Master Facility Plan Update

March 24, 2026





Today's Presenters

Jennifer Costanzo
STR Partners

Michael Arensdorff
Chief Operations & Technology Officer

Agenda

Brief Overview of Current Status
Reminder on 2026 work
FAC Update & Next Steps



Scope Generation and Prioritization

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ITEM GENERATION

Work items have been generated through the following activities:

- Health & Life Safety Surveys
- Facility Assessment Surveys
- D97 School Staff and Building Engineer Requests
- Space Utilization Plan Surveys with Principals and PTO

MFP GUIDING PRINCIPLES

- **Critical Infrastructure** Needs
- ISBE **Health and Life Safety** Requirements
- **Safety & Security**
- **Sustainability** Task Force
- **Educational Spaces** are Aligned with Curriculum

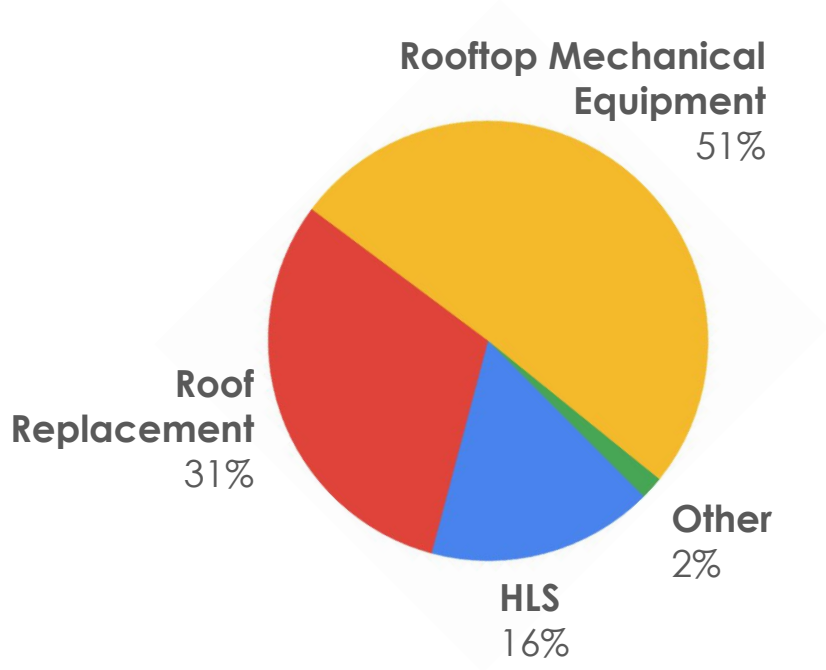
PRIORITIES LEGEND

Priorities Legend	*Please note that priorities are not tied to a specific year of work.*
1	Critical - Immediate 1st Year into the Building (has to happen in the first 5 years)
2	Preferred to be addressed along with other Priority 1 items if budget allows. Otherwise include in 2nd round
3	2nd Round of work at a facility - Good objective to be addressed within the 10 year plan; or at a minimum investigated further for decision on inclusion in plan
4	Items that do not require immediate attention or replacement. OR Items related to how spaces are used within a facility that may not require an architectural solution
D97 Internal	Minor items to be addressed internally with D97 staff within appropriate time lines.

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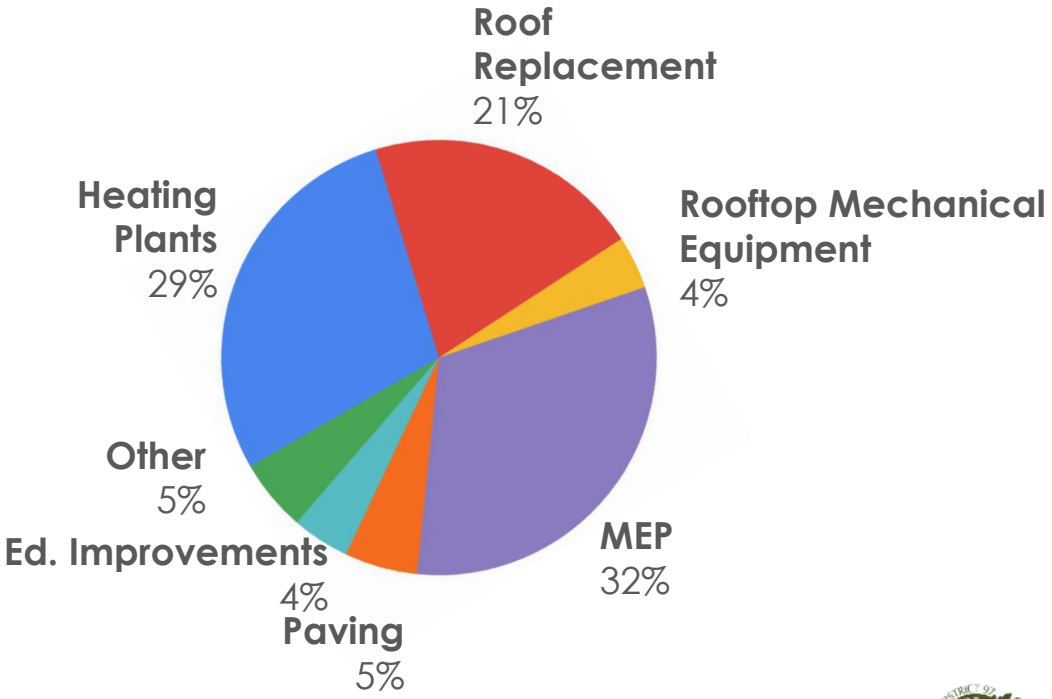
PRIORITY 1 BREAKDOWN

