

TOURISM ECONOMICS

The Impact of the BP Oil Spill on Visitor Spending in Louisiana

Prepared for the Louisiana Office of Tourism

December 2010



TOURISM
ECONOMICS

Overview

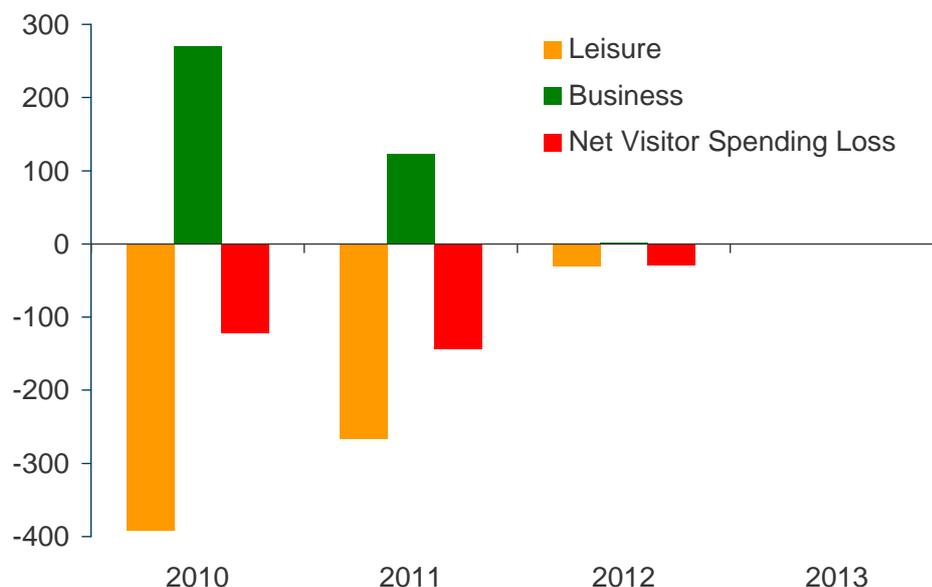
Tourism to Louisiana was unambiguously affected by the oil spill resulting from the explosion of the Deepwater Horizon oil rig in April, 2010. The threats from the oil spill, both real and perceived, to the gulf shoreline, waters, and seafood have impacted Louisiana tourism. Surveys of visitor perceptions conducted on behalf of the Louisiana Office of Tourism after the oil spill report a high rate of trip cancellations by leisure travelers. Travel surveys of actual visitors and tourism data confirm this for the second quarter of 2010. The descent of media, relief workers, and government officials has offset some of the lost spending from leisure travel in the near term. This report estimates past and prospective impacts on visitor spending resulting from the oil spill through the year 2013.

Summary results

- Lost visitor spending is expected to total \$295 million through 2013
- This represents a decrease of 0.8% from the baseline forecast over the 2010-2013 period
- Leisure tourism is expected to experience a \$691 million loss compared with the baseline forecast through 2013. This represents a cumulative 2.7% drop from pre-spill projections for leisure travel spending
- However, this is offset by an increase of 3.9% (\$395 million) in business visitor spending resulting from the increase of media and company and government officials
- The effects on visitor spending are expected to persist into 2013 Q1 before returning to the baseline forecast

