

ESTIMATES OF ALABAMA LOSSES DUE TO E-COMMERCE

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EXECUTIVE SUMMARY

E-commerce or online sales by remote sellers to buyers in Alabama exceeded \$34 billion in 2011. Most of those sales (\$32 billion) were business-to-business (B2B) sales of products, 87 percent of which are exempt from use tax. On taxable B2B sales, the buyers or sellers are compliant (i.e., they pay the tax owed) 75 to 80 percent of the time. Retail online sales in 2011 totaled about \$2.3 billion and most of those were subject to sales tax. However, on only about half of those purchases was the tax remitted. The report that follows indicates that Alabama and its local governments in 2011 did not receive many millions of dollars of tax revenues that were owed as business-to-business (B2B) use taxes and business-to-consumer (B2C or retail) sales or use taxes. Because of these remote sales Alabama also lost jobs and millions of dollars of income tax revenue that those jobs would have generated. Why is this so?

1. U.S. Supreme Court rulings prevent states from requiring remote sellers without “nexus,” or presence, to collect and remit sales tax owed by Alabama buyers on their purchases; and
2. Some remote sellers avoid nexus in Alabama so they can dodge applicable sales and use tax, which keeps their delivered prices low and gives them a competitive price advantage over sellers with nexus. Few retail buyers voluntarily comply and pay the use taxes they owe.

Some B2B buyers and retail consumers intentionally buy from out-of-state sellers to avoid paying sales tax. Some retail consumers simply don't know that taxes are owed on their online purchases and believe instead that online purchases are exempt from taxation. The effects of the lost taxes on retail sales have been minimal because online sales until recently have accounted for only a very small percentage of all retail sales. That has changed. Online retail is now approaching 5 percent of all sales and is expected to grow by 7.5 to 9.5 percent annually through 2016. Online sellers are securing a greater share of retail sales in Alabama and that means that Alabama and its local governments will lose even more needed tax revenue in the future.

How Much Tax Revenue Was and Will Be Lost? E-commerce sales growth has in the recent past and will in the near future outpace sales growth by traditional retailers and B2B sellers. If both B2B and B2C sales grow at the expected growth of Alabama Gross Domestic Product, a very conservative growth rate of only about 2 to 2.5 percent per year, that will cause Alabama state, county and local tax revenue losses to rise from \$263 million in 2011 to \$299 million in 2016.

CONSERVATIVE GDP GROWTH ESTIMATES (All Millions of Dollars)

Year	Sales Tax Loss		Income Tax Loss	Total Tax Loss
	Direct	Indirect		
2011	-\$165	-\$35	-\$63	-\$263
2012	-\$168	-\$36	-\$65	-\$269
2013	-\$172	-\$36	-\$66	-\$274
2014	-\$176	-\$38	-\$68	-\$282
2015	-\$181	-\$39	-\$71	-\$291
2016	-\$186	-\$40	-\$73	-\$299

A more likely growth rate of B2C online sales is estimated to be 6 to 7.5 percent annually. With continued B2B growth at the low rate of GDP growth expansion but B2C e-commerce growth at more likely higher growth rates, Alabama's revenue losses will grow from \$309 million in 2011 to \$398 million in 2016. Both sets of estimates are significant dollar amounts. The higher growth scenario (sustained) is more likely; but, even the conservative estimates are large annual revenue losses.

SUSTAINED GROWTH ESTIMATES (All Millions of Dollars)

Year	Sales Tax Loss		Income Tax Loss	Total Tax Loss
	Direct	Indirect		
2011	-\$189	-\$43	-\$77	-\$309
2012	-\$193	-\$46	-\$83	-\$322
2013	-\$203	-\$49	-\$89	-\$341
2014	-\$213	-\$52	-\$95	-\$360
2015	-\$222	-\$56	-\$101	-\$379
2016	-\$232	-\$59	-\$107	-\$398

Every dollar of retail sales “lost” from Alabama to California, Washington, Texas, or New York and other major remote seller states significantly impacts Alabama's economy. The loss annually of \$2 billion or more in retail sales to remote sellers causes the loss of thousands of jobs for Alabama workers, and the household income that those workers would have earned. Conservatively, \$1.3 billion in household income and \$433 million in additional lost retail sales to households that would have earned that income will be lost in 2012. If online retail growth is sustained through 2016, as we expect, those losses in 2012 will rise to \$2.1 billion of income and \$717 million of retail sales, respectively, in 2016.

