

INNOVATION

The background of the slide is an abstract composition of overlapping circles and lines in shades of orange, yellow, and pink. A large, semi-transparent orange circle is positioned in the upper left quadrant, with several thin white lines radiating from its center towards the right side of the slide. The right side of the slide is filled with a dense pattern of smaller, overlapping circles in various shades of yellow and orange, creating a textured, halftone-like effect.

Evolution of Innovation in Arkansas

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Accelerate Arkansas

INNOVATION



Evolution of Innovation in Arkansas

In the beginning

There was...



INNOVATION

Sam Walton opened his first Wal-Mart store in Rogers, Arkansas in 1962...

- n Wal-Mart started keeping track of its inventory on computers in the mid-1960s, a pioneering practice among retailers.**
- n By the 1990s, the company had the largest commercial computer database in the United States.**
- n Wal-Mart built its own warehouses so it could buy large quantities of goods at a lower price. It then built new stores close to the warehouses, and shipping costs fell.**
- n Stores could now be restocked quickly if an item sold out. “Just in time” became the watchword for management of its inventories. This was the beginning of applying innovative ideas to retail store supply chain logistics.**
- n Today, Wal-Mart is the recognized world leader in managing advanced supply chain logistics.**

And now, the numbers please

- § For 2009, Wal-Mart's net sales topped **\$405 billion**, with international net sales exceeding **\$100 billion** for the first time. Net income was **\$14.8 billion**.
- § Wal-Mart now employs over **2 million** associates worldwide, with **46,000** in Arkansas. More than **1,200 suppliers** have opened offices in Arkansas since the mid-1990s.
- § In 2009, Wal-Mart spent **\$15.6 billion** for merchandise and services with **1,700+** Arkansas-based suppliers. That spending supported over **62,000** more jobs in the state of Arkansas.
- § In 2009, Wal-Mart paid more than **\$161 million** in state and local taxes in the state of Arkansas.

And now

- § **Innovation continues to be a front-burner item at Wal-Mart, with an emphasis on sustainability.**
- § **February 2010: a public pledge to eliminate the equivalent of 20 million metric tons of greenhouse gas emissions from its global supply chain by the end of 2015.**
- § **According to the news release, that is about 150% of Wal-Mart's estimated global carbon footprint growth over the next 5 years.**
- § **An interesting footnote: The announcement was made jointly with The Environmental Defense Fund.**

Who's next?

 **NanoMech**™



NN-LABS, LLC

**COLLEGE
TOKENS**
COM
COUPONS BY TEXT



Bentonville International Group
Creating a Visible World™

Guard**IN**Fresh™

I**SIGHT**
ECOSYSTEMS LLC

izon
A.M.S

Equity**Net**


sumotext


Omnribalm

MeritBuilder
What have *you* done?



ilicon | Solar | Solutions

BeneVia
gobenevia.com

RMI
GROUP LLC.



directconnect

pathagility™

 **BioStrateg**



 **Lynguent**®

CloudSteel

 **BlackOak**
PARTNERS

STATION

BlueInGreen™
Dissolved Gas Solutions for Water Quality

ORLUMET LLC.

ACTICUT
INTERNATIONAL AB

 **COENCO**®

ist
International Silica
TECHNOLOGIES, LLC

MEDBOX
Your Pharmacy in your Doctor's office

GeoTrac
Driving Efficiency

aXept
custom engineered mems modules

 **invotek**

 **AGROBOTICS**
FARMING INNOVATIONS

ACCUPAL
Patent Injections For Creative Patients

Ed4U

 **InterveXion**
Therapeutics

CONSENSUS
BIOTECHNOLOGY

 **MerchantView**™

PERIOSEAL
DENTAL IMPLANTS
DIFFERENT FOR A REASON

 **capsearch**

USee Wildlife.com
Live Wildlife WebCams

INNOVATION

Arkansas

1971

NCTR

1962

Walmart 

National Center for Toxicological Research

- n NCTR, established by Executive Order in 1971, is an internationally recognized FDA research center that provides innovative and vital scientific technology, training, and technical expertise to improve public health.
- n NCTR—in partnership with researchers from government, academia, and industry—develops, refines, and applies current and emerging technologies to improve safety evaluations of FDA-regulated products.
- n NCTR fosters national and international collaborations to improve and protect public health and enhance the quality of life for the American people.

