Capital Asset Advisory Committee
2018 Capital Improvement Program
Financial Status as of May 15, 2021

May 20, 2021
### 2018 CAPITAL IMPROVEMENT PROGRAM – FINANCIAL STATUS 5/15/2021

#### Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Issuance</td>
<td>$567,000,000</td>
</tr>
<tr>
<td>Premium on First Bond Issuance</td>
<td>$50,165,349</td>
</tr>
<tr>
<td>Premium on Second Bond Issuance</td>
<td>$68,309,148</td>
</tr>
<tr>
<td>Interest Through April 2021, net of bank fees</td>
<td>$11,884,172</td>
</tr>
<tr>
<td>Fiscal Years 2019, 2020 and 2021 Capital Transfers (COP Principal &amp; Interest Payments Removed)</td>
<td>$51,353,182</td>
</tr>
<tr>
<td>Issuance Costs (Both issuances)</td>
<td>$(2,948,716)</td>
</tr>
<tr>
<td></td>
<td><strong>$745,763,135</strong></td>
</tr>
</tbody>
</table>

#### Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>As of May 15, 2021</th>
<th>As of April 15, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expended - All projects</td>
<td>$312,491,397</td>
<td>$297,160,452</td>
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<tr>
<td>Total Encumbered - All projects</td>
<td>$138,491,089</td>
<td>$116,815,193</td>
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Charter Projects

<table>
<thead>
<tr>
<th>Description</th>
<th>As of May 15, 2021</th>
<th>As of April 15, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expended - Charter</td>
<td>$45,469,151</td>
<td>$45,129,440</td>
</tr>
<tr>
<td>Total Encumbered - Charter</td>
<td>$3,074,737</td>
<td>$2,774,944</td>
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</tbody>
</table>

No Contracts on June 3 BOE Agenda for Approval
**2018 CAPITAL IMPROVEMENT PROGRAM – FINANCIAL STATUS 5/15/2021**

**Funding Breakdown 2018 Capital Improvement Program**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$567,000,000</td>
<td>First &amp; Second Bond Issuances</td>
</tr>
<tr>
<td>$50,165,349</td>
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<td>$68,309,148</td>
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</tr>
<tr>
<td>$51,353,182</td>
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</tr>
<tr>
<td>$(2,948,716)</td>
<td>Issuance Costs (Both Issuances)</td>
</tr>
<tr>
<td><strong>$745,763,135</strong></td>
<td><strong>Funds to Date</strong></td>
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</table>

**TBD* To Be Determined**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
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<tbody>
<tr>
<td>$83,601,924</td>
<td>4 Years Capital Transfer</td>
</tr>
<tr>
<td><strong>$829,365,059</strong></td>
<td><strong>Preliminary Total</strong></td>
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</tbody>
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TBD* To Be Determined
2018 CAPITAL IMPROVEMENT PROGRAM – FINANCIAL STATUS 5/15/2021

Work in Progress

Alameda Addition / Renovation
Columbine HS Aux Gym, Exterior Entry
Conifer HS Aux Gym
Golden HS Artificial Turf & Track
Green Mountain HS Aux Gym
Jefferson Jr./Sr. HS Addition / Renovation
Pomona HS Addition/Renovation
Kendrick Lakes ES Replacement
Bell MS Addition
Manning School Addition
Parmalee ES Addition / Renovation
Foster ES Addition / Renovation
Warren Tech South
Wayne Carle MS Addition
Lumberg ES Addition / Renovation

Marshdale ES Replacement
D’Evelyn ES Addition / Renovation
Artificial Turf & All-Weather Tracks @ 4 HS
29 Efficiency & Future Ready (Summer)
LED Replacement Phase II 11 Sites
7 Playgrounds, 5 Paving Projects
3 Roofing Projects
In Design

- Evergreen HS Renovation
- Evergreen MS Renovation
- Powderhorn Addition/Renovation
- Prospect Valley ES Replacement
- Ralston Valley HS Addition/Renovation
- Standley Lake HS Addition/Renovation
- Jeffco Open School Addition/Renovation
- Furniture, Fixtures & Equipment (FF&E) 14 Sites
FACILITIES INDOOR AIR QUALITY RESPONSE

05/20/2021
With regard to improving Indoor Air Quality:

Elimination is not always possible

Substitution is not applicable

Engineering Controls can be provided by school district facilities groups

Administrative Controls determined by county, school district, and site leadership

PPE requirements provided by county, school district, and site leadership
Necessity for Improved Indoor Air Quality

Improving IAQ
- Better Attendance (Students & Employees)
- Better Academic Performance
- Higher Test Scores
- Decreases Viral Loading (Influenza, Covid-19)
- Promotes In Person Learning
- Decreases Learning Loss by Keeping Buildings Open Longer
- Decreases Add’l Spending Needed to Address Education in a Pandemic

Increasing HVAC Equipment Operation
- Higher Energy Costs to Temper More Fresh Air
- Higher Energy Costs to Deliver More Air
- Higher Ops Costs to Increase Filtration
- Decreases Life of Expensive HVAC Assets
- Increases Maintenance Calls

The pandemic pushed a wavering scale towards improving IAQ.

Facilities suggests keeping improved IAQ measures to mitigate education costs.
Response Methodology

Consult ASHRAE & CDC Guidelines

- Take Immediate Action: Increase Ventilation
- Research Additional Solutions
  - Eliminate Poor Fit Options
  - Pilot Best Fit Option
  - District Wide Deployment
Consult ASHRAE & CDC Guidelines

American Society of Heating & Air Conditioning Engineers (ASHRAE)  
Center for Disease Control (CDC)

High Efficiency Air Filters (CDC & ASHRAE)
- CDC and ASHRAE recommend HEPA filtration  
- ASHRAE updated recommendation on UVGI from no stance to favorable  
- Ionic and Oxidizing technology must meet ozone exposure requirements

Increase Ventilation Rates (CDC & ASHRAE)
- Morning and afternoon flushing of building air  
- Increasing ratio of fresh air supplied to occupied spaces

Negative Air Pressure in Special Circumstances (CDC & ASHRAE)
- Used for hospitals to contain highly contagious viruses  
- Schools need positive pressure for security concerns

Increase Humidity (ASHRAE)
- Somewhat specific to combatting Covid-19 Virus, not all pathogens  
- Not a viable solution in our climate

5/25/2021
Take Immediate Action: Increase Ventilation

Immediately Deployable  Modifiable  Visible  Terminable w/o Stranded Assets  Pay As You Go Solution

<table>
<thead>
<tr>
<th>Room/Air Handler</th>
<th>2019 OA Damper Position</th>
<th>2019 Outside Air Changes</th>
<th>2020 OA Damper Position</th>
<th>2020 Outside Air Changes</th>
<th>Outside Air Changes Increase %</th>
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</thead>
<tbody>
<tr>
<td>Alameda HS A116 / AHU2</td>
<td>7.9 10%</td>
<td>0.79 35%</td>
<td>2.78 350%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alameda HS A219 / AHU1</td>
<td>6.9 10%</td>
<td>0.69 35%</td>
<td>2.43 350%</td>
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<td></td>
</tr>
<tr>
<td>Edgewater ES 212/ RTU1</td>
<td>13.3 19%</td>
<td>2.53 34%</td>
<td>4.52 179%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summit Ridge 403 / AHU2</td>
<td>12.2 11%</td>
<td>1.33 27%</td>
<td>3.25 244%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mixed Air Changes per Hour both yrs

August 2019 vs. August 2020

5/25/2021
Take Immediate Action: Increase Ventilation

Alameda HS AHU1 Damper % Open  
8/15/2019 vs. 8/20/2020

Increased Fresh Air

2019 Evening Event Not Allowed in 2020

2019 AHU1 2020 AHU1

Morning Flush Afternoon Flush

5/25/2021
Take Immediate Action: Increase Ventilation-Results

- March 2021 Environmental Services began a sampling of classrooms throughout the District.
- 3 to 10 classrooms sampled
- Measuring CO$_2$ in occupied classrooms determines the effectiveness of the ventilation system
- Target is 700 parts per million (PPM) above the exterior CO$_2$ (400 PPM).
- Data is still being compiled.
- Charts show two central Articulation Areas
Research Additional Solutions

