## Memorandum



TO:	Health Advisory Commission	Department of Public Health & Hun
FROM:	Adam Meier, Director, DPHHS	
DATE:	August 25, 2021	
SUBJECT:	Child Care and Development Block Grant Supplemental Funding, A	merican
	Rescue Plan Act Section 2201	

**Overview:** The American Rescue Plan Act (ARPA) allocated supplemental funding to the existing Child Care and Development Block Grant (CCDBG). COVID-19 has put a spotlight on the critical role that child care plays in supporting the economy, Montana businesses, and families. Federal guidance discusses the need for urgent resources and reforms in the child care industry: "Limited financial resources undercut the stability of the child care sector, which is overwhelmingly small business...and one in six child care jobs have been lost during the pandemic [nationally], annual turnover rates for child care workers were high—at around 30 percent." Montana's current child care crisis results in not enough supply to meet the demand, exacerbated by not being able to recruit and retain staff. The intent of the funding is to expand equitable access to high quality child care, to promote and support parental choice, to appropriately compensate a skilled workforce, and to facilitate a robust child care sector thereby supporting Montana businesses and the economy.

The Gianforte Administration aims to prioritize one-time-only funding opportunities with sustainable, long-lasting impacts on Montana's child care system as permitted by federal guidance. Additionally, the Montana Department of Public Health and Human Services (DPHHS) has worked to layer the various pandemic relief funds and policies to avoid duplication and promote complementary strategies to support the child care system long-term.

Lead agencies may use supplemental funds for any activities allowable under the existing CCDBG Act and the Child Care and Development Fund (CCDF) regulations and may also include child care assistance for certain health care sector employees, emergency responders, and others. The funding is not restricted to responding to the COVID-19 public health emergency. This funding has an administrative cap of 5%.

At the Governor's direction, the Early Childhood and Family Support Division has engaged stakeholders through meetings, surveys, site visits, public comments, and concept development with the Department of Labor and Industry, as well as with other public/private stakeholders to develop inclusive proposals for funding use. According to the national organization, First Children's Finance, the following elements are necessary for a strong child care system:

- Effective workforce;
- Business efficiency;
- Training & education;
- Consultation and specialized, individualized training;
- Access to capital;

- Subsidy;
- Supply building strategies;
- Facilities planning;
- System reform;
- System financing; and
- Public/Private partnerships.

House Bill 632 included language related to prioritization of funding to include:

- Child care deserts;
- One-time only infrastructure;
- Property improvements;
- Worksite child care;
- Licensing improvements; and
- Training and professional development.

**Allocation Request and Deadlines:** Montana will receive \$42,477,481 in supplemental funding to the existing Child Care and Development Block Grant (CCDBG). Funds must be obligated by September 30, 2023, liquidated by September 30, 2024, and may not supplant other routine funding. States shall set aside no more than five percent (\$2,123,874) of the block grant funds for administration.

**Structure:** DPHHS proposes the following uses, focused on one-time-only uses and investments, for these funds:

- <u>Multi-year Community/Business Innovation and Infrastructure Solution Grants \$15</u> <u>million</u>: Consistent with the Governor's priorities, this program is focused on developing child care infrastructure as a whole, rather than direct payments or subsidies for child care services. RFPs will be issued to fund innovative community and business concepts to create, expand, or advance child care availability for Montana families. The department intends to equitably distribute these funds across the state based on geographic representation and need for child cares services. Successful applicants will demonstrate a match (real or in-kind) commitment, community collaboration, diversification of funding, and that their project provides a long-term, sustainable plan for at least one of the following areas:
  - Affordability of child care;
  - Increased access to child care in underserved communities or segments of the community (this will receive priority points in scoring applications);
  - Partnership with business leaders;
  - Employer-supported child care;
  - Infant and toddler child care;
  - Non-traditional care hours;
  - Ensuring all children, including those with special needs, have equitable access to care; and/or

- Collaborative models such as child care hubs, businesses and/or public organizations working together to fund child care slots and/or shared space models.
- 2. <u>Multi-year targeted child care business specialized training, professional development</u> <u>and technical support - \$10 million</u>: This category includes:
  - Specialized training for start-up business operations and long-term business plan development/sustainability planning;
  - Paid mentoring and consultation from successful child care entrepreneurs;
  - Insurance pool support;
  - Shared service development;
  - Family child care provider networks;
  - Onsite child care for businesses;
  - Community planning solutions;
  - Health consultation to strengthen health and safety practices in facilities to respond and prepare for communicable illnesses and other health-related issues in child care facilities (e.g. special health care needs of children, immunization exemptions, environmental conditions); or
  - Professional development for small family, friend and neighbor providers, and those providers wishing to become licensed or compliant with federal health and safety standards.
- 3. <u>Business process improvements and regulation improvements \$2 million</u>: DPHHS has secured the third-party contractor to assess and evaluate current child care licensing processes and regulations and to assess barriers to becoming licensed for child care. This assessment will result in recommendations for improvements. Funding is reserved to implement recommendations to better support existing and new child care businesses and to support innovative child care models long term within the state policies and standards. The project will kick off by September 1, 2021, and work is estimated to begin by October 1, 2021.
- 4. <u>Pilot limited Child Care Resource & Referral (CCR & R) provider services in</u> <u>Northeastern/Eastern Montana - \$600,000 through September 2024</u>: A previous CCR&R in Eastern Montana was eliminated during budget reductions, requiring outreach from the Havre/Billings CCR&R. Given the unique needs of Eastern Montana in supporting businesses, DPHHS proposes to pilot a limited scope CCR&R to recruit new providers, support child care providers with licensure compliance, professional development, background checks, outreach, shared services, and technical assistance. Family services including eligibility determination for financial assistance will remain with the Billings/Havre CCR&R and the pilot site will connect families to those services. This pilot is intended to evaluate effective strategies to support long-term and sustained child care in the eastern region of the state. The pilot may inform future policy decisions and funding allocations for resource and referral services across the state.

- 5. <u>Child Care Workforce Supports \$7 million</u>: Issue stipends to teaching and caregiving staff working in child care facilities, aligned with the established Early Childhood Career Pathways (<u>https://www.mtecp.org/media/5j4e24ku/2021-updated-career-path.pdf</u>). Use one-time-only funds for workforce incentives to support recruitment and retention of the child care workforce. Not only do these incentives support actively working in a facility, but also incentivize continuing education, advanced coursework, and retention in the classroom. The approximately 3,600 teachers currently working in early childhood programs would receive between \$1,000 and \$2,000 incentives with this one time-only funding.
- 6. <u>Temporary Child Care Assistance for Certain Health Care Sector Employees \$5.5</u> <u>million</u>: Provide temporary financial assistance for parents who work in high-demand, hard to fill occupations in health care, behavioral health, disability services and longterm care settings, with an emphasis on providers who are heavily dependent on Medicaid reimbursement rates to the extent permitted by federal guidance. Child Care Resource & Referral Agencies will administer these funds through an application process. While the federal guidance waives income eligibility, priority will go to working parents who make between 185% and 250% of the Federal Poverty Level (FPL). Families will be assessed for eligibility under the Best Beginnings Child Care Assistance Program first, which goes up to 185% of the FPL. For example, for a family of three, the maximum income is \$26.45 per hour at 250% of FPL. Through this funding, approximately 596 children can be supported in child care for up to 12 months.
- 7. <u>Administration \$2,123,874</u>: Funds will be used to support the previously approved modified FTE through September 30, 2024, and will support the licensing business process redesign project. Staff will administer and monitor funded projects for this funding, as well as other ARPA funds in the division. An additional modified FTE will be housed with Department of Labor and Industry to support career pathways, workplace learning and apprenticeship. Funds will also be used for IT database updates and infrastructure to support the needs within these policy changes.

Eligibility: Funding must be used in accordance with the CCDBG and CCDF allowable uses.

**Application and Verification:** Dependent on the strategies outlined above, DPHHS may issues RFPs and applications as necessary. DPHHS will also issue contracts and monitor contract expenditures to assure financial and programmatic compliance. Monitoring will occur through desk audits, licensure compliance as applicable, and select onsite monitoring visits.

#### **Performance Metric:**

- Develop new models of child care business in at least 15 projects across the state with demonstrated strategies that can be shared for best practice and replication by other interested entrepreneurs/communities by September 30, 2024;
- Reduce direct staff turnover by 25 percent in child care programs, measured through reported licensing data by September 30, 2023;
- Maintain and increase current number of child care slots for children by ten percent by September 30, 2024; and
- Measure whether the pilot in North Eastern/Eastern Montana positively impacts child care capacity, including an increase in the number of child care providers and slots for children.
  - Identify whether location/community-specific support in the targeted geographical area increases participation in professional development and measure child care provider satisfaction levels.

**Recommendation:** Allocate \$42,477,481 for expanded child care and development block grant uses identified above to include no more than 5 percent for administrative use: to fund innovative solution grants; to provide targeted business specialized training, professional development and technical support to early childhood small businesses; to implement business process and regulation improvement recommendations; to pilot CCR&R services in Northeastern/Eastern Montana; to provide temporary child care assistance prioritized for certain health care sector employees; and for direct workforce supports for staff in child care facilities.

## Memorandum



TO:Health Advisory CommissionFROM:Adam Meier, Director, DPHHSDATE:August 25, 2021SUBJECT:Montana Veterans' Home, Columbia Falls

**Overview:** The American Rescue Plan Act (ARPA) provides \$250 million for COVID-19 prevention and operations projects to improve the quality of life of residents at state veterans' facilities. Allocations are based on each state's share of the total number of veterans (as of March 11, 2021) living in veterans' homes across the United States.

The projects must be identified as COVID-19 prevention and operations projects. Funding can be used for items such as:

- Facility improvements targeted to infection control and enhance care to veterans
- Personal Protective Equipment
- Improvement to HVAC systems
- Replacement of aging furniture, fixtures, and equipment

Funding may not be used for new construction

**Allocation Request and Deadlines:** The Montana Veterans Home (MVH) received \$1,004,788 to improve living conditions. This one-time payment must be used by September 30, 2022 for projects identified as COVID-19 prevention and/or operations projects to improve the quality of life of the residents. HAC approval is necessary by September 1, 2021 in order to complete all project deliverables by September 30, 2022.

**Structure:** As outlined further below, this funding will be used to improve air handling and ventilation systems to protect residents from COVID-19 and other air borne pathogen transmission; to expand the wander prevention system; to repair/replace an old sewer system; and to replace older transport vehicles with newer models. MVH will use standard state procurement processes to accomplish the following improvements:

- HVAC The installation of a facility air handling system to decrease contaminated particulates from re-circulation into the shared living spaces will help prevent the spread of COVID-19 and other air borne pathogens. In June 20201, Morrison-Maierle provided a detailed evaluation of the MVH ventilation systems along with recommendations for improvement. The estimated cost of improving the air handling systems at MVH is \$590,000.
- 2. Wander Prevention System Upgrade The MVH campus in Columbia Falls sits adjacent to the Flathead River on nearly 150 acres of undeveloped green space. There are various walking paths on the campus for residents to enjoy. During the most recent health survey, the facility was cited by CMS certification surveyors for not having adequate systems and processes to monitor residents when they are walking around on the campus. To address the citation but not restrict resident freedom of movement, MVH

would prefer to upgrade the current wander prevention system to include a resident monitoring system, which will cost approximately \$200,000.

- 3. Sewer System Replacement The sewer pipes in the MVH 1970 building (the DOM and Administration) and the 1973- 40 bed addition are approximately 50 years old. Cast iron pipes can last anywhere from 50 to 65 years. However, these sewer pipes are showing signs of failure as evidenced by slow leaking sewage and sewer gas odors wafting into resident living quarters. The sewer pipes are encased in concrete and maintenance staff have a difficult time accessing the faulty pipes. The temporary mediation of the odiferous problem is a seal to the concrete, apply cat litter on the floors that are accessible to staff (to soak up any residual leaks), and apply strong deodorizer solution to the cat litter to mask the raw sewage odor. The long-term solution is to hire a plumbing contractor, abandon the old lines that are encased in concrete and re-route the sewer lines with new lines and/ or perform a trenchless replacement (pipe-bursting and replacement) of the old lines. Estimated cost to re-route the sewer lines is \$60-\$260 per linear foot. Total cost estimate for this project is \$200,000.
- 4. Vehicle replacement The facility will upgrade vehicles with any funds remaining after the completion of the three previous operations projects. The MVH fleet is aging and is requiring more than routine maintenance to keep them safely running. MVH transports residents to VA clinics in these vehicles and safety must be priority. The vehicles in line to be replaced include: 1993 Ford Aero Star Van with 121,000 miles; 1999 Dodge Dakota Truck with 133,000 miles; 2006 Dodge Grand Caravan with 110,000 miles, 2006 Dodge Stratus with 75,000 miles, and a 1999 Dodge Dakota Truck with 133,000 miles for the maintenance crew. Estimated Cost per Vehicle - \$25,000-\$28,000

Eligibility: Each project is an eligible facility improvement project.

