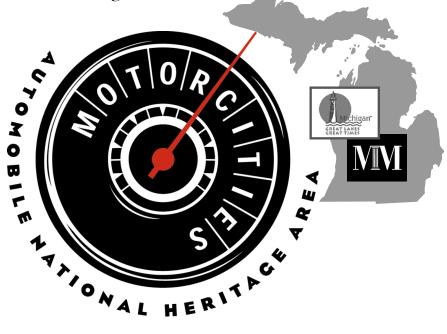
Visitor Awareness and Economic Impacts of MotorCities Hub Sites:

Providing a Baseline for Michigan's Automobile National Heritage Area



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Automobile National Heritage Area

MotorCities Visitor Contact Sites

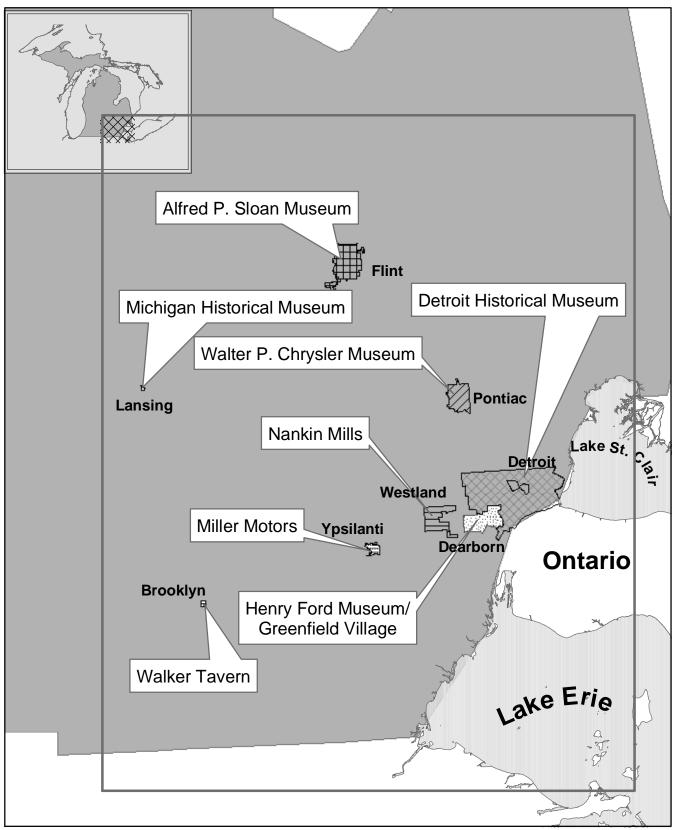


Figure 1: Location of ANHA Visitor Contact Sites (8 of 9 hubs), 2002.



Awareness and Economic Impacts of MotorCities Hub Sites: Providing a Baseline for Michigan's Automobile National Heritage Area

Overview and Study Purpose

The two primary purposes of this report are to document baseline awareness of "MotorCities: Automobile National Heritage Area" (ANHA) and of the current economic impacts of visitors to the sites and communities within which each of the ANHA hubs is located. This study is complementary to the state-wide study funded by Travel Michigan/Michigan Economic Development Corporation, titled *Estimating Economic Impacts of Michigan's Museums*, whose purpose was to document the economic impacts of Michigan museums on the state and local economies. Economic impacts are measured as the direct and secondary sales, income and jobs in the local area resulting from spending associated with museums. Museums create economic impacts from their own operations (museum jobs and spending in the local community) as well as by attracting visitors who spend money as tourists to the area.

Four of the nine ANHA hubs were included in the original 31 museums throughout Michigan that served as visitor contact sites for the state-wide study. Of the remaining five ANHA hub sites, four agreed to participate in the study, bringing the total number of museum contact sites to 35. Only the results pertaining to the MotorCities sites are included in this report. The reader may refer to the state-wide study for complete results.

The first purpose of this study was to document visitor awareness of the Automobile National Heritage Area during the first summer season after the unveiling of MotorCities, and to identify information sources used by visitors to become aware of MotorCities.

The economic impact portion of this study, as was the state-wide study, was guided by the following objectives:

- 1. Estimate the number of visits to Michigan museums in 2001;
- 2. Estimate spending profiles for a set of museum visitor segments;
- 3. Estimate total spending by museum visitors both inside the museum and in the local community;
- 4. Determine the percentage of museum visitor spending attributable to museums and the percentage related to tourism;
- 5. Estimate the state-wide economic significance and impact of museums including the impacts of museum operations and visitor spending; and
- 6. Estimate the local impacts of museums on Michigan communities.

Economic impact analysis traces the flow of money, via specific market transactions, spent by visitors and museums within state and local economies. Thus, it does not fully measure educational, cultural or other values normally associated with museums, except as captured by visitor expenditures and other funds generated by museums to support operations.

Background

With Michigan's continuing efforts to develop cultural and heritage tourism within the state, an important consideration is the economic impact on the state as a whole, and on communities serving as hosts to museums and other experiences serving the cultural tourist. One of the primary reasons for developing the automobile national heritage area was to develop an attraction, based on one of the key stories in Michigan's history, that would draw both tourists and their dollars to the State. As stated in the 2001 annual letter from the ANHA Board President and Executive Director, the MotorCities ANHA general management plan identifies "projects and programs that will bring quality of life and economic benefits to the citizens of our region for generations to come" (Clark, S. and Bodurow, C., 2001) Further, the 2001 Annual Report states that "[t]hese initiatives will foster pride in our communities and assist the entire region by expanding education associated with auto and labor heritage; encouraging the revitalization of sites, districts and neighborhoods; and increasing tourism and economic development" (MotorCities, 2001).

In this way, Michigan could take advantage of a major trend in tourism choices and behavior. Nationally and internationally, heritage/cultural tourism is increasingly recognized as a significant travel market segment (TIA, 2003). Among the many sites and stories in Michigan having national historic/cultural significance, its role in the development of the automobile is of major import. As such, the potential for a well developed, organized system of tourism opportunities and experiences could bring both recognition and additional dollars to the State. Because creation of a national heritage area based on the automobile was a new initiative, it provided the opportunity to gather data, both on the public's general awareness of the heritage area and economic impacts of the hub sites to their local communities, during the initial tourism season. This, then, provides baseline data against which to measure future economic impacts of the national heritage area initiative.

Because economic impact analysis requires a reasonably clear definition of the activity generating the impacts, the ANHA hub sites provide a set of tangible facilities at which to contact visitors, and a set of facilities and activities about which to ask visitor expenditure questions. It should be recognized, however, that many visitors are engaged in a variety of activities and visit a variety of site types when traveling. Thus, it is important to determine the portion of their expenditures associated with the MotorCities portion of their trips. Strategies for determining this are explained in the "results" portion of this report. Also, it should be cautioned that several of the MotorCities hub sites have other stories, activities and attractions available to visitors in addition to the artifacts, stories and experiences associated with automobile history. No effort was made to differentiate within-site spending for automobile and non-automobile-associated spending. Thus, this report serves best as a presentation of baseline data collection. Impacts specific to the ANHA initiative are best determined at some future time by comparing baseline data with later data.

See the accompanying state-wide report for broader background information about the history, importance and impacts associated with the growth of heritage and cultural tourism.

Introduction to Economic Analysis

The General Management Plan for MotorCities (ICON architecture Inc. 2001) made projections of economic impacts under alternative development proposals. Projections of increases in direct visitor spending ten years out ranged from \$61 million (Alternative 2) to \$468 million (Alternative 5). These spending estimates assume increases of from 125,000 to 750,000 person trips to the area. The 2002 Michigan Museum study provides data to examine some of the assumptions underlying these projections and also provides some baselines that can be used to track changes over time.

Estimating changes in the numbers of visitors that can be attributed to the heritage area is the most difficult part of the economic projections. There are over 900 attractions in the MotorCities region of varying relevance to the auto theme. Only a small percentage of these attractions have reliable visitor counts and only a few conduct systematic visitor surveys to identify visitor and trip characteristics or spending patterns. Visitors to MotorCities attractions are a mix of local residents, tourists who come primarily to visit these attractions, and tourists who come to the region to visit friends and relatives, on business, or for other reasons.

The Michigan Museum economic study provided an opportunity to gather some baseline data for MotorCities. Eight of the nine MotorCities Hub sites participated in the study. However, only five sites generated at least 90 on-site surveys and only two (Henry Ford Museum/ Greenfield Village and Walter P. Chrysler) generated a minimum of 50 mailback surveys with spending data. Museum visitor spending patterns are not significantly different from those of tourists in general, so the small mailback sample does not pose major problems for estimating spending.

The more difficult part for an economic impact analysis is estimating total use and the mix of different kinds of trips. Tourist spending varies considerably between day trips and overnight trips and also according to lodging types, especially between stays with friends or relatives versus in hotels, motels and B&B's. The museum visit is not always the primary purpose of the trip. A true impact analysis sorts out which trips and spending are caused by a particular attraction or marketing program to identify gains or losses attributable to the attraction or program.

As a baseline study, we adopt more modest objectives here. The visitor survey measures awareness of MotorCities, and provides baseline estimates of visitor and trip characteristics, including spending patterns, party sizes, lengths of stay and trip segment shares. Current levels of visitation are measured for seven of the nine Hub sites. Economic impacts of current use can be estimated for visitors to these nine sites. This will capture all trips in which at least one of the Hub sites is visited. As the impact models are basically linear, the results may be projected to any assumed level of visitation, as long as one assumes a similar mix of trip types.

We do not attempt to measure the total number of visitors across all MotorCities sites. This would require a clearer definition of which facilities or events should be included, procedures for extrapolating to sites not having visitor use estimates, and also adjustments to handle multiple counting of visitors who may visit more than one facility on a given trip or be counted multiple times at a single facility. To the extent that heritage tourists to the area would visit one or more of the hub sites on a given trip, their trips will be captured in the visit counts at these nine facilities. It must be assumed that visitors would not visit multiple hub sites on a single trip.



Data Collection

As with the state-wide study, two separate surveys, targeted at different audiences, were used for the ANHA study. The first was a survey sent to museum administrators (providers); the second was a visitor survey conducted of a sample of visitors at eight of the nine MotorCities hub sites (see Table 1). Hub site visitors were contacted at the respective museums, where they completed a short on-site survey, and were invited to complete a more comprehensive post-trip survey by mail or on the web.

MotorCities HUB SITE	Participated as Visitor Contact Site	Did Not Participate as Visitor Contact Site	Administrator Survey Received
Alfred P. Sloan Museum	~		~
Detroit Historical Museum	~		no
GM World		~	N/A
Henry Ford/Greenfield Village	v		v
Michigan Historical Museum (MHM)	~		~
Miller Motors	v		no
Nankin Mills Interpretive Center	~		no
Walker Tavern Historic Site	v		(part of MHM)
Walter P. Chrysler Museum	v		~

Table 1. MotorCities Hub Sites Participating in the Study

Survey of Museum Administrators

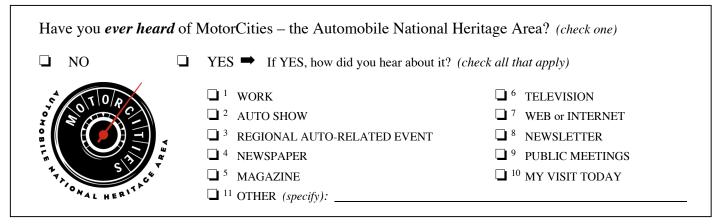
The survey of museum administrators was designed to gather visitation and budget data to be used in estimating the overall volume of museum visits, and to profile annual operating budgets, levels of employment and revenue sources of the ANHA hub sites. A six-page instrument was developed to be consistent with the 1996 MMA administrator survey. Additional items about tourism (tourism season[s], tourist visitation patterns, museum's relationship with tourists/tourism) and budget/economic issues were added to this instrument. Only those items relevant to economic impacts are covered in this report.

