Ocean View School District

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HVAC **Mechanical Systems Audit**

March 11, 2025

Keith Farrow, Assistant Superintendent, Administrative Services
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ASHRAE

(American Society of Heating, Refrigerating and Air-Conditioning Engineers)

Equipment Life Expectancy Chart

Equipment Item	Median Years
Air conditioners	
Window unit	10
Residential single or Split	
Package	15
Commercial through-the wall	15
Water-cooled package	15
Heat Pumps	
Residential air-to-air	15
Commercial air-to-air	15
Commercial water-to-air	19
Roof-top air conditioners	
Single-zone	15
Multi-zone	15
Boilers, hot water (steam)	
Steel water-tube	24 (30)
Steel fire-tube	25 (25)
Cast iron	35 (30)
Electric	15
Burners	21
Furnaces	
Gas- or oil-fired	18
Unit heaters	
Gas or electric	13
Hot water or steam	20
Radiant Heaters	
Electric	10
Hot water or steam	25

Equipment Item	Median Years
Air terminals	
Diffusers, grilles, and registers	27
Induction and fan coil units	20
VAV and double-duct boxes	20
Air washers	17
Ductwork	30
Dampers	20
Fans	
Centrifugal	25
Axial	20
Propeller	15
Ventilating roof-mounted	20
Coils	
DX, water, or steam	20
Electric	15
Heat Exchangers	
Shell-and-tube	24
Reciprocating compressors	20
Packaged chillers	
Reciprocating	20
Centrifugal	23
Absorption	23
Cooling towers	
Galvanized metal	20
Wood	20
Ceramic	34

Equipment Item	Median Years
Air-cooled condensers	20
Evaporative condensers	20
Insulation	
Molded	20
Blanket	24
Pumps	
Base-mounted	20
Pipe-mounted	10
Sump and well	10
Condensate 15	
Reciprocating engines	20
Steam turbines	30
Electric motors	18
Motor starters	17
Electric transformers	30
Controls	
Pneumatic	20
Electric	16
Electronic	15
Valve actuators	
Hydraulic	15
Pneumatic	20
Self-contained	10

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Existing HVAC Systems

Variable Refrigerant Flow- Fan Coil Units

- College View Elementary
- Marine View Middle
- Star View Elementary
- Vista View Middle
- Westmont Elementary



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Existing HVAC Systems

Boiler-Chiller System- Fan Coil Units

- Harbour View Elementary
- Hope View Elementary
- Lake View Elementary
- Oak View Elementary
- Spring View Middle



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Existing HVAC Systems

Roof Top Unit Systems

- Circle View Elementary
- Golden View Elementary
- Mesa View Middle
- Oak View Preschool
- Sun View Elementary
- Village View



Split Condensing/Furnace Systems

- Pleasant View Preschool
- Village View Elementary





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HVAC – System Age and Conditions

Facility	Circle View ES	College View ES	Golden View ES	Harbour View ES	Hope View ES	Lake View ES	Marine View MS	Mesa View MS	Oak View ES	Oak View PS	Pleasant View PS	Spring View MS	Star View ES	Sun View ES	Village View ES	Vista View MS	Westmont ES
Central Heating	RTU HP	VRV	RTU NG/DX	Boiler	Boiler	Boiler	VRF	Boiler	Chiller		NG Furnace	Boiler	VRF	RTU		VRF DOAS	VRF
Central Cooling	RTU HP	VRV	RTU NG/DX	Chiller	Chiller	Chiller	VRF	RTU DX	Boiler		Window Units	Chiller	VRF	RTU		VRF DOAS	VRF
Terminal Units	RTU HP	FCU	VAV	FCU	FCU AC Units	FCU	FCU	VAV HW Reheat	FCU			FCU	FCU		Split DX/Furnace	FCU	FCU
Window Units	5 HP	3 HP	1 HP 3 Furnace	6 HP	7 HP	5 HP	6 HP	1 HP (3Splits)	11 HP	10 HP		5 HP	4 HP and 3 Gas/DX	Bard	5 HP	5 HP	7 HP
Misc	2 Split DX			15 split furnace DX	5 RTU	2 RTU	5 RTU	5 RTU	3 RTU	1 mini split		6 RTU 6 split Furnace DX	2 RTU		3 RTU	1 RTU	

System is well within ASHRAE expected End of Life

System within 5 years of ASHRAE expected End of Life

System has exceeded ASHRAE expected End of Life

Per ASHRAE Equipment Life Expectancy Chart

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HVAC Overview

Q & A



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