

Building Schools for Tomorrow Committee

Financing Facilities Over
Time to Match Revenue
Sources



SIERRA SANDS
Unified School District
— Engaging All Learners —



Government
Financial
Strategies

Lori Raineri and Matt Kolker

Agenda

- ◆ District's History with Financing Facilities
- ◆ Funding Mechanisms
- ◆ How a Bond Measure Works
- ◆ Accountability and Oversight



There Are Only Three Sources of Money

- ◆ Money in the Cookie Jar
- ◆ Someone Else's Money
- ◆ Money to Come in the Future



✓ *Also known as:*

- *cash on hand*
- *gifts/grants/new taxes*
- *borrowing*



Potential Funding Sources Identified

- ◆ General Fund
- ◆ Developer Fees
- ◆ Department of Defense Grants
- ◆ State School Construction Program



- ✓ *Without an additional source of locally controlled dedicated facilities funding, it is unlikely that the District will be able to address important facilities needs.*

Three Ways for School Districts to Borrow

◆ Notes

- ▶ Short term borrowing in “anticipation” of specified revenue

◆ Bonds

- ▶ Require voter approval
- ▶ Repaid from taxes

◆ Lease-Purchase Agreements (including Certificates of Participation)

- ▶ No voter approval
- ▶ Repaid from budget

District's History of Financing Facilities

General Obligation Bond Election

Date	Measure	Voter Requirement	Vote Received	Authorization	Issued	Remaining
Jun 6, 2006	A	55%	61.1%	\$50,500,000	\$24,869,401	\$25,630,599

General Obligation Bonds, June 2006 Election - Measure A, \$50,500,000

Series	Issue Date	Type	Issuance - New Money	Issuance - Refinancing	Total Issuance	Net Debt Service	Debt Service to Principal at Issuance	Principal Paid & to be Paid as of Sep 1, 2021	Debt Service Paid & to be Paid as of Sep 1, 2021	Outstanding Principal as of Sep 1, 2021	Final Maturity	Able to Call?	Next Call Date	Callable Principal	Weighted Average Callable Coupon	Next Call Premium	
2006A	Aug - 2006	CIBs	\$14,715,000	\$0	\$14,715,000	\$23,344,523	1.59 : 1	\$5,450,000	\$11,881,138	\$0	Nov 1, 2017	n/a	n/a	\$0	n/a	n/a	(1), (3)
		CABs	\$4,752,868	\$0	\$4,752,868	\$13,620,000	2.87 : 1	\$4,752,868	\$13,620,000	\$4,752,868	May 1, 2031	No	n/a	\$0	n/a	n/a	
2008	Dec - 2008	CIBs	\$1,975,000	\$0	\$1,975,000	\$4,058,400	2.05 : 1	\$0	\$814,688	\$0	n/a	n/a	n/a	\$0	n/a	n/a	(2), (3)
		CABs	\$3,426,532	\$0	\$3,426,532	\$14,215,763	4.15 : 1	\$3,426,532	\$14,215,763	\$3,076,061	Nov 1, 2033	No	n/a	\$0	n/a	n/a	
2017 Ref	Sep - 2017	CIBs	\$0	\$11,668,508	\$11,668,508	\$12,984,437	1.11 : 1	\$11,668,508	\$12,984,437	\$7,782,142	Nov 1, 2029	Yes	May 1, 2027	\$1,691,795	2.14%	0.00%	(3)
			<u>\$24,869,401</u>	<u>\$11,668,508</u>	<u>\$36,537,909</u>	<u>\$68,223,122</u>		<u>\$25,297,909</u>	<u>\$53,516,025</u>	<u>\$15,611,072</u>							

Debt Service to Principal Ratios

Debt service of new money issuances to new money principal: 2.22 : 1
 Total debt service after refinancings to new money principal: 2.15 : 1

Certificates of Participation

Series	Issue Date	Type	Issuance - New Money	Issuance - Refinancing	Total Issuance	Net Debt Service	Debt Service to Principal at Issuance	Principal Paid & to be Paid as of Sep 1, 2021	Debt Service Paid & to be Paid as of Sep 1, 2021	Outstanding Principal as of Sep 1, 2021	Final Maturity	Able to Call?	Next Call Date	Callable Principal	Weighted Average Callable Coupon	Next Call Premium	
2010A	Jun - 2010	CIBs	\$14,150,000	\$0	\$14,150,000	\$16,663,932	1.18 : 1	\$14,150,000	\$17,154,085	\$8,650,000	Jun 1, 2026	Yes	Dec 1, 2021	\$8,650,000	1.73%	0.00%	(4)
2010B	Jun - 2010	CIBs	\$2,115,000	\$0	\$2,115,000	\$2,330,319	1.10 : 1	\$2,115,000	\$2,330,319	\$0	May 10, 2015	n/a	n/a	\$0	n/a	n/a	(5)
			<u>\$16,265,000</u>	<u>\$0</u>	<u>\$16,265,000</u>	<u>\$18,994,251</u>		<u>\$16,265,000</u>	<u>\$19,484,403</u>	<u>\$8,650,000</u>							

Debt Service to Principal Ratios

Debt service of new money issuances to new money principal: 1.17 : 1
 Current total debt service to new money principal: 1.20 : 1

Inyo-Kern Schools Financing Authority - Lease Revenue Bonds

Issue	Issue Date	Type	Issuance - New Money	Issuance - Refinancing	Total Issuance	Net Debt Service	Debt Service to Principal at Issuance	Principal Paid & to be Paid as of Sep 1, 2021	Debt Service Paid & to be Paid as of Sep 1, 2021	Outstanding Principal as of Sep 1, 2021	Final Maturity	Able to Call?	Next Call Date	Callable Principal	Weighted Average Callable Coupon	Next Call Premium	
2007	Mar - 2007	CIBs	\$4,500,000	\$0	\$4,500,000	\$7,065,646	1.57 : 1	\$1,270,000	\$2,940,943	\$0	May 1, 2017	n/a	n/a	\$0	n/a	n/a	(6), (7)
2017 Ref	Oct - 2017	CIBs	\$0	\$3,087,684	\$3,087,684	\$3,630,474	1.18 : 1	\$3,087,684	\$3,630,474	\$2,283,289	May 1, 2031	Yes	May 1, 2027	\$978,827	2.38%	0.00%	(7)
			<u>\$4,500,000</u>	<u>\$3,087,684</u>	<u>\$7,587,684</u>	<u>\$10,696,120</u>		<u>\$4,357,684</u>	<u>\$6,571,417</u>	<u>\$2,283,289</u>							

Debt Service to Principal Ratios

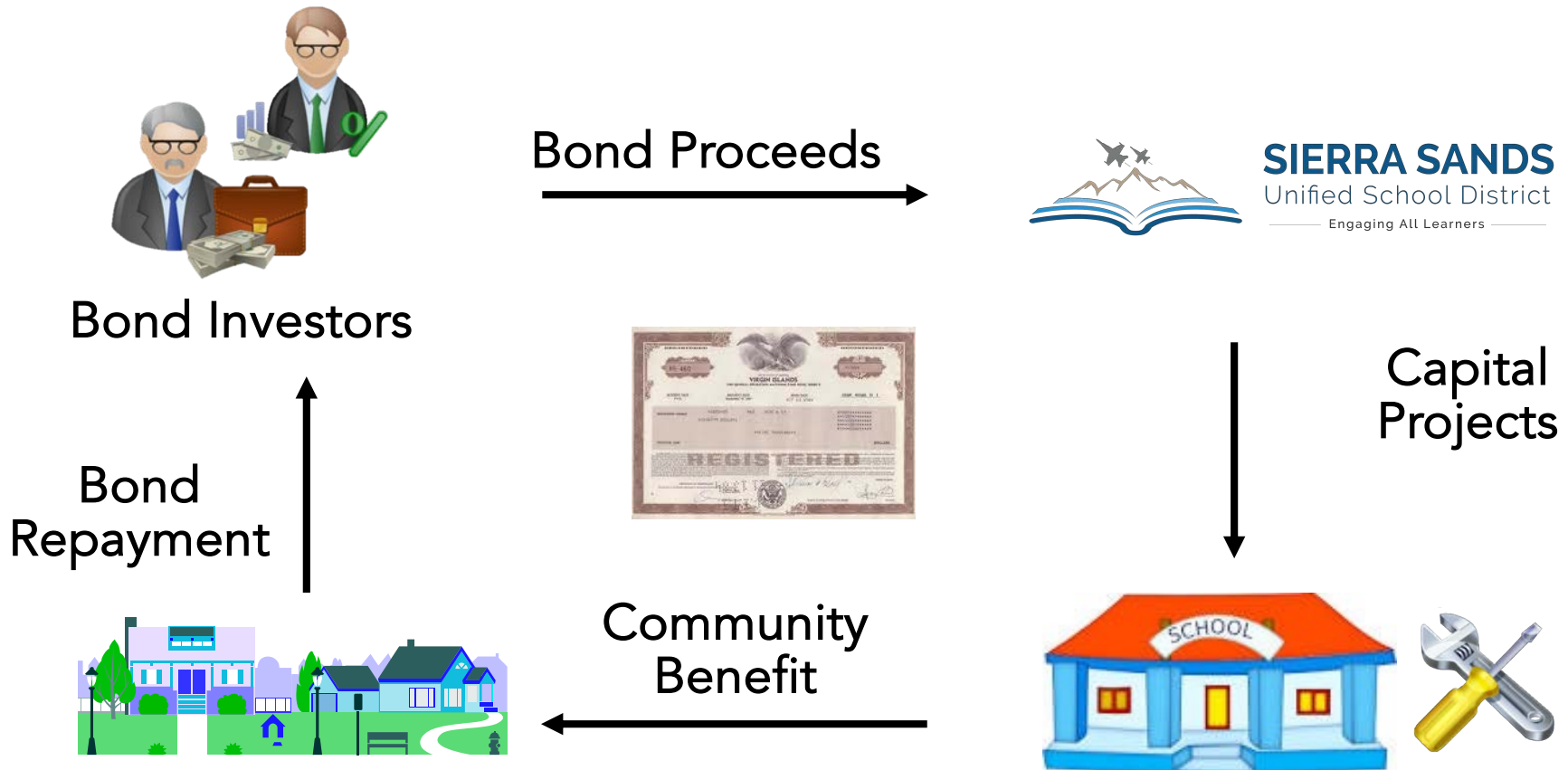
Debt service of new money issuances to new money principal: 1.57 : 1
 Current total debt service to new money principal: 1.46 : 1

- (1) Series 2006A CIB net debt service reflects deposit of \$88,945 to Debt Service Fund.
- (2) Series 2008 CIB net debt service reflects deposit of \$94,443 to Debt Service Fund.
- (3) 2006A CIBs and 2008 CIBs refinanced by 2017 Refunding Bonds, saving taxpayers \$1,722,660.
- (4) Net debt service shown reflects federal subsidy rate of 5.32%, resulting in net borrowing rate of 1.43% (6.75% - 5.32%). However, sequestration has reduced subsidy by \$490,153 (currently a reduction of 5.7% of the subsidy amount).
- (5) 2010 B CDP net debt service reflects deposit of \$304,619 to Capitalized Interest Fund.
- (6) Net debt service reflects application of \$297,112 deposited to reserve.
- (7) 2007 Lease Revenue Bonds refinanced by 2017 Refunding, saving District \$471,945 (assumes 0.5% interest earnings on reserve account, totaling \$21,541).