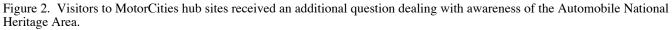
The survey was sent to the museum director (or appropriate staff person responsible for fiscal matters) at each museum. Surveys were accompanied by a cover letter from Michigan State University, as well as a supporting letter from the Michigan Museums Association, a partner in the study. The initial surveys were sent early in 2002. Because the ANHA extension of the state-wide study did not occur until July 2002, surveys to the added sites were sent during the summer of 2002. Administrators had the option of completing and returning the hard copy of the instrument or replying via the internet to a web-based version of the instrument. Reminder postcards were sent to museums that had not responded within two weeks. Finally, a second reminder accompanied by a duplicate hard copy of the survey was mailed to non-responding museums. In the spring of 2003, hub site museums that had not yet

returned their administrator surveys were called by phone to request completion of the survey. Four of the eight participating sites returned the administrator survey. Walker Tavern is part of the Michigan Historical Museum system, which reported for the entire system, so no separate survey was completed. Thus, it is impossible to separate and attribute the MHC museum-based expenditures and economic impacts to their local communities. The other three on-responding sites were the Detroit Historical Museum, Miller Motors (Ypsilanti Automotive Heritage Collection), and Nankin Mills Interpretive Center.

Visitor Survey

The survey of museum visitors gathered demographic and trip characteristics. Specific information needed for the economic analysis included primary trip purpose, zip code origin of visitors (local or not), whether a day or overnight trip, lodging types for overnight trips, and spending by the travel party within 30 miles of the hub site museum. The survey design included a short on-site survey gathering basic trip characteristics and a longer post-trip survey gathering detailed spending and other information after completing the trip. Additionally, the MotorCities site visitors received an additional question, attached to the on-site survey, asking about their awareness of MotorCities Automobile National Heritage Area (see Figure 2). ¹ Respondents agreeing to the post-trip surveys were given the option of either a mailback survey or an on-line version.





It should be noted that, for the state-wide survey, the museums selected as visitor contact sites were selected from only those considered to be "medium" and "large" museums, based on annual budget. ² All five of the additional MotorCities hub site museums, including one not participating in the study, would be considered "small" by AAM size classifications. Thus, they would not have been considered for inclusion in the state-wide study. (It should be noted that this smaller size reduced the number of visitors available to be contacted.)

¹ Because the ANHA study started one month after the state-wide study, the MotorCities awareness question was not collected for the five ANHA sites already in the state-wide study during the month of June.

² Using modified guidelines of the American Association of Museums (AAM), which uses annual budget for categorizing museums by size, "large" museums are those with budgets over \$1 million; "medium" museums are those with budgets from \$250,000 - 1 million; "small" museums are those with budgets of less than \$250,000.

The sampling plan was designed to contact a minimum of 400 visitors at each site, with a target of 200 agreeing to complete the post-trip survey and an expectation that at least 100 of these would actually complete the post-trip survey. Dates and times slots were selected to cover week and weekend days, and morning/afternoon/evening time blocks, as relevant to the various museums. Time blocks were distributed across four months – June through September – to cover both the primary tourism season and a portion of the autumn shoulder season. If a museum was unable to contact visitors during an identified time block, an alternative time block was assigned. For the four sites in the state-wide survey, this June-through-September contact period was used. However, for the four added sites (Miller Motors, Nankin Mills, Walker Tavern, and the Walter P. Chrysler Museum), visitors were contacted only during the months of July, August and September. The same number of sampling time blocks were compressed into three rather than four months. Of the four added ANHA sites, three provided their own staff to collect data; the fourth (Walker Tavern) requested MSU research associate support, which was paid for by MotorCities.

Museum visitors were contacted on site and asked to complete the short on-site survey. Visitors willing to complete a longer follow-up survey were asked to choose their preference for print or web version, and to provide the appropriate contact information (postal or email address). Those agreeing to complete the follow-up survey were to receive a small incentive thank you gift from the museum.

On-site surveys were returned to Michigan State University approximately every two weeks. As they were received, code numbers were assigned to each and respondents were grouped by follow-up survey preference, web or mail. Print versions of the survey were sent by mail to those requesting hard copies. The first mailing was followed by a reminder postcard and, for slow or non-responders, a duplicate print version of the survey was mailed with a second reminder. Individual email messages, including personal code numbers, were sent to those requesting use of the web version of the instrument. For each batch of messages sent, a substantial percent (ranging from about 20% to 35%) was returned as undeliverable. Careful review of contact information forms and re-sends using several possible interpretations of the addresses facilitated successful delivery of only a small portion of the returned email survey messages.

The on-site information was matched with that in the post-trip survey to create a merged file containing both the onsite and post-trip variables for each case.

Economic Impact Analysis Methods

The economic impacts of visitors to MotorCities facilities are estimated using the MGM2 economic impact model (Stynes et. al. 2000). The basic impact equation is:

Economic Impacts = Number of Visits * Spending per Visit * Multipliers

Each input to this equation comes from a different source. Visit estimates are based on reported general admission visitors at six of the nine Hub sites. The mix of visitor types and spending patterns were measured in the Michigan museum visitor survey. Multipliers are taken from an input-output model of the regional economy. For the purpose of this analysis, the region is defined to encompass all of Southeast Michigan covering the Detroit metropolitan area as well as Lansing and Flint.

MotorCities Visitors. The number of general admission museum visitors was estimated based on reports by museum administrators at six of the nine MotorCities hub sites. Guesstimates were made for the three sites ³ not providing visitor counts. Overall we estimate there were about 1.2 million visits to the nine facilities in 2002, with Henry Ford Museum/Greenfield Village (HFMGV) accounting for over two-thirds of the total. These counts do not include visitors to special events or organized youth or adult group programs. Use estimates for special events tend to be unreliable. Group programs predominantly serve local residents. Including visits not covered by general admissions would increase the visit estimates by 40-60%.

Visitor Trip Segments. In order to reliably estimate spending and economic impacts, visitors are segmented into four trip types that help explain visitor spending patterns. The four segments were formed based on data gathered in the visitor surveys:

Local Day Trips:	Visitors on day trips of less than 50 miles. These visitors generally live within the MotorCities region.
Non-local Day Trips:	Visitors on trips of 50 miles or more not staying overnight in the local area (within 30 miles of the museum). This segment includes day trips primarily to visit the museum, and also some visitors stopping en route to other destinations or as a side trip.
Hotel Overnight:	Overnight visitors staying in hotels, motels, or bed and breakfast establishments within 30 miles of the museum.
Other Overnight:	Other overnight visitors who stayed in campgrounds, with friends or relatives, or other types of lodging within 30 miles of the museum.

³ Missing visit counts were for the Detroit Historical Museum, Nankin Mills and Miller Motors.

Response Rates

Of the eight ANHA sites participating in the study, four returned the administrator's survey (Table 1, p. 7). A total of 1,049 museum visitors were contacted at cooperating ANHA museum sites. Sixty-one percent of these visitors agreed to participate in the post-trip survey and 38% of those completed the post-trip survey (Table 2).

Museum	On-site Responses	Refuse Post-trip	Agree to Post-trip	Post-trip Responses	Response Rate I (%)	Response Rate II (%)
	(A)	(B)	(C)	(D)	(D/A)	(D/C)
Detroit Historical Museum	23	8	15	6	26%	40%
Henry Ford Museum & Greenfield Village	353	39	296	127	36%	43%
Miller Motors	12	0	12	2	17%	17%
Nankin Mills	91	82	9	2	2%	22%
Walker Tavern	16	7	9	5	31%	56%
Walter P. Chrysler Museum	274	98	172	60	22%	35%
Alfred P. Sloan Museum	98	44	53	16	16%	30%
Michigan Historical Museum	182	107	75	26	14%	35%
Total	1049	385	641	244	23%	38%

Table 2. Distribution of Cases and Response Rates by ANHA Museum

Because four of the ANHA museum sites had contacted visitors and collected on-site survey data for one month (June) prior to the beginning of the MotorCities study, those sites did not distribute the MotorCities Awareness question during that month. Thus, total distribution of that survey and the final response rates are slightly different for the MotorCities question. The absence of MotorCities questions and the low number of initial visitor contacts (indicated by the number of on-site responses [23]) for the Detroit Historical Museum probably indicate that visitors were not contacted after June; thus, no MotorCities awareness questions were distributed. (See Table 3.)

Table 3. Responses to MotorCities Awareness Question

Museum	Distribution of MotorCities Question	Number of Responses	Response Rate (%)
Alfred P. Sloan Museum *	43	40	93%
Detroit Historical Museum *	-	-	-
Henry Ford Museum & Greenfield Village *	343	333	97%
Michigan Historical Museum *	140	119	85%
Miller Motors	12	12	100%
Nankin Mills	91	88	97%
Walker Tavern	16	16	100%
Walter P. Chrysler Museum	272	267	98%
Total	917	875	95 %

* Museums already in the state-wide survey (MotorCities question not distributed during June)

Non-response Bias

Non-response bias is tested by examining the distribution of "visitor segments" and "primary purposes" between the group of ANHA visitors who participated in the post-trip surveys and the group of visitors who did not. No significant differences are observed between the two groups in terms of trip purpose. A significantly higher percentage (.001) of overnight visitors, however, are represented in the group of those who responded to the post-trip survey than of those who did not. (See Table 4.)

	Did Not Respond to Post-trip Survey		
Lodging Segment			
Local Day Visitors	42%	28%	0.001
Non-local Day Visitors	13%	14%	
Overnight Visitors	46%	58%	
Total	100%	100%	
Number of cases	797	214 ^a	
Primary Purpose			
Visit this Museum	65%	69%	0.521
Visit the Community	14%	14%	
Business	5%	4%	
VFR	12%	8%	
Shopping	0%	1%	
Other	4%	4%	
Total	100%	100%	
Number of cases	797	224	

Table 4.	Comparie	son of Non-re	sponse Bias o	on Selected	Variables
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a. The number of cases for the segment analysis is less than the overall sample sizes due to some missing data.



In this section, basic demographic information about ANHA site visitors and descriptive information about trip characteristics are presented first. This section is followed by presentation of results on the MotorCities "awareness" question. Finally, the economic analysis portion of the results are presented.

Demographic Characteristics of ANHA Museum Site Visitors

Museum visitors were fairly evenly distributed across the four age group categories for those over 35 years of age, with many fewer visitors between 18 and 35 years old (Table 5). Respondents were evenly distributed by gender. Sixty-two percent had household incomes between \$25,000 and \$75,000, with another third (34%) having an annual household income of more than \$75,000. Seventy percent had some college education or higher (excluding technical or associate's degree). The vast majority (91%) were Euro-American/White. Approximately one-third of ANHA museum visitors were retired. Only general admission adult visitors (age 18 or older) were sampled, so these statistics exclude visitors who are part of organized school or adult groups and visitors to most special events.

Characteristics	Ν	Percent	Characteristics	Ν	Percent
Age			Work Status		
18-25	7	3	Student	6	3
26-35	17	7	Housekeeper	12	5
36-45	50	21	Retired	82	35
46-55	48	20	Full time	102	44
56-65	62	26	Part time	18	8
More than 65	51	22	Other	11	5
Total	235	100	Total	231	100
Missing value	9		Missing value	13	
Gender			Ethnicity		
Male	117	50	African American	4	2
Female	116	50	American Indian	2	1
Total	233	100	Asian American	1	0
Missing value	11		Euro-American/White	207	91
_			Other	14	6
Education Level			Total	228	100
Less than high school	4	2	Missing value	16	
High school graduate	46	20			
Technical or associates' degree	19	8	Annual Household Income		
Some college	47	20	Less than \$25,000	8	4
Undergraduate degree	57	25	\$25,000~\$49,999	63	32
Masters degree	46	20	\$50,000~\$74,999	58	30
Doctoral degree	11	5	\$75,000~\$99,999	32	16
Total	230	100	\$100,000~\$124,999	19	10
Missing value	14		More than \$125,000	16	8
			Total	196	100
			Missing value	48	

Table 5.	ANHA	Visitor	Demographics
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Note: Information is obtained from the post-trip surveys. Due to rounding error, the percent total may not add up to 100%.