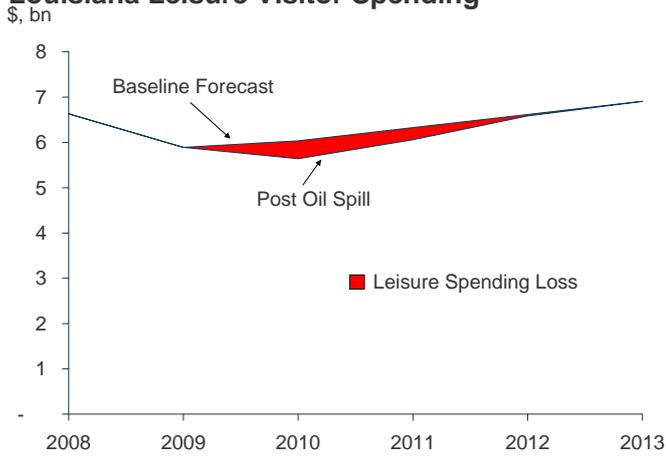
Louisiana Visitor Spending Loss

\$ million, relative to baseline forecast



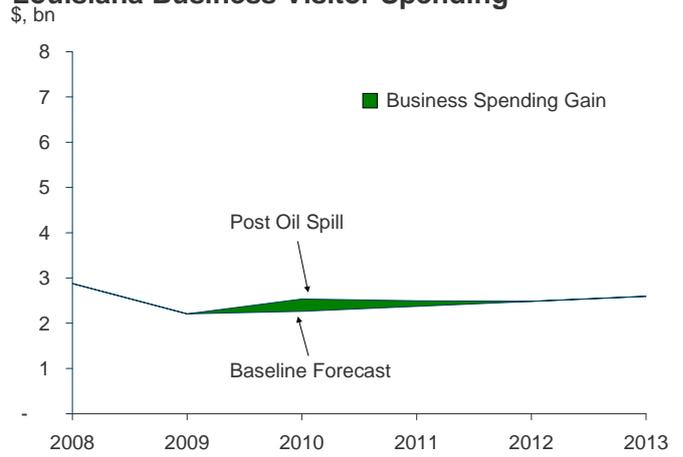
Source : Tourism Economics/Louisiana Office of Tourism

Louisiana Leisure Visitor Spending



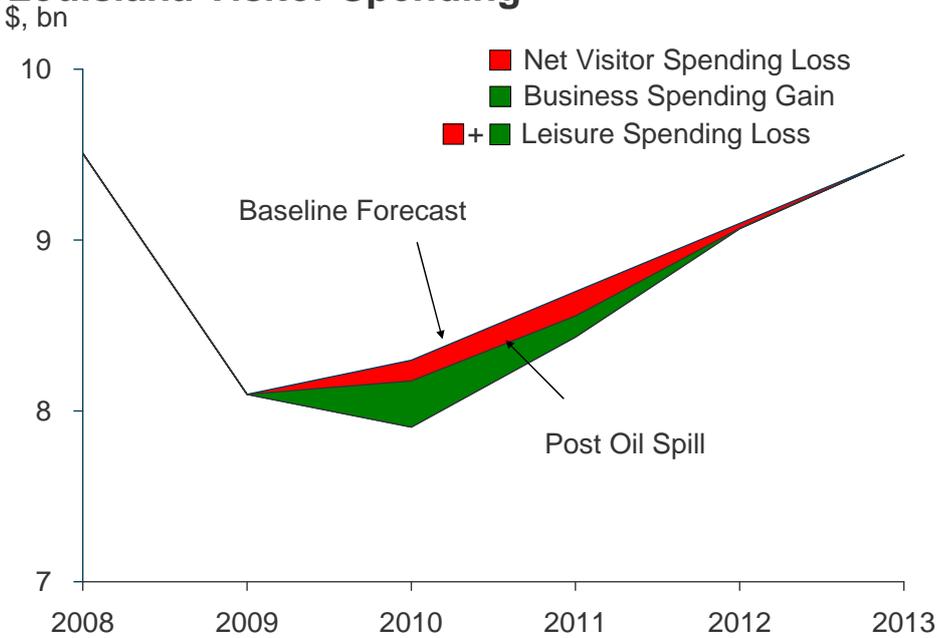
Source : Tourism Economics/Louisiana Office of Tourism

Louisiana Business Visitor Spending



Source : Tourism Economics/Louisiana Office of Tourism

Louisiana Visitor Spending



Source : Tourism Economics/Louisiana Office of Tourism

<i>Louisiana Visitors</i>					
<i>Oil Spill Impact, million</i>					
		2010	2011	2012	
Baseline Forecast		24.2	24.7	25.3	
	Business	6.3	6.4	6.6	
	Leisure	17.9	18.3	18.7	
Post Oil Spill		23.8	24.3	25.2	
	Business	7.0	6.8	6.6	
	Leisure	16.8	17.6	18.7	
Lost Leisure Visitors		-1.1	-0.7	-0.1	
% of Baseline Forecast		-4.5%	-2.9%	-0.3%	
Offsetting Business Visitors		0.7	0.3	0.0	
% of Baseline Forecast		3.0%	1.3%	0.0%	
Net Visitor Loss		-0.4	-0.4	-0.1	
% of Baseline Forecast		-1.5%	-1.6%	-0.2%	
Cumulative Visitors Lost		-0.4	-0.8	-0.8	
% of Baseline Forecast		-1.5%	-1.5%	-1.1%	

