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Economic Impact of the Expansion of the Virginia Museum of Fine Arts

The expansion of the Virginia Museum of Fine Arts (VMFA) will enhance its operations and draw more visitors to the museum. Expanded operations and incremental visitor spending will generate an annual economic impact of \$36.2 million that supports 371 jobs in Virginia.

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1. Executive Summary

Since 2005, the Virginia Museum of Fine Arts (VMFA) has undertaken a major expansion project worth \$150 million. The expansion will be complete in the spring of 2010. The VMFA expansion will generate a significant economic impact on the city of Richmond, Richmond metropolitan statistical area (MSA), and state of Virginia.¹ The estimated economic impacts of the VMFA expansion are summarized below:²

The impacts of the VMFA expansion on the state's economy span two broad categories.³

1. Expanded VMFA business operations that include additional revenue from increased ticket sales, gift and café sales, and parking sales.
2. Incremental visitor spending when VMFA visitors spend in the regional businesses outside of the museum facilities.

The expanded business operations of VMFA will generate an additional \$7.4 million in annual sales and directly employ 74 added workers for the museum in fiscal year (FY) 2010.

All business operations of the museum, such as exhibitions, parking, membership, education and outreach, food service, museum shops, and collection programs will experience increases in their operational capacities and revenue after the expansion.

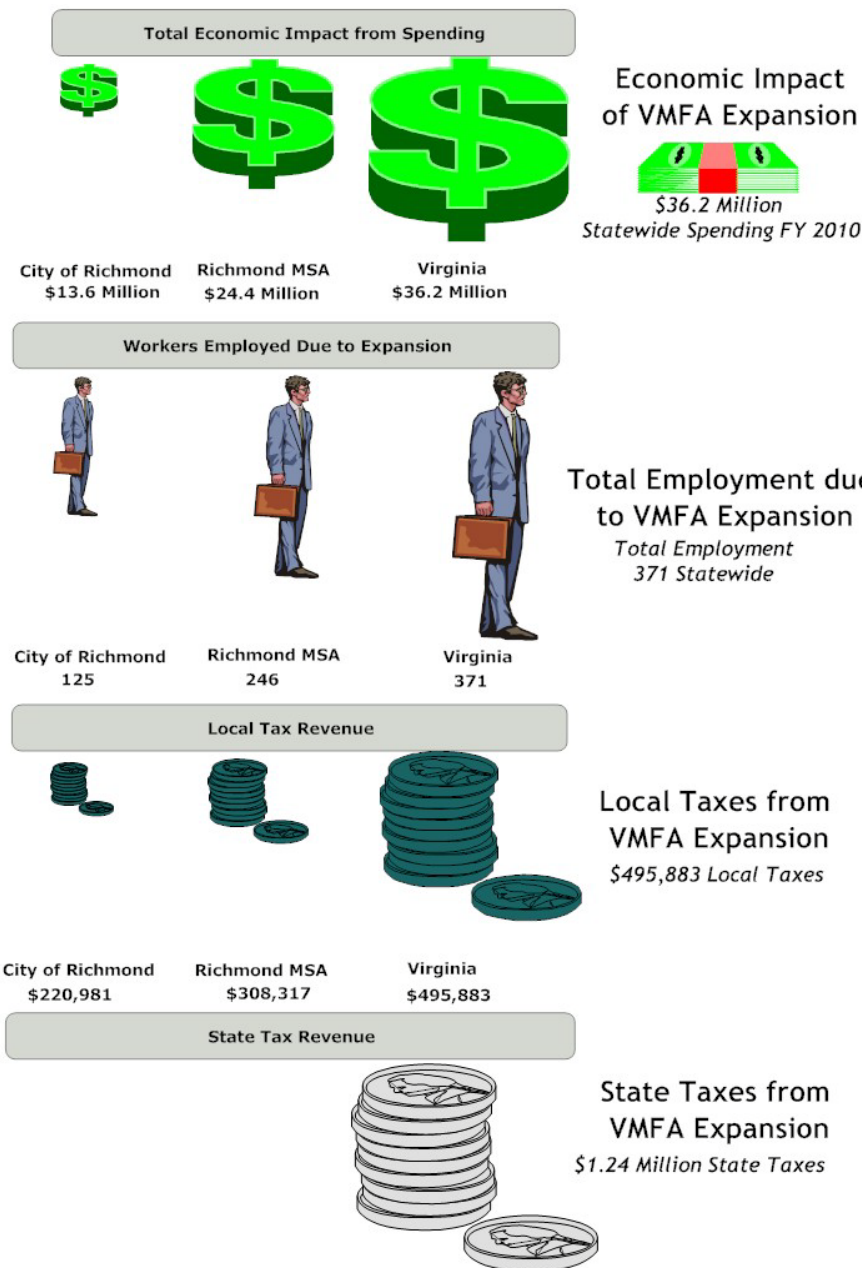
The direct and ripple impacts of VMFA expanded operations will result in \$10.7 million annual sales that support a total of 88 jobs in the city of Richmond in FY 2010.