Rooftop Mech. Equip.:	$17,653,613
Roof Replacement:	$10,850,343
HLS a/b Items:	$5,791,502
Other:	$593,106
Totals:	$34,888,564



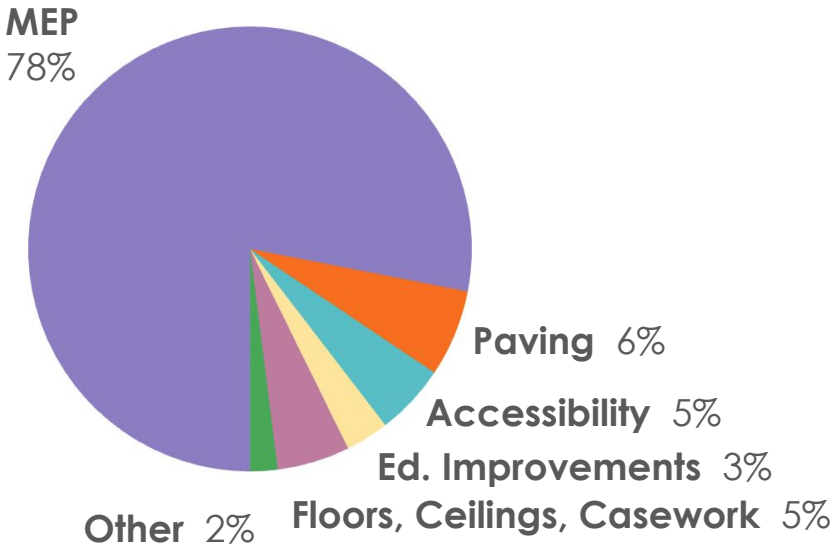
PRIORITY 2 BREAKDOWN

Heating Plants:	$2,550,208
Roof Replacement:	$1,827,661
Rooftop Mech. Equip.:	$351,028
Mech, Elec., Plumbing:	$2,837,445
Site Work/Paving:	$483,064
Ed. Improvements:	$382,567
Other:	$477,362
Totals:	$8,909,335



PRIORITY 3 BREAKDOWN

Mech, Elec., Plumbing:	$31,269,111
Site Work/Paving:	$2,543,177
Floors, Ceilings, Cswk:	$2,136,043
Accessibility:	$2,084,043
Ed. Improvements:	$1,472,536
Other:	$805,400
Totals:	$40,310,310



ADDITIONAL SCOPE CONSIDERATIONS

Additional Scope Considerations require direction from D97 for inclusion in the plan, or to put on hold for the next round of planning. *(The plan is a living document.) These are in addition to the costs included in Recommendation C.*

- Replace interior lighting with new **LED Lighting** system including occupancy sensors, daylight dimming, and controls.
- Provide **Air Conditioning** for instructional spaces
  - AC units only vs. AC and Light n' Bright
- Provide **Elevators** at Hatch and Mann
- **Electrification** of all D97 facilities
  - Phased Approach vs. Full Electrification
- **Solar RFP** - Brooks, Julian, adder sites - Beye & Irving

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Mechanical System Options

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Mechanical System Options

- **The Master Plan assumes a like-for-like replacement of the failing equipment of the HVAC system.**
  - New equipment will be more efficient than what is being replaced.
- **Alternative systems to advance D97's sustainability goals should be considered at this phase**
  - Used Julian MS as the test case
- **Each have pros and cons with varying:**
  - First costs
  - Impact on sustainability
  - Maintenance requirements
  - Operational costs
  - Disruption of existing building for installation

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Mechanical System Options

Description of Options

- Baseline: Direct System Replacement/Upgrade
- Option 1: Geothermal Heating and Cooling System
- Option 2: Variable Refrigerant Flow and Dedicated Outdoor Air
- Option 3: Heat Pump Chiller and Roof Mounted AHUs
- Option 3A: Heat Pump Chiller and Roof Mounted AHUs Plus Electric Boilers
- Option 3B: Heat Pump Chiller and Roof Mounted AHUs Plus Electric Terminal Equipment
- Option 4: Heat Pump Rooftop Units (RTUs) with Gas Heat

Mechanical System Options

Options were evaluated with the following metrics:

- Total Energy Cost
- Annual Maintenance Cost
- Equipment and installation cost
    - Reconciled with costs already included in the Master Plan
- Simple Payback (years)
- Return on Investment
- Annual GHG Emissions

Mechanical System: FAC Recommendation

Recommendation: Proceed with like-for-like replacement of failing equipment

- **Factors influencing recommendation**
  - None of the options allowed us to remain fiscally responsible and achieve the sustainability policy goals
    - i.e. Geothermal system provides 40% savings in GHG costs $20M - Julian only
  - Annual and operational costs (utilities & maintenance)
  - Total cost of ownership

- **Key Points:**
  - Recommendation holds for Brooks and Julian
  - Annually review options for Elem. Schools striving toward sustainability policy
    - Improved equipment efficiency
    - Pivot to a different system (electric boilers?)
  - Prefer to divert the premium to projects with a bigger impact and lower cost (i.e. onsite solar, LED lighting, controls)



