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# Understanding Research, Science & Technology Parks: U.S. & Global Best Practices

U.S. Parks – The Laboratory Model  
Sandia National Laboratories

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Science, Technology & Research Foundations



Sandia National Laboratories

# Sandia's Heritage

*“Exceptional service in the national interest”*

## Nuclear Weapons

### ***One Management Unit***

- Nuclear Weapons



## Integrated Technologies and Systems

### ***Three Management Units***

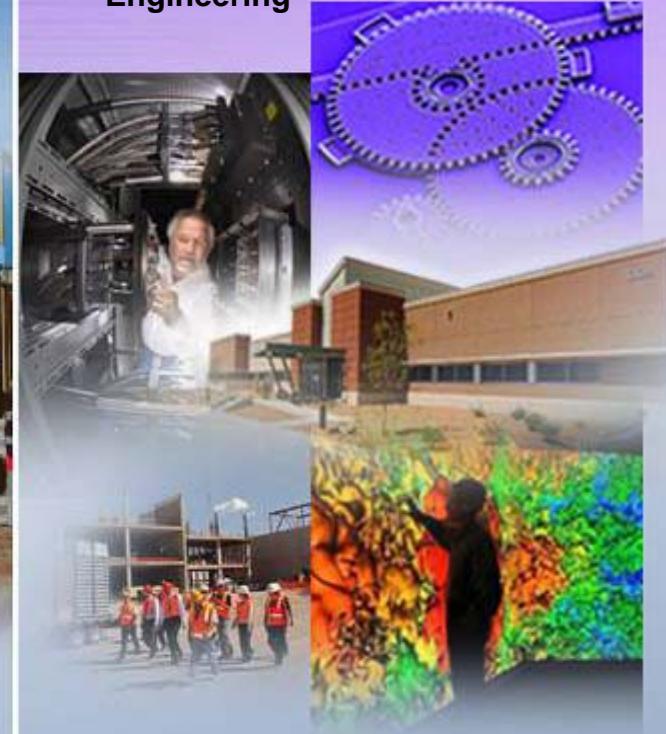
- Defense Systems and Assessments
- Energy, Resources, and Nonproliferation
- Homeland Security and Defense



