

The Impact of Hurricane Irma on the Florida Tourism Economy

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Prepared for:

VISIT FLORIDA



**TOURISM
ECONOMICS**

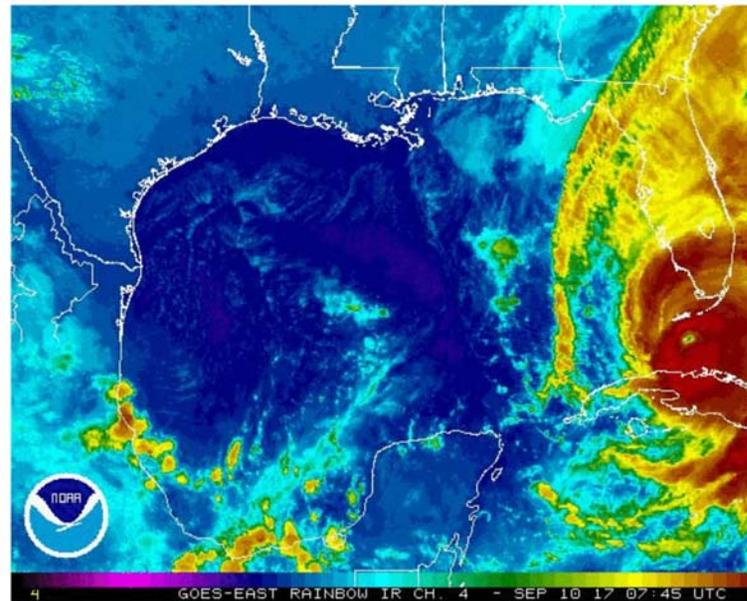
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Overview

Hurricane Irma is the strongest Atlantic basin hurricane ever recorded outside the Gulf of Mexico and the Caribbean Sea.

Hurricane Irma lasted as a hurricane from August 31 until September 11, hitting southwest Florida on September 10, battering the state's lower half and leaving a trail of tornadoes and storm-surge flooding as its core slowly moved inland.

This analysis assesses the impact of Irma on Florida's tourism industry, in terms of out-of-state visitors and associated spending.



Pre-hurricane trends

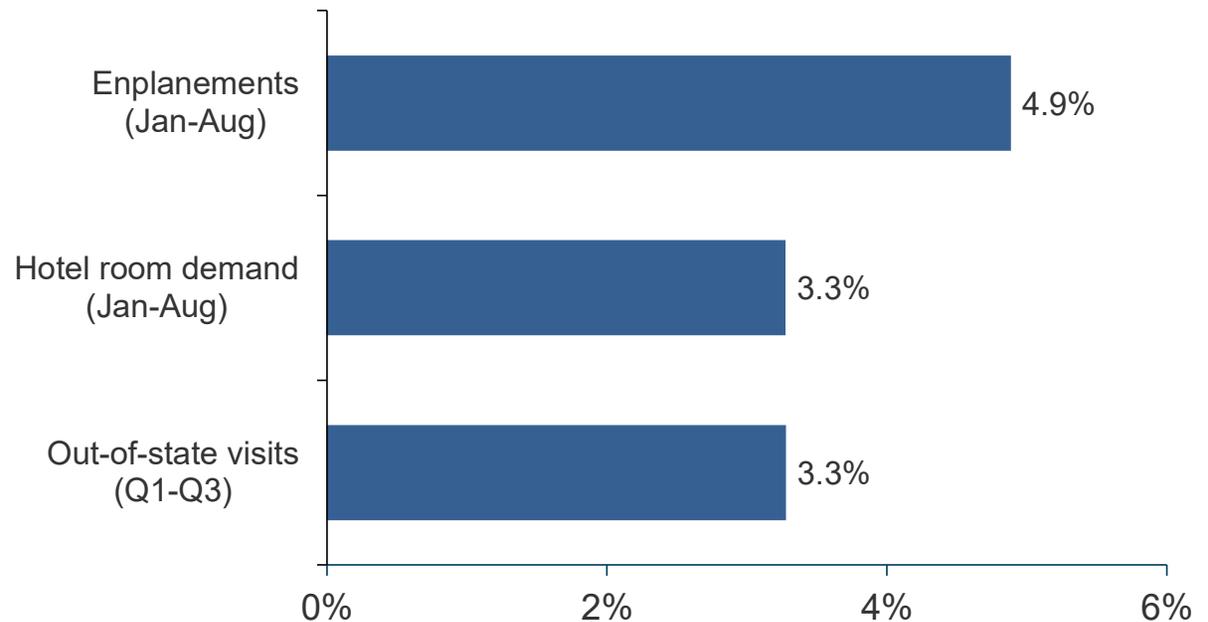
Florida tourism was performing well in 2017 from January through August.

Florida was experiencing another excellent year in the visitor economy with all metrics showing positive momentum.

