

**Dudley-Charlton
Regional
School District**



**Charlton Capital Improvement Plan
2027-2036**

Table of Contents

Table of Contents.....	2
Capital Improvement Plan Summary.....	3
Town of Charlton Capital Plan Totals.....	4

Individual Schools 10 Year Capital Plans

Charlton Elementary School.....	5—8
Heritage School.....	9-12
Charlton Middle School.....	13-15
Shepherd Hill High School.....	16-19

Capital Improvement Plan Summary

In May of 2024, Habeeb & Associates was contracted to conduct a Facilities Condition Assessment and Student Capacity Report, as approved by the towns of Dudley and Charlton, on all seven schools within the Dudley-Charlton Regional School District. The Facilities Condition Assessment was developed to address the physical structure, mechanical, electrical, plumbing, fire protection and sewage disposal systems of the schools and surrounding site areas. This assessment describes current conditions and provides priority recommendations and budget estimates for repair or replacement of deficient building components and systems, which are intended to be used for short and long-term capital planning. The goal being to utilize this assessment in context with the facilities goals, as defined by the Dudley-Charlton Regional School District, for the development of a 10-year Capital Improvement Plan.

The Facilities Condition Assessment summarizes DCRSD's aging infrastructure on a per school basis, and graded the needs of each facility on a scale of immediacy. As part of the district's response to the Facilities Assessment, the Facilities Director, along with Head Custodians of each school, organized each school's needs and projected these needs into a 10-year Capital Improvement Plan. The Capital Improvement Plan tries to remain cognizant of factors such as project order of operations, recurring administrative costs and project need immediacy. I/T capital needs, which were not on the Facilities Condition Assessment, have additionally been included as part of the overall Capital Improvement Plan, as certain I/T infrastructure needs are considered capital in nature and are outside the scope of general operational budgeting. Each item within the Capital Improvement Plan is numbered to correlate to the specific area of need within the Facilities Condition Assessment.

It's important to understand with rising inflation, wage rates and cost escalation, prolonged deterioration from deferred maintenance becomes more costly over time. Building materials damaged by water infiltration and freeze-thaw cycles that are not replaced will continue to deteriorate indefinitely until complete failure occurs. This Capital Improvement Plan seeks to address these issues before a catastrophic failure occurs.



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Town of Charlton Totals

	School Name	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Charlton Elementary	\$12,735,762	\$715,530	\$733,160	\$639,425	\$1,604,300	\$2,768,300	\$957,072	\$1,085,000	\$786,535	\$1,612,550	\$1,833,890
	Heritage	\$52,439,800	\$993,950	\$4,092,500	\$39,693,000	\$1,169,170	\$1,734,200	\$620,291	\$991,618	\$1,432,310	\$1,499,111	\$213,650
	Charlton Middle	\$13,401,907	\$400,250	\$138,488	\$1,577,000	\$323,480	\$4,362,185	\$1,730,516	\$2,671,639	\$614,780	\$1,033,869	\$549,700
	Shepherd Hill High School @53.79%(FY2025 enrollment)	\$15,629,575	\$1,034,074	\$1,298,821	\$5,463,988	\$1,159,348	\$982,908	\$1,551,060	\$952,158	\$812,305	\$1,335,210	\$1,039,703
	TOTAL PROJECT COSTS	\$94,207,044	\$3,143,804	\$6,262,969	\$47,373,413	\$4,256,298	\$9,847,593	\$4,858,939	\$5,700,415	\$3,645,930	\$5,480,740	\$3,636,943

Key Points for Consideration

- 2027 Heritage requires replacement of cooling system and Shepherd Hill requires boiler replacement. See Facilities Condition Assessment(FCA) pages 73,79,143,&151
- 2028 Heritage requires roof replacement and Shepherd Hill requires boiler building management system. See FCA pages 69,76,143,&151
- 2029 Shepherd Hill High School requires roof replacement and Heritage requires CMU veneer wall replacement. See FCA pages 69,76,139&148
- 2030 Charlton Elementary requires masonry repair and sealing. Heritage requires boiler replacement. Shepherd Hill requires electrical distribution replacement. See FCA pages 33,42,73,79,145,&152
- 2031 Charlton Elementary requires new roof. Charlton Middle requires paving and sidewalk replacements. See FCA pages 33,42,101,&110
- 2033 Charlton Elementary requires paving replacement and electrical distribution replacement. Charlton Middle requires building management system. See FCA pages 31,40,41,45,108,&113
- 2035 Shepherd Hill High School requires paving and sitework improvements. Charlton Elementary requires sanitary drain piping replacement. See FCA pages 38,137,138,&147



