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#### Innovative Industries Internship Legislative Report HB 15-1230 FY 2017-18

#### I. Background

This legislative report reviews and highlights the outcomes and achievements of House Bill 15-1230 Innovative Industries Internship (III) Program. Since the passage of the bill, the Innovative Industries Internship Program continues to make impacts through high-level internships within its innovative industries. For each cycle, \$450,000 is appropriated to fund approximately 90+ internships. The program works to incentivize businesses by reimbursing up to \$5,000 per intern working in high-level experiential work-based learning opportunities. The III Program also contracts up to \$10,000 per industry intermediary to provide support in the following areas: marketing, application review, industry support, and program development for its industry partners. The eight industries which are a part of the matching grant program include:

- Advanced Manufacturing
- Energy and Natural Resources
- Information Technology
- Aerospace

- Engineering
- Bioscience
- Construction
- Electronics

#### II. Summary of Activities

During FY 17-18, the III Program received both business and intern applications to launch the second program cycle. For each cycle, the application process for businesses and interns becomes more competitive. There is a high demand for more intern slots than available funding can currently support. One hundred thirty¹ internship slots were approved in FY 17-18 with 110 internships successfully completed. Eighty-eight businesses with under 100 employees and 21 large businesses with 100 employees or more participated in the program. The average hourly internship wage during FY 17-18 was \$15.53, an increase from the previous cycle(s). Of the businesses that participated in the program, five are rural and 104 are metro-based. Moving forward, a more concerted effort and outreach will be made to attract more rural businesses to participate in the program.

The number of internship spots approved is determined at the beginning of each new cycle based on available funding. In FY 17-18, industry demand continued to increase beyond the grant funding available. As a result, businesses in FY 17-18 again received initial approval for no more than one intern per business. Some businesses did request and receive an additional intern as a result of another participating business releasing an unfilled position. For FY 17-18, many businesses were not granted the additionally requested intern due to lack of funded slots. While no data is collected that determines if an internship from the Innovative Industries could be alternatively funded outside of a program such as this one, many

Internship spots were overbooked to account for attrition based on previous year numbers.

businesses have indicated that without the support of the III Program, the internship would not have been possible. Also, it is important to note this program supports career exploration and work-based learning while students are engaged in a full-time educational program. As a result, and as per the program guidelines, it is not mandated or expected for most students to be hired during their full-time school obligations. However, it is important to highlight that over the course of the program, 52 students have been hired by the participating business as a result of a successful Innovative Industries Internship. Clearly, the program is resulting in experienced and work-ready employees that support Colorado's talent pipeline by closing the skill gap.

#### III. Program Performance and Demographics

Due to more intentional conversations regarding work-based learning and registered apprenticeships, more businesses are interested in pursuing on-ramps that lead to such career pathway training. Information gathered from approved businesses, as well as feedback gathered at the conclusion of the internship, show 70% of participating businesses have expressed interest in developing a registered apprenticeship program. This is a 26% increase from the previous cycle.

#### Innovative Industries Internship (III) Program Update

	PY 2016-17	PY 2017-18	Cumulative
# of internships spots approved	208²	130³	338
# of businesses denied	25	53	78
# of interns approved	231 <sup>4</sup>	110	334
# of Veterans completed internships	14	4	18
Completed internships	181	110	284
Businesses under 100 employees	116	88	150
Businesses with 100+ employees	15	21	36
Average hourly wage	\$14.59	\$15.53	\$15.06
Number of interns hired as a result of internship	25 <sup>5</sup>	27	52

### INDUSTRY DEMOGRAPHICS<sup>6</sup>

 $<sup>\</sup>frac{2}{17}$  Program funding is for 90 internships annually. Initial funding includes awards from two fiscal years - PY 2015-16 and PY 2016-

<sup>&</sup>lt;sup>3</sup> Internship spots overbooked to account for attrition based on previous year's numbers.

 $<sup>^{4}</sup>$  Multiple student interns applied without a matching business during the first year of the program.

Intern data included only for those businesses who stated they hired their interns.