Filtration Methods Available

- **Physical**
  - MERV 13 Filters
  - HEPA Filters

- **Chemical**
  - Photocatalytic Oxidizers
  - Dry Hydrogen Peroxide
  - Oxidizers
  - Ionizers

- **Luminescent**
  - Ultraviolet Germicidal Disinfection

  - Used in HVAC equipment only
  - Can be used in classroom or HVAC equipment, considered for both applications
  - Can be used in classroom and HVAC equipment, but only considered for HVAC equipment use

Consult ASHRAE & CDC Guidelines
Take Immediate Action: Increase Ventilation
Research Additional Solutions
Eliminate Poor Fit Options
Pilot Best Fit Option
District Wide Deployment

5/25/2021
Eliminate Poor Fit Options

Production of ozone: PCOs, DHP, Ionizers, Oxidizers
• No FDA regulation
• OSHA requirements for adults not developing children
• Low ozone levels not effective for disinfection (ASHRAE)

Production of ions: PCOs, DHP, Ionizers, Oxidizers
• Ions can react with harmless classroom materials forming volatile organic compounds (VOCs)

High rate of filter or media changes: Merv 13 Filters, HEPA Filters, DHP, PCOs
• Increases operational cost
• HEPA filters require 4x changes
• Supply disruptions
## Eliminate Poor Fit Options

### Products designed to be used in the classroom:
- PCOs, DHP, Ionizers, Oxidizers, HEPA Filters

- Create noise in the classroom
- Can be abused or stolen
- Become stranded assets
- High initial and operational costs
- Disturb viral plumes above occupants

### Products that remove pathogens without killing them:
- Merv 13 Filters, HEPA Filters, Polar Ionizers

- Filters can retransmit particulate into the airflow if disturbed or overused
- Ionizers statically charge pathogens making them to cling to surfaces. If surfaces are brushed they can re-enter the air or transfer to hands, clothing, etc.

### Products that create considerable drag on HVAC fans:
- Merv 13 filters, HEPA Filters

- Increase fan power draw exponentially
- Decrease the life of HVAC systems
**Pilot Best Solution - UVGI Science**

- Photons release energy in molecules
  - Solar Panels
  - Photosynthesis
  - DNA Disruption (Disinfection)
- ASHRAE recommended
- Used since 1930s
- Fast disinfection, 7-12 minutes
- No ozone, actually destroys it
- Exposure concerns safely eliminated
  - Install in HVAC equipment only
  - Fan interlocks, fan off = lights off
  - Door interlocks, door open = lights off
  - Warning Placards

Consult ASHRAE & CDC Guidelines

Take Immediate Action: Increase Ventilation

Research Additional Solutions

Eliminate Poor Fit Options

Pilot Best Fit Option

District Wide Deployment

5/25/2021 12
Pilot Best Solution - Implementation

- **Intention**
  - Verify Performance
  - Identify installation issues

- **Installation**
  - UVGI installed in all six air handling units at Governor’s Ranch ES over Holiday Break ‘20-’21

- **Validation**
  - Air quality measurements taken 1/19/21 thru 3/25/21 at Governor’s Ranch, Ute Meadows ES, and Stony Creek ES

Illustration of UVGI bulb racks inside an air handler and ductwork

Consult ASHRAE & CDC Guidelines
Take Immediate Action: Increase Ventilation
Research Additional Solutions
Eliminate Poor Fit Options
Pilot Best Fit Option
District Wide Deployment

