The Economic and Fiscal Impact of The Proposed Corcoran Gallery Expansion On the District of Columbia

Prepared for the Corcoran Gallery of Art

By

Stephen S. Fuller, Ph.D.

Dwight Shar Faculty Chair and University Professor
Director of the Center for Regional Analysis
George Mason University

January 2004

The Economic and Fiscal Impact of the Corcoran Gallery Expansion on the District of Columbia

Executive Summary

Arts and culture have been shown to be a significant component of the District of Columbia's hospitality industry and is the segment that has the greatest long-term growth potential due to changing demographic and income patterns and the growing stature of Washington, DC as a world-class center for the arts. The Corcoran Gallery of Art is the oldest art museum in the City and operates the City's only College of Art and Design. Its extensive collection of American Art is recognized as one of the best in the world however its constrained gallery capacity limits its exhibits to only 10 percent of the collection. Still, the Gallery is a major visitor attraction and source of economic activity in combination with the City's other museums and cultural facilities.

The proposed Corcoran Gallery addition, designed by the acclaimed architect Frank Gehry, and the renovation of the existing historic building will double the Gallery's exhibit space, expand the capacity of the College to 750 full-time students, add a children's center and gallery, and increase the public spaces for receptions and special events and retail and restaurant services. Most significantly, the design of the proposed addition will establish the Corcoran Gallery of Art as an architectural and cultural destination, increasing its single-purpose and repeat visitor base and substantially enlarging its capacity to support special exhibits and accommodate a growing volume of visitors. With the completion of the expansion and renovation, the Corcoran Gallery will expand and solidify its worldwide reputation and will become one of the most visible "must see" destinations in the City.

The economic and fiscal benefits that will accrue to the District of Columbia as a result of the Corcoran Gallery's expansion will be significant as summarized below and in the accompanying table.

- Direct spending associated with the proposed expansion and renovation of the Gallery will total \$160.5 million;
- This construction spending will add a total of \$206 million to the City's economy, support 411 jobs and generate \$16.5 million in new personal earnings for District residents over the construction period;
- The economic activity in the District generated by this construction spending will generate \$1.7 million in one-time tax benefits;
- With the re-opening of the Corcoran Gallery of Art following completion of the proposed expansion and renovation, its increased capacity for exhibits and enrollment in the College and its newly acquired "must see" architectural status will increase its economic benefits to the District by more than 150 percent;

- The increased spending generated directly and indirectly as a result of the Gallery's expansion will add at least \$69 million net annually to the City's economy, support a total of 360 new jobs and generate net new personal earnings of \$7.9 million to the benefit of District residents; and,
- This increased economic activity in the District will have important fiscal benefits with revenues from major tax sources attributable to the Gallery's direct and indirect spending totaling \$5.4 million annually for a gain of 350 percent over pre-Gallery expansion tax revenues.

The Corcoran Gallery of Art has been shown to be an important source of economic and fiscal benefits for the District of Columbia. With the completion of the proposed Frank Gehry addition, these economic and fiscal benefits will experience a disproportional gain as a result of the Gallery's physical expansion that will double its exhibit and educational spaces in combination with its achieving world-wide architectural recognition. As one of the "must see" attractions in the District of Columbia, the Corcoran Gallery will become a visitor destination enabling it to attract visitors to the District that would not have otherwise come or to extend their stay, thus generating net new economic and fiscal benefits essential to growing the hospitality industry and strengthening the District's economic base. The rolled-up net fiscal value (current year) of the expanded Corcoran Gallery of Art to the District of Columbia respectively over ten, twenty and thirty years is conservatively projected to total \$46.2, \$102.5 and \$171.1 million.

Summary of Economic and Fiscal Benefits Associated with the Proposed Expansion of the Corcoran Gallery of Art (in millions of 2003 \$s)

Benefits	2003	Post-Construction	Net Change
Direct Outlays	\$31.7	\$83.8	\$52.1
Total Output (1)	\$43.5	\$112.4	\$68.9
Personal Earnings (2)	\$5.1	\$13.0	\$7.9
Jobs Supported (3)	208	568	360
Tax Revenues	\$1.18	\$5.40	\$4.22
Rolled-Up Revenues*			
10 years (4)	\$12.9	\$59.1	\$46.2
20 years (4)	\$28.5	\$131.0	\$102.5
30 years (4)	\$47.2	\$218.3	\$171.1

Sources: Tables 1-5; GMU Center for Regional Analysis (1) contribution to District's gross state product; (2) salary and wage income to District residents; (3) jobs in the District; (4) accumulated tax revenues over 10, 20 and 30-year period assuming no change in rates or spending patterns, expressed in current dollars reflecting a 2.0% rate of inflation. *Excludes \$1.7 million in new tax revenues generated during the construction period.

