

Wakefield Memorial High School Building Project

Finance Committee

January 12, 2023



Why Pursue an MSBA Grant?



Limitations of the aging facility have resulted in a NEASC accreditation status of “probation” for the school.

“The High School does not currently have the required facilities to offer an educational program consistent with the district’s strategic plan or the school improvement plan, nor to build upon the educational program enhancements that are now provided at the middle school level.”

Statement of Interest to MSBA, April, 2019

General Classrooms: Current State



Current WMHS classroom

- Inconsistently sized spaces
- Poor lighting and ventilation
- Layout inhibits collaboration
- Lack of breakout space

General Classrooms: Proposed



Sample proposed classroom

- Appropriately sized
- Excellent lighting and ventilation
- Flexible furniture allows better collaboration
- Ample breakout space

Science Classrooms: Current State



Current WMHS science classroom

- Undersized for group work
- Lack of proper ventilation for chemistry
- Lack of accessibility
- Fixed lab benches limit flexibility

Science Classrooms: Proposed



Sample proposed science classroom

- Sized and outfitted for teaming
- Excellent lighting and ventilation
- Fully accessible
- Flexible and adaptable benches

Library / Media Center: Current State



Current WMHS library

- Uncomfortable
- Hard to find
- Lacks access to natural light
- Not an appealing place for students to visit

Library / Media Center: Proposed



Rendering of proposed media center

- A central feature of the new school design
- Ample access to views and daylight
- Technology-centered
- Differentiated seating throughout

Hallways and Circulation: Current State



Current WMHS hallway

- Confusing circulation
- Long travel distances
- Creates disorientation and stress

Hallways and Circulation: Proposed



Rendering of proposed hallway / common space

- Clear layout
- Active and engaging common areas for academic collaboration and informal gathering
- Creates a sense of community

Community Space: Existing



Current WMHS cafeteria

- Awkward layout
- Uninviting
- Not well suited to alternative uses

Community Space: Proposed



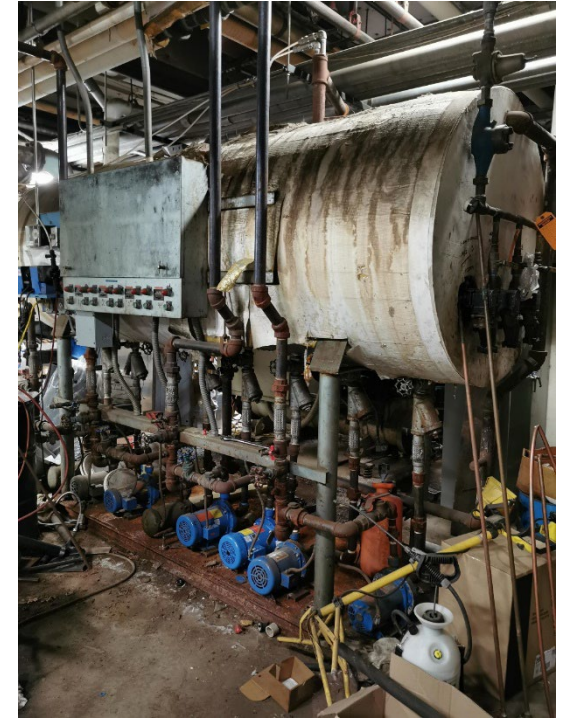
Rendering of proposed dining commons

- Serves multiple functions
 - Community gathering space
 - Event space
 - Cafeteria