**Performance Metric:** Success will be measured when each sequence/project has been completed. Specific markers include:

- Improved air quality for residents and staff and decreased transmission of air borne pathogens;
- Enhanced safety and freedom of movement for residents who utilize outdoor spaces on campus;
- Restored pipes to enhance air quality and to meet basic sanitation standards; and
- Enhanced safe transport of residents, and staff with more reliable vehicles resulting in lower repair and maintenance costs.

**Recommendation:** Allocate \$1,004,788 to improve air handling and ventilation systems to protect residents from COVID-19 and other air borne pathogen transmission; to expand the wander prevention system; to repair/replace an old sewer system; and to replace older transport vehicles with newer models.

## Memorandum



TO: Health Advisory Commission
FROM: Adam Meier, Director
DATE: August 25, 2021
SUBJECT: Eastern Montana Veterans Home, Glendive

**Overview:** Public Law 117-2 Section 8004 signed on March 11, 2021 provides \$250 million for an additional one-time payment for projects to state homes to greatly improve the living conditions of the veterans who reside in these facilities. The projects must be identified as COVID-19 prevention and operations projects. Allocations are based on each state's share of the total of veteran residents on March 11, 2021 in veterans' homes across the United States. Eligible uses of funding include:

- Facility improvements targeted to infection control and enhance care to veterans
- Personal Protective Equipment
- Improvement to HVAC systems
- Replacement of aging furniture, fixtures and equipment

Funding may not be used for new construction

**Allocation Request and Deadlines**: The Eastern Montana Veterans Home (EMVH) received \$546,723 to improve living conditions at state veterans' homes. This one-time payment must be used by September 30, 2022 for projects identified as COVID-19 prevention and/or operations projects to improve the quality of life of the residents. HAC approval is necessary by September 1, 2021 in order to complete all project deliverables by September 30, 2022.

**Structure:** This funding will be used to improve the quality of life in EMVH by upgrading resident rooms and corridors by replacing resident room laminate countertops with solid surface countertops; updating all cracked and worn wardrobe closets, swapping all existing carpet to vinyl flooring, and painting the interior of the facility. All the cabinetry and countertops are original to the 25-year-old facility and pose many infection-control concerns throughout the facility. The Montana Veterans Home will use standard state procurement processes to accomplish the following improvements:

- 1. The primary living spaces and nurses' stations receive new paint and vinyl flooring. Estimated cost is \$105,000.
- Eastern Montana Veterans' Home houses 39 double bed resident rooms and two private rooms. All resident rooms and wings receive new vinyl flooring, fresh paint, new wardrobe closets, and new solid surface countertops. Existing sinks and faucets will be reused. The estimated cost per resident room to complete is \$10,346.16 x 41 = \$424,192.56.
- 3. All resident corridors would receive new storage closets. The estimated cost is \$17,000.

**Performance Metric:** Success will be measured by the timely completion of each construction phase and reduction in infection control risk

**Recommendation:** Allocate \$546,723 to improve the quality of life in EMVH by upgrading resident rooms and corridors by painting the interior of the facility and replacing the following: resident room laminate countertops, all cracked and worn wardrobe closets, and all existing carpet.

## Memorandum



TO:Health Advisory CommissionFROM:Adam Meier, Director, DPHHSDATE:August 25, 2021SUBJECT:Pandemic Emergency Assistance Funds

**Overview:** The American Rescue Plan Act (ARPA) provides Pandemic Emergency Assistance Funds (PEAF) to needy families impacted by COVID-19. While PEAF-eligible families do not need to be eligible for the Temporary Assistance for Needy Families (TANF) program, federal guidance does require the funds meet "TANF Purpose One" in the federal legislation that created TANF in 1996, or that the State be able to demonstrate how the benefit is designed to address pandemic-related needs. TANF Purpose One is "to provide assistance to needy families so that children may be cared for in their own homes or in the homes of relatives." The PEAF funds may be used to provide certain non-recurrent, short term (NRST) benefits not to exceed four months. The Montana Department of Public Health and Human Services (DPHHS) recommends these funds be allocated as a payments to individuals in SNAP households (with minor children) who gain employment or increase their employment, as further outlined below.

**Allocation Request and Deadlines:** Montana will receive \$2,733,901 in Pandemic Emergency Assistance Funds. The department has until September 30, 2022, to expend the funds. Up to 15 percent of this allocation can be used to administer the use of funds.

**Structure:** DPHHS recognizes that unemployment or underemployment hinders the ability of needy families to care for their children in their own homes or in the homes of relatives. The COVID-19 pandemic has worsened such problems, while COVID-19 and various COVID-related benefits have discouraged the members of needy families from seeking new or improved employment. DPHHS proposes a one-time payment of \$500 to \$1,500 to individuals in SNAP households with minor children who meet one of the following criteria.

- Individual reports new employment (per their program reporting requirements) of at least 20 hours a week on or after September 1, 2021. The individual must complete twelve full consecutive weeks of employment to receive the one-time payment. The payment amount will be based on average hours worked during the twelve-week period (20-29 hours = \$500 payment, 30-39 = \$750, 40+ = \$1,000). Individuals who gain employment while participating in the SNAP E&T program will receive an additional one-time payment of \$500.
- Individual reports an increase in employment (per their program reporting requirements) of at least ten hours per work on or after September 1, 2021. The individual must complete twelve full consecutive weeks of increased employment to receive the one-time payment. The payment amount will be based on average hours worked during the twelve-week period (20-29 hours = \$500 payment, 30-39 = \$750, 40+ = \$1,000). Individuals who increase employment while participating in the SNAP E&T program will receive an additional one-time payment \$500.

The PEAF payment will not be countable towards the individual's SNAP/Medicaid/TANF benefit calculation. Employment income will follow current SNAP/TANF/Medicaid policy. Payments will be made until funds are expended or until September 30, 2022.

**Eligibility**: SNAP households with minor children where DPHHS can verify an individual has become gainfully employed or increased employment for a minimum of twelve full weeks.

Application and Verification: No additional application or verification requirements.

#### Performance Metrics:

- A total of 2,500 Montanans who receive SNAP become gainfully employed or increase their employment by August 31, 2022;
- DPHHS issues one-time payment of \$500 to \$1,500 to approximately 2,500 Montanans who meet the Pandemic Emergency Assistance Funds criteria by September 30, 2022; and
- Increase participation in the SNAP E&T program by at least 500 individuals in Yellowstone, Missoula, and Lewis & Clark County by June 30, 2022.

**Recommendation:** Allocate \$2,733,901 in Pandemic Emergency Assistance Funds to provide one-time payments to individuals in SNAP households with minor children who have become gainfully employed or increased their employment for a period of at least twelve complete weeks.

## Memorandum



TO:Health Advisory CommissionFROM:Adam Meier, Director, DPHHSDATE:August 25, 2021SUBJECT:Detection and Mitigation of COVID-19 in Confinement Facilities Funding

**Overview:** The Centers for Disease Control and Prevention (CDC), in partnership with the United States Department of Justice (U.S. DOJ), is providing supplemental funding to states through the existing Epidemiology and Laboratory Capacity (ELC) cooperative agreements to respond to COVID-19 in confinement facilities. Confinement facilities include adult prisons and jails, juvenile confinement facilities, police lockups, and other community confinement facilities.

Recent studies on the first year of the pandemic indicate that incarcerated populations had a significantly higher risk of COVID-19 infection compared to the general U.S. population. According to a recent U.S. DOJ report, "[F]rom March to June 2020, jails conducted 215,360 inmate COVID-19 tests. More than 11 percent of these tests were positives..." By December 2020, one in five state and federal prisoners had tested positive for the coronavirus, a rate more than four times higher than the general population.<sup>1</sup>

Due to their enclosed nature, confinement facilities face multiple challenges in preventing and mitigating the transmission and outbreaks of COVID-19 within these enclosed spaces. The objectives and goals of this funding are primarily focused on providing resources to confinement facilities for the detection and mitigation of COVID-19.

**Allocation Request and Deadlines:** The CDC allocated \$2,450,000 to Montana for the time period of August 1, 2021 through July 31, 2022, with a potential extension period through July 31, 2024. The Montana Department of Public Health and Human Services (DPHHS) received the Notice of Award on August 6, 2021. DPHHS is required to submit a work plan and budget to the CDC within 90 days of notice of award receipt.

**Structure:** The award's allowable activities are designed to detect, diagnose, trace, and monitor SARS-CoV-2 and COVID-19 infections, and mitigate the spread of COVID-19 in confinement facilities. The award requires recipients to assist facilities in establishing and implementing diagnostic and screening testing programs for residents, detainees, inmates, staff, and visitors. Additional allowable uses include fiscal support for COVID-19 prevention efforts, facility planning for quarantining, coordinating preparedness for communicable disease outbreaks, and staffing and facility strategies to prevent the spread of COVID-19 in confinement facilities.

<sup>&</sup>lt;sup>1</sup> Associated Press, *1 in 5 prisoners in the U.S. has had Covid-19; 1,700 have died.* (December 18, 2020), <u>1 in 5</u> prisoners in the US has had COVID-19, 1,700 have died (apnews.com)

<u>Montana Proposal</u>: DPHHS has collaborated closely with the Montana Department of Corrections (DOC) to propose the following uses for state and local confinement facilities, consistent with the governor's priority of using funds to make long-term, necessary investments, and with the grant's allowable uses.

 Fifty hospital beds for Montana State Prison (MSP) and Riverside Special Needs Unit (RSNU). MSP manages onsite acute illness in the inpatient infirmary. RSNU houses MSP's most elderly and medically fragile inmates. This population is highly susceptible to viruses and in many cases, if acquired, would require hospitalization. Hospital beds will provide needed equipment and tools to healthcare staff necessary to provide care for the medically fragile population.

At MSP, three hospital beds will be full comfort care bariatric level with needed technology capabilities. DOC's Clinical Services Division (CSD) is requesting needed equipment and tools for healthcare staff necessary to provide inpatient infirmary care. COVID-19 often limits the patient's ability to move or transfer, and hospital beds ensure necessary care and treatment can be rendered onsite, limiting the need for off-site transfer to hospitals. Additionally, due to the infirmary's small size, an overflow infirmary was necessary to care for the many COVID-positive offenders.

- 2. One hundred gallons of specialty bacteria and germ-resistant paint for medical areas at MSP, MWP, RSNU, and Pine Hills Correctional Facility (PHCF). Bacteria and germ-resistant paint is important for preventing spread of disease and illness in enclosed spaces in a correctional health care setting. This investment allows DOC to reduce the probability of spreading the virus within DOC's medical infirmaries and clinics. Replacement of day room flooring at the Montana Women's Prison to ensure sanitization and to reduce the risk of transmission of viruses and communicable disease.
- 3. A generator for MSP infirmary. Most infirmary beds are in a location without generator power. Patients with COVID-19 may be utilizing electronic medical equipment (oxygen concentrators, intravenous infusions, and wound vacs) as part of the treatment plan and a power outage would interrupt this equipment with significant health consequences.
- 4. Five all digital x-ray machines at MSP and MWP and one digital panograph machine at MWP. Onsite digital x-ray capacity at MSP and MWP will eliminate the need to transport offenders to a single location at MSP or to a community provider in Billings for these needed medical services. This reduction of transport will greatly reduce the risk of exposure within the facility, during transport, and in the community, as well as effectuating faster diagnoses of communicable disease.

- 5. Dentist chair onsite that will allow dental work to be completed at the location inmates are housed as opposed to in the community. This would prevent exposure to and from the public from viruses, as well as during transport. It is also an enhanced security feature that will help to not expose the public to any safety issues.
- 6. Additional medical equipment: vitals machines, PT/INR handheld machine (evaluates blood clots), glucometers capable of interfacing with EHR, vein finder, Abbott i-Stat 1 point of care blood analyzer, gurney, portable EKG machine, Life Pak, temperature screening kiosks, and walk-through temperature scanners. Adequate and updated health care equipment provides professionals with the tools to screen for COVID-19 effectively and efficiently, providing early diagnosis and treatment as well as managing acute illness, including COVID-19, onsite, reducing transmission to other inmates in congregate living settings, staff, and the community.
- 7. Community worker housing remodel at Montana Correctional Enterprises (MCE). Offenders located in this housing area are in close proximity to each other. This remodel will allow for more effective social distancing than is currently possible. This unit would house up to eight inmates who would otherwise be in a congregate prison placement, which increases risk of transmitting disease. Of note, DPHHS is currently seeking guidance from federal project officers regarding the allowability of this item.
- 8. Additional staff uniforms for staff at all DOC secure facilities. The addition of extra uniforms will allow staff to change uniforms more frequently, including following a potential COVID-19 exposure. Adequate clothing allocations provide staff the ability to ensure work clothes are laundered after each shift, reducing potential transmission of virus to inmates, staff, their families, and the community.
- 9. Six transport vehicles with isolation capabilities to isolate inmates from the van operators to prevent the spread of COVID-19 during transport between facilities. One small emergency response vehicle for the transport of incapacitated inmates during emergent medical events. Ensuring transportation vans with isolation capabilities are available provides staff the ability safely manage the volume of inmates needing transport, reduces the mixing of distinct populations to prevent communicable disease such as COVID-19, and enhances safety measures to prevent the spread and transmission of COVID-19 between facilities.
- 10. Air handling system at MCE laundry and the education building. The current system is not properly functioning and is not repairable. Inmates and staff work in this building throughout the week without properly functioning ventilation. As a result, there is a greater risk of staff and inmates within the building being exposed if a COVID-19 positive individual is present.

