Testimony to Ohio Senate

Higher Education Subcommittee of Finance

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Chairman Gardner, Vice-Chairman Cafaro and members of the subcommittee; thank you for the opportunity to come before you today and share the work of the Ohio Agricultural Research and Development Center (OARDC), Ohio State University Extension and Ohio Sea Grant. I'll be talking about the return on the investment that you, the General Assembly, made in us two years ago; share examples of our ongoing impact in critical areas affecting all Ohioans; and outline what we would do if provided additional funds to grow Ohio's economy through our food system and to make life better for our citizens.

The fiscal year 2015 General Revenue Fund appropriation amount for Ohio State University Extension is $23.06 million and the amount for the Ohio Agricultural Research and Development Center (OARDC) is $34.63 million.

During the 2013 biennial budget process I pledged that additional investments the Ohio General Assembly made in us would be used to increase our focus on water quality, energy and shale gas, and local foods/urban agriculture. You responded with additional funds, and I thank you for that statement of faith in us to be good stewards of taxpayer dollars as we seek to address some of Ohio's most challenging issues.

In the local foods and urban agriculture arena we have a significant presence in Cleveland, Toledo and Columbus and growing programs in other communities across the state. We've worked with individuals, local government, and community- and faith-based organizations focusing on production systems, business planning,

marketing, food safety and nutrition. Our educators have developed and offered a master urban farmer course in Franklin County that can now be replicated elsewhere. This successful effort was achieved by developing and engaging with an extensive network of community organizations, local government agencies and faith-based organizations.

OSU Extension has continued to support communities in the shale natural gas area of the state through education related to the impact of pipeline construction; providing resources for renewing and negotiating lease arrangements; and on wealth management issues shale energy presents to individuals and communities. In addition, our educators and specialists have focused on working with municipality and community leaders to plan for increased temporary and permanent residents and the resulting impact on infrastructure and local services.

The other priority investment area – water quality – went from important to urgent one Saturday this past August. Our scientists have been conducting research on water quality for decades. Most recently, they have been conducting extensive research focusing on nutrient movement within and from agricultural fields; updating the phosphorus index, which provides a tool to guide nutrient use; continued development and evaluation of conservation practices; and continued development and evaluation of nutrient application methods.

In September, I announced the Field to Faucet Initiative, a $1 million investment from the college to further advance water quality research and education. The initial focus areas of this investment include:

1. Identifying key hot spots, such as priority watershed areas within the western Lake Erie basin, to focus the application of known best management practices, including soil testing.

2. Creating an independent, third-party data cooperative to handle and assess farm-specific data, beginning with water/nutrient data.
3. Developing new mobile applications that will allow farmers and crop consultants to easily adapt best practices to the specifics of their field topography, soil and water test results, and cropping systems.

Additionally, I am pleased to be co-leading a multi-institutional effort under the direction of Chancellor John Carey that is building collaborative teams to address the highest priority water issues with a focus on Lake Erie and harmful algal blooms (HABs). This effort brought together dozens of faculty from eight Ohio universities; Ohio State's role in this program is only possible because of your continued investment in our agricultural lines.

In addition to our research investments, OSU Extension educators continue to work on education and outreach efforts related to water

through the Field to Faucet initiative. OSU Extension is the training provider for the newly required nutrient management certification through the Ohio Department of Agriculture. Since last October we have provided training for nearly 7,000 individuals as they seek to achieve nutrient management certification under the law. The Ohio Department of Agriculture reimburses meeting costs, but we have invested more than an additional $1 million in educator salary time to date. The proactive investment made by the General Assembly two years ago in water quality provided us with the necessary human capital to develop new resources and materials that are now being used to educate producers and applicators.

Beyond these three areas of targeted investment, I would be remiss if I did not mention 4-H and its nearly 215,000 members. STEM-based curricula continue to be a strong component of our projects through community clubs, and our school-based programs align well with state standards in science. Our community club programs emphasize

not only technical skills, but also communication, leadership, teamwork and community responsibility in a multigenerational environment.

For the next biennium I respectfully submit our 2015-2017 priorities for additional investment. At the top of our list, to no one's surprise, is water. With an additional investment of resources we would extend the Field to Faucet initiative to find sustainable solutions that protect Ohio's water resources from Lake Erie to the Ohio River. The funds invested in the past 9 months focus on short-term needs. In addition, mid- to long-term research programs are needed to provide the science that identifies best practices to take to the field and that inform new policy decisions. Our scientists will examine distressed watersheds statewide to discover differences and commonalities among them that provide cause and effect explanations, and we will use those results to provide science-based education through OSU Extension. Another investment I view as essential to our long-term

success in sustaining a safe water supply is support of Ohio's youth via 4-H, FFA and other school and community-based programs, to engage them to learn new ideas and practices, and to establish an expectation of conscious efforts and best practices to assure safe water for their future.

