



CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

Public Works Borrowing by Local Agencies 2001-2011

INTRODUCTION

Local governments fund a diverse array of public projects used to deliver a wide range of essential public services. This paper provides a general view of public works infrastructure¹ financing used by cities, counties, agencies and special districts in California from 2001 through 2011. The public works projects examined in this report are used to improve transportation, supply water, prevent floods, provide sewer systems, generate power and maintain a safe and secure environment for California citizens.

TRENDS IN ISSUANCE 2001-2011

As shown in Figure 1, issuance appears to be driven by economic and market forces as opposed to any long-term infrastructure planning program. This is evidenced by the growth in issuance during the housing boom, the curtailment during the 2008 financial crisis, and the implementation of the Build America Bonds program in 2009-2010.

ISSUANCE BY PURPOSE

Figures 2-4 describe the infrastructure category for which debt was issued and the issuance trends in each category over the ten-year period.

Power Related Projects

Power generation and transmission were the predominant infrastructure-related projects

FIGURE 1
CITY, COUNTY SPECIAL DISTRICT ISSUANCE, 2001-2011

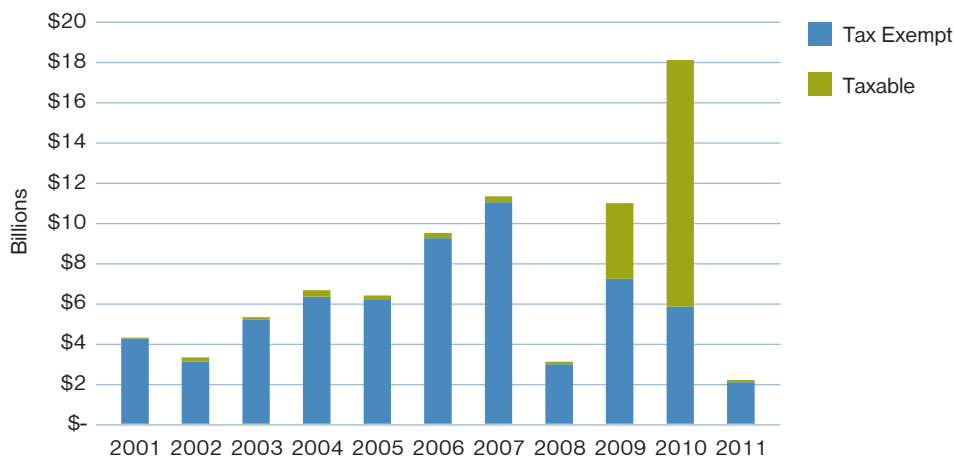
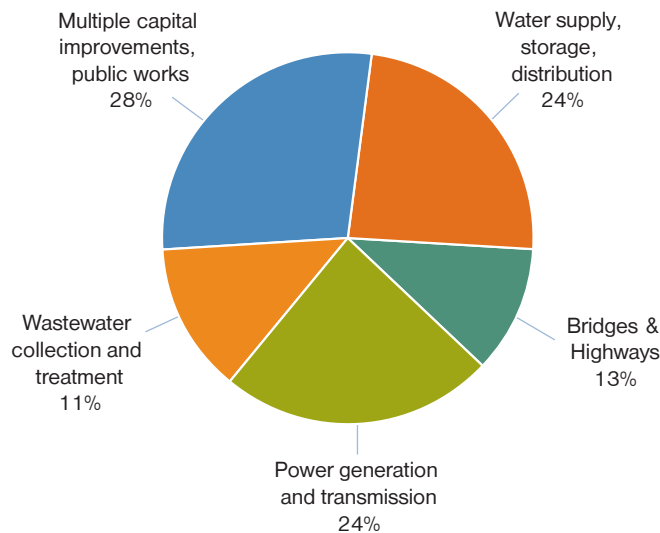


FIGURE 2
ISSUANCE BY PURPOSE, 2001-2011



¹ Infrastructure in this report is defined as power, water, sewer, new communities' infrastructure, bridges, transportation, county owned medical facilities and public buildings.