- 11. Sixty education tablets for MCE inmate students at MSP and MWP. This would include a Learning Management System (LMS), and the necessary servers to manage the system. During an outbreak, educational hours, including classroom work and training, are suspended. The use of the tablets and the LMS will allow these inmates to take the course in their cells to prevent in-person transmission of COVID-19 in congregate settings.
- 12. DOC will coordinate closely with a team from DPHHS to assist confinement facilities in establishing and implementing diagnostic screening testing programs for residents, detainees, inmates, staff, and visitors.

Eligibility: These funds are directed to DPHHS to support eligible confinement facilities.

#### Application and Verification: N/A

**Performance Metric:** Performance metrics will be developed by the CDC and shared with recipients within 30 days of the award.

**Recommendation:** Allocate \$2,450,000 to DPHHS to provide support, equipment, resources, and supplies to confinement facilities for the detection and mitigation of COVID-19.

## Memorandum



TO: Health Advisory CommissionFROM: Adam Meier, Director, DPHHSDATE: August 19, 2021SUBJECT: Provider Rate Study

**Overview:** HB632 allocated to the department of public health and human services up to \$2.75 million for a provider rate study to examine the impact of COVID-19 on providers and make recommendations to adjust rates, if necessary, to reflect impacts to providers in an effort to maintain services.

**Allocation Request and Deadlines:** HB 632 authorized up to \$2.75 million for a provider rate study.

**Structure:** The provider rate study RFP has been posted, responses received, and is in the final stages of evaluation, review, and approval. DPHHS expects to award the contract in the upcoming weeks.

**Recommendation:** Allocate to the department of public health and human services up to \$2.75 million for a provider rate study pursuant to HB 632.

## Memorandum



TO:Health Advisory CommissionFROM:Adam Meier, Director, DPHHSDATE:August 25,2021SUBJECT:Nursing Facility Payments

**Overview:** HB 632 Section 20 Subsection (2)(a) provides up to \$15 million to be distributed to nursing homes and hospital-based swing beds. Section 20 Subsection (6) directs DPHHS to provide the funds to existing facilities based on the number of Medicaid bed days in calendar 2020. Nursing facilities experienced economic harm during the COVID-19 public health emergency as they worked to prevent and/or mitigate COVID-19 infections in their facilities. These payments are the same payments, not in addition or supplemental to, that the Health Advisory Commission was briefed on during the June 24<sup>th</sup> meeting. Although legislative intent was clear and there was no discretion in its use, we are seeking to have the allocation go through the standard recommendation and approval process outline in HB632 for consistency.

**Allocation Request and Deadlines:** HB632 Section 6 states that for nursing home and hospitalbased swing bed payments, the Department of Public Health and Human Services will allocate \$15 million to nursing home facilities and facilities with hospital-based swing beds by the later of May 31, 2021, or 15 days after the receipt of federal funds from the American Rescue Plan Act. The allocation will be made based on the number of Medicaid patient days each facility had from January 1, 2020, through December 31, 2020. It is the intent of the legislature that no additional supplemental funds be allocated to nursing homes and facilities with hospital-based swing bed.

**Structure:** The funds were issued immediately after they became available to nursing facilities based on their Medicaid patient days. This distribution ensured that the funds were available to Nursing Homes to address the increased costs associated with providing care during the COVID-19 public health emergency, such as disease mitigation and prevention for low income and aging populations. The following are known prevention and mitigation activities performed by the nursing facility industry throughout the ongoing public health emergency:

- Increased quarantine and isolation requiring additional staffing.
- Increased cleaning requiring additional supplies and personal protective equipment.
- Increased communications to residents and families.
- Increased visitation alternatives and related costs.

**Eligibility:** \$15 million was issued to all Medicaid-enrolled nursing home facilities and facilities based on the number of Medicaid patient days each facility had from January 1, 2020, through December 31, 2020.

#### **Performance Metric:**

• All eligible facilities received funds based on the number of Medicaid patient days each facility had from January 1, 2020, through December 31, 2020.

**Recommendation:** Allocate to the Department of Public Health and Human Services up to \$15 million for nursing home and hospital-based swing bed payments pursuant to HB 632.



## **Department of Public Health and Human Services**

Early Childhood & Family Support Division + 1625 11th Avenue + P.O. Box 4210 + Hera, MT 596204210 + Phone: 406444 1958 + Fax: 406444 2750

Greg Gianforte, Governor

Adam Meier, Director

Jamie Palagi, Division Administrator

Date: August 16, 2021

To: Health Advisory Commission

From: Jamie Palagi, Early Childhood and Family Support Division Administrator

Cc: Kathleen O'Leary, Deputy Commissioner, Department of Labor and Industry

Re: Child Care Desert Definition

Attached to this memo is a white paper on Montana's child care desert definition. This paper was informed by a variety of stakeholders, including Representative Jane Gillette, Department of Labor and Industry staff, Department of Public Health and Human Services staff, and Montana Kids Count staff. This collaboration created consensus recommendations for the definition and approach to supply and demand analysis and child care desert definitions for use in Montana.

Thank you to the Health Advisory Commission for your interest in child care and for encouraging a consistent approach to this body of work. In advance of the August 25<sup>th</sup> meeting, please review the attached paper. There is an executive summary for brevity. The agreed upon data approach and definition may inform prioritization of the American Rescue Plan Child Care Funds moving forward.

Special thanks to author Amy Watson, Senior Economist, with Montana Department of Labor and Industry; and to Patty Butler, Early Childhood Services Bureau Chief, Montana Department of Public Health and Human Service; and Xanna Burg, Montana Kids Count Coordinator, with the Montana Budget and Policy Center for their contributions.

In addition, commission members may be interested in a report presented by Department of Labor and Industry and the Federal Reserve Bank of Minneapolis related to the Impacts of Child Care on the Montana Workforce: <u>https://lmi.mt.gov/\_docs/Publications/LMI-Pubs/Special-Reports-and-Studies/ChildcareReport2020.pdf</u>

## **Child Care Deserts**

An Analysis of Child Care Supply and Demand Gaps in Montana

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### **Executive Summary**

Access to child care is essential to a healthy economy, allowing parents of young children to engage in the labor force and preparing the state's future workforce through high-quality early childhood education. In Montana, an estimated 32,000 working parents with children under six-years-old rely on some form of child care arrangement to remain in the labor force, which translates to approximately 6% of the state's labor force in 2019.<sup>i</sup> Despite the state's reliance on child care to meet workforce needs, Montana parents and businesses have suffered from a lack of access to care.

Accurate and consistent reporting on the magnitude of the gap between the supply and demand for child care is essential to understanding the severity of the shortage, and to measuring the state's success in closing this gap. This paper provides a consistent definition of child care supply and demand in the state, and therefore; a measure of the gap between the two. The definitions of child care supply and demand, and the gap analysis presented is intended to reflect the existing best practices and most current methodology. This report will be updated as new information becomes available.

Highlights include:

- Only licensed child care providers and some Family, Friend, and Neighbor (FFN) caregivers are considered a part of child care supply in Montana. Licensed capacity is used to estimate the number of children each provider serves.
- The potential demand for child care is defined as the number of children under age six who live in households where all available parents are in the labor force.
- To measure the gap between the supply and demand for child care, the licensed child care capacity in the state is expressed as a percentage of estimated demand. Montana's total child care capacity currently meets 44% of estimated demand and infant capacity meets only 34% of estimated demand.
- Sub-state analysis reveals significant variation in child care gaps across Montana, with rural counties being more significantly under supplied than the state's urban areas. County-level analysis provides the most consistent and easily accessible information on sub-state area gaps in child care supply and demand, despite limitations.
- A child care desert is defined as any geographic area where child care supply meets less than a third of the potential demand. 60% of Montana's counties are classified as child care deserts, including six counties without a single licensed provider.

Using the definitions and analysis presented here provides policy-makers with the most updated and comprehensive understanding of the magnitude of the child care shortage and how the unmet need for child care varies across the state. Improving access to child care for Montana families and creating equitable access to high-quality affordable child care will help ensure that Montana parents can fully engage in the labor force and the state's economy can continue to grow.

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### Introduction

The lack of affordable, high-quality child care in Montana has become a persistent issue for many Montana families and businesses, hampering the state's economic recovery from the pandemic recession. Accurate and consistent reporting on the magnitude of the gap between the supply and demand for child care is essential to understanding the severity of the shortage, and to measuring the state's success in closing this gap.

Recognizing the importance of accurate and consistent reporting on the state's child care needs, early childhood education (ECE) researchers from various state agencies and external stakeholders have coalesced around a single methodology to measure the severity of the child care shortage in Montana. The methodology presented in this report reflects the most current research adopted by state agencies and ECE researchers to measure the child care gap in Montana and will be updated as more information becomes available. The analysis that follows details the methodology, assumptions, and limitations of the child care gap analysis.

### Supply of Child Care

In Montana, child care comes in a variety of forms. Large licensed centers, small family and group home settings, neighbors or close family friends, before and after school care, summer camps, and nannies are all examples of child care. While all these forms of child care provide important supports for Montana families and the economy, only licensed child care providers and some Family, Friend, and Neighbor (FFN) caregivers are considered a part of child care supply in Montana.<sup>ii</sup>

#### Provider Types Included

Licensed Family, Group, and Center-based providers are included in child care supply, as well as FFN caregivers receiving state assistance. The table below provides detailed information on the capacity limits for each provider type, as well as the prevalence of each type in Montana.

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Provider Type	Total Capacity	Infant Capacity	Percent of Providers	Percent of Capacity			
Centers	13 or more	Up to 12	30%	70%			
Group	Up to 12	Up to 6	43%	24%			
Family	Up to 6	Up to 3	22%	6%			
Family, Friend and	1 or 2	NA	4%	<1%			
Neighbor							

Eiguro 1	Child Care	Drovidor	Canacity	hy Type
rigule I.	Chillu Care	Provider	Capacity	

Source: DPHHS CCUBS database as of 7/6/21. NA = Not applicable because age limits are not typically placed on FFN providers. Capacity for group home providers increases on October 1,2021 in accordance with SB 142.

The child care supply used in these calculations is missing capacity for child care and early education programs not required to be licensed with the state. Head Start provides preschool to children under age 5. Not all Head Start programs in Montana are licensed with the state, and Head Start is only included in the child care supply if the program is licensed. Additionally, some programs may be licensed or registered with a tribal nation located within Montana. Capacity for these programs is also not included in the child care supply.

Legally operating unlicensed care is an important element of child care supply, especially in rural communities and communities with a significant shortage of licensed child care. However, data on unlicensed care is very limited because it is not tracked through the child care licensing database. Therefore, this type of unlicensed care is not included in child care supply. Illegal unlicensed care may be cause for concern. When a child care business is licensed, parents can have reasonable assurance that certain health and safety criteria are met and monitored by the state.

Out-of-school time care, including after school care is delivered in a variety of ways and is currently exempt from child care licensing regulations. For example, public schools, Boys and Girls Clubs, YMCA programs, youth center, etc. Legally operating unlicensed school-age care is not included in this analysis of child care supply. Although after-school and summer child care are important supports for families with school-age children, the focus of this analysis is on how licensed child care meets the estimated demand. Child care programs licensed by the Montana Department of Public Health and Human Services (DPHHS) may include school age children in their programs as well. A licensed facility may choose to serve children up to age 12.

Only providers located in Montana, and those with an active license/certification are included in child care supply. Providers with a terminated license status are also included if the expiration date for the license is within the last six months. Many providers with a terminated license status are in the process of renewing their license and have not closed permanently. Figure 2 shows the number of licensed providers in the state over the last ten months relative to pre-pandemic levels, as well as to the height of pandemic-related closures in April 2020.

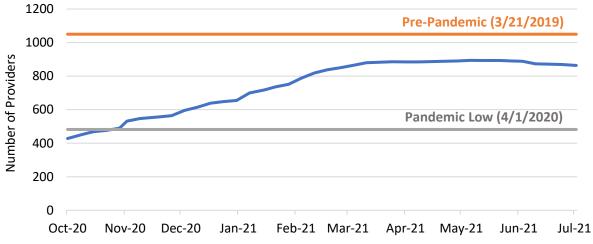


Figure 2. Number of Licensed Child Care Providers in Montana Over-Time

Source: MTDLI analysis of child care licensing data provided by MT DPHHS.

#### Number of Children per Provider

Licensed capacity is used to estimate the number of children served by each provider. A provider may care for more total children than their license capacity if they offer part-time care but may not exceed their capacity in the facility at one time. The actual number of children served by each facility can vary daily depending on staff availability, parental preferences, public health guidelines, among other things.

Capturing the actual number of enrolled children served by each provider is not possible within the existing data systems. Therefore, licensed capacity is used as a proxy.

Within the total licensed capacity of a facility, a child care provider may be licensed to care for a certain number of infants/toddlers. Children under the age of two must be cared for by a provider who is licensed to care for infants/toddlers. Infant capacity is a subset of the total capacity of the child care provider and varies by provider type, as shown in Figure 1. The supply of infant child care is calculated as a subset of the total supply of child care in Montana.