LOSSES WITH CONSERVATIVE GDP FORECAST

Year	Lost Household Income	Additional Lost Retail Sales
	\$ Billions	\$ Millions
2011	-\$1.3	-\$425
2012	-\$1.3	-\$433
2013	-\$1.3	-\$444
2014	-\$1.4	-\$459
2015	-\$1.4	-\$474
2016	-\$1.5	-\$488

LOSSES WITH SUSTAINED B2C GROWTH FORECAST

Year	Lost Household Income	Additional Lost Retail Sales
	\$ Billions	\$ Millions
2011	-\$1.5	-\$518
2012	-\$1.7	-\$558
2013	-\$1.8	-\$598
2014	-\$1.9	-\$637
2015	-\$2.0	-\$677
2016	-\$2.1	-\$717

Estimates of the lost sales and use tax revenues and household income in the 10 metropolitan areas and the 67 counties in Alabama are provided in Appendices B and C of this report. The tax revenue losses are expressed as a dollar amount per one percentage point of the applicable sales tax rate.

Conclusions. Alabama consumers and businesses buy and will continue to buy products from out-of-state sellers – some with and some without nexus – and the volume of those purchases will continue to grow rapidly. A significant amount of sales and use tax revenue owed to Alabama and its local governments is escaping and will continue to escape our state. In addition, the loss of sales revenues to in-state retailers lowers our state’s economic output and costs us jobs, household income and income tax revenues. The loss of household income diminishes further our state’s retail sales and sales tax revenues. The beneficiaries of our buying from remote sellers are the states where the sales occur including California, Washington, Colorado and Texas. The companies in those states contribute little if anything to the Alabama economy or our

communities but those states benefit economically from Alabama residents’ purchases.

Alabama retailers are disadvantaged by remote sellers who enjoy a competitive delivered price advantage equal to our sales tax rate, which averages 8.33 percent. Alabama retailers should compete more aggressively and those whose customers prefer to buy online must build their online selling capabilities. However, sellers without nexus in Alabama should collect and remit sales taxes to Alabama. The technology exists for this to be done. More importantly, retail competition should be fair.

Remote sellers should not be allowed to enjoy a significant delivered price advantage to the detriment of our state and local governments. More than just in-state retailers are negatively affected by this significant competitive disadvantage. Commercial property owners and developers, banks, construction trades, advertising agencies, Alabama manufacturers and citizens in all walks of life are affected negatively. Alabama should join the fight for fairness in the marketplace.

Estimates of Alabama Losses Due to E-Commerce

The ability of B2C e-commerce sellers to avoid paying sales taxes has “been a point of significant cost savings for online retailers since they have been able to reduce prices and attract customers by dodging sales tax.”

Janet Shim, IBISWorld Industry, p. 10

Introduction

In 2009, the U.S. Bureau of the Census estimated e-commerce at about \$3.4 trillion and divided it into two categories – Business-to-Business (B2B) e-commerce and Business-to-Consumer (B2C) e-commerce. B2C e-commerce amounted to about \$145 billion or only 4 percent of the total. However, B2C e-commerce has been growing at a double-digit rate in recent years, and Shim projects that rate to grow on average by 9.6 percent per year through 2016. (IBISWorld, December 2011.) In its latest quarterly report of U.S. retail sales, the Census Bureau reports that online retail sales are now 4.4% or more of all retail sales. (U.S. Census Bureau, Quarterly Retail E-Commerce Sales, November 17, 2011.)

The growing level of e-commerce sales is negatively impacting Alabama’s economy. First, as the level of retail e-commerce grows and more Alabamians spend a larger share of their disposable income with businesses located outside of the state, Alabama businesses of all types suffer lower sales revenues, operating expenses and profits. Alabama buyers, business (commercial, industrial, professional) and consumer buyers, like buyers everywhere, have a finite amount of money to purchase goods and services. Economy-minded buyers seek the best prices on products they purchase. Many find products they desire at lower prices on the Internet. The lower delivered prices on products sought and bought out of state often are due to the sellers’ failure to collect and remit sales taxes to Alabama and its counties and municipalities. Dollars spent on purchases from out-of-state sellers are dollars that cannot be spent in Alabama. As will be shown, nearly 5 percent of all of Alabama’s consumer retail expenditures occur outside of Alabama. The dollar value of those sales will likely double in the coming years.

