

APPLICATION COVER PAGE

Project Name: Hillsboro Manufacturing Training and Learning Center
Amount Requested: \$394,312

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District, School or ESD: Hillsboro School District		
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District or ESD: Hillsboro School District		
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	Participating High School or Middle School Name	Lead Contact Name	Grade Levels	Student Enrollment
1.	Century High School	Tim Morley	9-12	1,647
2.	Banks High School	Jeff Leo	9-12	369
3.	Brown Middle School	Koreen Barreras-Brown	7-8	729
4.	Glencoe High School	Claudia Ruf	9-12	1,595
5.	Hillsboro High School	Arturo Lomeli	9-12	1,334
6.	Liberty High School	Greg Timmons	9-12	1,424
7.	Miller Education Center	Gregg O'Mara	9-12	Dual enrolled with comprehensive HSD schools
8.	Hillsboro School District	Mike Scott	P-12	Total: 20,955

Application Narrative

A. Project Abstract

Hillsboro School District (HSD) aims to create a premier training and learning center housed at Century High School in the fields of manufacturing and design for students and educators across the district and region. HSD is uniquely positioned to create a first rate hub by building upon the existing infrastructure, program, equipment, and committed partnerships. As the 4th largest district in Oregon with 51% students of color, the region is projected to grow 30,000 high wage, high demand manufacturing positions over the next 10 years.¹ The Manufacturing Center will expand the reach of existing CTE programming from **209 students to 630 middle and high school students** by creating access to horizontal and vertical pathways for **7,098** middle and high school students in Hillsboro and Banks School Districts, and via Worksystems, Inc.'s Sector Pathway Training Program. The Center will: 1) create rigorous, career-aligned dual credit program of study opportunities supported via expanded partnerships; and 2) build a pipeline of students from Century's feeder middle and elementary schools who gain hands-on lab experience.

B. CTE Revitalization Grant Vision

The manufacturing program at Century High School (Century) is led by Tim Morley, who is the recipient of the 2012 Outstanding Career and Technical Education Promising Practice and the 2014 Career and Tech Education Teacher of the Year awards. HSD currently offers 19 Career and Technical Education (CTE) programs of study. Despite being located in the Silicon Forest, the district's industrial and engineering programs **lack sufficient industry-standard equipment, staffing supports, and funding to expand partnerships** in order to create a

¹ Worksystems, Inc.: <http://www.worksystems.org/research/advanced-manufacturing-sector-report-2014>

rigorous manufacturing CTE program of study for students. The proposed premier manufacturing hub (“The Center”) will support students across Hillsboro’s high schools and the feeder middle and elementary schools for Century. Additionally, in partnership with Banks School District (Banks) and Worksystems, Inc. (WSI), this program will provide access to underserved students in Hillsboro, Banks, Tigard-Tualatin, and Beaverton alternative education programs who would not otherwise have access to a rigorous manufacturing program.

This grant will allow the district to revitalize CTE in Hillsboro by expanding its current manufacturing offerings both horizontally and vertically to create a robust real-world applicable course of study. As a result, the first-rate training and learning center will: 1) create rigorous, career-aligned dual credit program of study opportunities for **430 high school students** from Hillsboro, Banks, and students in WSI’s Sector Pathway Training Program; and 2) build a pipeline of **200 middle school students and 180 elementary school students** from Century’s feeder schools who gain hands-on Manufacturing experiences. **In total, the CTE Manufacturing program will grow from serving 209 students to 630 middle and high school students.**

By funding the following, HSD will be able to revitalize the manufacturing CTE program for the region:

- Industry-Standard Manufacturing and Design Equipment: Century has been fortunate in working with local partners to acquire 11 pieces of manufacturing equipment. In order to simulate a real world manufacturing experience for students, the facility requires an investment in machines and technology including computers, Vinyl cutters, CNC machines, and additional items detailed in the proposed budget.

- Center Staffing: In order to leverage the industry-standard facility to expand access to students and teachers, the center will require a part-time Manufacturing Center Assistant, as well as compensation for teacher time spent after school and during weekend offerings. WSI has committed to provide a teacher to lead the Pathways to Training cohort of students. Hillsboro plans to sustain the Manufacturing Center Assistant position beyond the grant cycle.
- Expanded Partnerships and Internship Opportunities: As HSD builds a stronger connection between postsecondary and career pathways it is a priority to provide students with *paid* internship opportunities. In partnership with WSI, Hillsboro will fund 15 paid 180-hour student summer internships through the Summer Works program. Additionally, 40 students during the 2016-17 school year will participate in 15-hour unpaid internships.

