

### Cover Page

Project Name: Renovations and Remodeling
Amount Requested: \$ 389,202.63

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	Participating High School or Middle School Name (add additional rows as needed)	Lead Contact Name	Grade Levels	Student Enrollment
1.	St Helens High School	Joe Mauck	9-12	958
2.	St Helens Middle School	Joe Mauck	7-8	420

**Application Narrative**  
**Renovations and Remodeling (R & R)**

**A. Project Abstract**

The R&R program enables high school construction students to restore and remodel foreclosed or dilapidated houses, thereby gaining invaluable training in an abundance of career fields. The students would be involved in the market analysis, the rationale of a house selection (largest return on investment - ROI), the purchasing, the work itself, and ongoing maintenance until the time of sale. Students would be transported to and from the jobsite during double period classes and work alongside local contractors while performing all other work that does not require a license. To facilitate the operation of this program, several concurrent component programs will be running in the background. These include a middle school recruitment program for SHHS's CTE classes in general and an industry and college transition program for students successfully exiting the R & R program.

**B. CTE Revitalization Grant Vision**

Most of the construction industry is sustained through the business of remodeling, yet the majority of high school construction programs teach only new construction. Instead of a high school program building a house, which is the common educational paradigm, we are proposing a design that better reflects the industry and also provides transition steps into the workforce, community college, or higher degree programs. Our proposal is to build a program where students experience the reality of home acquisition, renovation, and resale. This innovative approach to engaging students with current workforce opportunities could possibly be the first ever remodeling program at the high school level. Instead of building a house

within a “perfect world” scenario, students will be forced to contemplate the reality of poor building materials, low income results, good work ethic, and a resume building repertoire.

To help combat the misnomer that to be successful all students should go to college and the stigma of the blue collar, low-wage jobs, the R&R program will begin to create hype about the construction program at the high school by recruiting middle school students as early as 7<sup>th</sup> grade to attend high school CTE classes. By limiting the number of students involved at this early level we can both reduce the cost of the initiative and bring back an atmosphere of excitement and competition that will foster a desire to be included even before the students ever reach the high school.

The opportunities and depths of education this program provides go far beyond the typical construction course. Students would not only be asked to look at a current local housing market for a potential first house; they would have to provide judicious reasoning as to why they believe their choice should be chosen, making it relevant and thorough. Before purchase, students would have to research what options would bring the biggest potential ROI and after purchase, would then get to experience first-hand the realities of those choices as they do the remodel. These choices would help create ownership in the process as well as a perception of not only the immensity of the project they are taking on, but their capacity to tackle and succeed on projects of this scope later on in life. By looking at a dilapidated house, students will also not just learn how to rebuild parts correctly, but they will get to see the end-result of poor choices made by previous builders, learn the seriousness of building haphazardly, become

aware of the cost involved in home improvements (or the lack thereof), and be better able to evaluate the practicality in cost of an improvement.

Through an advisory committee made up of contractors (both local and otherwise), students, business owners, a realtor, and a dedicated PCC advisory board, properties will be examined for a variety of benefits. These benefits would include: price, ROI, attainable skill set projects offered, and location (both for proximity and lack of distractions offered). Upon finding a suitable house and gaining purchase of it, students would work through the ROI potential based off research and lessons learned from the advisory board. This would include everything from curb appeal to green incentives including kitchen remodels, new lighting fixtures, foundation repair, and staging for sale, to name a few. Upon conclusion of the findings, students would be involved in the purchase of the materials, the transportation of such, and the initial staging onsite. The class would be a double period for reasonable time considerations. Students would be transferred to and from “class” by way of a van or shuttle bus.

At this point, depending on the severity of the condition of the house, the next steps would vary. If an addition or renovation was being made such that a drawing was required for a permit then the drafting department at the high school could be given the opportunity to draw those. Also, for yard maintenance and landscaping, the Natural Resources class has offered to be involved in the process. Likewise, the Art Department has offered to take on a task in the form of painting or adding appropriate artwork to the remodel, should they be requested.

Local companies and contractors would be encouraged to give their insight and volunteer in exchange for working with the students and creating relationships that could be fostered for

after school employment or merely for the community well-being. The Instructor at Gaston High School has volunteered to have his class build the cabinetry should the renovation need it, as he does for Sherwood High School's house building program every other year. This would be in line with connecting across districts, inherently teaching that working together breeds better results.

An important aspect to this program is its capacity to self-fund itself once seeded. Because the foreclosed or dilapidated homes would be bought at a discount, they could clearly be turned for a profit. This program could pay for itself, or even expand, just through the profitability of its core focus. Also, specific to St Helens, the history of the real estate market shows a steady supply of auctioned and foreclosed homes regardless of the larger economic cycles.