The Economic and Fiscal Impact of the Corcoran Gallery Expansion on the District of Columbia

Introduction

The hospitality industry has widely been recognized as the second most important sector in the District of Columbia economy (after the federal government) accounting for an estimated 10 percent of the City's \$65 billion gross state product (GSP). While the hospitality sector is composed of widely diverse attractions and consists of both business and leisure visitors, arts and culture accounts for a large and growing portion of the industry and has the added dimension of attracting the greatest number of repeat visitors from the leisure travel market.

A 200l study entitled "Economic Impact of the Arts and Culture in Greater Washington" reported that arts and culture generated direct outlays in 2000 totaling \$1.24 billion in the close-in Washington metropolitan area with the District of Columbia capturing 80 percent of this spending. The \$1.14 billion in direct spending associated with arts and culture in the District represented a contribution of \$1.5 billion to the District's overall economic activity (GSP) and supported 23,075 full-time equivalent jobs and generated personal earnings in the District totaling \$829.2 million. These arts and culture activities in the District of Columbia, and their indirect and induced spending, were estimated to have generated tax revenues totaling \$110.5 million in FY 2000.

The hospitality industry is one of the District's most important core industries and its gorwth is key to the District's long-term economic health. While all of this industry's component parts are important, art and culture facilities have the greatest growth potential as visitor attractions. Arts and culture attractions can extend the length of an out-of-town visitor's stay, as the more attractions there are the longer it takes to visit them, and they can attract repeat visitors not only over many years but also within a single year, as art and culture attractions regularly rotate programs and exhibits.

Additionally, the arts and culture segment of the hospitality industry has the advantage of being able to build from the largest single attraction existing in any competitive market—the Smithsonian Institution. The attractive power of the Smithsonian Institution is unquestioned and it continues to grow with the opening of the Air and Space Museum Annex at Dulles in December 2003 and the planned opening of the Museum of the American Indian on the Mall in September 2004. The hospitality industry has recently received a major boost with the opening of the new convention center and will further benefit significantly with the dedication of the National World War II Memorial in May. Other important additions are in the planning stages or are already under construction. An addition to the Phillips Collection, the renovation and expansion of the Arena Stage and new Shakespeare Theatre, and the recent Congressional authorization of the African-American Museum illustrate the potential of arts and culture as a driving force in the future economic growth of the District of Columbia.

The proposed Frank Gehry addition to and renovation of the Corcoran Gallery of Art represents a further strengthening of the arts and culture component of the hospitality industry and has the potential to raise the City's image as a one of the most important centers for art in the world. Not only will the Frank Gehry addition to the Corcoran Gallery double its exhibit space and instructional capacity, it will create an architectural attraction in the District unlike any in recent years that will generate additional visitation to the City and renewed interest locally and worldwide in revisiting Washington, D.C. to enjoy its many art and culture attractions. Based on the experiences of other cities that have benefited from major investments in the arts, it is clear that such investments can serve as catalysts that enlarge the visitor base attracted to these cities and generate benefits that are widely distributed within the host economy.

The objective of this analysis is to document the magnitude of the economic and fiscal benefits that are currently being generated by the presence of the Corcoran Gallery of Art in the District of Columbia and to estimate the increases that will occur in the value of these benefits and that will accrue to the District of Columbia as a result of the construction of the proposed Frank Gehry addition and Gallery renovations. This analysis will consider the changes in Gallery spending associated with the proposed expansion including impacts on its ability to host special exhibits, expand its educational programs, and support on-site retail and restaurant services and special events. Additionally, the impacts of the proposed expansion on visitation to the Gallery and the impacts that these additional visitors will have on the District's economy will be calculated.

These benefits will be expressed in terms of direct and indirect contributions to the District's economy (GSP), the jobs that this increased spending will support in the District, and the personal income that will be generated to the benefit of District residents. Additionally, the tax revenue implications of the estimated increases in earnings by District residents, the increased spending by residents and visitors in the District for retail goods and services and in restaurants, and the changes in parking revenues and hotel occupancy will be calculated. As increases in District tax revenues will recur annually, their accumulated value over 10, 20 and 30 years will be calculated to provide a framework for determining the public benefit and fiscal return on this investment in the arts.

Calculating Economic and Fiscal Impact

The fundamental output of this economic and fiscal impact analysis will be the determination of the total dollar value of monetary flows to the economy and the treasury of the District of Columbia as a result of investing an estimated \$160.5 million in the addition to and renovation of the Corcoran Gallery of Art. Economic impacts will be measured in terms of direct outlays associated with the construction and operation of the Corcoran Gallery of Art and the spending of students and visitors it attracts to the District of Columbia.

