



Ludington Area Schools Facilities Development Update

June 27, 2018



LUDINGTON AREA SCHOOLS

Current District Configuration



LUDINGTON AREA SCHOOLS



Scenario	Description	Cost	Millage Change	Annual Tax Bill Change
A	<ul style="list-style-type: none"> New Pre K-2 New 3-5 Additions/Renovations MS/HS, Retain PAC & Pool Improved Transportation Center Improve Athletics 	\$132,214,000	+2.86	\$143
B	<ul style="list-style-type: none"> New Pre K-2 New 3-5 MS/HS Additions and Renovations, Retain PAC & Pool New Transportation Center Relocate Athletics 	\$136,299,000	+2.86	\$143
C	<ul style="list-style-type: none"> Renovate Pre K-2 in existing MS/HS Renovate 3-5 in existing MS/HS New MS/HS Retain PAC & Pool New Transpiration Center Improve Athletics 	\$110,028,900	+2.01	\$100
D	<ul style="list-style-type: none"> New Pre K-2 Renovate 3-5 (Foster) MS/HS Additions and Renovations, Retain PAC & Pool Improve Transpiration Center Improve Athletics 	\$96,586,000	+1.5	\$75
E	<ul style="list-style-type: none"> New Pre K-2 New 3-5 New MS/HS, New PAC & Pool Improved Transportation Center Improve Athletics 	\$160,222,000	+3.46	\$173

