

Sequim School District



A Career Technical
Education Center of
EXCELLENCE



BUSINESS PLAN



Learning that works for Washington

CTE[™]

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Spotlight pictures- Sequim Robotics Federation and
Allison Hastings- Middle School Staff

Executive Summary

Career Technical Education Center of Excellence

Introduction: Sequim School District in collaboration with the Sequim Community and local/regional business partners are pursuing a \$15 million dollar Washington State funded grant to build a Career Technical Education (CTE) Center of Excellence. The project objective is to construct a 20,000 square foot (100' x 200') steel building that provides industry grade training capabilities for the conduct of technical and skilled trade instruction of Sequim School District students.

The building will replicate a training center for skilled trades and local industries

- 3 Open Bays 40'x100'
- Industrial grade access to water/power/air
- 2 Fully Resourced Classrooms 30'x100'
- Space Includes Restrooms/Shower
- 1 Fully Sourced Industry Rated Kitchen 50'x100'
- Access to both Middle and High School students

Primary Purpose: The development of 21st century industry ready graduates from career technical education programs with the knowledge, skills, and experiences for immediate entrance into a journeyman/skilled trade labor market required within the local/regional area and to the benefit of our local economy.

1. Create access to required floor space while conducting skilled and technical trade modules/culminating projects and industry required certifications
2. Provide access to technical trade tools, industrial equipment and industry grade instructional models that are currently not compatible within existing classroom configurations and/or meet industry required standards
3. Replicate large open manufacturing/construction/factory workspaces that are easily transformed to meet varied technical skill training tasks and objectives
4. Build relationships/provide industry expert contracted training/seminars utilizing latest industry and certification practice on specifications
5. Emergency/Crisis Management Center
6. Support Community Related Events
7. Conference Center
8. Regional EMS/Training Center

Project Challenges: The award of the \$15 million dollar grant is predicated upon the Sequim School District's ability to secure a \$1 million dollar matching fund through pledges of actual monetary donations or in-kind services donated from local/regional/community sources. (Local governments, non-profits, local businesses, and individuals)

Estimated Cost: \$16.5 million dollars

Economic Impact and Benefit: Research has shown that participation in CTE programs prepare students for high-wage, in-demand careers, while simultaneously addressing critical workforce shortages. A recent study (pg.13 CTE ACTE study) of Washington State CTE programs found that for every dollar spent on secondary CTE students, taxpayers receive a \$9 return on investment. Locally, this translates into over \$11 million per year of additional annual economic output, including \$3.7 million of wages, and over \$200,000 of additional city and county sales tax receipts per year.

Proposed Project Timeline: The Washington State Legislature will complete its 2023-2024 budget by early May 2023, for the fiscal year starting July 1, 2023. If the CTE Center is included in the budget, contract development will begin early in the new fiscal year. Detailed design and engineering for this type of project is expected to take five months and offsite fabrication and onsite preparation and construction seven months. The new CTE Center would open as soon as mid-calendar year 2025.



January 2023

Building The Next Chapter

Sequim School District recognizes that our local community will benefit from a robust and relevant Career Technical Educational program that educates and trains industry-ready, career-prepared graduates to enter the workforce as highly trained skilled trades people. Our local community is on the cusp of a unique and one time state investment to update and modernize our technical education facilities. Our next steps will be critical to capitalize on this potential \$15 million dollar state investment to modernize and construct a CTE Center of Excellence. It will allow Sequim School District to be cutting edge in our response to the workforce development and student training needs right in our own local community. In order to demonstrate the school district's and community's commitment to this endeavor, Sequim School District is seeking a \$1 million dollar match to realize a \$15 million dollar investment to benefit our local economy, our workforce development and our career ready graduates. Opportunities like this don't come along too often, and it is imperative that we seize the day.

Our local businesses and community members have emphasized that a well-trained, local workforce is needed in our area to fill the many openings in healthcare, building construction, manufacturing and diesel/marine automotive technologies. Sequim School District is committed to supporting our local economic development through technical education and training. These essential trade careers not only have strong earning potential for our youth; the careers will fill the hiring gap for our businesses and meet the service demand of our community. Building trades, skilled service careers, and the medical community need industry ready workers immediately in Clallam County.

To meet these pressing regional workforce needs, the Sequim School District is actively pursuing this one time financial opportunity to enhance our current programs and facilities by constructing a Career Technical Education Center of Excellence. The modern training facility will be designed to meet emergent industry standards. Additionally, the district will continue to broaden the current Career Technical Education program capability through the evolution of our current industry programs and the addition of new pathway courses and training experiences that effectively prepare and inspire our students to join the local labor and industry markets within our community. Careers are waiting for them.

Sequim School District is diligently working to develop and sustain an active partnership with our local businesses, community partners, public service agencies, and industry partners to prepare our graduates for careers in Clallam County. Meeting the call of pledging a \$1 million dollar match toward the much larger potential \$15 million dollar state investments before us. The Sequim School District is leading the charge to inform local community about the degree of community impact and return on investment that this opportunity for our student presents. Students graduating from Sequim CTE programs will realize their potential in industry ready training programs and enter local careers with strong living wage potential. Our collective goal is to design, develop, implement, and sustain a Career Technical Education Center that actively and effectively meets our local labor and industry employment needs with industry-ready and career-prepared graduates. We thank you for being a partner alongside us in this important workforce development opportunity. Join the cause and move our students and work force needs toward fulfillment.

Sincerely,

A handwritten signature in black ink that reads "Regan Nickels".

Superintendent
Sequim School District

Why a new Career Technical Education Center for Sequim?

Sequim School District in collaboration with local business and non-profit partners is pursuing \$15 million dollars in Washington State funding to create a Career Technical Education (CTE) Center of Excellence. The project objective is to invest in local economic development by targeting career training for local trades including building construction, manufacturing, fabrication, and health care. Construction of a 20,000 square foot (100' x 200') steel building that provides industry grade training capabilities and skilled trade instruction of Sequim School District students is the target of initial expenditures.

Mission Statement

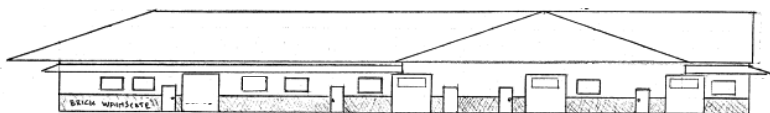
The Career Technical Education Center of Excellence provides modern, hands-on training that generates skilled students to pursue high-wage careers focused on Clallam County workforce needs.

The Need For A CTE Facility

The proposed new workforce trade training facility in Sequim will contribute to the growth of our local economy.

An important part of Sequim School District's curriculum is CTE (Career and Technical Education). This curriculum requires hands-on experiences to prepare students for careers in the skilled trades. The new building allows for industry driven curriculum and realistic exposure to training. Unlike traditional classrooms, this new facility is designed to adapt to the changing needs of well-paying skilled trade careers.

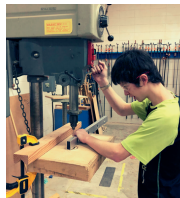
Clallam County has a shortage of workers in critical fields like healthcare, the building trades, maritime, manufacturing, and technical automotive industries. These shortages restrain economic growth. Studies show that participation in CTE programs prepares students for high-wage and in-demand careers, while simultaneously addressing critical workforce shortages. CTE programs create meaningful learning opportunities and increase graduation rates and result in higher earnings and benefits for graduates at the secondary and post-secondary levels.



Key Metrics

Research has identified several ways Career Technical Education helps our community.

➔ For Employers



1.) Workforce Shortages: CTE programs can address workforce shortages in key business sectors, which can have a significant impact on local, regional, and state economic output.

2.) Employer Training Costs: CTE programs can save employers on training costs for new employees.

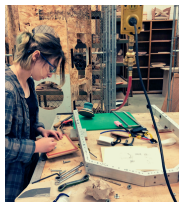
➔ For Workers



3.) Earnings: CTE programs enhance an individual's skills and productivity, thus increasing wage rates. This results in significantly greater short-term and lifetime earnings.