General Obligation Bonds

- ◆ Common in California since the early 20th Century
 - ▶ In 1978, Proposition 13 superseded authority
 - ▶ In 1986, restored at 2/3 voter approval level
 - ▶ In 2000, 55% voter approval measures allowed with additional accountability requirements
 - Maximum projected tax levy and specified citizens' oversight
- ◆ "Full Faith and Credit Bond" - Unlimited taxing authority
- ◆ "Ad Valorem" taxation
- ◆ Bonding capacity limited to 2.50% of AV for unified districts (1.25% of AV for union districts)
- ◆ County is responsible for ongoing administration
- ◆ No political discretion

A Bond is a Loan

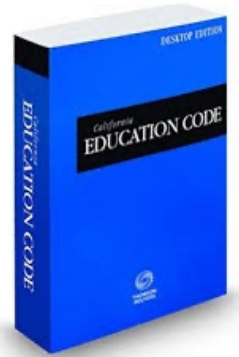


- ◆ A bond is a loan. Just like a home mortgage, a general obligation bond allows the taxpayers to buy and receive the benefit of the facilities now, and pay for them over time.

Issuing Bonds - Key Legal Constraints

◆ Bonding Capacity: limit on amount of outstanding bonds (this is for all bond measures combined)

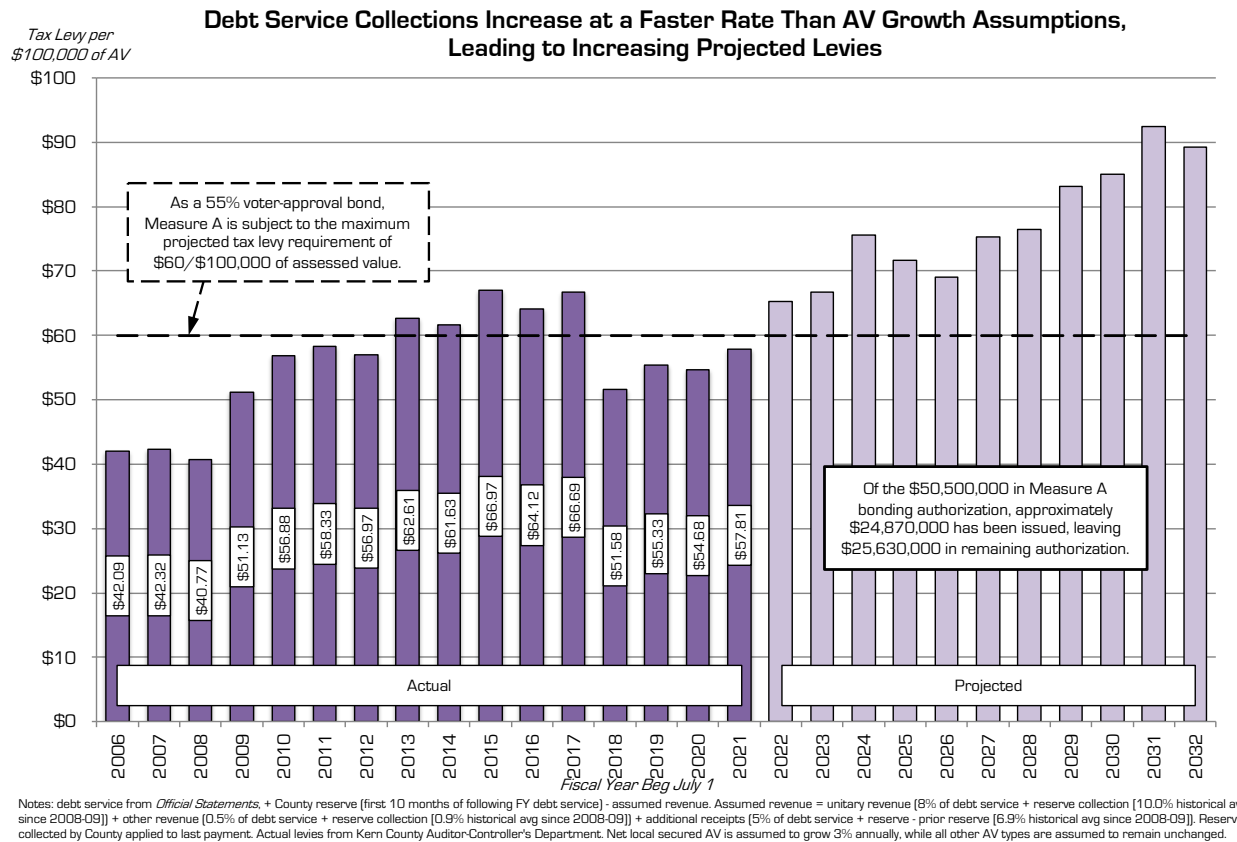
- ▶ 1.25% of total assessed value for union districts
 - Education Code 15268
- ▶ 2.50% of total assessed value for unified districts
 - Education Code 15270(a) ✓



◆ Taxing Capacity: limit on maximum projected tax levies (this is for 55% voter approval bond measures only)

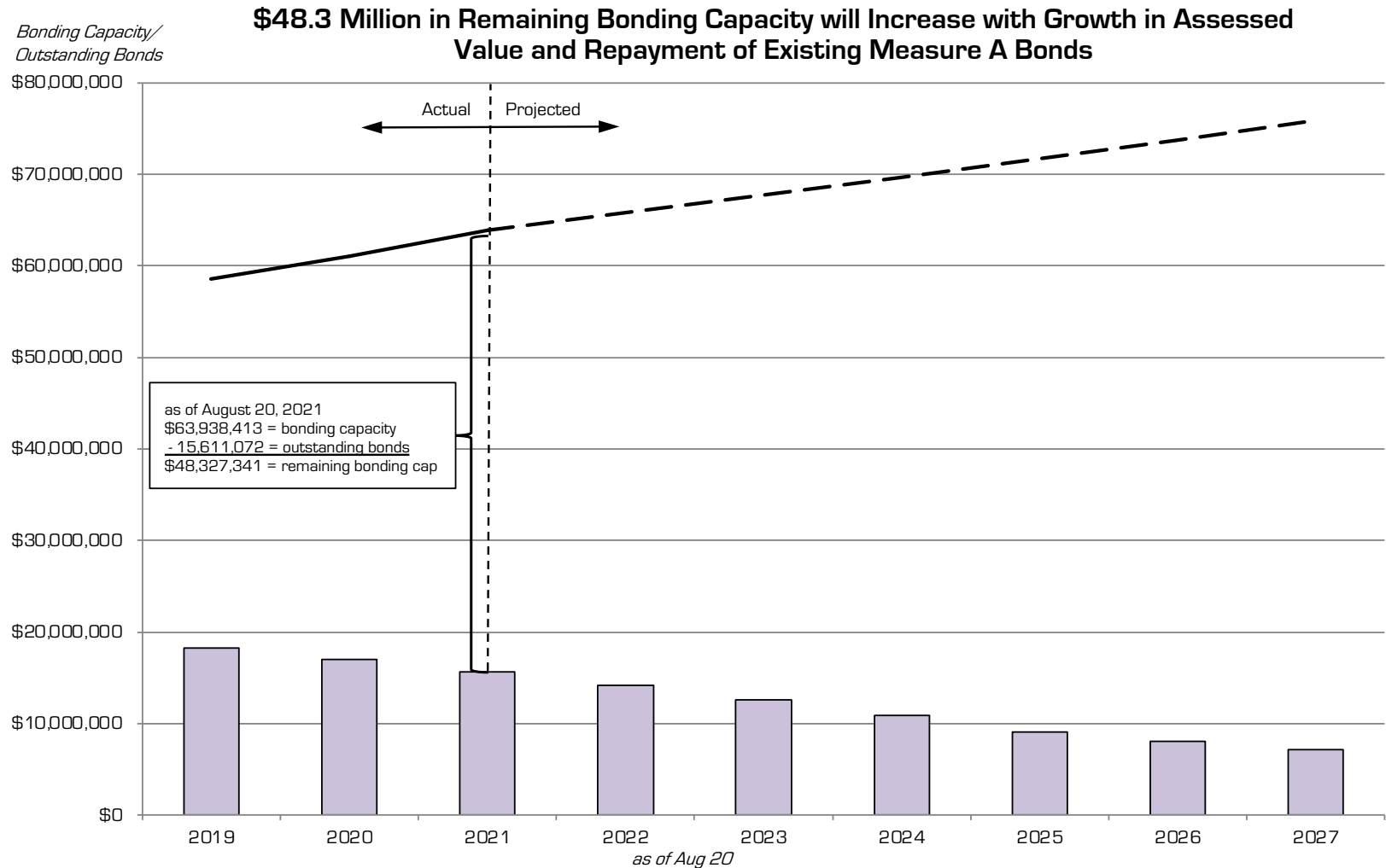
- ▶ \$30 per \$100,000 of assessed value for union districts
 - Education Code 15268
- ▶ \$60 per \$100,000 of assessed value for unified districts
 - Education Code 15270(a) ✓