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Charlton Elementary

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1.1 Drives and Walks: Paving is cracked and showing its age. Replace bituminous paving on existing base at drives, walks, and parking lots.	1995	\$481,195							\$481,195			
1.2 Bituminous Curbing: Bituminous curbs along the road are damaged. Replace bituminous curbing at entrances and parking lots.	1995	\$11,700							\$11,700			
1.3 Granite Curbing: Existing granite curbs are in good condition. Some sections need replaced/reset.	1995	\$960							\$960			
1.4 Concrete sidewalks: Concrete sidewalks are deteriorated and cracked. Replace with new concrete sidewalks.	1995	\$24,570							\$24,570			
1.5 Accessible Van Parking: Create one accessible van parking space.	1995	\$6,500							\$6,500			
1.6 Accessible Parking Identification: Add missing or replace broken signage at accessible parking spaces.	1995	\$1,300							\$1,300			
1.7 Accessible Curb Cuts: Provide curb cut at sidewalk to building entrance. Existing does not appear to have a proper side slope.	1995	\$2,600							\$2,600			
1.8 Site Lighting: There is no existing site lighting. Add pole-mounted site lights for improved night visibility.		\$62,400										\$62,400
1.9 Site Drainage: It was reported that water from the church parking lot is draining down to the old leeching field. As a result this area and the adjacent playground is always soggy. Conduct storm drainage study.		\$26,000							\$26,000			
1.10 Fencing: Chain link fences are generally in good condition with minor repairs/reset needed at the play area.	1995	\$33,605										\$33,605
1.11 Wood Fiber Playground Surfacing: Wood mulch is compacted and depleted. Remove and replace with poured in place rubber surfacing.		\$130,000										\$130,000
2.1 EPDM Roofs: The existing EPDM roofing membrane has been leaking and is at the end of its life expectancy. Replace with new PVC roofing system.	1988	\$2,611,050					\$2,611,050					
2.2 Metal Roof System: The existing metal standing seam roofing system is at the end of its life expectancy. Replace with new roofing system.	1988	\$84,500					\$84,500					
2.3 Damaged Masonry Walls: Replace cracked veneer brick and CMU block, about 3% to 4% of the entire 24,400 SF total exterior wall area.	1988	\$158,600				\$158,600						
2.4 Masonry Mortar Joints: Mortar joints are failing especially at CMU veneer. Repoint about 20% to 40% of the entire 24,400 SF total exterior wall area.	1988	\$585,000				\$585,000						
2.5 Masonry Joint Sealant: Remove deteriorated joint sealant at masonry wall and replace with new sealants and backer rods.	1988	\$13,650				\$13,650						



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Charlton Elementary

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.6 Staining and Efflorescence: Power wash and clean at various locations of the masonry veneer wall, approximately 70% to 80% of the 24,400 SF total wall areas.	1988	\$370,500				\$370,500						
2.7 Seal Masonry Walls: Clean the entire exterior wall and apply masonry primer and sealer.	1988	\$475,800				\$475,800						
2.8 Exterior Egress Doors: Some doors and frames are rusting at the bottom. Replace doors and frames.	1988	\$8,580						\$8,580				
2.9 Window Glazing: Existing windows are in fair condition. Some units need reglazing or replacement.	1988	\$1,625						\$1,625				
2.10 Window and Door Perimeter Sealants: Remove and replace deteriorated sealant joints with new sealant and backer rods.	1988	\$42,900						\$42,900				
2.11 Leaking Roof Drain at Interior Stair: Repair roof leaks.	1988	\$2,600	\$2,600									
3.1 Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new 2' x 4' ceiling system.	1988	\$338,624						\$338,624				
3.2 Cracking Gypsum Wall: Patch as needed and repaint.	1988	\$585						\$585				
3.3 Unsightly Painted Walls: Paint walls.	1988	\$1,950						\$1,950				
3.4 Worn Carpet: The original carpet is past its effective useful life. Replace with new carpet.	1988	\$166,608						\$166,608				
3.5 VAT Flooring: Abate VAT flooring and install new VCT.	1988	\$20,000										\$20,000
3.6 Cracking Masonry: Patch and repoint cracks and joints as needed.	1988	\$10,000										\$10,000
3.7 Inadequate Guardrail Height: Guardrails are too low. Add to existing or replace to height of 42".	1988	\$78,975										\$78,975
3.8 Sinks in Staff Rooms and Classrooms not ADA Compliant: Remove existing casework and counters at sink. Replace with new casework and countertop providing 30" min. wide kneespace access to sink.	1988	\$123,500										\$123,500
3.9 Interior Doors: Existing wooden classroom doors swell and become difficult to open.	1988	\$56,550	\$56,550									
3.10 Urinal Screens: Existing urinal partitions are significantly deteriorated and do not meet existing requirements, recommend replacing.	1988	\$15,000			\$15,000							
3.11 Student Desks & Chairs: Desks are beyond useful life. Replace with new	1988	\$90,000										\$90,000
4.1 Fire Sprinkler System: Building lacks a fire sprinkler system. Install a fire sprinkler system in all areas.		\$564,720										\$564,720
4.2 Exhaust Fans: Exhaust fans are beyond their useful service life expectancy. Replace existing exhaust fans.	1988	\$35,880	\$35,880									
4.3 Inaccessible Drinking Fountains: Install accessible drinking fountains.	1957	\$14,040										\$14,040