4.) Fringe Benefits: CTE program participation results in additional fringe benefits in the form of paid leave, paid insurance, retirement/savings plan contributions and other non-cash benefits.

➔ For The Public



5.) Tax Payments: CTE programs, which generate higher incomes for participants, lead to payment of increased payroll, sale/excise, local, state, and federal income taxes.

6.) Economic Impact: A recent study of Washington State CTE programs found that for every dollar spent on secondary CTE students, taxpayers receive a \$9 return on investment. Locally, this translates into over \$11 million per year of additional annual economic output, including \$3.7 million of wages, and \$200,000 of additional city and county sales tax receipts per year.



Clallam County Market Conditions Analysis

In 2022, the Clallam Economic Development Council (EDC) commissioned a comprehensive study by Olympus Consulting to “take the socioeconomic pulse of Clallam County”. The study, *Economic Development in Clallam County – When Prosperity Matters*, examined the question of prosperity from multiple angles and identified several findings relevant to the Sequim School District CTE Business Plan.

Community Member Challenges: Community member survey respondents rated the following as their top three challenges to their economic prosperity:

- Finding suitable housing that is affordable
- Access to quality healthcare
- Finding a job that will allow me to meet my financial obligations

Economic Output and Wages for Key Industries: The researchers analyzed over 175 job categories in fourteen job clusters. Five of these job clusters and 31 job categories are relevant to current or future training in the Sequim CTE Program – Construction, Healthcare, Automotive Repair/Maintenance, Manufacturing, and Information Technology.

Job Cluster	Employee FTEs	Wage/Emp FTE	Proprietor FTEs	Total FTEs	(2021 \$) Econ Output	Output/FTE
Construction	1,623.6	\$48,300	605.3	2,228.9	\$321,756,840	\$144,357
Healthcare	1,189.2	\$46,367	98.5	1,287.7	\$128,011,509	\$99,409
Automotive Repair/Maintenance	300.5	\$49,475	59.3	359.8	\$36,197,539	\$100,605
Manufacturing	372.7	\$67,913	6.1	378.8	\$118,304,623	\$312,314
Information Technology	154.3	\$81,867	518.8	673.1	\$51,955,077	\$77,188
CTE-Related Totals	3,640.3	\$293,922	1,288.0	4,928.3	\$656,225,588	\$133,154

In total, approximately 5,000 Clallam County workers (employees and proprietors) are generating over \$656 million in economic activity, averaging \$133,000 of output per full time equivalent worker. The following definitions help explain this table.

Employee FTEs: Full Time Equivalent employee workers, defined as being paid for an average of 40 hours per week, 52 weeks per year, including time for vacation/sick/paid leave.

Wage/Emp FTE: Average annual wages for a Full Time Equivalent worker.

Proprietor FTEs: Business owner Full Time Equivalents.

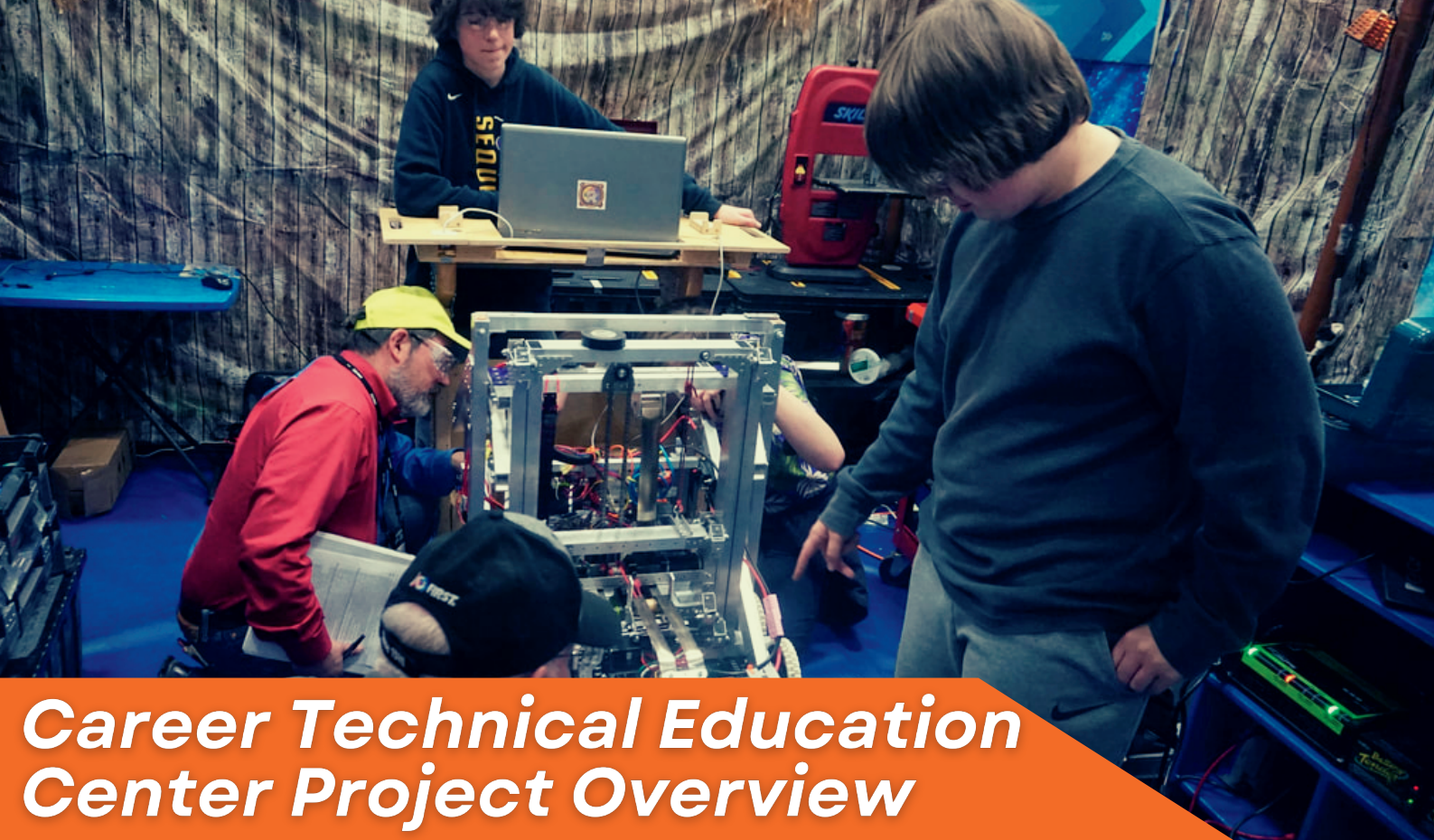
Total FTEs: The sum of Employees and Proprietors Full Time Equivalents.

Economic Output: The total dollar cost of the work created by a business including wages, material, and supplies, rent, vehicles, purchased services, taxes, profits, etc.

Output/FTE: The Economic Output divided by the Total FTEs equals the Output per Full Time Equivalent. This is an important measure of how many dollars of economic activity are created for each worker/proprietor as well as how much economic activity is lost to the community when a position is unfilled. Note that businesses with high material and supply costs will have higher Output/FTE than service-type businesses.

Job Openings/Job Growth: Within this economic environment, the 2022 EDC Study also found substantial numbers of job openings within each job area – as many as 29% of surveyed employers listed this as their number one business challenge. For example, our local hospital, Olympic Medical Center had 251 job openings when the study was completed. Most employers in these five job areas also stated that they were likely to expand their businesses (e.g. 58% of surveyed construction businesses, 62% of surveyed automotive repair businesses).

Together, these findings provide important data for the CTE Business Plan. Currently, there is a lack of qualified workers in key job areas, many businesses in these areas are likely to expand, and the Sequim Schools CTE Program can play an important role in addressing the needs.



