

# **WHITE CITY WATER IMPROVEMENT DISTRICT BOARD OF TRUSTEES RETREAT**

999 E Galena Dr  
Sandy, UT 84094  
Monday, October 27, 2025  
1:00 P.M.

## **A G E N D A**

1. Call to Order and Determination of Quorum
2. General Discussion of Emergency Response Plan and Vulnerability Assessment Updates (Closed Session Under Utah Code Ann. 52-4-205)
3. General Discussion of Water Rights and Future Needs of the Public presented by Don Barnett (Closed Session Under Utah Code Ann. 52-4-205 to discuss Property and Potential Litigation)
4. General Discussion on the Status of Bonds and Bond Availability Presented by John Crandall
5. General Discussion of District's Capital Facilities Plan and Upcoming Projects  
Presented by Cliff Linford
6. General Discussion of Potential State Fees for Utah Water Infrastructure Plan and Plan of Action Presented by Paul Ashton
7. General Discussion of Potential District Name Change Presented by Paul Ashton
8. Personnel Issues If Needed (Closed Session Under Utah Code Ann. 52-4-205)
9. Security Issues If Needed (Closed Session Under Utah Code Ann. 52-4-205)
10. Water System Issues
11. Adjourn



# Municipal Market Update

## ***White City Water Improvement District***

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*October 27, 2025*

## District Debt

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**WHITE CITY WATER IMPROVEMENT DISTRICT  
DEBT MONITOR**

As of March 14, 2025



Bond Type	Series	New Money/ Refunding	Ratings	Original Par	Outstanding Par	Final Maturity	Refinanced Call Date	Callable Par
	2020	New Money	Private Placement	2,600,000	1,932,000	8/1/2034	8/1/2027	1,393,000
Water Revenue Bonds	2021B	Refunding (Taxable) (Adv Refund 2015)	Private Placement	7,150,000	6,910,000	2/1/2035	2/1/2029	4,205,000
	2022	New Money	S&P AA-	8,000,000	7,755,000	2/1/2052	2/1/2032	6,670,000
		<b>TOTAL</b>		<b>\$17,750,000</b>	<b>\$16,597,000</b>			<b>\$12,268,000</b>

**WHITE CITY WATER IMPROVEMENT DISTRICT, UTAH**  
**OUTSTANDING DEBT**

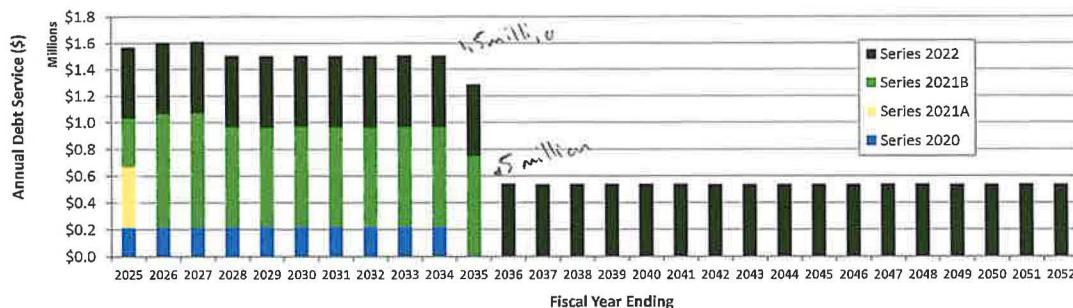


As of March 14, 2025

**Water Revenue Bonds**

Issue:	Water Revenue Bonds				Water Revenue Refunding Bonds				Water Revenue Refunding Bonds				Water Revenue Bonds					
Series:		2022				2021B				2021A				2020				
Original Par:		\$8,000,000				\$7,150,000				\$1,515,000				\$2,600,000				
Dated Date:		November 9, 2022				October 15, 2021				October 15, 2021				March 12, 2020				
Tax Status:		Tax-Exempt				Taxable				Tax-Exempt				Tax-Exempt				
Bldg Type:		Negotiated				Private Placement				Private Placement				Private Placement				
Bank Qualified:		Yes				No				Yes				Yes				
Credit Enhancement:		None				None				None				None				
Rating:		S&P AA-				Not Applied For				Not Applied For				Not Applied For				
Lead Underwriter/Purchaser:		Stifel, Nicolaus & Company, Incorporated				Truist Bank				Truist Bank				Truist Bank				
Financial Advisor:		None				Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)				
Trustee/Paying Agent:		U.S. Bank Trust Company, National Association				U.S. Bank Trust Company, National Association				U.S. Bank Trust Company, National Association				U.S. Bank National Association				
Call Date:		February 1, 2032				February 1, 2029				Non-Callable				August 1, 2027				
Due:		February 1				February 1				February 1				August 1				
<b>FISCAL YEAR</b>	<b>PRINCIPAL</b>	<b>COUPON</b>	<b>INTEREST</b>	<b>DEBT SERVICE</b>	<b>PRINCIPAL</b>	<b>COUPON</b>	<b>INTEREST</b>	<b>DEBT SERVICE</b>	<b>PRINCIPAL</b>	<b>COUPON</b>	<b>INTEREST</b>	<b>DEBT SERVICE</b>	<b>PRINCIPAL</b>	<b>COUPON</b>	<b>INTEREST</b>	<b>DEBT SERVICE</b>		
2025	125,000	5.000%	412,325	537,325	205,000		157,781	362,781	450,000	T	0.860%	1,935	451,935	176,000		39,992	215,992	
2026	135,000	5.000%	405,825	540,825	700,000		147,600	847,600						180,000		36,349	216,349	
2027	140,000	5.000%	398,950	538,950	725,000		131,569	856,569						183,000		32,623	215,623	
2028	145,000	5.000%	391,825	536,825	635,000		116,269	751,269						187,000		28,835	215,835	
2029	155,000	5.000%	384,325	539,325	645,000		101,869	746,869						191,000		24,964	215,964	
2030	160,000	5.000%	376,450	536,450	665,000		87,131	752,131						195,000		21,011	216,011	
2031	170,000	5.000%	368,200	538,200	675,000		72,056	747,056						199,000		16,974	215,974	
2032	180,000	5.000%	359,450	539,450	690,000		56,700	746,700						203,000		12,855	215,855	
2033	190,000		349,725	539,725	710,000		40,950	750,950						207,000		8,653	215,653	
2034	200,000		339,000	539,000	725,000		26,806	749,806						211,000	T	2.070%	4,368	215,368
2035	210,000	T	327,725	537,725	740,000	T	2.250%	8,325	748,325									
2036	225,000		315,763	540,763														
2037	235,000		303,113	538,113														
2038	250,000	T	3,500%	289,775														
2039	265,000			275,613	540,613													
2040	280,000			260,625	540,625													
2041	295,000			244,813	539,813													
2042	310,000	T	5,500%	228,175	538,175													
2043	325,000			210,713	535,713													
2044	345,000			193,288	537,288													
2045	365,000			172,763	537,763													
2046	385,000			152,138	537,138													
2047	410,000	T	5,500%	130,275	540,275													
2048	430,000			108,250	538,250													
2049	450,000			86,250	536,250													
2050	475,000			63,125	538,125													
2051	500,000			38,750	538,750													
2052	525,000	T	5,000%	13,125	538,125													
Non-Callable:				1,210,000														
Callable:				6,670,000														
Outstanding Par:				7,880,000														
Outstanding Interest:				7,199,350														
Outstanding Debt Service:				15,079,350														
DSRF Deposit:				No DSRF Requirement														
Purpose/Notes:				Water Tanks														
Principal and Interest payments reflect total for the fiscal year.																		
Water Revenue Bonds				Water Revenue Refunding Bonds				Water Revenue Refunding Bonds				Water Revenue Bonds				Water Revenue Bonds		
2022				2021B				2021A				2020				2020		
\$8,000,000				\$7,150,000				\$1,515,000				\$2,600,000				\$2,600,000		
November 9, 2022				October 15, 2021				October 15, 2021				March 12, 2020				March 12, 2020		
Tax-Exempt				Taxable				Tax-Exempt				Tax-Exempt				Tax-Exempt		
Negotiated				Private Placement				Private Placement				Private Placement				Private Placement		
Yes				No				Yes				Yes				Yes		
None				None				None				None				None		
S&P AA-				Not Applied For				Not Applied For				Not Applied For				Not Applied For		
Stifel, Nicolaus & Company, Incorporated				Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)		
None				U.S. Bank Trust Company, National Association				U.S. Bank Trust Company, National Association				U.S. Bank National Association				U.S. Bank National Association		
U.S. Bank Trust Company, National Association				February 1, 2032				February 1, 2029				Non-Callable				August 1, 2027		
February 1				February 1				February 1				February 1				August 1		
Principal and Interest payments reflect total for the fiscal year.																		
Water Revenue Bonds				Water Revenue Refunding Bonds				Water Revenue Refunding Bonds				Water Revenue Bonds				Water Revenue Bonds		
2021B				2021A				2020				2020				2020		
\$7,150,000				\$1,515,000				\$2,600,000				\$2,600,000				\$2,600,000		
October 15, 2021				October 15, 2021				March 12, 2020				March 12, 2020				March 12, 2020		
Taxable				Tax-Exempt				Tax-Exempt				Tax-Exempt				Tax-Exempt		
Private Placement				Private Placement				Private Placement				Private Placement				Private Placement		
No				Not Applied For				Not Applied For				Not Applied For				Not Applied For		
Truist Bank				Truist Bank				Truist Bank				Truist Bank				Truist Bank		
Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)				Stifel (Placement Agent)		
U.S. Bank Trust Company, National Association																		

