Capital Financing Recommendation

Kennedy Middle School & West Natick Fire Station

Board of Selectmen

August 20, 2018

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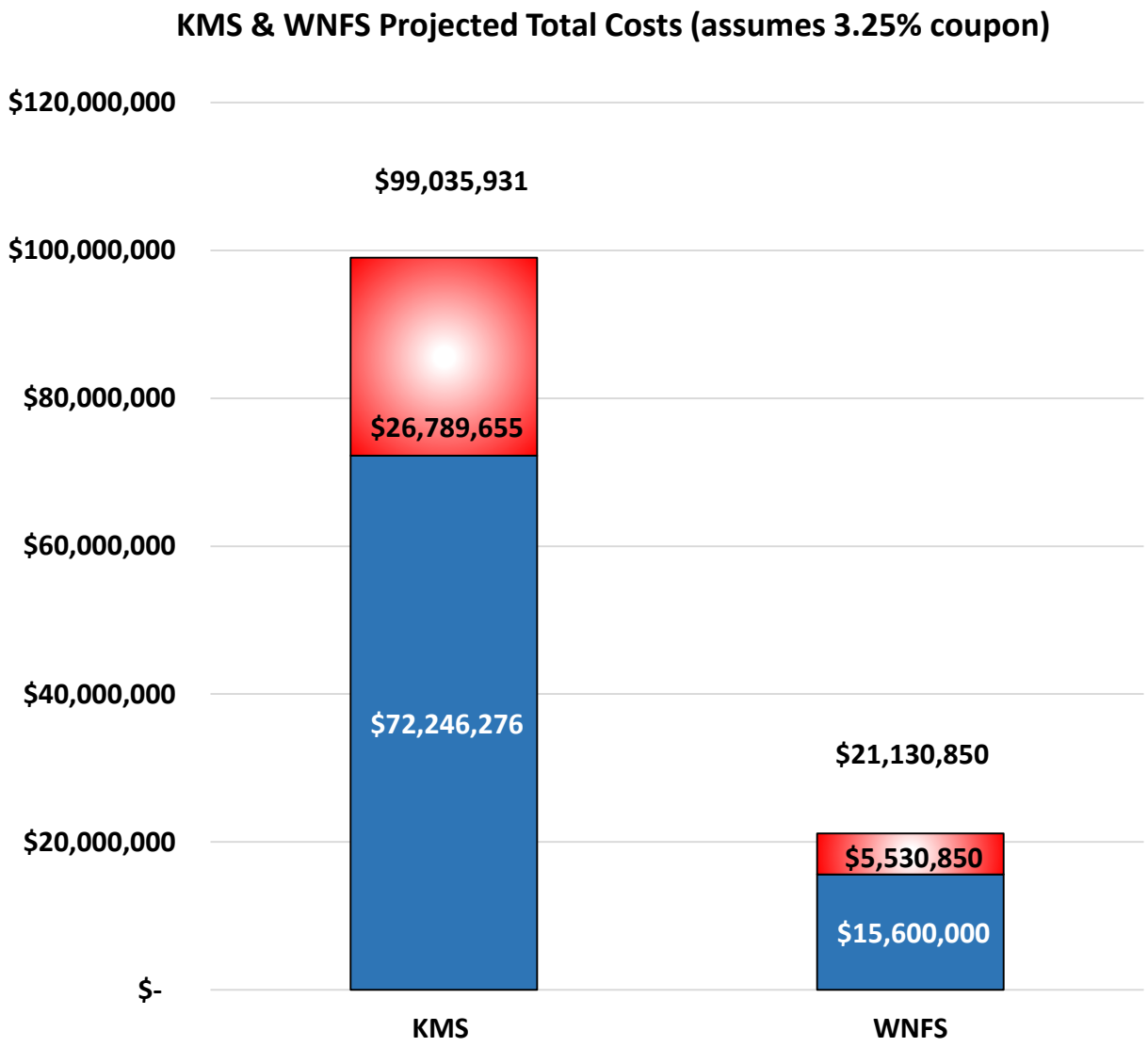
Town Administrator's Financing Recommendation:

KMS Level Debt Service 20 Years & WNFS Hybrid Debt Service 20 Years (5 yr. level debt, 15 yrs. level principal)



Tax Payer Tax Bill Impact Projection (assumes 3.25% coupon)					
COMBINED DEBT EXCLUSION IMPACT	FY20	FY21	FY25 Hybrid	FY30	FY39 Final Debt Payment
INCREMENTAL TAX RATE	$0.73	$0.73	$0.75	$0.73	$0.71
$250,000	$183	$183	$188	$183	$178
$500,000	$365	$365	$375	$365	$355
$750,000	$548	$548	$563	$548	$533
$1,000,000	$730	$730	$750	$730	$710

Town of Natick, Massachusetts - DEBT EXCLUDED FROM PROP 2 1/2
Financing Plan G - $15.6M Fire Station 20yrs (Hybrid) & $72.250M School 20yrs (Level)

