## **COVID-19 Effects on Indiana's State and Local Taxes**



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## **Executive Summary**

The goal of this study is to help state and local policymakers better understand the fiscal impacts of the ongoing global COVID-19 pandemic and aid with budget planning considerations. We also hope that our work will help federal policymakers understand the risks of diminished public services to state and local economies.

We estimate decreases in tax revenues to state and local government for five familiar economic scenarios resulting from the pandemic in 2020 and 2021: 1) a V-shaped recession, 2) a V-shaped recession with hangover, 3) Nike Swoosh, 4) Roller Coaster, and 5) L-Shaped recession. These scenarios span minimum (significant) to maximum (very severe) impacts.

For each scenario, we estimate the impact on Indiana state sales tax, personal and corporate income tax and 'other' tax revenue with reasonable assumptions. For calendar year 2020, we expect tax losses to range from 3.8 percent to 10.9 percent of 2019 total revenues for the state of Indiana. In 2021, we anticipate tax revenues will still range from 0.7 percent to 9.4 percent beneath those of 2019. Our scenarios reflect a state which will not fully recover from this pandemic before 2022, if not much longer.

Our scenarios reflect a state economy that is deeply damaged by the global pandemic. Though we believe these scenarios offer a strong starting point from which to assess fiscal conditions for the state, we, caution that in the few weeks since we began this study economic conditions have degraded more rapidly than anticipated.

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Next, we turn to local tax impacts for county and municipal governments. We aggregate these to the county level due to data limitations. We do not include property tax revenues in our simulations. Our estimates show tax revenue losses for all local governments that range from \$240 million to \$700 million in 2020. By the end of 2021, we anticipate tax revenues will rebound, but still remain beneath the 2019 levels.

Compared to the state, county-level tax losses comprise a smaller share of total revenues, ranging from losses of 2.4 percent to 6.8 percent across the five scenarios in 2020 and between 0.4 to 5.8 percent losses in 2021. However, individual county experiences vary profoundly. In 2020, we anticipate county-level revenue losses to range from less than 1 percent of total tax revenue to more than 48 percent of total tax revenues.

We examine variation in local economic structure and find that counties with higher shares of employment in the most "at-risk" sectors of recreation, eating and drinking establishments and accommodations experience greater revenue losses. Further, counties with a large share of revenue from a casino, racino or riverboat gaming facility are more impacted by the pandemic (some revenues could be distributed across other regional governments through revenue sharing arrangements). Variation in anticipated revenue losses can also be attributed to variation in the local share of non-property tax revenues, which is a local decision.

Apart from the loss of tax dollars, we also examine the share of revenue from non-property tax instruments, and adapt the DeBoer Index of tax capacity and cost to our analysis. With this approach, we estimate the relative level of unanticipated risk to Indiana's county and municipal governments. We find that most at-risk counties either rely on gaming revenues or experienced higher manufacturing job losses. Small, rural and non-casino counties had modest unanticipated risk.

Finally, we discuss the largely unknown expenditure components related to COVID-19 that face state and local governments such as direct additional wage costs of the disease, indirect costs through plausible productivity limitations from strict guidelines or informal care of workers' children, and additional expenditures anticipated for short-term and long-term response from the local governments in the form of workplace testing, protection equipment for workers, sanitization, technology, and healthcare costs.

## **Background**

The goal of this study is to help federal, state and local officials better apprehend the budget risks to state and local governments from the COVID-19 pandemic. The study is constructed to provide policymakers at the state and local level with potential ranges of tax revenue impacts across different economic scenarios through 2021 due to the disease. To do this, we evaluate the tax revenue losses associated with the COVID-19 pandemic across five different scenarios that are familiar possibilities for the path of the Indiana economy in the wake of COVID-19. This builds upon earlier work conducted by our Center that focused on the impacts of the early stages of the COVID-19 disease.

To perform this study, we outline the aggregate tax losses across five scenarios for Indiana state and local government. These scenarios have been widely discussed in the media and span minimal to maximum impacts. We then discuss separate concerns involving differences in county-level economic make-up, the role the differing mix of taxes play in county-level risk, the impact of existing budget stress on local governments in Indiana, and finally the unknown affects we might observe from government expenditures due to COVID-19. That is followed by a summary, a discussion of new required research and appendices providing more detail on potential local tax losses. We begin our analysis with a review of five potential economic scenarios through the end of calendar year 2021.

#### **Five Scenarios**

To provide comparative simulations of possible tax revenue changes due to COVID-19 we outline five different scenarios of economic activity through 2021. These are drawn initially from our earlier work (Hicks, Faulk and Devaraj, 2020c, 2020b, 2020a), which details a combination of impacts to the domestic economy from COVID-19. These include supply chain shocks, voluntary social distancing, shelter-in-place orders, the effect of reduced stock values and labor supply disruptions due to school closings.

We note that these scenarios are not projections. Rather, they are different potential outcomes which provide comparisons of pandemic impacts on state and local tax revenues. Thus, they serve as guideposts for policymakers as more information about the economic impact of COVID-19 and efforts to contain its spread become clearer.

Indiana's economy performed poorly in 2019, with annualized real GDP growth averaging only 0.26 percent over the first three quarters. Likewise, real GDP growth nationally in 1<sup>st</sup> quarter 2020 illustrated

significant effects from COVID-19: Annualized growth nationally declined by 5 percent reflecting deep effects of the disease on household consumption, income and business investment.

Each of our scenarios is presented to mimic the budget planning considerations of state and local leaders. Typically, budgets are compared against previous year collections, and are considered in current or nominal dollars that are not adjusted for inflation. Inflation is taken into account through the growth in expenditures across budget items. However, for purposes of understanding the relative magnitude of these scenarios, we discuss them in the traditional inflation adjusted terms.

Our five scenarios reflect a range of impacts, from significant to very severe. The first four scenarios begin with a decline in 1<sup>st</sup> quarter 2020 GDP, followed by a deep downturn in 2<sup>nd</sup> quarter. We anticipate GDP to decline in 2<sup>nd</sup> quarter 2020, by 17.2 percent. This estimate was derived from Hicks, Faulk and Devaraj (2020c), an early attempt to estimate the losses due to COVID-19. Each scenario follows a different path from 3<sup>rd</sup> quarter 2020 through 4<sup>th</sup> quarter 2021, though the final scenario anticipates a deeper 2<sup>nd</sup> quarter 2020 downturn, followed by a much slower recovery.

The first scenario is a *V-shaped recession* followed by a return to 2019 levels of GDP in 2021. The second, a *V-shaped recession with a hangover* that slows convergence of GDP, returning to mid-2018 levels of GDP in 2021. The third scenario is a '*Nike Swoosh*,' in which the economy recovers far more slowly, remaining well beneath the 2019 levels through 2021.

Our fourth and fifth scenarios imagine deeper consequences of the COVID-19 disease. Both scenarios anticipate no obvious return to positive growth through 2021. Scenario 4 is our *roller-coaster recovery*, which includes the possibility of strong temporary recoveries, followed by returns to shelter-in-place orders and the associated decreases in economic activity. This scenario has no underlying trend towards economic recovery, accounting for stalled growth from two winter recurrences of the disease, which we arbitrarily place in different quarters each year. The justification for deeper downturns during this period is much lower levels of business investment due to uncertainty. The final scenario, *L-shaped recession*, reflects a more pessimistic recovery, with GDP levels falling through 3<sup>rd</sup> quarter 2020 and very slow growth through 2021.

To judge the relative severity of the economic scenario's we developed, it is helpful to compare real GDP growth across the baseline and five scenarios' in real terms. We assume a 1.3% annual rate of inflation, and trace these five scenarios through the end of calendar year 2021. This appears in Figure 1.

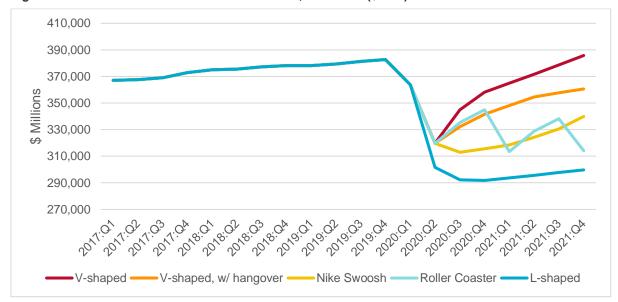


Figure 1. Five Economic Scenarios of Indiana GDP, 2017-2021 (\$2020)

Source: Authors' calculations

As *Figure 1* makes clear, these scenarios depict a broad range of economic losses due to COVID-19. Since we will be evaluating these impacts across annualized losses, we present the annual average impact of each scenario in *Table 1*.

Table 1: Real GDP Growth Across Five Scenarios								
Real GDP Growth	V-Shaped	V-Shaped, w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped			
2020	-2.5%	-3.7%	-5.7%	-4.2%	-7.2%			
2021	2.0%	1.5%	2.0%	-2.0%	0.8%			

It is also useful to compare the severity of these scenarios against historical business cycles. In *Table 2* we compare these real GDP changes for 2020 and 2021 against the ten worst annual declines in GDP since the start of the Great Depression (1930). We also include the most recent (April 24, 2020) GDP projections from the Congressional Budget Office.

2. Historic	al Comparison of Our Baseline and	Five Scenarios
Year	Annual Change (Real GDP)	Description
1932	-12.9	Great Depression
1946	-11.6	Post-WW2 Transition
1930	-8.5	Great Depression
2020	-7.2	L-Shaped
1931	-6.4	Great Depression
2020	-5.7	Nike Swoosh
2020	-5.6	CBO Current Projections
2020	-4.2	Roller Coaster
2020	-3.7	V-Shaped with Hangover
1938	-3.3	Great Depression
2009	-2.5	Great Recession
2020	-2.5	V-Shaped Recession
2021	-2.0	Roller Coaster (Year 2)
1982	-1.8	Early 1980s Recession
1933	-1.2	Great Depression
1947	-1.1	Post-WW2 Transition
1945	-1.0	Post-WW2 Transition

Source: Authors' Congressional Budget Office, April 24 projections calculations and Federal Reserve Bank of St. Louis, (FRED)

The *V-shaped recession* is similar in magnitude to the depths of economic decline in 2009's Great Recession. Our second scenario, the *V-shaped with hangover* ranks between the 2009 downturn of the Great Recession and the 1931 Great Depression.

Our next three scenarios fall into the considerable gap between the 1938 and 1931 downturns, which were -3.3 percent and -6.4 percent respectively. These are severe recession years, ranking among the worst in the nation's history. These include our *V-shaped with hangover*, the first year of the *Roller Coaster* and the *Nike Swoosh* scenarios.

Finally, our *L-shaped* scenario describes a single year decline, among the top four over the past century, with little recovery in 2020. Notably, four of the scenarios include modest recoveries in 2021, while the Roller Coaster Scenario portrays a second, deep downturn associated with two extra closures prompted by a resurgence of the COVID-19 disease.

Importantly, these are not projections, but alternative scenarios, for which those who develop state and local budgets may find useful. Among the challenges in providing economic projections during this period is the evolving nature of the disease and role of public policy, and their effects on the magnitude

and timing of the economic effects. The depth and duration of the downturn will be influenced by the extent and compliance with measures to restrict the disease transmission. It is possible that tighter short-term restrictions might lessen long-term incidence of disease. Likewise, efforts to mitigate the short-term economic effects might improve economic outcomes immediately, but those effects, either through fiscal or monetary policy may be transient.

Notably, the Congressional Budget Office's frequently used projections, show a 2020 downturn of -5.6 percent, which lies between our Nike Swoosh and Roller Coaster scenarios for this year.

## The Analysis

Before turning to the actual values of the scenarios we developed, we again emphasize the use of nominal (current) versus real (inflation adjusted) growth rates. Taxes are levied on nominal dollars, not inflation-adjusted dollars, and budgets are developed using nominal (current) values, not inflation-adjusted values. State and municipal budgets deal with inflation through expected growth in the expenditure side of budgeting (health care costs, equipment or material costs, etc.). However, the most recent data on price-level changes indicates a very low level of inflation. Indeed, given our experiences in the Great Recession, GDP losses of the magnitudes associated with the scenarios presented here appear unlikely to be accompanied by meaningful price-level changes.

For the remainder of the analysis, we treat inflation as effectively zero, so that real (inflation-adjusted) GDP and nominal (current dollar) GDP are identical. This assumption may bias our estimates, but the implicit errors of this assumption are likely to be modest.

The changes in GDP allow us to estimate the impacts of the virus on revenue for several types of taxes. Income taxes at the state- and local-level, and state-level sales tax and corporate income taxes can be directly estimated from GDP. We consolidate remaining state taxes into a category of "other" corresponding to the approach followed by Indiana Department of Revenue.

There are roughly 65 separate state and local tax funds. These include taxpayer selected instruments like the Military Relief Check-off through specialized fees on individual operations, like IMS admissions or underground storage tank fees. The responsiveness of these taxes to a change in GDP likely have a wide variation, and therefore, we did not calculate each.

For the broad 'other' category we calculated several tax elasticities, ranging from 1.3 (1997-2018) and 2.4 (2000-2018) using data from the National Association of State Budget Officers (NASBO), which uses a narrower version of "other" category excluding more volatile gasoline tax revenues. Using the Indiana Department of Revenue (DOR) definition of "other," we calculated an elasticity of 2.9 (2012-2019). The difference can be explained by the definition of 'other' taxes. We choose the higher estimated elasticity, which estimates revenue losses of between \$50.6 million and \$145.8 million to the 2020 estimates compared to the lowest elasticity estimate.

Vehicle excise taxes for local government are estimated from changes in GDP. To translate changes in GDP into changes in tax collections, we estimate elasticities of tax revenue, with respect to changes in GDP. These were reported in Hicks, Faulk, and Devaraj (2020c). For this study, we also estimated the elasticity of vehicle sales to GDP, which permit us to estimate the impact of COVID-19 on county excise taxes. We assume the elasticity of vehicle sales to excise tax revenue is unitary (equal to 1). This reflects a static composition of vehicle purchases across this downturn.

Our scenarios reflect state-level GDP growth rates, but changes to individual county GDP over a business cycle vary from the state level. Thus, we estimate the responsiveness of county GDP to state-level GDP changes, or a regional elasticity. We explain this in more detail in a later section examining the differences between state and local economies.

In addition to the GDP levels reported above, we also wish to separately treat specific taxes collected on activities most heavily associated with the COVID-19 pandemic. These are Innkeeper's Taxes, Food & Beverage Taxes and taxes associated with Casino Gaming. To model these, we examine data from Chetty et, al., 2020. This study estimates high frequency state-level data on transactions to create a daily expenditure tracker before and during the COVID-19 pandemic. This data is available across size expenditure categories. We focus on Restaurants and Hotels, as those are the two sectors against which two of our taxes of interest are levied.

We adapt the range of declines observed before and during the state's stay-at-home order to simulate change in demand for restaurants and hotels. We then linearly adapt the effect from the V-shaped recession to the other four scenarios. This is a simple, deterministic treatment of tax losses in these categories.

For Casinos, we similarly adapt reductions in demand, using the complete closure baseline as the foundation of the V-shaped recession. The remaining impacts are scaled across the remaining four scenarios, through 2021.

#### Impact on State-Level Tax Revenues

*Table 3* reports the economic growth estimates for 2020 and 2021, with corresponding variation in revenues from these three distinct taxes, in both years.

Real GDP Growth	V-Shaped (%)	V-Shaped, w/ Hangover (%)	Nike Swoosh (%)	Roller Coaster (%)	L-Shaped (%)
2020	-2.5	-3.7	-5.7	-4.2	-7.2
2021	2.0	1.5	2.0	-2.0	8.0
<u>2020</u>					
Innkeeper's	-21.0	-31.0	-48.0	-35.0	-60
Food & Beverage	-21.0	-31.0	-48.0	-35.0	-60
Casino	-33.0	-48.0	-72.0	-54.0	-92
<u>2021</u>					
Innkeeper's	18.0	13.5	18.0	-17.0	18.0
Food & Beverage	18.0	13.5	18.0	-17.0	18.0
Casino	30.0	22.5	30.0	-26.0	30.0

Source: Authors' calculations

Our use of a short time period to extrapolate losses in the tourism and hospitality sector is necessitated by the unique nature of the COVID-19 pandemic. The business cycle declines in employment that are currently observable, are much more heavily clustered in these industries, a reverse from the typical recessionary path. There is no readily available data with which to historically estimate these effects, so we are left applying some judgement in the development of these scenarios.

At first blush, many may find the impacts to these sectors implausibly large. However, losses over one quarter in all these sectors already approach the magnitudes estimated in our mild, V-shaped recession. For example, Casinos will be idle for roughly 90 days, or 25 percent of 2020. If they return to 2019 levels for the remainder of 2020, tax revenues be close to  $1/3^{rd}$  below the 2019 levels. Likewise, accommodations and restaurants experienced dramatic losses of revenue since the start of the COVID-19 response. As of May 1, 2020, consumer spending on eating places and hotels is down 51 percent from January levels. If they make a full recovery, as anticipated in the mild, V-shaped recession, tax revenues will still be a full 20 percent lower this year as compared to 2021.

We begin our estimates with state tax losses over the two-year period of 2020 and 2021 across all five scenarios. We present the data for each year, as losses from the 2019 baseline. This is designed to provide data for budget planning purposes, and to estimate the magnitude of the tax impact across these scenarios.

<u>2020</u>	V-Shaped	V-Shaped, W/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Sales Tax	-\$114.8	-\$169.9	-\$261.7	-\$192.8	-\$330.5
Individual Income Tax	-\$224.1	-\$331.7	-\$511.0	-\$376.5	-\$645.4
Corporate Income Tax	-\$65.2	-\$96.5	-\$148.6	-\$109.5	-\$187.7
Riverboat and Racino Wagering	-\$142.2	-\$206.9	-\$310.3	-\$232.7	-\$396.5
Other	-\$77.0	-\$114.0	-\$175.6	-\$129.4	-\$221.8
Total	-\$623.3	-\$918.9	-\$1,407.2	-\$1,040.9	-\$1,782.0
Percent below 2019 levels	-3.8%	-5.6%	-8.6%	-6.3%	-10.9%
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<u>2021</u>	V-Shaped	V-Shaped, W/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Sales Tax	\$91.8	\$68.9	\$91.8	-\$91.8	\$36.7
Individual Income Tax	\$179.3	\$134.5	\$179.3	-\$179.3	\$71.7
Corporate Income Tax	\$52.1	\$39.1	\$52.1	-\$52.1	\$20.9
Riverboat and Racino Wagering	\$129.3	\$97.0	\$129.3	-\$112.1	\$129.3
Other	\$61.6	\$46.2	\$61.6	-\$61.6	\$24.6
Sum (and end of 2021)	\$514.1	\$385.6	\$514.1	-\$496.9	\$283.2
Total below 2019 levels	-\$109.1	-\$533.2	-\$893.0	-\$1,537.8	-\$1,498.8
Percent below 2019 levels	-0.7%	-3.3%	-5.4%	-9.4%	-9.1%

Source: Authors' calculations

These estimates suggest Indiana will experience deep tax losses, ranging from 3.8 percent to 10.9 percent of revenues during 2020, with a modest rebound during 2021. In 2021, we still expect tax collections to range from 0.7 percent to 9.4 percent beneath the 2019 levels. To place this in historical context, both years are potentially the 2<sup>nd</sup> and 3<sup>rd</sup> worst post-war tax revenue declines, and the worst since 1955.

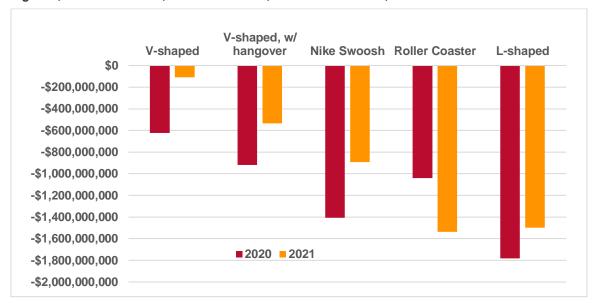


Figure 2, State Tax Losses, from 2019 Levels, Across 5 Scenarios, for 2020 and 2021

Source: Authors' calculations

Exacerbating the large potential losses of state taxes are the nearly contemporaneous nature of disbursements. State taxes, unlike local taxes, are predominately deployed immediately as part of the state's expenditures. The very sharp declines in 2<sup>nd</sup> quarter 2019 reflect the deep descent of the economy from post-war record low unemployment, to post-war record high unemployment in less than a full quarter.

One note of caution is useful here. In the Roller Coaster scenario, we place a resurgence of the disease randomly in 2021, in a late winter/spring and late fall/early winter, later the same year. Obviously, we have no mechanism for making this determination. We simply did so in this context to illustrate the possibility that 2021 may be worse than 2020, depending upon the disease effects.

#### Impact on Local-Level Tax Revenues

The tax impacts for individual counties show significant variation across the five scenarios that mimic the state tax effects. Note, we focus here on those taxes in which the base is expected to be influenced by GDP changes. We have not included property taxes in this estimate, though they are included in the total for determining the percentage annual change in tax revenues.

<u>2020</u>	V-Shaped	V-Shaped, w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Local Income Taxes	-\$92.53	-\$136.95	-\$210.97	-\$155.45	-\$266.49
Innkeeper's Tax	-\$26.09	-\$38.51	-\$59.63	-\$43.48	-\$74.54
Food and Beverage Taxes	-\$21.80	-\$32.19	-\$49.84	-\$36.34	-\$62.30
Casino	-\$66.64	-\$96.93	-\$145.40	-\$109.05	-\$185.78
Vehicle Excise Taxes	-\$39.66	-\$58.70	-\$90.43	-\$66.63	-\$114.22
Total	-\$246.73	-\$363.28	-\$556.27	-\$410.95	-\$703.34
Percent of Total Tax Revenues	-2.4%	-3.5%	-5.3%	-3.9%	-6.8%
2021	V-Shaped	V-Shaped, w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Local Income Taxes	-\$18.51	-\$81.43	-\$136.95	-\$229.48	-\$236.88
Innkeeper's Tax	-\$3.73	-\$21.74	-\$37.27	-\$64.60	-\$52.18
Food and Beverage Taxes	-\$3.11	-\$18.17	-\$31.15	-\$53.99	-\$43.61
Casino	-\$6.06	-\$51.49	-\$84.81	-\$161.55	-\$125.20
Vehicle Excise Taxes	-\$7.93	-\$34.90	-\$58.70	-\$98.36	-\$101.53
Total	-\$39.34	-\$207.74	-\$348.88	-\$607.98	-\$559.40
Percent of Total Tax Revenues	-0.4%	-2.0%	-3.4%	-5.8%	-5.4%

Source: Authors' calculations

In *Table 5* we aggregate the separate local income tax revenues to the county level (so municipal and county disbursements are included in this value). Food & Beverage Taxes and Innkeeper's taxes are reported at the county level. The Casino-related taxes are actually all taxes for riverboats, casinos, and racinos, which are allocated to local governments. These include the Riverboat Wagering Tax Distribution, the County Slot Machine Wagering Fee, the Riverboat Wagering Tax and the Supplemental Wagering Tax (which recently replaced the Riverboat Admissions Tax). These taxes are distributed to county, municipal, and some Convention and Visitor's Bureaus. We aggregated all to the county level.