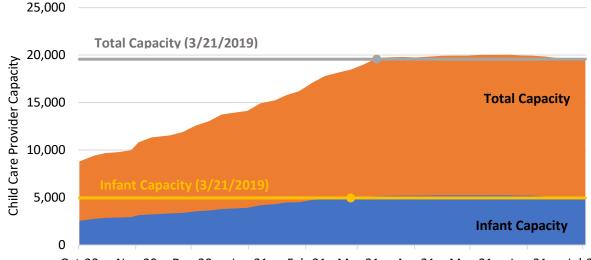
Figure 3 shows the change in both total child care capacity

Licensed Child Care Capacity the number of children the facility is licensed to serve at one time.

Number of Children Enrolled The total number of children who are served by a single facility. Differs from licensed capacity due to part time care, staff availability, parental preference, or public health guidelines.

and infant capacity in Montana over the last ten months relative to pre-pandemic levels. During April 2020, 43% of licensed child care providers closed as an immediate response to the pandemic. These closures accounted for 10,921 child care slots at licensed providers.<sup>III</sup> Since then, many child care providers have found new and innovative ways to open while also adhering to important public health guidelines. By March 2021, total and infant capacity reached pre-pandemic levels seen two years prior. Since then capacity has remained level, as shown in Figure 3.





Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Source: MTDLI analysis of child care licensing data provided by MT DPHHS. Capacity refers to number of children the facility is licensed to care for at one time. Infant refers to children under age two.

The total capacity and infant capacity data are available on a weekly basis from MT DPHHS child care licensing database. However, this analysis is concerned with capturing long-run trends in licensed capacity. Therefore, averaging child care capacity over a longer time frame is more appropriate. Licensed capacity data could be updated monthly or quarterly and should reflect the average capacity over a given time-period instead of a point-in-time estimate.

### Demand for Child Care

Many Montana parents rely on some form of child care to engage in the workforce before their children are schoolage. Approximately 6% of the state's labor force relied on some form of child care to remain in the labor force in 2019.<sup>iv</sup> However, the actual demand for licensed child care in Montana is difficult to measure. For example, not all working families need child care due to their preferences, work schedule, or access to other caregivers. This analysis uses the potential child care demand from working families as a proxy for actual child care demand. The potential

Actual Demand for Child Care The number of children whose parents would like them to attend a licensed child care facility.

**Potential Demand for Child Care** The number of children under age six who live in households where all available parents are in the labor force.

demand for child care is defined as **the number of children under age six who live in households where all available parents are in the labor force.**<sup>v</sup> When there is adequate licensed child care supply to meet potential demand, then parents can choose the type of care that fits their needs, rather than having that choice determined by cost or availability.

The actual demand for child care extends beyond just children living in households with all available parents working. Approximately 10% of people who are not in the workforce cite family responsibilities as the reason they are not looking for work.<sup>vi</sup> Some of these individuals would likely enter the labor force if they had access to child care. Additionally, families who have chosen to have a parent stay home as a full-time caregiver may still need some level of child care, even on a part-time basis. This estimate of potential demand for child care also only captures children under age 6, however school-age children may also need child care before or after-school, and during the summer.

While access to high-quality child care benefits the state's workforce, it also provides benefits to children and families. Parents who choose voluntarily to exit the labor force to care for their children may still prefer that their children attend a child care facility to experience the benefits of a structured learning environment. Access to high-quality early childhood education promotes the development of key social-emotional skills, which supports a child's ability to continuously engage in learning environments, manage their own behaviors, and get along well with others.<sup>vii</sup>

An alternative measure of child care demand is the total number of children under age six, which captures the total number of children who could potentially need child care. Using total population as an estimate of demand overcomes the limitation that more parents may work if child care was more accessible. However, not all families need or choose to use child care due to their own circumstances. Using the total population of children under age six as an estimate of child care demand would likely overestimate the actual demand for child care.

#### Methodology and Data Sources

The potential demand for child care in Montana is estimated using data from the American Community Survey (ACS) produced by the U.S. Census Bureau and the National Center for Health Statistics (NCHS) population data. The ACS estimates the number of children under six years old living in households where all available parents are in the labor force. These data are only available for all counties in Montana using 5-year estimates, which use survey responses collected over a span of five years. The data are published each December and available for the state and all 56 counties.<sup>viii</sup>

The National Center for Health Statistics (NCHS) population data is used to adjust the ACS 5-year estimates to reflect the most recent population counts. The NCHS data is available by single year of age and can be used to calculate the population under age six and under two by county in Montana in a given year. The percentage of children under the age of six who live in households where all available parents are in the labor force is multiplied by the NCHS population data to generate estimates of the total demand for child care and the demand for infant care in Montana. More detailed information on the child care demand calculation is available in appendix A1.

Calculating potential child care demand in this way allows demand to reflect changes in the population of children under six. However, this methodology does not adjust for any changes in the percentage of children under six living in working parent households over time. This percentage is held constant over the ACS 5-year timeframe. The ACS data also does not estimate the number of children under two in working parent households. Therefore, the demand for infant care is estimated assuming the percentage of children under two living in households where all available parents are in the labor force is the same as the percentage of children under six living in working parent households.

### Child Care Gap Analysis

The child care gap refers to the difference between the supply of licensed child care in Montana and the estimated demand for care. To measure the gap between the supply and demand for child care, the licensed child care capacity in the state is expressed as a percentage of estimated demand. The denominator reflects the potential demand for child care and the numerator is the licensed child care capacity in Montana. Therefore, any gap measurement under 100% is considered undersupplied. More detailed information on the child care gap calculation is available in appendix A1. Using this calculation of the child care gap, Montana's total child care capacity currently meets 44% of estimated demand and infant capacity meets only 34% of estimated demand.<sup>ix</sup>

#### Sub-State Geographical Area

The availability and demand for child care varies across the state. Understanding critical need areas is essential for targeting efforts to increase child care access in Montana. A county-level analysis provides a more detailed picture of how the child care gap varies across the state. To calculate the child care gap in each county, the total and infant capacity of licensed providers located in the county is compared to the estimated potential demand from children in the county who live in household where all available parents are in the labor force.

Identifying the child care gap by county is straightforward since child care licensing data collected by MT DPHHS, ACS 5-Year estimates, and NCHS population data are all reported at the county-level. This analysis assumes that parents prefer to find child care within their own county, and that providers are only serving families in the county. To the extent parent's search area and provider service areas align with county boarders, then a county-level analysis will best identify critical high-need child care areas in the state.

A limitation of using a county-level analysis is that parents do not restrict their child care choices to the boundaries of their county. A distance-based approach to researching the child care supply gaps allows for a more realistic representation of parental search areas and child care provider service areas, by eliminating arbitrary geographical boundaries. However, a distance-based approach is more time and resource intensive and the results do not significantly change the state's understanding of how child care gaps vary across Montana. Nearly all areas of the state are identified as having inadequate access to child care regardless of research methodology. Therefore, an area-based analysis of child care gaps at the county-level remains the preferred sub-state methodology. For more information on a distance-based approach to estimating child care supply and demand gaps, see appendix A2.

Figure 4 shows total child care supply as a percent of potential demand in each county in Montana. The county-level analysis reveals the widespread nature of the child care shortage in Montana. Every county in the state is unable to meet all potential demand with existing licensed child care capacity. In general, urban areas of the state have greater access to care than rural areas, and there are six counties without a single licensed provider. The gap in infant child care capacity is also broken out by county in Figure 5. Infant capacity is more significantly undersupply than total child care capacity, with all but five counties unable to meet half of potential demand with existing capacity.

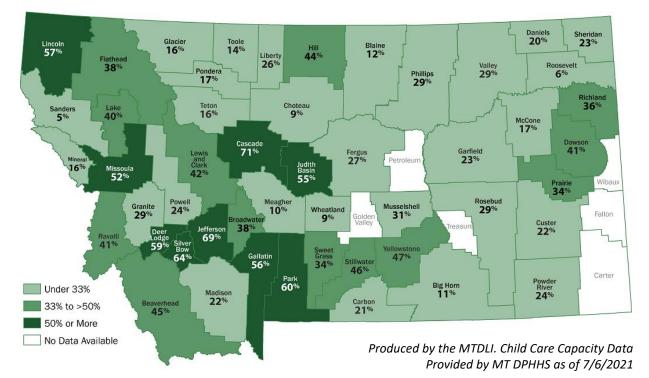
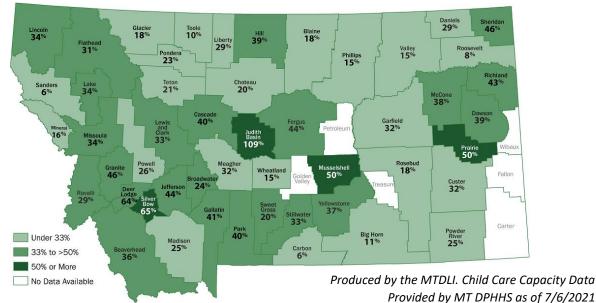


Figure 4. Child Care Capacity as a Percent of Children Under 6 by County



#### Figure 5. Infant Child Care Capacity as a Percent of Children Under Age 2

### Child Care Deserts

Nationally, the term "child care desert" is used to describe a geographic area with extremely limited access to child care. However, there is no formal threshold for the classification of an area as a child care desert. The most common threshold used is defined by the Center for American Progress (CAP) as a

census tract that contains either no child care providers or so few options that there are more than three times as many children as licensed child care slots. According to this definition, 60% of people in Montana were living in a child care desert in 2018.<sup>×</sup>

Based on the definition from the CAP, a child care desert is defined as any geographic area where child care supply meets less than a **Child Care Desert** any geographic area where licensed child care capacity meets *less than a third* of potential demand.

**third of the potential demand.** Stated another way, a child care desert is any area in Montana where over 66% of children living in working parent households cannot access licensed child care. According to this definition, 60% of Montana counties (34 of 56) are considered child care deserts as of July 2021.

Infant child care deserts are defined using the potential demand for infant care and licensed child care capacity for children under the age of two. Any geographic area where infant capacity meets less than a third of potential demand is considered an infant child care desert. Infant care is the most significantly undersupplied form of care in the state, meeting only 34% of estimated demand.<sup>xi</sup> Lack of availability for infants was the greatest barrier to accessing child care reported by Montana families according to a 2019 needs assessment.<sup>xii</sup>

One limitation of using child care deserts to identify areas with the greatest unmet need for child care is that the analysis does not consider other demographic or socioeconomic characteristics impacting a families' ability to access care. Other areas of the state may also have significant levels of unmet child care demand due to income or demographic barriers that prevent Montana families from accessing care. More information about barriers families face in accessing child care can be found in appendix A3.

#### Appendix

#### A1. Child Care Gap Analysis Calculation

The demand for child care in year (y) is calculated as follows:

Total Child Care Demand

(1) 
$$CDTot_{v} = PrctCWP_{v-4,v} \times TotChild_{v}$$

Infant Care Demand

(2) 
$$CDInfant_{y} = PrctCWP_{y-4,y} \times TotInfant_{y}$$

(3) 
$$PrctCWP_{y-4,y} = \left(\frac{CWP_{y-4,y}}{TotChild_{y-4,y}}\right)$$

Where,

 $PrctCWP_{y-4,y}$  = the percent of children under six years old living in households where all available parents are in the labor force from ACS 5-Year estimate.

 $TotChild_{y}$  = the total number of children under six in year (y) from NCHS population data.

 $TotInfant_y$  = the total number of children under two in year (y) from NCHS population data.

 $CWP_{y-4,y}$  = the number of children under six who live in households where all available parents

are in the labor force from ACS 5-Year estimate.

 $TotChild_{v-4,v}$  = the total number of children under age six from ACS 5-Year estimate.

The demand for child care is then compared to the licensed child care provider capacity to estimate the child care gap. The gap in total child care capacity and infant capacity in year (y) is calculated as follows:

(4) 
$$TCGap_y = \frac{TotLC_y}{CDTot_y}$$
  $TCGap_y = \begin{cases} < 1, then undersupplied \\ = 1, then meets demand \\ > 1, then oversupplied \end{cases}$ 

Infant Child Care Gap

(5) 
$$ICGap_y = \frac{InfantLC_y}{CDInfant_y}$$
  $ICGap_y = \begin{cases} < 1, then undersupplied \\ = 1, then meets demand \\ > 1, then oversupplied \end{cases}$ 

Where,

 $TotLC_{y}$  = Total Licensed Capacity reported by MTDPHHS.

 $InfantLC_{y}$  = Infant Licensed Capacity reported by MTDPHHS.

Data from the ACS 5-Year estimates is updated in December for the previous five years. NCHS population data is updated in the summer for the previous year. The potential child care demand

calculation is updated once per year in January to reflect updated data. The most recent data available for 2021 is 2015-2019 ACS 5-Year estimates and 2019 NCHS population data.

