
A Profile of Industries that Include Travel & Tourism

Luce County MI

Produced by
Economic Profile System-Human Dimensions Toolkit
EPS-HDT
January 28, 2013

About EPS-HDT

About the Economic Profile System-Human Dimensions Toolkit (EPS-HDT)

EPS-HDT is a free, easy-to-use software application that produces detailed socioeconomic reports of counties, states, and regions, including custom aggregations.

EPS-HDT uses published statistics from federal data sources, including Bureau of Economic Analysis and Bureau of the Census, U.S. Department of Commerce; and Bureau of Labor Statistics, U.S. Department of Labor.

The Bureau of Land Management and Forest Service have made significant financial and intellectual contributions to the operation and content of EPS-HDT.

See www.headwaterseconomics.org/eps-hdt for more information about the other tools and capabilities of EPS-HDT.

For technical questions, contact Ray Rasker at eps-hdt@headwaterseconomics.org, or 406-570-7044.



Headwaters Economics is an independent, nonprofit research group. Our mission is to improve community development and land management decisions in the West.



www.blm.gov

The Bureau of Land Management, an agency within the U.S. Department of the Interior, administers 249.8 million acres of America's public lands, located primarily in 12 Western States. It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.



www.fs.fed.us

The Forest Service, an agency of the U.S. Department of Agriculture, administers national forests and grasslands encompassing 193 million acres. The Forest Service's mission is to achieve quality land management under the "sustainable multiple-use management concept" to meet the diverse needs of people while protecting the resource. Significant intellectual, conceptual, and content contributions were provided by the following individuals: Dr. Pat Reed, Dr. Jessica Montag, Doug Smith, M.S., Fred Clark, M.S., Dr. Susan A. Winter, and Dr. Ashley Goldhor-Wilcock.

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Note to Users:

This report is one of fourteen reports that can be produced with the EPS-HDT software. You may want to run another EPS-HDT report for either a different geography or topic. Topics include land use, demographics, specific industry sectors, the role of non-labor income, the wildland-urban interface, the role of amenities in economic development, and payments to county governments from federal lands. For further information and to download the free software, go to: www.headwaterseconomics.org/eps-hdt.

This report contains color-coded text. **BLUE TEXT** describes data in figures specific to selected geographies. Blue text appears on report pages next to or below figures. **BLACK TEXT** describes what is being measured and data sources used. Black text appears at the top of study guide pages under the heading "What do we measure on this page?" **RED TEXT** explains methodologies and the importance of the information. Red text appears in the middle of study guide pages under the headings "Why is this important?" and "Methods." **GREEN TEXT** lists additional resources that help with interpretation of the information. Green text appears at the bottom of study guide pages under the heading "Additional Resources."

The EPS-HDT software also allows the user to "push" the tables, figures, and interpretive text from a report to a Word document. At that point, you can keep some text (most often blue and black text) and delete other text (most often red and green text). Blue text can serve as a starting point for additional description and interpretation of data unique to specific geographies.

Travel & Tourism Employment

Which industries include travel & tourism jobs?

This page describes the number of jobs (full and part-time) and the share of total jobs in industries that include travel and tourism.

Travel and Tourism: Consists of sectors that provide goods and services to visitors to the local economy, as well as to the local population. These industries are: retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food. It is not known, without additional research such as surveys, what exact proportion of the jobs in these sectors is attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents. Some researchers refer to these sectors as "tourism-sensitive." They could also be called "travel and tourism-potential sectors" because they have the potential of being influenced by expenditures by non-locals. In this report, they are referred to as "industries that include travel and tourism."

Employment in Travel & Tourism, 2009

	Luce County, MI	U.S.
Total Private Employment	1,312	114,509,626
Travel & Tourism Related	232	17,038,626
Retail Trade	32	3,124,994
Gasoline Stations	27	855,915
Clothing & Accessory Stores	0	1,535,923
Misc. Store Retailers	5	733,156
Passenger Transportation	1	460,000
Air Transportation	0	438,336
Scenic & Sightseeing Transport	1	21,664
Arts, Entertainment, & Recreation	16	2,010,339
Performing Arts & Spectator Sports	0	428,958
Museums, Parks, & Historic Sites	1	128,641
Amusement, Gambling, & Rec.	15	1,452,740
Accommodation & Food	183	11,443,293
Accommodation	30	1,838,641
Food Services & Drinking Places	153	9,604,652
Non-Travel & Tourism	1,080	97,471,000

Percent of Total

Travel & Tourism Related	17.7%	14.9%
Retail Trade	2.4%	2.7%
Gasoline Stations	2.1%	0.7%
Clothing & Accessory Stores	0.0%	1.3%
Misc. Store Retailers	0.4%	0.6%
Passenger Transportation	0.1%	0.4%
Air Transportation	0.0%	0.4%
Scenic & Sightseeing Transport	0.1%	0.0%
Arts, Entertainment, & Recreation	1.2%	1.8%
Performing Arts & Spectator Sports	0.0%	0.4%
Museums, Parks, & Historic Sites	0.1%	0.1%
Amusement, Gambling, & Rec.	1.1%	1.3%
Accommodation & Food	13.9%	10.0%
Accommodation	2.3%	1.6%
Food Services & Drinking Places	11.7%	8.4%
Non-Travel & Tourism	82.3%	85.1%

The major industry categories (retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food) in the table above are the sum of the sub-categories underneath them and as shown here do not represent NAICS codes. The data does not include employment in government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. Estimates for data that were not disclosed are shown in *italics* in the table above.

Study Guide and Supplemental Information

Which industries include travel & tourism jobs?

What do we measure on this page?

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Travel and Tourism: Consists of sectors that provide goods and services to visitors to the local economy, as well as to the local population. These industries are: retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food. It is not known, without additional research such as surveys, what exact proportion of the jobs in these sectors is attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents. Some researchers refer to these sectors as "tourism-sensitive." They could also be called "travel and tourism-potential sectors" because they have the potential of being influenced by expenditures by non-locals. In this report, they are referred to as "industries that include travel and tourism."

The information on this page is useful for explaining whether sectors that are likely to be associated with travel or tourism exist, and whether there are differences between geographies. It is less useful as a measure of the absolute size of employment in travel and tourism. To know this would require detailed knowledge, obtained through surveys and other means, of the proportion of a sector's employment that is directly attributable to travelers.

Why is this Important?

Public lands can play a key role in stimulating local employment by providing opportunities for recreation. Communities adjacent to public lands can benefit economically from visitors who spend money in hotels, restaurants, ski resorts, gift shops, and elsewhere. While the information in this report is not an exact measure of the size of the travel and tourism sectors, and it does not measure the type and amount of recreation on public lands, it can be used to understand whether travel and tourism-related economic activity is present, how it has changed over time, and whether there are differences between geographies.

Methods

There is no single industrial classification for travel and tourism under the North American Industrial Classification System (NAICS). However, there are sectors that, at least in part, provide goods and services to visitors to a local economy. We reviewed the published literature to discern how others identified industries that are part of travel and tourism. These industries, which follow generally accepted standards, include (identified by 3-digit NAICS codes in parenthesis):

Components of Retail Trade: Gasoline Stations (447), Clothing and Accessory Stores (448), Miscellaneous Store Retailers (453; includes Gift, Novelty, and Souvenir)

Components of Passenger Transportation: Air Transportation (481), Scenic and Sightseeing Transportation (487)

Components of Arts, Entertainment, and Recreation: Performing Arts and Spectator Sports (711); Museums, Parks, and Historical Sites (712; includes National Parks, Conservation Areas); Amusement, Gambling, and Recreation (713; includes Golf Courses, Alpine and Cross Country Skiing Facilities)

Components of Accommodation and Food: Accommodation (721; includes ski resorts, hotels, casino hotels, campgrounds, guest ranches), Food Services and Drinking Places (722)

Data on this page were obtained from County Business Patterns. We use this source because, compared to other sources, it has fewer data gaps (instances when the federal government will not release information to protect confidentiality of individual businesses). It also includes both full and part-time employment. The disadvantage of County Business Patterns data is that it does not include employment in government, agriculture, railroads, or the self-employed and as a result under-count the size of industry sectors. Also, County Business Patterns data are based on mid-March employment and do not take into account seasonal fluctuations. For these reasons, the data are most useful for showing long-term trends, displaying differences between geographies, and showing the relationship between sectors over time.

Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses data from the U.S. Department of Commerce to estimate these data gaps. These are indicated in *italics* in tables.

Additional Resources

The list of NAICS codes associated with travel and tourism were obtained from: Marcouiller, D.W. and X. Xia. 2008. "Distribution of Income from Tourism-Sensitive Employment." *Tourism Economics*. 14(3): 545-565. See: <http://www.ingentaconnect.com/content>.

For a similar definition of travel and tourism, see: Wilkerson, C. 2003. "Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District." *Economic Review*. Federal Reserve Bank of Kansas City. Third Quarter: 45-71. See: <http://kansascityfed.com/publicat/econrev/PDF/3q03wilk.pdf>.

Documentation explaining methods developed by Headwaters Economics for estimating disclosure gaps is available at www.headwaterseconomics.org/eps-hdt.

Because of space limitations, additional travel and tourism resources are listed on subsequent pages.

Data Sources

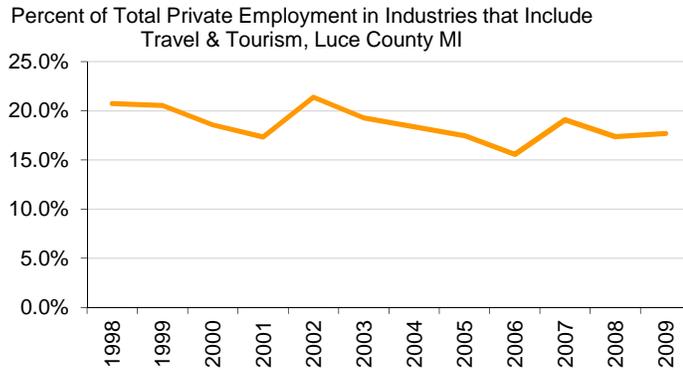
U.S. Department of Commerce. 2011. Census Bureau, County Business Patterns, Washington, D.C.
Study Guide

Travel & Tourism Employment

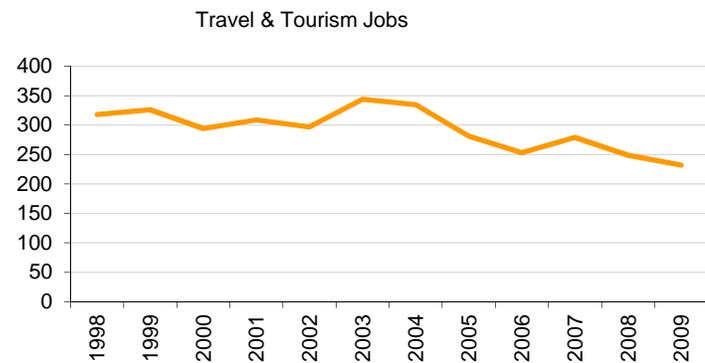
How have industries that include travel and tourism changed?

This page describes trends in industries that include travel and tourism as a percent of all jobs and compares industries containing travel and tourism to the rest of the economy. It also shows jobs in industries that include travel and tourism as a percent of total employment.

- In 1998, travel & tourism represented 20.74% of total employment. By 2009, travel & tourism represented 17.68% of total employment.

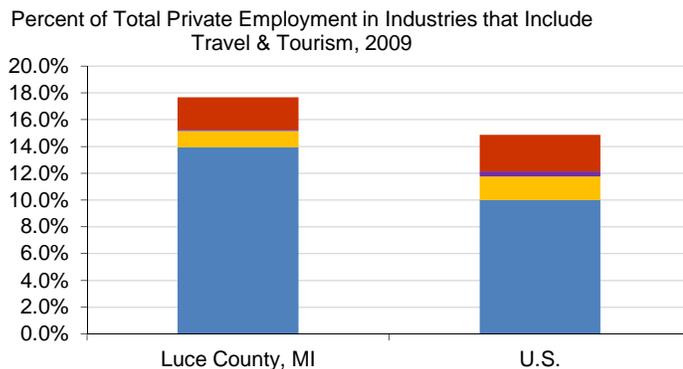


- From 1998 to 2009, travel & tourism employment shrank from 318 to 232 jobs, a 27% decrease.



- From 1998 to 2009, non-travel & tourism employment shrank from 1,215 to 1,080 jobs, a 11.1% decrease.

- In 2009, Luce County, MI had the largest percent of total travel & tourism employment (17.7%), and U.S. had the smallest (14.9%).



- Retail Trade
- Passenger Transportation
- Arts, Entertainment, & Recreation

Study Guide and Supplemental Information

How have industries that include travel and tourism changed?

What do we measure on this page?

This page describes trends in industries that include travel and tourism as a percent of all jobs and compares industries containing travel and tourism to the rest of the economy. It also shows jobs in industries that include travel and tourism as a percent of total employment.

The figures on this page that show industries that include travel and tourism as a percent of total jobs do not indicate the size of all travel and tourism related activity. Rather, they show the size of sectors that generally contain travel and tourism as a component of the overall economy. The share of the sectors shown here that corresponds to travel and tourism activities will vary between geographies.

Why is it important?

In some geographies travel and tourism is a significant driver of the economy. This can be true for "resort" economies but also for other areas that have abundant natural and social amenities, and offer recreational opportunities. Public land resources are a primary draw for pleasure travelers in many of these geographies. In some of these places, travel and tourism-related employment is growing faster than overall employment. While pleasure travel and recreation are important economic activities in and of themselves, they also stimulate other forms of economic development when visitors move families and businesses to communities they first visited as tourists.

Methods

This page reports on data and trends in sectors that are most likely to include travel and tourism. The information is useful to understand whether sectors that are likely to be associated with travel and tourism are growing or declining. It is less useful as a measure of the absolute size of employment in travel and tourism. A detailed knowledge, obtained through surveys and other means, is required to determine the proportion of a sector's employment that is due to local expenditures versus expenditures from visitors. It may be useful to supplement the information in this report with surveys and data from: (1) state tourism offices, which sometimes track indicators such as tourism employment, hotel receipts, bed taxes, etc.; (2) local Chambers of Commerce and tourism promotion groups; and (3) Forest Service, Bureau of Land Management, Fish and Wildlife Service, and National Park Service offices. In addition, it may be useful to supplement published statistics with computer models such as IMPLAN.

The top two figures on this page start in 1998 because that is the year the Census Bureau (and County Business Patterns) shifted to using the new North American Industrial Classification System (NAICS). The major industry categories (retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food) in the bottom figure are the sum of the sub-categories from the initial page of this report and as shown here do not represent NAICS codes. Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses data from the U.S. Department of Commerce to estimate these data gaps.

Additional Resources

Daniel Stynes at the University of Michigan provides a web-based resource for how to measure the impacts of tourism, including surveys and computer models such as IMPLAN, as well as links to a number of useful databases and publications. See: <http://web4.canr.msu.edu/MGM2/econ>.

The Census Bureau conducts an Economic Census every five years for selected industries (the latest was in 2007). This database allows a user to search the 2002 and 2007 Economic Census for information on the number of establishments, sales, employees, and payroll, by selected industries at the county level for selected states. See: <http://www.census.gov/econ/census07>.

The Forest Service collects information on visitor satisfaction and use. Annual summary reports and individual forest and grassland reports are available from: <http://www.fs.fed.us/recreation/programs/nvum>.

The U.S. Department of Commerce developed the U.S. Travel and Tourism Satellite Accounts to estimate the proportion of every sector in the economy that is attributable to travel and tourism at the national level. This information is useful for detecting sectors that have a higher potential to serve the needs of non-locals. The resulting ratios should not be applied to local economies. For more information, see: <http://www.bea.gov/industry/iedguide.htm#ttsa>.

For more information on amenity-led migration, see the EPS-HDT Amenities report.

