

Research at WSU: NIAR and ORA

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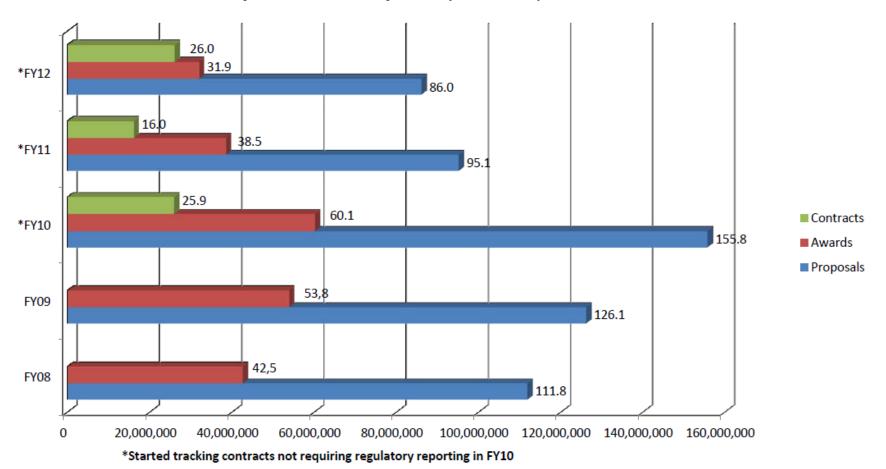
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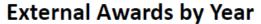


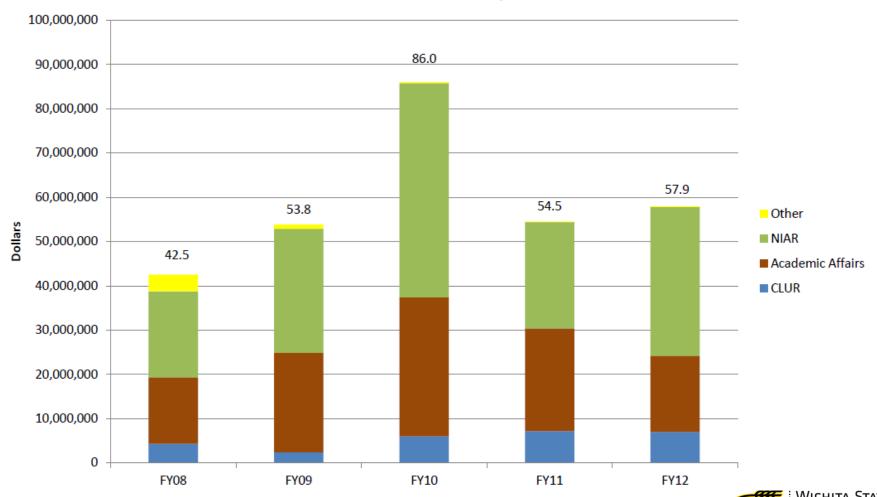
WSU Research Overview (at a glance)

Comparison of Proposals, Awards, and Contracts



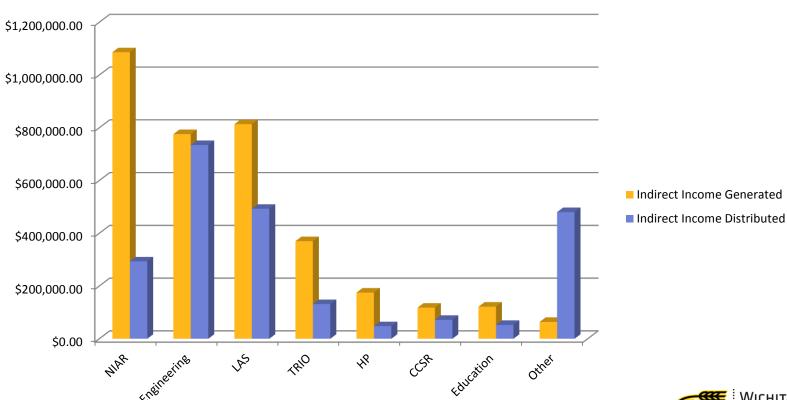
WSU Research Overview (at a glance)





