662,635	¢213 459 729	\$662,927,111

Table 18. Earnings Based on Riverside County Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Year ----

<u>11</u> Total	'A \$7,891,659	'A \$904,266	۸ \$0	'A \$1,193,453	'A \$9,661,333	₩.	•	'A \$1,900,856	A \$37,609,070	'A \$200,470		'A \$24,402		'A \$351,545	790,767	V		'A \$1,171,581		'A \$1,612,803	/A \$9,815,153	/A \$16,818	
2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ż	N/A	Ž	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2010	\$1,289,611	\$417,843	\$0	\$80,596	\$2,184,958	\$12,646,226	\$2,740,910	\$949,935	\$9,805,264	\$69,674	0\$	\$0	0\$	0\$	\$11,128	\$655,011	\$4,850,396	\$1,158,955	\$166,366	\$0	\$4,459,544	\$16,818	
<u>5005</u>	\$2,777,266	\$416,955	0\$	\$763,264	\$1,757,127	\$4,068,386	\$5,694,588	\$188,778	\$4,692,862	0\$	0\$	0\$	0\$	\$144,997	\$175,948	\$673,052	\$1,442,234	\$10,568	\$400,874	\$336,089	\$2,132,541	\$0	
<u>2008</u>	\$102,728	\$69,468	\$0	\$226,848	\$2,468,119	\$811,503	\$1,454,145	\$731,018	\$3,995,443	\$130,795	\$0	\$0	\$0	\$206,548	\$86,944	\$66,804	\$1,108,276	\$164	\$972,614	\$14,667	\$3,003,687	0\$	
<u>2007</u>	\$1,335,581	\$0	\$0	\$56,385	\$2,028,630	\$360,283	\$345,927	\$31,125	\$9,493,365	\$0	\$0	\$0	\$0	\$0	\$316,747	\$471,558	\$100,899	\$1,894	\$3,309,428	\$233,733	\$135,612	\$0	
2006	\$2,386,473	\$0	\$0	\$66,360	\$1,222,500	\$260,906	\$720,935	\$0	\$9,622,137	\$0	\$0	\$24,402	\$0	0\$	\$0	\$0	\$558,922	\$0	\$11,621	\$1,028,314	\$83,770	0\$	
Zip Code	91752	92203	92225	92230	92254	92274	92276	92507	92509	92530	92544	92545	92548	92562	92567	92570	92585	92586	92595	92879	92881	92883	

Table 19. Employment Based on Riverside County Type II Multipliers (Construction, Architecture, Engineering, Management/Science)

Year --

Total	154	18	0	23	188	353	213	37	735	4	0	0	0	7	11	36	157	23	95	32	191	0	3357	
2011	N/A	N/A	N/A	N/A	1079																			
2010	25	80	0	2	42	246	53	18	191	1	0	0	0	0	0	13	94	23	<b>m</b>	0	87	0	807	
5005	54	æ	0	15	34	79	111	4	91	0	0	0	0	m	ဧ	13	28	0	∞	7	41	0	499	
<u>2008</u>	2	1	0	4	48	16	28	14	78	m	0	0	0	4		П	22	0	19	0	58	0	300	
<u>2007</u>	26	0	0	П	39	7	7	н	185	0	0	0	0	0	9	თ	2	0	64	S	က	0	354	
<u> 2006</u>	47	0	0	1	24	5	14	0	191	0	0	0	0	0	0	0	11	0	0	20	2	0	317	
ip Code	91752	92203	92225	92230	92254	92274	92276	92507	92509	92530	92544	92545	92548	92562	92567	92570	92585	92586	92595	92879	92881	92883	Total	

Table 20. Tax Revenues in Riverside County Due to RCEDA Spending, 2006 - 2011.

Industry	<b>Business Taxes</b>	<u>Sales Taxes</u>	Personal Income Tax	<u>Total</u>
Agriculture, forestry, fishing, and hunting	\$10,424		\$13,552	\$249,171
Mining	\$17,016		\$48,187	\$436,113
Utilities	\$81,173		\$97,370	\$870,687
Construction	\$1,028,708		\$4,801,750	\$39,152,712
Manufacturing	\$286,358		\$530,807	\$7,053,083
Wholesale trade	\$26,949		\$233,724	\$1,750,934
Retail trade	\$83,006	\$3,245,459	\$288,771	\$3,617,236
Transportation and warehousing	\$71,096		\$126,609	\$1,423,032
Information	-\$15,483*		\$93,098	\$862,798
Finance and insurance	\$185,361		\$178,966	\$1,539,978
Real estate and rental and leasing	\$372,848		\$79,131	\$3,925,945
Professional, scientific, and technical services	\$20,534		\$397,602	\$2,309,113
Management of companies and enterprises	\$1,618		\$38,522	\$189,166
Administrative and waste management services	\$17,831		\$97,884	\$1,026,431
Educational services	\$9,166	\$185,455	\$20,467	\$215,087
Health care and social assistance	\$46,185		\$329,578	\$1,995,181
Arts, entertainment, and recreation	\$1,525	\$178,831	\$16,337	\$196,693
Accommodation	\$7,498	\$281,494	\$27,460	\$316,452
Food services and drinking places	\$19,054	\$715,326	\$44,103	\$778,483
Other services	\$34,591	\$1,149,157	\$106,357	\$1,290,105
Total	\$2.305.459	\$5.755.722	\$7.570.274	\$15.631.456
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**	†	001(100(010