The economic impacts of the expanded VMFA operations on the Richmond MSA and the state of Virginia are larger. It is estimated that the expanded operation can generate total impacts of \$12.4 million and 97 jobs in the Richmond MSA, and \$12.7 million and 100 jobs in Virginia.

¹ The economic impacts are measured for three study regions: city of Richmond, Richmond MSA, and state of Virginia. The Richmond MSA includes the following: cities of Richmond, Petersburg, Colonial Heights, and Hopewell; and counties of Henrico, Chesterfield, Amelia, Caroline, Charles City, Cumberland, Dinwiddie, Goochland, Hanover, King and Queen, King William, Louisa, New Kent, Powhatan, Prince George, and Sussex.

² The economic impact estimates in this report are for fiscal year 2010. The impact in future years should be of similar magnitude.

³ The economic impact of construction activities is outside the scope of this study.



After the expansion, VMFA is expected to draw 800,000 visitors per year to its Richmond headquarters and statewide programs.

After the expansion, VMFA expects 450,000 annual visitors to its Richmond headquarters and 350,000 visitors to its statewide programs. That is 543,000 more than its current level. In FY 2010, the additional visitors are expected to spend \$1.9 million in the city of Richmond, \$11.4 million in the Richmond MSA, and \$20.4 million in Virginia.⁴

Visitor spending and VMFA expanded operations can generate annual tax revenue of \$1.2 million for Virginia and \$220,981 for the city of Richmond in FY 2010.

For all local governments in the Richmond MSA, estimated tax revenue can reach \$308,317 in FY 2010. The estimated total tax revenue for local governments include local sales tax; meal tax; lodging tax; admission tax; and business, professional, and occupational licenses (BPOL). For the state government, estimated tax revenue includes sales tax, individual, and corporate income taxes.

⁴ These figures exclude visitor spending in museum shops and restaurants, as they are part of ongoing operation revenues.

Together, the expansion of the Virginia Museum of Fine Arts (VMFA) and the associated incremental visitor spending outside the museum operations will generate an annual economic impact of \$36.2 million that supports 371 jobs in Virginia.

A summary of the total economic impact from the expanded operations and the incremental visitor spending external to the operations of the museum is show below:

Summary of Economic Impact of VMFA Expansion: Expanded Operation and Incremental Visitor Spending (FY 2010)						
			Direct Impact	Total Impact	Local Tax Revenue	State Tax Revenue
Expanded Operations	City of Richmond	Spending	\$7.2 Million	\$10.7 Million	\$104,432	
		Employment	74	88		
	Richmond MSA	Spending	\$7.2 Million	\$12.4 Million		
		Employment	74	97		
	State of Virginia	Spending	\$7.2 Million	\$12.7 Million		\$359,089
		Employment	273	371		
Incremental Visitor Spending	City of Richmond	Spending	\$2.0 Million	\$2.9 Million	\$116,549	
		Employment	105	125		
	Richmond MSA	Spending	\$6.9 Million	\$12.0 Million	\$308,317	
		Employment	185	246		
	State of Virginia	Spending	\$13.3 Million	\$23.5 Million	\$495,883	\$882,216
		Employment	273	371		
Total VMFA Expansion Impact	City of Richmond	Spending	\$9.2 Million	\$13.6 Million	\$220,981	
		Employment	105	125		
	Richmond MSA	Spending	\$14.2 Million	\$24.4 Million	\$308,317	
		Employment	185	246		
	State of Virginia	Spending	\$20.6 Million	\$36.2 Million	\$495,883	\$1,241,305
		Employment	273	371		
Note: Numbers may not sum due to rounding						
Source: Chmura Economics & Analytics						

The VMFA expansion will provide additional benefits to the region. VMFA enhances the quality of life in Richmond and Virginia, which attracts businesses and helps them attract and retain their workforce.

2. Background

Since 2005, the Virginia Museum of Fine Arts (VMFA) has undertaken a major expansion that is expected to be completed in the spring of 2010. The \$150 million expansion project will significantly enlarge museum space and improve its accessibility. The expansion will achieve a 50% increase (38,500 square feet) in gallery space for permanent and loan exhibitions. The sculpture garden will increase by 300% while general use space on the museum campus will increase by 45% (99,800 square feet). A new parking facility for 600 cars opened in April 2007.

