Debt by Democracy:
Bond Referendum Requirements and Municipal Borrowing

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Brookings Municipal Finance Conference
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A tale of two cities…

Dallas, Texas

Dallas City Council approves $1.25 billion bond package and early May election

KERA | By Nathan Collins
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Office of Bond and Construction Management

Please note, our website will soon be changing. Same content new look.

Mission

The Office of Bond and Construction Management (BCM) was created to provide oversight of the City's bond programs to ensure the efficient, equitable, and transparent delivery of infrastructure improvements to the Dallas community.

Proposed 2024 Bond Project Listing

(To be updated every Friday)

Proposed 2024 Bond Map

2024 Bond Program Informational Brochure

(English, Spanish, Vietnamese)

2024 Bond FAQ's

(English, Spanish, Vietnamese)

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IMPORTANT DATES

Early Voting
April 22-30, 2024

Election Day Saturday
May 4, 2024

PLEASE NOTE:

he City Council has the authority o add or delete specific projects, nodify project scope, add new rojects, or adjust the amounts eeded for specific projects, vithin the same proposition.

assage of a proposition does not uarantee that the City of Dallas vill complete a specific project.

PROPOSITION A. STREETS AND TRANSPORTATION

$521,200,000

If passed, Proposition A would fund the construction of, repair to, and land purchase for:

- roads
- bridges,
- sidewalks,
- traffic signals,
- safety projects, and
- railroad crossing noise reduction.

The projects may include, but are not limited to, sidewalks listed in the Sidewalk Master Plan. The City will potentially partner and share costs with other entities, such as North Central Texas Council of

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FREQUENTLY ASKED QUESTIONS

What is a Bond Program?
A bond program is a voter issued debt program that will be used to fund improvements to the City's infrastructure, such as alleys, streets, sidewalks, parks, drainage, and facilities.

How is a Bond Program funded?
A bond program is funded by the issuance of general obligation bonds. The bonds are a debt that the City must pay back over time. The payment of the debt over time is called debt service. Debt service is funded by taxpayer dollars.

How much is the 2024 Capital Bond Program?
The total bond package is $1.25 billion.

How are the propositions in the 2024 Capital Bond Program approved?
By the issuance of general obligation bonds (GO), which must be approved by the residents of Dallas through an election. Voters will vote on the individual propositions that make up the 2024 Capital Bond Program and GO bonds will be sold based on the propositions that are approved.

When is the election?
The election will be held on May 4th. Early voting begins on April 22nd and ends on April 30th. For locations and hours, please click the **county you reside in:** Dallas County, Denton County, Collin County.

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Proposed 2024 Bond Project Listing

Name	Proposition	Amount
Dallas Police Training Academy Facility	Public Safety Facilities	$50,000,000.00
Future Project	Economic Development	$36,600,000.00
Future Project	Economic Development	$29,200,000.00
Dallas Zoo	Park & Recreation	$26,500,000.00
Irving Blvd (SH356) Over Elm Fork Trinity River	Street and Transportation	$24,750,000.00
Proposed Housing Project	Housing	$24,400,000.00
Peak Complete Street (Lemmon/ Haskell to Parry)	Street and Transportation	$22,110,000.00
Dallas Museum of Art	Cultural Arts Facilities	$20,014,618.70

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WFAA

Dallas officials release proposed project list for 2024 $1.25 billion bond program

Dallas city officials released the list a month before voting begins on the bond proposals.

Mar 23, 2024

Dallas News

Dallas bond election to decide fate of $19 million to shelter homeless people

Dallas voters will decide the outcome of 10 propositions on the ballot for the May 4 municipal bond election, including funding for projects to shelter and...

Apr 23, 2024

NBC 5 Dallas-Fort Worth

Dallas City Council finalizes $1.25 billion bond proposal Wednesday

Dallas City Council members Wednesday finalized the 2024 capital bond propositions that will be included in a $1.25 billion bond referendum for voters to...

Feb 14, 2024

CBS News

What's in the $1.25 billion Dallas bond and will voters approve it?

Dallas residents will have the chance to vote for or against a $1.25 billion bond project that includes money for street repairs, parks, a police training...

Apr 21, 2024

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Dallas 2024 Bond Propositions Approved by Voters

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Dallas 2024 Bond Propositions Approved by Voters

Chicago, Illinois

Chicago City Council approves $830 million of GOs – The Bond Buyer

February 27, 2025

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letseditthesadparts • 27d ago

How about not allowing a mayor and council to ever vote on something like that without a vote from the public. Apparently not all cities allow such things to be decided by current members of office without public approval. Changing people doesn't matter if the rules don't [redacted] change. It's really that simple.

4 Reply Share ···

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Chicago Boosts Bond Sale to $698 Million With High Yield at 5.6%

By Arvelisse Bonilla Ramos

June 4, 2025 at 6:04 PM CDT

Goals of the paper

–First, document the variation in bond referendum requirements in the U.S.

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How do these requirements shape public borrowing?

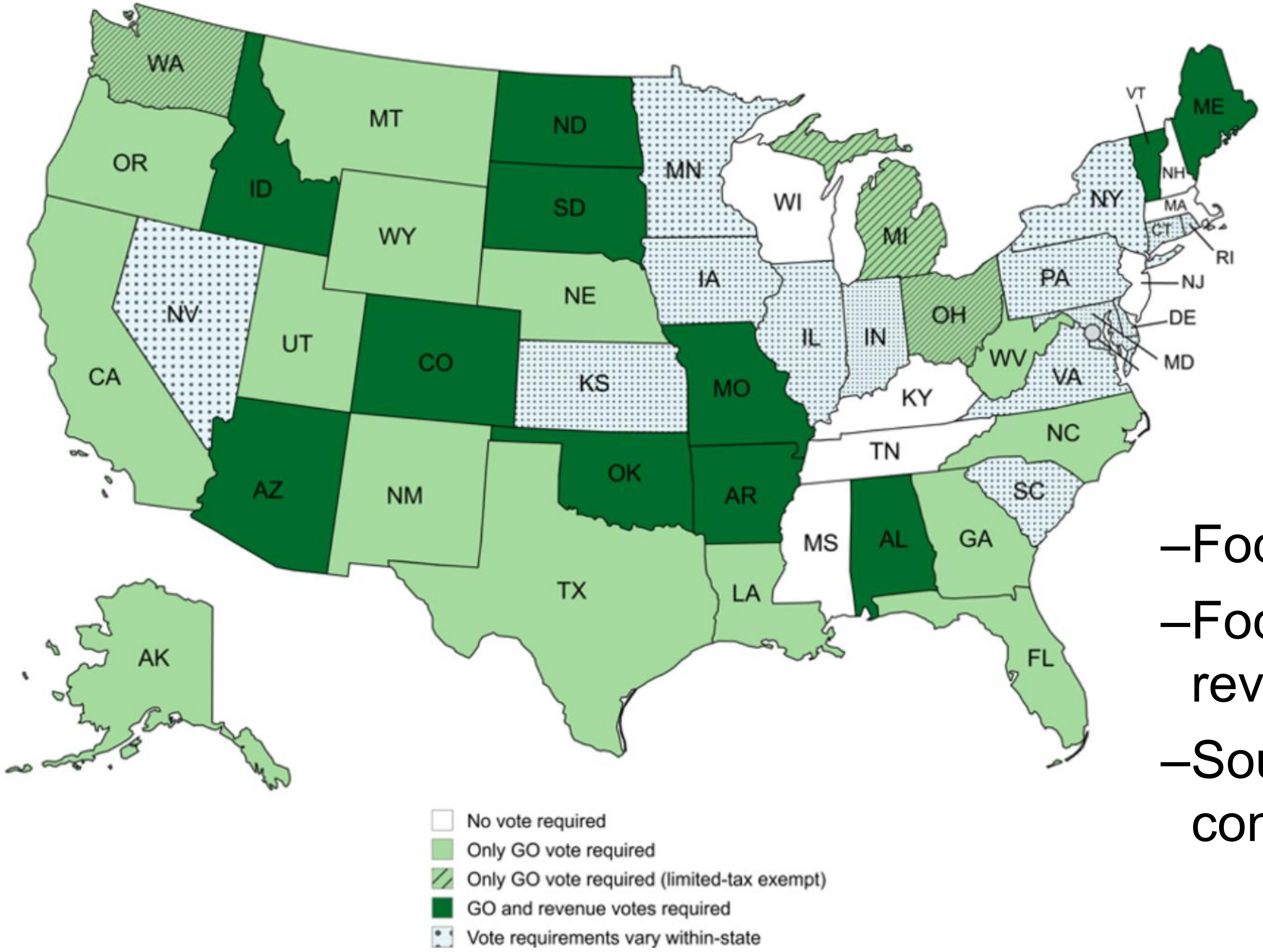
Disclosure incentives

Debt choice incentives

Are referendum requirements associated with richer information environments for voters and investors?

Are referendum requirements associated with municipalities' debt choice and borrowing costs?

Variation in bond referendum requirements



- Focus on U.S. cities
- Focus on UTGO, LTGO, revenue bonds
- Sourced from state constitutions, statutes, etc.

