

# **The 2003 Louisiana Tourism Satellite Account**

**Prepared for**

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## **Executive Summary**

Unlike most other industries, Travel and Tourism does not explicitly appear as a category in official statistics such as employment or output measures for a nation or US state. Thus, no comprehensive measure of the importance of tourism exists in standard government statistics. Tourism Satellite Accounts (TSA) to address this problem by providing a comprehensive assessment of the role of tourism in an economy. The following document summarizes the 2003 TSA results for Louisiana along with preliminary 2004 TSA results.

The TSA first focuses on expenditures in Travel and Tourism from all sources. The largest source typically consists of visitor spending. However, this is always augmented by government spending on tourist facilities (museums, parks) and construction projects directly attributable to Travel and Tourism. The World Tourism Organization/United Nations Methodology requires the inclusion of all expenditures in the region of interest (Louisiana in this study). The methodology also requires including only production within that border, or equivalently subtracting the portion of expenditures that were used to purchase items from outside the region. The goal of the TSA is to provide a comprehensive assessment of the Travel and Tourism sector that is comparable to government statistics regularly computed for other industries. In light of the loss of tourism due to hurricanes Rita and Katrina, this study becomes particularly important by providing baseline measures of Travel and Tourism prior to the hurricanes. Future recovery can then be measured relative to this baseline to assess the recovery of this crucial sector of Louisiana's economy.

In 2003, the Travel and Tourism industry accounted for 3.4% of Louisiana's Gross State Product, 168,000 direct jobs, and generated more than 8% of the state's total tax revenues.

## **Key Observations**

- Louisiana visitors spent over \$9.4 billion in 2003
- Over 168,000 Louisiana residents were directly employed in Travel & Tourism in 2003
- This employment translates into 9.1% of the workforce in 2003
- In terms of production, \$5.5 billion of Louisiana production (3.4% of Gross State Product) in 2003 was directly attributable to expenditures in Travel and Tourism
- In terms of tax revenues, visitor spending accounted for \$657 million of 2003 Louisiana revenues, or 8.3% of the 2003 budget
- Travel and Tourism Expenditures for New Orleans Metropolitan Area accounted for over \$5.2 billion and 57.4% of Louisiana's total visitor spending

## **Defining the Tourism Satellite Account**

Unlike most other industries, Travel and Tourism does not have a unique industrial classification. Thus, economic reports summarizing gross state product or employment by industry do not quantify the tourism sector. The Tourism Satellite Account (TSA) addresses this issue by providing a comprehensive overview of the tourism industry. The methodology for creating a TSA has been revised over time by the World Tourism Organization in partnership with OECD, the European Union, and United Nations.<sup>1</sup>

The TSA focuses on two key objectives. The first objective consists of measuring the size of a Travel and Tourism industry which spans many other industries using the traditional definitions of an industry. The second objective consists of quantifying the impact of Travel and Tourism on the broader economy. Thus, our first objective consists of measuring Louisiana's Travel and Tourism sector and our second task requires quantifying its impact on the Louisiana economy as a whole.

The TSA methodology begins by quantifying all of the demand for goods and services created by Travel and Tourism in the economy. The largest component typically consists of visitor spending. However, government spending on tourism and investment on Travel and Tourism projects must also be included to accurately measure demand. For example, government spending on museums or parks may defray the tourist's costs of visiting such facilities. Following national income accounting methodology, the TSA also requires including investments in infrastructure directly related to Travel and Tourism. In this way, the TSA remains consistent with the economic accounting principles used to measure other sectors.

The second objective consists of looking at the supply side of the economy. In particular, what Louisiana goods and services are used to meet Travel and Tourism demand? This objective requires first quantifying the Louisiana workers and production directly attributable to Travel and Tourism (for example Louisiana products sold directly to tourists). The second step requires measuring the indirect effect of tourism on the economy (for example, when a restaurant purchases Louisiana agricultural products).

The TSA also supplies policy-makers with key information in several areas. In particular, an initial TSA provides insight into the importance of Travel and Tourism as an engine of economic growth. It goes beyond simple spending measures to account for how much of each tourist dollar spent in the state is retained in the state and how those dollars spillover into other industries. It is important to note that the TSA only includes that portion of production that occurs in Louisiana. For example, consider the case of a tourist purchasing Mardi Gras beads originally manufactured in China and then sold by a Louisiana retailer. In this case, only the portion of the sale retained by the Louisiana retailer is included in our computations of economic impact.