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Charlton Elementary

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
4.4 Boilers: Boilers are beyond their useful service life expectancy. Replace existing boilers.	1957 1988	\$650,000		\$650,000								
4.5 Heating System Distribution Piping: Piping is original and beyond useful service life expectancy. Replace all areas in 1957 building.	1957	\$352,950			\$352,950							
4.6 Circulator Pumps: Hot water circulating pumps are beyond their useful life expectancy. Replace pumps.	1988	\$39,910		\$39,910								
4.7 Building Management System: Facility lacks integrated HVAC controls and energy management system. Provide fully integrated BMS.	1957	\$705,900										\$705,900
4.8 Unit Ventilators: Unit ventilators are failing and beyond useful service life. Replace all units.	1957 1988	\$239,525			\$239,525							
4.9 Cooling Systems: Packaged rooftop units are beyond useful service life expectancy. Replace all.	1988	\$31,200			\$31,200							
4.10 Domestic Water Heater: Indirect boiler water heater is failing. Replace indirect heater with new.	1988	\$30,000	\$30,000									
4.11 Domestic Water Distribution Piping: Piping is original and beyond useful life expectancy. Replace all areas in 1957 building.	1957	\$352,950						\$352,950				
4.12 Sanitary Drain Piping: Piping is original and beyond useful service life expectancy. Replace all areas in 1957 building.	1957	\$1,411,800									\$1,411,800	
4.13 Plumbing Fixtures: Plumbing fixtures in 1957 building are original and non-accessible. Replace all with accessible fixtures.	1957	\$131,950								\$131,950		
4.14 Kitchen Exhaust Hood: Kitchen hood is non-functional and lacks a fire suppression system. Install new hood with Ansul system.	1988	\$162,500	\$162,500									
4.15 Kitchen Sink: 2-bay sink is non-compliant with health code. Replace with 3-bay sink.	1988	\$6,500	\$6,500									
4.16 Kitchen Counters: Butcher block tray slide is non-sanitary. Replace with NSF stainless steel.		\$6,500	\$6,500									
4.17 Back-flow Preventers at Chemical Mixers: Chemical mixers in janitorial closets are required to have backflow preventers.	1999	\$1,300	\$1,300									
5.1 Electric Distribution: 1957 building has original distribution panels and wiring. Replace panels and wiring, all areas.	1957	\$247,065							\$247,065			
5.2 Convenience Receptacles: Classrooms in original 1957 building have inadequate number of receptacles for electronic devices. Add receptacles at room perimeter.	1957	\$282,360							\$282,360			
5.3 Standby Generator: LP standby generator is approaching end of useful service life. Replace with new generator and transfer switch.	1988	\$195,000								\$195,000		
5.4 Fluorescent Lighting: T8 and T5 lighting is inefficient. Replace with LED.	2025	\$0										



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Charlton Elementary

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
5.5 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.	1988	\$60,000	\$60,000									
5.6 Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1957	\$352,950	\$352,950									
5.7 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.	1988	\$458,835								\$458,835		
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$364,500	\$750	\$43,250	\$750	\$750	\$72,750	\$43,250	\$750	\$750	\$200,750	\$750
TOTAL PROJECT COSTS		\$12,735,762	\$715,530	\$733,160	\$639,425	\$1,604,300	\$2,768,300	\$957,072	\$1,085,000	\$786,535	\$1,612,550	\$1,833,890

Key Points for Consideration

- 2030 Charlton Elementary requires masonry repair and sealing. See Facilities Condition Assessment(FCA) pages 33&42
- 2031 Charlton Elementary requires new roof. See FCA pages 33&42
- 2033 Charlton Elementary requires paving replacement and electrical distribution replacement. See FCA pages 31&40
- 2035 Charlton Elementary requires sanitary drain piping replacement. See FCA pages 38