The total economic impacts—output value, personal earnings and jobs— will reflect the combination of these direct outlays and their subsequent monetary effects as these funds are circulated through the District economy; that is, the re-spending of these direct outlays will generate additional economic activity that otherwise would not have occurred. The total value of these combined direct and indirect values can be estimated by the application of appropriate multipliers that have been calculated for the District of Columbia by the Bureau of Economic Analysis of the U.S. Department of Commerce employing its Regional Input-Output Model (RIMS II).

Only those direct and indirect spending flows that occur in the District of Columbia will be included in the analysis of economic and fiscal benefits. And, only the major sources of fiscal impacts will be considered—personal income tax and taxes on retail sales, meals, parking and hotel rooms. Cigarette and alcoholic beverage sales, corporate income, real property and utilities sales all will generate tax revenue flows to the benefit of the District. Furthermore, additional revenue may be gained from the fees and licenses associated with District-based vendors doing business within or serving the hospitality industry. As a result of these exclusions, the estimated value in net new tax revenues is considered to be conservative.

The benchmark year for this analysis is 2003. The spending and other data used to establish the current value of the Corcoran Gallery of Art to the District of Columbia's economy and treasury will reflect a combination of actual and estimated outlays. The comparison year reflecting the completion of the proposed addition and renovations is 2008. However, it is unlikely that the Gallery will have achieved a stabilized level of operations in 2008 (this is particularly true of the College as enrollment lags admissions). Consequently, the values shown for the comparison year represent a projected stabilized level of operation for all subdivisions of the Gallery. The analysis for both periods will reflect 2003-dollar values including prevailing tax rates and spending patterns.

Proposed Gallery Addition and Renovation

The Corcoran Gallery of Art is the oldest art museum in Washington and is Washington's only professional college of art and design. The Gallery was established in 1869 and moved from its original location at Pennsylvania and 17th Street to its current building in 1897 (New York Avenue and 17th Street, NW). The Corcoran School of Art was established in 1890. The Clark wing was opened in 1928. The completed building contains 135,000 gross square feet housing 14 galleries, the College of Fine Arts, and administrative, storage and public spaces.

The proposed addition, designed by Frank Gehry, would add 140,000 gross square feet bringing the total building to 275,000 gross square feet. The addition would be located on vacant land (at grade parking) facing New York Avenue becoming the Gallery's main entryway with a full-height atrium, driveway access for buses, and fully accessible space for special events. The addition would add space for 22 new galleries, an innovative children's art center, a 5000-square foot library, archive and research center, capacity to

increase current enrollment in the College of Fine Arts up to 850 full-time students, and expanded retail shops and restaurant. The existing building would be totally renovated during the 30-month construction period including new roof and mechanical systems.

Beyond the physical improvements that will enlarge the Gallery's capacity to exhibit its collection and host special exhibits and cultural events, increase its educational programming and enrollments, and preserve the integrity of its historic structure, the design by noted architect Frank Gehry will add a new dimension to Washington's architectural landscape. While the design and model has been widely reviewed and applauded, its full impact on visitation to the Gallery following its re-opening in 2008 can only be guessed. There can be little doubt that when the Frank Gehry addition is completed it will become a visitor attraction unto itself as have his other major cultural structures—most notably the Guggenheim Art Museum in Bilbao, Spain, the Experience Music Project (EMP) in Seattle, and the recently completed Disney Center in Los Angeles.

Gehry-designed museums and cultural centers are not the only buildings to have become part of the visitor attraction. The I.M. Pei East Wing addition to the National Galley made its own architectural statement and continues to attract large numbers of visitors more interested in the architecture than the collection it housed. The new Getty Museum in Los Angeles by Richard Meier also has proven that building design and landscape can be central to creating a destination for visitors.

There is a short list of these special places and architectural experiences having worldwide recognition; with Washington's understated architectural palette, the Frank Gehry addition to the Corcoran Gallery of Art could easily become the "must see" building in Washington attracting its own destination-visitor base. The importance of this potential will be seen in many ways: an increase in visitation beyond that supported by increased gallery space and number of special exhibits; increased retail and restaurant spending because of longer visits at the Gallery and specific interest in the building's design; the size, image and quality of the space will make it easier to secure a larger number of blockbuster exhibits—success breeds success; heavy demand for the unique atrium space by special events such as receptions; and gains in street-level pedestrian traffic in the surrounding blocks by visitors more interested in visually surveying the building than in the collection it houses.