RQ1: Are referendum requirements associated with richer information environments?

Voters	Investors

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Voters	Investors

– Referendum requirements raise the marginal benefit of issuer disclosure:
  - Informed officials can use disclosure to reduce voter uncertainty about project costs and benefits
  - Ballot questions lack party/incumbency cues, increasing voters' reliance on issuer disclosure

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Investors

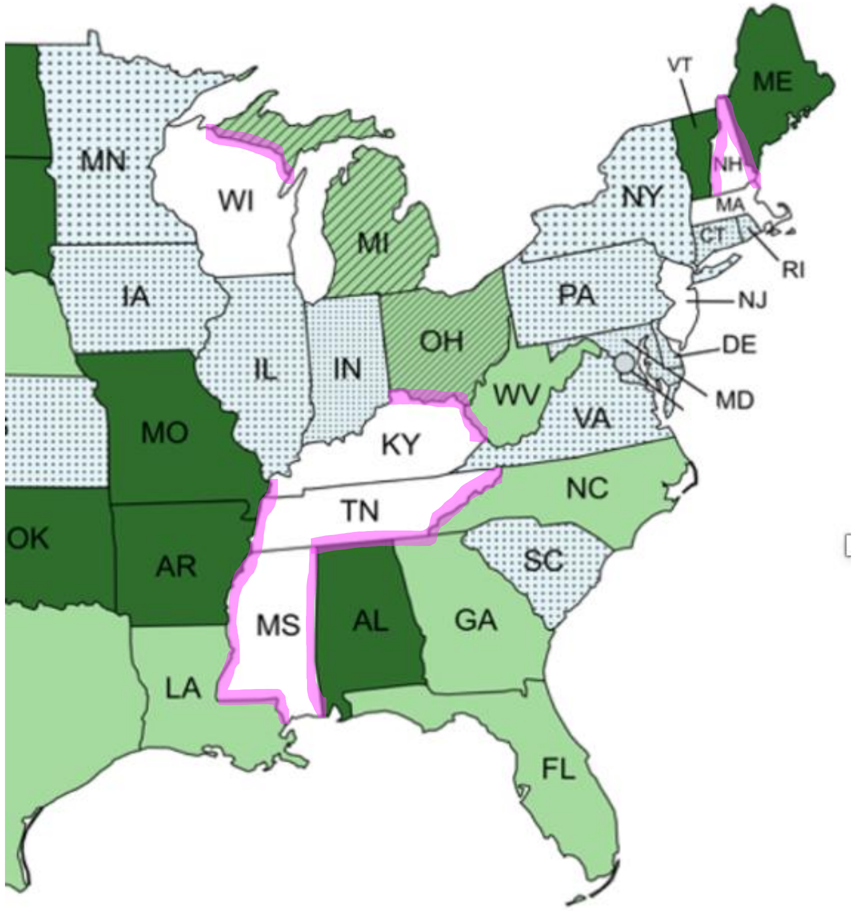
– Muni market is notoriously opaque
  - Disclosure compliance is low (Cuny, 2016; Schmitt, 2011)
  - Enforcement is weak (Maffett et al., 2024; Ivanov et al., 2025)

– As of 2025, retail investors hold 66% of outstanding muni bonds; investors and voters can overlap due to tax incentives

– But, investor response to formal financial disclosure is weak (Cuny et al., 2025)

Website disclosure

Vote required → ? → Website disclosure



– Focus on variation in GO bond referendum requirements (green vs. white states)
– Measure city website disclosure using the Wayback Machine
  - Compare along state borders to keep data collection tractable
  - Lessens the concern that unobserved geographic factors explain differences in websites (Gao et al., 2019; Homes, 1998)

Website disclosure

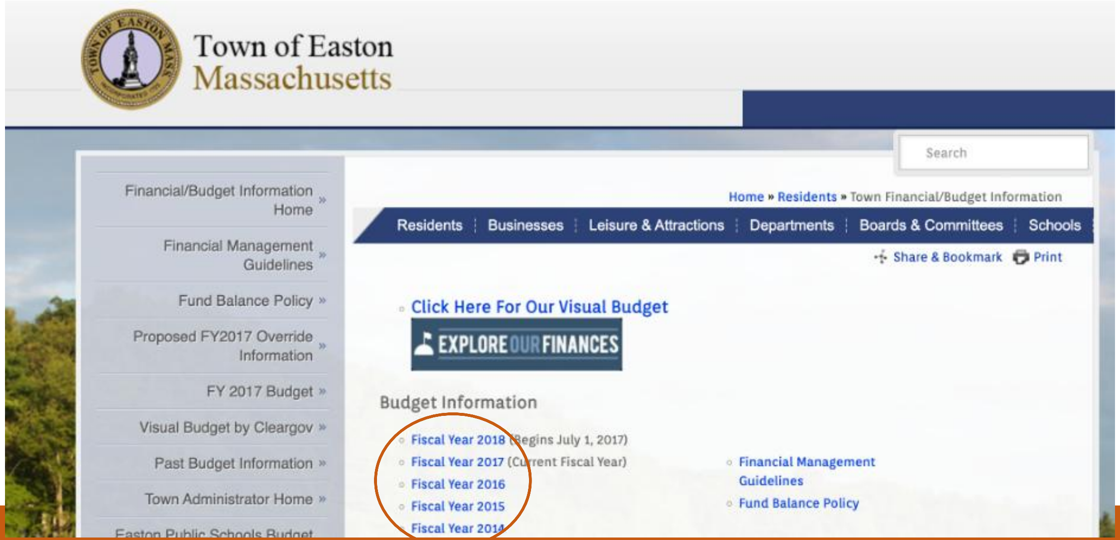
– Scrape annual snapshots for 335 cities from 2015-2020

– Bond-related information

- Bond URL Count
- Bond Count (text)

– General financial information

- Fiscal URL Count
- Fiscal Count (text)
- Financial documents



Website disclosure results

	Bond URLs (1)	Bond Count (2)	Fiscal URLs (3)	Fiscal Count (4)	Financial Docs (5)
Vote	0.892**	0.778***	2.34***	0.736*	0.601**
	(2.16)	(2.80)	(2.60)	(1.65)	(2.36)
Num Issuances	0.151	0.290*	0.240	0.795***	0.446**
	(0.52)	(1.82)	(0.71)	(3.33)	(2.40)
State Fiscal Monitor	0.182	0.705**	1.91*	0.703*	0.302
	(0.36)	(2.41)	(1.87)	(1.94)	(1.07)
County ln(GDP)	0.251	0.439	0.935	-0.253	1.11***
	(0.27)	(0.91)	(0.96)	(-0.54)	(2.97)
County ln(Pop)	2.52	-0.865	2.69*	1.44	0.569
	(1.50)	(-0.85)	(1.92)	(1.56)	(0.63)
County ln(Pers. Inc)	-2.31	0.457	-3.43**	-1.27	-1.73*
	(-1.16)	(0.45)	(-1.97)	(-1.22)	(-1.76)
N	1,572	1,656	1,442	1,656	1,627
Pseudo R^2	0.103	0.150	0.211	0.229	0.158
State-Border FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Cluster	County	County	County	County	County

Bond history
Monitoring

Local economic conditions

Comparing w/in state-border pair

Website disclosure results

Translates to 0.30 more URLs

Translates to 4 more mentions

Translates to 12 more mentions

Translates to 1.4 more PDFs

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Media coverage

Vote required → ? → Bond-related media coverage

– Media outlets endogenously produce more news about policy actions when reader interest is high

- By putting a fiscal decision before the voters, a bond referendum may raise reader interest in bond-related news and increase the supply of coverage
- Ex: Sun Valley, ID (2017): $17.5mm roads bond passed by 0.4%

Sun Valley moves forward with November roads bond measure

Peter Jensen Aug 11, 2017

The Sun Valley City Council is moving ahead with a bond measure to pay for roads projects that will be before voters on Nov. 7.

SUN VALLEY

Learn about Sun Valley roads bond Wednesday

Express staff Oct 19, 2017

SUN VALLEY

Sun Valley voters will decide $17.5 million roads bond

Peter Jensen Oct 27, 2017

Media coverage results

	Total Articles - 12mo			
	Full Sample		Border-City Sample	
	(1)	(2)	(3)	(4)
Vote	0.316***	0.274**	0.581**	0.551**
	(2.71)	(2.53)	(2.57)	(2.23)
Bond Issuance - 12mo	0.260***	0.260***	0.229	0.098
	(2.99)	(3.13)	(1.25)	(0.64)
Num Sources	0.907***	0.802***	1.02***	1.04***
	(17.40)	(16.10)	(7.82)	(7.44)
Amount	0.220***	0.171***	0.002	-0.081
	(4.70)	(4.54)	(0.01)	(-0.61)
County ln(GDP)		0.531**		-0.538
		(2.12)		(-0.91)
County ln(Pop)		-0.041		0.913
		(-0.18)		(0.84)
County ln(Pers. Inc)		-0.329		0.118
		(-0.98)		(0.10)
N	2,727	2,727	568	568
Pseudo R^2	0.611	0.621	0.512	0.524
Year-Month FE	Yes	Yes	Yes	Yes
Purpose FE	Yes	Yes	Yes	Yes
State-Border FE	No	No	Yes	Yes
Cluster	County	County	County	County

Full sample of green and white states; UTGO bond issuances from 2000-2020 (Mergent)

Media coverage results

Bond-related articles matched to cities (RavenPack)

articles within 12 months before UTGO issue to capture bond campaign period

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Recent bonds

Media landscape

Size of bond

Full sample of green and white states; UTGO bond issuances from 2000-2020 (Mergent)

Month, purpose, state-border pair FEs

Media coverage results

Translates to 31.5% more articles

Results hold in border cities

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	Full Sample		Border-City Sample	
	(1)	(2)	(3)	(4)
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State-Border FE	No	No	Yes	Yes
Cluster	County	County	County	County

Recent bonds

Media landscape

Size of bond

Month, purpose, state-border pair FEs

Validation using Texas bond elections

Is website disclosure more likely during elections?

