Address the following five questions in no more than 10 pages. The Proposed Budget Worksheet that follows is an additional page that must be included with the application.

1) How does this project address the purpose of this grant: To promote the participation and success of youth and young adults in career and technical education programs that lead to high skill, high wage, or high demand occupations that are nontraditional by gender?
   • What are the major activities or strategies that will be carried out and by whom?
   • What is the targeted age range of those to receive services and what is the rationale for targeting this group?
   • What is the timeline for this project?

Although women’s educational attainment has increased over time and several occupational fields have succeeded in integrating women where they were once denied, occupational segregation still persists. Nationally, women continue to make up less than three percent of the construction workforce and six percent in Oregon. Apprenticeship, or paid-on-the-job training, is the most common way in which workers access living wage careers in the building and construction, trades. Not only are fewer women accessing apprenticeship programs, but fewer girls are enrolling in high school level Career and Technical Education (CTE) classes. Young women’s lack of participation and involvement in Career and Technical Education classes during their secondary education puts them at a disadvantage when seeking employment in the trades or applying for apprenticeship. Students who enroll in CTE classes that offer hands-on experience as well as algebra and other high-level math and science courses will receive better scores in the application process to enter trades apprenticeship programs.

In terms of female students’ exploration of trades careers, it is valuable to look at the state and local enrollment data. During the 2009-2010 school year in Oregon (latest data available), female secondary students made up only 12% of the students earning Career and Technical Education Concentrator credits in Architecture and Construction, compared to 88% of male secondary students. For the same time period, for students within Portland Public Schools female students made up just 23% of all concentrators completing both a CTE program and graduating. Statistics such as these indicate that girls are still not enrolling or finding the support they need to continue courses of study in the architecture and construction area of Career and Technical Education.

Trades careers offer high-paying, full benefited alternatives to low-wage, traditionally female-dominated jobs, such as food service, child care, and office work. In Oregon, based on May 2011 data from the Bureau of Labor and Industries, the median hourly wages for all jobs in the construction and extraction occupations range was $23.10/hour. Specific wages for occupations range from $23.64/hour (sheet metal workers) to $29.93/hour (pile driver operators) to $32.38/hour (electricians). By comparison, in Oregon, median wages in the food preparation and serving occupations (such as waitresses) average only $11.17/hour, with median wages for personal care and services occupations (includes jobs such as hair stylists) paying only slightly higher at an average of $11.71/hour. According to the State of Oregon’s Bureau of Labor and Industries 2011 Construction Industry Occupational Wage Survey, the average wage for all occupations in the construction industry in Oregon was $25.77/hour.

For low-income children from disadvantaged families, attending a 4-year university is out of the question financially. According to Oregon Department of Education’s 2010-2011 school enrollment reports, nearly 54% of students within Multnomah County were eligible for free or reduced lunch services, and within Portland Public Schools specifically, this number is 44%. Out of the 60% of America’s low-income youth nationally, only one in three can expect to enroll in college, which results in a strong need for career and training opportunities for post-high school students. Low-income youth who are students within
Multnomah County (Oregon) and Portland Public Schools deserve equal access to career and technical educational opportunities which can put them on a course of self-sufficiency for the future. According to the Oregon Department of Education's 2010-2011 school enrollment reports, nearly 54% of students within Multnomah County were eligible for free or reduced lunch services, and within Portland Public Schools specifically, this number is 44%. Although OTI and the Women in Trades Career Fair serves youth statewide, a significant portion of girls served by OTI are students within this school district.

Relevant training and career education for Oregon youth is a documented need for Oregon residents and the trades industry itself. According to a recent survey of Oregonians statewide, 33% of those surveyed noted a priority for public schools to "graduate students who are ready to enter the workplace." In addition to providing fun, hands-on educational experiences for girls, the Women in Trades Career Fair, Building Girls & Local School Outreach Project aims to meet the predicted growth of the trades industry. Building up the future construction workforce is also growing concern of industry as the trades face the retirement of its baby boomer workers. Construction employment is expected to grow to 80,015 by 2018, according to the Oregon Employment Department, with 1,558 job openings per year. In Multnomah and Washington counties, the need is expected to grow to 29,387 by 2018, with 606 openings per year.

Support for career and technical education (CTE) is also demonstrated through state and local elected officials, as advocated by The Bureau of Labor and Industries Commissioner Brad Avakian, who has emphasized the importance of CTE to a strong economy: "The best way to expand economic opportunity tomorrow is to expand educational opportunity today. Restoring practical career education in our schools will help prepare more Oregon students for living-wage jobs while ensuring more Oregon businesses have the highly skilled workers they need to succeed."

