



AN ANALYSIS OF THE ECONOMIC SIGNIFICANCE

OF

The American Project

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A Summary of the Economic Significance of The American Project

At more than 21-stories, *The American* will be the tallest, freestanding bronze monument in the world that visitors can enter and ascend to a viewing area near the top.

The monument, designed by renowned Oklahoma artist and sculptor Shan Gray, will be located atop Holmes Peak, seven miles northwest of downtown Tulsa, Oklahoma.

In addition to its cultural mission, *The American* is expected to serve as a regional symbol and act as a catalyst for economic growth for both Tulsa and the state of Oklahoma.

The American represents a major effort to increase travel and tourism in Tulsa and across the state by developing a new American iconic travel destination that offers both domestic and international appeal.

The projected construction cost to develop the Park is \$38.4 million in 2006 dollars and will generate significant economic impact statewide. Total estimated construction impacts over the four years include an increase in production of goods and services of \$73.3 million, additional labor income to workers of \$29.2 million, nearly 250 jobs annually, and an estimated \$1.88 million in added tax revenue.

Upon the Park's opening in 2010, direct local tourism expenditures are estimated at \$36.5 million annually under the base case of 1.5 million visitors - \$13.7 million represents direct expenditures at the Park while the remaining \$22.8 million is captured by tourism-related businesses in the local economy.

Through estimated multiplier effects, the total annual increase in purchases of local goods and services (after adjusting for wholesale and retail margins) is \$51.5 million.

Workers in local tourism related industries and other industries that benefit from tourism will earn an additional \$22.2 million in annual labor income under the base case.

Estimated multiplier effects from tourism spending will support a total of 1,073 additional local jobs.

Tourism spending related to the Park is expected to produce \$4.8 million in annual tax revenue to state and local government.

With 2.2 million annual visitors, the project would generate added total sales of goods and services of \$75.5 million, labor income of \$32.5 million, 1,573 additional jobs, and \$6.8 million in new tax revenue to state and local government.

With 950,000 annual visitors, the project would generate added total sales of goods and services of \$32.6 million, labor income of \$14.0 million, 679 additional jobs, and \$3.2 million in new tax revenue to state and local government.

The American – Concept, Design, and Monument

At more than 21-stories, *The American* will be the tallest, freestanding bronze monument in the world that visitors can enter and ascend to a viewing area near the top. *The American* is projected to rival other American icons and monuments such as the St. Louis Arch, the Washington Monument, and the Statue of Liberty in terms of cultural significance and tourism popularity.

The objective of the project is to establish *The American* as a destination point for visitors throughout the world promoting American Indian history and culture, and to educate and enlighten persons about the diverse cultures of America.

The monument is being designed by renowned artist and sculptor Shan Gray, a lifelong Oklahoman and Osage Indian, and will be located atop Holmes Peak, seven miles northwest of downtown Tulsa, Oklahoma. The sculpture depicts an Indian brave standing with his right arm extended upward as a bald eagle lands on his shroud-covered forearm. An intricate, inner-skeletal structure will support the more than 350,000 pounds of bronze-alloy veneer that will sheath *The American*.



The American Monument and Plaza will be situated on approximately 115 acres along with a Visitor and Education Center, buffalo grounds, observation point, special gardens, and an informal fair area. The grounds will also include water features throughout. An amphitheater is planned in Phase II of construction.

Below the Monument, visitors will enter the Park grounds through *The American* Visitor Center which will include an exhibit hall, museum area, gallery, concessions, gift shop, restaurant, theatre, the Centennial Education Center, and an art camp and art retreat area, all in a landscaped setting. And, much like the Washington Monument and St. Louis Arch, an elevator system will take visitors up inside the bronze structure to an observation area.

Through the Center to the East, visitors will look out full-length glass windows in three directions. To the northeast, the monumental statue will be in view; to the southeast, visitors may view downtown Tulsa in the distance. At the base of *The American* Monument will be a plaza area where visitors can walk completely around the statue. An observation tower will also be available where pictures can be taken of the monument. Buffalo fields, along with water features and garden areas, will surround the plaza. Appendix A contains a detailed conceptual drawing of the Park.