In 2004, before the expansion commenced, VMFA contracted Chmura Economics & Analytics (Chmura) to conduct an economic impact study for the planned expansion. The 2004 Chmura study concluded

that “the expansion at the Virginia Museum of Fine Arts (VMFA) will have a significant impact on the local economy.” The study estimated that there would be \$5.5 million in direct ongoing revenue from the VMFA expansion. For the city of Richmond, the total economic impacts would be \$6.9 million and support 122 jobs per year. The total economic impacts for the Richmond metro area were estimated to be \$8.0 million and 154 jobs. The statewide impact was expected to be slightly higher with total spending effects of \$8.5 million, which would support 160 positions per year.

The 2004 Chmura study was based on the VMFA visitor and staffing projections at that time. Since then, VMFA has refined its business plan with new projections of visitor volume and staffing requirements. As a result, it is necessary to update the study. Chmura was contracted to provide an updated estimate of the economic impacts of VMFA expansion.

The remainder of the report is organized as follows:

- Section 3 outlines the methodology used to analyze the economic impacts,
- Section 4 provides a summary of the VMFA expansion and projected incremental revenue and staff after the expansion,
- Section 5 analyzes the economic impact of the VMFA expanded operations,
- Section 6 analyzes the economic impact of incremental visitor spending,
- Section 7 outlines tax revenue for local and state governments from VMFA expanded operations and increased visitor spending, and
- Section 8 delivers a summary.

3. Methodology

This study estimates the economic impacts of the VMFA expansion, which represents the incremental impacts beyond current operations and visitor spending. The economic impacts of the VMFA expansion come from the following two sources:

1. The expanded VMFA operation. After the expansion is complete, all areas of museum operations, including exhibition, membership, food service, and museum shops will experience an increase in sales and employment.
2. The expanded museum is expected to draw more visitors to VMFA, which would generate economic benefits to the regional economy as a result of incremental visitor spending outside of the museum.

The two components above constitute the direct economic impact of the VMFA expansion on the study regions (city of Richmond, Richmond MSA, and the state of Virginia). While all operational revenue of VMFA are expected to occur in the city of Richmond, visitor spending related to VMFA can occur in other parts of the Richmond MSA and the state.

After the expansion is complete, the museum headquartered in Richmond is expected to attract 450,000 visitors per year.⁵ All the incremental spending is expected to occur in the Richmond MSA, but not necessarily in the city of Richmond. Based on the size of the tourism industries of all localities in the Richmond MSA, it is estimated that 28% of the spending will occur in the city of Richmond, with the remainder occurring in other localities in the Richmond MSA.⁶ In addition, the museum is expected to attract 350,000 visitors to its travelling programs around the state annually. All incremental visitor spending from the stateside travelling programs is assumed to occur outside the Richmond MSA but within the state of Virginia.

The total economic impacts also include the economic ripple effects from the direct impacts. Ripple effects, categorized as indirect and induced (see the Appendix for definitions), measure the secondary benefits generated by VMFA expanded operations and incremental visitor spending. These effects include the benefits for the many local businesses supporting VMFA operations, such as suppliers for museum cafes and gift shops. They also include benefits for local businesses that cater to museum staff members.

The indirect and induced effects are estimated with IMPLAN Pro⁷ software after the direct impacts are determined. Different business operation and visitor spending items are input into IMPLAN model sectors to estimate the indirect and induced impacts for each sector. Those impacts are eventually

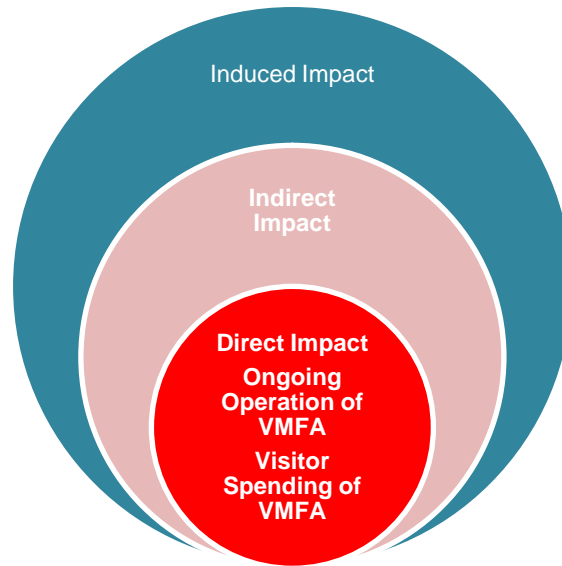
⁵ Source: VMFA Business Plan.

