

VI. Economic Impact of New Jobs – Escambia County and Region

In late 2012 when valid data was needed to make good decisions about the amount of government incentives to be provided in exchange for job creation the Haas Center, located at UWF, performed a Comprehensive Economic Impact Assessment to analyze the impact of new jobs for what was then referred to as the ST Project. We now know the actual number of jobs to be created is 400 new jobs with an average salary of \$41,000. However at the time of the Haas Center report the number of new jobs projected was 450 at an average salary of \$41,000, so the forecasted impact numbers in their report are slightly higher. Notwithstanding this minor difference, the employment results from their report summarized below are compelling:

Number of New Jobs

Industry	Escambia	Florida
Manufacturing	451	438
Construction	105	120
Health Care and Social Assistance	54	61
Retail Trade	52	62
Wholesale Trade	49	50
Administrative and Waste Services	46	53
Other Services, except Public administration	38	46
Accommodation and Food Services	34	39
Professional and Technical Services	27	39
Real Estate and Rental and Leasing	22	29

The total new jobs created by the effect of creating 450 new jobs has a ripple effect across all industries and actually results in the creation of a total of 878 new jobs. If this number is scaled down to reflect 400 new jobs, the ripple effect is a total of 780 new jobs for Escambia County residents. In addition to jobs, there is also an increased demand for housing, more goods and services, greater capital investments and a broader tax base for the county. These fiscal impacts are also outlined in the following Haas Center report.

Also included for information is a May 2016 article (from ThinkKentucky) which echoes the Haas report and in clear language talks about the “Economic Impact of 100 jobs”.

The Economic Impact of ST Aerospace



A Comprehensive Economic Impact Assessment

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ABOUT US

Located on University of West Florida's Emerald Coast Campus in Fort Walton Beach, Florida, the Haas Center collects, analyzes, and distributes economic data for clients seeking expert economic advice. We exist to help entrepreneurs and industry leaders--from traditional manufacturing to emerging technologies--meet their information needs in the modern economy.

The Haas Center specializes in data analysis for the purposes of economic forecasting, marketing research, business expansion, tourism, and real estate development as well as industry and academic studies. The Haas Center's staff combine academic credentials with varied experience, ranging from economists to survey specialists. Each professional combines innovation with attention to detail to produce high-quality research products for Center clients.

For further information please visit our website at haas.uwf.edu or contact Rod Lewis at clewis2@uwf.edu.

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PROJECT OVERVIEW

This document provides an economic impact analysis of a proposed aircraft maintenance and modification operation to be located in Escambia County. The plan is to build 2 aircraft hangars, 500 parking spaces, an administrative building, and a hangar apron/taxiway area. The expected cost of the project is approximately \$54.4 million. Construction is likely to start in 2013 and be completed within 17 months.

Once construction is underway it is projected that a total of 450 employees will be hired in the aircraft manufacturing industry (NAICS 33641). The average wage for these employees is expected to be \$40,913. Given the military installations and educational institutions in the Pensacola region, specialized workforce needs should be met by the local labor force.

ECONOMIC IMPACT ESTIMATES

Overview. Before presenting our estimates of the economic impacts in Escambia County, we provide a brief description of the modeling strategy and definitions of economic indicators used to analyze this project. Given the time constraints of

2012 and the necessary land acquisition and surveying requirements, we initialize 2013 as the starting date for construction.

Construction is expected to take 15 – 17 months with the second hangar completed in 2014. We modeled employment with 150 employees starting in 2014, and an additional 150 employees hired in 2015 and 2016 for a total of 450 manufacturing jobs. The table to the right illustrates the inputs we used in the model in terms of construction spending and jobs added in Escambia County.

The Model. The results provided in this document are produced using an economic modeling program developed by REMI (Regional Economic Modeling Incorporated). There are several reasons we utilized this model relative to others available. First, REMI is a dynamic general equilibrium model, allowing us to model changes to the economy over time. Second, the model is capable of estimating changes in each region in context of changes in other regions in the model. Therefore, we could estimate the impacts of the project in Escambia County, other regional Counties, or the state of Florida.

Defining the Results. The results from our model are presented in terms of three economic indicators: gross regional product, demand, and employment. These economic indicators, when differenced due to induced change

Table 1
Proposed Project Timeline

	2013	2014	2015	2016
Multipurpose Construction Spending (\$mil)	\$10.9	-	-	-
Single Tenant Construction Spending (\$mil)	\$24.6	\$10.9	-	-
Total Employment	-	150	300	450

PROJECT OVERVIEW

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es, are indicators of economic impact. We define the indicators below.