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Heritage School

		Total Estimated Project Costs	Costs Incurred in Each Year									
Project Name	Year Installed		Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1.1 Drives and Walks: Paving is cracked and heavily deteriorated with potholes and heaves. Replace bituminous paving and base.	1989	\$1,322,750					\$1,322,750					
1.2 Bituminous Curbing: Bituminous curbing is damaged. Replace bituminous curbing at parking lots.	1989	\$176,800					\$176,800					
1.3 Precast Concrete Curbs: Remove and replace deteriorated concrete curb at various locations throughout the site.	1989	\$39,000					\$39,000					
1.4 Bituminous sidewalks: Bituminous sidewalks are heavily deteriorated and cracked, creating a safety hazard. Replace with new bituminous sidewalks.	1989	\$29,900					\$29,900					
1.5 Concrete sidewalks: Remove and replace deteriorated sections of the concrete sidewalks.	1989	\$157,950						\$157,950				
1.6 Concrete Stairs: Patch and repair spalling concrete and seal.	1989	\$6,500						\$6,500				
1.7 Accessible Van Parking: Create accessible van parking space.	1989	\$6,500					\$6,500					
1.8 Exterior Handrails: Exterior handrails are missing extensions, creating a safety hazard. Replace with new handrails.	1989	\$3,900										\$3,900
1.9 Catch Basin / Manhole: Rebuild sinking manhole and reset storm drainage cover.	1989	\$19,500					\$19,500					
1.10 Fencing: Fencing is generally in good condition. Repair/replace any damaged sections of the chain link fence.	1989	\$611						\$611				
1.11 Pea Gravel Playground Surfacing: Pea gravel is depleted. Remove and replace with poured in place rubber surfacing.	1989	\$6,500										\$6,500
1.12 Concrete Loading Dock: Remove and replace spalling concrete slab at the loading dock.	1989	\$14,040						\$14,040				
1.13 Parking Lot and Play Field Drainage: The drainage for these two areas appears to be inadequate. Conduct storm drainage study.	1989	\$39,000					\$39,000					
1.14 Septic System and Leaching Field: The system appears to be in working order. Perform routine maintenance.	1989	\$6,500										\$6,500
2.1 Membrane EPDM Roof System: Replace original existing EPDM roof with new PVC roof system.	1989	\$929,500		\$929,500								
2.2 Standing Seam Metal Roof System: Replace original existing metal roof with new PVC roof system.	1989	\$3,126,500		\$3,126,500								
2.3 Snow Guards: Replace snow guards as part of roofing replacement.	1989	\$16,250		\$16,250								
2.4 Skylight: The existing skylight is leaking. Repair and reseal.	1989	\$6,500		\$6,500								
2.5 Deteriorating CMU Veneer Walls: Remove existing CMU veneer, repair insulation and air & vapor retarder. Install new rainscreen wall cladding system.	1989	\$39,650,000			\$39,650,000							
2.6 Exterior Egress Doors and Sidelights: Doors and frames are rusting at bottom. Replace doors and frames	1989	\$83,200							\$83,200			



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Heritage School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.7 Exterior Doors Weather Stripping: Replace weather stripping, 90% of exterior doors.	1989	\$3,900							\$3,900			
2.8 Window Glazing: Repair and replace broken seals at window glazing.	1989	\$162,500							\$162,500			
2.9 Window and Door Perimeter Sealants: Remove all deteriorated sealant joints at existing openings and replace with new sealants and backer rods.	1989	\$68,250							\$68,250			
2.10 Masonry Joints Sealants: Remove and replace deteriorated sealants with new sealants and backer rods.	1989	\$29,250			\$29,250							
2.11 Accessible Concrete Ramp: Replace deteriorating concrete ramp.	1989	\$93,600						\$93,600				
2.12 Exterior Stairs: Remove existing stairs and replace with new cast-in-place.	1989	\$26,000						\$26,000				
2.13 Exterior Handrails: Replace/add new galvanized steel handrails.	1989	\$1,560						\$1,560				
2.14 Paint Underside of Exposed Roof Deck: Prepare, prime and paint underside of metal roof deck and beams.	1989	\$39,000								\$39,000		
2.15 CMU Retaining Wall at Exterior Stair and Ramps: Replace deteriorating retaining walls.	1989	\$36,400								\$36,400		
2.16 Greenhouse Structure: Attached greenhouse has extensive waterproofing failure. Greenhouse is no longer in use. Recommend removing in its entirety.	1989	\$26,000								\$26,000		
3.1 Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new 2' x 4' ceiling system.		\$204,360								\$204,360		
3.2 Peeling and damaged paint: Remove existing flaking paint and repaint.		\$16,640								\$16,640		
3.3 Unsightly Exposed Entry Ceiling: Remove degrading paint and repaint.		\$2,925								\$2,925		
3.4 Worn Carpet: The original carpet is past its effective useful life. Replace with new carpet.		\$357,794							\$357,794			
3.5 VCT Flooring: VCT flooring is worn and beyond its useful life. Remove and install new VCT.		\$124,800							\$124,800			
3.6 Ceramic Tile Flooring: Tile flooring is worn or cracked and beyond its useful life. Remove and install new tile floor.		\$18,720							\$18,720			
3.7 Terrazzo Floor: Visible cracks at rear vestibule.		\$104							\$104			
3.8 Synthetic Gym Floor: Floor is worn and beyond its useful life. Remove and replace with new flooring.		\$158,600							\$158,600			
3.9.1 ADA Toilet Partitions: Install accessible toilet partitions.		\$23,400						\$23,400				
3.9.2 Standard Toilet Partitions: Install accessible toilet partitions.		\$37,440						\$37,440				
3.9.3 Urinal Screen: Install accessible toilet partitions.		\$11,830						\$11,830				
3.10 Inadequate Guardrail Design and height: Guardrails are mounted too low and are missing 12" extensions at top and bottom.		\$65,520						\$65,520				