Data Sources

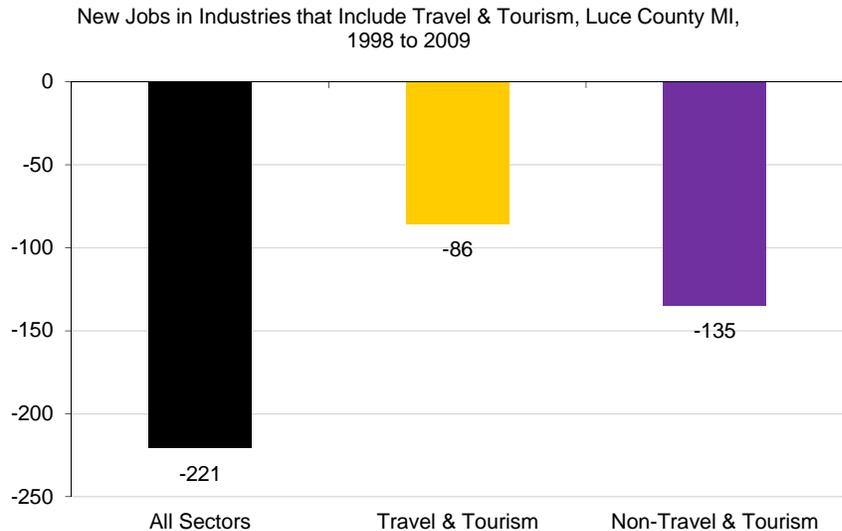
U.S. Department of Commerce. 2011. Census Bureau, County Business Patterns, Washington, D.C.

Travel & Tourism Employment

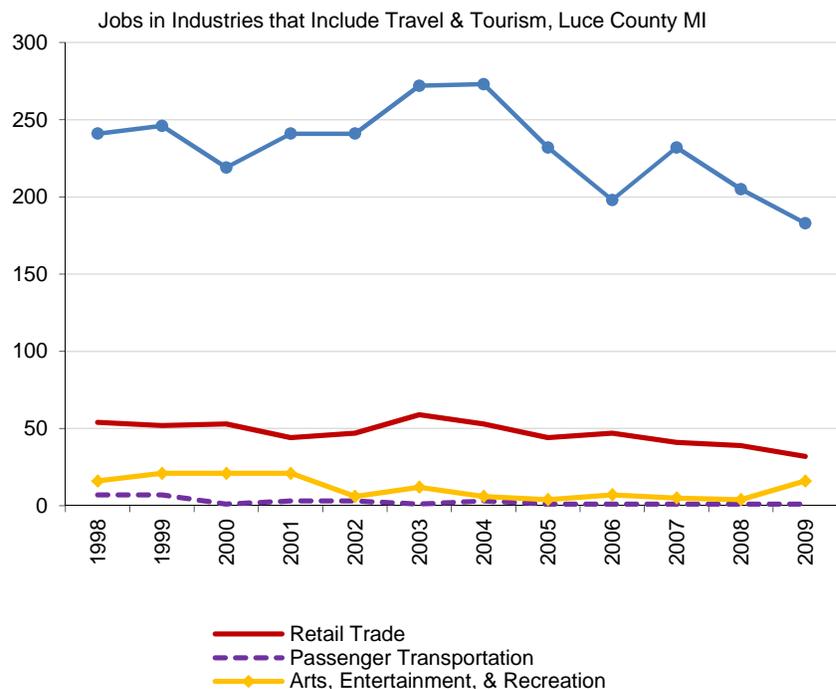
Which industries that include travel and tourism are changing the fastest?

This page describes the change in employment in sectors that include travel and tourism compared to the change in other sectors, and compares how the various industries that include travel and tourism have changed over time.

- From 1998 to 2009, travel & tourism employment shrank by 86 jobs.
- From 1998 to 2009, non-travel & tourism employment shrank by 135 jobs.



- From 1998 to 2009, retail trade shrank from 54 to 32 jobs, a 40.7% decrease.
- From 1998 to 2009, passenger transportation shrank from 7 to 1 jobs, a 85.7% decrease.
- From 1998 to 2009, arts, entertainment, & recreation shrank from 16 to 16 jobs, a 0% decrease.
- From 1998 to 2009, accommodation & food services shrank from 241 to 183 jobs, a 24.1% decrease.



Study Guide and Supplemental Information

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This page reports on data and trends in sectors that are most likely to include travel and tourism. The information is useful to understand whether sectors that are likely to be associated with travel and tourism are growing or declining. It is less useful as a measure of the absolute size of employment in travel and tourism. A detailed knowledge, obtained through surveys and other means, is required to determine the proportion of a sector's employment that is due to local expenditures versus expenditures from visitors.

Data on this page were obtained from County Business Patterns. We use this source because, compared to other sources, it has fewer data gaps (instances when the federal government will not release information to protect confidentiality of individual businesses). It also includes both full and part-time employment. The disadvantage of County Business Patterns data is that it does not include employment in government, agriculture, railroads, or the self-employed and as a result under-count the size of industry sectors. Also, County Business Patterns data are based on mid-March employment and do not take into account seasonal fluctuations. For these reasons, the data are most useful for showing long-term trends, displaying differences between geographies, and showing the relationship between sectors over time.

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Additional Resources

The Economic Research Service of the U.S. Department of Agriculture has developed a widely used classification system for identifying non-metropolitan recreation counties. See Johnson, K.M. and C.L. Beale. 2002. "Non-Metro Recreation Counties: Their Identification and Rapid Growth." *Rural America*. 17(4):12-19; available at: <http://www.ers.usda.gov/publications/ruralamerica/ra174/ra174b.pdf>.

A number of resources exist that help explain the importance of travel and tourism. See, for example: Reeder, R.J. and D.M. Brown. 2005. *Recreation, Tourism, and Rural Well-Being*. U.S. Department of Agriculture, Economic Research Service. ERR-7. 33 pp. <http://www.ers.usda.gov/publications/err7/err7.pdf>. Redder and Brown found that, compared to non-tourism dependent counties, those counties dependent on tourism have double the rate of employment growth; significantly higher levels of income and earnings per job; higher rates of population growth; lower rates of poverty; higher rates of education; better access to health care; but more expensive housing and higher rates of crime.

English, D.B.K., D.W. Marcouiller, and H.K. Cordell. 2000. "Tourism Dependence in Rural America: Estimates and Effects." *Society and Natural Resources*. 13 (3): 185-202. English et al. found that counties relatively dependent on tourism, when compared to non-tourism dependent counties, have the following characteristics: higher growth in per capita income; less economic diversity, with fewer employed in manufacturing, in particular in wood products sectors; housing that is more expensive; faster population growth; and higher levels of education. They also found that the average household income in tourism dependent counties was about the same as in nondependent counties.

The Federal Reserve Bank of Kansas City has defined travel and tourism as consisting of: hotels, air travel, and amusement and recreation services. See Wilkerson, C. 2003. "Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District." *Economic Review*. Federal Reserve Bank of Kansas City. Third Quarter: 45-71. <http://kansascityfed.com/publicat/econrev/PDF/3q03wilk.pdf>. Wilkerson points out that travel and tourism related sectors outperformed the nation, including during recessions. Snepenger D., J. Johnson and R. Rasker. 1994. "Travel Stimulated Entrepreneurial Migration." *Journal of Travel Research*. Vol. 34(1): 40-44. Snepenger et al. found that tourism can stimulate permanent migration of entrepreneurs.

