



City of Farmers Branch, Texas

Introduction to Ratings and Credit Analysis

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August 2022



Marti Shew **Managing Director**

- Specializes in public finance
- 18+ years experience in public finance and 18 years with the firm
- Reviews legal documentation, provides quantitative support, and oversees the general processing of financings
- Has structured more than 200 financings totaling over \$2 billion for a variety of issuers including cities, counties, school districts, public and private universities, airports, hospitals, and water districts
- Supplies refunding analyses, debt structuring, cash flow models, credit analyses, and sophisticated spreadsheet modeling
- Bachelor of Arts in Economics and Hispanic Studies with a minor in Mathematics, University of Texas in Austin
- FINRA Series 7, 50, 63 and 79 registrations



Ted Chapman **Investment Banking Analyst**

- Experience and expertise in broad range of sectors, including state and local government general obligation and appropriation-backed debt, municipal utilities, public power and special tax.
- Joined Hilltop Securities in 2021
- Prior to joining the firm, spent 21 years as a municipal bond credit analyst at S&P Global Ratings, serving as a subject matter expert and credit rating criteria author for municipal water utility revenue bonds and ESG. Also served from 2007 as a senior credit officer for credit rating committees within S&P's U.S. Public Finance department
- Smith's Research and Gradings' 2021 Municipal Analysts All-Star Team
- FINRA Series 50 registration





- A credit rating is an **opinion** about the **relative risk** and potential for default associated with a particular security
- It is not a recommendation to buy, sell or hold that security
- A credit rating is expressed in alphanumeric symbols across a spectrum from highest to lowest



Investment Grade

Moody's	S&P	Fitch
Aaa	AAA	AAA
Aa1	AA+	AA+
Aa2	AA	AA
Aa3	AA-	AA-
A1	A+	A+
A2	A	A
A3	A-	A-
Baa1	BBB+	BBB+
Baa2	BBB	BBB
Baa3	BBB-	BBB-
Ba1	BB+	BB+
Ba2	BB	BB
Ba3	BB-	BB-
B1	B+	B+
B2	B	B
B3	B-	B-
Caa1	CCC+	CCC+
Caa2	CCC	CCC
Caa3	CCC-	CCC-
Ca	CC	CC
C	C	C
D	D	D

Speculative Grade

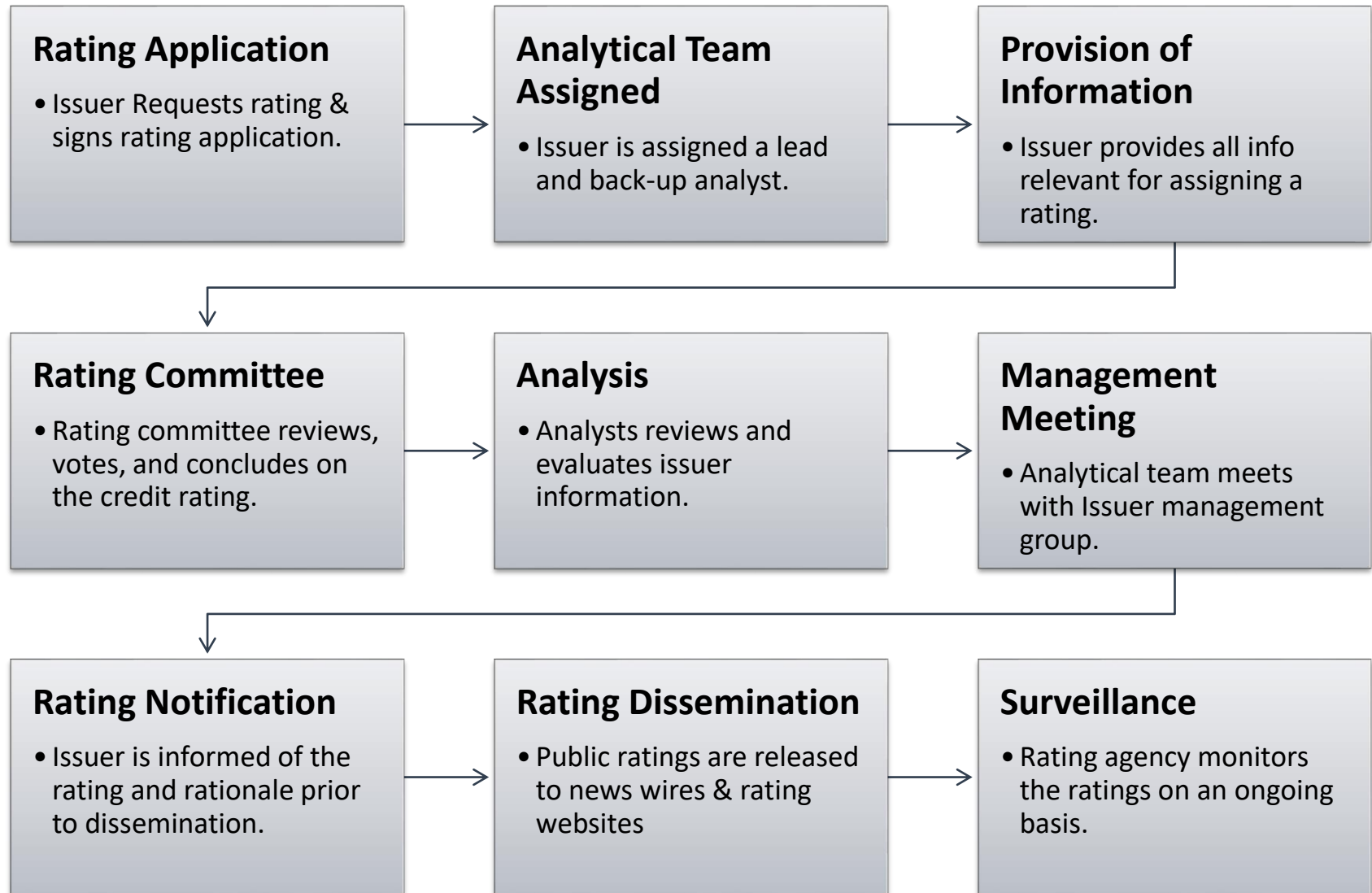


- There are three major agencies that provide credit ratings for debt issuers in the U.S. municipal market and other sectors
 - Moody's Investors Service ("Moody's")
 - S&P Global Ratings ("S&P")
 - Fitch Ratings ("Fitch")
 - Kroll Bond Rating Agency ("KBRA") is a newer participant in the market
- Ratings are assigned to both long-term and short-term obligations, although different symbols are used
- Ratings are assigned at the time of the issuance, and then reviewed periodically based on the availability of updated information, material events and the rating agency's internal surveillance procedures
 - A rating can go up, down or stay the same from one credit review to another
- Ratings are not a prerequisite for issuing debt



- The outlook on a long-term rating is a signal from the rating agency as to what direction they believe the rating might go over the next 6-24 months
 - **Stable** – based on current credit characteristics, the rating is not likely to change over that time horizon
 - **Positive** – rating might move up
 - **Negative** – rating might move down
- For those issuers with an investment grade rating, generally the outlook is most often 'stable'