SCHOOL ONLY - DEBT SERVICE SCHEDULE

Fiscal Year	Principal	Coupon	Interest	Total P+I
6/30/2020	2,050,000	3.25%	2,901,844	4,951,844
6/30/2021	2,715,000	3.25%	2,237,381	4,952,381
6/30/2022	2,805,000	3.25%	2,147,681	4,952,681
6/30/2023	2,895,000	3.25%	2,055,056	4,950,056
6/30/2024	2,995,000	3.25%	1,959,344	4,954,344
6/30/2025	3,090,000	3.25%	1,860,463	4,950,463
6/30/2026	3,195,000	3.25%	1,758,331	4,953,331
6/30/2027	3,300,000	3.25%	1,652,788	4,952,788
6/30/2028	3,410,000	3.25%	1,543,750	4,953,750
6/30/2029	3,520,000	3.25%	1,431,138	4,951,138
6/30/2030	3,635,000	3.25%	1,314,869	4,949,869
6/30/2031	3,755,000	3.25%	1,194,781	4,949,781
6/30/2032	3,880,000	3.25%	1,070,713	4,950,713
6/30/2033	4,010,000	3.25%	942,500	4,952,500
6/30/2034	4,140,000	3.25%	810,063	4,950,063
6/30/2035	4,280,000	3.25%	673,238	4,953,238
6/30/2036	4,420,000	3.25%	531,863	4,951,863
6/30/2037	4,565,000	3.25%	385,856	4,950,856
6/30/2038	4,715,000	3.25%	235,056	4,950,056
6/30/2039	4,875,000	3.25%	79,219	4,954,219
Total	72,250,000		26,785,931	99,035,931

FIRE STATION ONLY - DEBT SERVICE SCHEDULE

Fiscal Year	Principal	Coupon	Interest	Total P+I
6/30/2020	445,000	3.25%	626,519	1,071,519
6/30/2021	585,000	3.25%	483,031	1,068,031
6/30/2022	605,000	3.25%	463,694	1,068,694
6/30/2023	625,000	3.25%	443,706	1,068,706
6/30/2024	645,000	3.25%	423,069	1,068,069
6/30/2025	850,000	3.25%	398,775	1,248,775
6/30/2026	850,000	3.25%	371,150	1,221,150
6/30/2027	850,000	3.25%	343,525	1,193,525
6/30/2028	850,000	3.25%	315,900	1,165,900
6/30/2029	845,000	3.25%	288,356	1,133,356
6/30/2030	845,000	3.25%	260,894	1,105,894
6/30/2031	845,000	3.25%	233,431	1,078,431
6/30/2032	845,000	3.25%	205,969	1,050,969
6/30/2033	845,000	3.25%	178,506	1,023,506
6/30/2034	845,000	3.25%	151,044	996,044
6/30/2035	845,000	3.25%	123,581	968,581
6/30/2036	845,000	3.25%	96,119	941,119
6/30/2037	845,000	3.25%	68,656	913,656
6/30/2038	845,000	3.25%	41,194	886,194
6/30/2039	845,000	3.25%	13,731	858,731
Total	15,600,000		5,530,850	21,130,850

Projected Debt Costs

	Outstanding Debt		Approved Projects	Projected	
Fiscal Year	Excluded	W/I Levy	W/I Levy	Capital Request	Total General Fund
2020	$ 4,334,763	$ 4,317,229	$ 1,353,538	$ 534,689	$ 10,540,219
2021	$ 4,228,171	$ 3,474,168	$ 1,325,217	$ 3,852,140	$ 12,879,696
2022	$ 4,118,730	$ 2,966,399	$ 1,296,897	$ 5,177,169	$ 13,559,195
2023	$ 4,019,639	$ 2,545,640	$ 1,268,576	$ 5,939,079	$ 13,772,934
2024	$ 3,918,068	$ 2,296,942	$ 1,240,256	$ 5,803,856	$ 13,259,122
2025	$ 3,283,696	$ 1,974,752	$ 1,196,935	$ 5,531,552	$ 11,986,935
2026	$ 3,194,884	$ 1,529,702	$ 1,169,102	$ 5,348,488	$ 11,242,176
2027	$ 3,105,128	$ 1,217,921	$ 1,086,269	$ 5,137,763	$ 10,547,081
2028	$ 3,003,197	$ 1,125,182	$ 1,060,224	$ 4,604,614	$ 9,793,217
2029	$ 2,901,266	$ 1,057,743	$ 1,034,178	$ 4,260,595	$ 9,253,782
2030	$ 2,799,335	$ 924,604	$ 988,133	$ 3,945,450	$ 8,657,522
2031	$ 2,697,404	$ 824,599	$ 962,737	$ 3,824,538	$ 8,309,278
2032	$ 160,473	$ 733,027	$ 937,342	$ 3,702,506	$ 5,533,348
2033	$ 155,753	$ 509,978	$ 911,946	$ 3,602,975	$ 5,180,652
2034		$ 308,000	$ 886,551	$ 3,503,444	$ 4,697,994
2035		$ 299,850	$ 326,480	$ 3,183,913	$ 3,810,243
2036		$ 216,700	$ 318,472	$ 2,544,865	$ 3,080,037
2037		$ 161,425	$ 310,464	$ 2,125,175	$ 2,597,064
2038		$ 116,725	$ 302,456	$ 1,681,919	$ 2,101,100
2039			$ 294,448	$ 1,632,113	$ 1,926,561
2040			$ 286,440	$ 1,582,306	$ 1,868,746
2041			$ 278,432	$ 425,000	$ 703,432
2042			$ 270,424	$ -	$ 270,424
2043			$ 262,416		$ 262,416
2044			$ 254,408		$ 254,408
Total	$ 41,920,507	$ 26,600,586	$ 19,622,338	$ 77,944,147	$ 166,087,578