<i>Louisiana Visitor Expenditure</i>						
<i>Oil Spill Impact, \$ million</i>						
		2010	2011	2012	2013	
Baseline Forecast		8,297.6	8,698.8	9,097.6	9,498.6	
	Business	2,263.4	2,373.3	2,483.4	2,593.2	
	Leisure	6,034.2	6,325.5	6,614.2	6,905.4	
Post Oil Spill		8,175.7	8,555.4	9,068.5	9,497.7	
	Business	2,534.1	2,496.1	2,485.2	2,593.2	
	Leisure	5,641.6	6,059.3	6,583.3	6,904.5	
Lost Leisure Spending		-392.6	-266.2	-30.8	-0.9	
% of Baseline Forecast		-4.7%	-3.1%	-0.3%	0.0%	
Offsetting Business Spending		270.7	122.8	1.8	0.0	
% of Baseline Forecast		3.3%	1.4%	0.0%	0.0%	
Lost Visitor Spending		-121.9	-143.4	-29.1	-0.9	
% of Baseline Forecast		-1.5%	-1.6%	-0.3%	0.0%	
Cumulative Lost Revenue		-121.9	-265.3	-294.4	-295.3	
% of Baseline Forecast		-1.5%	-1.6%	-1.1%	-0.8%	

Oil Spill Impacts on Visitor Spending

Just prior to the explosion of the Deepwater Horizon oil rig, the “Louisiana Tourism Forecast: 2009-2013” was published by the University of New Orleans Hospitality Research Center and Louisiana State University Division of Economic Development on behalf of the Louisiana Department of Culture, Recreation and Tourism. This forecast provides our analysis with a useful baseline against which to assess the impacts of the oil spill on tourism spending. That is, the baseline forecast provides us with a model of what would have been absent the oil spill.

Our analysis quantifies the initial impacts on tourism volumes and spending using available data for the period since the explosion of the Deepwater Horizon. We then model continuing effects on visitor volume using inputs from surveys of visitor perception and intentions to travel to Louisiana collected after the oil spill as well as the baseline forecast. The visitor spending impact is then the resulting difference between the baseline spending forecast and the post oil spill spending forecast until the two forecasts converge.

While the model as presented above is conceptually simple, travelers are not a homogenous group. Therefore, differences in types of travelers must be considered. The model estimates the impacts on business and leisure visitors separately. Leisure visitors are more likely to be negatively affected by the oil spill. The most obvious segment affected would be the 10% of Louisiana visitors in 2009 reporting trip activities including outdoor recreation/fishing and usage of beaches.

Another important factor is seasonality. We developed our model on a quarterly basis to account for the differing levels of tourism activity during the year and to more accurately account for changing perception over time. Given an impact in absolute terms, the relative effect of that impact will differ depending on the timing of the impact within the year. Historically, the peak travel season in Louisiana has been the 1st and 2nd quarters, with the peak typically in the 2nd quarter. A detailed description of the methodology used to develop the quarterly model appears in the final section of this report.

Initial Impact

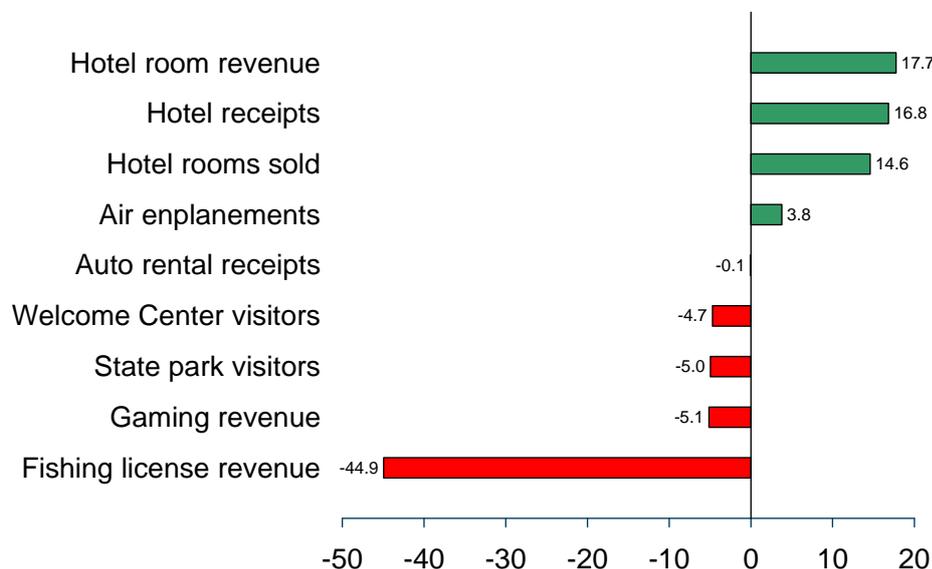
Our period of analysis begins in the second quarter of 2010, the quarter in which the explosion of the Deepwater Horizon occurred. Data were compiled from a number of sources to estimate the initial impact on tourism. These data include industry data covering

- hotel performance;
- air enplanements at Louisiana airports;
- gross receipts for hotels;
- gross receipts for car rental companies;
- gaming revenue from the Louisiana Department of Revenue;
- fishing licenses sold and revenue from the Louisiana Department of Wildlife and Fisheries;

- Louisiana Welcome Center visitors from the Louisiana Office of Tourism; and
- National survey results of prospective visitors.