The Rating Process





- Respond to rating agency inquiries in a timely manner
 - Most likely to ask for latest audited financial statements and adopted budget
 - May ask for completion of a questionnaire, depending on sector
 - *Ratings may be suspended due to insufficient information!*
- Schedule a conference call or meeting
 - Opportunity to provide explanation if audit hasn't been completed and/or discuss outlook for current fiscal year
- Focus on issues of concern cited in the rating agency report that was issued at the time of the last review or sale
 - In most cases, it is not necessary to go back any further
- Discuss strategy and progress in addressing these issues
- Be prepared to discuss pension and OPEB funding
- The outlook is most often 'stable'



- Most reviews during and since the “Great Recession” have resulted in rating and outlook affirmations
- In recognition of the relative strength of the municipal sector, Moody’s and Fitch implemented widespread rating recalibrations that resulted in higher ratings
- Over the past few years, S&P criteria revisions have resulted in many upgrades
- The rating process has become more transparent for issuers and investors

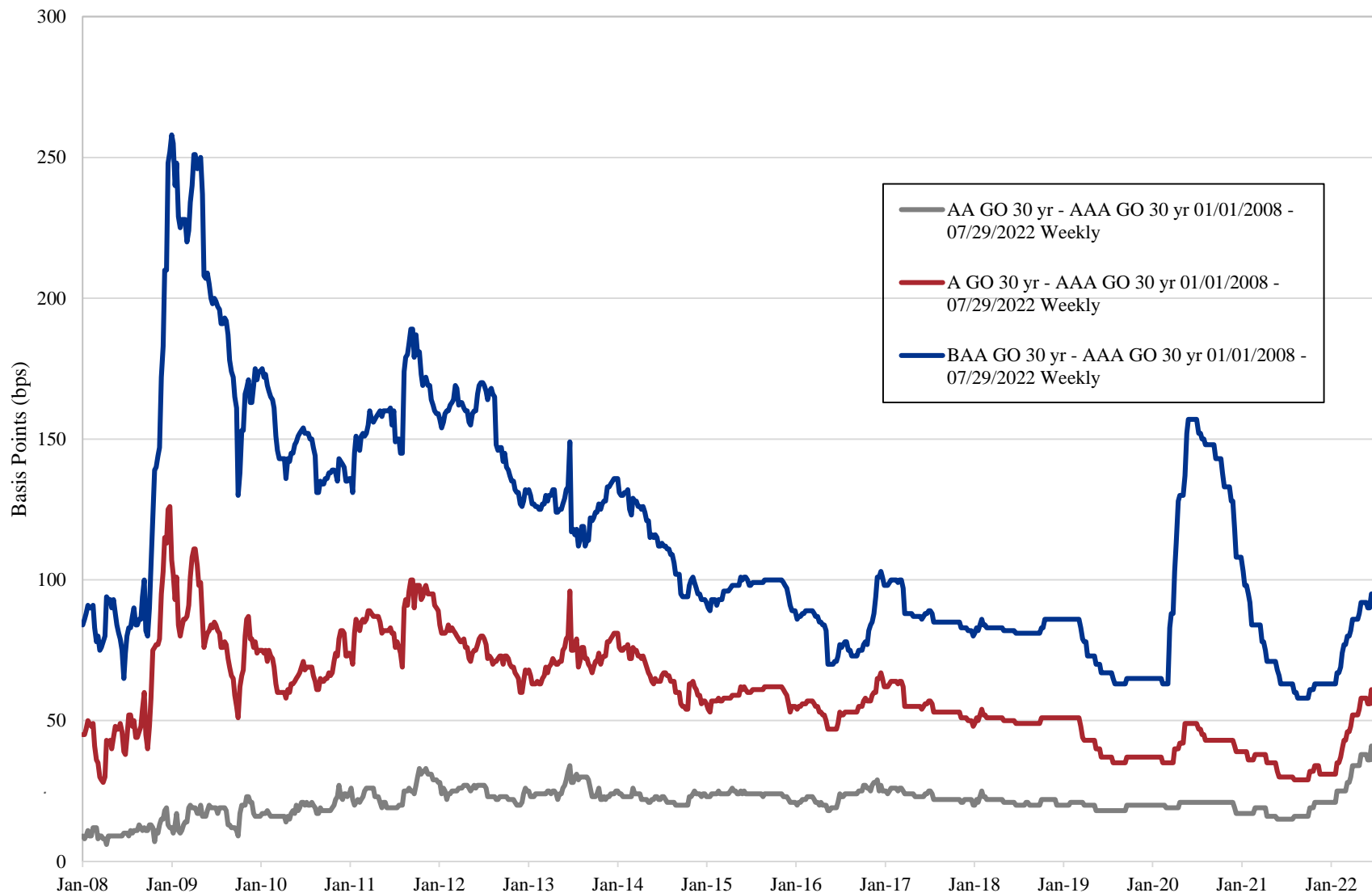


- The MMD tracks credit spreads for GO issues
 - Credit spreads are slightly wider for essential service water and sewer bonds
- Split bond ratings are problematic for issuers
 - Split occurs when rating agencies rate an issuer's bonds in different categories
 - Under current market conditions, bonds tend to price closer to the lower rating
- Even within rating categories, there may also be rating differentials
 - For example, an "A+" rated bond would price at a lower yield than an "A" rated bond

Credit Spreads as of August 4th, 2022



“Great Recession” to Present





- An issuer of General Obligation bonds pledges its full faith and credit to repay its obligation
- For local governments, this usually means the issuer's unlimited taxing power
- Because states generally do not levy property taxes, they pay their G.O. debt from legally available operating revenues, such as sales taxes and income taxes
- Main rating factors include
 - Institutional Framework
 - Economic
 - Management
 - Financial
 - Debt
- Within these factors, the rating agencies consider a number of sub-factors and metrics



- Two fundamental characteristics of revenue bonds are
 - They are secured and payable from user fees and charges
 - There is a link between the ratepayers and the ultimate beneficiaries of the project(s) being financed
- A number of different types of debt fall under the umbrella of revenue bonds
 - Municipal utility – Water, sewer, drainage solid waste, public power, gas
 - Transportation – Airport, seaport, toll road/bridge, transit
 - Higher education – Public and private not-for-profit colleges and universities
 - Health care – Not-for-profit hospitals and other health care providers
- Primary rating factors include:
 - Customer base
 - Rate structure and flexibility
 - Management
 - Finances
 - Legal provisions
 - Debt burden
 - Capital needs

Farmers Branch Rating History



Significant Rating Actions – 2007 - Present			
Date	Rating	Outlook	Action
Standard & Poor's Ratings Services			
Jun-22	AAA	Stable	Upgrade
Apr-16	AA+	Stable	Rating affirmed
Jul-14	AA+	Stable	Rating affirmed
Apr-13	AA+	Stable	Rating affirmed
Aug-11	AA+	Stable	Rating affirmed
Nov-10	AA+	Stable	Rating affirmed
May-10	AA+	Stable	Rating affirmed
Sep-09	AA+	Stable	Rating affirmed
Feb-09	AA+	Stable	Rating upgraded from AA "based on qualitative assessment in conjunction with credit ratio analysis"
Dec-07	AA	Stable	Rating affirmed
Moody's Investors Service			
Apr-13 (Most Recent)	Aa2	Stable	Rating affirmed
Sep-11	Aa2	None	Rating affirmed
Nov-10	Aa2	None	Rating affirmed
May-10	Aa2	None	Rating affirmed
Apr-10	Aa2	None	Rating recalibrated upward from Aa3
Jul-06	Aa3	None	Rating affirmed
Fitch Ratings			
Jun-22	AA+	Stable	Affirmed
Aug-21	AA+	Stable	Review - No Action
Aug-20	AA+	Stable	Affirmed
Mar-20	AA+	Stable	Review - No Action
Feb-20	AA+	Stable	Affirmed
Sep-19	AA+	Stable	Affirmed
Mar-18	AA+	Stable	Affirmed
May-16	AA+	Stable	Rating affirmed
May-16	AA+	Stable	Rating affirmed
Jul-14	AA+	Stable	Initial rating