WHITE CITY WATER IMPROVEMENT DISTRICT, UTAH  
OUTSTANDING DEBT



FISCAL YEAR	Series 2022	Series 2021B	Series 2021A	Series 2020	TOTAL DEBT SERVICE
2025	537,325	362,781	451,935	215,992	1,568,034
2026	540,825	847,600	0	216,342	1,604,774
2027	538,950	856,569	0	215,623	1,611,142
2028	536,825	751,269	0	215,835	1,503,929
2029	539,325	746,869	0	215,964	1,502,158
2030	536,450	752,131	0	216,011	1,504,592
2031	538,200	747,056	0	215,974	1,501,230
2032	539,450	746,700	0	215,855	1,502,005
2033	539,725	750,950	0	215,653	1,506,328
2034	539,000	749,806	0	215,368	1,504,174
2035	537,725	748,325	0	0	1,286,050
2036	540,263	0	0	0	540,763
2037	538,113	0	0	0	538,113
2038	539,775	0	0	0	539,775
2039	540,613	0	0	0	540,613
2040	540,625	0	0	0	540,625
2041	539,813	0	0	0	539,813
2042	538,175	0	0	0	538,175
2043	535,713	0	0	0	535,713
2044	537,288	0	0	0	537,288
2045	537,763	0	0	0	537,763
2046	537,136	0	0	0	537,136
2047	540,275	0	0	0	540,275
2048	538,250	0	0	0	538,250
2049	536,250	0	0	0	536,250
2050	538,125	0	0	0	538,125
2051	538,750	0	0	0	538,750
2052	538,125	0	0	0	538,125
<b>TOTAL</b>	<b>15,079,350</b>	<b>8,060,056</b>	<b>451,935</b>	<b>2,158,624</b>	<b>25,749,965</b>

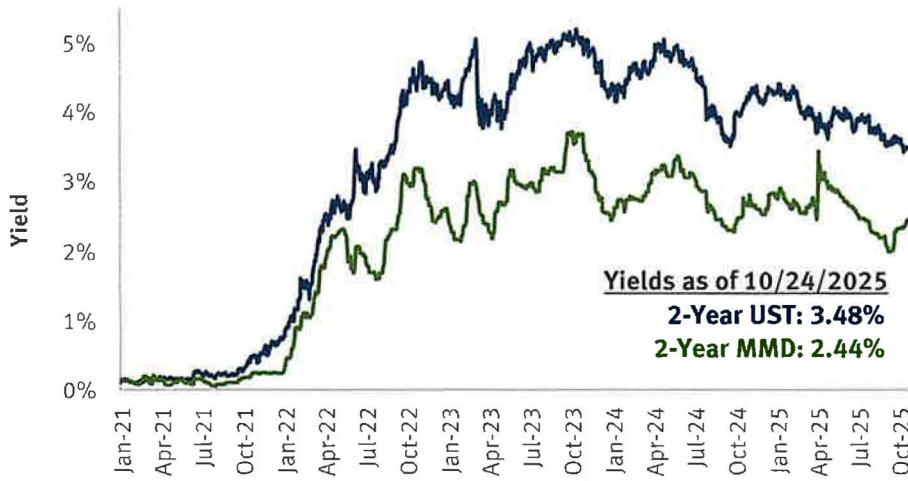
## **M**arket Update

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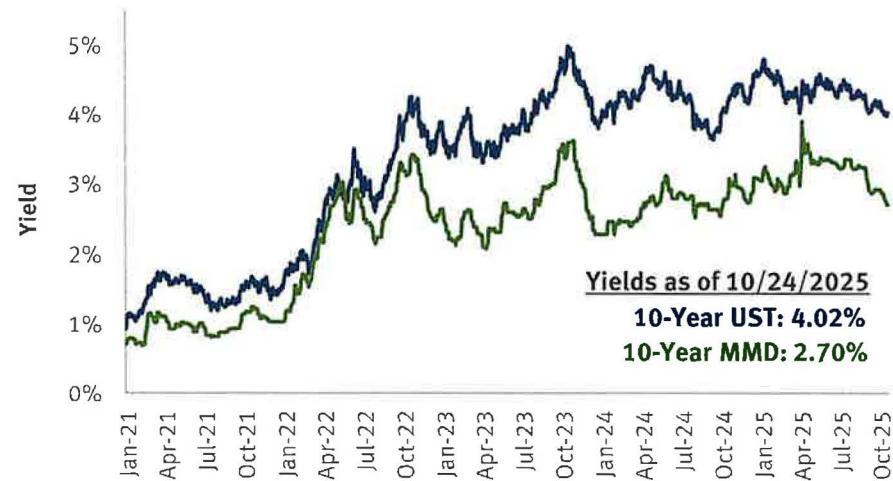
# Tax-Exempt and Taxable Interest Rate Movement

**AAA MMD and Treasury yields record mixed movement.**

## 2-Year AAA MMD and 2-Year UST Yields Since 2021



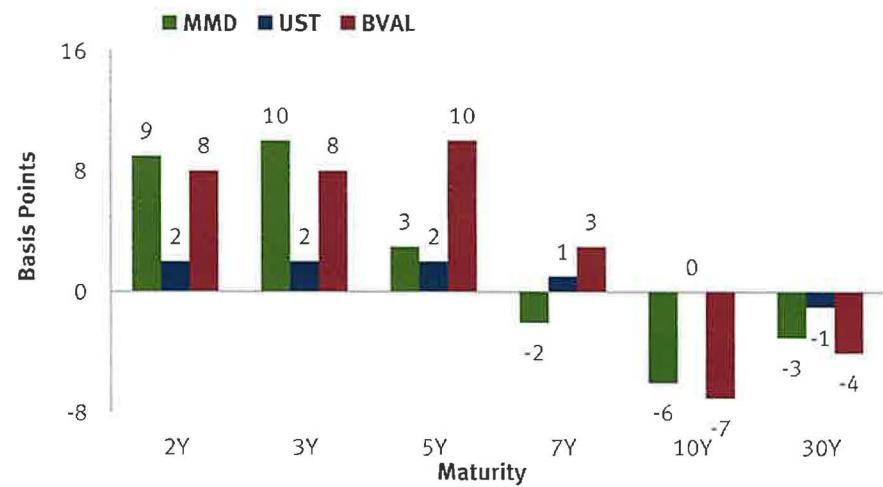
## 10-Year AAA MMD and 10-Year UST Yields Since 2021



## 30-Year AAA MMD and 30-Year UST Yields Since 2021



## Weekly Change in U.S. Treasury, AAA MMD and BVAL Yields



# Tax-Exempt Interest Rate Movement

**AAA MMD yields record mixed movement.**

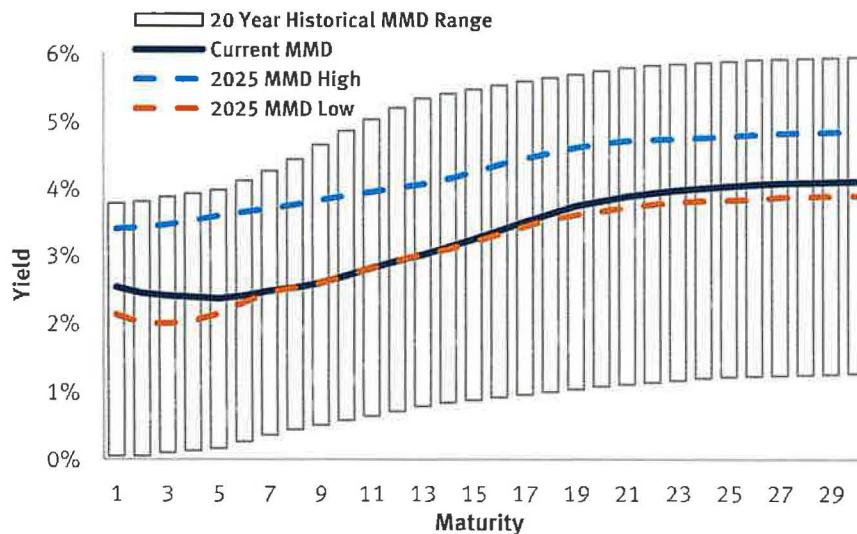
## AAA MMD Yields Since 2021

Comparing 2-, 10- and 30-Year AAA MMD



## Current AAA MMD Yields and Historic Context

20-Year Historical AAA MMD Range vs. Current AAA MMD



## 2-, 10- and 30-Year Muni to Treasury Ratios Since 2021



## AAA MMD Summary Statistics

	2-Year	10-Year	30-Year
Current	2.44%	2.70%	4.10%
Weekly Change	+9 bps	-6 bps	-3 bps
<b>2025 Year-to-Date</b>			
YTD Change	-34 bps	-36 bps	+21 bps
High	3.42%	3.89%	4.84%
Low	2.00%	2.70%	3.89%
Average	2.57%	3.16%	4.33%
Beginning of 2025	2.78%	3.06%	3.89%

## AAA BVAL Summary Statistics

	2-Year	10-Year	30-Year
Current	2.43%	2.69%	4.04%
Weekly Change	+8 bps	-7 bps	-4 bps
<b>2025 Year-to-Date</b>			
YTD Change	-35 bps	-40 bps	+24 bps

# New Issue Supply and Demand

## Municipal Issuance Volume

- 2025 weekly volume is expected to maintain 2024 levels:
  - \$10.7 billion in 2025 vs \$9.6 billion, \$7.2 billion, \$7.0 billion, \$8.8 billion in 2024, 2023, 2022 and 2021, respectively.
- Total municipal issuance reached a historical record of \$507.6 billion in 2024.
- Last week, municipal supply reached \$18.0 billion, of which \$2.7 billion was taxable.
- This week, municipal supply is expected to be \$6.7 billion, of which \$534.9 million is expected to be taxable.

## Weekly Supply

Previous 12 Weeks of New Issue Supply and Forecast of Current Week

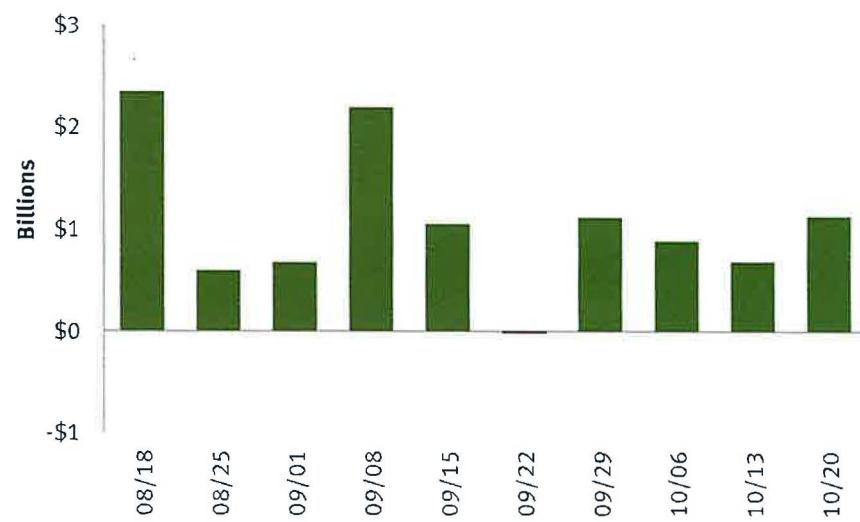


## Municipal Bond Funds Record Net Inflows

- Net fund inflows reached \$1.1 billion during the week of October 20, following inflows of \$678.1 million the week prior.
- The four-week moving average of flows increased to \$925.2 million of net inflows vs \$649.1 million of inflows the prior week.
- 2024 average weekly net inflows were \$402.5 million, compared to 2023 average weekly net outflows of \$301.6 million.
- 2024 inflows totaled \$21.3 billion vs outflows of \$15.6 billion in 2023 and \$80.4 billion in 2022.

