

Prepared by Texas Bond Review Board Staff

Texas Local Government Capital Appreciation Bond Analysis

Overview

Capital appreciation bonds (CABs) are sold at a discounted price called the par amount. They are often sold in combination with current interest bonds (CIBs). While the debt service for CIBs is paid throughout the life of the obligation, principal and interest on CABs is paid at maturity. Interest on CABs compounds semiannually and accumulates over the life of the bond, and the amount paid at the maturity is called the maturity value. Interest rates for CABs are generally higher than for CIBs, and CABs can be more expensive than CIBs because of the compounding interest. However, CABs can be an effective financing tool if they are used moderately and with reasonable terms.

Premium CABs (PCABs) provide a lower initial stated par amount and are sold with a premium. PCABs are issued to: (1) raise additional proceeds, (2) preserve debt limits, and (3) help local governments reach tax rate targets. Local governments issue more PCABs than non-premium CABs.

Over the past decade, total CAB maturity amounts outstanding have decreased by 44.2 percent from \$16.20 billion in fiscal year 2010 to \$9.04 billion in fiscal year 2019. The outstanding CAB maturities range from 2020 to 2053.

Heavy use of CABs can result in rating agency downgrades.

CABs are often used to refund existing CAB and CIB debt.

CABs Issued

Table 4.1 shows that the total CAB par issued for Texas local governments during fiscal year 2019 was 0.006 percent of the total CAB and CIB debt issued. School districts issuances accounted for 82.2 percent of the total CABs issued for local governments during fiscal year 2019. Of the total par issued by school districts, 0.02 percent was issued as CAB par. CABs have been used by school districts to enable them to remain under the 50-cent debt ceiling that limits the property taxes assessed for debt service costs to 50 cents per \$100 of assessed value. CAB issuances by school districts are general obligation (tax) debt repaid with ad valorem taxes.

For CAB debt issued in fiscal year 2019, Texas local governments will owe \$1.86 in interest and principal for every \$1 of principal borrowed.

The 84th Legislature passed House Bill 114, effective September 1, 2015, that prohibits Texas local governments from issuing CABs secured by property taxes with terms of more than 20 years and (with some exceptions) from refunding CABs to extend their maturity dates. It also limits each government's CAB debt to no more than 25 percent of its total outstanding bond debt including principal and interest. The 85th Legislature passed Senate Bill 295, which extends the allowed maturity date for CABs issued for refunding purposes and financing transportation projects.

Table 4.1 Texas Local Government Capital Appreciation Bonds Issued in Fiscal Year 2019							
Entity Type	Total Par Issued (CIB and CAB)	CAB Par	CAB Par/ Total Par	% of Total CAB Par Issued	CAB Premium	CAB Maturity Amount	% of Total CAB Maturity Amount
Public School Districts	\$9,736,167,086	\$1,525,779	0.02%	82.22%	\$852,703	\$2,490,000	72.21%
Cities, Towns, Villages	9,342,302,050	-	0.00%	0.00%	-	-	0.00%
Water Districts	5,559,533,000	330,000	0.01%	17.78%	865,341	958,500	27.79%
Other Special Districts	2,580,138,333	-	0.00%	0.00%	-	-	0.00%
Counties	1,837,683,000	-	0.00%	0.00%	-	-	0.00%
Comm Colleges/Junior Colleges	427,345,000	-	0.00%	0.00%	-	-	0.00%
Health/Hospitals	284,715,000	-	0.00%	0.00%	-	-	0.00%
Total	\$29,767,883,469	\$1,855,779	0.01%	100.00%	\$1,718,045	\$3,448,500	100.00%

Excludes commercial paper & conduit debt.
Source: Texas Bond Review Board - Bond Finance Office

Table 4.2 shows CAB issued amounts for the last five fiscal years.