S&P – AAA/Stable	
Rating Factors <ul style="list-style-type: none"> ▪ Favorably located within the Dallas-Fort Worth metroplex, Farmers Branch continues to experience robust property tax base growth ▪ Very strong management with comprehensive policies and long-term planning ▪ Trend of positive operating results supporting a very strong available fund balance above the city's minimum fund balance target ▪ Adequate debt burden with above-average amortization and modest additional debt plans ▪ Pension and OPEB costs not an immediate credit pressure ▪ Strong institutional framework score. 	
Upside Scenario <p>The AAA Rating reflects S&Ps view of the city's improved income and property wealth indicators, Trend of positive operations that benefited from a reliance on property tax revenue, very strong financial policies and practices, and a lower debt burden compared with state peers, with above amortization and modest additional debt plans.</p>	Downside Scenario <p>Rating could be lowered if the city's economic metrics deteriorate or if persistent budgetary pressure leads to significant available reserve drawdowns.</p>

Source: S&P Capital IQ, June 9, 2022



Moody's – Aa2/Stable	
Strengths <ul style="list-style-type: none"> Favorably located in the Dallas Fort Worth metropolitan area; taxable values appear to have stabilized Satisfactory financial management 	Challenges <ul style="list-style-type: none"> Significant concentration in commercial values Increased legal fees pose a challenge for the city
What Could Make the Rating Go Up <ul style="list-style-type: none"> Continued favorable financial management yielding increases in reserve levels Increases in economic activity yielding overall favorable taxable value growth, and reducing the city's concentration in commercial properties; improved socioeconomic profile 	What Could Make the Rating Go Down <ul style="list-style-type: none"> Taxable value contraction Inability to reduce expenditures to maintain a sustainable budget, yielding an erosion of reserve levels

Moody's Investors Service, April 8, 2013



Fitch – AA+/Stable	
Analytical Conclusion <p>The 'AA+' Issuer Default Rating (IDR) and CO rating reflect solid revenue growth prospects, solid expenditure flexibility and strong operating performance, characterized by an ample reserve cushion, even in periods of economic stress. Fixed carrying costs are moderate. Fitch Ratings expects long-term liabilities to remain a low to moderate burden on the resource base.</p>	Key Rating Drivers <ul style="list-style-type: none"> <i>Economic Resource Base: Several of the largest employers of the Dallas-Fort Worth MSA (IBM, Internal Revenue Service and GEICO) are located in Farmers Branch. Various class A office towers that maintain above-average occupancy and rental rates comprise much of the top taxpayer list. Median household income exceeds MSA, state and U.S. averages by more than 10%. Revenue Framework ('aa' factor assessment): Fitch expects solid growth in the city's operating revenues going forward based on economic development underway and the city's participation in the expanding MSA economy. Revenue-raising flexibility is strong, supported by ample tax rate capacity.</i> <i>Revenue Framework: 'aa': Fitch expects the city to return to its pre-pandemic trend of solid revenue growth, resulting from its participation in a broad, expanding regional economy. Commercial and residential property development, along with sales tax revenue, should support revenue growth above the rate of inflation over the long term. Farmers Branch retains a satisfactory independent legal ability to raise operating revenues.</i> <i>Long-Term Liability Burden: 'aa': The long-term liability burden is moderate at nearly 10% of 2021 resident personal income, and is expected to remain at a moderate level given overlapping entities' authorized future debt plans.</i> <i>Operating Performance: 'aaa': Fitch anticipates Farmers Branch will maintain the highest level of operating flexibility due to the combination of its solid expenditure flexibility and ample reserve levels. Fitch believes the city is well positioned to address challenges posed by future economic contractions.</i>

Source: Fitch Connect, June 9, 2022



- In an effort to provide greater transparency to the market, the rating agencies have begun to quantify their criteria, introducing “scorecards” that show the weightings assigned to major rating factors
 - For several years, Moody’s has used scorecard criteria for rating most major sectors
 - S&P has scorecard criteria for several sectors, including GO, municipal utility, healthcare and higher education
 - Unlike its peers, Fitch continues to use a quantified approach instead of a scorecard approach.
- Having a clear idea of what our clients’ scorecards look like at any given point in time can be a useful tool in helping them to managing their ratings
- Hilltop Securities has developed proprietary models based on the rating agencies’ updated criteria
 - We use our models to anticipate ratings for new issuers and/or debt structures, and to identify opportunities for rating or outlook enhancements as well as possible credit concerns
- The rating agencies may also consider factors that are not included in their scorecards
 - As a result, the rating indicated by the scorecard may be “notched” upward or downward
- The final, published rating is subject to the vote of a rating committee

Scorecard Rating Methodology – GO Bonds



Moody's Local Government GO Scorecard	
Rating Factor	Weighting
Economy 30%	
Tax Base Size: Full Value	10%
Full Value Per Capita	10%
Socioeconomic Indices: MFI	10%
Finances 30%	
Fund Balance as a % of Revenues	10%
5-Year Change in Fund Balance as a % of Revenues	5%
Cash Balance as a % of Revenues	10%
5-Year Change in Cash Balance as a % of Revenues	5%
Management 20%	
Institutional Framework – Uniform score for all issuers of the same type in the same state	10%
Operating History: 5-Year Average of Operating Revenues/ Operating Expenditures	10%
Debt/Pensions 20%	
Direct Debt/Full Value	5%
Direct Debt/Operating Revenues	5%
3-Year Average of Moody's Adjusted Net Pension Liability/Full Value	5%
3-Year Average of Moody's Adjusted Net Pension Liability/Operating Revenues	5%

S&P Local Government GO Scorecard	
Rating Factor	Weighting
Institutional Framework	10%
Uniform score for all issuers of the same type of in the same state	
Economy	30%
<ul style="list-style-type: none"> Total Market Value Per Capita Projected Per Capita Effective Buying Income as a % of US Projected Per Capita EBI 	
Management	20%
Issuer's Financial Management Assessment Score considered with other certain qualitative factors	
Financial	30%
Liquidity (10%)	
<ul style="list-style-type: none"> Total Government Available Cash as % of Total Governmental Funds Debt Service Total Government Available Cash as % of Total Governmental Funds Expenditures 	
Budgetary Performance (10%)	
<ul style="list-style-type: none"> Total Governmental Funds Net Result (%) General Fund Net Result (%) 	
Budgetary Flexibility (10%)	
<ul style="list-style-type: none"> Available Fund Balance as a % of Expenditures 	
Debt and Contingent Liabilities	10%
<ul style="list-style-type: none"> Net Direct Debt as a % of Governmental Funds Revenue Total Governmental Funds Debt Service as a % of Total Governmental Funds Expenditures 	