* This table excludes Fire Station 4 (West Natick) and the Kennedy Middle School

Town of Natick, Massachusetts - DEBT EXCLUDED FROM PROP 2 1/2

Estimated Fire Station:	**$ 15,600,000**
Maximum Term of Fire Station:	**20 years**
Amortization of Fire Station:	**HYBRID DEBT SERVICE**
Projected Bond Rate for Fire Station:	3.25%
School Total Project Cost:	$ 109,560,000
Est. MSBA Reimbursement (48.21%)	$ 37,313,724
Est. Local Share of Project Costs:	**$ 72,246,276**
Maximum Term of School:	**20 years**
Amortization of School:	**LEVEL DEBT SERVICE**
Projected Bond Rate for School:	3.25%
Dated Date of Bonds:	December 1, 2018
FY2018 Assessed Valuation:	$ 8,229,002,220

Financing Plan G - $15.6M Fire Station 20yrs (Hybrid) & $72.250M School 20yrs (Level)

EXEMPT General Fund Debt Service Only

	A	B	C	D (A-B-C)		E		F		G		
Fiscal Year	Existing Debt Service (see pages 2-4)	Less: Enterprise Supported Debt Service (see page 5)	Less: Existing General Fund NON-Exempt Debt Service (see pages 6-8)	Existing General Fund Exempt Debt Service (see page 9)	Existing Tax Rate Impact per $1,000	Plus $72.250M School Bonds (see pages 10 & 11)	Est. School Debt Service Tax Rate Impact per $1,000	Plus $15.6M Fire Station Bonds (see pages 10 & 11)	Est. Fire Station Debt Service Tax Rate Impact per $1,000	**Existing and Projected Exempt Debt Service (D+E+F)**	**Existing and Projected Est. Tax Rate Impact per $1,000**	Fiscal Year
2018	13,104,520	2,945,561	5,586,514	4,572,445	0.56	-	-	-	-	**4,572,445**	**0.56**	2018
2019	11,962,957	2,612,729	4,884,224	4,466,004	0.54	-	-	-	-	**4,466,004**	**0.54**	2019
2020	10,997,430	2,369,664	4,293,004	4,334,763	0.53	4,951,844	0.60	1,071,519	0.13	**10,358,125**	**1.26**	2020
2021	9,676,467	1,998,353	3,449,943	4,228,171	0.51	4,952,381	0.60	1,068,031	0.13	**10,248,584**	**1.25**	2021
2022	8,945,596	1,884,692	2,942,174	4,118,730	0.50	4,952,681	0.60	1,068,694	0.13	**10,140,105**	**1.23**	2022
2023	8,099,610	1,558,557	2,521,415	4,019,639	0.49	4,950,056	0.60	1,068,706	0.13	**10,038,401**	**1.22**	2023
2024	7,605,853	1,415,068	2,272,717	3,918,068	0.48	4,954,344	0.60	1,068,069	0.13	**9,940,480**	**1.21**	2024
2025	6,556,894	1,322,671	1,950,527	3,283,696	0.40	4,950,463	0.60	1,248,775	0.15	**9,482,933**	**1.15**	2025
2026	5,641,905	921,339	1,525,682	3,194,884	0.39	4,953,331	0.60	1,221,150	0.15	**9,369,365**	**1.14**	2026
2027	5,080,624	761,595	1,213,901	3,105,128	0.38	4,952,788	0.60	1,193,525	0.15	**9,251,440**	**1.12**	2027
2028	4,728,341	599,963	1,125,182	3,003,197	0.36	4,953,750	0.60	1,165,900	0.14	**9,122,847**	**1.11**	2028
2029	4,420,921	461,913	1,057,743	2,901,266	0.35	4,951,138	0.60	1,133,356	0.14	**8,985,760**	**1.09**	2029
2030	4,135,451	411,513	924,604	2,799,335	0.34	4,949,869	0.60	1,105,894	0.13	**8,855,097**	**1.08**	2030
2031	3,921,516	399,513	824,599	2,697,404	0.33	4,949,781	0.60	1,078,431	0.13	**8,725,616**	**1.06**	2031
2032	1,276,912	383,413	733,027	160,473	0.02	4,950,713	0.60	1,050,969	0.13	**6,162,154**	**0.75**	2032
2033	932,619	266,888	509,978	155,753	0.02	4,952,500	0.60	1,023,506	0.12	**6,131,759**	**0.75**	2033
2034	567,988	259,988	308,000	-	-	4,950,063	0.60	996,044	0.12	**5,946,106**	**0.72**	2034
2035	552,938	253,088	299,850	-	-	4,953,238	0.60	968,581	0.12	**5,921,819**	**0.72**	2035
2036	457,888	241,188	216,700	-	-	4,951,863	0.60	941,119	0.11	**5,892,981**	**0.72**	2036
2037	395,863	234,438	161,425	-	-	4,950,856	0.60	913,656	0.11	**5,864,513**	**0.71**	2037
2038	294,350	177,625	116,725	-	-	4,950,056	0.60	886,194	0.11	**5,836,250**	**0.71**	2038
2039	-	-	-	-	-	4,954,219	0.60	858,731	0.10	**5,812,950**	**0.71**	2039
2040	-	-	-	-	-	-	-	-	-	-	-	2040
2041	-	-	-	-	-	-	-	-	-	-	-	2041
2042	-	-	-	-	-	-	-	-	-	-	-	2042
2043	-	-	-	-	-	-	-	-	-	-	-	2043
2044	-	-	-	-	-	-	-	-	-	-	-	2044
Total	109,356,641	21,479,753	36,917,933	50,958,955		99,035,931		21,130,850		**171,125,736**		