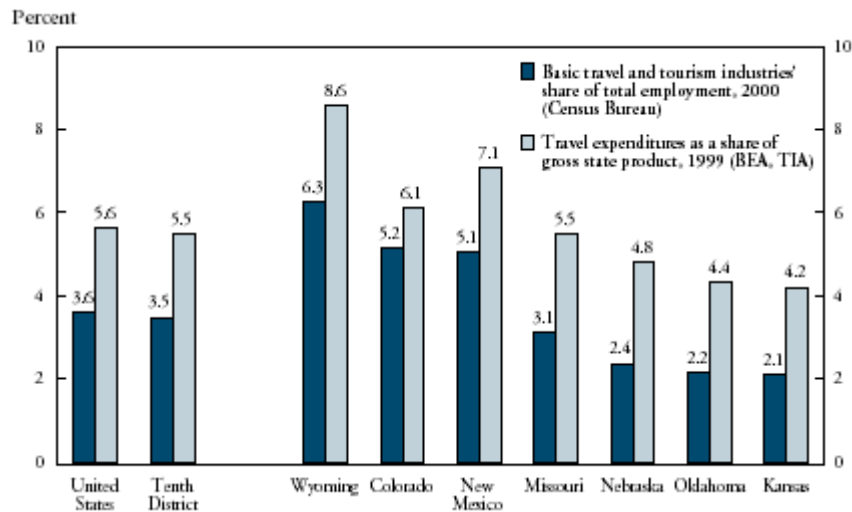
Tourism as an Economic Development Tool

In addition to its cultural mission, *The American* is expected to serve as an iconic symbol for the region and act as a catalyst for economic growth for both Tulsa and the state of Oklahoma. Iconic tourism destinations can have a significant and very visible economic impact on a regional economy. Even niche cultural and historical attractions such as the Antietam National Battlefield¹ and Valley Forge National Historical Park² generate an estimated \$10-25 million in direct visitor spending annually in their respective local economies. Tourism destinations with broader appeal can generate substantially more economic impact. For example, a recent impact study of the St. Louis Arch indicates that direct visitor spending exceeds \$100 million annually.³

The expansion of local tourism activity offers significant potential for job creation, export earnings, and enhanced regional pride and cohesion. Other economic benefits of tourism include new opportunities for economic development and added economic diversification. Often overlooked is the substantial spillover growth from tourism spending that benefits related industries in the regional economy. In addition, tourism can generate additional revenues for state and local government through fees and taxes.⁴

One of the economic development issues facing both the Tulsa region and the state is a relative lack of tourism destinations within Oklahoma, and the resulting low share of tourism-based spending and employment in the state relative to the nation. Many of the states within the plains region face a similar competitive disadvantage. In a comprehensive study⁵ of national tourism trends at the metropolitan area level, Global Insight found that none of the five largest metropolitan areas in the plains region ranked higher than 35th among the nation's top 100 metro areas in terms of total travel and tourism activity in 2000 – Kansas City (35th), Oklahoma City (52nd), Tulsa (69th), Omaha (70th), and Wichita (80th).⁶

Figure 1. Travel and Tourism's Share of Economic Activity

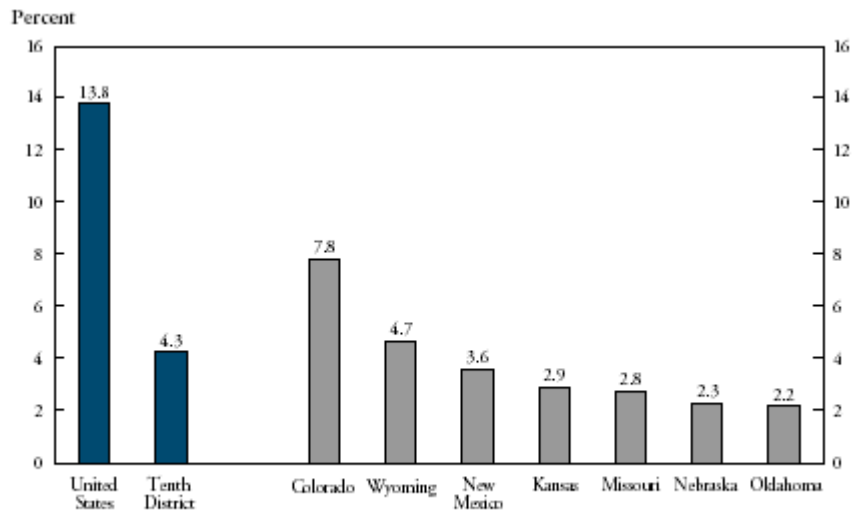


Another recent study⁷ of the impact of tourism by the Federal Reserve Bank of Kansas City illustrates the relative lack of basic travel and tourism in the region and the underdeveloped

nature of the tourism industry in many of the plains states. Results from the study are summarized in Figure 1 and indicate that only 4.4 percent of the Oklahoma workforce is employed in the travel and tourism sector, versus 5.6 percent nationally and an average of more than 7.0 percent in the nearby tourism-heavy states of Colorado, New Mexico, and Wyoming. Missouri (5.5 percent), Nebraska (4.8 percent), and Kansas (4.2 percent) also have tourism employment shares below the national average.