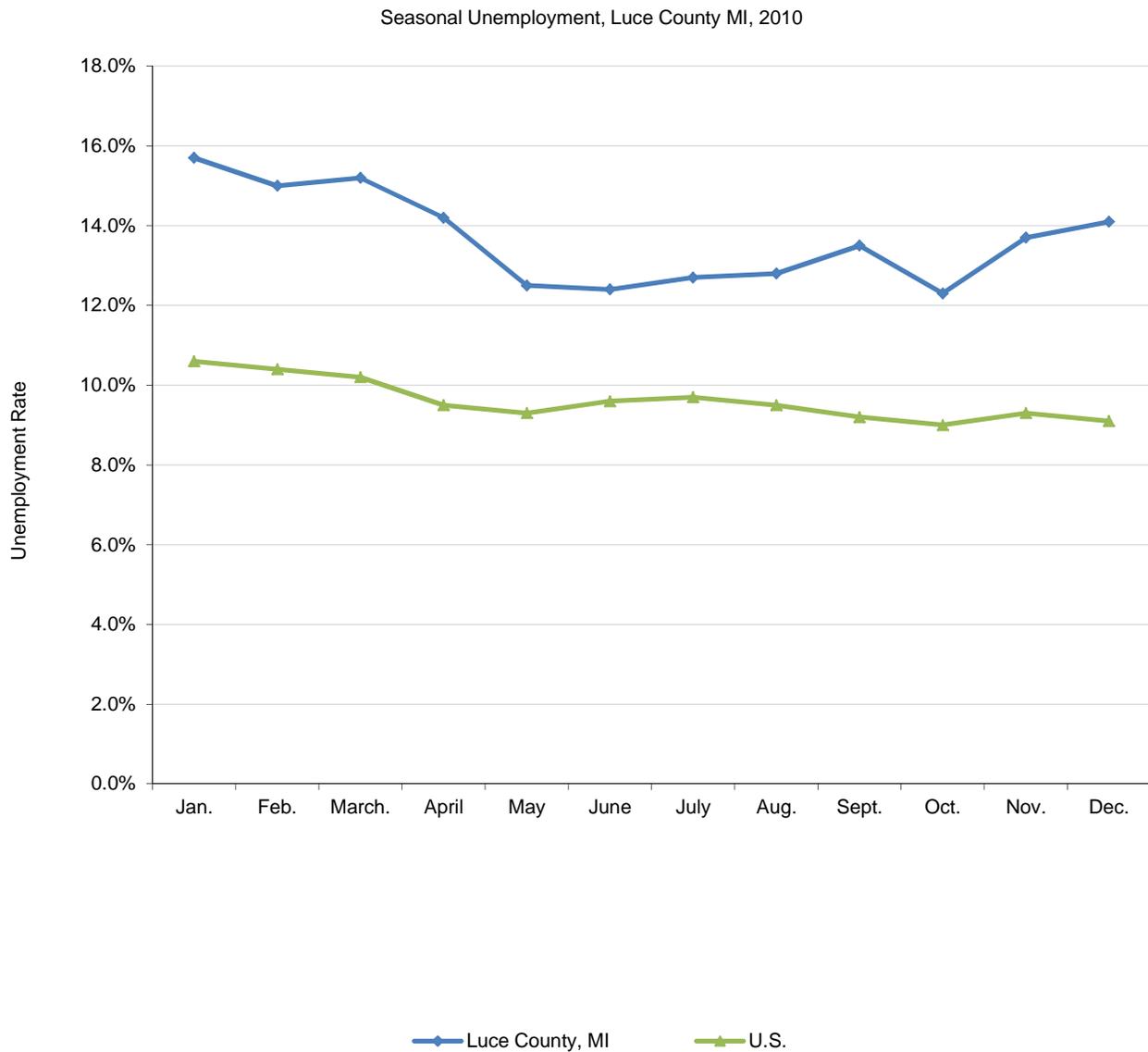
Data Sources

U.S. Department of Commerce. 2011. Census Bureau, County Business Patterns, Washington, D.C.

Travel & Tourism Benchmarks

To what extent is overall employment seasonal or part time?

This page describes differences in the seasonality of employment and part-time work for all industries.



- In 2010, Luce County, MI had the most change in unemployment (biggest absolute value of difference between min and max), and Luce County, MI had the least (smallest absolute value of difference between min and max).

Study Guide and Supplemental Information

To what extent is overall employment seasonal or part time?

What do we measure on this page?

This page describes differences in the seasonality of employment and part-time work for all industries.

People with jobs (full or part-time) are employed; people who are jobless, looking for jobs, and available for work are unemployed; and people who are neither employed or unemployed are not in the labor force.

Note: If many geographies are selected, it may be difficult to read the top figure on this page.

Why is it important?

Unemployment rate fluctuations reflect not only normal seasonal weather patterns that tend to be repeated year after year, but also the hiring and layoff patterns that accompany regular events such as the winter holiday and summer vacation season. It is possible that some seasonal workers may not live in the geography selected and therefore do not show in the unemployment figures. And seasonal unemployment also occurs in places that have a relatively high concentration in construction, fishing, and agriculture sectors.

Methods

The Bureau of Labor Statistics measures the seasonality of unemployment by tracking the change in month-to-month unemployment.

The County Business Patterns data used elsewhere in this report are based on mid-March employment and do not take into account seasonal fluctuations. March is a "shoulder" season for a number of tourism activities.

Additional Resources

For further analysis on long-term trends in unemployment, run the EPS-HDT Socioeconomic Measures report.

For detailed information on how the government measures unemployment, see: http://www.bls.gov/cps/cps_htgm.htm.

Data Sources

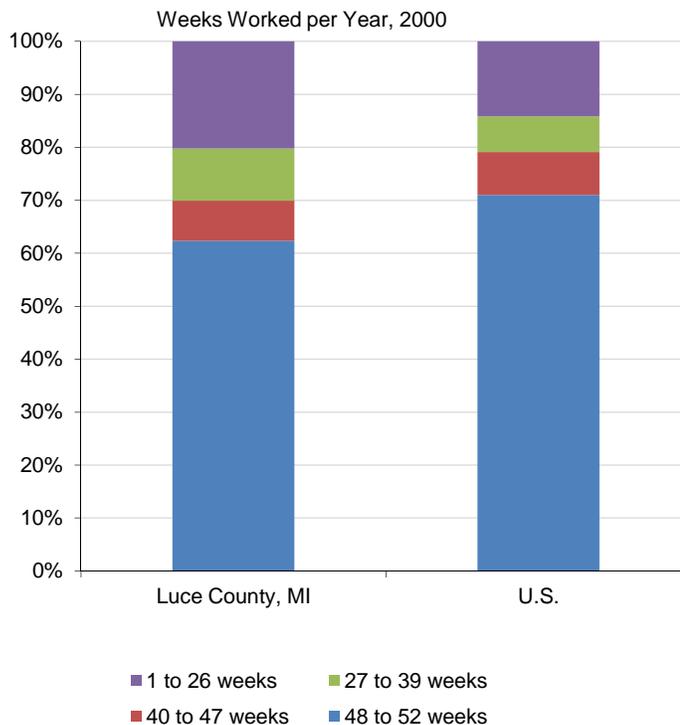
U.S. Department of Labor. 2012. Bureau of Labor Statistics, Local Area Unemployment Statistics, Washington, D.C.

Travel & Tourism Benchmarks

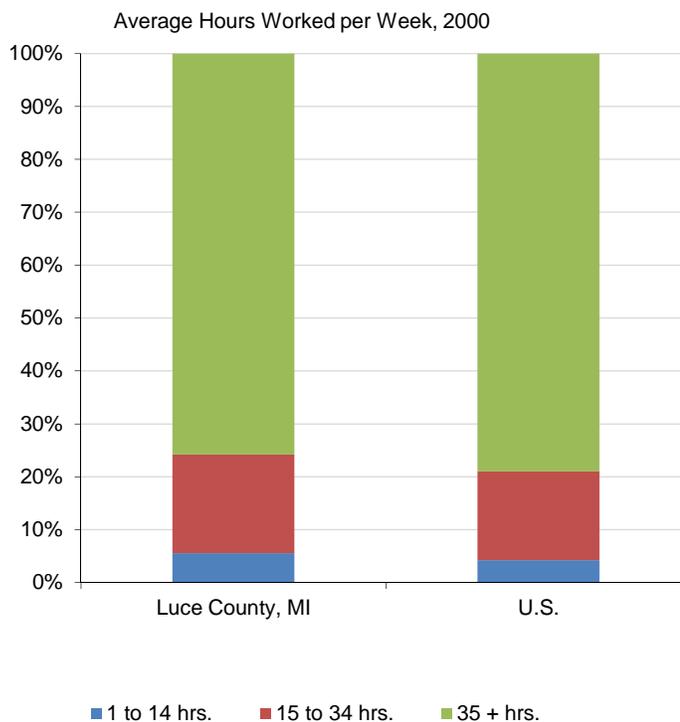
To what extent is overall employment seasonal or part time?

This page describes differences in the seasonality of employment and part-time work for all industries.

- In 2000, 30.1 percent of workers in Luce County MI worked less than 40 weeks over the course of the year, compared to 20.9 percent for the nation.



- In 2000, 24.2 percent of workers in Luce County MI worked less than 35 hours per week on average, compared to 21 percent for the nation.



Study Guide and Supplemental Information

To what extent is overall employment seasonal or part time?

What do we measure on this page?

This page describes differences in the seasonality of employment and part-time work for all industries.

Seasonal jobs are those that vary from season to season (for example, people working in ski resorts are often seasonal workers; as are farm workers who help with seasonal harvests). This is different from part-time workers, who may or may not be seasonal but who work less than 40 hours per week.

Why is it important?

Places that rely economically on tourism can have higher rates of seasonal unemployment and more part-time workers. While seasonal and part-time indicators by themselves are not measures of tourism, they can be used to complement other data in this report and from elsewhere to evaluate the nature and extent of tourism activities.