INNOVATION

Arkansas

1983



1971

NCTR

1962

Walmart 

Arkansas Science & Technology Authority

- n Created in 1983 by legislative statute – the first true state-based effort to support scientific and business innovation as an economic development tool
- n Its Mission: to bring the benefits of science and advanced technology to the people and state of Arkansas
- n Its Strategies: to promote -
 - n Scientific research
 - n Technology development
 - n Business innovation
 - n Math, science and engineering education

Arkansas Science & Technology Authority

n 2009 Focus:

n Increasing research activity

- n Completed 31 projects totaling approximately \$8 million in awards and tax credits

n Funded the Arkansas High Performance Computing Center, part of the state's cyberinfrastructure center

- n a core resource for the development of competitive research in the state and for economic development benefits

n Support for the Arkansas Research and Education Optical Network, ARE-ON, a high-speed fiber-optic-based internet communications network linking the state's four year public universities

INNOVATION

Arkansas

1988



1983



1971



NCTR

1962

Walmart 

Arkansas Capital Corporation Group

- n Founded in 1957 as a private, non-profit business development company to contribute to economic development in Arkansas by supporting expansion of entrepreneurial opportunities
- n Today bears little resemblance to its original operations that were initially focused solely on small business asset-backed loans

Arkansas Capital Corporation Group

- n Since 1988 ACC has spearheaded initiatives focused on infusing a spirit of entrepreneurship and innovation in all sectors of the state, both private and public, by -**
 - n creating and promoting development of venture capital funds and investment in Arkansas companies**
 - n SBA lending**
 - n multi-state university student business plan competitions**
 - n most recently, a statewide internet broadband initiative known as Connect Arkansas, to plan for and bring high speed internet to rural areas in the state currently under-served or not served at all**

INNOVATION

Arkansas

1997



Economic Development Commission

1988



1983



1971

NCTR

1962



Arkansas Economic Development Commission

- n Formed in 1955 as the Arkansas Industrial Development Commission to recruit manufacturing industries to the state
- n In 1997, its name was changed to its present name to reflect a broader emphasis beyond manufacturing industries to include service and high technology industries

Arkansas Economic Development Commission

n Today, its mission:

n To lead statewide economic development, create targeted strategies which produce better paying jobs, promote communities, and support the training and growth of a 21st century skilled workforce.

Arkansas Economic Development Commission

- n Has many statutorily-created tools and financial incentives to assist both new and established businesses that expand or locate in Arkansas, particularly those with technology underpinnings
- n Continues to successfully recruit and assist in retention of established technology-based industries
 - n Clean Energy, such as Wind Power
 - n Computer Technology, such as HP
 - n Telecom, such as Verizon and Allied Wireless
 - n Power Grid Management–Southwest Power Pool