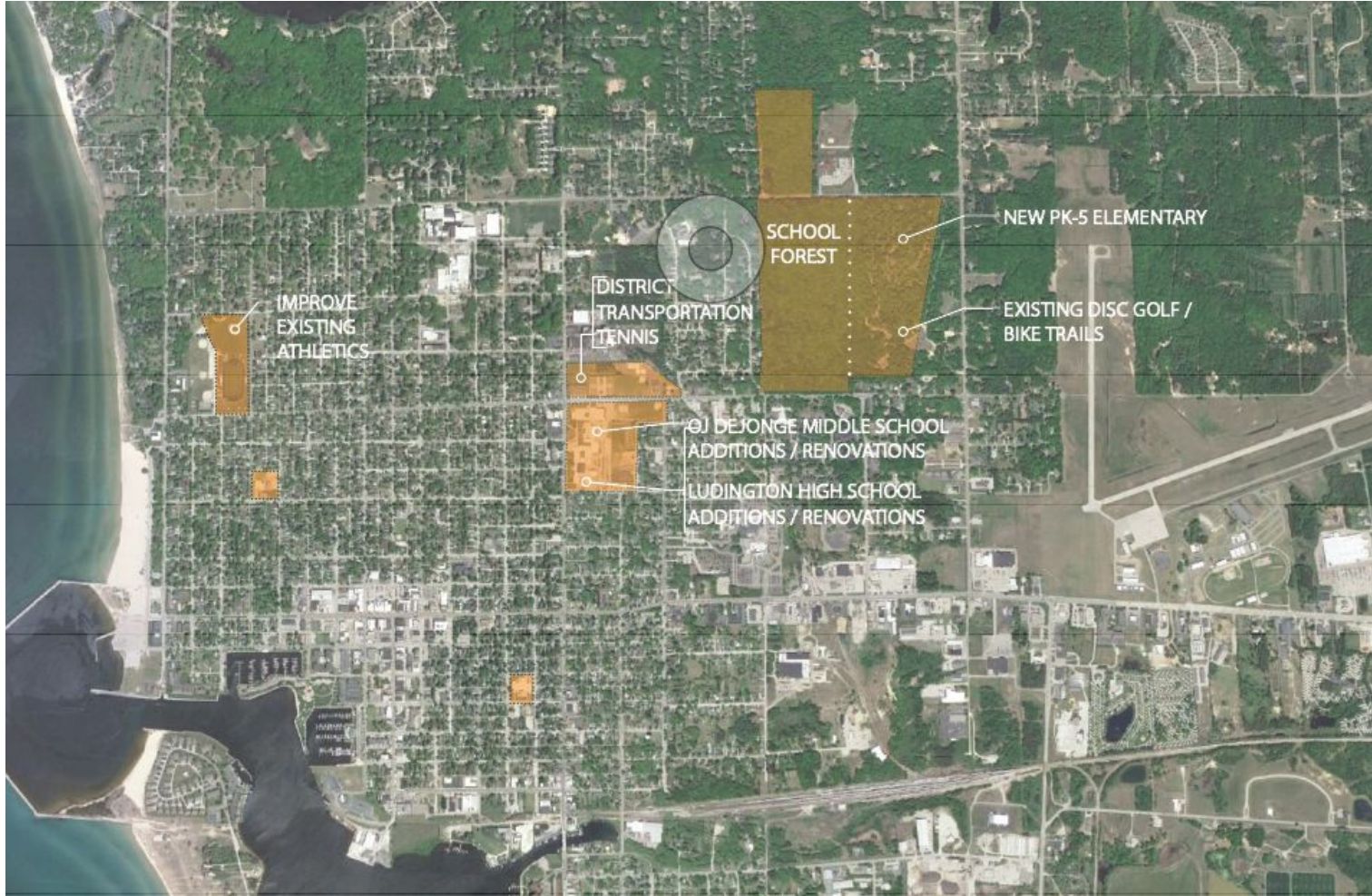




Scenario	Description	Cost
F	<ul style="list-style-type: none"> • New Pre K-5 • Additions/Renovations MS/HS, Retain PAC & Pool • Improved Transportation Center • Improve Athletics 	\$96,827,000
G	<ul style="list-style-type: none"> • New Pre K-5 • MS/HS Additions and Renovations, Retain PAC & Pool • New Transportation Center • Relocate Partial Athletics (Stadiums & Softball) & Improve Portion of Athletics 	\$111,141,000
H	<ul style="list-style-type: none"> • New Pre K-5 • MS/HS Additions and Renovations, Retain PAC & Pool • New Transportation Center • Relocate Partial Athletics (Stadiums & Baseball) & Improve Portion of Athletics 	\$110,680,000

LUDINGTON AREA SCHOOLS

Proposed New Configuration – Scenario F





Ludington Schools
Ludington, MI

Design Scenario F

June 7, 2018



EXECUTIVE SUMMARY RECOMMENDATIONS

	LOCATION	Subtotal Cost:
	New PreK-5 Building, 132K SF	\$25,043,040
	MS/HS - Concept 3 (Additions/Renovations)	\$39,034,587
	Improve Transportation	\$436,500
	Improve Existing Athletics	\$2,627,520
TOTAL DIRECT TRADE COSTS:		\$67,142,000
	SUBTOTAL INDIRECT CONSTRUCTION COSTS:	\$10,157,000
TOTAL CONSTRUCTION COSTS:		\$77,299,000
	TOTAL OWNER COSTS:	\$19,528,000
TOTAL CONSTRUCTION & OWNER COSTS:		
TOTAL ESTIMATED PROJECT COST :		\$96,827,000



LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN

COMPARISON OF EXAMPLE BOND VOTE ALTERNATIVES - MAY, 2019 ELECTION

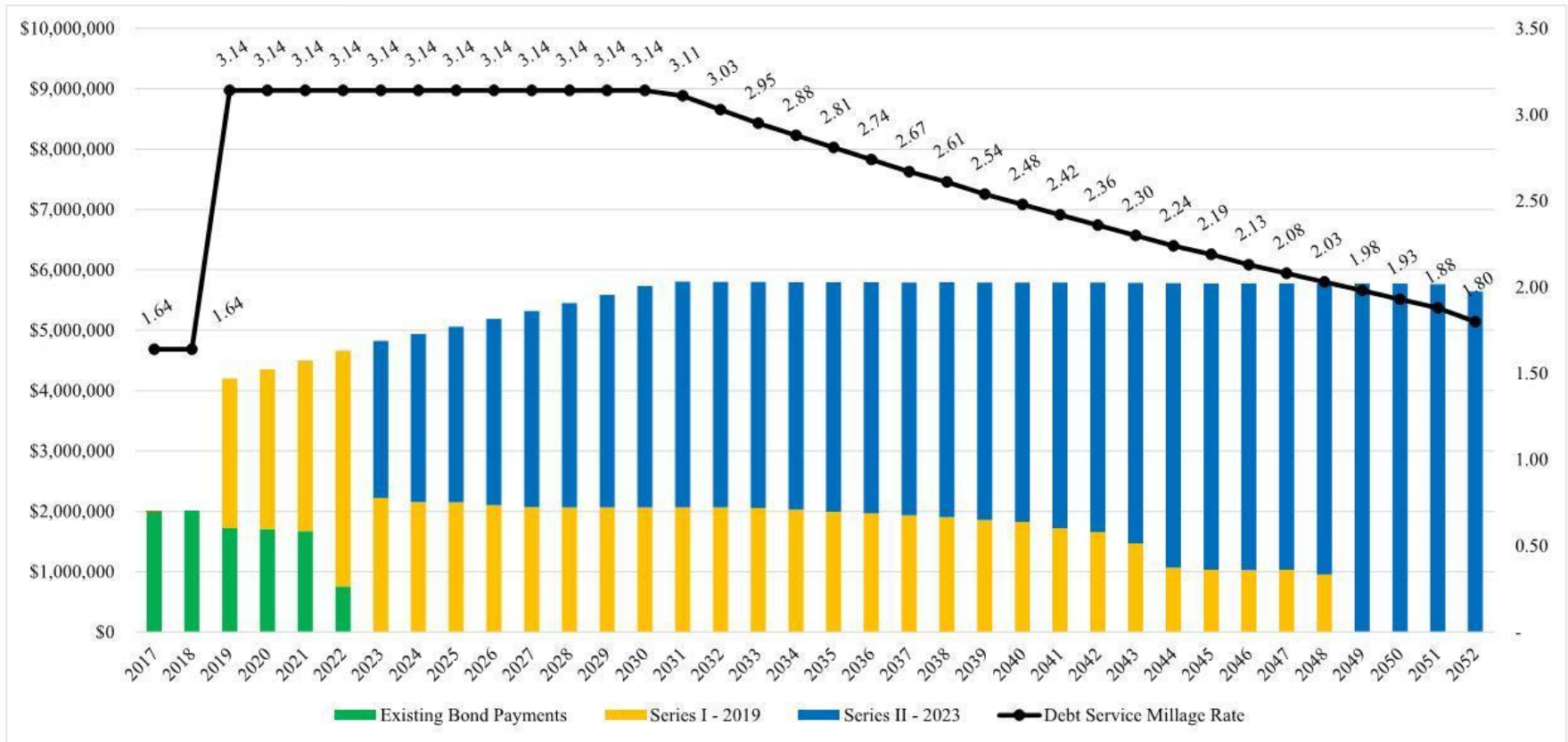
I. <u>Debt Service Millage Rate and Annual Tax Bill</u>	\$100 Million	\$95 Million	Difference
	3 Series	2 Series	
Estimated 2019/2020 millage rate	3.14	3.14	-
Less estimated 2018/2019 millage rate	(1.64)	(1.64)	-
Change in millage rate	1.50	1.50	-
Annual tax bill change ((\$100,000 market value/\$50,000 taxable value)	\$75.00	\$75.00	\$0.00
Per month	\$6.25	\$6.25	\$0.00
II. <u>Capital Improvement Plan Summary</u>			
<u>Series I - 2019</u>			
Construction allowance	\$34,830,473	\$34,830,473	\$0
Underwriting allowance	350,000	350,000	-
Bond issuance cost allowance	150,150	150,150	-
Less estimated interest income [1]	(330,623)	(330,623)	-
Par amount of bonds	\$35,000,000	\$35,000,000	\$0
<u>Series II - 2023</u>			
Construction sub-totals	\$32,348,767	\$59,752,392	(\$27,403,625)
Underwriting allowance	325,000	600,000	(275,000)
Bond issuance cost allowance	133,300	214,800	(81,500)
Less estimated interest income [1]	(307,067)	(567,192)	260,125
Par amount of bonds	\$32,500,000	\$60,000,000	(\$27,500,000)
<u>Series III - 2025</u>			
Construction sub-totals	\$32,348,767		\$32,348,767
Underwriting allowance	325,000		325,000
Bond issuance cost allowance	133,300		133,300
Less estimated interest income [1]	(307,067)		(307,067)
Par amount of bonds	\$32,500,000		\$32,500,000
<u>Proposal Total</u>			
Construction sub-totals	\$99,528,007	\$94,582,865	\$4,945,142
Underwriting allowance	1,000,000	950,000	50,000
Bond issuance cost allowance	416,750	364,950	51,800
Less estimated interest income [1]	(944,757)	(897,815)	(46,942)
Par amount of bonds	\$100,000,000	\$95,000,000	\$5,000,000

[1] Assumes a 24 month construction period with earnings at 1.00%.
Note: Bus purchases have a 6 year useful life and technology equipment has a 5 year useful life.