As was the case for the statewide survey of museum visitors, ANHA museum visitors tended to be older and included fewer African Americans than the Michigan population in general, but were similar by gender. Overall, ANHA visitors had higher levels of education and income than Michigan residents. (See Table 6.)

Table 6. ANHA Visitor Demographic Characteristics Compared with Michigan Population^a

Characteristic	Percent of ANHA Visitors	Percent of Michigan Population ^b
18-25	3%	9%
26-35	7%	19%
36-45	21%	23%
46-55	20%	19%
56-65	26%	12%
> 65	22%	17%
Gender		
Male	50%	49%
Female	50%	51%
Annual Household Income ^b		
Les than \$25,000	4%	26%
\$25,000 - \$49,999	32%	29%
\$50,000 - \$74,999	30%	21%
\$75,000 - \$99,999	16%	11%
\$100,000 - \$124,999	10%	4%
> \$125,000	8%	8%
Education ^b		
Less than high school	2%	17%
High school graduate	20%	31%
Technical or associates' degree	8%	7%
Some college	20%	23%
Undergraduate degree	25%	14%
Graduate degree	25%	8%
Work Status		
Student	3%	N/A
Housekeeper	5%	
Retired	35%	
Full time	44%	
Part time	8%	
Other	5%	
Race/Ethnicity		
Euro-American/White	91%	79%
African American	2%	14%
Other	7%	7%

a. Demographic characteristics are based on the post-trip sample.

b. Source: U.S. Census 2000. Michigan income figures are for 1999. Michigan education figures cover the population 25 years and over.

Trip Characteristics

Slightly over half of the ANHA museum visitors (56%) came from more than 50 miles of the museum and about half (49%) of the trips involved an overnight stay in the local area⁴. The percentage of "tourist" trips (greater than 50 miles) traveled between home and the museum drops off slowly with distance, except for those traveling more than 600 miles. One third of trips come from between 50 and 150 miles, 18% from 151 through 300 miles, 12% from 301 through 450 miles, and 8% from 451 through 600 miles. Over one quarter (28%) of visitors traveled from more than 600 miles away, although many of these trips likely involved multiple purposes and stops.

Two thirds of those visiting the ANHA sites where contacted were making their first visit to the museum. Two thirds of the trips were made primarily to visit the ANHA museum where the visitor was contacted, fourteen percent of respondents were visiting the community more generally, 11% were visiting friends and relatives, and 5% of trips were for business reasons. Nearly half of the visitors contacted (44%) were visiting with their families (more than spouse only), while another quarter were with a spouse or significant other. (See Table 7.)

Characteristics	Ν	Percent	
Stay Overnight Away from Hom	e		
No	527	51	
Yes	502	49	
Total	<u>1,029</u>	<u>100</u>	
Missing value	20		
Travel 50 Miles from Home			
No	456	44	
Yes	572	56	
Total	1,028	100	
Missing value	21		
Distances Traveled One Way			
50~150 miles	107	34	
151~300 miles	57	18	
301~450 miles	37	12	
451~600 miles	24	8	
More than 600 miles	86	28	
Total	311	100	
Missing value	261		

Table 7. Tri	p Characteristics	of ANHA	Visitors
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	1	1					
Characteristics	Ν	Percent					
First Visit to Museum where Interviewed							
No	355	34					
Yes	683	66					
Total	1,038	100					
Missing value	11						
Primary Purpose of Trip							
Visit this museum	671	66					
Visit the community	140	14					
Business	52	5					
VFR	111	11					
Shopping	5	0					
Other	42	4					
Total	1,021	100					
Missing value	28						
Group Type							
With Spouse or Significant other	262	25					
With group of friends	132	13					
With Family	450	44					
With organized group	80	8					
Alone	83	8					
Other	26	3					
Total	1,033	100					
Missing value	16						

Note: Information is obtained from the on-site surveys. Due to rounding error, the percent total may not add up to 100%.

⁴ It should be noted that the mix of trip types varies considerably across different museums. While the museums sampled cover a range of locations and museum types, we can not guarantee that the resulting sample of visitors is completely representative of all museum visitors.

Day trip visitors were more likely to indicate that "visiting this museum" was the primary purpose for the trip. Eighty-two percent of local day trips and 78% of non-local day trips were made primarily to visit the ANHA site while about half (49%) of overnight trips were made primarily to visit the ANHA site. (See Table 8.)

	Primary Trip Purpose							
Type of Visit	Visit this Museum	Visit the Community	Business	VFR	Shopping	Other	Total	N
Local Day Visit	82%	9%	3%	4%	1%	1%	100%	378
Non-local Day Visit	78%	9%	4%	5%	1%	2%	100%	129
Overnight Visit	49%	18%	7%	18%	0%	7%	100%	479
Average	66%	14%	5%	11%	1%	4%	100%	986

Table 8. Correlation between Lodging Segment and Primary Purpose

Note: Information is obtained from the on-site surveys.

Overall, the most commonly cited reason for the trip was specifically to visit the ANHA museum site where the visitors were contacted. Except for Walker Tavern (33%) and the Walter P. Chrysler Museum (48%), between half and three quarters of visitors contacted identified a visit to the museum as the primary trip purpose. Visiting the community in general was the primary trip purpose for Walker Tavern visitors, and visitors to the Walter P. Chrysler Museum had varied trip purposes, with a visit to the museum cited most frequently. (See Table 9.)

 Table 9. Distribution of Primary Trip Purpose by Museum

Museum	Visit this Museum	Visit the Community	Business	Visit Friends/ Relatives	Shopping/ Other	Total Percent	Total Number of Cases
Alfred P. Sloan Museum	72%	11%	1%	13%	3%	100%	94
Detroit Historical Museum	52%	19%	5%	19%	5%	100%	21
Henry Ford Museum &							
Greenfield Village	76%	13%	1%	8%	2%	100%	343
Michigan Historical Museum	67%	16%	5%	10%	2%	100%	177
Miller Motors	50%	17%	8%	8%	17%	100%	12
Nankin Mills	81%	13%	2%	3%	0%	100%	90
Walker Tavern	33%	53%	0%	7%	7%	100%	15
Walter P. Chrysler Museum	48%	12%	13%	17%	11%	100%	269
Total	66%	14%	5%	11%	5%	100%	1,021

Note: Information is obtained from the on-site surveys. Twenty-eight cases of missing values.

Trip data were analyzed also by lodging segment to better understand both trip behaviors and the economic impacts (Table 10). Day visitors were categorized by those who were local and non-local (traveling more than 50 miles from home to visit the ANHA museum). Overnight visitors were categorized by those who stayed overnight in hotels and those who stayed in other types of lodging (bed and breakfasts, campgrounds, seasonal home, or with friends or relatives). All non-hotel lodging was grouped together because there were so few of them.

	Day visitors		Overnight Visitors			
Museums	Local	Non-local	Hotel	Others	Total %	Total N
Alfred P. Sloan Museum	52%	29%	0%	19%	100%	93
Detroit Historical Museum	62%	10%	29%	0%	100%	21
Henry Ford Museum / Greenfield Village	28%	10%	42%	20%	100%	339
Michigan Historical Museum	53%	21%	13%	13%	100%	176
Miller Motors	18%	9%	0%	73%	100%	11
Nankin Mills	87%	5%	4%	4%	100%	87
Walker Tavern	38%	6%	0%	56%	100%	16
Walter P. Chrysler Museum	21%	10%	54%	15%	100%	268
Total	39%	13%	38%	10%	100%	1,011

Table 10. Shares by Lodging Segment for ANHA Visitors (by museum)

Notes:

• Information is obtained from the on-site surveys. Segment shares are determined by assuming the same ratios of local day, non-local day and overnight visitors from the on-site survey then split the overnight visitors into "Hotel" and "Others" in proportion to the shares from the post-trip surveys.

• Thirty-eight cases of missing values.

Visitor Awareness of MotorCities Automobile National Heritage Area

Of all visitors contacted at ANHA sites, more than three quarters (77%) have not previously heard of MotorCities (Table 11). These percentages vary, however, by individual site. Over four fifths of those visiting Miller Motors, though the overall number was small, had heard of the ANHA. This museum is focused specifically on an automotive theme. Other than the Walter P. Chrysler Museum, all the other museums exhibit stories on many topics other than the automobile. Of those, only the Alfred P. Sloan Museum had more than 30% of its visitors who had heard of MotorCities. (See Table 12.)

Table 11. Awareness of MotorCities

Have Heard of MotorCities	Ν	Percent
No	678	77
Yes	197	23
Total	875	100
Missing values	42	

	Number Yes	Total N	Percent of Yes (Number Yes/Total N)
Museum			
Alfred P. Sloan Museum	15	40	38%
Henry Ford Museum & Greenfield Village	55	333	17%
Michigan Historical Museum	35	119	29%
Miller Motors	10	12	83%
Nankin Mills	4	88	5%
Walker Tavern	0	16	0%
Walter P. Chrysler Museum	78	267	29%
Total	197	875	23%
Segment			
Local day visitors	72	314	23%
Non-Local day visitors	18	91	20%
Overnight visitors	98	445	22%
Total	188	850	22%

Table 12. Distribution of Respondents that Had Heard of MotorCities by Museum and by Segment

Note: Information is obtained from the on-site surveys.

Of the nearly one quarter of visitors who had heard of MotorCities, multiple sources for hearing about the Automobile National Heritage Area were identified. Visitors could identify more than one information source. The most often cited sources were magazines, newspapers, automobile shows and television, though no single source was used extensively more than others. This might reinforce the idea of promoting the heritage area through multiple sources. Twelve percent of those who indicated they had heard of MotorCities said that their trip on the day of contact for the survey was one source. Of these, 10 had heard of MotorCities also from at least one other source; for 13, the "visit today" was their first exposure to MotorCities. (See Table 13 for details.)

Source for hearing about MotorCities: ANHA	Number (N)	Percent
Magazine	31	16%
Newspaper	27	14%
Auto show	26	14%
Television	26	14%
Work	23	12%
My visit today	23	12%
Regional auto-related event	20	11%
Web or Internet	12	6%
Newsletter	5	3%
Public Meeting	1	1%
Other	47	27%
Friend/family/colleague	13	7%
Been here before/grew up here	12	6%
Travel promotion (brochure, guide, etc.)	5	3%
Information at another museum	3	2%
Billboard, sign, airport sign	3	2%
Information at hotel or campground	2	1%
Miscellaneous	9	6%

Table 13. Sources Where Visitors Heard about MotorCities

Notes:

• A total of 188 respondents answered this part of the question. Percentages do not equal 100 because visitors could choose more than one information source.

• Responses were obtained from the on-site surveys.

Types of sources listed in the "other" category include: word of mouth (friends, relatives or colleagues); exposure through previous visits; travel promotion materials (brochures and travel guides); and information displayed in a range of other venues, including other museums, the airport, hotels, campgrounds, restaurants, and a conference.

When comparing "primary trip purpose" across visitors who had and those who had not heard of MotorCities, the percentages are similar. Those indicating "visiting this specific museum" were slightly more likely to have heard of MotorCities than not, and those whose trips were primarily to visit friends and relatives were slightly less likely to have heard of MotorCities, but the differences are not significant. (See Table 14.)

Table 14. Correlation between "Heard of MotorCities" and Primary Trip Purpose

Primary Trip Purpose							
Heard of MotorCities	Visit this Museum	Visit the Community	Business	VFR	Shopping	Other	Ν
No	64%	13%	6%	12%	1%	4%	670
Yes	69%	13%	5%	8%	1%	4%	189
Average	65%	13%	6%	11%	1%	4%	Total: 859

Note: Information is obtained from the on-site surveys.

Economic Analysis

Recall that responses were categorized into four different segments based on trip type: local day trips, non-local day trips, overnight trips involving lodging at hotels/B&Bs, and overnight trips involving other types of loding.

Based on visitor survey responses, 39% of visitors were classifed as local, 13% were on day trips of more than 50 miles (one-way), 38% were overnight visitors staying in hotels and 10% were on overnight trips staying in other types of lodging (Table 15). The trip type segment mixes varied quite a bit across individual museums, with higher percentages of overnight visitors at Henry Ford Museum and Greenfield Village and the Walter P. Chrysler Museum. The sample sizes at three of the museums are too small to reliably estimate segment mixes, but we assume that the sample in the aggregate is reasonably representative of visitors to MotorCities facilities overall.