FAC/Admin Recommendation

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Recommendation C

Complete Priority 1 and 2 *(2026 thru 2030)*

	2026	2027	2028	2029	2030	
Schools Affected	All Schools	Mann ES Julian MS	Beye ES Hatch ES Brooks MS	Holmes ES Irving ES Whittier ES	Lincoln ES Longfellow ES	Totals
Priority 1	$5,380,554	$9,324,019	$10,317,748	$5,887,153	$3,979,090	**$34,888,564**
Priority 2	$0	$3,239,053	$4,327,152	$1,341,900	$1,230	**$8,909,335**
Priority 3	$0	$0	$0	$0	$0	**$0**
Totals	**$5,380,554**	**$12,563,072**	**$14,644,900**	**$7,229,053**	**$3,980,320**	**$43,797,899**

Complete Priority 3 *(2031 thru 2035)*

	2031	2032	2033	2034	2035	
Schools Affected	Irving ES Mann ES	Hatch ES Brooks MS	Whittier ES Julian MS	Beye ES Lincoln ES	Holmes ES Longfellow ES	Totals
Priority 1	$0	$0	$0	$0	$0	**$0**
Priority 2	$0	$0	$0	$0	$0	**$0**
Priority 3	$8,423,761	$6,805,276	$5,826,638	$9,842,392	$9,412,243	**$40,310,310**
Totals	**$8,423,761**	**$6,805,276**	**$5,826,638**	**$9,842,392**	**$9,412,243**	**$40,310,310**

STR/D97 to annually review the scope and adjust priorities in accordance with current needs. These are forecasts with today's knowledge, and will be reassessed annually.

ADDITIONAL SCOPE RECOMMENDATIONS

Additional Scope Considerations require direction from D97 for inclusion in the plan, or to put on hold for the next round of planning. *(The plan is a living document.) These are in addition to the costs included in Recommendation C.*

- Replace interior lighting with new **LED Lighting** system including occupancy sensors, daylight dimming, and controls.
- Provide **Elevators** at Hatch and Mann

<u>Additional Details to Come for April 14 - Proposals due March 27</u>

- **Solar RFP** - Brooks, Julian, adder sites - Beye & Irving

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ADDITIONAL SCOPE NOT RECOMMENDED

Additional Scope not being recommended:

- Provide **Air Conditioning** for instructional spaces
  - AC units only vs. AC and Light n' Bright
- **Electrification** of all D97 facilities
  - Phased Approach vs. Full Electrification

FUTURE MFP/SUSTAINABILITY INCREMENTAL ACTIONS

- **Mechanical Modernization:** Upgrade gas/electric systems with integrated smart controls.
- **Data-Driven Decisions:** Leverage current insights to adapt to the evolving energy landscape & decision points
- **Operational Sustainability:** Streamline energy contracts and systemic management to reduce costs.
- **Renewable Integration:** Install on-site solar during scheduled roof replacements.

*Leverage annual review of the plan to determine if there are tweaks (i.e. Julian roof)



MFP - Next Actions

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Master Facility Plan Next Actions

Next Update: April 14 - Presentation: **Financial update from D97/FORC** with FAC recommendations & long-term financial projections update;

Decisions: BOE feedback on recommendations and financial plans

BOE Approval: April 28, 2026 -

1. Approval of 10 year Master Facilities plan
2. Approval to move forward on summer 2027 work
3. Approval of financial commitment/plan - $86M over 10 years

QUESTIONS?



APPENDIX

Mechanical Systems
Advantages and Disadvantages

Mechanical System Options

Base Option - Direct System Replacement

- **Advantages**
  - Least intrusive - direct replacement of existing equipment and no retrofit of heating system
  - Maintenance staff knows the system
  - Replacement of equipment as units fail - does not need to be done at once.
- **Disadvantages**
  - Does not support District's sustainability goals
- **Service Life**
  - 20 years

Mechanical System Options

Option 1 - Geothermal with Direct Outdoor Air System (DOAS)

- **Advantages**
  - Supports District's sustainability goals
  - Lowest annual operating cost
  - Grants and rebates are available
  - Not totally proprietary
- **Disadvantages**
  - Potential limitations for a well field
  - Highest initial cost
  - Most disruptive to install
- **Service Life**
  - Well field - 50 years
  - Equipment - 20 years

Mechanical System Options

Option 2 - VRF and DOAS

(Variable Refrigerant Flow and Dedicated Outdoor Air System)

- **Advantages**
  - Supports District's sustainability goals
  - Less disruptive to existing ceilings to install
  - System may be phased in over time
- **Disadvantages**
  - System is completely proprietary
  - Requires multiple roof penetrations
  - Tight design tolerances requiring a skilled installing contractor
- **Service Life**
  - VRF System - 15 to 20 years
  - Dedicated Outdoor System - 15 to 20 years

Mechanical System Options

Option 3 - Heat Pump Chiller and Roof Mounted AHUs

(Air Handling Units)

- **Advantages**
  - First step toward District's Sustainability Goals
  - Most work is on the roof - minimum disruption inside the building
  - System may be phased in over time
- **Disadvantages**
  - System is not as efficient as others
  - Requires either SF in building or roof mounted "pump house"
  - May require structural reinforcement
- **Service Life**
  - Heat pump chiller - 20 years
  - Roof mounted AHUs - 15 to 25 years
  - Secondary heat source - 20 years