	Increase in Bond Text	
	(1)	(2)
Election Year	0.231***	0.227***
	(4.21)	(4.15)
Bond Issuance Year		0.014
		(0.49)
County ln(GDP)		-0.057
		(-0.41)
County ln(Pop)		-0.236
		(-0.82)
County ln(Pers. Inc)		0.619***
		(2.71)
N	1,440	1,440
Adj. R^2	0.073	0.076
City FE	Yes	Yes
Year FE	Yes	Yes
Cluster	County	County

Translates to 84% increase in likelihood of adding bond text

Is media coverage more likely during elections?

	Bond Coverage	
	(1)	(2)
Election [0, +3]	0.033**	0.034**
	(2.16)	(2.19)
Bond Issuance [0, +3]		0.051***
		(3.38)
County ln(GDP)		0.022
		(1.09)
County ln(Pop)		0.053
		(1.19)
County ln(Pers. Inc)		-0.057
		(-1.37)
N	32,208	32,208
Adj. R^2	0.209	0.211
City FE	Yes	Yes
Year-Month FE	Yes	Yes
Cluster	County	County

Translates to 83% increase in likelihood of coverage

Is this information relevant for voters?

Bond website text

	Failed		Margin	
	(1)	(2)	(3)	(4)
High Bond Text	-0.128**	-0.111*	0.091***	0.070**
	(-2.02)	(-1.79)	(3.44)	(2.62)
Amount		0.004		0.012
		(0.36)		(0.95)
County ln(GDP)		0.065		-0.049
		(0.77)		(-1.02)
County ln(Pop)		-0.141*		0.056
		(-1.74)		(0.88)
County ln(Pers. Inc)		0.026		0.022
		(0.25)		(0.42)
N	561	549	561	549
Adj. R^2	0.098	0.124	0.270	0.297
Year FE	Yes	Yes	Yes	Yes
Purpose FE	Yes	Yes	Yes	Yes
Cluster	County	County	County	County

Bond-related media coverage

	Failed		Margin	
	(1)	(2)	(3)	(4)
Bond Coverage[-3, 0]	-0.127***	-0.123***	0.065**	0.046*
	(-3.60)	(-2.81)	(2.19)	(1.90)
Amount		0.020*		0.0010
		(1.86)		(0.09)
Num Sources		−0.000		−0.000
		(-0.33)		(-0.82)
County ln(GDP)		0.090		0.000
		(1.16)		(0.00)
County ln(Pop)		-0.113		-0.005
		(-0.96)		(-0.05)
County ln(Pers. Inc)		-0.036		0.030
		(-0.27)		(0.34)
N	699	699	699	699
Adj. R^2	0.141	0.172	0.289	0.303
Year FE	Yes	Yes	Yes	Yes
Purpose FE	Yes	Yes	Yes	Yes
Cluster	County	County	County	County

Both bond-related website disclosure and bond-related media coverage are associated with a lower likelihood of failure and greater voter agreement

Is this information relevant for bond investors?

Vote required → ? → Secondary market trading

The information could be useful...	On the other hand...
–Disclosure from bond campaigns aligns with best-practices from municipal credit analysts (NFMA, 2017) –Voters and investors may overlap due to local ownership of muni bonds (e.g., Babina et al., 2021)	–Even for traditional investor-focused disclosure, investors show weak trading responses (Cuny et al., 2025) –Bond campaign materials are neither standardized nor disseminated through centralized investor platforms

Secondary-market trading results

	Trade	Retail Trade	Inst. Trade
	(1)	(2)	(3)
Vote	0.015*	0.033***	0.004
	(1.90)	(3.84)	(0.68)
High Tax Priv.	0.086***	0.103***	0.034***
	(10.60)	(11.56)	(5.12)
Continuing Disclosure	0.169***	0.123***	0.066***
	(15.82)	(12.17)	(8.17)
Amount	0.119***	0.114***	0.140***
	(36.56)	(32.54)	(54.22)
Maturity	0.152***	0.152***	0.084***
	(27.11)	(27.65)	(18.79)
Callable	-0.122***	-0.140***	-0.033***
	(-16.66)	(-19.67)	(-4.93)
Sinkable	-0.134***	-0.160***	-0.050***
	(-12.15)	(-15.11)	(-5.09)
Insured	0.073***	0.061***	0.022***
	(7.35)	(5.66)	(2.81)
Rating	0.001**	0.001*	-0.001***
	(2.14)	(1.93)	(-2.86)
N	50,467	50,467	50,467
Adj. R^2	0.241	0.229	0.202
County Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Purpose FE	Yes	Yes	Yes
Cluster	Issue	Issue	Issue

State tax privilege

Presence of regulated financial disclosure

Bond characteristics

Year trends and within-purpose

- When voter approval is required, bonds are 1.5% more likely to trade in the secondary market
- 3.3% more likely to trade by retail investors
- Consistent evidence in the border-city sample

RQ2: Financing choices and borrowing costs

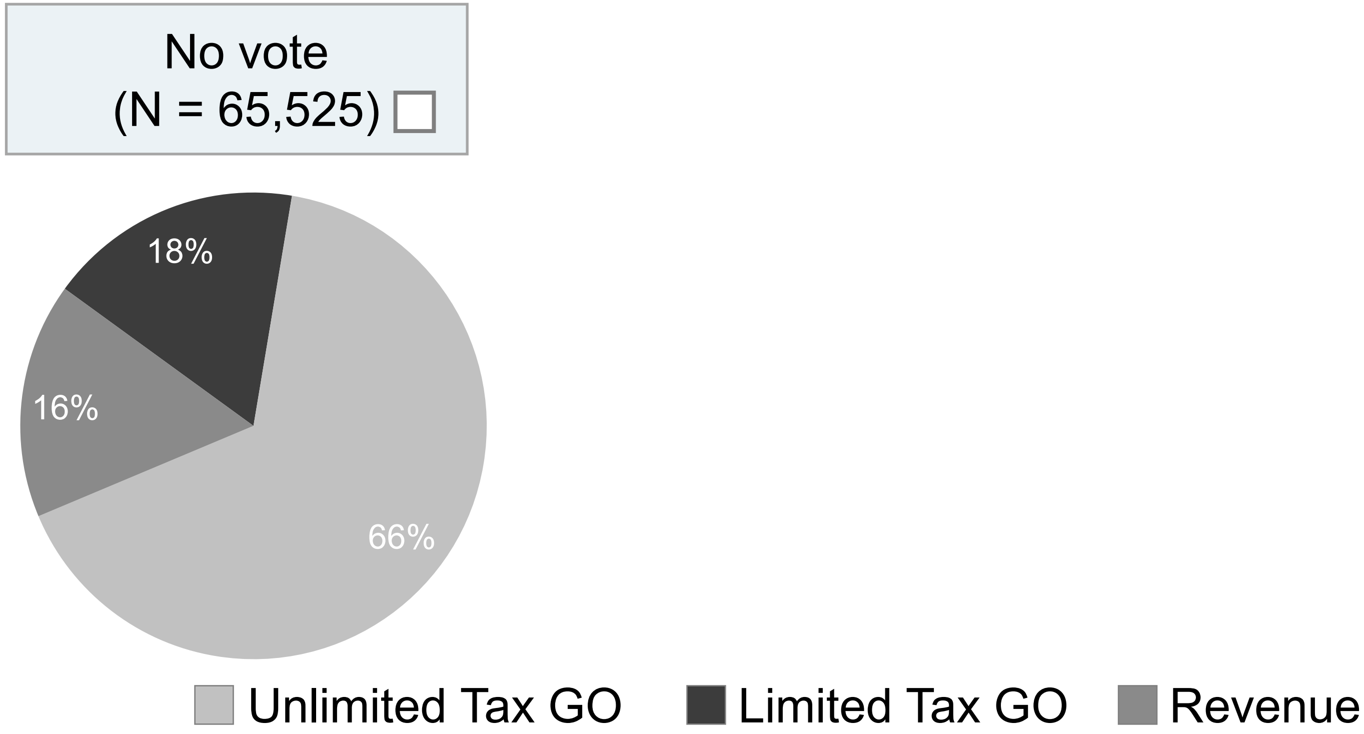
– So far, we find that for bonds subject to a vote, cities have incentives to disclose more bond-related information