The requested funding will enable Hillsboro to develop an **innovative** Center at Century that simulates the professional manufacturing experience by significantly increasing student hands-on time with industry standard equipment and rates of production. Students will learn real-world, critical thinking skills by using trial and error to move a rigorous, simulated project from concept to prototype. The Center will **integrate** academic, community resources, and high wage and high demand pathways for students. The program will **expand and grow the students served in the Manufacturing CTE Program** by vertically aligning programming across Century's feeder elementary and middle schools, and horizontally across Hillsboro and Banks high schools, and in collaboration with WSI's Sector Pathway Training Program to reach students in alternative education programs, offer 10 Portland Community College Credits in Machining 290, 291, 292 and anticipated in Engineering 100. HSD is committed to providing

transportation and aligning schedules so that all high school students across the district have access to the Center.

Collaboration with industry, postsecondary, and community partners will enable HSD to create new career-related and job-embedded learning opportunities for students and educators in the field of manufacturing. The program will expand the numbers of students served during the school day and out of school by offering six weekend courses during the grant cycle consisting of two 5-hour sessions, through which high school students will have the opportunity to earn 1 Portland Community College credit in 3D printing. By creating new dual credit opportunities to students who may not traditionally earn credit within the manufacturing pathway, HSD aims to increase the diploma to career pathway in a high wage and high demand industry.

The vision of the program is to **reinvent the ways in which students currently experience CTE programming, earning up to 10 dual credits at PCC**, so that students engage in a rigorous program of study that exposes and prepares them for the rich opportunities of manufacturing careers. Students will develop their entrepreneurial skills through the manufacturing process, and work in teams on a production assembly line pace and with the collaboration required of a manufacturing business. HSD's partners are committed to linking the course of study with industry exposure and higher education credit articulation. The Center is designed to increase **experiential learning opportunities** through which students will simulate on-the-job training experiences via 17-20 paid internships, as well as additional job shadow and unpaid internship opportunities created with industry partners. Additionally, increasing the equipment from 11 to 47 industry-standard machines will enable students to engage in more rigorous manufacturing projects. The expanded pathway will enable more students to access dual credit opportunities that lead to **high wage and high demand manufacturing careers**, which

Worksystems Inc. projects will grow by more than 30,000 positions in Washington County over the next decade, creating advanced manufacturing positions that pay a median of \$23.04/hour.²

As discussed at greater length in Section I: Equity, a core goal of the initiative is to expand access and rigor of the manufacturing program to **historically underserved students**, with a focus on increasing the participation of Latino/Hispanic and female students, as well as students in alternative education programs.

Additionally, the partnership with WSI will enable the center to be utilized by cohorts of youth in alternative education settings who would otherwise not have access to the courses of study and rigorous, job-applicable experience. If funded, the Center will become a hub for the region to develop the next generation of diverse students prepared for high wage, high demand manufacturing positions.

C. Partnerships

Hillsboro School District has garnered significant commitment for the proposed Center from K-12 school, postsecondary, industry, and community partners for this proposal. Partners have played a strong role in the development of the vision of creating the premier manufacturing hub. The project was developed with partners through a series of working meetings, and partners will continue to meet quarterly to advise on the direction of the program. As a collective, the partners outlined below and in the included letters of commitment represent a set of more than 15 organizations, businesses, and industry focused on producing, supporting, and delivering high wage and high demand manufacturing careers in our region.

² <http://www.worksystems.org/research/advanced-manufacturing-sector-report-2014>

HSD has garnered significant commitments from partner organizations that are integral to the project. Key partnership commitments outlined below. The enclosed Partner List and Letters of Commitment (Appendix D) provide further details.