Mechanical System Options

Option 3A - Heat Pump Chiller and Roof Mounted AHUs and Electric Boilers

- **Advantages**
  - Supports District's Sustainability Goals without full HVAC system replacement
  - Most work is on the roof - minimum disruption inside the building
  - System may be phased in over time
- **Disadvantages**
  - System is not as efficient as others
  - Requires either SF in building or roof mounted "pump house"
  - May require structural reinforcement
- **Service Life**
  - Heat pump chiller - 20 years
  - Roof mounted AHUs - 15 to 25 years
  - Electric Boilers - 15 to 25 years

Mechanical System Options

Option 3B - Heat Pump Chiller and Roof Mounted AHUs and Electric Terminal Equipment

- **Advantages**
  - Supports District's Sustainability Goals without full HVAC system replacement
  - System may be phased in over time
- **Disadvantages**
  - System is not as efficient as others
  - Requires either SF in building or roof mounted "pump house"
  - Major disruption throughout building
  - May require structural reinforcement
- **Service Life**
  - Heat pump chiller - 20 years
  - Roof mounted AHUs - 15 to 25 years
  - Electric fan powered boxes - 15 to 25 years

Mechanical System Options

OPTION 3 - Possible Path to more Sustainable Option:

- **Implement Option 3**
  - When existing boilers fail



- **Implement Option 3A**
  - When existing fan powered boxes fail



- **Implement Option 3B**

Mechanical System Options

Option 4 - Heat Pump RTU with Gas Heat

- **Advantages**
  - Direct replacement of equipment utilizing heat pumps
  - Maintenance staff knows the system
  - Can be phased in one RTU at a time
  - 2nd least intrusive installation
- **Disadvantages**
  - Supports sustainability goals at a lower level
- **Service Life**
  - 20 years

Scope Generation and Prioritization

ITEM GENERATION

Developed in collaboration with D97 Stakeholders, including:

- Teachers, Staff, Students, and Principals
- Administrative Team and Leadership
- Facilities Advisory Committee
- Parent Teacher Organization
- Cross-Agency Sustainability Exchange (CASE)

PRIORITIZATION SUMMARY

PRIORITY 1

Urgent Health and Life Safety items - Health and Life Safety code violations that are ISBE required to be corrected (HLS priority "a" and "b").

Critical Infrastructure Improvements including roofs, old mechanical equipment, exterior wall repairs, deteriorated stair treads

Must be addressed within 5 years.

PRIORITY 2

Next round of infrastructure needs heating plant replacement, roof areas not yet addressed, floor finishes, indoor air quality, hardscape.

Recommended to be addressed within 5 years. These items will likely become critical if not addressed.

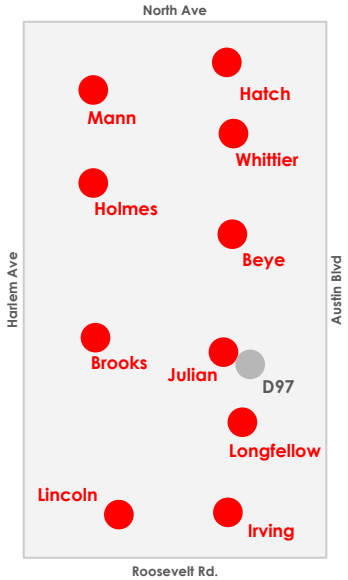
PRIORITY 3

Space improvements to enhance educational spaces including site improvements, MEP updates, casework, educational environment improvements, accessible upgrades, flooring, ceilings.

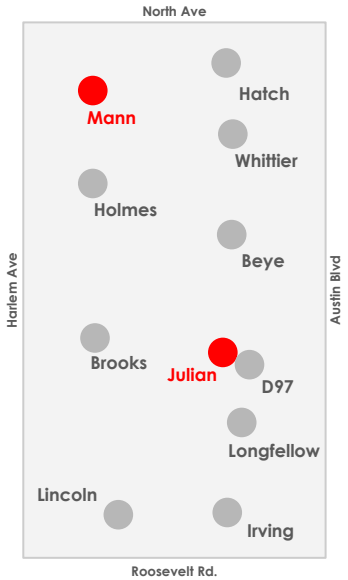
Recommended to be addressed within the 10 year plan.

