

## **Science and Technology Interim Committee**

### **Centers of Technical Excellence Presentation--10/18, 2012**

**Fred Mondragon, Former Cabinet Secretary, Economic Development**

**Founding Chairman, Governor's Science and Technology Advisory Committee**

#### **History**

- Centers of Technical Excellence funded in early 80's from State surplus funds
- Initial appropriation--\$35 M
- Oversight provided by Governor's Science and Technology Committee (STAC)
- Consisted of 7 Centers at three research Universities (CHTM, CNID, CETR, CAAR, CAIT)
- Two Centers (CHTM and CETR) performed admirably and thrived, one, CNID became MIND and BRaIN Institute

#### **Center for High technology Materials (CHTM)**

- Created at UNM to promote economic development through research in optoelectronics, microelectronics and nanotechnology
- Initial State funding--\$9.1 M, grants and contracts--\$178 M, 18 times original State investment
- Annual contract revenue--\$8 M from government and industry
- 48 professional and administrative staff and over 80 students annually
- 119 patents issued, 40% licensed, very significant license and royalty income
- 11 companies spun off through technology transfer and many companies assisted
- Future growth contemplates collaboration with the Centers for Integrated Nanotechnology (CINT), a Los Alamos/Sandia joint venture, requires approximately \$4M investment

## **Center for Energetic Technology Research (CETR)**

- Created at NM Tech to promote economic development through research in explosive materials and technology, subsequently merged with TERA
- Initial State investment was \$5 M, current revenue is approximately \$25 M annually related to the CETR
- Return on state investment estimated at \$500 M over the last 20 years, a 100 times return
- The National Science Foundation and private industry contract for research and services through 200-300 contracts per year
- Approximately 200 persons are employed, most of them in Socorro
- 50 students per year, employed or interning at CETR
- Responsible for world class Mechanical Engineering program that is a critical feeder for LANL, SNL
- Has spun off companies and revenue generating activities including Playas Center
- Contemplates approximately \$2 M investment to expand offerings in explosive research

## **Possible Future Centers of Technical Excellence**

- Astronomy and Astrophysics (NMTech)—Build on assets at VLA, Magdalena Ridge, Sloan Sky Survey, etc. for ED and tourism
- Space Commercialization (NMSU)—Capitalize on Spaceport, NM Space Consortium, WSMR, WSTF, etc. for ED and tourism
- Radioactive Materials Technology Corridor (SE New Mexico)—Expand on current activities such as WIPP, Urenco/LES, International Isotopes, etc. for attracting more R&D and production companies
- Cybersecurity/asset protection (UNM)—Expanding UNM Engineering and ASM programs, Sandia, FBI Regional Forensics Lab, RMTA WCX, etc. are significant building blocks for major R&D center

**Path Forward—Further refinement, studies, interim committee work**