Proj. Tax Levies for Existing Measure A Bonds > \$60



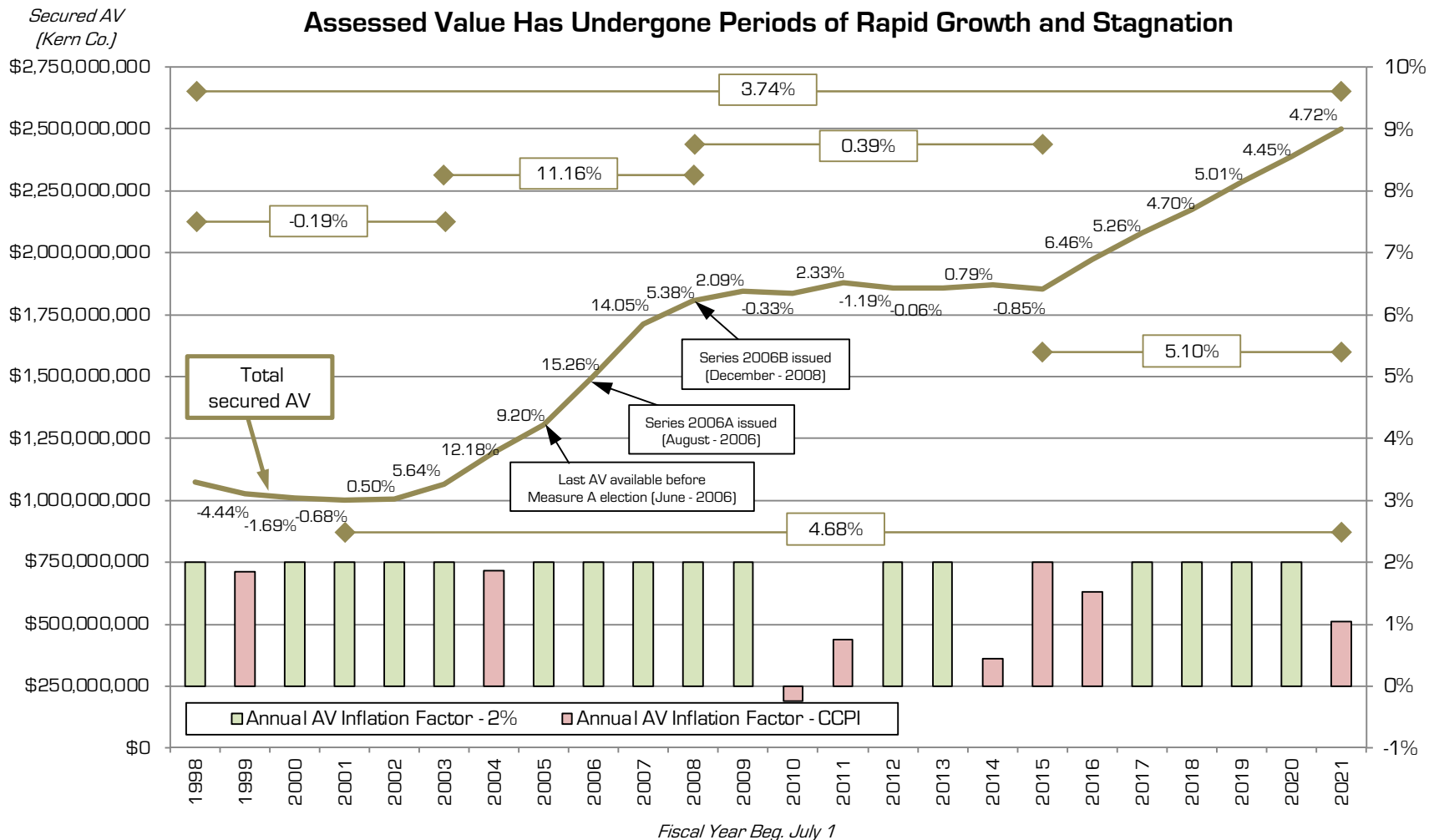
- ✓ Based on AV growth assumptions herein, not practical to issue additional Measure A Bonds within \$60 projected tax levy.
- ✓ Net Local Secured AV growth assumption of at least 10% would be needed for projected tax levies to be ≤ \$60 and to issue remaining authorization (primarily using CABs).

Opportunity for New Measure



Outstanding Measure A bond data from Official Statements. AV through 2021-22 is actual, provided by Kern and San Bernardino Auditor-Controller's Departments. Net local secured AV is assumed to grow 3% annually, while all other types of AV are assumed to remain unchanged. Data is as of August 20 each year when bonding capacity becomes "equalized." Values rounded.

Historical Assessed Value



Sierra Sands USD is situated primarily within Kern Co., historically, approximately 0.6% of the District's assessed value is in San Bernardino Co. Kern Co. assessed value obtained from Kern County Auditor-Controller's department. For San Bernardino Co., no AV available for 1998-99 - 2000-01; therefore only Kern Co. data is shown above. (The Kern Co. portion of the District averaged 4.68% growth since 2001-02, while the San Bernardino Co. portion average 3.19%.) AV from 2001-02 - 2003-04 from District's 2006A Bonds official statement citing California Municipal Statistics. Date ranges show compounded annual growth rates while other changes shown are annual changes. Annual California AV inflation factor provided by the California State Board of Equalization, and is the lesser of the annual change in the CA CPI or 2%.

Four (4) Reasons Secured Assessed Value Can Change

- ◆ Pursuant to Proposition 13 (and embodied in Article 13A of the California Constitution), a school district's real property tax base can change for four reasons:

1) Properties are sold (and reassessed at the sale price).



2) Properties are improved (and reassessed with the value of the improvement).



Four (4) Reasons Secured Assessed Value Can Change (Cont.)

- ◆ Pursuant to Proposition 13 (and embodied in Article 13A of the California Constitution), a school district's real property tax base can change for four reasons (cont.):

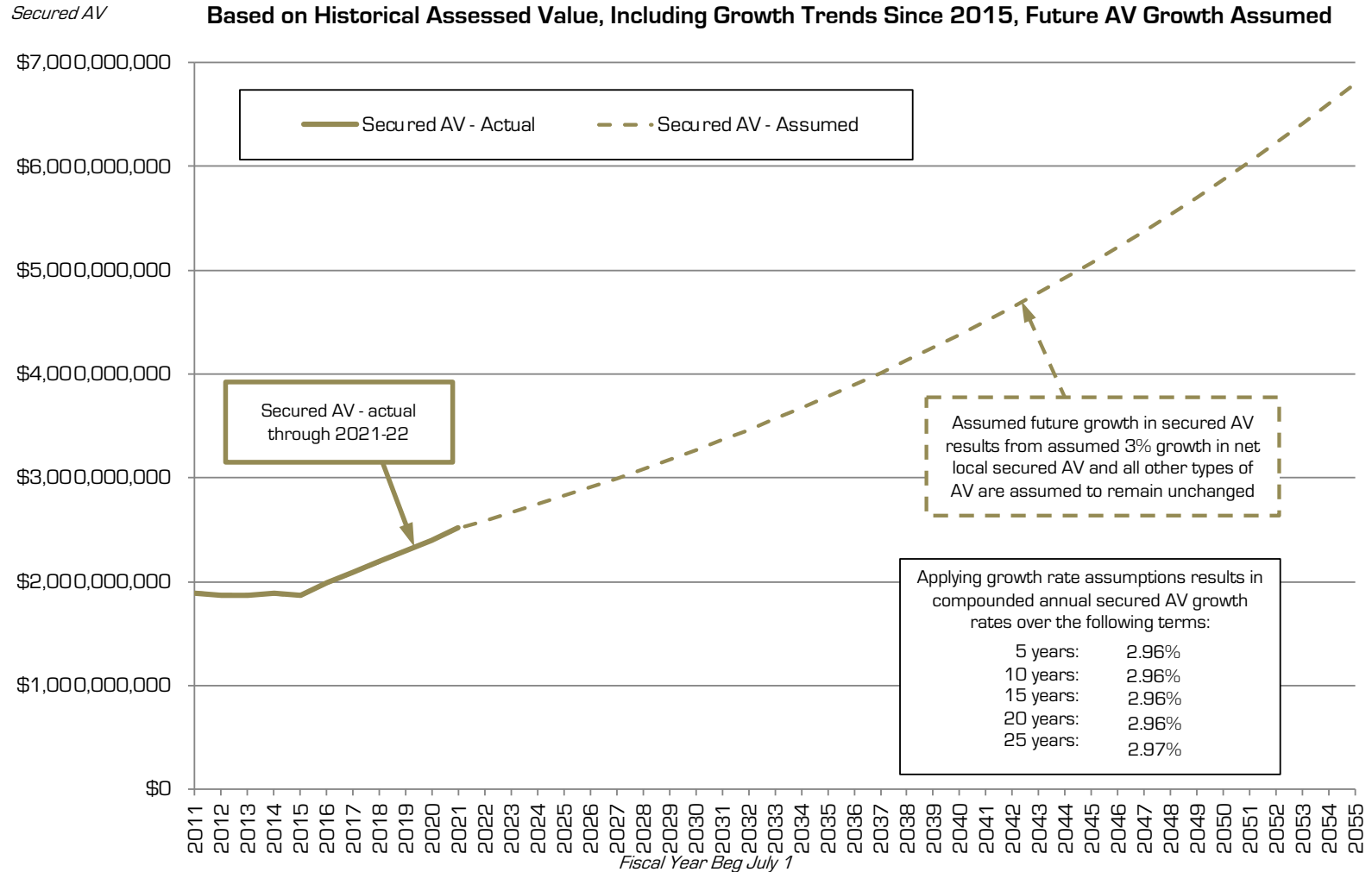
3) A year passes (each property's assessed value increases by the lesser of 2% or the change in the California Consumer Price Index).



4) Market value of one or more properties declines below assessed value - assessed value can be adjusted downward to the market value. If market value subsequently increases, assessed value can "catch up" to pre-decline AV plus allowable adjustments (e.g. 2% annual increase).



Projected Assessed Value



Actual assessed value obtained from Auditor-Controller's departments from Kern and San Bernardino Counties.

