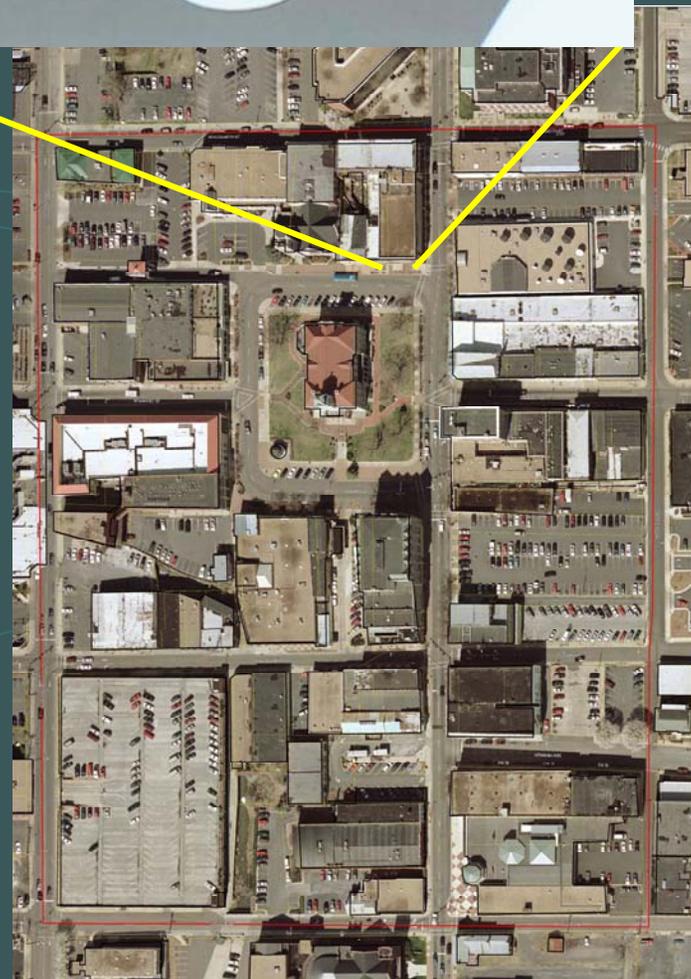


Economic Development &  
Workforce Training  
Initiatives  
in Harrisonburg  
at  
One Court Square

Presentation to the  
Joint Commission on Technology  
and Science  
Advisory Committee on Emerging  
Science and Technology Issues

Dr. James L. Barnes  
July 19, 2005



# Harrisonburg Downtown Technology Zone

- The Harrisonburg City Council established by ordinance the Harrisonburg Downtown Technology Zone (HDTZ), a two-by-three-block area in the heart of the downtown. City leaders allocated \$2 million to purchase and renovate the One Court Square Building, an old department store, in order to convert it into the Harrisonburg Innovation Center (HIC). These two initiatives serve as the catalyst for creating Harrisonburg's new economy — a model based on technology



# Harrisonburg Innovation Center at One Court Square

- Located two hours from Washington, D.C. and Richmond.
- HIC is a “self-networking” environment that integrates intellectual capital with technology to develop health and security solutions for corporate and national well-being.
- Host mezzanine IT companies.





# Mission Statement

- The HIC utilizes innovative entrepreneurial strategies to foster and develop creative solutions for the information technology marketplace.
  - Three anchor technologies
    - RFID
    - Data warehousing and disaster recovery
    - Health informatics

# Formula for Success

- Located 2 hours from Washington, D.C. and Richmond.
- Ideal location for DHS Continuity of Governance and Continuity of Operations.
- Available dark fiber.
- James Madison University.
- Access to 4000+ graduates per year.
- Fast track approval processes.
- Innovative networking model.
- Multiple incentive packages.
- Key anchor technologies.
- Experienced management team.
- Quality of life.



# Innovative Networking Model

- Self networking building.
- Technology assistance.
- Business assistance.
- Funding vehicles.
- Research and business support.
- Teaming for success.



# Technology Assistance

- Advanced communications network – IPv6.
- Global and domestic video conferencing.
- Data and disaster recovery.
- Power generation.
- Data back-up in two electric grids.
- Day-to-day service and maintenance.
- Mentoring.