– However, because the referendum process is costly, cities also have incentives to retain control over borrowing

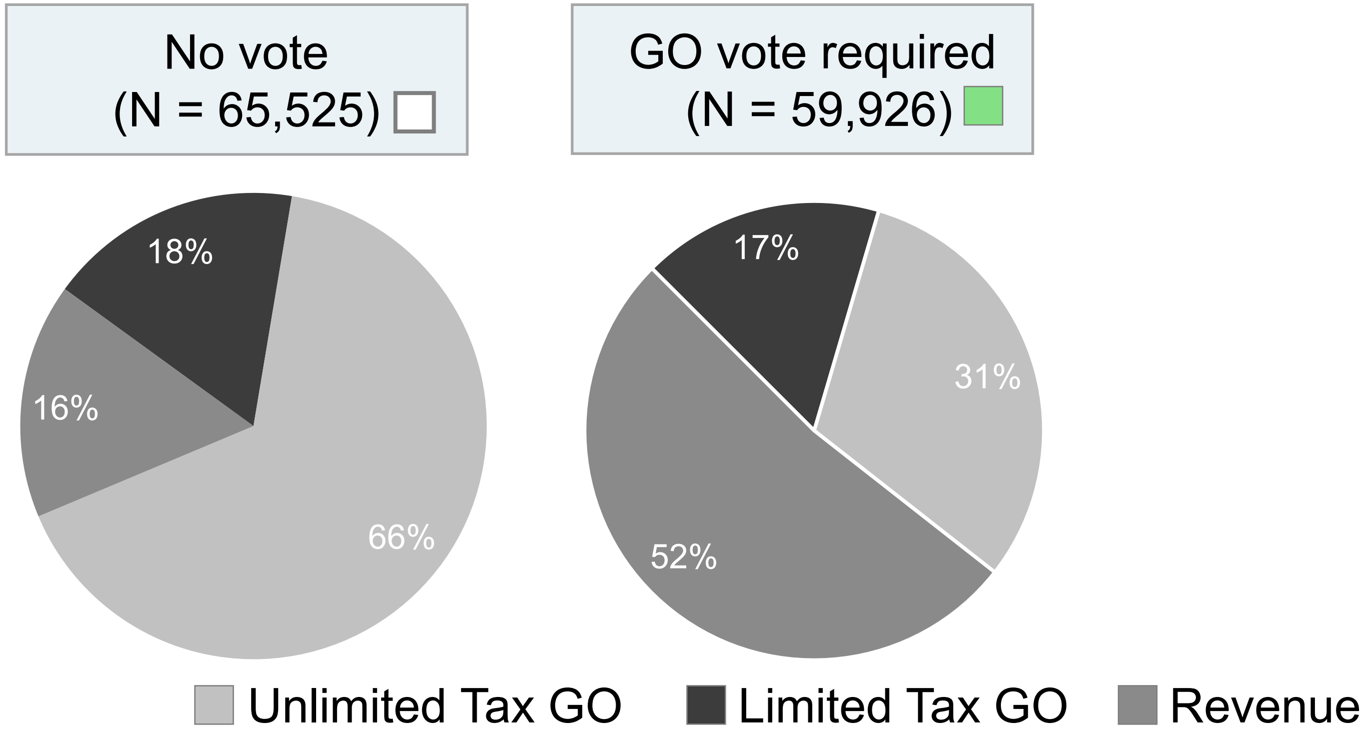
  - May prefer bond types that do not require referendums in the first place
  - But, these types of bonds also tend to be more expensive

→ **Are referendum requirements associated with cities' bond choice and borrowing costs?**

Financing choices

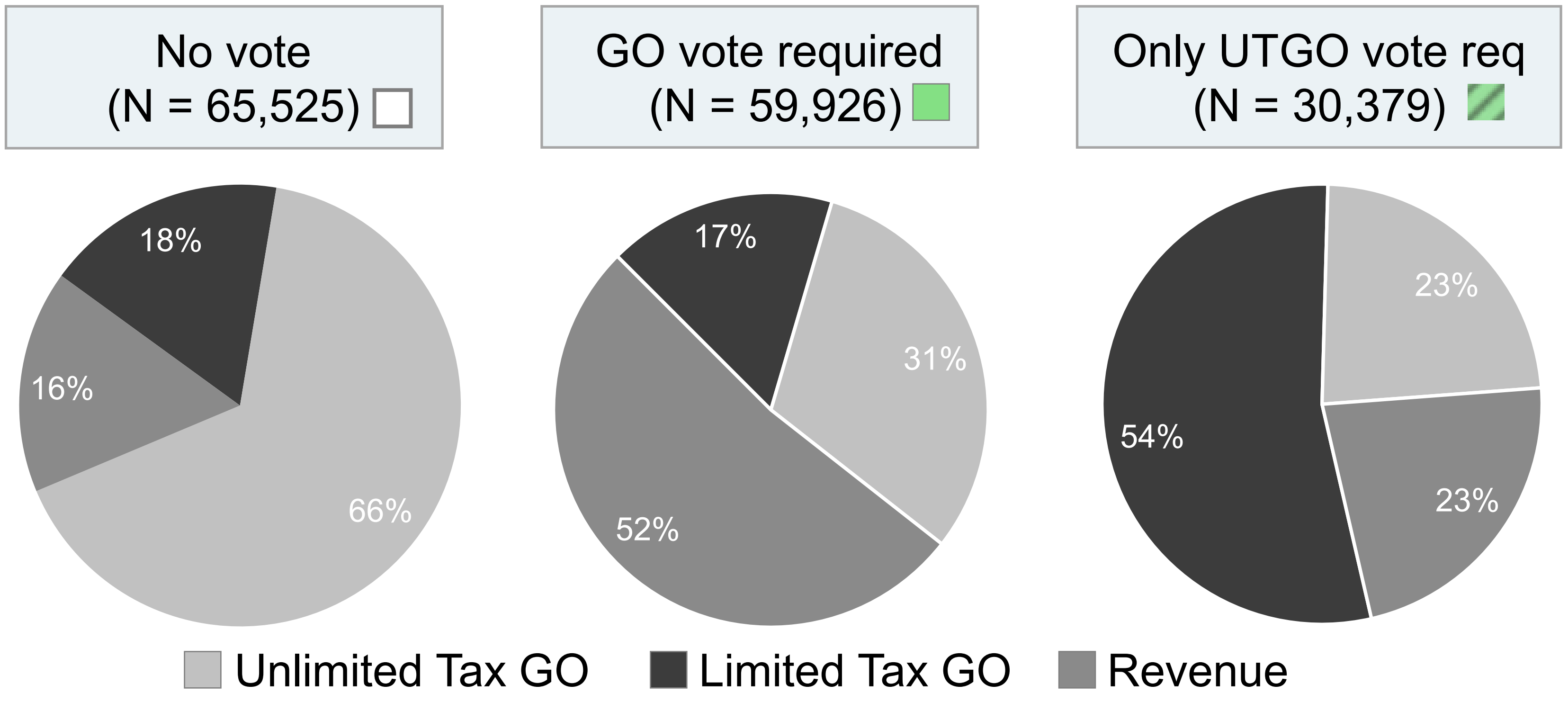


Financing choices



– Results:
  - When a GO vote is required, fewer UTGO bonds, 3x more revenue bonds

Financing choices



– Results:
- When a GO vote is required, fewer UTGO bonds, 3x more revenue bonds
- When only a UTGO vote is required, fewer UTGO, 3x more LTGO bonds
- Compared to the no-vote benchmark, cities may gravitate towards types of bonds where they have more control

Debt choice: GO vote required

- Regress a city's aggregate % bond type from 2000-2020 on *GO Vote*
- City-level regression (no fixed effects)
- Light green vs. white states
- Control for local economic conditions, state laws about muni finances, and tax privilege

	Pct UTGO			Pct LTGO	Pct Revenue
	(1)	(2)	(3)	(4)	(5)
GO Vote	-0.379***	-0.359***	-0.348***	-0.069***	0.411***
	(-10.60)	(-11.30)	(-9.52)	(-3.41)	(11.70)
County ln(GDP)		0.117**	0.045	-0.006	-0.036
		(2.02)	(1.18)	(-0.24)	(-0.94)
County ln(Pop)		-0.426***	-0.202***	-0.022	0.222***
		(-5.64)	(-3.64)	(-0.52)	(4.21)
County ln(Pers. Inc)		0.229**	0.099*	0.055	-0.152***
		(2.47)	(1.65)	(1.15)	(-2.69)
ln(Non-issuer county debt)		0.007*	0.005	0.003**	-0.009**
		(1.69)	(1.40)	(2.10)	(-2.53)
Proactive State			0.127***	0.003	-0.133***
			(2.63)	(0.10)	(-2.80)
LTGO Allowed			-0.030	0.266***	-0.234***
			(-0.98)	(11.80)	(-9.79)
State GO Vote			-0.085**	0.048**	0.028
			(-2.46)	(2.25)	(0.83)
High Tax Priv.			0.274***	-0.131***	-0.119***
			(8.64)	(-5.20)	(-3.71)
N	2,083	2,083	2,083	2,083	2,083
Adj. R^2	0.181	0.228	0.332	0.285	0.278
Cluster	County	County	County	County	County