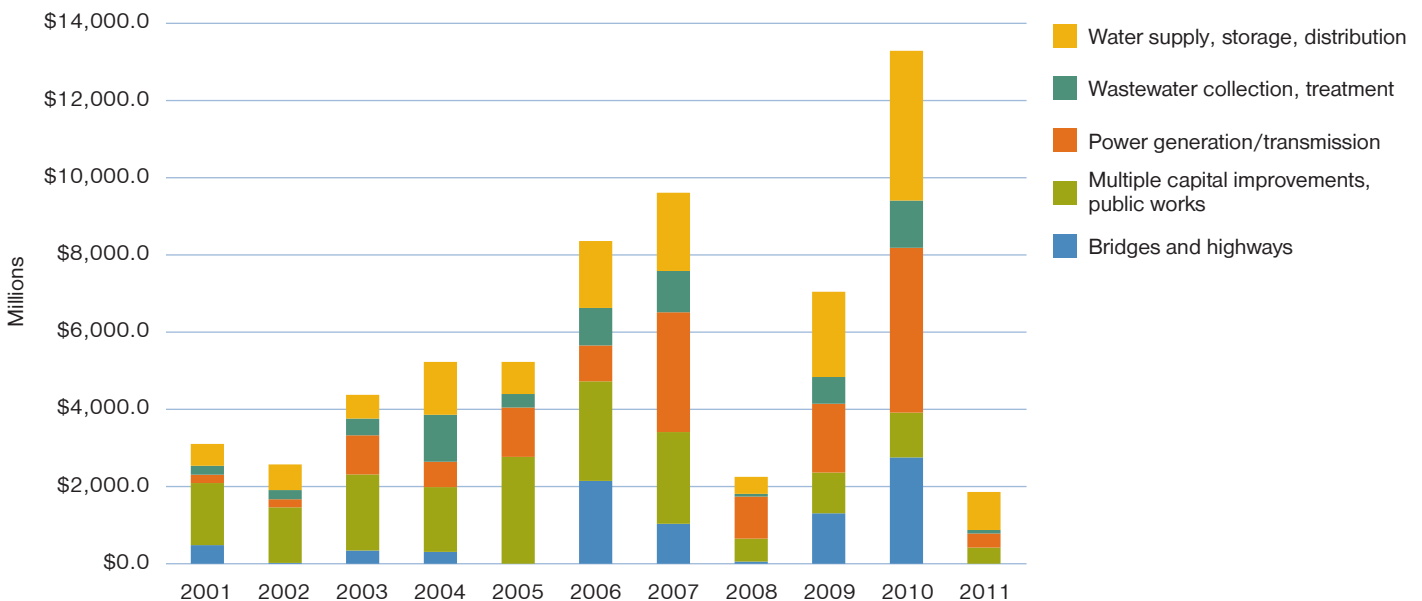
FIGURE 3

ISSUANCE BY MAJOR PROJECT CLASSIFICATION 2001-2011 (\$ MILLIONS)

YEAR	BRIDGES AND HIGHWAYS	MULTIPLE CAPITAL IMPROVEMENTS, PUBLIC WORKS	POWER GENERATION/ TRANSMISSION	WASTEWATER COLLECTION, TREATMENT	WATER SUPPLY, STORAGE, DISTRIBUTION
2001	\$485.0	\$1,607.7	\$214.9	\$227.8	\$565.6
2002	22.3	1,442.2	209.6	233.6	667.2
2003	341.1	1,973.4	1,013.2	430.2	616.5
2004	308.2	1,677.6	660.3	1,210.0	1,372.5
2005	0.0	2,769.5	1,277.0	348.5	830.9
2006	2,149.5	2,573.8	931.9	971.0	1,732.1
2007	1,031.7	2,381.5	3,105.0	1,066.0	2,029.8
2008	53.4	599.4	1,086.6	71.2	439.8
2009	1,308.2	1,053.1	1,787.3	688.5	2,205.9
2010	2,754.7	1,158.4	4,269.7	1,229.4	3,878.7
2011	0.0	416.8	366.7	91.1	982.7
TOTAL	\$8,454.1	\$17,653.3	\$14,922.1	\$6,567.3	\$15,321.7

FIGURE 4

TRENDS IN TOP 5 PURPOSES, 2001-2011



financed during the period. In 2010, large wind projects initiated by the Southern California Public Power Authority contributed to close to \$1 billion in issuance. Another surge occurred in 2007 with the issuance of revenue bonds in excess of \$1 billion to prepay natural gas purchases in northern and southern California. Power generation projects were primarily financed using public enterprise revenue bonds, with less than five percent financed by certificates of participation.