Career Technical Education Center Project Overview

Sequim School District in collaboration with the Sequim Community and local/regional partners will construct a building called the Career Technical Education Center on the Sequim Schools main campus. This document provides a high-level overview of the new CTE Center and how it will support our community.

Overview

The building will include the following:

- 100'x200' Steel Building
- 3 Open Bays 40'x100'
- Industrial grade access to water/power/air
- 2 Fully Resourced Classrooms 30'x100'
- Space Includes Restrooms/Showers
- 1 Fully Sourced Industry Rated Kitchen 50'x100'

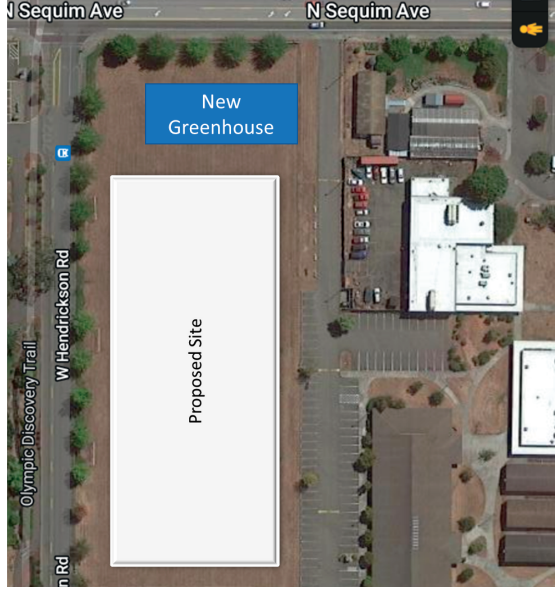
CTE Center Secondary Purpose

- Emergency/Crisis Management Center
- Support large community related events
- Conference center
- Regional EMS/training center
- Post graduation training
- Partnerships with Olympic and Peninsula College.

CTE Center Primary Purpose

- Facilitate the development of 21st century industry ready graduates from career technical education programs with the knowledge, skills and experiences for immediate entrance into a journeyman/skilled trade required within the local/regional area
- Supplement existing classrooms with access to required floor space in conducting CTE modules/culminating projects
- Provide access to industry rated tools and equipment that are not compatible with current classroom configurations and/or industry required standards
- Replicate manufacturing/construction/factory workspaces

Building Design and Location



The current site for building the Career Technical Education Center of Excellence is located behind the agricultural science buildings next to the newly built greenhouse that was finished Spring 2022. This location serves as the perfect opportunity to engage both the High School and Middle School students given the proximity to both campuses.

Meet the Sequim School District CTE Teachers



JIM HEINTZ
HIGH SCHOOL



LYNETTE JENNE
HIGH SCHOOL



BRITTNEY MURDACH
HIGH SCHOOL



BILL MCFARLEN
HIGH SCHOOL



KEVIN PHILLIPS
HIGH SCHOOL



CANDY SEELYE
HIGH SCHOOL



BRIDGETTE SHINGLETON
HIGH SCHOOL



CALEB GENTRY
MIDDLE SCHOOL



RENEE COLWILL
MIDDLE SCHOOL



LAURA GOULD
HIGH SCHOOL



STUART MARCY
HIGH SCHOOL



SARA TURNER
HIGH SCHOOL



DENISE DAHLL
HIGH SCHOOL



CHRISTY DITLEFSEN
HIGH SCHOOL



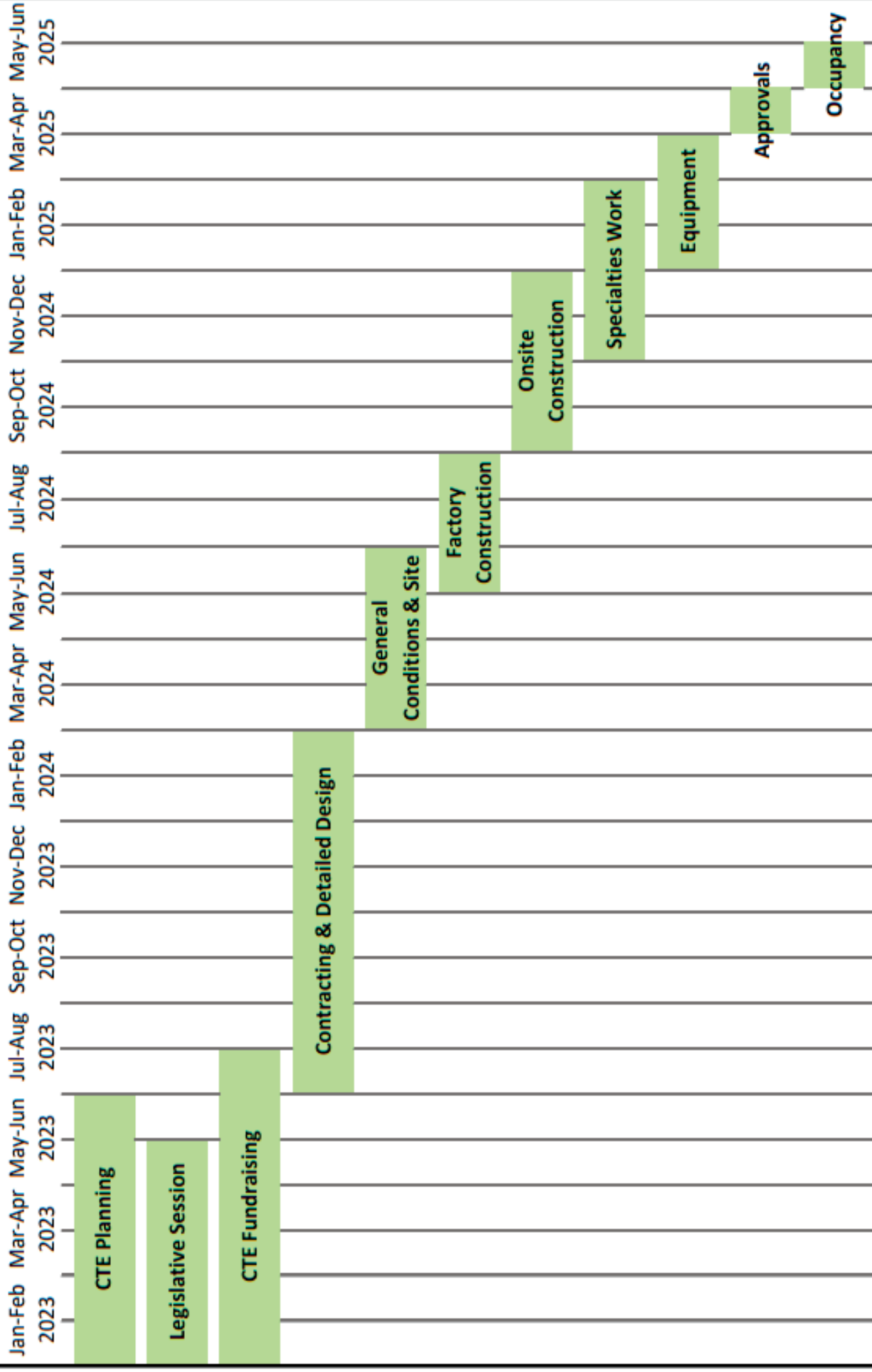
BRAD MOORE
HIGH SCHOOL



CHARLES KLEINBERG
HIGH SCHOOL



Sequim School District Career Technical Education Center Project Timeline



Project Budget

Background

The Sequim School District has been able to draw on several resources to develop the CTE Center Project Budget. This includes budgeting material from a similar facility at Washington State University, discussions with local contractors, the Washington State Office of Financial Management's Construction Cost Assessment Final Report (June 6, 2022), the Washington State Architectural and Engineering Fee Schedule, and additional research on the cost of several budget line items not included in the above reference material.

As part of the budget development process, we have estimated Low and High amounts for each line item. We have approached the budget from the perspective of developing a not-to-exceed total (High) to ensure that adequate resources will be available to successfully bring a new CTE Center online on a timely basis.