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<sup>1</sup> See Tourism Satellite Account: Recommended Methodological Framework (2001) for a more detailed description of broader methodological issues.

The TSA methodology was created to allow an accurate comparison of the importance of the Travel and Tourism industry to that of other industries in the state. At this point in Louisiana's history, this TSA provides an important baseline assessment for the importance of the Travel and Tourism sector prior to the destruction of hurricanes Katrina and Rita.

## **The Demand Side: Travel and Tourism Expenditures**

TSA methodology begins on the demand side by quantifying all expenditures in the economy attributable to Travel and Tourism activities. Table 1 summarizes 2003 Travel and Tourism related expenditures from all sources. Appendix A discusses data sources in greater detail.

**Table 1**  
**2003 Travel and Tourism Expenditures**

<b>Category</b>	<b>2003 Travel &amp; Tourism Spending (\$Millions)</b>
Domestic Out of State	\$5,946
International	\$364
Domestic In State	\$3,109
Government Spending	\$89
Investment	\$423
<b>Total</b>	<b>\$9,930</b>

Source: See Appendix A.

The largest spending component consists of Out of State travelers from within the US. Accounting for both business and pleasure travel, this group spent just under \$6 billion in Louisiana during 2003. International travelers added another \$364 million in expenditures. The Domestic In State category refers to travel within the state by Louisiana residents and accounted for \$3.1 billion in spending.<sup>2</sup> Government spending is defined by the TSA to include any government spending that subsidizes Travel and Tourism. We conservatively estimate this figure at \$89 million using state government expenditures on parks, museums, sports, and other items that could clearly be defined as travel related.<sup>3</sup> Investment includes expenditures on hotels and other facilities directly related to Travel and Tourism as well as a portion of highway expenditures that was allotted based on the proportion of vehicle miles driven by tourists in Louisiana.

Figure 1 contains a pie chart which highlights the proportion of expenditure that each category contributes. The bulk of expenditures in Louisiana's Travel and Tourism sector, 95%, come

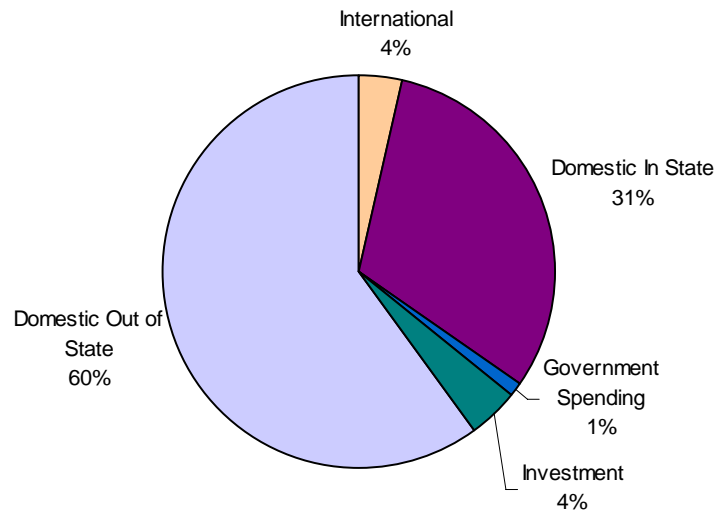
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<sup>2</sup> The definition of tourist or traveler includes all persons traveling for over 50 miles or staying overnight for business or pleasure, but explicitly excludes commuters or students.

<sup>3</sup> Whenever, we were unable to accurately measure a spending component, it was excluded from our computations. For example, the TSA methodology recommends including all government security expenditures related to Travel and Tourism. Lacking an accurate measure of this item, it was excluded from our analysis.

from tourists themselves. Out of State expenditures are roughly double those of In State tourists. The overall pattern parallels that of New Jersey.<sup>4</sup>

Figure 1: 2003 Travel and Tourism Inputs



## The Direct Economic Contribution of Travel and Tourism

This section focuses on measuring the direct impact of Travel and Tourism on Louisiana's economy. In particular, we focus on measuring the amount of Louisiana employment and production that can be attributed to the tourism industry. This calculation is complicated by the fact that items sold to Louisiana tourists may be produced in other states or even other countries. Items purchased outside Louisiana and later sold by local retailer to a tourist would be included in tourist expenditures. The contribution of this transaction to Louisiana's economy is measured only by the benefit to the local retailer.

