

# Washtenaw County

## Summary of Tourism Impacts

2002

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# Summary of Key Findings

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## Visitors

- ✘ 4.0 million visitors (person trips to the area)
  - ◆ 2.0 million day trips, 2.0 million overnight trips
- ✘ 7 million visitor days/nights
  - ◆ 2.0 million day trips and 5.0 million person nights on overnight trips
- ✘ 2.8 million travel party days/nights (average party size 2.5)
  - ◆ 40% overnight stays with friends and relatives (VFR), 28% day trips, 28% motel, 2% campground, 2% seasonal homes
  - ◆ 782,000 room nights in hotels

## Spending

- ✘ \$352 million total visitor spending in Washtenaw County excluding airfares
  - ◆ \$89 per travel party per day for day visitors, \$217 per party per night for visitors in motels
  - ◆ Spending by category: restaurants (25%), lodging (19%), gas and local transportation (12%), groceries (10%), recreation/entertainment (7%), other retail (23%).
  - ◆ Tourist spending accounts for 95% of all hotel sales in the area, 17% of restaurant sales, 24% of amusements, and 5% of retail trade
- ✘ Overnight visitors staying in motels account for 48% of visitor spending

## Economic Impacts

- ✘ Direct Effects in tourism-related businesses
  - ◆ 5,700 jobs
  - ◆ \$111 million for wages, salaries and payroll benefits
  - ◆ 1.26 million in local room tax, \$21 million in state sales taxes
  - ◆ Tourism jobs by primary tourism sectors
    - restaurants - 2,000      hotels - 1,200
    - amusements - 1,000      retail trade - 1,250
- ✘ Total impacts including secondary effects
  - ◆ 7,000 jobs
  - ◆ \$156 million wages and salaries
  - ◆ Tourism accounts for about 1.4% of all sales in the county and about 3% of all jobs

## Tourism Activity and Spending 1999-2002

In 2002, total tourist spending in Washtenaw county increased slightly over 2001 to \$352 million. Tax collections and room revenues were down slightly. These losses were offset by spending increases on day trips and visiting friends and relatives (Table 1.)

**Table 1. Tourism Activity and Spending, Washtenaw County, 1999-2002**

Measure	1999	2000	2001	2002
Room tax collections (2%)	\$1,226,927	\$1,311,839	\$1,244,845	\$ 1,197,622
Room Revenue	\$61,346,350	\$65,591,950	\$62,242,250	\$59,881,000
Party days/nights (in millions)	2,771	2,829	2,816	2,823
Spending per party per day	\$114	\$122	\$123	\$125
Total spending (in millions)	\$316	\$345	\$346	\$352

## Spending and Visits by Lodging Segment, 2002

Tourists are divided into five segments based on the type of lodging used (Table 2). Principal visitor segments for Washtenaw county are visitors on day trips (28%), overnight stays in hotels (28%) and stays with friends and relatives (40%). Available data suggests small decreases in hotel room nights that are largely offset by small increases in day trips compared 2000.

**Table 2. Breakdown of Visitors by Segment , Washtenaw County, 2002**

	Day Trip	Hotel, motel, cabin or B&B	Camp	Seasonal Home	Visiting friends or relatives	Total
Party nights (000's)	790	782	47	67	1,137	2,823
Party size	2.5	2.5	2.5	2.5	2.5	2.5
Length of stay in days	1	2	2	4	3	
Party Trips (000's)	790	391	24	17	379	1,600
Person Trips (000's)	1,975	978	59	42	948	4,001
Person days/nights (000's)	1,975	1,955	118	168	2,843	7,058
Party nights	28%	28%	2%	2%	40%	100%

The five visitor segments, based on lodging type, help explain variations in spending by different types of visitors. Table 3 provides a detailed analysis of spending for various goods and services by lodging type. Spending averages are reported on a party day basis for day trips and party night basis for overnight visitors. Spending averages from 2000 are price adjusted to 2002.

Total visitor spending in Washtenaw County in 2002 was \$352 million. Visitors staying in hotels accounted for about half of this spending. A typical travel party spends \$89 per day on day trips or staying with friends or relatives and \$217 per night if staying in a hotel.

**Table 3. Visitor Spending by Lodging Segment in Michigan**

Spending Category	Day Visitor	Motel	Camp	Seasonal Home	Stay with friends or relatives	Total Spending	
						\$MM	Pct
<i>Spending per party per night</i>							
Motel, hotel cabin or B&B	-	\$ 83.49	-	-	-	\$ 65.3	19%
Camping fees	-	-	\$ 19.31	-	-	0.9	0%
Restaurants & bars	\$ 23.28	50.38	7.24	\$ 21.90	\$ 25.00	88.5	25%
Groceries, take-out food/drinks	6.58	13.26	3.26	16.56	16.00	35.5	10%
Gas & oil	14.39	17.80	6.86	13.11	13.71	42.6	12%
Other vehicle expenses	0.51	1.82	2.21	5.39	0.26	2.6	1%
Local transportation	1.62	7.73	3.41	4.81	0.77	8.7	2%
Admissions & fees	12.35	12.77	6.59	4.72	4.94	26.0	7%
Clothing	6.44	9.83	4.61	6.45	3.51	17.4	5%
Sporting goods	0.49	1.22	1.32	1.81	1.80	3.68	1%
<u>Souvenirs and other expenses</u>	<u>23.02</u>	<u>18.92</u>	<u>11.98</u>	<u>12.25</u>	<u>23.45</u>	<u>61.0</u>	<u>17%</u>
Total Spending per party per night	\$ 88.67	\$ 217.23	\$ 96.80	\$ 87.01	\$ 89.44	\$ 352	100%
Party days/nights (000's)	790	782	47	67	1,137	2,823	
Total spending (\$MM)	\$ 70	\$ 170	\$ 5	\$ 6	\$ 102	\$ 352	
Percent of spending	20%	48%	1%	2%	29%	100%	