LUDINGTON AREA SCHOOL DISTRICT COUNTY OF MASON, STATE OF MICHIGAN

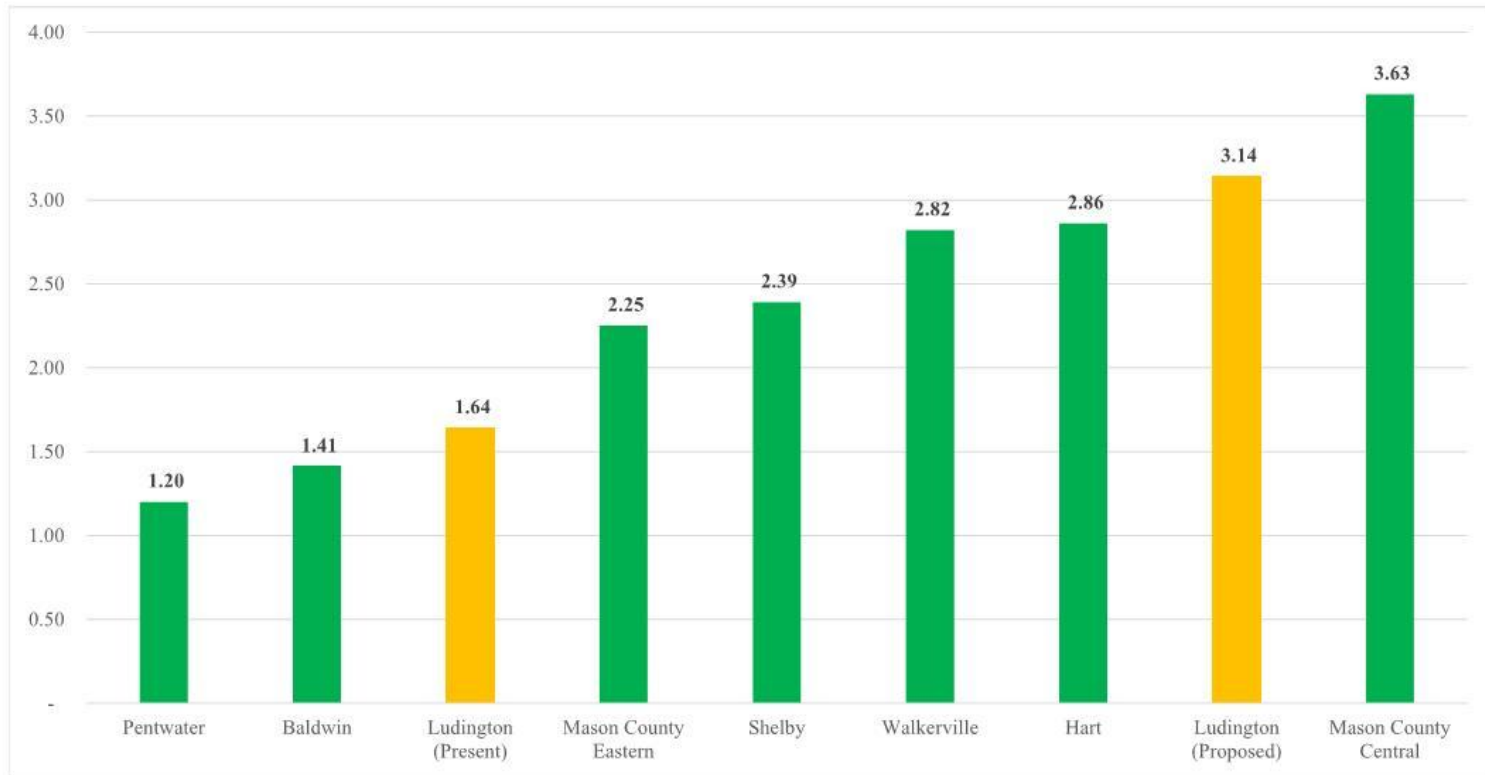
ESTIMATED MILLAGE STUDY - \$95 MILLION 2 SERIES - CHART FORMAT





LUDINGTON AREA SCHOOL DISTRICT COUNTY OF MASON, STATE OF MICHIGAN

COMPARISON OF 2017 DEBT SERVICE MILLAGE RATES - WEST SHORE ESD
(Per 2017 Continuing Disclosure Report and State Personal Property Tax Reimbursement Worksheet)