Museum	Day Trips		Overnig		
	Local	Non-local	Hotel	Other	Ν
Alfred P. Sloan Museum	52%	29%	0%	19%	93
Detroit Historical Museum	62%	10%	29%	0%	21
Henry Ford Museum/Greenfield Village	28%	10%	42%	20%	339
Michigan Historical Museum	53%	21%	13%	13%	176
Miller Motors	18%	9%	0%	73%	11
Nankins Mills	87%	5%	4%	4%	87
Walker Tavern	38%	6%	0%	56%	16
Walter P. Chrysler Museum	21%	10%	54%	15%	268
Total	39%	13%	38%	10%	1,011

Table 15. Visitor Segment Shares by Trip Type Segment

Note: The percentages of visitors on local day trips, non-local day trips and staying overnight within 30 miles of the museum were estimated in the on-site portion of the survey. Overnight trips were divided between hotel and other lodging types based on the distribution of lodging types measured in the mailback survey. N's are on-site sample sizes.

As spending is measured on a travel party basis, the number of individual museum visitors is first converted to party trips and party days/nights⁵ using length of stay and party size estimates for each segment. The 1.2 million individual visits represents 446,000 party trips and 746,00 party days/nights in the region. The hotel segment accounts for 38% of visits, 37% of party trips and 50% of party days/nights. (See Table 16.)

⁵ Day trips are measured in days while overnight trips are measured in nights. Spending is computed on a per day basis for day trips and per night basis for overnight trips.

Variable	Day Trips		Overnig		
	Local Non-local		Hotel	Others	Total
Visits	468,000	156,000	456,000	120,000	1,200,000
Segment Percentage	39%	13%	38%	10%	100%
Party Size	2.72	2.35	2.8	2.7	2.7
Party Trips	172,059	66,383	162,857	44,444	445,743
Length of Stay	1.0	1.0	2.3	3.0	
Party Days/Nights	172,059	66,383	374,571	133,333	746,347
Percent of Trips	39%	15%	37%	10%	100%
Percent of Days/Nights	23%	9%	50%	18%	100%

Table 16. Conversion of Visits to Party Trips and Party Days/Nights by Segment

Notes:

• Columns ma μ y not sum to the "total" due to rounding error during computations.

• Computations in the "party days/nights" row vary from hand-calculations using numbers in the table due to decimals being used in the actual computations.

Spending

Spending was measured on a party trip basis covering spending inside the museum and all other spending within 30 miles of the museum. Local visitor parties spent \$53 on the trip, split roughly evenly inside and outside the museum (Table 17). Visitors on day trips of 50 miles or more spent \$72 per party. Visitors staying in hotels spent \$591 on trips averaging about 2.3 nights in the local area. Other overnight visitors spent \$285 during a three-night stay.

On average about 15% of the trip spending is inside the museum and 85% in the surrounding community. This percentage varies quite a bit across trip segments. About half of spending on day trips is inside the museum, while 90% of the trip spending by visitors staying in hotels occurs outside the museum. Spending inside the museum is split evenly between museum admissions and spending in the gift shop or snack bar. The majority of spending outside the museum is for lodging, meals, shopping and transportation expenses.

Spending profiles for MotorCities visitors are a little different than the statewide museum visitor spending averages (Stynes, Vander Stoep and Sun 2003). Spending inside the museum is higher due to the higher admissions at HFM/GV and Walter P. Chrysler.⁶ Spending patterns of the "other overnight" segment are slightly lower than the statewide average due to a higher percentage of stays with friends and relatives in Southeast Michigan.

⁶ Some ANHA museums have no general admission fees.

Category	Day v	Day visitors		t Visitors	
	Local	Non-local	Hotel	Others	Overall ^a
Inside the Museum					
Museum or Exhibit admission	\$ 12.29	\$ 18.42	\$ 26.17	\$ 36.16	\$ 20.75
Gift shop or snack bar	13.28	18.65	27.20	21.70	20.11
All other expenses	2.35	0.35	1.77	0.35	1.67
Total Inside	27.92	37.42	55.14	58.22	42.53
Outside the Museum					
Lodging	0	0	232.19	27.84	91.02
Restaurants and bars	12.33	13.94	113.46	66.84	56.42
Grocery and take-out food	1.12	1.03	11.88	23.57	7.44
Gas and oil	4.14	6.39	38.57	27.91	19.89
Other transportation	0.09	0.60	27.49	1.97	10.76
Admissions to other museums	1.28	4.35	10.74	11.11	6.26
Other admissions	0.83	0.10	11.32	10.81	5.72
Shopping	5.48	8.06	75.88	34.78	35.50
Casino gaming	0	0	10.36	9.73	4.91
All other expenses	0	0	3.74	11.89	2.61
Total Outside	25.26	34.47	535.63	226.44	240.52
Grand Total	53.18	71.89	590.77	284.66	283.04

Table 17. Spending by Trip Type Segments within 30 Miles of the Museum (\$ per party per trip)

a. Overall averages are a weighted average of the columns using segment shares in Table 1.

Trip spending averages are converted to a per day/night basis in Table 18 by dividing the spending averages in Table 17 by the average length of stay for each segment. Per day spending averages are more easily interpreted and provide some flexibility in deciding how much of the trip spending may be attributed to the museum for visitors on multi-purpose trips. For example, a common practice is to count one night's spending if the museum visit was not the primary trip purpose. The hotel segment averages \$252 in spending per party per night, including an average of \$99 per night for the room. This is consistent with room rates in the region for the types of hotels that museum visitors would most likely use.

The spending averages are accurate to plus or minus 7% overall and within 8 to 23% of the mean for individual segments. Sampling errors are 8% for the hotel segment, which is the most important one for estimating total spending.

Category	Day v	isitors		t Visitors	
	Local	Non-local	Hotel	Others	Overall ^a
Inside the Museum					
Museum or Exhibit admission	\$ 12.29	\$ 18.42	\$ 11.15	\$ 11.84	\$ 12.61
Gift shop or snack bar	13.28	18.65	11.59	7.11	12.72
All other expenses	2.35	0.35	0.75	0.12	1.26
Total Inside	27.92	37.42	23.49	19.06	26.59
Outside the Museum					
Lodging	0	0	98.89	9.11	38.49
Restaurants and bars	12.33	13.94	48.33	21.88	27.17
Grocery and take-out food	1.12	1.03	5.06	7.72	3.27
Gas and oil	4.14	6.39	16.43	9.14	9.60
Other transportation	0.09	0.6	11.71	0.65	4.63
Admissions to other museums	1.28	4.35	4.57	3.64	3.17
Other admissions	0.83	0.1	4.82	3.54	2.52
Shopping	5.48	8.06	32.32	11.39	16.61
Casino gaming	0	0	4.41	3.19	1.99
All other expenses	0	0	1.59	3.89	0.99
Total Outside	25.26	34.47	228.14	74.15	108.44
Grand Total	53.18	71.89	251.63	93.21	135.03
Number of Cases (mailback)	58	31	69	37	195
Percent error (95% confidence level)	11%	18%	8%	23%	7%

Table 18. Spending by Trip Type Segments within 30 Miles of the Museum (\$ per party per day/night)

a. Overall averages are a weighted average of the columns using segment shares in Table 15.

Total visitor spending can be estimated by multiplying the number of visits (trips) by each visitor segment times the trip spending averages (Table 19). Visitors to the nine MotorCities Hub Sites spent a total of \$123 million in 2002, \$19 million inside the museums and \$104 million in the surrounding area. Thirty-nine million dollars were spent in lodging establishments, \$24 million in restaurants and \$15 million on shopping outside the museums. Visitors staying in hotels, motels and B&B's account for over three fourths of the spending. Only \$9 million of the spending is by local residents living within 50 miles of the museum.

Note that it is difficult to determine how much of the trip expenditures should be attributed to MotorCities. All sites included in the study existed prior to their designation as hub sites. Most of the sites provide other experiences and tell many stories other than those related to automobile history and heritage. These characteristics, combined with relatively low visitor awareness of MotorCities (about 22% of those visiting these eight sites), make it difficult to attribute spending to the existence of MotorCities at this time and with the survey structure. However, data can serve as a baseline of visitor spending during the inaugural season of the new Automobile National Heritage Area.

Category	Day Trips		Overnig	ht Trips	
	Local	Non-local	Hotel	Others	Total
Inside the Museum					
Museum or Exhibit admission	\$ 2.11	\$ 1.22	\$ 4.26	\$ 1.61	\$ 9.21
Gift shop or snack bar	2.28	1.24	4.43	0.96	8.92
All other expenses	0.40	0.02	0.29	0.02	0.73
Total Inside	4.80	2.48	8.98	2.59	18.86
Outside the Museum					
Lodging	-	-	37.81	1.24	39.05
Restaurants and bars	2.12	0.93	18.48	2.97	24.50
Grocery and take-out food	0.19	0.07	1.93	1.05	3.24
Gas and oil	0.71	0.42	6.28	1.24	8.66
Other transportation	0.02	0.04	4.48	0.09	4.62
Admissions to other museums	0.22	0.29	1.75	0.49	2.75
Other admissions	0.14	0.01	1.84	0.48	2.47
Shopping	0.94	0.54	12.36	1.55	15.38
Casino gaming	_	-	1.69	0.43	2.12
All other expenses	-	-	0.61	0.53	1.14
Total Outside	4.35	2.29	87.23	10.06	103.93
Grand Total	9.15	4.77	96.21	12.65	122.79
Percent	7%	4%	78%	10%	100%

Table 19. Total Spending by MotorCities Visitors in the Local Area (\$ millions)

Comparison of Trip and Spending Estimates with MotorCities Management Plan Assumptions

The survey estimates may be compared with some of the assumptions underlying the economic impact projections in the MotorCities Management Plan (ICON architecture Inc. 2001). The Plan did not cover local users and divided trips into day and overnight trips. Visitors on day trips were assumed to spend about \$50 per person per day or \$120 per day for an average party of 2.4 people. Day trip spending measured in the visitor survey is only \$72 per party for day trips, with an average party size of 2.35.

Assumptions for overnight trips in the Plan included an average party size of 2.0, length of stay of 4-5 days and spending of \$174 per party per day. The average length of stay for overnight visitors in our survey was only 2 to 3 nights. If we assume an even split between hotel and other over-night visitors, the measured spending average is \$172 per party per day, very close to the per day spending figure assumed in the Plan. However, since the average overnight stay measured in the survey is only about half of the 4.5 nights assumed in the Plan, the per trip spending average for overnight visitors is also half of what was assumed in the Plan.

Estimates in the Plan are projections ten years out, although we assume the spending averages are in current dollars. To achieve the projections in the Plan, additional spending would need to be generated from day trip visitors. The packaging of attractions and activities and enhanced information programs is one way to lengthen stays for day trips and increase spending. Additional attractions and spending opportunities can also help. The per day spending figures for overnight visitors in the Plan are realistic, but extending stays to 4-5 days probably is not.

The current visitor counts at Hub facilities provide a context for evaluating the trip projections of from 125,000 to 750,000 additional tourist visits within ten years. The high figure requires roughly doubling the current number of tourists to MotorCities hub sites because about 40% of the 1.2 million current visitors are local residents. Some significant new attractions and programs will likely be needed to achieve this goal. The increase of 125,000 trips under alternative 2 is more realistic, although achieving the spending projections will likely require somewhat larger numbers of trips to compensate for shorter than assumed overnight stays.

A large percentage of tourism trips to Southeast Michigan involve visiting friends and relatives (VFR). Enhanced auto heritage attractions could likely yield some increases in VFR trips and some extended stays, but only a portion of the nights and spending for VFR trips can likely be directly attributed to MotorCities attractions, so the larger share of a net increase in overnight trips may need to come from visitors staying in hotels. Because these visitors spend more than those on VFR trips, the spending goals can be achieved with fewer additional trips. Again, remember that future research to determine the impact of MotorCities on potential future additional spending must specifically determine if the MotorCities component of the site visits is the primary or secondary purpose of the trip.