\*We note that this negative value is not due to a mathematical error. Margins in this sector have been highly volatile for a considerable period of time, reflecting the end of the dot com bubble and other factors. The median margin across all U.S. firms in this sector is indeed negative. We view the accuracy of this particular result with skepticism due to the within sector volatility, but note that the small magnitude of the business taxes indicates it does not have an important influence on the overall tax results presented here.

Table 21: Output, Employment and Income Results based on Low- and Moderate- Housing Spending, 2000 - 2011

Industry	Output	Earnings	<u>Employment</u>
Agriculture, forestry, fishing, and hunting	\$369,240	\$65,160	2
Mining	\$608,160	\$124,890	2
Utilities*	\$1,134,870	\$190,050	2
Construction	\$54,636,660	\$15,176,850	335
Manufacturing	\$10,224,690	\$1,618,140	34
Wholesale trade	\$2,443,500	\$575,580	6
Retail trade	\$5,321,400	\$1,563,840	61
Transportation and warehousing*	\$2,009,100	\$428,970	10
Information	\$1,292,340	\$211,770	ო
Finance and insurance	\$1,927,650	\$412,680	9
Real estate and rental and leasing	\$5,696,070	\$423,540	16
Professional, scientific, and technical services	\$3,100,530	\$988,260	16
Management of companies and enterprises	\$244,350	\$81,450	Н
Administrative and waste management services	\$1,493,250	\$570,150	25
Educational services	\$304,080	\$108,600	4
Health care and social assistance	\$2,655,270	\$1,064,280	24
Arts, entertainment, and recreation	\$293,220	\$97,740	4
Accommodation	\$461,550	\$130,320	4
Food services and drinking places	\$1,172,880	\$347,520	21
Other services*	\$1,884,210	\$494,130	17
Total	\$97,273,020	\$24,673,920	298

#### 5. Conclusion

This study examines the effects of spending by the Riverside County Economic Development Agency (RCEDA) on the local (and to a lesser extent, the statewide) economy over the six fiscal years ending in June 2011. Overall, we find that, due to both direct spending and multiplier effects, total spending of approximately \$378.5 million by the RCEDA generated output valued between \$663 and \$678 million, personal income about \$172 million, and between 3,357 and 4,156 jobs. In addition, the Riverside projects created value outside of Riverside County but within California of roughly \$224 million in output, \$123 million in income, and 2,748 jobs. Separately, spending of \$54.3 million on Low- to Moderate-Income Housing over the period from 2000 to early 2011 resulted in an additional output value of approximately \$97.3 million, income of about \$24.7 million, and 598 jobs over that period of time. Finally, total California tax revenues consequent to the projects, including business, sales, and personal taxes, sums to about \$15.6 million.

# **Bibliography**

- Bergstrom, John C., H. Ken Cordell, Alan E. Watson, and Gregory A. Ashley (1990). "Economic Impacts of State Parks on State Economies in the South." *Southern Journal of Agricultural Economics*, 69–77.
- Blanchard, Olivier and Roberto Perotti (1999). "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output." NBER Working Paper.
- Doeksen, Gerald A., Tom Johnson, Diane Biard-Holmes, and Val Schott (1998). "A Healthy Health Sector Is Crucial for Community Economic Development." *The Journal of Rural Health*, 14(1): 66–72.
- Frechtling, Douglas C. and Andre Horvath (1999). "Estimating the Multiplier Effects of Tourism Expenditures on a Local Economy through a Regional Input–Output Model." *Journal of Travel Research*, 37: 324–332.
- Liu, Zhilin, Rosaria Ribeiro, and Mildred Warner (2004). "Comparing Child Care Multipliers in the Regional Economy: Analysis from 50 States." Cornell Linking Economic Development and Child Care Project.
- Moretti, Enrico (2010). "Local Multipliers." *American Economic Review: Papers and Proceedings*, 100: 1–7.
- Olfert, M.R. and Jack C. Stabler (1994). "Community Level Multipliers for Rural Development Initiatives." *Growth and Change*, 25: 467–486.
- Ramey, Valerie A. (2009). "Identifying Government Spending Shocks: It's All in the Timing." NBER Working Paper.
- Shoag, Daniel. "The Impact of Government Spending Shocks: Evidence on the Multiplier from State Pension Plan Returns." Job market paper.
- U.S. Department of Commerce, Bureau of Economic Analysis, Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II), Third Edition, U.S. Government Printing Office: Washington, D.C. March 1997.