WSU Research Overview (the business side)

Fiscal Year 2012
Indirect Income Generated
with
Indirect Income Distributed



Award Type

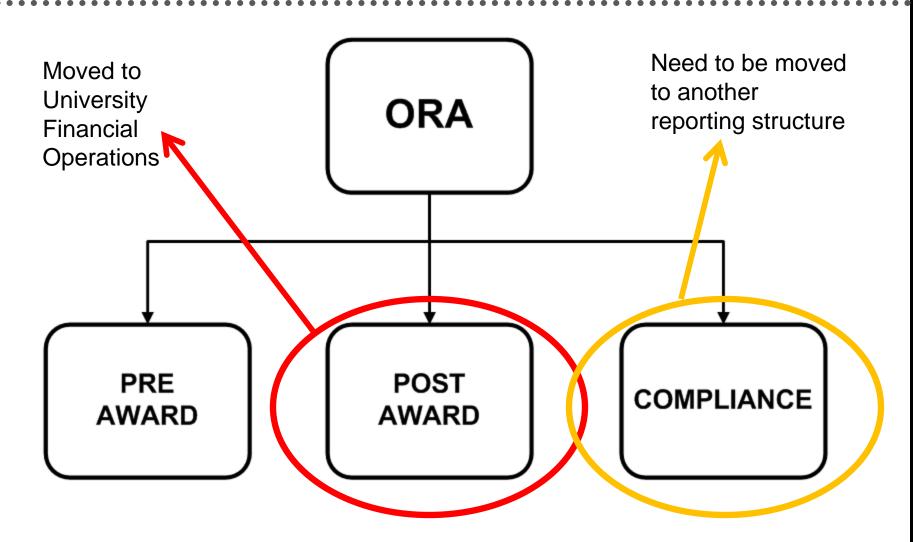
Types of Awards

ASSOCIATED WITH TRADITIONAL RESEARCH FUNDING

ASSOCIATED WITH SERVICE CENTER



ORA Organization / Re-organization







The National Institute for Aviation Research provides: research

certification testing

technology transfer training

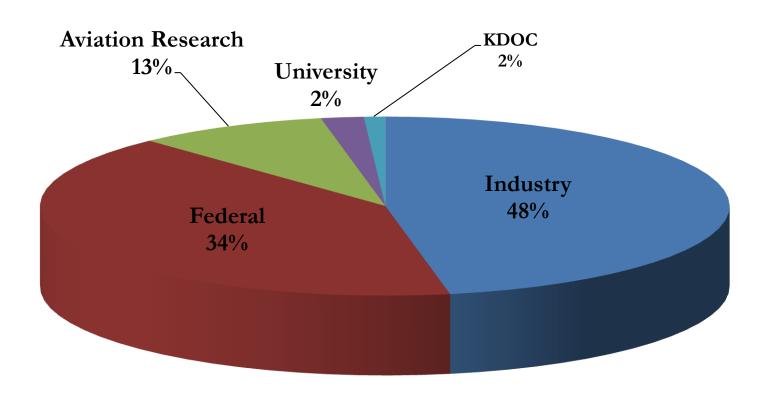
to:

aerospace industry aviation-related companies non-aviation companies federal aviation research sponsors