## Municipal Bond Funds Record Net Inflows

Recent Weekly Municipal Bond Fund Flows



# U.S. Economic Calendar – Key Events and Data Releases

Monday October 27	Tuesday October 28	Wednesday October 29	Thursday October 30	Friday October 31
<ul style="list-style-type: none"> <li>▪ <b>Durable Goods</b></li> <li>▪ Dallas Fed Manufacturing Survey</li> </ul>	<ul style="list-style-type: none"> <li>▪ FOMC Meeting Begins</li> <li>▪ <i>Case-Shiller Home Price Index</i></li> <li>▪ FHFA House Price Index</li> <li>▪ <b>Consumer Confidence</b></li> <li>▪ Richmond Fed Manufacturing Index</li> <li>▪ Money Supply</li> </ul>	<ul style="list-style-type: none"> <li>▪ MBA Mortgage Applications</li> <li>▪ <b>International Trade in Goods (Advance)</b></li> <li>▪ Retail Inventories (Advance)</li> <li>▪ Wholesale Inventories (Advance)</li> <li>▪ <i>Pending Home Sales Index</i></li> <li>▪ <b>EIA Petroleum Status Report</b></li> <li>▪ Survey of Business Uncertainty</li> <li>▪ <b>FOMC Announcement</b></li> <li>▪ <b>Fed Chair Press Conference</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>GDP</b></li> <li>▪ <b>Jobless Claims</b></li> <li>▪ <i>EIA Natural Gas Report</i></li> <li>▪ <i>Fed Balance Sheet</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Personal Income and Outlays</b></li> <li>▪ <i>Employment Cost Index</i></li> <li>▪ <i>Chicago PMI</i></li> <li>▪ Baker Hughes Rig Count</li> <li>▪ Farm Prices</li> </ul>

Monday November 3	Tuesday November 4	Wednesday November 5	Thursday November 6	Friday November 7
<ul style="list-style-type: none"> <li>▪ <i>PMI Manufacturing Final</i></li> <li>▪ <b>ISM Manufacturing Final</b></li> <li>▪ <i>Construction Spending</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Motor Vehicle Sales</i></li> <li>▪ <b>International Trade in Goods and Services</b></li> <li>▪ <i>Factory Orders</i></li> <li>▪ <i>JOLTS</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ MBA Mortgage Applications</li> <li>▪ <i>ADP Employment Report</i></li> <li>▪ <b>Treasury Refunding Announcement</b></li> <li>▪ <i>PMI Composite Final</i></li> <li>▪ <i>ISM Services Index</i></li> <li>▪ <b>EIA Petroleum Status Report</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ Challenger Job-Cut Report</li> <li>▪ <b>Jobless Claims</b></li> <li>▪ <i>Productivity and Costs</i></li> <li>▪ Wholesale Inventories (Preliminary)</li> <li>▪ <i>EIA Natural Gas Report</i></li> <li>▪ <i>Fed Balance Sheet</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Employment Situation</b></li> <li>▪ <i>Consumer Sentiment</i></li> <li>▪ Baker Hughes Rig Count</li> <li>▪ Consumer Credit</li> </ul>

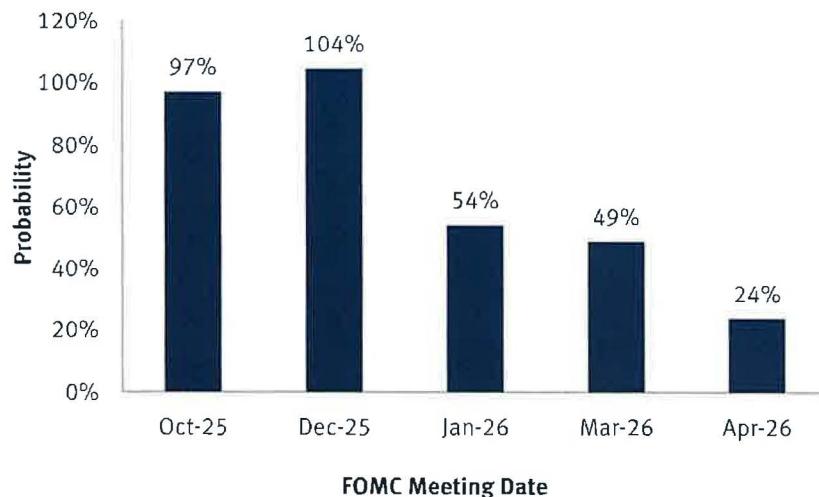
Legend:

- **Market Moving Indicator**
- **Merits Extra Attention**

*Note: Government shutdown may disrupt timing of federal economic data releases.*

- Last week, the CPI rose 0.3% in September, a tenth of a percentage point less than expected and following a 0.4% gain the month prior. Year-over-year, consumer prices rose 3.0%, also a tenth of a percentage point less than expected but still marking an acceleration from the 2.9% annual rise in August.
- Trade tensions came back into the spotlight the White House proposed a 100% tariff on all Chinese goods beginning November 1 and trade negotiations with Canada have been canceled. Meanwhile, the US has enacted new sanctions against Russia's two largest oil companies, as peace talks with Putin stalled.
- The U.S. government shutdown has become the second longest in history, second only to the 35-day shutdown in 2018-2019. Insiders suggest today's shutdown could last "a while" longer as both sides continue to dig in their heels.

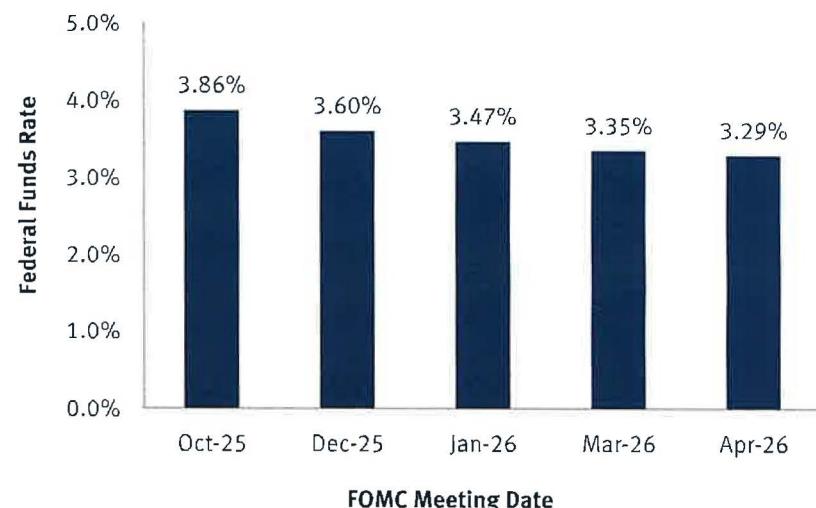
## Market Consensus Probability of a Rate Cut at Upcoming Fed Meetings *Calculated Using Fed Funds Futures. (Values > 100% indicate a greater than 25 bp cut)*



## Bloomberg Consensus Yield Curve Projections (%)

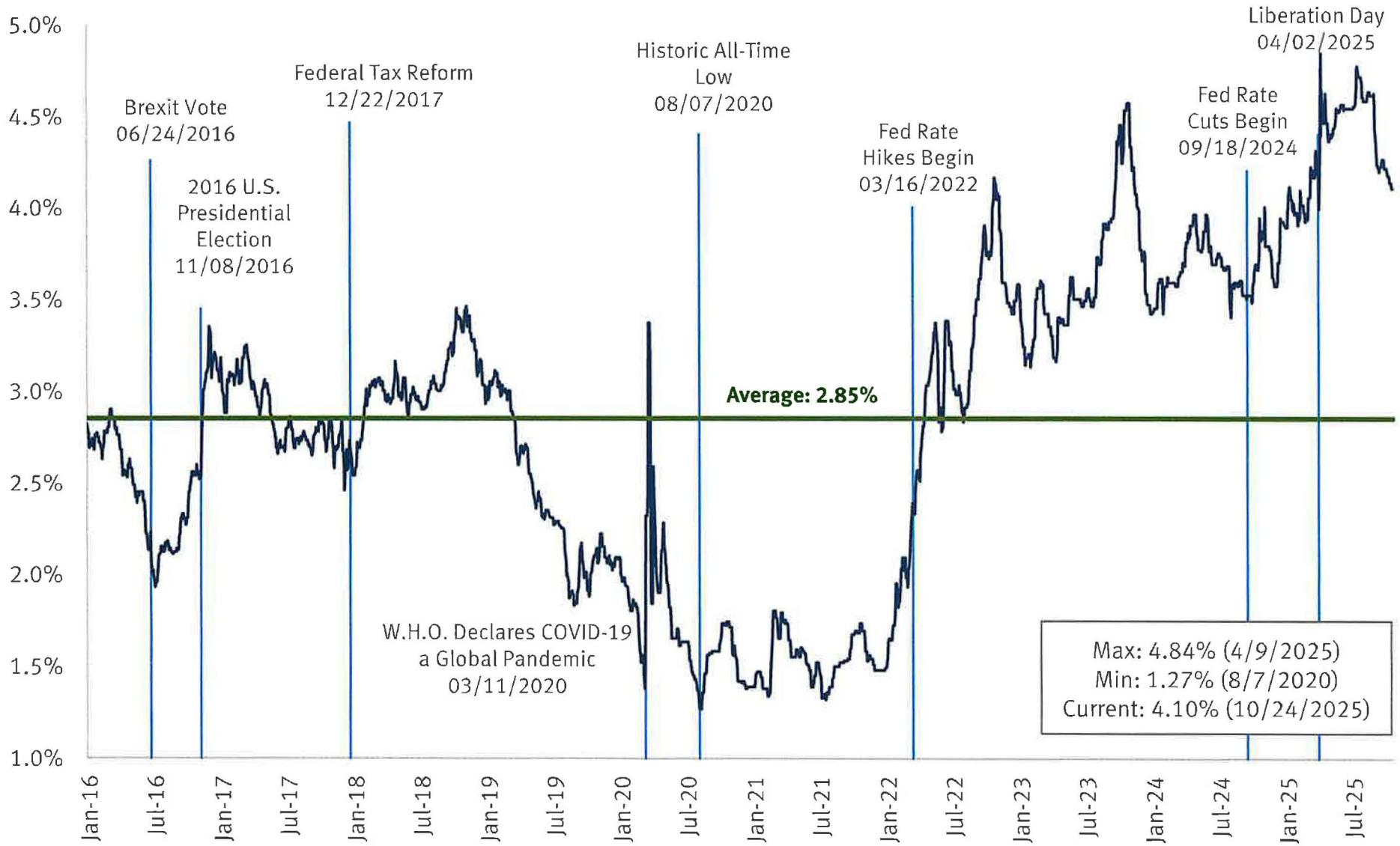
	Market Consensus Yield Curve Projections (%)				
	Current	Q4 25	Q1 26	Q2 26	Q3 26
Fed Funds	4.25	3.83	3.62	3.42	3.30
2-Yr UST	3.48	3.50	3.42	3.37	3.34
10-Yr UST	4.02	4.12	4.10	4.08	4.07
30-Yr UST	4.59	4.67	4.65	4.62	4.60