Estimates of these extra impacts based on an established projection model are not possible. However, other museums with architecturally significant expansions have experienced increased visitation that tracked above an arithmetic trend; that is a doubling of the space generated more than a doubling of the visitors. The analysis of benefits flowing from the proposed expansion to and renovation of the Corcoran Gallery of Art will reflect the expectation of an expanding market reach and accelerating capture rate in projecting future visitor volumes and their economic and fiscal impacts.

Economic and Fiscal Impact of the Construction Phase

The economic and fiscal impacts accruing to the District of Columbia from the construction outlays for the proposed addition to and the renovation of the existing building housing the Corcoran Gallery of Art will be realized over an extended period including the 30-months of actual on-site construction as well as the planning and design period preceding construction. Construction is expected to take place during the 2006-2008 period. The majority of construction impacts will be confined to this period. Additionally, the construction impacts will be one-time impacts. These will consist largely of outlays in the form of payroll and the purchase of building materials. Land acquisition costs are not involved in this analysis, as all new construction will be accommodated on land currently owned by the Corcoran Gallery. As a result, there could be no alternative private-sector use for this land and there will be no loss of real estate tax revenue from this proposed use as the building site is presently tax exempt.

The proposed construction budget and its economic impacts are presented in Table 1 below. The total cost, including contingency allowances, is \$160.5 million. The total economic impact of this construction spending (i.e., its total contribution to the City's gross state product) is estimated at \$206.0 million. This spending will support 411 new jobs over the construction period with approximately 30 percent of these jobs likely to be held by District residents. The spending of these funds will generate earnings for District residents either directly or indirectly from on- or off-site construction-related activities, as employees of suppliers or of firms indirectly benefiting from the direct construction outlays (employees of restaurants or retail establishments where earnings of construction workers are re-spent). These earnings will total \$16.5 million and would be fully taxable within the District of Columbia.

The direct and indirect construction spending, presented in Table 1, will generate new fiscal flows that will accrue to the District of Columbia treasury. In addition to permitting fees and other user charges, the major sources of new tax revenues will be generated by: the increase in personal income of District residents, new retail sales tax and meals tax revenues generated by spending by both the on-site construction workforce (regardless of place of residence) and District residents whose job and personal income can be linked directly or indirectly to the proposed construction activities and related spending, and corporate income tax on District-based firms benefiting directly or indirectly from increased business activity due to the construction project.

As the Corcoran Gallery is tax exempt, there will be no increase in real property tax revenues associated with the building improvements and it is assumed that any purchases of materials relating to the construction and renovation activities from District-based vendors would not be subject to sales tax. Purchases by District-based consultants, contractors and vendors working on the proposed project from other local businesses would likely be subject to sales taxes but these cannot be accurately calculated or represented in this analysis.

Table 1

Economic Impacts From Construction Outlays for the Proposed Expansion and Renovation of the Corcoran Gallery (in millions of 2003 \$s)

Sources	Direct Outlays	Total Output (1)	Personal Earnings (2)	New Jobs (3)
Soft Costs	\$21.761	\$32.339	\$4.084	85.8
Hard Costs	105.888	130.242	8.185	199.3
Corcoran*	19.020	25.673	2.830	90.5
Contingency	13.845	17.770	1.425	35.4
Totals	\$160.514	\$206.024	\$16.525	411.0

Sources: Corcoran Gallery of Art, GMU Center for Regional Analysis; Multipliers from the U.S. Bureau of Economic Analysis

The estimated new tax revenues generated by the construction of the proposed addition to and renovation of the Corcoran Gallery over the construction period are presented in Table 2 as follows: new personal income tax revenue will total \$1.1 million; retail sales tax revenue will total \$173,000; while new tax revenue from the sale of meals will total \$196,000. Corporate income tax revenues will vary depending on the percentage of the project outlays that are captured by District-based firms and their percentage of net earnings on this work. Assuming a 20 percent participation rate in the construction project and a 10 percent profit on this work, corporate income tax revenue would total \$313,000. The revenue sources presented in Table 2 sum to \$1.74 million. This total understates the City's potential gain in tax revenue from the direct and indirect spending related to the construction of the proposed addition and renovation of the Corcoran Gallery as it excludes many local tax revenues sources.

Still, this is a one-time source of increased tax revenues and the tax revenue flow generated by annual operations, which recur year after year, will be the more important source of on-going income for the City. These annual fiscal flows will derive from the net change in annual operating outlays by the Gallery and College and spending by students and visitors to the Gallery. These annual fiscal flows accumulated over time provide a sound measure of the proposed project's public investment value. These are developed in the following sections.

