



**The 2007 Economic Impact of
The Zoo Museum District
Saint Louis, Missouri
July 2008**

The St. Louis Regional Chamber & Growth Association (RCGA), working with the Metropolitan Zoological Park and Museum District, has estimated the economic impact of the Zoo Museum District and its institutions – **St. Louis Art Museum, St. Louis Zoological Park, Missouri Botanical Garden, St. Louis Science Center, and the Missouri History Museum** – on the regional economy.

Economic Impact Definitions

The economic impact of a business, organization, or event is a measure of the amount of and the way that dollars associated with that entity circulate through the region. The estimates were developed with a computer model called IMPLAN, which stores a profile of the St. Louis metropolitan economy in a database. The model uses production functions for each industry in the region to calculate how spending in one industry circulates through other industries in St. Louis. This economic impact can be expressed either as an annual flow of dollars (or output), or an equivalent level of employment.

There are three levels of impact that we consider when we develop these figures: the direct impact, the indirect business spending impact, and the induced household spending impact. All three of these can be expressed in terms of an annual flow of dollars (or output) or annual total employment. The total impact is the sum of these three factors.

Direct Impact

This is the most basic part of an organization's economic impact. It measures the dollars and jobs that the organization directly generates. When expressed in dollars, the direct impact is an approximation of a company's total revenue or gross output. Alternatively, the direct impact is the average annual value of output associated with the given number of jobs in that industry.

The economic impact of the Zoo Museum District is based on the amount of money the District and its five institutions spend in the local economy through operations and capital improvements as well as the amount out-of-town visitors spend on overnight accommodations, food and drink, shopping, gasoline and other items.

Indirect Business Impact

This is a secondary measure of a business's economic impact. It represents the dollars of revenue and jobs generated by the operating expenses of the organization. Examples might be the purchase of raw materials from a local supplier or the professional services of an accounting or law firm. This spending generates revenue and employment at firms that supply those goods or services. Every dollar that an organization spends locally to conduct its business supports another business in some way.

Induced Household Spending Impact

This is a tertiary measure of a business' economic impact. It is a measure of the business revenue generated by the personal spending of the organization's employees. Think of an

employee at an organization spending money at the local grocery store. The employee's paychecks support revenue and jobs the same way that the organization's spending on equipment supports revenue and jobs.

Methodology and Assumptions

Geography

The local economy for this analysis is defined as the sixteen-county St. Louis MO-IL MSA. The MSA includes St. Louis City, and St. Louis, St. Charles, Franklin, Jefferson, Lincoln, Warren, and Washington counties in Missouri and Bond, Calhoun, Clinton, Jersey, Macoupin, Madison, Monroe, and St. Clair Counties in Illinois

Operations Expenditures

The five institutions and the Zoo Museum District provided operations expenditures and payroll expenditures for 2007. The direct spending for these five institutions and the District totaled \$167 million. This spending generated a total of \$190 million in indirect and induced spending, bringing the total output impact of operations to \$357 million. Operations generated the direct employment of 2,600 jobs and indirect and induced impacts of an additional 1,800 jobs, bringing the total to an estimated 4,400 jobs.

Table 1
Estimated Total Economic Impacts of
Operating Expenses and Payroll of the Zoo Museum District

	Direct	Indirect	Induced	Total
Output	\$ 167 million	\$ 78 million	\$112 million	\$357 million
Employment	2,600	830	970	4,400

Notes:

Impacts were calculated using IMPLAN Professional for Windows, ver. 2.0.1017 (base year 2006).

Impacts presented in 2007 dollars

Impact estimates based on 2007 payroll and operating expenditures

Geographic Area: St. Louis, MO-IL Metropolitan Statistical Area (MSA)

Capital Improvements

The five institutions provided capital improvement spending for 2007. These include expenditures for building renovations, equipment, and vehicle purchases that are not part of the operating budget. The following analysis is based on dollar value of capital improvements for building, structure and landscaping and for automobiles and truck purchases. While the institutions also provided information about other equipment purchases, this was not included in the analysis because some of the equipment is specialized and not likely to be produced in the region. About \$9 million was spent for building and vehicle capital improvements, generating an additional \$8 million in indirect and induced spending, to total \$17 million in total impact. Capital improvement spending also generated a total 140 total jobs in the region.

It is important to note that capital improvement spending can vary from year to year. Major construction projects, such as a large building expansion, can generate a large one-time impact on the regional economy. The \$78 million expansion of the St. Louis Art Museum, which is expected to break ground in Fall 2008, is not included in this analysis.

Table 2
Estimated Total Economic Impacts of
Capital Improvements*

	Direct	Indirect	Induced	Total
Output	\$ 9 million	\$ 4 million	\$ 4 million	\$ 17 million
Employment	70	30	40	140

Notes:

Impacts were calculated using IMPLAN Professional for Windows, ver. 2.0.1017 (base year 2006).

Impacts presented in 2007 dollars

*Impact base on dollar value of capital improvements for building, structure and landscaping and automobiles and truck purchases only.

Geographic Area: St. Louis, MO-IL Metropolitan Statistical Area (MSA)

Out-of-town-Visitor Spending

The Zoo Museum District is an important asset to the region. The five institutions drew a combined total of over 5.8 million visits in 2007. The spending by these out-of town visitors is an important component of the District's regional economic impact.

Estimates of how much the out-of-town visitors spent are based on surveys prepared by the St. Louis Convention and Visitors Commission (CVC). According to the CVC's 2007 annual report, leisure tourists spend an average of \$92 per day per person for lodging, meals, attractions, entertainment, shopping, transportation, and other spending. This analysis assumes that out-of-town tourists are will stay for an average of 1.5 days. The total number of tourists was estimated to be based on attendance at each of the five institutions.

Out-of Town spending generated \$97 million in direct impact and another \$78 million in indirect and induced impacts for a total impact of \$175 million. The employment impact totals 2,410 jobs.

Table 3
Estimated Total Economic Impacts of
Out-of-town Visitor Spending of the Zoo Museum District

	Direct	Indirect	Induced	Total
Output	\$ 97 million	\$ 38 million	\$ 40 million	\$ 175 million
Employment	1,810	260	340	2,410

Notes:

Impacts were calculated using IMPLAN Professional for Windows, ver. 2.0.1017 (base year 2006).

Impacts presented in 2007 dollars

Impact estimates based on number of out-of-town visitors for the five institutions and typical tourist spending

Geographic Area: St. Louis, MO-IL Metropolitan Statistical Area (MSA)

Total Impact

The Zoo Museum District and its five intuitions' operating spending and capital improvement spending along with the spending of out-of-town visitors has a total regional economic impact of \$549 million. This spending generates 4,480 direct jobs and another 2,470 jobs indirectly, bringing the total employment impact to 6,950 jobs in the region.

Table 4
Estimated Total Economic Impacts for the Zoo Museum District

	Direct	Indirect	Induced	Total
Output	\$ 273 million	\$ 120 million	\$ 156 million	\$ 549 million
Employment	4,480	1,120	1,350	6,950

Notes:

Impacts were calculated using IMPLAN Professional for Windows, ver. 2.0.1017 (base year 2006).

Impacts presented in 2007 dollars

Geographic Area: St. Louis, MO-IL Metropolitan Statistical Area (MSA)



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