Project Name: Wichita State University (WSU) Center for Innovation and Enterprise Engagement (CIEE), South Central Kansas Advanced Manufacturing Initiative
Quarter Ending: March 31, 2012

**Objective:**

**EDAR1 Industry Roundtable: EDA**

- Expand the capacity and functionality of the advanced manufacturing industry group to meet regularly with one of the quarterly gatherings being in the format of a business symposium.

**EDA Grant Fund:**

- Provide in-kind leverage from WSU and partner institutions (personnel and facilities).
- EDA funds will be used for speaker fees and travel, supplies and roundtable operations.

**Kansas Small Business Development Center:**

Regional economic development professionals, post-secondary educators.

<table>
<thead>
<tr>
<th>Funding Agency</th>
<th>Resources/Inputs</th>
<th>Activity</th>
<th>Activity Output (as reporting timeframe)</th>
<th>Program Outcomes</th>
<th>Reporting Progress: Jan-Mar 2012 (Based on Outcomes)</th>
</tr>
</thead>
</table>
| EDA            |                  | Quarterly industry roundtable meeting - provide regular contact with business and industry to highlight business training, business counseling and mentoring services. | Quarterly meeting with collaborative partners (three meetings and one seminar annually - details below), Reports will include quarterly detail where available (2-year timeframe). | Contact and information sharing with more than 20 innovators and entrepreneurs per quarter to provide update on business counseling and technical assistance services, competitive innovation accelerator programs, and faculty fellowship programs. | Industry Roundtable Events:  
  - March 5, 2012 SBIR/STTR Industry Roundtable  
    - Content for the second industry roundtable focused on SBIR/STTR funding opportunities.  
    - 30 attendees  
    - Agenda and additional information on the Industry Roundtable can be found at the following web link: [Link to Industry Roundtable](http://www2.wichita.edu/edaa/edaa_sbir_sttr.shtml)  
  - June 13, 2012, Lander's Forum with CBE Collaborative Partners: SBA, Network Kansas, KSBDC, Score, etc., WSU Marcus Welcome Center  
    - August 14, 2012, Business Matchmaker at the WSU Metropolitan Complex  
      - The Wichita State University, the SBA Wichita District Office and event co-sponsors are anticipating 300 small businesses and approximately 100 buyers from government agencies and prime contractors. This event will provide a forum for buyers and sellers to meet for one-on-one meetings, matching buyer requirements with seller capabilities. Purchasing representatives from organizations like Boeing, Hawker Beechcraft, Spirit AeroSystems, McConnell Air Force Base, the State of Kansas, the City of Wichita, Sedgwick County and Wichita Public Schools have indicated plans to attend. Breakout sessions in core areas integral for strong and growing businesses will also be offered at the conference. Topics such as financing, exporting, government contracting, SBA Business Development Programs, aerospace purchasing requirements, and innovation are planned.  
  - U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators Online (NAICS) data for baseline quarterly job in three industry clusters within region in determine jobs retained and new jobs are reported in the appendix. |
### Objective: Competitive Innovation Accelerator

**EDA grant funds (Year 1, $150,000 and Year 2, $150,000).** Innovation Accelerator funds will be provided for qualifying projects from $10,000 to $50,000 at the discretion of the BID upon recommendation from the Technical Advisory Panel.

University or private sector innovations to be selected through competitive process with entrepreneurs and innovators recruited/mentored from collaborative partners (universities, non-profit research institutes, regional economic developers, Wichita Technology Corporation, Mid-American Technology Council (MTPC), Chamber of Commerce, Wichita Independent Business Association, Wichita Area Manufacturers Association, etc.).

Collaborative partners will provide services (labor or in-kind).

### Activity: Technical assistance, feasibility studies, planning activities, technology or process development, cluster networking, market expansion (pq 15).

**Activity Output:**
- Enterprise will use activity output to advanced innovation along the research-to-commercialization continuum as appropriate.
- Researcher/faculty member will incorporate new learning objects to curriculum as appropriate.

**Program Outcomes:**
- Movement of an innovation technology along the research-to-commercialization continuum to become a viable market product or process.
- Additional proposals, submitted or accepted, owing directly to the Fellowship and amount of funding secured.
- Job creation or retention.

### Reporting Progress: Jan-Mar 2012 (Based on Outcomes)

The second round of the Competitive Innovation Accelerator was held during the January to March 2012 quarter. Proposals were received between February 1, 2012 and March 29, 2012. Ten proposals were received and reviewed by the Technical Advisory Panel using the metrics provided in the solicitation. The Center for Innovation and Entrepreneurship Board of Directors funded three proposals on April 10, 2012.