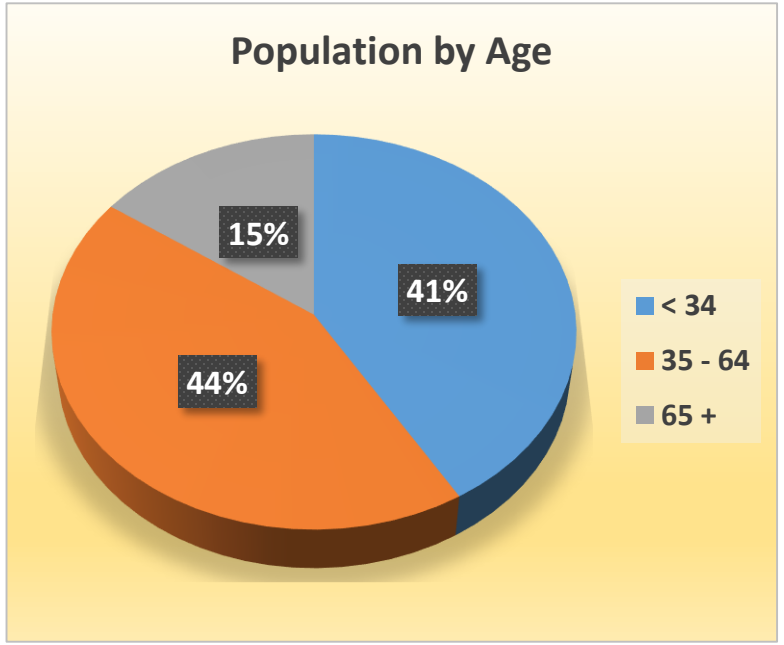
Assumptions:

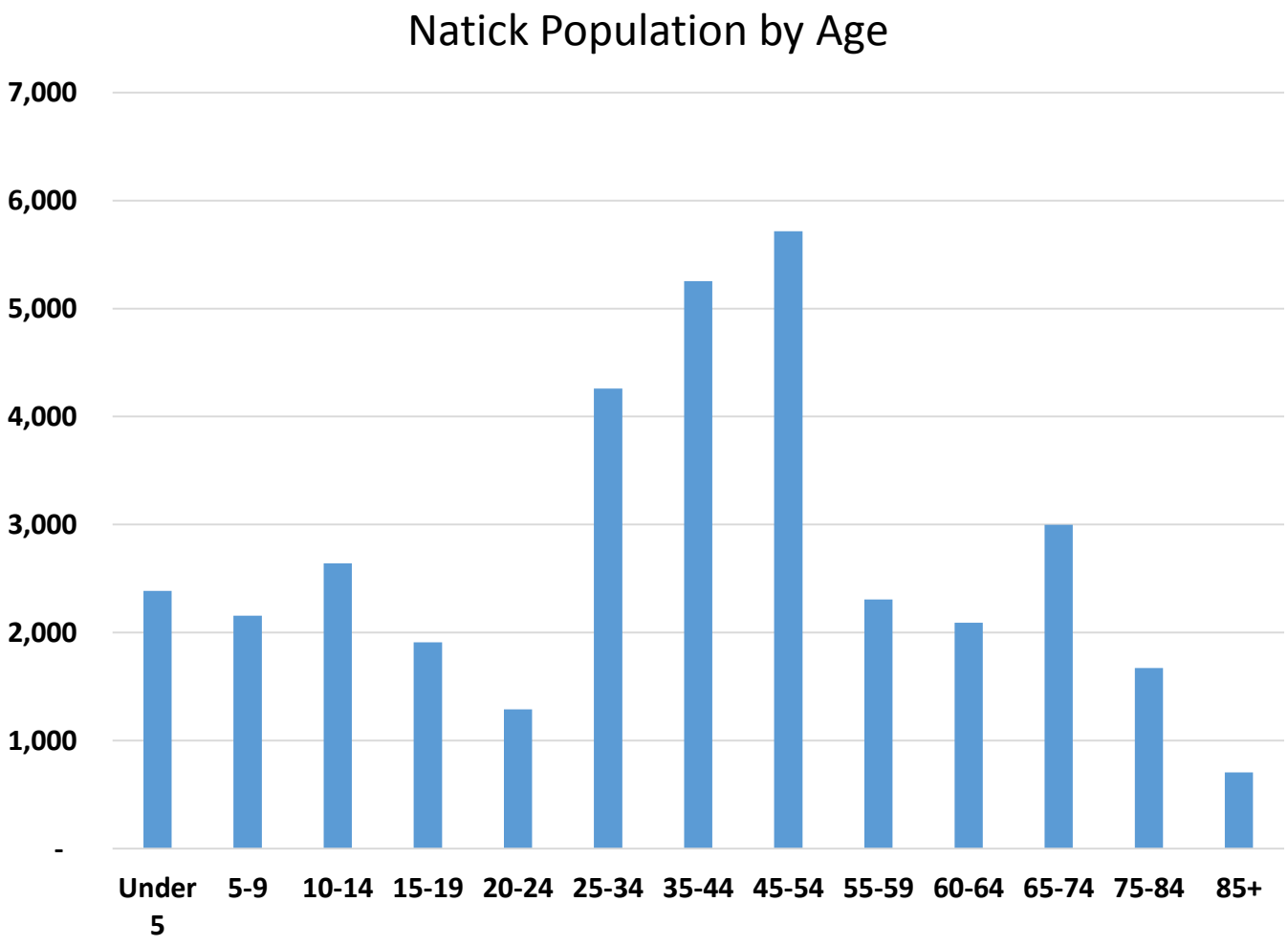
- Fire Station structured on a hybrid debt basis; level debt first 5yrs then equal/declining principal.
- School bonds structured on a level debt basis.
- Bonds structured a long first coupon; no impact in FY19.