⁶ It is estimated that 32% and 18% spending occur in Henrico and Chesterfield. Source: Virginia Tourism Corporation.

⁷ *IMPLAN Professional* is an economic impact assessment modeling system developed by Minnesota IMPLAN Group that is often used by economists to build models that estimate the impact of economic changes on local economies.

aggregated to reach the estimates of the overall economic impacts of the VMFA expansion. Figure 3.1 illustrates the economic impact framework.

Figure 3.1: Economic Impact Analysis Framework



This study also estimates the fiscal benefit of the VMFA expansion to local and state governments. Tax rates of the city are used to estimate fiscal impacts of the expanded operation because operations revenue occur fully in the city of Richmond. For visitor spending, tax rates of different regions are applied to spending items in those regions. For visitor spending occurred in the Richmond MSA, the average MSA tax rates are used to estimate tax benefits to local governments. For visitor spending that occurred in the state, the average tax rate for all localities in the state is used to estimate tax benefits of local governments in the state.



4. VMFA Expanded Operations

VMFA has undertaken a major expansion since 2005 that is to be completed for a grand opening on May 1, 2010. The expansion will achieve a 50% increase (38,500 square feet) for gallery space for permanent and loan exhibitions. The sculpture garden will increase by 300% while general use space on campus will increase by 45% (99,800 square feet). A new parking facility for 600 cars opened in April 2007.

The ongoing operation of VMFA includes diversified business functions with multiple revenue streams, each having different linkages and impacts on the regional economies. After the expansion is complete, it is expected that all operational areas of the museum will expand in size to accommodate increased exhibitions and visitors. Based on the VMFA Business Plan,⁸ the following business units are impacted:

- **Exhibitions.** The museum's permanent galleries are free, but there is an admission charge for special exhibitions. After the expansion, the museum's exhibition department will offer up to 10 special exhibitions per year with an estimated average attendance of 200,000 paying customers for FY 2010 to 2016. The average ticket price is expected to be \$6.00. The annual additional revenue from special exhibitions is estimated to be \$1.2 million. One additional full-time equivalent (FTE) position is needed.
- **Accessibility.** This area focuses on making the museum and its resources more accessible to the public. After the expansion, the new parking deck is expected to generate \$82,000 in annual fees. Eleven new FTEs and 3 wage employees are needed to work in the parking deck and in visitor services to improve accessibility.
- **Membership.** Membership levels of the museum fluctuated over the past several years. The membership office targets an increase of more than 50% in membership within a year of the expansion completion. That translates into 16,000 total members with \$750,000 added revenue. Two new FTEs are needed to support expanded membership service.
- **Education and Outreach.** VMFA's education and outreach program offers a wide range of programs including travel exhibitions, lectures, and studio art classes, among others. The goal is to achieve a total statewide attendance of 350,000 per year. This program is expected to generate additional revenue of \$326,000 per year and six new FTE employees will be hired.
- **Food Service and Special Events.** After the expansion is complete, the museum will operate two restaurants. The museum is also expected to expand its special events bookings to include parties, wedding receptions, and private meetings. In addition, the museum will expand its music programs, including popular events such as Art After Hours. Those initiatives will bring in additional revenue of \$2,577,000 per year. The operation is expected to hire one 49 full and part-time employees.
- **Museum Shop and Product Development.** After the expansion, the Museum Shop will occupy a larger store in the new atrium and will increase its sales significantly. The total sales are

⁸ Source: VMFA Business Plan.

expected to increase by \$1,862,000 per year. Product development handles license agreements of VMFA—its revenue is expected to increase by \$288,000 per year.

- Collection-Based Programs.** Collection-based programs include the VMFA library, photographic resources, and publications. These programs are projected to experience only modest growth after the expansion. They are expected to add annual sales of \$157,000, with no new employees.

In summary, it is estimated that the VMFA will add \$7.4 million revenue in FY 2010 because of the expansion. The total number employed by the museum will increase by 74, including salaried and hourly workers. (See Table 4.1.)

