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## ***FORMAL PROJECT APPROVAL***

A Formal Project Approval (FPA) is required for all Capital Projects with a Total Project Cost in excess of \$250,000.

FPA represents approval of the Project including the program justification and need, scope, the total project cost, and the funding and phasing plans for the project. Requests for formal project approval shall include a signed project agreement or facilities pre-design statement, the proposed cost and funding sources for the next phase of the project and for eventual completion of the project, and a variance report identifying any significant changes in scope, budget, schedule, deliverables or prescriptive criteria associated with a design-build project, funding plan, operating cost impact, or other cost considerations from the time the project received preliminary administrative approval. It also represents authorization to complete project development through the schematic design, targeting the approved scope and budget, unless otherwise designated by the approval authority.

Action Requested

and to improve energy efficiency, reduce operational costs, and replace systems and components that are nearing the end of their service lives.

VariANCES

This project began as an expansion of the current diesel technology lab and has expanded based on the conceptual planning process over the last year. The project as now envisioned reconfigures a portion of each of the principal teaching labs in the building.

SPECIAL CONSIDERATIONS

Work must be phased to allow current academic programs to continue during the work. Only a portion of the total project cost is available at this time. The first phase of the project will utilize \$1.5 million of 2013 capital renewal funds. The priority for the first phase will be expansion of the diesel technology teaching lab. A schematic project approval will be submitted for that project in early 2014.

TOTAL PROJECT COST AND FUNDING SOURCES

**Total Project Cost** **\$4,620,000**

Phase 1 of this project is funded with \$1.5M of 2013 R&R capital (563138). The remaining work is expected to be accomplished in 2 or 3 additional increments depending on future funding.

ANNUAL PROGRAM AND FACILITY COST PROJECTIONS

This project is expected to reduce the energy consumption of the existing facility. Elements of the project that will contribute to the energy efficiency of the facility include: renewal of the building automation system, replacement of the boilers, replacement of most of the building lighting systems, and replacement of the majority of the ventilating fans. Based on results from previous building renewal projects we expect to reduce the energy consumption of the building by at least 20%.

	<u>Amount</u>
Total Annual Program Cost Increase	unchanged
Total Annual O&M Cost (based on 20% reduction of energy consumption)	-\$20,000
Total Annual Renewal and Replacement Cost	unchanged

PROJECT DELIVERY METHOD

The project will be Design-Bid-Build.

AFFIRMATION

This project complies with Regents Policy, the campus master plan and the Project Agreement.

SUPPORTING DOCUMENTS

- Mission Area Analysis and Statement of Need
- Project Agreement
- One-page Project Budget
- Conceptual Work Items Narrative
- Work Items Floor Plan

### Approvals

The level of approval required for FPA shall be based upon the estimated TPC as follows:

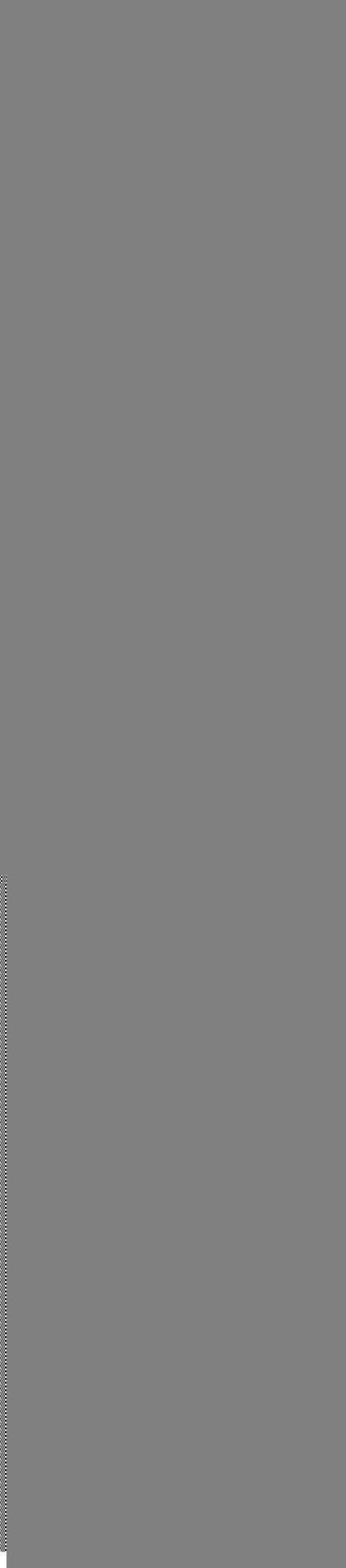
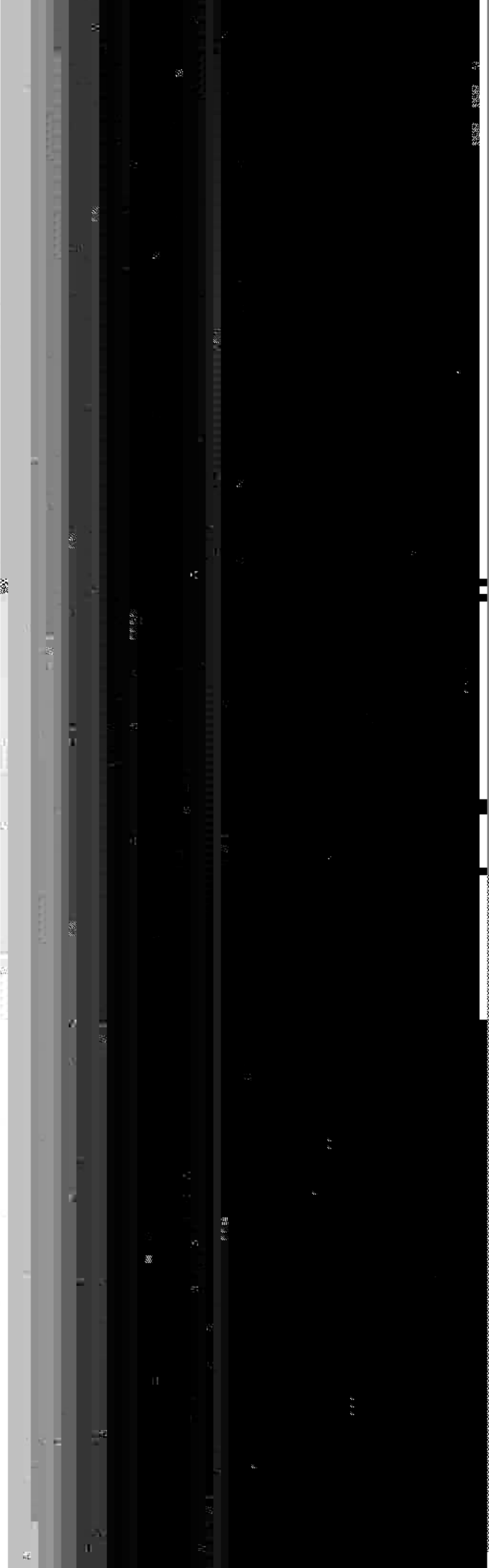
**TPC > \$4.0 million will require approval by the board based on the recommendations of the Facilities and Land Management Committee (FLMC).**

TPC > \$2.0 million but not more than \$4.0 million will require approval by the FLMC.

TPC > \$1.0 million but not more than \$2.0 million will require approval by the Chair of the FLMC.

TPC ≤ \$1.0 million will require approval by the AVP of Facilities and Land Management.

