Metrics, shining a light on universities and economic development
Impact across Virginia and across the university
University Metrics Initiative

Relationships with Industry
1. Material Transfer Agreements
2. Consortia Agreements
3. Sponsored Research by Industry
4. Other Industry Partnerships

Community Economic Development
1. Purchasing
2. Employment
3. Tourism
4. Extension & Outreach

Developing Workforce
1. Student Employment on Funded Projects
2. Student Economic Engagement
3. Student Entrepreneurship
4. Alumni in the Workforce
5. Faculty Entrepreneurship and Engagement

Knowledge Incubation & Acceleration Programs
1. Incubation and Acceleration
2. Participant-University Relationships
3. Attracting External Investment
### Commercially Sponsored Research Agreement Dollars

<table>
<thead>
<tr>
<th>Region</th>
<th>Actual Expenditures</th>
<th>% SRAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blacksburg-Christiansburg-Roanoke</td>
<td>$6,549,447</td>
<td>6.10%</td>
</tr>
<tr>
<td>Central VA</td>
<td>$9,279,723</td>
<td>8.64%</td>
</tr>
<tr>
<td>DC MSA</td>
<td>$11,632,565</td>
<td>10.83%</td>
</tr>
<tr>
<td>Shenandoah Valley</td>
<td>$1,583,023</td>
<td>1.47%</td>
</tr>
<tr>
<td>Southern VA</td>
<td>$2,696,110</td>
<td>2.51%</td>
</tr>
<tr>
<td>Southwest VA</td>
<td>$311,440</td>
<td>0.29%</td>
</tr>
<tr>
<td>Tidewater-Hampton Roads</td>
<td>$2,824,124</td>
<td>2.63%</td>
</tr>
<tr>
<td>TOTAL Commercial SRA Dollars</td>
<td>$107,382,478</td>
<td>100%</td>
</tr>
</tbody>
</table>

SRA Data Source: VT Office of the Vice President for Research

### Number of Individual Companies with VT SRAs Contracts

- **143**

### Top Company Sponsors by Actual Expenditures

1. Metropolitan Washington Council of Governments | $1,019,087
2. American Chemical Society | $947,984
3. Wetland Studies & Solutions, Inc. | $765,313
4. District of Columbia Water & Sewer Authority | $765,271
5. American Diabetes Association | $645,031

### Top Graduate Fields

- Education
- Engineering
- Information Technology
- Computer Science and Applications
- Public Administration

### Top Undergraduate Fields

- Engineering
- Business (Finance & Marketing)
- Biology
- Psychology
- Communications

### Alumni in Washington DC MSA Total Jobs*

<table>
<thead>
<tr>
<th>Field</th>
<th>Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>1,434</td>
</tr>
<tr>
<td>Engineering</td>
<td>1,025</td>
</tr>
</tbody>
</table>

Source: VT Alumni Association; All numbers are based on voluntary reporting

*3-Digit SOC Engineering Code, 17-2000; EMSI Complete Employment

### Salary Ranges (for all of Virginia)

- Engineering Degrees: $52,000 - $63,225 (avg. $60,000)
- Business Degrees: $36,000 - $57,000 (avg. $49,000)

Source: Alum data is from Virginia Tech Alumni Association; All numbers are based on VOLUNTART reporting
International Manufacturing Sector (NAICS 31-33)

Top Manufacturers by Expenditure
1) Toyota Motor Corp. ($1,824,502)
2) SAFRAN ($653,332)
3) Major Automotive Manufacturer ($498,913)
4) Theralase Inc. ($448,957)
5) Nissan Motor Company Ltd. ($376,829)

Top Manufacturing Sectors by Number of Contracts:
1) Transportation Equipment (7)
2) Chemical Manufacturing (4)
3) Electrical Equipment Manufacturing (3)
4) Computer and Electronic Products (2)
5) Paper Manufacturing (2)

SAFRAN enriching collaboration with Center for Power Electronics Systems (CPES)

Hispano-Suiza of SAFRAN Group, one of the leading companies in the development of electronic control unit in the aerospace industry, will participate in the new CPES mini-consortium on High Density Integration (HDI).

To further enhance research collaboration with CPES, SAFRAN sent Fabien Dubois, Ph.D. student from Ampere Laboratory, to work on site with CPES for 3 months. Fabien’s work at CPES is to define an innovative architecture which will lead to the improvement of the previous protection system.

Outcomes---inside and out

- APLU-IEP growth and improvement plan

- State Innovation and Entrepreneurship Measurement System

- Kauffman Foundation funded Roanoke- Blacksburg Entrepreneurship Metrics Study
Questions

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