 $<sup>^6</sup>$  Demographics represent businesses with applications that have met the minimum criteria. Not all businesses found an intern. Note: Some businesses reported multiple industries.

Industry	Number of Businesses
Aerospace	19
Advanced Manufacturing	36
Bioscience	31
Construction	15
Electronics	13
Energy & Natural Resources	24
Engineering	46
Information Technology	16

#### INTERN DATA FOR PY 2017-2018 INTERNSHIPS<sup>7</sup>

Intern Data		
Male	74	
Female	36	
Enrolled in high school	6	
Enrolled in adult education	2	
Enrolled in training or cert program	3	
Working on Bachelor's or Associate's	87	
*Had been enrolled full-time in one of the	13	
above schools less than six months ago		
Schools interns are attending		
Colorado State University	27	
University of Colorado Denver	8	
University of Colorado Boulder	24	
Colorado School of Mines	11	
Pikes Peak Community College	5	
Front Range Community College	2	
Metro State University	2	
All others	31	

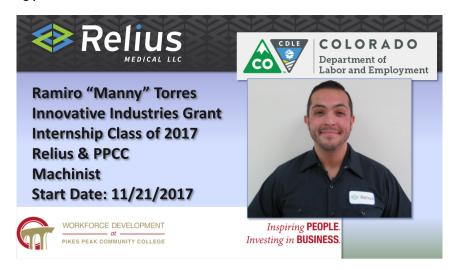
#### IV. Testimonials

Relius Medical, a business participating in the program has partnered with District 49 (D49) in Colorado Springs to provide internship exposure to its Pikes Peak Community College students attending secondary school within the district. The district, in collaboration with Relius, sponsors field trips for all its students in the district to expand areas of career interests, opportunities and job exposure. This is one example demonstrating how the III program creates an opportunity for historically underrepresented communities and supports career pathways that align education, training, and work-based learning.

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<sup>&</sup>lt;sup>7</sup> Intern data is self-reporting and includes only those interns placed in active internships. Multiple interns applied during the fiscal year. Some students reported they were enrolled (Out of school) less than six months of applying for intern program.

Example 1: Community College student who successfully completed an internship with Relius Medical, LLC for precision medical instrument manufacturing. These company postings are a way to welcome interns into the culture and training process.



#### V. Request for Information

The JBC requested the Colorado Workforce Development Council to respond to the questions below and be included in this report.

## Should this program be limited to "innovative industries" or should it be part of a more comprehensive statewide work-based learning initiative?

The Innovative Industries Internship program is already part of a comprehensive initiative. All the work being done by CDLE, local workforce centers, and the talent development network is coordinated and aligned through partnerships. This specific component plays a niche role in supporting these innovative industries, and it is the only program funded with state dollars that support this concept and gives industry full flexibility on their recruitment. Additionally, this program is attractive to companies who may not have otherwise engaged with the state or with local workforce centers due to misperceptions and bias. A successful experience by an employer can lead to more positive interactions with the talent development network, including tapping into other targeted talent pools.

Further, expanding the scope of targeted industries without significantly increasing the funds available would diminish the overall effectiveness of the program and its reach. During the 2018 legislative session, the program was effectively replicated through Senate Bill 42 to focus on agriculture through the Colorado Department of Agriculture. We recommend that the agriculture program is implemented for two years and evaluated to determine if the model is shown to be effective in other industries and if so then an expansion of scope and funding for this program is recommended.

# Should the program be modified to place greater emphasis on opportunities and industry-exposure for students with less advanced skills, including high school and community college students?

While students participating in concurrent enrollment (HS and community college) do participate, they make up a small percentage of the 100+ interns who apply each year. One way to facilitate greater access for this population is to focus marketing of the program in high schools, community colleges and technical schools, both through the program's industry intermediaries and by using an online internship opportunity platform (there are several) to extend awareness beyond current channels. Adjusting these efforts should not require program modifications, rather just process modifications. In order to maintain the value-added components for the participating companies, it is important that the students be engaged in the appropriate level of education for the positions being obtained.