- Postsecondary support via Portland Community College (PCC): Hillsboro will continue to build on longstanding relationships with Portland Community College to extend 10 dual credit offerings to students in Machining 290, 291, and 292, and anticipated in Engineering 100.
- Industry Partners: Industry partners include Worksystems, Inc., Duyck Machine, Inc., Hillsboro Chamber of Commerce, C.F. Plastics, Inc., BDE Manufacturing Technologies, and American Precision Industries, Inc. Industry partners have committed to strengthening the school to work connection through new opportunities including: 17-20 paid internships, mentoring opportunities, bi-monthly job shadows, guest speakers and other career-related learning experiences, a Career Manufacturing Day bus tour, in-kind access to equipment and materials, and continued engagement as advisory members.
- School Partners: Banks School District and Hillsboro Schools have committed to creating the aligned horizontal and vertical pathways that will provide 7,098 students with access to the Center. Specifically, Banks has committed to provide transportation for up to 80 students during the school year; providing extended contract pay for a certified staff member to attend the workshop with students; 3 substitute days for the Banks manufacturing teacher to collaborate with Hillsboro's manufacturing teacher; and to serve as advisory members to support the growth of the program. Century HS feeder schools, Brown Middle School and Reedville Elementary School are committed to

increasing access for historically underserved groups to gain hands-on manufacturing experiences.

- Education Training Partners: The Oregon Computer Science Teachers Association (OCSTA), PACTEC at Portland Community College, and the Center for Science at Portland State University have agreed to devote resources to ensure that educators across the region gain increased training to support the pipeline of students exposed to Manufacturing pathways and have committed to support teacher training workshops and providing educators with professional development (PDU) or continuing education (CEU) credits. Portland Metro STEM Partnership will also provide technical assistance related to project evaluation and assessment project goals.

In sum, Hillsboro has worked in close collaboration to develop partnerships with the key partners outlined above and other, more informal partners. The success of the manufacturing Center relies on the on-going commitment and support of HSD's partners during and beyond the grant cycle. Since such a strong foundation has been laid, and an infrastructure is being created to sustain it, this work will continue long into the future.

G. CTE Program of Study Design

Hillsboro School District and Century High School have worked closely with Portland Community College over the last 10 years to develop a CTE program of study and dual credit offerings. Century CTE teacher, Tim Morley, has training in the use and application of advanced digital technologies and has implemented dual credits through PCC for many of these technologies. Mr. Morley's program of study currently consists of **3 high school credits for completion and up to 10 articulated credits through PCC**. The approved courses articulated

with PCC are: Machining 290, 291, and 292. Additionally, Engineering 100 paperwork is in process for approval.

The program is an ODE-approved program of study and is aligned with relevant State academic content standards, industry-recognized technical standards, and employability skill sets determined in collaboration with an advisory board made up of industry representatives through PCC. The proposed program will enable Mr. Morley to develop more rigorous, relevant, and complex manufacturing and design projects for students to tackle, and triple the number of students who can participate and earn up to 10 dual credits. Additionally, through the amplified hands-on access to equipment, students will be increase their skill as measured by the state approved Technical Skills Assessment (TSA). Through the program, high school students will gain articulation of college credits, and more project-based and job-embedded industry experiences. The 10 dual credits available via PCC can be applied to the manufacturing pathway at Portland Community College and comparable programs at state universities.

Through the program of study, students will gain skills in using Rhino 3D software, and apply drafting and design skills to product prototypes on various manufacturing equipment. Articulated credits available aligned to Industry Validated Technical Skills.

The program is designed to be culturally responsive to meet the needs of historically underserved student populations. Intentional outreach through strategies outlined in Section I: Equity and Section L: Communication will ensure the program serves a higher number of historically underserved students. Through the grant cycle, HSD has also allocated funds to host teacher training and curriculum development opportunities, which will include a focus on culturally responsive pedagogy in manufacturing and CTE programming.

H. High Wage and High Demand Occupations

While Hillsboro School District is located within the Silicon Forest filled with high wage and high demand career opportunities, our students have not had access to rigorous advanced manufacturing academic and career pathways. By developing Century's program to become a premier manufacturing hub for the district and region, Hillsboro aims to revitalize and build a pipeline with the burgeoning local manufacturing industry. Worksystems, Inc. "2014 Advanced Manufacturing Sector Report" sheds light on the extent to which advanced manufacturing is a high wage and high demand path to pursue. WSI projects a 19.2% increase in manufacturing job growth between 2012 and 2022. Furthermore, our Washington County region is expected to have 37,665 advanced manufacturing positions and this "future growth will account for 4 out of every 10 new jobs."³ Clearly there is demand for advanced manufacturing positions. There is also demonstrated evidence of high wage opportunities through this career path. The WSI report has found that the median wage for advanced manufacturing is \$23.04 (2012), which is "nearly 1.5 times that of all industries (\$16.08). Oregon's manufacturing industry is outpacing national growth.