# Business Assistance

- Coaching and mentoring.
- Investor networking.
- University collaboration.
- Entrepreneurial education.
- Peer-to-peer networking.
- Market intelligence.
- Intellectual property.

# Funding Vehicles

- Service-Disabled Veteran-Owned Small Business (SDVOSB).
- Minority owned small business.
- SBIR/STTR.
- Enterprise Zone (proposed).
- VEDP/DBA.
- Earmarks/appropriation request.



# Research and Business Support

- Anchor technologies.
- High end business center.
- Grant and contract support.
- University and corporate collaboration.
- Marketing.

# Teaming for Success

- Client Members – HIC companies
- Partners and Affiliates – companies that provide support services to or collaborate with client members
- Sponsors – name recognition companies

**Teaming for  
Harrisonburg's  
Future**

**Harrisonburg Downtown  
Technology Zone/  
Harrisonburg  
Innovation Center**

**Harrisonburg Downtown  
Renaissance**

**Virginia Technology  
Incubator**

**James Madison  
University**

**Shenandoah Valley  
Small Business  
Development Center**

**Shenandoah Valley  
Technology Council**

**Shenandoah Valley  
Partnership**



# Biodiesel Initiative

- City/JMU sponsored conference in Fall 2004 and Spring 2006.
- Discussions between local developers and poultry industry.



## No Child Left Off Line

- Program to furnish computers and connectivity to students on free or reduced lunch.
- Need to have restrictions removed from state owned computers so that when they are replaced they can be donated to students of need.



# Workforce Training: An Economic Development Activity

- View workforce training and education as a key economic development activity.
- “America’s human resources are the basis of our innovation capabilities and these underpin our economic strength and national security.” (Rep. Bart Gordon (D-TN), Roundtable on the Science and Technology Workforce, June 23, 2005)



# The Critical Questions

- What will it take for Harrisonburg and Virginia to maintain global leadership in discovery and innovation in a time of rising international competition in global science and technology enterprise?
- How can education and training keep pace with the rapid change in science and technology?
- The key is a more responsive and flexible science and technology training and education infrastructure.



# Worker Profile

- High school/college graduates who grew up with computer games.
- Low skilled adults.
- Returning military personnel/BRAC dislocates.



# Future Harrisonburg Worker Profile

- Graduating JMU students.
- JMU alumni with 10 – 15 years of technology experience who would like to relocate to Harrisonburg.
- Retired government and military personnel.
- Returning military personnel/BRAC dislocates.



# Where People Work and Learn

- In Virginia, not all science and technology jobs will be in NoVA and Tidewater.
- Wireless Environments – Work and learn where you are.
- Practice-oriented educational environments.

# Practice-Oriented Educational Environments

- Its goal is to produce educated knowledge workers, people who are equipped not simply with technical know-how but also with the ability to create, analyze, and transform information and to interact effectively with others.<sup>1</sup>
- Compressed timeframe.
- Learner-centric.
- Integrated Learning – classroom, partnerships, internships, real-world, professional certifications.
- Professional and entrepreneurial thinking and skills.
- Critical needs curriculum.

<sup>1</sup>Greenspan, Alan, "Structural change in the new economy," a speech delivered to the National Governors Association, 92<sup>nd</sup> Annual Meeting, State College, Pennsylvania, July 11, 2000.



# Top Electronic Education Trends for the 21<sup>st</sup> Century

- Electronic education via the Net.
- Interactive online multimedia and multidimensional content.
- Self-paced, self-directed individualized virtual learning.
- On-demand virtual learning.
- Virtual Reality scenarios.
- Real-time Net learning.
- Teachbots-smart agents.
- Learner designed electronic learning.

Source: Dr. James Canton, Institute for Global Futures, <http://www.futureguru.com/trend6.php>, July 6, 2005.

# Synergistic Strategies for Success

- Integrating institutional structures and services
  - Establish links among programs and create pathways that students can navigate to gain necessary skills, credentials/certifications.
- Accelerating learning
  - Help students learn more, learn faster, and complete programs more quickly.
- Provide labor market payoffs
  - Help students gain credentials valued by employers, get a first or better job, and advance up career ladders as they gain skills and credentials.
- Providing comprehensive supports
  - Provide compelling motivators and support systems to help students persist through difficult transition points.



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