Information on the initial three grants are listed below. The fourth Competitive Innovation Accelerator grant was to Nitride Solutions. Nitride finalized their budget, executed a contract with WSU and started development of their process and product development. Initial testing was conducted.

Amount of private investment generated will be provided at the end of the project.

Annual average job creation for the ten-county region by industry. U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators Online (MAICBS) are included in the appendix.

Within the aerospace products and parts industry, employment continues to contract. The Wichita SBA 2010Q4 employment for this sector was 60,367 and in 2011 Q4 employment was 59,107, a year over year contraction of 4 percent.

Total wage and salary employment has increased from 285,400 in 2010Q4 to 288,233 in 2011Q4, a year over year increase of 1 percent.

### Objective: Composite Repair Innovation (previous SBIR recipient, grant ended 1Q10)

**EDA funds for personnel, supplies, lab equipment, facilities, TSI in-kind personnel, testing sensors and materials.**

WSU National Institute for Aviation Research (NIAR), WTC, WSC, KSBDC, WSUBF, KOUC (some services will be provided as in-kind leverage).

**Technology:**
- TSI Technologies, LLC (TSI) (formerly TSI Thermal Solutions Inc.) and Advanced Processing Technology (AVP)R&D - extension of commercialization plan for SBIR Phase II ($1awarded E355)
- Validation of remotely powered and interrogated microwave temperature sensor for composites cure monitoring and control.

**Development of Material State Management tool (system and software), Certification of MSM outcomes, Market intelligence and business plan development for MSM tool (2 year timeframe).**

**Knowledge of temperature within critical structures to reduce structural flaws, and provides actual cure state of materials during process.**

**Processing speed will increase since knowledge of true cure state removes need for slow, long cure to ensure capture of outlases, thus reducing energy usage and accent cost to manufacture.**

Quality will increase, less material will be scrapped and sent to landfill, increased competitiveness.

WSU and TSI Technologies and AVPro negotiated a scope of work and budget but were unable to come to terms. This project was canceled on February 20, 2012, phone calls as parties could not agree on terms of contract, specifically the scope of work and cost. Annual average job creation for the ten-county region by industry. U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators Online (MAICBS) are included in the appendix.
### Objective

**Career Accelerator (CA), ETA**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Funding Agency</th>
<th>Resources/Inputs</th>
<th>Activity</th>
<th>Activity Output</th>
<th>Program Outcomes</th>
<th>Reporting Period: Jan-Mar 2012 (Based on Outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 3: Develop and Implement Articulation Agreement with University and Other Educational Partners</td>
<td>ETA</td>
<td>Establish articulation agreements with all K-12, community college and technical colleges in the region to streamline access to the new engineering technology degree program for all students, including historically underrepresented, veterans and unemployed.</td>
<td>ETA funding will support WSU senior faculty (1/3 time in years 1 and 2 and 1/5 time in years 3 and 4) and staff member (1/2 time all four years) who will develop relationships and articulation agreements with institutions in the educational pipeline for stackable credentials/degree articulation in the new engineering technology degree program.</td>
<td>Develop and execute articulation agreements with local community colleges and technical colleges.</td>
<td>Enroll 25 students into the new engineering technology program Year 1 and 50 students in Years 2-4 of grant.</td>
<td>Launch new engineering technology program and increase career pathway in employment required articulation program.</td>
</tr>
</tbody>
</table>

### CA 2: Bridge Program for First-Time Engineering and Engineering Technology Students

<table>
<thead>
<tr>
<th>Objective</th>
<th>Funding Agency</th>
<th>Resources/Inputs</th>
<th>Activity</th>
<th>Activity Output</th>
<th>Program Outcomes</th>
<th>Reporting Period: Jan-Mar 2012 (Based on Outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish of committee to research best practices and develop bridge program.</td>
<td>ETA</td>
<td>In-kind development of bridge program for incoming engineering students.</td>
<td>Bridge program is designed to increase student success as measured by percentage of students completing program relative to number of students who did not participate in bridge program.</td>
<td>25 students participate in bridge program in Year 1 and 50 students in Years 2-4 of grant.</td>
<td>Annual reporting.</td>
<td>During the second quarter of the grant award, Wichita State University established agreements with residence life personnel, drafted a plan for the schedule of events, and advertised the program. Thirty-four prospective students applied during this time (twenty-five are required for the grant). The bridge program will be offered in August 2012. In the next quarterly report, April through June 2012, an update on the program development and a status of the applicants will be provided.</td>
</tr>
</tbody>
</table>

Hutchinson Community College, Cowley Community College, Butler Community College and Wichita Area Technical College will provide the initial locations for articulation agreements. In-kind contribution facility support from university.