Out of state visits and hotel room demand were both up 3.3% from the previous year while passenger counts were up nearly 5% in the first eight months of the year.

Florida Tourism Performance

% change, pre-hurricane 2017



Air travel indicators

Hurricane Irma's effect was seen immediately in passenger counts to Florida airports.

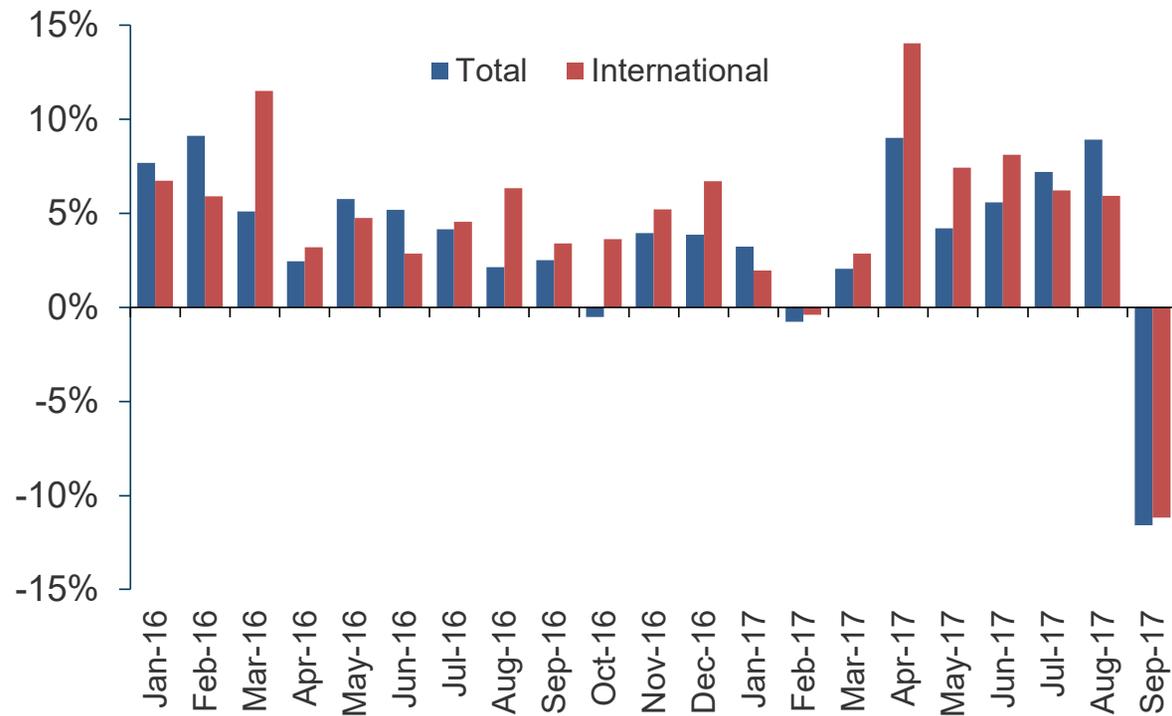
Total passenger counts decreased 11.6% percent in the month Irma hit Florida.

International enplanements were down 11.2% from the previous year.

Most of these decreases occurred at airports located in the southern part of the state.

Florida Airport Enplanements

% change year ago



Air travel indicators

Nearly all Florida airports saw decreased passengers in the September with extreme losses in key tourism destinations.

Airports east of Florida's panhandle halted operations during Hurricane Irma.

Many airports located in the southern part of the state experienced decreases greater than 15%.

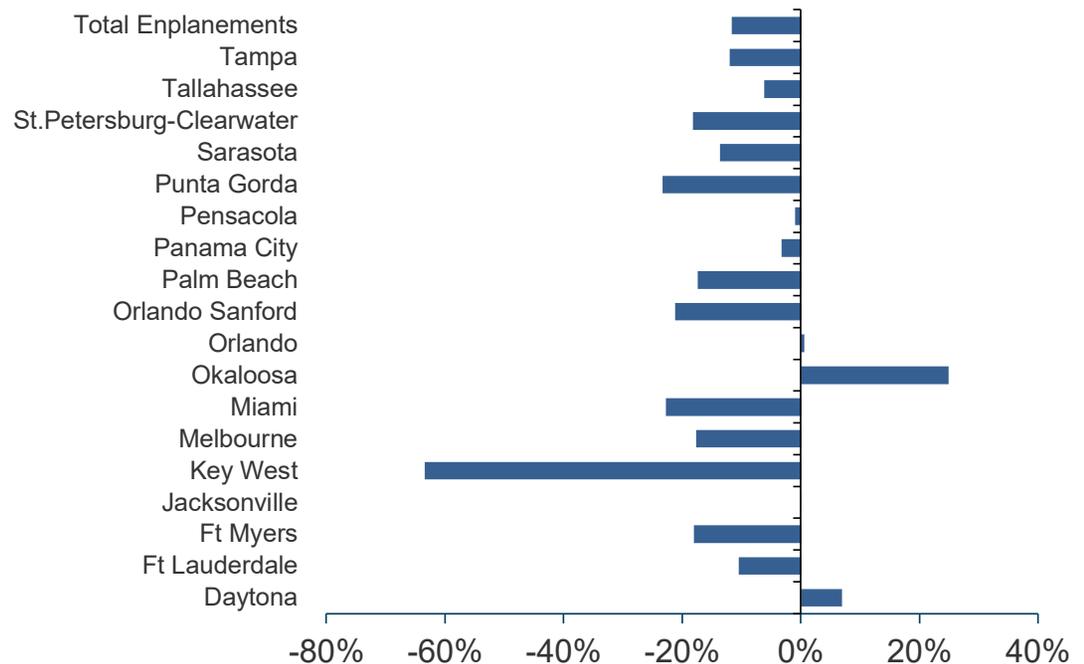
For the month of September, Key West experienced a 63.4% decrease in arrivals.