Some purchases Alabama businesses make to run their in-state operations are also being bought via the Internet rather than from sellers located in Alabama. Businesses of all types buy products that are not subject to sales or use taxes. Those products cannot be taxed because they are not for resale, are included as a component in a production process or are otherwise exempt. A portion of Alabama businesses’ online purchases are subject to use tax, however. Those purchases are made at the expense of sellers in Alabama and in some instances at the expense of applicable use taxes in Alabama.

The problem addressed here is that sales or use taxes that are owed on purchases by Alabama consumers or business buyers are not always collected or remitted. Taxes are not paid by sellers or buyers for a variety of reasons. First, some buyers physically cross state borders to take advantage of lower tax rates or prices and either carry products back with them or have them shipped to their home state for consumption. Second, states are constrained by earlier legal decisions from mandating that remote sellers on Internet (e-commerce), mail order, telephone and other such transactions collect and remit applicable taxes. Third, some businesses and individuals consciously

purchase products from sellers who are located a significant distance from the buyers “because they think they can successfully evade sales tax on the transaction.” (Fox, Luna and Georg, 2011, p. 4.) This brings about the need to determine a dollar amount for taxes owed that are not being remitted and how best to collect those taxes.

Remote (i.e., located outside of Alabama) online sellers do not always collect and remit taxes that are owed to the state of Alabama and its many counties and municipalities. This report estimates sales revenue as well as sales and use taxes loss to Alabama because remote sellers or Alabama buyers do not voluntarily remit the owed taxes or revenue. Estimates of other economic losses are also provided.

Background

Selling products through mail order catalogs, television advertising, direct mail, telephone solicitations and other such means has occurred for many years. Selling products over the Internet began in the 1990s following the development of the personal computer and the advent of the “World Wide Web.” Between 2000 and 2009, e-commerce grew from \$1.06 trillion and only 10.6 percent of all sales to \$3.37 trillion and 16.85 percent of all sales in the United States. This total represents Business-to-Business (B2B) and Business-to-Consumer (B2C) transactions. (See Appendix A.)

The impacts of out-of-state e-commerce purchasing on sales and use tax revenues by the state, counties and municipalities are significant. The inability of the state and its communities to oblige sellers who are not physically located in Alabama to collect and remit applicable sales taxes stems from the *Quill Corporation v. North Dakota* decision by the U.S. Supreme Court (504 U.S. 298, 1992), and a 1977 ruling of a similar nature (*Complete Auto Transit, Inc. v. Brady*, 430 U.S. 274). The Supreme Court ruled that sellers without some form of “physical presence,” including assets or some other tangible property located in the destination state, or “nexus,” cannot be compelled to collect and remit applicable sales or use taxes on their sales into that state.

The issue affects sales to customers by companies known as Business-to-Consumer (B2C) sellers over the Internet as well as through other electronic and non-store retail sales channels including catalog, telephone, television and mail order sellers who lack nexus. As noted above, B2C e-commerce, which accounted for only a couple of percentage points of all consumer purchases until recently, now is approaching nearly \$170 billion in the United States (some say it exceeded that in 2011) and accounts for 4.5 percent or more of all retail sales. That amounts to almost one of every \$20 of retail sales in our nation, and that number is growing significantly faster than the nation’s Gross Domestic Product (GDP). Because of those remote sales, Alabama retailers have suffered and continue to suffer growing reductions in revenue.

Sales and use taxes are imposed on a destination basis; that is, they are due to be collected and remitted from buyers where the products are received. Sellers are expected to collect and remit them or buyers are expected to remit them if they are not collected by the sellers. Fox, Luna and Schaur cite a study by the state of Washington where random audits revealed e-commerce noncompliance of as much as 23 percent on purchases made from out of state sellers. (Valz, 2010.) It is argued that “evasion rises with increases in distance because destination taxes are less enforceable.” (Fox, *et al.* 2011, p. 5.) Simply, sales tax compliance decreases with the ability to enforce destination taxation. Consideration of what action is needed in Alabama and nationwide to facilitate compliance is important. The first step is to measure the extent of the problem.