#### A2. Distance-Based Approach

The distance-based approach to measuring child care supply and adjusting for nearby demand was introduced in a 2019 article published in the journal Early Childhood Research Quarterly.<sup>xiii</sup> This approach differs from an area-based analysis in that it is centered on family locations and assumes families are interested in nearby providers whether or not they are located in the same census tract or other administrative area unit. This new approach in the original journal article uses an enhanced two-stage floating catchment area method (E2SFCA). In stage one of the two-stage calculation, a weighted capacity-to-population ratio is generated for every child care provider in the data set. Stage two of the methodology determines the quantity of local child care supply for each family location, based on the total capacity of nearby providers adjusted for their nearby young-child population.<sup>xiv</sup>

The American Community Survey 5-year estimates are used to determine family location. However, it is important to note a limitation of using ACS data in a distance-based approach. The data do not provide exact household locations and can only be geographically disaggregated down to the level of census block group. Thus, it is not possible to calculate each household's exact distance from a provider. Additionally, the distance-based approach considers only the distance from home to a child care provider and does not consider to proximity of the child care facility the caregiver's work.

The Center for American Progress uses a distance-based approach to estimate the child care supply and demand gap by census block across the United States.<sup>xv</sup> Their analysis finds that child care is most significantly undersupplied in rural communities, mid-income communities, and among minority groups. In Montana, the child care supply is classified as inadequate in all but a few census tracts in the Northwest and Southwest portions of the state, as well as a tract in the Billings area.<sup>xvi</sup>

The Bipartisan Policy Center (BPC) also conducted a distance-based analysis by census block that incorporated drive time to measure the child care gap in Montana — the number of children who potentially need child care but whose families cannot reasonably access formal child care facilities by driving. Each census block group was assigned a service area of a specific radius, based on driving distance. Potential child care need within the block group was proportionally allocated to the child care providers within the service area. A complex matrix balancing operation was used to balance the allocations from each block group to achieve the maximum allocation of children possible.<sup>xvii</sup>

Across twenty-five states, including Montana, BPC analysis found a child care gap of 31% - meaning 31% of children below the age of six with all available parents in the workforce did not have access to formal child care. In Montana, the child care gap was 48.6%, ranking 5<sup>th</sup> out of twenty-five states for largest percentage gap in child care capacity. The BPC analysis found rural areas of the state were far more underserved than urban areas, even after using the distance adjustment for families in rural communities, and even though urban communities had a much higher potential need for child care.

The BPC also analyzed the child care gap in opportunity zones within Montana. Opportunity zones were established under the Tax Cuts and Jobs Act of 2017, which created tax incentives for investors to

support low-income communities. There are 25 opportunity zones identified in Montana, and BPC estimates the child care gap in these zones is higher than the statewide average. BPC analysis finds a 49% gap in child care capacity within Montana's opportunity zones.

#### A3. Other Barriers Families Face in Accessing Care

The cost of care is a key barrier many families face in accessing child care. Over half of parents (53%) reported child care costs as a barrier to accessing care, particularly for low-income families.<sup>xviii</sup> On average, Montana families pay \$7,900 for care for children under the age of five, which translates to 16% of the state's average wage in 2020.

The average cost of full-time daycare for an infant in center-based care is \$12,750 per year, which is the most expensive form of care.<sup>xix</sup> In Montana, infant care is more expensive than in-state tuition for a fouryear public college and costs 3% more than the average rent. Costs grow exponentially for parents of multiple young children. Child care for two children—an infant and a 4-year-old—costs \$17,883. A typical family in Montana would have to spend 30.9% of its income on child care for an infant and a 4-year-old.<sup>xix</sup> According to the U.S. Department of Health and Human Services (HHS), child care is affordable if it costs not more than 7% of a family's income. By this standard, only 12% of Montana families can afford care.<sup>xxi</sup>

Certain Montana families experience added barriers to accessing child care. Due to a legacy of discriminatory policies, families that experience additional barriers to child care include children who are enrolled tribal members or reside on tribal land, children for whom English is not the primary language spoken at the home, children with disability or special health care needs, and children involved in the child welfare system.<sup>xxii</sup> Families who are enrolled tribal members or who reside on tribal land are more likely than non-tribal families to report a lack of affordable transportation, lack of infant care, lack of providers who speak their language, and a lack of child care providers who understand their culture as barriers to accessing child care.<sup>xxiii</sup>

<sup>vi</sup> IPUMS CPS June 2020 – May 2021.

<sup>vii</sup> McCoy DC, Yoshikawa H, Ziol-Guest KM, et al. Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes. Educational Researcher. 2017;46(8):474-487. doi:10.3102/0013189X17737739
 <sup>viii</sup> The data are contained in table B23008 published by the American Community Survey.

<sup>ix</sup> DPHHS child care licensing data as of 7/21. Montana Department of Commerce, CEIC population data. 2014-2019 ACS 5-Year Estimates. Infant is defined as a child less than two years old.

<sup>x</sup> https://childcaredeserts.org/2018/

<sup>xii</sup> "Montana's Early Childhood System: A Comprehensive Needs Assessment," Montana Department of Health and Human Services, Early Childhood Services Bureau. September 2019.

<sup>xiii</sup> Elizabeth Davis, Won Fy Lee, and Aaron Sojourner, "Family centered measures of access to early care and education," Early Childhood Research Quarterly 47 (2) (2019): 472–486.

<sup>xiv</sup> Rasheed Malik, Won F Lee, Aaron Sojourner, and Elizabeth Davis, "Measuring Childcare Supply Using the Enhanced Two-Stage Floating Catchment Area Method," Center for American Progress. 2020.

https://cdn.americanprogress.org/content/uploads/2020/06/18081719/Child-Care-Deserts-Methodology.pdf <sup>xv</sup> Rasheed Malik, Katie Hamm, Won F Lee, Elizabeth Davis, and Aaron Sojourner, "The Coronavirus will make child care deserts worse and exacerbate inequity," Center for American Progress. June 2020.

https://cdn.americanprogress.org/content/uploads/2020/06/18123133/Coronavirus-Worsens-Child-Care-Deserts.pdf? ga=2.34579045.592880714.1628802253-247174330.1605302969

<sup>xvi</sup> The data are available at https://childcaredeserts.org/

<sup>xvii</sup> Linda K. Smith, Anubhav Bagley, and Benjamin Wolters. "Childcare in 25 States: What we know and don't know. Quantifying the supply of, potential need for, and gaps in child care across the country." October 2020. Bipartisan Policy Center. https://childcaregap.org/report.html

<sup>xviii</sup> MTDPHHS Early Childhood Services Bureau needs assessment. September 2019.

<sup>xix</sup> "Lost Possibilities: The Impacts of Inadequate Child Care on Montana Families, Employers, and Economy" University of Montana Bureau of Business and Economic Research, September 2020.

<sup>xx</sup> Economic Policy Institute, October 2020. https://www.epi.org/child-care-costs-in-the-united-states/#/MT
 <sup>xxi</sup> Economic Policy Institute, October 2020.

<sup>xxii</sup> MTDPHHS Early Childhood Services Bureau needs assessment. September 2019.

xxiii MTDPHHS Early Childhood Services Bureau needs assessment. September 2019.

<sup>&</sup>lt;sup>i</sup> Watson, Amy. "Out of the Office: How a lack of child care has impacted Montana businesses," Economy at a Glance, Montana Department of Labor and Industry. November 2020.

<sup>&</sup>lt;sup>ii</sup> Only FFN caregivers who receive child care assistance are captured in the data collected by MT Dept of Health and Human Services and are included in child care supply.

<sup>&</sup>lt;sup>III</sup> Watson, Amy. "Impacts of Child Care on the Montana Workforce: Results from a Survey of Montana Businesses," November 2020. MTDLI.

<sup>&</sup>lt;sup>iv</sup>MTDLI analysis using 2014-2108 ACS 5-Year estimates and 2019 Local Area Unemployment Statistics (LAUS). <sup>v</sup>The labor force is defined by the U.S. Bureau of Labor Statistics (BLS) as the number of people who are employed or who are unemployed and actively seeking work.

<sup>&</sup>lt;sup>xi</sup> DPHHS child care licensing data as of 7/21. Montana Department of Commerce, CEIC population data. 2014-2019 ACS 5-Year Estimates.

## MONTANA VETERAN'S HOME COLUMBIA FALLS, MT

# Ventilation Systems Evaluation & Improvements Recommendations

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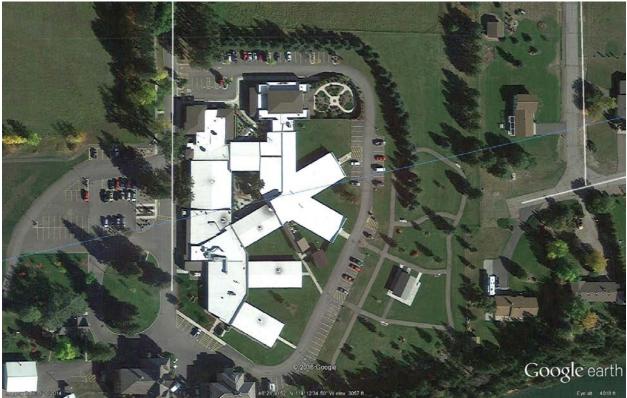


### Montana Veteran's Home – Columbia Falls Ventilation Systems Evaluation & Improvements Recommendations June 15, 2021

#### **Building Background**

Location: 400 Veteran's Drive, Columbia Falls, MT Heating Fuel Source: Nat. Gas Boiler Plant (100% Redundant Boiler System, with Propane Backup) Central Cooling Plant: Groundwater Well

The one-level nursing facility is approximately 61,000 sq-ft. The building has been constructed in five stages of additions dating back to 1967. The construction additions are as follows. Domiciliary 19,280-sf (1967-Original), 40-Bed Addition 11,059-sf (1972), 50-Bed Addition 15,665-sf (1982), Kitchen/ Laundry 2,805-sf (1982), SCU Addition 7,127-sf (1999), North Dining Addition 4,350-sf (2009).



Arial View of Montana Veteran's Home



### **Existing Resident Room HVAC Systems**

The existing HVAC systems for all resident rooms are 4-pipe fan coil units which are served by the facilities' central boiler heating and groundwater cooling plant. These fan coil units were installed in each resident room in 2009 as part of a mechanical/electrical improvements project. The fan coil units are mounted in the resident rooms on the exterior wall and have outdoor air louvers which draw ventilation air into the room while the unit is in operation. The original design intent was to have the units running continuously during occupied hours; which is 24/7 for the private rooms. The controls sequence for these units have since been modified to cycle the fan on/off only as required to meet heating/ cooling demand. The reason for this modification was due to inherit noise issues by having a fan-powered unit located in the living quarters. Consequently, there is currently no continuous mechanical ventilation to these rooms.



Typical Resident Room Hot-Water/ Chilled Water Fan Coil Unit



### Existing Central Mechanical Air-Handling/ Ventilation Systems:

There are (7) central air-handling units which provide outdoor air ventilation common areas of the facility.

1. AHU-1 (Serves 40-Bed)

### <u>Ductwork</u>

- <u>Unit Location</u>: mechanical room in maintenance area.
- Capacity: 3,000-CFM.
- Ventilation (3,000-CFM), 100% OSA
- Type: Constant Volume
- Configuration: Heat exchanger, no return air fan, separate in-line exhaust fan (2,000-CFM)
- Filtration: Outside air duct 30% pre, 80% final built into unit
- Heating/ Cooling: Hot-water (205 MBh), Chilled-water (88 MBh)
- 2009 Replaced 1972 H&V unit & exhaust fan
- 2. <u>AHU-2</u> (Kitchen/Laundry)
  - <u>Unit Location</u>: storage room near kitchen.
  - Capacity: 2,000-CFM.
  - Ventilation (1,000-CFM), 50% OSA
  - Type: Constant Volume
  - Configuration: Heat exchanger, no return air fan, separate roof-mounted exhaust fan (1,000-CFM)
  - Filtration: Outside air duct 30% pre, 80% final before fan
  - Heating/ Cooling: 1-zone hot-water, 2-zones of chilled-water coils
  - 2009 Added new CW & HW controls, 1982 original H&V unit remains
- 3. <u>AHU-3</u> (Serves Domiciliary)
  - <u>Unit Location</u>: basement boiler room
  - Capacity: 10,000-CFM.
  - Ventilation (2,888-CFM), 30% OSA
  - Type: Variable air volume
  - Configuration: SA fan w/VFD no return air fan, barometric relief
  - Filtration: 80% filter built into unit
  - Heating/ Cooling: Hot-water (535 MBh), Chilled-water (238 MBh)
  - 2009 Replaced 1967 multi-zone air handling unit, added 7 new VAV boxes w/ reheat



- 4. <u>AHU-4 (</u>50-Bed)
  - <u>Unit Location</u>: rooftop mechanical room
  - Capacity: 7,000-CFM.
  - Ventilation (2,764-CFM), 40% OSA
  - Type: Constant Volume
  - Configuration: Supply air fan w/ VFD, return fan w/ VFD
  - Heating/ Cooling: Hot-water (-MBh), Chilled-water (172 MBh)
  - 2009 Replaced 1982 supply & return fan motors, added chilled-water cooling coil
- 5. <u>AHU-5 (</u>Kitchen)
  - Not part of this scope of study
  - Make-up air unit interlocked to operate with kitchen hood fans.
- 6. <u>AHU-6 (</u>SCU)
  - <u>Unit Location</u>: penthouse mechanical room
  - Capacity: 9,900-CFM.
  - Ventilation (3,000-CFM), 30% OSA
  - Type: Variable air volume
  - Configuration: Supply air fan w/ VFD, return air fan w/ VFD
  - Filtration: 30% efficient, 2" flat, pleated filer upstream of coils
  - Heating/ Cooling: Hot-water (247 MBh), Chilled-water (122 MBh)
  - 2016 Modifications to 2001 AHU, including chilled water coil
- 7. <u>AHU-7 (Dining Addition)</u>
  - <u>Unit Location</u>: addition mechanical room
  - Capacity: 8,500-CFM.
  - Ventilation (2,313-CFM), 27% OSA
  - Type: Variable air volume
  - Configuration: Supply air fan w/VFD no return air fan, motorized relief, 10 VAV boxes w/ reheat
  - Filtration: MERV-6 (30% efficient filter integral to unit), MERV-11 (80% filter)
  - Heating/ Cooling: Hot-water (299 MBh), Chilled-water (177 MBh)
  - 2009 New construction addition



### **Recommendations:**

### 1. Increase Outdoor Ventilation Air:

It is our recommendation that outdoor air ventilation rates for <u>all resident rooms</u> and <u>common</u> <u>working areas (such as nursing)</u> be increased. Bringing in more fresh outside air to replace indoor air can help reduce airborne pathogens and other contaminants. The recommended method for increasing the ventilation rates to these areas is with the addition of new (roof mounted) Dedicated Outdoor Air Systems (DOAS Units) and/ or heat-recovery ventilation units. Due to ceiling space constraints, it may be necessary to route some ductwork mains along the roof of the existing facilities with appropriate exterior ductwork and insulation. If this is determined to be necessary, then a screening enclosure could be incorporated into the design. Additionally, the design concept would include, smaller-size units as opposed to large units; which would require major structural modifications to support.