Existing Building Deficiencies

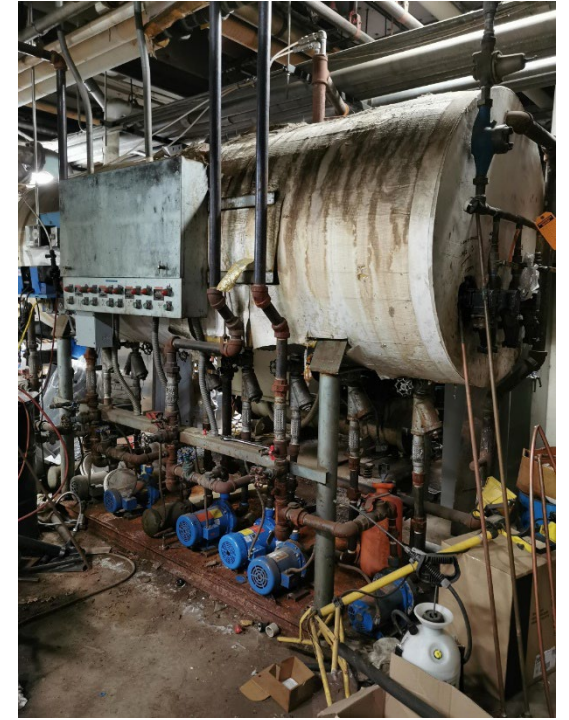
Infrastructure at end of useful life

- Mechanical, electrical, plumbing, and fire suppression systems are overdue for replacement
- Building envelope is deteriorated, leaking, and uninsulated
- Single-pane windows perform poorly



Existing Building Deficiencies

- Entire roof is failing and due for replacement
- Safety and security systems and hardware are in need of updating
- High maintenance costs and low prospects for future sustainability



Existing Building Deficiencies

Accessibility

Numerous conditions that are not in compliance with:

- Massachusetts Architectural Access Board (MAAB) regulations
- The Americans with Disabilities Act Architectural Guidelines (ADAAG)



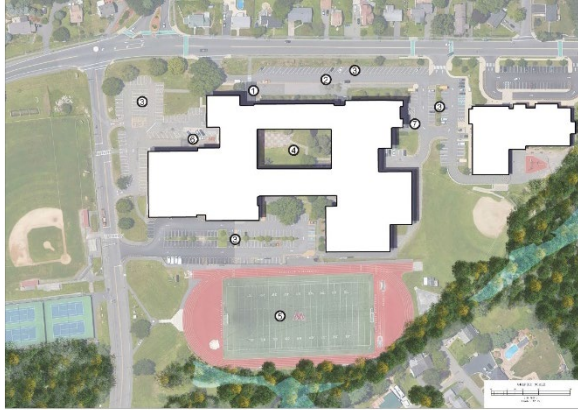
Project Involvement

The project has had input from:

- Residents
- Massachusetts School Building Authority (MSBA)
- Teachers, staff, and administration
- Students
- Town Boards
- Dept. of Elementary & Secondary Education (DESE)