## Direct Economic Impacts of Visitor Spending

Direct economic effects are the changes in economic activity within those economic sectors selling directly to tourists (e.g., hotels, restaurants, retail stores). Sales, jobs, wages and salaries, and value added are four measures of economic impact (Table 4). Wages and salaries include all payments to workers including contributions to retirement and health care programs. Jobs are not full time equivalents, but count part time and full time jobs the same. Value added is a commonly used measure of the contribution of an activity or sector to the region's economy. Value added includes wages and salaries paid to workers, profits and rents of firms, and sales and other indirect business taxes attributable to visitor spending.

Total direct sales are presented in Table 4 by spending category. It is important to understand that direct sales are less than visitor spending, as only the retail and a part of wholesale margins on goods bought by visitors is captured by the local economy.

The \$352 million spent by visitors in Washtenaw county in 2002 resulted in \$111 million in direct personal income (wages and salaries) in tourism-related sectors and a total direct value added to the region's economy of \$167 million. Tourism supported 5,684 jobs in tourism-related sectors.

**Table 4. Economic Impacts of Visitor Spending, Washtenaw County, 2002**

<b>Sector/Spending Category</b>	<b>Total Sales (Millions)</b>	<b>Jobs</b>	<b>Wages and Salaries (Millions)</b>	<b>Value Added<sup>a</sup> (Millions)</b>
<b>Direct Effects</b>				
Motel, hotel cabin or B&B	\$ 65	1,203	\$ 26	\$ 40
Camping fees	1	17	0	1
Restaurants & bars	88	1,991	36	51
Admissions & fees	26	988	11	16
Gambling	-	-	-	-
Other vehicle expenses	3	24	1	2
Local transportation	9	148	5	6
Retail Trade	57	1,247	28	46
Wholesale Trade	9	66	4	6
Local Production of Goods	<u>5</u>	<u>2</u>	<u>0</u>	<u>0</u>
<b>Total Direct Effects</b>	<b>263</b>	<b>5,684</b>	<b>111</b>	<b>167</b>
Secondary Effects	<u>111</u>	<u>1,277</u>	<u>45</u>	<u>73</u>
<b>Total Effects</b>	<b>\$ 374</b>	<b>6,961</b>	<b>\$ 156</b>	<b>\$ 241</b>
Multiplier	1.42	1.22	1.41	1.44

<sup>a</sup> Value added includes wages and salaries, profits and rents, and sales tax.

## Secondary and Total Economic Impacts of Visitor Spending

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Multipliers capture the magnitude of the secondary effects as visitor spending circulates through the local economy. The two types of secondary impacts are indirect and induced effects. *Indirect effects* are the changes in sales, income or employment within the region in backward-linked industries supplying goods and services to tourism businesses. For example, the increased sales in linen supply firms as a result of motel hotel sales is an indirect effect of visitor spending. *Induced effects* are the increased sales within the region that result from the spending of the income earned in tourism and supporting industries. Employees in tourism and supporting industries spend their income on housing, utilities, groceries and other goods and services thereby generating sales, income and employment throughout the region.

The size of a multiplier depends largely on a region's geographic size and overall economic diversity. Regions with extensive economic development will have larger tourism multipliers than regions with limited economic development. The overall tourism sales multiplier for Washtenaw county in 2000 was 1.42, which means that an additional \$ .42 in secondary sales is generated for every \$1.00 of direct tourism sales.

While the direct effects can be traced to individual tourism sectors, secondary effects generally accrue to a variety of firms within the county that benefit either by selling goods and services to tourism firms or to their employees.

## Tourism Satellite Accounts

Tourism Satellite Accounts (TSA) are an alternative method for estimating the significance of tourism to an area's economy. The satellite accounts help to ground the tourism economic estimates in the official economic accounts for Washtenaw county. The most recent year for which complete accounts are available is 2000.

The TSA method estimates only the direct effects within key tourism-related industries. Results should be roughly comparable to the direct effects in Table 4, after accounting for small changes between 2000 and 2002. While there are some variations within individual sectors, the overall figures in Table 5 are consistent with Table 4.

The TSA approach attributes a percentage of economic activity in each sector to tourist spending. The Tourism industry (TI) ratios in the first column are the percentage of sales in each sector attributed to tourist spending. TI ratios are adjusted from those used in the national tourism satellite accounts, based on the ratio of tourists to local residents of the area.