PROPOSED SUMMER WORK SCHEDULE

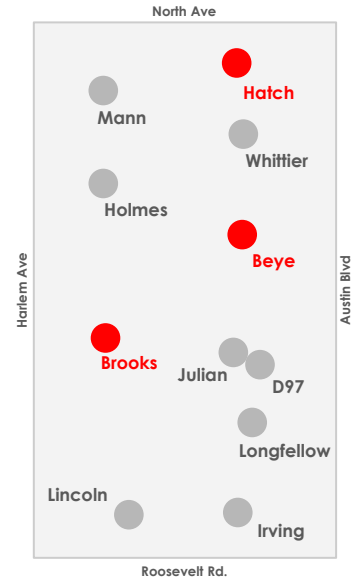
2026
All Schools



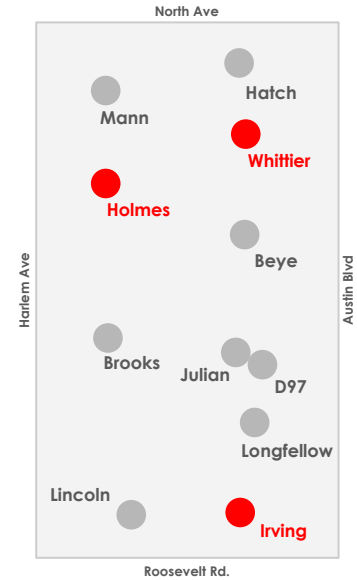
2027
Julian, Mann



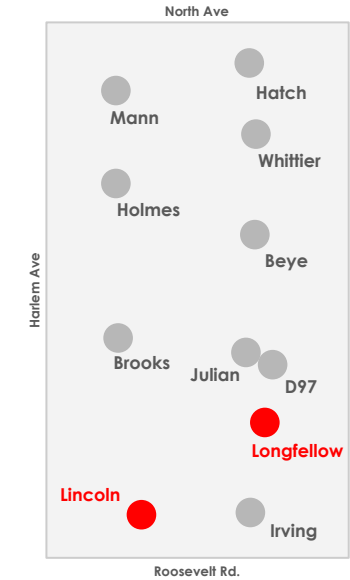
2028
Beye, Brooks, Hatch



2029
Holmes, Irving, Whittier

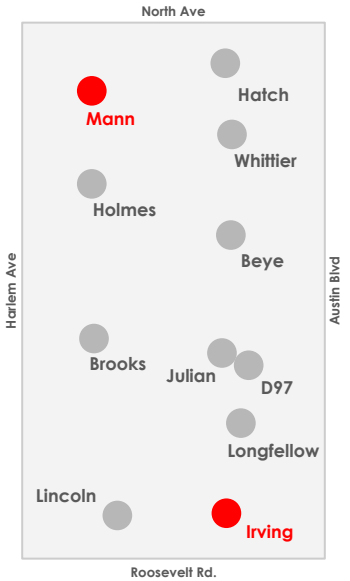


2030
Lincoln, Longfellow

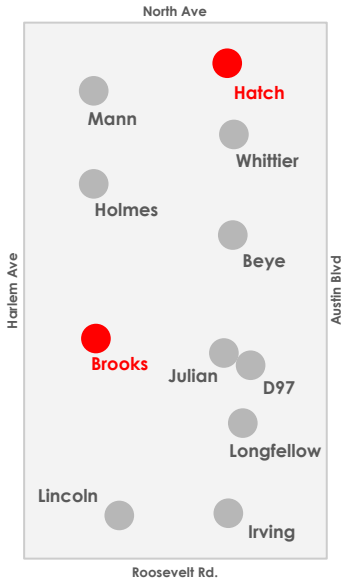


PROPOSED SUMMER WORK SCHEDULE

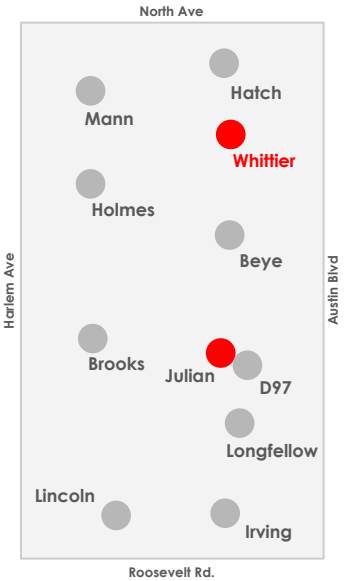
2031
Irving, Mann



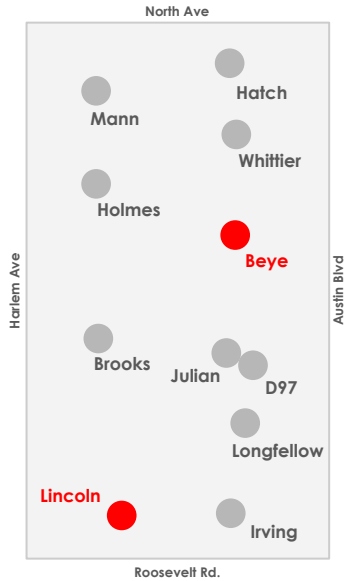
2032
Brooks, Hatch



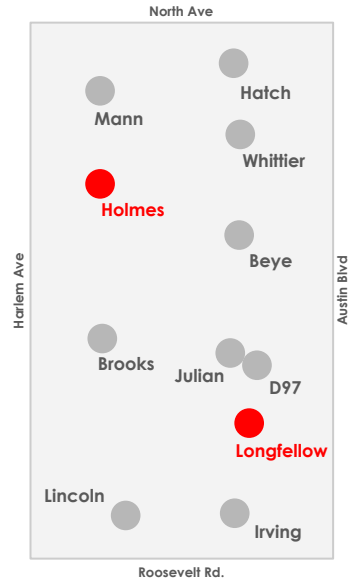
2033
Julian, Whittier



2034
Beye, Lincoln



2035
Holmes, Longfellow



ROOFING

Under grouping of 2027-2030 - Priority 1 work - equates to ***82% of Priority 1 costs*** for Roof Replacements and Rooftop Mechanical Equipment - about $28.5 M.

The Priority 1 Roof Replacement work across the schools is reflected in the following plans.