5/25/2021
Pilot the Best Solution – Design Verification

**Jeffco Provided AHU Specs to Vendor**

**Vendor Designed System**

**Jeffco Validated Design Calculations**

<table>
<thead>
<tr>
<th>Pathogen</th>
<th># Bulbs</th>
<th>UVGI (W)</th>
<th>Kill Rate, k (cm²/ Wsec)</th>
<th>Intensity, I (W/cm²)</th>
<th>Time, t (sec)</th>
<th>Velocity (FPM)</th>
<th>Max Vol Velocity (CFM)</th>
<th>Return Air Area (ft²)</th>
<th>Return Air Area (cm²)</th>
<th>distance (ft)</th>
<th>survival Rate S = e^(-klt)</th>
<th>Kill Rate N=1-S</th>
<th>Jeffco Calc Dose (uJ/cm²)</th>
<th>Fresshaire calc dose (uJ/cm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covid 229E</td>
<td>6</td>
<td>28</td>
<td>5900</td>
<td>0.007948734</td>
<td>0.248</td>
<td>681</td>
<td>15,500</td>
<td>22.75</td>
<td>21135</td>
<td>2.8</td>
<td>11.652</td>
<td>0.00001</td>
<td>99.999%</td>
<td>1975 1756</td>
</tr>
<tr>
<td>Bacillus Species</td>
<td>6</td>
<td>28</td>
<td>4860</td>
<td>0.007948734</td>
<td>0.248</td>
<td>681</td>
<td>15,500</td>
<td>22.75</td>
<td>21135</td>
<td>2.8</td>
<td>9.598</td>
<td>0.00007</td>
<td>99.993%</td>
<td>1975 1756</td>
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<tr>
<td>Covid OC43</td>
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<td>28</td>
<td>4100</td>
<td>0.007948734</td>
<td>0.248</td>
<td>681</td>
<td>15,500</td>
<td>22.75</td>
<td>21135</td>
<td>2.8</td>
<td>8.097</td>
<td>0.00030</td>
<td>99.970%</td>
<td>1975 1756</td>
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<tr>
<td>Influenza</td>
<td>6</td>
<td>28</td>
<td>3400</td>
<td>0.007948734</td>
<td>0.248</td>
<td>681</td>
<td>15,500</td>
<td>22.75</td>
<td>21135</td>
<td>2.8</td>
<td>6.714</td>
<td>0.00121</td>
<td>99.879%</td>
<td>1975 1756</td>
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<tr>
<td>Staphylococcus Aureus</td>
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<td>28</td>
<td>1700</td>
<td>0.007948734</td>
<td>0.248</td>
<td>681</td>
<td>15,500</td>
<td>22.75</td>
<td>21135</td>
<td>2.8</td>
<td>3.357</td>
<td>0.03484</td>
<td>96.516%</td>
<td>1975 1756</td>
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</table>

5/25/2021
Pilot the Best Solution - Results

Air Sampling Raw Counts (CFU/m^3)

- UV Turned Off
- UV Turned Back On

Consult ASHRAE & CDC Guidelines
Take Immediate Action:
- Increase Ventilation
- Research Additional Solutions
- Eliminate Poor Fit Options
- Pilot Best Fit Option
- District Wide Deployment

5/25/2021
Pilot the Best Solution - Results

Comparison Interior and Exterior Raw Counts at Governor's Ranch (CFU/m^3)

Comparison of Interior and Exterior Raw Counts (CFU/m^3) at Stony Creek

Comparison of Interior and Exterior Raw Counts (CFU/m^3) at Ute Meadows

5/25/2021
Costs

- Physical Filtration – Increase from MERV 8 to MERV 10 or 11 HVAC filters
  - Approximate Additional Filter Costs - $15,000
- Pilot Study – Governor’s Ranch Elementary School 6 Air Handling Units
  - Total Cost - $37,000
- District Wide Implementation
  - Estimated Cost $8.5 Million
  - Three Year Program
Conclusions

- Increasing IAQ has many intangible benefits
- Increasing IAQ may extend in person learning in a pandemic
- Increasing ventilation rates is a pay as you go solution
- Many IAQ products are not a good fit for our District

- UVGI technology will have long term value for the District
- Pilot successfully provided data for validation
- Test data showed improvement in IAQ at the test site
- Verifying the vendor’s design was straightforward

- Installation was straightforward
- Facilities recommends UVGI systems
- Facilities recommends continued increased ventilation
BACK UP SLIDES
Viral Plumes

Ascending cough flow by human thermal plume promotes the dispersion of droplets.

Virus-laden aerosols

Human thermal plume transports virus-laden aerosols from lower regions to human breathing zone.

Sedentary occupants are more likely to inhale virus-laden aerosols from lower regions.