Consider the example of a Louisiana tourist may purchasing Mardi Gras beads from a New Orleans retailer for \$5. If the beads were manufactured in Louisiana and sold to the retailer for \$3, the full \$5 is additional new Louisiana output of goods and services. The full \$5 is also available as an economic stimulus to create jobs in the Louisiana economy. Now suppose the Mardi Gras beads were instead manufactured in China. In this case, only \$2 of spending remains in the Louisiana economy. Economists refer to this \$2 as the *value added* of the transaction to the Louisiana economy. Total *value added* of the Travel and Tourism sector measures the

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<sup>4</sup> See Global Insight (2004), *The New Jersey Satellite Account: A Comprehensive Understanding of the Economic Contribution of Travel and Tourism to the State of New Jersey*.

production of Louisiana goods and services directly resulting from expenditures in the sector. The ratio of value added to total spending provides a measure of how much of each dollar in visitor spending remains in the state.

We compute value added by using IMPLAN Input/Output tables. These Input/Output tables use historical data on the proportion of output in each type of expenditure that remained in Louisiana to infer the proportion of current expenditures in each category that will be produced within Louisiana.

For 2003, the *value added* or contribution to Louisiana's production of goods and services by the Travel and Tourism sector was just over \$5.5 billion. This implies that Louisiana retained 56% of each dollar of tourism expenditures.<sup>5</sup> Imports from outside the state made up the remaining 44%. Table 2 contains estimates of 2003 value added for a number of other Louisiana sectors as given by typical State and Federal reports by NAICS industry categories with Travel and Tourism inserted based on the computation of its economic contribution in the previous section.

**Table 2**  
**2003 Louisiana Value Added**

Rank	Industry	Value Added (\$Millions)
1	Government (Fed, State, & Local)	\$18,711
2	Mining	\$18,188
3	Manufacturing	\$15,277
4	Real Estate, Rental, and Leasing	\$14,416
5	Retail Trade	\$10,557
6	Health Care and Social Assistance	\$9,938
7	Wholesale Trade	\$7,467
8	Professional and Technical Services	\$6,556
9	Construction	\$6,357
10	Finance and Insurance	\$5,623
<b>11</b>	<b>Travel and Tourism</b>	<b>\$5,517</b>
12	Transportation and Warehousing	\$5,435
	All Others	\$25,796
	<b>Total</b>	<b>\$144,321</b>

Source: US Bureau of Economic Analysis, IMPLAN, and author's calculations. Total does not include Travel and Tourism.

<sup>5</sup> As a reference, Global Insights reports found that Delaware retained 61 cents of each dollar of Travel and Tourism spending and New Jersey retained 66 cents of each dollar.

As with most other states, government tops the value added list for Louisiana. Driven by oil and gas, mining ranks second at \$18.2 billion in Louisiana value added. Petrochemicals are included in the large manufacturing sector with over \$15 billion in value added. In terms of value added, Travel and Tourism is roughly one third the size of manufacturing. The direct impact of Travel and Tourism places it 11<sup>th</sup> among Louisiana's industries, contributing 3.8% of Louisiana's Gross State Product. Measured in terms of output, Travel and Tourism is roughly equivalent to Finance and Insurance. The "all others" category also contains several sectors of interest. For example, the BEA reports that Agriculture, Forestry, Fishing, and Hunting contributed just over \$1.3 billion to Louisiana gross state product. Restated, Louisiana's Travel and Tourism sector is roughly four times the size of the Louisiana Agriculture sector in terms of value of production.

Not surprisingly, \$5.5 billion of production requires a substantial number of workers. In addition, Louisiana's Travel and Tourism is a very labor intensive industry which means it requires more workers per dollar of output than many other industries listed in Table 2. More specifically, over 168,000 Louisiana workers were employed in jobs directly supported by Louisiana Travel and Tourism for the year 2003.

Thus, Travel and Tourism plays a more important role as an employer than some sectors that appear much larger in terms of production. Table 3 shows that Travel and Tourism ranks fourth in direct employment, exceeding both mining and manufacturing. During the year 2003, 9.1% of all Louisiana workers were employed in the Travel and Tourism sector. Note that these calculations measure only the impact of **direct** expenditures in the sector. We will address the indirect impact on Louisiana's production in section VI. Another interesting issue lies in the composition of the Travel and Tourism sector.