Methods

The Census Bureau provides two standard measures of part-time work: weeks worked per year and average hours worked per week. Values reported are those of individuals who reported working during 1999 and, therefore, do not include retirees, those unemployed for the entire year of 1999, or other individuals not seeking employment.

The County Business Patterns data used elsewhere in this report are based on mid-March employment and do not take into account seasonal fluctuations. March is a "shoulder" season for a number of tourism activities.

Additional Resources

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Data Sources

U.S. Department of Commerce. 2000. Census Bureau, Systems Support Division, Washington, D.C.

Travel & Tourism Wages

How do wages in industries that include travel and tourism compare to wages in other sectors?

This page describes wages (in real terms) from employment in industries that include travel and tourism, including sub-sectors, compared to wages from employment in all non-travel and tourism sectors combined. It also describes the percent of jobs in each category. These are shown together to illustrate the relative wage levels in industries that include travel and tourism, including sub-sectors, and how many people are employed in each sub-sector.

Average Annual Wages, 2010 (2011 \$s)

	Luce County, MI	U.S.
All Sectors	\$35,840	\$48,218
Private	\$23,723	\$47,917
Travel & Tourism	\$12,541	\$21,258
Retail Trade	\$15,814	\$20,557
Gasoline Stations	\$15,848	\$19,380
Clothing & Accessories	na	\$19,293
Misc. Store Retailers	\$16,211	\$24,060
Passenger Transportation	na	\$60,162
Air Transportation	na	\$62,013
Scenic & Sightseeing	na	\$28,780
Arts, Entertainment, & Rec.	na	\$33,297
Performing Arts & Spectator Sports	na	\$79,330
Museums, Parks, & Historic Sites	na	\$31,448
Amusement, Gambling, & Rec.	na	\$20,319
Accommodations & Food	\$11,597	\$17,719
Accommodation	\$12,384	\$26,744
Food Services & Drinking Places	\$11,344	\$16,034
Non-Travel & Tourism	\$28,255	\$52,804
Government	\$46,387	\$49,691

This table shows wage data from the Bureau of Labor Statistics, which does not report data for proprietors or the value of benefits; the major industry categories (retail trade, passenger transportation; arts, entertainment, and recreation; and accommodation and food) are the sum of the sub-categories underneath them and as shown here do not represent NAICS codes.

Percent of Total Employment, 2010

	Luce County, MI	U.S.
All Sectors		
Private	46.6%	83.1%
Travel & Tourism	11.8%	12.9%
Retail Trade	2.6%	2.3%
Gasoline Stations	2.1%	0.6%
Clothing & Accessories	0.0%	1.1%
Misc. Store Retailers	0.6%	0.6%
Passenger Transportation	na	0.4%
Air Transportation	0.0%	0.4%
Scenic & Sightseeing	na	0.0%
Arts, Entertainment, & Rec.	na	1.5%
Performing Arts & Spectator Sports	0.0%	0.3%
Museums, Parks, & Historic Sites	na	0.1%
Amusement, Gambling, & Rec.	na	1.1%
Accommodations & Food	9.1%	8.7%
Accommodation	2.0%	1.4%
Food Services & Drinking Places	7.2%	7.3%
Non-Travel & Tourism	16.8%	70.2%
Government	53.4%	16.9%

Data Sources: U.S. Department of Labor. 2011. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Washington, D.C.

Study Guide and Supplemental Information

How do wages in industries that include travel and tourism compare to wages in other sectors?

What do we measure on this page?

This page describes wages (in real terms) from employment in industries that include travel and tourism, including sub-sectors, compared to wages from employment in all non-travel and tourism sectors combined. It also describes the percent of jobs in each category. These are shown together to illustrate the relative wage levels in industries that include travel and tourism, including sub-sectors, and how many people are employed in each sub-sector.

The primary purpose of this page is to compare the average annual wages between sectors and to investigate the relative number of people employed in high and low-wage sectors.

Travel and Tourism: Consists of sectors that provide goods and services to visitors to the local economy, as well as to the local population. These industries are: retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food. It is not known, without additional research such as surveys, what exact proportion of the jobs in these sectors is attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents. Some researchers refer to these sectors as "tourism-sensitive." They could also be called "travel and tourism-potential sectors" because they have the potential of being influenced by expenditures by non-locals. In this report, they are referred to as "industries that include travel and tourism."

Why is it important?

Industries that contain travel and tourism often pay relatively low wages, though this varies by industry sub-sector and by geography. Some important issues to consider are how travel and tourism-related industry wages compare to wages in other sectors, whether some components of the travel and tourism-related industry pay higher wages than others, and if there are significant wage differences between geographies. When comparing wage levels, it is also useful to remember that many travel and tourism-related jobs are seasonal and/or part-time. Refer to the previous page of this report for more information on the extent to which work is seasonal and/or part-time.

Methods

This page reports on data in sectors that are more likely to include travel and tourism. The information is useful to understand the mix of sectors that are likely to be associated with travel and tourism. It is less useful as a measure of the absolute size of employment in travel and tourism. A detailed knowledge, obtained through surveys and other means, is required to determine the proportion of a sector's employment that is due to local expenditures versus expenditures from visitors.

The tables use wage and employment data from the Bureau of Labor Statistics, which does not report data for proprietors or the value of benefits. As a result, the employment percents may not exactly match those on earlier pages of this report from County Business Patterns.

The major industry categories (retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food) are the sum of the sub-categories underneath them and as shown here do not represent NAICS codes. These are the same categories and sub-categories used in the initial pages of this report.

Depending on the geographies selected, some data may not be available due to disclosure restrictions.

Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses custom data aggregations calculated from various NAICS codes. Occasionally, one or more data values underlying these aggregations are non-disclosed. These are indicated in *italics* in tables.

Additional Resources

For an overview of how the Bureau of Labor Statistics treats employment, see: <http://www.bls.gov/bls/employment.htm>.

For an overview of how the Bureau of Labor Statistics treats pay and benefits, see: <http://www.bls.gov/bls/wages.htm>.

Employment and wage estimates are also available from the Bureau of Labor Statistics for over 800 occupations. Looking at travel and tourism by occupation, rather than by sector or industry, is helpful since wages can vary dramatically across occupations. For more information, see: <http://www.bls.gov/oes>.

For more information on wages in non-travel and tourism industries run the EPS-HDT Socioeconomic Measures report.

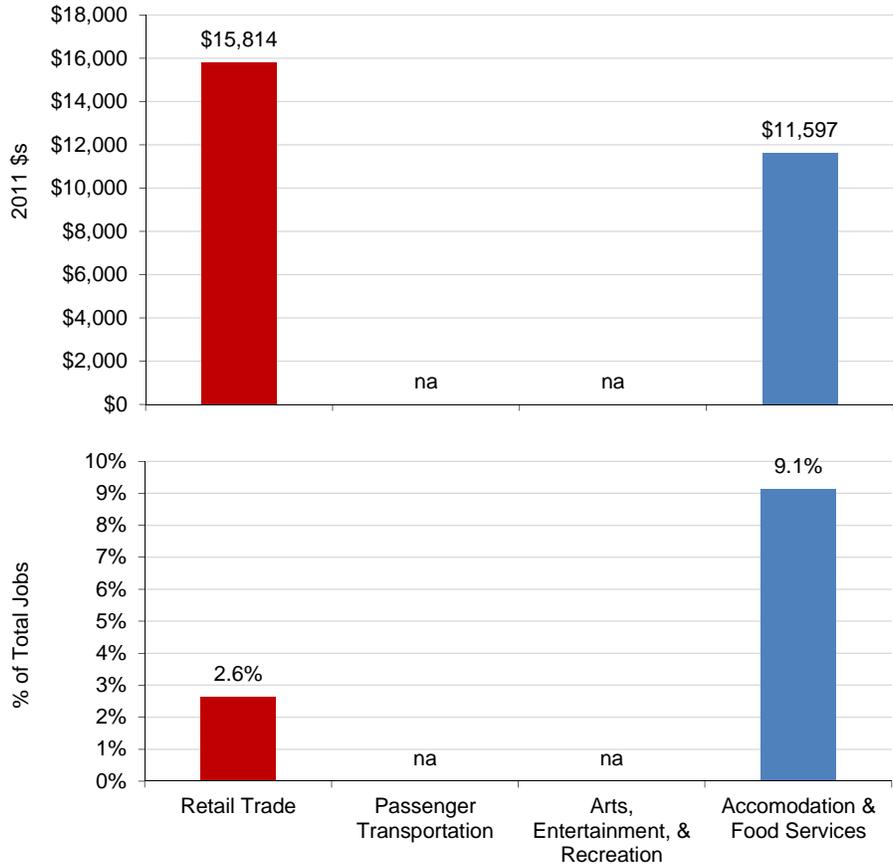
Data Sources

U.S. Department of Labor. 2011. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Washington, D.C. Study Guide

