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## Introduction and Table of Contents

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Winter 2014

## Message from President Kirk Schulz and Vice President for Research Ron Trewyn



As one of the more than 100 land-grant colleges and universities, Kansas State University's mission

includes a significant service component to benefit the people of Kansas, the nation and the world. The university has campuses in Manhattan, Salina and Olathe, each with a different focus.

With the launch of the Olathe campus in 2011, the university expanded its capabilities to better serve the community and businesses in the Greater Kansas City area with education, research and services that address workforce and economic development priorities not offered before in the area.

In August 2013, the U.S. Economic Development Administration designated Kansas State University Olathe as part of its University Center Economic Development Program. The university will receive a \$250,000 grant annually over the next five years to support the creation and infrastructure of the Innovation Accelerator, which will increase university-industry partnerships in developing and expanding products and technologies that will have a positive economic impact in the region.

Additionally, the Olathe campus is also expanding global linkages through the U.S-China Center for Animal Health to increase mutually beneficial training programs and trade opportunities. Another Olathe iniative aims to improve animal health in China with a new program to train Chinese veterinarians at Kansas State University and six partnering veterinary colleges.

The Federal Aviation Administration is turning to Kansas State University Salina to test certification standards for

small unmanned aircraft systems, or UAS. Under a memorandum of agreement signed by the university and the FAA on Aug. 29, researchers on the Salina campus will validate industry standards for small unmanned aircraft systems — systems typically weighing 55 pounds or less — set by the F38 technical committee of ASTM International. The Salina researchers will either design a new system or use the university's own unmanned aircraft systems using the standards to apply for airworthiness certification. The agreement between Kansas State University and the FAA is the first of its kind, and the project will be a test to determine where the F38 standards need further development or may be overly prescriptive.

Salina is the ideal location to test the standards because of the university's expertise with unmanned aircraft systems; its close proximity to the Small Airplane Directorate in Kansas City and the Wichita Aircraft Certification Office; and K-State Salina's involvement with ASTM's F38 technical committee. The university also will work closely with the National Institute for Aviation Research at Wichita State University throughout the project.

On the campus in Manhattan, civil engineer Dave Steward and colleagues in several colleges have spent the past four years completing a study on "Tapping unsustainable groundwater stores for agricultural production in the High Plains Aquifer of Kansas, projections to 2110." The study appears in the scientific journal Proceedings of the National Academy of Sciences of the United States of America, or PNAS. The study was funded by the National Science Foundation, the U.S. Department of Agriculture and Kansas State University's Rural Transportation Institute. It investigates future availability of groundwater in the High Plains Aquifer — also called the Ogallala Aquifer — and how reducing use would affect cattle and crops. The aquifer supplies 30 percent of the nation's irrigated groundwater and serves as the most agriculturally important irrigation in Kansas.



These are just a few examples of the impactful work at each of our three campuses, helping us progress toward our goal of making Kansas State University a Top 50 public research university by 2025.

President: Kirk Schulz Vice President for Research: Ron Trewyn











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