In addition, the Kansas City Federal Reserve study indicates that Oklahoma has a particularly low percentage of local travel expenditures by foreign visitors. As shown in Figure 2, Oklahoma ranks last among the seven states in the Bank’s Tenth District with an estimated 2.2 percent of travel expenditures by foreign visitors, as compared to 13.8 percent nationally and an average of 4.3 percent for the District states in 1999. However, all District states trail far behind the national average, with Colorado (7.8 percent) having the largest share yet achieving only slightly more than half the relative U.S. share of foreign travel expenditures.

FIGURE 1. Share of Total Travel Expenditures by International Visitors, 1999



Source: Travel Industry Association of America

In recognizing the benefits of bolstering tourism in Oklahoma and the economic development potential of tourism in general, Tulsa’s Vision 2025 program provides funding for numerous projects that promote travel and tourism in the Tulsa region. In addition, the state’s EDGE initiative currently calls for increased emphasis on promoting Oklahoma as a destination for international tourism. *The American Project* represents a major effort to meet the stated objective of increased travel and tourism in Tulsa and across the state by developing a new American iconic travel destination that offers both domestic and international appeal.

Nevertheless, there are a number of issues and barriers that have influenced the ability to communicate the value and role of tourism to government, the business sector, and the general community. Chief among these is the ability to clearly identify the local components of the tourism industry and to quantify its influence on the other sectors of the regional economy. This study seeks to address these issues as they relate to *The American Project* and provide a conservative estimate of the economic potential of the project and the spillover benefits that can be expected following the construction of the monument.

Measuring the Expected Economic Impact of The American

Among existing major U.S. cultural tourist attractions, The Jefferson National Expansion Memorial, commonly known as the St. Louis Arch, is believed to provide the most comparable model for use in evaluating the tourism potential of *The American*. Points of similarity with the Arch include the visual dimension and scope of the monument, an elevated viewing platform with a ride to the top, a location in a metropolitan area in the central interior of the country, and a theme based on the nation's cultural development and heritage. Nevertheless, because of differences in location and attraction features as well as the demonstrated ability of the St. Louis Arch to attract tourists, several adjustments are made to the underlying assumptions in order to produce more conservative estimates for *The American* than would be used in a comparable study of the St. Louis Arch.

The expected economic impacts from the construction and operation of the Park will come in two stages. The initial economic impact from the project will be realized during the construction phase of the monument in the 2006-2009 period. Estimating the construction impact is a relatively straightforward process using standard input-output analysis to estimate the economic multiplier, or ripple effects, generated during the construction phase.⁸

Additional economic impacts will then be visible through the ongoing annual operations of the Park as the monument opens for public visitation in 2010.⁹ The process of estimating the operating impact of a tourism attraction such as *The American* is greatly simplified by the large number of existing studies that provide detailed survey-based visitor and spending profiles for a variety of types of tourism attractions. Economic impact estimates are formed by using assumptions on expected visitation levels by type of visitor, developing a spending profile by visitor category, and then using the standard tools of economic impact analysis to track the flow of these expenditures through the regional economy.

The flow of business activity generated as tourists make direct expenditures in the local economy produces economic impacts that can be evaluated using common measures of economic activity such as output (direct sales), employment, and labor income (employee compensation plus proprietor's income). The estimated economic impacts are described using the following three measures: 1) the direct effect - the impact generated by the direct spending by tourists; 2) the indirect effect - the impact generated as a result of state firms purchasing goods and services in order to service the needs of tourists; and 3) the induced effect - the impact generated by new household spending in the local economy as a result of compensation generated from the direct and indirect effects.

In other words, the three effects provide a convenient way of describing the resulting multiplier effects that occur as the direct spending of tourists visiting *The American* benefits local firms in the tourism sector (direct effect), then impacts those firms that support and supply the tourism industry (indirect effect), and then finally affects the broader regional economy as worker's incomes and spending patterns are affected (induced effect).

