# The Economic Impact to Northwest Florida of the Deepwater Horizon Oil Spill

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## Introduction

The April 20th explosion aboard the Deepwater Horizon set off a chain of events that will have substantial economic repercussions for Floridians, as well as for our neighbors along the Central Gulf Coast. While the final cost cannot yet be predicted with accuracy, the following discussion highlights some of the areas of impact.

## Types of Economic Impact that Result from the Spill

Negative economic impacts resulting from the spill will cause lower levels of economic activity in directly affected sectors such as tourism and commercial fishing, and in the subsequent ripple effects that spread broadly throughout the economy. It will also be seen in diminished asset values that reflect expected future lost profitability due to the damage to their income-producing potential. Above and beyond these market transactions, it will be seen in lost well-being of residents, visitors and others who value our natural assets.

Perhaps the most visible economic impacts to date in Florida result from the behavior of the customers of our massive tourism industry. Prior to interaction with the Gulf of Mexico loop current, the oil had been expected to make its first Florida landfall in the Northwest part of the State. Large numbers of visitors to this area live in places (Atlanta, Birmingham, Houston, and other metro areas) that are typically within a day's drive down I-65 or across I-10; Northwest Florida is mostly a drive-to tourism market. Revenues from visitors are at their maximum from Memorial Day until schools start in August, unlike the fly-in markets of downstate Florida, where tourism peaks in the January to April period. In addition to the winter versus summer timing distinction, the magnitude of seasonal differences is more pronounced for Northwest Florida than it is for the rest of the State.

Planning by potential visitors for their vacation travel is not done as far in advance as it once was, but fears that the oil spill may reach our shores this spring or summer is clearly causing visitors to change their summer vacation plans. For potential visitors, alternative vacation destinations or activities instead of a Florida Gulf Coast beach vacation become much more attractive once the risk of encountering the ongoing oil spill is factored in. Under the best-case scenario, in which the spill is completely stopped and it never reaches our shores, this negative impact to the Florida visitor industry may be largely limited to the 2010 summer season. If the spill does reach our shores, affected areas are likely to suffer longer-lived damage to one of our most valuable income-generating assets - the Florida brand image of pristine beaches, beautiful marshes, and abundant fish and wildlife.

Local residents, regardless of whether they rely economically on visitors, will also experience losses. Locals value environmental amenities in much the same way that our visitors do, or perhaps even more so, since we choose to make our home where we can enjoy these natural assets. This valuation is partly captured by asset prices – real estate with proximity to water traditionally has commanded a premium relative to inland homes. Another indicator of value is the fact that even after controlling for relevant differences between regions, such as industry structure, education levels, and taxation rates, people on average are willing to willing to accept a lower wage in order to live in Florida. Much of the benefit that Floridians, and our visitors, receive from the quality of the environment simply is not measured well by market prices – often there isn't a monetary outlay associated with enjoyment of our natural beauty, but those assets provide benefits nonetheless to residents as well as visitors. Loss of enjoyment of our assets, particularly our natural assets, will become much more substantial if the spill reaches Florida.

Spending Flows: Direct Spending Effects and How They Ripple Through the Economy

Economists typically refer to the direct impact of visitor spending as that economic activity which is created in businesses that directly receive visitor dollars of spending. This would include, among other things, the hotels, motels, condos, houses, and RV parks where visitors stay, along with the restaurants where they eat, the grocery stores, supercenters and warehouse clubs where they shop, and the golf courses, charter boats and scuba shops where they entertain themselves. Who would have thought that Florida wedding planners and photographers would be affected by an oil spill off the coast of Louisiana, but it has become clear that brides won't risk scheduling a June beach wedding in Florida when they are not sure that our beautiful white beaches will still be oil-free. All of these businesses have to purchase inputs which they use to provide their goods or services. To the extent that these purchases are from other local businesses, the local impacts will be greater. These local input purchases generate what economists call indirect impacts, or supply chain effects. All of the businesses in the tourism supply chain, both the direct and indirect providers, must have owners and employees in order to operate. The local spending of these owners and employees that is done with income generated from participating in the tourism supply chain in turn creates more local economic activity. These effects are referred to as induced impacts, since they are induced by the income paid to proprietors and employees in the tourism supply chain.

