Subsidizing Sprawl, Segregation, and Regressivity: A Deep Dive into Sublocal Tax Districts

Darien Shanske & Deb Niemeier*

ABSTRACT: The role of federal policy in encouraging sprawl and segregation is well-known, as is the role of local zoning law. The role of state law in defining development patterns is less developed. In this Essay, we will use two sets of unique data to explore the role of state law in subsidizing unsustainable and inequitable development patterns.

While our focus is on California's Community Facilities District ("CFD"), our research is generalizable because there are similar laws in many states. There are a number of different types of CFDs. For example, a local government at the behest of a developer can form a CFD in order to complete a greenfield development project. The new CFD imposes special taxes on the new residents of the development. In anticipation of the new residents and the new tax revenue, the CFD is able to borrow to build infrastructure for the new development, which is advantageous to developers for many reasons. First, these borrowings free up the developer's own capital or credit by shifting risk to the public. Second, the interest on these borrowings are exempt from state and federal income taxes, thus reducing the costs of development. Third, the new residents likely do not fully take these future taxes into account when evaluating the price of the house they purchase.

We use property tax and the CFD tax burden of parcels in Sacramento County to examine spatial attributes of where these CFDs form and who pays for them. Although there are many variations of CFDs, our interest is in CFDs that provide significant infrastructure funding, either through developments or through school district capital projects. We also analyze data from securities documents to dive deeper into the financing and cost of CFD taxes.

^{*} Deb Niemeier, Clark Distinguished Chair, Professor, Civil and Environmental Engineering, University of Maryland. Darien Shanske, Professor of Law, UC Davis.

Our preliminary findings are:

Substantial subsidy. Estimating the size of the subsidy is difficult, but the subsidy is likely enough to make the chance to setup a CFD for a project a significant boon, thus possible carrot, for developers.

Arbitrary tax burdens. Especially when combined with California's Proposition 13, CFD taxes impose another level of unfairness on some taxpayers, as taxpayers in quite similar homes in similar neighborhoods can pay very different tax rates.

Sprawl. We find that there is nothing arbitrary about the kinds of projects these taxes subsidize. In fact, we recognize a sprawl pattern development: most of the infrastructure projects are located near urban fringe.

Segregation. We find, with some exceptions, that the developments subsidized with these special taxes are relatively segregated.

I.	INTRODUCTION2428
II.	SUBLOCAL TAXES
III.	POLICY FRAME2432
IV.	ANALYSIS
V.	POLICY DISCUSSION2448
VI.	CONCLUSION2450

I. Introduction

Much ink has already been spilled demonstrating that our current built environment was—and is—the product of numerous policy decisions. Some of these decisions are accidental (as with the mortgage interest deduction provided by the federal income tax), some can be reasonable at times, but

^{1.} See generally Dennis J. Ventry, Jr., *The Accidental Deduction: A History and Critique of the Tax Subsidy for Mortgage Interest*, 73 LAW & CONTEMP. PROBS. 233 (tracing the history of the mortgage interest deduction).

are problematic overall (as with local power over zoning),² and some are outright immoral (as with redlining).³ This Essay will demonstrate yet another policy tool that has contributed to the current structuralization of the built landscape: the sublocal tax district. These districts are very common, but are also, by virtue of their nature and spatial heterogeneity, very difficult to study.⁴

As we will demonstrate with a deep dive into their use in Sacramento, California, such taxing districts, by design, primarily enable low-density, urban fringe development. This low-density urban expansion then motivates further investments in schools and other services to meet the needs of the spatially expanding population. County and local governments then create new service-aimed and school sublocal tax districts to meet these needs. Our goal is not to demonize these districts or blame them for the many problems that are characteristic of the current built environment. Rather, our primary goal is instead to demonstrate that these districts represent a significant subsidy for a problematic development pattern that is already encouraged in numerous other ways. Aided by this demonstration, we will then outline some of the many reforms that could improve these districts.

II. SUBLOCAL TAXES

There are numerous types of sublocal taxing districts currently in use in the United States. Our focus is on sublocal taxing districts that facilitate the building of infrastructure in California, particularly for new developments. These sublocal tax districts can range from special tax increment districts to address blight, to a variety of improvement districts supporting land use decisions, urban services, and neighborhood development.⁵ Examples of similar districts—used for building suburban infrastructure—exist in many other states, including Texas (Municipal Utility Districts) and Florida (Community Development Districts).⁶

^{2.} Christopher S. Elmendorf, Beyond the Double Veto: Housing Plans as Preemptive Intergovernmental Compacts, 71 HASTINGS L.J. 79, 94-113 (2019).

^{3.} Redlining was the practice of federal housing institutions, such as the Federal Housing Administration, to characterize non-white communities as less creditworthy solely because those communities were not white. See generally RICHARD ROTHSTEIN, THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA (2017) (describing the development of redlining and its impact on the segregation of American cities).

^{4.} David P. Carter, Aaron Deslatte & Tyler A. Scott, *The Formation and Administration of Multipurpose Development Districts: Private Interests Through Public Institutions*, 2 PERSPS. ON PUB. MGMT. & GOVERNANCE 57, 60–61 (2019).

See generally Richard Briffault, The Rise of Sublocal Structures in Urban Governance, 82 MINN.
 REV. 503 (1997) (examining a variety of sublocal tax structures in comparison to more traditional avenues of taxation regimes like local or city governments).

^{6.} For a multi-state survey, see generally CARTER T. FROELICH & LUCY GALLO, NAT'L ASS'N OF HOME BUILDERS, AN OVERVIEW OF SPECIAL PURPOSE TAXING DISTRICTS (2014), https://www.nahb.org/-/media/NAHB/advocacy/docs/industry-issues/land-use-101/infrastructure/overview-of-special-purpose-taxing-districts.pdf [https://perma.cc/5YYP-K8ZK].