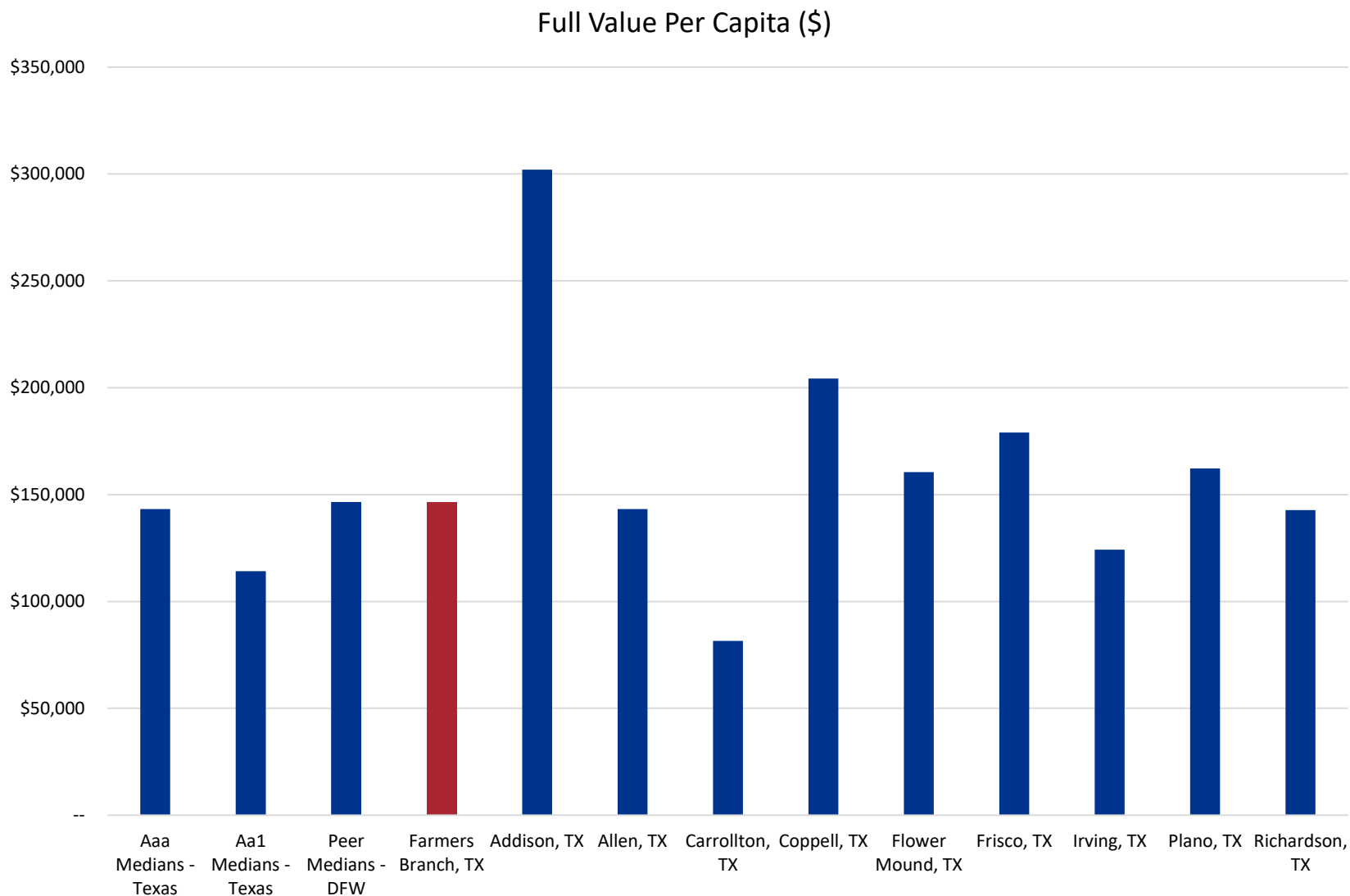
DFW Metroplex Ratings Comparison



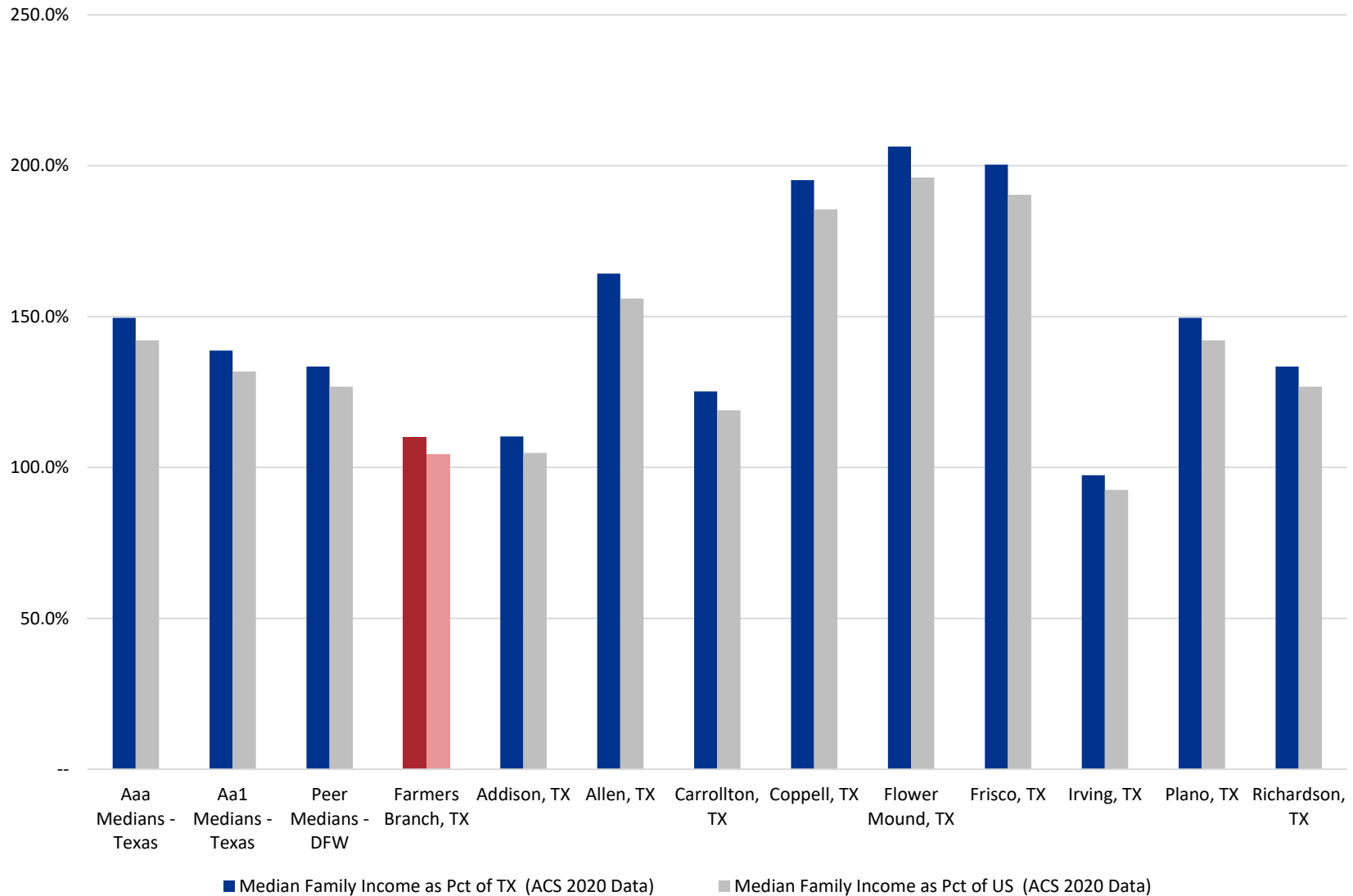
	Farmers Branch, TX	Addison, TX	Allen, TX	Carrollton, TX	Coppell, TX	Flower Mound, TX	Frisco, TX	Irving, TX	Plano, TX	Richardson, TX
S&P	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Moody's	Aa2	Aaa	Aaa	Aa1	Aaa	Aa1	Aaa	Aaa	Aaa	Aaa
Fitch	AA+	NR	NR	AAA	NR	AAA	NR	NR	AAA	NR