Miami's September enplanements dropped 22% and Orlando Sanford International Airport enplanements were down 21%.

Airports located in the northern part of the state saw little change in passenger traffic.

Florida Airport Enplanements

September, % change year ago



Hotel indicators

Impacts in the hotel industry were mitigated by displaced residents and those from out of state responding to the aftermath of the hurricane.

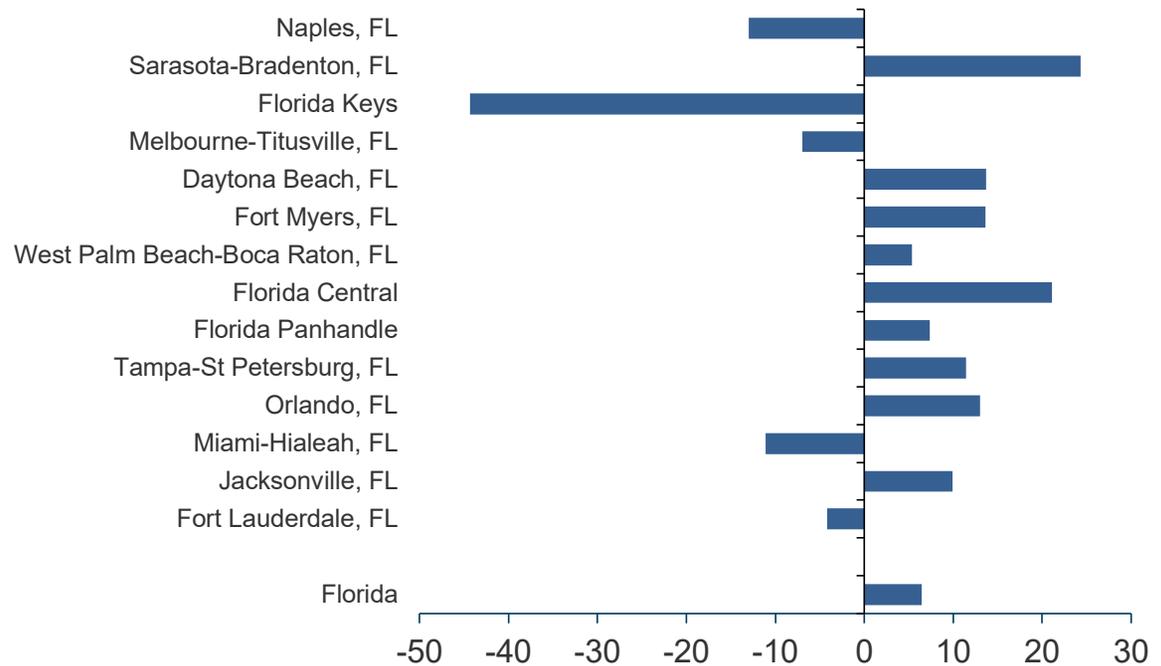
The hard hit Florida Keys experienced a 44% decrease in room demand from the previous September. Although not as dramatic as the Florida Keys, Naples, Miami, Melbourne and Fort Lauderdale also experienced drops in hotel demand.

Other areas of the state experienced increased room demand during the month.

Evacuated and displaced residents, and out of state workers including emergency responders, line workers, insurance adjusters, and building contractors led to increased room demand.