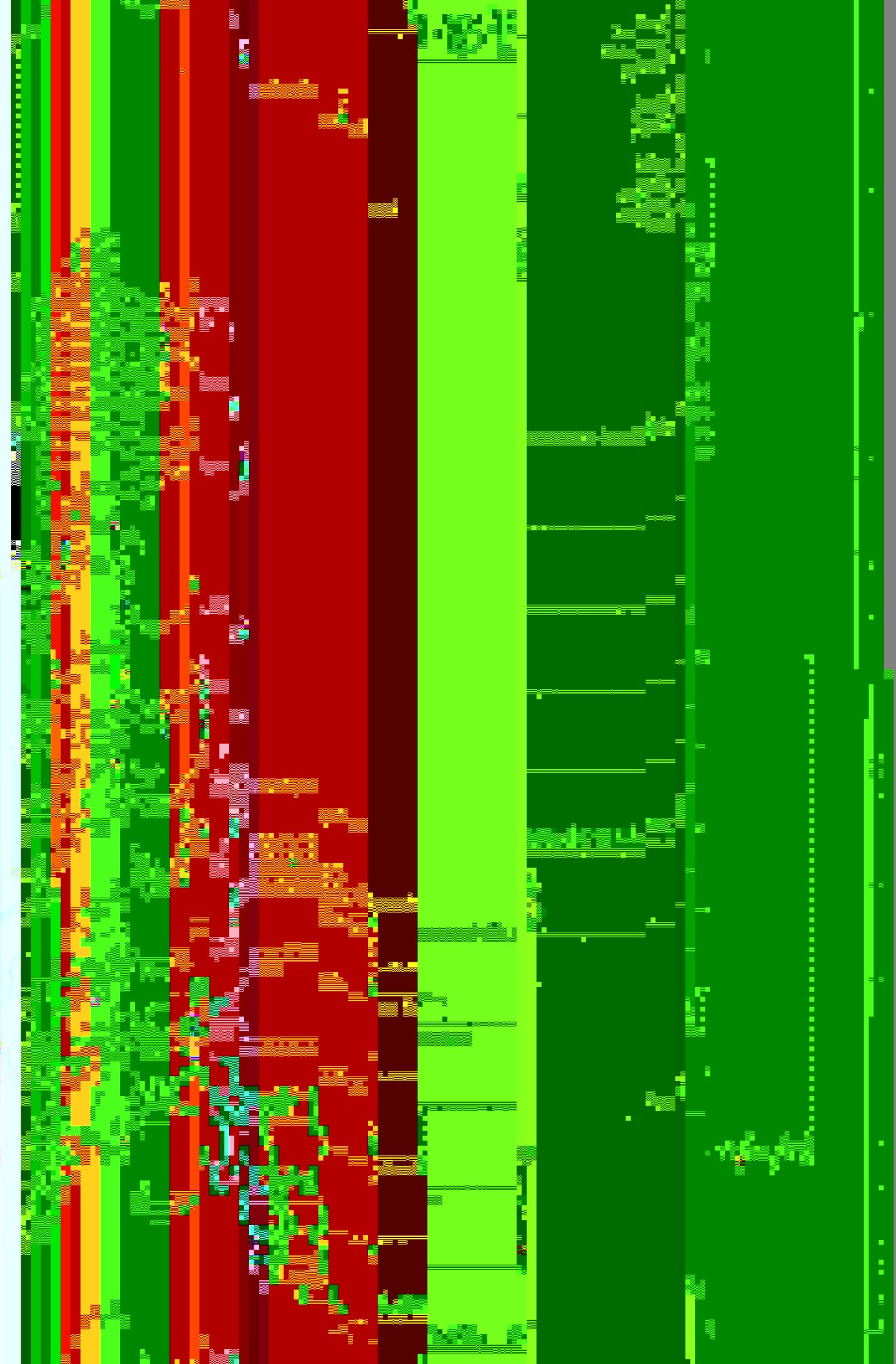




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**UNIVERSITY OF ALASKA**

Project Name: Technical Education Center Renewal

MAU: UAS

Building: Technology Education Center

Date: November 2013

Campus: Juneau

Prepared By: W.K.Gerken

Project # 2013-02

Account No.: 563138

Total GSF Affected by Project: 21,890

**PROJECT BUDGET****Total Project****A. Professional Services**

Consultant Basic Services	15.0%	536,000
Construction Administration	2.0%	71,000
Site Survey		-
Soils Engineering		-
Project Inspection	2.0%	71,000
Plan Review / Permits		8,000
Other		-
Professional Services Subtotal		<b>686,000</b>

**B. Construction**

General Contractor		3,191,000
Other Contractors (Voice/Data Installation)		-
Construction Contingency	12.0%	383,000
Art		-
Other (Interim Space Needs)		-
Construction Subtotal		<b>3,574,000</b>

Construction Cost per GSF

**C. Equipment and Furnishings**

Equipment		25,000
Furnishings		75,000
Make Ready/Move In		
Equipment and Furnishings Subtotal		<b>100,000</b>

**260,000****4,620,000**

Total Project Cost per GSF

\$

211.06

# Mission Area Analysis and Statement of Need: University of Alaska Southeast (UAS) Technical Education Center (TEC), Juneau Campus

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The University of Alaska Southeast's (UAS) School of Career Education offers post secondary workforce education and training in support of the UA System's role in building a future workforce for Alaska. UAS Career Education's programs extend back many years in the region, incorporating programs offered initially at community colleges in the region. Today, these UAS programs help fulfill President Gamble's initiative which focuses on the importance of productive partnerships with public entities and private industries in building a workforce to sustain and grow Alaska's communities.

UAS Career Education supports this theme of building Alaska's future workforce. It does so by focusing on and key elements in our UAS mission. To fulfill this mission, UAS Career Education supports training and collaboration in partnership with industries vital to Southeast Alaska. Using nology, Maritime and Multiskilled Worker training, Marine Transportation, and Welding, UAS Career Education provides training for high demand jobs. Programs offered by Career Education develop professional, community and industry leaders that serve both Juneau and all of Southeast Alaska.