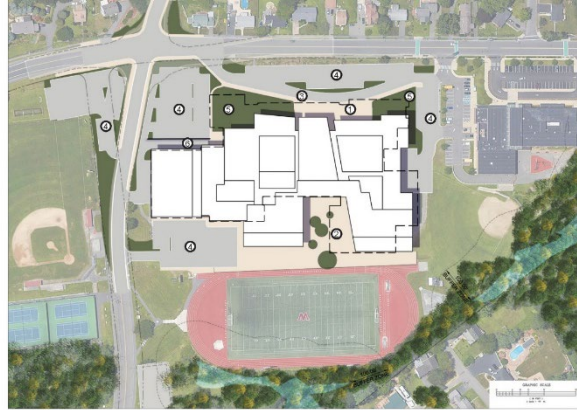


Site and Building Alternatives Considered

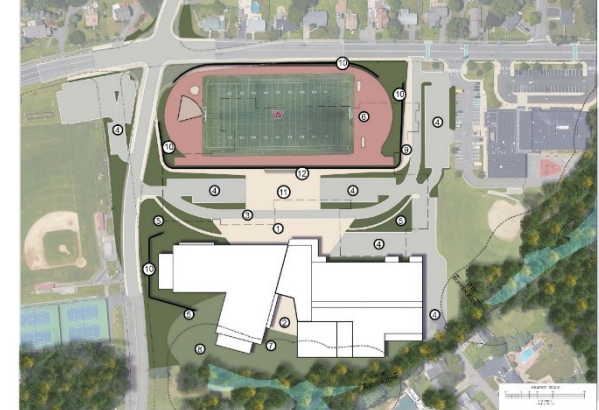


Code
upgrade
\$178 Million

*Not likely to be
reimbursed by MSBA*



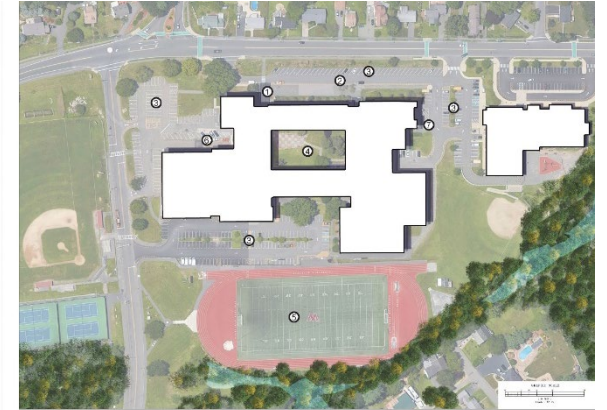
Addition /
Renovation
\$272 Million



New
construction
\$273.5 Million

Code Upgrade

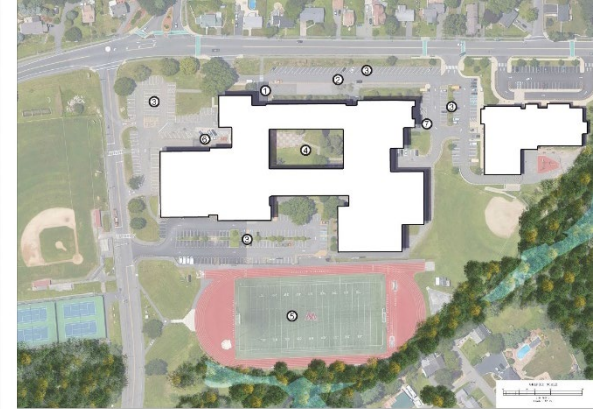
- Includes all building repairs and system upgrades needed for code compliance
 - Elements of life safety, accessibility, envelope, mechanical systems, and hazardous materials abatement
- Does NOT address the additional space needs and educational goals of the district



\$178 Million

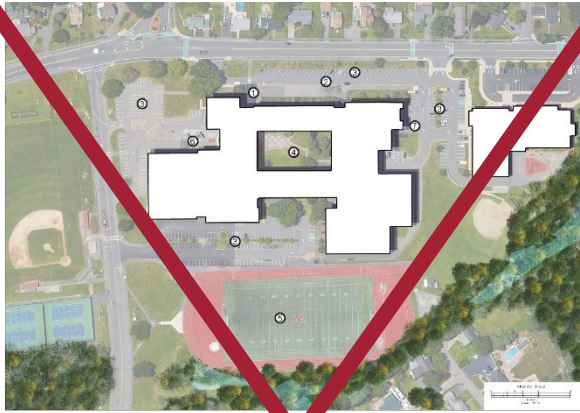
Code Upgrade

- Requires temporary swing space during construction
- NOT likely to be reimbursed by MSBA
- Permanent Building Committee / School Building Committee voted not to advance this option on April 28, 2022



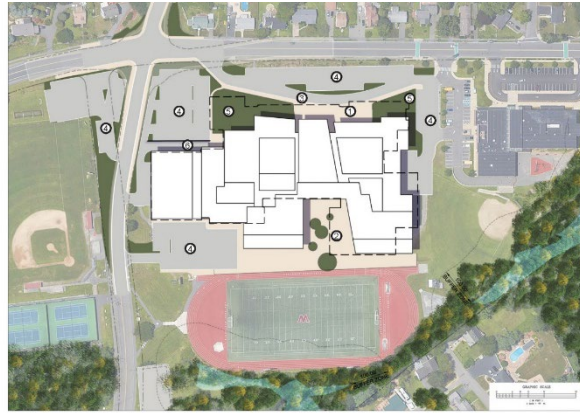
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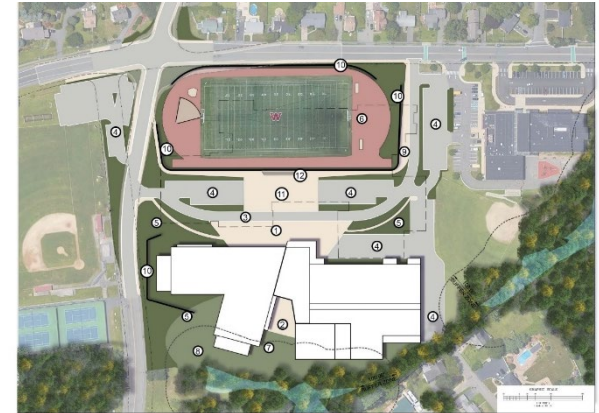