Debt choice: GO vote required

- Regress a city's aggregate % bond type from 2000-2020 on *GO Vote*
- City-level regression (no fixed effects)
- Light green vs. white states
- Control for local economic conditions, state laws about muni finances, and tax privilege

35% less UTGO — 7% less LTGO — 41% more Rev

	Pct UTGO			Pct LTGO	Pct Revenue
	(1)	(2)	(3)	(4)	(5)
GO Vote	-0.379***	-0.359***	-0.348***	-0.069***	0.411***
	(-10.60)	(-11.30)	(-9.52)	(-3.41)	(11.70)
County ln(GDP)		0.117**	0.045	-0.006	-0.036
		(2.02)	(1.18)	(-0.24)	(-0.94)
County ln(Pop)		-0.426***	-0.202***	-0.022	0.222***
		(-5.64)	(-3.64)	(-0.52)	(4.21)
County ln(Pers. Inc)		0.229**	0.099*	0.055	-0.152***
		(2.47)	(1.65)	(1.15)	(-2.69)
ln(Non-issuer county debt)		0.007*	0.005	0.003**	-0.009**
		(1.69)	(1.40)	(2.10)	(-2.53)
Proactive State			0.127***	0.003	-0.133***
			(2.63)	(0.10)	(-2.80)
LTGO Allowed			-0.030	0.266***	-0.234***
			(-0.98)	(11.80)	(-9.79)
State GO Vote			-0.085**	0.048**	0.028
			(-2.46)	(2.25)	(0.83)
High Tax Priv.			0.274***	-0.131***	-0.119***
			(8.64)	(-5.20)	(-3.71)
N	2,083	2,083	2,083	2,083	2,083
Adj. R^2	0.181	0.228	0.332	0.285	0.278
Cluster	County	County	County	County	County

Debt choice: Only UTGO vote required

8% more LTGO

41% less UTGO

31% more Rev

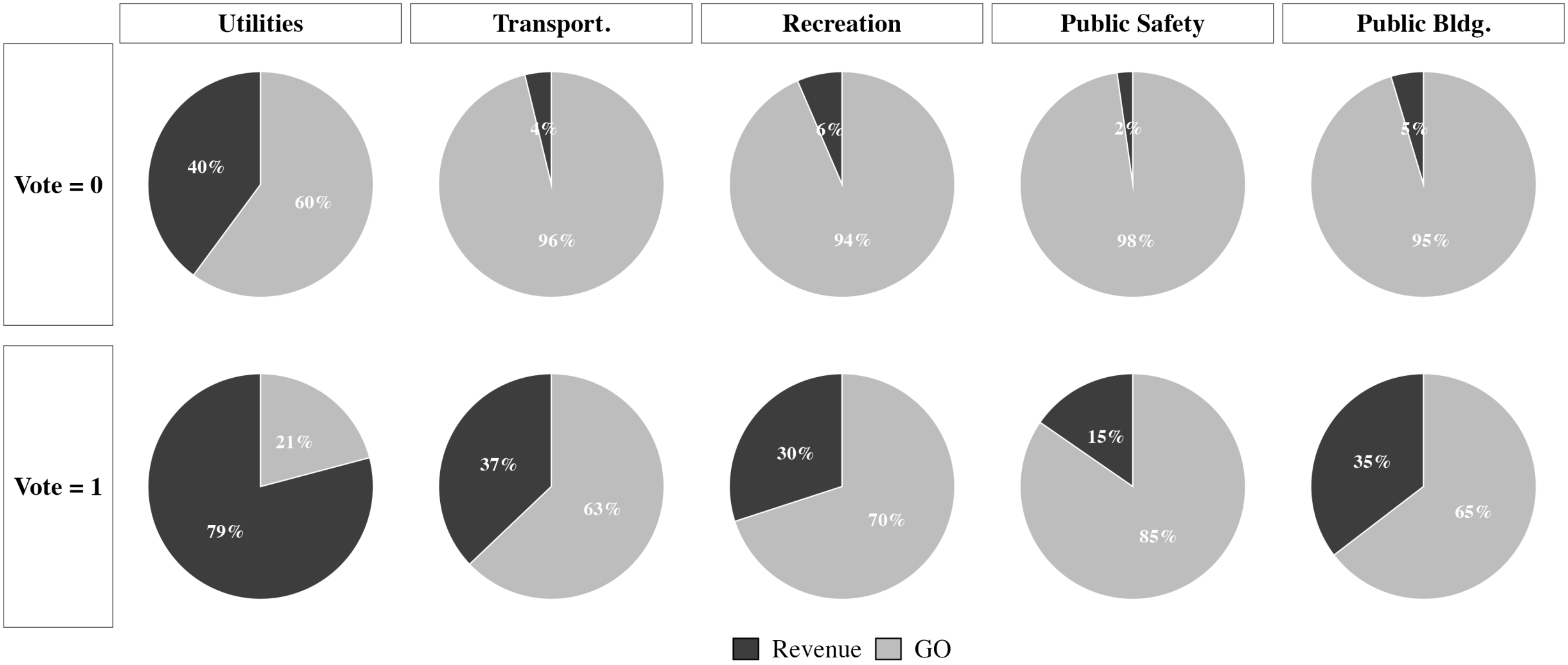
	Pct UTGO			Pct LTGO	Pct Revenue
	(1)	(2)	(3)	(4)	(5)
Only UTGO Vote	-0.467***	-0.454***	-0.412***	0.084*	0.306***
	(-13.10)	(-12.80)	(-8.43)	(1.89)	(11.10)
County ln(GDP)		0.058	0.024	-0.021	0.011
		(0.82)	(0.59)	(-0.54)	(0.28)
County ln(Pop)		-0.232**	-0.133**	0.102*	0.057
		(-2.13)	(-2.20)	(1.94)	(1.33)
County ln(Pers. Inc)		0.132	0.090	-0.062	-0.064
		(1.07)	(1.42)	(-1.12)	(-1.34)
ln(Non-issuer county debt)		0.014***	0.014***	-0.0007	-0.014***
		(2.91)	(3.10)	(-0.43)	(-3.48)
Proactive State			0.244***	0.027	-0.265***
			(6.33)	(0.66)	(-7.41)
LTGO Allowed			-0.248***	0.444***	-0.176***
			(-5.35)	(11.60)	(-7.34)
State GO Vote			0.043*	-0.068***	0.040*
			(1.78)	(-3.19)	(1.82)
High Tax Priv.			-0.095**	0.045	0.054*
			(-2.53)	(1.26)	(1.93)
N	1,746	1,746	1,746	1,746	1,746
Adj. R^2	0.269	0.282	0.375	0.421	0.154
Cluster	County	County	County	County	County

Debt choice: By supermajority requirement

	Pct UTGO	
	(1)	(2)
Vote	-0.404***	-0.391***
	(-12.20)	(-12.20)
Vote * Supermajority State	-0.086**	-0.117***
	(-2.34)	(-3.25)
County ln(GDP)		0.052
		(1.33)
County ln(Pop)		-0.262***
		(-4.38)
County ln(Pers. Inc)		0.152**
		(2.28)
ln(Non-issuer county debt)		0.008*
		(1.91)
Proactive State		0.012
		(0.43)
LTGO Allowed		-0.098***
		(-3.54)
State GO Vote		0.103***
		(4.57)
High Tax Priv.		0.166***
		(6.43)
N	2,780	2,780
Adj. R^2	0.202	0.297
Cluster	County	County

Incremental substitution when hurdle is higher

Project purposes (proportion of $ outstanding)



Project purposes

– Don’t find that *Vote* is associated with financing different projects more or less

– Likely because vote-requiring cities are able to substitute towards revenue bonds across project purposes

	Par of Outstanding Bonds (millions)				
	Utilities (1)	Transport. (2)	Recreation (3)	Public Safety (4)	Public Bldg. (5)
Vote	0.181	0.149	0.230	0.141	-0.297
	(0.68)	(0.62)	(1.29)	(0.50)	(-0.94)
N	1,886	1,886	1,886	1,886	1,886
Pseudo R^2	0.733	0.549	0.518	0.562	0.394
Cluster	State	State	State	State	State

	Pct Revenue				
	Utilities (1)	Transport. (2)	Recreation (3)	Public Safety (4)	Public Bldg. (5)
Vote	0.454***	0.278***	0.246***	0.213**	0.354**
	(10.70)	(4.30)	(3.19)	(2.19)	(2.83)
N	1,227	1,007	754	665	428
Adj. R^2	0.305	0.207	0.106	0.110	0.186
Cluster	State	State	State	State	State