Construction Impacts

Construction on the Park is expected to begin in 2006 and be completed in 2009. The projected cost to develop the park grounds, erect the monument, and construct the initial operating structures is \$38.4 million in 2006 dollars.¹⁰

The direct, indirect, and induced impacts generated during the construction phase are expected to be substantial. Because Oklahoma-based firms will perform nearly all phases of construction, the majority of the construction impacts will be captured within the state.¹¹ The only major leakages expected are purchases of raw materials and the retention of some professional services from outside the state.

The expected economic impacts during the construction phase are detailed in Table 1. Total direct construction expenditures of \$38.4 million over the four-year period will generate an estimated \$34.9 million in indirect and induced purchases of goods and services in other industries statewide, or a total impact of \$73.3 million in goods and services produced statewide.

Workers directly related to the construction project will earn an estimated \$17.2 million in labor income, which will support through indirect and induced multiplier effects an additional \$12.0 million in labor income for workers in other industries across the state. The total earnings impact of construction on the regional economy is estimated at \$29.2 million over the four years.

Table 1. Construction Impacts (In constant 2006 dollars)

Economic Measure	Type of Impact	Year of Impact				2006-09
		2006	2007	2008	2009	
Output	Direct	\$2,813,940	\$6,799,866	\$16,768,284	\$11,975,460	\$38,357,549
	Indirect/Induced	2,584,850	6,252,887	15,206,881	10,897,228	34,941,846
	Total	\$5,398,790	\$13,052,753	\$31,975,164	\$22,872,687	\$73,299,395
Labor Income	Direct	\$1,272,690	\$3,078,862	\$7,482,654	\$5,362,950	\$17,197,156
	Indirect/Induced	886,118	2,143,228	5,223,057	3,740,939	11,993,342
	Total	\$2,158,808	\$5,222,090	\$12,705,711	\$9,103,889	\$29,190,498
Employment (Job years)	Direct	40	99	251	184	573
	Indirect/Induced	29	73	181	134	416
	Total	69	171	431	318	989
Tax Revenue (State & Local)	Personal Income	\$46,025	\$114,680	\$287,196	\$211,991	\$659,892
	Property Taxes	0	22,500	45,000	45,000	112,500
	Sales – State	40,981	102,153	254,433	188,059	585,626
	Sales – Local	36,415	90,771	226,082	167,105	520,373
	Total	\$123,421	\$330,104	\$812,711	\$612,155	\$1,878,391
Price Deflator		1.000	1.030	1.061	1.093	

Source: OSU Center for Applied Economic Research, IMPLAN

Measured in terms of employment, the construction project will directly support nearly 150 full-time equivalent construction workers annually over the construction period, averaging more

than 200 annually in the last two years of the project. Indirect and induced multiplier effects will support an additional 100 jobs annually in other industries statewide. The total employment impact will support an average of nearly 250 jobs annually over the four years of the construction phase.

The direct, indirect, and induced impacts from construction will also generate substantial amounts of tax revenue to both state and local government. A total of \$1.88 million dollars in new tax revenue is generated from added state personal income tax payments on labor income earned (\$659,892), property tax payments (\$112,500), state sales tax (\$585,626), and local sales tax (\$520,373). Local governments in the Tulsa region should retain approximately one-third (\$632,873) of the added tax revenue during the construction phase in the form of property tax and sales tax revenue.

Park Visitation and Visitor Spending Assumptions

Annual economic impact estimates from the operations of the Park are formed using a base case assumption of 1.5 million annual visits to the Park. This represents approximately half the 3 million annual visitors to the Arch and is believed to be a conservative estimate that is more representative of cultural and historical tourism destinations considered to possess less national and international appeal than *The American*. Additional economic impact estimates are provided for visitation levels of 950,000 and 2.2 million visitors annually.

The total number of expected visits is broken down into five visitor categories in Table 2. The categories used in the analysis are 1) local day visitors; 2) non-local day visitors; 3) non-local visitors staying overnight in the local area with friends and family; 4) non-local overnight visitors staying in hotels, motels, and Bed & Breakfasts; and 5) non-local overnight visitors staying at campgrounds.

