

Sarah Dornink Executive Director

Senate Agriculture, Broadband & Rural Development Finance & Policy Committee

January 18, 2023



Who are we?

- 16-member legislative council created in 1997
- Mission Statement: MAELC provides leadership to promote and expand agricultural education in Minnesota
- Staff includes Sarah Dornink, Executive Director and Kari Schwab, Program Coordinator



Agriculture, Food & Natural Resources Education (AFNR)

- Agricultural Literacy
- School-Based Agricultural Education
- Post-Secondary AFNR Education
- Agriculture Teacher Preparation
- Farm Business Management (FBM)





Minnesota annual demand of **18,820** for AFNR employees

Current pipeline of 1,731 AFNR students in higher education

* RealTime Talent (2021)

School-Based Agricultural Education



- Formal Classroom Setting
- Nearly 40,000 students grades 7-12 (mainly 9-12)
- 15,800 FFA members
- 226 programs in the state with 331 teachers
- 30 programs in the sevencounty metro

Minnesota Career Fields, Clusters & Pathways

■ Agriculture, Food, and Natural Resources

> Animal Systems

> Plant Systems

> Agribusiness Systems

> Environmental Service Systems

> Natural Resources Systems

> Food Products and Processing Systems

> Power, Structural, and Technical Systems

■ Marketing

- > Merchandising
- > Marketing Management
- > Marketing Communications
- > Marketing Research
- > Professional Sales

■ Business, Management, and Administration

- > Administrative Support
- > Operations Management
- > Business Information Management
- > Human Resources Management
- > General Management

■ Hospitality and Tourism

- > Lodging
- > Recreation, Amusements and Attractions
- > Restaurants and Food/Beverage Services
- > Travel and Tourism

■ Law, Public Safety,

> Correction Services

> Emergency and Fire

> Law Enforcement

Protective Services

Administration

and Taxation

> Governance

> Planning

> Regulation

> Foreign Service

> National Security

> Public Management

and Administration

■ Government and Public

> Legal Services

> Security and

Services

> Revenue

Management Services

Corrections, and Security

■ Finance

- > Banking Services
- > Business Finance
- > Securities and Investment
- > Accounting
- > Insurance

CAREER FIELD Agriculture, Food

Natural Resources

Foundation Knowledge & Skills

Problem Solving . Critical Thinking Employability . Citizenship . Ethics Career Development • Integrity • Teamwork

Technology Application • Communications Safety, Health & Environment • Leadership Technical Literacy • Cultural Competence Lifelong Learning • Financial Well-Being

> Organizational & Global Systems Creativity • Innovation

Technology

■ Education and Training

- > Administration and Administrative Support
- > Professional Support Services
- > Teaching/Training

■ Human Services

> Counseling and

> Early Childhood

Services

> Consumer Services

Mental Health Services

> Family and Community

> Personal Care Services

Development and Services

Legal Responsibilities • Academic Foundations

Health Science

CAREER FIELD

■ Health Science

- > Biotechnology Research and Development
- > Diagnostic Services
- > Support Services
- > Health Informatics
- > Therapeutic Services

Legend:

■ = Career Cluster

> = Career Pathway

Explanation provided on reverse side.

■ Arts, Audio/Video Technology, and Communications

- > Audio/Video Technology and Film
- > Journalism and Broadcasting
- > Performing Arts
- > Printing Technology
- > Communications Technology
- > Visual Arts

■ Information Technology

- > Information Support and Services
- > Network Systems
- > Programming and Software Development
- > Web and Digital Communications





■ Transportation, Distribution, and Logistics

- > Facility and Mobile Equipment Maintenance
- > Health, Safety, and Environmental Management
- > Logistics Planning and Management Services
- > Sales and Services
- > Transportation Operations
- > Transportation Systems/Infrastructure Planning, Management, and Regulation
- > Warehousing and Distribution Center Operations

■ Architecture and Construction

- > Construction
- > Design/ Pre-construction
- > Maintenance/ Operations

■ Manufacturing

- > Production > Manufacturing
- Production Process Development
- > Maintenance.
- Installation, and Repair
- > Quality Assurance
- > Logistics and Inventory Control
- > Health, Safety, and Environmental Assurance

■ Science.