Sun, et al
UVGI equipment does not create ozone. Ozone is created at wavelengths below 200nm (UV-V spectrum). The most effective wavelength for disinfection is 253.7nm (UV-C spectrum). UVGI bulb glass is doped (treated) to allow 253.7nm and some higher wavelengths through. Wavelengths at 253.7nm actually breakdown existing ozone in the air.
## Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEPA Filters</strong></td>
<td>Media that filter smaller particulates. Treats air only.</td>
<td>These filters are effective in producing better IAQ. They do not kill viruses and can retransmit particulate into the airflow. They are costly and may become harder to procure. They produce a drag on our aging equipment. Require 4x the amount of changes as the MERV 10 or 11 currently used. Considerable energy costs due to higher fan speed operations in HVAC. This increase is exponential not linear, because fan power is a function of velocity cubed.</td>
</tr>
<tr>
<td><strong>Photocatalytic Oxidizers (PCOs)</strong></td>
<td>Ultraviolet light is shone on a metal plate treated with a catalyst (Titanium Dioxide, e.g.). This chemical reaction releases electrons into the air to turn water vapor into hydroxyl radicals that combine with and breakdown particulates in the air. Treats airflow only.</td>
<td>This equipment produces ozone in small amounts that meet Food and Drug Administration (FDA) requirements for adults. Young lungs are more sensitive to ozone. Ozone can also interact with harmless particulates in the classroom to form volatile organic compounds. This reaction is never replicated in a lab setting. Small energy usage increase.</td>
</tr>
<tr>
<td><strong>Oxidizers</strong></td>
<td>Ozone is sent into the space. Treats airflow only.</td>
<td>Amounts of ozone allowed by FDA and Occupational Safety and Health Administration (OSHA) are for adults, not children. Amounts of ozone acceptable for adults to be around produce negligible IAQ benefits. Negligible drag on HVAC equipment. Small energy usage increase.</td>
</tr>
<tr>
<td><strong>Polar Ionizers</strong></td>
<td>Electrons are sent into the space by passing air over an electric current. The electrons create static charge on particulates drawing them to the ground or surfaces in the space. Friction can cause these particulates to return the air. Surfaces need to be cleaned. Treats airflow only.</td>
<td>Ions may interact with harmless particulates in the classroom to form volatile organic compounds. This reaction is never replicated in a lab setting. Little to no maintenance. Negligible drag on HVAC Equipment. Ionizers also produce ozone which is a lung irritant. Some energy usage increase.</td>
</tr>
<tr>
<td><strong>Ultraviolet Germicidal Irradiance</strong></td>
<td>UV-C Light bulbs shine inside the air handling equipment serving the building. Bulbs are doped (chemically treated) to only emit light at 254nm the wavelength most effective at killing particulates and a small amount of wavelengths greater than 254nm. Treats airflow only.</td>
<td>At 254nm these bulbs do not create ozone, but rather break it down (Ozone is created at 180nm UV-U). No electrons are created. Bulbs are replaced by maintenance every two to three years. Higher install cost than other options, but lower life cycle cost. May also extend life of filters in use already. Creates negligible drag on HVAC equipment. Small energy usage increase. Door interlocks have to be installed to keep maintenance employees from being exposed to light.</td>
</tr>
<tr>
<td><strong>Dry Hydrogen Peroxide</strong></td>
<td>Classroom or HVAC Fixtures draw air from space into unit and across DHP media to treat the air with Hydrogen Peroxide. Disinfects airflow and surfaces.</td>
<td>Media has to be purchased and replaced often. More costly than other filtration systems. Small increase in power usage. Similar issues to PCOs regarding ozone and ions.</td>
</tr>
<tr>
<td><strong>Increased Ventilation</strong></td>
<td>Building Automation systems flushes the building by operating the HVAC equipment one hour earlier and ½ hour later than normal operations. The ratio of fresh air supplied to the spaces has also been increased whenever possible. Dilutes particulates in airflow.</td>
<td>Considerable energy costs to temper added, extended operation, and exponential fan power usage. Increased operation shortens the life of the equipment resulting in maintenance calls and need for replacement. Can be deployed and ceased on demand. Simplest solution to improving IAQ. No stranded assets if ceased (pay as you go).</td>
</tr>
</tbody>
</table>

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### Consult ASHRAE & CDC Guidelines

**Take Immediate Action:**
- Increase Ventilation
- Research Additional Solutions
- Eliminate Poor Fit Options
- Pilot Best Fit Option
- District Wide Deployment

5/25/2021
Research Additional Solutions – MERV 13 & HEPA Filters

Physical Filtration Method that filters smaller particulates.