Project Budget

Sequim School District Career Technical Education Center Project Budget				
Building Dimensions:		100' x 200'	Square Feet:	20,000
Revenue				
Grants & Funding Allocations			\$15,000,000	
Local Match for State Funding			\$1,000,000	
In-Kind Value of Land			\$500,000	
Total Revenue			\$16,500,000	
Expenses	Cost/Square Ft.		Item Cost	
	Low	High	Low	High
Construction Costs	\$279.00	\$320.00	\$5,580,000	\$6,400,000
Additional Building Costs	\$76.75	\$97.60	\$1,535,000	\$1,952,000
Total Building Costs	\$355.75	\$417.60	\$7,115,000	\$8,352,000
Other Project Costs			\$3,225,000	\$4,254,000
Design Contingency			\$534,000	\$835,000
Project Contingency/Escalation			\$1,138,000	\$1,754,000
Sales Tax			\$1,022,000	\$1,305,000
Project Budget Total			\$13,034,000	\$16,500,000

For additional detail, please see Appendix I – Budget Detail.

Sequim Schools Career Technical Education (CTE) Return on Investment (ROI) Model Analysis

Background

There is a rich body of research about the benefits of CTE programs in the United States including deep dives into Return on Investment (ROI) analyses for individuals and their families, workplaces, and communities. The literature spans research in two-dozen states, including Washington State. The findings show that participation in CTE programs prepare students for high-wage and/or in-demand careers, while simultaneously addressing critical workforce shortages. CTE programs increase graduation rates and result in higher earnings and benefits for graduates at the secondary and post-secondary levels.

We combined these studies with the 2022 Clallam EDC research paper completed by Olympus Consulting to complete the following ROI Analysis.

ROI Analysis

There are 31 job categories in five job clusters in Clallam County that are relevant to current or future training in the Sequim CTE Program – Construction, Healthcare, Automotive Repair/Maintenance, Manufacturing, and Information Technology. The district has embarked on a multi-phase effort to expose students early to technical career opportunities and training; build closer partnerships with employers and trade schools; and add and upgrade current offerings to enable Sequim High School CTE graduates to enter well-paying careers in our community. The next critical piece of the puzzle is replacing the inadequate training facilities with a new CTE Center.

The ROI Analysis determined that the development of the new CTE Center and accompanying strategies will enable between 90 and 110 graduates per year to fill open positions in the five job clusters, earning beginning wages of \$39,000 to \$51,000 per year.

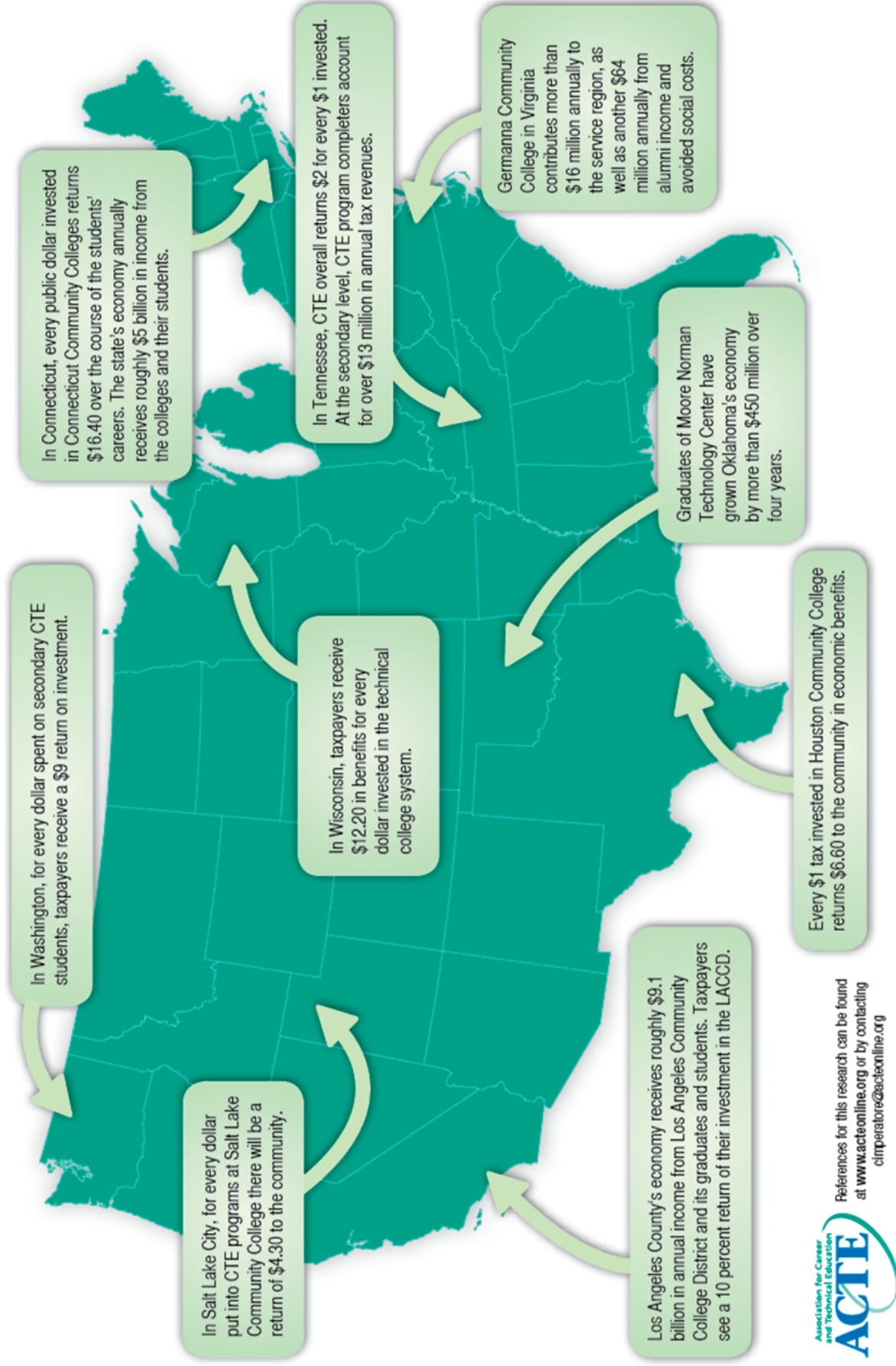
The ROI Analysis projects an additional \$11 to \$14 million of additional annual economic output by these new employees, generating significant annual tax receipts for the city of Sequim, Clallam County, and the State of Washington. Although the CTE Program is currently producing workforce-ready graduates, a new CTE Center supported by accompanying program changes will significantly increase the number of graduates and community benefit.

Additional Annual FTEs/Dollars	Annual ROI Projections	
	Low Scenario	High Scenario
Additional Full Time Equivalent Workers	90	110
Additional Wages	\$3,731,957	\$4,566,245
Additional Economic Output	\$11,910,662	\$14,664,405
Additional City Sales Tax Receipts	\$67,593	\$83,220
Additional County Sales Tax Receipts	\$143,702	\$176,926
Additional State Sales Tax Receipts	\$774,193	\$953,186

This study aligns with CTE research that shows that a successful CTE Program can address workforce shortages; enhance individual’s skills and productivity, thus increasing wage rates and benefits; generate additional tax payments; and improve economic output in a community.

The detailed results can be found in Appendix II – Return on Investment Analysis.

Investing in Career & Technical Education Yields Big Returns



How can you help?

We hope you will join us to help make this exciting opportunity a reality. Here are three ways you can help:

1. Share a copy of this business plan with your friends, coworkers, and neighbors.
2. Contact the Sequim City Council and Clallam Board of County Commissioners to ask for their support.
3. Make a donation to the CTE Program.

Charitable Donation Agreement for Sequim School District CTE Program

Your Name: _____

Your Address: _____

Your email address: _____

I/we hereby donate to Sequim School District the sum of \$ _____

Sequim School District agrees that it will apply the contributions in accordance with its tax-exempt purposes.