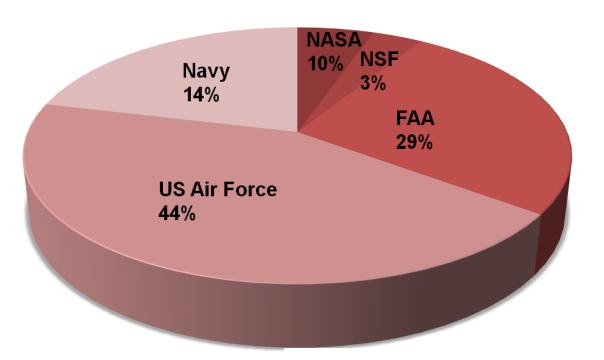


FY2012 Operating Budget: \$45 million





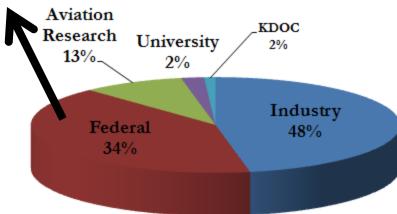
Federal Agency Funding



FAA Advanced Materials Budget

\$1.00 » \$ 0.78 to WSU







NIAR Staffing

NIAR employs more than 300

167 full/part-time

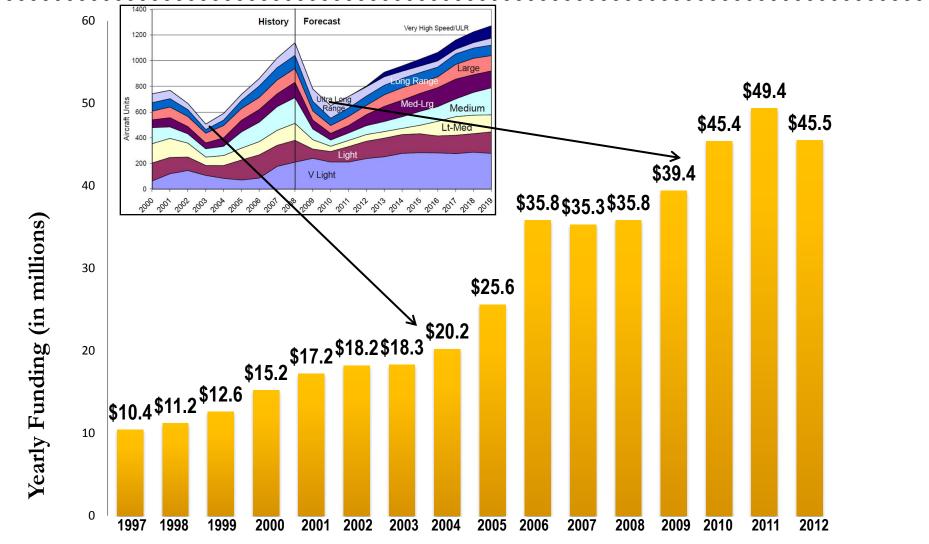
147 student lab technicians

Employees' salaries are not state-funded.

Each lab must earn the revenue to maintain its staff

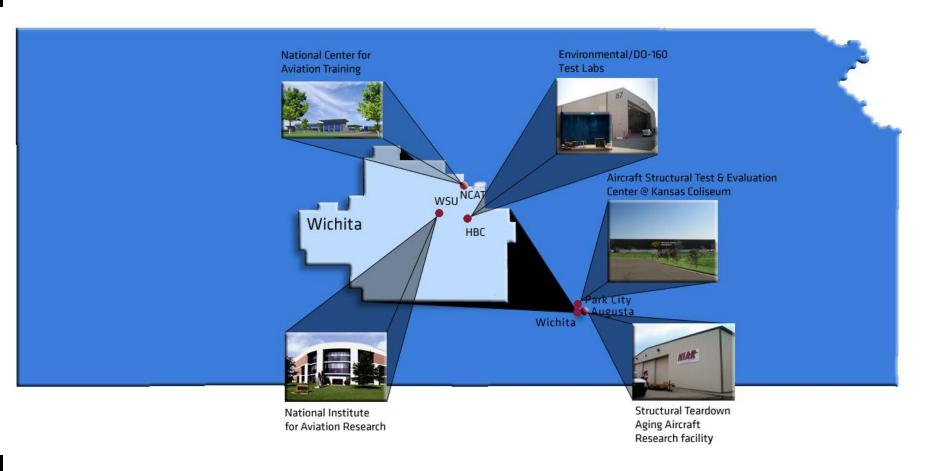


Funding History and Trending with Industry





NIAR Locations





NIAR ranks high among the nation's prestigious universities

Source: National Science Foundation – FY10 - by Aero R & D Expenditures

- 1. Georgia Institute of Technology
- 2. Utah State University
- 3. Wichita State University
- 4. University of Colorado
- 5. Texas A&M University
- 6. University of Maryland
- 7. Massachusetts Institute of Technology
- 8. University of Alabama
- 9. Pennsylvania State University
- 10. Princeton University