Importantly, we did not include local intergovernmental revenue sharing arrangements for some different types of casino/racino-related revenues. These are not fully visible to us, so cannot be allocated confidently in this setting. It should be well known to local officials, but the size of the revenue sharing is important. As our results will show, some counties with casino or racino gaming face steep revenue risk, part of which may be overstated, since some share of gaming revenues may be allocated to other counties.

Also, we did not include Innkeeper's Taxes for marketplace facilitators. It is a small share of overall tax revenues. Further, we did not include Marion County Admissions Taxes (\$15,598,085) and the Marion

County Supplemental Auto Excise Tax (\$8,369,224). We also do not have data on non-state fee assessments for entrance to parks or other municipal or county owned activities.

As *Table 5* illustrates, total losses for local governments range from 2.4 percent to 6.8 percent in 2020 and from 0.4 percent to 5.8 percent in 2021. However, the collection of taxes, and the disbursement of taxes for local governments is not contemporaneous. Thus, the losses from an economic shock today transmit to tax revenue disbursements potentially more than two years following the event.

Late property tax payments or non-payments that may result from businesses or households not being able to pay property taxes for COVID-related reasons are not included in this analysis. In addition, there is likely to be a lag in the impact of COVID on property tax revenue and local income tax distributions due to the timing of property tax payments. Property taxes in the current year are paid on property assessed values from the previous year. The pandemic may reduce the assessed value of property and associated property tax revenue if companies go out of business or households enter foreclosure. The revenue impact of reduced assessed valued will be delayed at least a year but will likely extend as assessed values change over time. A quarter of real property is reassessed each year. In addition, property tax levy growth is limited to the six-year average growth in Indiana nonfarm personal income, so as the decrease in income during the pandemic and recovery will potentially affect the property tax levy for several years. The local income tax distribution to local governments in the current year is based on the amount of income tax received from counties in the previous year, so local governments are likely to see impacts for the next few years at least, depending on the length of the recovery.

The distributions of the other major local taxes are more contemporaneous. Food and beverage tax and innkeeper's tax revenues are typically distributed within a few months of collection. The supplemental wagering (gaming) tax is distributed quarterly. There is a hold-harmless distribution for this tax (\$48 million), but it is funded from riverboat wagering tax revenue, so local governments should not rely on it. The motor vehicle excise tax (the largest of the motor vehicle-related tax revenue) is distributed at the same time that property taxes are distributed (twice a year).

In *Tables 6, 7, and 8*, we report county estimates of total revenue losses for major taxes for each year, along with percentages for 2020, to provide a snapshot of the magnitude of impacts to individual counties. To conduct this estimate, we first calculated the variability of individual county-level GDP to changes in state GDP. This is detailed more in a later section. We report the impacts to revenue raised for each year (2020 and 2021) separately as losses below the baseline of 2019. The effect on the timing of the

distribution of these revenues may be in subsequent years, depending on the tax. This is performed to assist local governments in assessing the impact to tax revenues of the economic scenarios surrounding COVID-19.

In the appendices to this study, we report each component of tax revenue losses by county. For governments wishing to assess their annual revenue losses, we recommend consulting the appendix, and the explanations for applying these losses that accompany these tables.

*Table 6* reports total tax losses from the 2019 baseline in 2020, *Table 7* reports tax losses in 2021 from the baseline of 2019, and *Table 8* reports the percent losses for each county in 2020.

County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$639,438	-\$944,657	-\$1,451,319	-\$1,071,323	-\$1,835,389
Allen	-\$11,792,551	-\$17,423,478	-\$26,836,542	-\$19,739,817	-\$33,827,657
Bartholomew	-\$2,416,773	-\$3,571,739	-\$5,497,399	-\$4,049,205	-\$6,938,895
Benton	-\$159,668	-\$235,868	-\$362,344	-\$267,487	-\$458,249
Blackford	-\$201,426	-\$297,475	-\$456,800	-\$337,306	-\$577,807
Boone	-\$2,741,120	-\$4,052,047	-\$6,241,873	-\$4,593,275	-\$7,872,269
Brown	-\$579,838	-\$856,848	-\$1,319,938	-\$970,887	-\$1,663,862
Carroll	-\$519,865	-\$768,397	-\$1,181,424	-\$871,654	-\$1,493,582
Cass	-\$958,162	-\$1,416,047	-\$2,177,271	-\$1,606,060	-\$2,751,926
Clark	-\$2,848,952	-\$4,209,710	-\$6,476,333	-\$4,772,447	-\$8,177,607
Clay	-\$596,822	-\$881,959	-\$1,355,594	-\$1,000,368	-\$1,714,006
Clinton	-\$772,096	-\$1,141,011	-\$1,754,057	-\$1,294,156	-\$2,217,428
Crawford	-\$282,618	-\$413,778	-\$627,350	-\$466,980	-\$797,520
Daviess	-\$628,385	-\$928,286	-\$1,426,865	-\$1,052,467	-\$1,803,157
Dearborn	-\$8,106,631	-\$11,814,286	-\$17,777,465	-\$13,303,774	-\$22,681,905
Decatur	-\$778,791	-\$1,151,116	-\$1,771,022	-\$1,305,425	-\$2,237,000
De Kalb	-\$1,139,539	-\$1,684,112	-\$2,590,500	-\$1,909,760	-\$3,272,445
Delaware	-\$2,572,166	-\$3,798,600	-\$5,845,479	-\$4,302,975	-\$7,372,545
Dubois	-\$1,119,493	-\$1,650,513	-\$2,529,876	-\$1,869,259	-\$3,200,370
Elkhart	-\$6,386,416	-\$9,440,511	-\$14,525,439	-\$10,706,890	-\$18,347,98°
Fayette	-\$568,020	-\$836,943	-\$1,280,796	-\$947,856	-\$1,622,371
Floyd	-\$1,734,123	-\$2,562,630	-\$3,939,726	-\$2,906,404	-\$4,979,882
Fountain	-\$357,171	-\$527,756	-\$811,042	-\$598,577	-\$1,025,549
Franklin	-\$450,859	-\$666,063	-\$1,023,615	-\$755,267	-\$1,293,963
Fulton	-\$500,700	-\$739,968	-\$1,137,643	-\$839,290	-\$1,438,077
Gibson	-\$557,907	-\$823,812	-\$1,265,933	-\$933,645	-\$1,599,400
Grant	-\$1,498,445	-\$2,213,948	-\$3,403,406	-\$2,510,484	-\$4,301,316
Greene	-\$617,858	-\$912,754	-\$1,402,387	-\$1,035,085	-\$1,773,308
Hamilton	-\$13,181,389	-\$19,479,023	-\$30,024,524	-\$22,066,115	-\$37,818,33
Hancock	-\$2,424,874	-\$3,584,023	-\$5,517,238	-\$4,063,242	-\$6,963,187
Harrison	-\$7,630,415	-\$11,113,274	-\$16,705,777	-\$12,510,401	-\$21,324,348
Hendricks	-\$6,316,500	-\$9,333,161	-\$14,385,736	-\$10,571,237	-\$18,117,198
Henry	-\$1,041,353	-\$1,538,171	-\$2,365,645	-\$1,743,260	-\$2,986,771
Howard	-\$2,025,661	-\$2,993,168	-\$4,603,663	-\$3,393,629	-\$5,814,848
Huntington	-\$850,207	-\$1,256,322	-\$1,931,551	-\$1,424,703	-\$2,441,091
Jackson	-\$1,095,371	-\$1,618,593	-\$2,489,985	-\$1,835,040	-\$3,144,349
Jasper	-\$1,009,391	-\$1,492,084	-\$2,295,210	-\$1,692,399	-\$2,900,123
Jay	-\$448,972	-\$663,337	-\$1,019,702	-\$752,168	-\$1,288,711
Jefferson	-\$323,302	-\$476,651	-\$731,240	-\$539,601	-\$923,933
Jennings	-\$689,373	-\$1,018,817	-\$1,566,349	-\$1,155,588	-\$1,980,042
Johnson	-\$3,309,742	-\$4,890,013	-\$7,521,594	-\$5,543,355	-\$9,498,167

C	V Chanad	V Shaped w/	Nilsa Consassis	Dallas Casatas	l Chamad
County	V-Shaped	Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Knox	-\$532,922	-\$786,767	-\$1,207,751	-\$891,874	-\$1,527,625
Kosciusko	-\$1,643,220	-\$2,427,552	-\$3,732,540	-\$2,752,036	-\$4,715,158
Lagrange	-\$912,387	-\$1,347,841	-\$2,074,080	-\$1,527,391	-\$2,617,128
Lake	-\$31,400,028	-\$45,838,751	-\$69,166,059	-\$51,660,844	-\$88,132,756
LaPorte	-\$4,111,999	-\$6,023,167	-\$9,139,954	-\$6,798,850	-\$11,613,357
Lawrence	-\$955,260	-\$1,411,277	-\$2,169,459	-\$1,600,156	-\$2,741,563
Madison	-\$5,282,589	-\$7,755,402	-\$11,813,887	-\$8,763,064	-\$14,981,169
Marion	-\$49,479,697	-\$73,095,335	-\$112,774,809	-\$82,735,010	-\$141,800,864
Marshall	-\$867,840	-\$1,281,774	-\$1,970,076	-\$1,452,949	-\$2,489,177
Martin	-\$181,375	-\$267,921	-\$411,551	-\$303,828	-\$520,499
Miami	-\$787,288	-\$1,163,299	-\$1,788,011	-\$1,319,316	-\$2,260,436
Monroe	-\$3,968,635	-\$5,861,440	-\$9,029,914	-\$6,637,081	-\$11,373,182
Montgomery	-\$983,944	-\$1,454,125	-\$2,236,398	-\$1,649,022	-\$2,825,604
Morgan	-\$2,382,154	-\$3,521,667	-\$5,418,828	-\$3,994,417	-\$6,845,241
Newton	-\$203,592	-\$300,607	-\$461,455	-\$340,819	-\$583,779
Noble	-\$989,083	-\$1,461,410	-\$2,246,086	-\$1,657,369	-\$2,839,594
Ohio	-\$1,796,667	-\$2,615,510	-\$3,928,617	-\$2,943,656	-\$5,016,664
Orange	-\$2,112,282	-\$3,087,474	-\$4,674,105	-\$3,479,821	-\$5,940,017
Owen	-\$354,350	-\$523,293	-\$803,886	-\$593,215	-\$1,016,210
Parke	-\$413,208	-\$610,490	-\$939,077	-\$692,030	-\$1,185,750
Perry	-\$386,524	-\$570,970	-\$877,745	-\$647,282	-\$1,108,972
Pike	-\$148,171	-\$218,654	-\$335,365	-\$247,832	-\$424,419
Porter	-\$2,550,809	-\$3,765,912	-\$5,785,962	-\$4,267,463	-\$7,310,088
Posey	-\$491,591	-\$726,186	-\$1,115,974	-\$823,384	-\$1,410,639
Pulaski	-\$356,978	-\$527,660	-\$811,337	-\$598,580	-\$1,025,683
Putnam	-\$881,873	-\$1,302,981	-\$2,003,838	-\$1,477,251	-\$2,531,145
Randolph	-\$533,454	-\$788,173	-\$1,211,307	-\$893,841	-\$1,531,414
Ripley	-\$522,697	-\$772,101	-\$1,186,303	-\$875,474	-\$1,499,837
Rush	-\$367,322	-\$542,771	-\$834,156	-\$615,617	-\$1,054,755
St. Joseph	-\$8,194,334	-\$12,109,215	-\$18,639,522	-\$13,725,804	-\$23,520,914
Scott	-\$479,255	-\$707,894	-\$1,088,360	-\$802,385	-\$1,374,699
Shelby	-\$3,794,738	-\$5,545,001	-\$8,381,665	-\$6,251,639	-\$10,669,203
Spencer	-\$401,963	-\$593,445	-\$913,083	-\$672,046	-\$1,151,370
Starke	-\$377,368	-\$557,336	-\$855,925	-\$631,963	-\$1,082,574
Steuben	-\$1,002,356	-\$1,481,398	-\$2,279,394	-\$1,679,682	-\$2,878,298
Sullivan	-\$224,384	-\$330,981	-\$507,531	-\$374,999	-\$642,128
Switzerland	-\$3,284,058	-\$4,780,817	-\$7,182,262	-\$5,380,249	-\$9,169,345
Tippecanoe	-\$3,643,104	-\$5,381,053	-\$8,276,330	-\$6,098,175	-\$10,448,166
Tipton	-\$457,776	-\$676,716	-\$1,040,671	-\$767,704	-\$1,315,525
Union	-\$139,545	-\$206,119	-\$316,770	-\$233,679	-\$400,337
Vanderburgh	-\$8,012,963	-\$11,778,981	-\$18,002,888	-\$13,310,055	-\$22,768,097
Vermillion	-\$265,228	-\$391,726	-\$601,614	-\$444,185	-\$760,911
Vigo	-\$3,046,570	-\$4,499,683	-\$6,931,292	-\$5,095,479	-\$8,731,456
Wabash	-\$909,882	-\$1,344,861	-\$2,068,410	-\$1,525,350	-\$2,613,772
Warren	-\$185,482	-\$274,090	-\$421,266	-\$310,884	-\$532,656
Warrick	-\$1,052,982	-\$1,554,958	-\$421,266	-\$310,064	-\$3,018,923
Washington	-\$495,518	-\$731,918	-\$2,390,073 -\$1,124,418	-\$829,913	-\$1,421,751
Wayne	-\$495,516 -\$1,210,935	-\$1,788,214	-\$2,748,513	-\$029,913	-\$3,471,841
Wells	-\$1,210,935 -\$676,839	-\$1,788,214	-\$2,746,513 -\$1,537,888	-\$2,026,601	-\$3,471,841
White		-\$1,000,346	-\$1,479,701	-\$1,090,854	
	-\$650,947 \$740,526		-\$1,479,701		-\$1,869,201 \$2,152,639
Whitley Total	-\$749,526 -\$246,726,075	-\$1,107,641 -\$363,2 <i>7</i> 5, <i>845</i>	-\$1,702,529 -\$556,266,282	-\$1,256,363 -\$410,953,289	-\$2,152,638 -\$703,337,412

County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$120,554	-\$555,494	-\$932,435	-\$1,582,058	-\$1,591,168
Allen	-\$2,105,482	-\$10,158,176	-\$17,149,473	-\$29,194,980	-\$27,978,68
Bartholomew	-\$448,023	-\$2,095,177	-\$3,528,649	-\$5,983,963	-\$5,898,918
Benton	-\$30,045	-\$138,651	-\$232,721	-\$395,012	-\$396,959
Blackford	-\$37,563	-\$174,577	-\$292,937	-\$498,144	-\$498,649
Boone	-\$506,250	-\$2,375,894	-\$4,007,002	-\$6,789,812	-\$6,648,867
Brown	-\$104,397	-\$500,267	-\$844,497	-\$1,435,783	-\$1,382,552
Carroll	-\$104,397	-\$453,255	-\$761,234	-\$1,287,069	-\$1,304,014
Cass	-\$181,915	-\$833,861	-\$1,401,024	-\$2,371,900	-\$2,387,208
Clark	-\$527,475	-\$2,468,602	-\$1,401,024	-\$7,052,131	-\$6,962,210
Clay	-\$113,630	-\$2,466,602 -\$519,565	-\$872,401		
Clinton	-\$1146,773	-\$672,019	-\$1,128,735	-\$1,477,188 -\$1,911,139	-\$1,492,056 -\$1,926,830
Crawford	-\$36,597	-\$229,262	-\$381,329	-\$691,115	-\$595,820
Daviess	-\$116,700	-\$544,523	-\$915,181	-\$1,554,796	-\$1,544,689
Dearborn	-\$830,297	-\$6,357,035	-\$10,501,131	-\$19,702,929	-\$15,791,130
Decatur	-\$147,066	-\$677,322	-\$1,139,298	-\$1,928,381	-\$1,928,036
De Kalb	-\$214,346	-\$990,218	-\$1,665,307	-\$2,821,150	-\$2,816,331
Delaware	-\$454,082	-\$2,210,037	-\$3,727,395	-\$6,363,795	-\$6,082,525
Dubois	-\$192,984	-\$955,630	-\$1,603,366	-\$2,762,878	-\$2,654,171
Elkhart	-\$1,211,854	-\$5,559,590	-\$9,350,877	-\$15,815,224	-\$15,857,82
Fayette	-\$97,457	-\$484,020	-\$810,233	-\$1,400,545	-\$1,352,436
Floyd	-\$328,518	-\$1,508,427	-\$2,534,121	-\$4,292,335	-\$4,316,502
Fountain	-\$67,758	-\$310,695	-\$521,628	-\$883,906	-\$891,400
Franklin	-\$84,367	-\$391,194	-\$657,123	-\$1,115,554	-\$1,114,814
Fulton	-\$95,233	-\$435,868	-\$732,176	-\$1,239,433	-\$1,249,500
Gibson	-\$101,090	-\$481,199	-\$809,115	-\$1,379,735	-\$1,350,827
Grant	-\$280,773	-\$1,300,694	-\$2,185,733	-\$3,708,243	-\$3,703,766
Greene	-\$116,125	-\$536,454	-\$900,654	-\$1,528,647	-\$1,533,884
Hamilton	-\$2,341,164	-\$11,348,854	-\$19,184,299	-\$32,644,147	-\$31,060,43
Hancock	-\$450,436	-\$2,103,195	-\$3,542,801	-\$6,004,750	-\$5,922,282
Harrison	-\$752,348	-\$5,954,724	-\$9,827,710	-\$18,530,094	-\$14,685,27
Hendricks	-\$1,111,958	-\$5,429,754	-\$9,181,194	-\$15,641,045	-\$14,797,37
Henry	-\$189,180	-\$899,042	-\$1,513,472	-\$2,576,593	-\$2,516,280
Howard	-\$377,101	-\$1,756,748	-\$2,955,102	-\$5,013,927	-\$4,973,733
Huntington	-\$160,076	-\$738,724	-\$1,241,420	-\$2,104,330	-\$2,107,017
Jackson	-\$203,314	-\$949,550	-\$1,597,928	-\$2,711,453	-\$2,681,836
Jasper	-\$192,503	-\$879,418	-\$1,478,322	-\$2,499,492	-\$2,517,550
Jay	-\$84,011	-\$389,616	-\$654,741	-\$1,111,050	-\$1,108,803
Jefferson	-\$54,400	-\$274,974	-\$462,337	-\$798,032	-\$751,689
Jennings	-\$131,252	-\$600,226	-\$1,008,229	-\$1,706,500	-\$1,721,527
Johnson	-\$610,312	-\$2,865,439	-\$4,822,163	-\$8,191,482	-\$8,072,795
Knox	-\$97,719	-\$460,364	-\$772,547	-\$1,317,412	-\$1,306,542
Kosciusko	-\$303,686	-\$1,422,901	-\$2,393,006	-\$4,066,189	-\$4,020,712
Lagrange	-\$164,912	-\$787,236	-\$1,326,605	-\$2,258,029	-\$2,191,723
Lake	-\$3,532,528	-\$24,938,126	-\$41,298,559	-\$76,488,570	-\$63,061,47
LaPorte	-\$542,102	-\$3,345,744	-\$5,570,057	-\$10,061,990	-\$8,716,453
Lawrence	-\$178,015	-\$828,343	-\$1,392,214	-\$2,363,804	-\$2,352,690
Madison	-\$763,386	-\$4,365,999	-\$7,294,683	-\$12,965,844	-\$11,574,22
Marion	-\$8,358,349	-\$42,254,324	-\$71,653,461	-\$122,521,516	-\$112,284,64
Marshall	-\$159,213	-\$750,303	-\$1,261,449	-\$2,146,826	-\$2,116,664
Martin	-\$34,071	-\$157,443	-\$264,248	-\$448,684	-\$450,558
Miami	-\$148,817	-\$684,445	-\$1,149,540	-\$1,948,401	-\$1,958,762
Monroe	-\$685,208	-\$3,398,871	-\$5,746,488	-\$9,821,902	-\$9,200,840
Montgomery	-\$185,433	-\$855,242	-\$1,437,887	-\$2,435,811	-\$2,436,522
	-\$165,433 -\$454,347			-\$2,435,811	
Morgan		-\$2,075,812 -\$176,174	-\$3,491,020 \$205,544		-\$5,934,131 \$502,226
Newton	-\$37,681		-\$295,544 \$1,442,672	-\$503,355	-\$502,226
Noble	-\$186,670	-\$859,600 \$4,307,165	-\$1,443,673	-\$2,447,677	-\$2,458,860
Ohio	-\$172,208 \$241,804	-\$1,397,165 \$1,684,615	-\$2,304,157	-\$4,360,372	-\$3,428,741
Orange	-\$241,804	-\$1,684,615	-\$2,803,626	-\$5,155,322	-\$4,205,807
Owen	-\$65,185	-\$306,419	-\$514,721	-\$876,365	-\$867,783
Parke Perry	-\$76,032 -\$71,348	-\$357,608 -\$334,589	-\$601,901 -\$562,570	-\$1,022,671 -\$956,348	-\$1,006,182 -\$945,787