Value of E-Commerce in the United States

The value of Business-to-Business e-commerce (online) transactions grew quickly through the 1990s and beyond as buying and selling business organizations took advantage of the opportunity to make their exchanges more efficient and accurate. The magnitude of their B2B exchanges justified investments in people, equipment and software to facilitate electronic data exchanges. In 2000, \$755.8 billion and 18 percent of all manufacturing shipments and \$277.8 billion and 9.9 percent of all wholesale transactions were via e-commerce. In that year, less than one percent of retail sales were e-commerce transactions.

In 2009, the dollar values and percentages of e-commerce by industry sector were as follows.

Sector	Dollars Billions	% Sector E-Commerce
Manufacturing	\$1,862.5 B	42.0%
Merchant Wholesale Sales (including MSBOs*)	\$1,211.2 B	23.4%
Retail	\$ 145.2 B	4.0%
Selected Services	\$ 153.0 B	2.3%

*Manufacturers’ Sales Branches and Offices

Source: U.S. Census Bureau, *Summary of U.S. Shipments, Sales, Revenues, and E-commerce: 2000-2009*

Business-to-Consumer (B2C) electronic transactions grew much more slowly as the ability of sellers to interact effectively with individual consumers was originally constrained by consumers’ limited access to personal computers and broadband and sellers’ lack of understanding of Internet-based consumer buying behavior and marketing strategies to meet customer expectations efficiently and effectively. As recently as 2003, the percentage of U.S. households with broadband access was less than 65 percent. That is approaching 75 percent and is expected to exceed 80 percent in five years. (Shim, p. 5.)

Kathryn Zickuhr at the Pew Research Center reports that 79 percent of Americans go online and two-thirds of American adults now have a broadband Internet connection at home. Another 5% go online using a dial-up connection. (Zickuhr, Pew Research Center, pp. 5 -11.) Shopping and buying products online is becoming uniformly popular among all U.S. age groups. The group of Americans who most buy products online are older baby-boomers aged 56 to 64. Among 56- to 64- year olds with Internet access, 69 percent report buying products online.

Table 1. Basic Demographics of Online Retail Buyers

Generation	Age Bracket	Percent of Online Adults Who Buy Products Online
All Online Adults	All	66%
Teens	12 to 17	48%
Millennials	18 to 33	68%
Gen X	34 to 45	66%
Younger Boomers	46 to 55	64%
Older Boomers	56 to 64	69%
Silent Generation	65 to 73	59%
G.I. Generation	74 +	57%

Source: Zickuhr, p. 11.

Some estimate the level of B2C e-commerce to be higher than U.S. Bureau of the Census estimates based on annual surveys. More than 100 million people or nearly a third of all Americans now make product purchases online annually. Annual online sales grew by an average of 11.1% between 2006 and 2011. Future growth in online retail selling is estimated to outpace GDP growth significantly and to average 9.64 percent annually through 2016. (Shin, pp. 4, 9 and 11.) Sucharita Mulpuru of Forrester Research also predicts high online retail sales growth through 2015. (Mulpuru, 2011).

Enright estimated that e-commerce retail sales (B2C) rose in 2010 to \$165.4 billion, a 14.8 percent increase over the 2009 level, and accounted for 4.2% of total retail spending. (Enright, *www.Internetretailer.com*, Feb. 17, 2011.) Shim reported e-commerce to have accounted for \$195.9 billion in 2011 retail transactions. (Shim, 2011, p. 4.) That estimate excludes Internet sales made by retailers who operate brick-and-mortar stores that have set up websites in conjunction with their physical outlets.

Retail Competition Channels of Distribution

Retail sales occur through three types of sellers (1) traditional storefront retailers known as “brick-and-mortar” sellers, (2) “pure-play” sellers like Amazon and eBay that sell online exclusively and operate no retail stores and (3) “brick-and-click” sellers like WalMart, Best Buy, Target and others who sell both out of retail stores and over the Internet.