A. MELLO-ROOS TAXES

In California, the type of district we will discuss is known as a Mello-Roos or CFD.7 CFDs were a response to Proposition 13,8 a ballot initiative passed by the voters of California in June 1978. Proposition 13 reduced property taxes by amending the California Constitution. Specifically, Proposition 13 rolled back the assessed valuation of all property in the state to its 1975-76 level.9 The maximum tax rate as a percentage of a property's assessed value was fixed at one percent; 10 at the time of Proposition 13, the average property tax rate was about 2.5 percent.11 Lest assessed valuations increase too much, Proposition 13 only allows valuations to be reassessed upward by the lesser of two percent or the consumer price index, unless the property is bought or improved, in which case the new assessed value is the market price.¹² It is this provision that makes California's property tax one that is primarily based on "acquisition value" rather than "market value." Recognizing that just permanently cutting one tax might lead state or local legislatures to increase others, Proposition 13 also required that all future tax increases be approved by two-thirds of both houses of the California Legislature.¹³ Additionally, Proposition 13 mandates that cities, counties, and special districts may only impose special taxes when two-thirds of the voters approve.¹⁴

Before the passage of Proposition 13, the infrastructure cost of new development was typically shared between the developers and local governments. For instance, the local government might pay for the extension of a major thoroughfare, while the developer paid for the side roads either with its own funds or by imposing a special assessment on the land benefited by these roads. Proposition 13 changed this dynamic in two ways. First, local governments, facing, on average, a 60 percent cut in revenues (2.5-1/2.5) were less able to finance improvements. ¹⁵

Second, Proposition 13 made it much less likely that new development would pay its way—again for two reasons. First, Proposition 13's reduction of the property tax rate meant that a local government was only going to receive

^{7.} See CAL. GOV'T CODE §§ 53311-68.3 (West 2021).

^{8.} See Cal. Assembly Off. of Rsch., Summary Digest of Statutes Enacted and Resolutions (Including Proposed Constitutional Amendments) Adopted in 1982 and 1979–1982 Statutory Record 521 (1982) ("This bill... would provide an alternative method of financing public capital facilities....").

^{9.} CAL. CONST. art. XIII A, § 2(a).

^{10.} Id. § 1(a).

^{11.} Steven T. Lawrence, Case Note, Solving the Proposition 13 Puzzle: From Amador to Nordlinger—Judicial Challenges and Alternatives, 24 PAC. L.J. 1769, 1771 (1993); John A. Miller, Rationalizing Injustice: The Supreme Court and the Property Tax, 22 HOFSTRA L. REV. 79, 94 n.35 (1993).

^{12.} See CAL. CONST. art. XIII A, § 2(a)-(b).

^{13.} *Id.* § 3(a).

^{14.} Id. § 4.

^{15.} See Lawrence, supra note 11, at 1175-78.

60 percent of what it used to receive per unit of value, which in many cases could mean that the property could demand more services than it paid in taxes. In the days before Proposition 13, not only was the local government getting a higher share of the property's value, but the local government knew that it could raise the tax rate if it needed to. Second, Proposition 13 instituted a cap on property value inflation.¹⁶ This cap means that, even if new development pays for itself at the moment, it likely will not do so for long.

With less reason and ability for local government to help with the financing of infrastructure, the Legislature passed the Mello-Roos Act of 1982. The Act creates a procedure that allows taxpayers to vote to tax themselves on the basis of something other than assessed value. ¹⁷ As a special tax, Mello-Roos taxes require a two-thirds majority of voters. ¹⁸

This form of sublocal taxing for development has numerous advantages.¹⁹ First, the districts created under the Act, CFDs, can have any desired boundaries; they need not even be contiguous.²⁰ Second, voting in districts with less than 12 voters is permitted; in such a district, each landowner's voting power is determined by the number of acres that they hold.²¹ Third, unlike special assessments, these taxes need not be based on any finding of proportionate benefit.²² Thus, though they cannot be measured on an ad valorem basis—that is, as a percentage of the assessed value of the home²³—they can be based on most anything else, including the size of a home or lot, which can function as a proxy for value. They can also be based on whether or not a property is developed, which means that developers of large projects can vote for a Mello-Roos tax that will be much higher on the developed parcels they have sold than upon the parcels that they still own and are developing.

The legislature clearly had in mind that this Act would fill the lacuna left by Proposition 13, particularly for developing areas, since the Act itself reads:

This chapter provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. The provisions of this chapter shall not affect or limit any other provisions of law authorizing or providing for the furnishing of governmental facilities or services or

^{16.} CAL. CONST. art. XIII A, § 2(b).

^{17.} CAL. GOV'T CODE §§ 53311–68 (West 2021).

^{18.} CAL. CONST. art. XIII A, § 4.

^{19.} The National Association of Home Builders lists up to 10 benefits just to developers. FROELICH & GALLO, supra note 6, at 10.

^{20.} CAL. GOV'T CODE § 53325.5.

^{21.} *Id.* § 53326(b). In such a district, a majority of voters could protest and prevent the formation of a CFD. *Id.* § 53324(a).

^{22.} Id. § 53325.3.

^{23.} If these taxes were measured on an ad valorem basis, they would be property taxes and limited to one percent. See CAL. CONST. art. XIII A, § 2(a).

the raising of revenue for these purposes. A local government may use the provisions of this chapter instead of any other method of financing part or all of the cost of providing the authorized kinds of capital facilities and services.²⁴

The legislative history also reveals that the name of the districts was changed from "public safety district" to "community facilities district," a change presumably deemed more consistent with the broad range of facilities and services that can be financed with Mello-Roos taxes, along with the absence of limits on the geographical boundaries of these districts.²⁵ The Act has been amended several times, though each amendment only addressed particular concerns—one such concern was ensuring adequate disclosure in response to homebuyer complaints.²⁶

This Essay aims primarily to make a descriptive contribution. That said, our research is oriented towards providing information useful for normative evaluation of these districts.

III. POLICY FRAME

There are two axes on which sublocal tax districts have typically been evaluated: economic efficiency and political significance.²⁷ These districts are argued to be economically efficient because, for example, they provide lower borrowing rates for developers (that are passed on to homebuyers, at least in part)²⁸ and for the case of blight, they provide an important economic development tool.²⁹ They are argued to be desirable politically (at least potentially) because they offer a further means for local communities to self-differentiate.³⁰

Others have argued that these districts do not save money for homeowners and, furthermore, any efficiencies they create for homeowners or developers are counter-weighed by inefficiencies, such as the environmental

2432

^{24.} CAL. GOV'T CODE § 53311.5.