Table 4.2 Texas Local Government Capital Appreciation Bonds Par Amount Issued by Fiscal Year (\$ in millions)					
	2015	2016	2017*	2018	2019
Public School Districts	\$214.1	\$70.5	\$38.1	\$16.3	\$1.5
Cities, Towns, Villages	-	0.7	1.2	0.4	-
Water Districts and Authorities	1.8	2.5	11.6	0.6	0.3
Other Special Districts and Authorities	-	-	-	-	-
Counties	-	-	-	-	-
Community and Junior Colleges	-	-	0.0	-	-
Health/Hospital Districts	-	-	-	-	-
Total CAB Par Amount Issued	\$215.9	\$73.8	\$51.0	\$17.3	\$1.9
Total Par Amount Issued**	\$38,152.2	\$39,412.4	\$29,942.5	\$32,645.2	\$29,767.9
CAB Par Amount % of Total	0.57%	0.19%	0.17%	0.05%	0.01%

* CCDs issued \$35,000 of CABs in 2017.
** Includes current interest bonds, excludes commercial paper authorizations and conduit issuances.
Source: Bond Review Board - Bond Finance Office

Three ratios have been developed to compare CAB issuances. The first is the “Maturity Value/Par” ratio which is calculated by dividing the CAB maturity amount by the CAB par amount and represents the total amount to be repaid (principal plus interest) compared to the par amount borrowed. This ratio disregards premiums received on PCABs.

The second is the “Maturity Value/Proceeds” ratio which is calculated by dividing the CAB maturity amount by the total CAB proceeds including the additional proceeds received as premium on PCAB issuances. This ratio represents the total amount to be repaid at maturity (principal plus interest) compared to the total amount of proceeds received (par plus premium).

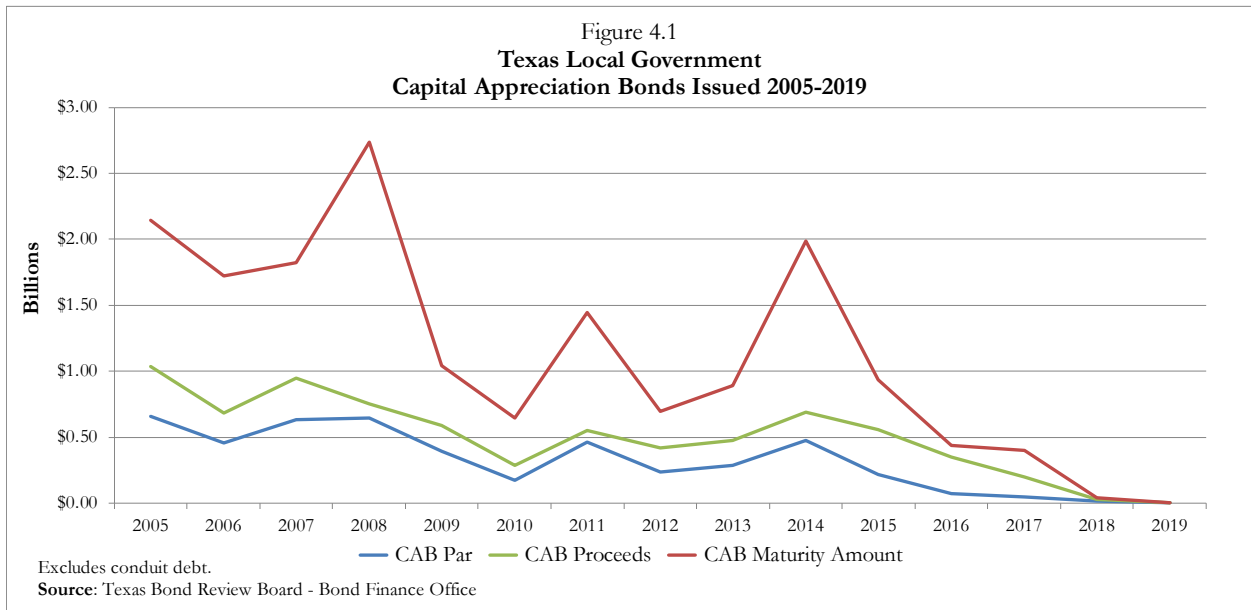
The third is the “Accreted Interest/Proceeds” ratio (AIPR) which is calculated by dividing the CAB maturity amount minus the original par amount by the total proceeds including the CAB premium. This ratio represents the total amount of interest to be paid at maturity compared to the total amount of proceeds received including premium (par plus premium).