Table 4.1: Annual Expanded Museum Operations (FY 2010)		
Operations Area	Revenue	Employment
Exhibitions	\$1,200,000	1
Accessibility (including parking)	\$82,000	15
Membership	\$750,000	2
Education and Outreach	\$326,000	6
Food Service and Special Events	\$2,304,000	49
Museum Shop and Product Development	\$2,423,000	1
Collection Program (library, photo, publication)	\$157,000	0
Total	\$7,242,000	74
Source: VMFA		



5. Economic Impact of Expanded Operations

The expanded museum operations, with its diversified business functions and multiple revenue streams, will also benefit other businesses in the city of Richmond, Richmond MSA, and the state. Those impacts are classified as indirect and induced impacts. Using a museum restaurant as an example, the indirect impact measures the increased sales to businesses that supply museum restaurants, such as local food stores and bakeries. An indirect impact measures the increased sales for businesses that cater to the staff working in the museum restaurants, such as local retail shops and restaurants. Since each business operation unit of the VMFA (such as food services and museums shops) have different linkages with the regional economy, Chmura first estimates the indirect and induced impacts of each operation, before aggregating them to get the overall impacts of the expanded museum operation.

The total annual economic impacts of the expanded operation, on the city, the MSA, and the Commonwealth are summarized in Table 5.1. Using the economic impact on the city of Richmond as an example, the total annual economic impacts (direct and ripple) of the expanded operation are estimated to be \$10.7 million in FY 2010, which can support 88 new jobs in the city. Among those, \$7.4 million belong to the direct incremental revenue of the museum operations, including ticket sales, food sales, and museum shop sales. Indirect impacts are estimated to be \$2.2 million and 7 jobs, benefiting other businesses within the city that support the VMFA operations. Induced impacts are estimated to be \$1.3 million and 7 jobs in the city for FY 2010, mostly benefiting consumer-related business in the city such a retail shops and restaurants.

Table 5.1: Annual Economic Impact of Expanded VMFA Operations (FY 2010)

		Direct	Indirect	Induced	Total
City of Richmond	Spending (\$ Million)	\$7.2	\$2.2	\$1.3	\$10.7
	Employment	74	7	7	88
Richmond MSA	Spending (\$ Million)	\$7.2	\$2.6	\$2.6	\$12.4
	Employment	74	9	15	97
State of Virginia	Spending (\$ Million)	\$7.2	\$2.8	\$2.7	\$12.7
	Employment	74	9	16	100

Source: Chmura Economics & Analytics and IMPLAN Pro 2008

The economic impacts of the expanded VMFA operations on Richmond MSA and Virginia are larger than that on the city, as more businesses outside the city limit also benefit from VMFA expanded operations. It is estimated that the expanded operation can generate total impacts of \$12.4 million and 97 jobs in the Richmond MSA, and \$12.7 million in sales that supports 100 jobs in the Commonwealth.

6. Economic Impact of Incremental Visitor Spending

After the VMFA expansion is complete, it is expected to draw a much larger number of visitors, both to its Richmond headquarters, and to its travelling programs around the state. As a tourism attraction, a large part of the economic impact of the VMFA on the region comes from visitors who spend money outside the museum while attending the museum exhibits and activities. This section details the direct spending and the ripple economic impacts of visitor spending. Impacts estimated in this section exclude visitors spending at the museum to avoid double counting, as those have been estimated in Section 5.

The latest attendance figures show that in FY 2006, museum attendance in Richmond was 167,206 while statewide total attendance was 256,949.⁹ The expansion is expected to significantly increase the museum attendance. From FY 2010 to 2016, VFMA is expected to serve an average 450,000 visitors each year at the museum headquarters in Richmond, and an average of 350,000 visitors at partner sites throughout Virginia.¹⁰ As a result, the expansion could bring additional 282,794 visitors to its Richmond location and 260,257 in other sites around state.

The additional people who are expected to visit the expanded museum will spend money at local business establishments such as retail shops and restaurants. Overnight visitors will also spend on lodging in the Richmond area. To estimate the economic impacts of visitor spending, one important assumption is the average spending per visitor. An April 1997 study described visitors to VMFA during its Faberge exhibition.¹¹ The study found that 42.8% of the visitors were non-Richmond MSA residents who came to Richmond for the purpose of viewing the exhibit. The remainder were residents from the Richmond region or out-of-region visitors who came to town primarily for other purposes. The spending of that second group of visitors is not included in this study to be conservative. Of all visitors, approximately 9.1% of total respondents stayed overnight in a hotel, motel, or bed and breakfast. A larger percentage of survey respondents (33.7%) stayed with friends and family or were day-trippers.