Additionally, this program has the benefit of community visibility. Because the work done by the students is in the residential areas of the community itself, it acts as a positive benefit to the housing value wherever work is done. Signage would announce the renovation project during the working phase, and the home would be advertised as being the result of a student project during sale as well. This provides multiple benefits, in increasing the value of communities where it operates, in providing recognition of the school and the program to the community itself, and in causing students involved in the program to identify with and become invested in the communities they support.

Oregon high school construction programs that "build a house" and sell it, usually only build a limited section of the house due to time, lack of precise skills needed, or licensing or liability issues. The beauty of the R & R program is that it can still focus on all the skill sets learned by

these other programs, but can allow the full experience of taking each aspect from evaluation to completion by limiting the scope of what is renovated. For example, with a foreclosed home, students can build an addition, renovate a kitchen, or replace siding, but because the house is already completed, the scope of the project is controlled.

Students will also be able to work side-by-side with local contractors and businesses and create relationships that could extend to future employment considerations. The contractors and businesses would be brought on throughout the entire project for help in determining the projects to be done, giving lessons they've learned from their own experiences, and for general advisement in bidding jobs within specific, licensed trades. Upon sale of the house, students will work through all numbers relating to initial purchase price, time invested, labor and materials, overhead, and calculate their total return on investment. Instead of whole house construction, which presents only best-case-scenarios, students will get hands-on experience with the "messiness" of remodeling and be empowered with the knowledge that they have worked on real homes and not simply had another textbook experience. Throughout the process of renovating the house a focus would be made on building science, what did and did not work, and obvious hands-on skills that can be taken with them to high wage, high demand jobs later. Because of the nature of "transitions," many students waver upon exiting high school. This is due to many factors, the largest usually being the fear of the unknown and lack of a true calling in life. To circumvent this issue, students would be given many choices without the unknown part ever having to factor in. This would be possible because of a number of steps.

1. Trade School – A contact would be set in place through various apprenticeship unions

that are local or would like to be involved that would come out and work periodically with the students onsite. This would create a relationship that the students could rely on to eradicate the fear of the unknown when they leave high school. Upon exiting the program instead of “taking the jump” they would be merely changing their location, but accompanying their supervisor.

2. College – Much like the trade school idea, having one of the PCC Building Technology teachers visit periodically with the students would make transitioning to the community college a more fluid process. This is made easier by the fact that one of the current PCC BCT instructors lives locally in St Helens and has offered his services.

3. University – For those students who would like to keep the hands-on aspect in their lives, but go on to a four year university, there is an either/or option now. The AAS degree from PCC is now transferable to SOU and OIT which means a high school student can go on to Community College and earn an AAS in any of the Building Construction, Welding, Auto Body, Diesel Tech, etc., and then transfer to get a four year degree.

4. Workforce – By far the easiest sell, local contractors who work with the students on the jobsite would be able to coach and interview their future employees long before those students even applied. The students would also have formed a relationship that would encourage/inspire/challenge them to want to do their best on the new job. This in turn would also reduce turnover and false assumptions of work ethic/attitude required on a jobsite prior to more permanent consequences.

### **C. Partnerships**

A core and key aspect to this program is the involvement of professionals and organizations within our community. We have reached out to several professionals in setting up this first proposal, and will continue to expand our partnerships.

At each step of the process we will interact with several partners:

Evaluation and purchasing of houses: Real Estate Agents, Bankers

Renovation and repair of the houses: Drywall Hangers, Electricians, Plumbers, Roofers, etc.

Advisory and educational assistance: PCC, General Contractors, Local Vendors, etc.

As a contractor who has hired many former students, the current Building Construction instructor is very aware of the value of partnerships. In fact, one of the reasons behind the basis of the grant was that the instructor could not find enough skilled employees who were willing to be taught to deliver even on his own projects. Students had good understanding of tool safety and hand tools, but they had little to no background in past construction techniques and current industry practices on older homes. However, on previous projects that required licensed contractors, when students had the opportunity to work alongside those professionals, relationships were created naturally that resulted in employment.