**Table 3**  
**2003 Louisiana Employment by Industry**

Rank	Industry	Employment
1	Health Care and Social Assistance	260,205
2	Retail Trade	224,799
3	Educational Services	175,994
<b>4</b>	<b>Travel and Tourism</b>	<b>168,643</b>
5	Accommodation and Food Services	161,910
6	Manufacturing	155,900
7	Construction	128,483
8	Public Administration	104,315
9	Administrative and Waste Services	91,038
10	Transportation and Warehousing, Excluding Postal Service	79,703
11	Wholesale Trade	75,687
	All Others	397,633
	<b>Total</b>	<b>1,855,667</b>

Source: Louisiana Department of Labor, IMPLAN, and author's calculations. Total does not include Travel and Tourism.

## The Composition of Louisiana's Travel and Tourism Sector

In addition to broad measures of production and employment created by Louisiana's Travel and Tourism sector, the TSA methodology also allows us to analyze the impact of Travel and Tourism on other sectors. In particular, Table 4 provides details on where Travel and Tourism workers are employed as defined by finer and more traditional definitions of sectors.

Generally, bars and restaurants are very labor intensive enterprises, and most states have a large fraction of Travel and Tourism employment in the "Food Services and Drinking Places" category. Roughly 33% of Travel and Tourism jobs fall into this category. This is followed by Hotels, motels and other accommodations at 14.5% and Transportation Services at 8.6%. The Other Amusements sector (dominated by Louisiana's casino industry) follows at 7.7% in this breakout.

**Table 4**  
**Composition of Direct 2003 Travel & Tourism Employment by Sector**

Rank	Industry	Employment	% of Total
1	Food Services and Drinking Places	55,076	32.7%
2	Hotels, Motels and Other Accommodations	24,526	14.5%
3	Transportation Services	14,565	8.6%
4	Other Amusement, Gambling, and Recreation Industries	12,971	7.7%
5	Gasoline Stations	9,990	5.9%
6	General Merchandise stores	8,926	5.3%
7	Food and Beverage stores	5,554	3.3%
8	Real Estate	5,448	3.2%
9	Miscellaneous Store Retailers	5,401	3.2%
10	Transit and Ground Passenger Transportation	5,206	3.1%
	All Others	20,981	12.4%
	<b>Total</b>	<b>168,643</b>	<b>100.0%</b>

Source: Expenditure data sources summarized in appendix A, IMPLAN, and author's calculations.

Table 5 focuses on this same decomposition of the Travel and Tourism sector as measured by value added. The contributions to Travel and Tourism appear more even across sectors by this measure, although Food Services again top the list. The important role of gambling in Louisiana's Travel and Tourism industry is highlighted again by the next two categories, both of which include a substantial casino component. Comparing the " % of Total" Travel and Tourism columns in Tables 4 and 5 reveals that both casino-related sectors appear slightly more important measured by dollars of production than in terms of employment. In other words, casinos are less labor-intensive than other Travel and Tourism sectors.



**Table 5**  
**Composition of Direct 2003 Travel & Tourism Value Added by Sector**

<b>Rank</b>	<b>Industry</b>	<b>Value Added (\$Millions)</b>	<b>% of Total</b>
1	Hotels, Motels and Other Accommodations	\$893	16.2%
2	Food Services and Drinking Places	\$885	16.0%
3	Other Amusement, Gambling, and Recreation Industries	\$638	11.6%
4	Real Estate	\$460	8.3%
5	Automotive Repair and Maintenance - Except Car Wash	\$363	6.6%
6	Gasoline Stations	\$330	6.0%
7	General Merchandise Stores	\$294	5.3%
8	Scenic and Sightseeing Transportation and Support	\$222	4.0%
9	Food and Beverage Stores	\$184	3.3%
10	Air Transportation	\$182	3.3%
	All Others	\$1,066	19.3%
	<b>Total</b>	<b>\$5,517</b>	<b>100.0%</b>

Source: Expenditure data sources summarized in Appendix A, IMPLAN, and author's calculations.

## **Total Impact of Travel and Tourism on Louisiana's Economy Including Secondary Effects**

Up until this point, this report has focused on the direct impact of visitor spending on the Louisiana economy and the Travel and Tourism industry which meets the demand created by that spending. For example, Louisiana's Travel and Tourism industry contains no jobs in agriculture. However, tourists purchase meals at Louisiana's restaurants and those restaurants require additional seafood and produce to fill that demand. Likewise, spending by workers earning wages supported by the Travel and Tourism industry creates additional demand in the Louisiana economy.<sup>6</sup>

<sup>6</sup> IMPLAN separates these two items to the second spending of businesses (the indirect effect) and impact of spending by workers (induced effect). For ease of exposition, we do not present separate results based on this distinction, but instead we refer to indirect plus induced as secondary impacts. The total impact is simply direct plus these secondary impacts.