The survey respondents reported their expenditures on food, lodging, entertainment, and shopping. The study found that the average overnight out-of-region visitor spent \$172.40, and daytrip out-of-region visitors spent an average of \$40.70 for an average spending of \$29.40 per day for all visitors.¹² Those spending figures are adjusted to 2010 dollars using the consumer price index (CPI), to account for the effects of inflation on the price of goods and services. After the adjustment, it is estimated that the average visitor (including both out-of-region and local residents) to VMFA would spend \$41 dollars per person. Excluding their spending in restaurants and shops within the museum (valued at \$16.7 per

⁹ Source: VMFA Business Plan. The museum also provided attendance data for FY 2009 and FY 2008. FY 2009 data are incomplete as it includes months where the museum closed for expansion. FY 2008 data do not have statewide attendance figures.

¹⁰ Source: VMFA Business Plan.

¹¹ This is the most recent museum visitor study available. The Chmura 2004 impact study used the same survey. Figures in this survey were inflation-adjusted to estimate 2010 value.

¹² Out of region visitors represent 42.8% of the total with in-region visitors representing the remainder.

person), the average VMFA visitors would spend an additional \$24.5 per person in the region (Table 6.1).¹³

Table 6.1: Direct Annual Spending Resulting from Visitors (FY 2010)

Direct Spending Category	Average Spending per Visitor	Spending in Richmond City	Spending in Richmond MSA	Spending Statewide
Food	\$6.1	\$491,656	\$1,728,385	\$3,319,027
Shopping	\$8.2	\$662,309	\$2,328,304	\$4,471,056
Lodging	\$9.0	\$725,473	\$2,550,356	\$4,897,463
Recreation	\$1.1	\$92,262	\$324,342	\$622,835
Total	\$24.5	\$1,971,700	\$6,931,386	\$13,310,382

Source: VMFA

For the VMFA Richmond location, the increased visitor volume is estimated to be 282,794. The additional visitors are expected to add \$6.9 million annual spending to the Richmond MSA outside the VMFA facilities.¹⁴ It is likely that some spending will occur in localities outside the city of Richmond, especially Henrico and Chesterfield, as visitors may choose to stay and dine outside of the city. A Virginia Tourism Corporation report estimated that the city of Richmond accounts for 28% of total tourism expenditures in the metropolitan area.¹⁵ Using this percentage, Chmura allocates \$2.0 million of the increased visitor spending in Richmond, while total spending in the Richmond MSA is \$6.9 million (inclusive of the city). Total visitor spending in Virginia includes not only the visitors to Richmond headquarters, but 260,257 additional visitors to VMFA statewide programs. The statewide incremental spending is estimated to be \$13.3 million per year.

The total annual economic impacts of incremental visitor spending, on the city, the MSA, and the state are summarized in Table 6.1. Using the economic impact on the city of Richmond as an example, the total annual economic impact (direct, indirect, and induced) of incremental visitor spending is estimated to be \$2.9 million in FY 2010, which can support 37 jobs in the city of Richmond outside of the VMFA. Among those, \$2.0 million are associated with direct incremental spending at city restaurants, shops, and hotels that cater to museum visitors. Indirect impacts are estimated to be \$0.6 million and 4 jobs, benefiting other businesses within the city that support the tourism industry. Induced Impacts are estimated to be \$0.3 million and 3 jobs per year, serving the workers of those employed in the city's tourism industry.

¹³ As a reference, a report by the Virginia Tourism Corporation estimates that the average leisure traveler to Virginia spent \$48 per person per day from 2007 to 2009. <http://www.vatc.org/research/visitation.asp>.

¹⁴ As with the 2004 study, it is assumed that all visitor spending at Richmond location will occur in the Richmond MSA.

¹⁵ Source: VTC website at <http://www.vatc.org/research/economicimpact.asp>.

Table 6.2: Annual Economic Impact of Increased Visitor Spending (FY 2010)					
		Direct	Indirect	Induced	Total
City of Richmond	Spending (\$Million)	\$2.0	\$0.6	\$0.3	\$2.9
	Employment	31	4	3	37
Richmond MSA	Spending (\$Million)	\$6.9	\$2.3	\$2.7	\$12.0
	Employment	111	16	21	149
State of Virginia	Spending (\$Million)	\$13.3	\$4.9	\$5.2	\$23.5
	Employment	199	31	41	271
Source: Chmura Economics & Analytics and IMPLAN Pro 2008					

The economic impacts of the incremental visitor spending on the Richmond MSA and the state of Virginia are larger than that on the city of Richmond, as more businesses outside the city limit also benefit from increased visitors to VMFA. It is estimated that the incremental visitor spending can generate total annual impacts of \$12.0 million and 149 jobs in the Richmond MSA, and \$23.5 million in sales that support 271 jobs for the Commonwealth.