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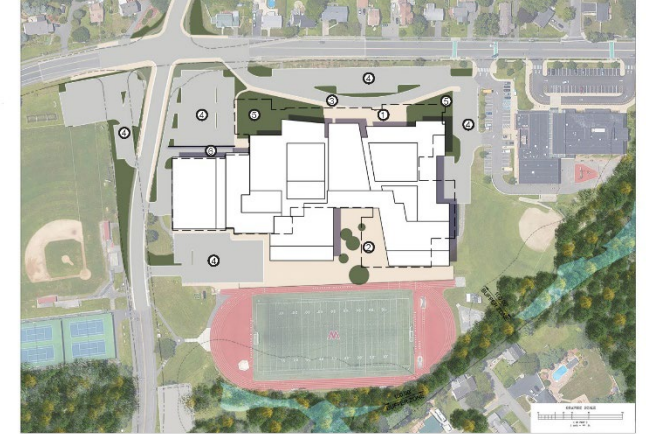
Addition /
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Addition / Renovation

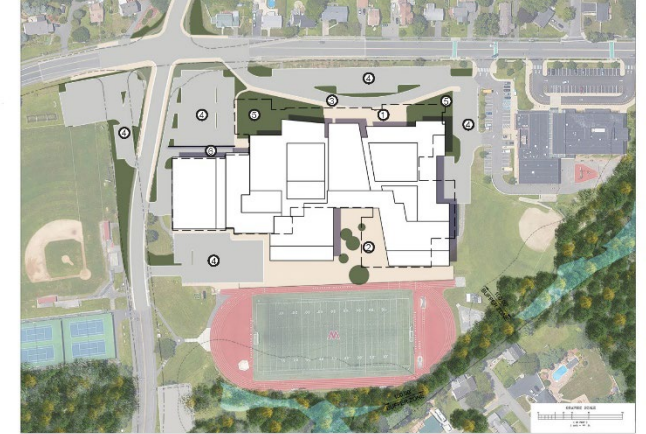
- Results in a primarily new or renewed building
- Challenging adjacencies and spatial conditions remain
- Disruptive to learning
 - Temporary modular facilities required for the duration of construction: approximately 3.5 years



\$272 Million

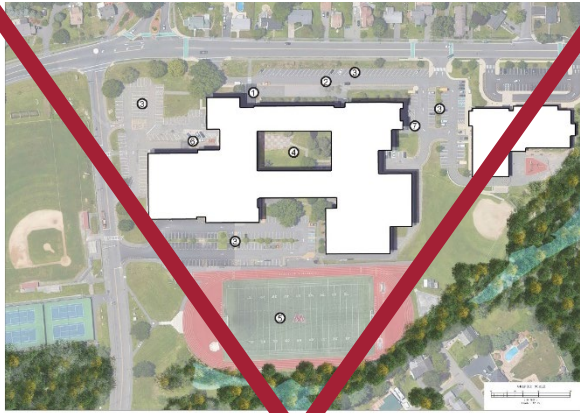
Addition / Renovation

- Adds approximately 1 year to construction schedule
- Similar cost to new construction
- Permanent Building Committee / School Building Committee voted not to advance this option on April 28, 2022



