Budget Detail Request - Fiscal Year 2016-17

Your request will not be officially submitted unless all questions and applicable sub parts are answered.

1. Title of Project: Brevard Public Schools Aviation and Manufacturing Technology High School Programs
2. Date of Submission: 01/04/2016
3. House Member Sponsor(s): Tom Goodson

4. DETAILS OF AMOUNT REQUESTED:

a. Has funding been provided in a previous state budget for this activity? No
If answer to 4a is ?NO? skip 4b and 4c and proceed to 4d

b. What is the most recent fiscal year the project was funded?

c. Were the funds provided in the most recent fiscal year subsequently vetoed? No

d. Complete the following Project Request Worksheet to develop your request (Note that Column E will be the total of Recurring funds requested and Column F will be the total Nonrecurring funds requested, the sum of which is the Total of the Funds you are requesting in Column G):

FY:	**Input Prior Year Appropriation for this project for FY 2015-16 (If appropriated in FY 2015-16 enter the appropriated amount, even if vetoed.)**			**Develop New Funds Request for FY 2016-17 (If no new Recurring or Nonrecurring funding is requested, enter zeros.)**			
Column:	A	B	C	D	E	F	G
Funds Description:	Prior Year Recurring Funds	Prior Year Nonrecurring Funds	Total Funds Appropriated (Recurring plus Nonrecurring: Column A + Column B)	Recurring Base Budget (Will equal non-vetoed amounts provided in Column A)	**INCREASED or NEW Recurring Requested**	**TOTAL Nonrecurring Requested** (Nonrecurring is one time funding & must be re-requested every year)	**Total Funds Requested Over Base Funding** (Recurring plus Nonrecurring: Column E + Column F)
Input Amounts:					0	3,250,000	3,250,000

e. New Nonrecurring Funding Requested for FY 16-17 will be used for:
☐Operating Expenses ☐Fixed Capital Construction ☑Other one-time costs

f. New Recurring Funding Requested for FY 16-17 will be used for:
☐Operating Expenses ☐Fixed Capital Construction ☐Other one-time costs

5. Requester:

a. Name: Janice Scholz
b. Organization: Brevard Public Schools
c. Email: scholz.janice@brevardschools.org
d. Phone #: (321)633-1000 Ext. 380

6. Organization or Name of Entity Receiving Funds:
a. Name: Brevard Public Schools
b. County (County where funds are to be expended) Brevard
c. Service Area (Counties being served by the service(s) provided with funding) Brevard

7. Write a project description that will serve as a stand-alone summary of the project for legislative review. The description should summarize the entire project?s intended purpose, the purpose of the funds requested (if request is a sub-part of the entire project), and most importantly the detail on how the funds requested will be spent - for example how much will be spent on positions and associated salaries, specifics on capital costs, and detail of operational expenses. The summary must list what local, regional or statewide interests or areas are served. It should also document the need for the funds, the community support and expected results when applicable. Be sure to include the type and amount of services as well as the number of the specific target population that will be served (such as number of home health visits to X, # of elderly, # of school aged children to receive mentoring, # of violent crime victims to receive once a week counseling etc.)

Brevard Public Schools, Career & Technical Education
? Advanced Manufacturing / CNC Machining Program Bayside High School and
? Aviation Maintenance & Fabrication Technology Eau Gallie High School
Manufacturing Technology: According to the Central Florida Talent Gap Analysis 2014, the manufacturing sector reported the greatest number of vacant positions and the greatest number of new hires in the region. Manufacturing reported the third-highest average salary statewide within the many categories surveyed. With more than 500 manufacturing companies in Brevard County, Florida, many of these companies are in need of qualified, entry level technicians with essential knowledge and skills in machining, safety, quality assurance, measurement, knowledge of manufacturing and production processes, welding, lean manufacturing practices, and maintenance awareness. Brevard Public Schools Career & Technical Education (BPS CTE) is a participant in the Advancing in Manufacturing (AIM) grant through CareerSource Brevard (CSB). As such, the curriculum for the Manufacturing Technology program will be developed with industry input. BPS CTE also has already committed a teacher to the planning process required to set up the program and are actively recruiting for this position at this time. Support for the Manufacturing Technology program is widespread among the manufacturing industry and will provide the pipeline needed to keep manufacturing strong across the Eastern Central Florida region. Unfortunately, the AIM grant is focused on training and placing unemployed workers into jobs with manufacturers as they develop a sector strategy partnership. Therefore, CSB funds are not able to provide the items necessary for these two programs to be started. However, CareerSource Brevard fully supports this legislative ask since it is a part of the overall sector strategy.
Aviation Maintenance & Fabrication: Brevard Public Schools Career & Technical Education has been working closely with Eastern Florida State College, Melbourne International Airport, Embraer, and other local aviation-related companies to implement a new Aviation Technology program at Eau Gallie High

School. There is (and will continue to be) a critical need for aviation fabrication technicians in Brevard County in the next few years. Some companies will need to hire 500 ? 700 new employees in the next five years. The prospective employees are required to have foundational knowledge and skills related aircraft maintenance, assembly, and fabrication. This three course program will serve as a ?pipeline? for qualified, entry-level technicians for immediate employment and/or to pursue post-secondary degrees and FAA certifications. Embraer has promised to conduct interviews with each graduate of the program.
Purpose of the funds requested: The funds will be used for ?start-up? and implementation of the new Career & Technical Education programs. As indicated above, these programs are needed in response to local business and industry needs (current and future) for entry-level technicians, machinists, assemblers, and fabricators.
How the funds requested will be spent- The funds requested will be spent on the following:
Aviation Technology new facility construction, classroom and aviation lab furniture, student computers, aviation tools (for fabrication, measurement, and maintenance), software licenses, textbooks and lab manuals, industry certification exams and training, professional development for teacher(s), teacher(s) salary costs for a two-year start-up period, learning modules and simulation equipment, manufacturing/cnc machining lab renovation, and infrastructure additions. Following is a breakdown of these expenditures:
Associated salaries: Salary costs for two teachers for a two-year start-up period ($85K / year X 2 teachers X two years = $340,000)
Specifics on capital costs:

? Bayside HS Advanced Manufacturing classroom and lab: Electrical, Plumbing, Painting, Demolition, HVAC, Safety Shut-Off System, Lighting - $243,000

? Eau Gallie HS Aviation Technology: Construction on new building for the aviation technology program. Lab space is proposed to be 100? x 50? and classroom is to be 50? x 50? - $750,000

The following outlines the operational startup costs:
Software Licenses (including certification exam prep courses): Licensing includes SolidWorks, and Machine Training Solutions (http://www.machiningsolutions.com/) licensure that provides virtual /online simulation training for manufacturing courses from CNC essentials to milling and turning. For both programs - $260,000.
Technology: Both programs require special technology and curriculum for a variety of items including welding, composites, fabrication, machining, etc. This line item also includes mechatronic tools/simulation capabilities. Cost for both programs - $990,000
Computers: Computers are CAD level desktop, which increases the price slightly. Total for 64 computers for both programs is $100,000
Furniture: Includes desks, chairs storage for tool, consumables, etc. Currently, the Aviation program uses borrowed tables that are needed back in the program they came from. Both programs - $214,000
Outreach: Specifically to recruit students to the programs and to engage businesses with the programs to ensure sustainability. Both programs use consumables that represent a significant recurring cost. The industry engagement is expected to dramatically reduce these recurring costs. $50,000
Tools: Includes items such as precision instruments, measurement tools, and fabrication tools. For both programs - $288,000
Textbooks/lab manuals/testing costs: This includes the first year of testing costs, with the assumption that recurring testing costs will be covered by industry collaboration. For both programs - $15,000
Local, regional and statewide interests or areas served: With regard to providing secondary students with specific entry-level knowledge, skills, and industry certification credentials, local, state, and national manufacturing, CNC machining, and aviation maintenance and fabrication needs will be served. CareerSource

Florida has selected manufacturing as one of their statewide priority interests this year. The focus is providing direct industry input that will help guide curriculum needs, address image attraction concerns and give a real time look at workforce needs. Regionally the three workforce boards (CareerSource Central Florida, CareerSource Flagler/Volusia and CareerSource Brevard) have had joint Executive Committee meetings that established manufacturing as one of the key industries for the local areas to work together on regionally. The Pine Ridge High School program in Volusia is similar to the proposed Manufacturing program. However, there is not an Aviation program currently in the state, so this program will be a best practice model that can be replicated. At the local level, the AIM grant is gathering industry members input on curriculum and this will become and ongoing advisory model for the Manufacturing program. Additionally, manufacturers are beginning a youth summer internship program that would take students from the program into the workplace to experience 8 weeks of real time manufacturing.
The Aviation program has similar support including Embraer?s work with the program curriculum development, various aviation companies donating parts of planes, engines, etc. for the students to learn in a hands on environment. The Aviation program also has the support of the Melbourne Airport Authority because of the growing aviation companies at their facility. A sector strategy around aviation is being proposed to the Melbourne Airport Authority, which would provide staff to CareerSource Brevard that would facilitate the engagement of more aviation companies with the BPS CTE Aviation program for sustainability.
Need for the funds, the community support:
Regarding employment needs in central Florida, an online survey was conducted from March 3 through April 15, 2014, resulting in 269 survey responses from companies representing 91,393 employees, which equates to 6 percent of the region?s workforce of 1.5 million. The respondents reported 5,542 open and future jobs in the region with 66 percent representing anticipated hires over the next 2-3 years. Manufacturing reported the greatest number of both open and new positions.

Difficulty in hiring was reported by 84% of the manufacturing companies. The top three reasons reported on the survey, and validated in interviews and focus groups, were related to a lack of skilled applicants.
Survey results also indicated difficulty in finding qualified aerospace/aviation technology personnel. Finding technical positions has been an ongoing challenge for a number of years and will continue unless more students enter the field. Embraer, Space X, AAR, and their vendors are all in need of technicians and are planning on increased hires over the next 3 ? 5 years. In order to meet that demand the Aviation program must be in place by Fall 2016. Over 60 aviation industry members are supporting the program via donations and committing to be a part of the advisory board for the Aviation program, which clearly shows industry support.
Expected results: Approximately 240 Brevard County graduating high school students will have the necessary aviation technology or manufacturing technology knowledge, skills, and industry certification credentials to apply for immediate employment and/or attend post-secondary education, training, or apprenticeship. The success of the program will be demonstrated in part by the number of industry members who are supporting the programs with their donations of time and resources. Another result that is somewhat intangible is the ability of the graduates from both programs to be able to use their skills in either industry. For instance, manufacturing uses many of the composite materials that aviation uses, so if a student completes the Aviation program but decides to enter manufacturing later in their career then they would have at least a basic knowledge that would assist them.

8. Provide the total cost of the project for FY 2016-17 from all sources of funding:

Federal: 10,000
State: 0 (Excluding the requested Total Amount in #4d, Column G)
Local: 7,000
Other: 0

9. Is this a multi-year project requiring funding from the state for more than one year?
No