With a typical resident room size of 200 sq-ft and a standard 8-ft ceiling height. The recommended continuous ventilation rate for these rooms should be at least 2-air changes per hour (53-CFM) of 100% outdoor air with no recirculated air that could be exchanged between adjacent rooms. The current ventilation airflow to these rooms is provided through the fan coil's wall louver and is only active when the unit is in heating or cooling demand. The ventilation rate is zero when the unit is not operating; which is far less than ASHRAE recommendations. This ventilation air should be balanced with a proportional amount of continuous exhaust as required to maintain proper pressurization between resident rooms and corridors.

This recommendation applies to the following areas of the building

- Domiciliary North Wing (10 Resident Rooms)
- Domiciliary Center Wing (12 Resident Rooms)
- Domiciliary South Wing (8 Resident Rooms)
- 40-Bed (19 Resident Rooms)
- 50-Bed North Wing (6 Resident Rooms)
- 50-Bed Center Wing (10 Resident Rooms)
- 50-Bed South Wing (11 Resident Rooms)
- Dining Rm. 205
- Dining Rm. P106

Note: The 40-Bed and 50-Bed resident wings have existing centralized air-handling systems which currently exhaust (-) pressure from resident rooms and supply (+) pressure to the common spaces. The resident rooms in the (3) Domiciliary wings do not have an existing centralized air-handling system.

Where possible, existing ductwork will be utilized to distribute ventilation & exhaust.

### Estimated construction cost associated with recommendations:

- \$350k for new DOAS ventilation equipment, ductwork and controls
- \$100k for the additional structural & electrical supporting upgrades



### 2. Improve Filtration:

It is our recommendation that all the facilities existing air handlers be fitted with highefficiency mechanical air filters. The higher the filter's MERV rating, the more efficient the filter. ASHRAE recommends at least MERV 13 for capturing airborne viruses. These filters are physically larger and come with the penalty of higher air pressure drop; as a result, there will be the need to make modifications to the existing air handlers to fit the new filters as well as upsizing the units' fan power to match static pressure increase. Fan motor sizes may need to be increased which will also require new electrical feeders, breakers and possible panel alterations.

### Install UV Lights:

Adding UV lights to existing air-handlers in the appropriate location can help to keep the units heating & cooling coils' surfaces clean.

UV-C Lighting technology emits energy which targets and damages air contaminants such as microorganisms, bacteria, viruses, mold, and other volatile contaminants on the coil and helps prolong equipment life.

This recommendation applies to 6 of the 7 the following existing air-handling units.

- AHU-1 40-Bed
- AHU-2 Kitchen/ Laundry
- AHU-3 Domiciliary
- AHU-4 50-Bed
- AHU-6 SCU
- AHU-7 2009 Addition

### Estimated construction cost associated with recommendations:

- \$60k for new MERV filtration equipment and ductwork modifications
- \$80k for additional fan power upgrades and supporting electrical capacity



### 3. Humidity Control:

Keeping indoor humidity within the ASHRAE 55 suggested range (40% to 60%) can minimize the effects of bacteria and allergens. Maintaining the space relative humidity decreases the bio-burden of infectious particles in the space and decreases the infectivity of many viruses in the air.

The design intent for this recommendation would be to incorporate humidity control within the new outdoor ventilation equipment proposed in Recommendation #1. Humidity control would be achieved with air conditioning coils built into outdoor ventilation units and duct-mounted air stream humidifiers.

This recommendation applies to the following existing air-handling units.

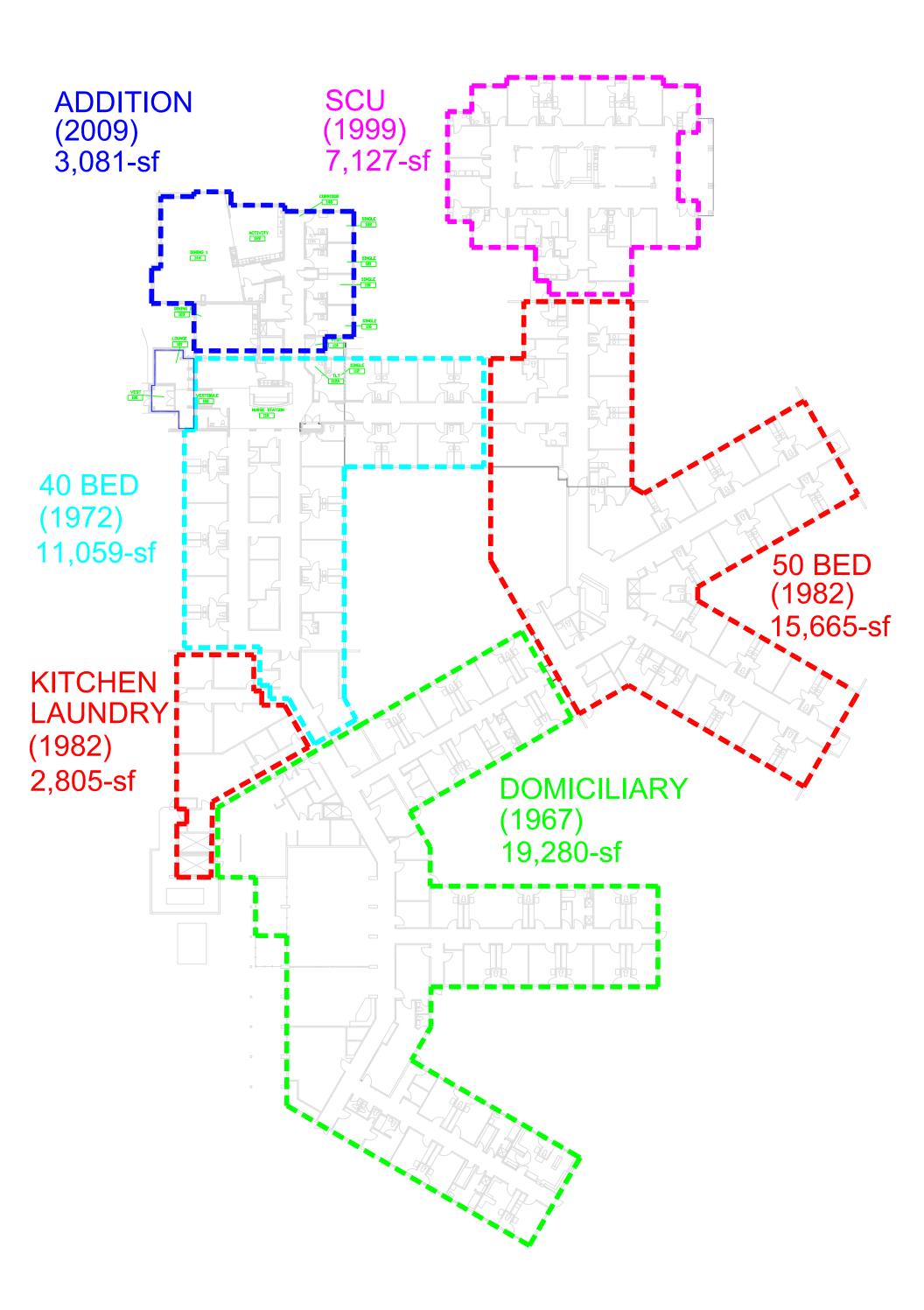
- AHU-1 40-Bed
- AHU-3 Domiciliary
- AHU-4 50-Bed
- AHU-6 SCU
- AHU-7 2009 Addition

### Estimated construction cost associated with recommendations:

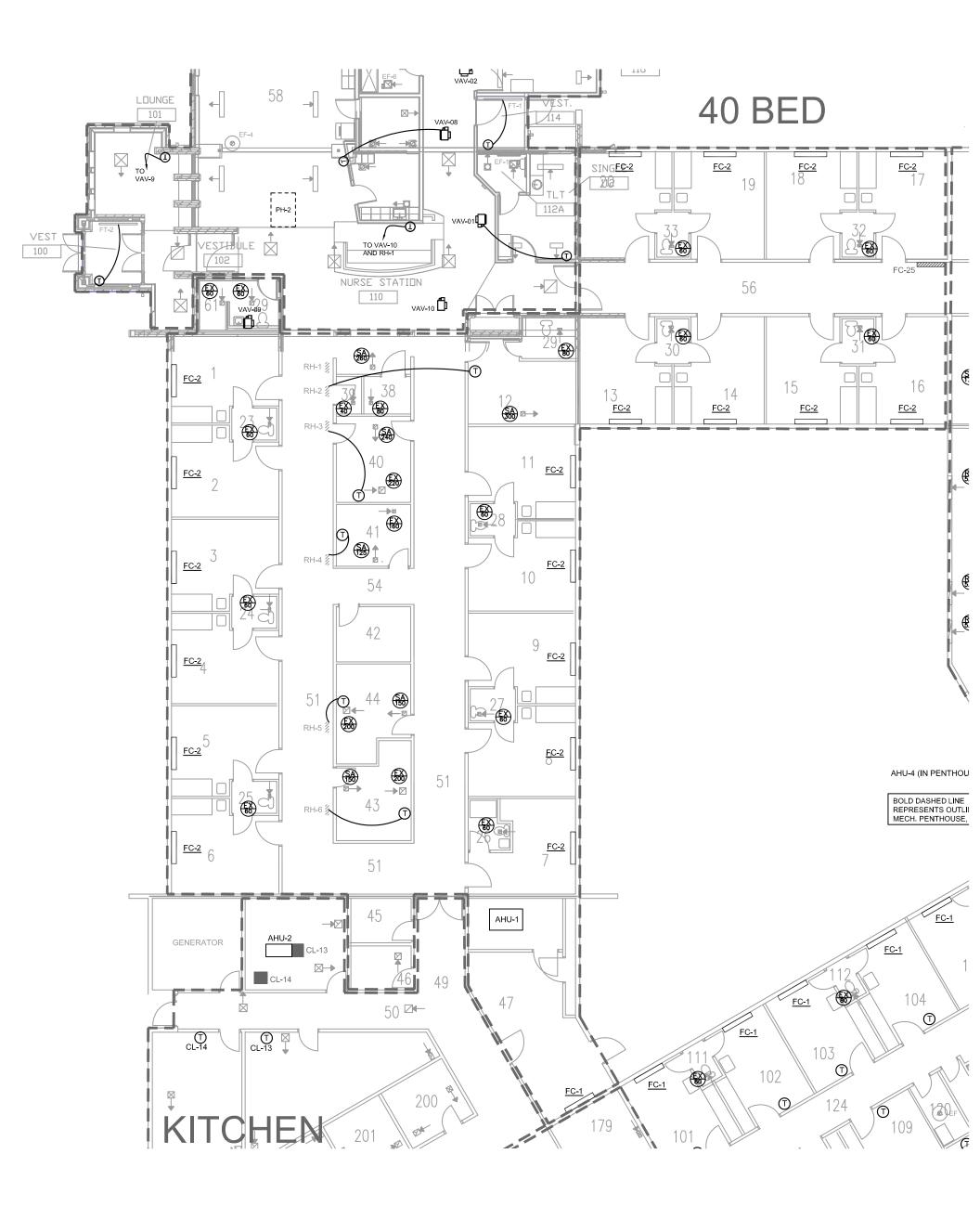
• No additional cost if implemented with Recommendation #1