ROOF MAP PRIORITY 1

Brooks MS



Brooks critical roofs replaced in 2026

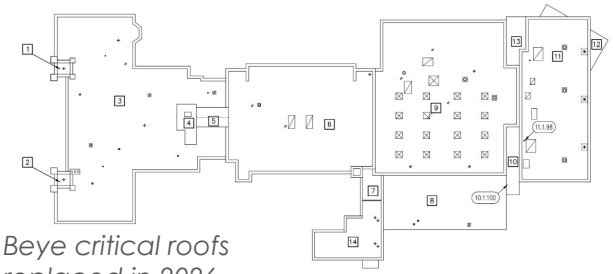
Julian MS



Julian: other critical roofs replaced in previous years

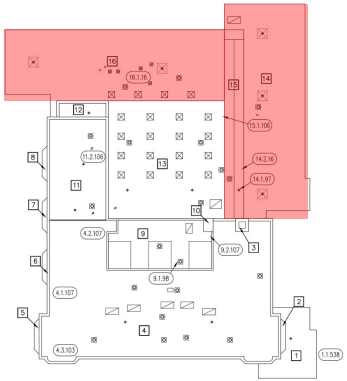
ROOF MAP PRIORITY 1

Beye ES

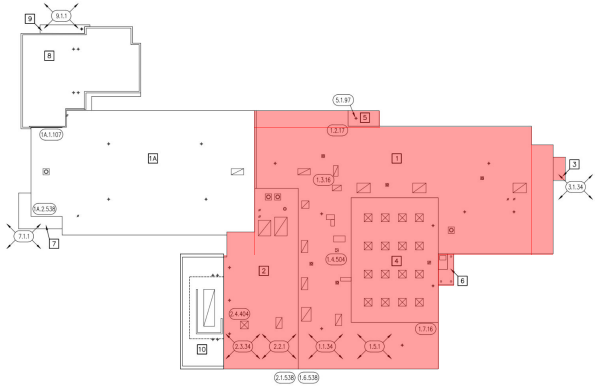


Beye critical roofs replaced in 2026

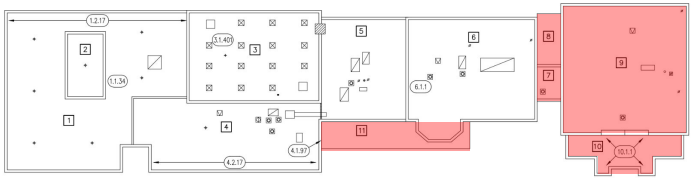
Hatch ES



Holmes ES



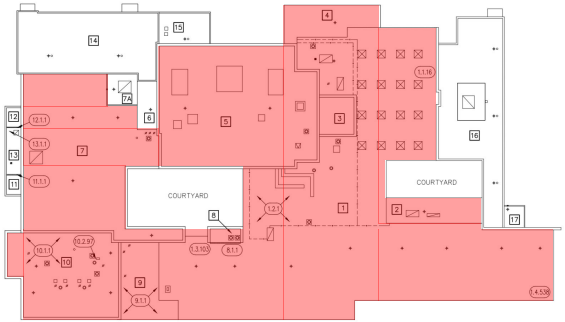
Irving ES



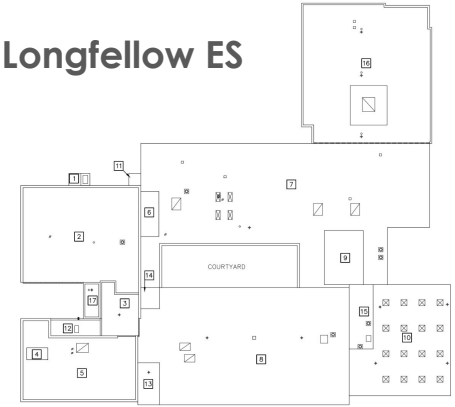
Irving critical roofs replaced in 2026

ROOF MAP PRIORITY 1

Lincoln ES

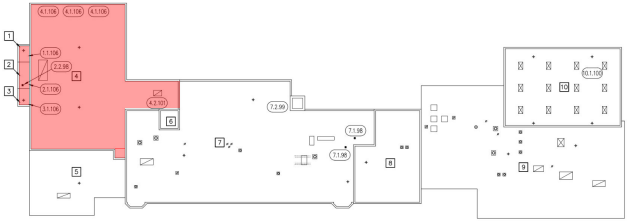


Longfellow ES

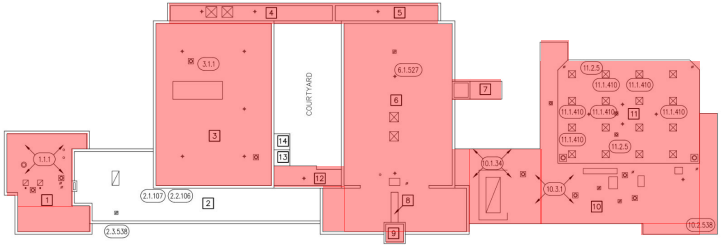


Longfellow critical roofs replaced in previous years

Mann ES



Whittier ES



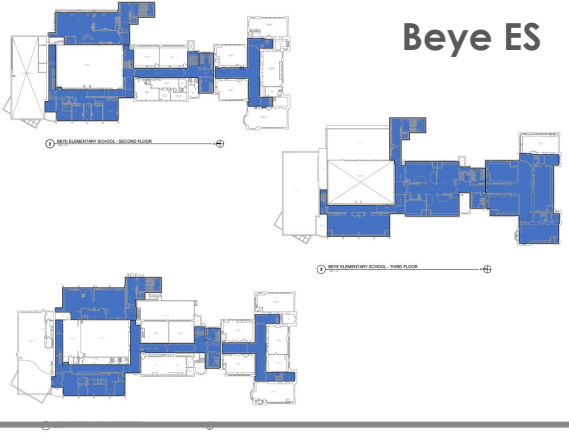
PREVIOUS LED LIGHTING UPGRADES

Brooks and Julian Middle Schools were previously upgraded to LED in prior years with exception of the theater lighting.