Economic Effects of Visitor Spending

Economic impacts of MotorCities visitor spending may be estimated by applying the spending changes to a model of the regional economy. Multipliers for the Detroit metro region (Table A-1) should be adequate for this application.

Spending is converted to the associated income and jobs in the region using economic ratios and multipliers from an input-output model for Southeast Michigan . The MGM2 model employs distinct multipliers for each tourism-related sector. The multipliers convert sales into the associated jobs and income and estimate secondary effects as the visitor spending circulates through the local economy. (The full set of MGM2 multipliers are reported in Appendix A, Table A-1).

Direct effects capture the sales, jobs and income in those businesses selling directly to visitors, e.g. hotels, restaurants, attractions, and retail shops. On average, every million dollars of visitor spending supports 20 direct jobs and another six jobs through secondary effects. Forty percent of direct sales represents wages and salaries to workers in tourism businesses. The overall tourism sales multiplier for Southeast Michigan is 1.58. A sales multiplier of 1.58 means that for every dollar of direct sales another \$. 58 in sales is generated in the region through secondary effects⁷. The sales multiplier represents the ratio: (direct + secondary effects) / direct effects. Total sales effects are estimated by multiplying the sales multiplier X direct sales.

Economic impacts are estimated for two distinct scenarios:

- *Economic Significance* measures the direct and secondary economic activity associated with the \$123 million spent by MotorCities visitors on trips to the area.
- *Economic Impact* estimates the economic activity that would be lost to the region in the absence of these facilities.

⁷ Secondary effects include sales in backward-linked industries (indirect effects) in the region as well as sales from household spending of income earned from tourists (induced effects).

Economic Significance of MotorCities Visitor Spending

Estimates of economic significance (Table 20) are based on the \$123 million in spending indicated in Table 19. This spending results in \$106 million in direct sales⁸ in the MotorCities region and supports 2,100 direct jobs in museums and tourism-related businesses. Direct personal income (wages and salaries, including payroll benefits) resulting from this spending is \$43 million and value added is \$66 million. Value added includes personal income, profits and rents, and sales and other indirect business taxes. Another 641 jobs and \$24 million in personal income results from secondary effects, yielding a total impact of 2,748 jobs and \$67 million in personal income.

Sector/Spending Category	Sales (\$000's)	Jobs	Personal Income (\$000's)	Value Added (\$000's)
Direct Effects				
Motel, hotel cabin or B&B	\$ 39,051	683	\$ 15,463	\$ 24,075
Restaurants & bars	26,279	657	10,167	14,365
Admissions & fees	14,432	348	6,328	9,464
Gambling	2,120	51	929	1,390
Other vehicle expenses	4,620	44	1,636	2,686
Retail Trade	14,943	302	7,348	12,008
Wholesale Trade	2,338	15	987	1,629
Local Production of Goods	1,742	5	264	502
Total Direct Effects	105,525	2,107	43,124	66,120
Secondary Effects	60,742	641	24,241	38,362
Total Effects	\$ 166,267	2,748	\$ 67,365	\$104,482

Table 20. Economic Significance of MotorCities Visitor Spending, 2002

Direct effects can be itemized by economic sector. Of the 2,107 direct jobs, 683 are in hotels, 657 in restaurants, 348 in museums and other amusement/entertainment facilities, and 302 in retail trade.

Economic Impacts of MotorCities Visitor Spending

Not all of this spending can be directly attributed to MotorCities attractions. While all spending on trips that are made primarily to visit one or more of these attractions would be lost if the trip were not made, for other trips only a portion of the trip spending might be lost in the absence of these attractions. Fully sorting out impacts "with versus without" the MotorCities attractions requires fairly detailed knowledge of trip motivations and what substitutions might be made in the absence of these facilities. Lacking this information, we make some reasonable assumptions about which spending can be directly attributed to the museum visits.

The economic impact scenario counts all visitor spending inside the museums, but excludes spending by local residents outside the museums. We count only the equivalent of one night's spending outside the museum for trips where the museum visit was not the primary trip purpose and half of the spending outside the museum for day trips

⁸ The difference of \$17 million between visitor spending of \$123 million and direct sales of \$106 million represents the costs of imported goods sold at retail to visitors. Only the retail margins on these purchases accrue to the local economy.

where the museum visit was not the primary trip purpose. The assumption here is that the museum visit extended overnight stays by one night and day trips by the equivalent of half of the spending⁹.

Overall, two thirds of the trips were made primarily to visit the museum. Eighty-two percent of visits by local residents were made primarily to visit the museum, 78% of non-local day trips were primary purpose trips, and 49% of overnight trips were primarily to visit the museum. (Refer back to Table 8, p. 17.)

With the assumptions and spending exclusions noted above, sixty-three percent, or \$76 million of the \$123 million spent by MotorCities visitors, would be lost in the absence of these facilities (Table 21). The \$76 million in spending for the impact scenario includes the \$19 million spent inside the museums and \$57 million spent outside museums. Fifty-five percent of the spending outside the museum is assumed to be lost to the region in the absence of the MotorCities facilities.

The largest difference in spending between the significance analysis based on Table 19 and impact analysis based on Table 21 is for overnight trips, as these were less likely to be made primarily to visit the museum and also involve greater spending. Only about half of the spending outside the museum by visitors in hotels is attributed directly to the museum visit.

Spending Category	Day	visitors	Overnight	Visitors		
	Local Non-local		Hotel	Others	Total	
Inside the Museum						
Museum or exhibit admission	\$ 2.11	\$ 1.22	\$ 4.26	\$ 1.61	\$ 9.21	
Gift shop or snack bar	2.28	1.24	4.43	0.96	8.92	
All other expenses	0.40	0.02	0.29	0.02	0.73	
Total Inside	4.80	2.48	8.98	2.59	18.85	
Outside the Museum						
Lodging	-	-	21.61	0.70	22.31	
Restaurants and bars	-	0.82	10.56	1.69	13.07	
Grocery and take-out food	-	0.06	1.11	0.60	1.76	
Gas and oil	-	0.38	3.59	0.71	4.67	
Other transportation	-	0.04	2.56	0.05	2.64	
Admissions to other museums	-	0.26	1.00	0.28	1.54	
Other admissions	-	0.01	1.05	0.27	1.33	
Shopping	-	0.48	7.06	0.88	8.42	
Casino gaming		-	0.96	0.25	1.21	
All other expenses	-	-	0.35	0.30	0.65	
Total Outside	-	2.04	49.85	5.73	57.61	
Grand Total	4.80	4.52	58.83	8.31	76.47	

Table 21. Visitor Spending Directly Attributable to MotorCities Hub Sites (\$ millions)

⁹ The impact scenario here is roughly comparable to Scenario B in the state-wide Michigan Museum study, where one fourth of spending outside the museum was counted for non-primary purpose trips. Counting one night's spending and a half-day for day trips was deemed easier to understand. Using the one-fourth assumption for non-primary purpose trips increases the total spending attributed to the museums to \$80.8 million, not significantly different than results presented in Table 21.

Economic impacts are estimated by applying the \$76 million in spending in Table 21 to the impact model. Impacts are roughly 62% of those reported in the significance analysis. The distribution of impacts changes somewhat because the reductions in lodging expenses are greater than other sectors. Direct effects are 1,322 jobs, \$27 million in personal income and \$41 million in value added (Table 22). With secondary effects the total impact is 1,720 jobs, \$42 million in personal income and \$65 million in value added. These impacts may be interpreted as the expected loss in economic activity in the region if the MotorCities Hub sites were all closed. Again, remember that in such a scenario, the attractions associated with the previously existing components of these sites would be lost also.

Sector/Spending Category	Sales (\$000's)	Jobs	Personal Income (\$000's)	Value Added (\$000's)
Direct Effects				
Motel, hotel cabin or B&B	\$ 22,314	390	\$ 8,836	\$ 13,757
Restaurants & bars	14,857	372	5,748	8,121
Admissions & fees	12,077	292	5,295	7,920
Gambling	1,210	29	531	794
Other vehicle expenses	2,644	25	936	1,537
Retail Trade	9,954	201	4,894	7,999
Wholesale Trade	1,521	9	642	1,059
Local Production of Goods	968	3	152	285
Total Direct Effects	65,544	1,322	27,034	41,472
Secondary Effects	37,672	398	15,054	23,810
Total Effects	\$ 103,216	1,720	\$ 42,088	\$ 65,282

Table 22. Economic Impact of MotorCities Visitor Spending, 2002

Discussion

Using the MGM2 model, we are able to make estimates of spending and economic impacts of MotorCities visitors. Impacts depend considerably on the types of trips that are generated. Table 23 shows the total economic impact (direct and secondary) on the region of attracting an additional 10,000 trips for each of six trip types. For primary purpose trips all spending is assumed to represent new money to the region. For non-primary purpose trips, only spending inside the museum and a portion of the trip spending outside the museum is assumed to represent additional spending. The assumptions applied above in the impact analysis are used in determining the portion of trip spending attributed to MotorCities for non-primary purpose trips.

The greatest impacts are from primary purpose trips involving overnight stays in hotels. Each additional 10,000 trips supports an additional 132 jobs in the region and contributes \$3.3 million in wages and salaries. A similar number of primary purpose overnight trips in other types of lodging generates about half as many jobs. Extending stays of non-primary purpose trips by one night has a similar total impact. Impacts from day trips and non-primary purpose overnight trips have significantly lower impacts.

Based on these figures, the projected impact of \$61 million in spending under Alternative 2 of the Plan could be achieved with approximately 100,000 additional primary purpose trips involving hotel stays. Under the existing mix of trip types, approximately 200,000 additional visits would be needed to generate \$61 million in additional spending.

Trip Type	Spending (\$ 000')	Total Sales (\$ 000's)	Jobs	Personal Income (\$ 000's)	Value Added (\$ 000's)
Primary Purpose Trips					
Day Trips	\$ 719	\$ 894	16	\$ 373	\$ 575
Hotel Overnight	5,908	8,172	132	3,295	\$ 5,118
Other Overnight	2,847	3,588	63	1,468	\$ 2,267
Not Primary Purpose					
Day Trips	547	689	13	290	448
Hotel Overnight	2,831	3,882	64	1,576	2,447
Other Overnight	1,325	1,712	30	711	1,096
Existing Mix	3,083	4,194	69	1,701	2,639

Table 23. Economic Impacts of 10,000 Additional Trips by Trip Types

Note: Total impacts include direct and secondary effects. The existing mix scenario assumes the current distribution of trip types as reported in Table 15.

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Appendix A

Understanding MGM2 Multiplier Calculations

	Direct Effects			Total Effects Multipliers					
Sector	Jobs/ MM Sales	Personal Income/ Sales	Value Added/ Sales	Sales I	Sales II	Jobs II/ MMsales	Income II/ Sales	VA II/ Sales	
Hotels & Lodging Places	17.6	0.40	0.62	1.31	1.62	24.4	0.65	1.01	
Eating & Drinking	25.1	0.39	0.55	1.29	1.58	31.0	0.61	0.90	
Amusement & Recreation	24.2	0.44	0.66	1.27	1.60	30.7	0.68	1.04	
Auto Repair& Service	9.6	0.35	0.58	1.27	1.53	14.5	0.56	0.90	
Local Transportation	21.5	0.50	0.63	1.24	1.60	27.5	0.75	1.00	
Food Processing	4.5	0.21	0.37	1.26	1.44	8.7	0.38	0.64	
Apparel-materials purchase	5.8	0.41	0.50	1.26	1.56	11.3	0.62	0.83	
Petroleum Refining	0.4	0.03	0.12	1.26	1.32	2.3	0.12	0.27	
Sporting Goods	8.4	0.23	0.40	1.31	1.51	13.1	0.43	0.72	
Manufacturing	6.8	0.33	0.53	1.26	1.51	11.7	0.53	0.84	
Retail Trade	20.3	0.49	0.80	1.16	1.48	25.4	0.68	1.11	
Wholesale Trade	6.3	0.42	0.70	1.22	1.52	11.8	0.64	1.03	

Table A-1. Sector-specific Multipliers for Southeast Michigan

SOURCE: An input-output model for Southeast Michigan using 2000 data and the IMPLAN system.

