

### From the Dean and Director

Kansas State University just celebrated its 150th anniversary and reflected on its many accomplishments. As our nation's first land-grant university, K-State has vastly improved the lives of Kansans. It's important to recognize that this university reaches into every Kansas county, bringing research from the lab to the community.

This country's land-grant universities merge teaching, research, and extension into one system. Nowhere else in the world do universities do that. This integration has propelled our country into a world leader, particularly in food and agricultural production.

As we celebrated our successes, we were also busy developing our Vision 2025 Strategic Plan for the College of Agriculture and K-State Research and Extension. We can't rest on our successes, we must look forward and move ahead.

Our citizens have told us there are five grand challenges facing Kansas — global food systems, water, health, developing tomorrow's leaders, and community vitality. We built our 2025 Strategic Plan around finding solutions to these challenges.

We aren't going to solve these challenges alone. We are educating and working with the next generation of students, scientists, and extension educators. We train and work with several thousand volunteers in 4-H, Master Gardeners, Master Food Volunteers, lawn and crop consultants, and others who work with Kansas citizens in many walks of life, sharing the newest research-based knowledge for life.

In addition to this brochure, we have developed a companion website (www.ksu.edu/solutions) with links to videos, articles, annual reports, and more information about our programs.

As you read our 2014 report, reflect on our 150 years of success and join us as we look toward building a successful tomorrow for Kansas. I am sure it will be a challenging but productive journey.

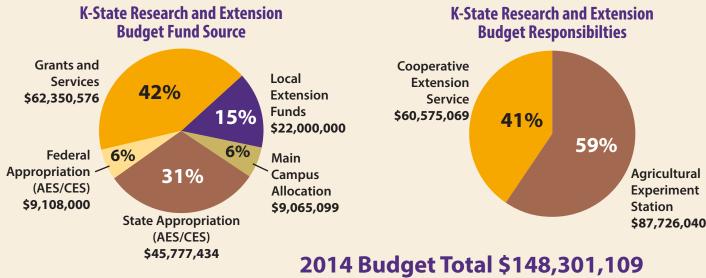
John D. Floros, Dean, College of Agriculture, and Director, K-State Research and Extension

### Did you know ...

- K-State created the first-ever canola that would grow in Kansas and produce heart-healthy cooking oil?
- Senior citizens saved more than \$1.7 million in prescription drug costs using K-State Research and Extension educational programs and consultations in 2012?
- Subsurface drip irrigation, which uses less water, was perfected in western Kansas by K-State?
- Local civic, county, and faith-based boards operate more efficiently as a result of K-State Research and Extension board training in 15 Kansas communities?
- Feed rations for beef cattle and feedlot protocols were developed by K-State scientists?
- Kansas State University created "Farmers' Institutes," which later became the nationwide Cooperative **Extension Service?**
- K-State develops new varieties of turfgrass, shrubs, trees, and flowers especially for the Kansas climate?
- K-State initiated ServSafe Food Service Manager and Food Handler classes that were presented to more than 700 Kansans in 2012, with 400 receiving food safety certification?

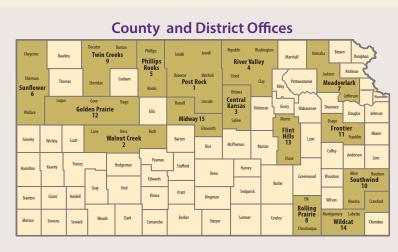
## Visit www.ksu.edu/solutions

### **Budget Data for Fiscal Year 2014**



### **Districting Offers Kansas Counties New Partnership Opportunities**

Since 1991, Kansas counties have had the opportunity to create extension district partnerships that provide better public access to agents with specialized expertise, better support for local offices, and often better use of human and financial resources. At this time, 42 counties have formed 15 districts.



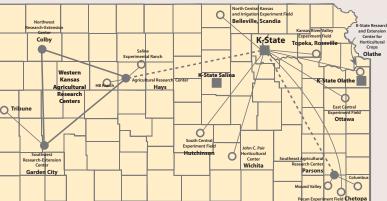
### **Research and Extension Facilities Across the State**

Headquartered in Manhattan, K-State Research and Extension includes statewide county and district offices, research centers, and experiment fields supported by county, state, federal, and private funds. K-State Research and Extension supports faculty in more than 20 academic departments across five K-State colleges in Manhattan plus the K-State Olathe campus.



Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, John D. Floros, Director.

#### **Research and Extension Facilities**





## 5 **K**·STATE

# **Making a Difference** for Kansans





Why K-State Research and Extension can help find solutions for these five grand challenges

### We have

- a statewide network to share unbiased information,
- expertise on topics important to Kansas, and
- established local, state, regional, national, and international partnerships.

## Providing Knowledge for Life for all Kansans

Visit www.ksu.edu/solutions

## Global Food Systems

One in five Kansans, rural and urban, work in jobs related to agriculture and food production. Agriculture drives the Kansas economy. In 2012, the cattle industry alone generated \$7.88 billion in cash receipts, and in 2011 Kansas exported nearly \$5.3 billion in agricultural products.