**Table 6**  
**Total 2003 Employment Attributable to the Travel and Tourism Sector**

<b>Rank</b>	<b>Industry</b>	<b>Total Employment</b>	<b>% of Total</b>
1	Food Services and Drinking Places	61,537	25.5%
3	Hotels, Motels, and Other Accommodations	25,273	10.5%
2	Transportation Services	15,918	6.6%
4	Other Amusement, Gambling, and Recreation Industries	13,475	5.6%
5	General Merchandise Stores	10,980	4.6%
6	Gasoline Stations	10,727	4.5%
7	Real Estate	9,252	3.8%
8	Food and Beverage Stores	7,747	3.2%
9	Miscellaneous Store Retailers	6,391	2.7%
10	Transit and Ground Passenger Transportation	5,674	2.4%
	All Others	73,875	30.7%
	<b>Total</b>	<b>240,849</b>	<b>100.0%</b>

Source: Expenditure data sources summarized in Appendix A, IMPLAN, and author's calculations.

Table 6 contains the total employment created both directly and indirectly by the Travel and Tourism sector. Comparing Table 6 to Table 5 reveals that the effects of Travel and Tourism expenditures account for over 70,000 additional Louisiana jobs. Not surprisingly, these secondary impacts are dispersed more evenly over a larger number of sectors than the direct impact. Table 7 includes similar results for value added. Based on this measure, the secondary impact of Travel and Tourism is almost \$4 billion of additional economic activity.

**Table 7**  
**Total 2003 Economic Impact of Travel and Tourism on Louisiana's Economy**

Rank	Industry	Total Economic Impact (\$Millions)	% of Total
1	Food Services and Drinking Places	\$988.8	10.6%
2	Hotels, Motels, and Other Accommodations	\$932.8	10.0%
3	Real Estate	\$781.8	8.4%
4	Other Amusement, Gambling, and Recreation Industries	\$662.5	7.1%
5	Transportation Services	\$397.0	4.2%
6	General Merchandise Stores	\$362.0	3.9%
7	Owner-Occupied Dwellings	\$357.6	3.8%
8	Gasoline Stations	\$353.8	3.8%
9	Scenic and Sightseeing Transportation and Support	\$284.3	3.0%
10	Food and Beverage Stores	\$256.2	2.7%
	All Other	\$3,982.1	42.5%
	<b>Total</b>	<b>\$9,358.9</b>	<b>100.0%</b>

Source: Expenditure data sources summarized in appendix A, IMPLAN, and author's calculations.

Jobs and production from the Travel and Tourism sector (and their secondary impacts) also generate tax revenue for state and local governments. Table 8 summarizes the Louisiana state tax revenues generated from the Travel and Tourism sector for the year 2003. Some of these revenue sources are apparent and stem primarily from visitor spending. Others are generated primarily from secondary effects due to the income of workers and businesses in the sector.

With the exception of two taxes, all items in Table 8 are computed based on the proportion of the state's total revenues that would likely be attributable to visitors. For example, our sales tax is estimated by multiplying total Louisiana sales tax collections by the proportion of Louisiana's retail sales that can be attributed to visitor expenditures. Corporate Income Tax and Individual Income tax revenues are computed from IMPLAN's Input/Output tables. These revenues account for the taxes that will be paid by businesses and workers in the Travel and Tourism sector. State revenues from video poker and casinos were reduced to reflect only the portion of revenues coming from tourists. Even excluding all non-visitor spending, these gambling revenues approach \$250 million.<sup>7</sup>

<sup>7</sup> Overall, the taxes generated by Louisiana's Travel and Tourism sector accounted for 8.3% of the total Louisiana state budget. By comparison, the New Jersey TSA estimated that Travel and Tourism generated 6.2% of New Jersey's state budget for the year 2003.

**Table 8**  
**2003 Louisiana State Tax Revenues Attributable**  
**to the Travel and Tourism Sector**

Revenue Category	Visitor Taxes (\$Millions)
Alcohol Beverage	\$0.5
Beer Tax	\$1.2
Gasoline Tax	\$90.7
Corporate Income Tax	\$17.3
Individual Income Tax	\$73.9
Auto Rental Excise	\$3.6
Sales Tax	\$212.4
Land-Based Casino	\$16.8
Video Draw Poker	\$49.8
Motor Vehicle Licenses	\$7.9
Riverboat Gaming	\$182.8
<b>Total</b>	<b>\$657.0</b>

Sources: Louisiana state budget, IMPLAN, expenditure data summarized in Appendix A, and author's calculations.