Louisiana Tourism Indicators, 2010Q2

% change year ago



Source : STR, Louisiana Office of Tourism, Louisiana Department of Revenue, Louisiana Department of Wildlife & Fisheries

There are two competing dynamics apparent in the data. Hotels fared very well at the beginning of this crisis. The number of hotel rooms sold in the second quarter was up nearly 15% over 2009. However, fewer visitors passed through Louisiana welcome centers and visits to state parks also declined. Both declined by approximately 5% and are indicative of leisure travel volumes. Thus, the increase in hotel room demand can be partially explained by an increase in business travel (with the other part being an increase in the average length of stay). This is expected in the current context given the presence of activity related to the oil spill and cleanup efforts.

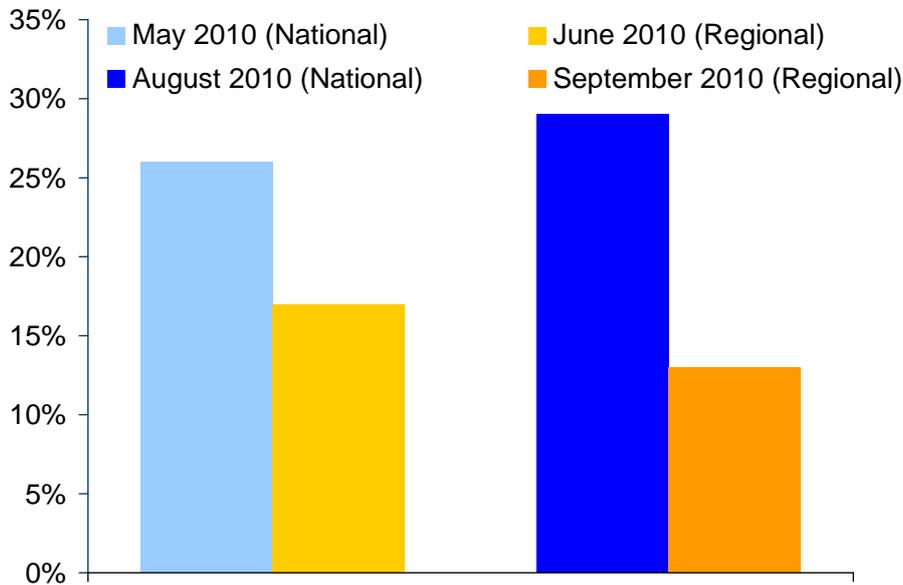
Additionally, MDRG has conducted multiple surveys of leisure travelers on behalf of the Louisiana Office of Tourism. The national surveys, conducted in May and August and regional surveys, conducted in June and September, identify those leisure travelers who had plans to visit Louisiana and cancelled their plans after the oil spill.

Visitors in the national survey were more likely to have cancelled or postponed trips after the oil spill. In May 2010, 26% of respondents who had planned trips to Louisiana prior to the oil spill had either cancelled or postponed their trips after the oil spill. Regional travelers had cancelled or postponed only 17% of planned trips to Louisiana in June, but that number had improved to 13% by September.

The hypothesis that business travel has otherwise bolstered the loss of leisure travelers is confirmed in 2nd quarter travel survey data released by TNS. Their survey results show declining leisure travel in the face of a strong increase in business visitation.

Cancelled/postponed trips after oil spill

% of respondents with plans to visit Louisiana prior to oil spill



Source : MDRG/Louisiana Office of Tourism

Based on the available data, we estimate that total visitation to Louisiana declined 1% in the 2nd quarter. Business travel increased 17.6% over 2009 Q2 while leisure travel decreased 7.6%.

To arrive at the spending level of the initial impact we adjusted per visitor spending (by purpose of trip) based on the baseline forecast using data available for 2010 Q2. On a per trip basis, spending per visit increased modestly in the 2nd quarter from the prior year. This was driven both by increases in room rates and general price inflation overall.