Hotel Room Demand

September, % change year ago



Credit card data

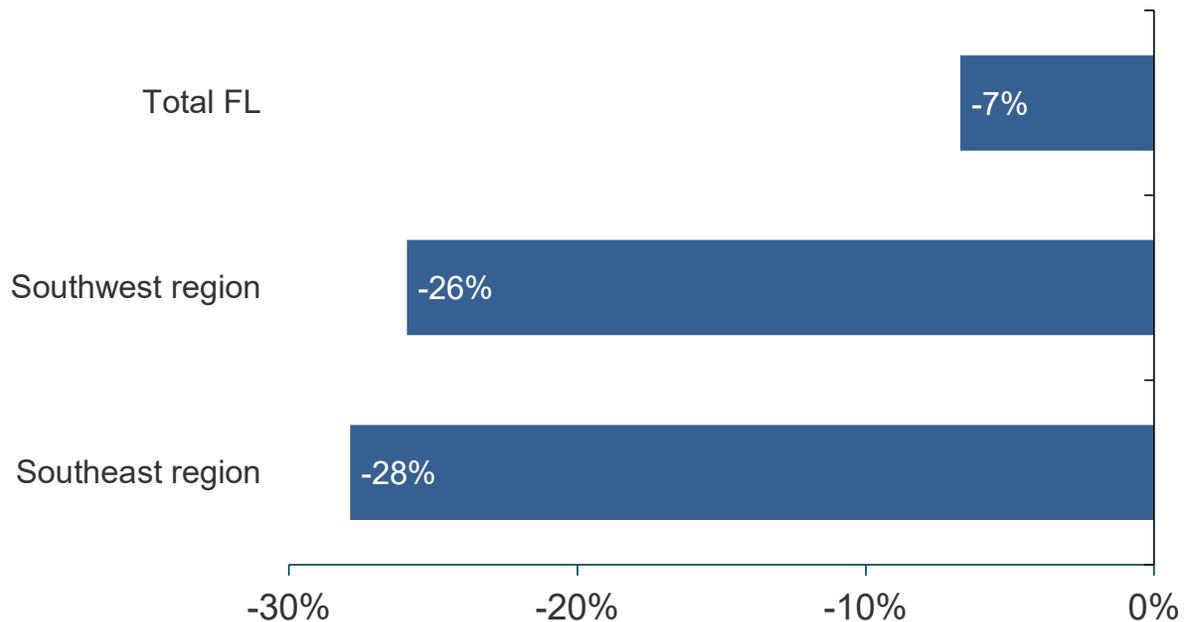
Out-of-state visitors' Visa Card sales dropped more than 25% in the southern part of the state.

Visa Card sales by visitors from out of state fell in the southwest region of the state by 26% and in the southeast region by 28%.

Visa Card sales by out-of-state visitors dropped 7% across all of Florida.

Florida Visa Card Sales, September 2017

Out-of-state visitors, % change year ago



Benefits of seasonality

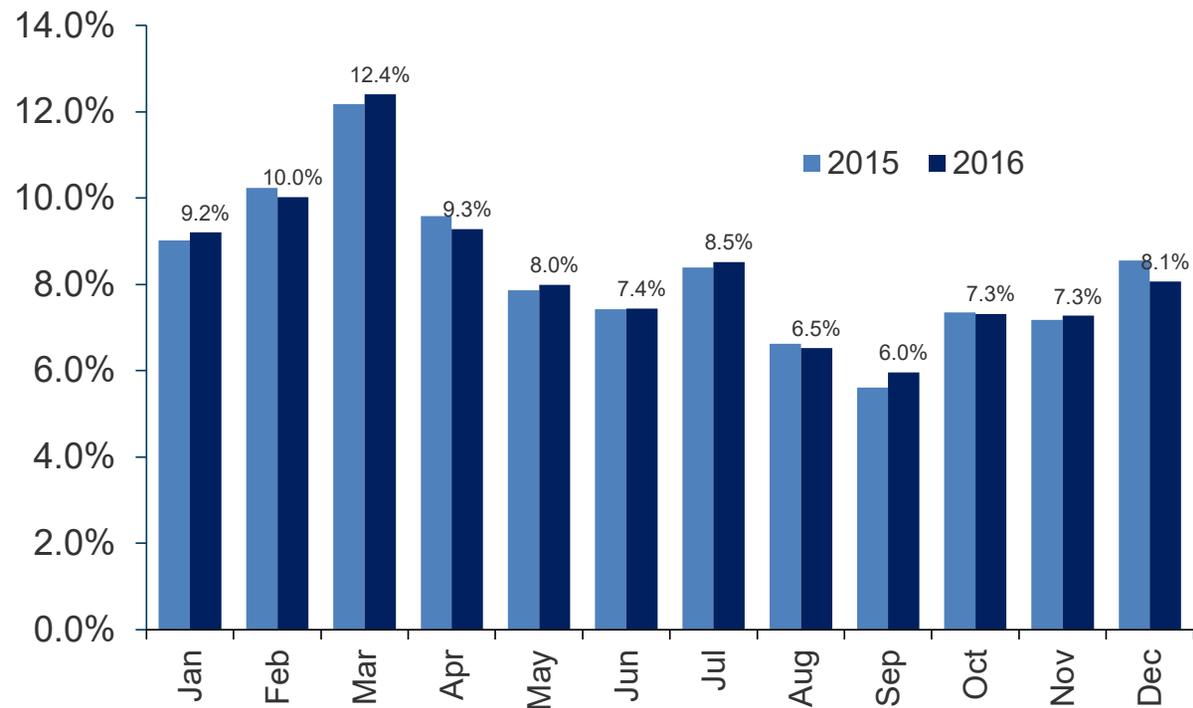
September accounts for the lowest share of tourism activity during the year.