The U.S. Bureau of Economic Analysis publishes information describing interindustry relationships within the economy. Their research shows, among other things, the amount of a particular commodity that is typically required by an industry to produce a dollar's worth of output for that industry. This, along with county-specific information on personal income, can be used to develop detailed descriptions of the structure of local economies. Economists typically use the resulting "input-output models" to examine the impact on employment and other economic variables (output, value-added, labor income) of particular events, including natural or man-made disasters. Input data that must be entered into a region-specific impact model include the relevant initial changes in output, or earnings, or employment in the sector that bears the direct impact, as well as the timing of the effects. If a dollar in revenue is lost to the hotelier or the charter boat operator, input-output models can tell us with some precision what other sectors are most affected; i.e., what the ripple effects look like in specific sectors throughout the rest of the regional economy.

The output from these models typically has the shortcoming that only the market value of lost transactions, measured at market prices, is measured. As was noted above, residents and visitors value our environmental amenities in ways that are not captured in market transactions. The input-output models do not account for the lost well-being of local residents, or that of visitors or others, perhaps unaffected financially by the spill, who nonetheless would willingly have paid something to avoid the disaster and its consequences, had they been able to do so. That is, it is relatively straightforward to measure lost profit to the hotelier or the charter boat operator resulting from a room night not sold or a charter trip not taken because a visitor chose not to come, because that transaction takes place in a market with well-defined prices. It is more difficult to measure the lost well-being to the visitor who would have paid to stay in that hotel room or take that charter trip. It is also difficult to measure the value of the lost well-being resulting from the disaster to those who care deeply that a beach has been fouled, but had not been paying a specific price in a specific market transaction for use of the beach.

For the five coastal counties in Northwest Florida that are closest to the spill (Escambia, Santa Rosa, Okaloosa, Walton, and Bay), stretching from Pensacola to Panama City, tourism is a key economic driver. According to national data provider EMSI, visitor spending is responsible for eight percent of employment in Santa Rosa County (lowest among the five counties) to twenty-five percent of employment in Walton County (highest among the five). The more than 45,000 jobs that are supported by visitor spending in these counties are spread broadly throughout the economy, although the bulk occur where we might expect them to, with over 10,000 in restaurants, about 3,500 in hotel/motels, and 1,200 in air transportation. The construction activity that occurs in order to provide accommodation for summer visitors, snowbirds, and second home owners is substantial. The value of homestead exemptions, which apply mostly to primary residences (and thus not vacation or rental homes) in Walton County, for example, is only about forty percent of what it would be if it Walton had the same share of exempt value as the State overall. This implies that the share of construction in Walton County that is undertaken to serve the needs of visitors is far greater than the share for the State. A drop in property values associated with perceptions of degraded environmental quality, should it occur, would be an important economic impact of the spill.

Are There Offsetting Positive Economic Impacts?

In much the same way as the cleanup of a Superfund site generates income to people that either own or are employed in a remediation business, so will the oil spill generate some economic impact that partly offsets the negative impacts mentioned above. The contamination at a Superfund site destroys part of the wealth of a community via environmental degradation and limiting future uses for that parcel of land, but the tens of millions of dollars that flow to enable remediation of the site represent income to those businesses doing the cleanup. There may even be payments to neighboring residents who are most likely to be affected by the contamination. In the case of the oil spill, these income flows will include employment and income associated with disaster response efforts, the ensuing litigation, subsequent monitoring, and so on. To the extent that these cleanup and/or compensation payments are made by the owners of the companies found to be liable for the damages, they will be borne by the owners, typically the shareholders, of those companies. If they instead must be borne by the affected area residents and the owners (whether local or not) of local businesses, whether directly (through time and effort expended in remediation) or indirectly (e.g., through our local and state governments), then those funds are no longer available to support other spending. The net impact to society at large of the disaster will be negative even if BP shareholders pay for every lost dollar of tourism or fishing income, every lost dollar of value associated with our non-market valuation of our natural assets, and every dollar of fiscal impact to governments and thus the taxpayer, regardless of who bears the financial burden of cleanup. This is because the income flows for remediation represent the diversion of resources that could have been productive doing other things in our economy, but instead are called upon to repair our damaged assets.