Bond Tax Levies

- ◆ Bond tax rate \approx debt service \div assessed value
- ◆ Each property in the District pays its pro rata share, based on its individual assessed value (not market value)



Development of Bond Financing Plan for Potential New Bond Measure

◆ Elements of Plan

▶ Tax Base Analysis

- Historical and projected assessed value

▶ Bonding capacity (maximum bonds outstanding)

▶ Taxing capacity (maximum projected tax levy)

▶ Interest rate assumptions

▶ Capital funding cash flow needs

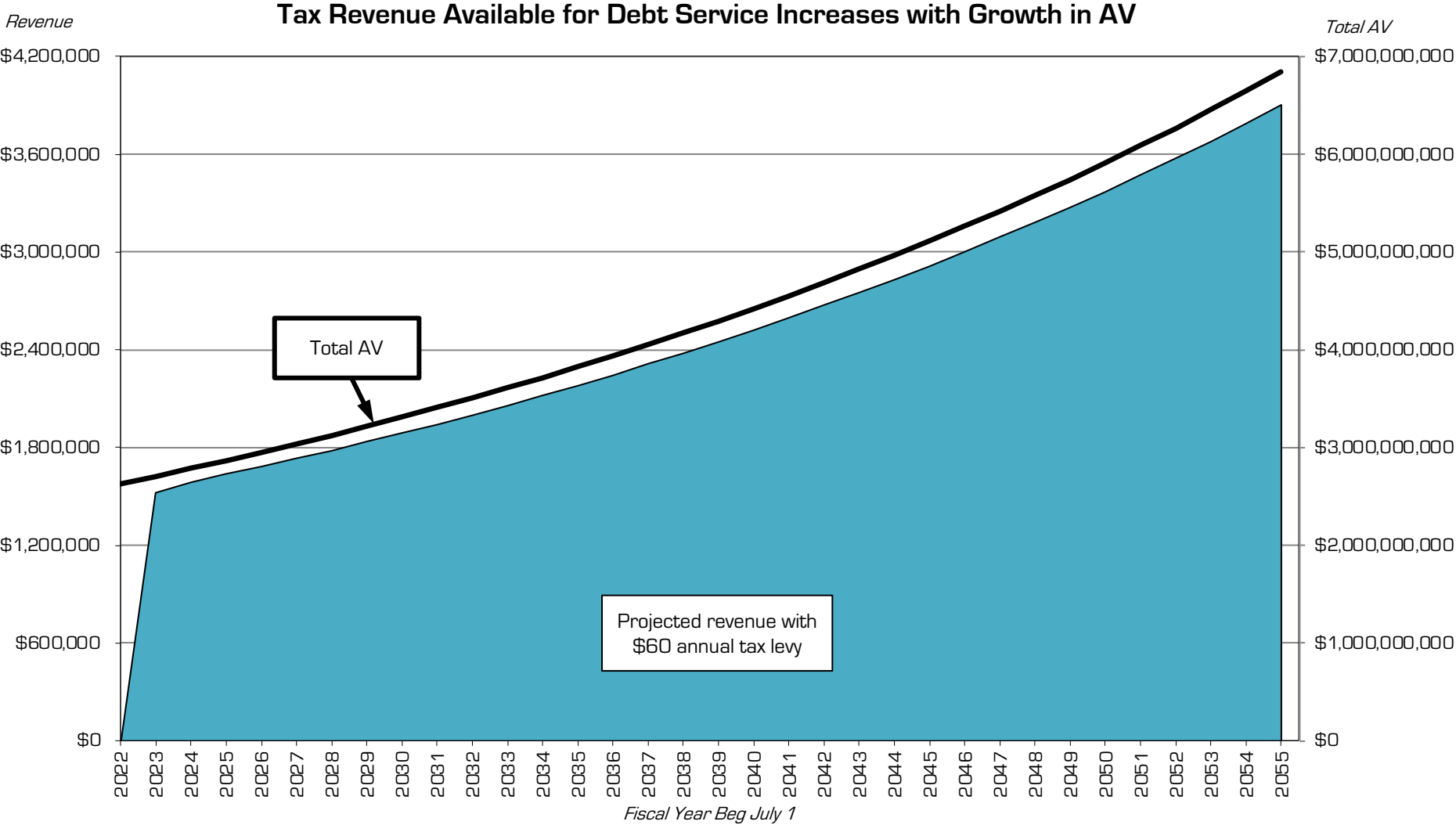
▶ 3-year Expenditure Reasonable Expectations Test



✓ *Sound pre-election planning maximizes chances of successful post-election implementation.*



Stable Tax Rate → Payments Grow w/Proj. AV

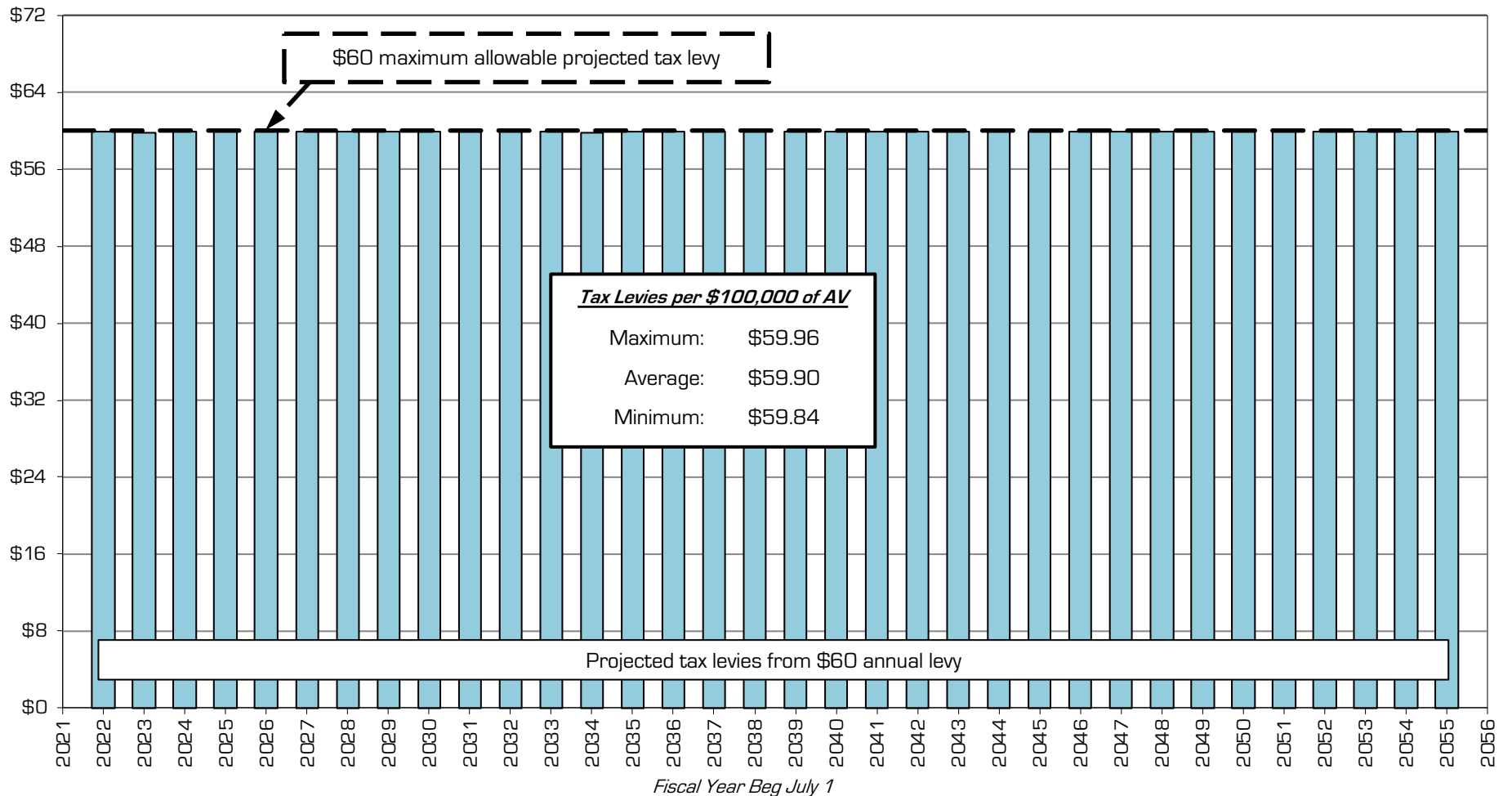


Notes: 2021-22 AV is actual. Tax revenue based on assumed net local secured growth rate of 3% annually, while all other types of AV are assumed to remain constant, and assumes a \$60 annual tax levy per \$100,000 of AV.