^{25.} CAL. ASSEMBLY OFF. OF RSCH., *supra* note 8, at 521; *see also* CAL. GOV'T CODE § 53339 ("The territory proposed to be annexed to the community facilities district may be territory located outside the territorial limits of the agency that formed the community facilities district").

^{26.} See CAL. CIV. CODE § 1102.6b (West 2019); CAL. GOV'T CODE § 53341.5 (West 2019).

^{27.} Darien Shanske, Note, Public Tax Dollars for Private Suburban Development: A First Report on a National Phenomenon, 26 VA. TAX REV. 709, 749–50 (2007).

^{28.} David Bumgardner & Keyavash Hemyari, *Dodging MUD Slingers: An Analysis and Defense of Texas Municipal Utility Districts*, 21 TEX. REV. L. & POL. 377, 400 (2017); Barton A. Smith, *The Argument in Favor of MUDs as Currently Constituted in Texas*, ASS'N OF WATER BD. DIRS. (Apr. 20, 2017), https://awbd-tx.org/wp/news/the-argument-in-favor-of-muds-as-currently-constituted-in-texas [https://perma.cc/KQD9-6Z9S].

^{29.} See Rachel Weber & Sara O'Neill-Kohl, The Historical Roots of Tax Increment Financing, or How Real Estate Consultants Kept Urban Renewal Alive, 27 ECON. DEV. Q. 193, 195–96 (2013).

^{30.} See Nadav Shoked, Quasi-Cities, 93 B.U. L. REV. 1971, 2027-31 (2013).

impacts caused by sprawl pattern development.³¹ Additionally, as a matter of political economy, these districts have been critiqued for rendering the local government landscape more opaque and unresponsive to local voters.³² One problem suggested by social choice theory is that the availability of these districts affects the incentives of local government officials in unhelpful ways and, in particular, pushes such officials towards overfinancing capital projects that skew upward distributively.³³

Recent evidence also suggests that self-differentiation in the form of segregation may at least be partially influenced by aspects of sublocal governance.³⁴ For example, a study of Chicago use of sublocal tax districts shows consistent support of development in areas that will provide greater benefit to higher income residents to the exclusion of poor and minority communities.³⁵ In some cases, the connection between these districts and segregation is more apparent than others. For instance, these districts have been used to construct high-end developments centered on golf courses,³⁶ and golf courses have been shown to be "exclusionary amenities."³⁷ One final example: tax increment sublocal tax districts were meant to be a tool for jobs creation and retention generally, but have largely steered towards real estate development in the past few decades.³⁸ In sum, there is already a substantial literature showing how the power to create sublocal districts, a power typically created with reasonable intentions, has, in fact, often been used in ways that skews to the benefit of the already advantaged.

Before proceeding to our analysis and how it fits into the larger policy discussion, it is important to make one refinement upfront. We do not believe that adopting these tax districts creates a necessary tradeoff between

^{31.} See Sara C. Galvan, Wrestling with MUDs to Pin Down the Truth About Special Districts, 75 FORDHAM L. REV. $3041,\,3071-72$ (2007).

^{32.} See id. at 3072.

^{33.} See Vladimir Kogan & Mathew D. McCubbins, The Problem with Being Special: Democratic Values and Special Assessments, 14 PUB. WORKS MGMT. & POL'Y 4, 30 (2009) (explaining that special assessments, a different type of development district, "leave the system vulnerable to strategic manipulation by large property owners and businesses, who can more easily overcome the problems of collective action, in effect transforming assessments into a potential tool for upward redistribution"). But see Rebecca Hendrick, Use of Special Assessments by Municipal Governments in the Chicago Metropolitan Area: The Taming of Leviathan?, 1 ILL. MUN. POL'Y J. 15, 32–33 (2016) (finding no overuse).

^{34.} See, e.g., Michael Craw, Exit, Voice, and Neighborhood Change: Evaluating the Effect of Sublocal Governance in Little Rock, 55 URB. AFFS. REV. 501 (2019) (arguing that differences in sublocal governance structures play a role in mediating the relationship between property values and neighborhood racial and ethnic composition).

^{35.} Emily Talen & Luc Anselin, City Cents: Tracking the Spatial Imprint of Urban Public Expenditures, 108 CITIES: INT'L J. URB. POL'Y & PLAN., Jan. 2021, at 1, 8.

^{36.} Darien Shanske, Above All Else Stop Digging: Local Government Law as a (Partial) Cause of (and Solution to) the Current Housing Crisis, 43 U. MICH. J.L. REFORM 663, 665–67 (2010).

^{37.} Lior Jacob Strahilevitz, Exclusionary Amenities in Residential Communities, 92 VA. L. REV. 437, 468–69 (2006).

^{38.} Weber & O'Neill-Kohl, supra note 29, at 203.

economic efficiency and political economy values, even though that is how it may appear at first. That is, it seems that if we want to reduce costs by making these local tax districts available, then we must also accept that these districts are going to exacerbate sprawl, segregation, and other ills, but that is not so. In fact, the reverse is arguably true.

If these districts actually reduce costs to developers (and perhaps homeowners) in a significant way and enable (benign) community differentiation, then these districts could be powerful levers of improvement if they were reformed.³⁹ Reform could include options like: (1) limiting the use of these districts to areas near public transportation; (2) requiring these districts to build at a certain level of density and to maintain a reserve fund for creating transit connections as that option becomes viable, which might happen soon if the districts were required to be denser; (3) banning these districts in flood plains or other sensitive areas; and (4) requiring these districts to have substantial affordable housing.

In short, in evaluating the ways in which these districts tilt development in problematic ways, we also think it is useful to consider that there is an opportunity to use these districts to tilt matters in a better direction. Needless to say, better late than never as to reforming these districts.