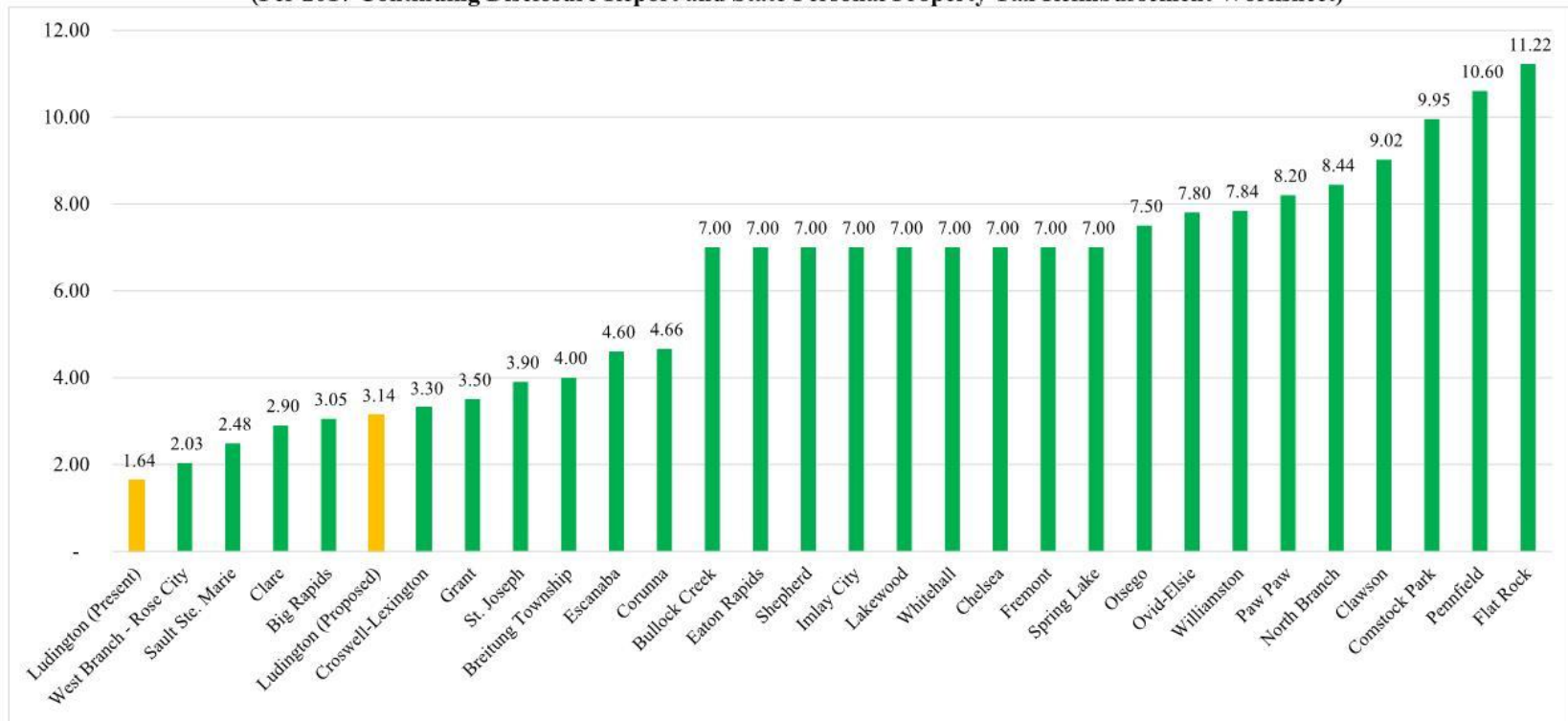




LUDINGTON AREA SCHOOL DISTRICT COUNTY OF MASON, STATE OF MICHIGAN

COMPARISON OF 2017 DEBT SERVICE MILLAGE RATES - SIMILAR ENROLLMENT AND NOTABLY SUCCESSFUL DISTRICTS

(Per 2017 Continuing Disclosure Report and State Personal Property Tax Reimbursement Worksheet)