Projected Tax Levies ≤ \$60 / \$100,000 AV

Tax Levies per \$100,000 of AV

Bond Plan Structured So Projected Levies Do Not Exceed Desired Level

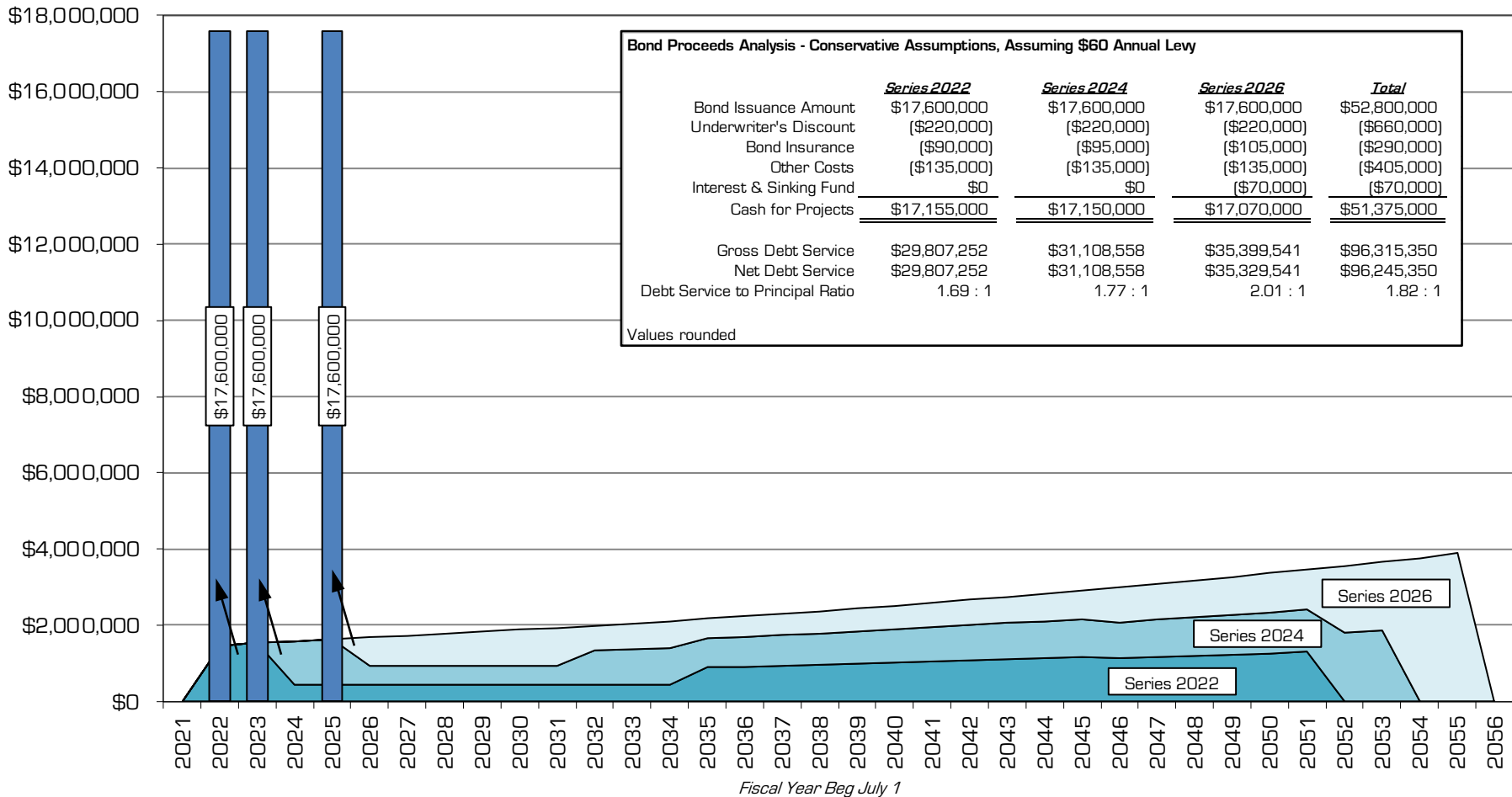


Notes: debt service is assumed based on "AAA" MMD rates as of Aug 16, 2021, plus 75bp for assumed "A+" rating of bonds, plus adjustments for possible rate increases prior to issuances (+125bp for 2022, +150bp for 2024, & +175bp for 2026). Net local secured AV is assumed to increase 3% annually, while all other AV types are assumed to remain unchanged. Net collection assumes County reserve policy (first 10 months of following FY debt service) less assumed revenue. Assumed revenue = unitary revenue 8% of debt service + reserve collection [10.0% historical avg since 2008-09] + other revenue [0.5% of debt service + reserve collection [0.9% historical avg since 2008-09]] + additional receipts [5% of debt service + reserve - prior reserve [6.9% historical avg since 2008-09]]. Reserve collected by County applied to last payment.

Approx. \$51.4M for Needs is Achievable

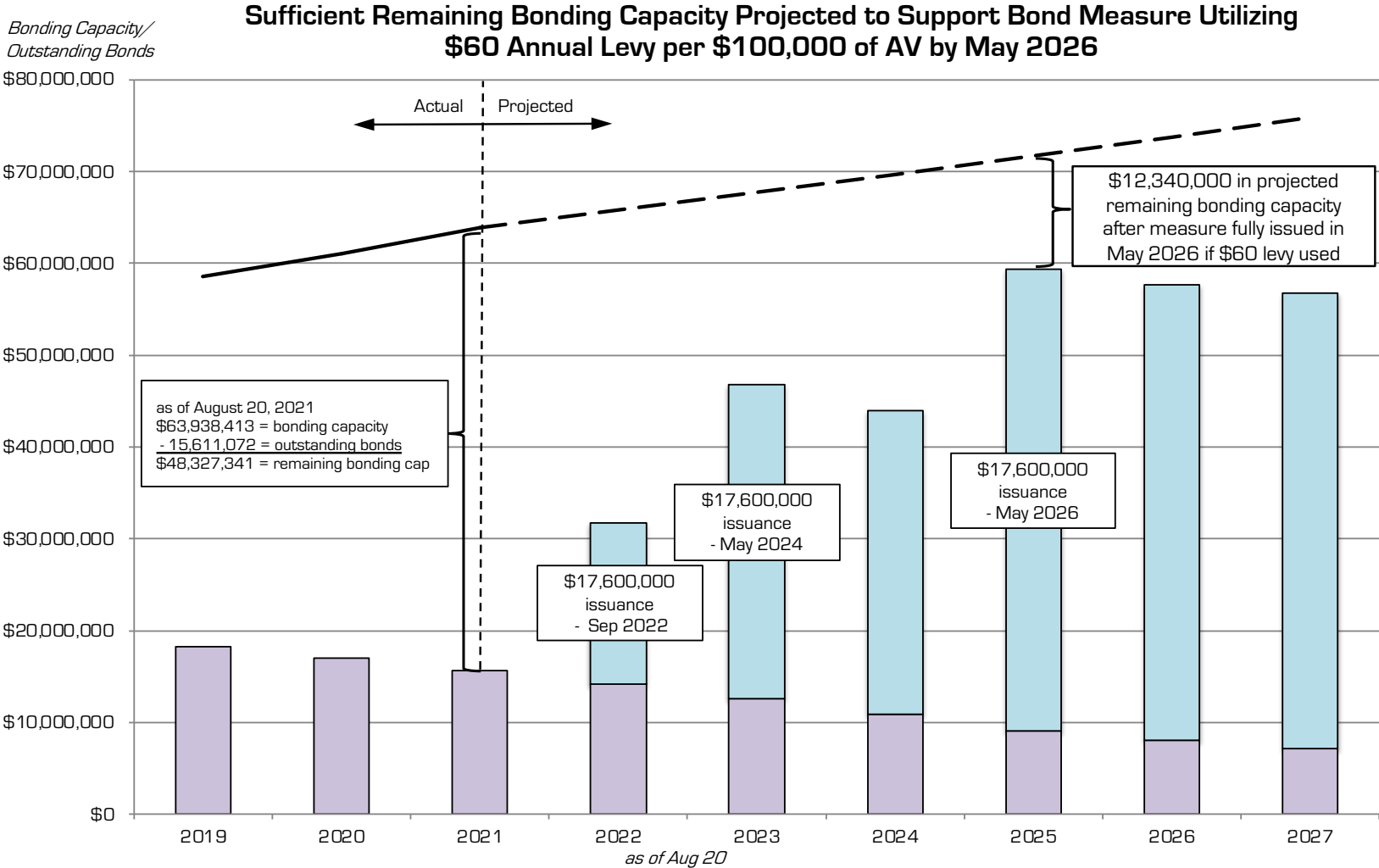
\$52.8 Million Issuance Projected by \$60 Annual Tax Levy

Issuance/Net
Debt Service



Notes: debt service is assumed based on "AAA" MMD rates as of Aug 16, 2021, plus 75bp for assumed "A+" rating of bonds, plus adjustments for possible rate increases prior to issuances (+125bp for 2022, +150bp for 2024, & +175bp for 2026). Net local secured AV is assumed to increase 3% annually, while all other AV types are assumed to remain unchanged. Net collection assumes County reserve policy (first 10 months of following FY debt service) less assumed revenue. Assumed revenue = unitary revenue 8% of debt service + reserve collection [10.0% historical avg since 2008-09]] + other revenue [0.5% of debt service + reserve collection [0.9% historical avg since 2008-09]] + additional receipts [5% of debt service + reserve - prior reserve [6.9% historical avg since 2008-09]]. Reserve collected by County applied to last payment.

Bonding Capacity is Sufficient



Outstanding Measure A bond data from Official Statements. AV through 2021-22 is actual, provided by Kern and San Bernardino Auditor-Controller's Departments. Net local secured AV is assumed to grow 3% annually, while all other types of AV are assumed to remain unchanged. Data is as of August 20 each year when bonding capacity becomes "equalized." Values rounded.

Ad Valorem Taxes ≈ \$1.09 Per \$100 of Assessed Value



2021 ANNUAL SECURED PROPERTY TAX BILL
FOR FISCAL YEAR BEGINNING JULY 1, 2021 AND ENDING JUNE 30, 2022

CURRENT OWNER
[REDACTED]

A PROPERTY ADDRESS - DESCRIPTION
[REDACTED]

B OWNER AS OF 01/01/21
[REDACTED]

C IMPORTANT MESSAGES
[REDACTED]

REPRINTED BILL

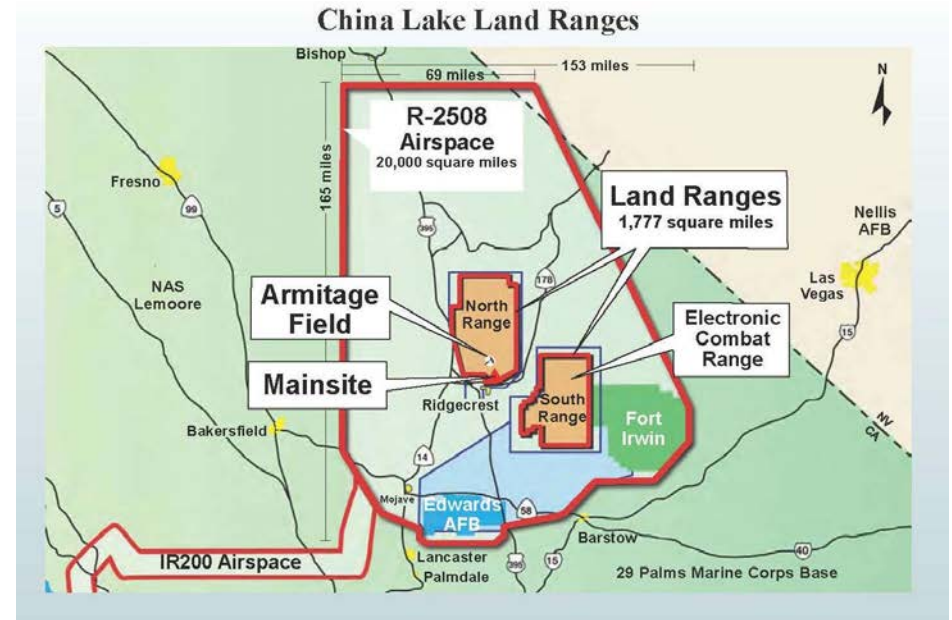
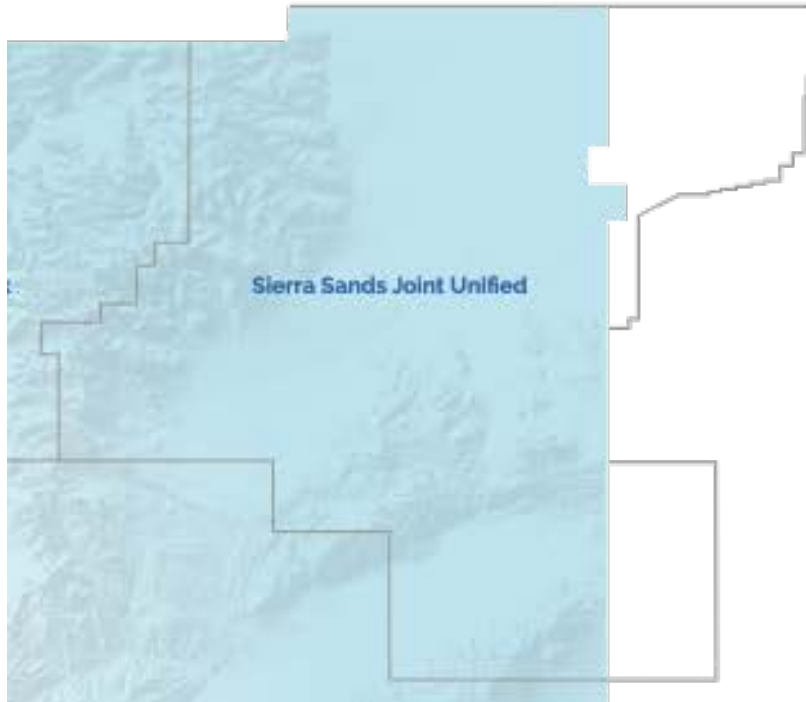
D	E	F	G	H	I
BILL NO.	ASSESSOR TAX NO.	TAX RATE AREA	1ST INSTALLMENT	2ND INSTALLMENT	TOTAL DUE
[REDACTED]	[REDACTED]	111-007	810.96	810.96	1,621.92