Table 4.3 lists the top 20 most expensive CABs issued and outstanding as of fiscal year-end 2019 as defined by the “Maturity Value/Proceeds” ratio. CABs become increasingly more expensive as interest continues to compound with longer term maturities. For comparison, the Maturity Value/Proceeds ratio for CIBs is generally less than 2.0 and the AIPR is generally less than 1.0. The decline in the Maturity Value/Proceeds ratio compared to the Maturity Value/Par ratio shows the effect of including the premiums on PCABs in the comparison.

Table 4.3 Texas Local Government Top 20 Most Expensive Capital Appreciation Bonds Outstanding as of August 31, 2019						
Issuer	Issue	Closing Date	CAB Maturity Date	Maturity Value/Par	Maturity Value/Proceeds	Accreted Interest / Proceeds Ratio
Forney ISD	Unl Tax Ref Bonds Txbl Ser 2014A	2/18/2014	8/15/2053	12.69	10.87	10.01
Forney ISD	Unl Tax Ref Bonds Ser 2014	2/18/2014	8/15/2053	10.17	8.34	7.52
Forney ISD	Unl Tax Ref Bonds Txbl Ser 2013B	8/27/2013	8/15/2043	7.94	6.89	6.03
Hutto ISD	Unl Tax Ref Bonds Ser 2012A	5/3/2012	8/1/2045	249.18	6.71	6.68
Anna ISD	Unl Tax School Bldg Bonds Ser 2010A	9/21/2010	8/15/2046	3,819.06	6.25	6.25
Anna ISD	Unl Tax School Bldg Bonds Ser 2011	6/23/2011	2/15/2051	6.17	5.87	4.92
Anna ISD	Unl Tax School Bldg Bonds Ser 2010	4/8/2010	8/15/2043	12.00	5.82	5.33
Forney ISD	Unl Tax Ref Bonds Ser 2013A	8/27/2013	8/15/2043	9.35	5.49	4.90
Lake Worth ISD	Unl Tax Ref Bonds Ser 1995	9/21/1995	2/15/2024	8.25	5.31	4.66
Robstown ISD	Unl Tax School Bldg & Ref Bonds Ser 1994	1/4/1995	2/15/2022	13.16	5.26	4.86
Anna ISD	Unl Tax School Bldg Bonds Ser 2009	10/15/2009	8/15/2042	7.57	5.26	4.56
Galena Park ISD	Unl Tax School Bldg & Ref Bonds Ser 1996	8/20/1996	8/15/2031	6.09	5.11	4.27
Crowley ISD	Unl Tax Ref & School Bldg Bonds Ser 1993	5/19/1993	8/1/2023	9.87	5.04	4.53
Central Texas Regional Mobility Auth	Sr Lien Rev Bonds Ser 2010	3/11/2010	1/1/2040	5.03	5.03	4.03
Hillsboro ISD	Unl Tax School Bldg & Ref Bonds Ser 2001	2/15/2001	8/15/2031	75.90	4.94	4.88
Alvarado ISD	Unl Tax Ref Bonds Ser 1995	6/29/1995	2/15/2025	14.78	4.83	4.50
Frisco ISD	Unl Tax School Bldg & Ref Bonds Ser 2002	9/24/2002	8/15/2034	11.65	4.79	4.37
Crowley ISD	Unl Tax School Bldg & Ref Bonds Ser 2002	2/19/2002	8/1/2031	47.10	4.78	4.67
Frisco ISD	Unl Tax School Bldg & Ref Bonds Ser 1999	8/10/1999	8/15/2029	59.78	4.73	4.65
Anna ISD	Unl Tax School Bldg & Ref Bonds Ser 1998	3/17/1998	8/15/2028	19.42	4.59	4.36

Excludes commercial paper and conduit debt.
Source: Texas Bond Review Board - Bond Finance Office

Figure 4.1 illustrates the total CAB par amount issued, the total proceeds received (including premiums on PCABs), and CAB maturity amount (total debt-service owed at maturity) since 2005.