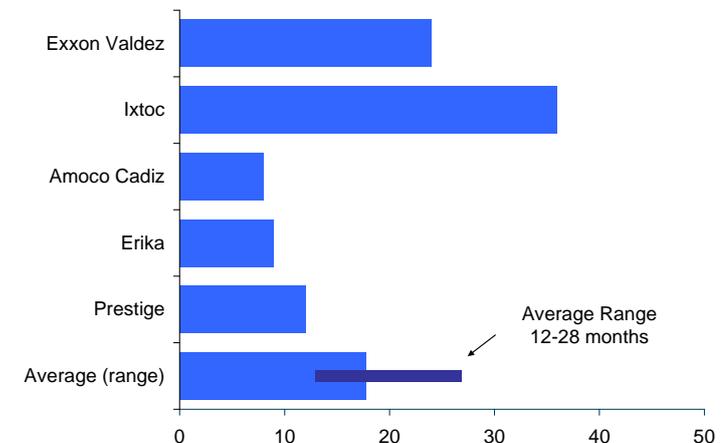
Multiplying per visitor spending by the number of visitors provides us with visitor spending by purpose of trip. Our results show business travelers spent \$68 million in 2010 Q2, representing an increase of 17.2% relative to the baseline forecast. Leisure travel spending tallied \$1.4 billion, 9.2% below the baseline forecast. In total, visitor spending was \$2.1 billion in 2010 Q2. Lost visitor spending is calculated at \$42 million, 2.0% below the baseline forecast in the 2nd quarter.

Continuing effects from perceptions

The effects on Louisiana visitation related spending are expected to persist for some time. This is supported by research conducted by Tourism Economics on behalf of the US Travel Association which analyzed the impact of previous oil spills on tourism spending for affected destinations. The average range of impact duration for the five prior spills analyzed was between 12 and 28 months, with the Ixtoc spill impacts lasting 36 months.

Duration of Oil Spill Tourism Impacts

Months after initial disruption for visitor spending to return to baseline

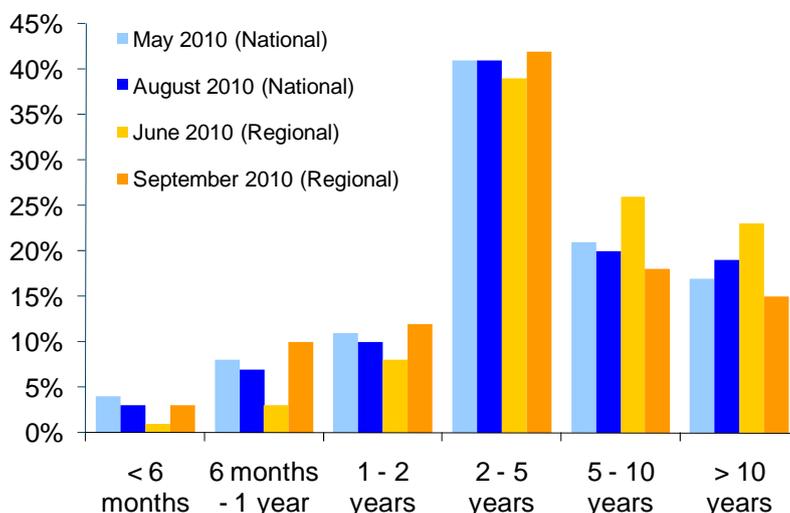


Source : Tourism Economics

Further evidence of lingering effects is suggested in survey results of leisure travelers, both national and regional, conducted for the Louisiana Office of Tourism by MDRG. These surveys were conducted in waves following the onset of the crisis. Not only do these surveys suggest that visitors had already cancelled or postponed planned trips to Louisiana in the following 12 months, but the May survey shows that perceptions regarding the recovery of Louisiana’s tourism product would be long lived. Nearly 80% of national respondents believed the oil spill would affect Louisiana for 2 or more years. The percentage jumps to 88% from the regional survey which includes the majority of Louisiana’s top source markets. The national survey conducted in August shows expectations declining with the distribution more closely related to the earlier regional survey.