⁽¹⁾ contribution to City's gross state product; (2) new income earned by District residents; (3) on- and off-site jobs in the District supported by direct outlay and their re-spending in the local economy. *includes project management as well as relocation costs incurred during period existing building is being renovated.

Table 2
Fiscal Impacts of Proposed Corcoran Gallery Construction (spending in millions and revenue in thousands of 2003 \$s)

Sources	Spending Subject To DC Taxation	Estimated Revenue Impacts
Personal Income*	\$16.525	\$1,057.6
Retail Sales New DC Earnings Employee Spending**	2.479 .534	142.5 30.7
Meals New DC Earnings Employee Spending**	1.322 .641	132.2 64.1
Corporate Earnings***	32.100	313.0
Total Revenue Impact		\$1,740.1

Source: GMU Center for Regional Analysis; U.S. Bureau of Economic Analysis. *personal income tax based on 80% of gross earnings is taxable at an average rate of 8%. **day-time spending by DC workers regardless of place of residence whose jobs are supported by project spending; ***assumes 20% of project outlays captured by DC firms and net earnings represent 10% of sales.

The Economic and Fiscal Impacts of Post-Construction Operations

In order to calculate the net economic and fiscal impacts on the District of Columbia resulting from changes in operating outlays and visitation with the completion of the proposed Corcoran Gallery expansion, the present spending levels associated with current levels of operations had to be established. Comparing these current spending levels with projected post-construction spending will establish the District of Columbia's net economic and fiscal benefits resulting from this project.

The current economic benefits accruing to the District of Columbia from the Corcoran Gallery of Art and Design are presented in Table 3. These are disaggregated by major source: the Gallery, the College of Art and Design, the retail store and restaurant/cafe within the Gallery, special events/receptions, non-tuition student spending, and Gallery

visitor spending. With the exception of student and visitor spending the data reflect expenditure estimates provided by the Corcoran Gallery for 2003 and represent actual or close approximations of actual outlays.

Students spending estimates were developed from estimates of annual cost of living for students studying at the College of Fine Arts. Disposable income was determined by subtracting the tuition cost from this total. Only students new to the District of Columbia were considered residents (students residing in the District prior to enrolling were excluded). Spending for retail purchases and in restaurants was estimated as a percentage of disposable income adjusted for place of residence. In 2003, the College had 409 degree students with an estimated 5 percent being previous District residents. Of the remaining 389 students, 72 lived in the City as new residents. Given these students' full-time status, it was assumed that they were not working and had no taxable income. The College also has courses for continuing education with 816 students registered in 2003 of which 443 were District residents. It was assumed that these students were all prior residents of their current jurisdiction and did not represent net new spending potential.

Visitor spending is a major source of economic and fiscal benefit for the District of Columbia. The actual number of annual visitors to the Corcoran Gallery fluctuates depending on the number of special exhibits hosted each year, their duration and appeal. Counts provided by the Gallery show a base level ranging between 250,000 and 500,000 with higher counts occurring in response to special exhibits. For purposes of this analysis, the baseline visitor count was set at 500,000. Also important in estimating spending potential is the proportion of these visitors that are non-District residents and, among these, who are day-trippers (local) and who are over-night visitors (non-local and international). Also, important is where these over-night visitors are staying—in the District or in the suburbs. Spending patterns differ for each of these groups. Finally, the key question remains: what portion of Corcoran visitor spending during their visit can be credited to their visit to the Gallery as opposed to another visitor attraction?

In this analysis, only the share of daily visitor spending (excluding spending occurring within the Gallery) that can be attributed to the Corcoran Gallery visit is claimed to be associated to this visit. For those visitors only coming into the District to visit the Corcoran Gallery, all associated spending is claimed. For those visitors visiting other attractions on the same day, the daily spending associated with this visit is apportioned to the Corcoran Gallery visit based on the average length of stay in the gallery.

A study in 1994 established the mean length of time visitors took in visiting all major attractions in the District and the number of attractions a visitor visited on a single day given the time required to complete the visit. Larger and more complex museums had longer lengths of stay than smaller museums with more limited collections. The average length of visit at the Corcoran was 1.5 hours compared, for example, to 2.4 hours for the National Gallery. Given the Corcoran's visit time, one-third of daily visitor spending was awarded to its visitors not on a single-attraction visit. A recent museum survey in the District established that approximately 14 percent of District visitors at medium-size museums were on a single-purpose trip. This same research identified the sources of the

visitors to the District's museums: 4.8% resided in the District; 25.6% resided in the Washington area suburbs or close enough to be on a day trip (no overnight stay); 7.6% were international visitors; and 62% were non-local. These percentages were used in this analysis in assigning and apportioning visitor spending values. The District's share of area-wide visitor spending on lodging, meals, retail sales, and transportation was based on a metropolitan Washington visitor-spending survey conducted in 1993-1994. While the spending percentages were held constant, the dollar values converted to 2003 values.