This donation made on _____(date)

By: _____ By: _____

(Donor Signature)

(Second Donor Signature)

(Name)

(Name)

Date: _____



Appendices

Appendix I – Budget Detail

Background

The Sequim School District has been able to draw on several resources to develop the CTE Center Project Budget. This includes budgeting material from a similar facility at Washington State University, discussions with local contractors, the Washington State Office of Financial Management’s Construction Cost Assessment Final Report (June 6, 2022), the Washington State Architectural and Engineering Fee Schedule, and additional research on the cost of several budget line items not included in the above reference material.

This appendix provides a detailed budget followed by the budget assumptions for each budget component. As part of the budget development process, we have estimated Low and High amounts for each line item. We have approached the budget from the perspective of developing a not-to-exceed total (High) to ensure that adequate resources will be available to successfully bring a new CTE Center online on a timely basis.

Detailed Project Budget

Sequim School District Career Technical Education Center				
Project Budget				
Building Dimensions100' x 200'		Square Feet:		20,000
Revenue				
Grants & Funding Allocations				\$15,000,000
Local Match for State Funding				\$1,000,000
In-Kind Value of Land				\$500,000
Total Revenue				\$16,500,000
Expenses	Cost/Square Ft.		Item Cost	
	Low	High	Low	High
Foundation	\$30.00	\$35.00	\$600,000	\$700,000
Modular Building Structure	\$35.00	\$40.00	\$700,000	\$800,000
Insulation	\$12.50	\$15.00	\$250,000	\$300,000
Building Labor	\$30.00	\$35.00	\$600,000	\$700,000
Electrical – solar ready	\$22.00	\$24.00	\$440,000	\$480,000
Plumbing	\$10.00	\$12.00	\$200,000	\$240,000
HVAC	\$27.50	\$30.00	\$550,000	\$600,000
Solar panels and installation	\$27.50	\$30.00	\$550,000	\$600,000
Window/doors	\$12.50	\$15.00	\$250,000	\$300,000
Exterior Finishes	\$12.50	\$15.00	\$250,000	\$300,000
Commercial Kitchen	\$27.50	\$30.00	\$550,000	\$600,000
Safety Equipment	\$10.00	\$12.00	\$200,000	\$240,000
Security	\$2.00	\$3.00	\$40,000	\$60,000
Fencing	\$10.00	\$12.00	\$200,000	\$240,000
Performing Stage	\$10.00	\$12.00	\$200,000	\$240,000
Construction Costs	\$279.00	\$320.00	\$5,580,000	\$6,400,000

Sequim School District Career Technical Education Center					
Project Budget					
Building Dimensions		100' x 200'		Square Feet:	20,000
Expenses (continued)		% of Construct \$		Item Cost	
General Conditions		12.5%	14.0%	\$698,000	\$896,000
Site Development		15.0%	16.5%	\$837,000	\$1,056,000
Total Building Costs				\$7,115,000	\$8,352,000
		% of Building \$		Item Cost	
Architect, Engineering		9.8%	9.6%	\$699,000	\$798,000
Project Management		10.0%	11.0%	\$712,000	\$919,000
Equipment/Furnishings		10.0%	12.0%	\$712,000	\$1,002,000
In-Kind Value of Land		N/A	N/A	\$533,000	\$533,000
Other Project Costs		8.0%	12.0%	\$569,000	\$1,002,000
Project Costs		37.8%	44.6%	\$3,225,000	\$4,254,000
Design Contingency		7.5%	10.0%	\$534,000	\$835,000
Project Contingency/Escalation		16.0%	21.0%	\$1,138,000	\$1,754,000
Sales Tax		8.9%	8.9%	\$1,022,000	\$1,305,000
Other Costs Subtotal				\$2,694,000	\$3,894,000
Total Project Budget				\$13,034,000	\$16,500,000

Definitions

Building Construction Costs

Building Construction Costs include materials and labor estimates for identified components of the project such as foundation, steel building, electrical, plumbing, etc.

General Conditions

General conditions are an integral part of the construction contract and consist of items and resources needed for project completion that will not be part of the finished product. They include things like garbage removal, temporary offices and protection, and administrative time; all aspects of the project that are necessary but ultimately not seen at completion.

Site Development

Site development includes preparing the site for construction, permitting, fees, drainage, utilities, landscaping, hardscaping, and related costs.

Project Costs

Other Project Costs are for cost items that can vary greatly based on the actual project design. These include items such as environmental reviews, administrative fees, furnishings, and permits.

Design Contingency

Design contingency is an allowance for cost increases that arise from additional costs that are identified during the design process and before a construction contract is put in place.

Project Contingency/Escalation

Project contingency/escalation refers to a designated amount of money within a construction budget to cover unexpected costs that may occur while completing the project.



Appendix I – Budget Detail

Budget Assumptions

Expense Item	Reference
Foundation	Per discussion with local manufactured building contractor
Modular Building Structure	Per discussion with local manufactured building contractor
Insulation	Per discussion with local manufactured building contractor
Building Labor	Per discussion with local manufactured building contractor
Electrical – solar ready	https://capitalimprovement.org/commercial-electrical-cost-per-square-foot/
Plumbing	https://homeguide.com/costs/install-new-house-plumbing-pipes-cost
HVAC	https://capitalimprovement.org/commercial-hvac-system-cost-per-square-foot/
Solar panels and installation	Per calculations worksheet below
Window/doors	Design Team Estimate
Exterior Finishes	Design Team Estimate
Commercial Kitchen	Per calculations worksheet below
Safety Equipment	Design Team Estimate
Security	https://www.qstartech.com/cost-school-safety/
Fencing	Per calculations worksheet below
Performing Stage	Design Team Estimate
Construction Costs	
General Conditions	Per Washington State University AgTM & AgEd Feasibility Study adjusted for Sequim
Site Development	Per Washington State University AgTM & AgEd Feasibility Study adjusted for Sequim
Architect, Engineering	Per WA State OFM Construction Cost Assessment Final Report
Project Management	Per WA State OFM Construction Cost Assessment Final Report
Equipment/Furnishings	Estimate based on project use cases for the facility
In-Kind Value of Land	Per real estate sale of comparable property
Other Project Costs	Design Team Estimate
Design Contingency	Per Washington State University AgTM & AgEd Feasibility Study adjusted for Sequim
Project	Per Washington State University AgTM & AgEd Feasibility Study adjusted for Sequim
Contingency/Escalation	Study adjusted for Sequim
Sales Tax	Washington State sales tax rate for Sequim
Total Project Budget	Total aligns with WA State OFM Construction Cost Assessment Final Report

Click on links below:

Electrical-Solar Ready: [Capital Improvement](https://capitalimprovement.org)

Plumbing: [Home Guide](https://homeguide.com)

HVAC: [Capital Improvements](https://capitalimprovement.org)

Security: [Q Star Technology](https://www.qstartech.com)



Appendix I – Budget Detail

Washington State University AgTM & AgEd Feasibility Study Calculations

The following table contains figures from the Washington State University AgTM & AgEd Feasibility Study, which is similar to the Sequim CTE Center project. This information helped inform the estimates for the Sequim CTE Center Budget.

WSU Agriculture Technology and Production Management and Agriculture Education Center Budget Estimates			
	Cost Phase 1	Cost/Sq Ft Phase 1	% of Total Phase 1
Square Feet	15,000		
General Conditions	\$1,756,847	\$117.12	12.4%
Site Development	\$1,649,301	\$109.95	11.6%
Building Construction	\$5,889,240	\$392.62	41.4%
Design Contingency	\$1,394,323	\$92.95	9.8%
Total Construction Costs	\$10,689,711	\$712.65	75.2%
Project Costs (1)	\$3,527,687	\$235.18	24.8%
Project & Construction Costs	\$14,217,398	\$947.83	100.0%
Project Contingency/Escalation	\$3,000,000	\$200.00	21.1%
Total - Low End	\$14,217,398	\$947.83	
Total - High End	\$17,217,398	\$1,147.83	

Additional Calculations

The following tables lay out the backup for solar, kitchen and fencing estimates.