Perception of Effect on Louisiana

% of respondents



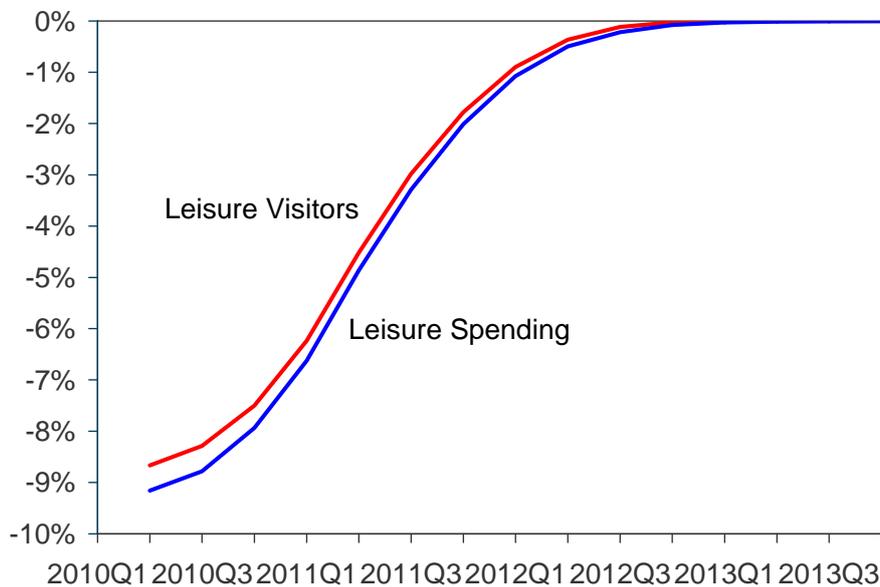
Source : MDRG/Louisiana Office of Tourism

Our model uses this distribution of perceptions as a starting point for estimating the recovery rate of leisure visitation over time. Looking at the chart, it is apparent that visitor perceptions initially recover slowly. Perceptions then rapidly improve after year two and then slow again as time progresses. If one were to plot this over time, one would expect to see a classic power- or S-curve. However, the effects on travel to Louisiana are not likely to be as long lived as suggested by the survey results. Thus, while our model exhibits the S-curve shape implied by the survey results, the duration of effects is shortened by applying the S-curve methodology only on the outstanding balance of “lost” visitors from the previous quarter as opposed to the initial impacts.

Thus, while our model exhibits the S-curve shape implied by the survey results, the duration of effects is shortened by applying the S-function only on the outstanding balance of “lost” visitors from the previous quarter as opposed to the initial impacts. To explain this more intuitively – once a visitor is “recovered” their perception of the destination is assumed to remain positive. Conversely, the “gained” business travel is expected to wane in a similar pattern. However, we expect that shape of the S-curve will be steeper. That is, the offsetting business travel related to the oil spill will decline at a faster rate than the recovery of leisure travelers. The model implies that visitor volumes should return to the baseline forecast in 2012 Q4.

Leisure Impact

% relative to baseline forecast



Source : Tourism Economics

Effects on visitor spending

Along with the decrease in visitor volume resulting from the disaster, per visitor spending was also assessed. In the face of decreased demand, purveyors of travel services are likely to lower prices to attract visitors. Thus, visitors can consume the same amount of services for an otherwise lower amount. This downward pressure on prices in the near term will delay

the return of spending relative to visitor volume. In addition, MDRG surveys indicate that visitors from nearby markets are less hindered than those from further away—who tend to stay longer and spend more per visit. Our model indicates that visitor spending will return the baseline by 2013 Q2, although the losses in spending in 2013 Q1 are expected to be only marginal. This would put the duration of effects on visitor spending at approximately 36 months.

Tracking the effects

The projection of impacts presented in this report remains open to both positive and negative risks. Visitor demand will vary based upon perceptions which will be affected by the revelation of new information over time and through the positive marketing of Louisiana. Perceptions are set to continue to improve though the possibility of additional shocks (e.g. oil washing ashore or evidence of tainted seafood) could send perceptions sliding. The results will also be refined and revised with the collection of historic data over time. Future updates to this report will incorporate any new data available to accurately assess the impacts on tourism spending.

Methodological notes

Seasonality is an important factor in determining the effects of a shock on tourism activity. To address seasonality, we use a quarterly model as the basis of our analysis. The baseline forecast, however, is an annual model which needed to be converted to a quarterly basis. Historical visitor volumes were seasonalized based on a weighted average of visitation by quarter from TNS data for Louisiana and STR data on room nights sold. A two year moving average was then used to seasonalize the forecast periods. Visitor spending was seasonalized using the US Travel Association's Travel Price Index.

Additionally, the baseline forecast was only available on an aggregated basis, i.e. total visits and total visitor spending. Thus, TNS data (from which the baseline forecast was partially derived) was used to disaggregate business and leisure visitation and spending.

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