Fiscal Impacts: Revenues and Expenditures for Local and State Government

Governmental entities across the Central Gulf Coast are mobilizing resources to protect residents and businesses from the worst effects of the oil spill. Emergency operations centers are coordinating the activities of thousands of individuals engaged in monitoring, coordination, planning, preparation, information dissemination, response and remediation. Some of these expenses will be borne by taxpayers across the nation, as the Federal government responds, and some will ultimately be borne by those parties found to be liable for causing the spill. These increased costs are an important component of the fiscal impact to local and state governments, and ultimately to state and local taxpayers, of the ongoing spill.

There are also substantial effects on the revenue side. Because the spill will cause lower levels of economic activity in tourism and/or fisheries-dependent areas, local and state government revenues will be affected. Government entities rely on revenue generated from property, sales, income and other taxes, user fees and charges, and intergovernmental transfers. All of these may be affected by the oil spill, and it is likely that the majority of the impacts will be negative, i.e., they will reduce revenues.

The Central Gulf States that will bear the brunt of the impact of the BP oil spill vary substantially in their economic structure. Louisiana has a particularly large commercial fishery sector relative to other states. Mississippi has seen dramatic growth in revenue associated with gaming. Florida's economy relies heavily on the natural assets of sun, sand, and sea as drivers of the tourism industry. The sales and use tax is the largest component of general revenue for the State. Goods and services that are purchased by visitors, including lodging, restaurant meals and goods from retailers, contribute disproportionately to state tax revenues, and in those counties that impose local option sales taxes. Ad valorem property tax revenues are the largest own-source revenue generator for Florida counties. Expensive beachfront properties contribute disproportionately to county revenues and they are generally not subject to Florida's cap on growth in assessed values for owner-occupied structures.

The timing of the spill is particularly important, both in terms of seasonal impacts and in terms of the business cycle. For example, a tourist development tax, or bed tax, is levied on short-term rentals in most counties in Florida. A quick examination of the raw data shows that for Walton County, retail sales in the hotel/motel classification typically differ by a factor of seven when comparing the winter trough to the summer peak. Unlike the central and southern part of Florida, the peak visitor spending flow in northern Florida is between Memorial Day (in late May) until public schools resume in August. Given the need for advance planning and booking (the lead time is longer for the condo and single family market than for hotels) by potential visitors, the spill, and the resulting uncertainty about subsequent beach quality, could hardly have come at a worse time. In terms of the business cycle, 2010 has been projected to be the year of recovery for visitor expenditures for destinations in Florida, particularly for the mostly drive-to market in Northwest Florida. Several counties that were particularly hard-hit by the eight hurricanes that made landfall in Florida in 2004-2005 were still on the path to recovery to levels of tourism activity that would have been predicted by pre-hurricane trends.

## Conclusion

The economic impact to Florida of the oil spill cannot yet be calculated with precision. However, the effect will be substantial, even if the spill never reaches our shores, because of the important role that perceptions play in planning and decision-making for our customers. The effects will be seen first in our visitor industry, including all of the businesses that rely on visitor spending in the key summer season. Those effects will have collateral damage as they ripple through the economy. Changes in asset values will be more severe if the perceptions of risk and damage are more pronounced and non-market valuations of environmental amenities will also suffer. The fiscal impact to local and state government will be seen in reduced revenue and increased spending. These effects will only become larger should a hurricane or tropical storm exacerbate the potential for damage. The more quickly the oil flow can be completely stopped, and the spill contained, the less the damage will be.