YOUR TAX DISTRIBUTION			YOUR TAX DISTRIBUTION		
TAXING AGENCY	RATE/PHONE#	TAX AMOUNT	TAXING AGENCY	RATE/PHONE#	TAX AMOUNT
GEN LOCAL GOVT	1.000000	1,383.56			
SIERRA SANDS 06B	.012329	17.05			
SIERRA SAND ABRF	.045481	62.92			
KCCD SRID 2002B	.011797	16.19			
KCCD SRID 2002C	.002334	3.22			
KCCD SFID 16B	.018603	25.73			
KCCD SFID 16C	.005965	8.25			
*KCSWHP LAND USE	661-862-8888	105.00			
TOTAL	1.096419	1,621.92			

J	VALUES	MINERAL	LAND	IMPROVEMENTS	OTHER IMPROVEMENTS	PERSONAL PROPERTY	EXEMPTIONS	K	NET TOTAL VALUE
01/01/21		0	6,315	139,038	0	0	7,060		138,353

- ◆ Sample Tax Bill (for 2021-22) with a net assessed value of \$138,353, near the 2019-20 median single family residential net assessed value of \$136,827
- ◆ Ad Valorem Taxes = \$1.094619 per \$100 of Assessed Value
 - ▶ 1.0% general local government property tax
 - ▶ 0.094619% is the total of all bond taxes
- ◆ In this case, a total of:
 - General Local Government Property Tax \$1,383.56
 - Voter Approved Bonds +\$133.36
 - Special Assessments +\$105.00
 - \$1,621.92**
- ◆ Voter approved taxes are listed separately
 - ▶ Per \$100, Measure A totals 0.05781
 - In this case, a total of \$79.97

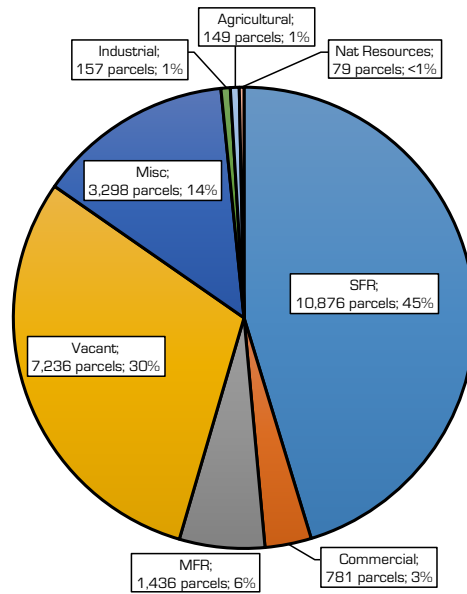
Approx. 87% of Acreage in District is Gov't Owned



✓ Slightly more than 97% of Government owned land in the District is Federal

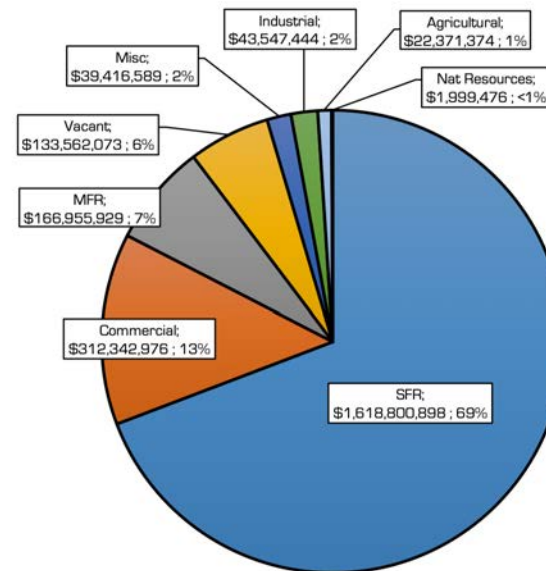
SFR Are 45% of Total Parcels, but 69% of Total AV*

45% of District Parcels are SFR



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Misc comprised of County categories: Miscellaneous, Exempt, Institutional, None, Unknown, & parcels with \$0 AV. Percentages rounded.

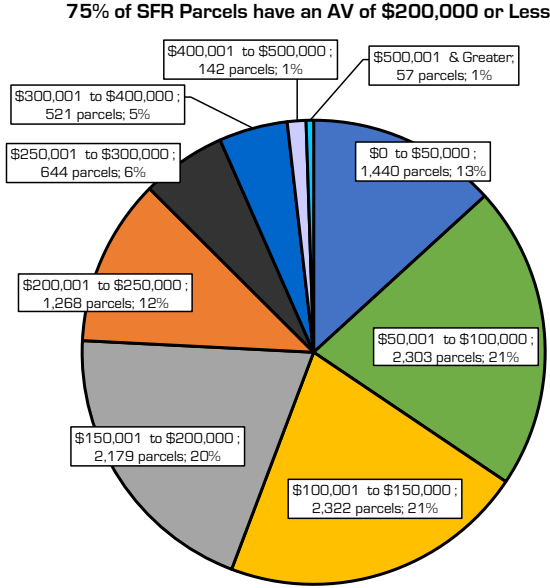
69% of AV in District is SFR



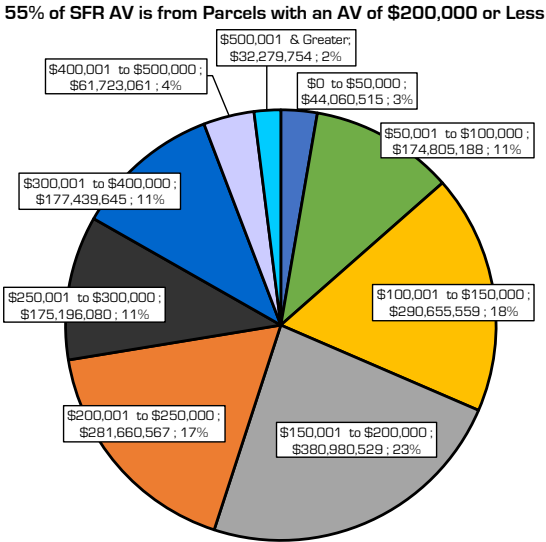
Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Misc comprised of County categories: Miscellaneous, Exempt, Institutional, None, Unknown, & parcels with \$0 AV. Percentages rounded.