The School of Career Education's primary role is to prepare students for productive employment by providing academic, vocational, and community interest courses. The School also assists students in the transition to college and the successful completion of their programs of study at all levels—from non credit Workforce Certificates (WCs) and credit bearing Occupational Endorsements (OEs), to Certificates and Associate degrees. The School's offerings are shown in Table 1:

Entry Level Miner Maritime & Multiskilled Worker	Automotive Technology Building Energy Retrofit Tech Diesel/Heavy Duty Tech Healthcare Information Tech Law Enforcement Marine Engine Room Prep Marine Transportation Mine Health Information Mgt. Health Sciences Law Enforcement Nursing (with UAA)		
	Power Technology (Auto/Diesel/Mine Welding)		

Career Education requires strong partnerships with the industries we serve. These partnerships are the backbone of strong and growing programs. These partnerships engage students, faculty, staff, communities, workforce development, professional development and academic success. Our partnerships help to keep our programs relevant to our students and area industries.

Examples of partnerships vital to UAS Career Education include: Hecla/Greens Creek Mine, Coeur Mining Kensington, Alaska Department of Labor and Workforce Development, Alaska Department of Education and Early Development, Alaska Public Safety Academy, Alaska Marine Highway System, Southeast Conference, Key

Bank, First Bank, Delta Fuel, NC Machinery, Tlingit Haida Regional Housing Authority, Alaska Ship and Drydock, Silver Bay Seafoods, Sitka Sound Science Center, Juneau and Sitka Pioneers Homes, Wildflower Court, Bartlett Community Hospital, PeaceHealth, Southeast Alaska Regional Health Corporation (SEARC), First Student transportation services, Miller Construction, Dipsticks Auto Club, Mendenhall Motors, and more.

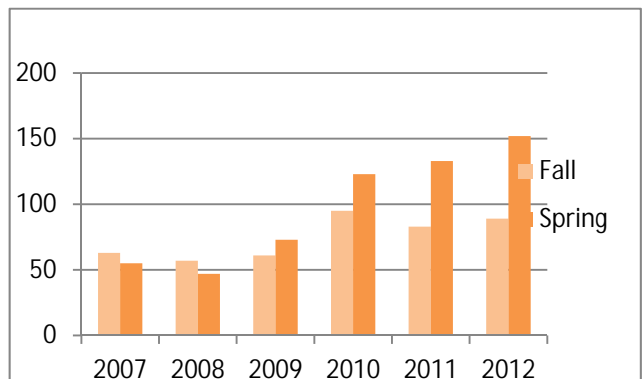
UAS Career Education programs align closely with the changing economy of Southeast Alaska. No longer dependent largely on government and timber alone, the region's economy is increasingly diversified—focusing on mining, seafood, the visitor industry, healthcare, timber, and government (

Southeast Conference, 2013a). Between 2010 and 2012 the region grew by 2,800 people to a new record high of 74,423. The labor force increased by 1,800 jobs. Job earnings in the region increased by 10 percent over this two year period. Some 280 new mining jobs were created, an increase of 50 percent. Nearly a million visitors came to the region, including an increase of 61,000 more cruise ship passengers. And, Southeast Alaska continued to expand its ocean based economy: more than a quarter of all work related income in the region comes directly from maritime employment: so called “Blue Jobs” ( Southeast Conference 2013b).

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The UAS Technical Education Center (TEC) at the Juneau Campus is located near downtown Juneau—adjacent to Juneau Douglas High School. The TEC was built in 1983 to be a Marine Center housing programs in boat building, boat restoration and boat repair. Activities in the TEC were expanded over the years to include Construction, Diesel, Auto, Welding, and recently Mine Training. Current space allocations at the TEC cannot accommodate the needs of our growing programs and serve the needs of our industry.

Renovation of the TEC will improve the layout of the building, expand Career Education's ability to offer high demand trainings and classes, and increase safety and security of staff and the space. Of immediate need is expansion of Power Technology/Diesel lab facilities, used for mine mechanic training as well as training for heavy duty diesel and marine mechanics. The Power Technology program has seen dramatic increase in numbers requiring larger classrooms, larger lab spaces, additional sections, and newer, more technologically advanced equipment. These increases are due to partnership and scholarships coming from Hecla and Coeur, which serve both industry and students alike. Moreover, Power Technology has a mutually beneficial relationship with nearby Juneau Douglas High School. JDHS students walk across the street to take career education classes in the TEC, thereby building a solid career pathway from secondary level education to post secondary.