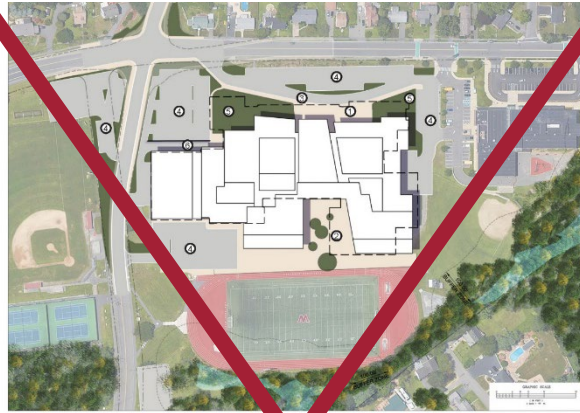
\$272 Million

Site and Building Alternatives Considered

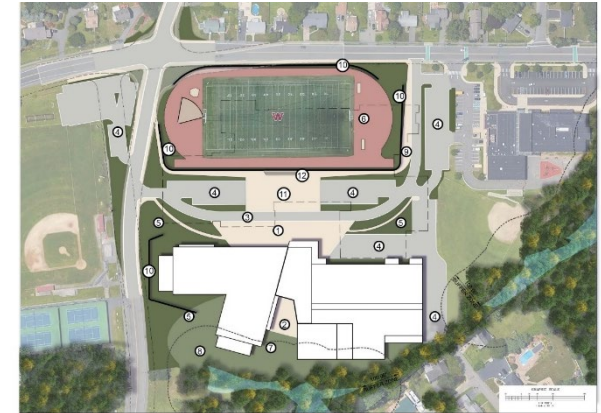


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\$178 Million

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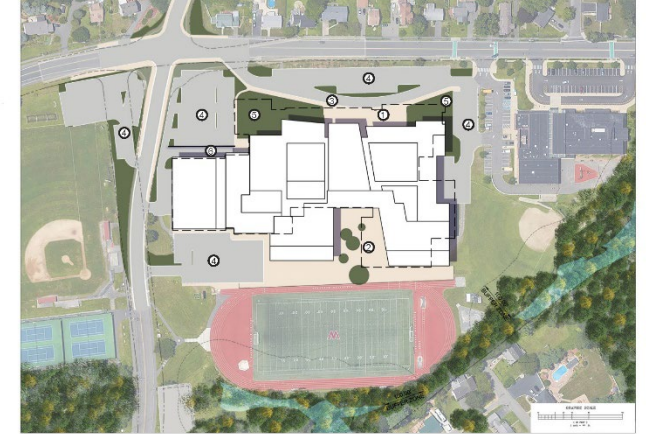
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\$272 Million



New
construction
\$273.5 Million

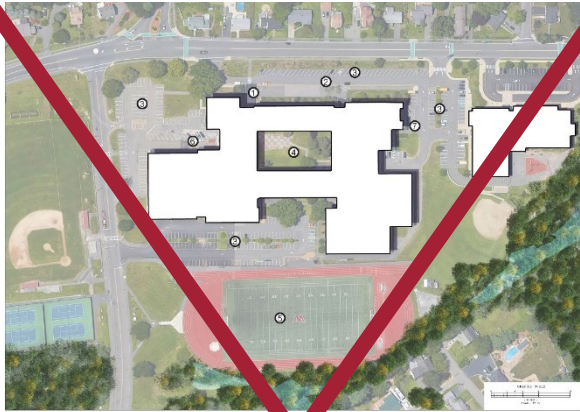
New Construction

- Designed to meet all educational needs
- Current high school untouched during construction
 - No swing space required
- Permanent Building Committee / School Building Committee voted to advance this as the preferred schematic option