## Laboratory Transformation

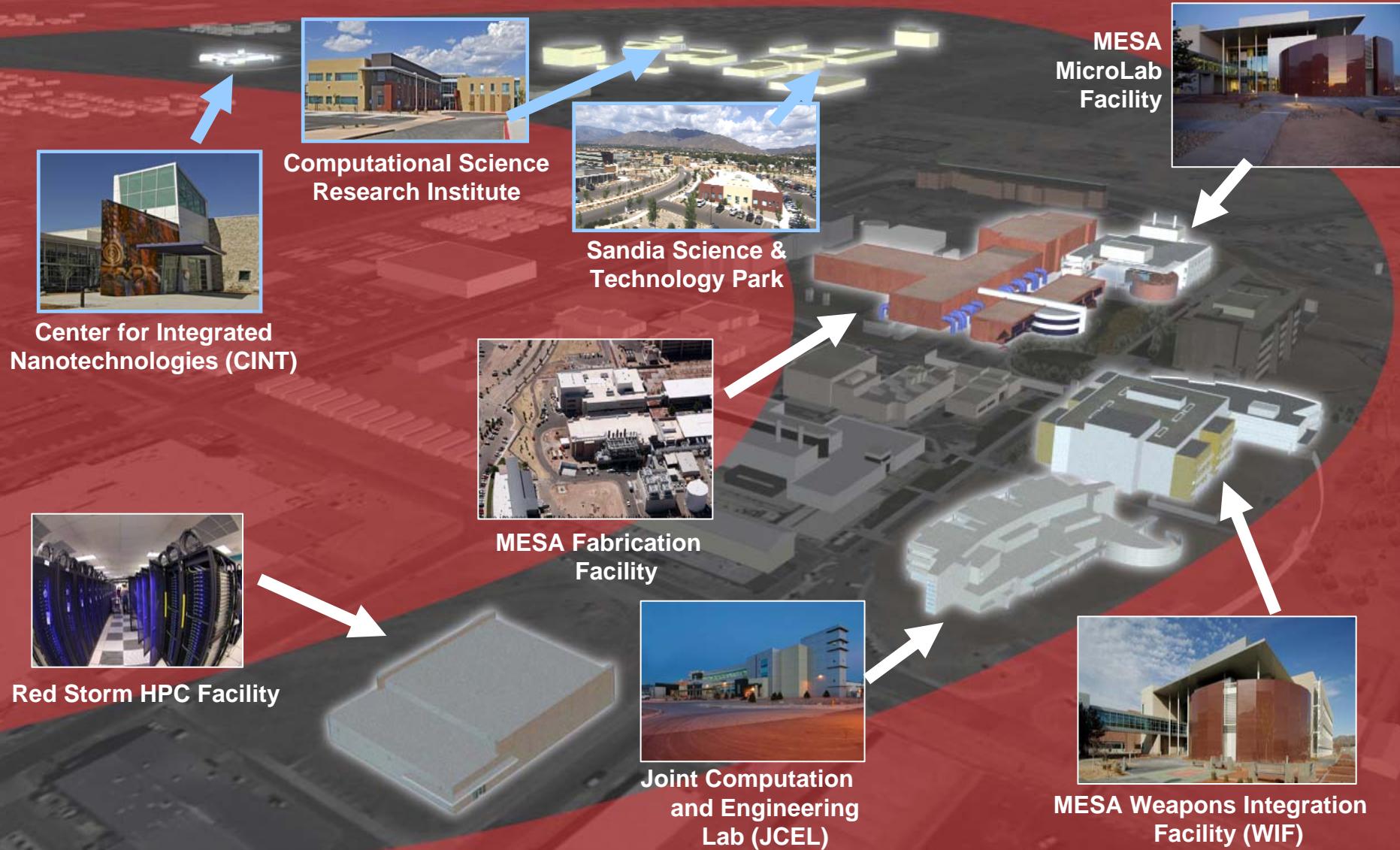
### ***Two Management Units***

- Integrated Enabling Services
- Science, Technology, and Engineering



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# Sandia Innovation Corridor



# Sandia Science & Technology Park

## A Master-Planned Technology Community



- Affiliated with Sandia National Laboratories
- Founded in 1998 to attract industry in support of mission work
- 200+ Acres
- [www.sstp.org](http://www.sstp.org)



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# Business Model

- Created vision
- Provides executive-level champion
- Provides executive director and program staff
- Manages day to day activities, including marketing



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**TVC**

- Founded Science & Technology Park Development Corporation (STPDC), the nonprofit entity which oversees the Park
- Provides chairman of the board for STPDC
- Manages grants



- Shared vision
- Funds infrastructure



**New Mexico State  
Land Office**

- Sell and lease land
- May build and own buildings (private)



Provides  
planning funds



Provides  
telecommunications  
infrastructure



Provides  
infrastructure



Provides economic  
impact analyses



Provides  
leadership and  
support



**Sandia National Laboratories**

# Our Objectives

- **Create joint research and development opportunities**
- **Commercialize technologies**
- **Develop new business**
- **Strengthen supplier relations**
- **Foster regional economic development**