Brief explanation of Multiplier table:

Direct effects are economic ratios to convert sales to jobs, income and value added.

- Jobs/Million sales is the number of jobs per million dollars in sales in each sector.
- Income/sales is the percentage of sales going to wages and salaries (includes sole proprietor's income)
- Value added (VA) / sales is the percentage of sales that is value added (VA covers all income, rents, profits and indirect business taxes).

Total effects are multipliers that capture the total effect relative to direct sales. These capture the impacts from the circulation of visitor spending within the local economy.

- Sales II Multiplier = (direct + indirect + induced sales) / direct sales.
- Sales I captures only direct and indirect sales = (direct + indirect sales) / direct sales.
- Job II / Million Sales = total jobs (direct + indirect + induced) per \$ million in direct sales.
- Income II / Sales = total income (direct + indirect + induced) per \$ of direct sales
- VA II / Sales = total value added (direct + indirect + induced) per \$ of direct sales.

Using Hotel sector row to illustrate:

Direct Effects: Every million dollars in hotel sales creates 18 jobs in hotels. Forty percent of hotel sales goes to wages and salaries of hotel employees and 62% of hotel sales is value added. That means 38% of hotel sales goes to purchase inputs by hotels. The wage and salary income creates the induced effects and the 38% spent on purchases by the hotel starts the rounds of indirect effects.

Multiplier Effects: There is an additional 31 cents of indirect sales in the region for every dollar of direct hotel sales (Type I sales multiplier = 1.31). Total secondary sales are 62 cents per dollar of direct sales, which means 31 cents in indirect effects and 31 cents in induced effects. An additional 6 jobs are created from secondary effects for each million dollars in hotel sales (241 total jobs – 18 direct jobs per million sales). These secondary jobs are scattered across other sectors of the local economy. Including secondary effects, every million dollars of hotel sales in Southeast Michigan yields \$1.62 million in sales, \$650,000 in income, and \$1.01 million in value added.

Appendix B

Copy of On-site Visitor Survey Instrument

CULTURAL TOURISM IN MICHIGAN:

Experiences and Economic Impacts of Visitors to Michigan Museums

Thank you for visiting	today.	We hope you enjoy your visit.					
 We are conducting a short survey of randomly selected visitors to museums throughout Mich evaluate the community and state economic tourism impacts of visitors to museums better understand your and other visitors' reasons for visiting museums, what you we expect in the way of services. Results will be used to help museums and the tourism industry enhance their services and pro- 	and other cultura ant to see and do	al sites, and o during your visit, and what you					
Your participation is completely voluntary. Your responses are confidential and will be analyzed with those of other museum visitors throughout the state. Your individual identity will not be revealed. Your response is very important so that we can obtain a representative sample of visitors to museums. You indicate your voluntary agreement to participate by completing and returning this questionnaire. <i>Thank you for your participation</i> . Visitors who agree to complete the long version of the survey (mailed or taken via the web) will receive a small gift by the museum you are visiting							
today as a token of our appreciation for your time and comments. Please return the survey to the If you have questions about this study, contact Dr. Gail A. Vander Stoep. If you have questions	he Museum Rese	earch Associate who contacted you.					
participant, or are dissatisfied at any time with any aspect of this study, you may contact (anor Michigan State University Committee on Research Involving Human Subjects (UCRIHS).							
Dr. Gail A. Vander Stoep Michigan State University Department of Park, Recreation & Tourism Resources 131 Natural Resources Building East Lansing, MI 48824-1222 PH: 517-353-5190, ext. 117 FX: 517-432-3597 vanders1@msu.edu	Ashir Kumar, Michigan State UCRIHS 202 Olds Hall East Lansing, M PH: 517-353-21 ucrihs@msu.ed	University II 48824 90 FX: 517-432-3403					

	CULTURAL TOURISM: Ex	periences and Economic Impacts of Visitors to Michigan Museums					
1.	Was the primary purpose of your trip to the	is community to visit THIS museum?					
	$\square^{1} \text{ YES } (go \text{ to } Q2) \qquad \square^{2} \text{ NO } \clubsuit$	If NO, what was the primary reason for this trip? (check one)					
	•	 □¹ VISIT THIS COMMUNITY IN GENERAL, BUT NOT THE MUSEUM SPECIFICALLY □² BUSINESS □³ VISITING FRIENDS or RELATIVES □⁴ SHOPPING □⁵ OTHER (specify): 					
2.	Is this your first visit to this museum? \square^1 YES (go to Q3) \square^2 NO \clubsuit	If NO, how many times have you visited this museum in the past 12 months?					
3.	Did you travel more than 50 miles from he	ome to visit this museum?					
		If YES, about how many miles one way did you travel?					
4.	Are you staying overnight away from your permanent home on this trip? \square^1 YES, Overnight trip \square^2 NO, day trip						
5.	Which best describes the type of group for your visit to this museum today?						
	\square^1 WITH SPOUSE or SIGNIFICANT OTHER \square^2 WITH GROUP OF FRIENDS (not organized)						
	WITH FAMILY (including children)	⁴ WITH ORGANIZED GROUP (e.g., tour group, club, church)					
	□ ⁵ ALONE	⁶ OTHER (please describe):					
6.	Would you be willing to complete a longer survey at home, after the trip, to provide more information about your visit, what you spent during the whole trip and specifically in the museum, and what you liked about the visit?						
		Ild you prefer to receive?					
	(complete the attac	(hed contact card) \square^2 WEB VERSION, WITH CONTACT VIA EMAIL MESSAGE					

Appendix C

Copy of Mailback Visitor Survey Instrument



Cultural Tourism:

Experiences & Economic Impacts of Visitors to Michigan Museums

Thank you for agreeing to complete this survey after your visit to a museum in Michigan earlier this summer. We hope you enjoyed your visit.

Please have the SAME person complete this survey as was originally contacted at the museum.

As indicated during your visit to the museum, the purposes of this study are to:

- · evaluate the community and state economic impacts of visitors to museums and other cultural sites, and
- better understand your and other visitors' reasons for visiting museums, what you want to see and do during your visit, and what you expect in the way of services.

Results will be used to help museums and the tourism industry enhance their services, programs and promotional efforts to better meet your needs.

Your participation is completely voluntary. Your responses are confidential and will be analyzed with those of other museum visitors throughout Michigan. Your individual identity will not be revealed. Your response is very important so that we can obtain a representative sample of visitors to museums. You indicate your voluntary agreement to participate by completing and returning this questionnaire. While answers to all questions will help us better serve tourists and museum visitors in the future, you may skip any questions you choose not to answer. *Thank you for your participation*.

If you have questions about this study, contact Dr. Gail A. Vander Stoep or Craig Wiles. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact (anonymously, if you wish) Ashir Kumar, M.D., Chair of the Michigan State University Committee on Research Involving Human Subjects (UCRIHS).

Dr. Gail A. Vander Stoep Michigan State University Department of Park, Recreation & Tourism Resources 131 Natural Resources Building East Lansing, MI 48824-1222 PH: 517-353-5190, ext. 117 FX: 517-432-3597 vanders1@msu.edu Craig Wiles 517-336-8191 wilescra@msu.edu

Ashir Kumar, M.D. Michigan State University UCRIHS 202 Olds Hall East Lansing, MI 48824 PH: 517-353-2190 FX: 517-432-3403 ucrihs@msu.edu

The questionnaire is divided into sections to make it easier for you to answer. Thank you again for your participation. Please complete, fold, then return in the enclosed return envelope.

NOTE: The term "**MUSEUM**" as used in this survey, is very broad. It is intended to cover any facility (historical site or historic building, interpretive center, traditional museum, nature center, zoo, aquarium, historic ship, and others) that has at least one physical site and offers programs and services to visitors, including both community residents and tourists.

A – This set of questions asks about your overall trip to the community where you visited the museum.

1. What is the name of the museum attraction you visited when you were first contacted about this survey? (fill in a museum name)

NAME OF MUSEUM:

2. Indicate the city/town/community where you visited the museum: (fill in a city, town or community name)

CITY / TOWN / COMMUNITY:

3.	What was the <i>primary</i> purpose of your trip to the	ne community in which yo	ou visited this museum? (check only one)						
	\square^1 Specifically to visit the museum w	□ ¹ SPECIFICALLY TO VISIT THE MUSEUM WHERE YOU WERE CONTACTED FOR THIS SURVEY								
	\square^2 to visit the community or region i									
	\square^3 FOR BUSINESS									
	\square^4 TO VISIT FRIENDS or RELATIVES									
	\square^5 TO GO SHOPPING									
	$\square^{6} \text{ OTHER } (specify): _$									
	OTHER (specify):									
			.							
4.	Did you travel more than 50 miles from home to \Box^1 NO (go to Q5) \Box^2 YES \Rightarrow If Y			1 0						
	$\square^{-} \operatorname{NO} (go to QS) \qquad \square^{-} \operatorname{YES} \xrightarrow{\longrightarrow} \operatorname{If} \operatorname{YI}$	ES, about now many miles of	ne way did you travel from y	our home?						
	+									
5.	How did you find out about this museum? (check	ck all that apply)								
	\square^1 word of mouth \square^6 radi	O STORY OR AD	□ ¹¹ MAGAZINE ARTI	CLE OR ADVERTISEMENT						
		VISION PROGRAM OR A								
	$\square^{3} \text{ BILLBOARD} \square^{8} \text{ NeW}$			HOTEL IN THE COMMUNITY						
	\square^4 HIGHWAY "MUSEUM" SIGN \square^9 BROO		\square^{13} TRAVEL GUIDE (
	\square^5 TRAVEL BOOK (e.g., Fodor's) \square^{10} AUTO			SITOR INFORMATION CENTER						
	\square^{15} OTHER: (specify)			STOKINI OKUMITON CLIVILK						
	OTTILK. (specify)									
60	a. During the trip when you visited the museum, d	id you stay overnight and	w from your primary hom	e.9						
va.		· · · ·	•••••							
		b. On this trip, how many	hours did you spend:							
	\square^2 YES, overnight trip	IN THE MUSEUM?								
	+		$\sqrt{TDID} \left(\frac{2}{2} 4 h \text{ source} \right)^2$							
		FOR THE WHOLE-DAY	[I KIP (<u><</u> 24 nours)?							
	+									
	6c . Total number of nights away from home of	luring this trip:		_						
	6d. Total number of nights within 30 miles of	f the museum:		_						
	6e . What was the lodging type where you stay	ved within 30 miles of the	museum vou visited?							
	(if more than one type of lodging, check a		indsedin jed (isited)							
	$\square^1 \text{HOTEL} / \text{MOTEL} \implies \implies$	→ Was this a "historie	U	\square^2 YES \square^3 DON'T KNOW						
	□ ² BED & BREAKFAST → → →		U							
	$\square^3 \text{CAMPGROUND} \implies \implies \implies$	Campground was:	D ¹ PUBLIC	² PRIVATE \square ³ DON'T KNOW						
	\Box^4 STAYED WITH FRIENDS or RI	ELATIVES								
	\square^5 PERSONALLY-OWNED SEASO	ONAL HOME								
	$\square^6 \text{OTHER: } (specify)$									

7. While visiting this community (within 30 miles of the museum), what else did you do (including visiting other museums or attractions)? (*check all that apply*)

□ ¹ VISITED PARK, NATURAL AREA	□ ⁵ VISITED OTHER MUSEUM(s) (includ	e historic sites, zoos, aquariums, nature centers, gardens)
² BOATING (non-motorized)	□ ⁶ PAID TOUR	9	SHOPPING
D ³ BOATING (motorized)	7 PAID CHARTER	10	PERFORMING ARTS (e.g., concert, theater, ballet)
\square^4 SPENT TIME ON A BEACH	□ ⁸ ATE AT RESTAURANT(s)	11	VISITED AMUSEMENT PARK
¹² OTHER(s): (specify)			

B -- This set of questions asks about your visit to the museum where you were contacted.