Online retailers have been able to compete successfully with traditional retailers for these key reasons. (Shim, p. 8.) First, the online sellers have no physical storefronts and that allows them to avoid costs and fees associated with retail property ownership. This produces for those sellers comparatively lower operating expense ratios and higher pretax net profit margins. Second, because online sellers are not required to collect and remit applicable sales and use taxes, they enjoy a significant “delivered price” competitive advantage, which amounts to about 8.33 percent on average across Alabama. (Drenkard, 2012.) This has resulted in large sums of cash owed to Alabama and other U.S. states, counties and municipalities going uncollected. Further, the ability to avoid collecting and remitting sales and use taxes has been “a point of significant cost savings for online retailers since they have been able to reduce prices and attract customers by dodging sales tax.” (Shim, 2011, p. 10.)

Alabama Sales and Use Taxes

The Alabama state sales and use tax rate is 4 percent on

purchases made for consumption or use. Across the 67 counties and approximately 500 municipalities, additional local sales and use taxes apply. The average county and municipal sales/use tax is another 4.33 percent. In a growing number of metropolitan areas, like Birmingham and Montgomery, the total tax rate is now 10 percent. In smaller and rural areas, it is somewhat lower.

According to the Tax Foundation, a nonpartisan tax research group based in Washington, D.C., Alabama’s average sales tax rate for 2012 is 8.33% (Drenkard, 2012), making it the eighth highest combined state and local tax rate in the nation. The 4.33 percent average local rate ranks as the fourth highest in the country. Many Alabama cities now have a combined sales tax rate of 10 percent, putting those cities at the top of the nation in terms of sales taxes levied. The number of Alabama cities at that 10 percent sales tax level grows each year.

The Alabama Department of Revenue has added an item on page one of the state income tax form that asks tax filers to report the dollar amount of Internet and other purchases they made in the earlier year on which they were not charged sales taxes. Filers are asked to remit the taxes owed on their purchases, and, in 2011, 20,000 filers remitted a total of \$700,000. (Snellgrove, 2012.) That is an average of \$35 per filer and represents an average level of untaxed e-commerce retail buying by the compliant reporters of \$875 per filer and altogether \$1.75 million in e-purchases.

Alabamians’ purchases from out-of-state B2C sellers are benefiting other states including California, Florida, New York, Texas, Illinois, Colorado, Pennsylvania and Washington, where a disproportionate number of e-commerce sellers operate. More than half (52 percent) of all e-sellers’ establishments are located in these eight states. (Shim, 2011, pp. 17-18.)

Less than one percent (0.8 percent) of the nation’s e-commerce establishments is located in Alabama. The location of e-commerce businesses differs from what is typical for the rest of the retail industry. Traditional retailers locate “close to their customers” and participate in community activities and affairs. Local retailers are likely to support the local schools and youth sports programs, volunteer to assist with community events, and contribute in many other ways to their local communities. Remote sellers in California, Washington, Colorado, Texas and Florida don’t and aren’t expected to do much of that in Alabama. See Table 2.

Table 2. States Where a Majority of Remote Sellers Are Located

State	Number of E-Commerce Establishments	Percent of US Total
California	8,070	15.8%
Florida	4,699	9.2%
New York	3,882	7.6%
Texas	2,962	5.8%
Illinois	1,941	3.8%
Colorado	1,890	3.7%
Pennsylvania	1,685	3.3%
Washington	1,532	3.0%

Source: Shim, IBISWorld, 2011.

Compliance

Not all of the sales made by remote sellers without nexus require collection and remittance of sales taxes or the payment of the most common state tax rate. Some product sales such as prescription pharmaceuticals and custom computer software are exempt from sales taxes. On other products, the applicable state sales tax rate is lower than 4 percent. This is true for automobile and some machinery sales, for example.

Some Alabama consumers buy from B2C remote sellers that also have retail, wholesale or some other physical presence in Alabama and those sellers are expected to and likely do collect and remit sales taxes to the Alabama Department of Revenue as well as Alabama counties and municipalities. However, even on those sales, Alabama loses the effects that added sales revenues in Alabama businesses would have had. When Alabama residents make retail purchases from out-of-state sellers, the economic impacts of those purchases accrue to other states and not Alabama. For example, lowered retail sales revenues in Alabama cost Alabama jobs and related income tax revenue.