IV. ANALYSIS

A. Insights from Tax Record Data at the Parcel Level

We use Sacramento County parcel data to provide a glimpse into the local subtleties of how CFDs work within an urbanized region. The county is located in central California and is home to roughly 1.5 million people.⁴⁰ The City of Sacramento serves as both the county seat and the state capital.⁴¹ We collected parcel level tax information from the Tax Assessor's office and joined this to a parcel shapefile. The parcel level match of tax data to parcels in the shapefile was within two percent. Our final dataset has 448,796 individual land parcels (Figure 1a). Of these, approximately 31 percent of the parcels have one or more CFD levies assessed on them (Figure 1b).

^{39.} If these districts simply cause political economy harms for no gain to anyone, then they should be abolished.

^{40.} Quick Facts: Sacremento County, California; United States, U.S. CENSUS BUREAU (July 1, 2019), https://www.census.gov/quickfacts/fact/table/sacramentocountycalifornia,US/PST045219 [https://perma.cc/9X3S-R58T].

^{41.} What Distinguishes a County from a City?, SACRAMENTO CNTY., https://www.saccounty.net/Government/Pages/CountyfromCity.aspx [https://perma.cc/Y2WT-K2YH].

Figure 1a

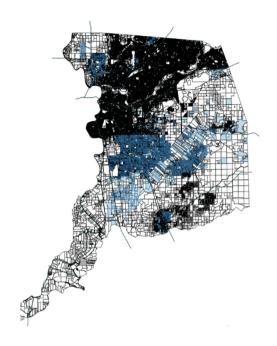
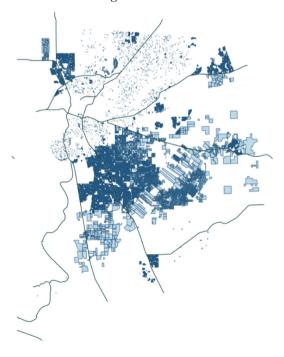


Figure 1b



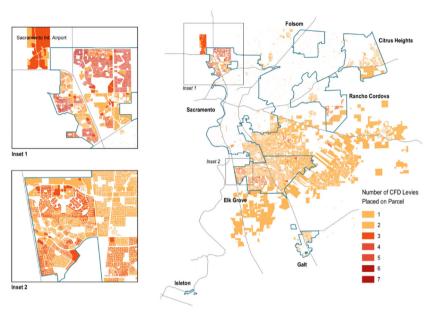
Parcels can have more than one CFD levy placed on them. Looking just at those parcels with CFD levies, the average number of CFD levies placed on a parcel is 1.7, but some parcels have a far greater number of CFD levies. As Table 1 displays, there are approximately 87,000 parcels with one CFD levy on them and upwards of 1,800 parcels with at least six CFD levies on them. The CFD levy hotspots—those parcels with three or more CFD levies on them—occur mostly in the northern area of Sacramento City, the eastern portion of the city of Elk Grove, and within Rancho Cordova (Figure 2).

Table 1. Parcels with CFD Levies and Average Total Amount of Levies Assessed (\$)

No. CFD Levies on Parcel	0	1	2	3	4	5	6	7
No. Parcels	304965	86855	22889	13543	7779	5188	1820	1
Avg. Total Levy Assessment	NA	\$684	\$1552	\$1945	\$1761	\$1401	\$1381	\$3175

If we examine Figure 2, in sets 1 and 2, it is clear that these levy hotspots exhibit significant variability in the numbers of levies assessed on a given parcel. There can be a single CFD levy residential parcel next to, or in close proximately to, a parcel with three or more levies on it.

Figure 2



CFD levies are assessed for a multitude of reasons. The CFD taxes can be used to provide ongoing services like maintenance for parks and landscaping. They can also be created to provide public safety operations or to fund school capital improvements.⁴² As we noted earlier, our interest is primarily in those levies that facilitate the construction of new residential infrastructure, for example: roads; wastewater plants; and water systems. However, as we will show, other types of CFDs track the infrastructure CFDs. That is, where CFD-driven residential development occurs, there is also a tendency for CFDs for schools and protective services to follow.

As Table 2 displays, in the Sacramento region approximately two percent of the 138,075 parcels with one or more CFDs on them have an energy CFD levy assessed on them, while upwards of 78 percent of parcels with one or more CFDs have a school improvement CFD. Our infrastructure designation includes any basic infrastructure that is required for development: right-of-way acquisition, construction of new roads, new water systems, and new wastewater plants. Table 2 further shows that approximately 32 percent of those parcels with one or more CFD levies on them have an infrastructure CFD tax.

^{42.} CAL. GOV'T CODE \S 53313 (West 2021). Elk Grove USD CFD No. 1 is an example of a school facility CFD.

Type of CFD	Energy	Infrastr.	Public Safety	Schools	Services
% of CFD Parcels with Levy Type (No. Parcels)	2% (2876)	32% (43544)	6% (8162)	78% (107342)	55% (76156)
Avg. Levy	\$2253	\$1014	\$443	\$170	\$125

Assessment

Table 2. Percent of Parcels by CFD Levy Type

As Table 2 exhibits, the most expensive average parcel CFD tax, \$2,253, is aimed at energy improvements, with the average infrastructure CFD closely following at \$1,014. Parcels related to energy improvements can be attributed to the Renovate America program,43 which provided financing for energy efficiency improvements. Many of these are applied to a single parcel and can be found throughout the region. Although a majority of parcels with one or more CFDs levied on them are part of a public school or services CFD, Table 2 shows that the assessed amount of these taxes are relatively small (\$170 and \$125, respectively) compared to the CFDs for infrastructure development.

In Figure 3, we look at the distribution of CFD levies by type attached to each individual parcel. In Figure 3a, we use a violin plot44 to show the distribution of the levy amount by levy type on individual parcels. Here, we can see that there are a few parcels with significantly higher CFD levy amounts relative to most of the data, upwards of \$80,000 for infrastructure and school CFDs.

See HERO Financing is Built for Energy-Efficient Home Improvements., RENOVATE AM., https:// www.renovateamerica.com/archive/hero [https://perma.cc/6URU-Z4L5].

Violin plots show the distribution of data. The shape of the plot is the probability distribution of the data, smoothed using a kernel density estimator. They are useful for showing peaks within data distributions.