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Heritage School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
3.11 Sinks in Staff rooms and classrooms not ADA compliant: Remove existing casework and counters at sink. Replace with new casework and countertop providing 30" min. wide kneespace access to sink.		\$133,380						\$133,380				
3.12 Interior Doors into stairwells: Damaged door frames do not close or have difficulty closing. Recommend replacing.		\$7,800						\$7,800				
4.1 Fire Sprinkler System: Building lacks a fire sprinkler system. Install a fire sprinkler system in all areas.		\$902,512								\$902,512		
4.2 Exhaust Fans: Exhaust fans are beyond their useful service life expectancy. Replace existing exhaust fans.	1987	\$26,910						\$26,910				
4.3 Boilers: Boilers have cracked sections and are beyond their useful service life expectancy. Replace boilers with new.	1987	\$1,040,000				\$1,040,000						
4.4 Circulator Pumps: Hot water circulating pumps are beyond their useful life expectancy. Replace pumps.	1987	\$79,820				\$79,820						
4.5 Cooling Tower: Cooling tower is failing. Replace with new unit and pumps.	1987	\$325,000	\$325,000									
4.6 Heat Pumps: Heat pumps are failing and beyond useful service life. Replace with new units.	1987	\$609,700	\$609,700									
4.8 Mechanical Room Tank: Tank is corroded. Replace with new.	1987	\$32,500	\$32,500									
5.1 Standby Generator: Standby generator is approaching end of useful service life. Replace with new generator and transfer switch.	1987	\$195,000										\$195,000
5.2 Fire Alarm System: Upgrade fire alarm devices, 11 zones.	1987	\$155,123								\$155,123		
5.3 Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1987	\$564,070									\$564,070	
5.4 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.		\$733,291									\$733,291	
6.1 John Deere 4700 Tractor w/mower & plow	2000											
6.2 John Deere Z915E Zero Turn Mower	2017											
6.3 Commodore Duo Carpet Machine	2013											
6.4 Cub Cadet 36" Snow Blower	2010											
6.5 Kent Floor Scrubber	2000	\$25,000	\$25,000									
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$459,700	\$1,750	\$13,750	\$13,750	\$49,350	\$100,750	\$13,750	\$13,750	\$49,350	\$201,750	\$1,750



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Heritage School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
TOTAL PROJECT COSTS		\$52,439,800	\$993,950	\$4,092,500	\$39,693,000	\$1,169,170	\$1,734,200	\$620,291	\$991,618	\$1,432,310	\$1,499,111	\$213,650

Key Points for Consideration

- 2027 Heritage requires replacement of cooling system. See Facilities Condition Assessment(FCA) pages 73&79
- 2028 Heritage requires roof replacement. See FCA pages 69&76
- 2029 Heritage requires CMU veneer wall replacement. See FCA pages 69&76
- 2030 Heritage requires boiler replacement. See FCA pages 73&79



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Charlton Middle School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1.1 Drives and Walks: Paving is cracked and heavily deteriorated with potholes and heaves. Replace Bituminous Paving and base.	1998	\$2,187,900					\$2,187,900					
1.2 Granite Curbing: Existing granite curbs are in good condition. Some sections need replaced/reset.	1998	\$2,665					\$2,665					
1.3 Bituminous Curbing: Bituminous curbing is damaged. Replace bituminous curbing at parking lots.	1998	\$384,800					\$384,800					
1.4 Bituminous Sidewalks: Bituminous sidewalks are deteriorated and cracked. Replace with new bituminous sidewalks.	1998	\$110,500					\$110,500					
1.5 Concrete Sidewalks: Remove and replace deteriorated sections of the concrete sidewalks.	1998	\$35,100					\$35,100					
1.6 Catch Basin / Manhole: Some catch basins/manholes are in fair condition but need adjustment.	1998	\$32,500					\$32,500					
1.7 Accessible Parking Identification: Add missing or replace broken signage at accessible parking spaces.	1998	\$10,400					\$10,400					
1.8 Drainage Issue at Parking lot: The drainage appears to be inadequate. The maintenance staff indicated snow/ice build-up. This could accelerate the deterioration of the bituminous parking lot. Conduct storm drainage study.	1998	\$26,000					\$26,000					
1.9 Drainage Issue at Unenclosed Courtyard: The existing grade does not provide enough slope to drain away from the building. Install a French drain along the perimeter wall and drain to a retention pond.	1998	\$39,000				\$39,000						
1.10 Fencing: Fencing is generally in good condition. Some sections need repair/replacement.		\$12,220										\$12,220
2.1 Staining and Efflorescence: Power wash and clean at various locations of the masonry veneer wall, approximately 5% to 10% of 65,200 SF total.	1998	\$127,140										\$127,140
2.2 Exterior Egress Doors: Some doors and frames are rusting at the bottom. Replace doors and frames.	1998	\$21,450										\$21,450
2.3 Exterior Doors Weather Stripping: Replace weather stripping on exterior doors.	1998	\$4,680										\$4,680
2.4 Window glazing: Existing windows are in fair condition. Some units need reglazing or replacement.	1998	\$32,500										\$32,500
2.5 Window and Door Perimeter Sealants: Remove and replace failing sealant joints with new sealants and backer rods.	1998	\$107,250										\$107,250
2.6 Masonry Joints Sealants: Remove and replace failing sealant joints with new sealants and backer rods.	1998	\$120,900										\$120,900