Solar Power - Washington State	
Watts per square foot	100
Square Feet of solar panels	2,000
Watts of power	200,000
Average Cost per watt to install:	\$2.62
Estimated Cost	\$524,000
Total CTE Square Feet	20,000
Cost per Square Foot	\$26.20
Kilowatt Hours	200
Amps @240 volts	833.33
https://www.solar-estimate.org/residential-solar/solar-panel-calculators	
Solar Power - Commerical Buildings	
Medium or large commercial solar panel system (100kW) cost: \$200,846	
Large commercial solar panel system (250kW) cost: \$502,113	
https://wgsi.org/solar-installation/commercial-solar-panel-cost/	

Fencing Costs			
Mt. Diablo School District - Cambridge Elementary - 2020			
Total Linear Feet Fencing	2,150		
		\$/Lin Ft	2024 Cost
Bid Low	\$396,889	\$184.60	\$232.99
Bid Medium	\$459,933	\$213.92	\$270.00
Bid High	\$597,682	\$277.99	\$350.86
4-year Inflation (2021-2024)			126.2%
Sequim CTE Linear Feet Fencing Estimate			800
Cost Low			\$186,393
Cost Medium			\$216,000
Cost High			\$280,692
https://www.mdusd.org/bid1870fencingces			

Commercial Kitchen Cost	
Cost per Square Foot	\$250
Square Feet (50' x 100')	5,000
% for actual Kitchen	50%
Kitchen sq ft for cost compare	2,500
Cost	\$625,000
Total CTE Square Feet	20,000
Cost per Square Foot	\$31.25
https://mathiasfoodservice.com/2021/05/how-much-does-a-commercial-kitchen-cost/	

Click on links below:

Solar Power: [Solar Estimate & WGSi](https://www.solar-estimate.org/residential-solar/solar-panel-calculators)

Commercial Kitchen: [Mathias](https://mathiasfoodservice.com/2021/05/how-much-does-a-commercial-kitchen-cost/)

Fencing: [Example](https://www.mdusd.org/bid1870fencingces)



Appendix II – Return on Investment Analysis

Overview

This appendix explains the seven-step process used to create the Sequim CTE Center Return on Investment (ROI) Analysis that draws on two primary sources:

- CTE Program research from over two dozen states, including Washington State.
- The 2022 Clallam Economic Development Council study, *Economic Development in Clallam County – When Prosperity Matters*.

It is important to note that the Clallam EDC study’s well researched and timely data made an enormous contribution to this project. This level of detail is rarely available for these types of analyses. It is also important to note that the availability of online jobs data provided near-real-time position openings and starting wage data, something that was not possible a few years ago.

All ROI Analysis estimates in this analysis are informed by supporting data and every effort has been made to aim low in the estimates in order to not overstate the model’s results. While this ROI Analysis does not pretend to be a crystal ball with perfect foresight, it provides a range of what should be considered solid low and high estimates of the impact a robust CTE Program operating out of a new CTE Center will bring to the community.

The Seven Steps ROI Analysis Process

- Step 1 – Identify CTE-Related Job Categories and Clusters to Include in the ROI Analysis
- Step 2 – Compile 2022 Clallam EDC Data for the CTE Job Areas
- Step 3 – Summarize the EDC Data for the CTE Job Areas
- Step 4 – Identify Current Unfilled Clallam County Positions in the Five CTE-Related Job Clusters
- Step 5 – Identify Current Wage Ranges for CTE-Relevant Positions
- Step 6 – Build the ROI Model
- Step 7 – Complete the Return on Investment Analysis
 - Part A: ROI Analysis – Employees and Economic Output
 - Part B: ROI Analysis – Financial Benefits to Local Government
 - Part C: ROI Analysis – Financial Benefits to State Government

Step 1 – Identify CTE-Related Job Categories and Clusters to Include in the ROI Analysis

There are over 175 job categories in fourteen job clusters that describe the work that takes place in Clallam County (Source: 2022 EDC Study). Working with the Sequim Schools CTE Director, 31 job categories in five job clusters were identified that are relevant to current or future training in the Sequim CTE Program. These jobs and job clusters created the foundations to assess job openings, current wages, economic output, and potential economic benefits when open jobs are filled with CTE graduates.

Code	Industry Description	Code	Industry Description
Construction - Maintenance		Healthcare	
60	Maintenance of nonresidential structures	483	Offices of physicians
61	Maintenance of residential structures	484	Offices of dentists
Retail - Construction Related		485	Offices of other health practitioners
405	Retail-Building material/garden equip	486	Outpatient care centers
Building Construction		487	Medical and diagnostic laboratories
50	Construction - healthcare facilities	488	Home health care services
51	Construction - manufacturing facilities	489	Other ambulatory health care services
53	Construction - education structures	490	Hospitals
54	Construction - highways and streets	491	Nursing and community care facilities
55	Construction - commercial structures	Automotive Repair/Maintenance	
56	Construction - other new nonresidential	512	Automotive repair and maintenance
57	Construction - single family residences	Manufacturing	
58	Construction - multi-family residences	239	Sheet metal work manufacturing
59	Construction - other new residential	247	Machine shops
Information Technology		356	Other aircraft parts/equip manufacturing
428	Software publishers	376	Surgical/medical instr manufacturing
459	Custom computer programming services	380	Dental laboratories
460	Computer systems design services		
461	Other computer related services		



Appendix II – Return on Investment Analysis

Step 2 – Compile 2022 Clallam EDC Data for the CTE Job Areas

Data from the 31 job categories in five job clusters in the 2022 EDC Study were compiled to gain an understanding of the number of Clallam County workers, proprietors, and economic output value relevant to the CTE Program.

The following definitions help explain the tables below.

Emp FTEs: Full Time Equivalent employee workers, defined as being paid for an average of 40 hours per week, 52 weeks per year, including time for vacation/sick/paid leave.

Wage/Emp FTE: Average annual wages for a Full Time Equivalent worker.

Proprietor FTEs: Business owner Full Time Equivalents.

Total FTEs: The sum of Employees and Proprietors Full Time Equivalents.

Economic Output: The total dollar cost of the work created by a business including wages, material, and supplies, rent, vehicles, purchased services, taxes, profits, etc.

Output/FTE: The Economic Output divided by the Total FTEs equals the Output per Full Time Equivalent.

This is an important measure of how many dollars of economic activity are created for each worker/proprietor as well as how much economic activity is lost to the community when a position is unfilled. Note that businesses with high material and supply costs will have higher Output/FTE than service-type businesses.

Area	Industry Description	Emp FTEs	Wage/Emp FTE	Proprietor FTEs	Total FTEs	(2021 \$) Econ Output	Output/FTE
Construction - Maintenance							
60	Maintenance of nonresid. structures	96.6	\$47,890	48.8	145.4	\$31,417,345	\$216,075
61	Maintenance of residential structures	54.4	\$46,067	26.3	80.7	\$16,111,953	\$199,652
	Totals	151.0	\$47,233	75.1	226.1	\$47,529,298	\$210,214
Retail - Construction Related							
405	Retail-Building material/garden equip	346.1	\$42,728	10.6	356.7	\$46,919,485	\$131,538
Building Construction							
50	Construction - healthcare facilities	43.4	\$47,136	21.4	64.8	\$7,540,689	\$116,369
51	Construction - manufacturing facilities	76.2	\$48,586	34.0	110.2	\$13,055,676	\$118,473
53	Construction - education structures	111.5	\$55,026	41.1	152.6	\$19,515,857	\$127,889
54	Construction - highways and streets	116.3	\$55,337	47.6	163.9	\$25,756,711	\$157,149
55	Construction - commercial structures	167.7	\$46,967	79.3	247.0	\$27,456,089	\$111,158
56	Construction - other new nonresidential	125.0	\$56,643	50.2	175.2	\$28,581,489	\$163,136
57	Construction - single family residences	274.0	\$47,437	140.8	414.8	\$47,356,608	\$114,167
58	Construction - multi-family residences	83.0	\$47,471	42.3	125.3	\$10,189,543	\$81,321
59	Construction - other new residential	129.4	\$48,581	62.9	192.3	\$47,855,395	\$248,858
	Totals	1,126.5	\$50,155	519.6	1,646.1	\$227,308,057	\$138,089
Construction Totals		1,623.6	\$48,300	605.3	2,228.9	\$321,756,840	\$144,357



