



# **\$300M General Obligation Bond Program – Streets and Traffic Signals**

**Government Performance &  
Financial Management Committee**

**and**

**Transportation & Infrastructure  
Committee**

**February 4, 2021**

# \$300M General Obligation Bond Program



- Street Network
- Street Degradation
- Street Funding Scenarios
- Traffic Signals
- Financial Capacity Analysis
- Timeline for May 1, 2021 Election Date
- Discussion





# Street Network



# Streets and Funding Levels



- The Department of Public Works maintains 11,807 lane miles of streets.
- Number of lane miles by Council District ranges from 622 (CD11) to 1,097 (CD6).

<i>Street Lane Miles and Citywide and District Ratings - FY 2021</i>		
<b>Council District</b>	<b>Lane Miles</b>	<b>Average PCI - FY 21</b>
1	750.00	62.9
2	937.15	60.1
3	994.89	73.0
4	923.41	63.0
5	707.15	63.2
6	1,096.59	66.5
7	872.93	65.7
8	883.83	69.7
9	909.35	61.1
10	733.13	66.6
11	622.36	64.5
12	625.63	70.9
13	1,010.56	63.4
14	740.36	57.4



# Streets and Funding Levels



- Each street segment has a Pavement Condition Index Rating of 0-100.
- Overall street network has a PCI of 64.9.
- PCI by Council District ranges from 57.4 (CD14) to 73.0 (CD3).

<i>Street Lane Miles and Citywide and District Ratings - FY 2021</i>		
<b>Council District</b>	<b>Lane Miles</b>	<b>Average PCI - FY 21</b>
1	750.00	62.9
2	937.15	60.1
3	994.89	73.0
4	923.41	63.0
5	707.15	63.2
6	1,096.59	66.5
7	872.93	65.7
8	883.83	69.7
9	909.35	61.1
10	733.13	66.6
11	622.36	64.5
12	625.63	70.9
13	1,010.56	63.4
14	740.36	57.4





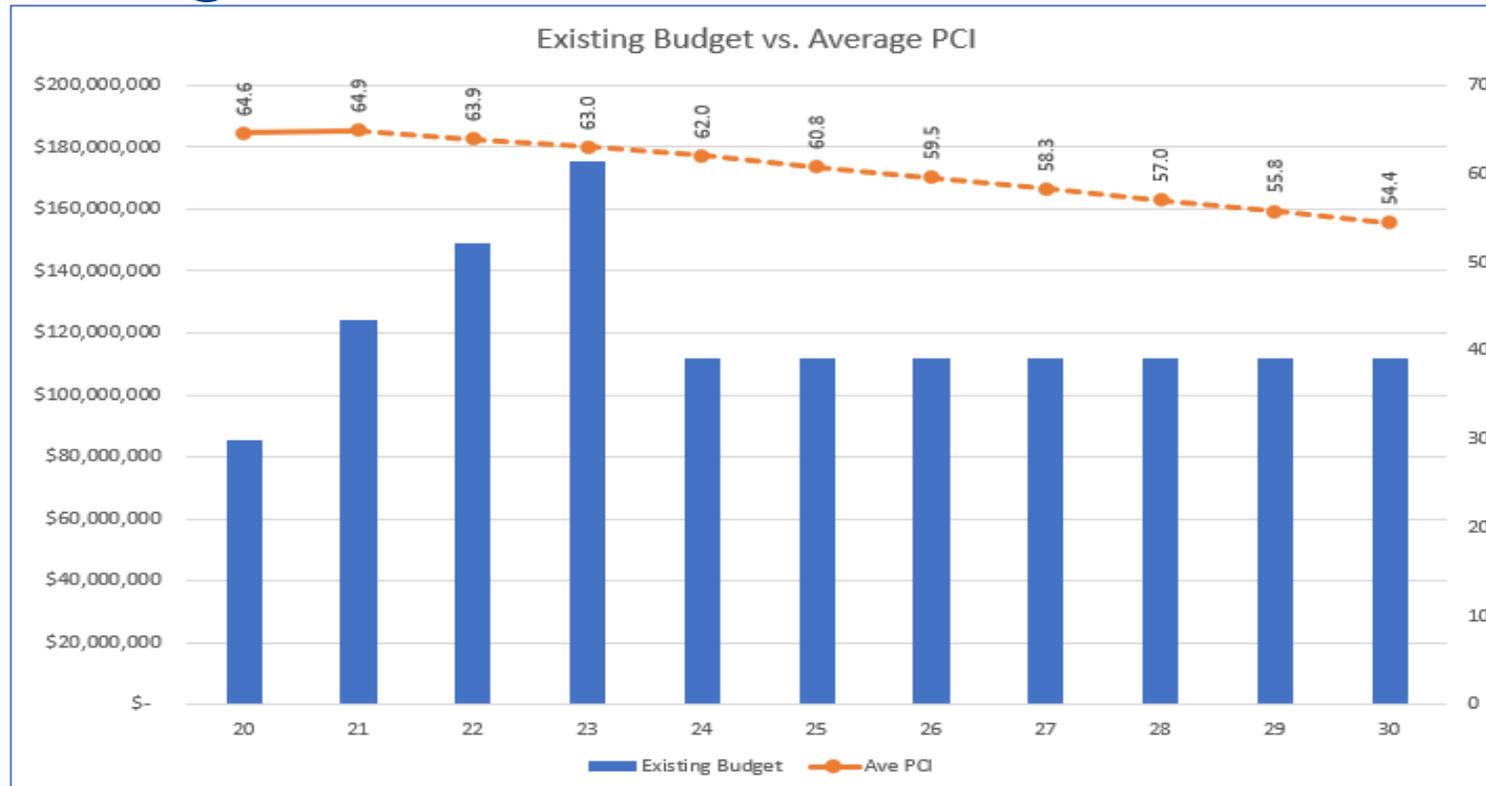
# Street Degradation



# Street Degradation



- Current funding levels result in an average one percentage point reduction of PCI (currently 64.9) through FY 2030.



# Streets and Degradation



- An annual average budget of \$347.0M would be needed to maintain zero-degradation of our street network through FY 2030.
- An average annual budget of \$493.1 would be needed to increase our average PCI street ratings by one percentage point annually, through FY 2030.





# Street Funding Scenarios



# Street Funding Scenarios



- Bond funds can be used for resurfacing or reconstruction of streets.
- Streets in “D” condition are resurfaced and streets in “E” condition are reconstructed.