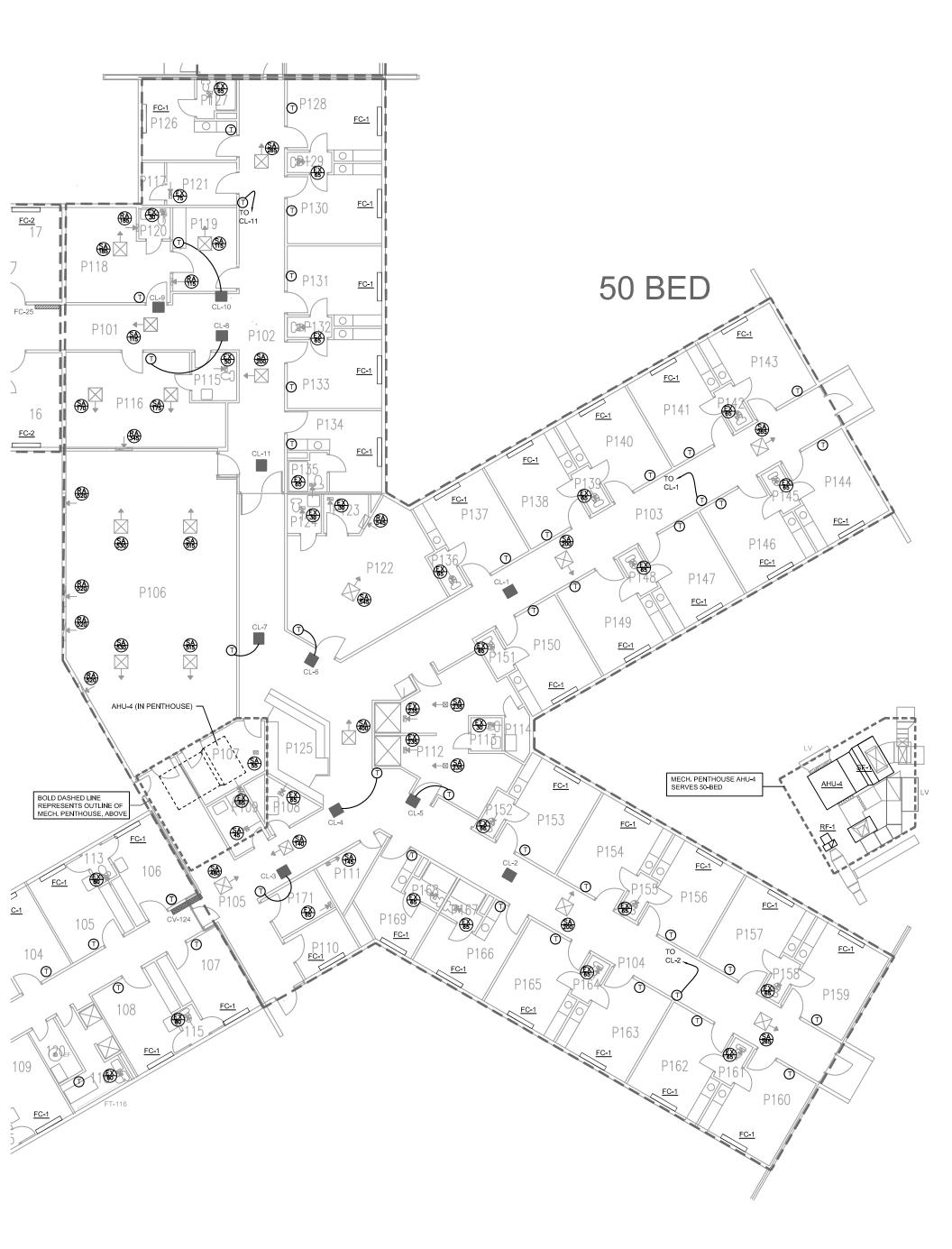


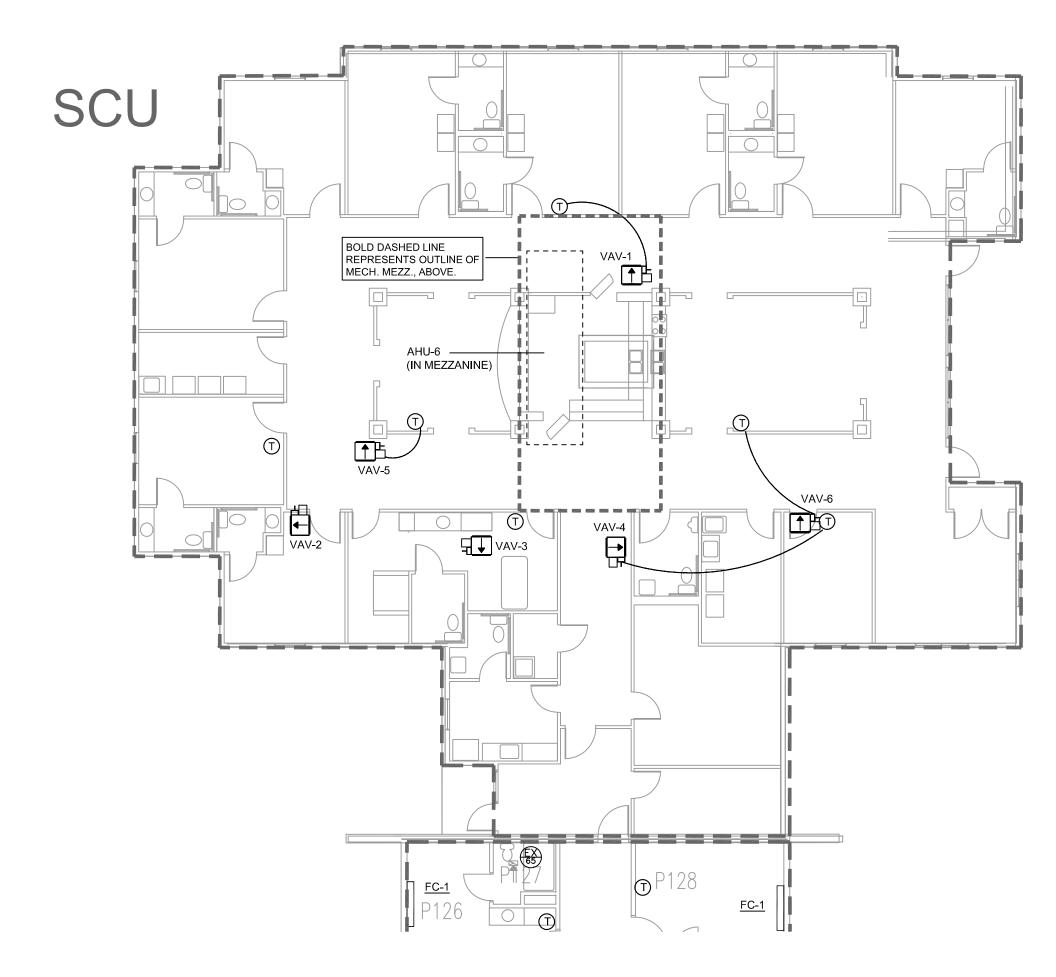
### **APPENDIX A** – BUILDING VENTILATION SYSTEMS PLANS