**Major Activities, Strategies & Staffing**

**Project Description and Major Activities:**
Project activities will encourage middle and high school girls to view careers in construction as exciting and viable options through positive skills coaching, exposure to female role models, career guidance and supervised hands-on construction experiences and activities. Project outcomes will be implemented through the following major components: Building Girls Summer Camp, School & Community-Based Workshops, and the Women in Trades Career Fair Girls' Days, and Educational Events and Outreach.

*Building Girls Summer Camp:* This day camp curriculum, geared for middle and high school girls, includes applied math and measurement, construction basics (such as measuring wood, using a skill saw, and hammering nails), tools use and safety, visits to construction sites, teamwork and project planning. The camp's activities culminate with a service-learning project, such as tool sheds built for community gardens. Several former campers have gone onto returning as a volunteer for other campers, or enrolling in the Work Crew.

*Community/School-Based Activities:* School-based activities and programming introduce girls to learning how to properly and safely use power tools and practice math and measurement, all the while having fun building projects. In partnership with select local schools and community-based organizations, staff works with small groups of girls during school hours to complete basic construction projects while learning skills.

*Women in Trades Career Fair Girls' Days:* Hundreds of youth and educators from across Oregon and Southwest Washington are served through the annual Women in Trades Career Fair, providing middle and high school youth with hands-on trades-related workshops led by tradeswomen role models. Workshops (such as carpentry and electrical) cover a wide range of
trades and allow youth to interact directly with successful tradeswomen and explore trades career options. Girls can learn how to use a power drill, wire an electrical light and switch, climb a utility pole, and more.

Educational & Community Events: OTI staff actively participates in a variety of educational activities which are produced by partner community organizations and schools, such as the NW Youth Expo. These events allow us to be “mobile” and present our programs and hands-on workshops to wider audiences in the Portland-metro area.

For girls who have never picked up a power tool before or never used a measuring tape, trades education activities provided by OTI create avenues for girls to gain self-esteem and self-confidence in learning skills traditionally limited to men. OTI provides girls with opportunities girls to engage in hands-on, interactive learning in a nurturing environment among their peers while applying their experiential learning to community service. Regardless of what a young woman’s future career path might be, OTI hopes that girls involved with our activities will: increase their skills in basic math and measurement; increase their knowledge and experiential education activities in a variety of construction-building projects; increase their understanding of safely using trades tools; and increase their sense of self-assurance. When a girl uses a power tool for the first time ever, the result is an immediate sense of self-discovery and self-confidence. Very few girls have the opportunity through their families or schools to use construction tools. Through a time-tested curriculum designed by tradeswomen, OTI creates experiential educational opportunities for girls to learn in a nurturing environment among their peers, along with support from adult tradeswomen role models. Reaching young women while they are still in school and before they decide upon a future career path is critical for the future trades workforce, and industry employers.

Staffing: The project activities will be accomplished through the work of the OTI staff, OTI’s Board of Directors, contract assistant instructors and tradeswomen volunteers; however the following staff will provide project management. Katie Hughes, Girls Program & Outreach Specialist, will be responsible for program coordination, youth supervision and recruitment, instruction, school and community partner outreach, project design, and planning. Katie has worked as a carpenter by trade, with a unique combined background in youth education, social work, and construction. She has a Bachelor’s Degree in Social Work from the University of Portland. Before OTI, Katie worked at Helensview High School where she taught vocational trades courses in an alternative school setting. She has also worked in various paid positions with several chapters of Habitat for Humanity and continues to volunteer with Portland Habitat for Humanity. Connie Ashbrook, Executive Director, will provide overall project management and supervision of the project. Previous to co-founding OTI Connie worked in the trades for seventeen years as a dump truck driver, carpenter apprentice and elevator constructor. She was the first woman in Oregon to become licensed as an elevator mechanic. Connie served on the Oregon State Apprenticeship and Training Council for nine years and currently serves on the Federal Advisory Committee on Registered Apprenticeship.

Last year OTI provided hands-on trades educational activities to 1,647 girls. This number includes 1,220 girls who came to the 2011 Women in Trades Career Fair; 119 middle & high school aged girls who attended our four Building Girls Construction Camps, 18 young women who were paid to build garden sheds while they learned carpentry and employment skills as part of the Building Girls Construction Crew, and 290 girls who built small projects through hands-on workshops. Our projects and activities show girls that they can not only be successful in the trades, but that these trades careers are an available option to them.

The targeted age range for the project is girls ages 10-18, with a focus on low-income and at-risk
middle school and high school girls. The rationale for targeting this group is to reach girls before their senior year of school before they make their final post-secondary educational decisions, and to reach girls not likely to pursue college. Reaching young women while they are still in school and before they decide upon a future career path is critical for the future trades workforce, as well as for the trades industry employers.