Figure 3a. Distribution of Levy Amount by Levy Type (\$)

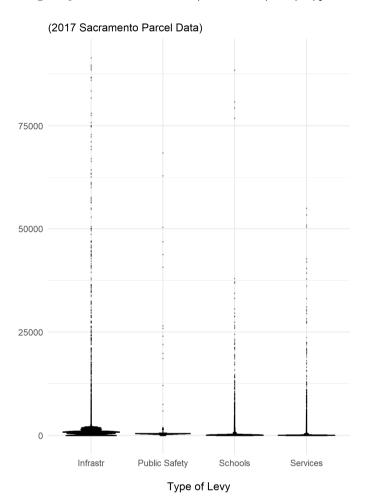


Figure 3b. Levy Amount Assessed (\$)

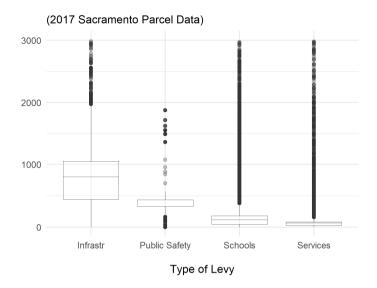


Figure 3c. Net Assessment (\$)

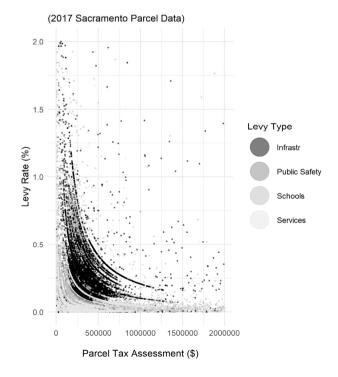


Figure 3a also indicates that the distribution of a parcel's levy assessment amount is long tailed. Each type of CFD levy exhibits the long outlier tail of significantly higher levy assessments relative to much of the rest of the data. By constraining the outliers, we can look more closely at the distribution of CFD levies assessed on parcels, as we did in Figure 3b. Here, using boxplots to show the interquartile range (the middle 50 percent of the data) it is clear that—regardless of the type of CFD levy assessed on a single parcel—the actual amount of that levy (in absolute dollars) can vary quite substantially. For the infrastructure CFDs, the levy tax for the interquartile range can span from around \$500 to more than \$1,000.

Because the CFD tax is assessed based on the parcel value, we can calculate the CFD tax rate to compare parcels. Here, we find that the median levy assessment on parcels for public safety and infrastructure CFDs is generally a higher rate than taxes for schools and services CFDs (Figure 3b). In addition, as Figure 3c suggests, there is significant variation within the range of zero to one percent of assessed value. That is, a parcel valued at \$500,000 could have an infrastructure levy range from 0.2 percent of its value to upwards of 0.5 percent. There is a reason for that. The California Debt and Investment Advisory Commission ("CDIAC"), a unit within the Treasurer's Office, recommends that the total property-related tax on a parcel not exceed two percent.⁴⁵ Since the first one percent is taken up by the post-Proposition 13 property tax, that leaves one percent for the remaining tax base.46 Given that the pre-Proposition 13 average property tax rate in California was 2.5 percent, the two percent ceiling is not unreasonable. However, it is worth noting that when a large Mello-Roos tax occupies a large share of the remaining one percent, then that is a share of the property's tax capacity that is no longer available for more general purposes.

The spatial variation associated with the different CFD levy types supports our assertion that CFDs facilitate urban fringe and greenfield development. Figure 4 shows that nearly all of the parcels with infrastructure CFDs are clusters of development that abut the urban incorporation boundaries. We find the same general spatial pattern with the services and public safety CFDs. The CFDs associated with schools reflect population growth in the southern part of the county, which follow residential development patterns. School districts are frequently the most common recipient of CFDs, and these funds assist in upgrading and constructing new capital facilities.

^{45.~} Kathleen Brown, Cal. Debt Advisory Comm'n, Guidelines for Mello-Roos Financing 9 (1991), http://www.treasurer.ca.gov/cdiac/reports/M-Roos/MR_guidelines.pdf [https://perma.cc/P3AC-H3HL].

^{46.} Note that the assessed value of property in California lags its market value because of Proposition 13 and so the special CFD tax might be more significant relative to the traditional property tax for homeowners in older CFDs.

Figure 4



1. CFDs and Greenfield Development

Looking at CFDs relative to greenfield development, in total, the incorporated cities (e.g., see Figure 4, blue boundaries) account for a 2019 population of approximately 961,563⁴⁷ and we calculated a land area of about 238 square miles, giving a density of about 4,110 persons per square mile. The unincorporated region accounts for about 715 square miles with a population of approximately 598,437, creating a density of roughly 846 persons per square mile. This population density is significantly lower than the incorporated area within the region.

As Table 3 displays, the County's parcels are roughly split between incorporated (77 percent) and unincorporated (23 percent), respectively. This indicates that—at a minimum—upwards of 25 percent of CFDs have been levied on greenfield parcels, most of these in the form of school CFDs. Notably, infrastructure CFDs have been created almost exclusively on the urban fringe. Additionally, consider that almost every parcel in Elk Grove, incorporated in 2000, has a school CFD tax levied (94 percent) on it. Our point is that whether cities are incorporated or unincorporated is a noisy signal for greenfield development, and there are many indications that the actual percentage of CFDs used for greenfield development is far higher because that development is occurring in areas that are incorporated. We found evidence that many CFDs have been levied on incorporated parcels in lower density settings. For example, as Table 3 shows, the cities of Elk Grove and Galt together constitute about 50 percent of the CFD parcels, but have lower densities than either Citrus Heights or the City of Sacramento, which together have only 27 percent of parcels with CFDs.

^{47.} Demographics and Facts, SACRAMENTO CNTY., https://www.saccounty.net/Government/Pages/DemographicsandFacts.aspx [https://perma.cc/6SW3-TJJJ] (calculated by adding all incorporated cities in Sacramento County). "Sacramento County encompasses approximately 994-square miles" Id.