<i>PCI Distribution—Lane Miles</i>					
<b>Council District</b>	<b>A (100-85)</b>	<b>B (85-70)</b>	<b>C (70-55)</b>	<b>D (55-40)</b>	<b>E (40-0)</b>
1	53.4	198.7	261.6	167.8	68.5
2	61.9	240.6	273.5	214.1	147.0
3	214.3	377.5	279.3	88.3	35.6
4	60.3	253.0	327.9	193.9	88.4
5	48.8	215.3	218.5	137.6	87.0
6	148.5	314.6	354.7	199.1	79.7
7	99.0	277.4	258.8	151.9	85.9
8	224.5	291.3	189.3	91.1	87.6
9	61.1	216.1	305.3	226.0	100.8
10	79.4	256.2	245.8	93.8	57.9
11	38.6	224.2	187.0	117.0	55.5
12	85.8	308.3	144.6	50.7	36.2
13	75.5	314.5	307.4	211.8	101.4
14	47.5	158.7	187.6	188.5	158.1
Citywide	1,298.8	3,646.3	3,541.1	2,131.5	1,189.6





# Street Funding Scenarios

- The cost of resurfacing (asphalt, concrete, or asphalt over concrete) is estimated at \$380K per lane mile while reconstruction (concrete or asphalt and full subgrade replacement) is estimated at \$2M per lane mile.
- Based on lane mile costs, \$810.0M is needed to resurface all “D” rated streets and \$2.4B to reconstruct all “E” rated streets (\$3.2B total).

<i>PCI Distribution —Lane Miles</i>		
<b>Council District</b>	<b>D (55-40)</b>	<b>E (40-0)</b>
1	167.8	68.5
2	214.1	147.0
3	88.3	35.6
4	193.9	88.4
5	137.6	87.0
6	199.1	79.7
7	151.9	85.9
8	91.1	87.6
9	226.0	100.8
10	93.8	57.9
11	117.0	55.5
12	50.7	36.2
13	211.8	101.4
14	188.5	158.1



# Street Funding Scenarios



- Scenario 1:
- Assumption of \$225M for streets.
- Following previous bond funding models, each Council District would receive a baseline funding amount (75%) and increments based upon pavement condition.

<i>Pavement Condition-Based Bond Funding</i>				
<b>Council District</b>	<b>Average PCI -FY 21</b>	<b>Base Budget</b>	<b>Condition Increment</b>	<b>Funding Total</b>
14	57.4	\$12,053,571	\$7,616,000	\$19,669,571
2	60.1	\$12,053,571	\$7,056,000	\$19,109,571
9	61.1	\$12,053,571	\$6,496,000	\$18,549,571
1	62.9	\$12,053,571	\$5,936,000	\$17,989,571
4	63.0	\$12,053,571	\$5,432,000	\$17,485,571
5	63.2	\$12,053,571	\$4,872,000	\$16,925,571
13	63.4	\$12,053,571	\$4,312,000	\$16,365,571
11	64.5	\$12,053,571	\$3,752,000	\$15,805,571
7	65.7	\$12,053,571	\$3,192,000	\$15,245,571
6	66.5	\$12,053,571	\$2,632,000	\$14,685,571
10	66.6	\$12,053,571	\$2,072,000	\$14,125,571
8	69.7	\$12,053,571	\$1,512,000	\$13,565,571
12	70.9	\$12,053,571	\$952,000	\$13,005,571
3	73.0	\$12,053,571	\$392,000	\$12,445,571
<b>Total</b>	<b>64.9</b>	<b>\$168,749,994</b>	<b>\$56,224,000</b>	<b>\$224,973,994</b>



# Street Funding Scenarios



- Scenario 1:
- Based upon condition-based funding, a total of:
  - 592 lane miles can be resurfaced or,
  - 112 lanes miles can be reconstructed.

<i>District PCI Ratings, Bond Funding, and Lane Miles</i>				
<b>Council District</b>	<b>Average PCI -FY 21</b>	<b>Funding Total</b>	<b>Resurfacing Lane Miles</b>	<b>Reconstr. Lane Miles</b>
14	57.4	\$19,669,571	51.76	9.83
2	60.1	\$19,109,571	50.29	9.55
9	61.1	\$18,549,571	48.81	9.27
1	62.9	\$17,989,571	47.34	8.99
4	63.0	\$17,485,571	46.01	8.74
5	63.2	\$16,925,571	44.54	8.46
13	63.4	\$16,365,571	43.07	8.18
11	64.5	\$15,805,571	41.59	7.90
7	65.7	\$15,245,571	40.12	7.62
6	66.5	\$14,685,571	38.65	7.34
10	66.6	\$14,125,571	37.17	7.06
8	69.7	\$13,565,571	35.70	6.78
12	70.9	\$13,005,571	34.23	6.50
3	73.0	\$12,445,571	32.75	6.22
<b>Total</b>	<b>64.9</b>	<b>\$224,973,994</b>	<b>592.04</b>	<b>112.49</b>



# Street Funding Scenarios



- Scenario 2:
- Assumption of \$225M for streets.
- Equally dividing the \$225M would result in \$16.1M in funding per Council District.

<i>Equal Distribution Bond Funding</i>		
<b>Council District</b>	<b>Average PCI -FY 21</b>	<b>Funding Total</b>
1	62.9	\$16,071,428
2	60.1	\$16,071,428
3	73.0	\$16,071,428
4	63.0	\$16,071,428
5	63.2	\$16,071,428
6	66.5	\$16,071,428
7	65.7	\$16,071,428
8	69.7	\$16,071,428
9	61.1	\$16,071,428
10	66.6	\$16,071,428
11	64.5	\$16,071,428
12	70.9	\$16,071,428
13	63.4	\$16,071,428
14	57.4	\$16,071,428
<b>Total</b>	<b>64.9</b>	<b>\$224,999,992</b>



# Street Funding Scenarios



- Scenario 2:
- Based upon equal division of funding, a total of:
  - 592 lane miles can be resurfaced or,
  - 112 lanes miles can be reconstructed.