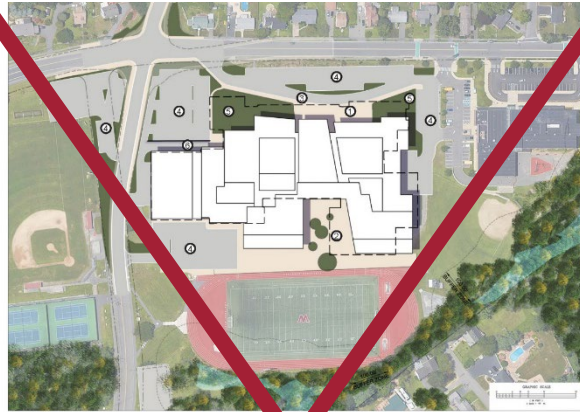
\$273.5 Million

Site and Building Alternatives Considered

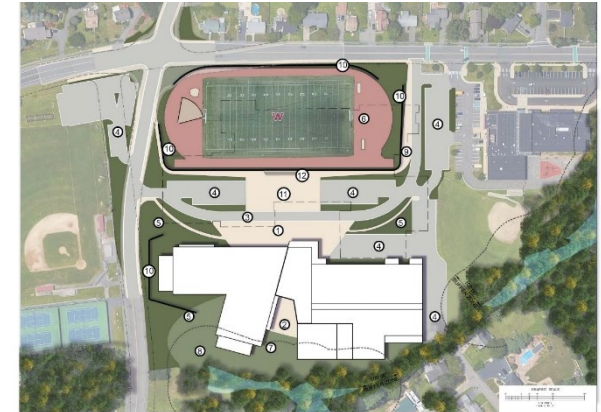


**Code
upgrade**
\$178 Million

*Not likely to be
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**Addition /
Renovation**
\$272 Million



**New
construction**
\$273.5 Million

Features of the Proposed Design

- Addresses current and future space needs of the educational program
- Clear and compact building organization
- Fully accessible
- Provides programmatic adjacencies to promote interdisciplinary and hands-on learning approaches



Features of the Proposed New Construction

- Creates virtual, extended, and enhanced learning opportunities through integrated technology
- Enhances integration of special education
- Provides multiple spaces for community use

Proposed Schedule

- December 2022: MSBA voted on schematic design
- January 28, 2023: Town Meeting
- March 11, 2023: Ballot vote
- January 2024: Construction begins
- January 2027: School opening
- January 2027: Site work / Athletic fields
- January 2028: MSBA audit

Cost Summary

Construction costs: \$223.6 Million

- Includes costs paid to the construction manager to build the school project*
 - Site work to the building
 - Roads
 - Fields

*except pre-construction services

Cost Summary

Soft costs: \$49.9 Million

- Includes the other costs needed to design, manage, furnish, and equip the project
- Owners Project Manager and designer fees
- Pre-construction services
- Furniture, fixtures, equipment, and technology
- Contingencies, etc.

Cost Summary

	Construction costs	\$223.6 Million
+	Soft costs	\$ 49.9 Million
<hr/>		
	Total project cost	\$273.5 Million
	Estimated Town share	\$208 Million

Bond Anticipation Note Schedule

1 - 30 Year Level Debt Structure @ 5.50%

Dated	Due	Amount	Type	Term (days)	30/360 Day Count Rate (1)	Interest	FY Total
5/15/2023	5/15/2024	\$6,000,000	New Money BAN (1)	360	4.00%	\$240,000	
							\$240,000 Fiscal 2024
9/15/2023	9/15/2024	\$20,000,000	New Money BAN (1)	364	4.00%	\$797,808	
							\$797,808 Fiscal 2025
9/15/2024	9/15/2025	\$20,000,000	Renewal BAN	360	4.00%	\$800,000	
9/15/2024	9/15/2025	\$45,000,000	New Money	360	4.00%	\$1,800,000	
							\$2,600,000 Fiscal 2026
9/15/2025	9/15/2026	\$80,000,000	New Money	360	4.00%	\$3,200,000	
							\$3,200,000 Fiscal 2027
9/15/2026	9/15/2027	\$80,000,000	Renewal BAN	360	4.00%	\$3,200,000	
9/15/2026	9/15/2027	\$50,000,000	New Money	360	4.00%	\$2,000,000	
							\$5,200,000 Fiscal 2028
9/15/2027	9/15/2028	\$13,000,000	New Money (includes \$6M local share)	360	4.00%	\$520,000	
							\$520,000 Fiscal 2029

(1) Renew and pay down with MSBA reimbursements; final amount added to final bond issue at the end of the project.