CABs Outstanding

Table 4.4 provides a comparison between the total CAB debt outstanding and total CIB and CAB debt outstanding for each type of local government entity. The CAB debt service (principal plus interest) is 2.5 percent of total debt-service owed by local governments. School districts owe the most CAB debt service at 56.9 percent of total CAB debt-service owed among all local governments. While CAB par was 0.9 percent of total CIB and CAB par outstanding at fiscal year-end 2019, CAB interest accounted for 5.4 percent of total interest owed.

Table 4.4 Texas Local Government Capital Appreciation Bonds Outstanding as of August 31, 2019											
Entity Type	Total Par Outstanding (CIB+CAB)	CAB Par Outstanding	CAB Par / Total Par	Total Interest Outstanding (CIB+CAB)	CAB Interest	CAB Interest / Total Interest	Total Debt Service (CIB+CAB)	CAB Maturity Amount Outstanding	CAB Maturity Amount/ Total Debt Service	% of Total CAB Par Outstanding	% of Total CAB Maturity Amount Outstanding
Public School Districts	\$87,841,012,438	\$1,097,161,400	1.25%	\$50,072,996,185	\$4,046,261,842	8.08%	\$137,914,008,623	\$5,143,423,242	3.73%	51.71%	56.92%
Cities, Towns, Villages	76,899,537,469	217,085,407	0.28%	36,644,511,991	985,731,806	2.69%	113,544,049,460	1,202,817,212	1.06%	10.23%	13.31%
Water Districts	33,219,291,183	94,479,208	0.28%	15,018,421,715	187,247,488	1.25%	48,237,712,898	281,726,697	0.58%	4.45%	3.12%
Other Special Districts	16,915,863,397	645,032,413	3.81%	13,993,278,296	1,552,002,587	11.09%	30,909,141,693	2,197,035,000	7.11%	30.40%	24.31%
Counties	14,505,829,564	36,010,079	0.25%	6,528,118,787	96,154,921	1.47%	21,033,948,351	132,165,000	0.63%	1.70%	1.46%
Comm Colleges / Junior Colleges	5,258,164,980	20,665,742	0.39%	2,535,506,919	20,594,258	0.81%	7,793,671,899	41,260,000	0.53%	0.97%	0.46%
Health & Hospitals	3,552,860,501	11,149,367	0.31%	2,312,093,549	26,756,617	1.16%	5,864,954,050	37,905,984	0.65%	0.53%	0.42%
Total	\$238,192,559,532	\$2,121,583,616	0.89%	\$127,104,927,443	\$6,914,749,520	5.44%	\$365,297,486,974	\$9,036,333,135	2.47%	100.00%	100.00%

Excludes commercial paper, conduit debt and Build America Bond subsidies.
Source: Texas Bond Review Board - Bond Finance Office

Figure 4.2 below shows the maturity amount (principal plus interest) for each local government entity with CABs outstanding since 2005.