Borrowing cost: GO vote required

	Wtd. Avg. Yield Spread		
	(1)	(2)	(3)
GO Vote	0.354***	0.326***	0.271***
	(8.45)	(7.36)	(4.64)
County ln(GDP)		-0.128	-0.127
		(-1.18)	(-1.29)
County ln(Pop)		0.227**	0.098
		(2.17)	(0.89)
County ln(Pers. Inc)		-0.093	0.032
		(-0.63)	(0.21)
ln(Non-issuer county debt)		-0.014**	-0.010
		(-2.00)	(-1.43)
Proactive State			-0.383***
			(-4.94)
LTGO Allowed			-0.178***
			(-4.44)
State GO Vote			0.155***
			(3.01)
High Tax Priv.			-0.031
			(-0.48)
N	2,072	2,072	2,072
Adj. R^2	0.069	0.086	0.110
Cluster	County	County	County

Yield spreads ↑ by 27-35 basis points

Borrowing cost: Only UTGO vote required

	Wtd. Avg. Yield Spread		
	(1)	(2)	(3)
Only UTGO Vote	0.185***	0.154***	0.294***
	(4.87)	(4.47)	(8.13)
County ln(GDP)		0.138**	0.104
		(2.04)	(1.56)
County ln(Pop)		0.291***	0.228**
		(3.27)	(2.56)
County ln(Pers. Inc)		-0.472***	-0.375***
		(-5.25)	(-4.28)
ln(Non-issuer county debt)		-0.009	-0.009
		(-1.19)	(-1.19)
Proactive State			-0.267***
			(-4.98)
State GO Vote			0.004
			(0.12)
High Tax Priv.			0.131**
			(2.44)
N	1,727	1,727	1,727
Adj. R^2	0.025	0.087	0.103
Cluster	County	County	County

Yield spreads ↑ by 18-29 basis points

Debt choice and borrowing cost in border-city sample

	Pct UTGO	Wtd. Avg. Yield Spread
	(1)	(2)
Vote	-0.302***	0.357**
	(-2.94)	(2.08)
County ln(GDP)	0.128	0.032
	(0.94)	(0.14)
County ln(Pop)	0.389*	-0.536
	(1.72)	(-1.62)
County ln(Pers. Inc)	-0.503*	0.365
	(-1.96)	(0.90)
ln(Non-issuer county debt)	-0.0001	0.009
	(-0.02)	(0.97)
State GO Vote	0.192	0.028
	(1.26)	(0.09)
High Tax Priv.	-0.062	-0.262
	(-0.38)	(-0.84)
N	427	425
Adj. R^2	0.124	0.206
State-Border FE	Yes	Yes
Cluster	County	County

Comparing within a state-border pair

Conclusion

– Descriptive paper, first to document the variation in bond referendum requirements for U.S. cities

How do these requirements shape public borrowing?

Disclosure incentives

Debt choice incentives

Richer information environments for voters and investors

More referendum-exempt, costlier bonds, but allows for more timely and perhaps less costly project execution

Thank You!

Appendix

Website disclosure and media descriptives

Panel A: Website disclosure descriptive statistics

Variable	Unit	Mean	Std	Min	P1	Median	P99	Max	N
Vote	City-Year	0.38	0.49	0.00	0.00	0.00	1.00	1.00	1,656
Bond URLs	City-Year	0.28	1.21	0.00	0.00	0.00	8.20	8.45	1,656
Bond Count	City-Year	4.09	11.66	0.00	0.00	0.00	67.22	68.70	1,656
Fiscal URLs	City-Year	0.58	2.82	0.00	0.00	0.00	20.41	20.90	1,656
Fiscal Count	City-Year	12.97	37.61	0.00	0.00	0.00	238.42	240.15	1,656
Financial Docs	City-Year	2.14	5.61	0.00	0.00	0.00	31.00	31.00	1,656
Num Issuances	City-Year	4.24	5.21	0.00	0.00	2.00	25.45	43.00	1,656
State Fiscal Monitor	City-Year	0.49	0.50	0.00	0.00	0.00	1.00	1.00	1,656

Panel B: Media coverage descriptive statistics

Variable	Unit	Mean	Std	Min	P1	Median	P99	Max	N
Vote	Issuance	0.40	0.49	0.00	0.00	0.00	1.00	1.00	3,412
Total Articles - 12mo	Issuance	1.88	6.42	0.00	0.00	0.00	39.67	57.07	3,412
Bond Issuance - 12mo	Issuance	0.22	0.42	0.00	0.00	0.00	1.00	1.00	3,412
Num Sources	Issuance	3.11	1.68	0.69	0.69	3.22	6.93	8.54	3,412
Amount	Issuance	15.36	1.19	10.20	12.23	15.38	18.76	19.93	3,412
County ln(GDP)	Issuance	16.33	1.60	10.05	12.34	16.52	19.16	20.23	3,412
County ln(Pop)	Issuance	12.37	1.39	6.35	8.61	12.52	15.13	16.11	3,412
County ln(Pers. Inc)	Issuance	16.10	1.50	10.19	12.26	16.25	18.80	19.92	3,412

Descriptive statistics

Panel C: Texas election descriptive statistics

Variable	Unit	Mean	Std	Min	P1	Median	P99	Max	N
Increase in Bond Text	City-Year	0.27	0.44	0.00	0.00	0.00	1.00	1.00	1,530
Election Year	City-Year	0.10	0.30	0.00	0.00	0.00	1.00	1.00	1,530
Bond Issuance Year	City-Year	0.23	0.42	0.00	0.00	0.00	1.00	1.00	1,530
Bond Coverage	City-Month	0.04	0.20	0.00	0.00	0.00	1.00	1.00	32,208
Election [0, +3]	City-Month	0.04	0.19	0.00	0.00	0.00	1.00	1.00	32,208
Bond Issuance [0, +3]	City-Month	0.02	0.14	0.00	0.00	0.00	1.00	1.00	32,208
Failed	Election	0.12	0.32	0.00	0.00	0.00	1.00	1.00	872
Margin	Election	0.40	0.28	0.00	0.00	0.36	1.00	1.00	872
Bond Count	Election	43.44	108.16	0.00	0.00	4.00	374.00	892.00	558
Bond Coverage [-3, 0]	Election	0.27	0.44	0.00	0.00	0.00	1.00	1.00	700

Descriptive statistics

Panel D: Secondary market trading descriptive statistics

Variable	Unit	Mean	Std	Min	P1	Median	P99	Max	N
Vote	Bond	0.42	0.49	0.00	0.00	0.00	1.00	1.00	50,467
Trade	Bond	0.47	0.50	0.00	0.00	0.00	1.00	1.00	50,467
Retail Trade	Bond	0.40	0.49	0.00	0.00	0.00	1.00	1.00	50,467
Inst. Trade	Bond	0.28	0.45	0.00	0.00	0.00	1.00	1.00	50,467
High Tax Priv.	Bond	0.30	0.46	0.00	0.00	0.00	1.00	1.00	50,467
Continuing Disclosure	Bond	0.85	0.35	0.00	0.00	1.00	1.00	1.00	50,467
Amount	Bond	12.82	1.19	7.60	9.90	12.77	15.94	18.17	50,467
Maturity	Bond	4.47	0.79	0.69	2.30	4.62	5.66	6.01	50,467
Callable	Bond	0.45	0.50	0.00	0.00	0.00	1.00	1.00	50,467
Sinkable	Bond	0.06	0.23	0.00	0.00	0.00	1.00	1.00	50,467
Insured	Bond	0.22	0.42	0.00	0.00	0.00	1.00	1.00	50,467
Rating	Bond	5.56	6.84	0.00	0.00	0.00	16.00	16.00	50,467

Panel E: Debt choice descriptive statistics

Variable	Unit	Mean	Std	Min	P1	Median	P99	Max	N
GO Vote	Issuer	0.37	0.48	0.00	0.00	0.00	1.00	1.00	2,780
Only UTGO Vote	Issuer	0.25	0.43	0.00	0.00	0.00	1.00	1.00	2,780
Pct UTGO	Issuer	0.49	0.45	0.00	0.00	0.44	1.00	1.00	2,780
Pct LTGO	Issuer	0.23	0.38	0.00	0.00	0.00	1.00	1.00	2,780
Pct Revenue	Issuer	0.27	0.40	0.00	0.00	0.00	1.00	1.00	2,780
Wtd. Avg. Yield Spread	Issuer	-0.05	0.67	-1.69	-1.08	-0.12	2.62	6.32	2,753
ln(Non-issuer county debt)	Issuer	19.59	3.37	0.00	0.00	20.26	23.26	24.23	2,780
Proactive State	Issuer	0.33	0.47	0.00	0.00	0.00	1.00	1.00	2,780
LTGO Allowed	Issuer	0.60	0.49	0.00	0.00	1.00	1.00	1.00	2,780
State GO Vote	Issuer	0.59	0.49	0.00	0.00	1.00	1.00	1.00	2,780
High Tax Priv.	Issuer	0.37	0.48	0.00	0.00	0.00	1.00	1.00	2,780