Natick Demographics

Tax Relief Programs

- FY18 257 tax exemptions were granted for seniors, veterans and other qualifying residents.
- There were also 39 participants in the Veteran & Senior tax work-off program





Prior Value Range		Percent Change	Value Change
0-250K	Average	13%	17,187
	Median	9%	15,000
	Count	1,494	
250-500K	Average	11%	44,609
	Median	9%	38,100
	Count	4,765	
500-750K	Average	5%	32,671
	Median	5%	29,500
	Count	3,542	
750-1M	Average	5%	45,270
	Median	5%	39,200
	Count	1,070	
1M +	Average	4%	45,361
	Median	3%	38,300
	Count	375	

Chart illustrates Single Family Homes and Condominiums within specified prior value (FY18) ranges in comparison with projected FY19 values

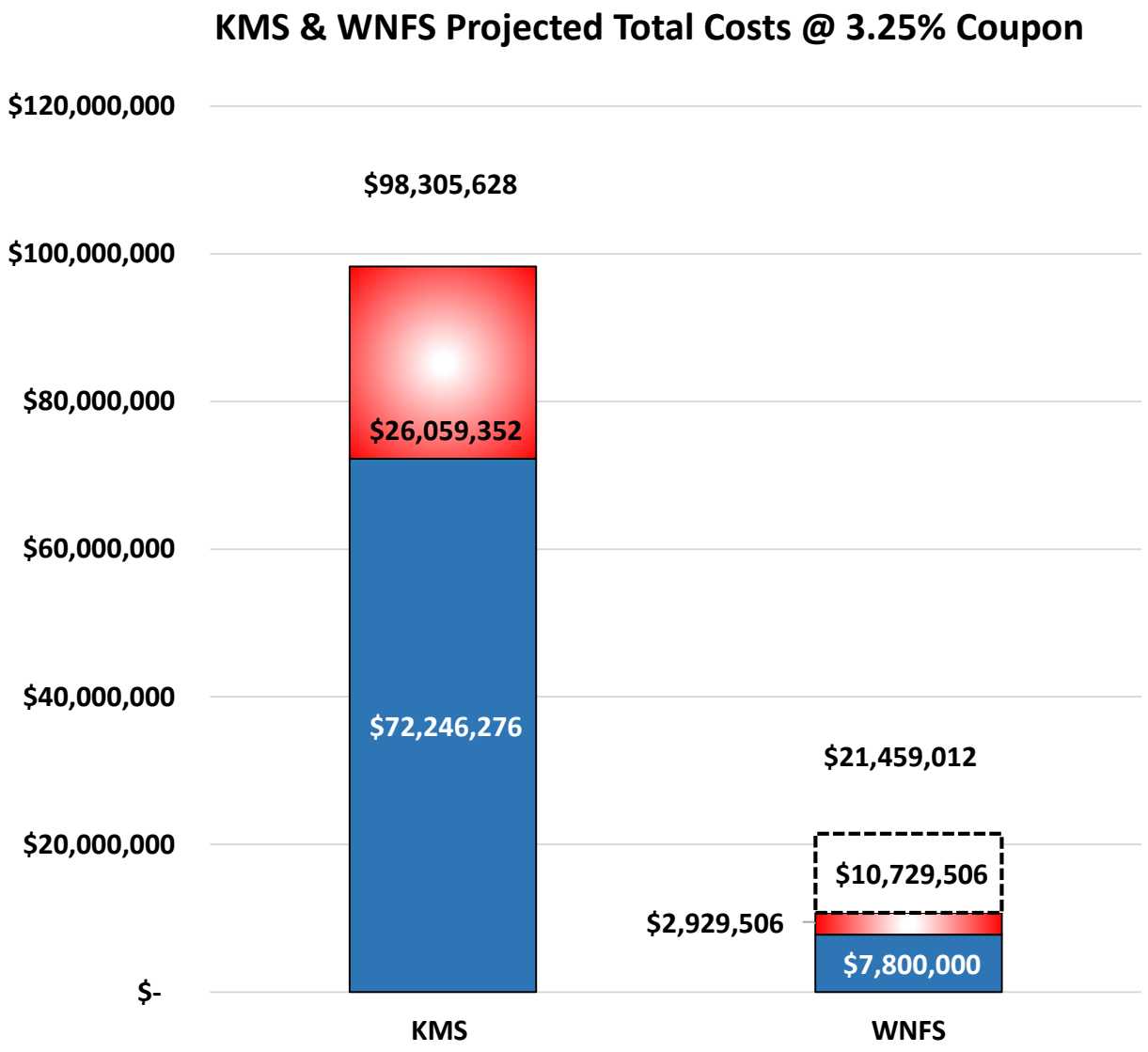
Projected values are as of 8/13/18. These values have not been approved by the Department of Revenue and are subject to change.