The R & R program also has even more partners that have committed, but the very reason that they are contractors is why they did not write a letter of commitment (i.e. they do things, not talk about them). Also, as many of the contractors and PCC instructors already do volunteer and provide demonstrations, an ongoing role is evident. Local partners that have already helped out the program in the past and have offered future assistance include a real estate



agent, construction managers, a surveyor, CTE teachers, carpenters, drywall installers, electricians, plumbers, and roofers (incidentally enough, all of which are high wage, high demand jobs), and even a nationally recognized tiny house movement instigator and builder, Dee Williams. These contractors, along with college teachers and apprenticeship reps will be able to connect with students outside the common classroom and make relationships that can span the bridge of education to industry. By doing this they can make avenues for all students to find purpose and direction in a skill that can provide a living for a family. Since the Building Construction program is already articulating with PCC for college credit, this advanced class will allow students to pick up even more credits that they can use as 4-year college elective credits, or expound on by going straight into a two year associate program.

## D. & E. Project Outcomes and Progress Measures

<b>Area 1 - Improved and sustainable partnerships with business, industry, labor, and educational providers.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
1.1 More partnerships will be created as word gets out of the “employee long-term interview process.”	Increase in program partners	At least three new partners will respond and commit when contacted
1.2 More students will attend college	Dual credit increase in numbers	Participation increase by 5%
<b>Area 2 – Improved student access to CTE programs of study with particular attention to historically underserved students.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
2.1 More female students will attend CTE classes due to 7 <sup>th</sup> and 8 <sup>th</sup> grade middle school recruitment and programs	Non-traditional enrollment numbers for CTE courses will be higher than normal	90% of 8 <sup>th</sup> grade Echo completers will enroll for a CTE course and 5% overall CTE female enrollment increase
2.2 Due to profitability of R&R program, more classes will be offered, thus more access to more students	Higher numbers enrolled for CTE courses	More FTE allocated for CTE classes
<b>Area 3 – Increased rigor in technical and academic content aligned to diploma requirements, industry-recognized technical standards such as the Oregon Skill Sets, and employability skills.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
3.1 Students will have a higher level of training available due to real world context, thus exhibiting a higher level or rigor naturally.	Students will be able to be checked off on higher Oregon Skill sets.	A new more rigorous TSA will be implemented for students attaining this level of development
<b>Area 4 – Increased student awareness of career opportunities through exposure to employers.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
4.1 Students will be comfortable in making long term decisions about their careers in life	Students will be exposed on a regular basis to careers through local partners. These contacts will be made as that specific skillset is needed or covered in the remodeling of the house.	Students will find a niche or career that they enjoy and thrive in based of an entrance and exit survey given at the beginning and end of their class.

<b>Area 5 – Improved ability to meet workforce needs in the region with a focus on high wage and high demand occupations.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
5.1 Students will be more capable of dealing with current industry needs due to having to face a myriad of unforeseen experiences in the process of remodeling a dilapidated house and responding appropriately.	Students will take pre and posttests constructed of real world experience questions	Students will score 50% higher on post test

## F. Activities and Timeline

<b>Activity</b>	<b>Outcome(s) addressed</b>	<b>Timeline</b>	<b>Person(s) responsible</b>
Purchasing of required supplies and equipment		January 16'-August 16'	Joe Mauck – Instructor + Advisory board
Purchasing of initial house	3.1	January 16'-September 16'	Joe Mauck – Instructor + Advisory board + Student involvement
Construction of trailer setup	3.1	January 16'-August 16'	Joe Mauck and Students
Instructor licensing, bonding, insurance, and certificates		June 16'-August 16'	Joe Mauck
Middle School component (Echo) planning and development		June 16'-August 16'	HS CTE and Art Instructors
Curriculum and class scheduling		June 16'-August 16'	Joe Mauck
Renovations and Remodeling– length dependent on scope of project.	1.1, 1.2, 2.2, 3.1, 4.1, 5.1	September 16'-June 17'	Instructor, Partners, students.
Middle School component (Echo)	2.1	September 16'-June 17'	HS CTE and Art Instructors + students

### **G. CTE Program of Study Design**

St Helens High school has already taken a dilapidated half-time program and turned it into a thriving full time opportunity for students in the last five years. As a full-fledged program of study that already has college credit available through PCC's dual credit program, the St Helens High School Construction Program's next step is undoubtedly the creation of an advanced class with real world connections and ties. By creating the R&R program, students can take their 2<sup>nd</sup> year class that builds Tiny Homes and the learning of new construction right into a deeper knowledge and a more accurate representation of the construction industry. Although already aligned with the Oregon Skill set standards and CCCT, students participating in this course would be able to not only reach a higher level of standards, but work first hand with local skilled workers who will apply these standards in real world situations.

Historically underserved student populations will finally have the option to pursue a high wage high demand occupation, or, use the skill set given to go right into a college and even a four year university pursuing the career fields covered in this course. Instead of gender and financial constraints being a given, students will have an equal opportunity at the high school level to enter into high demand high wage jobs.