8. What were your favorite parts of the visit to the museum? (*list up to three*)

a.			
b.			
с.			

9. What were the disappointments (if any) during your visit to the museum? (In other words, what are the things most important to you that the museum could do to improve your experience in the future?) ((*list up to three*)

10.	What was the total number of people in your travel party? ADULTS CHILDREN (<18 years)
	c.
	b.
	a.

11.	Which <i>best</i> describes the type of group for your	visit to this museum? (check only one)
	□ ¹ SPOUSE or SIGNIFICANT OTHER	GROUP OF FRIENDS (not organized)

- Image: Participation and the second second
- **12.** Do you think that you will visit this museum again in the next 12 months? (*check one*)

2 . Do you unink that you	d will visit tills indsedin again in the next 12 months: (check one)
\square^1 YES	
□ ² MAYBE	If no, explain why not:
\square^3 NO \implies	

For all questions below, the word MUSEUM refers to facilities including all types of museums, zoos, aquariums, botanical gardens, historic sites, historic buildings & vessels, planetariums, etc.

13a. How many times have you visited museums, including the one where you were contacted for this survey,

in the past 12 months (include all facility types listed above)?

13b. How many of these museum visits involved travel more than 50 miles from your primary residence?

Outside of Michigan?

In Michigan?

14. When you travel for pleasure, which of the following best describes your behavior relative to visiting museums? (check only one)

 \square^1 I ALWAYS INCLUDE A VISIT TO AT LEAST ONE MUSEUM IN MY TRIP.

 \square^2 I usually include a visit to a museum in my trip.

 \square^3 i sometimes include a visit to a museum in my trip.

 \square^4 I RARELY INCLUDE A VISIT TO A MUSEUM IN MY TRIP.

⁵ OTHER (*explain*): _____

15. When you travel for pleasure, which of the following best describes how you usually plan your trips? (check only one)

 \square^1 I PLAN TRIPS SPECIFICALLY TO VISIT MUSEUMS.

 \square^2 I PLAN TRIPS TO A COMMUNITY OR REGION TO HAVE A VARIETY OF EXPERIENCES, AND USUALLY PLAN TO INCLUDE A MUSEUM VISIT AS PART OF THAT TRIP.

□³ WHEN PLANNING A TRIP, I DO NOT SPECIFICALLY PLAN MUSEUM VISITS, BUT IF I SEE AN INTERESTING MUSEUM ADVERTISED WHEN I GET TO MY DESTINATION, I WILL VISIT IF I HAVE TIME.

□⁴ IF THE WEATHER TURNS BAD DURING A TRIP AND WE CAN'T DO WHAT WE PLANNED OUTSIDE, I'LL LOOK FOR LOCAL MUSEUMS TO VISIT INSTEAD.

⁵ OTHER (*explain*):

16.		2 = SO	CRY ME	IMPOF WHAT	-	
	a.	VISITING COMMUNITIES THAT PRESERVE THEIR HISTORIC CHARACTER	1	1	2	3
	b.	STAYING AT HISTORIC HOTELS OR BED & BREAKFASTS (B&Bs)		1	2	3
	c.	EATING AT LOCAL ETHNIC RESTAURANTS		1	2	3
	d.	EATING AT RESTAURANTS HOUSED IN HISTORIC BUILDINGS		1	2	3
	e.	SHOPPING AT STORES AND GIFT SHOPS LOCATED IN HISTORIC BUILDINGS	1	1	2	3
	f.	BUYING SOUVENIRS THAT REFLECT LOCAL HISTORY, ARTS & CRAFTS, and/or CULTURE	1	1	2	3
	g.	ATTENDING CULTURAL, HISTORIC AND ETHNIC FESTIVALS AND SPECIAL EVENTS	1	1	2	3
	h.	ATTENDING LOCAL MUSIC, DANCE, AND/OR THEATER PERFORMANCES	1	1	2	3
	i.	WALKING ALONG WATERFRONT TRAILS, BOARDWALKS, and/or OTHER COMMUNITY SELF-GUIDED WALKS	1	1	2	3
	j.	GOING ON HISTORIC OR CULTURAL TOURS WITH A GUIDE	1	1	2	3
	k.	TRAVELING VIA HISTORIC TRANSPORTATION (e.g., trolleys, horse-drawn carriages, trains, boats)		1	2	3
	1.	VIEWING, READING WALL DISPLAYS, MENU MINI-HISTORIES, HISTORIC MARKERS & MONUMENTS, OUTSIDE EXHIBITS ALONG PATHS THAT EXPLAIN LOCAL HISTORY/CULTURE		1	2	3
	m.	OTHER: (specify)	1	1	2	3

17. Indicate how likely you would be to visit a facility with each of the following words in its name while traveling: *(circle one number for each name)* **1 = VERY LIKELY**

2 = SOMEWHAT LIKELY **3 = NOT AT ALL LIKELY**

a.	MUSEUM	1	2	3	f. INFORMATION CENT	TER 1	2	3
b.	SCIENCE CENTER	1	2	3	g. INTERPRETIVE CEN	rer 1	2	3
c.	DISCOVERY CENTER	1	2	3	h. ACTIVITY CENTER	1	2	3
d.	EXPLORATORIUM	1	2	3	i. HANDS-ON CENTER	1	2	3
e.	LEARNING CENTER	1	2	3				

D -- This set of questions asks about your spending during your trip that included the museum where you were contacted.

18. Report all spending within 30 miles of the community (where the museum was located, see Question 2) by your travel party on that entire trip (whether day trip or overnight trip). If you are part of a larger group (e.g., bus tour), report just your own expenses or those of your immediate travel party (see Question 19). Report all expenses – whether paid by cash, credit card, or check – to the nearest dollar, including any pre-paid expenses. Enter "zero" (0) if you did not spend any money in a given category.

SPENDING AT THE MUSEUM

MUSEUM / EXHIBIT ADMISSION	\$
GIFT SHOP / SNACK BAR	\$
OTHER (specify)	\$

SPENDING IN THE COMMUNITY (outside the museum, but within 30 miles)

	LODGING (hotel, motel, B&B, campground fees, etc.)	\$		
	RESTAURANTS AND BARS	\$		
	GROCERIES AND TAKE-OUT FOOD	\$		
	AUTO GAS AND OIL	\$		
	OTHER TRANSPORTATION EXPENSES (parking, tolls, bus, taxi, etc.)	\$		
	ADMISSIONS TO OTHER MUSEUMS	\$		
	OTHER ADMISSIONS (entertainment, recreation, theme park, etc.)	\$		
	SHOPPING (clothes, souvenirs, etc.)	\$		
	CASINO GAMING	\$		
	OTHER: (specify)	\$		
19.	How many people do these expenses cover? AI	DULTS	CHILDREN (<18 years)	
20 .	About what percent of your TOTAL trip spending would you say is related	ed to the cultural a	and historic components of your tr	rip?
	(fill in a % number amount) ABOUT	%		
21.	What is the maximum amount you would have been willing to pay (single	e adult admission	n) to visit this museum?	

(fill in a \$ dollar amount)

ABOUT \$_____

E -- This set of questions provides general information about you so we can better understand museum visitation and travel choices for groups of people having similar interests and characteristics.

22. What is the zip code of your primary residence?

	What is your current age? <i>(check one)</i> Are you <i>(check one)</i>	$\Box^{1} 18 - 25 $ YEARS OLD $\Box^{2} 26 - 35 $ YEARS OLD $\Box^{3} 36 - 45 $ YEARS OLD $\Box^{1} $ MALE	☐ ⁴ 46 – 55 YEARS OLD ☐ ⁵ 56 – 65 YEARS OLD ☐ ⁶ MORE THAN 65 YEARS OLD ☐ ² FEMALE
25.	What was your annual household income before taxes in 2001? (check one)	□ ¹ LESS THAN \$25,000 □ ² \$25,000 - \$49,999 □ ³ \$50,000 - \$74,999	☐ ⁴ \$75,000 - 99,999 ☐ ⁵ \$100,000 - \$124,999 ☐ ⁶ MORE THAN \$125,000
26.	What is your highest level of education? (check one)	 ¹ LESS THAN HIGH SCHOOL ² HIGH SCHOOL GRADUATE ³ TECHNICAL or ASSOCIATE'S DEGREE ⁴ SOME COLLEGE 	 UNDERGRADUATE DEGREE MASTERS DEGREE DOCTORAL DEGREE
27.	What is your current work status? (check one)	 ¹ STUDENT (possibly with part-time work) ² FULL-TIME HOUSEKEEPER ³ RETIRED 	 ⁴ WORKING FULL TIME ⁵ WORKING PART TIME ⁶ OTHER (specify)
28.	What is your ethnicity? (check one)	 ¹ AFRICAN AMERICAN ² AMERICAN INDIAN ³ ASIAN AMERICAN 	 ⁴ EURO-AMERICAN / WHITE ⁵ HISPANIC / LATINO(A) ⁶ OTHER
29 .	Are you a member of any Michigan museum (<i>use definition at top of page 4</i>)	_	seum memberships:

Thank you for completing the survey.

Is there anything else you would like us to know about your travel preferences and choices, especially related to museums?

Please fold and return this survey in the enclosed envelope. If you have misplaced the envelope, please mail to:

Dr. Gail A. Vander Stoep – Museum Visitor Survey Michigan State University Department of Park, Recreation & Tourism Resources 131 Natural Resources Building East Lansing, MI 48824-1222

Appendix D

Copy of Museum Administrator Survey Instrument



Partnering for Cultural Tourism: Economic Impacts of Tourists Visiting Michigan Museums

Thousands of people visit Michigan each year to enjoy its natural and cultural resources, with interest in cultural tourism increasing. Michigan is rich in pre-history, history and cultural resources, with many of its stories told through hundreds of museums, large and small, throughout the state. *Travel Michigan*, with the support of *Michigan Museums Association* (MMA), is interested in finding out the economic impact of the "cultural" portion of the tourism industry. They would like to determine how much museums invest in staff, programs and services – in general and targeted for tourists – and the various

sources of funding for your facility (including tourist contributions through entrance fees, gift shop and food concession spending, and donations). Survey results, combined with those of a museum visitor survey, will be used to improve the quality of museum-based cultural tourism in Michigan.

The questionnaire is divided into sections to make it easier for you to answer. Your participation is completely voluntary. The responses you give will remain confidential and will be analyzed with the comments of other museum respondents. Your individual identity and that of your museum will not be revealed. You indicate your voluntary agreement to participate by completing and returning this questionnaire. Thank you for your participation. Please complete, fold, then return in the enclosed return envelope. If you desire, you may also enclose the "thank you" card to be entered into a drawing for one of two MMA conference discounts.

A -- Descriptive information about your "museum."

1.	Indicate type of "museum." (check one)						
	1 AQUARIUM 5 GENERAL * 9 NATURE CENTER 2 ARBORETUM/ 6 HISTORIC HOUSE / SITE 10 PLANETARIUM BOTANICAL GARDEN 7 HISTORY 11 SCIENCE / TECHNOLOGY 3 ART 8 NATURAL HISTORY/ 12 ZOO 4 CHILDREN'S / YOUTH ANTHROPOLOGY 13 SPECIALIZED ^{† or} OTHER: (specify discipline)						
	* museum with collections representing two or more disciplines (e.g., art and history)						
	[†] museum with collections limited to one narrowly-defined discipline (e.g., textiles, stamps, maritime, ethnic group)						
2a.	Indicate if your museum is organized as a public (federal, state, county, local government), private nonprofit, or private for-profit institution.						
	\square^1 PUBLIC \square^2 PRIVATE, NONPROFIT \square^3 PRIVATE, FOR PROFIT						
	2b. \square^{1} FEDERAL \square^{3} COUNTY \square^{2} STATE \square^{4} CITY/OTHER LOCAL						
3.	Is the museum associated with a university, college or other higher educational institution?						
	\square^1 YES \square^2 NO						
4.	Indicate the city/town, county and zip code where your museum is located (if more than one location, list all here or on back):						
	CITY / TOWN: COUNTY:						
	ZIP CODE:						

B -- This set of questions deals with museum visitors.