Water Related Projects

Water-related project financing was done by cities, counties, districts, joint powers authorities and community facilities districts using a variety of bond types. Water projects averaged about \$1 billion per year prior to the Build America Bond (BAB) program initiation in 2009. As with power, municipal utilities went to market with significant BAB issuance (\$4 billion) for water projects

during 2009 and 2010. Figure 5 presents the top ten BAB issuances by principal over the period 2009-2010.

Transportation Related Projects

The majority of transportation infrastructure issuance was used to build and improve bridges and roads in the San Francisco Bay Area, with a small percentage associated with an Orange County transportation project.

FIGURE 5

TOP TEN BAB ISSUERS FOR WATER PROJECTS 2001-2011

\$526,135,000	San Diego County Water Authority Financing Agency
492,710,000	Los Angeles Department of Water and Power
417,720,000	San Francisco City & County Public Utilities Commission
400,000,000	East Bay Municipal Utility District
351,470,000	San Francisco City & County Public Utilities Commission
346,090,000	Los Angeles Department of Water and Power
344,200,000	San Francisco City & County Public Utilities Commission
250,000,000	Metropolitan Water District of Southern California
250,000,000	Metropolitan Water District of Southern California
\$154,550,000	Stockton Public Financing Authority

FIGURE 6

ISSUANCE BY MUNICIPAL TYPE, 2001-2011

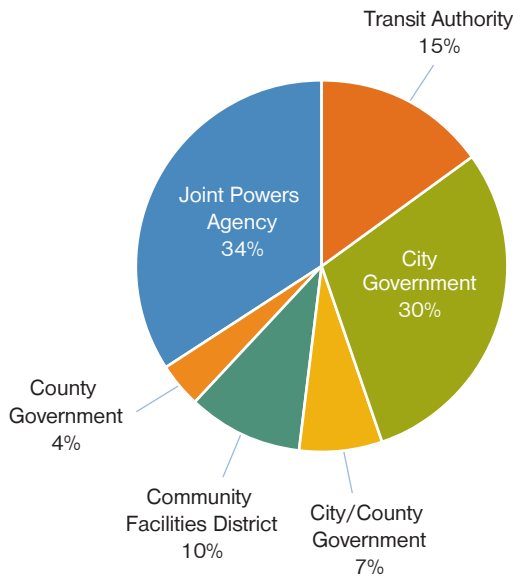
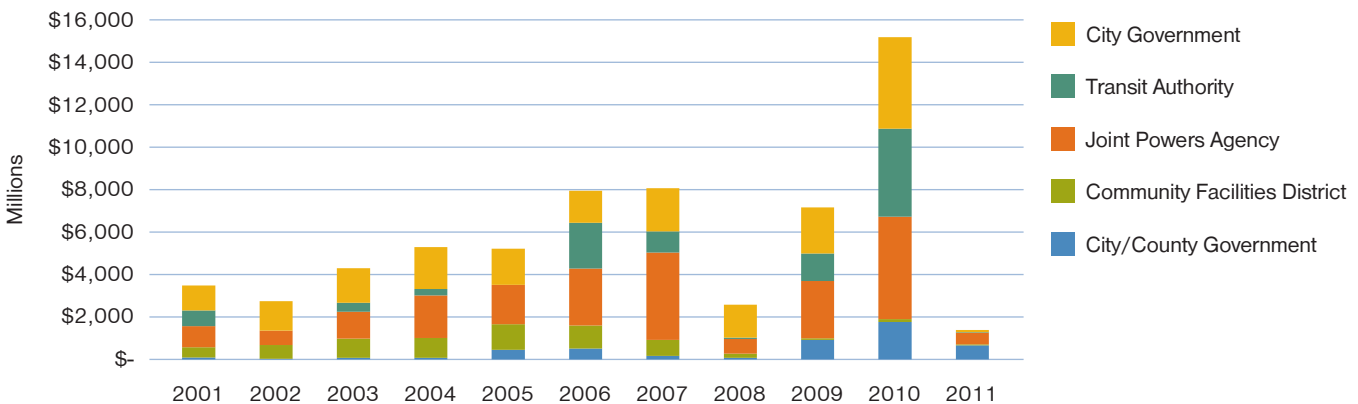


FIGURE 7

ISSUANCE TRENDS BY MUNICIPAL TYPE, 2001-2011



The Bay Area Toll Authority issued 93 percent of the bridge and highway financing which included \$1.1 billion in seismic retrofit expenses.