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Charlton Middle School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.7 Water Infiltration at Masonry Wall: It was reported that the leak occurred during a wind-driven rain. Per existing details, the wind-driven rain appears to enter the wall at the louver and drops or travels along the perimeter beam before dropping at a low point. Replace louver with storm resistant louver.	1998	\$118,560										\$118,560
3.1 Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new 2' x 4' ceiling system in kitchen.		\$22,880									\$22,880	
3.2 Unsightly Gym Ductwork: Existing paint is flaking off. Repaint.		\$12,480									\$12,480	
3.3 Worn Carpet: The original carpet is past its effective useful life. Replace with new carpet.	1998	\$634,959									\$634,959	
3.4 VCT Flooring: VCT flooring is worn and has begun lifting in some places. Remove and install new VCT.	1998	\$63,134		\$63,134								
3.5 Terrazzo Floor: Existing Terrazzo Floor is Cracked. Patch and repair.	1998	\$354		\$354								
3.6 Classroom AV Equipment: Classrooms use outdated CRT screens. Recommend replacing.	1998	\$156,000								\$156,000		
3.7.1 Accessible Toilet Partitions: Existing toilet partitions are significantly deteriorated. Recommend replacing.	1998	\$28,080								\$28,080		
3.7.2 Standard toilet partitions: Existing toilet partitions are significantly deteriorated. Recommend replacing.	1998	\$45,760								\$45,760		
3.7.3 Urinal Screens: Existing urinal partitions are significantly deteriorated and do not meet existing requirements. Recommend replacing.	1998	\$13,520								\$13,520		
3.8 Interior Casework and Sinks: Most sinks in staff locations and classrooms do not meet ADA requirements. Modify existing casework at these locations to meet requirements and replace existing sink with new sink.	1998	\$286,520								\$286,520		
4.1 Exhaust Fans: Rooftop Exhaust fans are beyond expected useful service life. Replace exhaust fans.	1999	\$134,550									\$134,550	
4.2 Back-flow Preventers at Chemical Mixers: Chemical mixers in janitorial closets are required to have backflow preventers.	1999	\$9,000				\$9,000						
4.3 Inaccessible Drinking Fountains in Gym: Install accessible drinking fountains.	1998	\$28,080				\$28,080						
4.4 Boilers: All boilers have replacement sections and are approaching end of expected useful service life. Replace existing boilers.	1999	\$1,560,000			\$1,560,000							
4.5 Chiller & Circulating Pumps: Chiller & Circulating pumps are end of expected useful service life. Replace pumps.	1999	\$275,000	\$275,000									
4.6 ACCU-1: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$19,500	\$19,500									
4.7 ACCU-2: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$20,800	\$20,800									



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Charlton Middle School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
4.8 ACCU-3: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$8,450	\$8,450									
4.9 ACCU-4: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$39,000	\$39,000									
4.10 ACCU-5: Air Cooled Condensing Unit is failing and beyond end of useful service life. Replace unit.	1999	\$32,500	\$32,500									
4.11 Building Management System: Facility lacks integrated HVAC controls and energy management system. Provide fully integrated BMS.	1999	\$2,654,639							\$2,654,639			
4.12 Fire Pump: Water pressure is inadequate. Replace pump.	1999	\$65,000				\$65,000						
4.13 Fire Protection Storage Tank: Tank is failing. Replace tank.	1999	\$97,500				\$97,500						
4.14 Elevator: Replace faulty safety switch.	2024	\$0										
5.1 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.	1999	\$70,000		\$70,000								
5.2 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.	1999	\$1,725,516						\$1,725,516				
5.3 Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1999	\$1,327,320					\$1,327,320					
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$697,800	\$5,000	\$5,000	\$17,000	\$84,900	\$245,000	\$5,000	\$17,000	\$84,900	\$229,000	\$5,000
TOTAL PROJECT COSTS		\$13,401,907	\$400,250	\$138,488	\$1,577,000	\$323,480	\$4,362,185	\$1,730,516	\$2,671,639	\$614,780	\$1,033,869	\$549,700

Key Points for Consideration

- 2029 Charlton Middle requires new boilers and circulator pumps. See Facilities Condition Assessment(FCA) pages 107 & 113
- 2031 Charlton Middle requires paving, sidewalk, and paging/timeclock replacements. See FCA pages 101,109,110,&114
- 2032 Charlton Middle requires installation of security system. See FCA pages 109,&114
- 2033 Charlton Middle requires building management system. See FCA pages 108,&113