Estimates vary as to the magnitude of uncollected sales taxes owed on e-commerce purchases by businesses as well as consumers. As noted by persons who regularly conduct business tax audits, some degree of noncompliance is nearly always found. One estimate issued recently by the National Conference of State Legislatures (NCSL) is that only about 50 percent of the sales and use taxes owed nationally on B2C e-commerce purchases are being collected. The estimated shortfall was \$8.6 billion in 2010. (Arduin, Laffer & Moore Econometrics, September 2011, p. 10.)

The problem is not limited to B2C sales, however. Business-to-Business (B2B) e-commerce sales account for almost 20 times more than B2C sales and totals more than \$3 trillion in sales annually. As noted above, B2B buyers and sellers embraced the use of the Internet at a much higher rate than did consumers, and because many B2B relationships are long-standing and stable, it was advantageous to invest in information systems designed especially for routinely recurring transactions as well as customized ordering and billing transactions.

A large percentage of B2B transactions are exempt from state and local sales taxes. For example, goods purchased for resale are exempt. Because of the size and scope of many business operations, many buyers and sellers are subject to tax compliance audits that can be justified financially by state and local revenue authorities. It is much less likely that business sellers can claim “ignorance” of the law.

The compliance rate in B2B e-commerce is much higher than in the B2C arena. National tax experts acknowledge that the level of noncompliance is not negligible, arguing that many companies simply lack the technology to comply easily and are not economically capable of manual compliance on many relatively small-dollar transactions. Estimates of noncompliance on sales and use taxes owed in B2B e-commerce are as high as 20% to 25%.

Indirect Effects of Retail Sales Losses to Remote Sellers

The loss of taxable product sales to remote sellers who do not collect and remit applicable tax revenues to Alabama is a significant problem. But, there are other impacts of the loss of sales to remote sellers. There is a multiplier, or “trickle-down effect.” In addition to losses in sales and use tax collections, e-commerce sales made

by out-of-state sellers result in higher levels of unemployment, and in some cases relocation of families, lost personal income, and lost Alabama income tax revenues. Sales revenues earned by Alabama-based businesses contribute to gross state product. For example, the U.S. Department of Commerce reports that every \$1 million in retail sales in Alabama leads to the creation of 22.5 jobs spread across many sectors of the economy. Only 12.5 percent of the jobs created are in the retail sector. When millions of dollars of sales revenue leaks out of Alabama to other states, those states' economies are boosted at the expense of Alabama.

How Might Sales Taxes Affect Customer and Firm Behavior?

The ability of online sellers to avoid collecting and paying sales taxes has been a significant competitive advantage to "pure-play" sellers – online retailers who do not operate physical outlets. Anderson *et al.* report that some retailers who operate retail outlets have avoided opening a first store in high-tax states as that would eliminate their online sales price advantage throughout those states. (Anderson, *et al.* 2010, p. 1.)

They also addressed this question: Does collecting sales taxes have a negative impact on sales through Internet and catalog channels? Based on a study of buying by 13,021 customers of a multichannel (brick-and-click and catalog) apparel retailer, they measured how the firm's customers responded when the retailer began collecting sales taxes on Internet and catalog orders. The customers whose purchases were studied resided in two neighboring states. In one state, sales taxes of 4 to 6 percent applied to retail transactions. Before a new store was opened there, customers did not pay taxes on online purchases. When a regularly priced (not a factory store) new store opened, sales taxes began to be collected on all sales: in-store, Internet and catalog. Even though only one store opened in the previously un-stored state, customers throughout that state became subject to the requirement that applicable sales taxes be collected and remitted as "nexus" was created.

The study revealed changes in the number of orders placed by customers in the state with sales taxes after a new store opened there and compared that to ongoing purchases by customers in the neighboring state. It was determined that the store opening in the adjacent state was associated with an 11.6 percent decrease in Internet sales. The authors determined that Internet sales affected most significantly were of non-discounted items. For such items, customers have the greatest incentive to search for alternative sellers and the greatest ease of search – including local retailers who may offer immediate delivery at similar prices with sales taxes included as well as other Internet sellers who lack nexus and are not required to collect and remit sales taxes.