Other Public Works Projects

Projects in this category include infrastructure associated community development which includes public works projects related to the building and expansion of housing communities. As shown in the trended data in Figure 3, growth in these projects occurred during the building expansion of 2003-2007 while it decreased significantly after the housing slowdown. Issuance for 2009-2010 was primarily associated with non-housing projects. These included some public transportation improvements in San Diego County (\$300 million) and renovation of the Rose Bowl in the city of Pasadena (\$150 million).

ISSUANCE BY MUNICIPALITY

Joint powers agencies and cities were responsible for two thirds of the infrastructure financing during the period 2001 to 2011. They were the main issuers for water, power, sewer and transportation projects, while community facilities districts issued the majority of housing related community development debt.

The "City/County Government" issuance shown in Figures 6 and 7 represent the City and County of San Francisco, whose major financings revolved around water

and county hospital projects. County government expenditures were primarily related to airport expansion in Sacramento and Orange Counties along with major expansions in county hospitals and justice centers. The trends and mix of issuance by entity remained stable over the period, with the exception of increased issuance by San Francisco, as shown in Figure 7, during the BAB program period.

ISSUANCE BY BOND TYPE

Local agencies employed a variety of bond types to finance their infrastructure projects. Figures 8 and 9 show the breakdown of bond types during the period 2001-2011. Public enterprise revenue bonds, whose debt service is paid by revenues from the project, were issued in over half of the project financings. Revenue bonds and cer-

tificates of participation are used for large fee and lease based projects such as water, power bridges and government buildings, while bonds paid through taxes, such as general obligation bonds and limited tax obligation bond are associated with parks, hospitals, flood control and community development related to new and existing housing communities. Sales tax revenue bonds typically fund transportation proj-

FIGURE 8
ISSUANCE BY BOND TYPE, 2001-2011

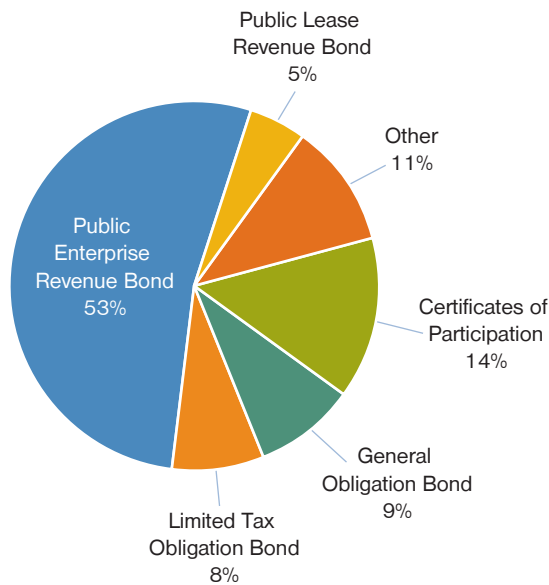
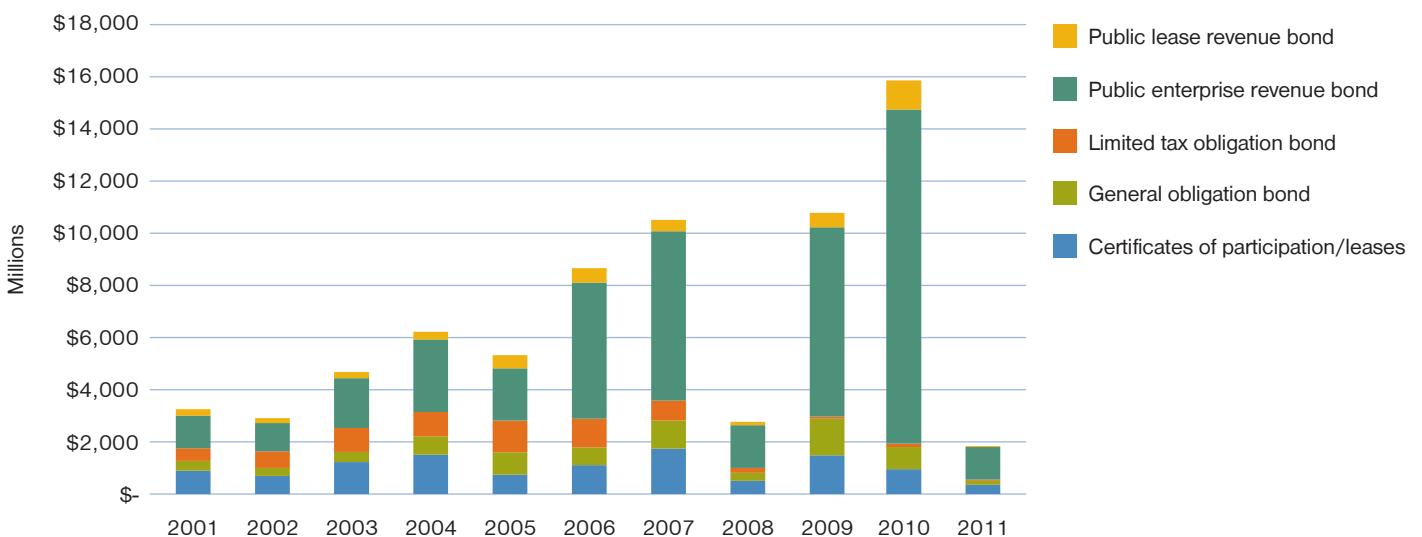