Gross Regional Product. The gross regional product (GRP) is equivalent to the gross domestic product (GDP) at the national level. It is a measure of the total value of all goods and services produced in a selected region over a defined period. This can be thought of as a "value added" concept. If the amount of services and goods produced in a region increases, the GRP will rise as well. Changes to an economy that cause more goods and services to be produced within the region have a positive effect on GRP. Changes to an economy that result in less goods or services produced within the region have a negative effect on GRP.

Demand. Another measure of economic impact is demand. Demand is the total value (direct, indirect, and induced) of goods and services demanded as a result of some activity. Some of this demand will be met by increased production within the region, while the rest will be met by goods and services imported into the region. Demand can roughly be thought of as total sales.

Employment. Employment is defined as the total number of jobs either existing in a region or generated by changes in the local economy. Impacts of the construction and operation of an aerospace manufacturing facility are for Escambia County.

Impact Estimates. The impact estimates for both Escambia County and Florida over the next ten years are presented in the table below (for a 20 year forecast see Appendix A). As the data indicate, the impacts are beneficial for both the County and State. The first year of construction alone will have an impact of 373 jobs and demand of over \$51 million in the county.

Table 2
Economic Impacts
(In Millions 2012 USD)

Escambia County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Demand	\$51.8	\$74.4	\$121.6	\$188.6	\$198.0	\$205.9	\$211.7	\$217.8	\$223.7	\$229.7
GDP	\$19.8	\$37.7	\$65.9	\$102.6	\$106.8	\$110.8	\$114.2	\$117.4	\$120.2	\$123.0
Employment	373	434	657	1,007	1,038	1,054	1,058	1,059	1,060	1,063
Florida	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Demand	\$55.7	\$78.5	\$127.9	\$198.5	\$209.4	\$218.4	\$225.1	\$231.6	\$238.2	\$244.8
GDP	\$21.7	\$39.7	\$68.7	\$107.1	\$111.8	\$116.1	\$120.0	\$123.4	\$126.2	\$129.4
Employment	407	470	711	1,090	1,131	1,154	1,161	1,165	1,167	1,173

Once construction is complete and the facility is at full production in 2016, this project is expected to add over 1,000 total jobs to Escambia County. This would increase the demand and GRP for the county by over \$188 million and \$102 million, respectively.

ECONOMIC IMPACT ESTIMATES

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The table to the right displays the top 10 Escambia County and State jobs impact across industries in 2016. It should be no surprise that the majority of job creation will come from construction and manufacturing after the facility is completed. The next largest industry that would be affected by this project in Escambia County is Health Care and Social Assistance.

Table 3
Sector Employment

Industry	Escambia County	Florida
Manufacturing	451	438
Construction	105	120
Health Care and Social Assistance	54	61
Retail Trade	52	62
Wholesale Trade	49	50
Administrative and Waste Services	46	53
Other Services, except Public Administration	38	46
Accommodation and Food Services	34	39
Professional and Technical Services	27	39
Real Estate and Rental and Leasing	22	29

Fiscal Impacts. The table below displays the County and State fiscal impacts of this project from 2013 to 2022. Approximately \$1 million in revenue would be collected by the state and local governments during the construction phase in 2013. After completion of construction, fiscal revenues are estimated to reach over \$7.5 million (2022) for the County and an additional \$0.7 million outside the County. Overall, if we compare fiscal revenues to expenditures we see that each year is a net benefit to Escambia County.

Table 4
Fiscal Impacts
(In Millions 2012 USD)

Escambia County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	\$0.9	\$2.2	\$4.0	\$6.1	\$6.3	\$6.6	\$6.8	\$7.1	\$7.3	\$7.5
Expenditures	-\$0.7	-\$0.2	\$0.0	\$0.3	\$1.6	\$2.8	\$4.0	\$5.0	\$5.9	\$6.7
Florida	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	\$1.0	\$2.4	\$4.2	\$6.4	\$6.8	\$7.1	\$7.4	\$7.7	\$8.0	\$8.2
Expenditures	-\$0.8	-\$0.4	-\$0.2	-\$0.06	\$1.3	\$2.6	\$3.8	\$5.0	\$6.0	\$6.9