As Patrick Kraft, CMfgE, Faculty, Department Chair and Machine Manufacturing Technology department at Portland Community College (PCC) wrote in his letter of commitment: "We know the program will support the development of career pathways that lead to high wage and high demand occupations. Oregon is facing a critical shortfall of youth in the manufacturing pipeline, due to both retirement of aging technicians, and growth of industry markets." Our proposal will build the student and educator pipeline to high wage and high demand advanced manufacturing careers by providing students on-the-job training using industry approved equipment, dual credits articulated with PCC, and career-related learning that includes

³ <http://www.worksystems.org/research/advanced-manufacturing-sector-report-2014>

industry tours, mentors, and internship experiences. With the vision of creating a premier program and opening accessibility to all of our Hillsboro high schools and partner districts, elementary and middle schools, we aim to prepare tomorrow's manufacturing leaders.

As outlined further in Section L: Communication, HSD has developed a series of strategies to communicate the purpose and goals of the program to students, families, and the community. The high wage and high demand pathways will be linked to communications around the Manufacturing Hub materials through avenues including the website, open house events, family nights during forecasting at each high school, Community tours, and via local media outlets.

I. Equity

HSD serves a diverse population of students with 51% students of color. Further, HSD has scored "not meeting" in the annual ODE CTE Report in terms of percentage of nontraditional students who participate in the district's CTE programming. However, HSD has a history of closing gaps as evidenced by the work they've done to create dual language programs that are eliminating gaps for English Language Learners. The district will apply that same pressure and expertise to close gaps for historically underserved students in their CTE programs. If funded, HSD's goal is to increase the number of students of color served within the CTE manufacturing program, with a specific focus on recruiting, supporting, and retaining the significant Hispanic/Latino student population, female students, and students in alternative education programs. To this end, HSD has multiple strategies it plans to pursue: 1) partnering with Worksystems, Inc. to serve students in the Sector Pathway Training program who attend alternative education settings; 2) leveraging programs such as Adelante Chicas that already

working within Hillsboro middle and high schools that target Hispanic/Latino and female students; and 3) develop intentional student and family outreach mechanisms.

1) Partner with Worksystems, Inc. to expand program to Sector Pathway Training Program. Through the partnership with WSI, an additional cohort of approximately 25 Sector Pathway Training Program students from alternative school settings in HSD, Tigard-Tualatin, and Beaverton will have access to the program. The WSI cohort are students who have historically been underserved and have not had success in a traditional school setting.

2) Leverage programs in HSD that target underserved populations. In order to reach students who have not participated in the past, HSD will collaborate with programs already working in the district that have a focus on STEM programming for historically underserved students including: Adelante Chicas, Digital Connectors, and Tech Wizards through Oregon State University's extension programming. To support this effort, a representative of Adelante Chicas will serve on the advisory for this program. These three programs offer culturally responsive pedagogy and are an avenue to recruit greater numbers of historically underserved student populations, with a specific focus on expanding the reach to more Hispanic/Latina students.

3) Develop intentional student and family outreach mechanisms. The planned afterschool and school visit programming for 380 middle and elementary school students will build a pipeline of interested students with an emphasis on reaching historically underserved students. As highlighted in the letters of commitment from Brown Middle School and Reedville Elementary, both schools serve a large population of students of color and economically disadvantaged students. Mr. Morley has already begun forming student advisory groups consisting of members of HSD's diverse community to help provide input and suggestions to

continue to expand the recruitment, support, and retention of historically underserved students in the CTE manufacturing program. Finally, as outlined in Section L: Communication, the Center will host open house events, create bilingual outreach videos, and create a high school to feeder school mentor program aiming to attract and support historically underserved students.

It is the intent of the manufacturing hub to provide Hillsboro and partnering district students who have been historically underserved greater access, support, and a rigorous diploma to career pathway in manufacturing.

J. Diploma Connections

The manufacturing and design center will help all students meet the Oregon Diploma requirements and pursue high wage, high demand career pathways. In support of the core academic credit requirements, the program will reinforce the Next Generation Science Standards 8 practices and the Math Common Core 8 practices through the real-world problem solving and simulated hands-on manufacturing courses. The career related learning experiences both within the lab and via industry internships, job shadows, and mentoring opportunities will support the Essential Skills development. As an example, students will develop the following Essential Skills: using technology to learn, live, and work; demonstrating personal management and teamwork skills; and demonstrating civic and community engagement.