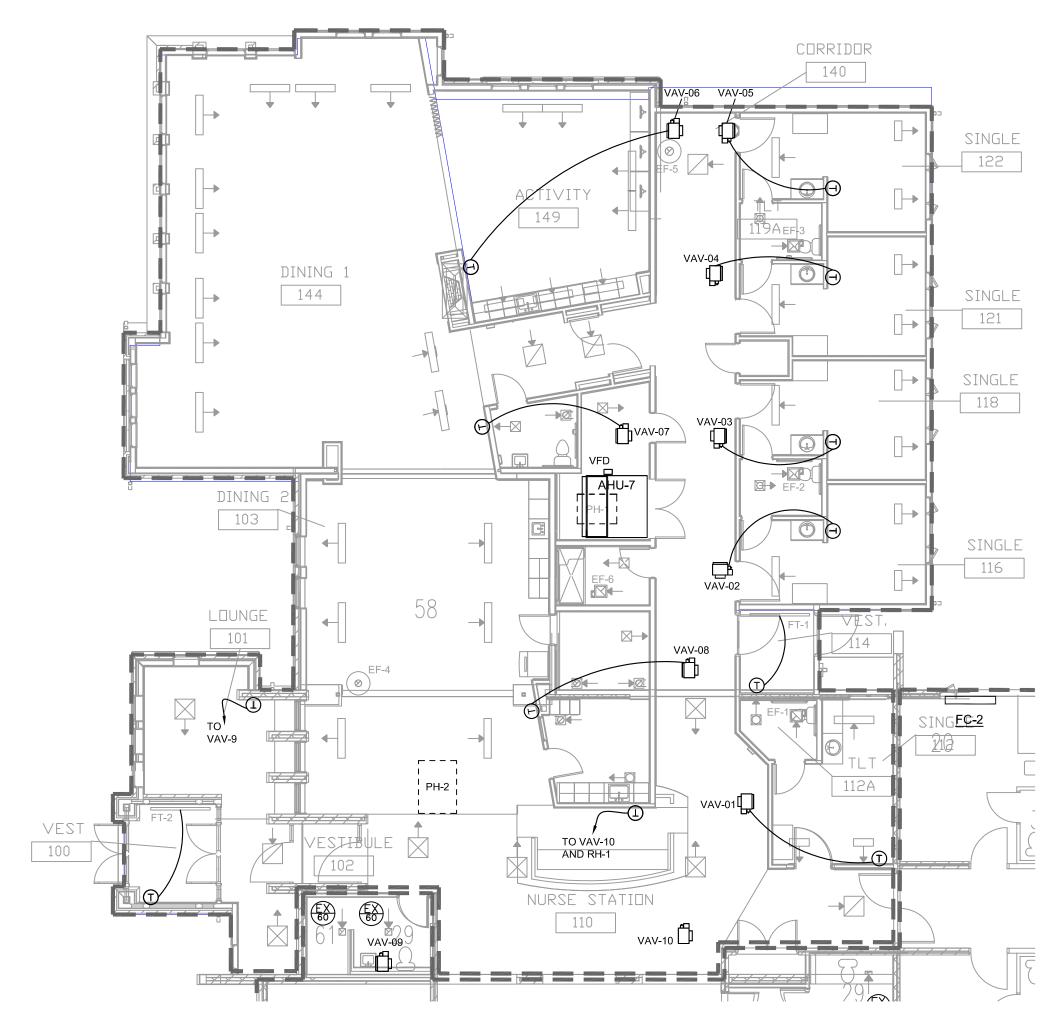






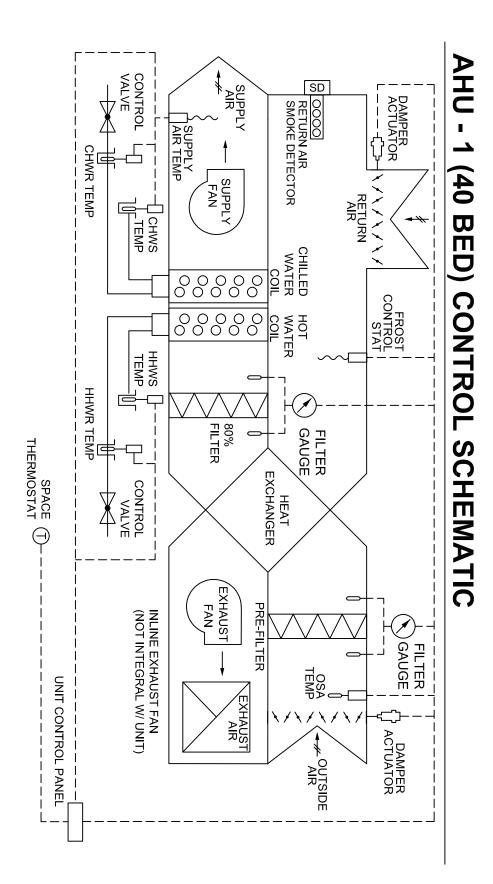


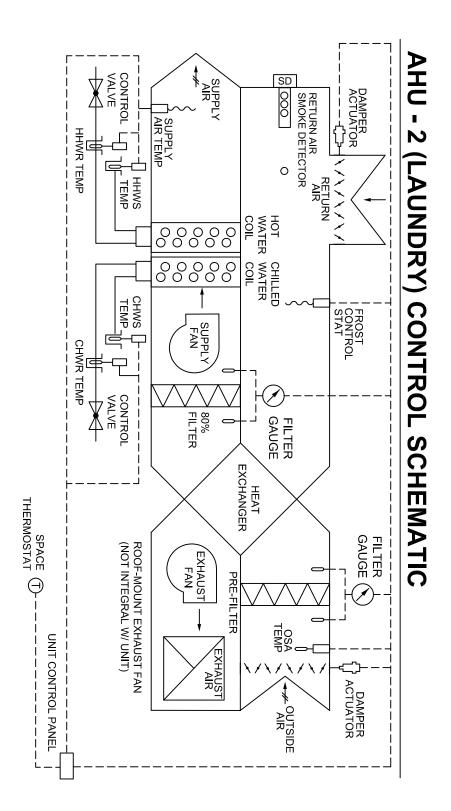
## 2009 ADDITION

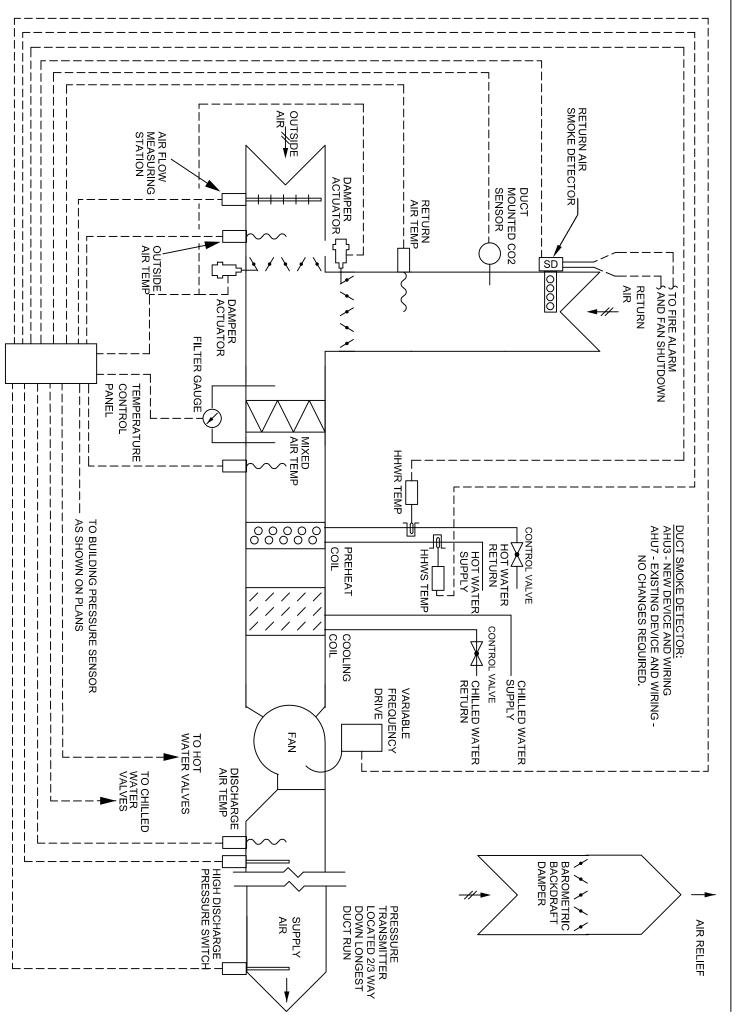




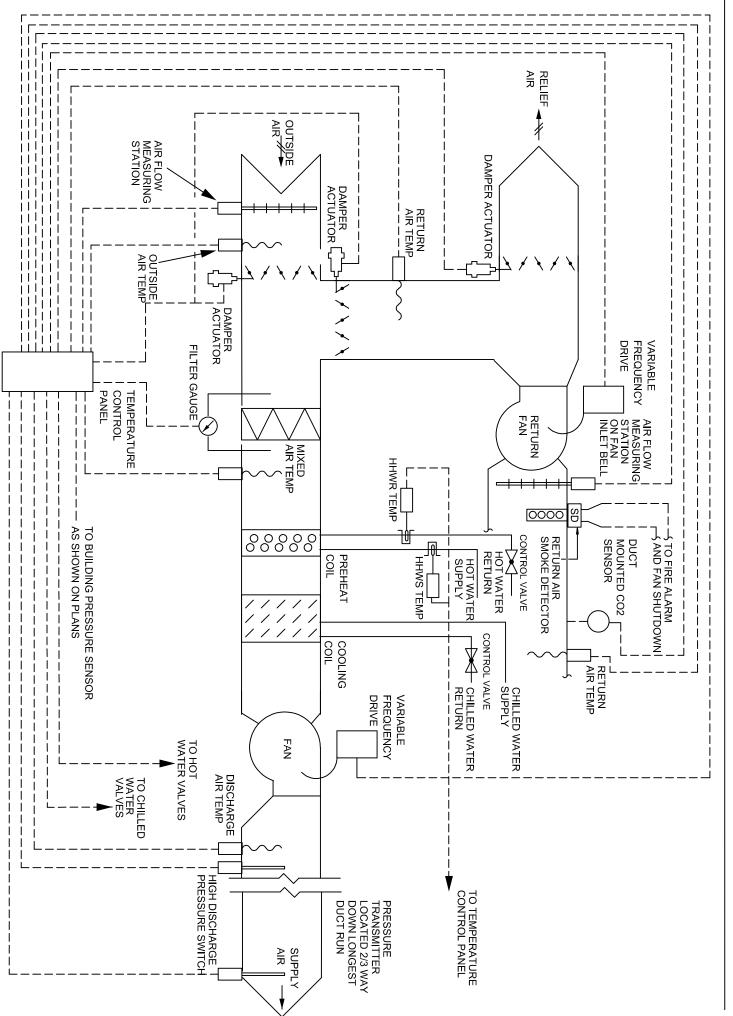
### **APPENDIX B** – AIR HANDLING SYSTEMS CONTROL SCHEMATICS



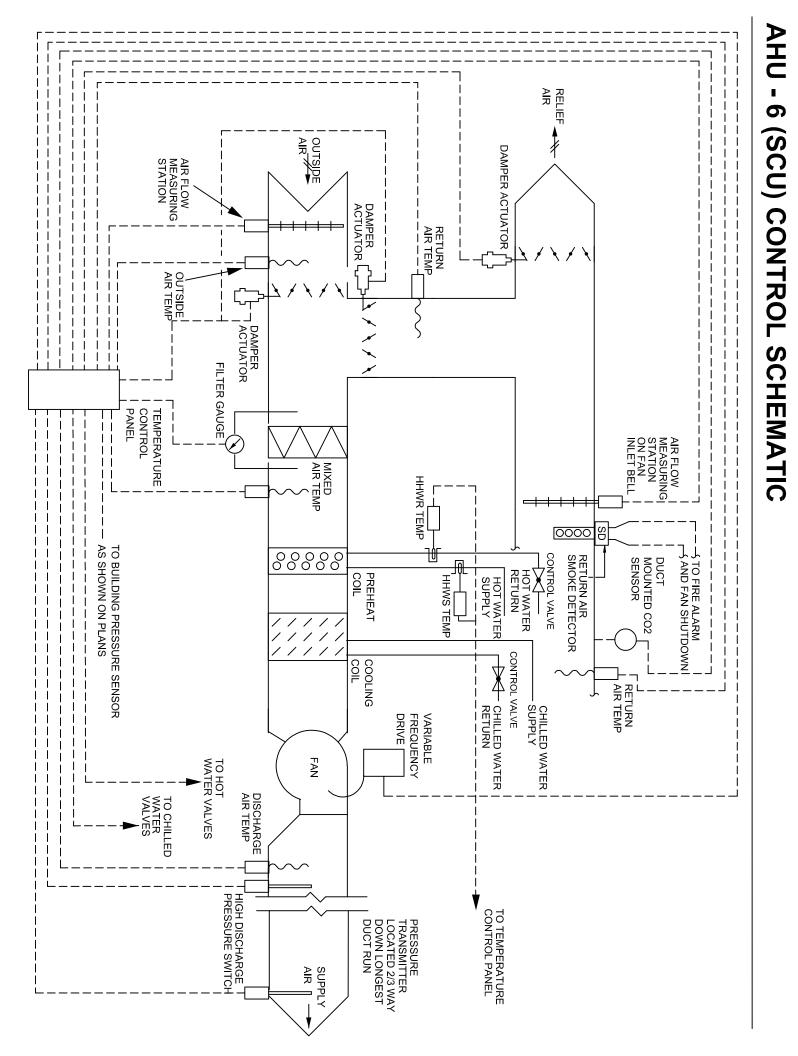


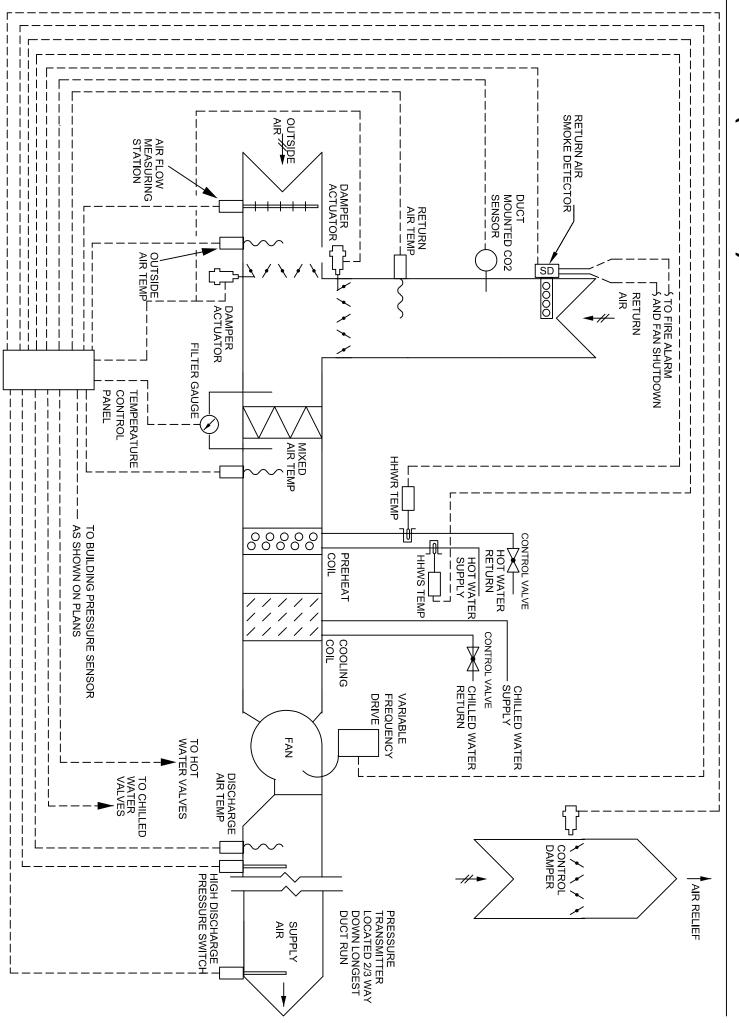


AHU - 3 (DOM) CONTROL SCHEMATIC



## AHU - 4 (50 BED) CONTROL SCHEMATIC





# AHU - 7 (ADDITION) CONTROL SCHEMATIC



### **APPENDIX C** – SUPPORTING DESIGN GUIDELINES

### ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers regarding SARS-CoV-2 :

### Facilities of Concern:

Long Term Care / Extended Care Assisted Living

- Nursing Homes
- o Hospice
- Memory Care Facilities
- Coupling both <u>operational policies and procedures</u> with <u>design interventions</u> can contribute to better overall outcomes for residents, patients and staff.
- SARS-CoV-2, the virus that causes COVID-19, has been shown to spread mainly from person-to-person through respiratory droplets. Research indicates that SARS-CoV-2 is resilient in aerosol form.
- Infectious respiratory droplets/aerosols are produced when an infected person talks, coughs or sneezes.
  - Droplets can land in the mouths or noses of nearby people.
  - Droplets can land on surfaces and be spread through contact with contaminated surfaces.
  - When in close contact with an infected person, aerosols/droplet nuclei can possibly be inhaled into the lung

### Operation of heating, ventilating, and air-conditioning systems to reduce SARS-CoV-2 transmission:

- Transmission of SARS-CoV-2 through the air is sufficiently likely, therefore airborne exposure to the virus should be controlled.
- Changes to building operations, including the operation of HVAC systems can reduce airborne exposures.
- Ventilation and filtration provided by heating, ventilating, and air-conditioning systems can reduce the airborne concentration of SARS-CoV-2 and thus the risk of transmission through the air.
- Unconditioned spaces can cause thermal stress to people that may be directly life threatening and that may also lower resistance to infection.
- In general, disabling of heating, ventilating, and air-conditioning systems is not a recommended measure to reduce the transmission of the virus.

### Potential Design Intervention Strategies / Opportunities

- Improve level of filtration.
- Utilize/create relative air pressure differences to direct airflow.
- Increase dilution by increasing outside air.
- Utilize directional airflow and local source control techniques.

### Evaluate for Resident Rooms & Common Areas



- Different equipment and systems centralized versus decentralized.
- Different opportunities and challenges.

### Mechanical Air Filters:

Consist of media with porous structures of fibers or stretched membrane material to remove particles from airstreams.

- The fraction of particles removed from air passing through a filter is termed "filter efficiency" and is provided by the Minimum Efficiency Reporting Value (MERV) under standard conditions.
  - MERV ranges from 1 to 16; higher MERV = higher efficiency
  - o MERV ≥13 (or ISO equivalent) are efficient at capturing airborne viruses
  - MERV 14 (or ISO equivalent) filters are preferred
  - High efficiency particulate air (HEPA) filters are more efficient than MERV 16 filters.

Increased filter efficiency may result in increased pressure drop or reduced airflow through the filter. Utilize higher efficiency filters with similar pressure drop or verify HVAC systems can handle filter upgrades without negative impacts to pressure differentials and/or air flow rates prior to changing filters.

### Virus Infected Patients:

• For infected patient separation: The most preferred recommendation is to <u>co-locate all</u> <u>patients to an area</u> served by a single air handling unit and to modify that unit to create negative pressure for the entire area being served. **Filters on this system should be replaced with HEPA filters**