Source: Municipal Advisory Council of Texas

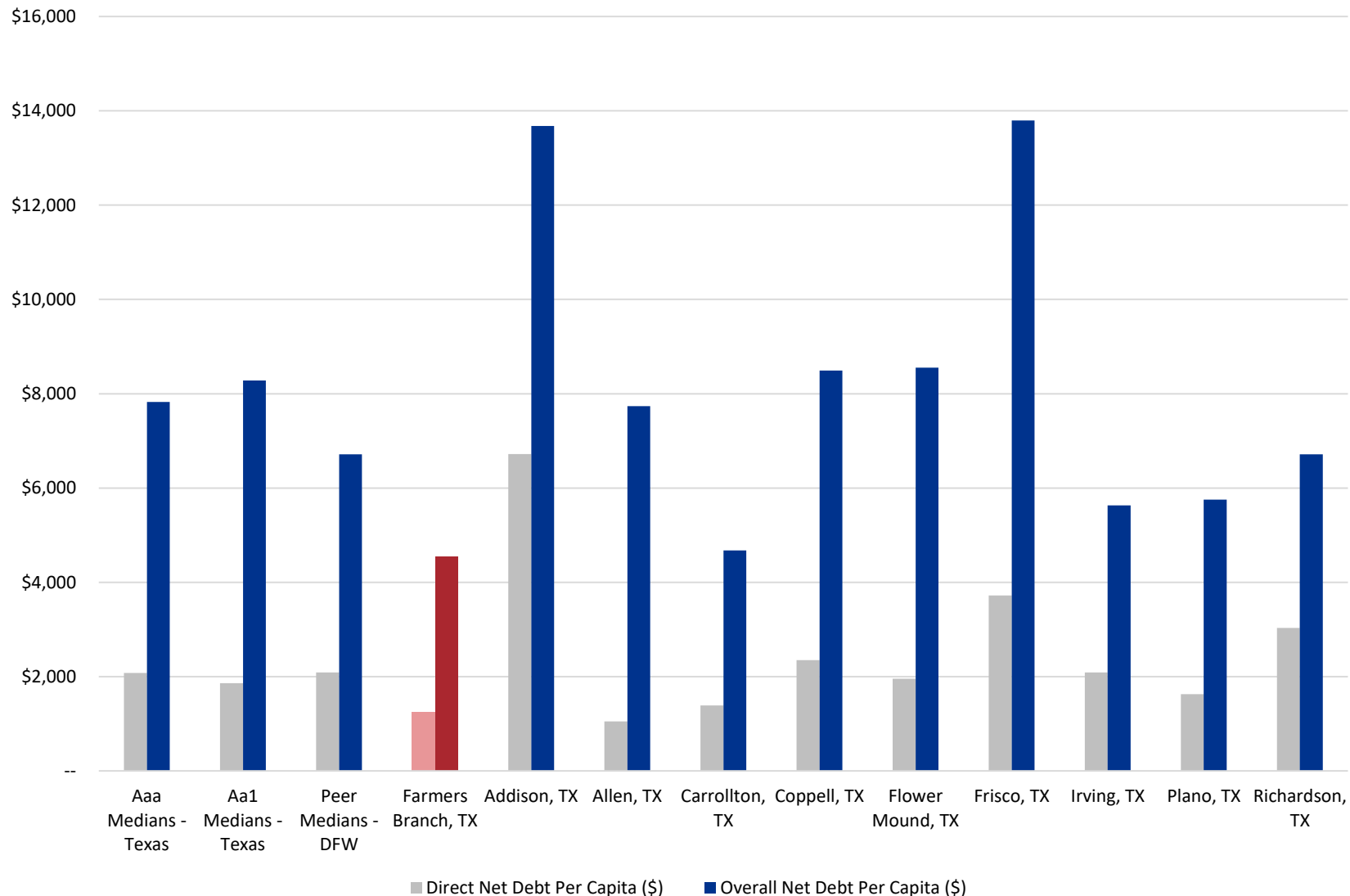
Comparison to State and Peer Medians – Per Capita Market Value (Wealth)



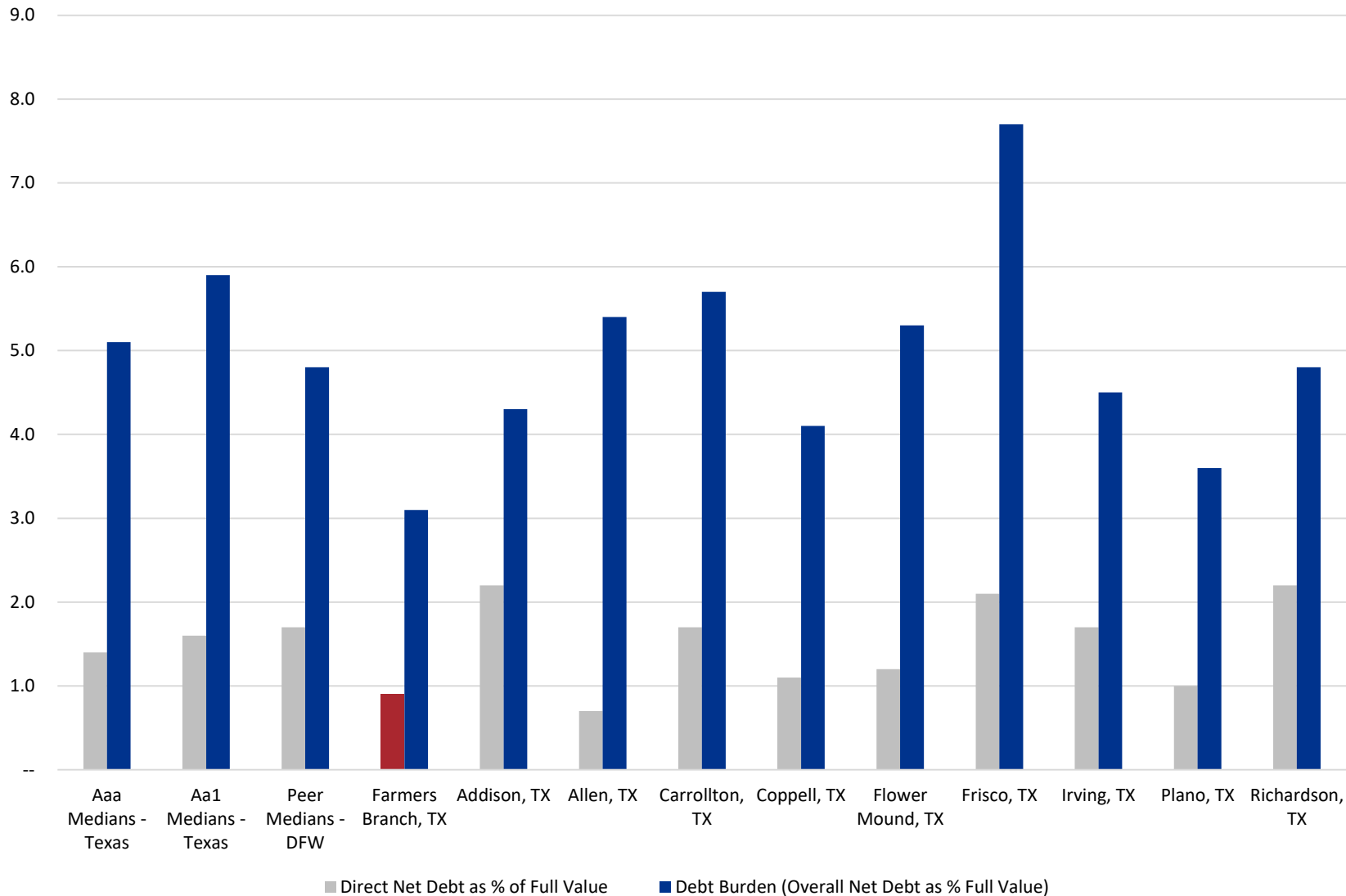
Comparison to State and Peer Medians – Median Family Income