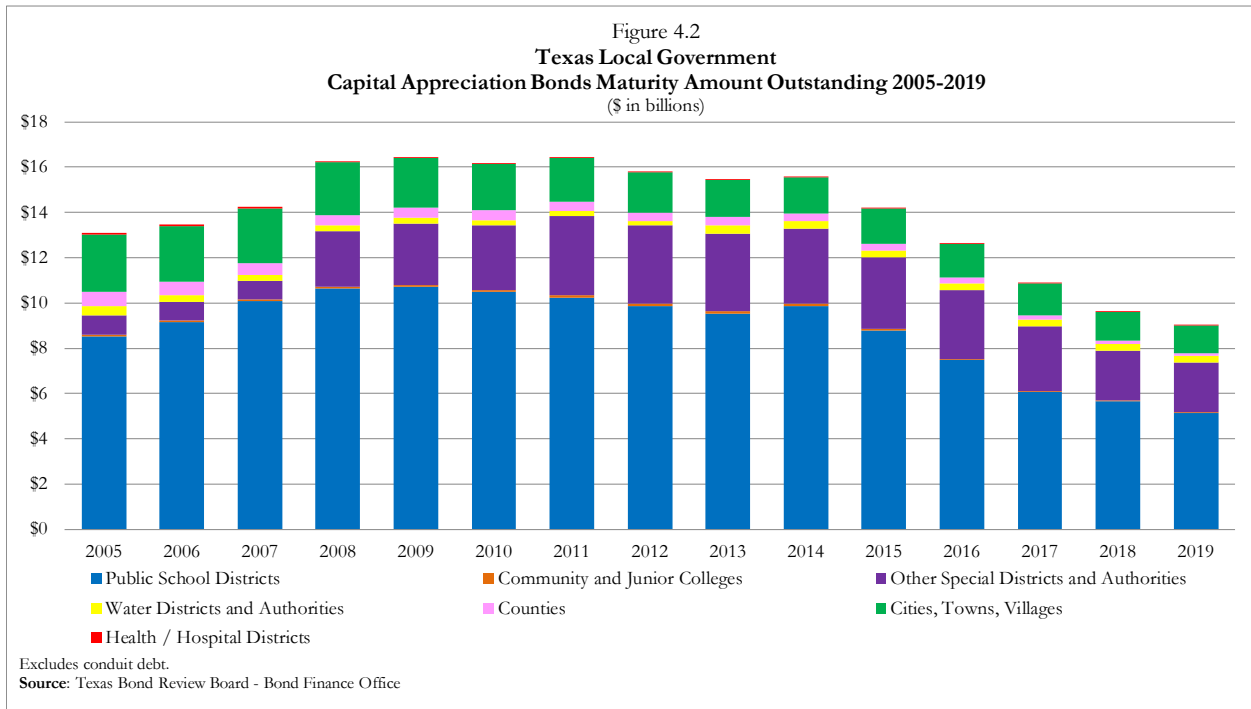


Figure 4.3 shows CIB debt service and CAB debt service for all local governments since 2005. In fiscal year 2019, CAB maturity amounts accounted for 2.5 percent (\$9.04 billion) of the total debt service outstanding.