To date, 21 prospective students have inquired on the BS/ET degree program and two have committed to the Mechatronics Technology concentration (both part of the KEEP grant).

Our advisory committee has been established and is scheduled to host its first meeting Wednesday, May 9.

The BS/ET website has been developed, and Facebook and Twitter accounts established.

Six BS/ET program courses have been approved by the Provost and Vice President of Academic Affairs:

- Technical Calculus I (offered via Mathematics Dept.)
- Technical Calculus II (offered via Mathematics Dept.)
- Material Applications in Engineering
- Introduction to Fluids
- Introduction to Strength and Mechanics of Materials
- Industrial Controls and Instrumentation
### Other Updates

<table>
<thead>
<tr>
<th>Funding Agency/Project</th>
<th>Barriers to Success</th>
<th>Project Achievements/Best Practices</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETA</td>
<td>None at this time.</td>
<td>Initiative are being developed and we anticipate that they will be piloted and launched as scheduled.</td>
<td>None at this time.</td>
</tr>
<tr>
<td>EDA</td>
<td>Due to the retirement of initial project officer and the resulting delay in development of Scope of Services, some first, second and third quarter outcomes may be delayed to subsequent quarters.</td>
<td>The competitive solicitation process went very well and the response to the solicitations was substantial: seven faculty submissions and 15 business submissions in the first round and three faculty and 16 business solicitations in the second competition. Members of the Technical Advisory Panel enjoyed the opportunity to review and score the proposals. The CIIIE Executive Committee added an additional level of proposal analysis with semi-finalist presentations including questions posed by the committee members and technical experts in the meeting. The CIIIE Board of Directors is pleased to have the Jobs and Innovation Accelerator funding, and they believe that this grant award is a vital economic development tool to accelerating the research to market development of innovation in advanced manufacturing and support innovation-driven job creation and economic prosperity.</td>
<td>Many thanks to Assistant Secretary Fernandez, and other EDA leaders, for their visit to Wichita and attendance at the KideeF Event.</td>
</tr>
<tr>
<td>SBA</td>
<td>Delays in establishing the final contract may result in some first, second and third quarter outcomes being delayed to subsequent quarters.</td>
<td>This initiative is very pleased to have a strong partnership with the Hispanic Chamber of Commerce and good leadership from the Wichita SBA District Office.</td>
<td>None at this time.</td>
</tr>
<tr>
<td>Category 3: Economic Indicators Notes:</td>
<td></td>
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</tbody>
</table>

1. **Annual Average Job Creations for the Ten-County Area by Industry**
   
   Source: U.S. Census Bureau, Local Employment Dynamics, Quarterly Workforce Indicators Online (NAICS), http://www.census.gov/programقرارves/.
   
   Notes: The data in the table above includes all male and female employees between the ages of 14 and 69 years of age in both the public and private sectors.
   
   **QWI definition for Job Creation**: “The number of new jobs that are created by either new area businesses or the expansion of employment by existing firms.”

   The QWI counts only new full-time employees, and the data does not include part-time employers or independent contractor employment. Unlike the Quarterly Census of Employment and Wages, which counts employment within a quarter on the 12th day of the month, the QWI counts all jobs within a quarter. For more information about the QWI, go to http://www.census.gov/programقرارves/.

   Data may not add up to the totals because of data suppression for confidentiality purposes.

2. **Average Wage for Ten-County Area by Industry**
   

3. **Annual Average Unemployment Rate for Ten-County Area**
   
   Source: Kansas Department of Labor, Labor Market Information, Labor Force Estimates, http://www.dot.state.ks.us/lsb/survey/current.html. (Data for benchmark years was revised and updated data is included in the 2011 report.)

4. **Academic Achievement on No Child Left Behind Test Scores**
   
   
   Note: "No Child Left Behind Act" requires "adequate yearly progress", or AYP. The term refers to the growth rate in the percentage of students who achieve the state's definition of academic proficiency. The following school districts in the 10-county area did not make AYP in the 2006-2007 school year: USD 421 El Dorado, USD 465 Winfield, USD 470 Arkansas City, USD 331 Kingman-Norwich, USD 259 Wichita, and USD 333 Wellington. The following school districts in the 10-county area did not make AYP in the 2007-2008 school year: USD 421 El Dorado, USD 331 Kingman-Norwich, USD 259 Wichita, and USD 333 Wellington. The following school districts in the 10-county area did not make AYP in the 2008-2009 school year: USD 225 Blueihe, USD 269 Wichita, and USD 261 Hayti, USD 331 Kingman-Norwich, USD 333 Peabody-Burns, and USD 336 Oxford.