Historically, September through November account for one fifth of the annual hotel room revenue while the three months of January through March account for nearly a third of annual revenue.

The impact of Irma on annual visitor statistics were more muted than a shock to the visitor economy taking place during the high visitor season.

Florida Hotel Room Revenue

Percent of annual



Visitor losses

Hurricane Irma cost Florida 1.8 million out-of-state visitors in 2017, over the course of four months.

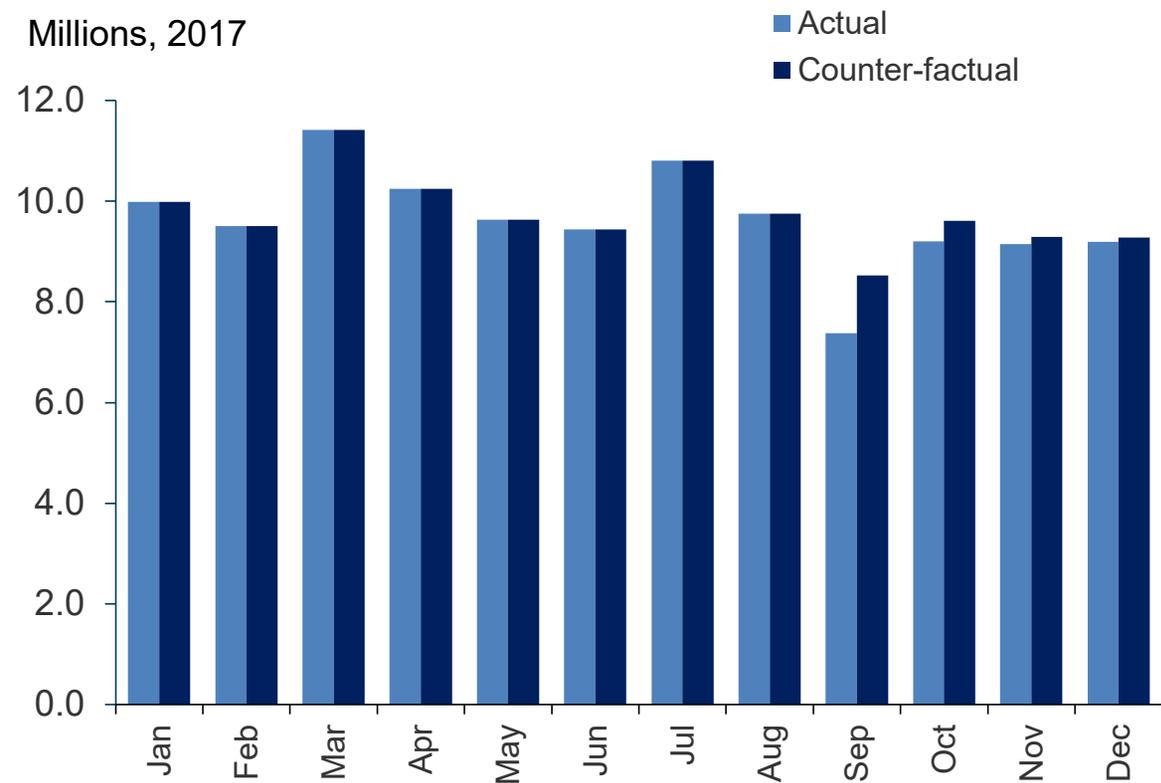
Counter-factual modeling shows that 1.8 million fewer visitors came to Florida after Hurricane Irma than was expected based on pre-hurricane trends.

The majority of these lost visits occurred during September.

By December the number of actual out-of-state visitors was nearly equal to the number of expected visitors to the state.