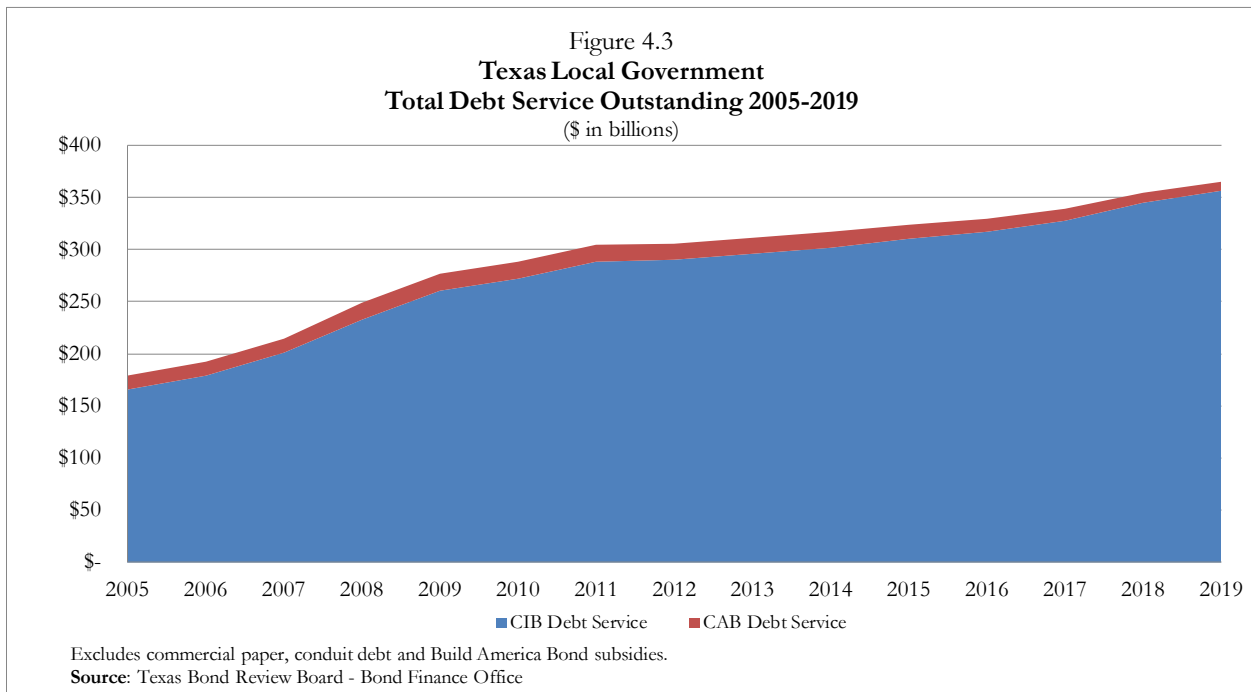


Figure 4.4 compares the ratio of total debt service to total par outstanding for CIB and CAB debt for all local governments. On average, issuers of CAB debt paid \$3.56 in principal and interest for every \$1 of principal borrowed since 2005 compared to \$1.63 for CIB debt.

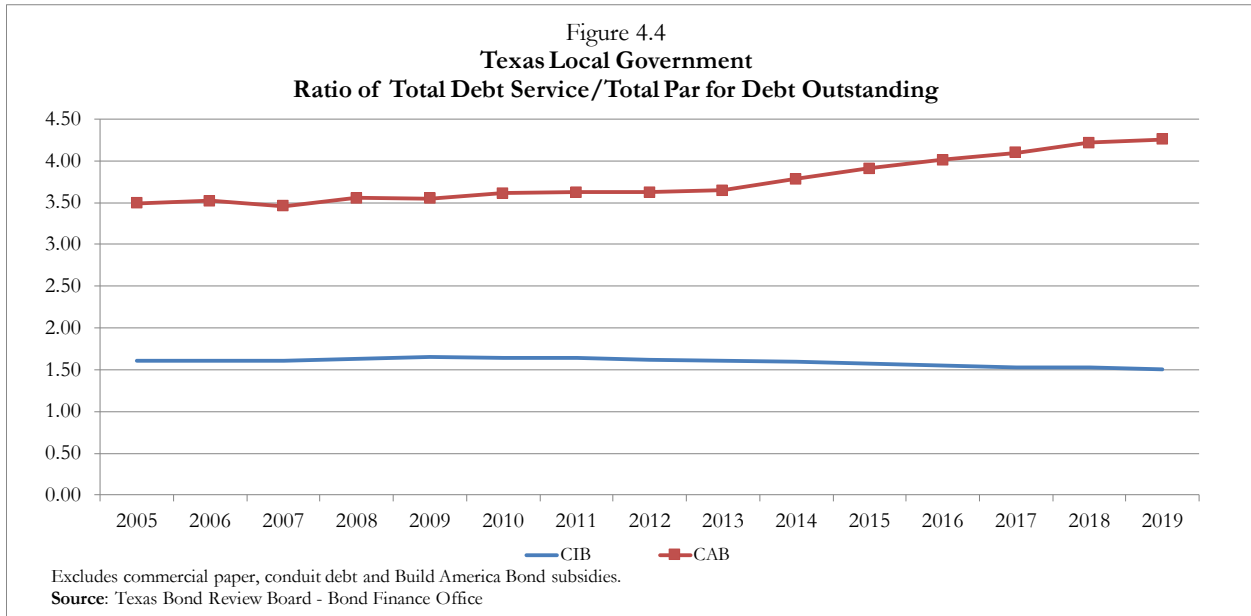


Figure 4.5 compares the ratio of public school district (ISD) debt service to ISD debt outstanding for CIB and CAB debt. On average, school districts paid \$3.82 in principal and interest for every \$1 of principal borrowed since 2005 for CAB debt compared to \$1.60 for CIB debt.