<i>District PCI Ratings, Bond Funding, and Lane Miles</i>				
<b>Council District</b>	<b>Average PCI -FY 21</b>	<b>Funding Total</b>	<b>Resurfacing Lane Miles</b>	<b>Reconstr. Lane Miles</b>
1	62.9	\$16,071,428	42.29	8.04
2	60.1	\$16,071,428	42.29	8.04
3	73.0	\$16,071,428	42.29	8.04
4	63.0	\$16,071,428	42.29	8.04
5	63.2	\$16,071,428	42.29	8.04
6	66.5	\$16,071,428	42.29	8.04
7	65.7	\$16,071,428	42.29	8.04
8	69.7	\$16,071,428	42.29	8.04
9	61.1	\$16,071,428	42.29	8.04
10	66.6	\$16,071,428	42.29	8.04
11	64.5	\$16,071,428	42.29	8.04
12	70.9	\$16,071,428	42.29	8.04
13	63.4	\$16,071,428	42.29	8.04
14	57.4	\$16,071,428	42.29	8.04
<b>Total</b>	<b>64.9</b>	<b>\$224,999,992</b>	<b>592.11</b>	<b>112.50</b>



# Street Funding Scenarios



- PCI impact scenario assumptions:
  - 3.5-year implementation (start in FY 21 and complete in FY 24),
  - Approximate allocations of \$70M per year.

<i>PCI Impacts Based on Funding Scenarios</i>					
<i>Program Funding</i>	<i>FY 21</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>FY 25</i>
<b>\$200M Resurfacing</b>	64.91	65.75 <sup>+0.84</sup>	66.36 <sup>+0.61</sup>	67.20 <sup>+0.84</sup>	66.44 <sup>-0.76</sup>
<b>\$300M Resurfacing</b>	64.91	66.10 <sup>+1.19</sup>	68.00 <sup>+1.90</sup>	69.67 <sup>+1.67</sup>	68.90 <sup>-0.77</sup>
<b>\$200M Reconstruction</b>	64.91	64.93 <sup>+0.02</sup>	64.58 <sup>-0.35</sup>	63.96 <sup>-0.62</sup>	63.19 <sup>-0.77</sup>
<b>\$300M Reconstruction</b>	64.91	65.02 <sup>+0.11</sup>	64.74 <sup>-0.28</sup>	64.17 <sup>-0.57</sup>	63.41 <sup>-0.76</sup>

**Table Notes:**

1. Superscripted numbers indicate PCI change year over year.
2. Analysis presented in \$100M increments for discussion purposes.

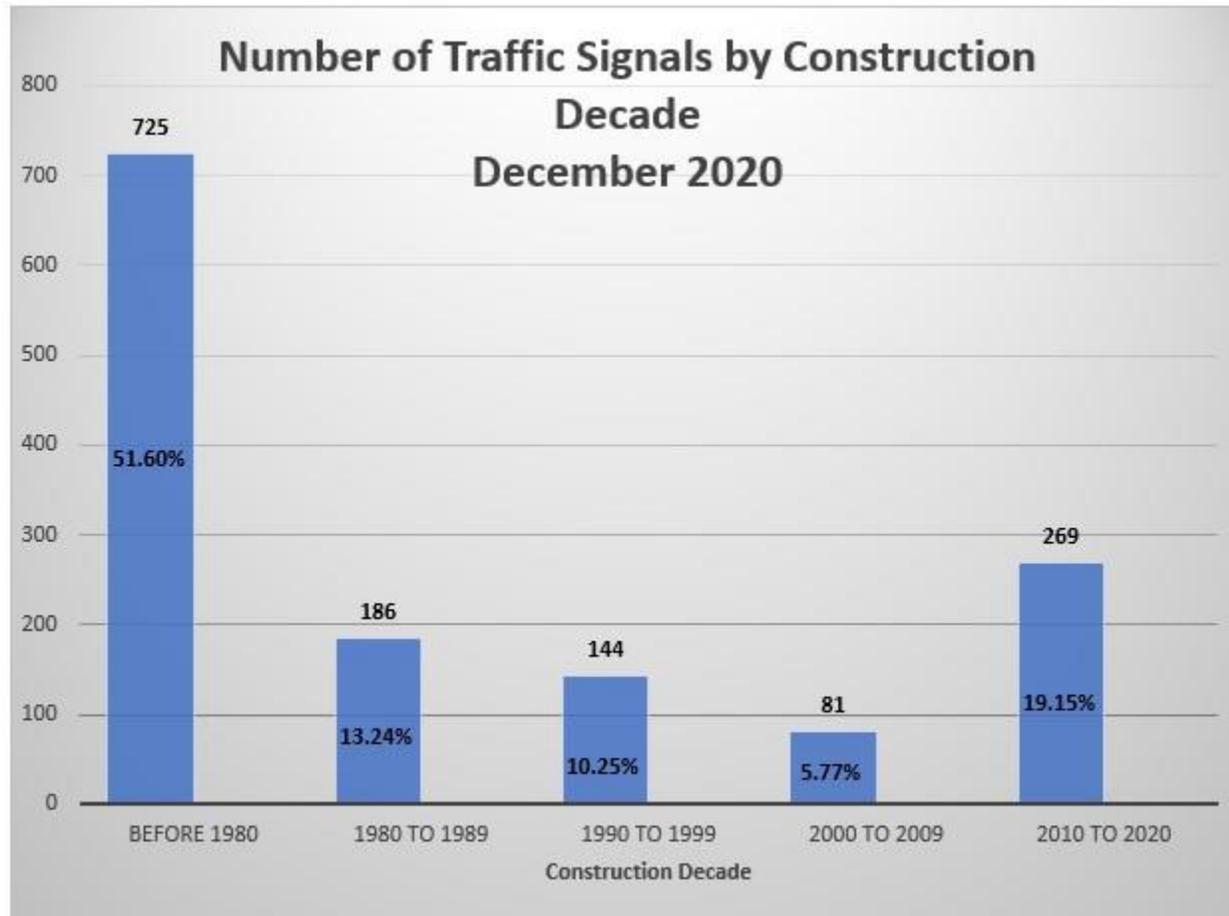




# Traffic Signals



# Traffic Signal Age



Construction Decade	December 2020	December 2020 Percent
Before 1980	725	51.60%
1980 to 1989	186	13.24%
1990 to 1999	144	10.25%
2000 to 2009	81	5.77%
2010 to 2020	269	19.15%
<b>Total</b>	<b>1,405</b>	<b>100.00%</b>



# Proposed Transportation Investment 3.5-Year Strategy: \$75 Million



Project(s)	Amount
School Flashers	\$2 Million
Accessible Pedestrian Signals	\$1 Million
Battery Backup System and ATC Cabinet Upgrades	\$2 Million
Bicycle and Vehicle Detection Upgrade	\$2 Million
*Full Signal Upgrades (Arterial Corridor Signal Upgrades and/or CBD Signal Upgrades) (Also removal of outdated or no longer warranted signals)	\$55.75 Million
*New Warranted Signals (City-wide)	\$12.25 Million
<b>Total</b>	<b>\$75 Million</b>