A second priority is battling food insecurity. A recent report from the United States Department of Agriculture highlighted the fact that more than 1 in 6 Ohio households faced "food insecurity" from 2010-2012. Since we also enjoy one of the strongest agricultural economies in the nation, the level of food insecurity in Ohio is surprising; to change this trajectory will require a broad set of solutions. Increased access to nutritious, healthy, safe and affordable foods for food insecure populations is critical. As many of you in this room realize, food deserts are not limited to our inner-cities, but are also found in some of our most rural areas. OSU Extension works closely with many existing community networks across the state, but there is a

need to invest additional resources to move these efforts forward. The benefits of finding solutions to the food insecurity problem are extensive – from improved health to educational attainment to job creation.

Third on my priority list is a commitment to preparing the next generation for success. I believe very strongly that we must continue to identify new and creative ways to engage young people in our communities. We will continue to strengthen Ohio's national leadership role in 4-H through new projects and programs. We want to engage young people not currently participating in programs and focus on entrepreneurship, science, technology, engineering, and math. We'll look to integrate technology in order to open new doors and further accelerate our 4-H members' engagement. We couldn't offer 4-H in the way that we do without the 22,000 volunteers who extend our efforts. We must continue to identify creative and innovative strategies to support and provide volunteer professional

development focusing on the project subject matter as well as best practices when working with and engaging young people.

We have all experienced the impact of big data on our daily lives and decision-making. Our fourth priority area is to address the massive data sets that are now being generated in the food system, from production to retail. It is important that we not only have the ability to interpret these large data sets, but also understand how to use findings in educational programs that benefit producers and consumers. We know that farmers rely on data to make decisions – we know, for example, that there are significant data that can help us solve the water quality problems in Ohio; we know that there are data that will help us understand food deserts; and we know there are data to help us understand how young people best learn. Our challenge, like so many others, is to have the means not only to collect these data, but interpret them to make informed decisions and develop educational programs based on the findings.

Many of you are familiar with Ohio Sea Grant. The scientists working in this program conduct on-lake research related to water quality and a host of other issues. Sea Grant is a federally established program funded primarily by NOAA, but the investment that Ohio makes in it allows us to do more work in water quality, and enhances our ability to partner with communities to increase economic development for areas bordering Lake Erie. You will receive an invitation in the coming weeks to join Ohio Sea Grant at Stone Lab, on Gibraltar Island, to see how we are studying the health of the lake. I encourage you to consider this opportunity.

Our research and extension missions do not occur in a vacuum. Our college's mission also includes producing an educated work force. Enrollment in the college continues to increase with over 3,200 undergraduates and 500 graduate students on the Columbus and Wooster campuses. Just over a week ago, I had the privilege to award nearly 500 undergraduate and graduate degrees in agriculture

and natural resources to our students at spring commencement in Ohio Stadium. Our graduates continue to find success, as employers tell me that they have both the subject matter knowledge and the work force skills needed to be successful employees. Approximately 92 percent of our students are employed or continuing their education within 6 months of graduation and 77 percent of our graduates find their first employment right here in Ohio.

Ohio State ATI, our two-year program based in Wooster, is the nation's leading producer of two-year degrees in food and agriculture. Earlier this month we awarded 99 associate degrees to ATI students, pushing our total degrees awarded over this academic year past 150. ATI enrollment has continued to grow, and we now have over 700 students enrolled. All Ohio State ATI degree programs have a "roadmap to Columbus" - half of our ATI graduates earn their Associate degrees and enter the workforce, but the other half of our

graduates can and do move seamlessly to a 4-year program on the Columbus campus.

As we look to ATI's future, we see enrollment continuing to grow. In addition, we see a great opportunity to contribute to the College Credit Plus Initiative. If we are able to expand and update our e-learning presence to offer courses in high schools across the state, courses that high school teachers are not certified to teach in the agricultural sciences, it will create more awareness of this potential career path to Ohio's number one industry.

In conclusion, thank you again for your ongoing support of the research, extension, and Sea Grant lines in the Board of Regents budget, as well as support for the entire College of Food, Agricultural, and Environmental Sciences. I appreciate the opportunity to share the return on investment of the past biennium with you and present our priorities for the next two years for your consideration.

I’m happy to answer any questions that you may have.