### **H. High Wage and High Demand Occupations**

The September 25<sup>th</sup> 2015 State of Oregon labor market indicators for Columbia County show construction as the industry that added the most jobs this year (160 of them), second to manufacturing (see attachments). Due to the town's rural status, much of the local business and industry is hands on, does not require a higher level college degree, and supports a growing economy. This focus remains consistent with the 2014 Bureau of Labor and Industry

Construction Industry Occupational Wage Survey Results which clearly shows that on average, construction industry personnel for Columbia county make over \$30/hr. and many over \$40/hr. Every one of the jobs that will be covered in the R&R program will be an opportunity for students to find their niche career early in life and have the opportunity to begin a career while still leaving the option for higher education open.

By working with and connecting with local contractors, students can learn and see firsthand the opportunities of a high wage and high demand occupation. According to State of Oregon Employment Department and their most recent list of high wage AND high demand jobs, Real estate agents, construction managers, surveyors, CTE teachers, carpenters, Drywall installers, Electricians, Plumbers, Roofers, etc. are all listed, with most being classified as a high skill job as well (Source: State of Oregon Employment Dept.~ qualityinfo.org). It is evident that students taking the R&R course would be a step ahead of most students graduating high school with no job contacts or awareness of the possibilities locally.

Not only would the project be helping the local community by updating and restoring dilapidated houses, but the students involved would be able to take pride in their community with an attitude of "I did that!" The community would have something to rally behind in saying "Our town has a CTE program that does some pretty cool stuff!" The parents would suddenly be asking their children's advice for real estate and remodeling types of questions.

### **I. Equity**

One of the merits of the R&R program is the opportunity for historically underserved students to have direct access to these high wage and high demand jobs. Students will be chosen mainly on their attitude and work ethic based off their sophomore year Building Construction class and

will have an equal opportunity from the start. In 2013, the Woodworking/Building Construction department started an advertising campaign specifically designed to educate the parents and the incoming 8<sup>th</sup> graders about the CTE options available at the high school level. Incredibly, with specific postcards, brochures, signs and events, the program was able to draw more non-traditional students into the program, and this year for the first time (potentially in the whole history of the school) there are classes with more female than male students in the Woodworking program. Due to the lack of St Helens' population diversity, the number of students of color is typically small, but currently, numbers are up as well, possibly because of the same advertising. The learning of vocational and technical skill sets brings diversity to a commonality as all students start at nearly the same level in this field, and the opportunities are endless from there.

A key issue in the lens of equity is that typically communities of high wage high demand jobs are portrayed with a computer tech and engineering focus (think Hillsboro with Intel and AMD). This is unfortunate because these industry communities are also commonly made up of higher living costs and thus less family and community orientation. In all actuality, St Helens' specific community high wage high demand jobs have little or nothing to do with these industries, but are focused mainly on construction and manufacturing. Rationally speaking, if our community was to focus on getting students into tech related fields it would not be equitable as many of our students are not as financially eligible to compete. However, by promoting a genuine ticket to success with achievable high wage high demand occupations straight out of high school, students across the board are eligible to compete or move on as desired. As a former teacher once said, "sports allow for only the best to succeed, CTE allows for 100% to succeed."

## **J. Diploma Connections**

One of the key reasons for student drop-out rates and poor grades is the lack of relevance in most subjects to student's personal lives. When students come from broken homes, two working parent families, poverty, etc. connecting to unrelated instruction seems hardly worth focusing on. However, when students are given the opportunity to change their obstacles because of immediate financial opportunities, suddenly relevance and motivation go hand in hand and there is hope.

When former students come back into my program and tell current students how they started making \$22/hr straight out of high school, often a direct correlation is made. When that correlation is connected by a relationship (a union journeyman in the apprentice program, a community college instructor, a local contractor, etc.) and students can correlate direct relief from current difficulties based off participation, lives can change for the better. Much like sports encourages higher grades due to buy-in and involvement, by finding achievable goals that give immediate hope students will be encouraged to fulfill diploma requirements and thereby gain access to their new positive ambitions.

Students that have the opportunity to try out the different trades available can find a specific place that they are needed, valued, and rewarded early in life at a time when little else holds relevance in their difficult lives. Consequently they are driven to attain essential skills needed.

## **K. Sustainability:**

As pointed out previously, one of the key benefits of the R & R program is that the purchasing of low-cost or foreclosed homes incorporates a built-in safety net. Because of this, the sustainability of the program can be judged with greater certainty than more long term high



school house building programs that may suffer from drastic fluctuations in the real estate market. With the R&R model, a house can be deliberately chosen for smaller, faster, and more reasonable projects that students can accomplish with little or no outside contractor help, and thus have more ownership. More importantly, by focusing the scope, the project can be kept within a more reasonable timeline.