Appendix II – Return on Investment Analysis

Step 2 – Compile 2022 Clallam EDC Data for the CTE Job Areas (continued)

Area	Industry Description	Emp FTEs	Wage/ Emp FTE	Proprie- Tor FTEs	Total FTEs	(2021 \$) Econ Output	Output/ FTE
Healthcare							
483	Offices of physicians	230.8	\$93,373	92.0	322.8	\$45,995,804	\$142,490
484	Offices of dentists	220.4	\$59,099	50.0	270.4	\$31,847,629	\$117,780
485	Offices of other health practitioners	169.2	\$38,932	24.8	194.0	\$18,204,703	\$93,839
486	Outpatient care centers	198.3	\$71,845	58.3	256.6	\$30,760,245	\$119,876
487	Medical and diagnostic laboratories	14.9	\$77,859	5.4	20.3	\$3,313,952	\$163,249
488	Home health care services	55.4	\$57,872	13.0	68.4	\$5,015,947	\$73,333
489	Other ambulatory health care svcs.	49.2	\$67,594	13.1	62.3	\$7,760,672	\$124,569
490	Hospitals	1,949.9	\$67,450	18.1	1,968.0	\$432,288,393	\$219,659
491	Nursing and community care facilities	715.6	\$47,213	23.8	739.4	\$64,870,201	\$87,734
	Totals	3,603.7	\$63,382	298.5	3,902.2	\$640,057,546	\$164,025
	Estimated % Technician/Aides	33%		0%	33%	20%	
	Revised Totals	1,189.2	\$46,367	0.0	1,287.7	\$128,011,509	\$99,409
Automotive Repair/Maintenance							
512	Automotive repair and maintenance	300.5	\$49,475	300.5	359.8	\$36,197,539	\$100,605
Manufacturing							
239	Sheet metal work manufacturing	2.5	\$56,074	0.5	3.0	\$727,532	\$242,511
247	Machine shops	7.0	\$46,700	1.0	8.0	\$1,338,669	\$167,334
	Other aircraft parts/equip						
356	manufacturing	187.9	\$88,382	3.6	191.5	\$66,376,862	\$346,615
376	Surgical/medical instr manufacturing	35.2	\$65,643	0.4	35.6	\$9,380,585	\$263,500
380	Dental laboratories	140.1	\$42,302	0.6	140.7	\$40,480,975	\$287,711
	Total	372.7	\$67,913	6.1	378.8	\$118,304,623	\$312,314
Information Technology							
428	Software publishers	39.9	\$51,485	15.4	55.3	\$8,119,567	\$146,828
	Custom computer programming						
459	services	60.1	\$97,805	167.3	227.4	\$19,407,183	\$85,344
460	Computer systems design services	50.3	\$83,733	304.1	354.4	\$18,592,417	\$52,462
461	Other computer related services	4.0	\$121,983	32.0	36.0	\$5,835,910	\$162,109
	Total	154.3	\$81,867	518.8	673.1	\$51,955,077	\$77,188

Note that the Healthcare section includes data for all healthcare employees including physicians, dentists, nurses, etc. The ROI Analysis estimated the percentage of the workforce relevant to the CTE-trained positions and reduced the totals accordingly.



Appendix II – Return on Investment Analysis

Step 3 – Summarize the EDC Data for the CTE Job Areas

The table below summarizes the 31 job categories in the five job clusters to display totals for each job cluster.

Job Cluster	Employee FTEs	Wage/ Emp FTE	Proprietor FTEs	Total FTEs	(2021 \$) Econ Output	Output/ FTE
Construction	1,623.6	\$48,300	605.3	2,228.9	\$321,756,840	\$144,357
Healthcare	1,189.2	\$46,367	98.5	1,287.7	\$128,011,509	\$99,409
Automotive Repair/Maintenance	300.5	\$49,475	59.3	359.8	\$36,197,539	\$100,605
Manufacturing	372.7	\$67,913	6.1	378.8	\$118,304,623	\$312,314
Information Technology	154.3	\$81,867	518.8	673.1	\$51,955,077	\$77,188
CTE-Related Totals	3,640.3	\$293,922	1,288.0	4,928.3	\$656,225,588	\$133,154

In total, approximately 5,000 workers (employees and proprietors) are generating over \$650 million in economic activity, averaging \$133,000 of output per full time equivalent worker. The key metric from this table is the Output per FTE, which is used in Step 6 below to build the ROI Model.

Step 4 – Identify Current Unfilled Clallam County Positions in the Five CTE-Related Job Clusters

Step 4 draws on the section of the 2022 EDC Study that includes a sampling survey of employers to identify unfilled positions at a single point in time. The table below provides a count of these open positions, limited to the five CTE-related job clusters.

Job Cluster	Comment	Unfilled Positions
Automotive	All Positions in the 2022 EDC Survey	40
Construction Maintenance	"	8
Construction	"	53
Equip Maintenance	"	33
Healthcare	Estimate of technician/aides positions only	114
Manufacture	All Positions in the 2022 EDC Survey	39
Total Positions		362

Note that healthcare positions in the 2022 EDC Study were listed by setting (e.g. hospital, primary care clinic), not position type (e.g. physician, medical assistant), and an estimate was required to calculate unfilled positions relevant to the CTE Program.

Also note that because the EDC Study was a sample, only a portion of employers in the county were surveyed. Thus the “total” unfilled positions are an undercount, providing a job opening “floor” as well as an understanding of where unfilled positions were most prevalent.

Appendix II – Return on Investment Analysis

Step 5 – Identify Current Wage Ranges for CTE-Relevant Positions

The Indeed.com website and the Olympic Medical Center’s job opening website (January 2023) were used to identify 41 position openings in local businesses to determine average wage ranges for the job clusters in ROI Analysis. All positions were entry level that match the qualifications of students graduating from the Sequim Schools CTE Program. The key outcome of this step was to estimate the average starting wage a CTE graduate might earn.

<u>Position</u>	<u>Annual Wage Range</u>	
	<u>Low</u>	<u>High</u>
Certified Nursing Assistant/Medical Assistant	\$39,387	\$46,367
Automotive Technician	\$41,187	\$43,660
Construction - Carpenter/Roofer/HVAC/Joiner/Laborer	\$43,525	\$68,640
Manufacturing - Welder/Fabricator/Edging Tech/Paint Tech	\$38,293	\$45,377
Computer - Support Technician	\$51,420	\$52,000

Figures in the Low Annual Wage column are used in Step 6 below to estimate beginning wages for CTE graduates that will be hired into unfilled positions.

Step 6 – Build the ROI Model

The ROI Model pulls data from the tables in the preceding steps, including the estimated current market starting wages, which are the Low Annual Wages from Step 5. This step determines Low and High Estimates of CTE Graduate Hires that will be placed into open positions each year once the new CTE Center is up and fully operational.

The following definitions help explain the tables below.

Hire Rate: This is the percent of Unfilled Positions from Step 4 that will be filled by CTE Program graduates each year, projected from a Low Hire Rate to a High Hire Rate for each job area.

Employee FTEs: This is a count of the new CTE Program graduates that are projected to be hired each year.

Avg Emp Wage/FTE: This is the Low Annual Wage figure from Step 5 for each job area.