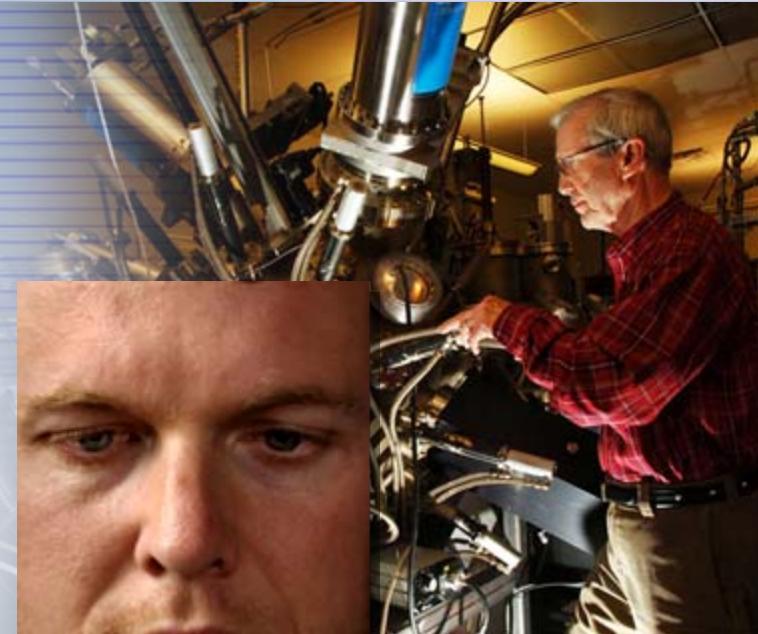


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# Our Competitive Advantage

## Access to Sandia

- World-class technologies
- State-of-the-art facilities
- Internationally recognized scientists and engineers



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# Success Factors

- **Affiliation with an R&D Institution, Sandia National Laboratories**
- **High Level Champion**
- **Public/Private Partnership**
- **Political Support**
- **Focus on Results**



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# Public/Private Partnership



- Sandia National Laboratories
- Technology Ventures Corporation
- City of Albuquerque
- Department of Energy
- Lockheed Martin Corporation
- Economic Development Administration
- State of New Mexico
- Bernalillo County
- Public Service Company of New Mexico
- Mid-Region Council of Governments
- New Mexico Congressional Delegation



# Political Support

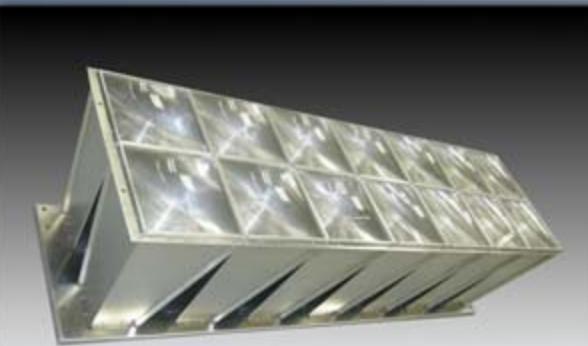


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# Focus on Results

Park Metrics	Results Since Park Founded in 1998						
Number of Companies	27						
Number of Employees	2,113						
Number of Buildings	18						
Square Feet of Occupied Space	897,925						
Acreage Developed (out of 240)	67						
Funds-In and In-Kind Services from Tenants to Sandia (i.e. CRADAs, Licensing Agreements)	\$17,591,682						
DOE/Sandia In-Kind Services to Tenants (CRADAs)	\$2,667,916						
Contracts from Sandia Procurement to Tenants	\$244,468,938						
Contracts between Tenants	\$7,186,865						
Public and Private Investment in the Park	<table><tr><td>Public</td><td>\$66,811,090</td></tr><tr><td>Private</td><td>\$229,369,458</td></tr><tr><td>Total</td><td>\$296,180,548</td></tr></table>	Public	\$66,811,090	Private	\$229,369,458	Total	\$296,180,548
Public	\$66,811,090						
Private	\$229,369,458						
Total	\$296,180,548						
Average Salary for Each Full-Time Job in the Park	\$62,000						
Average Salary for Each Full-Time Job in Albuquerque	\$37,000						

