Western Kentucky’s Opportunity in the $140 Billion Bioeconomy Highlighted in 5 State Regional Study

August 25, 2009 (Murray, Kentucky) – Murray State University and the Purchase Area Development District are pleased to announce the conclusion of the “Regional Strategy for Biobased Products in the Mississippi Delta,” a 5-state, 98-county examination of the potential for agriculture and forestry revitalization through the development of new markets. This project was initiated by Memphis Bioworks® Foundation, a 501c3 organization, focused on developing the biosciences and based in Memphis, Tennessee, and included participation from companies and organizations across Arkansas, Kentucky, Mississippi, Missouri, and Tennessee.

The Purchase Area of Western Kentucky and its partners in the other four states can secure a key leadership role in the emerging multi-billion global bioeconomy by leveraging their assets and attracting technology partners from outside the region. The basis of the bioeconomy is the utilization of renewable biological raw materials – called biomass - that replace petroleum through clean manufacturing processes. Biomass refers to agricultural crops and forestry materials which can effectively harness solar energy and through photosynthesis convert it into a range of useful products based around key plant components such as carbohydrates, fatty acids, proteins, sugars and starches. These can serve as the chemical building blocks to replace petroleum in many products such as biofuels, green chemicals, novel polymers, and biomaterials. The bioeconomy sits at the intersection of established industries such as agriculture, biotechnology and chemistry and merges them to create this new sector which is already valued at over $140 billion in global sales.¹

Among other things the comprehensive study concluded:

- Sustainably grown and harvested biomass in the 98-county region can adequately supply an $8 billion biofuels and biobased products industry without affecting the food and feed supply chain.
- The transformation to a bioeconomy will support more than 25,000 green and supporting jobs during the next 10 years, and more than 50,000 jobs within the next two decades related to bioprocessing and its supply chain in both rural and urban locations.

¹ Third Time Lucky; The Economist, June 4, 2009.
The bioeconomy will open up markets for new crops which will increase biodiversity in the region, leading to reduced use of synthetic fertilizers, agricultural chemicals, and water, while increasing options for local farmers.

The bioeconomy will contribute to reducing greenhouse gas emissions, increased air quality, providing sustainable raw materials for local industries, and bolstering national security.

The 8-county Purchase Area of Western Kentucky is poised to grow this sector of the economy, based on strong leadership by Murray State University and the surrounding economic development organizations.

“The bioeconomy offers Western Kentucky farmers the opportunity to grow alternative crops, participate in value-added agriculture, and for companies within the region and globally to benefit from a reliable sources of renewable raw materials,” says Tony Brannon, Dean of the School of Agriculture at Murray State University.

“We are excited to participate with Murray State University and the Purchase Area Development District to access new opportunities for Western Kentucky, while providing a regional approach that builds strong collaborations,” says Steve Bares, Ph.D., President and Executive Director, Memphis Bioworks Foundation.

On September 15, the organization will host a dinner at 6:30 p.m. in the Murray Room at the Regional Special Events Center at MSU. The Kentucky Implementation program will begin at 7 p.m. thereafter. The following morning, September 16, there will be a breakfast in Mayfield, KY at the Purchase Area Development District (PADD) at 7:30 a.m., followed by a program at 8 a.m. These events are open to the public. However persons affiliated with agricultural commerce in west KY are particularly encouraged to attend, as this program is directed toward these individuals.

Special thanks to the following companies and organizations who contributed to the “Regional Strategy for Biobased Products in the Mississippi Delta: MSU Regional Business & Innovation Center, MSU Regional Stewardship, MSU School of Agriculture, MSU College of Business & Public Affairs, Purchase Area Development District, and the Kentucky Agricultural Development Fund.

For more information concerning the study and new economic opportunities in Western Kentucky contact: Tony Brannon at 270-809-3328 or tony.brannon@murraystate.edu.

About:
Murray State University
Murray State University is a four-year public university that is home to 10,022 students. As one of the nation's best public universities, Murray attracts students who are seeking a great education in a personalized, college-town setting. MSU is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate, Bachelor's, Master's, and Specialist degrees. Academic programs are offered in the core areas of arts and sciences, agriculture, business, health and human services, teacher education, communications, engineering, and applied technologies. Teaching, research, and service excellence are core values and guiding principles that promote economic development and the well-being of the citizens of the Commonwealth of Kentucky and the region.
**MSU Office of Regional Stewardship and Outreach**
The Regional Stewardship Program is a state legislative initiative that seeks to promote regional and statewide economic development, livable communities, social inclusion, creative governance and civic participation through public engagement activities initiated by comprehensive university faculty and staff. Its purpose is to link the resources and knowledge of our public universities to the needs and challenges of their respective regions. KY is the first state in the nation to launch a statewide stewardship program.

**Purchase Area Development District**
The Purchase Area Development District is a partnership organization that offers support to city and county governments in the 8-county region of Western Kentucky. They provide opportunities for community leaders to gather, share common concerns, and create innovative approaches to local and regional challenges. The Purchase Area Development District is governed by those we serve. Our Board of Directors includes Judge/Executives, Mayors, and citizen members from throughout the Purchase. Additionally, 250 community members actively participate in committees and task forces that provide input and guidance to the program areas they support. For more information, visit [www.purchaseadd.org](http://www.purchaseadd.org).

**Memphis Bioworks Foundation**
The Memphis Bioworks Foundation is a not-for-profit organization, formed to lead the collaboration between public, private, academic and government entities to accelerate the growth of the bioscience industry in the region. Memphis Bioworks strives to leverage and expand the regional strengths in the biosciences through education, research, job training, and commercialization. Memphis Bioworks is leading the development of the UT-Baptist Research Park, which serves as the focal point of the city’s biomedical economic development. For more information, visit [www.agbioworks.org](http://www.agbioworks.org) or [www.memphisbioworks.org](http://www.memphisbioworks.org).