Hillsboro will build on its existing supports to personalize education for students in this program. Currently, each student in HSD creates an educational plan and profile in middle school that follows them through high school. Students engage in a series of career exploration avenues to build their plan of study in high school. The program's aim of developing an expanded horizontal and vertical pipelines of students will rely on these individualized plans to

expose and help students pursue their interest in high wage, high demand manufacturing and design pathways.

Expanding the reach of the manufacturing program to address the needs of historically underserved students in achieving the diploma is a central goal of the proposed center. The premier facility is focused and committed to serving underrepresented student populations within and outside of the school day through partnerships with other Hillsboro high schools, Banks, Worksystems, Inc.'s Sector Pathway Training program, and the middle and elementary feeder school programming. All of the participating high school students will be able to earn dual credit for their high school diploma and credit toward Portland Community College. High school students will work with industry partners and in turn have additional adult support and mentoring to encourage diploma completions. As a result of additional career related learning opportunities students will first hand see the diploma to industry connection.

K. Sustainability

The Manufacturing and Design Center is designed to be financially sustainable and to ensure enduring systems change. The proposed budget will serve to revitalize CTE through investments in equipment, staffing, and expanded partnerships to create the robust lab environment. Beyond the one-time investments, the sustainability plan centers on supporting on-going lab management and access beyond the regular school day, estimated at \$50,000 annually. HSD has identified four primary sources of funding to support the program sustainably: ODE CTE Program of Study Sustainability Funds, fundraising and profits from sales of student created work, in kind funding via HSD's STE(A)M afterschool programming, and facility use fees. As is evidenced in the budget, significant in-kind contributions will support the Center during and beyond the grant cycle. HSD is also committed to providing in-kind transportation

and support to align schedules so that all high school students across the district have access to the Center.

In addition to planning for fiscal sustainability, HSD will invest in on-going collaboration across the partner organizations to maintain and deepen investment in the program. HSD's College and Career Coordinator will continue to collaborate across boundaries to strengthen partnerships with HSD CTE teachers and staff, postsecondary, school/district, industry, and other community partners. Given the commitments made by partner organizations for this project, HSD will continue to work with the invested group of partners to maintain and grow the Manufacturing Center. Finally, by building a pipeline of students and educators invested in the Manufacturing pathway, HSD will continue to seed and grow lasting commitment to the project to achieve the intended impact.

L. Communication

HSD will dedicate staff capacity and a set of strategies to communicate the purpose of the manufacturing career pathway and program to students, parents, school staff, and the community. To this end, HSD is investing 0.2 FTE of College and Career Coordinator's time to support this grant. The College and Career Coordinator, Brooke Nova, will leverage her role of overseeing CTE programs and her regular meetings with Counselors and Administrators from across the district to communicate the purpose and goals of CTE programming, and plans to use existing meeting forums.

There are a number of existing communications channels that will be harnessed including the HSD College and Career Pathways website, district and school newsletters, and Century High School's annual printed course catalog. The College and Career Pathways website already serves to inform students and families how to become aware, eligible and prepared for the future

including a feature video of Mr. Morley's manufacturing and engineering programs of study. The CTE pathway programs will be also highlighted through parent nights and forecasting at all participating HSD high schools. Additionally, the College and Career Coordinator has developed a set of Pathway Professional Learning Communities (PLC) and communications materials for students and parents which will be leveraged for the proposed manufacturing hub.

HSD plans specific outreach strategies to reach students who have been historically underserved in the manufacturing career pathway, focusing on females and students of color. HSD plans to work with partner organizations and programs such as Adelante Chicas, who serve targeted populations, to reach historically underserved students. Key activities include:

- Hosting open house events at the Manufacturing Hub semi-annually to current and potential parents, families, industry partners, and the broader community in which students present their learning and their work
- Creating at least 6 bilingual outreach videos highlighting the opportunity by spotlighting students, career-related learning experiences, and projects to be used in outreach and forecasting materials.
- Partnering with the Hillsboro Tuesday Market so that students will be able to sell the products developed to the broader community and showcase their talents and skills.
- Creating a mentor program through which high school students mentor middle and elementary school students during afterschool and weekend workshops and visit classrooms to share a student's perspective on the manufacturing pathway.