LUDINGTON AREA SCHOOL DISTRICT
COUNTY OF MASON, STATE OF MICHIGAN

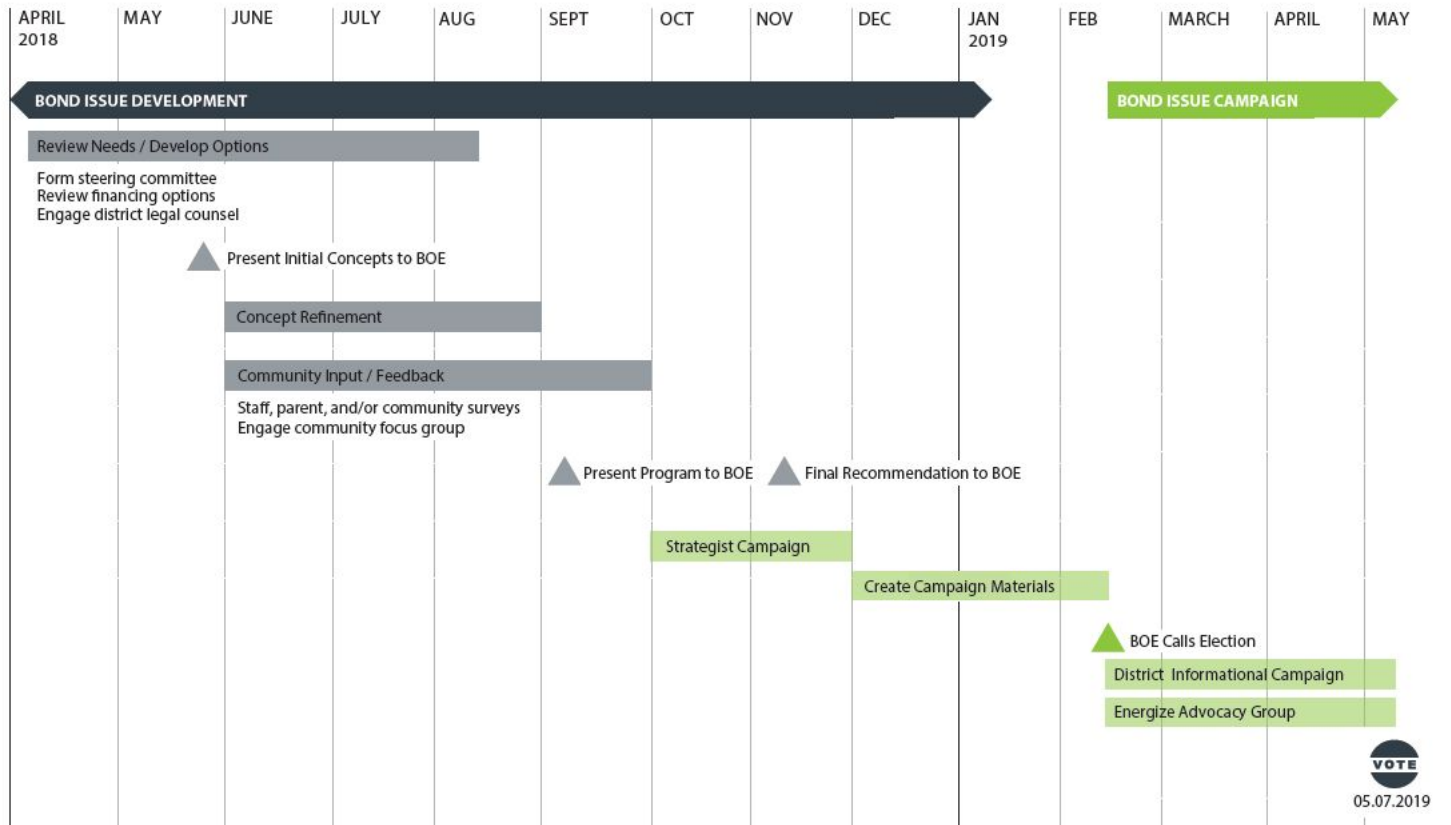
ANNUAL TAX BILL INCREASE CHART - 1.50 MILLS

Market Value	Taxable Value	Millage Increase	Annual Increase	Monthly Increase
45,000	22,500	1.50	\$33.75	\$2.81
50,000	25,000	1.50	37.50	3.13
55,000	27,500	1.50	41.25	3.44
60,000	30,000	1.50	45.00	3.75
65,000	32,500	1.50	48.75	4.06
70,000	35,000	1.50	52.50	4.38
75,000	37,500	1.50	56.25	4.69
80,000	40,000	1.50	60.00	5.00
85,000	42,500	1.50	63.75	5.31
90,000	45,000	1.50	67.50	5.63
95,000	47,500	1.50	71.25	5.94
100,000	50,000	1.50	75.00	6.25
105,000	52,500	1.50	78.75	6.56
110,000	55,000	1.50	82.50	6.88
115,000	57,500	1.50	86.25	7.19
120,000	60,000	1.50	90.00	7.50
125,000	62,500	1.50	93.75	7.81
130,000	65,000	1.50	97.50	8.13
135,000	67,500	1.50	101.25	8.44
140,000	70,000	1.50	105.00	8.75
145,000	72,500	1.50	108.75	9.06
150,000	75,000	1.50	112.50	9.38
155,000	77,500	1.50	116.25	9.69
160,000	80,000	1.50	120.00	10.00
165,000	82,500	1.50	123.75	10.31
170,000	85,000	1.50	127.50	10.63
175,000	87,500	1.50	131.25	10.94
180,000	90,000	1.50	135.00	11.25
185,000	92,500	1.50	138.75	11.56
190,000	95,000	1.50	142.50	11.88
195,000	97,500	1.50	146.25	12.19

Market Value	Taxable Value	Millage Increase	Annual Increase	Monthly Increase
200,000	100,000	1.50	\$150.00	\$12.50
205,000	102,500	1.50	153.75	12.81
210,000	105,000	1.50	157.50	13.13
215,000	107,500	1.50	161.25	13.44
220,000	110,000	1.50	165.00	13.75
225,000	112,500	1.50	168.75	14.06
230,000	115,000	1.50	172.50	14.38
235,000	117,500	1.50	176.25	14.69
240,000	120,000	1.50	180.00	15.00
245,000	122,500	1.50	183.75	15.31
250,000	125,000	1.50	187.50	15.63
255,000	127,500	1.50	191.25	15.94
260,000	130,000	1.50	195.00	16.25
265,000	132,500	1.50	198.75	16.56
270,000	135,000	1.50	202.50	16.88
275,000	137,500	1.50	206.25	17.19
280,000	140,000	1.50	210.00	17.50
285,000	142,500	1.50	213.75	17.81
290,000	145,000	1.50	217.50	18.13
295,000	147,500	1.50	221.25	18.44
300,000	150,000	1.50	225.00	18.75
305,000	152,500	1.50	228.75	19.06
310,000	155,000	1.50	232.50	19.38
315,000	157,500	1.50	236.25	19.69
320,000	160,000	1.50	240.00	20.00
325,000	162,500	1.50	243.75	20.31
330,000	165,000	1.50	247.50	20.63
335,000	167,500	1.50	251.25	20.94
340,000	170,000	1.50	255.00	21.25
345,000	172,500	1.50	258.75	21.56
350,000	175,000	1.50	262.50	21.88