The Elementary Schools had partial updates to LED lighting, reflected in the following plans.

PREVIOUS LED LIGHTING UPGRADES

Beye ES



Hatch ES



Holmes ES



Irving ES



LED Lighting already replaced

OAK PARK DISTRICT 97 ELEMENTARY SCHOOLS

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PREVIOUS LED LIGHTING UPGRADES

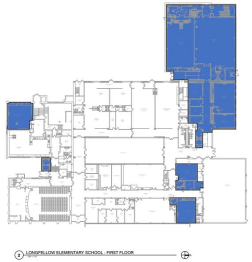
Lincoln ES

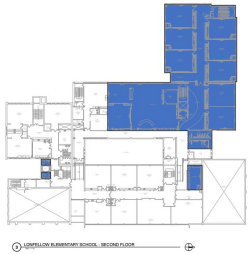






Longfellow ES

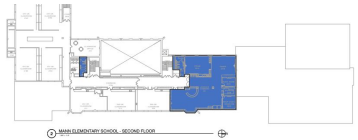


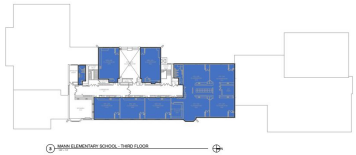


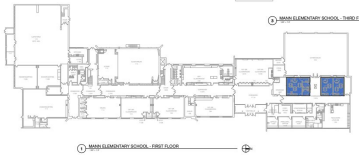




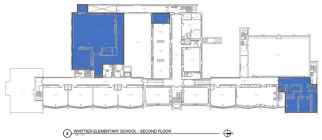
Mann ES







Whittier ES







LED Lighting already replaced

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Annual School Schedule
(2027 - 2030)

ANNUAL OVERVIEW OF SCOPE SCHEDULE

Scope Considerations	2026	2027	2028	2029	2030
Schools Affected	All Schools	Mann ES Julian MS	Beye ES Hatch ES Brooks MS	Holmes ES Irving ES Whittier ES	Lincoln ES Longfellow ES
Priority 1	$5,380,554	$9,324,019	$10,317,748	$5,887,153	$3,979,090
Priority 2		$3,239,053	$4,327,152	$1,341,900	$1,230
Priority 3		$3,866,748	$9,723,311	$12,541,686	$7,904,560
LED Lighting		$2,135,826	$5,109,301	$7,393,523	$2,230,791
AC @ Clsrms +Light and Bright		$3,898,125	$14,671,125	$22,113,000	$11,517,188
Elevators		$974,531	$641,484	$0	$0
Phase 1 Electrification Only		$1,684,744	$2,819,238	$1,851,326	$798,082
Phase 2 and equip. Electrification		$20,404,117	$33,574,374	$22,421,613	$9,665,660
Totals	**$5,380,554**	**$45,527,163**	**$81,183,732**	**$73,550,201**	**$36,096,601**

2027 School Schedule

2027						Additional Scope Considerations				
	Priority 1	Priority 2	Priority 2A	Priority 2B	Priority 3	LED Lighting	AC Scope + Light n' Bright	Elevator	Phase 1 Only Electrification	Full Facility Electrification
Mann	$907,900	$1,244,000	$1,184,000	$60,000	$2,212,520					
Julian	$5,550,295	$999,500	$0	$999,500	$465,747					
LED Lighting	$0	$0	$0	$0	$0	$1,479,360				
AC scope + Light n' Bright at Elem Clsrms	$0	$0	$0	$0	$0		$2,700,000			
Elevator Installation (Mann + Hatch)	$0	$0	$0	$0	$0			$675,000		
Electrification of Facility - Phase 1 only	$0	$0	$0	$0	$0				$1,166,922	
Electrification of Facility - Phase 2 only	$0	$0	$0	$0	$0					$15,299,644
Trade Cost Totals	$6,458,195	$2,243,500	$1,184,000	$1,059,500	$2,678,267	$1,479,360	$2,700,000	$675,000	$1,166,922	$15,299,644
Scope Contingency (5%)	$322,910	$112,175	$59,200	$52,975	$133,913	$73,968	$135,000	$33,750	$58,346	$764,982
Escalation (10%)	$678,110	$235,568	$124,320	$111,248	$281,218	$155,333	$283,500	$70,875	$122,527	$1,606,463
Soft Costs (fees, contingency, insurances, FFE, Abatement and Design Fees) - 25%	$1,864,804	$647,811	$341,880	$305,931	$773,350	$427,165	$779,625	$194,906	$336,949	$4,417,772
Total Project Cost	**$9,324,019**	**$3,239,053**	**$1,709,400**	**$1,529,653**	**$3,866,748**	**$2,135,826**	**$3,898,125**	**$974,531**	**$1,684,744**	**$22,088,861**

