

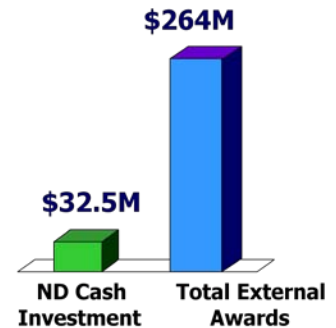
# North Dakota EPSCoR

## North Dakota Successes Include:

- **1st** in state competitiveness factors based on academic R&D, science/engineering grad students and degrees awarded (Beacon Hill-2010)
- In technology factors, North Dakota jumped from **36th** in 2001 to **13th** in 2010 (Beacon Hill Institute)
- **3rd** in the nation Fed R&D Obligations per Capita: 26% increase 2003-07
- **3rd** in the nation for University R&D/\$1,000 of Gross State Product
- **2nd** in the nation in percentage change 1986 -2005, ND's share of National Science Foundation research funds increased by **160%**
- **1st** in growth (**31%** increase) of science, technology, engineering and math jobs 2002–2009
- Facilitated recruitment of over **200 new faculty researchers** to the state
- Provided research opportunities for over **2,100 students** since 1992
- Six federal agencies partnered with ND EPSCoR: NSF, NIH, NASA, EPA, DOE, and DoD

Sources: <http://www.ssti.org/Digest/Tables/042110t.htm>. <http://www.nsf.gov/statistics/nsf10311/pdf/nsf10311.pdf>.  
<http://www.ssti.org/Digest/Tables/021308t.htm>. <http://www.nsf.gov/statistics/showpub.cfm?TopID=8&SubID=1>.  
<http://www.beaconhill.org/CompetitivenessHomePage.html>. <http://ncf.uschamber.com/enterprising-states/http://>

## Return on Investment 1986-2009 (8:1 ROI)



## National Recognition

- North Dakota's unique convergence of university, state, federal and private sector collaborations resulting in economic development as recognized by U.S. Department of Commerce. <http://www.iedconline.org/EDAmerica/Summer2006/NDSU.html>
- North Dakota ranks No. 1 for job growth, says the U.S. Chamber of Commerce, noting "investments in R&D infrastructure are beginning to pay off as the state is the fastest growing in science, technology, engineering and mathematics job growth." (May 2010) <http://ncf.uschamber.com/enterprising-states/>

## North Dakota Research Highlights



- NSF EPSCoR funded researchers are: developing nanomaterials to enable flexible electronic technologies such as RFID, e-paper, and photovoltaics; exploring use of nanocatalysts to convert oil seed crops into commercially important chemicals currently derived from petroleum.

- NIH EPSCoR/IDeA funded research centers are investigating: *Neural mechanisms* and functional significance of visual perception, visual attention, visual cognition and action; *Pathophysiological mechanisms* and neurodegenerative disease such as alzheimer's and epilepsy; *Proteases*, key biological players, impact several diseases including cancer, arthritis, autoimmune diseases, diabetes, and asthma.

• DOE EPSCoR funded researchers are increasing understanding of toxic trace elements transport properties during the initial stages of coal pyrolysis. This knowledge assists in development of oxy-coal combustion systems and abatement technologies for coal combustion and gasification systems.

• NASA EPSCoR researchers are developing an inflatable Lunar/Mars habitat prototype, a pressurized rover, and surface space suits, to study ways to establish modular bases on planetary surfaces.