Comparison to State and Peer Medians – Per Capita Debt Ratios



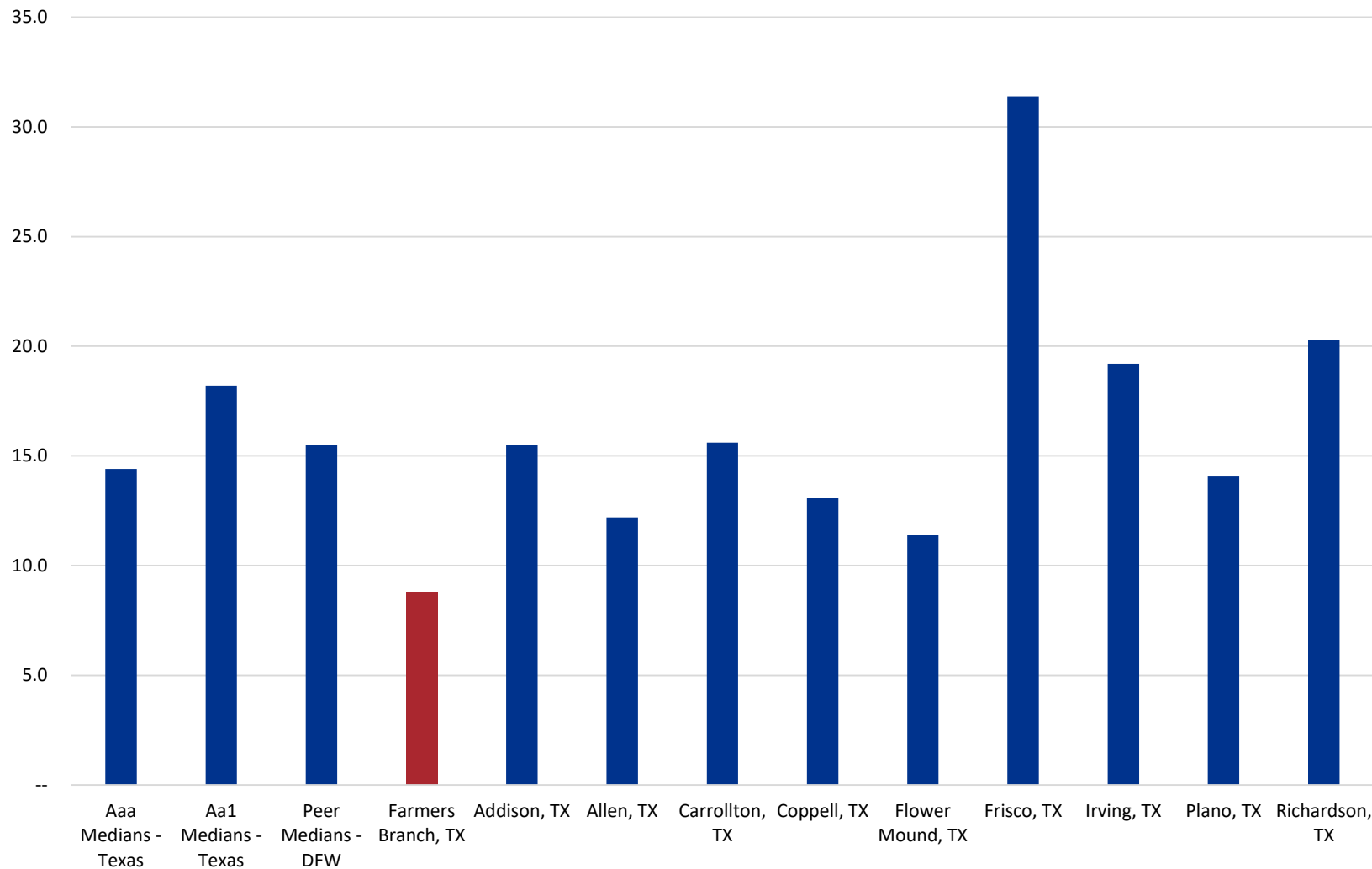
Comparison to State and Peer Medians – Debt as Percentage of Market Value