Local day visitors are assumed to live within the Tulsa region, generally within a 50-75 mile radius of the park. Non-Local (NL) day visitors live outside the local area and do not stay overnight in the local region. A separate day visit category is maintained for visitors staying with friends or relatives in the Tulsa area. Overnight visitors staying in the local area are divided between those staying in campgrounds or other camping sites and those staying in hotels, motels, Bed & Breakfasts, and other rented accommodations.

Table 2. Estimated Visitors by Type of Visit (Base Case)

Visitor Segment	Visitors	Party Visits	Share of Total
Local Day User	150,000	53,571	10.0%
Non-Local Day User	990,000	353,571	66.0%
Visiting Friends/ Relatives	120,000	42,857	8.0%
Overnight Stay	225,000	80,357	15.0%
Camping	15,000	5,357	1.0%
Total Visitors	1,500,000	535,714	100.0%

The five visitor segments are initially based on a visitor profile constructed from survey data collected at the St. Louis Arch. It is believed that visitors to *The American* will have similar regional and international tourist travel patterns, again due to the similarity of the attractions and the proximity of the geographic locations. However, three adjustments have been made to the St. Louis Arch profile in order to better reflect the expected visitor base at *The American*.

First, an additional category is added to reflect visitors staying with friends and relatives. These visitors generate less economic impact than visitors making an overnight stay in local lodging, which avoids any potential overstatement of their impact. Second, a smaller share of local day users is used to evaluate *The American* due to the smaller size of the local market in Tulsa relative to St. Louis. Third, due to the first two adjustments, a relatively larger share of non-local day users is used. Non-local day users generate considerably less economic impact than visitors staying overnight in the region. These adjustments better reflect the market

conditions present in the Tulsa market and lend a more conservative interpretation to the final economic impact estimates.

Finally, total visits are converted to party visits in Table 2 by applying an average party size of 2.8 persons. Because tourists commonly travel in groups (frequently reflecting family size or capacity of the transportation used), most available survey-based spending profiles are typically constructed for an average party size.

Estimates of the amount of local tourism spending per party for each visitor group are shown in Table 3. The starting point for the profiles is survey data used to evaluate the St. Louis Arch, which are then adjusted to reflect lower local hotel costs and the general lower cost of living in the Tulsa area. Average spending in the local economy is estimated at \$68.20 per 2.8-person party. Of the total spending per party, an estimated \$25.48, or 37.4 percent, is assumed spent directly at the Park, an average of \$9.10 per visitor. The remaining \$42.72 is assumed spent locally with other tourism-related businesses.

Table 3. Tourism Spending Per Party by Visitor Type

Spending Category	Visitor Group					Average Spending Per Party
	Local Day User	Non-Local Day User	Visit Friends Relatives	Overnight Stay	Camping	
Motel, hotel, cabin, or B&B	0.00	0.00	0.00	80.47	0.00	12.07
Camping fees	0.00	0.00	0.00	0.00	8.76	0.09
Restaurants & bars	12.35	16.46	12.35	32.93	17.54	18.20
Groceries, take-out food	3.09	3.09	12.37	6.19	20.85	4.48
Gas & oil	4.82	9.64	8.68	8.68	20.64	9.05
Other vehicle expenses	0.52	0.78	0.78	1.03	0.00	0.78
Local transportation	0.00	0.26	0.26	5.14	1.48	0.98
Admissions, fees	5.26	7.36	7.36	12.62	12.62	7.99
Clothing & general merch.	0.98	1.96	2.95	4.91	4.91	2.42
Gambling	0.00	0.75	0.75	0.75	0.75	0.68
Souvenirs & entertainment	7.71	12.34	11.31	10.28	11.28	11.48
Total Visitor Spending Per Party	\$34.73	\$52.65	\$56.80	\$163.00	\$98.83	\$68.20

Visitors making an overnight stay in the local area are expected to spend \$163.00 per party, the most among the five visitor groups and more than double the average expenditure. The average price paid for local lodging or accommodations for this group is estimated at \$80.47. Campers have the second highest expected expenditure at \$98.83, followed by visitors staying with friends or relatives (\$56.80), non-local day users (\$52.65), and local day users (\$34.73).

Across all visitor categories, the largest per party expenditures are expected in restaurants and bars (\$18.20); motels, hotels, and other lodging (\$12.07); souvenirs and entertainment (\$11.48); gas and oil (\$9.05); and admissions and fees (\$7.99). Expenditures on gaming, horse racing, and lottery tickets are estimated to equal \$0.75 per party.