\*Includes funds to leverage grants and partnership projects affecting transportation operations



# Transportation Funding Strategy



- Projected funding strategy:

<i>Projected Funding Strategy</i>					
<i>Program Funding</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>FY 25</i>	<i>Total</i>
<b>\$75M Scenario</b>	\$20.5 M	\$20.5 M	\$17.5 M	\$16.5 M	\$75 M



# Outcomes



- Enhanced public safety
- Focus on traffic signal upgrades along full corridors versus individual locations
- Improved incident management
- Improved responsiveness to a changing transportation demand or services models
- Performance measures to include:
  - Reduction of pre-1980 constructed signals by 15%
  - Increase in the number of signals with BBU's on key corridors by 10%



# Constraints



- In-house staffing preparation and training
- Program planning and scheduling
- Contractors' availability and capacity
- Program management resource availability
- Weather/natural disasters, COVID19 status, and other unforeseen conditions





# Financial Capacity Analysis



# Financial Capacity Analysis



- Determining financial capacity for issuing General Obligation debt must consider:
  1. Current outstanding debt
  2. Voter authorized but unissued debt
  3. Tax base value and future growth
  4. Tax rate allocated to debt service fund
  5. Impact of other potential debt or policy direction



# Financial Capacity Analysis



## 1. Current outstanding debt and commitments

- \$2.1B (principal) outstanding as of Nov 2020
- \$280.8M - FY22 debt service payment (principal + interest)
- Tax increment financing is \$26.5M and projected to grow 5% in FY22 (5-yr average growth of 15.5%)

## 2. Voter authorized but unissued debt

- Issue remaining \$710.5M of 2017 bond program
  - FY22 - \$178M
  - FY23 - \$178M
  - FY24 - \$178M
  - FY25 - \$176.5M
- Use Commercial Paper as just-in-time interim financing



# Financial Capacity Analysis



## 3. Tax base value and future growth

- Current value is \$147.4B
- Average annual growth is 4.06% (30-year average)
- No growth assumed in tax base value in current forecast
- Preliminary values for FY22 will be known in mid-May, and certified values will be known on July 25

Forecast Assumptions*				
	FY22	FY23	FY24	FY25
Optimistic	2.16%	3.77%	4.41%	5.18%
Baseline	1.20%	0.28%	2.14%	3.65%
Pessimistic	0.24%	(2.26%)	0.48%	2.54%
Dire	(0.72%)	(3.83%)	(0.56%)	1.86%

\*Forecast developed by Dearmon Analytics, LLC - July 2020



# Financial Capacity Analysis



## 4. Tax rate dedicated to debt service fund

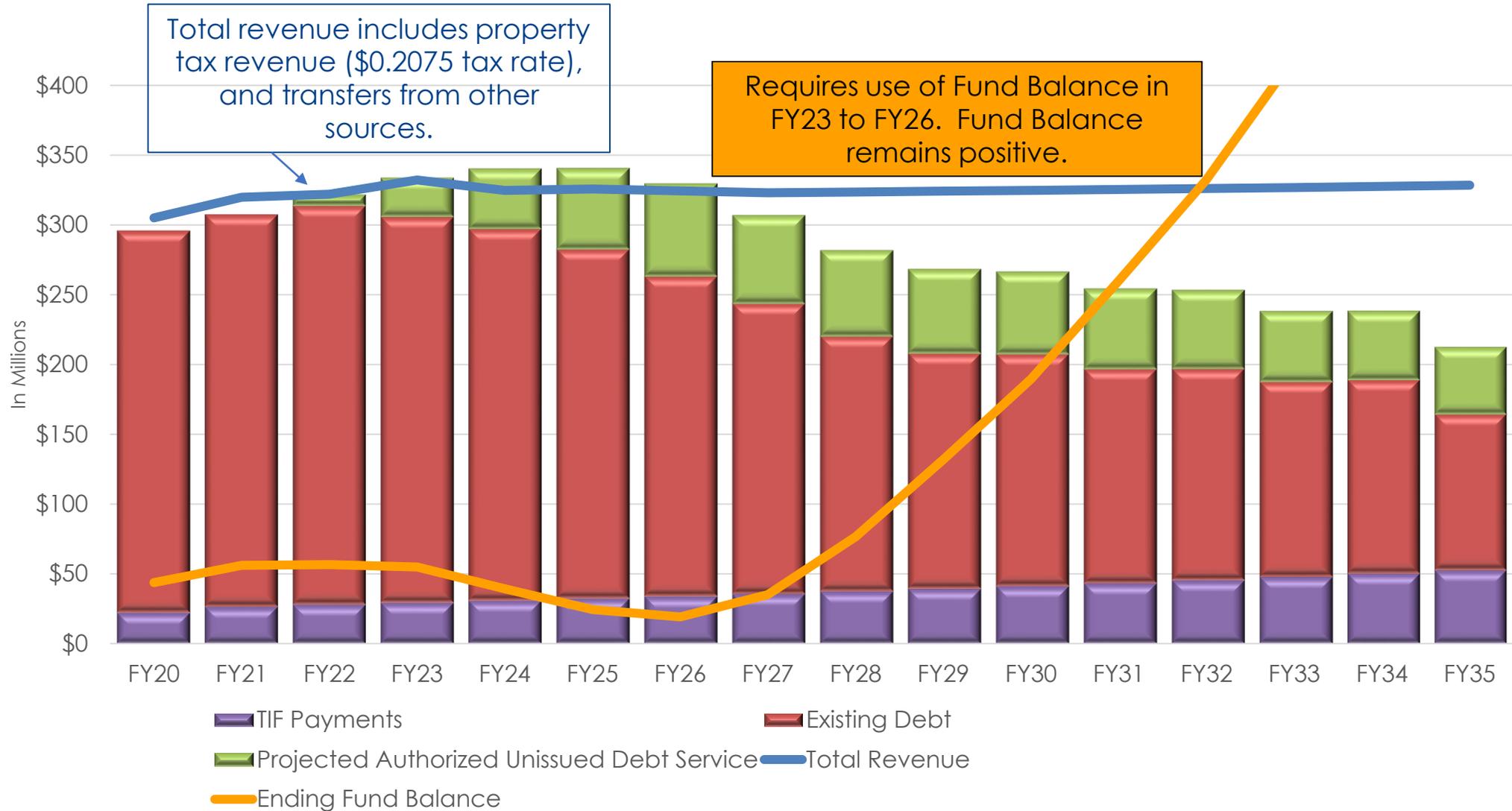
- Current property tax rate is \$0.7763 with \$0.5688 (73%) allocated to the General Fund and \$0.2075 (27%) allocated to debt service
- Debt service tax rate has decreased by (\$0.0249) or 10.7% since FY16
- No change in tax rate