During this whole process the instructor and advisory board would be constantly scanning the market for viable 2<sup>nd</sup> properties for the largest ROI, keeping in mind upkeep and insurance costs, property taxes, and other liabilities in conjunction with buying another property early. Essentially a 2<sup>nd</sup> property could be purchased at any time and not be hindered or forced by any outside influences. This way the funds could be used to the best possible potential. An example would be if a house is auctioned off and the price is considerably lower than the market value, the program could buy the 2<sup>nd</sup> property early and wait on it until the 1<sup>st</sup> is completed, albeit with regular maintenance.

To put this sustainability into perspective, the return on investment for the program is estimated around \$20k-\$40k for each house renovated, although this may vary dramatically depending on the scope of the project taken on. If the projects were to be as successful as estimated (estimates given by current local contractors) it would allow for potential finances for hiring a teaching aide and/or starting an account to give back funding to the next revitalization grant for other schools. Another option (as is done with the Auto Shop at St Helens High School) is using the students tracked hours in an exchange for discount priced tools through business partners when students successfully exit the program. This would allow for students to not

only have the skills necessary to compete in a high demand, high wage field, but have the tools as well. In doing so, the intent is for students to graduate from high school with the tools and skills necessary to provide immediate competitive financial security for themselves and a family.

#### **L. Communication**

Because St Helens is a smaller community, local communication is expeditious as it is infectious. By adding to the program's current advertising campaign, students and parents will be mailed professional brochures and postcards as well as have access to information off the high school's website. School staff would be included on an ongoing basis in order for relevant classes to be tied into as many points as possible. Finally, the community would be given the opportunity to be both exposed to the program and involved as local contractors are brought on board. The community would also be made aware by signage on the house under construction and with media attention. Because of the closeness of the community, the local newspaper already covers school stories on a weekly basis and having one of the nation's first remodeling programs making headway locally would generate an ongoing story.

## **V. Bonus Narrative**

### **A. Career and Technical Student Organizations (CTSOs)**

Currently the Woodworking and Building Construction program participates in SkillsUSA, both in Carpentry and Cabinetry. The past two years St Helens High School has placed both 1<sup>st</sup> and 2<sup>nd</sup> at state in Carpentry and placed higher than half of the participants at the National level. The R&R program will encourage student participation by giving students self-confidence prior to competition as well as compound upon the very skills necessary to compete. By engaging students in SkillsUSA and doing well, students will be letting employers know of their value prior to employment. Currently, former students who have placed or have participated have done middle school and high school presentations explaining the value and interest added. Instead of using SkillsUSA as a motivator, the R&R program will use it as an added benefit, as the students main focus for learning the skills now will be for immediate financial gain.

## **B. Middle School Component - Echo**

Currently, the Woodworking / Construction program at St Helens High School markets to 7<sup>th</sup> and 8<sup>th</sup> graders through postcards, brochures, and 8<sup>th</sup> grader orientation night. While increasing numbers in the program is critical, it is most important to bring in the right students who are mature, capable, and interested.

Our proposal is to provide transportation between the middle and the high school twice monthly for 30 students and more as the program develops. These 30 students would be selected through a student/parent application process and recommendation from their middle school teachers. Grades would not be a factor, as often the least achieving students will perform better in a hands-on environment.

The pilot group will be split by grade. The 7<sup>th</sup> graders would work through an exploratory rotation, spending two days in each CTE program. The students would work with juniors / seniors in each program. The 8<sup>th</sup> graders would spend all 18 sessions in one program, working with advanced students on a particular project generating more of the right students in the right programs. Middle school students could find a niche at an earlier age. They would be actively participating and “buying-in” or “getting hooked” on CTE through hands-on activities and seeing a finished product instead of just hearing about it. They would be introduced to careers that are readily available to them specific to Oregon and even specific to St Helens. And lastly, the students would learn that they can choose a CTE program and continue on to college; it does not have to be either/or.

We have proposed to call this program “Echo” because we wish the middle school students to echo what they see in successful high school CTE students.

#### **D. Focus on Regional, Statewide or System Changes**

Due to the programs potential for not only sustainability, but profitability, the potential is for it to be used as a model for any district. As the program is critiqued and expanded a better model can be addressed and streamlined to create a curriculum of industry ready graduates. As shown in the partnering with Gaston High school to create cabinets for houses every other year, similar programs can partner with each other to provide added benefit and collaboration.