7. Fiscal Impacts of the VMFA Expansion

In addition to injecting millions of spending dollars and creating hundreds of jobs in the city, the metro area and the state, the VMFA expansion will also generate significant revenue for state and local governments due to expanded business operations and incremental visitor spending. For this study, only taxes from the direct impacts are estimated.

Chmura estimates the following five major taxes for local governments: sales tax; lodging tax; meal tax; admission tax; and business, professional, and occupational licenses (BPOL) tax. On the state level, major tax revenue comes from sales, corporate, and individual income taxes.

7.1. Fiscal Impacts from VMFA Expanded Operation

The expanded operations will contribute to the state and local governments in the form of tax revenue. VMFA is headquartered in the city of Richmond, and local taxes from its expanded operations will benefit only the city. Since VMFA is an agency of the Commonwealth of Virginia, the museum is exempt from property taxes.¹⁶ Moreover, because the museum does not charge admission, the local tax revenue from the expanded operation will result from increased sales in museum shops and restaurants in the form of sales, and meal taxes. For state government, sales tax and individual income taxes are the main sources of tax revenue because the museum is exempt from corporate income tax.

Both state and city governments benefit from sales tax revenue at the museum shops and restaurants. Virginia has a 5% sales tax rate with 4% going to state government and 1% to local government. Based on incremental operations revenue of food services and museum shops, it is estimated that city and state governments can receive \$47,270 and \$189,080 in sales tax in FY 2010 (Table 7.1).

Table 7.1: Annual Tax Revenue from Expanded Operations (FY 2010)		
	City of Richmond Government	State Government
Sales Tax	\$47,270	\$189,080
Meal Tax	\$57,162	
Income Tax-Individual		\$170,009
Total	\$104,432	\$359,089
Source: Chmura Economics & Analytics		

The city of Richmond has a 6% meal tax, which is applied to the total sales of food services. The annual tax revenue is estimated to be \$57,162 in FY 2010, benefiting the city of Richmond.

For state government, individual income taxes are estimated to be \$170,009 per year, based on estimated incremental payroll at the VMFA. Together, the expanded operations of VMFA will contribute

¹⁶ VMFA pays the city of Richmond a lump-sum fee each year in lieu of taxes.

\$104,432 in annual tax revenue to the city of Richmond and \$359,089 to the state government for FY 2010.

7.2. Fiscal Impacts from Incremental Visitor Spending

The incremental visitor spending, which occurs outside of the museum, will also generate significant tax revenue for state and local governments. Unlike VMFA operations, where all local tax revenue goes to the city of Richmond, visitor spending taxes directly benefit the locality in which the spending occurs in the Richmond MSA and around the state.

To calculate sales tax revenue for the state and local governments, Chmura applied the sales tax rates for retail, food services, and lodging sales. Incremental visitor spending generates \$18,794 annually in sales tax for the city of Richmond, \$38,339 for all local governments in the Richmond MSA, and \$126,875 for all local governments in the state. Finally, state government is expected to receive \$507,502 in sales tax revenue in FY 2010.

	City of Richmond Government	Local Governments in Richmond MSA	Local Governments in Virginia	State of Virginia
Local Sales Tax	\$18,794	\$66,070	\$126,875	\$507,502
Meal Tax	\$29,499	\$38,339	\$85,631	
Lodging Tax	\$58,038	\$185,351	\$249,771	
Admission Tax	\$6,458	\$6,923	\$14,574	
BPOL	\$3,759	\$11,635	\$19,031	
Income Tax-Individual				\$279,135
Income Tax-Corporate				\$95,579
Total	\$116,549	\$308,317	\$495,883	\$882,216

Source: Chmura Economics & Analytics

The city of Richmond has a 6% meal tax. Incremental visitor spending in the city will result in \$29,499 meal tax revenue for FY 2010. Many of the large localities in the Richmond MSA, such as Henrico and Chesterfield Counties, do not charge meal taxes. However, Petersburg and Hopewell have meal taxes. The average meal tax rate for the Richmond MSA is estimated to be 2.2%. As result, the total meal tax revenue for local governments in the Richmond MSA is estimated to be \$39,339 in FY 2010. Statewide, the average meal tax is 2.6%, and total meal taxes for all local governments are \$86,631 in FY 2010.

The city of Richmond has an 8% lodging tax. Incremental visitor spending in the city will result in \$58,038 lodging tax revenue in FY 2010. Other large localities in the Richmond MSA, such as Henrico and Chesterfield Counties, also have 8% lodging tax. The average lodging tax rate for the Richmond MSA is estimated to be 7.3%. As a result, the total lodging tax revenue for local governments the in Richmond MSA is estimated to be \$185,351 in FY 2010. Statewide, the average lodging tax rate is 5.1%, and total lodging taxes for all local governments in state are \$249,711 in FY 2010.

