FCC Precision Ag Task Force – Adoption & Jobs Work Group
Jobs Subcommittee
Areas of Focus / Priorities

Updated: July 20, 2020

I. **Connectivity:** A major building block and necessity to promote the adoption of precision agriculture technologies and enhance rural quality of life is having adequate connectivity. Connectivity must be deployed that will sustain the capacity needs of the industry for now, but most importantly into the future. Connectivity is the driver for a thriving rural community; which in turn attracts businesses, a skilled workforce and retains its residents.

   Current focus:

   - **Connectivity is the foundation for precision ag adoption. The adoption will lead to the demand for skilled workforce, attract thriving ag based-businesses and lead to enhanced quality of life in rural areas.**

   - **Full collaboration with Adoption Subcommittee**

II. **Career and Technical Education:** A focus of the Jobs Subcommittee has been on the recent advancement of CTE tracts. The Jobs Subcommittee has identified several state and local initiatives that will serve as a model for recommendations such as the Kentucky Federation for Advanced Manufacturing Education.

   Current focus:

   - **K-12 STEM Programs: Identify key success metrics to incorporate into recommendations, policy initiatives. Identify ways to promote precision ag tracts.**

   - **Examine public/ private partnership opportunities to accelerate such programs**

III. **Apprenticeship Programs:**   The Department of Labor's 'Industry Recognized Apprenticeship Programs' (IRAPs) as well as industry/state apprenticeship programs have been identified as a potential tool to attract and develop a technologically skilled workforce to support the deployment of rural broadband networks and precision agriculture technologies.

   Current focus:

- **Meet with Department of Labor to examine IRAPs**

- **Scope occupational descriptions in precision agriculture**

- **Work with trade associations and industry leaders to identify barriers/success of apprenticeship initiatives**

- **Further explore existing public/private partnerships, including but not limited to Pennsylvania Ag Education Apprenticeship for Ag Equipment Service Techs.**

IV. **Land Grant Universities/Extension Programs/Community Colleges:** Another major topic identified was the success of STEM and precision agriculture technology tracts offered by land grant universities, extension and community colleges. Increased enrollments in STEM and agriculture tracts as well student- led Ag Tech start -ups show these institutions are succeeding in promoting precision ag as a viable and exciting career path. Similar program outreach to community colleges, extension locations, and through distance learning will support rural citizen retention, diversify the skilled workforce and support the adoption of precision agriculture and demand for rural e-connectivity.

Current focus:

- **Identify key success metrics that can be promoted through policy and/or enhanced USDA NIFA partnerships**

- **Research university/college led entrepreneurship programs that integrate industry stakeholders, promoting entrepreneurial spirit**

- **Identify tribal colleges/ag tech tracts that are currently offered and the role they can play in developing skilled workforce**

Work Group Lead:

V. **Automation**: A broad topic of discussion is focused on automation and remote telemetry. Initial findings show automation and remote telemetry technologies could help alleviate labor shortages and increase efficiencies while driving the demand for skilled jobs such as IT techs, field techs, network engineers, administrators, agronomists. These technologies are also recognized for their positive impact on natural resource conservation and energy management in the 2018 Farm Bill.

Current focus:

- **Categorize obstacles in deploying automation/machine learning technologies: industry perspective, farmer perspective**

- **Recommend ways federal and state government can promote the adoption of automation and machine learning technologies through NRCS, FSA, RUS, encourage inter-agency coordination**

- **Identify current and emerging technologies being deployed to support the adoption of automation, remote telemetry**

- **Recommend funding reform to include providers/carriers that are not considered ISPs or ETCs, but deploy networks to support precision agriculture technologies**