Est Cost at Various Valuation Intervals

YEAR	400K	500K	600K	700K	800K	900K	1M	1.25	1.5M
2024	\$13.00	\$16.25	\$19.50	\$22.75	\$26.00	\$29.25	\$32.50	\$40.63	\$48.75
2025	\$43.20	\$54.00	\$64.80	\$75.60	\$86.40	\$97.20	\$108.00	\$135.00	\$162.00
2026	\$237.52	\$296.90	\$356.28	\$415.66	\$475.04	\$534.42	\$593.80	\$742.25	\$890.70
2027	\$417.32	\$521.65	\$625.98	\$730.31	\$834.64	\$938.97	\$1,043.30	\$1,304.13	\$1,564.95
2028	\$718.92	\$898.65	\$1,078.38	\$1,258.11	\$1,437.84	\$1,617.57	\$1,797.30	\$2,246.63	\$2,695.95
2029	\$781.52	\$976.90	\$1,172.28	\$1,367.66	\$1,563.04	\$1,758.42	\$1,953.80	\$2,442.25	\$2,930.70
2030	\$782.68	\$978.35	\$1,174.02	\$1,369.69	\$1,565.36	\$1,761.03	\$1,956.70	\$2,445.88	\$2,935.05
2031	\$782.60	\$978.25	\$1,173.90	\$1,369.55	\$1,565.20	\$1,760.85	\$1,956.50	\$2,445.63	\$2,934.75
2032	\$782.76	\$978.45	\$1,174.14	\$1,369.83	\$1,565.52	\$1,761.21	\$1,956.90	\$2,446.13	\$2,935.35
2033	\$782.28	\$977.85	\$1,173.42	\$1,368.99	\$1,564.56	\$1,760.13	\$1,955.70	\$2,444.63	\$2,933.55
2034	\$782.52	\$978.15	\$1,173.78	\$1,369.41	\$1,565.04	\$1,760.67	\$1,956.30	\$2,445.38	\$2,934.45
2035	\$782.36	\$977.95	\$1,173.54	\$1,369.13	\$1,564.72	\$1,760.31	\$1,955.90	\$2,444.88	\$2,933.85
2036	\$782.52	\$978.15	\$1,173.78	\$1,369.41	\$1,565.04	\$1,760.67	\$1,956.30	\$2,445.38	\$2,934.45
2037	\$782.48	\$978.10	\$1,173.72	\$1,369.34	\$1,564.96	\$1,760.58	\$1,956.20	\$2,445.25	\$2,934.30
2038	\$782.40	\$978.00	\$1,173.60	\$1,369.20	\$1,564.80	\$1,760.40	\$1,956.00	\$2,445.00	\$2,934.00

Est Cost per 100,000 of value continued

YEAR	400K	500K	600K	700K	800K	900K	1M	1.25M	1.5M
2039	\$782.32	\$977.90	\$1,173.48	\$1,369.06	\$1,564.64	\$1,760.22	\$1,955.80	\$2,444.75	\$2,933.70
2040	\$782.64	\$978.30	\$1,173.96	\$1,369.62	\$1,565.28	\$1,760.94	\$1,956.60	\$2,445.75	\$2,934.90
2041	\$782.28	\$977.85	\$1,173.42	\$1,368.99	\$1,564.56	\$1,760.13	\$1,955.70	\$2,444.63	\$2,933.55
2042	\$782.56	\$978.20	\$1,173.84	\$1,369.48	\$1,565.12	\$1,760.76	\$1,956.40	\$2,445.50	\$2,934.60
2043	\$782.28	\$977.85	\$1,173.42	\$1,368.99	\$1,564.56	\$1,760.13	\$1,955.70	\$2,444.63	\$2,933.55
2044	\$781.96	\$977.45	\$1,172.94	\$1,368.43	\$1,563.92	\$1,759.41	\$1,954.90	\$2,443.63	\$2,932.35
2045	\$782.36	\$977.95	\$1,173.54	\$1,369.13	\$1,564.72	\$1,760.31	\$1,955.90	\$2,444.88	\$2,933.85
2046	\$782.04	\$977.55	\$1,173.06	\$1,368.57	\$1,564.08	\$1,759.59	\$1,955.10	\$2,443.88	\$2,932.65
2047	\$781.72	\$977.15	\$1,172.58	\$1,368.01	\$1,563.44	\$1,758.87	\$1,954.30	\$2,442.88	\$2,931.45



Questions