ECONOMIC IMPACT ESTIMATES

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APPENDIX A: Economic Impacts - 20 Years (In Millions 2012 USD)

Escambia County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Demand	\$51.8	\$74.4	\$121.6	\$188.6	\$198.0	\$205.9	\$211.7	\$217.8	\$223.7	\$229.7	\$235.8	\$241.9	\$248.1	\$254.6	\$261.2	\$268.0	\$275.1	\$282.0	\$289.2	\$296.4
GDP	\$19.8	\$37.7	\$65.9	\$102.6	\$106.8	\$110.8	\$114.2	\$117.4	\$120.2	\$123.0	\$126.0	\$129.0	\$132.1	\$135.5	\$139.0	\$142.6	\$146.4	\$150.1	\$154.1	\$158.0
Employment	373	434	657	1,007	1,038	1,054	1,058	1,059	1,060	1,063	1,066	1,071	1,077	1,085	1,094	1,104	1,115	1,126	1,137	1,149
Florida	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Demand	\$55.7	\$78.5	\$127.9	\$198.5	\$209.4	\$218.4	\$225.1	\$231.6	\$238.2	\$244.8	\$251.5	\$258.2	\$265.0	\$272.3	\$279.8	\$287.1	\$295.2	\$303.0	\$311.3	\$319.1
GDP	\$21.7	\$39.7	\$68.7	\$107.1	\$111.8	\$116.1	\$120.0	\$123.4	\$126.2	\$129.4	\$132.6	\$135.9	\$139.3	\$142.9	\$146.7	\$150.6	\$154.8	\$158.9	\$163.2	\$167.6
Employment	407	470	711	1,090	1,131	1,154	1,161	1,165	1,167	1,173	1,178	1,185	1,195	1,205	1,218	1,231	1,246	1,260	1,276	1,292

APPENDIX B: Fiscal Impacts - 20 Years (In Millions 2012 USD)

Escambia County	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenue	\$0.9	\$2.2	\$4.0	\$6.1	\$6.3	\$6.6	\$6.8	\$7.1	\$7.3	\$7.5	\$7.7	\$7.9	\$8.1	\$8.3	\$8.5	\$8.7	\$8.9	\$9.1	\$9.3	\$9.4
Expenditures	(\$0.7)	(\$0.2)	\$0.0	\$0.3	\$1.6	\$2.8	\$4.0	\$5.0	\$5.9	\$6.7	\$7.4	\$8.1	\$8.7	\$9.2	\$9.6	\$10.1	\$10.5	\$10.9	\$11.2	\$11.5
Florida	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenue	\$1.0	\$2.4	\$4.2	\$6.4	\$6.8	\$7.1	\$7.4	\$7.7	\$8.0	\$8.2	\$8.5	\$8.8	\$9.0	\$9.3	\$9.5	\$9.8	\$10.0	\$10.2	\$10.5	\$10.7
Expenditures	(\$0.8)	(\$0.4)	(\$0.2)	(\$0.1)	\$1.3	\$2.6	\$3.8	\$5.0	\$6.0	\$6.9	\$7.8	\$8.5	\$9.2	\$9.8	\$10.4	\$10.9	\$11.3	\$11.8	\$12.2	\$12.6

ECONOMIC IMPACT ESTIMATES

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Just the Facts:

Economic Impact of 100 Jobs

May 2016

When an existing Kentucky business expands or a new business locates in the state, significant economic benefits ensue. With those new jobs come payroll dollars, increased demand for housing, goods and services, greater capital investment and a broader tax base all of which spreads throughout the economy. While each job added brings economic value to the state, that value varies by industry based on wages, skill level required, labor intensity, etc.