The Travel and Tourism sector also generates substantial revenues for local governments. With slightly higher sales tax rates than the state, local governments received in excess of \$212 million in sales tax revenues alone. In addition, Louisiana's riverboat casinos paid over \$77 million in local fees during 2003 and over \$23 million in property taxes. Likewise, roughly \$90 million in hotel-motel room taxes was collected and rebated to local governments.

## Conclusion

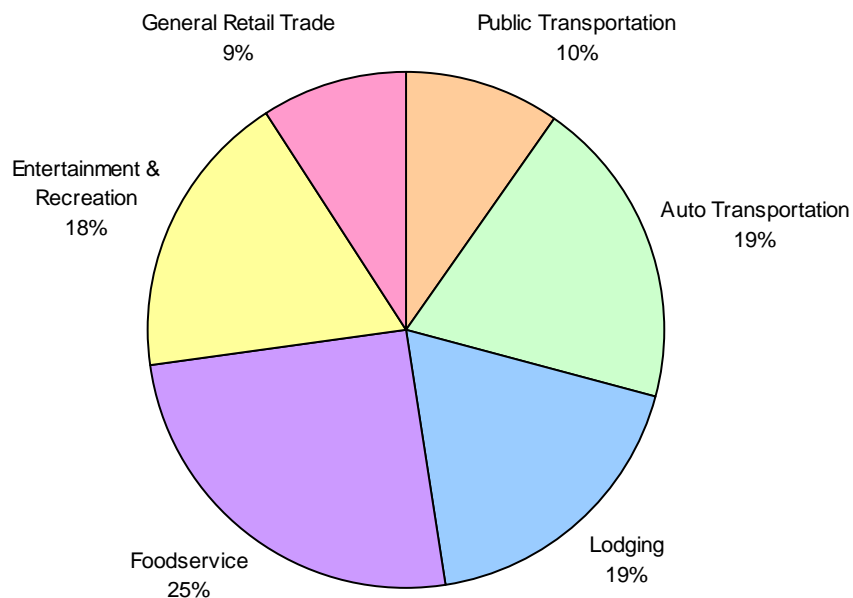
The Louisiana 2003 Tourism Satellite Account provides accounting measures for Travel and Tourism computed to be comparable to regularly collected government statistics using the United Nations TSA methodology. Results reveal that the sector plays a large role in Louisiana's economy, particularly in terms of employment and tax revenues. For the year 2003, the sector employed over 168,000 Louisiana workers or 9.1% of the Louisiana workforce. In terms of State tax revenues, the Travel and Tourism sector contributed \$657 million or 8.3% of the budget. In terms of value added, the sectors contribution topped \$5.5 billion, accounting for 3.8% of the workforce.

# **APPENDIX A**

## **Data Sources**

## **Travel and Tourists Spending Categorized**

In their report titled “The Economic Impact of Travel on Louisiana Parishes 2003” the Travel Industry Association (TIA) of America reports visitor spending split between 6 categories illustrated below.



Also, Table 1 of this report splits this spending among domestic travelers between the categories “Domestic out of State” and “Domestic in State” this was done using the TIA report titled “2003 TravelScope Profile of U.S. Travelers to Louisiana”. In summary, all input data used in the impact model and this report with regard to Traveler and Tourist spending was extracted from TIA’s reports. TIA’s reports stem from their 57.8 thousand household “TravelScope” survey.

## **Government Spending**

TSA methodology suggests including all government spending that subsidizes the activities of visitors. Obvious examples include spending on state parks and museums. However, the methodology also suggests adding items such as additional security provided during tourism events. For this study, we included only items from the Louisiana state budget directly related to tourism and the Superdome subsidy reported at \$21.5 million. Government spending on roads is treated elsewhere as it has a unique place in the impact model. Due to recovery efforts with Katrina, we were unable to obtain detailed information on Travel and Tourism expenditures by local governments in the New Orleans area. Thus, our figure should be considered a conservative estimate of government expenditures on Travel and Tourism.

## Construction

Using data purchased from McGraw Hill Construction we calculated annual construction spending within Louisiana. McGraw-Hill Construction is the author of the F.W. Dodge Reports and is the lead authority on construction information. Government spending on roads is treated elsewhere as it has a unique place in the impact model. Annual spending on Travel and Tourism related construction in Louisiana was reported as:

Construction Spending (\$Millions)	
2002	\$306.5
2003	\$297.3
2004	\$447.3

It is worth noting that construction spending in Travel and Tourism is quite volatile and can be sensitive to a few large projects.