- These filters are effective in producing better IAQ
- Recommended by ASHRAE and CDC
- Increases air handler pressure drop and load on the supply air fan
  - Due to fan affinity laws, increases power draw of fan exponentially, resulting in high energy costs
  - Shortens the lifetime of equipment when we have other filtration options available
- They do not kill viruses and can retransmit particulate into the airflow
- They are costly and may become harder to procure
- Require 4x the amount of filter changes as the MERV 8-11 currently used

5/25/2021
Chemical Filtration (Oxidizing or Ionizing) – multiple methods

- Not regulated by FDA
- Many follow OSHA requirements for ozone exposure for adults, not younger occupants that are more sensitive to ozone
- Products emitting low enough ozone to be used near people are not creating enough ozone to be effective
- Ions released into a space at elevated concentrations can interact with otherwise harmless materials in the classroom creating unmonitored potential for forming volatile organic compounds (VOCs), this potential is never replicated and studied in a lab setting
- Does not kill pathogens. Statically charges pathogens so that they cling to surfaces instead of remaining in the air. If the surface is brushed before cleaning, pathogens may be released back into the air
- Small energy usage increase
- Little to no drag on HVAC fans
- Little to no maintenance
Research Additional Solutions – UV Light

Luminescent - Ultraviolet Germicidal Irradiance Disinfection Installed inside of the rooftop air handling units or ductwork, UV light does not reach occupants

- Door interlocks have to be installed to keep maintenance employees from being exposed to light
- OSHA requirements must be followed during maintenance, easily avoided by turning bulbs off
- Bulbs replaced every 2-3 years
- May also extend life of filters in use already
- Creates negligible drag on HVAC equipment
- Small energy usage increase
- Higher install cost than other options, but lower life cycle cost than ionizers, oxidizers, and HEPA filters
- Does not emit ozone or ions
- The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) recommends the use of UVGI for air disinfection and outlines design criteria in their standards and guidelines
- At 254nm these bulbs do not create ozone, but rather break it down (Ozone is created at 180nm UV-U)
References


Department of Labor, Department of Health and Human Services. OSHA 3990-032020


https://www.freshaireuv.com/commercial-hvac/

“What is UVC?” Crystal IS. Website. ND. 5/7/2020.


CAAC Design and Construction Update
5-20-2021
2021 Projects
New Buildings & Additions
Kendrick Lakes ES – Replacement
Larson Incitti – GC Roche

New Building
Complete

Old Building
Demolition Started
Conifer HS – Aux Gym Addition
Cannon – CMGC FCI
Conifer HS – Aux Gym Addition
Cannon – CMGC FCI
Conifer HS – Aux Gym Addition
Cannon – CMGC FCI

Construction
Columbine HS – Aux Gym Addition
EIDOS – CMGC Swinerton
Green Mountain HS – Aux Addition
MOA – CMGC GE Johnson
Jefferson HS – Aux Gym Addition
MOA – CMGC Haselden
Bell MS – 1 Story, 4 Classroom Addition
Eidos – GC Golden Triangle

Construction
CTE South – New Building
HCM – GC JHL
Manning Opt – 1 Story – 7 Classroom Addition
AMD – GC Fransen Pittman
Wayne Carle – 2 Story – 8 Classroom Addition
RB+B – GC Basset
Lumberg ES – 4 CR Addition
MOA – CMGC Haselden
Parmalee ES – 1 Story – 6 Classroom Addition
OZ – GC Saunders
Alameda HS – Addition
WOLD – CMGC Phipps

Construction
Foster ES – 1 Story – 7 Classroom Addition
Larson Incitti – GC GE Johnson
Pomona HS – Aux Gym Addition
Sybazz – CMGC Saunders

Construction
<table>
<thead>
<tr>
<th>Full Name</th>
<th>Project Scope</th>
<th>Construction Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marshdale</td>
<td>New Building</td>
<td>16,500,000 21.4% 21,000,000</td>
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Total $16,500,000 21.4% 21,000,000

Construction
Ground Breaking
Monday 5/17
D’Evelyn – 8 CR Addition
HCM – GC Himmelman