Technology, Engineering, and **Mathematics**

- > Engineering and Technology
- > Science and Mathematics

Contact Us www.MinnState.edu/System/CTE

AFNR Pathways

Learning by Doing – Minnesota students gain relevant industry skills and food and environmental literacy through classes and experiences related:

■ Agriculture, Food, and Natural Resources

- > Animal Systems
- > Agribusiness Systems
- > Environmental Service Systems
- > Food Products and Processing Systems
- > Natural Resources Systems
- > Plant Systems
- > Power, Structural, and Technical Systems



CAREER FIELD

Agriculture, Food, Natural Resources

Post-Secondary AFNR & Farm Business Management (FBM)

Post-Secondary

- 32 (of 33) Minnesota State institutions plus the University of Minnesota, Twin Cities & Crookston offer degree programs in AFNR
- Over 1,700 AFNR degrees awarded between the Minnesota State and UMN systems (2022)





FBM

- 62 Farm Business Management Instructors
 **Added urban and specialty crops
- 7 Minnesota State colleges
- 2,800 students enrolled statewide in the program



Agriculture Teacher Preparation

Current agriculture teacher licensure programs:



- Southwest Minnesota State University,
 Marshall
- University of Minnesota, Crookston
- University of Minnesota, Twin Cities
- Minnesota State Colleges & Universities (2+2)

- Approximately 40 students enrolled in teacher preparation programs statewide
- 100 openings for the 2022-2023 school-year
- 60 filled by new teachers that were not teaching last year (12 unfilled)



MAELC Funding

In 1997 the Minnesota Legislature provided a biennial special appropriation to the University of Minnesota base level funding for the enhancement of agricultural education programming.

MAELC Operations & Scholarships \$240,109

MAELC Grants, Special Initiatives & New Programming \$250,000

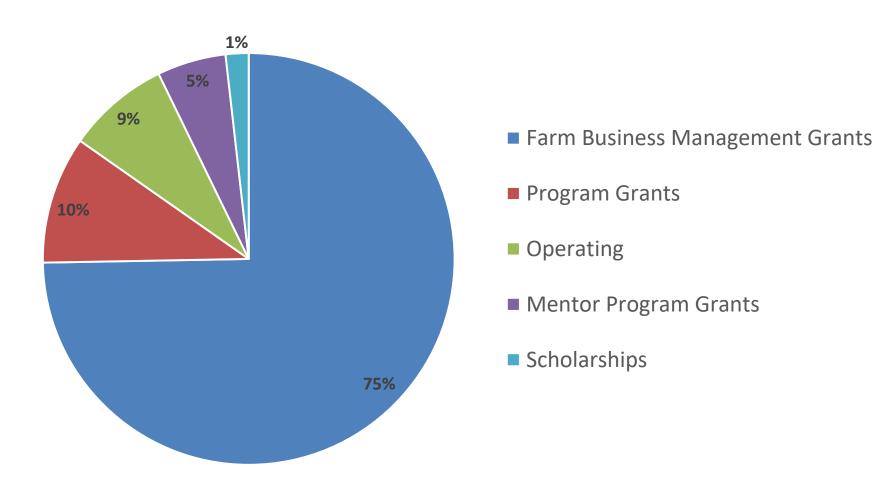
Farm Business Management & Mentor Program Grants \$2,000,000

Total Budget: \$2,490,109/year

MAELC is housed at the University of Minnesota – St. Paul



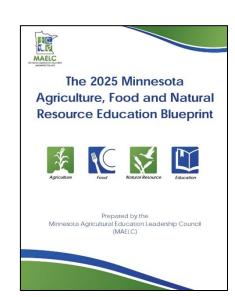
MAELC Budget Breakdown





Meeting MAELC's Mission

- Leadership, Engagement & Promotion
- Starting & Supporting AFNR Programs
- Teacher Recruitment & Retention