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Shepherd Hill High School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1.1 Drives and Walks: Paving is cracked and deteriorated with potholes and heaves. Replace bituminous paving and base.		\$1,658,800									\$1,658,800	
1.2 Granite Curbing: Existing granite curbs are in fair to poor condition. Some areas need to be replaced/reset.		\$53,300									\$53,300	
1.3 Bituminous Curbing: Bituminous curbing is damaged. Replace bituminous curbing at parking lots.		\$46,800									\$46,800	
1.4 Bituminous sidewalks: Bituminous sidewalks are deteriorated and cracked. Replace with new bituminous sidewalks.		\$91,000									\$91,000	
1.5 Catch Basin / Manhole: Some catch basins/manholes are in fair condition but need adjustment.	1998	\$16,250									\$16,250	
1.6 Basketball Court: The basketball courts are in fair to poor condition. Patch and repair.	1998	\$21,840									\$21,840	
1.7 Tennis Courts: The tennis courts are in fair to poor condition. Patch and repair.	1998	\$49,400									\$49,400	
1.8 Fencing: Fencing is generally in good condition. Some sections need repair/replacement.		\$3,055									\$3,055	
1.9 Accessible Parking Identification: Add signage at accessible parking spaces.		\$9,100									\$9,100	
1.10 Drainage Issue at Play Fields: The drainage appears to be inadequate. Conduct storm drainage study.		\$26,000									\$26,000	
2.1 Modified Bitumen Roofing: The existing roof is at the end of its life expectancy. Replace with new PVC roofing system.	1998	\$10,140,000			\$10,140,000							
2.2 Staining and Efflorescence: Power wash and clean at various locations of a brick veneer masonry wall, approximately 40% to 50% of 62,000 SF.		\$604,500								\$604,500		
2.3 Damaged Brick Veneer: There is damaged brick veneer throughout the exterior walls. Replace with new.		\$26,000								\$26,000		
2.4 Damaged Masonry Mortar Joints: There are damaged masonry mortar joints throughout the exterior walls. Replace with new.		\$23,400								\$23,400		
2.5 Deteriorating Steel Lintels: Some lintels at exterior doors are rusting and sagging and need to be replaced.	1973	\$31,850								\$31,850		
2.6 Exterior Egress Doors: Doors and frames are rusting at the bottom. Replace frames and doors.	1973 2012	\$42,900								\$42,900		
2.7 Exterior Doors Weather Stripping: Replace weather stripping on 90% of exterior doors.	2012	\$102,050								\$102,050		
2.8 Window Balancing System: Window balancing has failed and windows are hard to open. Replace with new balancing system.	2012	\$32,500								\$32,500		
2.9 Window Glazing: Repair and replace glazing at windows with a broken seal.	2012	\$32,500								\$32,500		



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Shepherd Hill High School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
2.10 Window and Door Perimeter Sealants: Remove and replace deteriorated sealant joints with new sealants and backer rods.	2012	\$73,125								\$73,125		
2.11 Masonry Joints Sealant: Remove and replace failing sealant joints with new sealants and backer rods.		\$19,500								\$19,500		
2.12 Water Infiltration at Unit Ventilation: Replace louver with storm resistant louver.		\$31,200								\$31,200		
2.13 Concrete Loading Dock: Loading dock is in poor condition. Remove and replace bituminous apron with concrete.		\$9,360								\$9,360		
3.1 Unsightly 2' x 4' ACT Ceilings: Replace sagging / stained suspended acoustic ceiling with new 2' x 4' ceiling system.		\$93,600								\$93,600		
3.2 Unsightly Painted Walls: Paint walls.		\$2,600								\$2,600		
3.3 Stair Treads: Replace damaged or missing stair treads.		\$48,048								\$48,048		
3.4 VCT Flooring: VCT flooring is worn and beyond its useful life. Remove and install new VCT.		\$468								\$468		
3.5 Synthetic Gym Floor: Floor is worn and beyond its useful life. Remove and replace with new flooring.		\$104,000								\$104,000		
3.6 Urinal Screen: Install accessible toilet partition screens.		\$27,040								\$27,040		
3.7 Non-ADA single occupant restrooms: Modify to meet accessibility guidelines.		\$97,500								\$97,500		
3.8 Inadequate Guardrail Design: Guardrails mounted too low and missing extensions. Replace to meet guidelines.		\$252,720									\$252,720	
3.9 Classroom Door Approach: Additional lockers have been added in the hallways outside of classrooms resulting in ADA approach clearance issues. Recommend removing 1 to 2 lockers to provide clearance.		\$2,600							\$2,600			
3.10 Classroom door approach: Doors and walls have been placed in such a way as to not provide enough clearance as required by accessibility guidelines.		\$65,000							\$65,000			
3.11 Sinks in Staff Rooms and Classrooms not ADA Compliant: Remove existing casework and counters at sink. Replace with new casework and countertop providing 30" min. wide kneespace access to sink.		\$98,800							\$98,800			
3.12 Unsightly Finishes in Restrooms: Provide new finishes.		\$585,000							\$585,000			
3.13 Doors and Hardware: Doors have inconsistent, or missing hardware.		\$6,240							\$6,240			
4.1 Fire Sprinkler System: Building lacks a complete fire sprinkler system. Install a fire sprinkler system in all areas.	1973	\$1,926,892										\$1,926,892
4.2 Boilers: Boilers are original equipment and are beyond expected useful service life. Replace boilers.	1973	\$1,040,000	\$1,040,000									
4.3 Circulation Pumps: Hot water circulation pumps are beyond expected useful service life. Replace pumps.	1973	\$59,865	\$59,865									