Construction
Ground Breaking
Wednesday 5/26
2021
Efficiency Future
Ready
&
DW projects
Golden HS – Door Replacement
EUA – GC MW Golden
Brady - Efficiency Future Ready
Alan Ford – GC Himmelman
## DW Security Glass Installation

### 12 - Schools

<table>
<thead>
<tr>
<th>School</th>
<th>Contact</th>
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</thead>
<tbody>
<tr>
<td>Creighton MS</td>
<td>Rose Stein</td>
</tr>
<tr>
<td>Red Rocks ES</td>
<td>Mandalay MS</td>
</tr>
<tr>
<td>Weber ES</td>
<td>Moore MS</td>
</tr>
<tr>
<td>Meiklejohn ES</td>
<td>Drake MS</td>
</tr>
<tr>
<td>Ken Caryl MS</td>
<td>Dutch</td>
</tr>
<tr>
<td>Leawood ES</td>
<td>Conifer HS</td>
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Construction

DW Tracks & Turf Fields
HCM – CMGC Saunders

Alameda HS

Wheat Ridge HS

Jefferson

D'Evelyn
2022 Projects
New Buildings & Additions
Powderhorn ES - Addition
Hollis & Miller – TBD

Construction Documents
Bids 6/15/2021
Prospect Valley ES - Replacement MOA - TBD

Construction Documents
Bids
6/29/2021
Standley Lake HS - Addition
Cannon – TBD

Construction Documents
Bids
7/15/2021
### Evergreen MS Efficiency & Future Ready

**AMD - TBD**

<table>
<thead>
<tr>
<th>Project Scope</th>
<th>Construction Budget</th>
<th>Total Project Budget</th>
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<tbody>
<tr>
<td>Exterior-Doors</td>
<td>$40,050</td>
<td>$52,500</td>
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<tr>
<td>Interior Finishes-Flooring, Ceiling, Partition, Wall Finish, Casework</td>
<td>$240,030</td>
<td>$315,000</td>
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<td>Food Service</td>
<td>$48,006</td>
<td>$63,000</td>
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<tr>
<td>Mechanical - AHUs</td>
<td>$372,047</td>
<td>$488,250</td>
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<tr>
<td>LED lighting and Power Improvements</td>
<td>$239,176</td>
<td>$296,100</td>
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<tr>
<td>Technology Infrastructure</td>
<td>$87,189</td>
<td>$107,940</td>
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<tr>
<td>Safety &amp; Security (79132 Remaining)</td>
<td>$99,487</td>
<td>$123,165</td>
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**Addition / Renovation**

- $4,800,600
- $6,300,000

**Net Project Construction Budget**

- $5,926,540
- $5,906,185
- $20,355

**Completion Documents**

- Bids
- 7/29/2021
Ralston Valley HS - Addition
EUA - TBD

Construction Documents
Bids
8/12/2021
Next Meeting 6/17/21
**Completed Work:**

- Produced Kendrick Lakes Groundbreaking:
  - Today’s My Lucky Day - JPS TV video
  - Kendrick Lakes Walkthrough - JPS TV video
- Produced Pomona Groundbreaking:
  - The Best Investment We Could Make - JPS TV video
- Produced Alameda Beam Signing:
  - This Really Has Been a Dream - JPS TV video
- Green Mountain H.S. Ribbon Cutting
  - This is a Great Day for Green Mountain High School - JPS TV video
- Produced Marshdale Groundbreaking:
  - Video in the works (images below)
- Produced Warren Tech South Construction Update video
- Published Columbine Beam Signing story to Jeffco Builds
- Media coverage:
  - Denver 7 Marshdale Story

**Website analytics:**
Jeffcobuilds.org and all pages with “jeffco builds” in the URL (ie sub-pages)

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<tr>
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<th>Page views</th>
<th>Unique page views</th>
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<td>1,422</td>
<td>1,250</td>
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<tr>
<td>May 2021</td>
<td>1,432</td>
<td>1,217</td>
</tr>
<tr>
<td>% change</td>
<td>.7% increase</td>
<td>2.7% decrease</td>
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</tbody>
</table>

**Upcoming Work:**

- **Events:**
  - D’Evelyn Groundbreaking - May 26th at 3 PM
- Preview to Summer Construction/Annual Report
  - Written and in design
- Track & Field video