Meeting MAELC's Mission

Leadership, Engagement & Promotion

- Provide visibility and communications
- Organize strategic committees/meetings
- Represent Agricultural Education at various functions
- Serve as a resource for the legislature and government agencies
- Facilitate Minnesota Team AgEd







EAM

AgEd





UofM-Twin Cities
Ag Education















Minnesota



















Meeting MAELC's Mission

Starting & Supporting AFNR Programs

- MAELC Grant Programs
 - Program Grants
 - Farm Business Management
 - Mentor Programs
- Outreach to Schools (New & Current)
- Curriculum
- Focus on Work-Based Learning & Internships
- AgEd for All (Equity, Diversity & Inclusion Efforts)



Farm Business Management (FBM) & Mentor Program Grant Funds

\$2,000,000 / year

- -FBM Challenge Grants \$1,730,000
- -FBM Additional Instructor Grants \$125,000 *Specialty Crops & Urban
- -Mentor Program Grants \$135,000
- **-Evaluation** *\$10,000*

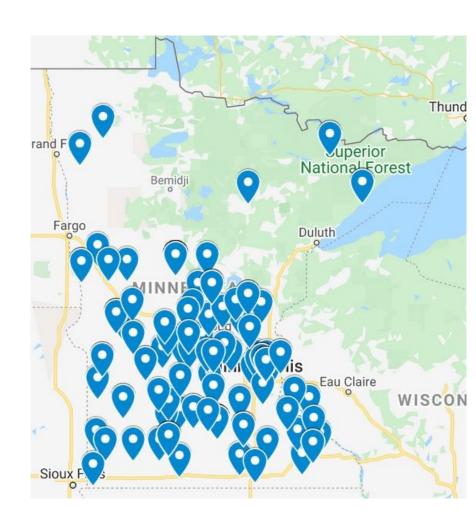


Program Grant Funds

\$250,000 / year

- Common Fund (Statewide)
- Strategic Initiatives

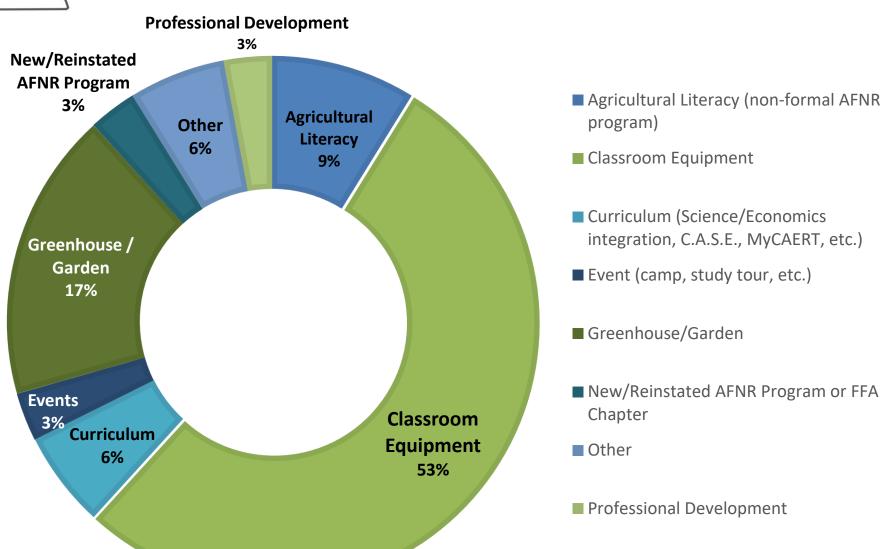
- 47% School-Based Programs
- 23% Post-Secondary
- 17% AFNR Education
 Support Organizations
- 13% Agricultural Literacy



*Nearly \$300,000 per year of grant requests go unfunded



Which Category Best Describes Your Grant Project?