Florida Out-of-State Visits

Millions, 2017

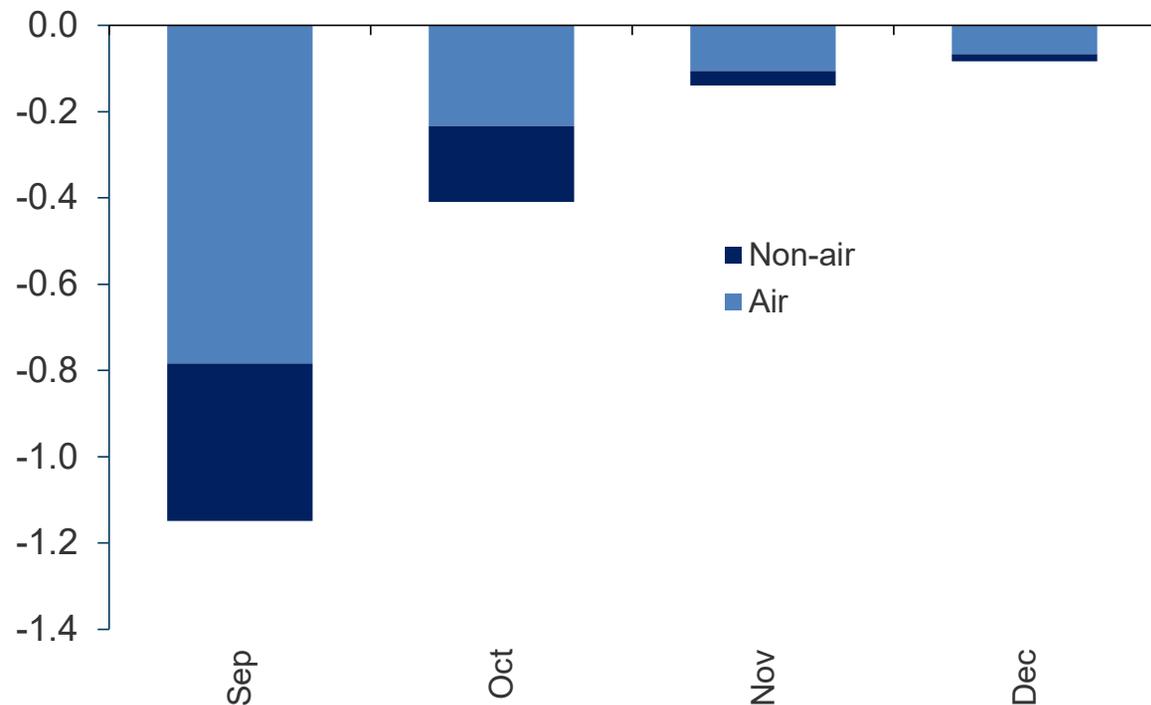


Visitor losses

Of the 1.8 million visitor losses in the final four months of 2017, 1.2 million would have arrived by air.

Florida Out-of-State Visitor losses

Millions, 2017



Visitors who would have traveled to Florida by air accounted for two-thirds of the visitor losses.

By December, the difference between actual and counter-factual visitors was 83,231. Nearly 80% of these visitor losses were expected to have arrived by air.

Visitor losses

In the “no hurricane” counterfactual scenario, Florida would have hosted 36.7 million out-of-state visitors during the final four months of the year.

An estimated 34.9 million out-of-state visitors came to Florida in the final four months of 2017. This is 1.8 million less than would have been expected had there not been a major hurricane.

The majority of these visitor losses occurred during September with reductions in each of the subsequent months of 2017.

Florida Visitor Losses (2017)				
	September	October	November	December
Actual performance estimates				
Air	3,027,004	4,745,636	4,706,337	4,722,485
Non-air	4,345,258	4,458,072	4,443,787	4,470,386
Total	7,372,262	9,203,708	9,150,123	9,192,870
Counterfactual (no hurricane scenario)				
Air	3,811,241	4,979,436	4,812,020	4,788,755
Non-air	4,709,816	4,633,415	4,477,633	4,487,346
Total	8,521,056	9,612,850	9,289,653	9,276,101
Loss				
Air	(784,237)	(233,800)	(105,684)	(66,271)
Non-air	(364,558)	(175,343)	(33,846)	(16,960)
Total	(1,148,794)	(409,143)	(139,530)	(83,231)

Visitor losses

Relative to anticipated growth, visits fell 13.5% in September, with tapering losses in the following months.

Based on trends through August and a steady economy, continued growth was expected for out-of-state tourism. Losses are measured against these benchmarks.

The bulk of the decrease in visitors occurred in September with actual visitor figures down 11.4% from the previous year and the loss (actual relative to counterfactual) down 13.5%.

The actual performance estimates show that November and December had positive visitor growth although not as strong as the counterfactual model predicted.