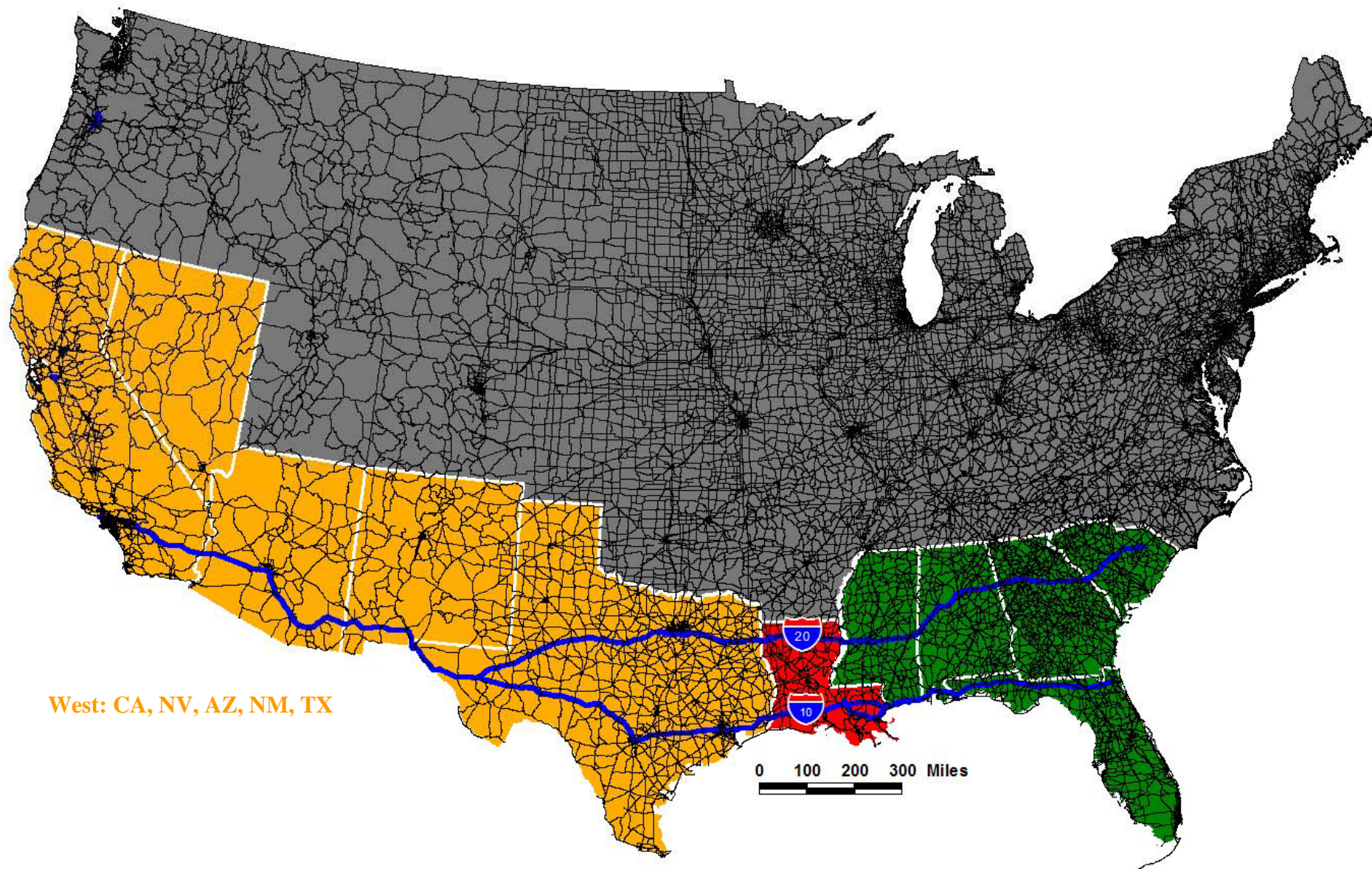
## Roads

The Louisiana Department of Transportation and Development (LADOTD) reported their “lettings” (actual contracts awarded) for FY03’-04’ to be \$599.7 million, \$627.2 million for FY04’-05’. However, not all road work is done on behalf of Travelers and Tourists. In order to address this problem we utilized TravelScope data for 2003 and were able to calculate the number of Household Trips in three categories for that year:

1. Household-trips taken by vehicle\* to LA destinations (8.50 million).
2. Household-trips taken by vehicle by LA residents to out of state destinations (13.4 million).
3. Household-trips taken by vehicle that likely passed through LA (3.08 million).