2028 School Schedule

2028						Additional Scope Considerations				
	Priority 1	Priority 2	Priority 2A	Priority 2B	Priority 3	LED Lighting	AC Scope + Light n' Bright	Elevator	Phase 1 Only Electrification	Full Facility Electrification
Beye	$367,100	$1,567,850	$1,117,350	$450,500	$2,601,225					
Hatch	$748,450	$331,500	$0	$331,500	$2,422,800					
Brooks	$5,720,225	$967,500	$0	$0	$1,417,920					
LED Lighting	$0	$0	$0	$0	$0	$3,385,044				
AC scope + Light n' Bright at Elem Clsrms	$0	$0	$0	$0	$0		$9,720,000			
Elevator Installation (Mann + Hatch)	$0	$0	$0	$0	$0			$425,000		
Electrification of Facility - Phase 1 only	$0	$0	$0	$0	$0				$1,867,818	
Electrification of Facility - Phase 2 only	$0	$0	$0	$0	$0					$24,111,710
Trade Cost Totals	$6,835,775	$2,866,850	$1,117,350	$782,000	$6,441,945	$3,385,044	$9,720,000	$425,000	$1,867,818	$24,111,710
Scope Contingency (5%)	$341,789	$143,343	$55,868	$39,100	$322,097	$169,252	$486,000	$21,250	$93,391	$1,205,585
Escalation (15%)	$1,076,635	$451,529	$175,983	$123,165	$1,014,606	$533,144	$1,530,900	$66,938	$294,181	$3,797,594
Soft Costs (fees, contingency, insurances, FFE, Abatement and Design Fees) - 25%	$2,063,550	$865,430	$337,300	$236,066	$1,944,662	$1,021,860	$2,934,225	$128,297	$563,848	$7,278,722
Total Project Cost	**$10,317,748**	**$4,327,152**	**$1,686,500**	**$1,180,331**	**$9,723,311**	**$5,109,301**	**$14,671,125**	**$641,484**	**$2,819,238**	**$36,393,612**

2029 School Schedule

2029						Additional Scope Considerations				
	Priority 1	Priority 2	Priority 2A	Priority 2B	Priority 3	LED Lighting	AC Scope + Light n' Bright	Elevator	Phase 1 Only Electrification	Full Facility Electrification
Holmes	$1,550,100	$329,000	$0	$329,000	$2,533,280					
Irving	$720,525	$523,000	$255,000	$268,000	$2,724,483					
Whittier	$1,467,250	$0	$0	$0	$2,705,213					
LED Lighting	$0	$0	$0	$0	$0	$4,694,300				
AC scope + Light n' Bright at Elem Clsrms	$0	$0	$0	$0	$0		$14,040,000			
Elevator Installation (Mann + Hatch)	$0	$0	$0	$0	$0			$0		
Electrification of Facility - Phase 1 only	$0	$0	$0	$0	$0				$1,175,445	
Electrification of Facility - Phase 2 only	$0	$0	$0	$0	$0					$15,411,390
Trade Cost Totals	$3,737,875	$852,000	$255,000	$597,000	$7,962,975	$4,694,300	$14,040,000	$0	$1,175,445	$15,411,390
Scope Contingency (5%)	$186,894	$42,600	$12,750	$29,850	$398,149	$234,715	$702,000	$0	$58,772	$770,570
Escalation (20%)	$784,954	$178,920	$53,550	$125,370	$1,672,225	$985,803	$2,948,400	$0	$246,843	$3,236,392
Soft Costs (fees, contingency, insurances, FFE, Abatement and Design Fees) - 25%	$1,177,431	$268,380	$80,325	$188,055	$2,508,337	$1,478,705	$4,422,600	$0	$370,265	$4,854,588
Total Project Cost	**$5,887,153**	**$1,341,900**	**$401,625**	**$940,275**	**$12,541,686**	**$7,393,523**	**$22,113,000**	**$0**	**$1,851,326**	**$24,272,939**

2030 School Schedule

2030						Additional Scope Considerations				
	Priority 1	Priority 2	Priority 2A	Priority 2B	Priority 3	LED Lighting	AC Scope + Light n' Bright	Elevator	Phase 1 Only Electrification	Full Facility Electrification
Lincoln	$2,069,850	$0	$0	$0	$2,570,475					
Longfellow	$355,500	$750	$0	$750	$2,247,543					
LED Lighting	$0	$0	$0	$0	$0	$1,359,720				
AC scope + Light n' Bright at Elem Clsrms	$0	$0	$0	$0	$0		$7,020,000			
Elevator Installation (Mann + Hatch)	$0	$0	$0	$0	$0			$675,000		
Electrification of Facility - Phase 1 only	$0	$0	$0	$0	$0				$486,450	
Electrification of Facility - Phase 2 only	$0	$0	$0	$0	$0					$6,377,900
Trade Cost Totals	$2,425,350	$750	$0	$750	$4,818,018	$1,359,720	$7,020,000	$675,000	$486,450	$6,377,900
Scope Contingency (5%)	$121,268	$38	$0	$38	$240,901	$67,986	$351,000	$33,750	$24,323	$318,895
Escalation (25%)	$636,654	$197	$0	$197	$1,264,730	$356,927	$1,842,750	$177,188	$127,693	$1,674,199
Soft Costs (fees, contingency, insurances, FFE, Abatement and Design Fees) - 25%	$795,818	$246	$0	$246	$1,580,912	$446,158	$2,303,438	$221,484	$159,616	$2,092,748
Total Project Cost	**$3,979,090**	**$1,230**	**$0**	**$1,230**	**$7,904,560**	**$2,230,791**	**$11,517,188**	**$1,107,422**	**$798,082**	**$10,463,742**