Table 7, Con't					
County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Pike	-\$26,895	-\$127,697	-\$214,088	-\$366,064	-\$362,212
Porter	-\$458,501	-\$2,196,681	-\$3,693,654	-\$6,306,985	-\$6,148,408
Posey	-\$91,600	-\$426,192	-\$715,983	-\$1,216,242	-\$1,212,278
Pulaski	-\$68,537	-\$311,330	-\$522,897	-\$883,844	-\$896,016
Putnam	-\$163,746	-\$764,386	-\$1,285,710	-\$2,182,605	-\$2,162,620
Randolph	-\$100,558	-\$463,501	-\$778,411	-\$1,320,076	-\$1,325,388
Ripley	-\$97,543	-\$453,235	-\$761,149	-\$1,293,091	-\$1,291,387
Rush	-\$69,755	-\$319,596	-\$536,589	-\$909,062	-\$917,183
St. Joseph	-\$1,505,199	-\$7,092,364	-\$11,950,387	-\$20,287,736	-\$19,869,953
Scott	-\$87,694	-\$414,223	-\$696,799	-\$1,185,716	-\$1,165,287
Shelby	-\$445,090	-\$3,032,765	-\$5,032,016	-\$9,255,927	-\$7,711,518
Spencer	-\$69,647	-\$344,208	-\$580,767	-\$994,167	-\$939,608
Starke	-\$70,394	-\$327,105	-\$548,951	-\$933,320	-\$934,001
Steuben	-\$187,352	-\$870,144	-\$1,464,390	-\$2,481,729	-\$2,463,385
Sullivan	-\$39,720	-\$192,483	-\$322,867	-\$554,093	-\$540,168
Switzerland	-\$312,532	-\$2,552,173	-\$4,210,736	-\$7,970,482	-\$6,241,489
Tippecanoe	-\$659,627	-\$3,143,445	-\$5,292,852	-\$9,013,922	-\$8,781,219
Tipton	-\$88,157	-\$399,501	-\$671,051	-\$1,133,548	-\$1,150,685
Union	-\$25,810	-\$120,818	-\$203,034	-\$345,219	-\$342,360
Vanderburgh	-\$1,173,476	-\$6,649,366	-\$11,163,401	-\$19,705,950	-\$17,408,572
Vermillion	-\$49,524	-\$229,948	-\$385,910	-\$655,994	-\$656,765
Vigo	-\$528,202	-\$2,610,907	-\$4,412,923	-\$7,539,865	-\$7,086,096
Wabash	-\$173,051	-\$792,238	-\$1,331,578	-\$2,252,795	-\$2,266,763
Warren	-\$35,282	-\$161,440	-\$271,066	-\$459,068	-\$463,504
Warrick	-\$190,574	-\$908,151	-\$1,527,664	-\$2,604,404	-\$2,544,675
Washington	-\$92,452	-\$429,619	-\$721,352	-\$1,225,761	-\$1,224,768
Wayne	-\$219,391	-\$1,044,557	-\$1,756,970	-\$2,995,066	-\$2,928,854
Wells	-\$129,474	-\$589,823	-\$990,523	-\$1,675,548	-\$1,695,904
White	-\$122,213	-\$565,443	-\$950,967	-\$1,611,481	-\$1,606,942
Whitley	-\$142,805	-\$652,601	-\$1,095,808	-\$1,855,195	-\$1,874,451
Total	-\$39,338,594	-\$207,735,233	-\$348,878,800	-\$607,982,522	-\$559,402,150

County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-1.4%	-2.1%	-3.2%	-2.3%	-4.0%
Allen	-2.1%	-3.1%	-4.8%	-3.5%	-6.1%
Bartholomew	-1.7%	-2.5%	-3.9%	-2.9%	-4.9%
Benton	-0.9%	-1.4%	-2.1%	-1.5%	-2.7%
Blackford	-1.3%	-1.9%	-2.9%	-2.1%	-3.7%
Boone	-1.7%	-2.6%	-3.9%	-2.9%	-5.0%
Brown	-2.2%	-3.2%	-4.9%	-3.6%	-6.2%
Carroll	-1.8%	-2.7%	-4.2%	-3.1%	-5.3%
Cass	-1.9%	-2.8%	-4.3%	-3.2%	-5.4%
Clark	-1.7%	-2.6%	-4.0%	-2.9%	-5.0%
Clay	-2.1%	-3.1%	-4.8%	-3.5%	-6.0%
Clinton	-1.5%	-2.2%	-3.4%	-2.5%	-4.3%
Crawford	-2.6%	-3.9%	-5.9%	-4.4%	-7.5%
Daviess	-1.6%	-2.3%	-3.6%	-2.6%	-4.5%
Dearborn	-9.0%	-13.2%	-19.8%	-14.8%	-25.3%
Decatur	-1.9%	-2.8%	-4.3%	-3.2%	-5.4%
De Kalb	-1.6%	-2.4%	-3.7%	-2.8%	-4.7%
Delaware	-2.0%	-2.9%	-4.5%	-3.3%	-5.7%
Dubois	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Elkhart	-1.8%	-2.6%	-4.0%	-3.0%	-5.1%
Fayette	-2.0%	-3.0%	-4.6%	-3.4%	-5.8%
Floyd	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Fountain	-1.5%	-2.3%	-3.5%	-2.6%	-4.4%
Franklin	-1.7%	-2.5%	-3.8%	-2.8%	-4.9%
Fulton	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Gibson	-1.0%	-1.5%	-2.4%	-1.7%	-3.0%

County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Grant	-1.9%	-2.8%	-4.3%	-3.2%	-5.5%
Greene	-1.7%	-2.5%	-3.9%	-2.9%	-4.9%
Hamilton	-1.9%	-2.7%	-4.2%	-3.1%	-5.3%
Hancock	-2.0%	-3.0%	-4.6%	-3.4%	-5.9%
Harrison	-13.0%	-19.0%	-28.5%	-21.4%	-36.4%
Hendricks	-2.0%	-3.0%	-4.7%	-3.4%	-5.9%
Henry	-1.9%	-2.8%	-4.4%	-3.2%	-5.5%
Howard	-1.5%	-2.2%	-3.4%	-2.5%	-4.3%
Huntington	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Jackson	-1.8%	-2.7%	-4.2%	-3.1%	-5.3%
Jasper	-2.0%	-3.0%	-4.6%	-3.4%	-5.8%
Jay	-1.5%	-2.1%	-3.3%	-2.4%	-4.2%
Jefferson	-0.9%	-1.4%	-2.1%	-1.6%	-2.7%
Jennings	-1.9%	-2.8%	-4.4%	-3.2%	-5.5%
Johnson	-1.6%	-2.4%	-3.6%	-2.7%	-4.6%
Knox	-1.1%	-1.7%	-2.5%	-1.9%	-3.2%
Kosciusko	-1.4%	-2.1%	-3.2%	-2.4%	-4.1%
Lagrange	-1.9%	-2.8%	-4.4%	-3.2%	-5.5%
Lake	-3.4%	-5.0%	-7.5%	-5.6%	-9.5%
LaPorte	-2.7%	-3.9%	-5.9%	-4.4%	-7.5%
Lawrence	-1.8%	-2.7%	-4.1%	-3.0%	-5.2%
Madison	-3.4%	-4.9%	-7.5%	-5.6%	-9.5%
Marion	-2.9%	-4.2%	-6.5%	-4.8%	-8.2%
Marshall	-1.3%	-2.0%	-3.0%	-2.2%	-3.8%
Martin	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Miami	-2.1%	-3.1%	-4.7%	-3.5%	-5.9%
Monroe	-2.1%	-3.0%	-4.7%	-3.4%	-5.9%
Montgomery	-1.6%	-2.4%	-3.6%	-2.7%	-4.6%
Morgan	-2.6%	-3.9%	-6.0%	-4.4%	-7.5%
Newton	-0.9%	-1.3%	-2.0%	-1.5%	-2.6%
Noble	-1.6%	-2.3%	-3.5%	-2.6%	-4.5%
Ohio	-15.5%	-22.6%	-34.0%	-25.5%	-43.4%
Orange	-7.5%	-10.9%	-16.5%	-12.3%	-21.0%
Owen	-1.6%	-2.3%	-3.6%	-2.7%	-4.6%
Parke	-2.0%	-3.0%	-4.6%	-3.4%	-5.9%
Perry	-1.8%	-2.6%	-4.0%	-3.0%	-5.1%
Pike	-0.8%	-1.2%	-1.8%	-1.3%	-2.3%
Porter	-1.0%	-1.5%	-2.3%	-1.7%	-2.9%
Posey	-1.1%	-1.6%	-2.4%	-1.8%	-3.0%
Pulaski	-1.9%	-2.7%	-4.2%	-3.1%	-5.3%
Putnam	-2.0%	-2.9%	-4.5%	-3.3%	-5.7%
Randolph	-1.6%	-2.3%	-3.6%	-2.6%	-4.5%
	-1.6%	-2.3%	-3.6%	-2.6%	-4.5%
Ripley Rush				-2.4%	-4.5% -4.0%
	-1.4%	-2.1%	-3.2%		
St. Joseph	-2.2%	-3.2% -2.6%	-4.9%	-3.6%	-6.2% 5.19/
Scott	-1.8%		-4.1%	-3.0%	-5.1%
Shelby	-5.2%	-7.7%	-11.6%	-8.6%	-14.7%
Spencer	-1.2%	-1.8%	-2.8%	-2.1%	-3.5%
Starke	-1.3%	-1.9%	-3.0%	-2.2%	-3.8%
Steuben	-1.7%	-2.5%	-3.8%	-2.8%	-4.8%
Sullivan	-0.9%	-1.3%	-2.0%	-1.5%	-2.5%
Switzerland	-17.5%	-25.4%	-38.2%	-28.6%	-48.8%
Tippecanoe	-1.6%	-2.4%	-3.7%	-2.8%	-4.7%
Tipton	-1.6%	-2.4%	-3.7%	-2.7%	-4.6%
Union	-1.3%	-2.0%	-3.0%	-2.2%	-3.8%
/anderburgh	-2.9%	-4.3%	-6.5%	-4.8%	-8.2%
Vermillion	-1.1%	-1.6%	-2.5%	-1.8%	-3.2%
Vigo	-2.0%	-3.0%	-4.6%	-3.4%	-5.7%
Wabash	-2.0%	-3.0%	-4.6%	-3.4%	-5.8%
Warren	-1.3%	-1.9%	-3.0%	-2.2%	-3.7%
Warrick	-1.4%	-2.1%	-3.3%	-2.4%	-4.2%
Washington	-1.5%	-2.1%	-3.5%	-2.6%	-4.2 % -4.4%
v v ası iii iyiUH	-1.4%	-2.0 /0	-0.0 /0	-2.0 /0	<del>-4.4</del> /0

Table 8, Con't					
County	V-Shaped	V Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Wells	-1.8%	-2.7%	-4.2%	-3.1%	-5.3%
White	-1.5%	-2.3%	-3.5%	-2.6%	-4.4%
Whitley	-1.6%	-2.3%	-3.6%	-2.6%	-4.5%
Average (unweighted)	-2.4%	-3.5%	-5.3%	-3.9%	-6.8%

Individual county experiences vary significantly, from a low of 0.8 percent to a high of 48.8 percent across the remainder of 2020. Some of the variability is obvious, with the presence of a casino or racino placing an individual county at risk of deep revenue losses. Again, we emphasize that we do not know the terms or magnitude of revenue sharing arrangements, which might result in some share of tax revenues allocated to casino counties further allocated to other counties. Nonetheless, losses to counties that host casinos, racinos, or riverboat gaming facilities are at extraordinary risk of tax losses in the next two years.

#### Considerations

In this section, we have reported the fiscal impacts to state and local governments of five different economic scenarios for COVID-19 through calendar year 2021. This is designed to be useful for several purposes. First, the state-level impacts potentially inform elected officials at the state and federal level about the potential magnitude of revenue losses. Which scenario is most likely to reflect current conditions will become more apparent in the coming months.

This study is also designed to help local policymakers consider budget constraints for the coming years. The data in *Tables 6*, 7 and 8 provide some useful insight into these matters. Conducting an analysis of sub-county tax distribution would have required many months, as Department of Local Government Finance data are not structured to accommodate such analysis. In view of the urgency of the matter, we have aggregated these data to the county level, across 17 local taxes, each with different distributions to county and municipal governments. At the very least, the share of tax revenue losses reported by county, in *Table 8* is sufficient to inform budget planning.

To support more detailed budget considerations, we report individual tax impacts in the appendix of this report. From that data, local officials should be able to assess tax effects across each of these scenarios. We remind the reader that by far the greatest uncertainty surrounding revenue collections in the coming years involves the path of the economy, not detailed distribution calculations. The sole circumstance where this may not be true is for small casino counties, such as Dearborn, Harrison, Ohio and Switzerland Counties, where a large share of tax losses may actually be part of an intergovernmental revenue sharing arrangement.

Components of the estimates provided above include individual tax elasticities and a separate treatment of taxes levied on those industries hardest hit by COVID-19 social distancing and stay at home orders. Aggregating the tax revenues to the county level allow for differing impacts because the composition of taxes varies non-trivially across Indiana counties. Despite this, the unknown path of the economy makes it useful for us to describe in more detail four broad considerations that require additional consideration in evaluating the impact of this pandemic.

These are the differences in local economic conditions, the differences across counties in the share of revenue from each tax, the existing fiscal capacity of each county and finally how expenditures may influence budgets. It is to these issues we now turn our attention.

#### The Roles of Different Local Economies

Our five scenarios begin with five alternative paths of economic disruption, each based on Indiana's economy. However, individual counties experience economic growth and disruption differently than the state as a whole. In order to capture those differences, we modeled the contemporaneous elasticity of state and county Gross Domestic Product from 2001 to 2018. In this model, we estimate the responsiveness of each county's GDP to a 1 percent change in state GDP. That model was simply:

$$log(GDP_{i,t}) = \alpha + E_i log(INGDP_t) + e_{i,t}$$

...where the Gross Domestic Product in county i, in year t, is a function of Indiana Gross Domestic Product in year t, and a stochastic term. Both values were transformed into logarithmic form for ease of interpretation. This yields short run elasticity of GDP in each county, relative to the state.

The values ranged from 1.2 in Marion County, to 0.69 in Union County. The interpretation of this range is that when state GDP changes by 1.0 percent, the GDP in Marion County changes by 1.2 percent in the same direction. That same 1.0 percent change in state GDP would result in only a 0.69 percent change in Union County GDP.

These values were estimated using data from 2001 to 2018, the only years where county-level GDP are available from Bureau of Economic Analysis. Indeed, these data were published in December 2019, making this the first published county-level elasticity estimate for Indiana.

The response of county-level GDP to changes in state GDP offers insight into the differences between the state and county economies across the state. However, there are features of this downturn which may lessen that relationship for some counties. The main feature of this are single, large employers in leisure and hospitality.

Figure 3 displays the county-level variation of employment in the "at-risk" sectors of arts, entertainment, recreation, and accommodations and food service.

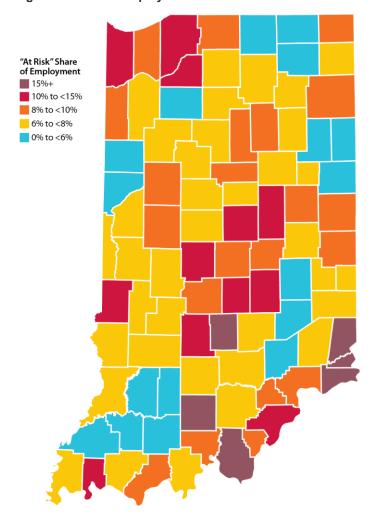


Figure 3. Share of Employment in "At Risk" Sectors

Source: BEA, author's calculations

# Considerations Regarding Differences in County Tax Structure

A few counties are extremely reliant on volatile revenue sources that have been particularly impacted by the pandemic. Rural counties with casinos and large urban counties with innkeepers and food and beverages taxes are disproportionately affected. For example, there are eight counties where more than half of tax revenue come from non-property tax instruments. While most of these host gaming facilities, and may share a portion of their gaming revenues, these places face more volatility in tax revenues.

There is also some evidence that counties with larger shares of their employment in "at-risk" sectors rely more heavily upon non-property tax revenues. This may be due to a lower capital to labor ratio in non-manufacturing firms. This lower capital to labor ratio would result in lower Gross Assessed Value per worker in these counties, forcing them to shift tax burdens to income and consumption taxes (e.g. Food & Beverage). This would increase risk across both domains of economic and tax structure for these counties. See *Figure 4*.



Figure 4. Correlation Between Non-Property Tax Share and County Economic Structure

The map of county reliance on non-property tax (see *Figure 5*) is similar to that of the "at-risk" employment as reflected in the scatterplot above.

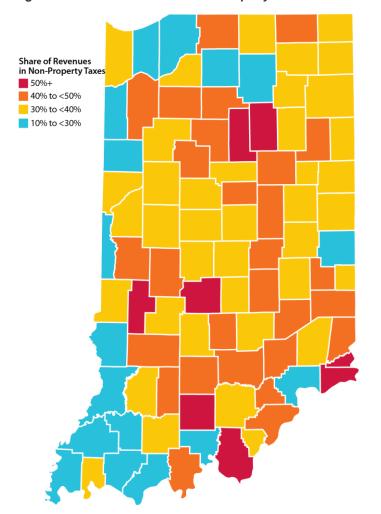


Figure 5. Share of Revenues in Non-Property Taxes

Source: DLGF, author's calculations

## **How Does Existing Budget Stress Effect Local**

#### **Governments?**

DeBoer (forthcoming) conducted an important analysis of local government finance in Indiana. This work compared the taxing capacity in each county (property, income, and other revenue potential) against the cost of providing key services (education, road mileage and population). The result is the DeBoer Index, which provides an estimate of the additional available revenue capacity minus cost requirements in each Indiana county. See *Figure 6*.

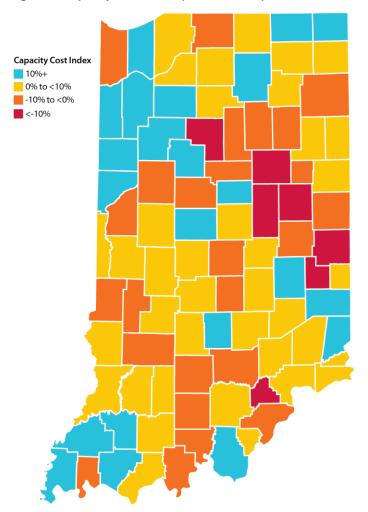


Figure 6. Capacity Cost Index (DeBoer Index)

Source: DeBoer (forthcoming)

The DeBoer Index is an important mechanism to view the available slack in potential tax revenues that could be used to buffer declines in economic activity and tax revenue through the ongoing effects of COVID-19. Communities with a high index can more readily withstand revenue losses without impacting key services. Those communities with low values on the DeBoer Index have almost no buffer with which to absorb tax revenue losses without affecting public services.

Unfortunately, there is a modest negative correlation between the DeBoer Index and the share of non-property tax revenue. One likely reason for this is the very high correlation between the DeBoer Index and property tax cap credits (see Figure 4 in DeBoer, forthcoming). So, counties with existing fiscal stress already rely on more volatile tax instruments. See *Figure 7*.



Figure 7, DeBoer Index and Non-Property Tax Share

The combination of exposure to 'at-risk' economic sectors, the reliance on more volatile tax instruments, and a lower ranking on the DeBoer Index provide insight into the likely risk of tax revenue losses. Our estimate of county level income tax elasticity reflects a combination of the first two factors, along with income distribution differences across counties. This is then applied to income taxes as the largest non-property local tax source of revenue.

While we have considered the tax instrument and economic composition in our rankings, we have not fully modeled all potential risk to revenues. The nature of a global pandemic is that it imposes uncertainty about household and business consumption and investment. Our analysis does not consider long-term changes to consumption or investment patterns, or regional variation in the extent of the disease. These factors add risk beyond that of the economic and fiscal considerations presented thus far.

To offer additional insight, we consider unanticipated risk to fiscal health. To do so, we use these four categories: "at-risk" employment share, non-property tax share, the DeBoer Index and relative tax revenue losses to rank each Indiana county.

The most at-risk counties meet two obvious criteria. They are first, heavily reliant upon gaming revenues. So, Orange, Madison, Ohio, and Switzerland counties are the top four at-risk counties. Dearborn and Lake counties are among the most at-risk 15 counties. Second, counties that have experienced significant

budget risk due to manufacturing job losses also rank high. These include Wabash, St. Joseph, Grant, Fayette, Lake, Delaware and Vigo counties.

Counties with modest risk are small, rural, non-casino hosting counties such as Pike, Benton, Gibson, Posey, Warren, Sullivan, Kosciusko, Newton, and Rush counties. These are the least 'at-risk' counties in our overall fiscal measure. See *Appendix Table A12* for county-level measures of these indicators.

Again, this fiscal risk covers more than just the loss of tax dollars modeled in this study. It includes how much potential revenue versus public service costs each county faces (the DeBoer Index). It also includes unanticipated risk across the 'at-risk' industries and local tax mix. Our final analysis considers expected impacts to local government expenditures that are not modeled in this analysis.

## **COVID-19 Effects on Local Government Expenditures**

Budget details across county, municipal and special districts are not readily available in Indiana. Thus, modeling potential impacts across budget areas is not readily feasible. Moreover, the prioritization of individual budget items likely varies across Indiana's local governments. As a consequence, we have little empirical insight into the budget effects of COVID-19. We can however, speculate intelligently over the likely expenditure effects related to the disease. We organize this section to review additional costs for personnel, costs related to the purchase of equipment or material and other financial costs associated with the disease.

Personnel comprise the largest share of local government expenditures so nearly every new cost involves some personnel-related actions. However, here we focus on direct additional wage costs of the disease and local government response to the disease. In the immediate term we observe several challenges to wage costs by state and local governments.

The direct effects of the disease and quarantine of infected staff may result in over-time requirements, particularly among essential public services such as police and fire. Heightened demand for some services, including EMS, may also strain expected budgets of local government. We also anticipate COVID-19 reducing the productivity of many workers. Non-essential personnel working remotely may be unable to perform some basic portions of their jobs, or may be less effective due to lack of internet availability or other technology to support their work.

While there is compelling evidence of higher levels of productivity while working from home, no analysis of government services have been evaluated.<sup>2</sup> Also, many workers at home may face child care duties which limit their productivity or constrain their hours of work. The closure of schools due to COVID-19 imposes cost on local government workers of whom 7 percent or more are likely have children under the age of 12.