LUDINGTON AREA SCHOOLS

BOND TIMELINE





Thank you!

LUDINGTON AREA SCHOOLS

Facilities Assessment - Summary



Ludington Schools
Ludington, MI

Design Scenario D
May 15, 2018

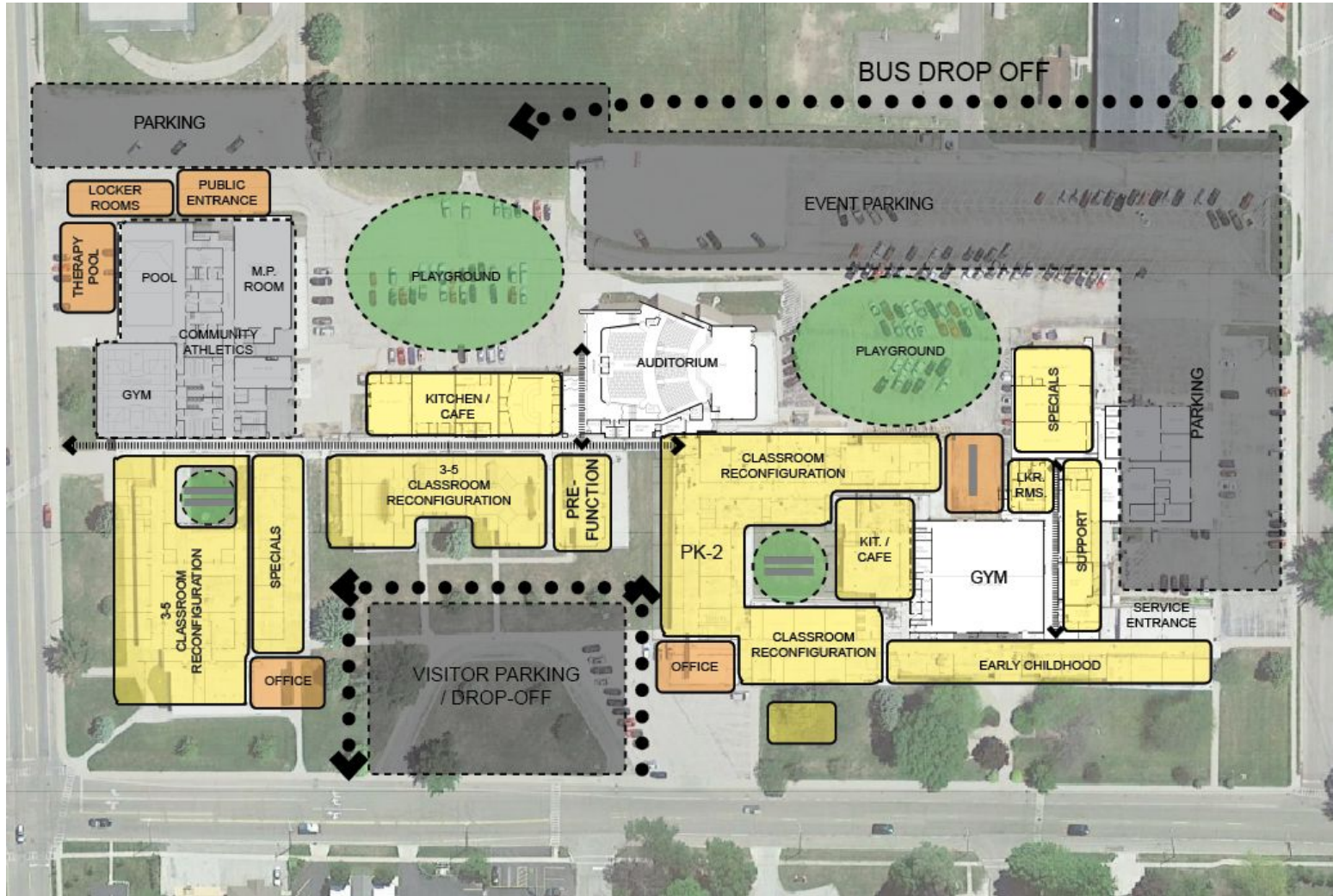


Total Cost per School
Estimate Summary Sheet

Report Recommendation Section:	Totals		New PreK-2 Building, 90K SF	Renovate Foster	MS/HS - Concept 3	Transportation	Improve Existing Athletics
	SQFT		90,000	78,000	292,254	15,000	0
TOTAL DIRECT TRADE COSTS:	\$66,976,105		\$17,074,800	\$7,802,698	\$39,034,587	\$436,500	\$2,627,520
	\$/SQFT or \$/ACRE		190	100	134	29	
Discount for non-Qualified Bond (non union)	-\$1,339,522.09	-2.00%	-\$341,496.00	-\$156,053.95	-\$780,691.74	-\$8,730.00	-\$52,550.40
Contingency: (Design, Estimate, Construction)	\$6,697,610	10%	\$1,707,480	\$780,270	\$3,903,459	\$43,650	\$262,752
Escalation (Series 2)	\$2,893,368	4%	\$737,631	\$337,077	\$1,686,294	\$18,857	\$113,509
SUBTOTAL I - INDIRECT CONSTRUCTION COSTS:	\$ 8,251,456		\$ 2,103,615	\$ 961,292	\$ 4,809,061	\$ 53,777	\$ 323,710
Construction Manager Fee Only (CM Costs are below)	\$1,880,689	2.50%	\$479,460.38	\$219,099.75	\$1,096,091.20	\$12,256.92	\$73,780.76
SUBTOTAL II - INDIRECT CONSTRUCTION COSTS:	\$10,132,145		\$2,583,076	\$1,180,392	\$5,905,152	\$66,034	\$397,491
TOTAL CONSTRUCTION COSTS:	\$77,108,250		\$19,657,876	\$8,983,090	\$44,939,739	\$502,534	\$3,025,011
Architectural / Engineering Fees, & Costs, & Consultants:	\$6,125,367	8%	\$1,561,593	\$713,604	\$3,569,947	\$39,921	\$240,302
AE Costs	\$0	0%	\$0	\$0	\$0	\$0	\$0
CM Costs	\$0		\$0	\$0	\$0	\$0	\$0