Florida Visitor Losses (2017)				
	September	October	November	December
Actual performance estimates				
Air	-16.7%	-0.04%	2.6%	2.7%
Non-air	-4.1%	-0.01%	3.1%	3.5%
Total	-11.4%	-0.5%	2.4%	2.7%
Counterfactual (no hurricane scenario)				
Air	4.9%	4.9%	4.9%	4.2%
Non-air	3.9%	3.9%	3.9%	3.9%
Total	2.4%	4.0%	4.0%	3.6%
Loss (actual relative to counterfactual)				
Air	-20.6%	-4.7%	-2.2%	-1.4%
Non-air	-7.7%	-3.8%	-0.8%	-0.4%
Total	-13.5%	-4.3%	-1.5%	-0.9%

Spending losses

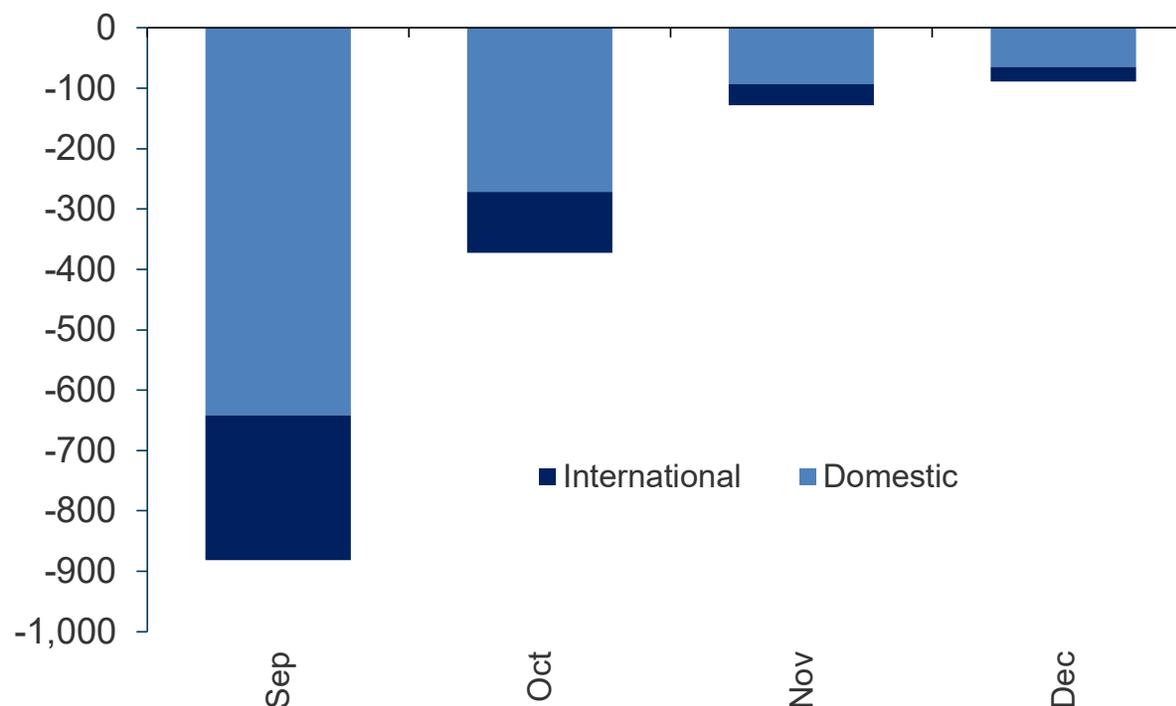
Hurricane Irma cost Florida 1.8 million out-of-state visitors in 2017 with an associated loss in spending of \$1.5 billion.

Out-of-state visitor spending losses totaled \$1.5 billion in the final months of 2017.

\$1.1 billion of these spending losses is attributable to spending by domestic visitors and \$400 million is attributable to losses in the international visitor spending.

Florida Out-of-State Visitor Spending losses

Million dollars, 2017



Spending losses

Hurricane Irma cost Florida \$1.5 billion in visitor spending.

Visitor spending fell 9.5% in September from the previous year. Had there been no hurricane, visitor spending was projected to increase 4.6%. This equated to a loss of \$882 million in September alone.

Losses mitigated in the ensuing months, with October registering less than half the September amount.

While out-of-state visitor spending is estimated to have increased in October, November, and December, it remained below the counterfactual estimates.

Florida Visitor Spending Losses (2017)				
	September	October	November	December
Actual performance estimates				
millions (\$)	5,659	8,382	8,397	9,804
% change	-9.5%	1.7%	4.6%	4.8%
Counterfactual (no hurricane scenario)				
millions (\$)	6,541	8,754	8,525	9,893
% change	4.6%	6.2%	6.2%	5.8%
Loss				
Domestic	\$ (642)	\$ (271)	\$ (93)	\$ (65)
International	\$ (240)	\$ (101)	\$ (35)	\$ (24)
Total	\$ (882)	\$ (373)	\$ (128)	\$ (89)

Economic impacts

Declines in visitor spending flowed through the Florida economy, resulting in a total economic loss of \$2.5 billion.

Total economic impacts were modeled using the IMPLAN Florida model to estimate indirect (supply chain) and induced (income effect) impacts.

Total business sales declined \$2.5 billion relative to the counterfactual scenario.

Employment impacts reached nearly 19,000, though these are calculated on proportionate basis to sales. In most cases, these jobs were likely preserved given the short duration of impacts.