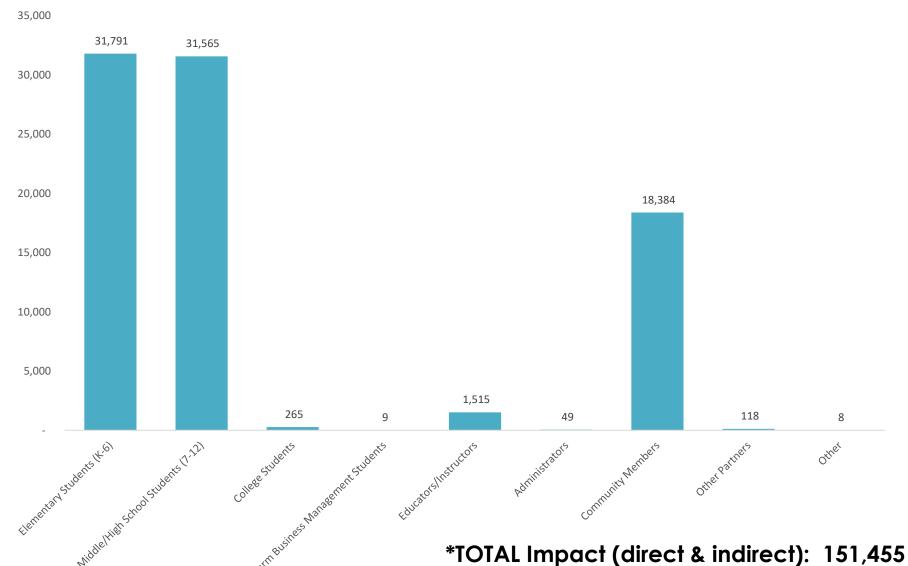




MAELC Grant Impact – One Year Example

*All information is self-reported by grantee

Total Direct Impact: 83,704





What is the greatest impact this grant has had in your school/community?



"I think that the greatest impact is in **career awareness and student curiosity** because it makes science more interesting and relevant."

"I also feel with the lack of state funding for equipment to technical programs, grants like the MAELC grant will become increasingly important for programs to survive."





Meeting MAELC's Mission

Teacher Recruitment & Retention

- State Teach Ag Results (STAR)
- MAELC Scholarship Programs
 - Undergraduate, Graduate & Diversity
- Collegiate Internship Program
- Mentor Programs
- Professional Development



Minnesota's STAR Committee



The State Teach Ag Results (STAR) was created by the National Teach Ag Campaign & is designed to assist states in creating sustainable and effective recruitment and retention plans to help fulfill the agriculture teacher shortage.

Chaired by MAELC

- A few of our strategies
 - Website/Social Media Presence (Communications Intern)
 - Current and Future Teacher Recognition/Celebration
 - Midwest Regional Future Agriscience Teacher (FAST)
 Symposium
 - Teach Ag Signing Day for committed future teachers
 - Statewide Teacher Community Building Efforts
 - Inclusion & Diversity Efforts
 - Teach Ag Booth & Workshop
 - Agricultural Education Internship



teachagmn.org



Scholarship Funds

Undergraduate (Juniors & Seniors) \$15,000

Graduate (Additional & Initial Licensure) \$10,000

Diversity (Undergraduate & Graduate) \$5,000/scholarship (MAELC/donor match)

Since 2000, MAELC has provided 781 scholarships for over \$797,000 to students studying Agricultural Education at the post-secondary level



AFNR Education Challenges & Opportunities

- Increasing access to programming and FFA membership
- Matching industry workforce needs and having accurate employment data
- Ensuring flexibility in curriculum to fulfill credits and provide students choice in their schedules
- Increasing opportunities for concurrent enrollment, workbased learning/internship, and summer programming
- Maintaining equipment to be industry aligned and current
- Ensuring we meet the demand for quality agriculture teachers in the classroom



Thank you.

For more information, contact Sarah Dornink at:

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