## Market Consensus Implied Overnight Effective Rate After Each Fed Meeting



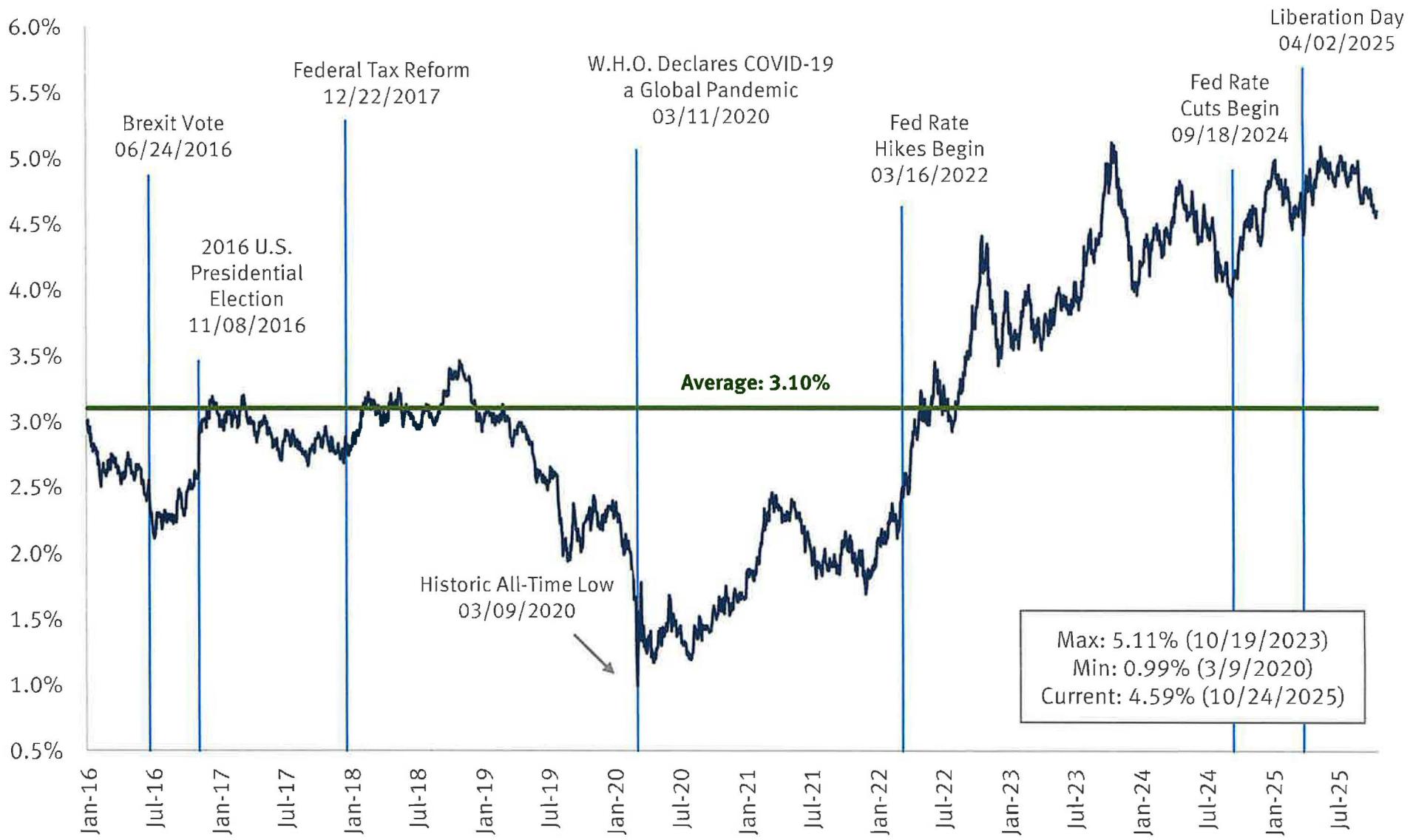
## Market Volatility: A Defining Characteristic

### 30-Year AAA MMD Since 2016



# Market Volatility: A Defining Characteristic

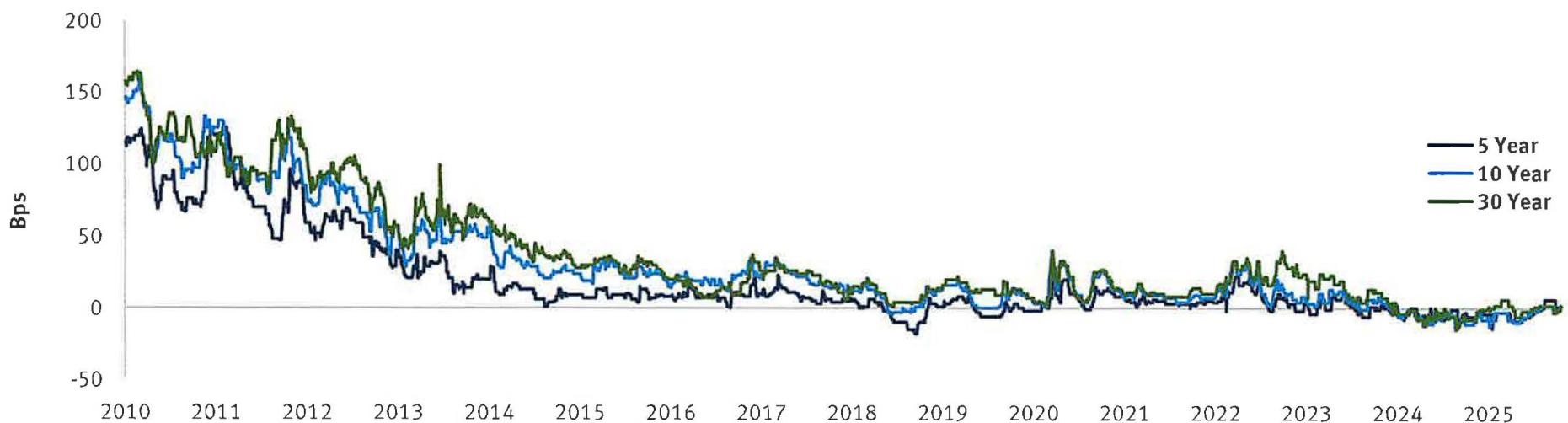
## 30-Year UST Since 2016



## Tax-Exempt Credit Spreads over the AAA MMD Index Since 2010



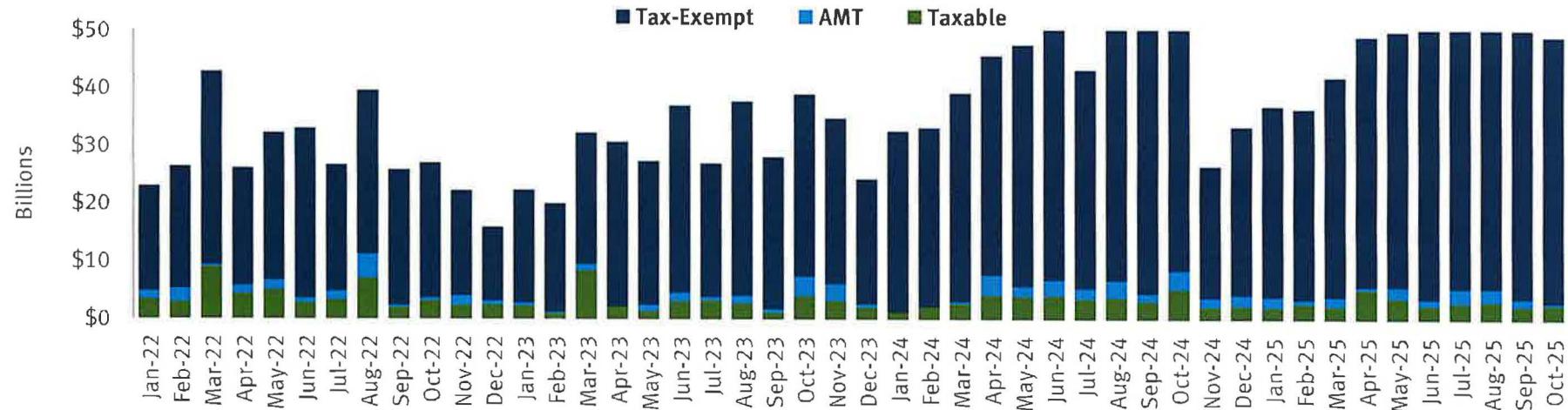
## California GO Spreads over the AAA MMD Index Since 2010