Figure 2

State	GO	Revenue	Sources	State	GO	Revenue	Sources
AL	Majority	Depends	AL Const, Article XII, S222, S222.01 AL League of Municipalities (2024)	MT	Majority	None	MT Code § 7-7-4221 (2023)
AK	Majority	None	AK Stat § 29.47.190 (2023) AK Stat § 29.47.250 (2023)	NE	Majority	None	NE Rev Stat § 18-506.01 (2023)
AZ	Majority	Depends	AZ Rev Stat § 35-452 (2023) AZ Rev Stat § 9-523 (2023) AZ Rev Stat § 9-441.03 (2023)	NV	Depends	None	NV Rev Stat § 350.020 (2023)
AR	Majority	Majority	AR Const, Amendment 62 AR Code § 14-72-606 (2023)	NH	None	None	NH Rev Stat § 33:3 (2023)
CA	2/3	None	CA Govt Code § 43608 (2023) CA Govt Code § 43614 (2023) CA Govt Code § 54380 (2023)	NJ	None	None	NJ Rev Stat § 40A:2-17 (2023)
CO	Majority	Majority	CO Rev Stat § 31-15-302 (2023)	NM	Majority	None	NM Const, Article IX NM Stat § 3-30-06 (2023)
CT	Depends	Depends	CT Gen Stat § 7-369. (2023)	NY	Depends	Depends	NY Loc Fin L § 34.00 (2023)
DE	Depends	None	DL Code (2023)	NC	Majority	None	NC Const, Article 5, Section 4
FL	Majority	None	FL Const, Article XII, Section 12 FL Stat § 100.201 (2023) FL Revenue Bond Act of 1953	ND	60%	Majority	ND Century Code § 21-03-04 2 ND Century Code § 21-03-07
GA	Majority	None	GA Code § 36-82-1 (2023) GA Code § 36-82-3 (2023) GA Code § 36-82-63 (2023)	OH	Majority for UTGO	None	OH Revised Code § 5705.51 (2023)
HI	N/A	N/A	N/A	OK	60%	Depends	11 OK Stat § 22-128 (2023) 11 OK Stat § 22-155 (2023)
ID	2/3	Depends	ID Const Art VIII § 3	OR	Majority	None	OR State Treasury OR Const, Article XI, Section 11b
IL	Depends	None	65 ILCS 5/8-4-1 (2023) IL Municipal Bond Reform Act 65 ILCS 5/8-5-16 (2023)	PA	Depends	Depends	PA Cons Stat Title 53 ch 81 (2023)
IN	Depends	None	IN Code § 36-4-6-19 (2023) IN Code § 6-6-1.1-20-3.5 (2023) IN Code § 5-1.4-4-5 (2023)	RI	Depends	Depends	RI Gen L § 45-12-2.1 (2024) RI Gen L § 45-12-20 (2024)
IA	Depends	None	IA Code § 384.25 (2023) IA Code § 384.26 (2023)	SC	Depends	None	SC Const, Article X, Section 14
KS	Depends	Depends	KS Stat § 10-120 (2023) KS Stat § 10-1212 (2023)	SD	60%	60%	SD Codified L § 6-8B-2 (2023)

Figure 2

State	GO	Revenue	Sources
KY	None	None	KY Rev Stat Ch 66 (2024) KY League of Cities (2019) KY Rev Stat § 96.640 (2024)
LA	Majority	None	LA Const, Article VI, Section 33 LA Rev Stat § 39:521 (2023) LA Rev Stat § 39:524 (2023)
ME	Majority	Depends	ME Rev Stat 30-A § 5772 (2023) ME Rev Stat 30-A § 5404 (2023)
MD	Depends	Depends	MD Local Gov Code § 19-304 (2023) MD Local Gov Code § 19-302 (2023)
MA	None	None	MA Gen L ch 44 § 8a (2023)
MI	Majority for UTGO	None	Michigan Municipal League
MN	Depends	None	League of Minnesota Cities
MS	None	None	MS Code § 21-33-301 (2023)
MO	2/3 or 4/7	Yes, threshold depends	MO Rev Stat § 95.115 (2024) MO Rev Stat § 95.130 (2024) MO Rev Stat § 250.070 (2024) MO Const, Article VI, Section 26(b)
TN	None	None	TN Code § 9-21-108 (2023)
TX	Majority	None	TX Govt Code § 1251.001 (2023)
UT	Majority	None	UT Code § 11-14-201 (2023)
VT	Majority	Majority	24 V.S.A. § 1755
VA	Depends	None	VA Const, Article VII, Section 10
WA	60% for UTGO	None	WA Rev Code § 84.52.056 (2023) WA Rev Code § 35.41.050 (2023)
WV	Majority	None	WV Code § 8-18-16 (2023) WV Code § 8-13C-14 (2023)
WI	None	None	WI Stat § 67.05 (2023)
WY	Majority	None	WY Stat § 22-21-103 (2023)

Appendix bond campaign examples

Bond Facts

Sun Valley 2017 Road & Path Bond

- Issuer: **City of Sun Valley**
- Size of issue: **$17,500,000**
- Type: **General Obligation Bonds**
- Term of Bonds: **20 years (2018-2038)**
- Anticipated rating: **AA**
- Municipal Advisor: **Zions Public Finance Inc.**
- Bond Counsel: **Hawley Troxell Ennis & Hawley, LLP**
- Anticipated Interest rate: **2.93%**
- Total Amount to be Repaid: **$23,544,975**

Post-election Bond Issuance Timeline:

WEEK 1 Draft Preliminary Official Statement

WEEK 4 Meet with rating agency; adopt bond resolution

WEEK 6 Obtain rating; publish Official Statement

WEEK 8 Bond Sale; closing documents

WEEK 10 Closing and delivery of funds

City of SUN VALLEY

Bond Details

Sun Valley 2017 Road & Path Bond

How Much Will I Pay?

Taxable Value	Annual Cost
$100,000	$55.43
$500,000	$277.14
$1M	$554.30

- Property owners would pay the tax levy over the next 20 years.
- Money for roadway projects would be available beginning in 2018.
- A super-majority of two-thirds voters must support the measure for it to pass.
- If passed the City of Sun Valley would issue $17.5 million in General Obligation Bonds.
- The City anticipates a rating of AA and a 2.93% interest rate. With these terms, the City would repay $23.5 million over the next 20 years (2018-2038).

City of SUN VALLEY

Timeline

Sun Valley 2017 Road & Path Bond

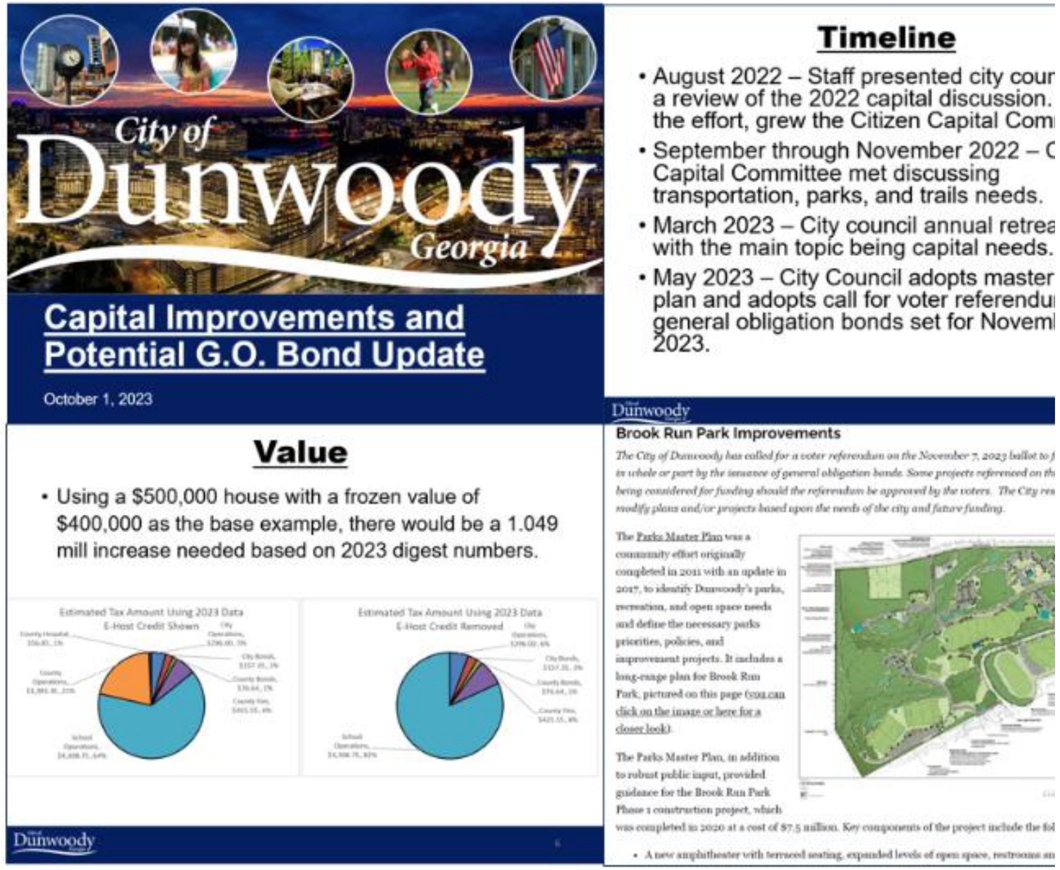
City of SUN VALLEY

Year 1 Construction

Sun Valley 2017 Road & Path Bond

City of SUN VALLEY

Appendix bond campaign examples



City of Dunwoody Georgia

Capital Improvements and Potential G.O. Bond Update

October 1, 2023

Timeline

- August 2022 – Staff presented city cour a review of the 2022 capital discussion. the effort, grew the Citizen Capital Comi
- September through November 2022 – C Capital Committee met discussing transportation, parks, and trails needs.
- March 2023 – City council annual retrea with the main topic being capital needs.
- May 2023 – City Council adopts master plan and adopts call for voter referendu general obligation bonds set for Novem 2023.