Table 3. Sacramento County Parcel Data

Location	Citrus Heights	Isleton	Rancho Cordova	Folsom	Elk Grove	City of Sac.	Galt	Unincorp.
Pop. Density (pop/sqmi)	6183	1654	2312	2400	4194	5217	4381	836
Percent of Region's CFDs	0.2%	0	0	0.27%	45-4%	27.0%	4.1%	23%
Percent of Incorp. Land Area in Region	6.0%	0.2%	14.5%	14.6%	18.0%	42.0%	2.5%	-
Percent of Total Incorp CFDs	0.3%	-	ı	0.4%	59.0%	35.1%	5·4%	-
Within Each City								
No. Parcels	24626	5^{24}	206	23488	51993	129448	7627	188583
No. Parcels with CFDs	242	0	0	294	48951	29132	4451	24741
% of Parcels w/in each City with CFDs	1%	_	_	1.3%	94%	23%	58.4%	14%

2. CFD Levies and Race

Figure 5 examines the spatial characteristics of the parcel level CFDs relative to the region's demographics. Here, it is clear that a moderate number of parcels are located in largely white areas. To the north, CFD parcels exist just outside of the City of Sacramento's incorporated limits. Centrally, CFD parcels within Elk Grove and greenfield CFD parcels to the southeast of Elk Grove are also in mostly white areas of the region. However, when looking more closely at CFD parcels in the greenfield areas in the northern portion of Sacramento County, there is a suggestion that CFDs are being used to support development in areas with higher percentages of Latinx and African American populations, something displayed by the darker shaded polygons in Figure 6. This is important because there is evidence that minority households who become homeowners have a greater financial investment in their homes than do white households.⁴⁸ Lowering the cost of housing would therefore provide some additional support for these households, if that is what CFDs in fact do. On the other hand, if CFDs primarily benefit developers at the expense of homeowners, then CFDs are imposing an additional cost on minority households while more broadly encouraging exclusionary development patterns. We will try to disentangle these crosscurrents in future work.

^{48.} BRIAN J. MCCABE, NO PLACE LIKE HOME: WEALTH, COMMUNITY, AND THE POLITICS OF HOMEOWNERSHIP 11 (2016).

Figure 5. CFDs and County Demographics

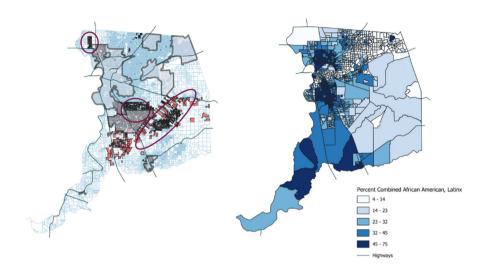
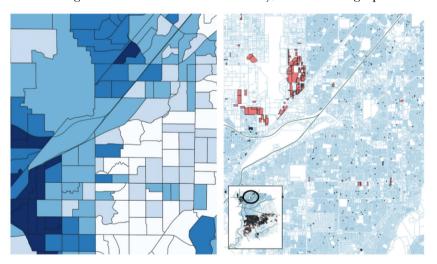


Figure 6. North Sacramento County, Parcel Demographics



B. "A DEEPER DIVE" INTO SELECT DISTRICTS

As explained above, in many cases, the Mello-Roos taxes are securitized in order to fund infrastructure improvements. We compiled a fair amount of information available about these financings. Our first source of information is a listing of CFD debt outstanding maintained by CDIAC. Based on the latest available report, there is currently about \$1.2 billion in principal secured by CFDs in Sacramento County, which amounts to seven percent of the total debt

issued statewide.⁴⁹ There are a total of 46 outstanding issues.⁵⁰ We found approximately 107 CFD Mello-Roos taxes collected in Sacramento County in our parcel data. The CDIAC data also revealed the terms of the bonds and their interest rates. Though this data is imperfect in a number of ways,⁵¹ we think it demonstrates some broad points.

First, these borrowings were more expensive than if the local governments borrowed for the infrastructure themselves. To see this, examine Figure 7 and compare the CFD line with the bond buyer line, which is the line representing conventional tax-based borrowings. Remember, in a pre-Proposition 13 world, local governments might well have financed some of the infrastructure themselves and so this is, in part, a meaningful comparison. Second, 30-year mortgage rates are not consistently or significantly more expensive than these bonds. This means that having the homeowners pay for these improvements at their cost of funds would not obviously be worse than requiring them to pay a CFD tax. Third, based on informal discussions as to commercial developer rates, it was thought that the Prime Rate + 2 was a reasonable guess, and so there is usually at least some benefit to using CFD financing rather than the rates of the developers.

When bonds such as these are offered in the public marketplace, federal securities law requires that there be a disclosure document about the project.⁵² These disclosure documents—Official Statements—are broadly similar in what they disclose.⁵³

^{49.} Cal. Debt & Inv. Advisory Comm'n, California Mello-Roos Community Facilities Districts Yearly Fiscal Status Reports 2017–2018, at 8 (2019), https://www.treasurer.ca.gov/cdiac/reports/M-Roos/2018.pdf [https://perma.cc/DHA3-94TF].

^{50.} Id. (counting all issues based on the TOC).

^{51.} For instance, the various disclosure documents do not disclose exactly the same data and, in most cases, the key information represents a reasonable prediction as to the development plan.

^{52. 17} C.F.R. § 240.15c2-12 (2020).

^{53.} They are also, usually, available on a website called EMMA. See generally Understanding New Issue Calendar, EMMA, https://emma.msrb.org/EmmaHelp/UnderstandingNewIssueCalendar [https://perma.cc/KB35-WUZ7] (explaining the calendar and data available).

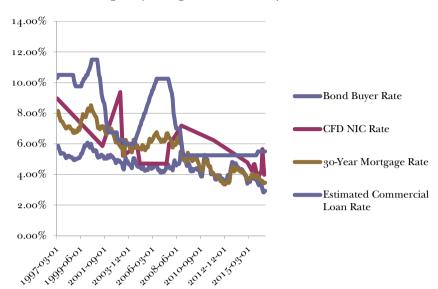


Figure 7. Long-Term Trends by Different Rates

We examined these documents in order to learn about the projects financed. Again, the information here is noisy. For one thing, there is no standard disclosure, just similar disclosures; thus, there is no requirement that terms have exactly the same definition in each document. Also, because these financings were typically done before the projects were completed, the disclosure only represents reasonable surmises of what would happen. Notably, we were unable to find every financing document. Still, some broad trends emerge from the data.