Productivity may be reduced due to strict social distancing guidelines. Workers will need to be trained in appropriate social distancing practices and enforcement guidelines. With current guidelines recommending offices be open for appointments, the time lost due to queuing will affect productivity. Individual government workers may process fewer licenses or applications than in pre-COVID-19 work. This would require more hours to complete the same quality and quantity of government services.

Lastly, any additional requirements may impose higher costs on state and local governments. Compliance with executive orders, such as taking temperatures of employees, or enforcing social distancing, requires additional duties on workers and supervisors. Controlling entrances or managing capacity at public buildings or events, cleaning or disinfecting surfaces, and other tasks reduce the quality and quantity of other public services.

State and local governments will also face requirements to purchase additional supplies and equipment. In addition to workplace technology required to complete tasks remotely, state and local governments will face additional costs for disinfectants, personal protective equipment, soap, and contracted disinfecting of offices and workspaces. Governments may be forced to pay for individual COVID-19 testing, and for workplace testing of temperature, etc. Additional training costs are also likely to impact budgets.

Local governments may need to modify existing workplaces with screens and shields to reduce transmission risk among workers and clients. Likewise, new technologies to track and evaluate performance of remote workers may be needed. Technology to secure supervisor approval of purchases and other routine, often in person practices, move to remote locations.

Finally, we anticipate local governments will face higher healthcare costs immediately, as workers become ill from COVID-19. These may be very large, depending on the number of employees affected

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<sup>&</sup>lt;sup>2</sup> See Bloom, Nicholas, James Liang, John Roberts, and Zhichun Jenny Ying. "Does working from home work? Evidence from a Chinese experiment." The Quarterly Journal of Economics 130, no. 1 (2015): 165-218.

and the severity of illness. In the short term, these costs will be felt most acutely by local governments whose healthcare plans are self-insured. This may be particularly difficult for smaller, self-insured governments. Over the longer term, we should anticipate higher healthcare insurance costs as insurance companies assess the incremental cost of COVID-19 on the healthcare costs of the population.

In reviewing the effect of COVID-19, this study focuses primarily on tax revenues, but it should also be clear that the cost of maintaining or expanding key public services will rise in the short run. Even if long-term operations enjoy some productivity gains from the introduction of technology, the cost of this will be borne in the short run. Moreover, we anticipate significant increases in the cost of employee health care to affect state and especially self-insured local governments in both the short and long term.

## **Summary**

This study presents five economic scenarios surrounding the COVID-19 global pandemic. These scenarios account for lost economic activity in 2020 and 2021. These estimates are for a deep and lengthy downturn, and each of our scenarios are among the seven worst since the start of the Great Depression. We evaluate scenarios where GDP declines in 2020 range from 2.5 percent to 7.2 percent. While we generally anticipate improved economic conditions in 2021, our most optimistic scenario places GDP at only 2.0 percent above that of 2019. Our most pessimistic scenario considers GDP in 2021 at -2.0 percent beneath the 2019 level.

Our scenarios reflect a state economy that is deeply damaged by the global pandemic. Our middle scenarios are close to the Congressional Budget Office projections for the year. Though we believe these offer a strong starting point from which to assess fiscal conditions for the state, we caution that in the very few weeks since we began this study economic conditions have degraded more rapidly than anticipated.

For each scenario, we estimate the tax revenue impact for the state of Indiana across sales taxes, personal and corporate income taxes and 'other' tax revenues. For calendar year 2020, we expect tax losses to range from 3.8 percent to 10.9 percent of total revenues. In 2021, we anticipate tax revenues will still range from 0.7 percent to 9.1 percent beneath those of 2019. Our scenarios reflect a state which will not fully recover from this pandemic before 2022, if not much longer.

Most of our focus is on local tax revenues for county and municipal governments. We aggregate these to the county level due to data limitations. For this estimate, we calculate non-property tax losses for all local governments that range from \$240 million to \$700 million in 2020. By the end of 2021, we anticipate tax revenues will rebound, but remain beneath the 2019 levels by as little as \$39 million and as much as \$559 million.

County level tax losses comprise a smaller share of total revenues, ranging from losses of 2.5 percent to 6.8 percent across the five scenarios. However, individual county experiences vary profoundly. In just 2020, we anticipate county level revenue losses to range from less than 1.0 percent of total tax revenue to more than 48 percent of total tax revenues.

The wide variation in anticipated tax losses for local governments can be attributed to variations in local economic structures, with a higher share of employment in the most "at-risk" sectors of recreation, eating and drinking establishments and accommodations. Variation in tax revenue losses can also be attributed to variation in the local share of non-property tax revenues, which is a local decision.

The largest element of county variation is the presence of a casino, racino, or riverboat gaming facility. Tax revenues from these facilities to these counties comprise a large share of taxes, however, much of these may be distributed to other regional governments through revenue sharing arrangements. So, the actual operating tax losses may be smaller for these communities than depicted in this study. They are still very large.

As part of this study, we discuss the role local economic structure plays in the variation of tax revenues among counties. This is primarily due to the share of employment in "at-risk" sectors, which increase exposure to disruption from this pandemic. We also examine the share of taxes in non-property tax instruments, and adapt the DeBoer Index of tax capacity and cost to our analysis. With this, we discuss the relative level of unanticipated risk to Indiana's county and municipal governments. We also discuss the largely unknown expenditure components related to COVID-19 that face state and local governments.

This work is designed to help state and local policymakers consider budgeting and fiscal options related to this global pandemic. We also hope that our work will help federal policymakers understand the risks of diminished public services to the Indiana economy.

This study has estimated several measures of tax and economic relationships, or elasticities. These relationships will be useful in updating this study as more information becomes available in the coming months.

There are other issues that require study. We believe it is important to better understand the role of fiscal adjustment during a business cycle, especially with regard to tax rates, and tax incentives. We think more comprehensive tax elasticity estimates are need for Indiana and other states.

Future research should chronical the scope and size of additional government expenditures due to COVID-19. Perhaps most importantly, any future research needs to more fully examine the impact of COVID-19 on long-term government costs, especially those related to the accrual of human capital by our youngest citizens.

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## **Technical Appendix**

Tables A1-A12

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$393,969	-\$583,075	-\$898,250	-\$661,868	-\$1,134,632
Allen	-\$5,521,586	-\$8,171,948	-\$12,589,216	-\$9,276,265	-\$15,902,168
Bartholomew	-\$1,516,841	-\$2,244,924	-\$3,458,397	-\$2,548,292	-\$4,368,501
Benton	-\$93,254	-\$138,016	-\$212,619	-\$156,667	-\$268,571
Blackford	-\$100,234	-\$148,346	-\$228,533	-\$168,393	-\$288,673
Boone	-\$1,657,172	-\$2,452,615	-\$3,778,352	-\$2,784,049	-\$4,772,655
Brown	-\$276,387	-\$409,053	-\$630,163	-\$464,331	-\$795,995
Carroll	-\$318,929	-\$472,015	-\$727,157	-\$535,800	-\$918,515
Cass	-\$631,265	-\$934,272	-\$1,439,284	-\$1,060,525	-\$1,818,043
Clark	-\$1,720,991	-\$2,547,067	-\$3,923,860	-\$2,891,266	-\$4,956,455
Clay	-\$375,826	-\$556,222	-\$856,883	-\$631,387	-\$1,082,378
Clinton	-\$477,537	-\$706,754	-\$1,088,783	-\$802,261	-\$1,375,305
Crawford	-\$49,639	-\$73,465	-\$113,177	-\$83,393	-\$142,960
Daviess	-\$329,497	-\$487,656	-\$751,254	-\$553,556	-\$948,953
Dearborn	-\$530,942	-\$785,794	-\$1,210,547	-\$891,982	-\$1,529,112
Decatur	-\$452,676	-\$669,961	-\$1,032,101	-\$760,496	-\$1,303,707
De Kalb	-\$765,250	-\$1,132,569	-\$1,744,769	-\$1,285,619	-\$2,203,919
Delaware	-\$1,110,716	-\$1,643,860	-\$2,532,434	-\$1,866,004	-\$3,198,863
Dubois	-\$473,231	-\$700,381	-\$1,078,966	-\$795,028	-\$1,362,904
Elkhart	-\$4,412,822	-\$6,530,976	-\$10,061,233	-\$7,413,540	-\$12,708,926
Fayette	-\$296,851	-\$439,339	-\$676,820	-\$498,709	-\$854,930
Floyd	-\$1,148,283	-\$1,699,460	-\$2,618,086	-\$1,929,116	-\$3,307,056
				-\$360,238	
Fountain	-\$214,427	-\$317,353	-\$488,895		-\$617,551 -\$778,745
Franklin	-\$270,398	-\$400,188	-\$616,506	-\$454,268	
Fulton	-\$315,278	-\$466,611	-\$718,834	-\$529,667	-\$908,000
Gibson	-\$196,706	-\$291,125	-\$448,490	-\$330,467	-\$566,514
Grant	-\$1,022,405	-\$1,513,159	-\$2,331,083	-\$1,717,640	-\$2,944,526
Greene	-\$340,872	-\$504,490	-\$777,188	-\$572,665	-\$981,711
Hamilton	-\$6,089,350	-\$9,012,238	-\$13,883,717	-\$10,230,108	-\$17,537,327
Hancock	-\$1,345,885	-\$1,991,910	-\$3,068,618	-\$2,261,087	-\$3,876,149
Harrison	-\$293,970	-\$435,076	-\$670,252	-\$493,870	-\$846,634
Hendricks	-\$2,679,054	-\$3,965,000	-\$6,108,243	-\$4,500,811	-\$7,715,676
Henry	-\$451,127	-\$667,668	-\$1,028,570	-\$757,894	-\$1,299,247
Howard	-\$1,148,478	-\$1,699,747	-\$2,618,529	-\$1,929,442	-\$3,307,615
Huntington	-\$498,832	-\$738,271	-\$1,137,337	-\$838,037	-\$1,436,636
Jackson	-\$677,921	-\$1,003,323	-\$1,545,660	-\$1,138,907	-\$1,952,412
Jasper	-\$701,922	-\$1,038,845	-\$1,600,382	-\$1,179,229	-\$2,021,536
Jay	-\$278,277	-\$411,850	-\$634,472	-\$467,506	-\$801,439
Jefferson	-\$65,567	-\$97,039	-\$149,492	-\$110,152	-\$188,832
Jennings	-\$502,483	-\$743,675	-\$1,145,662	-\$844,172	-\$1,447,151
Johnson	-\$1,590,733	-\$2,354,284	-\$3,626,870	-\$2,672,431	-\$4,581,310
Knox	-\$264,433	-\$391,361	-\$602,907	-\$444,247	-\$761,567
Kosciusko	-\$763,569	-\$1,130,082	-\$1,740,937	-\$1,282,795	-\$2,199,078
Lagrange	-\$509,444	-\$753,978	-\$1,161,533	-\$855,866	-\$1,467,200
Lake	-\$3,163,165	-\$4,681,484	-\$7,212,016	-\$5,314,117	-\$9,109,914
Laporte	-\$809,558	-\$1,198,146	-\$1,845,793	-\$1,360,058	-\$2,331,528
Lawrence	-\$518,506	-\$767,389	-\$1,182,194	-\$871,090	-\$1,493,297
Madison	-\$1,537,530	-\$2,275,545	-\$3,505,569	-\$2,583,051	-\$4,428,087
Marion	-\$18,924,699	-\$28,008,555	-\$43,148,314	-\$31,793,494	-\$54,503,133
Marshall	-\$460,021	-\$680,831	-\$1,048,847	-\$772,835	-\$1,324,860
Martin	-\$111,732	-\$165,363	-\$254,748	-\$187,709	-\$321,787
Miami	-\$505,629	-\$748,331	-\$1,152,835	-\$849,457	-\$1,456,212
Monroe	-\$1,608,521	-\$2,380,610	-\$3,667,427	-\$2,702,315	-\$4,632,539
Montgomery	-\$610,379	-\$903,360	-\$1,391,663	-\$1,025,436	-\$1,757,891
Morgan	-\$1,609,348	-\$2,381,835	-\$3,669,313	-\$2,703,705	-\$4,634,922
Newton	-\$93,261	-\$138,026	-\$212,635	-\$156,679	-\$268,592
Noble	-\$584,769	-\$865,458	-\$1,333,274	-\$982,412	-\$1,684,135

able A-1 Con't					
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Ohio	-\$46,024	-\$68,116	-\$104,935	-\$77,321	-\$132,549
Orange	-\$186,079	-\$275,397	-\$424,261	-\$312,613	-\$535,908
Owen	-\$159,295	-\$235,756	-\$363,192	-\$267,615	-\$458,769
Parke	-\$233,950	-\$346,246	-\$533,407	-\$393,037	-\$673,777
Perry	-\$215,294	-\$318,635	-\$490,870	-\$361,694	-\$620,047
Pike	-\$58,875	-\$87,134	-\$134,234	-\$98,909	-\$169,559
Porter	-\$826,911	-\$1,223,829	-\$1,885,358	-\$1,389,211	-\$2,381,505
Posey	-\$228,447	-\$338,101	-\$520,859	-\$383,791	-\$657,927
Pulaski	-\$259,852	-\$384,582	-\$592,464	-\$436,552	-\$748,375
Putnam	-\$487,781	-\$721,916	-\$1,112,141	-\$819,472	-\$1,404,810
Randolph	-\$315,640	-\$467,147	-\$719,659	-\$530,275	-\$909,043
Ripley	-\$306,833	-\$454,113	-\$699,579	-\$515,479	-\$883,679
Rush	-\$223,422	-\$330,664	-\$509,402	-\$375,349	-\$643,455
St. Joseph	-\$4,759,008	-\$7,043,333	-\$10,850,539	-\$7,995,134	-\$13,705,944
Scott	-\$286,270	-\$423,679	-\$652,695	-\$480,933	-\$824,457
Shelby	-\$508,395	-\$752,424	-\$1,159,140	-\$854,103	-\$1,464,177
Spencer	-\$137,202	-\$203,058	-\$312,820	-\$230,499	-\$395,141
Starke	-\$216,246	-\$320,044	-\$493,041	-\$363,294	-\$622,789
Steuben	-\$518,271	-\$767,041	-\$1,181,657	-\$870,695	-\$1,492,620
Sullivan	-\$52,502	-\$77,702	-\$119,704	-\$88,203	-\$151,204
Switzerland	-\$48,729	-\$72,119	-\$111,103	-\$81,865	-\$140,340
Tippecanoe	-\$1,800,547	-\$2,664,810	-\$4,105,247	-\$3,024,919	-\$5,185,576
Tipton	-\$300,850	-\$445,258	-\$685,939	-\$505,428	-\$866,449
Union	-\$70,558	-\$104,425	-\$160,872	-\$118,537	-\$203,206
Vanderburgh	-\$1,992,172	-\$2,948,414	-\$4,542,151	-\$3,346,848	-\$5,737,455
Vermillion	-\$137,974	-\$204,201	-\$314,580	-\$231,796	-\$397,365
Vigo	-\$1,315,442	-\$1,946,854	-\$2,999,207	-\$2,209,942	-\$3,788,472
Wabash	-\$655,030	-\$969,444	-\$1,493,467	-\$1,100,450	-\$1,886,485
Warren	-\$119,294	-\$176,555	-\$271,990	-\$200,414	-\$343,567
Warrick	-\$363,108	-\$537,400	-\$827,887	-\$610,022	-\$1,045,752
Washington	-\$309,210	-\$457,631	-\$704,999	-\$519,473	-\$890,525
Wayne	-\$654,658	-\$968,894	-\$1,492,620	-\$1,099,825	-\$1,885,415
Wells	-\$454,402	-\$672,515	-\$1,036,037	-\$763,396	-\$1,308,678
White	-\$406,082	-\$601,002	-\$925,868	-\$682,218	-\$1,169,517
Whitley	-\$464,535	-\$687,512	-\$1,059,140	-\$780,419	-\$1,337,861
Total	-\$92,531,031	-\$136,945,927	-\$210,970,752	-\$155,452,133	-\$266,489,37

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$78,794	-\$346,693	-\$583,075	-\$977,044	-\$1,008,561
Allen	-\$1,104,317	-\$4,858,996	-\$8,171,948	-\$13,693,534	-\$14,135,26°
Bartholomew	-\$303,368	-\$1,334,820	-\$2,244,924	-\$3,761,765	-\$3,883,112
Benton	-\$18,651	-\$82,063	-\$138,016	-\$231,270	-\$238,730
Blackford	-\$20,047	-\$88,206	-\$148,346	-\$248,580	-\$256,598
Boone	-\$331,434	-\$1,458,311	-\$2,452,615	-\$4,109,786	-\$4,242,360
Brown	-\$55,277	-\$243,221	-\$409,053	-\$685,440	-\$707,551
Carroll	-\$63,786	-\$280,657	-\$472,015	-\$790,943	-\$816,458
Cass	-\$126,253	-\$555,513	-\$934,272	-\$1,565,537	-\$1,616,038
Clark	-\$344,198	-\$1,514,472	-\$2,547,067	-\$4,268,059	-\$4,405,738
Clay	-\$75,165	-\$330,727	-\$556,222	-\$932,048	-\$962,114
Clinton	-\$95,507	-\$420,232	-\$706,754	-\$1,184,291	-\$1,222,493
Crawford	-\$9,928	-\$43,682	-\$73,465	-\$123,104	-\$127,075
Daviess	-\$65,899	-\$289,958	-\$487,656	-\$817,154	-\$843,514
Dearborn	-\$106,188	-\$467,229	-\$785,794	-\$1,316,735	-\$1,359,211
Decatur	-\$90,535	-\$398,355	-\$669,961	-\$1,122,637	-\$1,158,851
De Kalb	-\$153,050	-\$673,420	-\$1,132,569	-\$1,897,819	-\$1,959,039
Delaware	-\$222,143	-\$977,430	-\$1,643,860	-\$2,754,577	-\$2,843,434
Dubois	-\$94,646	-\$416,443	-\$700,381	-\$1,173,612	-\$1,211,471
Elkhart	-\$882,564	-\$3,883,283	-\$6,530,976	-\$10,943,798	-\$11,296,820
Fayette	-\$59,370	-\$261,229	-\$439,339	-\$736,190	-\$759,938

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Floyd	-\$229,657	-\$1,010,489	-\$1,699,460	-\$2,847,743	-\$2,939,606
Fountain	-\$42,885	-\$188,696	-\$317,353	-\$531,780	-\$548,934
Franklin	-\$54,080	-\$237,950	-\$400,188	-\$670,586	-\$692,218
Fulton	-\$63,056	-\$277,445	-\$466,611	-\$781,889	-\$807,111
Gibson	-\$39,341	-\$173,102	-\$291,125	-\$487,832	-\$503,568
Grant	-\$204,481	-\$899,716	-\$1,513,159	-\$2,535,564	-\$2,617,356
Greene	-\$68,174	-\$299,967	-\$504,490	-\$845,362	-\$872,632
Hamilton	-\$1,217,870	-\$5,358,628	-\$9,012,238	-\$15,101,587	-\$15,588,73
Hancock	-\$269,177	-\$1,184,379	-\$1,991,910	-\$3,337,795	-\$3,445,465
Harrison	-\$58,794	-\$258,694	-\$435,076	-\$729,046	-\$752,563
Hendricks	-\$535,811	-\$2,357,568	-\$3,965,000	-\$6,644,054	-\$6,858,379
Henry	-\$90,225	-\$396,992	-\$667,668	-\$1,118,796	-\$1,154,886
Howard	-\$229,696	-\$1,010,660	-\$1,699,747	-\$2,848,224	-\$2,940,103
Huntington	-\$99,766	-\$438,972	-\$738,271	-\$1,237,103	-\$1,277,009
Jackson	-\$135,584	-\$596,570	-\$1,003,323	-\$1,681,244	-\$1,735,478
Jasper	-\$140,384	-\$617,691	-\$1,038,845	-\$1,740,767	-\$1,796,921
Jay	-\$55.655	-\$244,884	-\$411,850	-\$690,128	-\$712,390
Jefferson	-\$13,113	-\$57,699	-\$97,039	-\$162,606	-\$167,851
Jennings	-\$100,497	-\$442,185	-\$743,675	-\$1,246,158	-\$1,286,357
Johnson	-\$318,147	-\$1,399,845	-\$2,354,284	-\$3,945,017	-\$4,072,275
Knox	-\$52,887	-\$232,701	-\$391,361	-\$655,793	-\$676,948
Kosciusko	-\$152,714	-\$671,940	-\$1,130,082	-\$1,893,650	-\$1,954,736
Lagrange	-\$101,889	-\$448,311	-\$753,978	-\$1,263,422	-\$1,304,177
Lake	-\$632,633	-\$2,783,585	-\$4,681,484	-\$7,844,648	-\$8,097,702
LaPorte	-\$161,912	-\$712,411	-\$1,198,146	-\$2,007,705	-\$2,072,469
Lawrence	-\$103,701	-\$456,285	-\$767,389	-\$1,285,895	-\$1,327,376
Madison	-\$307,506	-\$1,353,027	-\$2,275,545	-\$3,813,075	-\$3,936,077
Marion	-\$3,784,940	-\$16,653,735	-\$28,008,555	-\$46,933,254	-\$48,447,230
Marshall	-\$92,004	-\$404,818	-\$680,831	-\$1,140,851	-\$1,177,653
Martin	-\$22,346	-\$98,324	-\$165,363	-\$277,094	-\$286,033
Miami	-\$101,126	-\$444,954	-\$748,331	-\$1,253,961	-\$1,294,411
Monroe	-\$321,704	-\$1,415,498	-\$2,380,610	-\$3,989,131	-\$4,117,813
Montgomery	-\$122,076	-\$537,133	-\$903,360	-\$1,513,739	-\$1,562,569
Morgan	-\$321,870	-\$1,416,226	-\$2,381,835	-\$3,991,183	-\$4,119,931
Newton	-\$18,652	-\$82,070	-\$138,026	-\$231,288	-\$238,748
Noble	-\$116,954	-\$514,597	-\$865,458	-\$1,450,227	-\$1,497,009
Ohio	-\$9,205	-\$40,501	-\$68,116	-\$114,140	-\$117,822
Orange	-\$37,216	-\$163,750	-\$275,397	-\$461,477	-\$476,363
Owen	-\$31,859	-\$140,179	-\$235,756	-\$395,051	-\$407,794
Parke	-\$46,790	-\$205,876	-\$346,246	-\$580,197	-\$598,913
Perry	-\$43,059	-\$189,459	-\$346,246	-\$580,197	-\$551,152
Pike	-\$43,059 -\$11,775	-\$51,810	-\$318,635 -\$87,134	-\$533,929 -\$146,009	-\$351,152 -\$150,719
	-\$165,382	-\$727,682			
Porter			-\$1,223,829 -\$338,101	-\$2,050,740 -\$566,548	-\$2,116,893 -\$584,824
Posey	-\$45,689 \$51,070	-\$201,033 \$228,670	-\$338,101 \$394,592	-\$566,548 \$644,434	-\$584,824 \$665,222
Pulaski	-\$51,970	-\$228,670 \$420,247	-\$384,582 \$724,046	-\$644,434 \$1,200,607	-\$665,222
Putnam	-\$97,556	-\$429,247	-\$721,916	-\$1,209,697	-\$1,248,720
Randolph	-\$63,128	-\$277,763	-\$467,147	-\$782,787	-\$808,038
Ripley	-\$61,367	-\$270,013	-\$454,113	-\$760,945	-\$785,492
Rush	-\$44,684	-\$196,611	-\$330,664	-\$554,086	-\$571,960
St. Joseph	-\$951,802	-\$4,187,927	-\$7,043,333	-\$11,802,341	-\$12,183,06
Scott	-\$57,254	-\$251,917	-\$423,679	-\$709,949	-\$732,850
Shelby	-\$101,679	-\$447,387	-\$752,424	-\$1,260,819	-\$1,301,491
Spencer	-\$27,440	-\$120,737	-\$203,058	-\$340,260	-\$351,236
Starke	-\$43,249	-\$190,297	-\$320,044	-\$536,290	-\$553,590
Steuben	-\$103,654	-\$456,078	-\$767,041	-\$1,285,311	-\$1,326,773
Sullivan	-\$10,500	-\$46,201	-\$77,702	-\$130,204	-\$134,404
Switzerland	-\$9,746	-\$42,882	-\$72,119	-\$120,848	-\$124,747
Tippecanoe	-\$360,109	-\$1,584,481	-\$2,664,810	-\$4,465,357	-\$4,609,401
Tipton	-\$60,170	-\$264,748	-\$445,258	-\$746,109	-\$770,177
Union	-\$14,112	-\$62,091	-\$104,425	-\$174,983	-\$180,628
Vanderburgh	-\$398,434	-\$1,753,111	-\$2,948,414	-\$4,940,586	-\$5,099,960
Vermillion	-\$27,595	-\$121,417	-\$204,201	-\$342,175	-\$353,213
Vigo	-\$263,088	-\$1,157,589	-\$1,946,854	-\$3,262,296	-\$3,367,531