Total Tourism Spending and Economic Impacts

Based on the visitor spending profiles, total direct tourism expenditures related to *The American* are estimated at \$36.5 million annually under the base case of 1.5 million visitors. The spending estimates for the base case are detailed by both visitor group and spending category in Table 4.

Table 4. Total Tourism Spending by Visitor Group and Spending Category (1.5 Million Visitors)

Spending Category	Local Day User	Non-Local Day User	Visiting Friends/Relatives	Overnight Stay	Camping	Total Spending	Percent of Total Spending
Motel, hotel, cabin, or B&B	0	0	0	6,466,352	0	6,466,352	17.7%
Camping fees	0	0	0	0	46,929	46,929	0.1%
Restaurants & bars	661,496	5,821,167	529,197	2,645,985	93,964	9,751,809	26.7%
Groceries, take-out food	165,677	1,093,468	530,166	497,031	111,696	2,398,038	6.6%
Gas & oil	258,276	3,409,242	371,917	697,345	110,571	4,847,352	13.3%
Other vehicle expenses	27,722	274,452	33,267	83,167	0,000	418,608	1.1%
Local transportation	0,000	90,908	11,019	413,219	7,929	523,074	1.4%
Admissions, fees	281,686	2,602,777	315,488	1,014,069	67,607	4,281,626	11.7%
Clothing & general merch.	52,621	694,593	126,290	394,655	26,304	1,294,462	3.5%
Gambling	0	265,179	32,143	60,268	4,018	361,607	1.0%
Souvenirs & entertainment	413,219	4,363,589	484,843	826,437	60,429	6,148,517	16.8%
Total Visitor Spending	\$1,860,697	\$18,615,374	\$2,434,330	\$13,098,527	\$529,446	\$36,538,375	100.0%

Non-local day users contribute \$18.6 million in total local spending, approximately half of the total. Visitors staying overnight in local lodging are the other major contributor to local spending; these visitors generate an estimated \$13.1 million, or 35.8 percent of the total, although they represent only 15 percent of total visitors. Local day users (\$1.86 million), visitors staying with friends or relatives (\$2.43 million), and campers (\$529,446) contribute only 13.2 percent of local spending, yet the three groups combined comprise 19 percent of total visitors.

Of the \$36.5 million in total spending, \$13.7 million is estimated to reflect direct expenditures at the Park. The remaining \$22.8 million in annual spending is captured by other tourism-related businesses in the local economy.

The estimated economic impacts from tourism spending for each of the three visitation scenarios are detailed in Table 5.¹² The direct local spending estimates are first reduced to reflect only the margin earned by local firms making tourism-related retail and wholesale transactions rather than the full sales price. Based on the underlying estimates for wholesale and retail margins, only \$29.4 million (80.5 percent) of the \$36.5 million in total local purchases is considered locally captured sales in forming the economic impact estimates.

Under the base case assumption of 1.5 million visitors, \$29.4 million in locally captured sales generates additional indirect and induced spending on goods and services in the local

economy of \$22.1 million. The total local spending impact after adjusting for wholesale and retail margins totals \$51.5 million.

Workers in local tourism related industries will earn an additional \$12.4 million in direct labor income as a result of the added local tourism spending, while indirect and induced effects support an additional \$9.8 million in labor income for workers in other local industries. The estimated total local earnings impact under the base case is \$22.2 million annually.

Table 5. Economic Impacts From Tourism Spending

Visitation Scenario	Low Case	Base Case	High Case
Annual Visitors	950,000	1,500,000	2,200,000
Party Nights	339,286	535,714	785,714
Spending per Visitor	\$24.36	\$24.36	\$24.36
Total Direct Spending	\$23,140,971	\$36,538,375	\$53,589,616
% of Sales Captured Locally	80.5%	80.5%	80.5%
Spending Captured Locally	\$18,625,503	\$29,408,689	\$43,132,743
Indirect/Induced Local Spending	13,977,369	22,069,530	32,368,645
Total Local Spending	\$32,602,872	\$51,478,219	\$75,501,388
Direct Labor Income	\$7,841,890	\$12,381,932	\$18,160,166
Indirect/Induced Labor Income	6,200,859	9,790,831	14,359,885
Total Labor Income	\$14,042,749	\$22,172,762	\$32,520,051
Direct Employment	398	629	923
Indirect/Induced Employment	281	444	651
Total Employment	679	1,073	1,573
Tax Revenue:			
State Personal Income	\$352,885	\$557,187	\$817,207
State Sales Tax	864,713	1,365,336	2,002,493
State Gasoline Tax	521,898	824,050	1,208,606
State Gaming/Lottery	17,176	27,121	39,777
Local Property Taxes	450,000	450,000	450,000
Local Sales/Hotel/Motel Tax	973,402	1,536,950	2,254,193
Total Tax Revenue	\$3,180,074	\$4,760,643	\$6,772,277

