



Hampton Roads Technology Clusters

Hampton Roads (HR)

HR Research
Partnership

Tech Council

Incubators

Clusters,
Dept
Commerce,
Sensors,
Mod-Sim,
BioScience

Applied
Research
Center

Support the development of regional technology clusters in through the Hampton Roads Research Partnership (HRRP)

Sensors – W&M Lead
Modeling and Simulation – ODU/VMASC Lead
Bioscience – EVMA Lead

Coordination supported by grants from the
U.S. Department of Commerce



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Hampton Roads Research Partnership

HRRP -- 7 academic institutions (W&M, CNU, EVMS, Hampton, NSU, ODU, VA Wesleyan), two federal research-technology laboratories (NASA Langley, Jefferson Lab), NIA.



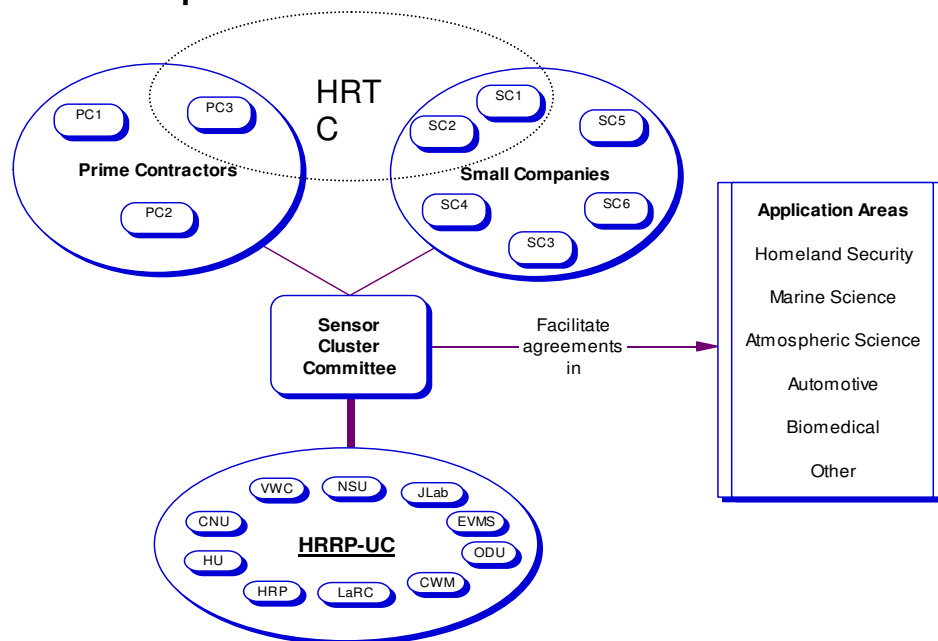
Grants -- Economic Development Administration of U.S. Department of Commerce -- HRRP-University Center – \$90 K per year, continuing. EDA grant of \$915 K for 2007-2009 to Hampton Roads Partnership.

Business-University Connections -- Sensors, Modeling and Simulation, and Bioscience. University leads in each area.



Hampton Roads Sensors Cluster

W&M Lead -- Link sensors research in regional universities and labs to the private sector to pursue collaborative research and contracts.



Sensors Cluster – 2006-07: 46 companies, 21 state, local, and fed agencies involved; 15 SBIR/STTRs/BAs submitted; 4 general meetings and 3 sub-cluster meetings -- over 160 attendees; 4 Hampton Roads Technology Council Sensors Forums -- over 250 attendees.



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Modeling and Simulation Cluster

ODU/VMASC Lead -- Link research in regional universities and labs to the private sector to pursue collaborative research and contracts.

Virginia Business Magazine (May, 2006):

*By some estimates, the industry already pumps more than **\$400 million** a year into the Hampton Roads' economy and has created more than **4,000 jobs** with salaries twice the local average of \$32,000. ... By 2009, the number of jobs in modeling and simulation here will grow to **7,000**...[and] the area M&S industry as a whole will balloon to nearly **\$1 billion**.*

W&M Strengths:

Defense and homeland security, transportation, education, neurosurgery, cancer diagnosis, superconductors, and marine science, particularly estuarine hydrodynamics and sediment transport.



M&S: Example W&M Initiatives

- Joint Forces Command Agreement and Related SBIR Proposals: collaborations including conflict avoidance and political, military, economic, social, infrastructure and information systems (PMESII)
- Investigate projects with VMASC, particularly in disaster management and maritime security.
- Participate in Hampton Roads M&S 2008-2010 legislative funding proposal with other research universities in the region. W&M section:
 - Coastal wind-driven water levels, including waves
 - Transportation networks
 - Next generation virtual environments
- M&S Workforce Development – Participate in Workforce Innovation in Regional Economic Development (WIRED) grant from the U.S. Department of Labor for the Southeastern Virginia Portal Project.



EVMS Lead -- Link research in regional universities and labs to the private sector to pursue collaborative research and contracts.

W&M Strengths:

Bioinformatics – Collaborations with INCOGEN and the Eastern Virginia Medical School to develop cancer markers. W&M expertise in mass spectrometry and decision algorithms. Includes 2006-2007 National Cancer Institute grants to W&M (\$1.3 M), and INCOGEN (\$.85 M) with subcontracts to each other and to EVMS.

Marine Biology – VIMS. Sensors based on monoclonal antibodies; marine molecular genetics, aquaculture