Based on these data sources and assumptions, the direct spending within the District economy associated with the operation of the Corcoran Gallery, the College of Fine Arts and the District spending assignable to Gallery visitors totaled \$31.7 million in 2003. This direct spending within the District economy generated a total contribution of \$43.5 million to gross state product. This spending supported 207 jobs in the District of Columbia (direct and indirect) and generated \$5.1 million in personal (taxable) earnings for District residents. The sources and related impacts of these economic benefits are shown in Table 3.

With the completion of the proposed expansion to the Corcoran Gallery (as described above), its operational outlays, student capacity, visitation, and on-site retail sales and sales of prepared food are projected to increase by significant amounts. The projected increases in these outlays and their estimated impacts on the District's economy are presented in Table 4.

The principal drivers of the increases in direct outlays associated with post-construction operations are: the doubling of the Gallery's exhibit capacity; an increase in full-time enrollment in the College of Art and Design to 850 and an increase in continuing education students to 3,300; increases in the number of high-impact exhibits; the creation of the children's center and gallery; the expansion of retail and restaurant space; and the creation of an architecturally unique atrium that will lend itself to use for receptions and special events.

The overall uniqueness and architectural appeal of the Gehry addition will, in combination with the renovated and expanded exhibit space, make the Corcoran Gallery a "must see" attraction for an increasing number and share of the District's visitor base. As a result, not only will the increase in Gallery visitation be disproportional to the increase in exhibit space, the length of visit will also increase to be similar with comparable attractions; e.g., National Galley and major Smithsonian museums (2.5 hours). The percentage of single-purpose visits will also increase (it is assumed the percentage will increase from 14% to 20%). A longer visit will increase the share of a visitor's daily spending that can be appropriately assigned to the Corcoran Gallery; it will also increase the volume of on-site restaurant sales. Finally, the unique architectural experience created by the Gehry addition will generate a substantial increase in demand for books and souvenirs supporting increased retail sales in the Gallery shop.

Table 3

Economic Impact of the Corcoran Gallery on the District of Columbia, 2003 (in millions of 2003 \$s)

Sources	Direct Outlays	Total Output (1)	Personal Earnings (2)	Jobs Supported (3
Gallery	\$12.379	\$17.265	\$2.025	76.0
Salaries	6.013			
Operations	6.366			
College	\$7.512	\$11.052	\$1.386	44.4
Salaries	4.508			
Operations	3.004			
Retail Store*	\$0.825	\$1.093	\$0.120	5.6
Salaries	0.165			
Restaurant	\$0.550	\$0.705	\$0.080	4.6
Salaries	0.110			
Gallery Totals	\$21.266	\$30.115	\$3.611	130.6
Special Events**	\$4.000	\$5.128	\$0.586	33.3
Salaries	0.800			
Students***	\$1.927	\$2.453	\$0.248	11.3
Live in DC	0.891	1.134	0.115	5.2
Live in Suburbs	1.036	1.319	0.133	6.1
Visitors***	\$4.476	\$5.785	\$0.654	31.5
Grand Totals	\$31.669	\$43.481	\$5.099	206.7

Sources: Corcoran Gallery of Art, GMU Center for Regional Analysis (1) contribution to City's gross state product; (2) income earned by District residents; (3) direct and indirect jobs supported by direct outlays in the District of Columbia. *Sales totaled \$1.13 million; **excludes fee paid to Gallery; ***excludes students who were District residents prior to admission; excludes tuition payments to College; continuing education student spending excluded; ****excludes District residents (4.8%); based on average of 500,000 annual visitors with 25.6% from area suburbs; excludes in-Gallery spending.

Projections of future visitation following the completion and reopening of the Corcoran Gallery are based on experiences of other major museums and galleries that have undergone high-visibility expansions as well as the calculation of baseline and exhibit generated visitation. These analyses support a range of projected visitation from 1,200,000 to 1,500,000 depending on the number of special exhibits in a year. This level falls below the National Gallery with more than 6 million visitors but would exceed the City's other major galleries. It is estimated that the Children's Center will attract 150,000 visitors annually, special exhibits will account for 450,000 annual visitors, and the general collection in combination with the "must see" architectural spaces (new and renovated) will support a baseline visitation of between 750,000 and 900,000 for a doubling of the current level. For purposes of this analysis, a 1.2 million-visitation level was adopted.