Table A-2 Con't					
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Wabash	-\$131,006	-\$576,426	-\$969,444	-\$1,624,473	-\$1,676,876
Warren	-\$23,859	-\$104,979	-\$176,555	-\$295,849	-\$305,393
Warrick	-\$72,622	-\$319,535	-\$537,400	-\$900,508	-\$929,557
Washington	-\$61,842	-\$272,105	-\$457,631	-\$766,841	-\$791,578
Wayne	-\$130,932	-\$576,099	-\$968,894	-\$1,623,552	-\$1,675,924
Wells	-\$90,880	-\$399,874	-\$672,515	-\$1,126,917	-\$1,163,269
White	-\$81,216	-\$357,353	-\$601,002	-\$1,007,084	-\$1,039,571
Whitley	-\$92,907	-\$408,791	-\$687,512	-\$1,152,047	-\$1,189,210
Total	-\$18,506,206	-\$81, <i>4</i> 27,308	-\$136,945,927	-\$229,476,958	-\$236,879,441

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	\$0	\$0	\$0	\$0	\$0
Allen	-\$1,389,310	-\$2,050,886	-\$3,175,565	-\$2,315,516	-\$3,969,456
Bartholomew	-\$331,705	-\$489,660	-\$758,183	-\$552,842	-\$947,729
Benton	\$0	\$0	\$0	\$0	\$0
Blackford	\$0	\$0	\$0	\$0	\$0
Boone	-\$113,051	-\$166,884	-\$258,402	-\$188,418	-\$323,002
Brown	-\$100,973	-\$149,056	-\$230,796	-\$168,289	-\$288,495
Carroll	\$0	\$0	\$0	\$0	\$0
Cass	-\$24,635	-\$36,367	-\$56,310	-\$41,059	-\$70,387
Clark	-\$329,126	-\$485,852	-\$752,287	-\$548,543	-\$940,359
Clay	\$0	\$0	\$0	\$0	\$0
Clinton	-\$9,806	-\$14,475	-\$22,413	-\$16,343	-\$28,016
Crawford	-\$16,009	-\$23,632	-\$36,591	-\$26,681	-\$45,739
Daviess	-\$38,982	-\$57,545	-\$89,102	-\$64,970	-\$111,377
Dearborn	-\$109,765	-\$162,034	-\$250,891	-\$182,942	-\$313,614
Decatur	-\$56,053	-\$82,745	-\$128,122	-\$93,422	-\$160,152
De Kalb	-\$79,749	-\$117,725	-\$182,284	-\$132,916	-\$227,856
Delaware	-\$162,142	-\$239,352	-\$370,610	-\$270,237	-\$463,263
Dubois	-\$91,960	-\$135,750	-\$210,194	-\$153,266	-\$262,742
Elkhart	-\$407,706	-\$601,851	-\$931,899	-\$679,510	-\$1,164,874
Fayette	-\$4,250	-\$6,274	-\$9,714	-\$7,083	-\$12,143
Floyd	-\$42,029	-\$62,043	-\$96,066	-\$70,048	-\$120,082
Fountain	\$0	\$0	\$0	\$0	\$0
Franklin	-\$15,428	-\$22,774	-\$35,263	-\$25,713	-\$44,079
Fulton	-\$8,114	-\$11,978	-\$18,546	-\$13,523	-\$23,183
Gibson	-\$58,570	-\$86,461	-\$133,875	-\$97,617	-\$167,343
Grant	-\$69,562	-\$102,687	-\$158,999	-\$115,936	-\$198,748
Greene	-\$6,545	-\$9,662	-\$14,961	-\$10,909	-\$18,701
Hamilton	-\$1,147,723	-\$1,694,258	-\$2,623,368	-\$1,912,872	-\$3,279,210
Hancock	-\$106,820	-\$157,686	-\$244,159	-\$178,033	-\$305,199
Harrison	-\$83,875	-\$123,815	-\$191,714	-\$139,792	-\$239,643
Hendricks	-\$603,764	-\$891,270	-\$1,380,031	-\$1,006,273	-\$1,725,039
Henry	-\$10,855	-\$16,024	-\$24,811	-\$18,091	-\$31,013
Howard	-\$181,712	-\$268,241	-\$415,341	-\$302,853	-\$519,176
Huntington	-\$35,846	-\$52,916	-\$81,935	-\$59,744	-\$102,418
Jackson	-\$117,647	-\$173,670	-\$268,908	-\$196,079	-\$336,135
Jasper	-\$39,122	-\$57,752	-\$89,422	-\$65,204	-\$111,778
Jay	-\$21,898	-\$32,325	-\$50,052	-\$36,496	-\$62,565
Jefferson	-\$58,537	-\$86,411	-\$133,798	-\$97,561	-\$167,248
Jennings	-\$9,431	-\$13,922	-\$21,557	-\$15,718	-\$26,946
Johnson	-\$114,893	-\$169,603	-\$262,611	-\$191,488	-\$328,264
Knox	-\$11,692	-\$17,259	-\$26.724	-\$19,486	-\$33,405
Kosciusko	-\$148,060	-\$218,564	-\$338,422	-\$246,766	-\$423,028
Lagrange	-\$143,191	-\$211,377	-\$327,293	-\$238,651	-\$409,117
Lake	-\$817,673	-\$1,207,041	-\$1,868,966	-\$1,362,788	-\$2,336,208
LaPorte	-\$295,123	-\$435,658	-\$674,568	-\$491,872	-\$843,210
Lawrence	-\$55,965	-\$82,615	-\$127,920	-\$93,275	-\$159,900
Madison	-\$140,144	-\$206,879	-\$320,328	-\$233,573	-\$400,410

able A-3 Con't					
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Marion	-\$12,637,821	-\$18,655,830	-\$28,886,447	-\$21,063,034	-\$36,108,059
Marshall	-\$75,622	-\$111,633	-\$172,851	-\$126,037	-\$216,064
Martin	\$0	\$0	\$0	\$0	\$0
Miami	-\$13,487	-\$19,909	-\$30,826	-\$22,478	-\$38,533
Monroe	-\$581,366	-\$858,207	-\$1,328,836	-\$968,943	-\$1,661,045
Montgomery	-\$56,439	-\$83,315	-\$129,004	-\$94,066	-\$161,256
Morgan	-\$43,113	-\$63,643	-\$98,544	-\$71,855	-\$123,180
Newton	\$0	\$0	\$0	\$0	\$0
Noble	-\$17,657	-\$26,065	-\$40,359	-\$29,428	-\$50,448
Ohio	-\$10,989	-\$16,221	-\$25,117	-\$18,315	-\$31,396
Orange	-\$268,536	-\$396,410	-\$613,796	-\$447,560	-\$767,245
Owen	-\$18,970	-\$28,003	-\$43,359	-\$31,616	-\$54,199
Parke	-\$32,185	-\$47,512	-\$73,566	-\$53,642	-\$91,958
Perry	-\$32,073	-\$47,346	-\$73,310	-\$53,455	-\$91,637
Pike	\$0	\$0	\$0	\$0	\$0
Porter	-\$290,728	-\$429,170	-\$664,521	-\$484,547	-\$830,651
Posey	-\$20,876	-\$30,817	-\$47,717	-\$34,793	-\$59,646
Pulaski	\$0	\$0	\$0	\$0	\$0
Putnam	-\$59,567	-\$87,932	-\$136,152	-\$99,278	-\$170,190
Randolph	-\$9,648	-\$14,242	-\$22,052	-\$16,079	-\$27,564
Ripley	-\$14,894	-\$21,987	-\$34,044	-\$24,824	-\$42,556
Rush	\$0	\$0	\$0	\$0	\$0
St. Joseph	-\$1,342,981	-\$1,982,496	-\$3,069,672	-\$2,238,302	-\$3,837,089
Scott	-\$52,505	-\$77,508	-\$120,012	-\$87,509	-\$150,015
Shelby	-\$63,396	-\$93,585	-\$144,905	-\$105,660	-\$181,132
Spencer	-\$109,851	-\$162,161	-\$251,087	-\$183,085	-\$313,859
Starke	-\$1,694	-\$2,500	-\$3,871	-\$2,823	-\$4,839
Steuben	-\$102,005	-\$150,578	-\$233,154	-\$170,008	-\$291,442
Sullivan	-\$10,101	-\$14,911	-\$23,088	-\$16,835	-\$28,860
Switzerland	-\$78,080	-\$115,260	-\$178,468	-\$130,133	-\$223,084
Tippecanoe	-\$562,567	-\$830,456	-\$1,285,867	-\$937,611	-\$1,607,333
Tipton	\$0	\$0	\$0	\$0	\$0
Union	-\$8,690	-\$12,828	-\$19,863	-\$14,483	-\$24,829
Vanderburgh	-\$1,068,669	-\$1,577,558	-\$2,442,671	-\$1,781,114	-\$3,053,339
Vermillion	-\$1,122	-\$1,656	-\$2,565	-\$1,870	-\$3,206
Vigo	-\$532,745	-\$786,433	-\$1,217,703	-\$887,909	-\$1,522,129
Wabash	-\$33,461	-\$49,395	-\$76,483	-\$55,769	-\$95,603
Warren	\$0	\$0	\$0	\$0	\$0
Warrick	-\$127,630	-\$188,406	-\$291,726	-\$212,717	-\$364,657
Washington	-\$10,929	-\$16,134	-\$24,981	-\$18,216	-\$31,227
Wayne	-\$141,717	-\$209,201	-\$323,924	-\$236,194	-\$404.904
Wells	\$0	\$0	\$0	\$0	\$0
White	-\$47.617	-\$70,291	-\$108,838	-\$79,361	-\$136,047
Whitley	\$0	\$0	\$0	\$0	\$0
Total	-\$26.089.167	-\$38.512.580	-\$59.632.382	-\$43.481.945	-\$74.540.478

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	\$0	\$0	\$0	\$0	\$0
Allen	-\$198,473	-\$1,157,758	-\$1,984,728	-\$3,440,195	-\$2,778,619
Bartholomew	-\$47,386	-\$276,421	-\$473,864	-\$821,365	-\$663,410
Benton	\$0	\$0	\$0	\$0	\$0
Blackford	\$0	\$0	\$0	\$0	\$0
Boone	-\$16,150	-\$94,209	-\$161,501	-\$279,935	-\$226,102
Brown	-\$14,425	-\$84,144	-\$144,248	-\$250,029	-\$201,947
Carroll	\$0	\$0	\$0	\$0	\$0
Cass	-\$3,519	-\$20,530	-\$35,194	-\$61,002	-\$49,271
Clark	-\$47,018	-\$274,271	-\$470,180	-\$814,978	-\$658,251
Clay	\$0	\$0	\$0	\$0	\$0
Clinton	-\$1,401	-\$8,171	-\$14,008	-\$24.281	-\$19.611

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Crawford	-\$2,287	-\$13,341	-\$22,870	-\$39,641	-\$32,017
Daviess	-\$5,569	-\$32,485	-\$55,689	-\$96,527	-\$77,964
Dearborn	-\$15,681	-\$91,471	-\$156,807	-\$271,799	-\$219,530
Decatur	-\$8,008	-\$46,711	-\$80,076	-\$138,799	-\$112,107
De Kalb	-\$11,393	-\$66,458	-\$113,928	-\$197,475	-\$159,499
Delaware	-\$23,163	-\$135,118	-\$231,631	-\$401,495	-\$324,284
Dubois	-\$13,137	-\$76,633	-\$131,371	-\$227,710	-\$183,920
Elkhart	-\$58,244	-\$339,755	-\$582,437	-\$1,009,557	-\$815,411
Fayette	-\$607	-\$3,542	-\$6,072	-\$10,524	-\$8,500
Floyd	-\$6,004	-\$35,024	-\$60,041	-\$104,071	-\$84,058
Fountain	\$0	\$0	\$0	\$0	\$0
Franklin	-\$2,204	-\$12,856	-\$22,040	-\$38,202	-\$30,855
Fulton	-\$1,159	-\$6,762	-\$11,592	-\$20,092	-\$16,228
Gibson	-\$8,367	-\$48,808	-\$83,672	-\$145,031	-\$117,140
Grant	-\$9,937	-\$57,968	-\$99,374	-\$172,248	-\$139,124
Greene	-\$935	-\$5,455	-\$9,351	-\$16,208	-\$13,091
Hamilton	-\$163,960	-\$956,436	-\$1,639,605	-\$2,841,982	-\$2,295,447
Hancock	-\$15,260	-\$89,016	-\$152,600	-\$264,506	-\$213,639
Harrison	-\$11,982	-\$69,896	-\$119,821	-\$207,691	-\$167,750
Hendricks	-\$86,252	-\$503,136	-\$862,520	-\$1,495,034	-\$1,207,527
Henry	-\$1,551	-\$9,046	-\$15,507	-\$26,878	-\$21,709
Howard	-\$25,959	-\$151,426	-\$259,588	-\$449,953	-\$363,423
Huntington	-\$5,121	-\$29,872	-\$51,209	-\$88,763	-\$71,693
Jackson	-\$16,807	-\$98,039	-\$168,067	-\$291,317	-\$235,294
Jasper	-\$5,589	-\$32,602	-\$55,889	-\$96,874	-\$78,244
Jay	-\$3,128	-\$18,248	-\$31,282	-\$54,223	-\$43,795
Jefferson	-\$8,362	-\$48,781	-\$83,624	-\$144,948	-\$117,074
Jennings	-\$1,347	-\$7,859	-\$13,473	-\$23,353	-\$18,862
Johnson	-\$16,413	-\$95,744	-\$164,132	-\$284,496	-\$229,785
Knox	-\$1,670	-\$9,743	-\$16,703	-\$28,951	-\$23,384
Kosciusko	-\$21,151	-\$123,383	-\$211,514	-\$366,624	-\$296,120
Lagrange	-\$20,456	-\$119,326	-\$204,558	-\$354,568	-\$286,382
Lake	-\$116,810	-\$681,394	-\$1,168,104	-\$2,024,714	-\$1,635,346
LaPorte	-\$42,160	-\$245,936	-\$421,605	-\$730,782	-\$590,247
Lawrence	-\$7,995	-\$46,638	-\$79,950	-\$138,580	-\$111,930
Madison	-\$20,021	-\$116,786	-\$200,205	-\$347,022	-\$280,287
Marion	-\$1,805,403	-\$10,531,517	-\$18,054,029	-\$31,293,651	-\$25,275,64
Marshall	-\$10,803	-\$63,019	-\$108,032	-\$187,255	-\$151,245
Martin	\$0	\$0	\$0	\$0	\$0
Miami	-\$1,927	-\$11,239	-\$19,267	-\$33,395	-\$26,973
Monroe	-\$83,052	-\$484,471	-\$830,523	-\$1,439,572	-\$1,162,732
Montgomery	-\$8,063	-\$47,033	-\$80,628	-\$139,755	-\$112,879
Morgan	-\$6,159	-\$35,927	-\$61,590	-\$106,756	-\$86,226
Newton	\$0	\$0	\$0	\$0	\$0
Noble	-\$2,522	-\$14,714	-\$25,224	-\$43,722	-\$35,314
Ohio	-\$2,522 -\$1,570	-\$14,714 -\$9,157	-\$25,224 -\$15,698	-\$43,722	-\$35,314
			· · ·		-\$537,072
Orange	-\$38,362	-\$223,780	-\$383,623	-\$664,946	
Owen	-\$2,710	-\$15,808	-\$27,099	-\$46,972	-\$37,939
Parke	-\$4,598	-\$26,821	-\$45,979	-\$79,697	-\$64,370
Perry	-\$4,582	-\$26,728	-\$45,819	-\$79,419	-\$64,146
Pike	\$0	\$0	\$0	\$0	\$0
Porter	-\$41,533	-\$242,273	-\$415,326	-\$719,898	-\$581,456
Posey	-\$2,982	-\$17,397	-\$29,823	-\$51,693	-\$41,752
Pulaski	\$0	\$0	\$0	\$0	\$0
Putnam	-\$8,510	-\$49,639	-\$85,095	-\$147,498	-\$119,133
Randolph	-\$1,378	-\$8,040	-\$13,782	-\$23,889	-\$19,295
Ripley	-\$2,128	-\$12,412	-\$21,278	-\$36,881	-\$29,789
Rush	\$0	\$0	\$0	\$0	\$0
St. Joseph	-\$191,854	-\$1,119,151	-\$1,918,545	-\$3,325,478	-\$2,685,963
Scott	-\$7,501	-\$43,754	-\$75,007	-\$130,013	-\$105,010
Shelby	-\$9,057	-\$52,830	-\$90,566	-\$156,981	-\$126,792
			-\$90,566 -\$156,930	-\$150,981	
Spencer	-\$15,693	-\$91,542	-\$156,930 -\$2,419	-φ∠1∠,UII	-\$219,702

Γable A-4 Con't					
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Steuben	-\$14,572	-\$85,004	-\$145,721	-\$252,583	-\$204,010
Sullivan	-\$1,443	-\$8,417	-\$14,430	-\$25,012	-\$20,202
Switzerland	-\$11,154	-\$65,066	-\$111,542	-\$193,340	-\$156,159
Tippecanoe	-\$80,367	-\$468,806	-\$803,667	-\$1,393,022	-\$1,125,133
Tipton	\$0	\$0	\$0	\$0	\$0
Union	-\$1,241	-\$7,242	-\$12,414	-\$21,518	-\$17,380
Vanderburgh	-\$152,667	-\$890,557	-\$1,526,669	-\$2,646,227	-\$2,137,337
Vermillion	-\$160	-\$935	-\$1,603	-\$2,778	-\$2,244
Vigo	-\$76,106	-\$443,954	-\$761,065	-\$1,319,179	-\$1,065,490
Wabash	-\$4,780	-\$27,884	-\$47,802	-\$82,856	-\$66,922
Warren	\$0	\$0	\$0	\$0	\$0
Warrick	-\$18,233	-\$106,358	-\$182,329	-\$316,036	-\$255,260
Washington	-\$1,561	-\$9,108	-\$15,613	-\$27,063	-\$21,859
Wayne	-\$20,245	-\$118,097	-\$202,452	-\$350,917	-\$283,433
Wells	\$0	\$0	\$0	\$0	\$0
White	-\$6,802	-\$39,680	-\$68,024	-\$117,908	-\$95,233
Whitley	\$0	\$0	\$0	\$0	\$0
Total	-\$3,727,024	-\$21,740,973	-\$37,270,239	-\$64,601,747	-\$52,178,334