## Should the program be more focused on underrepresented groups, including low-income students, consistent with the Higher Education Master Plan and the Talent Pipeline Report?

The current program focuses on outreach and recruitment to underrepresented groups that are consistent with the Higher Education Master Plan and the Talent Pipeline Report. Intermediaries support individual businesses in setting up internship programs and in recruiting interns for the companies. There is an intermediaries outreach and recruitment workgroup that worked on strategies that would help identify underrepresented groups without having an intrusive application process.

Additionally, the first Talent Pipeline Report showed that approximately 22% of Colorado college graduates are leaving the state for employment. This program, by providing in-state internships for students, contributes to more of Colorado's talent staying within the state for employment opportunities. Further, creating a participant focus to any specific group would require strengthening partnerships with entities that can provide recruitment support to businesses, which may require additional funding.

## If internships for high-level students are of value to expanding high-tech industries, is the additional incentive of state funding necessary?

There is not a specific requirement in the legislation that these internships are reserved for "high-level students." The internships are quality internships that have work plans and competencies that are to be accomplished during the 130 hours of the internship. The internships have provided opportunities to all levels of students. The additional incentive of state funding is necessary to provide all students the opportunity to have a quality internship with industries that are innovative. This program has a significant impact on small businesses that would not have the opportunity to hire students regardless of their skill level without the financial incentive. The internships range from entry-level to mid-level skill set. Some businesses require some knowledge and experience in the industry. All students have the ability to apply the knowledge gained from high school, technical college, and college to the internship.

Data is not collected that would determine if an internship from the Innovative Industries could be alternatively funded outside of a program such as this one. Many businesses have indicated that without the support of the III Program, the internship would not have been possible, particularly given the narrow operating budgets of the smaller firms.

### Is funding at the level of \$5,000 per intern necessary? Once a program is launched, will a business continue it with less external support?

Sustainability is always a goal from time-limited grants such as III. The funding level could be tested during a future cycle to determine the criticality of \$5,000 per intern. Based on the success of the program, many grantees have expressed interest in developing their III programs into full apprenticeships, which is indicative of the commitment by businesses. Additionally, the industry intermediaries have discussed what it will take for the program to be sustainable without funding from the state.

#### **Additional Evaluation Items:**

Comments from participants indicate the effectiveness of the program:

"Colorado's Innovative Industries Internship program is the perfect support to help small businesses grow through lean startup years. It provides hard working and eager to learn interns, introduces us to future employees, and helps Colorado companies succeed."

Thomas Murphey, Phd Opterus, CEO

"I owe all of my successes at Opterus to my outstanding mentor, Thomas Murphey. He has taken the time to get me up to speed and ensured I am learning all I can while working for the company. I am very fortunate he was my mentor and greatly appreciate the opportunity to stay on over the school year. Because of my experience through this internship I have a much more concrete plan for my years following graduation. I have gained a great appreciation for the advanced composites industry and plan to further my knowledge in the area one way or another. I am also very appreciative of the Colorado Workforce Development [Council] which allowed me the opportunity to intern with such an advanced startup. I know firsthand how difficult it is for students to find internships, let alone local internships and realize how important these programs are for the future of these industries."

K. Johnson, intern Opterus

#### VI. Looking Forward

During FY 18-19 a concerted effort has been made to create marketing material that appeals to more underrepresented populations, as well as making new connections with the Colorado Internship Professional Group that administers career service opportunities to its community college system network. Additionally, the new intern application has self-reporting elements

for students who receive financial assistance (such as the Pell grant) in order to better track disadvantaged students benefiting from the program. Lastly, the Innovative Industries Intermediaries Targeted Outreach Task group has taken the initiative to develop goals that move the success of the program forward by identifying resources and support for business and interns while creating outcomes and expectations that are more closely aligned with the bill. Moving forward, the III program will continue to create new workforce development opportunities that connect business with future talent to sustain Colorado's talent pipeline.

For questions regarding this legislative report contact:

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