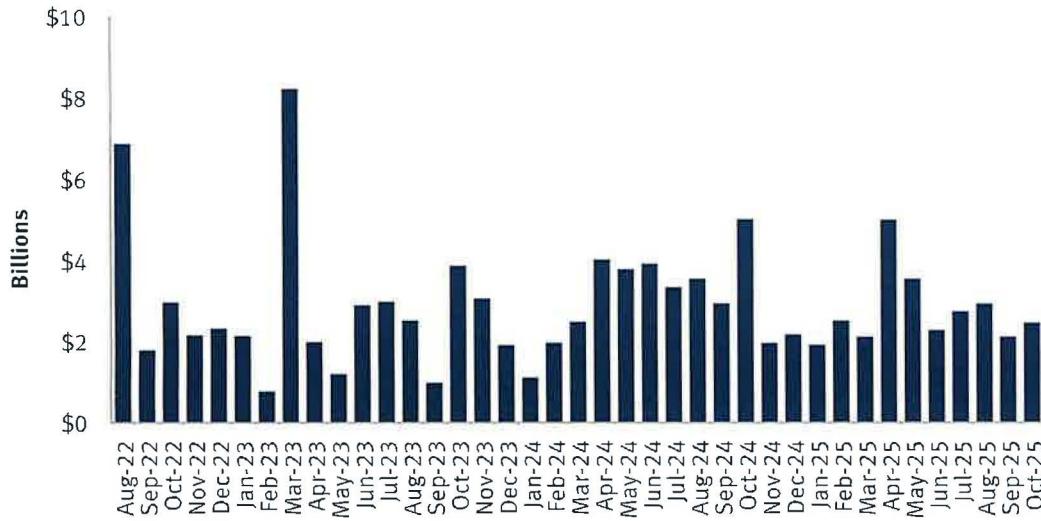
## Annual National Municipal Issuance Volume by Tax Status



## 2022 Through 2025 YTD National Monthly Municipal Issuance Volume by Tax Status



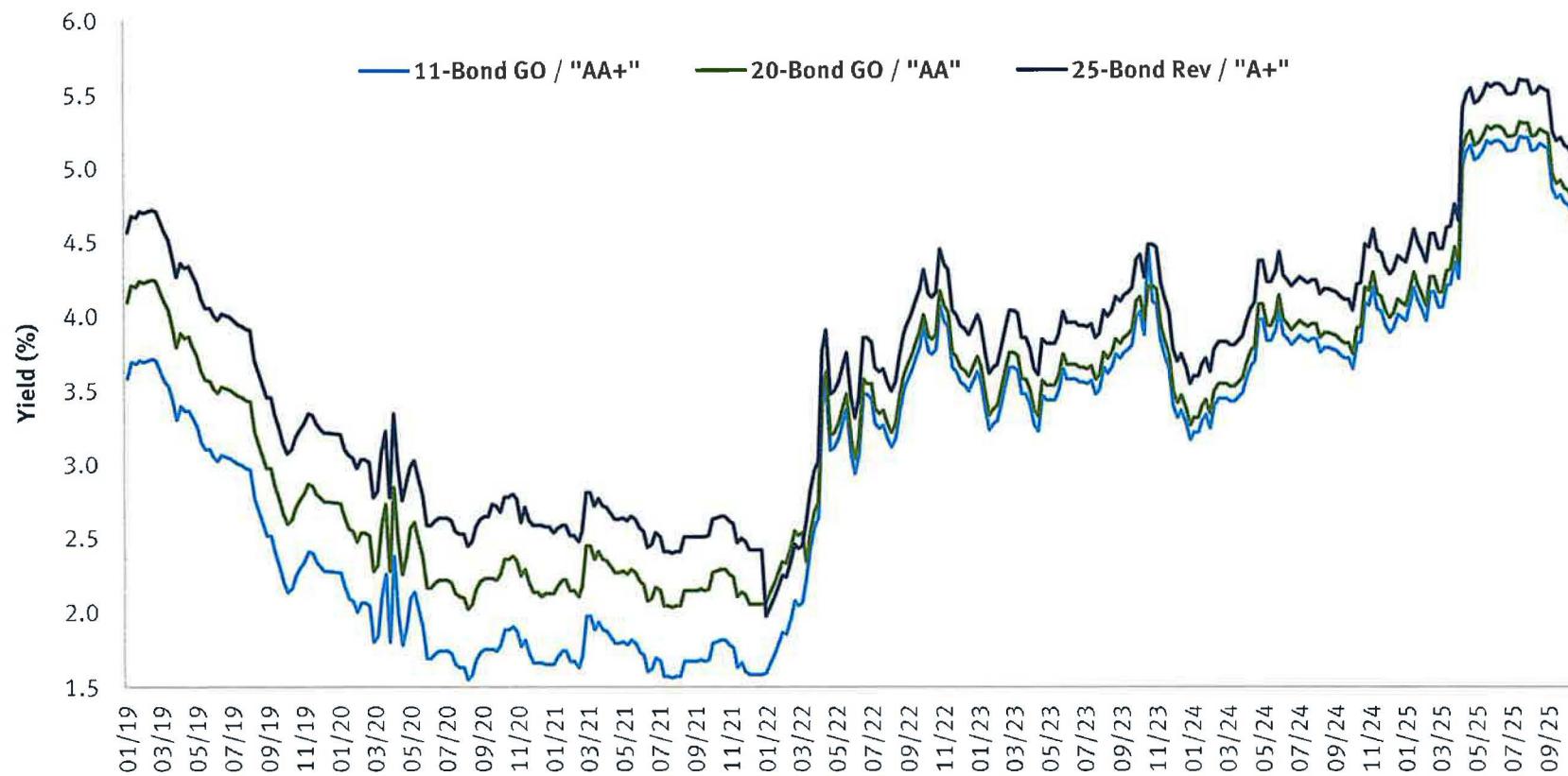
## Monthly National Taxable Municipal Issuance Since 2022



- Since 2011, taxable issuances have averaged 13% of total yearly volume. The advent of Build America Bonds in 2009 and 2010 led to 21% and 36% of volume being taxable, respectively.
- Taxable issuances in 2021 and 2022, totaled nearly \$119 and \$53 billion in aggregate par amount, respectively.
- In 2023, taxable issuances dropped to approximately \$37 billion. Taxable issues still accounted for almost 10% of total yearly volume.
- 2024 taxable issuance decreased slightly year-over-year to \$36 billion, representing 7% of total issuance.

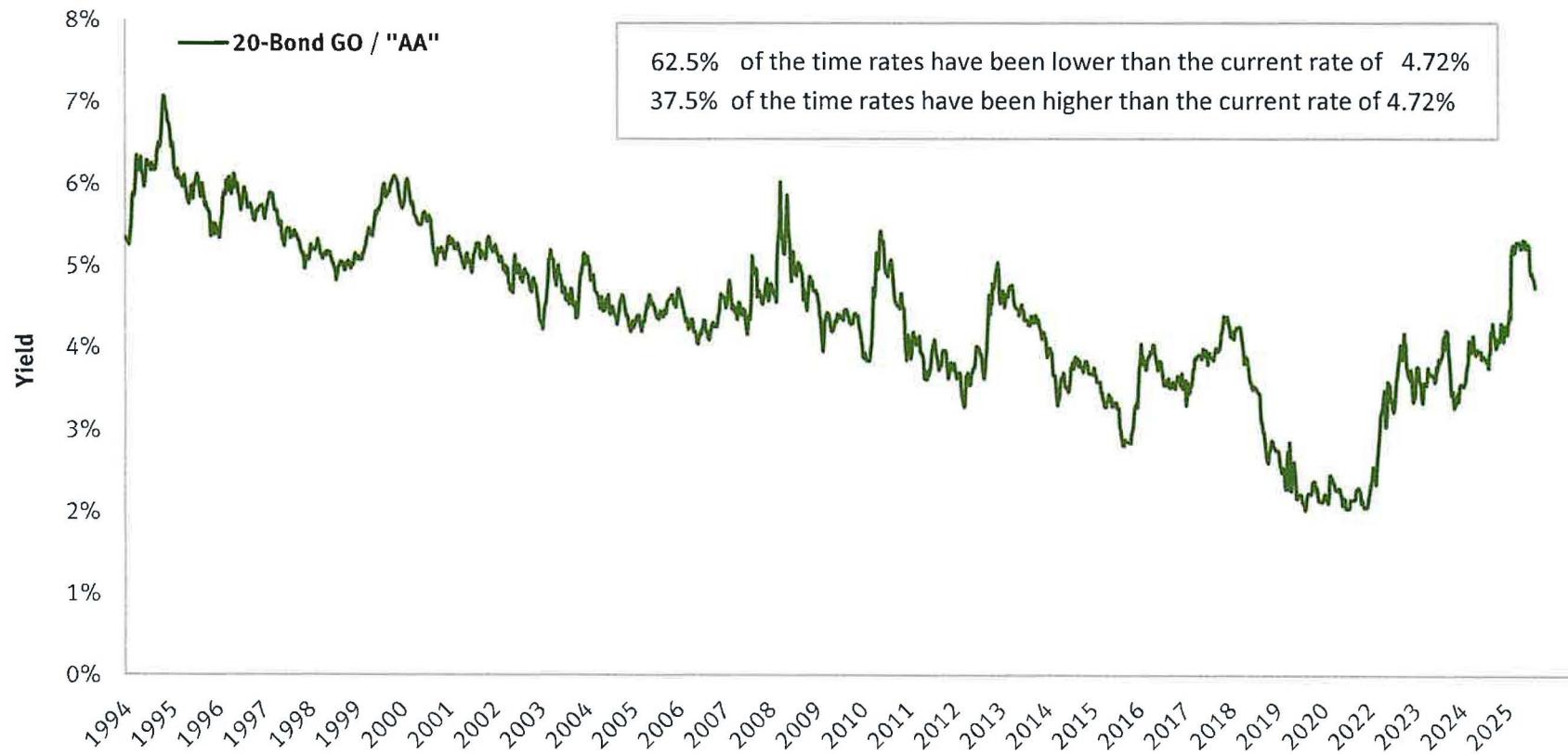
## National Annual Taxable Municipal Issuance Since 2008





### Definitions of the Bond Buyer Indices:

- The 11-Bond GO Index is a subset of the 20-Bond GO Index, described below. It shows the average yield of 11 selected bonds from the 20-Bond GO Index, with an average credit rating equivalent to S&P's "AA+".
- The 20-Bond GO Index is the average yield of 20 selected GO bonds maturing 20 years from now, with an average credit rating equivalent to S&P's "AA".
- The 25-Bond Rev Index is the average yield of 25 selected Revenue bonds maturing 30 years from now, with an average credit rating equivalent to S&P's "A+".



### Definitions of the Bond Buyer Index:

- The 20-Bond GO Index is the average yield of 20 selected GO bonds maturing 20 years from now, with an average credit rating equivalent to S&P's "AA".