## 5. Impact of other potential debt or policy direction

- Judgement or settlements
- Equipment notes
- Tax rate reduction
- Tax relief for over-65/disabled
- Potential federal infrastructure funding



# Financial Capacity Analysis



# Proposed \$300M Bond Program



- Revenue assumption
  - No growth in taxable valuation (5% growth in tax increment financing)
  - No change in debt service tax rate - \$0.2075
- Bonds
  - Use commercial paper for interim financing
  - 20-year term with level principal
  - Assume 3.75% interest rate
  - \$100M bonds issued over 3 years
- Total cost to repay bonds is \$423.8M (principal + interest)
  - Highest annual debt cost \$26.4M and declines over future years

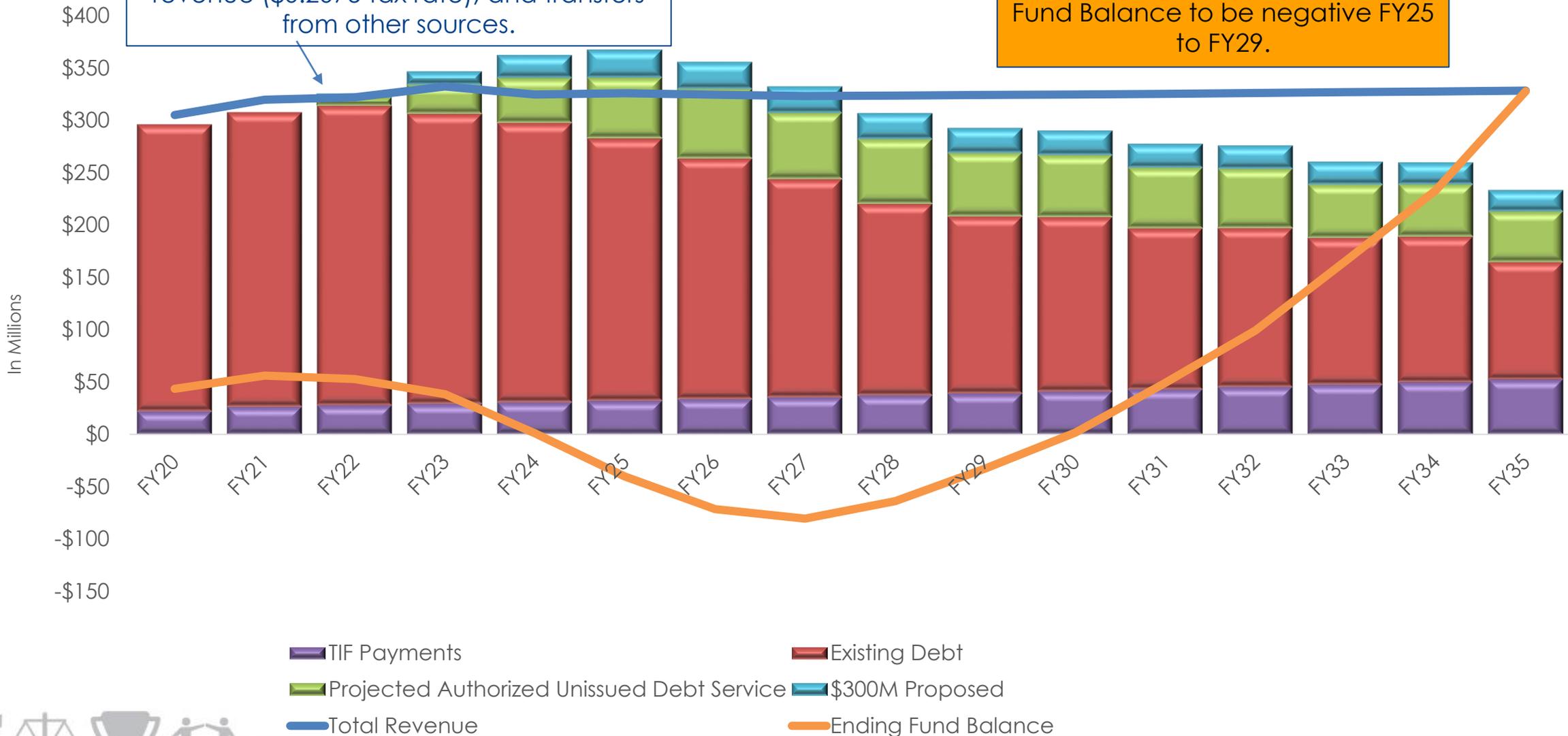


# Proposed \$300M Bond Program



Total revenue includes property tax revenue (\$0.2075 tax rate), and transfers from other sources.

\$300M additional debt causes Fund Balance to be negative FY25 to FY29.



# Proposed \$300M Bond Program



- \$300M additional debt causes Fund Balance to be negative FY25 to FY29
- Options to address negative Fund Balance in the Debt Service Fund
  - Grow: Growth in property tax values will generate additional revenue (each 1% generates \$3M revenue for Debt Service Fund, so 8.8% growth is needed to pay debt service)
  - Tax: Increase in Debt Service property tax rate will generate additional revenue (each 1¢ generates \$14.4M revenue, so 1.83¢ needed to pay debt service expense)
  - Reprioritize: Issue \$300M additional street bonds instead of issuing bonds for non-street propositions in 2017 program
  - Wait: Begin additional \$300M street projects in FY24 using Commercial Paper and issue the bonds beginning in FY26



# Other Considerations



- Implementation of prior Street Propositions continue

Bond Program	Inception-to-Date Budget	Expense + Encumbered	Unencumbered
2017 Bonds	\$306.9M	\$143.3M	\$163.6M
2012 Bonds	\$265.6M	\$255.2M	\$10.4M
2006 Bonds	\$406.5M	\$399.8M	\$6.7M
	\$979.0M	\$798.3M	\$180.7M

## Notes:

Amounts listed are based on entries into the City's accounting system as of 12/31/20. 2017 bond program commitments do not reflect \$69.2M project expenses transferred to the 2006 & 2012 bond programs.

\$227M authorized in 2017 has not yet been appropriated/budgeted.