* Tax base data from FY 2019-20

75% of SFR Parcels Assessed ≤ \$200k; Comprise 55% of SFR Total Assessed Value



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

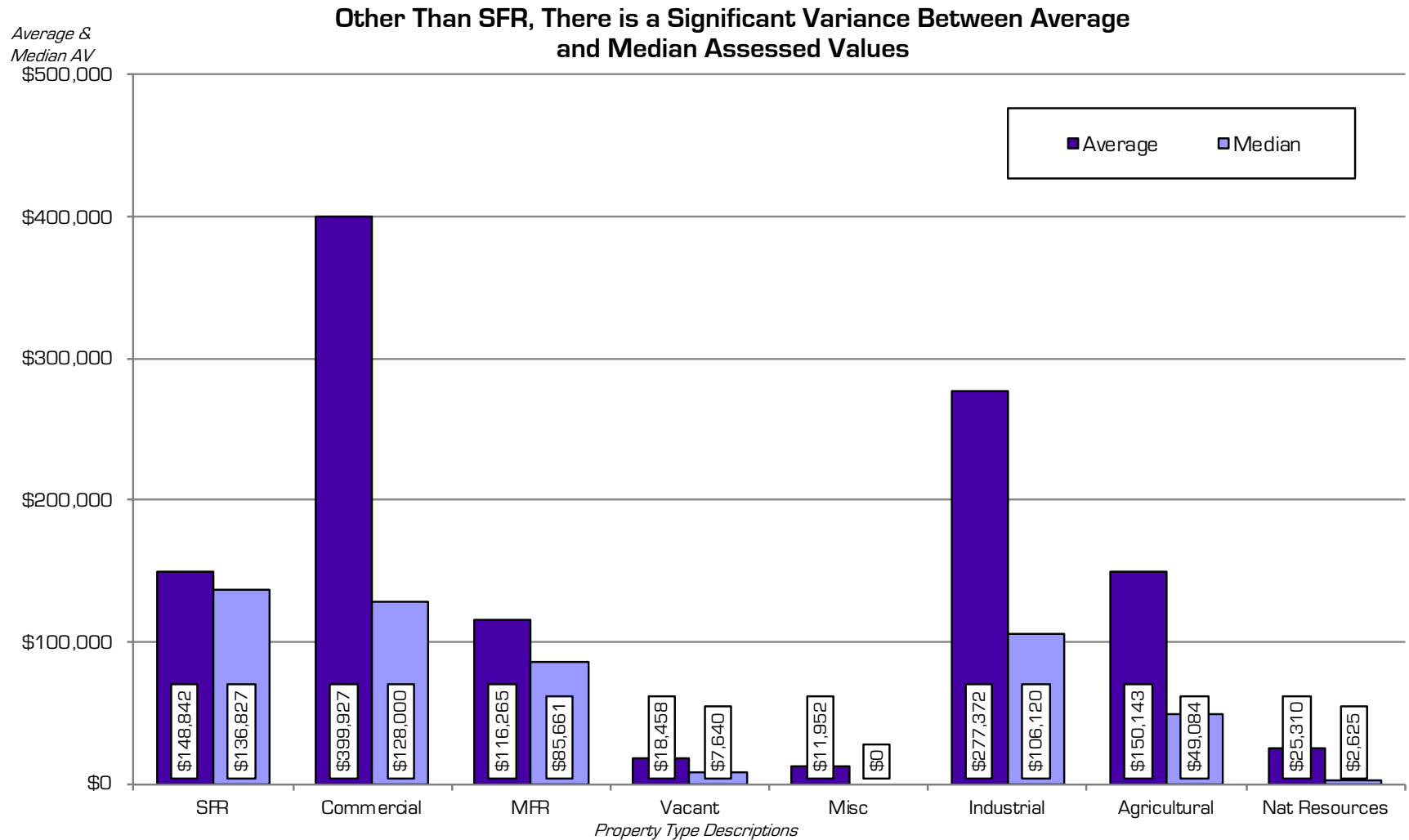


Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

Why the Average May Not Be Typical



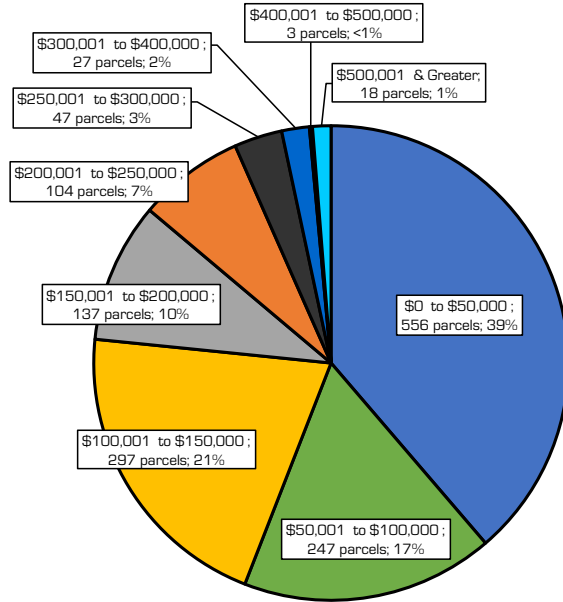
Understanding Who Pays What



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Misc comprised of County categories: Miscellaneous, Exempt, Institutional, None, Unknown, & parcels with \$0 AV. Percentages rounded.

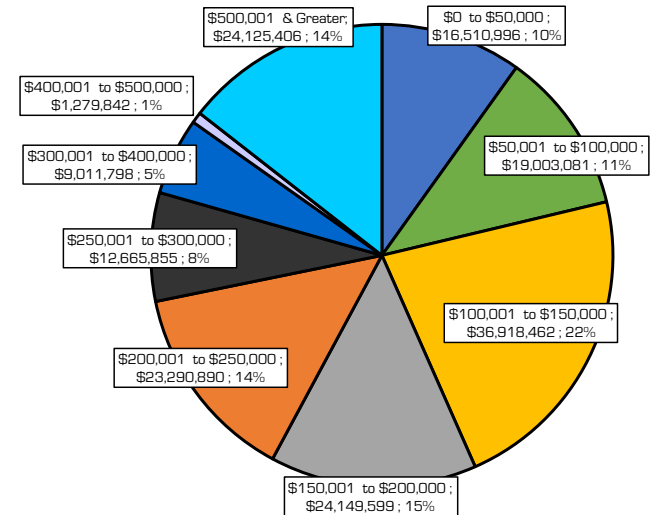
87% of MFR Parcels Assessed ≤ \$200k; Comprise 58% of MFR Total Assessed Value

87% of MFR Parcels Have an AV of \$200,000 or Less



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

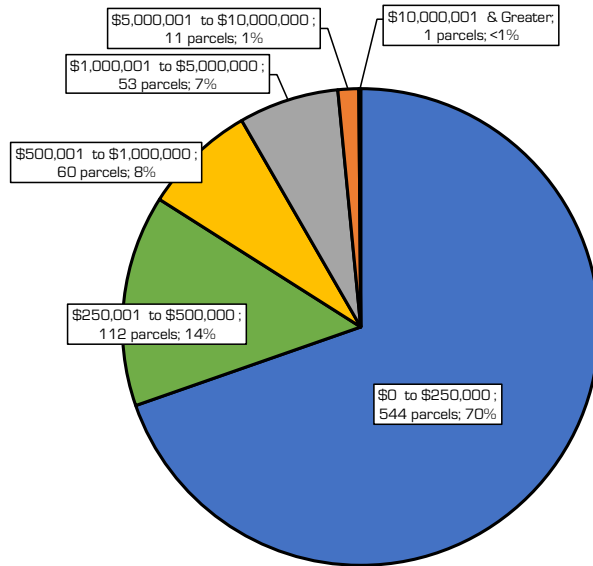
58% of MFR AV is from Parcels with an AV of \$200,000 or Less



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

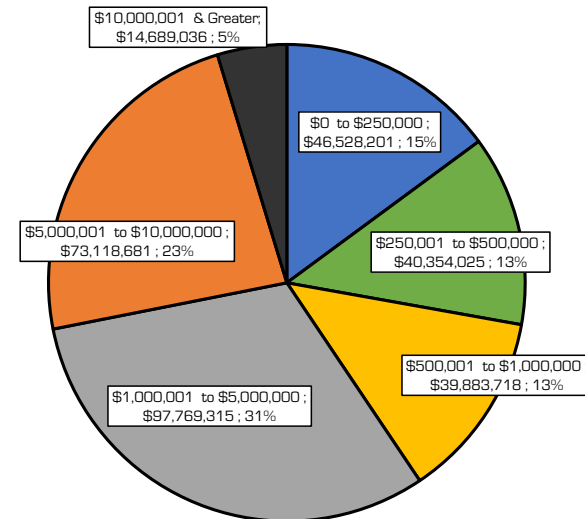
84% of Commercial Parcels Pay 28% of Commercial Taxes

84% of Commercial Parcels Have an AV of \$500,000 or Less



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

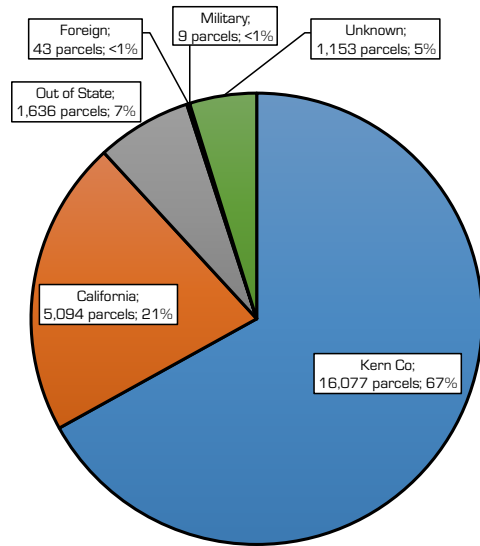
28% of Commercial AV is from Parcels with an AV of \$500,000 or Less



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

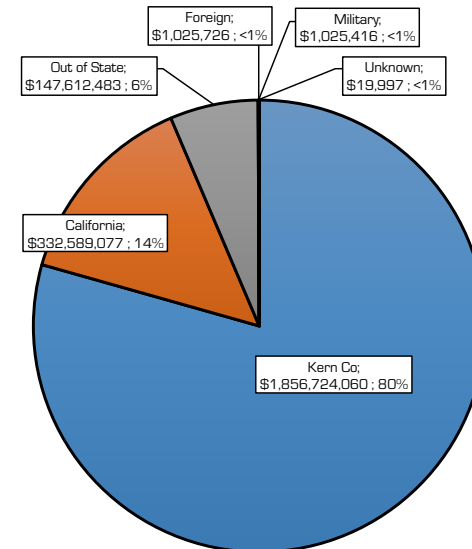
Majority of Parcels Locally Owned

67% of Tax Bills are Sent Within Kern County



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

80% of District's AV Have Billing Address in Kern County



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

Top 20 Taxpayers

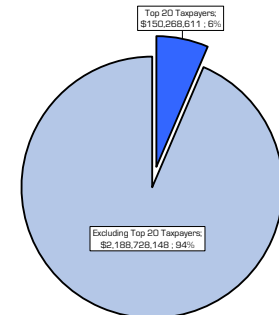
(by billing address)

Top 20 Taxpayers by Billing Address

<u>Mailing Address</u>	<u>Owners</u>	<u>Net Value</u>	<u>% of District's AV</u>	<u># of Parcels</u>	<u>Owner/Mailing Location</u>
PO Box 8050 Bentonville AR	Wal Mart Stores	\$20,933,940	0.9%	3	Out of State
18818 Teller Av # 277 Irvine CA	Springhill Suites & Hampton Inn	\$18,897,346	0.8%	2	California
4831 Calloway Dr Ste 102 Bakersfield CA	Mojave Pistachios	\$8,213,055	0.4%	71	Kern Co
PO Box 105842 Atlanta GA	Home Depot	\$8,103,064	0.3%	2	Out of State
PO Box 1209 Ridgecrest CA	AltaOne Federal Credit Union	\$7,988,566	0.3%	10	Kern Co
977 Huntington Wy Perris CA	Clarion Inn	\$7,181,713	0.3%	1	California
8558 Chalmers Dr # 401 Los Angeles CA	La Mirage Condos	\$6,857,524	0.3%	231	California
710 N China Lake Bl Ridgecrest CA	Misc commercial properties	\$6,763,820	0.3%	28	Kern Co
25 Via Diamante Newport Coast CA	Ridgecrest Town Center	\$6,417,801	0.3%	1	California
1047 N Inyo St Ridgecrest CA	Tharp Trust - misc commerical/industrial properties	\$6,210,177	0.3%	39	Kern Co
7978 Cooper Creek Bl University Park FL	Kmart	\$6,000,000	0.3%	1	Out of State
PO Box 3165 Harrisburg PA	Rite Aid	\$5,900,000	0.3%	1	Out of State
317 W Inyokern Rd Ridgecrest CA	Misc commerical/industrial properties	\$5,807,706	0.2%	39	Kern Co
930 N Norma St Ridgecrest CA	Froehlich Trust - commercial property	\$5,661,000	0.2%	1	Kern Co
PO Box 1159 Deerfield IL	Walgreens	\$5,300,000	0.2%	1	Out of State
PO Box 990 Minneapolis MN	Albertsons/Staples	\$5,179,523	0.2%	1	Out of State
4615 Island Dr Bakersfield CA	College Heights Apartments	\$5,118,037	0.2%	1	Kern Co
7239 Topanga Canyon Bl Canoga Park CA	Ridgecrest Villa Apts, misc commercial properties	\$4,623,834	0.2%	8	California
709 Meadowood Dr Woodland CA	Demarais Family Trust - commercial property	\$4,560,130	0.2%	4	California
155 N Eucalyptus Dr Anaheim CA	American Inn & Suites, America's Best Value Inn & Suites etc	\$4,551,375	0.2%	6	California
		\$150,268,611	6.4%	451	

Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

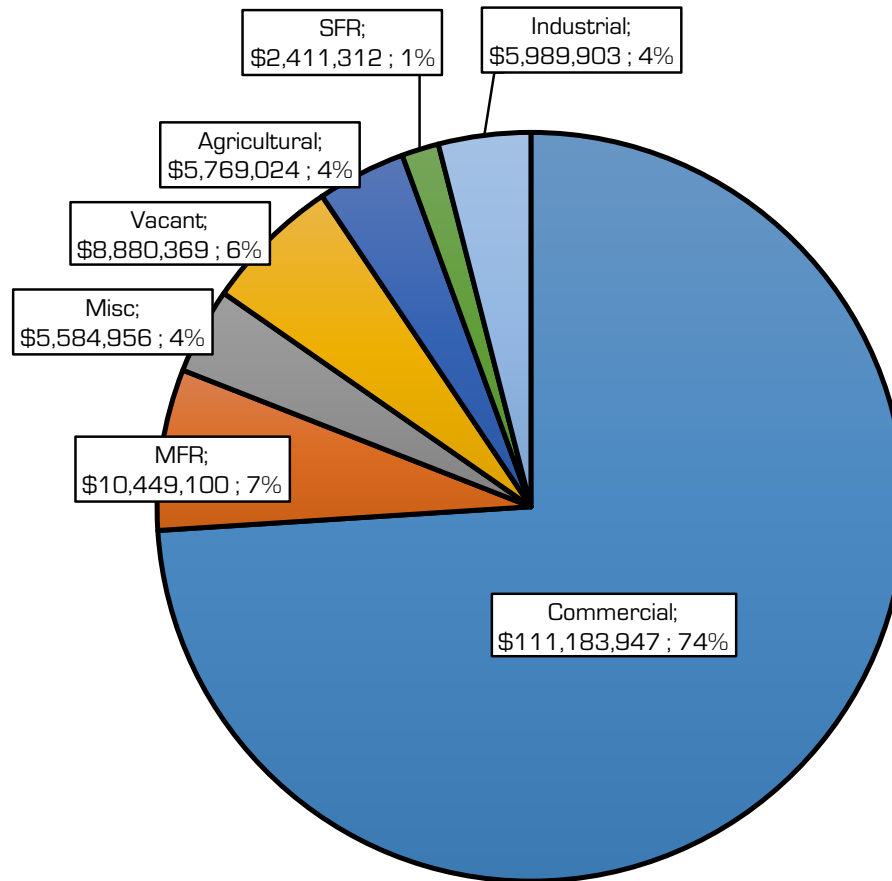
Top 20 Taxpayers (by Billing Address) Comprise 6% of Total District AV



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

Top 20 Taxpayers Mostly Commercial

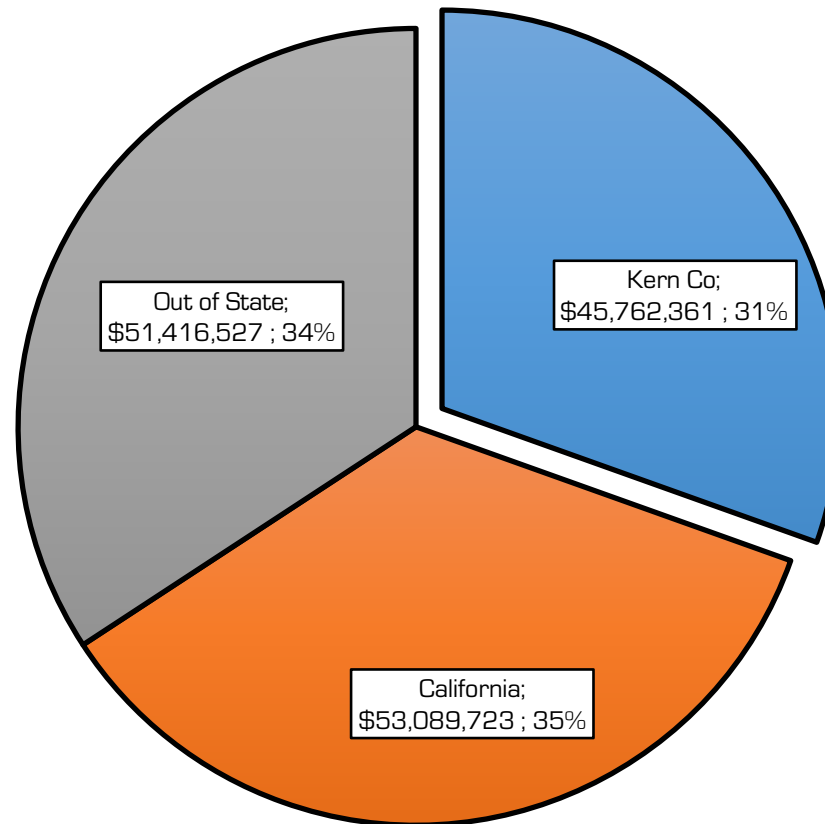
**Commercial Property Accounts for 74% of the AV for the Top 20 Taxpayers
(by Billing Address)**



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

Minority of "Top 20" AV Locally Owned

For Top 20 Taxpayers (by Billing Address), 69% of AV is Owned Outside of Kern County



Note: District located in Kern & San Bernardino counties, but as Kern accounts for approximately 99.4% of total AV, only Kern Co data is shown. 2019-20 assessment roll as provided by Kern County Assessor's Department. Percentages rounded.

Return on Investment

THE VALUE OF SCHOOL FACILITY INVESTMENTS: EVIDENCE FROM A DYNAMIC REGRESSION DISCONTINUITY DESIGN*

STEPHANIE RIEGG CELLINI
FERNANDO FERREIRA
JESSE ROTHSTEIN

Despite extensive public infrastructure spending, surprisingly little is known about its economic return. In this paper, we estimate the value of school facility investments using housing markets: standard models of local public goods imply that school districts should spend up to the point where marginal increases would have zero effect on local housing prices. Our research design isolates exogenous variation in investments by comparing school districts where referenda on bond issues targeted to fund capital expenditures passed and failed by narrow margins. We extend this traditional regression discontinuity approach to identify the dynamic treatment effects of bond authorization on local housing prices, student achievement, and district composition. Our results indicate that California school districts underinvest in school facilities: passing a referendum causes immediate, sizable increases in home prices, implying a willingness to pay on the part of marginal homebuyers of \$1.50 or more for each \$1 of capital spending. These effects do not appear to be driven by changes in the income or racial composition of homeowners, and the impact on test scores appears to explain only a small portion of the total housing price effect.

I. INTRODUCTION

Federal, state, and local governments invest more than \$420 billion in infrastructure projects every year, and the American Recovery and Reinvestment Act of 2009 is funding substantial temporary increases in capital spending.¹ School facilities may be among the most important public infrastructure investments: \$50 billion is spent on public school construction and repairs each year

*We thank Janet Currie, Joseph Gyourko, Larry Katz, David Lee, Chris Mayer, Tom Romer, Cecilia Rouse, Tony Yezer, and anonymous referees, as well as seminar participants at Brown, Chicago GSB, Duke, George Washington, Haas School of Public Policy, IIES, University of Oslo, NHH, Penn, Princeton, UMBC, Wharton, Yale; and conferences of the American Education Finance Association, National Tax Association, NBER (Labor Economics and Public Economics), and Southern Economic Association for helpful comments and suggestions. We are also grateful to Eric Brunner for providing data on California educational foundations. Fernando Ferreira would like to thank the Research Sponsor Program of the Zell/Lurie Real Estate Center at Wharton for financial support. Jesse Rothstein thanks the Princeton University Industrial Relations Section and Center for Economic Policy Studies. We also thank Igar Fuki, Scott Mildrum, Francisco Perez Arce, Michela Tincani, and Moises Yi for excellent research assistance. scellini@gwu.edu, fferreir@wharton.upenn.edu, rothstein@berkeley.edu.

1. Council of Economic Advisers (2009, Table B-20). The annual total includes gross investment in structures, equipment, and software for both military and nonmilitary uses.

© 2010 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology.
The Quarterly Journal of Economics, February 2010

We find that passage of a bond measure causes house prices in a district to rise by about 6%. This effect appears gradually over the two or three years following the election and persists for at least a decade. Our preferred estimates indicate that marginal homebuyers are willing to pay, via higher purchase prices and expected future property taxes, \$1.50 or more for an additional dollar of school facility spending, and even our most conservative estimates indicate a willingness to pay (WTP) of \$1.13.

Turning back to our substantive application, our primary analyses are of the impact of passing a bond on house prices. We find treatment effects of 6% or more, and implied valuations of \$1.50 or more for \$1 in school capital spending. As theory predicts,

Oversight & Accountability

◆ Required citizens' oversight committee

"The purpose of the citizens' oversight committee shall be to inform the public concerning the expenditure of bond revenues"

-Education Code Section 15278 (b)

◆ Goals of the oversight committee

- ▶ Ensure bond funds are spent only on the proper purposes.
- ▶ Ensure no funds are used for teacher or administrative salaries or other school operating expenses.

-Education Code Section 15278 (b)(1)&(2)



Questions to Consider

- ◆ What's the best use of our existing funds?
- ◆ What are the reasons to consider a school bond measure?
 - ▶ What would happen if there's no local bond funding for school facilities?
- ◆ What oversight measures would enhance credibility and effectiveness?