Measured by employment, \$29.4 million in locally captured spending will directly support an estimated 639 jobs in local tourism related industries. Estimated multiplier effects support an additional 444 jobs in other industries in the local economy, or a total of 1,073 direct, indirect, and induced jobs locally.

Finally, tourism spending related to the Park is expected to produce a significant stream of tax revenue to state and local government. Under the base case of \$29.4 million in locally

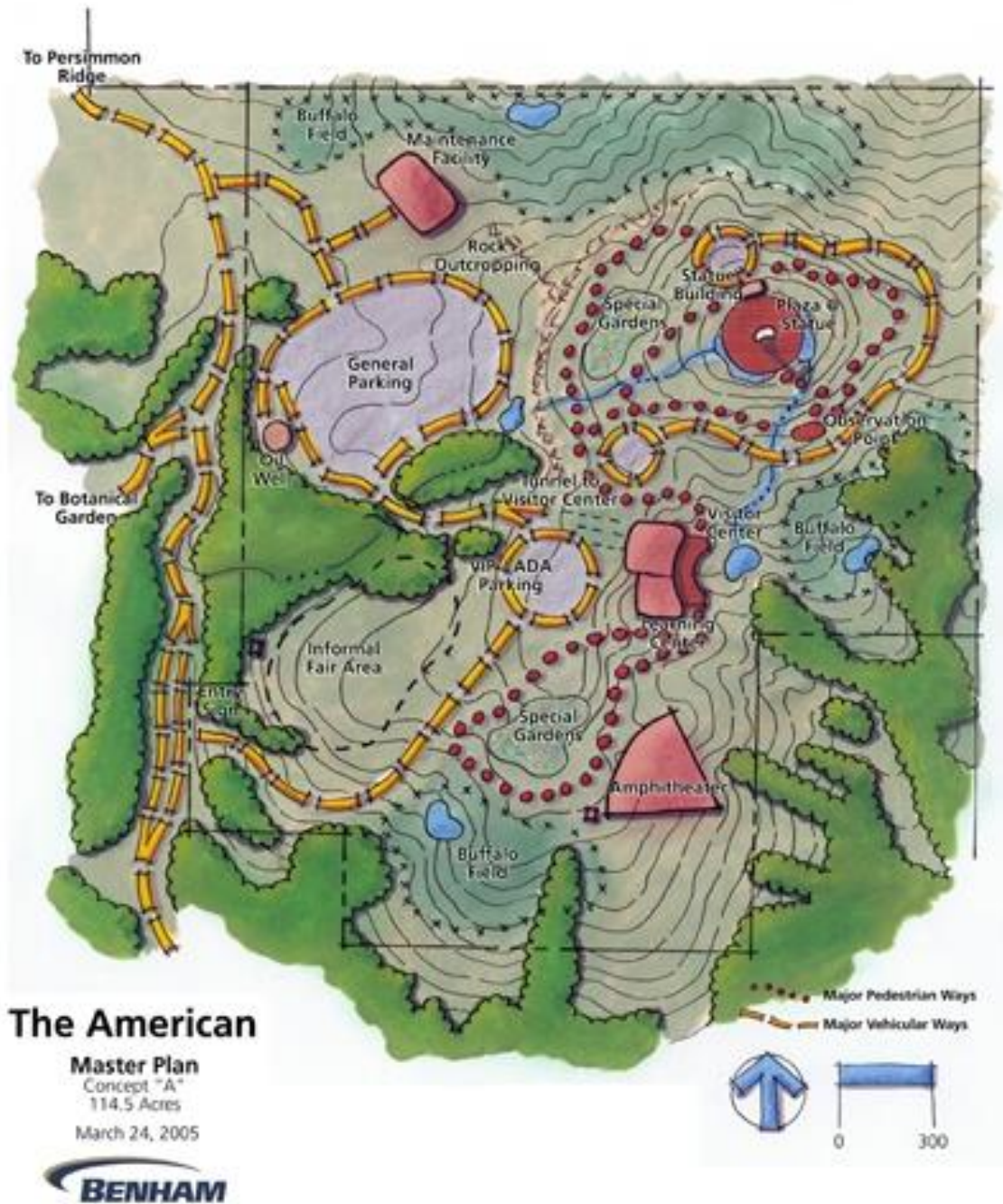
captured spending, state government will receive additional personal income tax (\$557,187), sales tax (\$1,365,336), gasoline tax (\$521,898), and gaming/lottery (\$27,121) receipts. Local governments will receive an estimated \$450,000 in property taxes and \$1,536,950 in sales tax and hotel/motel tax receipts annually.