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	\$0	\$0	\$0	\$0	\$0
Allen	-\$1,712,572	-\$2,528,082	-\$3,914,449	-\$2,854,286	-\$4,893,062
Bartholomew	\$0	\$0	\$0	\$0	\$0
Benton	\$0	\$0	\$0	\$0	\$0
Blackford	\$0	\$0	\$0	\$0	\$0
Boone	-\$410,117	-\$605,411	-\$937,410	-\$683,528	-\$1,171,763
Brown	-\$44,627	-\$65,879	-\$102,006	-\$74,379	-\$127,507
Carroll	\$0	\$0	\$0	\$0	\$0
Cass	\$0	\$0	\$0	\$0	\$0
Clark	\$0	\$0	\$0	\$0	\$0
Clay	\$0	\$0	\$0	\$0	\$0
Clinton	\$0	\$0	\$0	\$0	\$0
Crawford	\$0	\$0	\$0	\$0	\$0
Daviess	\$0	\$0	\$0	\$0	\$0
Dearborn	\$0	\$0	\$0	\$0	\$0
Decatur	\$0	\$0	\$0	\$0	\$0
De Kalb	\$0	\$0	\$0	\$0	\$0
Delaware	-\$454,855	-\$671,452	-\$1,039,668	-\$758,091	-\$1,299,585
Dubois	\$0	\$0	\$0	\$0	\$0
Elkhart	\$0	\$0	\$0	\$0	\$0
Fayette	\$0	\$0	\$0	\$0	\$0
Floyd	\$0	\$0	\$0	\$0	\$0
Fountain	\$0	\$0	\$0	\$0	\$0
Franklin	\$0	\$0	\$0	\$0	\$0
Fulton	\$0	\$0	\$0	\$0	\$0
Gibson	\$0	\$0	\$0	\$0	\$0
Grant	\$0	\$0	\$0	\$0	\$0
Greene	\$0	\$0	\$0	\$0	\$0
Hamilton	-\$2,992,055	-\$4,416,842	-\$6,838,982	-\$4,986,758	-\$8,548,727
Hancock	-\$236,350	-\$348,897	-\$540,228	-\$393,916	-\$675,285
Harrison	\$0	\$0	\$0	\$0	\$0
Hendricks	-\$1,501,899	-\$2,217,089	-\$3,432,912	-\$2,503,165	-\$4,291,140
Henry	-\$138,634	-\$204,650	-\$316,877	-\$231,056	-\$396,097
Howard	\$0	\$0	\$0	\$0	\$0
Huntington	\$0	\$0	\$0	\$0	\$0
Jackson	\$0	\$0	\$0	\$0	\$0
Jasper	\$0	\$0	\$0	\$0	\$0
Jay	\$0	\$0	\$0	\$0	\$0
Jefferson	\$0	\$0	\$0	\$0	\$0

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Jennings	\$0	\$0	\$0	\$0	\$0
Johnson	-\$267,552	-\$394,958	-\$611,548	-\$445,920	-\$764,435
Knox	\$0	\$0	\$0	\$0	\$0
Kosciusko	\$0	\$0	\$0	\$0	\$0
Lagrange	-\$25,636	-\$37,843	-\$58,596	-\$42,726	-\$73,245
Lake	\$0	\$0	\$0	\$0	\$0
LaPorte	\$0	\$0	\$0	\$0	\$0
Lawrence	\$0	\$0	\$0	\$0	\$0
Madison	-\$444,388	-\$656,001	-\$1,015,743	-\$740,646	-\$1,269,679
Marion	-\$10,898,492	-\$16,088,249	-\$24,910,838	-\$18,164,153	-\$31,138,547
Marshall	\$0	\$0	\$0	\$0	\$0
Martin	\$0	\$0	\$0	\$0	\$0
Miami	\$0	\$0	\$0	\$0	\$0 \$0
Monroe	-\$802,786	-\$1,185,066	-\$1,834,940	-\$1,337,977	-\$2,293,675
Montgomery	\$0	\$0	\$0	\$0	\$0
Morgan	-\$86,240	-\$127,306	-\$197,119	-\$143,733	-\$246,399
Newton	\$0	\$0	\$0	\$0	\$0
Noble	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0
Ohio	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0
	·				
Orange	-\$93,515	-\$138,045	-\$213,748	-\$155,858	-\$267,185
Owen	\$0	\$0	\$0	\$0	\$0
Parke	-\$18,778	-\$27,720	-\$42,922	-\$31,297	-\$53,652
Perry	\$0	\$0	\$0	\$0	\$0
Pike	\$0	\$0	\$0	\$0	\$0
Porter	\$0	\$0	\$0	\$0	\$0
Posey	\$0	\$0	\$0	\$0	\$0
Pulaski	\$0	\$0	\$0	\$0	\$0
Putnam	-\$19,755	-\$29,162	-\$45,154	-\$32,925	-\$56,442
Randolph	\$0	\$0	\$0	\$0	\$0
Ripley	\$0	\$0	\$0	\$0	\$0
Rush	\$0	\$0	\$0	\$0	\$0
St. Joseph	\$0	\$0	\$0	\$0	\$0
Scott	\$0	\$0	\$0	\$0	\$0
Shelby	-\$148,948	-\$219,876	-\$340,453	-\$248,247	-\$425,566
Spencer	\$0	\$0	\$0	\$0	\$0
Starke	\$0	\$0	\$0	\$0	\$0
Steuben	\$0	\$0	\$0	\$0	\$0
Sullivan	\$0	\$0	\$0	\$0	\$0
Switzerland	\$0	\$0	\$0	\$0	\$0
Tippecanoe	\$0	\$0	\$0	\$0	\$0
Tipton	\$0	\$0	\$0	\$0	\$0
Union	\$0	\$0	\$0	\$0	\$0
/anderburgh	-\$1,023,223	-\$1,510,471	-\$2,338,794	-\$1,705,371	-\$2,923,493
Vermillion	\$0	\$0	\$0	\$0	\$0
Vigo	-\$484,224	-\$714,807	-\$1,106,798	-\$807,040	-\$1,383,498
Wabash	\$0	\$0	\$0	\$0	\$0
Warren	\$0	\$0	\$0	\$0	\$0
Warrick	\$0	\$0	\$0	\$0	\$0
Washington	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0
Wayne	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0
Wells	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0
White	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0
Whitley	\$0	\$0	\$0	\$0	\$0

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	\$0	\$0	\$0	\$0	\$0
Allen	-\$244,653	-\$1,427,143	-\$2,446,531	-\$4,240,654	-\$3,425,143
Bartholomew	\$0	\$0	\$0	\$0	\$0
Benton	\$0	\$0	\$0	\$0	\$0
Blackford	\$0	\$0	\$0	\$0	\$0
Boone	-\$58,588	-\$341,764	-\$585,881	-\$1,015,528	-\$820,234
Brown	-\$6,375	-\$37,190	-\$63,753	-\$110,506	-\$89,255
Carroll	\$0	\$0	\$0	\$0	\$0
Cass	\$0	\$0	\$0	\$0	\$0
Clark	\$0	\$0	\$0	\$0	\$0
Clay	\$0	\$0	\$0	\$0	\$0
Clinton	\$0	\$0	\$0	\$0	\$0
Crawford	\$0	\$0	\$0	\$0	\$0
Daviess	\$0	\$0	\$0	\$0	\$0
Dearborn	\$0	\$0	\$0	\$0	\$0
Decatur	\$0	\$0	\$0	\$0	\$0
De Kalb	\$0	\$0	\$0	\$0	\$0
Delaware	-\$64,979	-\$379,046	-\$649,793	-\$1,126,307	-\$909.710
Dubois	\$0	\$0	\$0	\$0	\$0
Elkhart	\$0	\$0	\$0	\$0	\$0
Fayette	\$0	\$0	\$0	\$0	\$0
Floyd	\$0	\$0	\$0	\$0	\$0
Fountain	\$0	\$0	\$0	\$0	\$0
Franklin	\$0	\$0	\$0	\$0	\$0 \$0
Fulton	\$0 \$0	\$0	\$0	\$0	\$0 \$0
Gibson	\$0 \$0	\$0	\$0	\$0	\$0 \$0
Grant	\$0 \$0	\$0	\$0	\$0	\$0 \$0
Greene	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0
Hamilton	-\$427,436	-\$2,493,379	-\$4,274,364	-\$7,408,897	-\$5,984,109
Hancock	-\$33,764	-\$196,958	-\$337,643	-\$585,247	-\$472,700
Harrison	\$0	\$0	\$0	\$0	\$0
Hendricks	-\$214,557	-\$1,251,582	-\$2,145,570	-\$3,718,988	-\$3,003,798
Henry	-\$19,805	-\$115,528	-\$198,048	-\$343,284	-\$277,268
Howard	\$0	\$0	\$0	\$0	\$0
Huntington	\$0	\$0	\$0	\$0	\$0
Jackson	\$0	\$0	\$0	\$0	\$0
Jasper	\$0	\$0	\$0	\$0	\$0
Jay	\$0	\$0	\$0	\$0	\$0
Jefferson	\$0	\$0	\$0	\$0	\$0
Jennings	\$0	\$0	\$0	\$0	\$0
Johnson	-\$38,222	-\$222,960	-\$382,218	-\$662,510	-\$535,105
Knox	\$0	\$0	\$0	\$0	\$0
Kosciusko	\$0	\$0	\$0	\$0	\$0
Lagrange	-\$3,662	-\$21,363	-\$36,622	-\$63,479	-\$51,271
Lake	\$0	\$0	\$0	\$0	\$0
LaPorte	\$0	\$0	\$0	\$0	\$0
Lawrence	\$0	\$0	\$0	\$0	\$0
Madison	-\$63,484	-\$370,323	-\$634,839	-\$1,100,388	-\$888,775
Marion	-\$1,556,927	-\$9,082,076	-\$15,569,274	-\$26,986,741	-\$21,796,983
Marshall	\$0	\$0	\$0	\$0	\$0
Martin	\$0	\$0	\$0	\$0	\$0
Miami	\$0	\$0	\$0	\$0	\$0
Monroe	-\$114,684	-\$668,989	-\$1,146,838	-\$1,987,852	-\$1,605,573
Montgomery	\$0	\$0	\$0	\$0	\$0
Morgan	-\$12,320	-\$71,866	-\$123,200	-\$213,546	-\$172,479
Newton	\$0	\$0	\$0	\$0	\$0
Noble	\$0	\$0	\$0	\$0	\$0
Ohio	\$0	\$0	\$0	\$0	\$0
Orange	-\$13,359	-\$77,929	-\$133,592	-\$231,560	-\$187,029
Owen	\$0	\$0	\$0	\$0	\$0
Parke	-\$2,683	-\$15,649	-\$26,826	-\$46,499	-\$37,557
Perry	\$0	\$0	\$0	\$0	\$0
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able A-6 Con't					
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Pike	\$0	\$0	\$0	\$0	\$0
Porter	\$0	\$0	\$0	\$0	\$0
Posey	\$0	\$0	\$0	\$0	\$0
Pulaski	\$0	\$0	\$0	\$0	\$0
Putnam	-\$2,822	-\$16,462	-\$28,221	-\$48,916	-\$39,509
Randolph	\$0	\$0	\$0	\$0	\$0
Ripley	\$0	\$0	\$0	\$0	\$0
Rush	\$0	\$0	\$0	\$0	\$0
St. Joseph	\$0	\$0	\$0	\$0	\$0
Scott	\$0	\$0	\$0	\$0	\$0
Shelby	-\$21,278	-\$124,123	-\$212,783	-\$368,824	-\$297,896
Spencer	\$0	\$0	\$0	\$0	\$0
Starke	\$0	\$0	\$0	\$0	\$0
Steuben	\$0	\$0	\$0	\$0	\$0
Sullivan	\$0	\$0	\$0	\$0	\$0
Switzerland	\$0	\$0	\$0	\$0	\$0
Tippecanoe	\$0	\$0	\$0	\$0	\$0
Tipton	\$0	\$0	\$0	\$0	\$0
Union	\$0	\$0	\$0	\$0	\$0
Vanderburgh	-\$146,175	-\$852,685	-\$1,461,747	-\$2,533,694	-\$2,046,445
Vermillion	\$0	\$0	\$0	\$0	\$0
Vigo	-\$69,175	-\$403,520	-\$691,749	-\$1,199,031	-\$968,448
Wabash	\$0	\$0	\$0	\$0	\$0
Warren	\$0	\$0	\$0	\$0	\$0
Warrick	\$0	\$0	\$0	\$0	\$0
Washington	\$0	\$0	\$0	\$0	\$0
Wayne	\$0	\$0	\$0	\$0	\$0
Wells	\$0	\$0	\$0	\$0	\$0
White	\$0	\$0	\$0	\$0	\$0
Whitley	\$0	\$0	\$0	\$0	\$0
Total	-\$3,114,949	-\$18,170,536	-\$31,149,491	-\$53,992,451	-\$43,609,287

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$67,223	-\$97,779	-\$146,668	-\$110,001	-\$187,409
Allen	-\$694,630	-\$1,010,372	-\$1,515,557	-\$1,136,668	-\$1,936,546
Bartholomew	-\$150,124	-\$218,362	-\$327,544	-\$245,658	-\$418,528
Benton	-\$17,309	-\$25,176	-\$37,764	-\$28,323	-\$48,254
Blackford	-\$24,956	-\$36,300	-\$54,450	-\$40,837	-\$69,575
Boone	-\$110,725	-\$161,055	-\$241,582	-\$181,187	-\$308,688
Brown	-\$29,796	-\$43,340	-\$65,011	-\$48,758	-\$83,069
Carroll	-\$39,401	-\$57,310	-\$85,966	-\$64,474	-\$109,845
Cass	-\$76,174	-\$110,799	-\$166,199	-\$124,649	-\$212,365
Clark	-\$215,492	-\$313,443	-\$470,164	-\$352,623	-\$600,765
Clay	-\$52,567	-\$76,461	-\$114,692	-\$86,019	-\$146,551
Clinton	-\$64,949	-\$94,472	-\$141,708	-\$106,281	-\$181,071
Crawford	-\$174,274	-\$253,489	-\$380,233	-\$285,175	-\$485,854
Daviess	-\$61,868	-\$89,991	-\$134,986	-\$101,239	-\$172,482
Dearborn	-\$7,193,605	-\$10,463,426	-\$15,695,139	-\$11,771,354	-\$20,054,900
Decatur	-\$50,319	-\$73,191	-\$109,787	-\$82,340	-\$140,283
De Kalb	-\$82,541	-\$120,060	-\$180,091	-\$135,068	-\$230,116
Delaware	-\$230,034	-\$334,595	-\$501,893	-\$376,420	-\$641,308
Dubois	-\$235,219	-\$342,137	-\$513,206	-\$384,904	-\$655,763
Elkhart	-\$386,207	-\$561,755	-\$842,633	-\$631,975	-\$1,076,698
Fayette	-\$145,792	-\$212,061	-\$318,092	-\$238,569	-\$406,451
Floyd	-\$145,792	-\$212,061	-\$318,092	-\$238,569	-\$406,451
Fountain	-\$33,702	-\$49,022	-\$73,532	-\$55,149	-\$93,958
Franklin	-\$45,133	-\$65,647	-\$98,471	-\$73,853	-\$125,824
Fulton	-\$40,732	-\$59,247	-\$88,870	-\$66,653	-\$113,556
Gibson	-\$65,495	-\$95,265	-\$142,898	-\$107,173	-\$182,592

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Grant	-\$136,962	-\$199,217	-\$298,826	-\$224,119	-\$381,833
Greene	-\$64,834	-\$94,304	-\$141,456	-\$106,092	-\$180,749
Hamilton	-\$536,753	-\$780,732	-\$1,171,098	-\$878,323	-\$1,496,403
Hancock	-\$136,846	-\$199,049	-\$298,574	-\$223,931	-\$381,511
Harrison	-\$7,048,637	-\$10,252,563	-\$15,378,844	-\$11,534,133	-\$19,650,746
Hendricks	-\$284,335	-\$413,579	-\$620,368	-\$465,276	-\$792,693
Henry	-\$96,693	-\$140,644	-\$210,966	-\$158,225	-\$269,568
Howard	-\$161,771	-\$235,304	-\$352,956	-\$264,717	-\$450,999
Huntington	-\$72,573	-\$105,561	-\$158,342	-\$118,757	-\$202,326
Jackson	-\$82,841	-\$120,495	-\$180,743	-\$135,557	-\$230,949
Jasper	-\$65,446	-\$95,194	-\$142,791	-\$107,093	-\$182,455
Jay	-\$41,547	-\$60,433	-\$90,649	-\$67,987	-\$115,829
Jefferson	-\$63,393	-\$92,208	-\$138,313	-\$103,734	-\$176,733
Jennings	-\$55,763	-\$81,110	-\$121,665	-\$91,249	-\$155,461
Johnson	-\$273,009	-\$397,104	-\$595,655	-\$446,742	-\$761,115
Knox	-\$75,146	-\$109,303	-\$163,955	-\$122,966	-\$209,498
Kosciusko	-\$151,227	-\$219,966	-\$329,949	-\$247,462	-\$421,602
Lagrange	-\$72,581	-\$105,573	-\$158,359	-\$118,769	-\$202,348
Lake	-\$24,756,906	-\$36,010,045	-\$54,015,068	-\$40,511,301	-\$69,019,254
LaPorte	-\$2,414,808	-\$3,512,448	-\$5,268,671	-\$3,951,503	-\$6,732,191
Lawrence	-\$90,187	-\$131,181	-\$196,772	-\$147,579	-\$251,431
Madison	-\$2,380,861	-\$3,463,071	-\$5,194,606	-\$3,895,955	-\$6,637,553
Marion	-\$1,766,037	-\$2,568,782	-\$3,853,173	-\$2,889,879	-\$4,923,498
Marshall	-\$91,980	-\$133,789	-\$200,683	-\$150,512	-\$256,428
Martin	-\$20,202	-\$29,385	-\$44,077	-\$33,058	-\$56,320
Miami	-\$72,141	-\$104,933	-\$157,400	-\$118,050	-\$201,122
Monroe	-\$269,725	-\$392,327	-\$588,490	-\$441,367	-\$751,959
Montgomery	-\$74,528	-\$108,405	-\$162,607	-\$121,956	-\$207,776
Morgan	-\$134,680	-\$195,899	-\$293,848	-\$220,386	-\$375,473
Newton	-\$27,846	-\$40,503	-\$60,754	-\$45,565	-\$77,630
Noble	-\$92,928	-\$135,168	-\$202,752	-\$152,064	-\$259,072
Ohio	-\$1,709,561	-\$2,486,634	-\$3,729,951	-\$2,797,463	-\$4,766,048
Orange	-\$1,466,339	-\$2,132,856	-\$3,199,284	-\$2,399,463	-\$4,087,974
Owen	-\$42,177	-\$61,348	-\$92,022	-\$69,017	-\$117,584
Parke	-\$33,896	-\$49,303	-\$73,955	-\$55,466	-\$94,498
Perry	-\$37,804	-\$54,987	-\$82,481	-\$61,861	-\$105,392
Pike	-\$25,111	-\$36,525	-\$54,787	-\$41,090	-\$70,005
Porter	-\$321,273	-\$467,306	-\$700,960	-\$525,720	-\$895,671
Posey	-\$50,651	-\$73,675	-\$110,512	-\$82,884	-\$141,210
Pulaski	-\$26,199	-\$38,108	-\$57,163	-\$42,872	-\$73,041
Putnam	-\$74,214	-\$107,947	-\$161,921	-\$121,440	-\$206,899
Randolph	-\$51,162	-\$74,417	-\$111,625	-\$83,719	-\$142,632
Ripley	-\$56,336	-\$81,943	-\$122,915	-\$92,186	-\$157,058
Rush	-\$34,000	-\$49,454	-\$74,181	-\$55,636	-\$94,787
St. Joseph	-\$521,822	-\$759,013	-\$1,138,520	-\$853,890	-\$1,454,776
Scott	-\$47,271	-\$68,758	-\$103,137	-\$77,353	-\$131,787
Shelby	-\$2,765,804	-\$4,022,987	-\$6,034,481	-\$4,525,861	-\$7,710,725
Spencer	-\$40,959	-\$59,577	-\$89,365	-\$67,024	-\$114,189
Starke	-\$45,672	-\$66,432	-\$99,648	-\$74,736	-\$127,329
Steuben	-\$66,828	-\$97,204	-\$145,807	-\$109,355	-\$186,308
Sullivan	-\$41,981	-\$61,064	-\$91,596	-\$68,697	-\$117,039
Switzerland	-\$3,114,998	-\$4,530,907	-\$6,796,360	-\$5,097,270	-\$8,684,238
Tippecanoe	-\$337,767	-\$491,297	-\$736,945	-\$552,709	-\$941,652
Tipton	-\$31,153	-\$45,314	-\$67,971	-\$50,978	-\$86,851
Union	-\$14,693	-\$21,372	-\$32,057	-\$24,043	-\$40,962
Vanderburgh	-\$2,837,816	-\$4,127,733	-\$6,191,599	-\$4,643,699	-\$7,911,488
Vermillion	-\$31,693	-\$46,099	-\$69,148	-\$51,861	-\$88,356
Vigo	-\$210,831	-\$306,664	-\$459,996	-\$344,997	-\$587,772
Wabash	-\$64,293	-\$93,516	-\$140,275	-\$344,997	-\$179,240
Warren	-\$16,632	-\$24,192	-\$140,273	-\$103,200	-\$46,369
Warrick	-\$116,686	-\$169,725	-\$254,587	-\$190,940	-\$325,305
Washington	-\$110,000	-\$80,362	-\$120,544	-\$90,408	-\$154,028
v v asriirigittii	-\$134,725	-\$195,964	-\$120,344	-\$220,460	-\$375,598

Table A-7 Con't	able A-7 Con't				
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Wells	-\$54,025	-\$78,582	-\$117,874	-\$88,405	-\$150,616
White	-\$48,174	-\$70,072	-\$105,108	-\$78,831	-\$134,305
Whitley	-\$65,082	-\$94,665	-\$141,998	-\$106,498	-\$181,442
Total	-\$66,640,128	-\$96,931,095	-\$145,396,642	-\$109,047,482	-\$185,784,599

Note: Casino gaming taxes include the Riverboat Wagering Tax Distribution, the County Slot Machine Wagering Fee, the Riverboat Wagering Tax and the Supplemental Wagering tax.