Construction/Planning Staffing/GC's	\$4,211,190	5.50%	\$1,073,595	\$490,602	\$2,454,339	\$27,445	\$165,208
CGL Insurance, Builders Risk Ins., Bonds: (assume CM agency)	\$1,301,640	1.70%	\$331,838	\$151,641	\$758,614	\$8,483	\$51,064
Permits	\$382,835	0.50%	\$97,600	\$44,600	\$223,122	\$2,495	\$15,019
Testing, Surveying, Borings	\$191,418	0.25%	\$48,800	\$22,300	\$111,561	\$1,248	\$7,509
Abatement	\$365,321	0.50%	\$97,600	\$44,600	\$223,122	\$0	\$0
Fundamental Commissioning	\$182,661	0.25%	\$48,800	\$22,300	\$111,561	\$0	\$0
Owner Purchased Technology	\$2,922,572	4%	\$780,796	\$356,802	\$1,784,974	\$0	\$0
Owner Purchased FF&E	\$2,922,572	4%	\$780,796	\$356,802	\$1,784,974	\$0	\$0
Bond Issuance /Election Costs:	\$364,854	0.485%	\$93,015	\$42,505	\$212,642	\$2,378	\$14,313
Underwriting Allowance	\$955,390	1.27%	\$243,566	\$111,303	\$556,814	\$6,227	\$37,481
Less estimated interest income	(\$897,815)						
Busses (\$ EA, @ \$90K EA)	\$450,000						
TOTAL ALLOWANCE OWNER COSTS: (includes; AE Fees/Costs, CM Fees/Costs, Insurance, Bonds, Permits, Testing, Survey, Borings, Abatement, Fundamental Commissioning, Owner purchased Technology, Owner Purchased FFE, and Bond Costs	\$19,478,004		\$5,157,999	\$2,357,059	\$11,791,668	\$88,196	\$530,897
TOTAL CONSTRUCTION & OWNER COSTS:	\$96,586,254		\$24,815,875	\$11,340,148	\$56,731,407	\$590,730	\$3,555,908
TOTAL ESTIMATED INVESTIGATION & REPAIR COSTS:	\$96,586,254						

LUDINGTON AREA SCHOOLS

Elementary Remodel Concept (Scenario C)



LUDINGTON AREA SCHOOLS

Foster Elementary Concept (Scenario D)



LUDINGTON AREA SCHOOLS

Middle School / High School Addition & Renovation Concept (Scenario D)