# EMCORE/Sandia Partnership

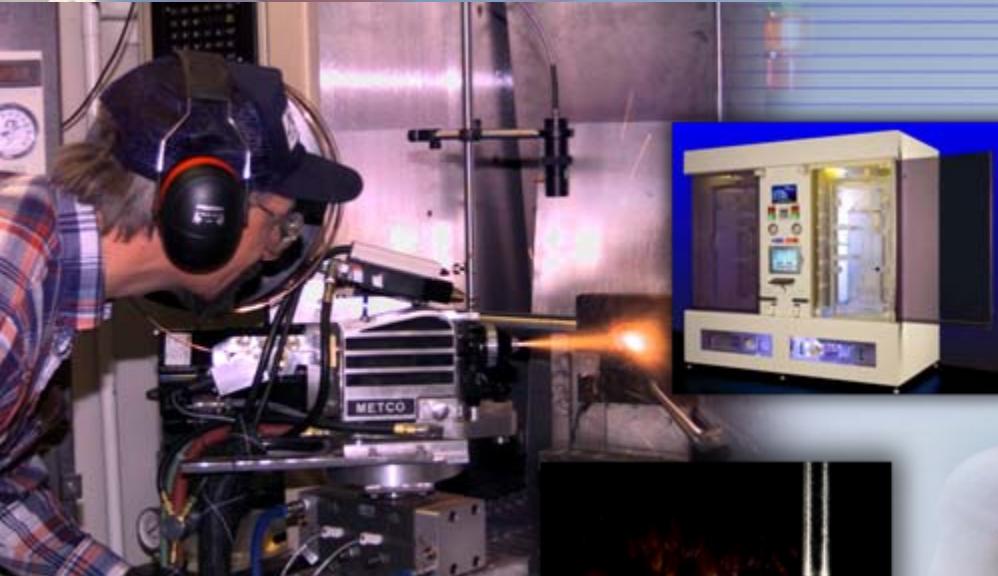


- EMCORE is a publicly traded company
- First company to move into Park in 1998
- Licensed VCSEL technology
- Licensed solar cell technology
- Licensed transponder technology
- \$103.8M investment in Park
- 500 employees at Park



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# Ktech/Sandia Partnership



- Ktech is a local company
- Provide technicians to Pulsed Power facility
- Licensed cold spray technology
- \$34.2M investment in Park
- 500 employees at Park



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# Grant Funding

## Federal Investment

- **\$2.850 Million** from U.S. Department of Commerce Economic Development Administration for Fiber Optic Backbone and Equipment
- **\$200K** from U.S. Department of Energy for Master Development Plan

## State Investment

- **\$1.157 Million** for Park Infrastructure

## City Investment

- **\$785K** for Park Infrastructure

**Total Grant Funding: \$4.992 Million**



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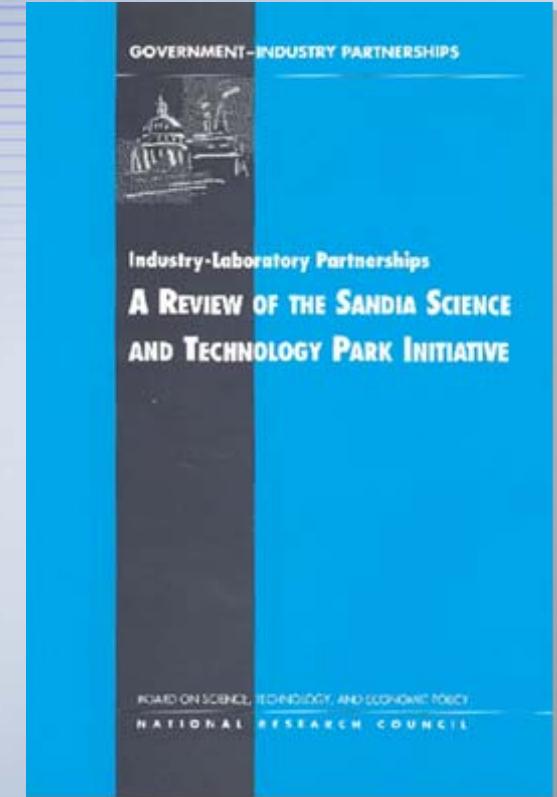
# Challenges

- **Engaging the federal government**
  - To recognize research parks as tools for U.S. innovation
  - To fund research parks on a grander scale
- **Improving linkages between Sandia and Park**
  - To make interactions easier
  - To facilitate more deals and activities



# 1998 NAS Symposium Sandia Science & Technology Park

- **Conditions for success**
  - Clear concept
  - Effective leadership
  - Broad support in community
  - Sustained financial commitment
- **Recognize importance of Sandia's partnerships with industry**
- **Cultivate synergies**
- **Focus on technologies and companies that are complementary to Sandia**



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