OSC and Workforce Development

Oct. 2, 2013

The OH-TECH Consortium

Ohio Supercomputer Center provides high performance computing, software, storage and support services for Ohio's scientists, faculty, students, businesses and their research partners.

OARnet connects Ohio's universities, colleges, K-12, health care and state and local governments to its high-speed fiber optic network backbone. OARnet services include co-location, support desk, federated identity and virtualization.

OhioLINK serves nearly 600,000 higher education students and faculty by providing a statewide system for sharing 50 million books and library materials, while aggregating costs among its 90 member institutions.

eStudent Services provides students increased access to higher education through e-learning and technology-enhanced educational opportunities, including virtual tutoring.

Research & Innovation Center will operate, when opened, as the proving grounds for next-generation technology infrastructure innovations and a catalyst for cutting-edge research and collaboration.

OSC: More than 25 Years of Supercomputing

1987

Ohio Board of Regents establishes Ohio Supercomputer Center

August 1989

OSC installs Cray Y-MP

1999

Built SGI Cluster at SC'99

2004
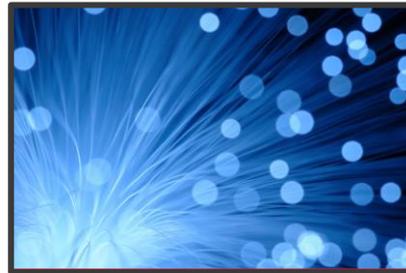
Highly scalable, fiber-optic network lit by OSCnet, now OARnet

Blue Collar Computing launched to support industry HPC needs

December 2005

Dedicated virtual computational science school

2011 Regents create the Ohio Technology Consortium

2013

Third Frontier Funding: Industrial Outreach Program

Ohio's 100 Gigabit per Second Network

Legend
- 100Gbps Link
- 100Gbps Site

Ohio Supercomputer Center

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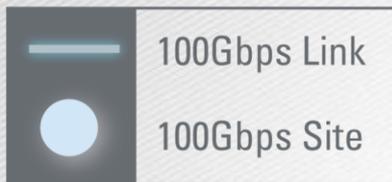
Ohio | **Third Frontier**
Innovation Creating Opportunity

Ohio | **Development Services Agency**

Plainfield, Indiana

- **Replex Plastics**
  Mount Vernon, Ohio

- **Applied Sciences**
  Cedarville, Ohio

Management Inc.
Highland Heights, Ohio

- **Engendren**
  Kenosha, Wisconsin

Ongoing Efforts to Support Industry

Economic Impacts

	Year 3	Year 5
For Profit Jobs Created	23	105
Not-for-Profit Jobs Created	6	10
Product Revenue	$1.4 million	$3.9 million
Client/End-User Revenue	$1.1 million	$57 million

Industry Leaders

Simulation Experts

Simulation Driven Design
High Definition Simulation
(2008–Present)

Small to Medium Businesses

Computational Simulation
Coarse Simulation and Modeling
(1990's–Present)

Virtual Modeling
No Simulation or Modeling
(1970's–Present)

Physical Modeling
(Ancient–Present)
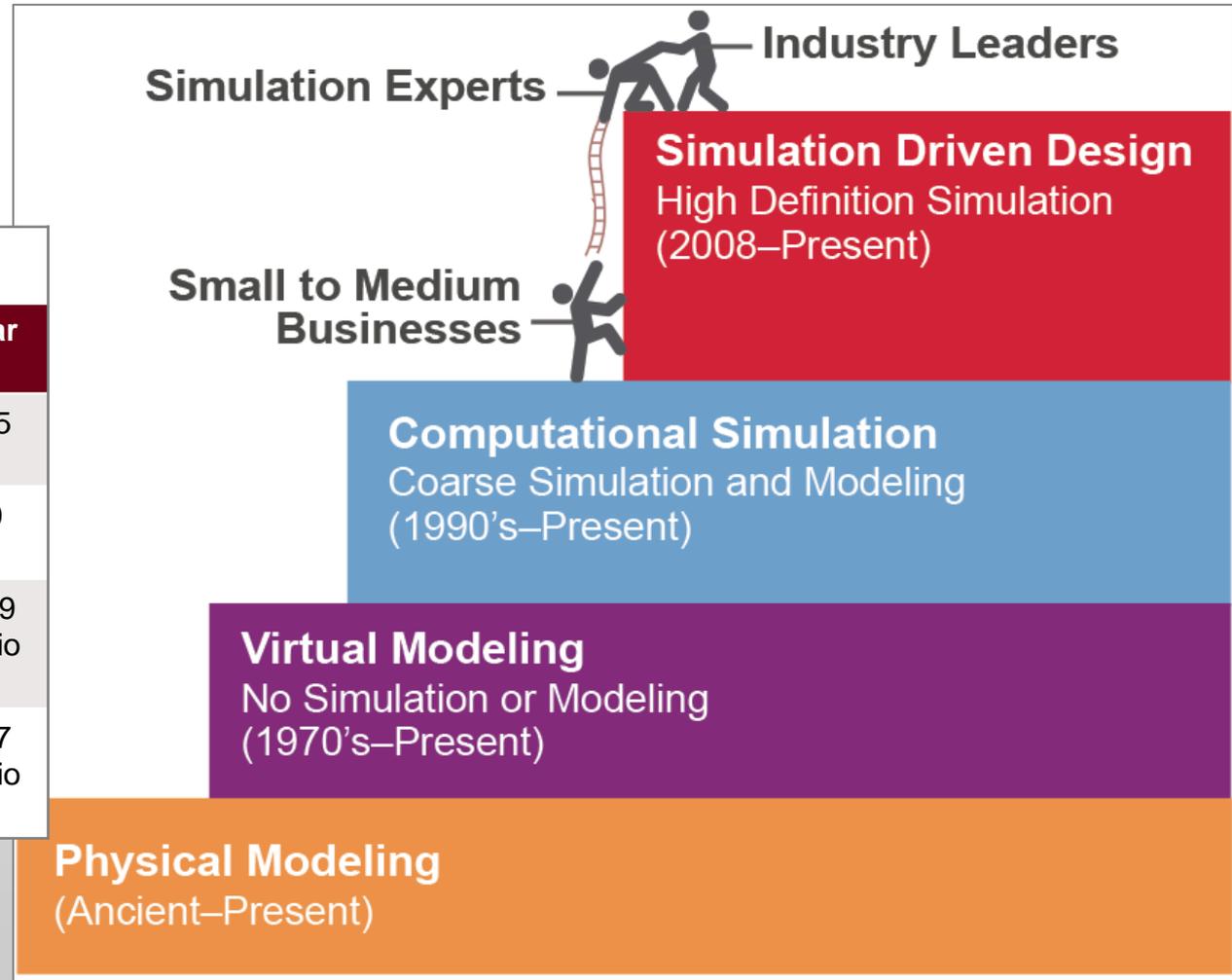
Feeding the Computational Science Workforce Pipeline

Summer Education Offerings
- Summer Institute, two-week residential program for high school sophomores, juniors or seniors
- Young Women's Summer Institute, week-long residential program for middle school girls

Internship/Student Programs
- 31 student employment positions at OSC, OARnet, eStudent Services and OH-TECH
- BP internship program
- 2 NSF-funded research interns
- 11 grad/undergrad summer interns, funded by Regents

Ralph Regula School of Computational Science
- Statewide virtual program
- Baccalaureate minor
- Associate degree program

"Stackable" Certificates
- Offered through RRSCS
- Structured to review basic modeling principles and methods to update skills
- Basic courses for industry personnel

Questions

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