The city of Richmond has a 7% admission tax. Though the museum does not collect admission taxes, museum visitors may attend other entertainment events while they are in town, where those taxes are collected which could create additional admission taxes for the city. Incremental visitor spending in the city will result in \$6,458 admission tax revenue in FY 2010. The average admission tax rate for the Richmond MSA is estimated to be 2.1%. As a result, total admission tax revenue for all local governments in the Richmond MSA are estimated to be \$6,923 in FY 2010. Statewide, the average admission tax rate is 2.3%, and total admission taxes for all local governments in the state are \$14,574 in FY 2010.

BPOL taxes were estimated in a similar fashion. BPOL tax rates differ by type of businesses and locality. Chmura first calculated average BPOL taxes for retail, professional, and personal businesses for the Richmond MSA, and the state. Chmura then applies different BPOL tax rates for retail, professional, and personal services to visitor spending in those three study regions. The annual BPOL tax revenue from incremental visitor spending is estimated to be \$3,759 for the city of Richmond, \$11,635 for local governments in the Richmond MSA, and \$19,031 for all local governments in Virginia.

The state government also benefit from increased individual income taxes as a result of new jobs created by incremental visitor spending. The annual individual income taxes are estimated to be \$279,135 for FY 2010. In addition, corporate income taxes for state governments are estimated to be \$95,579 for FY 2010.

Together, the incremental visitor spending will contribute \$116,549 in annual tax revenue to the city of Richmond, \$308,317 per year for local governments in the Richmond MSA, \$495,883 for all local governments in Virginia, and \$882,216 for state government for FY 2010.

8. Summary

VMFA expansion will generate significant impacts in the Richmond and state economy. The annual economic impacts are estimated to be \$13.6 million in spending that supports 125 jobs in the city of Richmond, \$24.4 million in sales that supports 246 jobs in Richmond MSA, and \$36.2 million in sales that supports 371 jobs in the state of Virginia. Some of the economic impact results from increased operational capacity after the expansion, and some come from significant increases in visitors to VMFA, both at its Richmond headquarters and its statewide programs.

Table 8.1: Summary of Economic Impact of VMFA Expansion: Expanded Operation and Incremental Visitor Spending (FY 2010)

		Direct Impact	Total Impact	Local Tax Revenue	State Tax Revenue
City of Richmond	Spending	\$9.2 Million	\$13.6 Million	\$220,981	
	Employment	105	125		
Richmond MSA	Spending	\$14.2 Million	\$24.4 Million	\$308,317	
	Employment	185	246		
State of Virginia	Spending	\$20.6 Million	\$36.2 Million	\$495,883	\$1,241,305
	Employment	273	371		

Source: Chmura Economics & Analytics

Local and state governments also receive significant tax revenue as a result of VMFA expansion. It is estimated that the VMFA expansion (including operations and visitor spending) will generate annual tax revenue of \$220,981 for city of Richmond government, \$308,317 for all local governments in Richmond MSA, and \$495,883 for local governments in Virginia. The State of Virginia can also benefit from the VMFA expansion, in the form of \$1.2 million tax revenue.

An economic impact analysis of the museum expansion captures only the quantifiable impacts. While the dollar impact is quite substantial, there is not a good way to measure the impacts of the VMFA expansion on increased quality of life to the residents in the Richmond metro area. The VMFA expansion, along with the recently completed Center Stage Performing Arts center, greatly enhances the arts and cultural asset for the city of Richmond. Those cultural assets will aid the metro area in attracting and retaining a well-educated workforce as well as expanding and relocating businesses.

Appendix 1: Glossary

IMPLAN Professional is an economic impact assessment modeling system. It allows the user to build economic models to estimate the impacts of economic changes in states, counties, or communities. It was created in the 1970s by the Forestry Service and is widely used by economists to estimate the impact of specific events on the overall economy.

Input-Out Analysis—an examination of business-business and business-consumer economic relationships capturing all monetary transactions in a given period, allowing one to calculate the effects of a change in an economic activity on the entire economy (impact analysis).

Direct Impact—economic activity generated by a project or operation. For construction, this represents activity of the contractor; for operations, this represents activity by tenants of the property.

Overhead—construction inputs not provided by the contractor.

Indirect Impact—secondary economic activity that is generated by a project or operation. An example might be a new office building generating demand for parking garages.

Induced (Household) Impact—economic activity generated by household income resulting from direct and indirect impacts.

Multiplier—the cumulative impacts of a unit change in economic activity on the entire economy.