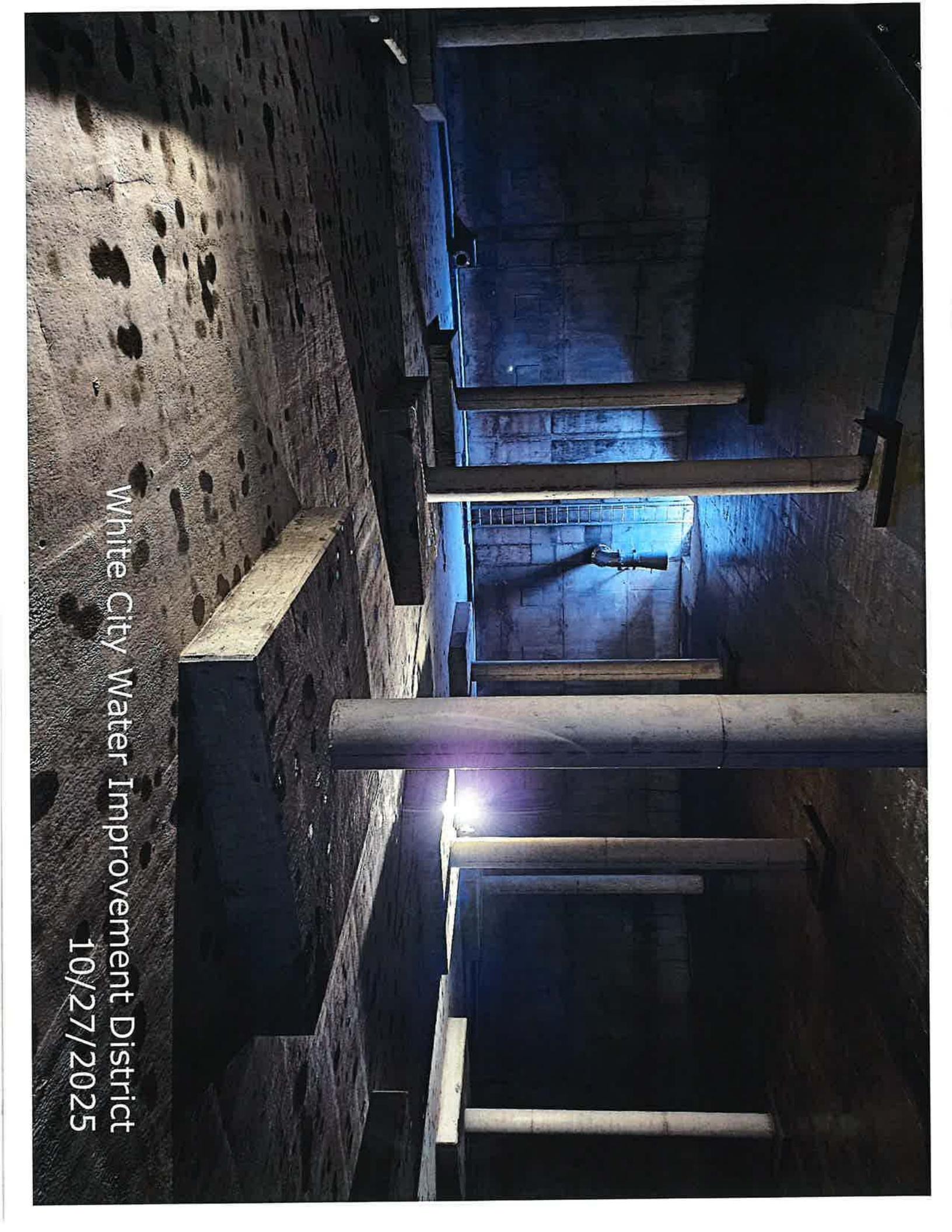
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STIFEL

Public Finance



White City Water Improvement District  
10/27/2025

# WCWID System Overview

- Water Distribution
  - 303,497 LF of pipe
  - 57.5 Miles of pipe
- Storage
  - 5 tanks (7.0 Million Gallons)
- Source
  - 9 Wells
    - 11,050 Gallons Per Minute
    - 15.9 Million Gallons Per Day
  - Booster Pump Station



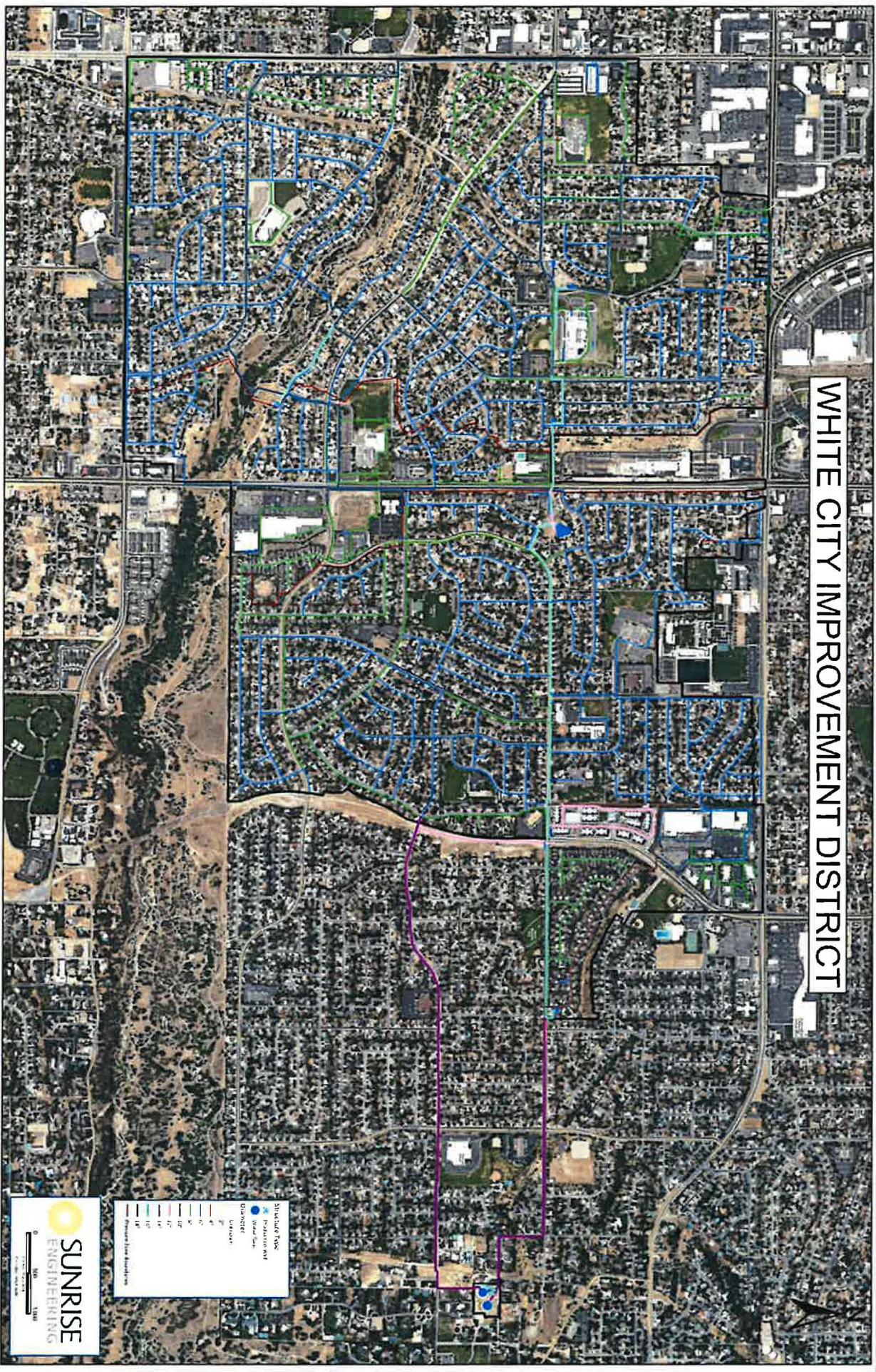
sunrise-eng.com

4,221

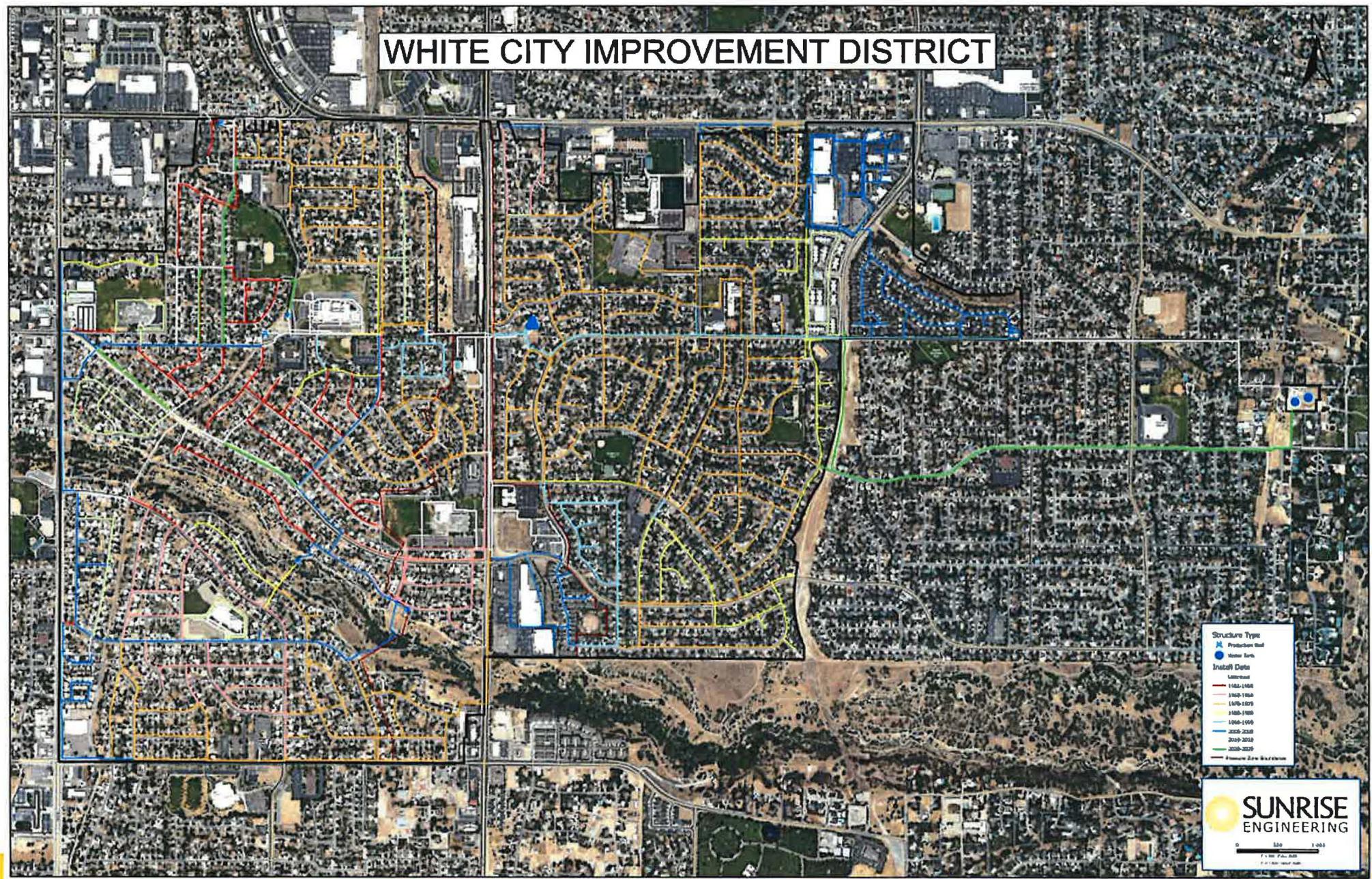
4,150 Connections

Creating solutions that work and relationships that last.