**Table 5. Tourism Satellite Accounts (TSA), Washtenaw County, 2000**

<b>TI ratio</b>	<b>Sector</b>	<b>Output</b> (millions)	<b>Jobs</b>	<b>Wages &amp; Salaries</b> (millions)	<b>Value Added</b> (millions)
95%	Hotels and Lodging Places	\$ 60	1,137	\$ 24	\$ 37
17%	Eating and Drinking	85	1,974	35	49
24%	Amusement and Recreation	6	221	2	3
34%	Membership Sports	7	250	3	4
22%	Entertainment	6	72	1	2
11%	Professional Sports	0	1	0	0
5%	Retail Trade	55	1,120	27	44
1%	Wholesale Trade	9	69	4	6
12%	Auto Rental and Leasing	1	9	0	1
3%	Auto Repair and Services	3	28	1	2
24%	Local Transportation	10	179	6	7
6%	Transportation Services	0	6	0	0
	<b>Total tourism sectors</b>	<b>\$ 242</b>	<b>5,067</b>	<b>\$ 104</b>	<b>\$ 155</b>

## Methods

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We employ two distinct methods to estimate tourism impacts. The first uses the MITEIM model which multiplies visits in party nights times an average spending per party night to obtain total tourist spending in the region. Distinct spending profiles are used for each segment. The MITEIM “high” spending profiles were used for Washtenaw county with an average room rate of \$83 in 2002. Visits were estimated based on room taxes (for motel), an inventory of lodging establishments, and assumed occupancy rates for seasonal homes and campgrounds. Mary Kerr of the Ann Arbor Area CVB provided room tax data for this analysis. Day trips and trips to visit friends or family are estimated by allocating a share of statewide totals to each county based on population and tourist attractions.

Direct and secondary economic impacts are estimated by applying total spending to an input-output model of the Washtenaw county economy. The model is estimated using year 2000 data and the IMPLAN system. The model converts spending to the associated income and jobs and estimates multiplier effects.

The Tourism satellite approach uses IMPLAN base year data for the county for 2000. Sales, income and jobs in 16 tourism-related sectors are extracted from the IMPLAN accounts. Tourism industry ratios for each sector are adjusted from national ratios based on the resident population, numbers of tourists and spending patterns of each group.

MITEIM estimates for 2000 are compared with the TSA estimates to establish consistency and then projected to 2001 and 2002 using local room tax data and price indices to adjust estimates over time.

## References

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Further information about measuring the economic impacts of tourism can be accessed at :  
<http://www.msu.edu/course/prr/840/econimpact/index.htm>

# Glossary of Economic Impact Terms

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**Impact analysis** estimates the impact of dollars from outside the region (“new dollars”) on the region’s economy. Impact analysis typically includes only the spending of visitors from outside the region.

**IMPLAN** is a micro-computer-based input output modeling system. With IMPLAN, one can estimate Input-Output models of up to 528 sectors for any region consisting of one or more counties.

**Multipliers** capture the size of the secondary effects in a given region, generally as a ratio of the total change in economic activity in the region relative to the direct change. Multipliers express the degree of interdependency between sectors in a region’s economy and therefore vary across regions and sectors.

**Region** - defines the geographic area for which impacts are estimated. Impact regions are generally an aggregation of one or more counties.

**Sector** - a grouping of industries that produce similar products or services. Tourism is more an activity or type of customer than an industrial sector. While hotels are a relatively pure tourism sector, restaurants, retail establishments and amusements sell to both tourists and local customers. Tourist spending surveys are useful in determining visitor spending in various sectors.

## Economic Impact Effects

**Direct effects** are the changes in economic activity during the first round of spending. For tourism this involves the impacts on the tourism industries (businesses selling directly to tourists) themselves.

**Secondary effects** are the changes in economic activity from subsequent rounds of re-spending of tourism dollars. There are two types of secondary effects:

**Indirect effects** are the changes in sales, income or employment within the region in backward-linked industries supplying goods and services to tourism businesses. For example, the increased sales in linen supply firms resulting from more motel sales are an indirect effect of visitor spending.

**Induced effects** are the increased sales within the region from household spending of the income earned in tourism and supporting industries. Employees in tourism and supporting industries spend the income they earn from tourism on housing, utilities, groceries and other consumer goods and services. This generates sales, income, and employment throughout the region’s economy.

**Total effects** are the sum of direct, indirect and induced effects.

## Measures of Economic Activity

**Sales** - the dollar volume of a good or service produced or sold.

**Income** is the money earned within the region from production and sales. Total income includes wage and salary income and income from sole proprietor’s profits and rents.

**Jobs or employment** - a measure of the number of jobs required to produce a given volume of sales/production. Jobs are usually not expressed as full-time equivalents, but include part-time and seasonal positions.

**Value added** is the sum of total income and indirect business taxes. Value added is the most commonly used measure of the contribution of a region to the national economy, as it avoids double counting of intermediate sales and captures only the “value added” by the region to final products.