Comparison to State and Peer Medians – Debt Service Expenditures



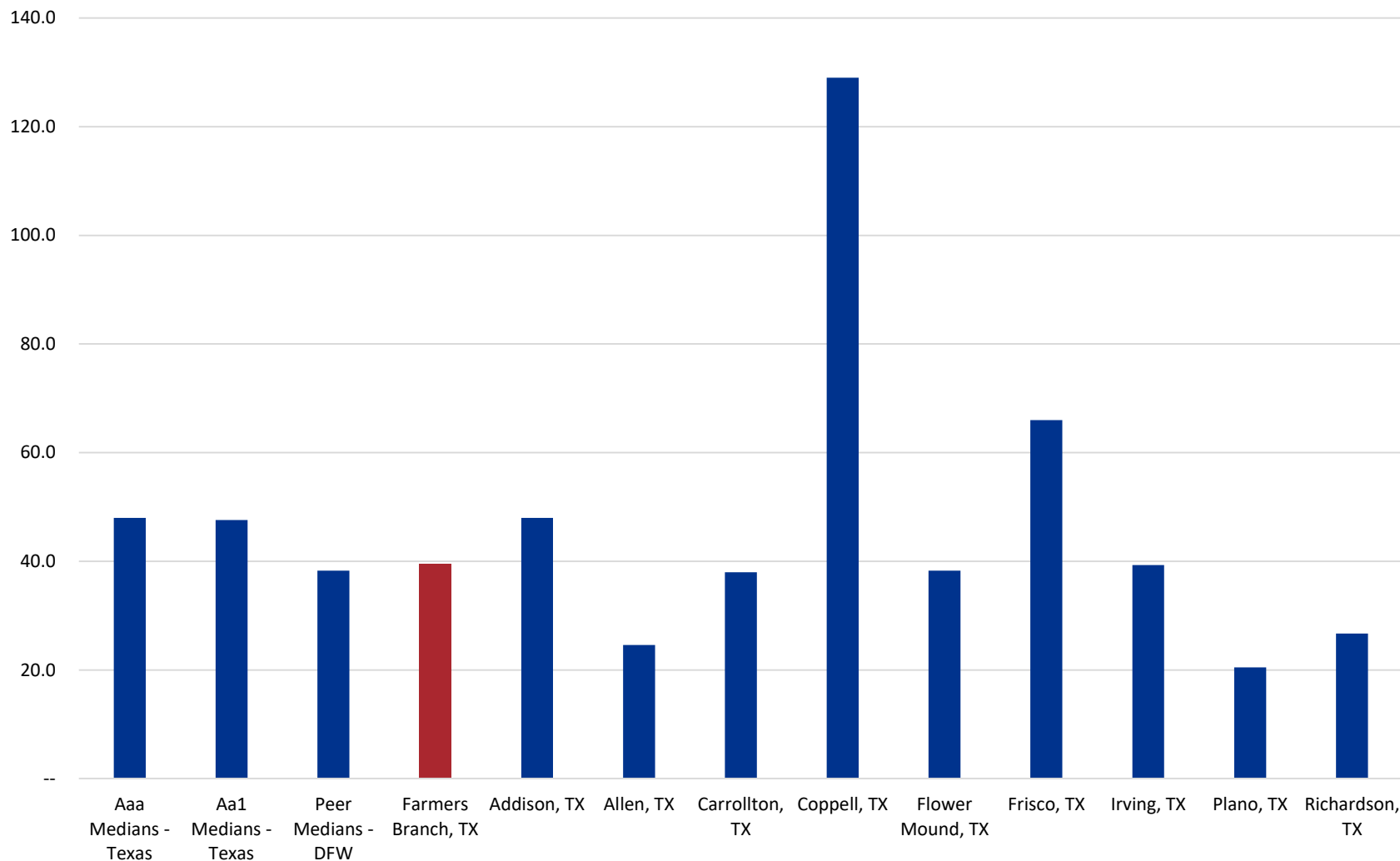
Debt Service as % of Operating Expenditures