The projected direct spending associated with the expanded and renovated Gallery is shown in Table 4. At full operation, the Gallery will generate total spending of \$83.8 million, up from \$31.7 in 2003, for a 165 percent gain. The Gallery's total contribution to the City's gross state product is projected at \$112.4 million. This spending will support 568 full-time equivalent jobs in the District compared to 207 jobs presently supported and generate personal earnings of \$13.0 million, up from \$5.1.

While substantial increases are projected for the Gallery's retail and restaurant sales, the largest gain in economic benefits is associated with the projected growth of the Gallery's visitor base reflecting its newly gained "must see" status resulting from its unique architectural design and associated visitor following. As a result, the visitor spending captured in the District because of the presence of the Corcoran Gallery is projected to increase by more than \$25 million, growing from its current level of \$4.5 million to \$30.3 million for a gain of 575 percent. The fiscal impacts of these spending increases are presented in the following section.

Table 4

Annual Post-Expansion Economic Impacts of the Corcoran Gallery on the District of Columbia, 2008+

(in millions of 2003 \$s)

Sources	Direct Outlays	Total Output (1)	Personal Earnings (2)	Jobs Supported (3
Gallery	\$19.48	\$27.170	\$3.187	119.6
College	12.20	17.950	2.251	72.2
Retail Store*	5.760	7.634	0.840	39.2
Restaurant	2.057	2.637	0.301	17.1
Gallery Totals	\$39.50	\$55.391	\$6.579	248.1
Special Events**	\$10.00	\$12.820	\$1.464	83.3
Students***	\$4.02	\$5.118	\$0.517	23.6
Visitors****	\$30.27	\$39.122	\$4.424	213.0
Grand Totals	\$83.79	\$112.451	\$12.984	568.0

Sources: Corcoran Gallery of Art; GMU Center for Regional Analysis Notes: (1), (2), and (3) same as in Table 3; *sales total \$7.118; **excludes fee to Gallery; ***exclude students who were District residents prior to admission; excludes tuition payments to college; continuing education student spending excluded; ***excludes District residents; based on average of 1.2 million annual visitors with 25.6 percent from area suburbs; excludes in-Gallery spending.

Fiscal Impact of the Proposed Corcoran Gallery Expansion

The spending associated with the Corcoran's operations, students and visitors generates tax revenues for the District of Columbia. The principle sources of these revenues are: personal income, retail sales, restaurant sales, parking and hotels. Corporate income, utilities, and tobacco and alcoholic beverage sales also generate tax revenues for the City but these are not major sources and are difficult to measure. While real property is a major tax revenue source for the City, as a non-profit the Gallery is tax exempt. Also, its tax-exempt status affects its direct tax liability in terms of sales and corporate taxes. The comparative tax revenue flows associated with the Corcoran Gallery before and after the completion of the proposed addition are presented in Table 5.

Table 5
Fiscal Impacts of the Corcoran Gallery, Pre- and Post-Expansion (in thousands of 2003 \$s)

Sources	Current (2003)	After Expansion (1)	Net Change
Personal Income*	\$326.3	\$831.0	\$504.7
Retail Sales	\$94.3	\$483.6	\$389.3
In Gallery	65.0	409.3	344.3
Other District**	29.3	74.3	45.0
Restaurant Sales	\$106.0	\$334.9	\$228.9
In Gallery	55.0	205.7	150.7
Other District**	51.0	129.2	78.2
Special Events***	\$96.1	\$224.6	\$128.5
Students****	\$85.2	\$178.0	\$92.8
Retail Sales	20.0	41.8	21.8
Meals	65.2	136.2	71.0
Visitors****	\$473.8	\$3,347.6	\$2,873.8
Retail Sales	32.2	227.2	195.0
Meals	194.0	1,371.0	1,950.0
Hotel	193.6	1,367.9	1,174.3
Parking	54.0	381.5	327.5
Totals	\$1,181.7	\$5,400.0	\$4,218.0

Sources: GMU Center for Regional Analysis; based on spending data from Tables 3 and 4 above. (1) nominally 2008 but reflecting stabilization across all operating divisions. *based on total personal earnings reflecting direct and indirect impacts;**taxes on spending by DC residents whose income flows from Gallery-related spending ***total of sales, meals, personal and corporate income taxes;****excludes students who resided in the District prior to admissions; spending by continuing education students outside of Gallery excluded; *****excludes District residents; reflects tax revenues on spending external to the Gallery. Assumes DC tax rates remain unchanged.