Value

- Using a $500,000 house with a frozen value of $400,000 as the base example, there would be a 1.049 mill increase needed based on 2023 digest numbers.

Estimated Tax Amount Using 2023 Data E-Host Credit Shown

Estimated Tax Amount Using 2023 Data E-Host Credit Removed

Dunwoody

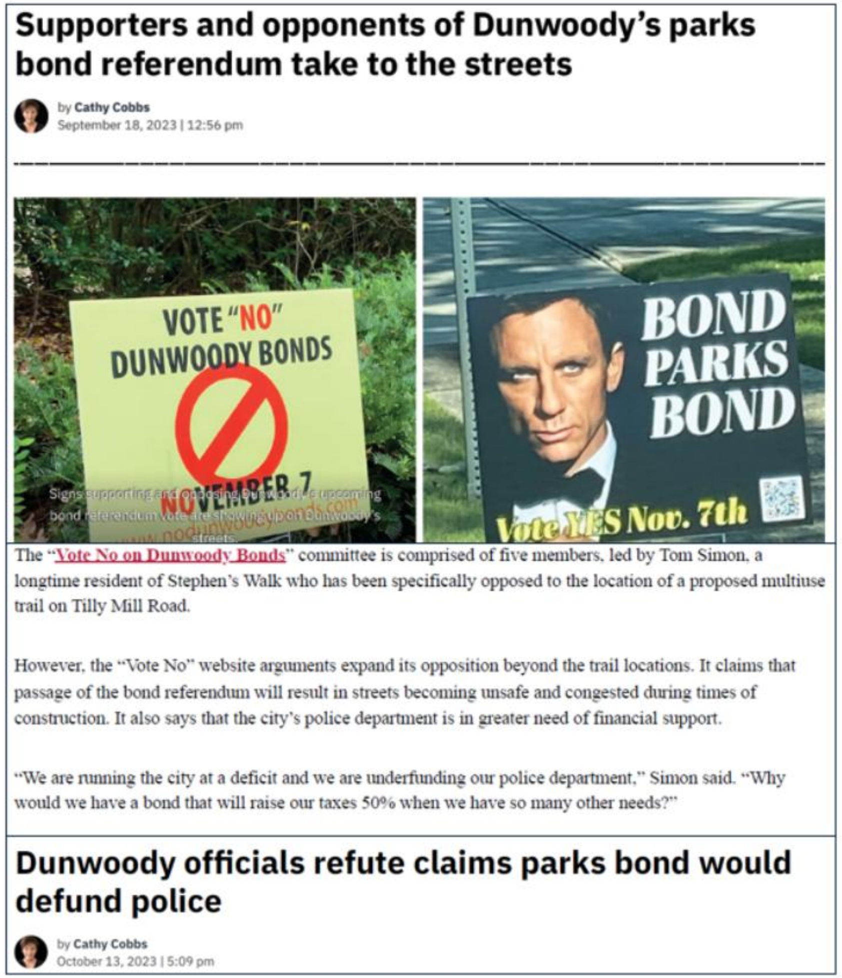
Brook Run Park Improvements

The City of Dunwoody has called for a voter referendum on the November 7, 2023 ballot to f in whole or part by the issuance of general obligation bonds. Some projects referenced on th being considered for funding should the referendum be approved by the voters. The City re modify plans and/or projects based upon the needs of the city and future funding.

The Parks Master Plan was a community effort originally completed in 2011 with an update in 2017, to identify Dunwoody's parks, recreation, and open space needs and define the necessary parks priorities, policies, and improvement projects. It includes a long-range plan for Brook Run Park, pictured on this page (you can click on the image or here for a closer look).

The Parks Master Plan, in addition to robust public input, provided guidance for the Brook Run Park Phase 1 construction project, which was completed in 2020 at a cost of $7.5 million. Key components of the project include the fol

- A new amphitheater with terraced seating, expanded levels of open space, restrooms an



Supporters and opponents of Dunwoody's parks bond referendum take to the streets

by Cathy Cobbs
September 18, 2023 | 12:56 pm

Signs supporting and opposing Dunwoody's upcoming bond referendum vote are showing up on Dunwoody's streets.

The "Vote No on Dunwoody Bonds" committee is comprised of five members, led by Tom Simon, a longtime resident of Stephen's Walk who has been specifically opposed to the location of a proposed multiuse trail on Tilly Mill Road.

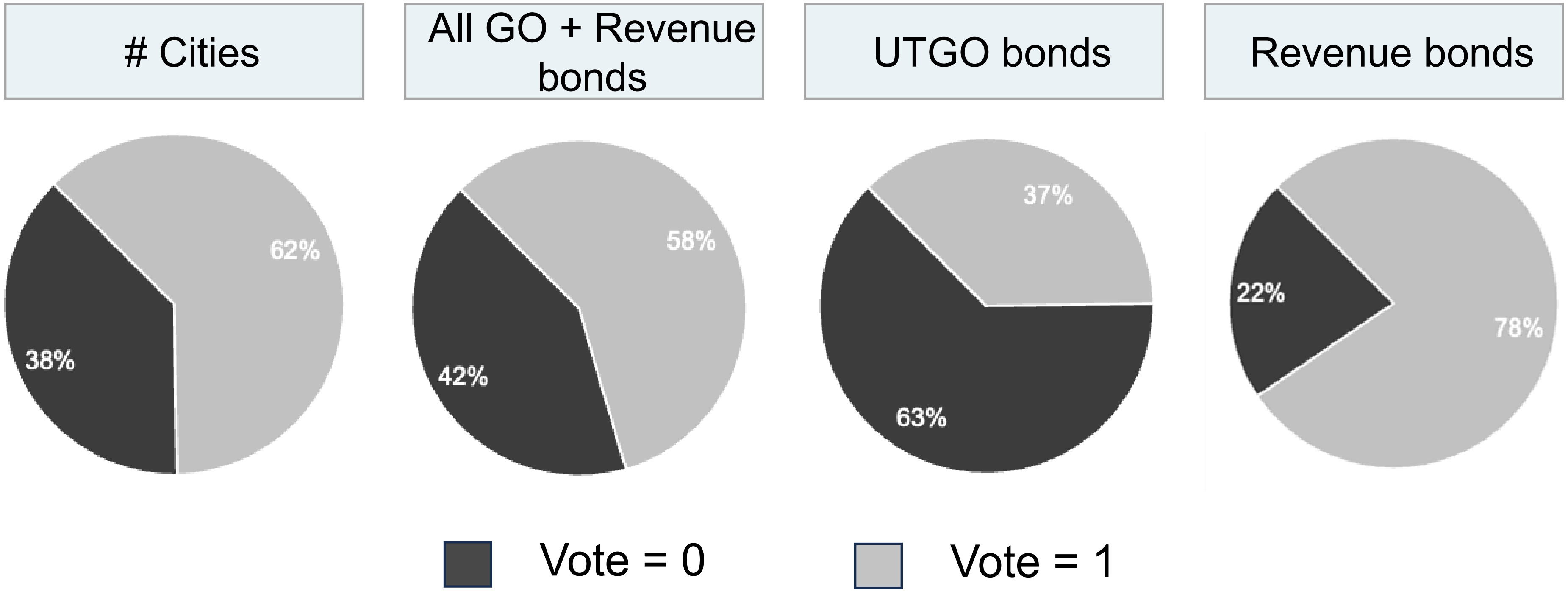
However, the "Vote No" website arguments expand its opposition beyond the trail locations. It claims that passage of the bond referendum will result in streets becoming unsafe and congested during times of construction. It also says that the city's police department is in greater need of financial support.

"We are running the city at a deficit and we are underfunding our police department," Simon said. "Why would we have a bond that will raise our taxes 50% when we have so many other needs?"

Dunwoody officials refute claims parks bond would defund police

by Cathy Cobbs
October 13, 2023 | 5:09 pm

Debt composition more broadly across vote, no vote



– Insights:
  - Across all bonds, the proportion issued by cities in vote-requiring states mirrors the proportion of cities in these states
  - Across UTGO bonds, only 37% are issued by cities in vote-requiring states
  - Across revenue bonds, almost 80% are issued by cities in vote-requiring states