# WCWID System Overview



# WCWID System by Age



# 1995-2025 Improvements

- **Pipes** – Added or Replaced 1995 – 2010
  - 75,600 LF (Developments and Bond Projects)
- **CIP Pipes** – Added or Replaced 2011 – 2025 (+21,000 LF )
  - Mumford Phase I & II (2,600 LF) -2011
  - Meckalilee Cove (1,000 LF) - 2012
  - 9400 South Loop (800 LF) - 2013
  - Onyx (1,000 LF) 2015
  - Eastmont, Zinnia Phase I (1,000 LF)-2016
  - Zinnia Phase II (950 LF)– 2017
  - 730 East Peony (1,850 LF) – 2018
  - 9400 South JV Transfer (500 LF) -2018
  - Tulip Aster (1,800 LF)- 2019
  - Zinnia Larkspur to Dollar (275 LF) -2020
  - Carnation Peony to Canal (700 LF)-2020
  - Well # 8 School Line (380 LF)-2021
  - 9400 South JV Connections -2020
  - Garnet Onyx to Galena (980 LF) 2021
  - Sego Lily Phase I (2,504 LF) 2022
  - Sego Lily Phase II (1,025 LF) 2023
- **CIP Pipes Continued**
  - Amber – Galena to Onyx (1015) 2024
  - Poppy – Galena to Onyx (1,015) 2025
  - Poppy – Onyx to 9400 S. (1,850 LF) 2025
- **Transmission Lines**
  - 10000 South 18" (6,300 LF) 2024
  - Highland Drive 12" (2,650 LF)
- **Since 2011 Average 2,048 LF per Year**



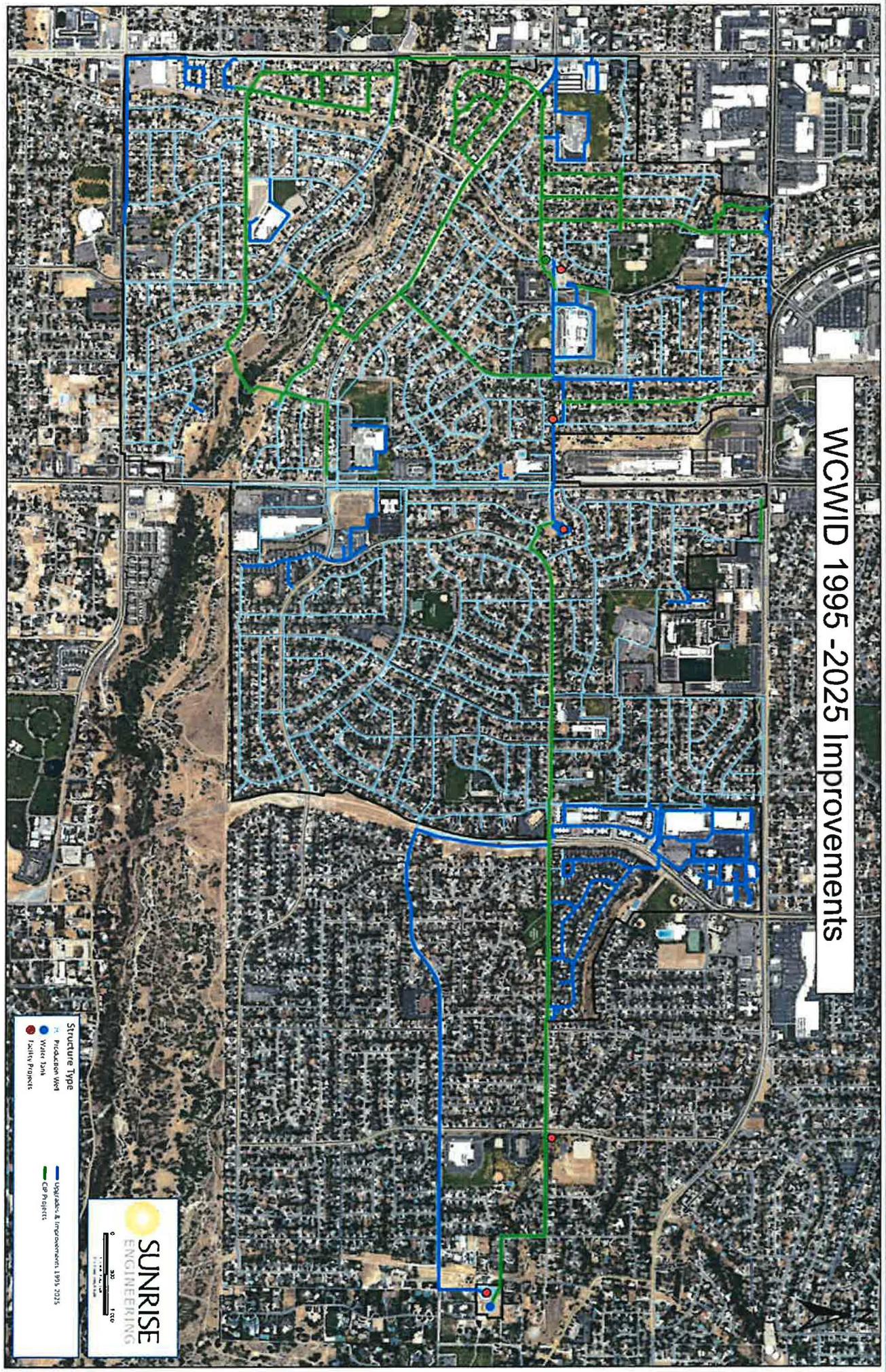
# 1995-2025 Improvements

- **New Wells**
  - Well #10 (3,000 gpm)
  - Well #5A (2,500 gpm)
- **Upgraded Wells/Booster Pump**
  - Wells 3A, 4, 8, 9
  - Booster Pump Station 2011
  - Standby Generator
- **New Office Building**
- **Storage**
  - Harston 3.0 MG Tank
  - Harston 2.0 MG Tank
  - Tank Farm Repainting
  - Tank Farm Piping Upgrades
- **Improvement Bonds**
  - 2001 – \$5 Million
  - 2005 – \$3.3 Million
  - 2007 – \$1.2 Million
  - 2020 - \$2.6 Million
  - 2022 - \$8.0 Million
- **Total Improvement Bonds**
  - \$20.1 Million



# 1995-2025 Improvements

WCWID 1995 - 2025 Improvements



# WCWID Pipe Statistics

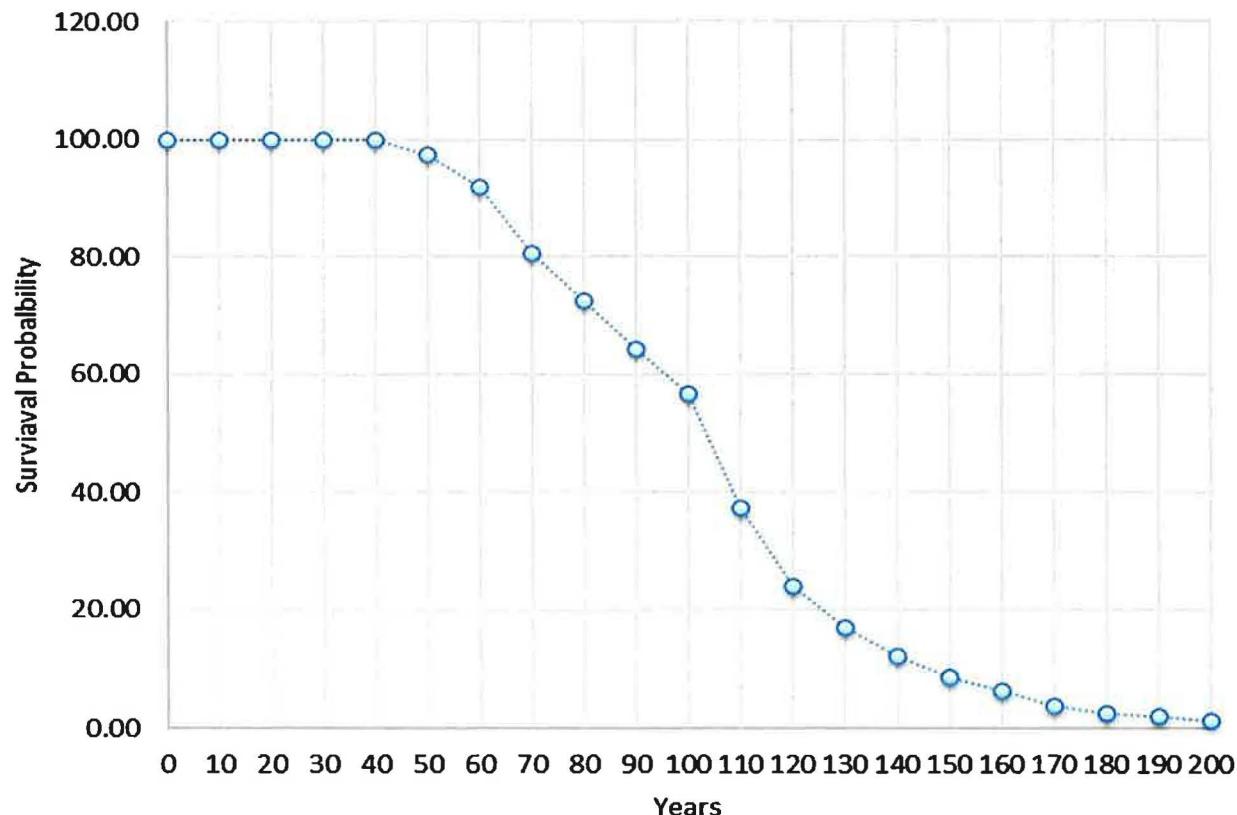
Diameter (In)	Length (FT)	Length (Miles)	Percentage
4"	528	0.1	0.2%
6"	168,910	32.0	55.7%
8"	64,951	12.3	21.4%
10"	35,761	6.8	11.8%
12"	5,886	1.1	1.9%
14"	5,390	1.0	1.8%
16"	11,237	2.1	3.7%
18"	10,821	2.0	3.6%
<b>Totals</b>	<b>303,484</b>	<b>57</b>	<b>100.0%</b>