In spite of this special tax status, the Gallery is a major source of tax revenue. In 2003, earnings and spending subject to taxation totaled \$31.7 million and the value of tax revenues generated this direct and indirect spending totaled \$1.2 million. With the proposed Gallery expansion in full operation, related spending in the District subject to taxation has been projected to increase to \$83.8 million, for a gain of 165 percent. Annual tax revenues generated by this spending are estimated to total \$5.4 million, for a gain over current revenues of 360 percent.

The net fiscal benefit of the proposed Gallery expansion is the difference between these two totals. The projected value of annual revenues (\$5.4 million) less the current value of revenues (\$1.2 million) is \$4.2 million. This net fiscal benefit reflects the total of new personal income, retail and restaurant sales that otherwise would not have occurred, and spending by visitors (hotel, retail, meals, parking) that would not have taken place in the District in the absence of the proposed Gallery expansion. This net fiscal benefit is a conservative value as it excludes revenues generated from increased local corporate income, changes in real property value especially on adjacent commercial parcels, and increased utilities, tobacco and alcoholic beverages sales. It is also based on a conservative projection of visitation to the Gallery holding this and visitor spending patterns constant over time.

The net fiscal benefit to the District of Columbia of \$4.2 million resulting from the expansion and renovation of the Gallery recurs annually. As such, it can be viewed as a public return on investment over time. If all these variables are held constant, except inflation, the long-term accumulated value of the net fiscal benefit can be calculated yielding a value in current dollars that can be pledged against current borrowing with a fixed interest rate and annual pay back schedule. Assuming a modest long-term annual inflation rate of 2 percent, the net 10-year and 20-year rolled up (accumulated) tax revenue value to the District of the Gallery's annual net fiscal benefit of \$4.2 million would be \$46.2 and \$102.5 million, respectively. Rolled up over thirty years, the net value of these fiscal benefits to the District would total \$171.1 million.

These rolled-up fiscal values exclude the tax revenues noted above and hold all other variables constant except a nominal rate of inflation (2%) and thus understate the full value of the proposed Gallery expansion to the long-term fiscal base of the City. The value of this public benefit likely will grow in response to future changes in tax rates, in Gallery, student and visitor spending patterns, in visitation levels, and inflation. Going forward, it is likely that all of these variables will increase and enlarge the real fiscal return to the City from the expansion of the Gallery.

Summary of Economic and Fiscal Benefits

The economic and fiscal impacts accruing to the District of Columbia from the construction and operation of the proposed expansion of the Corcoran Gallery of Art have been calculated. The construction phase was shown to involve direct spending outlays totaling \$160.5 million. This spending will generate a total economic impact on

the District's gross state product of \$206.0 million over the construction period, generating or supporting 411 full-time equivalent jobs in the District and personal earnings of \$16.5 million to the benefit of District residents. The fiscal impact from this direct and indirect construction spending (including only major tax sources) was calculated to total \$1.7 million.

The economic benefits of the Gallery's operations, in 2003 and following completion of the proposed expansion were calculated and their respective fiscal impacts estimated. These were compared to determine the net fiscal benefit to the District resulting from the proposed Corcoran Gallery expansion. The before-and-after comparison of these benefits is shown below in Table 6.

The net fiscal benefit for the District of Columbia as a result of the Corcoran Gallery expansion is an annual increase in tax revenues of \$4.2 million. Holding tax rates, spending patterns, and visitation levels constant, this increase in annual net tax revenues represents a total 10-year rolled-up revenue gain of \$46.2 million in current-year dollars. Over 20 and 30 years, these rolled-up net tax revenue values to the District of Columbia would total \$102.5 and \$171.1 million, respectively.

Table 6

Summary of Economic and Fiscal Benefits Associated with the Proposed Expansion of the Corcoran Gallery of Art (in millions of 2003 \$s)

Benefits	2003	Post-Construction	Net Change
Direct Outlays	\$31.7	\$83.8	\$52.1
Total Output (1)	\$43.5	\$112.8	\$68.9
Personal Earnings (2)	\$ 5.1	\$13.0	\$7.9
Jobs Supported (3)	208	568	360
Tax Revenues	\$1.18	\$5.40	\$4.22
Rolled-Up Benefit*			
10 years (4)	\$12.9	\$59.1	\$46.2
20 years (4)	\$28.5	\$131.0	\$102.5
30 years (4)	\$47.2	\$218.3	\$171.1

Sources: Tables 1-5; GMU Center for Regional Analysis

(1) contribution to District's gross state product; (2) salary and wage income to District residents; (3) jobs in the District; (4) accumulated tax revenues over 10, 20 and 30-year period assuming no change in rates or spending patterns expressed in current dollars reflecting 2.0% annual rate of inflation. *Excludes \$1.7 million in new tax revenues generated during the construction period.