Economic Output: This is the dollars of Economic Output generated by the CTE hires based on multiplying the number of FTEs by the Output per FTE.

Sequim School District CTE ROI Model				
Based on 2022 Clallam County Economic Analysis				
	Hire Rate	Employee FTEs	Avg Emp Wage/FTE	Economic Output
Construction industries				
Current Market Starting Wage			\$43,525	
Output per FTE				\$144,357
Estimated CTE Hires - Low	2.1%	34		\$4,908,131
Estimated CTE Hires - High	2.6%	42		\$6,062,985
Estimated Total Wages - Low				\$1,479,848
Estimated Total Wages - High				\$1,828,048



Appendix II – Return on Investment Analysis

Sequim School District CTE ROI Model - Continued				
Based on 2022 Clallam County Economic Analysis				
	Hire Rate	Employee FTEs	Avg Emp Wage/FTE	Economic Output
Healthcare				
Current Market Starting Wage			\$39,387	
Output per FTE				\$99,409
Estimated CTE Hires - Low	3.0%	36		\$3,578,723
Estimated CTE Hires - High	3.6%	43		\$4,274,586
Estimated Total Wages - Low				\$1,417,934
Estimated Total Wages - High				\$1,693,644
Automotive Repair/Maintenance				
Current Market Starting Wage			\$41,187	
Output per FTE				\$100,605
Estimated CTE Hires - Low	3.2%	10		\$1,006,046
Estimated CTE Hires - High	4.0%	12		\$1,207,255
Estimated Total Wages - Low				\$411,865
Estimated Total Wages - High				\$494,238
Manufacturing				
Current Market Starting Wage			\$38,293	
Output per FTE				\$312,314
Estimated CTE Hires - Low	2.0%	7		\$2,186,199
Estimated CTE Hires - High	2.5%	9		\$2,810,828
Estimated Total Wages - Low				\$268,050
Estimated Total Wages - High				\$344,635
Information Technology				
Current Market Starting Wage			\$51,420	
Output per FTE				\$77,188
Estimated CTE Hires - Low	2.0%	3		\$231,563
Estimated CTE Hires - High	2.5%	4		\$308,751
Estimated Total Wages - Low				\$154,260
Estimated Total Wages - High				\$205,680
Totals				
Estimated CTE Hires - Low		90		\$11,910,662
Estimated CTE Hires - High		110		\$14,664,405
Estimated Total Wages - Low				\$3,731,957
Estimated Total Wages - High				\$4,566,245

This information is then forwarded to Step 7 to generate the results of the Return on Investment Analysis.



Appendix II – Return on Investment Analysis

Step 7 – Complete the Return on Investment Analysis

Step 7 contains three sections that show results of the ROI Analysis with a focus on Employees and Economic Output (Part A), Financial Benefits to Local Government (Part B), and Financial Benefits to State Government (Part C).

Part A: ROI Analysis – Employees and Economic Output

The following table brings together the data from Step 6, breaking out the figures into two scenarios.

Sequim School District CTE ROI Analysis					
Low Scenario					
	Hire Rate	New CTE Employees	Avg Emp Wage/FTE	Output per FTE	Economic Output
Construction industries	2.1%	34	\$43,525	\$144,357	\$4,908,131
Healthcare	3.0%	36	\$39,387	\$99,409	\$3,578,723
Automotive Repair/Maintenance	3.2%	10	\$41,187	\$100,605	\$1,006,046
Manufacturing	2.0%	7	\$38,293	\$312,314	\$2,186,199
Information Technology	2.0%	3	\$51,420	\$77,188	\$231,563
Totals		90			\$11,910,662
High Scenario					
	Hire Rate	New CTE Employees	Avg Emp Wage/FTE	Output per FTE	Economic Output
Construction industries	2.6%	42	\$43,525	\$144,357	\$6,062,985
Healthcare	3.6%	43	\$39,387	\$99,409	\$4,274,586
Automotive Repair/Maintenance	4.0%	12	\$41,187	\$100,605	\$1,207,255
Manufacturing	2.5%	9	\$38,293	\$312,314	\$2,810,828
Information Technology	2.5%	4	\$51,420	\$77,188	\$308,751
Totals		110			\$14,664,405

The ROI Analysis projects an additional \$11.9 to \$14.6 million of additional annual economic output provided by 90 to 110 CTE graduate hires. Although the CTE Program is currently producing workforce-ready graduates, a new CTE Center supported by accompanying program changes will significantly increase the number of graduates and community benefit.

Appendix II – Return on Investment Analysis

Part B: ROI Analysis – Financial Benefits to Local Government

The Sequim School District is requesting funding from the City of Sequim and Clallam County to help reach the \$1 million local match for the CTE Center. This section calculates the additional tax dollars that will come to city and county based on the one-time infusion of \$15 million of state dollars as well as tax receipts from ongoing annual increases in economic output. The table below is based on a 1.14% Sequim City sales tax rate and a 1.27% Clallam County sales tax rate.

Sequim School District CTE Local Sales Tax Revenue Analysis		
	Low Scenario	High Scenario
Annual Tax Receipts		
Economic Output from CTE Program	\$11,910,662	\$14,664,405
Sequim Tax Rate	1.14%	1.14%
Percent of work completed in Sequim City Limits	50.00%	50.00%
Additional Annual Sequim Tax Receipts	\$67,593	\$83,220
Clallam County Tax Rate	1.27%	1.27%
Percent of work completed in the County	95.00%	95.00%
Additional Annual County Tax Receipts	\$143,702	\$176,926
Total Local Annual Tax Receipts	\$211,295	\$260,147
CTE Construction Period Tax Receipts		
Washington State Funding Request	\$15,000,000	\$15,000,000
Sequim Tax Rate	1.14%	1.14%
Percent of work completed in Sequim City Limits	100.00%	100.00%
Additional Annual Sequim Tax Receipts	\$170,250	\$170,250
Clallam County Tax Rate	1.27%	1.27%
Percent of work completed in the County	100.00%	100.00%
Additional Annual County Tax Receipts	\$190,500	\$190,500
Total One-Time Annual Tax Receipts	\$360,750	\$360,750

Depending on the scenario, annual, recurring local tax receipts are projected to increase between \$211,000 and \$260,000.

Because costs related to the CTE Center are sales taxable, 100% of the \$15,000,000 of potential state funding will generate city and county sales tax. This will result in a one-time infusion of \$360,750 tax dollars into the community.



Appendix II – Return on Investment Analysis

Part C: ROI Analysis – Financial Benefits to State Government

The analysis in Part B – Financial Benefits to Local Government is also applicable to the 6.5% sales tax receipts that go directly to the state. The table below computes state tax receipts to determine when the state will directly recoup its investment in the Sequim CTE Center.

Sequim School District CTE State Sales Tax Revenue Analysis		
	Low Scenario	High Scenario
CTE Construction Period Tax Receipts		
Washington State Funding Request	\$15,000,000	\$15,000,000
Washington State portion of Sales Tax	6.50%	6.50%
Total One-Time Sales Tax Receipts	\$975,000	\$975,000
Annual Tax Receipts		
Economic Output from CTE Program	\$11,910,662	\$14,664,405
Washington State portion of Sales Tax	6.50%	6.50%
Additional Annual Sales Tax Receipts	\$774,193	\$953,186
Return on Investment		
Cumulative Year 5 Tax Receipts	\$4,845,965	\$5,740,932
Cumulative Year 10 Tax Receipts	\$8,716,931	\$10,506,863
Cumulative Year 15 Tax Receipts	\$12,587,896	\$15,272,795
Cumulative Year 20 Tax Receipts	\$16,458,861	\$20,038,726
Cumulative Year 25 Tax Receipts	\$20,329,826	\$24,804,658

Based on these calculations, the \$15 million of state funds will be repaid in 15 to 20 years. Using the current Washington State Various Purpose General Obligation Bond interest rate of 2.39%, the net future value of the \$15,000,000 state investment, which is approximately \$24 million, will be recouped in approximately 25 years.