Analysis of taxes can not be reasonably estimated at this time without a projected or approved tax rate.

Note that this analysis is includes parcel changes due to permits including new construction and demolition.

Requested Model Financing 1:

KMS Hybrid Debt Service 20 Years & WNFS Debt Exclusion $7.8M Level Debt Service; Tax Levy $7.8M Level Debt Service 20 Years @ 3.25%



$7.8M, 20 YEARS @ 3.25% WITHIN TAX LEVY IMPACT

Fiscal year	Debt Service	Value of Projects Deferred
2020	$536,475	$7.8M spent within the tax levy would potentially defer $4.4M worth of projects over the first 5 years
2021	$536,475	
2022	$536,475	
2023	$536,475	

Tax Payer Tax Bill Impact Projection @ 3.25%

COMBINED DEBT EXCLUSION IMPACT	FY20	FY21	FY25 Hybrid	FY30	FY39 Final Debt Payment
INCREMENTAL TAX RATE	$0.63	$0.63	$0.73	$0.65	$0.52
$250,000	$158	$158	$183	$164	$131
$500,000	$315	$315	$365	$327	$262
$750,000	$473	$473	$548	$490	$393
$1,000,000	$630	$630	$730	$654	$523

Requested Model Financing Debt Service Detail:

Debt Service Schedule Detail

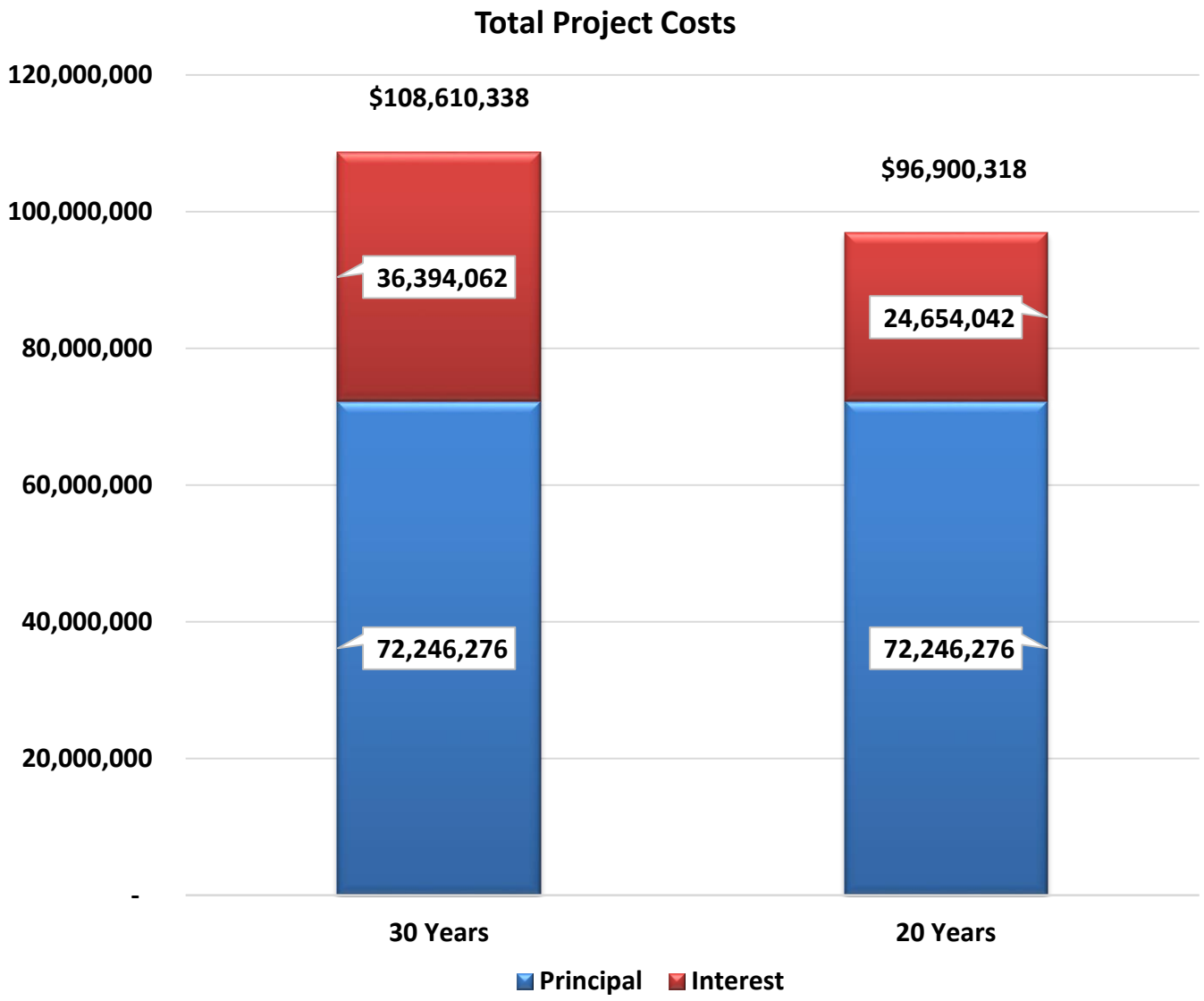
Debt Service			
Project:	West Natick Fire Station		
Total Cost:		$15,600,000	
Offsetting Funds:		$ (7,800,000)	
Cost to be Issued:		$ 7,800,000	
Term:	20	Years	
Interest	$ 2,929,506	3.25%	
Starting Year	FY	2020	$ 10,729,506