# Summary



- Mid-May through July 25 – determine revenue available in Debt Service Fund based on new property values
- Summer – determine if 2017 bond projects can stay on current schedule or must be slowed based on available revenue to pay debt service for issuing General Obligation bonds
- August 10 – present FY22 and FY23 biennial budget (including capital budget) to City Council





# **BOND election TIMELINE for MAY 1, 2021 uniform Election DATE**





1. January 31, 2021: The first date on which the election can be called (the election can be held no more than 90 days from the date of the election order).
2. February 12, 2021: The last date on which a bond election can be called (78 days before Election Day).
3. March 2, 2021: The last date by which notice of the bond election, including the location of each polling place, must be submitted to the Dallas County Clerk and voter registrar (60 days before Election Day).





4. April 1, 2021 –April 21, 2021: The dates within which the notice of the bond election must be published in a newspaper published in the jurisdiction of the City, or if no newspaper is published in the jurisdiction of the City, then in a newspaper of general circulation in the City. The notice, which is typically a copy of the election order, must state the nature of the election, including the propositions to be voted on; the location of each polling place; and the hours the polls will be open. The information must be published in English and Spanish).





5. April 10, 2021 (but moves to April 12, 2021): The last date on which the voter information document must be posted prominently in an easily accessible manner on the website of the City (not later than the 21<sup>st</sup> day before Election Day). The voter information document must state the following:
- i. the language that will appear on the ballot;
  - ii. the following information formatted as a table:
    - a. the principal of the debt obligations to be authorized;
    - b. the estimated interest on the debt obligations to be authorized;





- c. the estimated combined principal and interest required to pay on time and in full the debt obligations to be authorized;
- d. as of the date the City adopts the debt obligation election order:
  - 1) the principal of all outstanding debt obligations of the City;
  - 2) the estimated remaining interest on all outstanding debt obligations of the City, which may be based on the City's expectations relative to the interest due on any variable rate debt obligations; and
  - 3) the estimated combined principal and interest required to pay on time and in full all outstanding debt obligations of the City, which may be based on the City's expectations relative to the interest due on any variable rate debt obligations;





- iii. the estimated maximum annual increase in the amount of taxes that would be imposed on a residence homestead in the City with an appraised value of \$100,000 to repay the debt obligations to be authorized, if approved, based upon assumptions made by the governing body of the City; and
- iv. any other information that the City considers relevant or necessary to explain the other information required in the voter information document.

The voter information document must remain posted through the next day following Election Day. The information must be posted in English and Spanish.

*(It is recommended that the City make the posting no later than Friday, April 9, 2021.)*





6. April 10, 2021 (but moves to April 12, 2021) : The last date on which the (1) notice of bond election and (2) a sample ballot (if any), and (3) the voter information document (see Section 5 above) must be posted prominently on the City's website (not later than the 21st day before Election Day). The notice, which is typically a copy of the election order, must state the nature of the election, including the propositions to be voted on; the location of each polling place; and the hours the polls will be open. The information must be posted in English and Spanish.

*(It is recommended that the City make the posting no later than Friday, April 9, 2021.)*





7. April 10, 2021 (but moves to April 12, 2021): The last date on which to post (1) notice of the bond election and (2) a sample ballot (if any), and (3) the voter information document (see Section 5 above) must be posted on the bulletin board used for the posting of notices of City Council meetings (not later than the 21st day before Election Day). The information must be posted in English and Spanish.

*(It is recommended that the City make the posting no later than Friday, April 9, 2021.)*





8. April 10, 2021 (but moves to April 12, 2021): The last date on which a copy of (1) the election order, (2) a sample ballot (if any), and (3) the voter information document (see Section 5 above) must be posted in at least three (3) public places within the boundaries of the City (not later than the 21st day before Election Day). The information must be posted in English and Spanish.

*(It is recommended that the City make the posting no later than Friday, April 9, 2021.)*

9. April 10, 2021 (but moves to April 12, 2021): The last date for Dallas County to post the notice provided under Section 4 of this memorandum on the Dallas County internet website.





10. April 19, 2021 – April 27, 2021: Early voting period. A copy of (1) the election order, (2) a sample ballot (if any), and (3) the voter information document (see Section 5 above) must be posted in a prominent location in each polling place throughout the early voting period. The information must be published in English and Spanish.
  
11. May 1, 2021: Election Day. A copy of (1) the election order, (2) a sample ballot (if any), and (3) the voter information document (see Section 5 above) must be posted in a prominent location at each polling place on Election Day. The information must be published in English and Spanish.





12. May 4, 2021 – May 12, 2021: The dates within which the local canvass must occur. The canvass may not occur prior to the date on which the early voting ballot board has verified and counted all provisional ballots, or the date on which all timely received ballots cast from addresses outside of the United States are counted, as applicable.





# Discussion





# Appendix



# History of City Bond Programs



Year	Date of Election	Number of Propositions	Amount Authorized
2017	Nov 2017	10	\$1,050.0M
2012	Nov 2012	3	\$642.0M
2006	Nov 2006	12	\$1,353.5M
2005	Nov 2005	1	\$23.8M
2003	May 2003	17	\$579.0M
1998	May 1998	11	\$543.5M
1995	May 1995	8	\$174.7M
1989	May 1989	2	\$60.7M
1985	May 1985	11	\$428.1M



