

## FY 2020 Capital Improvement Requests

Agency/Institution  
Bridgerland Technical College

Agency Priority	Project Name	Cost Estimate	Description/Justification
1	Life Safety Update: Fire Issue -- Main Building Electrical Feed Panels.	\$ 100,000.00	<b>Life Safety Update:</b> A rock chuck entered the building's main electrical room and shorted out main power panels. Basic repairs were made, but 40-year old panels need updated and the power monitoring system needs put in place to avoid school-wide shutdown.
2	Life Safety Update: Main Campus HVAC System Upgrade Phase I, HVAC Upgrade to Auto Collision, Building Trades, Welding, Machining, Automotive, and Diesel Labs. Floor and Ceiling Exhaust Fans for Emissions in Automotive and Diesel Labs.	\$ 600,000.00	<b>HVAC System Renovation/Replacement:</b> The HVAC system at BTECH has aged beyond the statistical life cycle and is inefficient compared to modern standards. In addition, the supplemental cooling system for the building is in poor condition. Current cooling systems are not adequate in the large bay shop areas during hot summer months. New cooling systems need added to bring the labs down to proper levels for learning environments. Replace systems in Cabinetmaking, Automotive, Auto Collision, and Diesel labs. <b>Life Safety Update:</b> Current systems are not adequate to vent exhaust fumes from vehicles being repaired in the Diesel and Automotive labs. Floor venting areas are completely rusted out. Ceiling exhaust vents no longer function and need automatic switching to operate whenever CO levels are elevated.
3	Life Safety Update: Hot Water and Cooling System in Meat Lab and Freezer Cooling Unit for Culinary Arts.	\$ 300,000.00	<b>Life Safety Update:</b> The meat lab must maintain 55-degree air temperature and hot water at 180 degrees for proper conditions for meat handling and cleaning. Currently, neither of those can be achieved. A new hot water boiler system needs added and a cooling system for the air need updated. Possibility of solar preheat for water may be explored for efficiency. Current cooling systems for the walk-in freezers in the Culinary Arts Department are vented into the lab area making excessive noise and added heat. These systems need redesigned and upgraded to vent to the exterior of the building to help reduce noise and add energy efficiency.
4	Life Safety Update: Waterless Fire Suppression systems in IT Rooms in Main Campus, Brigham City Campus, and West Campus. Backup Generator in Brigham City Campus.	\$ 150,000.00	Waterless fire suppression systems are needed in all server rooms to avoid major electrical damage of critical servers in case of fire or accidental discharge of water-based fire system. A backup generator needs added to Brigham City Campus to avoid network shut downs of both BTECH and USU campuses during power outages.
5	Electrical Upgrade to Eliminate Dirty Power Penalty for Both Main and West Campus	\$ 100,000.00	To help eliminate dirty power penalties, a study and updates need performed to help reduce the \$15,000 to \$20,000 per year penalties currently being accessed by the power provider at Main and West Campuses to reduce dirty power.
6	Brigham City Campus - Facility Improvements	\$ 100,000.00	BTECH occupies the DFCM-owned Brigham City Educational Complex on 1100 South in Brigham City. As BTECH expands programs into this facility, the need to modify areas for specific program functions is required. Developing the Information Technology Program at the Brigham City facility requires updating labs for their specific requirements and providing essential infrastructure. Also, the need for a backup generator option is needed to facilitate both BTECH and USU infrastructure. The fiber optic lines for both USU's new branch campus building and existing facilities, as well as BTECH, all run through this facility; and if power is lost, all of these buildings are left without network connection. This would result in shutting all buildings down. Even if power remains at the new USU building, they are left without the ability to communicate. It is in hopes that the generator request for improvements will be pursued by DFCM, but BTECH also wants to cover any possible contingency by submitting this request.
7	Life Safety/Energy Efficiency: Parking Lot Lighting. Main & West Campus. (Have Done Part of Main and West.)	\$ 60,000.00	BTECH's Main and West Campus parking lot lighting is insufficient to safely or efficiently light the parking lots. After dark, there is a serious life-safety concern because there isn't enough light for constituents to safely navigate the parking lot and obstacles therein. In addition, the existing lighting has been in place for more than 30 years and is extremely inefficient. Replacing the current lighting with new LED systems is imperative.
<b>Total Request</b>		<b>\$ 1,410,000.00</b>	