Our food and agricultural systems are productive but need to improve to feed the world's growing population. Kansas stands to gain a great deal economically. K-State Research and Extension is Kansas' partner in the success of the state's agriculture.

### What we are doing

Developing new crop varieties that suit the Kansas climate and meet domestic and international consumer demand.

Reducing food loss caused by insects, poor storage, and processing techniques.

Identifying ways to maintain cattle rangeland threatened by climate variations.

Leading national and international teams to solve global food issues.

Helping families stretch their food dollars.

### Find these stories and more at *www.ksu.edu/solutions*

• Drone research to monitor crops efficiently

Why we are chosen for national grants
Kansas Center for Sustainable Agriculture and Alternative Crops annual report



## Water

Current irrigation trends could deplete 69 percent of the groundwater in the Ogallala Aquifer within 50 years. The economic impact of this is significant. The top eight Kansas counties for agricultural production are located in western Kansas, overlaying the Ogallala Aquifer. Those counties contribute about one-third of total agricultural revenue for the entire state of Kansas.

#### What we are doing

Breeding new drought-tolerant varieties of wheat, grain sorghum (milo), and other crops that can be used for human and pet food, livestock feed, and fuel.

Developing more efficient irrigation and watermonitoring systems for farm and home use.

Decreasing municipal water costs by working with landowners to reduce sedimentation into reservoirs and improve surface water quality.

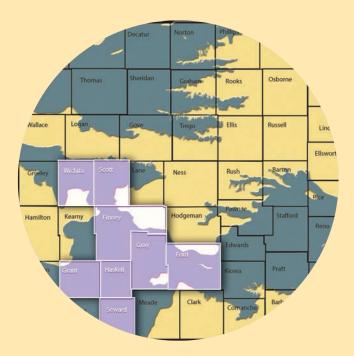
Improving livestock genetics to help make production more efficient, reducing water needed to feed livestock.

Partnering with multiple stakeholders to develop a 50-year water policy.



Saving water in urban areas

Safely using poultry waste in southeast Kansas
Preserving the Ogallala Aquifer while maintaining productivity



## Health

Kansas has one of the highest obesity rates in the nation, and more than 20 percent of Kansas children live in poverty. With a shortage of primary care physicians, especially in rural areas, education and prevention are vital. K-State Research and Extension programs address quality of life, healthy development, and health behaviors across all life stages for all socioeconomic groups, and target the diversity of Kansas.

### What we are doing

Attracting more than 15,000 Kansans annually to participate in Walk Kansas, the eight-week program to increase exercise and improve nutrition.

Identifying best practices to help prevent childhood obesity.

Saving more than 6,000 Medicare participants an average of \$832 per person with Senior Health Insurance Counseling for Kansas.

Conducting workshops to help families and practitioners understand care options for elderly Kansans.

Sharing unbiased information about the Affordable Care Act. Most Americans don't have adequate information to make the best decision for their situation.

### Find these stories and more at *www.ksu.edu/solutions*

- Promoting efficient burning practices
- Reducing foodborne illness
- Providing education on health-related issues



## Developing Tomorrow's Leaders

The complex global society of the future will require leaders with effective teamwork and communication skills. We need to prepare leaders of all ages so they contribute to a vibrant Kansas economy for years to come.

#### What we are doing

Guiding nearly 72,000 youth who participate in Kansas 4-H programs to apply leadership skills.

Adding value to our Kansas economy, Kansas 4-H members are twice as likely to attend college and pursue careers in science, engineering, and computer technology. They are also 3.4 times more likely to actively contribute to their communities.

Meeting needs of military youth and their families at Fort Riley, Fort Leavenworth, and McConnell Air Force Base through the Kansas Operation Military Kids (OMK) program. OMK helps develop community support for families when a member is deployed or reintegrating into the community.

## Find these stories and more at *www.ksu.edu/solutions*

- Working with 4-H families in southwest Kansas • Why families choose 4-H
- Developing adult leaders through the Kansas Agriculture and Rural Leadership program



## Community Vitality

Rural, suburban, and urban communities throughout Kansas face many challenges with a variety of available resources. When citizens are encouraged to combine their experiences and skills to work together, everyone in the community benefits.

### What we are doing

Improving communities through the Kansas PRIDE program, which reported 576 collaborative partnerships and 94,833 adult and youth volunteer hours worth more than \$2 million.

Partnering with local communities, K-State Research and Extension staff live and work in every Kansas county and share expertise from the university's three campuses.

Training Extension Master Gardeners who donated more than 97,000 hours of service with a value of \$1.7 million.

Helping communities of all sizes maintain necessary services, such as grocery stores, that hire locally and generate local sales tax.

Working directly with farmers, ranchers, and families to develop better financial management practices.

### Find these stories and more at www.ksu.edu/solutions

County/local leadership programs
Sharing emergency management information