### Table: Unemployment Rate

<table>
<thead>
<tr>
<th>Years</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Average Unemployment Rate for Ten-County Area</td>
<td>6.3</td>
<td>4.4</td>
<td>3.0</td>
<td>4.2</td>
<td>8.0</td>
<td>7.8</td>
<td>6.8</td>
<td>6.8</td>
<td>6.8</td>
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</tr>
</tbody>
</table>

### Table: Academic Achievement on No Child Left Behind Test Scores

<table>
<thead>
<tr>
<th>Years</th>
<th>2006-2007</th>
<th>2007-2008</th>
<th>2008-2009 School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>70.8%</td>
<td>74.8%</td>
<td>81.9%</td>
</tr>
<tr>
<td>Math - % Tardiness 06-07</td>
<td>90.2%</td>
<td>90.6%</td>
<td>90.6%</td>
</tr>
<tr>
<td>Math - % Tardiness 07-08</td>
<td>70.8%</td>
<td>71.8%</td>
<td>76.9%</td>
</tr>
<tr>
<td>Math - % Tardiness 07-08</td>
<td>92.2%</td>
<td>90.8%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Math - % Tardiness 08-09</td>
<td>88.2%</td>
<td>86.5%</td>
<td>89.6%</td>
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</tbody>
</table>

### Table: Number of New Business Startups or Expansions

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1995</td>
<td>2.4%</td>
<td>18.7%</td>
<td>21.8%</td>
<td>31.8%</td>
<td>n/a</td>
<td>32.1</td>
<td>32.1</td>
<td>32.1</td>
</tr>
<tr>
<td>2005</td>
<td>25</td>
<td>39</td>
<td>40</td>
<td>31</td>
<td>n/a</td>
<td>32</td>
<td>33</td>
<td>33</td>
</tr>
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### Table: Venture Capital Investments (Kansas)

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<tr>
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<tbody>
<tr>
<td>Total</td>
<td>$1,400,000</td>
<td>$1,200,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Venture Capital as a % of Worker Earnings</td>
<td>0.50%</td>
<td>0.35%</td>
<td>0.42%</td>
<td>0.57%</td>
<td>0.65%</td>
<td>0.57%</td>
<td>0.65%</td>
<td>0.65%</td>
</tr>
<tr>
<td>Worker Earnings ($)</td>
<td>$71,715,730,000</td>
<td>$75,251,627,000</td>
<td>$78,668,410,000</td>
<td>$83,656,552,000</td>
<td>$97,649,002,000</td>
<td>$110,700,405,000</td>
<td>$123,700,000,000</td>
<td>$136,700,000,000</td>
</tr>
</tbody>
</table>

### Table: Kaufman Index of Entrepreneurial Activity for Kansas

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total</td>
<td>128</td>
<td>128</td>
<td>126</td>
<td>118</td>
<td>116</td>
<td>116</td>
<td>116</td>
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<tr>
<td>Index</td>
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### Table: Number of New Business Startups or Expansions

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</thead>
<tbody>
<tr>
<td>Total</td>
<td>128</td>
<td>128</td>
<td>126</td>
<td>118</td>
<td>116</td>
<td>116</td>
<td>116</td>
<td>116</td>
</tr>
</tbody>
</table>

| Index | 0.25%     | 0.25%     | 0.25%     | 0.25%     | 0.25%     | 0.25%     | 0.25%     | 0.25%     |
### Quarterly Economic Indicators for the Wichita Area Economy

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Percent Change From Same Quarter Prior Year</th>
<th>Percent Change From Prior Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Q.</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>2nd Q.</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>3rd Q.</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>4th Q.</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

#### Construction

- **New Housing Starts:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Residential Construction:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Non-Residential Construction:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Miscellaneous:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

#### Retail Sales

- **Total Sales:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Auto Sales:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Building Materials:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Other:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

#### Employment & Wages

- **Civilian Labor Force:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Employment:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Unemployed:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Wage & Salaries:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

#### Electrical Use

- **Total:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Residential:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Commercial:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Industrial:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

#### Earnings & Employment

- **Total Earnings:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Average Weekly Earnings:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Unemployment Rate:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

#### Inventories & Sales

- **Inventories:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

- **Sales:**
  - 1st Q.: xx
  - 2nd Q.: xx
  - 3rd Q.: xx
  - 4th Q.: xx

Please note that the above data is for illustration purposes only and does not reflect actual figures.