For the most part, these bonds⁵⁴ (over 60 percent) financed infrastructure for projects consisting mostly of single-family homes on large lots. At least 50 percent of the projects had not yet pulled all of the required entitlements, and about one-third of the projects disclosed that at least some of the property to be developed was located on flood plains.⁵⁵

The Official Statements further reveal that the financings themselves were expensive, with over 40 percent having capitalized interest and incurring significant issuance expenses of almost \$500,000 on average.⁵⁶ This is important because it indicates that it is very unlikely that the ultimate taxpayers are getting

^{54.} We focused on 27 long-term issues that represented money for new projects versus refunding. Note that the data collected for Sacramento County issuances for part of this project was consistent with the data collected for 29 issues for Sacramento, Placer, and Riverside counties that occurred in 2003. See Shanske, supra note 27, at 723.

^{55.} Based on data collected by the authors from the Official Statements of these issues posted on EMMA. Data on file with the authors.

^{56.} Id.

a "good deal" through the use of the CFD financing mechanism. As Figure 7 demonstrated, CFD rates are about the same as home mortgage rates, therefore homeowners could—at least sometimes—have borrowed the money needed for these improvements at their borrowing rate instead of paying the CFD tax. It is true that the CFD rates can be a bit lower than the developer's rate, and perhaps there are some savings there, but the expense of CFD borrowings likely undermine any savings for homeowners.

This is not to say that these financings are not advantageous to *developers*.⁵⁷ For instance, CFD financings ease the risk on the developers' own capital. Note that even if the savings from a CFD are passed on to homeowners, this subsidy does not seem particularly well placed. Much like other housing subsidies, the subsidy would skew upward distributionally and would probably, like federal housing subsidies, just encourage higher income households to increase their housing investment.⁵⁸

We think, on balance, the evidence shows that higher CFD taxes reduce home prices, but not in an amount that fully takes into account the new taxes, a phenomenon known as capitalization. If homebuyers do respond to CFD taxes, then it indicates that it is possible that any savings that results from using CFDs may be passed on. It is important to emphasize that the capitalization literature generally finds a great range in the extent of capitalization.⁵⁹ Indeed, the one paper we know of that studied capitalization of developer district taxes in particular found imperfect capitalization, but also some overcapitalization—that is, homeowners reducing the purchase price more than the present value of the extra tax burden.⁶⁰ In the end, the extent of capitalization depends on so many variables, including variables that may change during the development process (e.g., interest rates, competition), that a strong conclusion regarding capitalization across the board is not warranted.⁶¹

^{57.} That CFDs so clearly aid developers provides some support to Kogan and McCubbin's concerns. Kogan & McCubbins, supra note 33.

^{58.} Haydar Kurban, Federal Spending and Segregation in Chicago Suburbs, REV. BLACK POL. ECON., Spring 2006, at 49, 59-61.

^{59.} See, e.g., G. Stacy Sirmans, Dean H. Gatzlaff & David A. Macpherson, The History of Property Tax Capitalization in Real Estate, 16 J. REAL EST. LITERATURE 327, 333–35 (2008) (reporting range); see also Cameron K. Murray, Developers Pay Developer Charges, 74 CITIES: INT'L J. URB. POL'Y & PLAN., Apr. 2018, at 1, 6 (finding developers pay developer fees); Erica Myers, Are Home Buyers Inattentive? Evidence from Capitalization of Energy Costs, 11 AM. ECON. J.: ECON. POL'Y 165, 178 (2019) (finding high capitalization of home energy prices).

^{60.} Stephen B. Billings & Thomas G. Thibodeau, Financing Residential Development with Special Districts, 41 REAL EST. ECON. 131, 155-58, 161 (2013).

^{61.} In one particularly important recent paper, the evidence suggested much higher capitalization the more that housing supply was constrained—so more capitalization in the Boston suburbs than in more rural New Hampshire. Byron Lutz, *Quasi-Experimental Evidence on the Connection Between Property Taxes and Residential Capital Investment*, 7 AM. ECON. J.: ECON. POL'Y 300, 316–17 (2015). It is an interesting question whether the communities we discuss are more like the Boston suburbs, but assuming they *are* more like the suburbs (thus high capitalization)

What is warranted is to note that developers have an expectation of some extra profit due to undercapitalization.

Before discussing some policy options, it worth taking a moment to quantify just how much a developer could benefit from CFD financing. Let us assume that a developer has imposed a \$2,000-year special tax/parcel on a 1,000-unit development. Let us assume further that this tax secures a 25-year borrowing at a five percent borrowing rate. The total principal amount of the bonds would be about \$28,000,000. As noted already, these bonds are expensive, so let us suppose that the developer on her own could have financed the same⁶² improvements for \$25,000,000.

Part of the benefit to the developer is that CFDs enable the developer to delay borrowing this amount, say, for three years, at its own cost of funds or opportunity cost in terms of other investments. That might be a fairly high number, say, \$5,000,000, if the developer borrowed \$25 million for three years at seven percent (two points higher than a CFD borrowing). Now, let us add imperfect capitalization by the homebuyers, say, 25 percent. This means that instead of insisting on a \$28 million reduction in the purchase price of their homes, they only demand an \$18.75 million discount, yielding the developer another \$6 million. Adding these two benefits and rounding down, we arrive at a \$10 million possible benefit to the developer from the opportunity cost savings and undercapitalization on a \$28 million borrowing or a subsidy worth about one-third of the principal amount of the bonds. While this example is just a quick estimation of the potential savings a CFD financing could provide a developer, it shows just how attractive CFDs could be to developers. Because the use of CFDs could turn out to be so beneficial, it indicates that CFDs can be a useful policy lever.