INNOVATION

2001



Arkansas
Biosciences
Institute

Arkansas

1997



1988



1983



1971

NCTR

1962

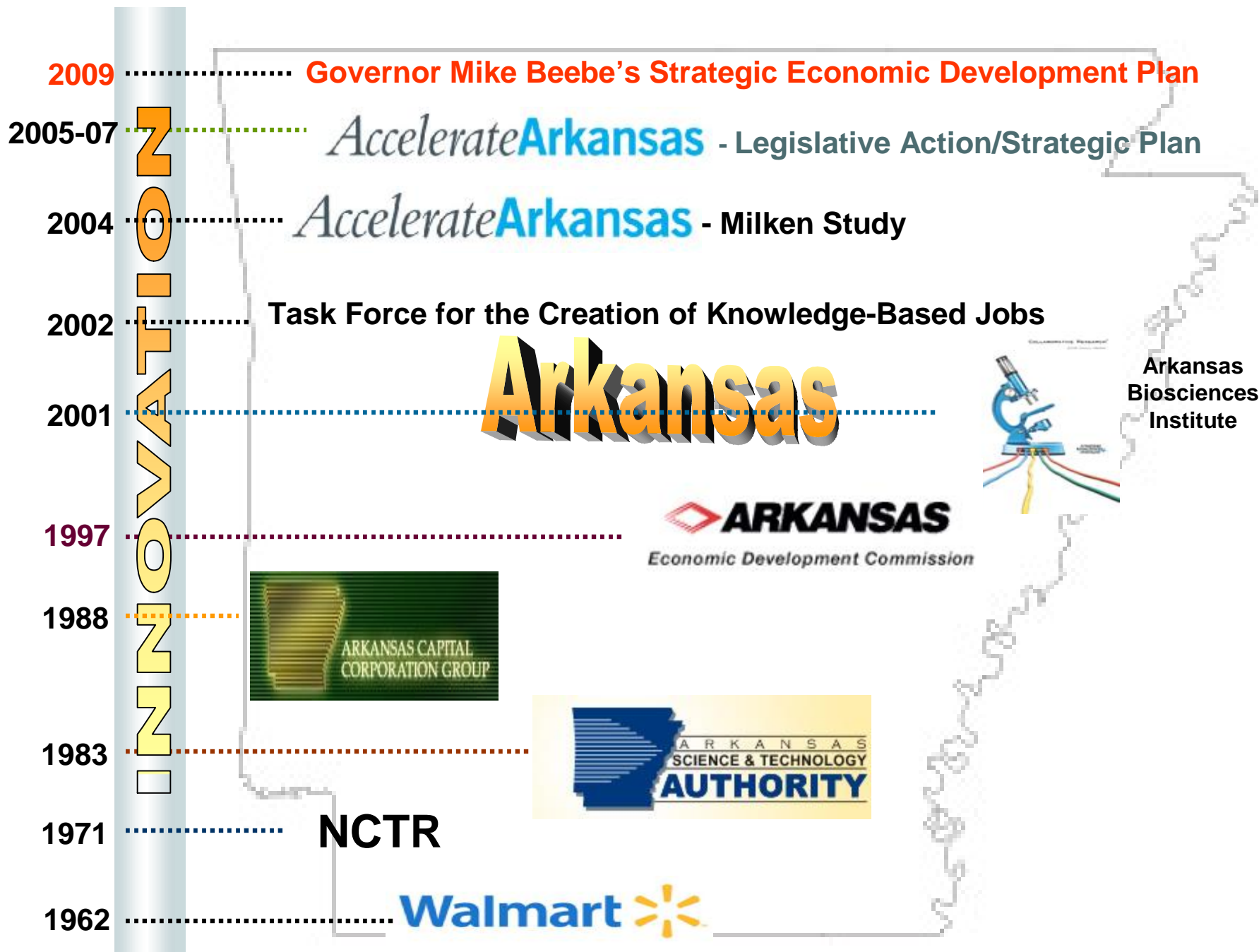


Arkansas Biosciences Institute

- n The agricultural and biomedical research program of the Arkansas Tobacco Settlement Proceeds Act of 2000, is a partnership of scientists from:
 - n Arkansas Children's Hospital Research Institute
 - n Arkansas State University
 - n University of Arkansas – Division of Agriculture
 - n University of Arkansas, Fayetteville
 - n University of Arkansas for Medical Sciences

Arkansas Biosciences Institute

- n As outlined in the Act, the purpose of the Arkansas Biosciences Institute is to conduct:
 - n Agricultural research with medical implications
 - n Bioengineering research that expands genetic knowledge and creates new potential applications in the agricultural medical fields
 - n Tobacco-related research that identifies and applies behavioral, diagnostic, and therapeutic knowledge to address the high level of tobacco-related illnesses in Arkansas
 - n Nutritional and other research that is aimed at preventing and treating cancer, congenital and hereditary conditions, or other related conditions
 - n Other areas of developing research that are related or complementary to primary ABI-supported programs



Task Force for the Creation of Knowledge-Based Jobs

- n The mission of the Task Force was to recommend ways to expand the number of knowledge-based jobs and companies in Arkansas, by –
 - n Increasing knowledge-based employment in existing businesses
 - n Increasing the number of new, knowledge-based start-up businesses
 - n Attracting new knowledge-based businesses from outside the state

Accelerate Arkansas

- n Began in 2003
- n Commissioned a 2004 study by the Milken Institute – funded by the Winthrop Rockefeller Foundation – to analyze the issue of per capita income in Arkansas and identify the actions necessary to raise that per capita income to the national average by 2020

Accelerate Arkansas

- n The Milken study was one of the most extensive ever conducted on the Arkansas economy
 - n Analyzed the Arkansas economy relative to Milken's established State Technology and Science Index, with business and competitive factors and industry groups within the state

Accelerate Arkansas and the Milken Institute Study

- n Compiled a comprehensive list of Arkansas institutions and policy tools currently benefitting the knowledge-based economy
- n Calculated the economic impact of the successful creation of knowledge-based industries in Arkansas
- n Made recommendations to enhance and expand Arkansas' knowledge-based economy

Arkansas Institutional Fund

- n Created in 2001 and fully activated in 2005, the Fund works to build the state economy by increasing access to venture capital for innovative Arkansas businesses
- n The “fund of funds” program is expected to result in over \$420 million of equity, near equity, and debt capital for Arkansas businesses through its first and second rounds of investment
- n Through September 2008, AIF had made 7 commitments totaling more than \$24 million to venture capital firms seeking to invest in technology based Arkansas businesses

Accelerate Arkansas

- n 2007 Strategic Plan -Five Core Strategies
 - n Support job-creating research
 - n Develop risk capital for all stages of the business cycle, especially the funding gap
 - n Encourage entrepreneurship and new enterprise development
 - n Increase the education levels of Arkansans in science, technology, engineering and math (STEM)
 - n Sustain successful existing industry through advancing technology and competitiveness

Governor Mike Beebe's 2009 Economic Development Plan

- n Five goals for economic development
 - n Increase the income of Arkansans at a growth pace greater than the national average
 - n Expand entrepreneurship focusing on knowledge-based enterprises
 - n Compete more effectively in the global marketplace
 - n Develop economic development policies that meet special needs and take advantage of existing assets in various areas of the state
 - n Increase the number of workers with post-secondary training

Task Force for the 21st Century Economy

- n Established by the legislature in 2007 to study role and scope of 21st Century economic development, and to identify programs and services needed for continued development in Arkansas

Task Force for the 21st Century Economy

- n Report made extensive recommendations for increased support for -
 - n STEM education at all levels
 - n Workforce education
 - n Research and development infrastructure
 - n Entrepreneurship
 - n Risk capital
 - n Existing business innovation
 - n Cyberinfrastructure development
 - n Increased global competitiveness in business and industry recruitment

Evolution of Innovation in Arkansas

What's next?

Where do we go from here?