Finally, to reach the broader community, HSD began Community Tours last year that have successfully engaged and exposed community partners in the pathways. HSD also engages local

news outlets to spread the message. The Manufacturing Lab will garner attention as a hub of industry-standard equipment and as students take on increasingly complex projects.

Bonus Narrative

B. Middle School Component

The middle school and elementary school components of the proposal are integral to the proposed plan to revitalize CTE across Hillsboro. The Center will not only serve as an industry-standard learning environment for high school students in the region, but also as a space accessible to the elementary and middle students to gain exposure to the field. HSD aims to build a pipeline of 380 middle and elementary school students from Century HS's feeder schools who gain hands-on lab experience during the grant cycle. HSD recognizes that it is critical to reach students early in their academic careers in order to ignite their interests in career pathways such as manufacturing. Through an emphasis on reaching historically underserved student populations, HSD hopes to create a new generation of students who enter high school exposed to and excited about the high wage and high demand manufacturing CTE pathways.

The Center will offer afterschool programming to middle school students, enabling them to access to new technologies and manufacturing techniques. Specifically, Brown Middle School students who participate in the Oregon Mathematics Engineering Science Achievement (MESA) program focused on STEM education will visit the Center throughout the grant cycle. Center staff and participating high school students will mentor middle school students to assist them in learning to use the technologies and in using design software to develop their projects. Further collaboration with Brown Middle School is planned in partnership with the Gateway to Technology instructor and STE(A)M coach. Mr. Morley and mentor students will also host visits to the Center and will bring hands-on manufacturing lessons to middle school classrooms. Similar connections are planned with elementary schools. Finally, through the district funded STE(A)M coaches at each HSD school, the grant team will coordinate additional opportunities to

build and expand the link between elementary, middle, high school and career manufacturing pathways.

C. Out of School Time Programming

Extending student access to CTE activities beyond the normal school day is an integral component of the Center proposal. Through funding for additional staffing, the Center will be accessible for regular afterschool programming and weekend workshops. Specifically, partnership with Century's feeder school, Brown Middle School, will provide hands-on manufacturing lab experience for students who do not currently have access for at least 100 students at the Center and an additional 100 through school visits. By having the lab open outside of school time, the Center staff will be able to support teams in activities such as First Robotics, Oregon Game Project Challenge, and Oregon MESA. The out of school time will allow for the expanded formation of clubs in the CTE manufacturing field, particularly with an emphasis on reaching historically underserved students, such as Multicultural Tech Club and Enabling the Future. Supporting outside school time will also allow industry volunteers to engage more frequently with students.

Six weekend workshops during the grant cycle will allow for significantly more high school students to access the facility and earn dual credit. The Center team projects 180 additional high school students will gain 1 dual credit through participating in 2 5-day weekend workshops during the grant cycle. HSD envisions the Center as a space for industry, postsecondary, educators, students, families, and community to explore and engage around the field of manufacturing.

D. Focus on Regional, Statewide or System Changes

Despite being the fourth largest district in Oregon, Hillsboro School District does not currently have an industry-standard manufacturing facility. Creating the Center at Century High School will extend the opportunity to access rigorous manufacturing CTE programming to 7,098 students across Hillsboro, Banks, and students participating in Worksystems, Inc.'s Sector Pathway Training Program from across Beaverton, Tigard-Tualatin, and Hillsboro. As a hub for manufacturing, the Center will reinvigorate and reconnect the schools with the manufacturing industry that is rapidly growing in the region. The proposal will develop an elementary, middle, and high school pipeline to CTE programs of study, postsecondary attainment, and high wage, high demand manufacturing occupations. HSD envisions preparing students to be the most marketable and desired employees of the burgeoning industry surrounding the district, aptly coined the Silicon Forest. The Center will not only extend hands-on lab access to a broad set of students, but will also extend the number of high school students in the region who gain dual credits with Portland Community College from 200 to 430 students.

The commitments made by partners will support the development and growth of the Center. In particular, key collaboration with Portland Community College, local industry partners such as BDE Manufacturing, Worksystems, Inc., and the Hillsboro Chamber of Commerce will deepen the connection of school to career. It is HSD's hope that the Center serves as a model that can be replicated across Oregon for how to link core academic work with simulated real-world manufacturing learning and training so that students move seamlessly to discover and pursue high wage, high demand careers that support the future of our state.