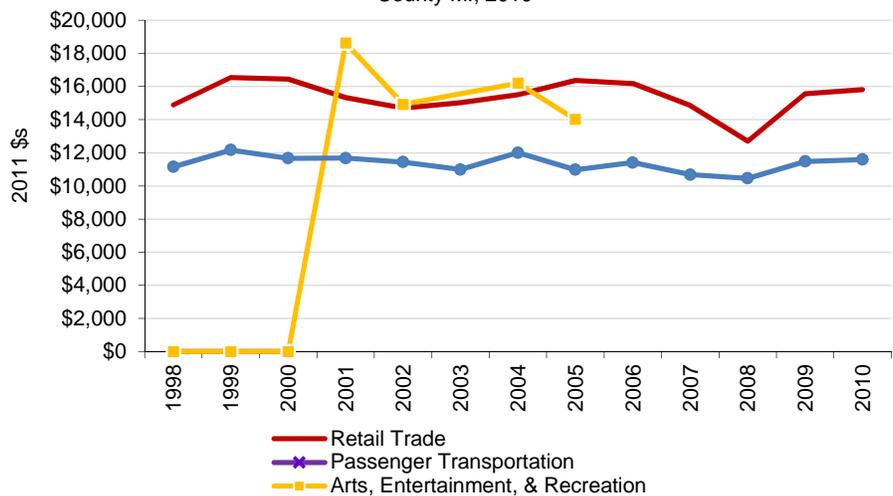
How do jobs and wages in industries that include travel and tourism compare?

This page describes average wages (in real terms) and employment levels in industries that include travel and tourism. It also shows average wage trends (in real terms) for industries that include travel and tourism at the regional level.

Avg. Annual Wages and Percent of Total Jobs in Industries that Include Travel and Tourism, Luce County MI, 2010



Avg. Annual Wages in Industries that Include Travel and Tourism, Luce County MI, 2010



Study Guide and Supplemental Information

How do jobs and wages in industries that include travel and tourism compare?

What do we measure on this page?

This page describes average wages (in real terms) and employment levels in industries that include travel and tourism. It also shows average wage trends (in real terms) for industries that include travel and tourism at the regional level.

The figure *Avg. Annual Wages and Percent of Total Jobs in Industries that Include Travel and Tourism* is useful for describing how many people are working in relatively high and low-wage travel and tourism-related industries. The figure *Avg. Annual Wages in Industries that Include Travel and Tourism* is useful for comparing wage trends by sector.

Why is it important?

While industries that include travel and tourism often pay relatively low wages, not all components of the travel and tourism-related industry pay the same wages or employ the same number of people. A significant increase in travel and tourism jobs that pay below the average for all industries will decrease overall average earnings per job. On the other hand, a significant increase in travel and tourism jobs that pay above the average for all industries will increase overall average earnings per job. A modest change in travel and tourism-related employment, especially when this is a small share of total employment, will not likely affect average earnings in a local area.

Methods

This page reports on data and trends in sectors that are more likely to include travel and tourism. The information is useful to understand whether sectors that are likely to be associated with travel and tourism are growing or declining. It is less useful as a measure of the absolute size of employment in travel and tourism. A detailed knowledge, obtained through surveys and other means, is required to determine the proportion of a sector's employment that is due to local expenditures versus expenditures from visitors.

The figures use wage and employment data from the Bureau of Labor Statistics, which does not report data for proprietors or the value of benefits. As a result, the employment percents may not exactly match those on initial pages of this report from County Business Patterns. The major industry categories (retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food) are the sum of the sub-categories from the previous page of this report and as shown here do not represent NAICS codes. These are the same categories and sub-categories used in the initial pages of this report. The bottom figure on this page starts in 1998 to be consistent with the start date of figures on earlier pages of this report.

Depending on the geographies selected, some data may not be available due to disclosure restrictions.

Additional Resources

For an overview of how the Bureau of Labor Statistics treats employment, see: <http://www.bls.gov/bls/employment.htm>.

For an overview of how the Bureau of Labor Statistics treats pay and benefits, see: <http://www.bls.gov/bls/wages.htm>.

If there are significant undisclosed data on this page, other sources for travel & tourism wage data include:

The Bureau of Labor Statistics' Quarterly Census of Employment and Wages, which has data for industries at the state level, is available at: <http://data.bls.gov:8080/PDQ/outside.jsp?survey=en>.

The Bureau of Labor Statistics' Occupational Outlook Handbook, 2010-2011 Edition, which has detailed industry earnings and wages data at the national level, is available at: <http://www.bls.gov/oco>.

The County Business Patterns database, which reports industry-level employment and payroll and can be used to estimate earnings, is available at: <http://www.census.gov/econ/cbp/index.html>.

Data Sources

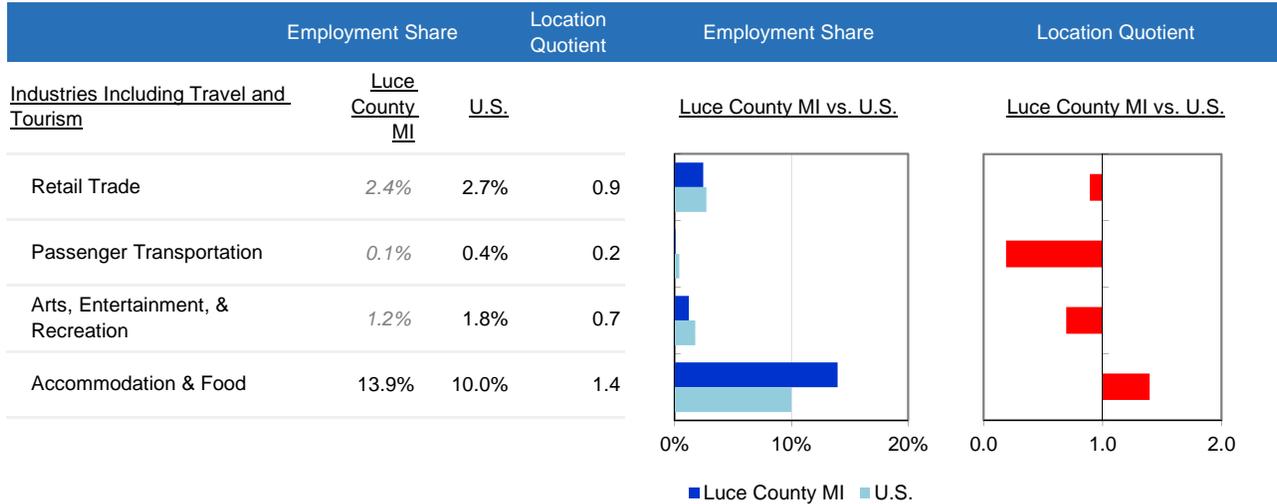
U.S. Department of Labor. 2011. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Washington, D.C.

Travel & Tourism Benchmarks

How does regional employment in industries that include travel and tourism and other measures compare to the U.S.?