The TEC is home to the UAS Center for Mine Training, Southeast Alaska's only mine training facility, where miners are trained in underground operations and MSHA safety courses. The Center's Introduction to Mining Occupation and Operations class, offered online throughout Alaska, introduces high schools students to different aspects of mining occupations. This class has generated much interest and numbers will be continuing to grow. The UA Mining and Petroleum Training Service (MAPTS) funds Mining Safety and Health Administration (MSHA) classes every other week. These classes are for the “first time miner” and “refresher” courses. The increased attention of the Center's classes has made additional space a priority.

The TEC is especially used by non traditional students—those fr

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ceiling with lighting. Mechanical work will consist of additional ventilation for the spray booth and classroom HVAC.

**Work Item 4 – New Power Tech Lab - \$237,915**

In the high bay all existing shelving will be demolished and the roll-up door along the southwest wall removed and filled in with standard framing. The existing pit in the storage area adjacent to Engine Cleaning will be filled with concrete to be flush with the surrounding floor. The walls of the existing Engine Cleaning room will be demolished and replaced to follow the step in the ceiling structure from 20ft to 11ft. New heavy duty shelving will be

#### **Work Item 8 – Remodel of 2<sup>nd</sup> Floor Restrooms - \$158,951**

Work will consist of demolition of the existing restrooms and locker rooms to allow for a student lounge, storage space, and new restrooms. New partition walls, drop ceilings and lighting will be required. Mechanical work will consist of alterations to all existing restroom fixtures.

#### **Work Item 9 – 2<sup>nd</sup> Floor Faculty Upgrades - \$163,165**

Work will consist of demolition of the existing classrooms and hallway to allow for additional offices and storage space. All demolished and new walls are non-structural interior partition walls. New finishes will be required in all updated spaces as well as new ceilings, and lighting. Existing offices will receive new carpet and paint to match.

#### **Work Item 10 – 2<sup>nd</sup> Floor Large Classroom/Computer Lab - \$133,959**

Work will consist of demolition of the existing classrooms and hallway to allow for a new larger classroom. The large classroom will require a new moveable partition to divide the space into 2 smaller classrooms for periodic independent use. The entire classroom space will need comprehensive audio visual capability including the electrical support for use as a computer lab in the south end.

#### **Work Item 11 – Mechanical Controls Upgrade - \$496,605**

All mechanical controls in the building will be upgraded to Direct Digital Controls. See mechanical conceptual narrative for details.

#### **Work Item 12 – Boiler Upgrades - \$177,903**

Boilers will be replaced with new more efficient equipment. See mechanical conceptual narrative for details.

#### **Work Item 13 – HVAC System Upgrades - \$117,930**

Existing fans and exhaust system will be upgraded with new equipment. See mechanical conceptual narrative for details.

#### **Work Item 14 – Compressor Replacement \$79,905**

Existing compressor will be replaced with a new compressor. See mechanical conceptual narrative for details.

**Work Item 15 – Marine Tech Lab Renovations - \$64,675**

The North half of the welding lab will be remodeled to include a new classroom and storage rooms. The classroom will get all new finishes and lighting. The Marine Lab will be an open high bay space with new wall paint and new suspended lighting.

**Work Item 16 – Welding Building Upgrades - \$143,479**

Restrooms and janitorial will be remodeled to accessible restrooms with new fixtures. The Metal Storage room will receive a new exterior double door for ease of receiving welding materials. The storage containers existing south of the welding building will be relocated to free up access to the south face of the building.

**Work Item 17 – Welding Equipment Upgrade - \$111,022**

The welding lab will be refitted with updated equipment, partitions, and ventilation systems. Mechanical will provide details as known.

**Work Item 18 – TEC Exterior Painting and Glazing Replacement - \$150,000**

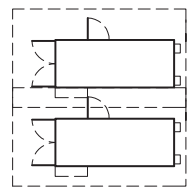
**Work Item 19 – TEC Roofing Replacement - \$300,000**

One portion of the roof has been replaced within the last 7-8 years, representing roughly 20% of the roof area. Other areas of the roof have been in place for roughly 20 years, and will require replacement within ten years.

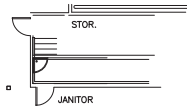
**POSSIBLE– Electrical Upgrades - \$200,000 (place holder)**

Study letter with Ben Haight underway. Current electrical costs are distributed throughout HMS estimate. Costs will be refined after receipt.





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