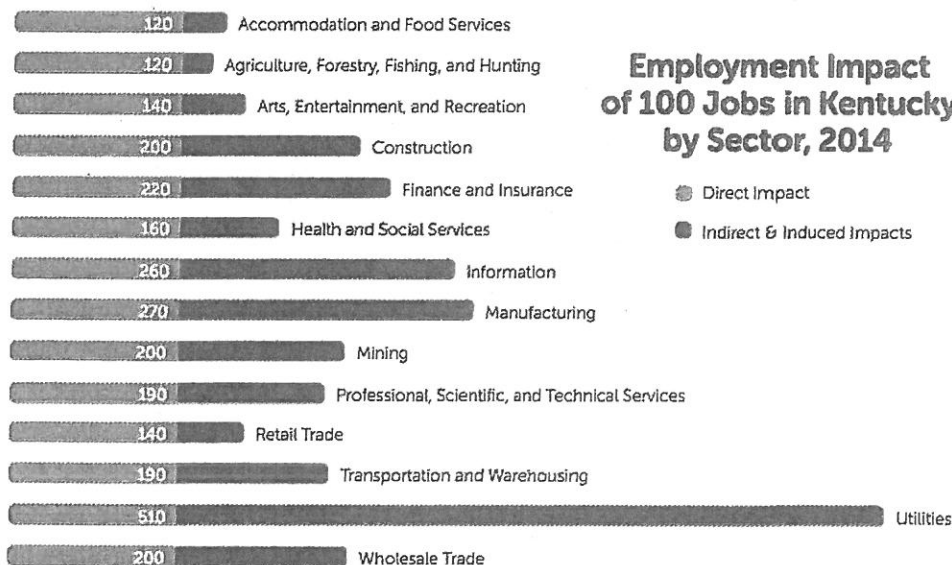
After an initial impact occurs, changes ripple through other sectors. For example, if a restaurant expands and adds 100 jobs, it is likely a result of increased sales at the restaurant. The restaurant will buy goods and services it needs from other businesses in order to serve customers. That is an indirect impact; indirect impacts also include the wages of the new employees at the restaurant. Those businesses, depending on the size of the impact, may also hire additional workers. When the employees at the restaurant and the supporting businesses buy goods and services for their households, this creates induced impacts. Combined, the direct, indirect and induced impacts are the total impact and measure the ripple effects of the initial change. Not all of these changes will

occur within Kentucky, there will be leakage as goods and services from outside the state will be purchased.

The additional jobs will grow the state economy which is measured as value added, similar to gross domestic product (GDP).

If 100 new jobs are added to the Kentucky economy in the utility sector, the ripple effect is

an additional 410 jobs in other sectors resulting in a total impact of 510 jobs. These jobs are located throughout all the other sectors of the state economy. Sectors with the lowest overall employment impact are typically those that are lower paying in service sectors such as retail, restaurants and hotels.



100 jobs

Economic impact modeling captures the direct impact of an employment expenditure on the economy.

The additional jobs will grow the state economy which is measured as value added, similar to gross domestic product (GDP). The table below provides the total value added (by sector) resulting from 100 additional jobs. For example, if 100 jobs were added to Kentucky's manufacturing sector, the total employment

impact is 270 jobs (170 jobs added in other sectors). In addition, the overall state economy will grow by \$27.1 million.

State and local governments will also benefit from additional jobs in the form of tax revenues, licenses, fees and fines. Major tax revenue

streams include corporate income, personal income, property and sales taxes. Licenses include motor vehicles, hunting, fishing, etc. The addition of 100 jobs to the retail sector will support 40 jobs in other parts of the economy and generate \$1 million in state and local taxes.

Economic Impact of Adding 100 New Jobs in Kentucky by Sector, 2014

Industrial Sector	Total Jobs	Total Value Added	Total State & Local Taxes*
Accommodation and Food Services	120	\$4,357,000	\$542,000
Agriculture, Forestry, Fishing and Hunting	120	\$3,339,000	\$159,000
Arts, Entertainment and Recreation	140	\$5,875,000	\$438,000
Construction	200	\$12,971,000	\$1,139,000
Finance and Insurance	220	\$17,233,000	\$1,420,000
Health and Social Services	160	\$9,794,000	\$664,000
Information	260	\$27,106,000	\$3,301,000
Manufacturing	270	\$27,117,000	\$2,764,000
Mining	200	\$45,237,000	\$3,525,000
Professional, Scientific and Technical Services	190	\$13,584,000	\$753,000
Retail Trade	140	\$7,393,000	\$1,000,000
Transportation and Warehousing	190	\$12,825,000	\$891,000
Utilities	510	\$86,466,000	\$12,200,000
Wholesale Trade	200	\$22,446,000	\$4,009,000

*Tax estimates include corporate, business and household taxes. They do not include local education taxes.

Note: Not comparable with previous years.

Source: The economic impacts estimates and conclusions resulting from this study have been derived from IMPLAN Group LLC 2013 matrixes and databases. Additional input data was provided by the United States Bureau of Labor Statistics, 2014 annual Quarterly Census of Employment and Wages and the United States Bureau of Economic Analysis.