V. POLICY DISCUSSION

Since the 1970s, cities have been forced to compete for development, which often requires infrastructure investment. As infrastructure expenditures began to dominate local spending in the 1980s, new investment tools, like sublocal special tax districts that worked for both growth and infrastructure development were developed. These tools, while successful in many regards, have produced disparate patterns of development and urban sprawl.

Our data indicate that the Mello-Roos mechanism used in Sacramento County provides a substantial subsidy to sprawl pattern and segregated development.⁶⁴ Moreover, when CFDs are used for the construction of public

the paper found capitalization ranged from 70 percent to 97 percent. *Id.* at 323. The possibility of 30 percent undercapitalization could be quite motivating.

^{62.} Or maybe slightly less if the local government has negotiated for more amenities than the developer would provide otherwise.

^{63.} Michael A. Pagano & David Perry, Financing Infrastructure in the 21st Century City, 13 PUB. WORKS MGMT. & POL'Y 22, 24–25, 27–28 (2008).

^{64.} Supra Section IV.A.1-2.

infrastructure and schools, we have shown that there are significant implications for the taxes assessed on an individual parcel.⁶⁵ These taxes restrict the revenue that is available to local governments for general purposes.

Certain policy lessons follow these conclusions fairly directly. First, the worst uses for CFDs should simply be forbidden. For example, CFDs should not be permitted in environmentally sensitive areas (e.g., flood plains) or for explicitly exclusionary developments (e.g., gated communities). Even implicitly exclusionary uses should be forbidden or limited (e.g., golf courses). Another good idea would be to limit their use to areas near public transit, which would help to offset the need for roadway construction, or require a certain amount of higher density development.⁶⁶

Changing the law to channel the availability of CFDs to certain areas or types of development is appropriate as a planning tool. CFDs represent a region's joint motivation to attract development and improve infrastructure. Within the urban core, this dual motivation can result in the re-emergence of previously blighted conditions. Outside of the urban core, our data suggest that while new infrastructure might be built to accommodate growth, it is also likely to add to a sprawling regional infrastructure inventory that eventually must be maintained and replaced. Access to robust public transit is one means of ensuring that the sublocal tax districts do not produce a sprawling infrastructure.

We have also demonstrated that CFD financings offer several financial advantages to developers. Returning to our numerical example, requiring CFDs to provide benefits that do not erode too much of the developers' profits seems plausible. According to our back of the envelope calculation, developers might benefit by as much as 33 percent of the principal value of CFD bonds.⁶⁷ Given the roughness of our estimate—and varying conditions among developments—it would not be wise to attempt to carve out such a large amount of funds for policy initiatives; notably, however, the redevelopment agencies in California were required to set aside 20 percent of their tax revenue for affordable housing.⁶⁸ With this in mind, perhaps there could be a requirement that ten percent of CFD proceeds be set aside for affordable housing or mass transit. Given the scale of CFD bonds (a bit under one billion dollars per year) and the need for new housing,⁶⁹ such a

^{65.} Supra fig.3a.

^{66.} Note that another complexity is that requirements for near substitutes for Mello-Roos taxes, such as developer fees and special benefit assessments, would also need to be adjusted.

^{67.} See supra Section IV.B.

^{68.} ALAMEDA CNTY. CMTY. DEV. AGENCY, WHAT WAS LOST AFTER DISSOLUTION OF REDEVELOPMENT 1 (2014), https://www.acgov.org/cda/hcd/documents/Lost-Redevelopment-funds-impact-Affordable-Housing.pdf [https://perma.cc/[569-8949].

^{69.} Given this vast need, it could be objected that any limitation on developer profits or channeling of development is ill advised. We think this gets matters backward. It is very likely true

requirement could raise a significant amount of funding. As already noted, there have been approximately \$1.2 billion in Mello-Roos bonds issued secured by property in Sacramento County; over \$16 billion have been issued statewide.

In sum, our research shows that CFDs have contributed to development patterns that are suboptimal across multiple dimensions. Our research also indicates that they likely provide substantial benefits to developers. Thus, relatively small changes to the rules governing where CFDs could be used and requiring some set-asides could potentially yield substantial results.

VI. CONCLUSION

Our built environment is the result of decades of decisions or non-decisions. Sublocal tax districts are one tool that has contributed to current problems, though in almost all cases not nearly the most important one. Nevertheless, achieving the change we need will require using all available tools, and that requires taking an inventory. Sublocal districts are hard to study. In this Essay, we attempted to shed light on what they are and how they function. We think that our data points to some commonsense reforms, not outright abolition. For instance, we think that developers can make money without building in flood plains and that taking away a subsidy to develop in environmentally sensitive areas hardly constitutes a major imposition on the autonomy of individuals and communities. That is to say that the major harms these districts contribute to can be mitigated with minimal costs to the benefits they might provide in certain contexts. And, if redesigned thoughtfully, these districts could help improve development patterns across multiple dimensions.

that the housing crisis in California (and elsewhere) is in large part driven by state and local regulatory decisions that make building housing more expensive, and thus, in an odd way, the CFD subsidy is a way to compensate developers for these costs. *See generally* JONATHAN WOETZEL, JAN MISCHKE, SHANNON PELOQUIN & DANIEL WEISFIELD, MCKINSEY GLOB. INST., A TOOL KIT TO CLOSE CALIFORNIA'S HOUSING GAP: 3.5 MILLION HOMES BY 2025 (2016), https://www.mckinsey.com/~/media/McKinsey/Industries/Public%20and%20Social%20Sector/Our%20Insights/Closing%20Californias%20housing%20gap/Closing-Californias-housing-gap-Full-report.pdf [https://perma.cc/X664-LWEM] (discussing how state and local policies have worsened the California housing crisis). But the right approach is surely to change the underlying state and local law and not to use CFD law to compensate the handful of developers that make it through the regulatory thicket. *See generally* Christopher S. Elmendorf & Darien Shanske, *Auctioning the Upzone*, 70 CASE W. RSRV. L. REV. 513 (2020) (arguing that auctioning the right to upzone could increase housing supply and decrease price).

^{70.} CAL. DEBT & INV. ADVISORY COMM'N, supra note 49, at 8.