FIGURE 9
TRENDS IN TOP 5 BOND TYPES, 2001-2011



ects, while special assessment bonds fund public works and non-fee based power and utility related projects.

SUMMARY

California local agency public works issuance in 2011 proved to be the lowest volume in the past ten years. As suggested by this review, public works infrastructure financing by local agencies has not followed a formal long term planning cycle but rather appears to be driven by economic and market forces. For example, debt issuance has followed the housing boom of 2003-2007, collapse of the financial markets in 2008, then lifted by the BAB program in 2009-2010.

Large agencies in both northern and southern California took advantage of the BAB program; borrowing significant amounts to fund needed and delayed water, power, and transportation projects. As of 2011 and evidenced in 2012, the five year trough in housing development has essentially eliminated new housing community-related infrastructure financings over the past three years.

APPENDIX 1

SUMMARY OF LOCAL AGENCY INFRASTRUCTURE FINANCING

PROJECT	TOTAL ISSUANCE (\$000'S) 2001-2011	LEADING ISSUERS	LEADING BOND TYPES ISSUED
Airport	\$3,945,045	City, County	Public Enterprise Revenue
Bridges and highways	8,454,070	Transit Authority	Public Enterprise Revenue
Flood control, storm drainage	1,227,492	Community Facility District, Joint Powers Authority	Limited Tax Obligation Bond
Health care facilities	4,786,187	Health Care District Hospital District	General Obligation, Public Enterprise Revenue Certificate of Participation
Multiple capital improvements, public works	17,653,338	Joint Powers Authority, Community Facilities Districts	Special Assessment, Limited Tax Obligation Bond, Multiple
Other capital improvements, public works	265,903	City	Special Assessment
Parks, open space	662,481	Multiple	General Obligation, Certificate of Participation
Ports, marinas	582,605	Multiple	Public Enterprise Revenue Bond, Public Lease Revenue Bond
Power generation/transmission	14,922,124	Joint Powers Authority, City	Special Assessment
Prisons, jails, correctional facilities	251,643	Multiple	Multiple
Public building	3,065,651	City, Joint Powers Authority	Certificate of Participation, General Obligation
Public transit	2,729,965	Transit Authority	Sales Tax Revenue, Certificate of Participation
Seismic safety, improvements, repairs	51,910	Multiple	Multiple
Solid waste recovery facilities	484,625	City, County, Joint Powers Authority	Public Enterprise, Certificate of Participation
Street construction and improvements	435,778	City, Joint Powers Authority, Community Facilities Districts	Special Assessment, Limited Tax Allocation, Certificate of Participation
Wastewater collection, treatment	6,567,289	Multiple	Multiple (Revenue Related)
Water supply, storage, distribution	\$15,321,717	Multiple	Public Enterprise, Certificate of Participation