Losses of more than \$80 million in state taxes and \$70 million in local taxes were incurred due to out-of-state visitor declines.

Economic Impacts of Irma on Florida Tourism

	Direct	Indirect and Induced	Total
Business sales (million \$)	\$ (1,471)	(1,019)	(2,490)
Employment	(11,530)	(7,368)	(18,899)
Personal Income (million \$)	\$ (368)	\$ (329)	\$ (696)
State taxes (million \$)	\$ (55.11)	\$ (27.50)	\$ (82.61)
Local taxes (million \$)	\$ (47.99)	\$ (22.62)	\$ (70.61)

Offsets

Florida experienced strong hotel room demand in October and November, with increases of 10% and 7%, respectively.

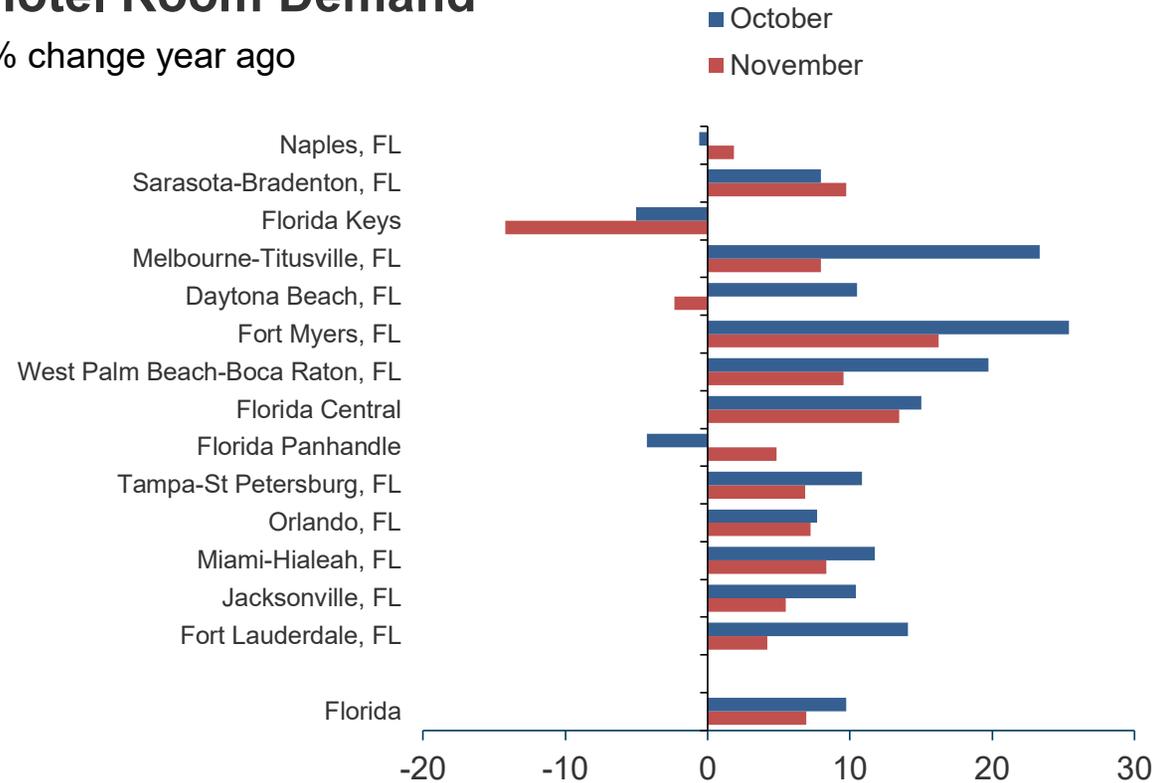
Both months exceeded the 3.3% average of the first seven months of the year. The strong growth in October was not just displaced Florida residents but also out-of-state responders to the hurricane.

Hardest hit Florida Keys, continued to see lower demand due to damaged properties.

While out-of-state tourism was damaged, the hotel industry benefited from resident and worker demand associated with the disaster.

Hotel Room Demand

% change year ago



About Tourism Economics

Tourism Economics is an Oxford Economics company with a singular objective: combine an understanding of tourism dynamics with rigorous economics in order to answer the most important questions facing destinations, developers, and strategic planners. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, destination recovery plans, tourism forecasting models, tourism policy analysis, and economic impact studies.

With over four decades of experience of our principal consultants, it is our passion to work as partners with our clients to achieve a destination's full potential.

Oxford Economics is one of the world's leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics enjoys a reputation for high quality, quantitative analysis and evidence-based advice. For this, it draws on its own staff of more than 150 professional economists; a dedicated data analysis team; global modeling tools, and a range of partner institutions in Europe, the US and in the United Nations Project Link. Oxford Economics has offices in London, Oxford, Dubai, Philadelphia, and Belfast.

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