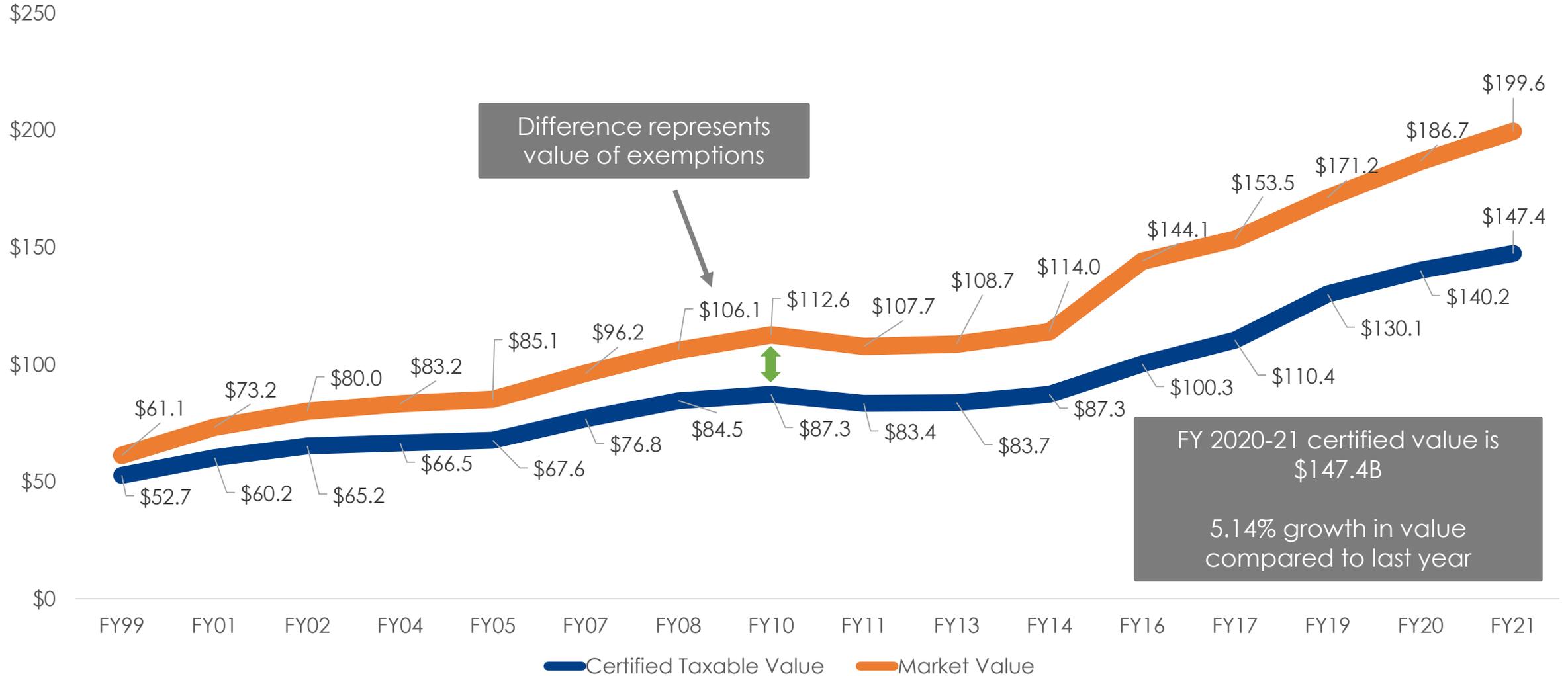
# 2017 Bond Program



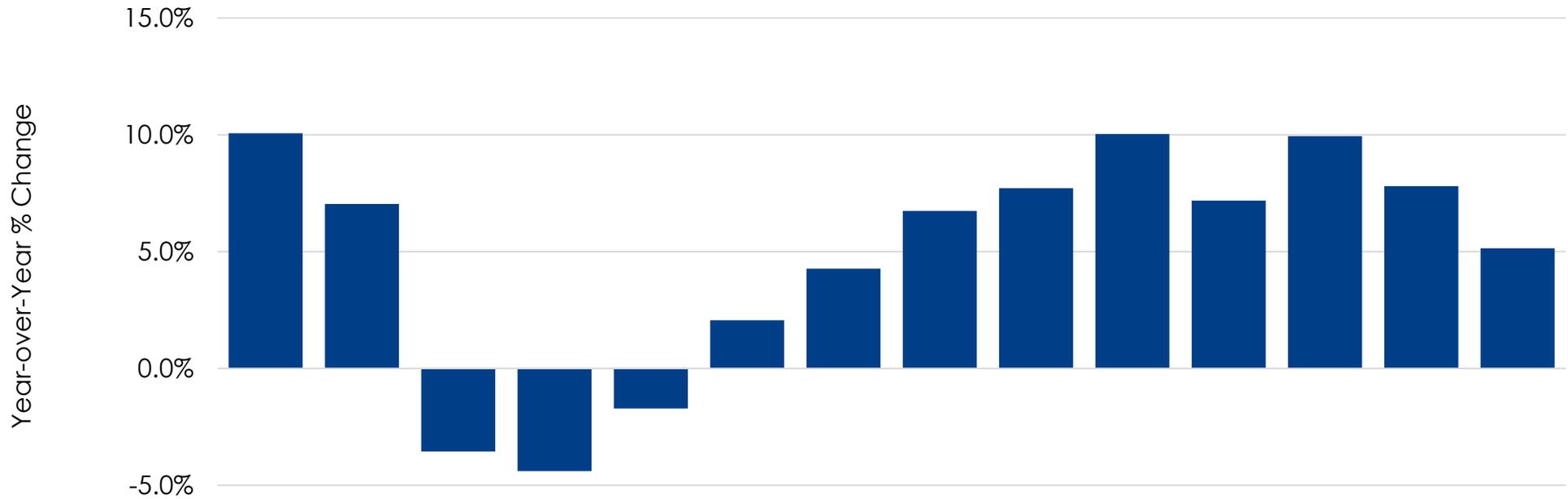
Proposition	Total Authorized	Bonds Issued	Bonds not yet Issued
Street and Transportation (A)	\$533,981,000	\$123,540,000	\$410,441,000
Park and Recreation (B)	261,807,000	105,963,000	155,844,000
Fair Park (C)	50,000,000	27,600,000	22,400,000
Flood Protection (D)	48,750,000	8,380,000	40,370,000
Library Facilities (E)	15,589,000	15,000,000	589,000
Cultural Facilities (F)	14,235,000	13,760,000	475,000
Public Safety Facilities (G)	32,081,000	18,561,000	13,520,000
City Facilities (H)	18,157,000	6,685,000	11,472,000
Economic Development (I)	55,400,000	19,013,000	36,387,000
Homeless Assistance (J)	20,000,000	1,000,000	19,000,000
<b>Total</b>	<b>\$1,050,000,000</b>	<b>\$339,502,000</b>	<b>\$710,498,00</b>