- 11. New Mexico State University
- 12. University of Texas
- 13. University of Michigan
- 14. Stanford University
- 15. Purdue University
- 16. University of Florida
- 17. Virginia Polytechnic Institute
- 18. University of Illinois
- 19. University of Washington
- 20. University of Tennessee



Technical Thrusts





Advanced Materials



Mechanical Test



Nondestructive **Evaluation**



PRIMARY THRUSTS



Aging Aircraft



Crashworthiness

WICHITA STATE

UNIVERSITY

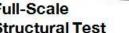


Full-Scale Structural Test



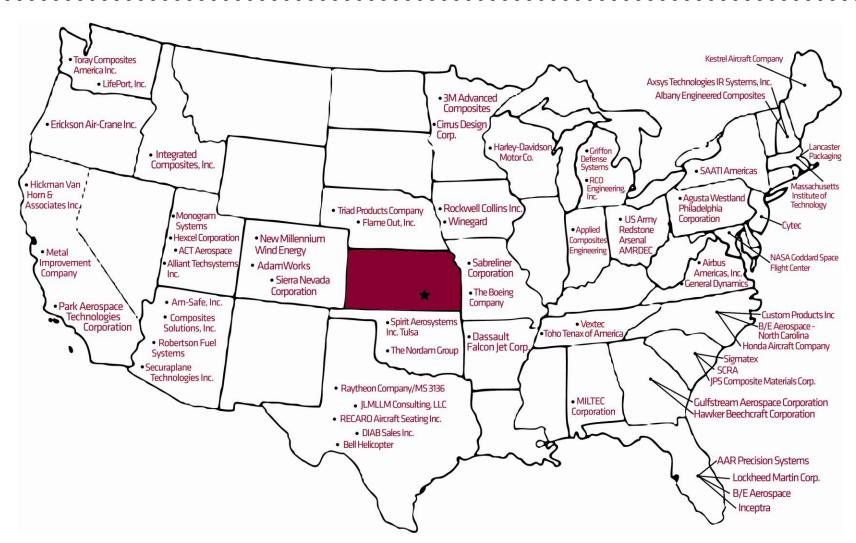






Aerodynamics

Existing Partnerships: Nation





Existing Partnerships: Kansas

Manhattan **★**Wichita ICE Corporation McFarland Research & Development, Inc. Colin Snyder Aerospace Systems & Components, Inc. **Envision Industries** Tonganoxie AMETEK Advanced Industries Inc. Aero-Mach Labs, Inc. Biomedical Devices of Kansas Absolute Calibrations & Consulting Services LLC Bombardier Aerospace USB FireWire/RR Business Ventures, LLC Rapid PSI AMETEK Advanced Industries Inc. Benecor, Inc Mid-Continent Instruments and Avionics **EAS** Corporation Olathe Leading Technology Composites, Inc. **RV Products** Garmin International, Ltd. Boeing Defense, Space and Security Benecor, Inc Wescon Products Company CIBOR Inc. Merriam Burnham Composites, Inc Spirit AeroSystems Inc. **Absolute Computer Solutions** Harlow Aerostructures LLC The Boeing Company Senior Aerospace Composites Work Force Alliance Hesston Aerospace Systems & Components, Inc. J.B. Dwerlkotte Associates Kaman Aerostructures - Wichita, Inc. Great Plains Industries, Inc. AGCO Corporation Airbus North America Engineering, Inc. Goodrich Cabin Systems Hawker Beechcraft Corporation IR Custom Metal Products Wellington Wichita Area Technical College Electromech Technologies Triumph Accessory Services North American Aviation, Inc. Cessna Aircraft Textron Bombardier Aerospace Millennium Concepts, Inc. Kollsman, Inc/Elbit Systems Cessna Aircraft Company





Aircraft Structural Test & Evaluation Center







Future Opportunities

- Emerging Public/Private Partnerships
 - Further engagement with industry (ON CAMPUS)
 - Ability to train students different
- Engineering Design Center
- Expansion of NIAR Research Operations
- Build the next NIAR at WSU Software Certification and Network Security Center
- Explore more Technology Transfer opportunities with WSU interests