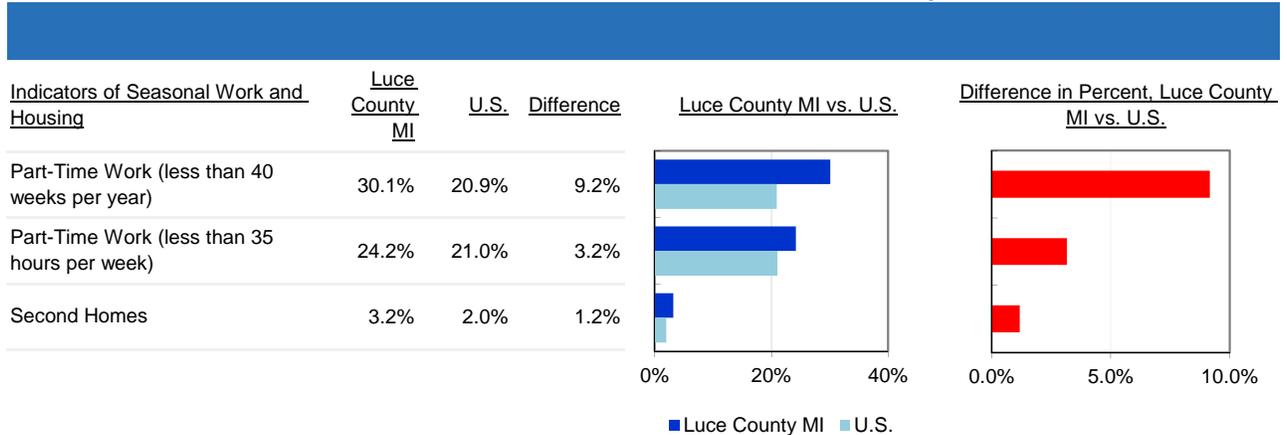
This page describes the difference in travel-and-tourism specialization between the region and the U.S. by comparing jobs in industry sectors that include travel and tourism as a share of total employment and with location quotients. It also shows other possible indicators of travel and tourism (part-time work and second homes) at the regional level.

Percent of Total Private Employment in Industry Sectors that Include Travel & Tourism, Luce County MI vs. U.S., 2009



- In 2009, accommodation & food had the highest location quotient score (1.4) and passenger transportation had the lowest (0.2).

Other Possible Measures of the Presence of Travel and Tourism, Luce County MI vs. U.S., 2000



- In 2000, the difference between Luce County MI and the U.S. in the percent of people working less than 40 weeks per year was 9.2%.
- In 2000, the difference between Luce County MI and the U.S. in the percent of people working less than 35 hours per week was 3.2%.
- In 2000, the difference between Luce County MI and the U.S. in the percent of homes which were second homes was 1.2%.

Data Sources: U.S. Department of Commerce. 2011. Census Bureau, County Business Patterns, Washington, D.C.; U.S. Department of Commerce. 2000. Census Bureau, Systems Support Division, Washington, D.C.

Study Guide and Supplemental Information

How does regional employment in industries that include travel and tourism and other measures compare to the U.S.?

What do we measure on this page?

This page describes the difference in travel-and-tourism specialization between the region and the U.S. by comparing jobs in industry sectors that include travel and tourism as a share of total employment and with location quotients. It also shows other possible indicators of travel and tourism (part-time work and second homes) at the regional level.

Location quotient: A ratio that compares an industry's share of total employment in a region to the national share. More precisely, it is the percent of local employment in a sector divided by the percent employment in the same sector in the U.S. In other words, it is a ratio that measures specialization, using the U.S. as a benchmark. A location quotient of more than 1.0 means the local area is more specialized in that sector relative to the U.S. A location quotient of less than 1.0 means it is less specialized.

The term "benchmark" in this report should not be construed as having the same meaning as in the National Forest Management Act (NFMA).

Why is it important?

Geographies with economies that focus on travel and tourism may have a competitive advantage in this area, but can also be sensitive to business cycles and other changes (e.g., a rise in fuel costs) that affect pleasure travel and recreation spending. Public lands represent a tremendous scenic and recreational resource, and travel and tourism activities related to these lands can benefit local communities and in some cases diversify rural economies that have historically been tied to commodity production. The growth of travel and tourism activities is also associated with in-migration that can lead to business relocation and new business development across a range of business sectors.

A useful way to think about location quotients is as a measure of whether a place or geography produces enough goods or services from an industry to satisfy local demand for those goods or services.

Results above or below the 1.0 standard indicate the degree to which a place or geography may import or export a good or service. Although there is no precise cutoff, location quotients above 2.0 indicate a strong industry concentration (and that an area is likely exporting goods or services) and those less than .5 indicate a weak industry concentration (and that an area is likely importing goods or services). A few caveats: (1) A large location quotient for a particular sector does not necessarily mean that sector is a significant contributor to the economy. (2) LQs greater than 1.0 only suggest potential export capacity when compared to the U.S. and do not take into account local demand. Local demand may be greater than a national average, and therefore all goods and services may be consumed locally (i.e., not exported). (3) LQs can change from year to year. (4) LQs can vary when income or wage data are used rather than employment.

Methods

$LQ = (e_i/e) \text{ divided by } (E_i/E)$

Where: e_i = Local employment in industry i ; e = Total local employment; E_i = U.S. employment in industry i ; E = Total U.S. employment.

The number of second homes is not available as a single variable from the Census Bureau. We have calculated second homes as a percent of total homes as follows: seasonally occupied homes (Census SF1 H005005) are added to other vacant homes (Census SF1 H005007) and then divided by total homes. By this definition, second homes do not include homes that are vacant because they are for rent or sale.

Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses data from the U.S. Department of Commerce to estimate these data gaps. These are indicated in *italics* in tables.

Additional Resources

For a review of literature on economic diversity, see Sterling, Andrew. 1998. "On the Economics and Analysis of Diversity." Electronic Working Papers Series, University of Sussex, available at: www.sussex.ac.uk/Units/spru/publications/imprint/sewps/sewp28/sewp28.pdf.

A useful book on the evolving competitive environment for rural areas is: Gaston, William A., and Karen J. Baehler. 1995. *Rural Development in the United States: Connecting Theory, Practice, and Possibilities*. Washington: Island Press.

A succinct definition of a location quotient is offered by Florida State University's Department of Urban and Regional Planning:

<http://mailer.fsu.edu/~tchapin/garnet-tchapin/urp5261/topics/econbase/lq.htm>.

Documentation explaining methods developed by Headwaters Economics for estimating disclosure gaps is available at www.headwaterseconomics.org/eps-hdt.