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$6,111	-\$51,945	-\$85,556	-\$162,965	-\$126,298
Allen	-\$63,148	-\$536,760	-\$884,075	-\$1,683,953	-\$1,305,063
Bartholomew	-\$13,648	-\$116,005	-\$191,067	-\$363,937	-\$282,051
Benton	-\$1,574	-\$13,375	-\$22,029	-\$41,960	-\$32,519
Blackford	-\$2,269	-\$19,284	-\$31,762	-\$60,500	-\$46,887
Boone	-\$10,066	-\$85,560	-\$140,923	-\$268,425	-\$208,029
Brown	-\$2,709	-\$23,025	-\$37,923	-\$72,234	-\$55,981
Carroll	-\$3,582	-\$30,446	-\$50,147	-\$95,517	-\$74,026
Cass	-\$6,925	-\$58,862	-\$96,949	-\$184,665	-\$143,116
Clark	-\$19,590	-\$166,516	-\$274,262	-\$522,405	-\$404,863
Clay	-\$4,779	-\$40,620	-\$66,904	-\$127,435	-\$98,762
Clinton	-\$5,904	-\$50,188	-\$82,663	-\$157,453	-\$122,026
Crawford	-\$15,843	-\$134,666	-\$221,803	-\$422,482	-\$327,423
Daviess	-\$5,624	-\$47,807	-\$78,742	-\$149,984	-\$116,238
Dearborn	-\$653,964	-\$5,558,695	-\$9,155,498	-\$17,439,043	-\$13,515,258
Decatur	-\$4,574	-\$38,883	-\$64,042	-\$121,985	-\$94,539
De Kalb	-\$7,504	-\$63,782	-\$105,053	-\$200,101	-\$155,078
Delaware	-\$20,912	-\$177,754	-\$292,771	-\$557,659	-\$432,186
Dubois	-\$21,384	-\$181,760	-\$299,370	-\$570,229	-\$441,927
Elkhart	-\$35,110	-\$298,433	-\$491,536	-\$936,259	-\$725,601
Favette	-\$13,254	-\$112,658	-\$185,554	-\$353,435	-\$273,912
Floyd	-\$13,254	-\$112,658	-\$185,554	-\$353,435	-\$273,912
Fountain	-\$3,064	-\$26,043	-\$42,894	-\$81,703	-\$63,320
Franklin	-\$4,103	-\$34,875	-\$57,442	-\$109,412	-\$84,795
Fulton	-\$3,703	-\$31,475	-\$51,841	-\$98,745	-\$76,527
Gibson	-\$5,954	-\$50,610	-\$83,357	-\$158,775	-\$123,051
Grant	-\$12,451	-\$105,834	-\$174,315	-\$332,029	-\$257,322
Greene	-\$5,894	-\$50,099	-\$82,516	-\$157,173	-\$121,809
Hamilton	-\$48,796	-\$414,764	-\$683,140	-\$1,301,220	-\$1,008,445
Hancock	-\$12,441	-\$105,745	-\$174,168	-\$331,749	-\$257,106
Harrison	-\$640,785	-\$5,446,674	-\$8,970,993	-\$17,087,605	-\$13,242,894
Hendricks	-\$25,849	-\$219,714	-\$361,881	-\$689,298	-\$534,206
Henry	-\$8,790	-\$74,717	-\$123,064	-\$234,407	-\$181,666
Howard	-\$14,706	-\$125,005	-\$205,891	-\$392,173	-\$303,934
Huntington	-\$6,598	-\$125,005	-\$92,366	-\$175,936	-\$136,350
Jackson	-\$7,531	-\$64,013	-\$105,433	-\$173,936	-\$155,640
			-\$105,455		-\$155,640
Jasper Jay	-\$5,950 -\$3,777	-\$50,572 -\$32,105	-\$83,295 -\$52,878	-\$158,657 -\$100,721	-\$122,959
Jefferson	-\$5,763	-\$48,986 \$43,000	-\$80,682	-\$153,681	-\$119,103
Jennings	-\$5,069	-\$43,090	-\$70,972	-\$135,184	-\$104,768
Johnson	-\$24,819	-\$210,961	-\$347,466	-\$661,839	-\$512,926
Knox	-\$6,831	-\$58,067	-\$95,641	-\$182,172	-\$141,184
Kosciusko	-\$13,748	-\$116,857	-\$192,470	-\$366,610	-\$284,123
Lagrange	-\$6,598	-\$56,086	-\$92,376	-\$175,955	-\$136,365
Lake	-\$2,250,628	-\$19,130,337	-\$31,508,790	-\$60,016,742	-\$46,512,975
LaPorte	-\$219,528	-\$1,865,988	-\$3,073,392	-\$5,854,079	-\$4,536,911
Lawrence	-\$8,199	-\$69,690	-\$114,784	-\$218,635	-\$169,442
Madison	-\$216,442	-\$1,839,756	-\$3,030,187	-\$5,771,785	-\$4,473,133
Marion	-\$160,549	-\$1,364,665	-\$2,247,684	-\$4,281,303	-\$3,318,010
Marshall	-\$8,362	-\$71,075	-\$117,065	-\$222,981	-\$172,810
Martin	-\$1,837	-\$15,611	-\$25,711	-\$48,974	-\$37,955

able A-8 Con't		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Miami	-\$6,558	-\$55,746	-\$91,816	-\$174,888	-\$135,538
Monroe	-\$24,520	-\$208,423	-\$343,286	-\$653,878	-\$506,755
Montgomery	-\$6,775	-\$57,590	-\$94,854	-\$180,675	-\$140,023
Morgan	-\$12,244	-\$104,071	-\$171,411	-\$326,498	-\$253,036
Newton	-\$2,531	-\$21,517	-\$35,440	-\$67,504	-\$52,316
Noble	-\$8,448	-\$71,808	-\$118,272	-\$225,280	-\$174,592
Ohio	-\$155,415	-\$1,321,024	-\$2,175,805	-\$4,144,390	-\$3,211,902
Orange	-\$133,304	-\$1,133,080	-\$1,866,249	-\$3,554,760	-\$2,754,939
Owen	-\$3,834	-\$32,591	-\$53,680	-\$102,247	-\$79,241
Parke	-\$3,081	-\$26,192	-\$43,140	-\$82,172	-\$63,683
Perry	-\$3,437	-\$29,212	-\$48,114	-\$91,645	-\$71,025
Pike	-\$2,283	-\$19,404	-\$31,959	-\$60,874	-\$47,178
Porter	-\$29,207	-\$248,256	-\$408,893	-\$778,844	-\$603,604
Posey	-\$4,605	-\$39,140	-\$64,465	-\$122,791	-\$95,163
Pulaski	-\$2,382	-\$20,245	-\$33,345	-\$63,514	-\$49,223
Putnam	-\$6,747	-\$57,347	-\$94,454	-\$179,912	-\$139,432
Randolph	-\$4,651	-\$39,534	-\$65,115	-\$124,028	-\$96,122
Ripley	-\$5,121	-\$43,532	-\$71,701	-\$136,572	-\$105,844
Rush	-\$3,091	-\$26,272	-\$43,272	-\$82,423	-\$63,878
St. Joseph	-\$47,438	-\$403,226	-\$664,137	-\$1,265,022	-\$980,392
Scott	-\$4,297	-\$36,528	-\$60,163	-\$114,597	-\$88,813
Shelby	-\$251,437	-\$2,137,212	-\$3,520,114	-\$6,704,979	-\$5,196,358
Spencer	-\$3,724	-\$31,650	-\$52,130	-\$99,294	-\$76,953
Starke	-\$4,152	-\$35,292	-\$58,128	-\$110,720	-\$85,808
Steuben	-\$6,075	-\$51,640	-\$85,054	-\$162,007	-\$125,556
Sullivan	-\$3,816	-\$32,440	-\$53,431	-\$101,773	-\$78,874
Switzerland	-\$283,182	-\$2,407,044	-\$3,964,543	-\$7,551,511	-\$5,852,421
Tippecanoe	-\$30,706	-\$261,001	-\$429,885	-\$818,828	-\$634,592
Tipton	-\$2,832	-\$24,073	-\$39,650	-\$75,523	-\$58,530
Union	-\$1,336	-\$11,354	-\$18,700	-\$35,619	-\$27,605
Vanderburgh	-\$257,983	-\$2,192,858	-\$3,611,766	-\$6,879,554	-\$5,331,655
Vermillion	-\$2,881	-\$24,490	-\$40,336	-\$76,831	-\$59,544
Vigo	-\$19,166	-\$162,915	-\$268,331	-\$511,106	-\$396,107
Wabash	-\$5,845	-\$49,681	-\$81,827	-\$155,861	-\$120,792
Warren	-\$1,512	-\$12,852	-\$21,168	-\$40,321	-\$31,248
Warrick	-\$10,608	-\$90,166	-\$148,509	-\$282,874	-\$219,228
Washington	-\$5,023	-\$42,693	-\$70,317	-\$133,937	-\$103,802
Wayne	-\$12,248	-\$104,106	-\$171,469	-\$326,607	-\$253,120
Wells	-\$4,911	-\$41,747	-\$68,760	-\$130,971	-\$101,502
White	-\$4,379	-\$37,226	-\$61,313	-\$116,787	-\$90,510
Whitley	-\$5,917	-\$50,291	-\$82,832	-\$157,775	-\$122,276
Total	-\$6,058,193	-\$51,494,644	-\$84,814,708	-\$161,551,825	-\$125,202,664

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped
Adams	-\$178,246	-\$263,804	-\$406,400	-\$299,453	-\$513,348
Allen	-\$2,474,453	-\$3,662,191	-\$5,641,754	-\$4,157,082	-\$7,126,426
Bartholomew	-\$418,103	-\$618,793	-\$953,276	-\$702,414	-\$1,204,138
Benton	-\$49,105	-\$72,676	-\$111,961	-\$82,497	-\$141,424
Blackford	-\$76,236	-\$112,829	-\$173,818	-\$128,076	-\$219,559
Boone	-\$450,056	-\$666,082	-\$1,026,127	-\$756,093	-\$1,296,160
Brown	-\$128,054	-\$189,520	-\$291,963	-\$215,130	-\$368,795
Carroll	-\$161,536	-\$239,073	-\$368,301	-\$271,380	-\$465,222
Cass	-\$226,087	-\$334,609	-\$515,479	-\$379,827	-\$651,131
Clark	-\$583,343	-\$863,347	-\$1,330,022	-\$980,016	-\$1,680,027
Clay	-\$168,429	-\$249,275	-\$384,019	-\$282,961	-\$485,077
Clinton	-\$219,804	-\$325,310	-\$501,153	-\$369,271	-\$633,036
Crawford	-\$42,697	-\$63,191	-\$97,349	-\$71,731	-\$122,967
Daviess	-\$198,037	-\$293,094	-\$451,524	-\$332,702	-\$570,346
Dearborn	-\$272,319	-\$403,032	-\$620,888	-\$457,496	-\$784,279

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped -\$632,858	
Decatur	-\$219,742	-\$325,219	-\$501,012	-\$369,167		
De Kalb	-\$211,998	-\$313,757	-\$483,356	-\$356,157	-\$610,555	
Delaware	-\$614,419	-\$909,340	-\$1,400,874	-\$1,032,223	-\$1,769,526	
Dubois	-\$319,083	-\$472,244	-\$727,510	-\$536,060	-\$918,960	
Elkhart	-\$1,179,682	-\$1,745,929	-\$2,689,674	-\$1,981,865	-\$3,397,483	
Fayette	-\$121,127	-\$179,268	-\$276,170	-\$203,494	-\$348,847	
Floyd	-\$398,018	-\$589,067	-\$907,482	-\$668,671	-\$1,146,292	
Fountain	-\$109,041	-\$161,381	-\$248,615	-\$183,190	-\$314,040	
Franklin	-\$119,901	-\$177,453	-\$273,374	-\$201,433	-\$345,314	
Fulton	-\$136,576	-\$202,132	-\$311,392	-\$229,447	-\$393,338	
Gibson	-\$237,136	-\$350,961	-\$540,670	-\$398,388	-\$682,951	
Grant	-\$269,517	-\$398,885	-\$614,499	-\$452,789	-\$776,209	
Greene	-\$205,606	-\$304,297	-\$468,783	-\$345,419	-\$592,146	
Hamilton	-\$2,415,508	-\$3,574,953	-\$5,507,359	-\$4,058,054	-\$6,956,664	
Hancock	-\$598,973	-\$886,480	-\$1,365,659	-\$1,006,275	-\$1,725,043	
Harrison	-\$203,933	-\$301,820	-\$464,966	-\$342,607	-\$587,326	
Hendricks	-\$1,247,448	-\$1,846,223	-\$2,844,182	-\$2,095,713	-\$3,592,650	
Henry	-\$344,044	-\$509,185	-\$784,419	-\$577,993	-\$990,846	
Howard	-\$533,700	-\$789,877	-\$1,216,837	-\$896,617	-\$1,537,057	
Huntington	-\$242,955	-\$359,573	-\$553,937	-\$408,164	-\$699,710	
Jackson	-\$216,963	-\$321,105	-\$494,675	-\$364,497	-\$624,852	
Jasper	-\$202,901	-\$300,293	-\$462,614	-\$340,873	-\$584,354	
Jay	-\$107,249	-\$158,729	-\$244,529	-\$180,179	-\$308,878	
Jefferson	-\$135,805	-\$200,992	-\$309,636	-\$228,153	-\$391,120	
Jennings	-\$121,696	-\$180,109	-\$277,466	-\$204,448	-\$350,483	
Johnson	-\$1,063,556	-\$1,574,063	-\$2,424,908	-\$1,786,775	-\$3,063,042	
Knox	-\$181,651	-\$268,843	-\$414,164	-\$305,174	-\$523,155	
Kosciusko	-\$580,365	-\$858,940	-\$1,323,231	-\$975,013	-\$1,671,450	
Lagrange	-\$161,534	-\$239,071	-\$368,298	-\$271,378	-\$465,219	
Lake	-\$2,662,285	-\$3,940,181	-\$6,070,009	-\$4,472,638	-\$7,667,380	
LaPorte	-\$592,510	-\$876,915	-\$1,350,923	-\$995,417	-\$1,706,429	
Lawrence	-\$290,602	-\$430,091	-\$662,573	-\$488,212	-\$836,935	
Madison	-\$779,667	-\$1,153,907	-\$1,777,640	-\$1,309,840	-\$2,245,440	
Marion	-\$5,252,648	-\$7,773,919	-\$11,976,038	-\$8,824,449	-\$15,127,62	
Marshall	-\$240,217	-\$355,521	-\$547,695	-\$403,565	-\$691,825	
Martin	-\$49,442	-\$73,173	-\$112,727	-\$83,062	-\$142,392	
Miami	-\$196,031	-\$290,126	-\$446,951	-\$329,332	-\$564,569	
Monroe	-\$706,237	-\$1,045,231	-\$1,610,221	-\$1,186,479	-\$2,033,964	
Montgomery	-\$242,598	-\$359,045	-\$553,123	-\$407,564	-\$698,681	
Morgan	-\$508,773	-\$752,984	-\$1,160,003	-\$854,739	-\$1,465,267	
Newton	-\$82,485	-\$122,078	-\$188,066	-\$138,575	-\$237,557	
Noble	-\$293,729	-\$434,719	-\$669,702	-\$493,465	-\$845,939	
Ohio	-\$30,094	-\$44,539	-\$68,614	-\$50,558	-\$86,670	
Orange	-\$97,814	-\$144,765	-\$223,016	-\$164,328	-\$281,705	
Owen	-\$133,909	-\$198,186	-\$305,313	-\$224,967	-\$385,659	
Parke	-\$94,398	-\$139,709	-\$215,227	-\$158,588	-\$271,866	
Perry	-\$101,353	-\$150,002	-\$231,084	-\$170,273	-\$291,896	
Pike	-\$64,186	-\$94,995	-\$146,344	-\$107,832	-\$184,855	
Porter	-\$1,111,896	-\$1,645,607	-\$2,535,124	-\$1,867,986	-\$3,202,261	
Posey	-\$191,617	-\$283,593	-\$436,887	-\$321,916	-\$551,857	
Pulaski	-\$70,926	-\$104,970	-\$161,711	-\$119,156	-\$204,267	
Putnam	-\$240,557	-\$356,024	-\$548,470	-\$404,136	-\$692,804	
Randolph	-\$157,005	-\$232,367	-\$357,972	-\$263,768	-\$452,175	
Ripley	-\$144,634	-\$214,058	-\$329,765	-\$242,985	-\$416,545	
Rush	-\$109,900	-\$162,653	-\$250,573	-\$184,633	-\$316,513	
St. Joseph	-\$1,570,522	-\$2,324,373	-\$3,580,791	-\$2,638,477	-\$4,523,104	
Scott	-\$93,209	-\$137,949	-\$212,515	-\$156,590	-\$268,441	
Shelby	-\$308,195	-\$456,129	-\$702,686	-\$517,768	-\$887,603	
Spencer	-\$113,952	-\$168,649	-\$259,811	-\$191,439	-\$328,182	
Starke	-\$113,756	-\$168,359	-\$259,364	-\$191,110	-\$327,617	
Steuben	-\$315,253	-\$466,574	-\$718,776	-\$529,624	-\$907,928	
Sullivan	-\$119,800	-\$177,304	-\$273,144	-\$201,264	-\$345,025	
Switzerland	-\$42,251	-\$62,531	-\$96,332	-\$70,981	-\$121,682	

Table A-9 Con't						
County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped	
Tippecanoe	-\$942,224	-\$1,394,491	-\$2,148,270	-\$1,582,936	-\$2,713,605	
Tipton	-\$125,773	-\$186,143	-\$286,762	-\$211,298	-\$362,225	
Union	-\$45,604	-\$67,494	-\$103,978	-\$76,615	-\$131,340	
Vanderburgh	-\$1,091,084	-\$1,614,805	-\$2,487,672	-\$1,833,022	-\$3,142,323	
Vermillion	-\$94,439	-\$139,770	-\$215,321	-\$158,658	-\$271,985	
Vigo	-\$503,328	-\$744,925	-\$1,147,587	-\$845,591	-\$1,449,584	
Wabash	-\$157,099	-\$232,506	-\$358,185	-\$263,926	-\$452,444	
Warren	-\$49,556	-\$73,343	-\$112,987	-\$83,254	-\$142,721	
Warrick	-\$445,559	-\$659,427	-\$1,015,874	-\$748,538	-\$1,283,209	
Washington	-\$120,129	-\$177,791	-\$273,894	-\$201,817	-\$345,971	
Wayne	-\$279,835	-\$414,155	-\$638,023	-\$470,122	-\$805,924	
Wells	-\$168,411	-\$249,249	-\$383,977	-\$282,931	-\$485,024	
White	-\$149,073	-\$220,629	-\$339,888	-\$250,443	-\$429,332	
Whitley	-\$219,908	-\$325,464	-\$501,391	-\$369,446	-\$633,336	
Total	-\$39,661,105	-\$58,698,436	-\$90,427,320	-\$66,630,657	-\$114,223,983	

County	V-Shaped	V-Shaped w/ Hangover	Nike Swoosh	Roller Coaster	L-Shaped	
Adams	-\$35,649	-\$156,856	-\$263,804	-\$442,050	-\$456,309	
Allen	-\$494,891	-\$2,177,519	-\$3,662,191	-\$6,136,644	-\$6,334,601	
Bartholomew	-\$83,621	-\$367,931	-\$618,793	-\$1,036,896	-\$1,070,345	
Benton	-\$9,821	-\$43,213	-\$72,676	-\$121,782	-\$125,710	
Blackford	-\$15,247	-\$67,087	-\$112,829	-\$189,065	-\$195,164	
Boone	-\$90,011	-\$396,049	-\$666,082	-\$1,116,138	-\$1,152,142	
Brown	-\$25,611	-\$112,687	-\$189,520	-\$317,573	-\$327,818	
Carroll	-\$32,307	-\$142,151	-\$239,073	-\$400,608	-\$413,531	
Cass	-\$45,217	-\$198,957	-\$334,609	-\$560,696	-\$578,783	
Clark	-\$116,669	-\$513,342	-\$863,347	-\$1,446,690	-\$1,493,358	
Clay	-\$33,686	-\$148,218	-\$249,275	-\$417,705	-\$431,179	
Clinton	-\$43,961	-\$193,428	-\$325,310	-\$545,114	-\$562,698	
Crawford	-\$8,539	-\$37,573	-\$63,191	-\$105,888	-\$109,304	
Daviess	-\$39,607	-\$174,272	-\$293,094	-\$491,131	-\$506,974	
Dearborn	-\$54,464	-\$239,641	-\$403,032	-\$675,352	-\$697,137	
Decatur	-\$43,948	-\$193,373	-\$325,219	-\$544,961	-\$562,540	
De Kalb	-\$42,400	-\$186,558	-\$313,757	-\$525,755	-\$542,715	
Delaware	-\$122,884	-\$540,688	-\$909,340	-\$1,523,758	-\$1,572,912	
Dubois	-\$63,817	-\$280,793	-\$472,244	-\$791,327	-\$816,854	
Elkhart	-\$235,936	-\$1,038,120	-\$1,745,929	-\$2,925,610	-\$3,019,985	
Fayette	-\$24,225	-\$106,592	-\$179,268	-\$300,396	-\$310,086	
Floyd	-\$79,604	-\$350,256	-\$589,067	-\$987,085	-\$1,018,927	
Fountain	-\$21,808	-\$95,957	-\$161,381	-\$270,423	-\$279,146	
Franklin	-\$23,980	-\$105,513	-\$177,453	-\$297,354	-\$306,946	
Fulton	-\$27,315	-\$120,187	-\$202,132	-\$338,707	-\$349,634	
Gibson	-\$47,427	-\$208,680	-\$350,961	-\$588,097	-\$607,068	
Grant	-\$53,903	-\$237,175	-\$398,885	-\$668,402	-\$689,963	
Greene	-\$41,121	-\$180,934	-\$304,297	-\$509,904	-\$526,352	
Hamilton	-\$483,102	-\$2,125,647	-\$3,574,953	-\$5,990,461	-\$6,183,702	
Hancock	-\$119,795	-\$527,096	-\$886,480	-\$1,485,454	-\$1,533,372	
Harrison	-\$40,787	-\$179,461	-\$301,820	-\$505,753	-\$522,067	
Hendricks	-\$249,490	-\$1,097,754	-\$1,846,223	-\$3,093,671	-\$3,193,467	
Henry	-\$68,809	-\$302,758	-\$509,185	-\$853,228	-\$880,752	
Howard	-\$106,740	-\$469,656	-\$789,877	-\$1,323,577	-\$1,366,273	
Huntington	-\$48,591	-\$213,800	-\$359,573	-\$602,528	-\$621,965	
Jackson	-\$43,393	-\$190,927	-\$321,105	-\$538,067	-\$555,424	
Jasper	-\$40,580	-\$178,553	-\$300,293	-\$503,194	-\$519,426	
Jay	-\$21,450	-\$94,379	-\$158,729	-\$265,979	-\$274,558	
Jefferson	-\$27,161	-\$119,509	-\$200,992	-\$336,798	-\$347,662	
Jennings	-\$24,339	-\$107,092	-\$180,109	-\$301,805	-\$311,541	
Johnson	-\$212,711	-\$935,930	-\$1,574,063	-\$2,637,620	-\$2,722,704	
Knox	-\$36,330	-\$159,853	-\$268,843	-\$450,494	-\$465,027	