The estimated economic impacts under the low and high case scenarios relative to the base case scenario are proportional to the difference in visitation levels. The high case scenario of 2.2 million visitors provides an approximation of the expected local economic impact if the visitation level at *The American* more closely matched the number of visitors to the St. Louis Arch. The low case scenario roughly reflects the visitation level needed to generate enough revenue to allow the Park to operate at breakeven cash flow.

Total local spending under the high case is \$53.6 million, of which \$43.1 million is captured locally after adjusting for wholesale and retail margins. Through direct, indirect, and induced effects, locally captured spending under the high case would generate added total sales of goods and services of \$75.5 million, labor income of \$32.5 million, 1,573 additional jobs, and new tax revenue to state and local government of \$6.8 million.

Total local spending under the low case is \$23.1 million, of which \$18.6 million is captured locally after adjusting for wholesale and retail margins. Through direct, indirect, and induced effects, locally captured spending under the low case would generate added total sales of goods and services of \$32.6 million, labor income of \$14.0 million, 679 additional jobs, and new tax revenue to state and local government of \$3.2 million.

Appendix A: The American Park Concept Drawing



Endnotes

¹ See: <http://web4.canr.msu.edu/MGM2/parks/Antietam.htm>.

² See: <http://web4.canr.msu.edu/MGM2/parks/ValleyForge.htm>.

³ See: <http://web4.canr.msu.edu/MGM2/parks/JeffersonArch.htm>.

⁴ While tourism has the potential to contribute in a positive manner to socio-economic development in a regional economy, the incremental growth resulting from the expansion of tourism can also impart costs on a local community. The economic and cultural impacts of tourism include an influx of people, potential infrastructure degradation, added competition in the local labor market as a result of an influx of people seeking employment, and others. This study does not attempt to forecast any potential costs from the expansion of tourism. Hence the results presented are gross benefits, not net benefits, and do not take into account any related public costs resulting from the expected expansion in tourism activity.

⁵ See: Global Insight. 2002. "The Role of Travel and Tourism in America's Top 100 Metropolitan Areas."

⁶ It is well known that larger cities tend to attract more tourism spending in general, and these rankings are largely consistent with relative population levels among these metropolitan areas.

⁷ See: Wilkerson, Chad. "Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District." *Economic Review*, Federal Reserve Bank of Kansas City, Third Quarter 2003, pp. 45-71.

⁸ The construction impacts are generated from an IMPLAN input-output model of the State of Oklahoma using the 2003 Oklahoma IMPLAN dataset. For details, refer to IMPLAN Professional: User's guide, analysis guide, data guide. Minnesota IMPLAN Group, 1998. Stillwater, MN.

⁹ The *Park* will host paid foundry tours beginning in 2007 and extending through the completion of construction in 2009. However, the expected revenue generated from the tours is not expected to exceed \$200,000 in any year.

¹⁰ The construction impacts are based on detailed construction budgets prepared by the construction and design team.

¹¹ Tulsa-based Flintco has been named construction manager and will head an Oklahoma-based design and construction team. The Benham Group (Tulsa office) is providing architecture and engineering services, Horizon Engineering Services Co. (Tulsa) is providing civil engineering services, The Bronze Horse near Pawhuska is providing foundry and field operations support, and Norman-based Synappsys Digital Services is providing laser engineering and the molds.

¹² The annual operating impacts are generated from an IMPLAN input-output model aggregated over the seven counties comprising the Tulsa Metropolitan Statistical Area (MSA) using the 2003 Oklahoma IMPLAN dataset. A model based on the Tulsa region rather than the entire state produces slightly more conservative economic impact estimates. For details, refer to IMPLAN Professional: User's guide, analysis guide, data guide. Minnesota IMPLAN Group, 1998. Stillwater, MN.