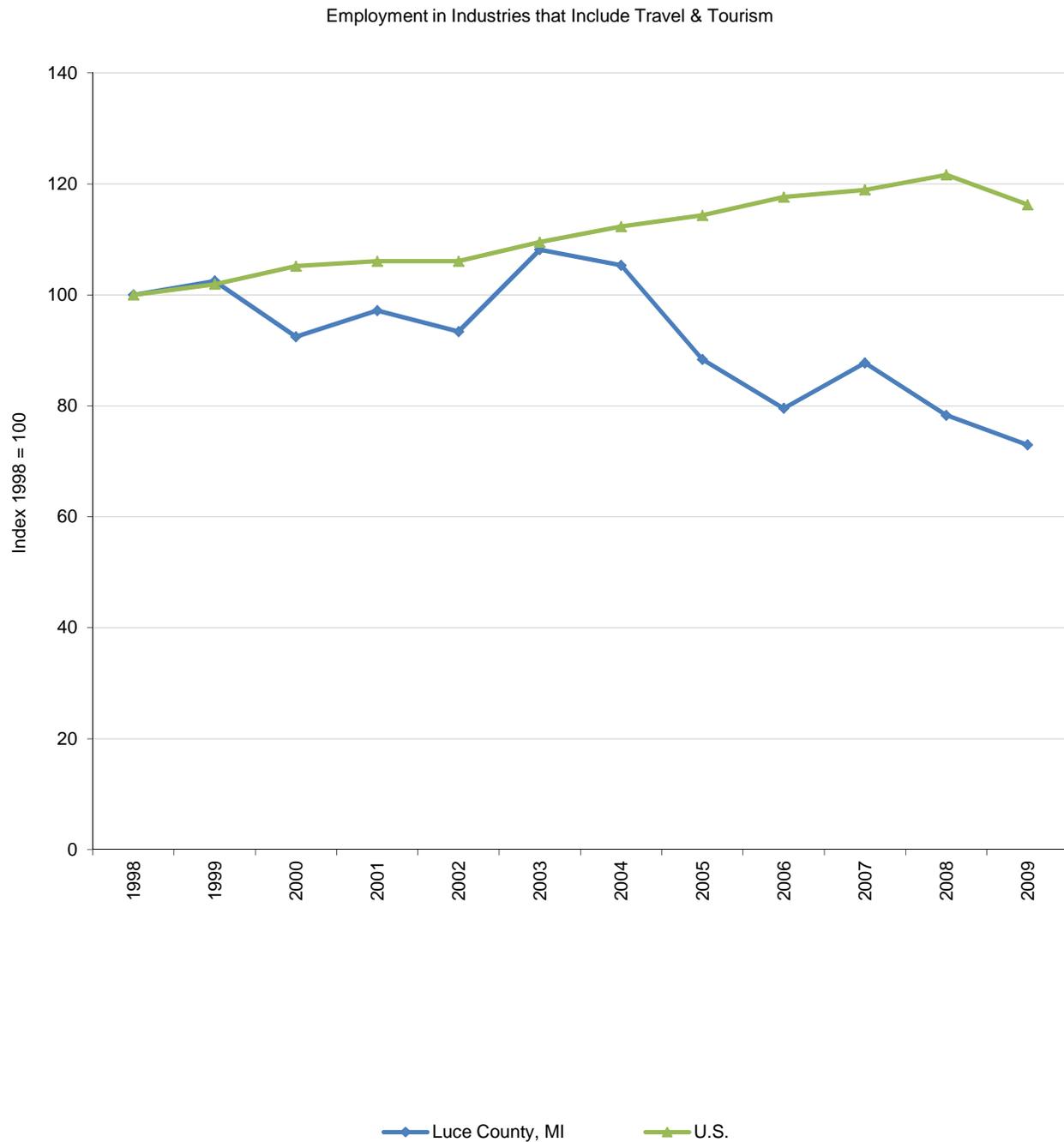
Data Sources

U.S. Department of Commerce. 2011. *Census Bureau, County Business Patterns*, Washington, D.C.; U.S. Department of Commerce. 2000. *Census Bureau, Systems Support Division*, Washington, D.C.

Travel & Tourism Benchmarks

How does employment in industries that include travel and tourism compare across geographies?

This page describes the change in employment in industries that include travel and tourism for all selected geographies and the U.S. The information is indexed (1998=100) so that data from counties with different size economies can be compared to each other, and to larger geographies.



- From 1998 to 2009, Luce County, MI had the fastest rate of change in travel & tourism employment, and the U.S. had the slowest.

Study Guide and Supplemental Information

How does employment in industries that include travel and tourism compare across geographies?

What do we measure on this page?

This page describes the change in employment in industries that include travel and tourism for all selected geographies and the U.S. The information is indexed (1998=100) so that data from counties with different size economies can be compared to each other, and to larger geographies. Indexing makes it easier to understand the relative rate of change in employment over time.

Index: Indexed numbers are compared with a base value. In the line chart, employment in 1998 is the base value, and is set to 100. The employment values for subsequent years are expressed as 100 times the ratio to the base value. The indexing used in the line chart enables easier comparisons between geographies over time.

The term "benchmark" in this report should not be construed as having the same meaning as in the National Forest Management Act (NFMA). Note: If many geographies are selected, it may be difficult to read the figure on this page.

Why is it important?

Not all geographies have attracted or lost travel and tourism-related employment at the same rate. An index makes it clear where the rate of travel and tourism-related growth or decline has been the fastest. Lines above 100 indicate positive absolute growth while those below 100 show absolute decline. The steeper the curve the faster the rate of change. It may be helpful to look for large year-to-year rises or dips in figure lines to identify rapid employment changes. If the reasons behind these fluctuations are not evident, it may be helpful to talk with regional experts or locals to learn more about what caused abrupt changes.

Geographies with economies that focus on travel and tourism may have a competitive advantage in this area, but can also be sensitive to business cycles and other changes (e.g., a rise in fuel costs) that affect pleasure travel and recreation spending. Public lands represent a tremendous scenic and recreational resource, and travel and tourism activities related to these lands can benefit local communities and in some cases diversify rural economies that have historically been tied to commodity production. The growth of travel and tourism activities is also associated with in-migration that can lead to business relocation and new business development across a range of business sectors.

Methods

This page reports on trends in sectors that are more likely to include travel and tourism. The information is useful to understand whether sectors that are likely to be associated with travel and tourism are growing or declining. It is less useful as a measure of the absolute size of employment in travel and tourism. A detailed knowledge, obtained through surveys and other means, is required to determine the proportion of a sectors' employment that is due to local expenditures versus expenditures from visitors.

The figure begins in 1998 because that is the year the Census Bureau (and County Business Patterns) shifted to using the new North American Industrial Classification System (NAICS). Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses data from the U.S. Department of Commerce to estimate these data gaps.

Additional Resources

The Economic Research Service of the U.S. Department of Agriculture has developed a widely-used classification system for identifying non-metropolitan recreation counties. See Johnson, K.M. and C.L. Beale. 2002. "Non-Metro Recreation Counties: Their Identification and Rapid Growth." *Rural America*. 17(4): 12-19 ; available at: <http://www.ers.usda.gov/publications/ruralamerica/ra174/ra174b.pdf>. Reeder, R.J. and D.M. Brown. 2005. *Recreation, Tourism, and Rural Well-Being*. U.S. Department of Agriculture, Economic Research Service. ERR-7. 33 pp. <http://www.ers.usda.gov/publications/err7/err7.pdf>. Redder and Brown found that, compared to non-tourism dependent counties, those counties dependent on tourism have double the rate of employment growth; significantly higher levels of income and earnings per job; higher rates of population growth; lower rates of poverty; higher rates of education; better access to health care; but more expensive housing and higher rates of crime.

English, D.B.K., D.W. Marcouiller, and H.K. Cordell. 2000. "Tourism Dependence in Rural America: Estimates and Effects." *Society and Natural Resources*. 13 (3): 185-202. English et al. found that counties relatively dependent on tourism, when compared to non-tourism dependent counties, have the following characteristics: higher growth in per capita income; less economic diversity, with fewer employed in manufacturing, in particular in wood products sectors; housing that is more expensive; faster population growth; and higher levels of education. They also found that the average household income in tourism dependent counties was about the same as in nondependent counties.

Snepenger D., J. Johnson and R. Rasker. 1994. "Travel Stimulated Entrepreneurial Migration." *Journal of Travel Research*. Vol. 34(1): 40-44. Snepenger et al. found that tourism can stimulate permanent migration of entrepreneurs.

Documentation explaining methods developed by Headwaters Economics for estimating disclosure gaps is available at www.headwaterseconomics.org/eps-hdt.

Data Sources

U.S. Department of Commerce. 2011. *Census Bureau, County Business Patterns*, Washington, D.C.

Data Sources & Methods

Data Sources

EPS-HDT uses published statistics from government sources that are available to the public and cover the entire country. All data used in EPS-HDT can be readily verified by going to the original source. The contact information for databases used in this profile is:

- **County Business Patterns**
Bureau of the Census, U.S. Department of Commerce
<http://www.census.gov/epcd/cbp/view/cbpview.html>
Tel. 301-763-2580
- **2000 Decennial Census**
Bureau of the Census, U.S. Department of Commerce
<http://www.census.gov>
Tel. 303-969-7750
- **Quarterly Census of Employment and Wages**
Bureau of Labor Statistics, U.S. Department of Labor
<http://www.bls.gov/cew>
Tel. 202-691-6567
- **Local Area Unemployment Statistics**
Bureau of Labor Statistics, U.S. Department of Labor
<http://www.bls.gov/lau>
Tel. 202-691-6392

Methods

EPS-HDT core approaches

EPS-HDT is designed to focus on long-term trends across a range of important measures. Trend analysis provides a more comprehensive view of changes than spot data for select years. We encourage users to focus on major trends rather than absolute numbers.

EPS-HDT displays detailed industry-level data to show changes in the composition of the economy over time and the mix of industries at points in time.

EPS-HDT employs cross-sectional benchmarking, comparing smaller geographies such as counties to larger regions, states, and the nation, to give a sense of relative performance.

EPS-HDT allows users to aggregate data for multiple geographies, such as multi-county regions, to accommodate a flexible range of user-defined areas of interest and to allow for more sophisticated cross-sectional comparisons.

Adjusting dollar figures for inflation

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. The U.S. Department of Commerce reports personal income figures in terms of current dollars. All income data in EPS-HDT are adjusted to real (or constant) dollars using the Consumer Price Index. Figures are adjusted to the latest date for which the annual Consumer Price Index is available.

Data gaps and estimation

Some data are withheld by the federal government to avoid the disclosure of potentially confidential information. Headwaters Economics uses supplemental data from the U.S. Department of Commerce to estimate these data gaps. These are indicated in *italics* in tables. Documentation explaining methods developed by Headwaters Economics for estimating disclosure gaps is available at www.headwaterseconomics.org/eps-hdt.