Museums provide various types of programs and services to visitors and have different methods for keeping track of numbers of visitors or participants served. Answer with the best information you have available.

- 5. Does your museum keep track of the number of people visiting or participating in programs? \square^1 YES (GO TO QUESTION # 6) \square^2 NO \implies (GO TO QUESTION # 8)
 - L
- 6. Indicate how you keep track of museum visitor numbers (check all that apply)
 - AUTOMATIC COUNTER AT THE DOOR (e.g., turnstile, foot pad, laser beam)
 - AUTOMATIC COUNTER AT THE PARKING LOT ENTRANCE
 - □ STAFF MEMBER USING A HAND-HELD "CLICKER" COUNTER
 - VOLUNTARY VISITOR SIGN-IN (GUEST BOOK OR OTHER LOG)
 - $\Box \quad \text{TICKET SALES} \implies \implies \implies \qquad \Box \quad \text{with home zip codes recorded}$
 - **without** home zip codes recorded
 - PROGRAM REGISTRATIONS (including school and youth groups)
 - GUESSTIMATES
 - **OTHER** (specify):
- 7. Based on "counting" strategies indicated above, indicate the number of visitors or participants for each type of program or service provided by your museum **during 2001**. Indicate zero (0) for each program or service *not* offered by the museum.

GENERAL ADMISSION		
# people	TOURING THE MUS	EUM
GROUP PROGRAMS & SPECIA	L EVENTS	
# people	PARTICIPATING IN	FESTIVALS or SPECIAL EVENTS
# people	PARTICIPATING IN	SCHOOL OR ORGANIZED YOUTH GROUP PROGRAMS
# people	PARTICIPATING IN	ADULT, FAMILY OR OTHER GROUP PROGRAMS
# people	PARTICIPATING IN (describe briefly):	OFF-SITE PROGRAMS
# people	OTHER:	(describe briefly):
Total # VI	SITORS & PARTICIP	ANTS in 2001
		he total number of visitors in 2001, how many would be classified as tourists om your facility)? (<i>Circle</i> if your response is in NUMBERS or PERCENT %)
Compared with the same time period	l as last year (e.g., Januar	ry 1 – April 15), indicate the TOTAL NUMBER of VISITORS for
2001 and 2002. Number of Visitors for 2001		Number of Visitors for 2002
		years, indicate if the number of TOURISTS visiting your museum
is D ¹ INCREASING	\square^2 DECREASING	\square^3 REMAINING FAIRLY CONSTANT
Explain why you think this is the c	case:	
Explain why you unink this is the c	ase.	
Explain why you unlik this is the c		

C -- This set of questions deals with your museum staff.

10. List the number of each **paid** staff working in your museum **in 2002**, and if they are full- or part-time. (*NOTE: If any one person fulfills the duties of more than one "position" indicated below, record them ONLY ONCE, and indicate their primary job type.*)

POSITION	# PAID	PART- or FULL-TIME
DIRECTOR		Part-time Full-time
DEPUTY/ASSISTANT DIRECTOR		🗖 Part-time 🔲 Full-time
ACCOUNTANT/BOOKKEEPER		🗖 Part-time 🛛 Full-time
CURATOR (EXCLUDING EDUCATION)		🗖 Part-time 🔲 Full-time
ASST. CURATOR		🗖 Part-time 🔲 Full-time
CONSERVATOR		🗖 Part-time 🛛 Full-time
EXHIBIT DESIGNERS/CONSTRUCTORS		🗖 Part-time 🔲 Full-time
ADMINISTRATIVE SECRETARY		🗖 Part-time 🔲 Full-time
EDUCATION SPECIALIST/INTERPRETER		🗖 Part-time 🛛 Full-time
SUPPORT STAFF		🗖 Part-time 🔲 Full-time
OTHER (SPECIFY TYPE):		🗖 Part-time 🔲 Full-time

REMINDER: Please do NOT double report staff having multiple job duties. See #10 instructions.

11. Indicate the number of each type of **unpaid** staff helping conduct the activities of your museum in 2002.

YEAR-ROUND STAFF	SUMMER/SEASONAL STAFF
# UNPAID FULL-TIME STAFF	# UNPAID FULL-TIME STAFF
# UNPAID PART-TIME STAFF	# UNPAID PART-TIME STAFF

	D This set of questions deals with admissions fees.	
12.	What are your 2002 standard daily admission fees?	
	ADULTS CHILDREN $\rightarrow \rightarrow \rightarrow (SPECIFY AGE RANGE)$ SENIOR CITIZENS	
13.		
	13b. SPECIAL TICKETS (e.g., IMAX or other theater presentation, headset rentals, special events): FEES: (SPECIFY TYPE)	-
14.	Do you have special group rates? \square^1 YES \square^2 NO \implies (GO TO QUESTION # 15) \blacksquare	
	Define or specify "group" criteria:	

E	This set of	questions deals	with your mus	eum's tourism 🛛	links and	opportunities.
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15. Which of the following statements best describes your museum's relationship with tourism and tourists? (check one)

1	TOURISTS ARE THE MUSEUM'S PRIMARY TARGET MARKET
2	TOURISTS ARE ONE OF SEVERAL TARGET MARKETS AND WE SPECIFICALLY CONSIDER THEM IN DEVELOPING
_	PROGRAMS, EXHIBITS, AND PROMOTIONAL ACTIVITIES
3	WE HAVE MANY TOURISTS VISITING OUR MUSEUM, BUT WE DO NOT PROGRAM FOR OR PROMOTE SPECIFICALLY
_	TO THEM
4	TOURISTS ARE WELCOME, BUT VERY FEW VISIT OUR MUSEUM, NOR IS IT IN OUR MISSION TO SERVE THEM
5	WE WOULD LIKE TO SERVE MORE TOURISTS, BUT DO NOT HAVE THE STAFF, MONEY, FACILITIES TO TARGET THEM
6	OTHER (write your own statement):

16.	Indicate which, if any, of the following you or any of your museum staff may be engaged in currently to create links with the
	tourism sector: (check all that apply)

- SERVE AS MEMBER OF LOCAL CONVENTION AND VISITORS BUREAU
- SERVE AS MEMBER OF LOCAL OR REGIONAL TOURISM COUNCIL
- PROMOTE THE MUSEUM THROUGH VARIOUS MEDIA

 \clubsuit (If yes, indicate media sources used (*check all that apply*):

- TELEVISION MAGAZINES
 - **TOURISM-RELATED PUBLICATIONS**
- NEWSPAPER OTHER (describe briefly):

PROVIDE MUSEUM BROCHURES TO ANY STATE WELCOME CENTER

PROVIDE MUSEUM BROCHURES THROUGHOUT YOUR LOCAL AREA (e.g., visitor center, hotels, restaurants, gas stations)

WORK WITH OTHER MUSEUMS OR ORGANIZATIONS TO PRODUCE JOINT REGIONAL BROCHURES

HAVE DEVELOPED A TOURISM "PASSPORT" PROGRAM (involving more than one museum or attraction)

HAVE BECOME A MEMBER OF A HERITAGE CORRIDOR PROGRAM (involving more than one museum or attraction)

- HAVE ATTENDED AT LEAST ONE OF *MMA*'S CULTURAL TOURISM CONFERENCES/WORKSHOPS IN THE PAST 5 YEARS
- RECEIVE OR READ TOURISM-RELATED PUBLICATIONS (e.g., newsletters, journals, magazines)
- HAVE PARTICIPATED IN TOURISM-SPECIFIC CONFERENCES OR WORKSHOPS (local, state or national)
- **OTHER** (describe):

RADIO

17. What is the total number of brochures your museum **distributes** annually? (Write zero [0] if none.)



18. List your museum's main attractions or interpretive stories for **tourists** (maximum of three):

9. What is your museum's operating season ?	
OPEN ALL YEAR	
OPEN PART OF THE YEAR: ➡ Opening Date:	
Closing Date:	
0. What do you consider your museum's prime tourism	season(s)?
SUMMER: Starting Date:	
Ending Date:	
	_ /

F -- This set of questions deals with your museum's budget (income and expenditures).

21. What was your museum's **gross annual operating budget** during 2001 (or most recent completed fiscal year if not based on a "calendar" year)?

\$

22. Indicate the percentage of your **2001 operating budget spent** on the following items. In Column **A**, indicate the **TOTAL DOLLARS** spent on each; in Column **B**, indicate the percent of that line spent in the **LOCAL AREA** (*write zero [0] if none*):

	A: TOTAL \$	B: % LOCAL		A: TOTAL \$	B: % LOCAL
SALARIES (full-time)		%	SEASONAL/TEMPORARY EXHIBITS		%
SALARIES (part-time)		%	GOODS FOR MUSEUM STORES		%
O&M: UTILITIES		%	PAID ADVERTISING/PROMOTIONS		%
O&M: RENT/MORTGAGE		%	PUBLICATIONS/PRINTING		%
O&M: SUPPLIES		%	(non-advertising)		
O&M: SERVICES (incl. consultants)		%	OTHER:		%
O&M: TRANSPORTATION		%	OTHER:		%
O&M: MAINTENANCE		%	OTHER:		%

23. This question refers to your museum's total income or revenues during 2001.

- a. What was the museum's total income (other than "capital campaign" dollars for a special project)?
- b. Indicate what percentage of your 2001 revenues came from the following sources (write zero [0] if none for any category):

		TOTAL:	100 %
OTHER (specify below):	%		
IN-KIND SERVICES/MATERIALS	%	GRANT(s)	%
PRIVATE GIFTS/DONATIONS	%	FOUNDATION(s)	%
FOOD/OTHER CONCESSIONS	%	ENDOWMENT(s)	%
MUSEUM STORE SALES	%	FEDERAL GOVERNMENT	%
SPECIAL TICKET SALES	%	STATE GOVERNMENT	%
ADMISSION FEES (general)	%	COUNTY GOVERNMENT	%
MEMBERSHIP FEES	%	CITY GOVERNMENT	%

24. What was your museum's total capital outlay (expenses other than annual operating expenses) during the last three fiscal years?

\square^1 LESS THAN \$50,000	5 \$500,000 - \$999,999
\square^2 \$50,000 - \$99,999	6 \$1,000,000 - 2,499,999
\square^3 \$100,000 - \$249,999	7 \$2,500,000 - \$4,999,999
4 \$250,000 - \$499,999	1 ⁸ \$5,000,000 - \$9,999,999

- **9** \$10,000,000 \$19,999,999
 - \square^{10} \$20,000,000 \$29,999,999
 - \square^{11} \$30,000,000 \$49,999,999
 - ¹² \$50,000,000 OR MORE

25. What is your museum's projected total capital outlay (other than annual operating expenses) to be in the next three fiscal years?

- $\Box^{1} \text{ LESS THAN $50,000} \\ \Box^{2} \text{ $50,000 $99,999}$
- \square^3 \$100,000 \$249,999
- \square^4 \$250.000 \$499.999
- $\Box^{5} \quad $500,000 $999,999$ $\Box^{6} \quad $1,000,000 $2,499,999$
- \$249,999
- **1**⁴ \$250,000 \$499,999
- **1**7 \$2,500,000 \$4,999,999
- **1**⁸ \$5,000,000 \$9,999,999
- **9** \$10,000,000 \$19,999,999
- **1**¹⁰ \$20,000,000 \$29,999,999
- **1**¹¹ \$30,000,000 \$49,999,999
- **1**¹² \$50,000,000 OR MORE

Thank You

for completing this survey. If you would like us to notify you when the study results are available from *Travel Michigan* and on the MMA web site, please provide your e-mail address below (*print clearly so we can read the address easily*).

E-mail Address:

If you have any questions about this study, please contact Dr. Gail A. Vander Stoep, Principal Investigator. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact (anonymously, if you wish) Ashir Kumar, M.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS).

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Please fold and return the survey in the envelope provided. If you have misplaced the envelope, please return survey to Dr. Vander Stoep c/o the address written on the left above. Thank you.