ble A-10 Con't		V-Shaped w/				
County	V-Shaped	Hangover	Nike Swoosh	Roller Coaster	L-Shaped	
Kosciusko	-\$116,073	-\$510,721	-\$858,940	-\$1,439,304	-\$1,485,734	
Lagrange	-\$32,307	-\$142,150	-\$239,071	-\$400,605	-\$413,528	
Lake	-\$532,457	-\$2,342,810	-\$3,940,181	-\$6,602,466	-\$6,815,449	
LaPorte	-\$118,502	-\$521,409	-\$876,915	-\$1,469,425	-\$1,516,825	
Lawrence	-\$58,120	-\$255,730	-\$430,091	-\$720,694	-\$743,942	
Madison	-\$155,933	-\$686,107	-\$1,153,907	-\$1,933,574	-\$1,995,947	
Marion	-\$1,050,530	-\$4,622,330	-\$7,773,919	-\$13,026,567	-\$13,446,779	
Marshall	-\$48,043	-\$211,391	-\$355,521	-\$595,738	-\$614,956	
Martin	-\$9,888	-\$43,509	-\$73,173	-\$122,615	-\$126,570	
Miami	-\$39,206	-\$172,507	-\$290,126	-\$486,157	-\$501,839	
Monroe	-\$141,247	-\$621,489	-\$1,045,231	-\$1,751,469	-\$1,807,968	
Montgomery	-\$48,520	-\$213,486	-\$359,045	-\$601,642	-\$621,050	
Morgan	-\$101,755	-\$447,720	-\$752,984	-\$1,261,757	-\$1,302,459	
Newton	-\$16,497	-\$72,587	-\$122,078	-\$204,563	-\$211,162	
Noble	-\$58,746	-\$258,481	-\$434,719	-\$728,448	-\$751,946	
Ohio	-\$6,019	-\$26,483	-\$44,539	-\$74,633	-\$77,040	
Orange	-\$19,563	-\$86,076	-\$144,765	-\$242,579	-\$250,404	
Owen	-\$26,782	-\$117,840	-\$198,186	-\$332,095	-\$342,808	
Parke	-\$18,880	-\$83,070	-\$139,709	-\$234,106	-\$241,658	
Perry	-\$20,271	-\$89,190	-\$150,002	-\$251,355	-\$259,463	
Pike	-\$12,837	-\$56,484	-\$94,995	-\$159,181	-\$164,316	
Porter	-\$222,379	-\$978,469	-\$1,645,607	-\$2,757,503	-\$2,846,455	
Posey	-\$38,323	-\$168,623	-\$283,593	-\$475,210	-\$490,539	
Pulaski	-\$14,185	-\$62,415	-\$104.970	-\$475,210	-\$181,571	
Putnam	-\$14,165 -\$48,111		+ - ,	-\$175,696		
		-\$211,690	-\$356,024		-\$615,826	
Randolph	-\$31,401	-\$138,164 \$137,378	-\$232,367	-\$389,373	-\$401,933	
Ripley	-\$28,927	-\$127,278	-\$214,058	-\$358,691	-\$370,262	
Rush	-\$21,980	-\$96,712	-\$162,653	-\$272,553	-\$281,345	
St. Joseph	-\$314,104	-\$1,382,060	-\$2,324,373	-\$3,894,895	-\$4,020,537	
Scott	-\$18,642	-\$82,023	-\$137,949	-\$231,157	-\$238,614	
Shelby	-\$61,639	-\$271,212	-\$456,129	-\$764,325	-\$788,980	
Spencer	-\$22,790	-\$100,278	-\$168,649	-\$282,601	-\$291,717	
Starke	-\$22,751	-\$100,105	-\$168,359	-\$282,115	-\$291,215	
Steuben	-\$63,051	-\$277,422	-\$466,574	-\$781,827	-\$807,047	
Sullivan	-\$23,960	-\$105,424	-\$177,304	-\$297,104	-\$306,688	
Switzerland	-\$8,450	-\$37,181	-\$62,531	-\$104,782	-\$108,162	
Tippecanoe	-\$188,445	-\$829,157	-\$1,394,491	-\$2,336,715	-\$2,412,093	
Tipton	-\$25,155	-\$110,680	-\$186,143	-\$311,916	-\$321,978	
Union	-\$9,121	-\$40,132	-\$67,494	-\$113,099	-\$116,747	
Vanderburgh	-\$218,217	-\$960,154	-\$1,614,805	-\$2,705,889	-\$2,793,176	
Vermillion	-\$18,888	-\$83,107	-\$139,770	-\$234,209	-\$241,764	
Vigo	-\$100,666	-\$442,928	-\$744,925	-\$1,248,253	-\$1,288,519	
Wabash	-\$31,420	-\$138,247	-\$232,506	-\$389,605	-\$402,172	
Warren	-\$9,911	-\$43,609	-\$73,343	-\$122,898	-\$126,863	
Warrick	-\$89,112	-\$392,092	-\$659,427	-\$1,104,985	-\$1,140,630	
Washington	-\$24,026	-\$105,713	-\$177,791	-\$297,920	-\$307,530	
Wayne	-\$55,967	-\$246,254	-\$414,155	-\$693,990	-\$716,376	
Wells	-\$33,682	-\$148,202	-\$249,249	-\$417,660	-\$431,133	
White	-\$29,815	-\$131,185	-\$220,629	-\$369,702	-\$381,628	
Whitley	-\$43,982	-\$193,519	-\$325,464	-\$545,373	-\$562,965	
Total	-\$7,932,221	-\$34,901,773	-\$58,698,436	-\$98,359,541	-\$101,532,42	

County	Local Income Taxes (all types)	Food & Beverage	Innkeeper's Taxes	Gaming (four types)	Motor Vehicle	Property Tax (net levy)
Adams	11,842,255			203,706	3,331,697	30,308,416
Allen	142,311,825	8,155,103	6,615,760	2,104,941	46,251,465	353,136,949
Bartholomew	42,340,685		1,579,548	454,922	7,815,016	88,481,425
Benton	3,025,239		, , , , , , , , , , , , , , , , , , ,	52,450	917,860	13,276,712
Blackford	3,265,218			75,625	1,424,968	10,924,363
Boone	46,958,507	1,952,938	538,337	335,531	8,412,253	99,919,527
Brown	8,745,821	212,512	480,826	90,292	2,393,529	14,826,385
Carroll	9,889,560		,	119,397	3,019,355	15,207,137
Cass	18,517,983		117,312	230,831	4,225,930	27,668,099
Clark	54,051,510		1,567,265	653,006	10,903,604	96,418,928
Clay	11,478,441		1,001,000	159,294	3,148,212	13,589,554
Clinton	14,185,496		46,694	196,816	4,108,488	32,490,837
Crawford	1,691,948		76,232	528,102	798,073	7,606,798
Daviess	9,910,553		185,629	187,480	3,701,620	26,101,568
Dearborn	15,955,602		522,691	21,798,804	5,090,079	46,257,562
Decatur	13,677,138		266,920	152,482	4,107,332	23,065,170
De Kalb	22,174,940		379,759	250,126	3,962,582	42,485,433
Delaware	31,169,304	2,165,975	772,105	697,074	11,484,460	82,829,726
Dubois	13,796,284	2,100,070	437,904	712,786	5,964,177	45,353,502
Elkhart	116,317,806		1,941,456	1,170,324	22,050,123	218,158,485
Fayette	9,079,092		20,238	441,794	2,264,062	16,133,848
Floyd	32,724,874		200,137	441,794	7,439,593	62,016,055
Fountain	6,791,314		200,137	102,128	2,038,159	
			73.465	136,766		14,256,155
Franklin Fulton	8,397,019		-,	123,431	2,241,137	15,771,319
	9,727,216		38,638		2,552,815	17,542,434
Gibson	6,016,231		278,906	198,469	4,432,446	42,894,415
Grant	29,051,882		331,247	415,036	5,037,701	43,819,520
Greene	10,533,482	44047070	31,169	196,467	3,843,111	21,556,844
Hamilton	156,493,758	14,247,879	5,465,349	1,626,525	45,149,691	489,027,402
Hancock	38,070,418	1,125,476	508,665	414,686	11,195,762	67,350,244
Harrison	8,872,470	7.151.000	399,405	21,359,506	3,811,823	24,118,461
Hendricks	72,371,390	7,151,899	2,875,065	861,622	23,316,787	202,175,782
Henry	13,372,405	660,161	51,689	293,009	6,430,722	33,471,353
Howard	32,022,591		865,294	490,216	9,975,709	91,963,891
Huntington	14,759,673		170,697	219,920	4,541,215	31,537,778
Jackson	19,709,631		560,224	251,032	4,055,375	34,779,966
Jasper	20,498,318		186,296	198,321	3,792,538	25,411,556
Jay	8,526,631		104,275	125,901	2,004,662	20,134,433
Jefferson	2,475,317		278,747	192,101	2,538,420	28,643,007
Jennings	15,451,110		44,910	168,980	2,274,683	18,041,191
Johnson	43,724,675	1,274,059	547,107	827,299	19,879,558	141,418,978
Knox	8,023,275		55,676	227,716	3,395,346	35,753,595
Kosciusko	21,535,367		705,047	458,263	10,847,938	81,876,434
Lagrange	15,249,639	122,075	681,861	219,943	3,019,335	28,206,894
Lake	176,964,521		3,893,680	75,020,928	49,762,329	618,966,830
LaPorte	22,728,980		1,405,349	7,317,599	11,074,951	112,418,675
Lawrence	15,339,160		266,500	273,294	5,431,818	31,793,501
Madison	42,394,814	2,116,131	667,350	7,214,731	14,573,211	90,452,380
Marion	459,415,443	51,897,579	60,180,098	5,351,628	98,180,338	1,049,746,49
Marshall	13,538,021		360,106	278,726	4,490,038	46,178,029
Martin	3,592,536			61,218	924,140	6,329,074
Miami	15,096,617		64,222	218,610	3,664,130	19,011,106
Monroe	44,335,936	3,822,792	2,768,408	817,347	13,200,699	127,505,163
Montgomery	17,952,879		268,759	225,844	4,534,537	38,430,500
Morgan	45,455,093	410,665	205,299	408,123	9,509,779	34,973,891
Newton	3,020,237	· · · · · · · · · · · · · · · · · · ·	,	84,380	1,541,778	18,171,781
Noble	17,093,901		84,080	281,599	5,490,261	40,789,332
Ohio	1,584,831		52,327	5,180,487	562,501	4,185,328
Orange	5,873,288	445,308	1,722,123	4,443,450	1,828,300	13,976,841
Owen	5,012,431	,	90,332	127,809	2,502,976	14,560,476
Parke	7,404,697	89,421	153,263	102,715	1,764,444	10,714,149

Table A-11 Con't						
County	Local Income Taxes (all types)	Food & Beverage	Innkeeper's Taxes	Gaming (four types)	Motor Vehicle	Property Tax (net levy)
Perry	6,769,933		152,729	114,557	1,894,445	12,995,312
Pike	1,961,882			76,093	1,199,735	15,465,918
Porter	26,303,847		1,384,419	973,555	20,783,109	199,933,814
Posey	8,944,482		99,410	153,489	3,581,624	33,710,263
Pulaski	8,036,424			79,392	1,325,720	9,747,782
Putnam	14,590,133	94,070	283,651	224,890	4,496,393	24,848,755
Randolph	9,643,975		45,941	155,035	2,934,674	21,008,005
Ripley	9,218,543		70,926	170,716	2,703,432	21,253,258
Rush	7,020,747			103,029	2,054,215	16,923,995
St. Joseph	124,620,860		6,395,149	1,581,278	29,355,555	218,690,615
Scott	8,917,484		250,025	143,246	1,742,215	15,725,850
Shelby	14,881,260	709,277	301,886	8,381,223	5,760,663	42,343,574
Spencer	4,287,612		523,099	124,118	2,129,944	25,393,007
Starke	6,841,598		8,065	138,401	2,126,281	19,690,943
Steuben	15,371,568		485,737	202,509	5,892,573	38,177,337
Sullivan	2,303,894		48,100	127,216	2,239,256	20,526,957
Switzerland	1,650,217		371,807	9,439,389	789,736	6,544,008
Tippecanoe	48,901,445		2,678,889	1,023,535	17,611,661	150,853,551
Tipton	9,379,520			94,404	2,350,890	16,528,759
Union	2,390,730		41,381	44,524	852,416	7,112,805
Vanderburgh	53,577,986	4,872,488	5,088,898	8,599,443	20,394,100	183,499,889
Vermillion	4,824,170		5,343	96,039	1,765,219	17,328,449
Vigo	41,724,239	2,305,830	2,536,882	638,883	9,407,996	95,333,837
Wabash	19,245,031		159,339	194,826	2,936,423	22,147,131
Warren	3,895,073			50,401	926,277	9,360,040
Warrick	10,791,306		164,281	353,593	8,328,197	52,995,004
Washington	9,510,702		52,045	167,422	2,245,400	20,056,573
Wayne	18,654,637		674,841	408,259	5,230,552	60,573,310
Wells	13,553,930			163,713	3,147,872	20,145,409
White	12,426,790		226,745	145,983	2,786,420	26,606,241
Whitley	13,897,165			197,219	4,110,436	29,316,643
Total	2,625,724,461	103,831,636	124,234,030	201,939,781	741,329,068	6,609,048,71

County	Employ. Share In 'At Risk' Sectors	Non- Prop. Tax Share Of Revenue	DeBoer Index	Nike Swoosh	'At Risk' Employ. Share Rank	Non- Prop. Tax Share Rank	DeBoer Index Rank	Revenue Loss Rank	Risk Rank
Adams	5.1%	33.7%	4.4%	-3.2%	86	65	50	76	81
Allen	9.2%	36.8%	-7.2%	-4.8%	25	52	16	16	21
Bartholomew	7.5%	37.1%	7.2%	-3.9%	50	49	59	46	56
Benton	5.0%	23.1%	47.2%	-2.1%	89	85	91	89	91
Blackford	7.0%	30.4%	-8.8%	-2.9%	55	75	9	81	62
Boone	7.3%	36.8%	16.1%	-3.9%	51	51	79	45	63
Brown	15.7%	44.6%	49.0%	-4.9%	6	17	92	14	25
Carroll	6.0%	46.1%	12.8%	-4.2%	68	14	73	38	48
Cass	6.1%	45.5%	-11.7%	-4.3%	66	16	6	34	23
Clark	10.7%	41.1%	-8.4%	-4.0%	13	31	11	44	16
Clay	7.6%	52.1%	-5.3%	-4.8%	48	5	20	17	9
Clinton	6.6%	36.3%	-6.1%	-3.4%	59	55	18	69	53
Crawford	9.0%	28.9%	-3.2%	-5.9%	28	78	24	13	28
Daviess	6.0%	34.9%	1.6%	-3.6%	76	59	39	63	69
Dearborn	15.9%	48.4%	10.5%	-19.8%	5	12	71	4	11
Decatur	5.9%	44.1%	8.2%	-4.3%	77	20	65	33	50
Dekalb	6.4%	38.7%	5.8%	-3.7%	64	40	55	56	59
Delaware	10.0%	35.8%	-12.9%	-4.5%	19	57	4	27	19
Dubois	5.7%	31.6%	6.9%	-3.8%	79	73	56	50	75
Elkhart	5.3%	39.3%	0.1%	-4.0%	82	38	34	42	51
Fayette	7.8%	42.3%	-12.2%	-4.6%	45	24	5	24	14
Floyd	9.4%	39.7%	7.5%	-3.8%	24	37	62	49	42

Table A-12 Con't									
County	Employ. Share In 'At Risk' Sectors	Non- Prop. Tax Share Of Revenue	DeBoer Index	Nike Swoosh	'At Risk' Employ. Share Rank	Non- Prop. Tax Share Rank	DeBoer Index Rank	Revenue Loss Rank	Risk Rank
Fountain	6.4%	38.5%	-0.7%	-3.5%	63	41	31	68	55
Franklin	7.6%	40.8%	11.5%	-3.8%	47	32	72	48	52
Fulton	6.8%	41.5%	8.9%	-3.8%	58	28	67	51	57
Gibson	5.5%	20.3%	15.0%	-2.4%	81	88	78	86	90
Grant	7.8%	44.3%	-15.1%	-4.3%	44	18	2	32	12
Greene	6.0%	40.4%	-6.0%	-3.9%	70	35	19	47	41
Hamilton	11.0%	31.3%	8.3%	-4.2%	12	74	66	36	46
Hancock	9.1%	43.2%	0.5%	-4.6%	26	21	36	21	18
Harrison	16.3%	58.8%	13.9%	-28.5%	4	4	76	3	8
Hendricks	10.1%	34.5%	2.5%	-4.7%	18	62	42	20	27
Henry	7.9%	38.3%	-8.1%	-4.4%	43	43	13	30	26
Howard	9.9%	32.0%	-7.7%	-3.4%	20	68	14	70	43
Huntington	7.7%	38.4%	-1.9%	-3.8%	46	42	27	54	40
Jackson	6.5%	41.4%	-1.7%	-4.2%	62	29	29	37	35
Jasper	8.0%	49.3%	26.1%	-4.6%	41	10	85	25	37
Jay	5.2%	34.8%	0.5%	-3.3%	85	60	35	71	73
Jefferson	8.7%	16.1%	3.5%	-2.1%	34	92	47	88	78
Jennings	5.2%	49.9%	0.1%	-4.4%	84	9	33	31	34
Johnson	11.2%	31.9%	-4.9%	-3.6%	11	69	22	59	38
Knox	8.0%	24.7%	3.4%	-2.5%	40	84	46	83	74
Kosciusko	6.9%	29.1%	27.1%	-3.2%	57	77	87	73	86
Lagrange	5.3%	40.6%	28.0%	-4.4%	83	34	88	29	68
Lake	11.3%	33.1%	-7.4%	-7.5%	9	67	15	8	15
Laporte	11.4%	27.4%	3.6%	-5.9%	8	82	48	12	29
Lawrence	7.6%	40.1%	-2.4%	-4.1%	49	36	25	40	30
Madison	11.2%	42.5%	-14.8%	-7.5%	10	23	3	7	2
Marion	8.8%	39.1%	-8.6%	-6.5%	33	39	10	9	10
Marshall	7.3%	28.8%	8.1%	-3.0%	52	79	64	77	79
Martin	5.0%	42.0%	0.6%	-3.8%	88	25	37	53	54
Miami	8.1%	50.0%	-7.0%	-4.7%	39	8	17	18	5
Monroe	11.7%	33.7%	9.9%	-4.7%	7	64	70	19	36
Montgomery	8.3%	37.4%	5.4%	-3.6%	37	46	53	58	49
Morgan	9.0%	61.6%	7.1%	-6.0%	27	3	57	11	13
Newton	9.0%	20.4%	21.7%	-2.0%	30	87	83	90	85
Noble	5.6%	36.0%	2.8%	-3.5%	80	56	44	65	71
Ohio	25.0%	63.8%	3.9%	-34.0%	2	2	49	2	3
Orange	24.3%	50.6%	-1.8%	-16.5%	3	6	28	5	1
Owen	6.0%	34.7%	9.4%	-3.6%	72	61	68	60	77
Parke	6.3%	47.0%	7.6%	-4.6%	65	13	63	22	39
Perry	6.0%	40.7%	-9.3%	-4.0%	69	33	8	43	32
Pike	4.9%	17.3%	19.3%	-1.8%	90	91	81	92	92
Porter	9.4%	19.8%	13.0%	-2.3%	23	89	74	87	80
Posey	6.0%	27.5%	34.1%	-2.4%	74	81	89	85	89
Pulaski	4.3%	49.2%	19.7%	-4.2%	91	11	82	35	61
Putnam	7.0%	44.2%	4.8%	-4.5%	54	19	51	28	31
Randolph	8.3%	37.8%	-8.2%	-3.6%	36	45	12	61	33
Ripley	7.0%	36.4%	2.0%	-3.6%	56	54	40	64	58
Rush	5.7%	35.2%	13.0%	-3.2%	78	58	75	75	83
Scott	8.7%	41.3%	-15.2%	-4.1%	35	30	1	41	20
Shelby	10.1%	41.5%	5.4%	-11.6%	17	27	54	6	17
Spencer	9.0%	21.8%	2.8%	-2.8%	29	86	45	82	70
St. Joseph	9.8%	42.5%	-2.2%	-4.9%	21	22	26	15	7
Starke	10.1%	31.6%	7.2%	-3.0%	16	72	60	79	64
Steuben	8.1%	36.5%	38.5%	-3.8%	38	53	90	52	67
Sullivan	6.0%	18.7%	7.1%	-2.0%	75	90	58	91	87
Switzerland	25.0%	65.2%	9.9%	-38.2%	1	1	69	1	4
Tippecanoe	9.5%	31.8%	-1.4%	-3.7%	22	71	30	55	44
Tipton	6.0%	41.7%	14.7%	-3.7%	71	26	77	57	66
Union	6.6%	31.9%	4.8%	-3.0%	60	70	52	78	76
Vanderburgh	10.3%	33.5%	-0.6%	-6.5%	15	66	32	10	24

Table A-12 Con't									
COUNTY	Employ. Share In 'At Risk' Sectors	Non- Prop. Tax Share Of Revenue	DeBoer Index	Nike Swoosh	'At Risk' Employ. Share Rank	Non- Prop. Tax Share Rank	DeBoer Index Rank	Revenue Loss Rank	Risk Rank
Vermillion	6.0%	27.9%	2.1%	-2.5%	73	80	41	84	82
Vigo	10.6%	37.3%	-3.7%	-4.6%	14	48	23	26	22
Wabash	8.9%	50.4%	-5.0%	-4.6%	32	7	21	23	6
Warren	2.1%	34.2%	21.7%	-3.0%	92	63	84	80	88
Warrick	7.2%	27.0%	17.7%	-3.3%	53	83	80	72	84
Washington	6.1%	37.4%	1.3%	-3.5%	67	47	38	66	60
Wayne	9.0%	29.2%	-10.2%	-3.2%	31	76	7	74	47
Wells	5.1%	45.6%	2.8%	-4.2%	87	15	43	39	45
White	7.9%	36.9%	26.9%	-3.5%	42	50	86	67	72
Whitley	6.6%	38.3%	7.3%	-3.6%	61	44	61	62	65