Dudley Charlton Regional School District

2027-2036 Capital Improvement Plan

Shepherd Hill High School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
4.4 Piping: Copper hot water piping is corroded and leaking. Replace piping all areas.	1973	\$1,204,307					\$1,204,307					
4.5 Unit Ventilators: Unit ventilators are beyond expected useful service life. Replacement parts no longer available. Replace unit ventilators at classrooms.	1973	\$816,563	\$816,563									
4.6 Exhaust Fans: Rooftop exhaust fans are beyond expected useful service life. Replace exhaust fans.	1973	\$107,640						\$107,640				
4.7 Building Management System: Pneumatic temperature controls are obsolete. Replacement parts no longer available. Facility lacks integrated HVAC controls and energy management system. Provide fully integrated BMS.	1973	\$2,408,614		\$2,408,614								
4.8 Lab Waste Neutralization: Laboratory sink drains not equipped with acid neutralization. Add chip tanks to each lab sink.	1973	\$109,200							\$109,200			
4.9 Nurse Office Toilets: Toilets are not accessible. Renovate toilet rooms with accessible fixtures.	1973	\$52,000							\$52,000			
4.10 Toilet Rooms: Toilet rooms are not accessible. Renovate toilet rooms with accessible fixtures.	1973	\$364,000							\$364,000			
4.11 Kitchen Equipment: Approximately 60% of kitchen equipment is original. Replace with new equipment.	1973	\$455,000							\$455,000			
4.12 Lab Sinks: Laboratory sinks are not accessible. Replace sinks with accessible units.	1973	\$9,750							\$9,750			
4.13 Back-flow Preventers at Chemical Mixers: Chemical mixers in janitorial closets are required to have backflow preventers.	1973	\$4,550							\$4,550			
5.1 Switchgear: Electric switchgear is original Federal Pacific equipment and a known fire hazard. Replace switchgear with new equipment.	1973	\$1,204,307				\$1,204,307						
5.2 Electric Distribution: Electrical distribution panels are original Federal Pacific equipment and a known fire hazard. Replace distribution panels with new.	1973	\$843,015				\$843,015						
5.3 Phone System: Phone system is obsolete technology. Upgrade system with VOIP.		\$78,000					\$78,000					
5.4 Security System: Upgrade security system with integrated electronic security system consisting of intrusion, card access, and CCTV.		\$1,565,600						\$1,565,600				
5.5 Paging/Timeclock System: Existing systems are non-integrated, unsynchronized and obsolete. Replace with new integrated system.	1973	\$1,204,307						\$1,204,307				
5.6 Lighting: Upgrade fluorescent lighting to LED.	2025	\$0										
5.7 Fire Alarm: Heat detectors are original and obsolete. Replace with new.	1973	\$130,000					\$130,000					



Dudley Charlton Regional School District 2027-2036 Capital Improvement Plan Shepherd Hill High School

Project Name	Year Installed	Total Estimated Project Costs	Costs Incurred in Each Year									
			Future Plan Years									
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
5.8 Standby Power: Circulator pumps and boilers are switched manually to generator. Add automatic transfer to standby power.	1973	\$60,000					\$60,000					
Football Field and Track: Field is due for maintenance and repairs	2014	\$40,000					\$40,000					
7.1 IT Network Infrastructure: Replace servers, UPS's, wireless access points, network switches and network cables (ethernet and fiber)		\$845,000	\$6,000	\$6,000	\$18,000	\$108,000	\$315,000	\$6,000	\$18,000	\$108,000	\$254,000	\$6,000
TOTAL PROJECT COSTS		\$29,056,656	\$1,922,428	\$2,414,614	\$10,158,000	\$2,155,322	\$1,827,307	\$2,883,547	\$1,770,140	\$1,510,141	\$2,482,265	\$1,932,892

Key Points for Consideration

- 2027 Shepherd Hill High School requires new boilers. See Facilities Condition Assessment(FCA) pages 143 & 151
- 2028 Shepherd Hill High School requires a building management system. See FCA pages 143 & 151
- 2029 Shepherd Hill High School requires roof replacement. See FCA pages 139 & 148
- 2030 Shepherd Hill High School requires new electrical switchgear and distribution. See FCA pages 145 & 152
- 2032 Shepherd Hill High School requires new security system and paging/timeclock system. See FCA pages 145 & 152