*\*excludes* air travel.

Using measurements of roadway mileage and applying it to each type of traveler, we estimated that Travelers and Tourists drove 7.8 billion vehicle miles in Louisiana in 2003. A significant portion of this was driven by travelers who were passing through the state. To isolate these travelers we focused only on vehicle travelers who reported traveling in an easterly or westerly direction to or from the states highlighted in the illustration below.



West: CA, NV, AZ, NM, TX

East: MS, AL, FL, GA, SC



The sum of vehicle miles traveled (VMT) in Louisiana was derived from the Louisiana Department of Transportation and Development. Taking the Daily estimate (102 million) we extrapolated to yearly VMT (37.4 billion) in Louisiana. Applying our estimates above to each of the three sets of vehicle travelers we came up with 7.80 billion VMT by Travelers & Tourists. This represents roughly 21% of the total VMT for the state in 2003. This translates into roughly \$125.3 million in spending on behalf of T&T.

## **APPENDIX B**

### **Tax Calculations**

This appendix provides details on the computations behind the Tax Revenue estimates presented in Table 8. Table B-1 adds two columns to Table 8, total Louisiana revenues in each category and Visitor Taxes as a percentage of total revenues. The first two taxes are alcohol taxes. The impact of visitor taxes on alcohol and beer tax receipts requires analysis of the relative consumption of these goods. We began by using TravelScope and census data to find that visitors make up roughly 3.1% of the population in Louisiana on an average night. Combining this observation with the assumption that visitor consumption and resident consumption are equal implies that visitors make up 3.1% of alcohol and beer consumption. Thus, 3.1% of Louisiana alcohol and beer taxes were attributed to visitors.

**Table B-1**  
**Taxes Attributable to Visitors as a Percentage**  
**Of Total Louisiana Tax Revenues**

Revenue Category	Visitor Taxes	State Total (\$Millions)	Visitor Taxes as a % in category
Alcohol Beverage	\$0.5	\$16.0	3.1%
Beer Tax	\$1.2	\$38.2	3.1%
Gasoline Tax	\$90.7	\$434.2	20.9%
Corporate Income Tax	\$17.3	\$212.4	8.2%
Individual Income Tax	\$73.9	\$2,188.2	3.4%
Auto Rental Excise	\$3.6	\$4.0	90.0%
Sales Tax	\$212.4	\$2,109.5	10.1%
Landbased Casino	\$16.8	\$62.3	27.0%
Video Draw Poker	\$49.8	\$166.0	30.0%
Motor Vehicle Licenses	\$7.9	\$86.0	9.1%
Riverboat Gaming	\$182.8	\$335.1	54.5%
<b>Total</b>	<b>\$657.0</b>	<b>\$7,889.7*</b>	<b>8.3%</b>
* includes categories not listed above			

With regard to the gasoline tax, the work summarized in Appendix A indicated that 20.9% of vehicle miles traveled were attributable to visitors in 2003. Applying this percentage to total Louisiana gasoline tax revenues implies that Louisiana visitors contributed \$90.7 million in gasoline taxes in 2004.

Both corporate and individual income taxes are more difficult to estimate and require analysis of value added and employment in Travel and Tourism, both direct and secondary. We used Implan for both computations and these calculations suggest that just over 8% of corporate income taxes and 3.4% of individual income taxes are attributable to Travel and Tourism.

For Auto Rental Excise taxes, we assumed that 90% of all rentals were to visitors. Sales tax computations were based on comparing 2003 Louisiana retail sales to our Implan estimate of retail sales attributable to Travel and Tourism. Based on this calculation, we estimate that visitor

spending led to \$1.1 billion or 10.4% of Louisiana retail sales in 2003. We apply this proportion to total Louisiana retail sales to obtain our estimates in table 8.

All casino taxes were estimated by applying estimates of the percentage of visitors from outside the metropolitan area to taxes paid by casinos. For example, Loren C. Scott and Associates estimated that 27.0% of gamblers at the Landbased casino were visitors. Applying this percentage to the \$62.3 million of revenue implies that visitors accounted for \$16.8 million of that revenue. A similar calculation for riverboats uses Loren C. Scott and Associates estimate that 54.5% of riverboat patrons were visitors. For video poker, we use the assumption that visitors account for 30% of revenue. Motor vehicle taxes are estimated using Implan.

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