Beg Bal	FY	Principal	Interest	Total	End Bal
$ 7,800,000	2020	$ 282,975	$ 253,500	**$ 536,475**	$ 7,517,025
$ 7,517,025	2021	$ 292,172	$ 244,303	**$ 536,475**	$ 7,224,853
$ 7,224,853	2022	$ 301,668	$ 234,808	**$ 536,475**	$ 6,923,185
$ 6,923,185	2023	$ 311,472	$ 225,004	**$ 536,475**	$ 6,611,713
$ 6,611,713	2024	$ 321,595	$ 214,881	**$ 536,475**	$ 6,290,119
$ 6,290,119	2025	$ 332,046	$ 204,429	**$ 536,475**	$ 5,958,072
$ 5,958,072	2026	$ 342,838	$ 193,637	**$ 536,475**	$ 5,615,234
$ 5,615,234	2027	$ 353,980	$ 182,495	**$ 536,475**	$ 5,261,254
$ 5,261,254	2028	$ 365,485	$ 170,991	**$ 536,475**	$ 4,895,770
$ 4,895,770	2029	$ 377,363	$ 159,113	**$ 536,475**	$ 4,518,407
$ 4,518,407	2030	$ 389,627	$ 146,848	**$ 536,475**	$ 4,128,780
$ 4,128,780	2031	$ 402,290	$ 134,185	**$ 536,475**	$ 3,726,490
$ 3,726,490	2032	$ 415,364	$ 121,111	**$ 536,475**	$ 3,311,125
$ 3,311,125	2033	$ 428,864	$ 107,612	**$ 536,475**	$ 2,882,262
$ 2,882,262	2034	$ 442,802	$ 93,674	**$ 536,475**	$ 2,439,460
$ 2,439,460	2035	$ 457,193	$ 79,282	**$ 536,475**	$ 1,982,267
$ 1,982,267	2036	$ 472,052	$ 64,424	**$ 536,475**	$ 1,510,216
$ 1,510,216	2037	$ 487,393	$ 49,082	**$ 536,475**	$ 1,022,822
$ 1,022,822	2038	$ 503,234	$ 33,242	**$ 536,475**	$ 519,589
$ 519,589	2039	$ 519,589	$ 16,887	**$ 536,475**	$ (0)

Debt Service			
Project:	KMS		
Total Cost:		$ 72,246,276	
Offsetting Funds:		$ -	
Cost to be Issued:		$ 72,246,276	
Term:	20	Years	
Interest	$ 26,059,352	3.25%	
Starting Year	FY	2020	$ 98,305,628

	Beg Bal	FY	Principal	Interest	Total	End Bal
1	$ 72,246,276	2020	$ 2,600,000	$ 2,348,004	**$ 4,948,004**	$ 69,646,276
2	$ 69,646,276	2021	$ 2,675,000	$ 2,263,504	**$ 4,938,504**	$ 66,971,276
3	$ 66,971,276	2022	$ 2,750,000	$ 2,176,566	**$ 4,926,566**	$ 64,221,276
4	$ 64,221,276	2023	$ 2,850,000	$ 2,087,191	**$ 4,937,191**	$ 61,371,276
5	$ 61,371,276	2024	$ 2,950,000	$ 1,994,566	**$ 4,944,566**	$ 58,421,276
6	$ 58,421,276	2025	$ 3,894,752	$ 1,898,691	**$ 5,793,443**	$ 54,526,524
7	$ 54,526,524	2026	$ 3,894,752	$ 1,772,112	**$ 5,666,864**	$ 50,631,772
8	$ 50,631,772	2027	$ 3,894,752	$ 1,645,533	**$ 5,540,285**	$ 46,737,020
9	$ 46,737,020	2028	$ 3,894,752	$ 1,518,953	**$ 5,413,705**	$ 42,842,268
10	$ 42,842,268	2029	$ 3,894,752	$ 1,392,374	**$ 5,287,126**	$ 38,947,516
11	$ 38,947,516	2030	$ 3,894,752	$ 1,265,794	**$ 5,160,546**	$ 35,052,764
12	$ 35,052,764	2031	$ 3,894,752	$ 1,139,215	**$ 5,033,967**	$ 31,158,012
13	$ 31,158,012	2032	$ 3,894,752	$ 1,012,635	**$ 4,907,387**	$ 27,263,260
14	$ 27,263,260	2033	$ 3,894,752	$ 886,056	**$ 4,780,808**	$ 23,368,508
15	$ 23,368,508	2034	$ 3,894,752	$ 759,477	**$ 4,654,229**	$ 19,473,756
16	$ 19,473,756	2035	$ 3,894,752	$ 632,897	**$ 4,527,649**	$ 15,579,004
17	$ 15,579,004	2036	$ 3,894,751	$ 506,318	**$ 4,401,069**	$ 11,684,253
18	$ 11,684,253	2037	$ 3,894,751	$ 379,738	**$ 4,274,489**	$ 7,789,502
19	$ 7,789,502	2038	$ 3,894,751	$ 253,159	**$ 4,147,910**	$ 3,894,751
20	$ 3,894,751	2039	$ 3,894,751	$ 126,568	**$ 4,021,319**	$ -