New Pipe Installed	Length (FT)	Percentage of System	LF/YR
1995-2010	75,000	24.7%	5,000
2010-2025	30,727	10.1%	2,048
<b>Total</b>	<b>105,727</b>	<b>34.8%</b>	



# Pipe Replacement Curves

Average Survival Rate of Ductile Iron Pipes (AWWA)



# Pipe Age Replacement Analysis



Pipe Replacement by Age					
Period	LF	LF/Year	\$/LF	\$/Period	\$/Year
2014-2019	5,892	1,178	\$380.00	\$2,238,920	\$447,784
2020-2029	15,485	1,548	\$380.00	\$5,884,172	\$588,417
2030-2039	26,067	2,607	\$380.00	\$9,905,590	\$990,559
2040-2054	44,386	2,959	\$380.00	\$16,866,746	\$1,124,450
Totals	91,830			\$34,895,430	
Pipe Replacement by Equal Amount Each Year					
Period	LF	LF/Year	\$/LF	\$/Period	\$/Year
2014-2019	11,479	2,296	\$380.00	\$4,361,929	\$872,386
2020-2029	22,958	2,296	\$380.00	\$8,723,857	\$872,386
2030-2039	22,958	2,296	\$380.00	\$8,723,857	\$872,386
2040-2054	34,436	2,296	\$380.00	\$13,085,786	\$872,386
Totals	91,830			\$34,895,430	

**Recommendation – Continue with Approximately 2,000 LF per year**

Three Critical Factors for Determining Pipe Replacement:

- 1- Age of the Pipe
- 2- How critical the pipe is to the network
- 3- How many leaks and problems the pipe has had



# CIP Projects – Facilities/Engineering

FACILITIES		
A	New Office Building/985 East Galena Parking	Completed
B	Tank Farm Seismic Foundation	\$ 83,000
C	Harston Tank Extra Storage (2.0 MG)	Completed
D	Abandon Wells # 2, #7 (TBD Based on Water Rights)	Completed
E	Replacement Well #1/8	\$ 1,900,000
F	Booster Station Building Upgrades	\$ 150,000
G	Chlorination Trailer	\$ 100,000
H	Radio Read Upgrades	\$ 100,000
I	Well #8 Pump to Waste (450 LF)	Completed
J	Tank Farm Replacement	\$ 5,840,000
K	Booster Station Replacement	\$ 900,000
L	Additional Well	
		Total \$ 9,073,000

ENGINEERING		
a	Sandy/Jordan Valley Connections	\$ 20,000
b	Future Well Sites Zones of Influence	\$ 35,000
c	Treatment/Chlorination Study	\$ 30,000
d	Hydraulic Water Model Calibration/Fire Flow Tests	\$ 35,000
		Total \$ 120,000



# CIP Projects – Pipeline Replacement

NEW PIPE LINES/CONNECTIONS		
a	Highland Pipeline South (1500 LF)	Removed
b	Sandy City Connection	\$ 230,000
c	18" Transmission Line 3.0 MG Tank (8,000 LF)	Completed
		Total \$ 230,000
PIPELINE REPLACEMENT		
1	Garnett (Galena to Onyx - 1,015 LF)	Completed
2	Amber (Galena to Onyx- 1,015 LF)	Completed
3	Poppy (Galena to Onyx - 1,015 LF)	Completed
4	Zinnia (Larkspur to Dollar - 275 LF)	Completed
5	1150 East (Bronze to Diamond - 275 LF)	\$ 116,000
6	Carnation (Peony to Canal Crossing 650 LF)	Completed
7	1380 East Waterline Replacement (1,200 LF)	\$ 567,000
8	Indian Ridge (Shoshone to 9400 South 1,150 LF)	\$ 571,000
9	Poppy (Well #4 to Onyx - 1850 LF)	Completed
10	1300 East (Sego Lily to Buddlea - 2310 LF)	\$ 904,000
11	1300 East AC Line Abandonment	\$ 50,000
12	Sego Lilly -730 East to Barium (2100 LF)	Completed
13	Sego Lilly - Barium to Flint (1,000 LF)	Completed
14	9400 South - 1700 East to Tramway (1,200 LF)	\$ 315,000
15	Marble - Electra to Turquoise (400 ft)	\$ 118,000
16	Carnation/Phlox (1540 LF)	\$ 641,000
17	Garnett (Onyx - Emerald) - 1,000 LF	\$ 459,000
18	Amber (Onyx-Emerald) - 875 LF	\$ 405,000
19	Poppy (Galena to Sunflower) -800 LF	\$ 384,000
		Total \$ 4,530,000

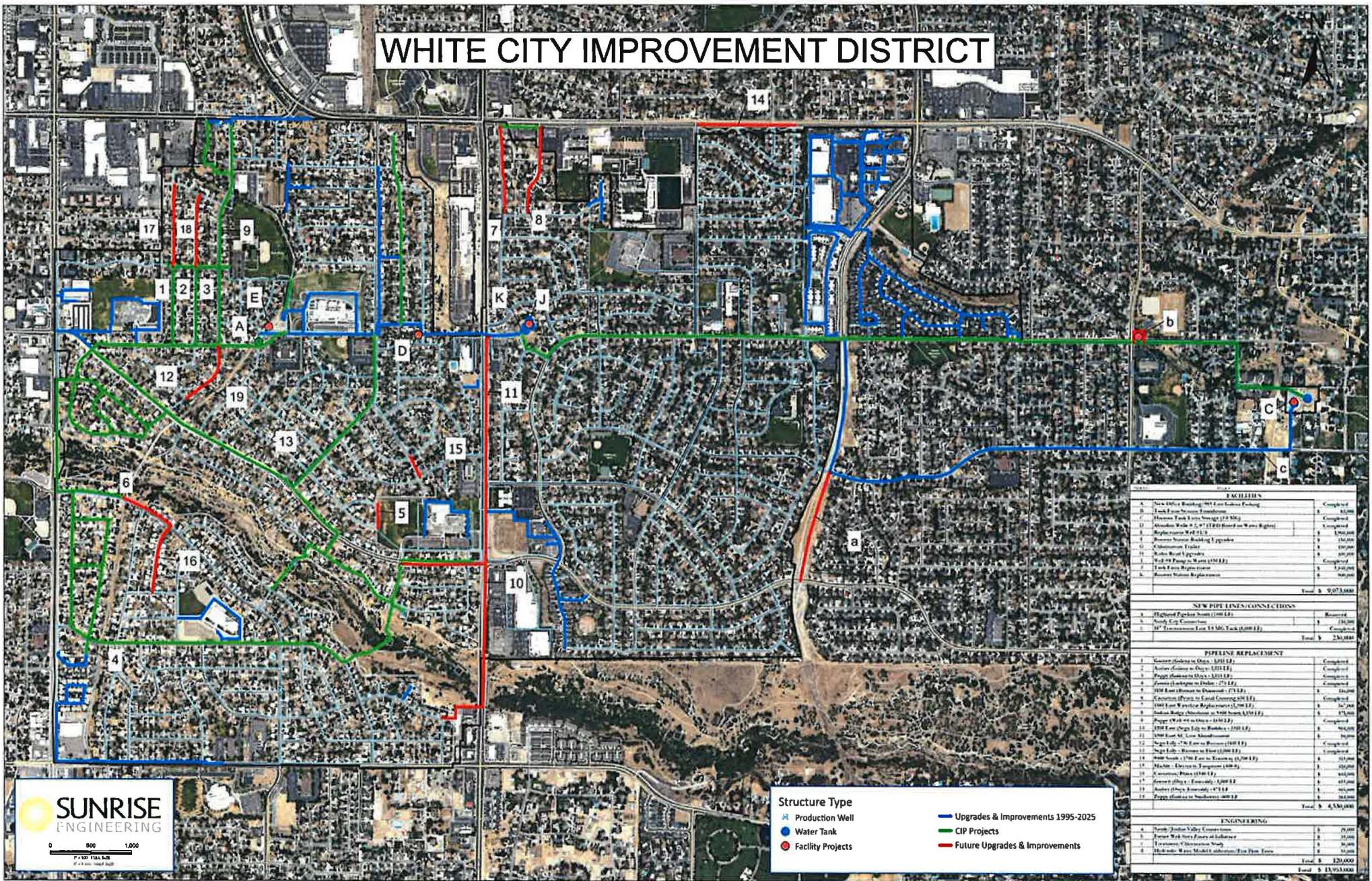
# CIP Projects -Summary

<b>FACILITIES</b>	Total	\$ 9,073,000
<b>NEW PIPE LINES/CONNECTIONS</b>	Total	\$ 230,000
<b>PIPELINE REPLACEMENT</b>	Total	\$ 4,530,000
<b>ENGINEERING</b>	Total	\$ 120,000
<b>CIP Projects Total</b>		<b>\$ 13,953,000</b>



# CIP Projects

## WHITE CITY IMPROVEMENT DISTRICT



# Conclusion

- Source – Excellent
  - No chlorination ability
- Storage – Good
  - (Tank Farm Aging)
- Distribution – Good
  - 54% of system is 6"
  - Aging infrastructure, consider 2,000 LF of pipe replacement each year.