Comparison to State and Peer Medians – General Fund Balance



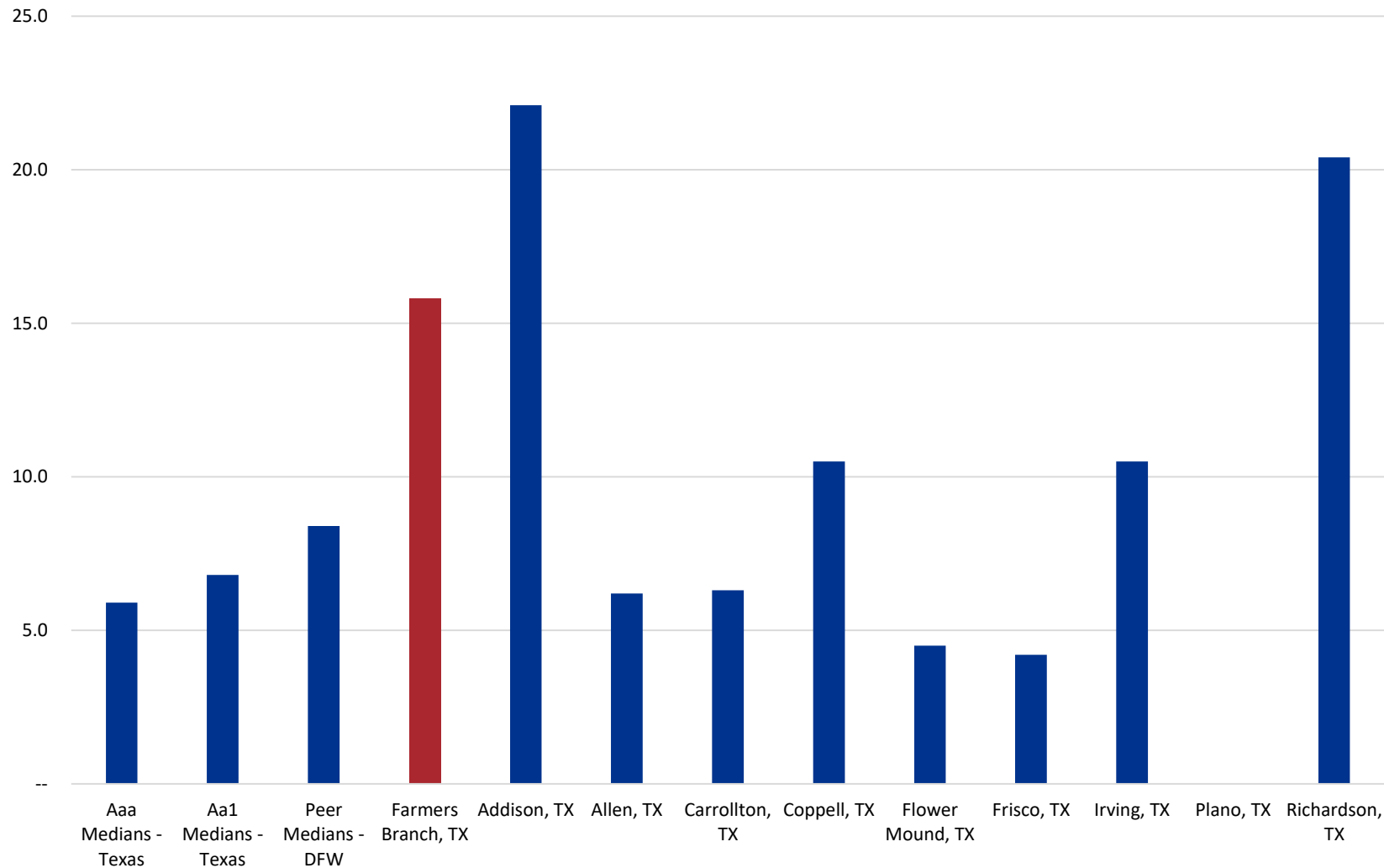
General Fund Balance as % of Revenues



Comparison to State and Peer Medians – Tax Base Concentration



Top Ten TaxPayers as % of Total



Comparison to State and Peer Medians – Moody's Metrics



Selected Rating Metrics	Median Ratios Texas Aaa - Rated Municipalities	Median Ratios Texas Aa1 - Rated Municipalities	Median Ratios Peer Metroplex Municipalities	Farmers Branch, TX	Addison, TX	Allen, TX
Fiscal Year	Most Recent	Most Recent	Most Recent	2021	2021	2021
Current Senior Most Rating*	Aaa	Aa1	Aaa	Aa2	Aaa	Aaa
Economic						
Estimated Current Population	148,971	87,654	114,852	35,991	15,790	109,591
Per Capita Income (2020 ACS)	49,455	39,604	35,658	36,111	50,600	45,071
Per Capita Income as % of State (2020 ACS)	163.8	123.1	143.4	112.2	157.2	140.1
Per Capita Income as % of U.S. (2020 ACS)	149.1	111.9	130.5	102.0	143.0	127.4
Median Family Income (2020 ACS)	113,796	105,562	119,361	83,605	83,290	124,926
Median Family Income as % of State (2020 ACS)	149.6	138.8	133.4	109.9	109.5	164.2
Median Family Income as % of U.S. (2020 ACS)	142.1	131.8	126.8	104.4	104.0	156.0
Median Home Value (2020 ACS)	341,800	259,400	192,100	210,600	348,200	323,500
County Annual Unemployment Rate (BLS Data, %)	5.4	5.1	5.6	5.6	5.6	4.3
Tax Base						
Total Full Value (\$000)	16,616,962	10,079,470	14,902,241	6,251,428	4,659,409	14,902,241
Full Value Per Capita (\$)	143,236	114,194	146,544	146,544	302,010	143,236
Average Annual Increase in Full Value (%)	7.1	8.3	7.6	6.6	4.1	7.9
Top Ten TaxPayers as % of Total	5.9	6.8	8.4	15.8	22.1	6.2
Financial						
Total General Fund Revenues (\$000)	151,106	85,020	145,298	75,948	42,211	112,713
General Fund Balance as % of Revenues	48.0	47.6	38.3	39.5	48.0	24.6
Total Operating Funds Revenues (\$000)	192,806	98,897	162,730	79,646	50,444	121,348
Operating Funds Balance as % of Revenues	42.0	44.5	37.3	42.7	41.3	23.6
5-Year Dollar Change in Fund Balance as % of Revenues	11.9	16.4	12.7	21.5	12.7	5.0
5-Year Dollar Change in Cash Balance as % of Revenues	14.8	16.7	16.6	21.0	14.8	7.0
Debt						
Direct Net Debt Outstanding (\$000)	342,450	158,123	190,560	53,370	103,685	109,008
Overall Net Debt Outstanding (\$000)	804,665	642,396	796,272	194,111	211,049	804,665
Direct Net Debt as % of Full Value	1.4	1.6	1.7	0.9	2.2	0.7
Direct Net Debt Per Capita (\$)	2,079	1,863	2,091	1,251	6,721	1,048
Debt Burden (Overall Net Debt as % Full Value)	5.1	5.9	4.8	3.1	4.3	5.4
Overall Net Debt Per Capita (\$)	7,824	8,280	6,715	4,550	13,680	7,734
Debt Service as % of Operating Expenditures	14.4	18.2	15.5	8.8	15.5	12.2
Payout, 10 Years, All Tax-Supported Debt (%), Current Value	64.7	63.9	66.6	N/A	67.8	N/A
Pension & OPEB						
Net Pension Obligation (Including Current Portion) (\$000)	23,280	15,602	19,672	19,672	2,119	19586
ANPL - Net of Support (\$000)	320,744.6	173,638.9	268,073.0	216,402.3	94,459.4	224,624.9
(ANPL - net of support) / Operating Revenues (x)	1.9	1.8	1.9	2.7	1.9	1.9
(ANPL - net of support) / Full Value (%)	1.9	1.9	2.0	3.5	1.9	1.5
3-Year Avg of Moody's ANPL / Full Value	1.6	1.5	1.7	2.8	1.6	1.2
3-Year Avg of Moody's ANPL / Operating Revenues (x)	1.6	1.4	1.5	2.2	1.5	1.4

Comparison to State and Peer Medians – Moody's Metrics



Selected Rating Metrics	Carrollton, TX	Coppell, TX	Flower Mound, TX	Frisco, TX	Irving, TX	Plano, TX	Richardson, TX
Fiscal Year	2021	2021	2021	2021	2021	2021	2021
Current Senior Most Rating*	Aa1	Aaa	Aa1	Aaa	Aaa	Aaa	Aaa
Economic							
Estimated Current Population	136,170	41,290	76,030	190,093	240,420	285,300	110,140
Per Capita Income (2020 ACS)	39,604	60,211	55,101	54,660	31,992	49,455	40,408
Per Capita Income as % of State (2020 ACS)	123.1	187.1	171.2	169.9	99.4	153.7	125.6
Per Capita Income as % of U.S. (2020 ACS)	111.9	170.2	155.7	154.5	90.4	139.8	114.2
Median Family Income (2020 ACS)	95,235	148,511	156,995	152,433	74,116	113,796	101,488
Median Family Income as % of State (2020 ACS)	125.2	195.2	206.4	200.4	97.4	149.6	133.4
Median Family Income as % of U.S. (2020 ACS)	118.9	185.5	196.1	190.4	92.6	142.1	126.8
Median Home Value (2020 ACS)	267,100	414,000	376,500	420,700	196,500	341,800	295,500
County Annual Unemployment Rate (BLS Data, %)	5.6	5.6	4.4	4.3	5.6	4.3	5.6
Tax Base							
Total Full Value (\$000)	11,200,104	8,506,328	12,661,042	33,718,537	29,860,240	46,564,855	16,616,962
Full Value Per Capita (\$)	81,563	204,258	160,563	178,985	124,172	162,211	142,718
Average Annual Increase in Full Value (%)	0.2	6.6	7.9	10.1	7.1	8.3	7.6
Top Ten TaxPayers as % of Total	6.3	10.5	4.5	4.2	10.5	N/A	20.4
Financial							
Total General Fund Revenues (\$000)	145,298	84,189	72,758	191,012	258,974	320,362	151,106
General Fund Balance as % of Revenues	38.0	129.0	38.3	66.0	39.3	20.5	26.7
Total Operating Funds Revenues (\$000)	162,730	88,912	81,448	265,298	308,076	361,503	192,806
Operating Funds Balance as % of Revenues	37.3	122.9	37.1	48.8	42.0	20.2	24.2
5-Year Dollar Change in Fund Balance as % of Revenues	20.6	66.8	16.4	19.8	11.1	2.0	11.9
5-Year Dollar Change in Cash Balance as % of Revenues	16.7	52.7	16.6	20.8	8.6	3.2	23.9
Debt							
Direct Net Debt Outstanding (\$000)	190,560	97,495	154,130	701,070	502,824	470,730	359,400
Overall Net Debt Outstanding (\$000)	642,396	352,316	674,562	2,598,914	1,354,534	1,661,569	796,272
Direct Net Debt as % of Full Value	1.7	1.1	1.2	2.1	1.7	1.0	2.2
Direct Net Debt Per Capita (\$)	1,388	2,350	1,955	3,721	2,091	1,630	3,031
Debt Burden (Overall Net Debt as % Full Value)	5.7	4.1	5.3	7.7	4.5	3.6	4.8
Overall Net Debt Per Capita (\$)	4,678	8,491	8,555	13,796	5,633	5,752	6,715
Debt Service as % of Operating Expenditures	15.6	13.1	11.4	31.4	19.2	14.1	20.3
Payout, 10 Years, All Tax-Supported Debt (%), Current Value	83.4	64.0	72.1	65.5	54.2	61.7	69.6
Pension & OPEB							
Net Pension Obligation (Including Current Portion) (\$000)	N/A	15,830	13,927	28,400	145,208	48,223	23,280
ANPL - Net of Support (\$000)	268,073.0	170,708.5	143,499.1	320,744.6	892,675.6	953,794.3	363,806.1
(ANPL - net of support) / Operating Revenues (x)	1.6	1.9	1.8	1.2	2.9	2.6	1.9
(ANPL - net of support) / Full Value (%)	2.4	2.0	1.1	1.0	3.0	2.0	2.2
3-Year Avg of Moody's ANPL / Full Value	2.2	1.6	0.9	0.7	2.4	1.7	1.8
3-Year Avg of Moody's ANPL / Operating Revenues (x)	1.5	1.5	1.4	0.9	2.3	2.1	1.6