Finance Model 2: Kennedy Middle School Financing – Debt Exclusion

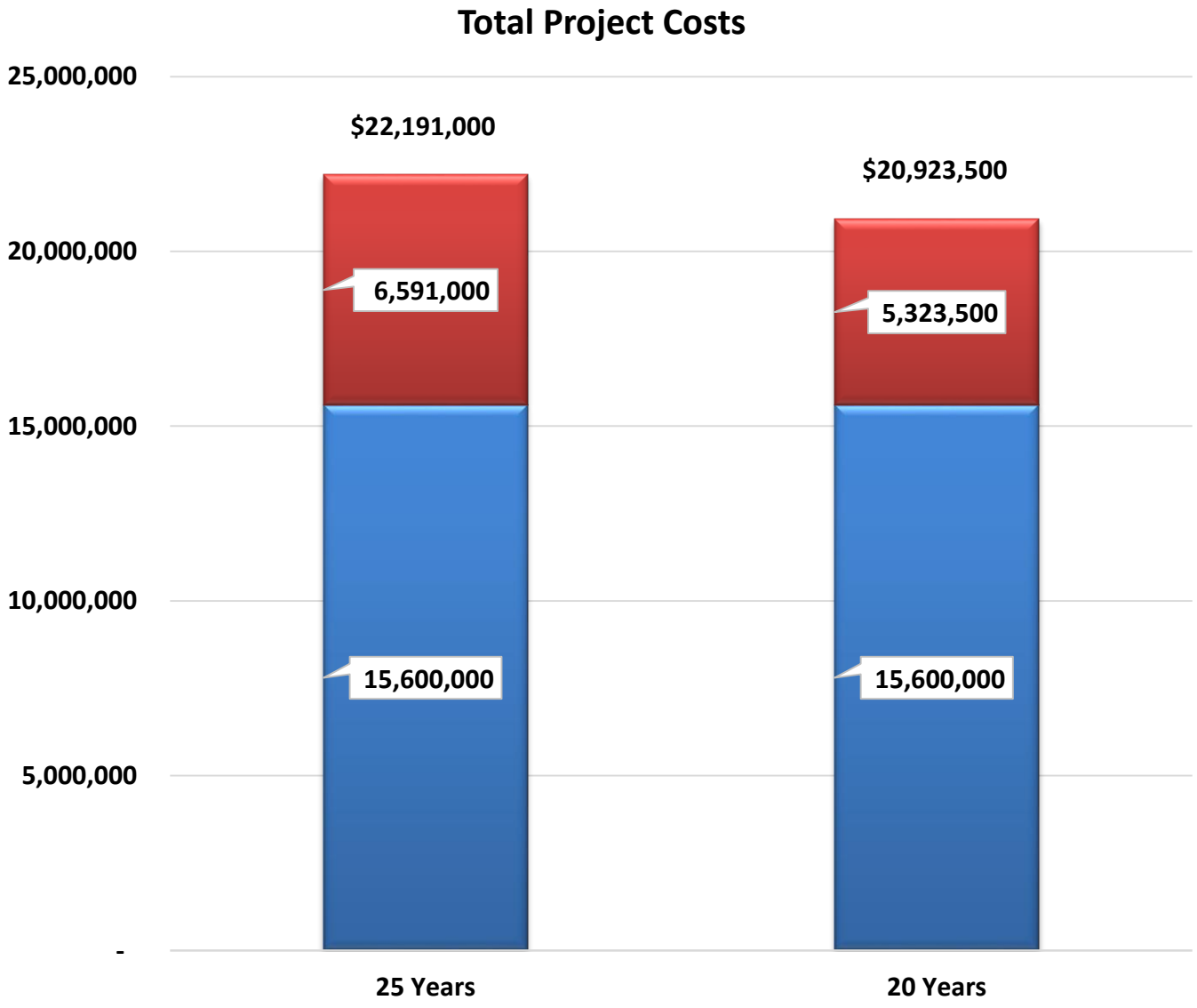


Scenario Highlights:
Offsets – MSBA 37M
Level Principal

KMS DEBT EXCLUSION 20 YRS @ 3.25%*	FY20	FY21	FY22
INCREMENTAL TAX RATE	$0.6834	$0.6634	$0.6534
$250,000	$171	$166	$163
$500,000	$342	$332	$327
$750,000	$513	$498	$490
$1,000,000	$683	$663	$653

* Tax Impact Table is an estimated projection. Previous projections were modeled with higher interest rates

West Natick Fire Station Financing – Debt Exclusion



Scenario Highlights:
Level Principal

WNFS DEBT EXCLUSION 20 YRS @ 3.25%*	FY20	FY21	FY22
INCREMENTAL TAX RATE	$0.1434	$0.1434	$0.1434
$250,000	$36	$36	$36
$500,000	$72	$72	$72
$750,000	$108	$108	$108
$1,000,000	$143	$143	$143

* Tax Impact Table is an estimated projection

KMS & WNFS Debt Cost Comparison

Financing Methodology Cost Comparison (assuming 20 Years @ 3.25%)			
	Principal	Interest	Total Cost
Administrator's Recommendation	$87,846,276	$32,320,505	$120,166,781
Requested Financing Model 1: KMS Hybrid Debt Service 20 Years & WNFS Debt Exclusion $7.8M Level Debt Service; Tax Levy $7.8M Level Debt Service	$87,846,276	$31,918,364	$119,764,640
Financing Model 2: Level Principal Debt Service	$87,846,276	$29,977,542	$117,823,818

QUESTIONS / CONCERNS?