# Historical Property Values (\$ in billions)



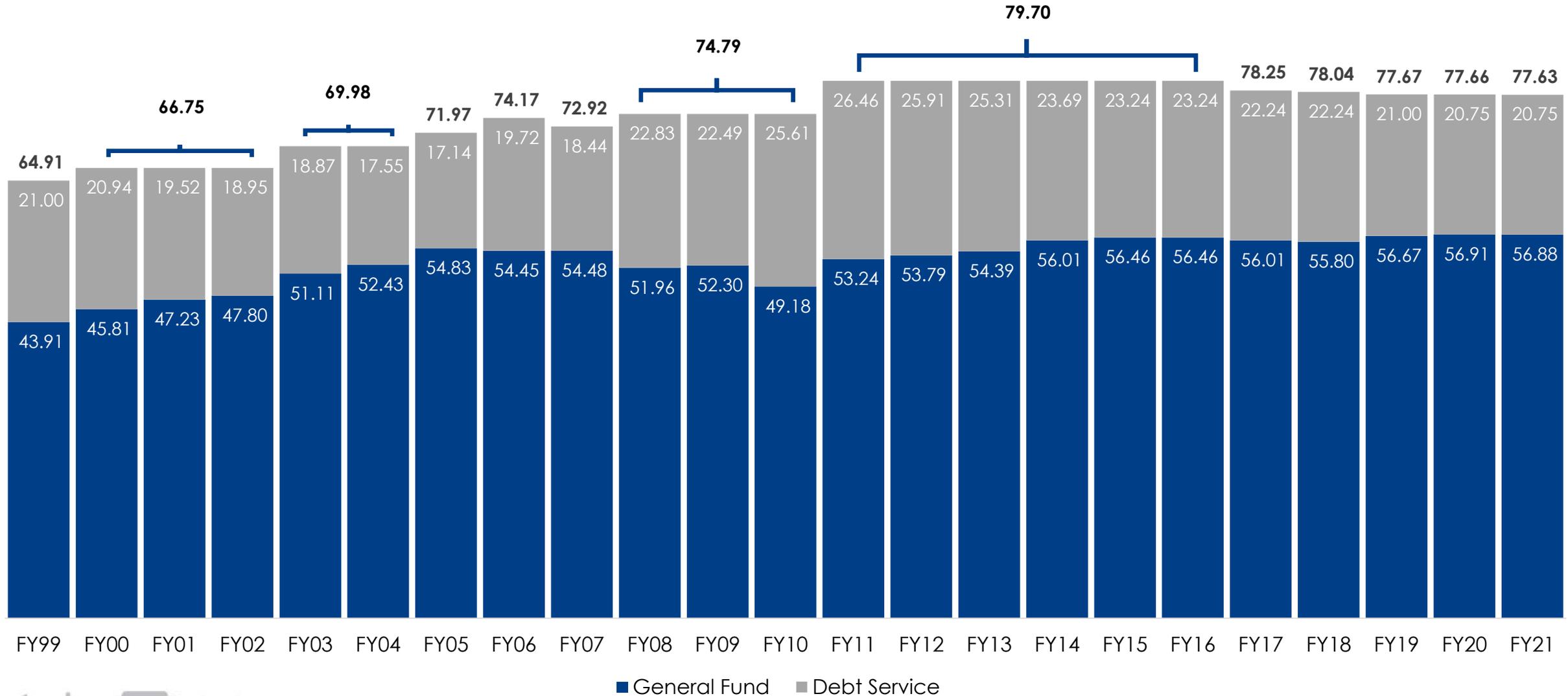
# Historical Property Values (% Change)



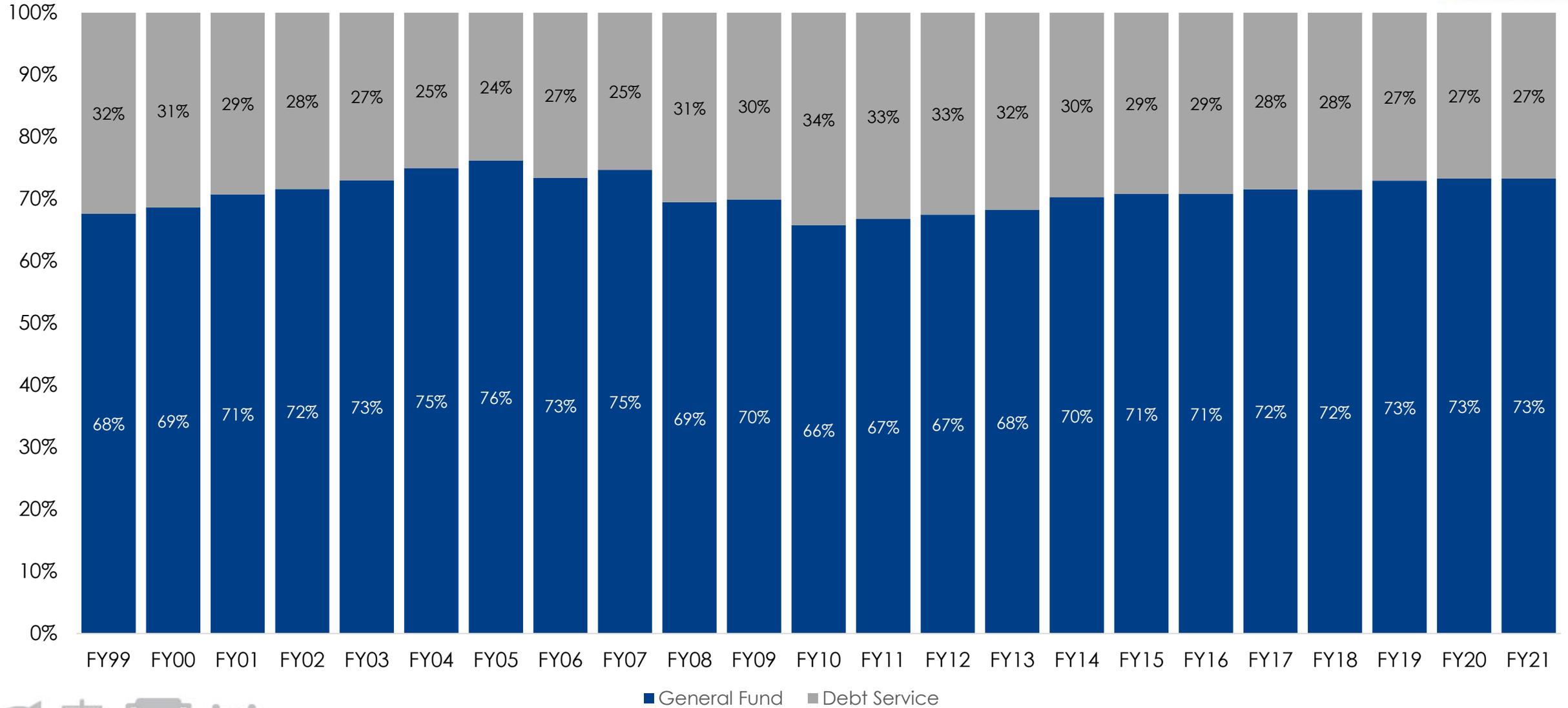
	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
% Change in Property Tax Base Value	10.1%	7.0%	-3.6%	-4.4%	-1.7%	2.1%	4.3%	6.7%	7.7%	10.0%	7.2%	9.9%	7.8%	5.1%



# Historical Tax Rate Distribution (\$ in cents)



# Historical Tax Rate Distribution (%)



# Financial Capacity Analysis