The Anderson study provides evidence that some online consumers are sensitive to "delivered price" increases that would result if sales taxes are added to online purchases. In the Anderson study, sales taxes of only 4 percent and 6 percent were added. Some consumers are buying online to avoid a much higher average tax rate of 8.33 percent in Alabama. It is reasonable to expect the imposition of 8 to 10 percent sales tax on consumers' purchases in Alabama to make Alabama brick-and-mortar and brick-and-click retailers' offers more attractive and to discourage some purchases from remote sellers. The tax would likely cause online sellers to discount their prices to Alabama online shoppers in an attempt to compete on a level playing field with the brick-and-mortar and brick-and-click retailers. Such an action will be good for Alabama's consumers as well as its retailers.

Key Issues

To estimate recent and likely future losses of sales and use tax revenues in Alabama, several key issues had to be addressed.

1. What is the recent value of B2C and B2B e-commerce? The last full report on e-commerce sales from the Census Bureau ends with estimates through 2009. Estimates for sales in 2010 and 2011 are needed as well as a forecast of future sales.
2. What is the applicable sales and use tax rate for Alabama? The state rate is 4%. However, counties and municipalities typically additional percentages to beyond that.
3. What percentage of e-commerce sales are exempt from sales and use tax?
4. What percentage of the taxable amount of e-commerce sales are made by sellers that have "nexus" in Alabama and thus are required to collect and remit sales and use taxes?
5. On what percentage of remote sales made to Alabama buyers who are not charged taxes are those buyers compliant (i.e., they report and remit taxes owed on those purchases)?

Other Relevant Studies Reviewed

Other researchers and analysts have made estimates of national and/or state level e-commerce sales revenues and sales and use tax losses on B2C and/or B2B transactions for a variety of geographic areas. Multiple approaches have been employed to derive estimates of national and state level losses of obligated and uncollected sales and use taxes and the methods used and findings of several reports were examined to determine how others have addressed the key issues noted above and to determine methods appropriate for this study.

Bruce, Fox and Luna (BFL) of the Center for Business and Economics Research at the University of Tennessee have published several reports of national and state sales tax revenue losses on e-commerce since 2000. In a report by the Economics Center at the University of Cincinnati dated October 2011, the works by BFL were described as "the cornerstone of the literature on sales tax of electronic transactions." Despite criticisms that the Tennessee CBER lost tax revenue estimates are too high by some and too low by others, according to the Economics Center, the BFL estimates "appear to be fundamentally sound." (Economics Center, 2011, p.3.)

In their State Tax Notes paper in 2009, BLF estimated Alabama's direct "baseline" sales tax revenue loss due to e-commerce noncompliance to be at least \$115.5 million in 2008 and forecast that to grow to \$151.6 million by 2011. Their more optimistic or higher level of loss in Alabama for 2011 was \$169.3 million. They estimated that 13 percent of B2B e-commerce and 69.6 percent of B2C e-commerce are taxable in the average state.

Arduin, Laffer & Moore Econometrics in September 2011 estimated Florida's retail sales online to grow from \$12.3 billion to about \$30 billion by 2020. (Arduin *et al.*, 2011.) They estimated Florida's 2010 retail sales tax losses on Internet sales to be \$374 million. Their estimates and forecasts were based on Forrester Research estimates that Internet retail sales will grow by nearly 10 percent annually through 2011. They calculated their sales tax loss estimates on the National Conference of State Legislatures' (NCSL) estimate that taxes owed on 50.6 percent of Internet retail sales go unpaid. (Arduin *et al.*, p. 10.) Florida's Internet sales tax

revenue losses were forecast to rise to between \$842 million and \$937 million by 2020.

Robert P. Strauss, a Carnegie Mellon Professor of Economics and Public Policy, testified before the Pennsylvania House Committee on Finance in May 2011 that \$4 billion to \$6.5 billion of Internet sales would be made into that state in 2011 that would be subject to tax but not taxed. The overall net tax additions to the Commonwealth that would result from a leveling of the playing field, he argued, would range from \$246 million to \$398 million in 2012. Those forecasts were based on estimates that online sales totaled 4.2 percent of all retail sales in 2010 and that percentage would continue to grow.

Richard Parker of Rea & Parker Research reported on the economic impacts of the ineffective Internet sales tax collections on California. (Parker, 2010.) He found the losses to extend beyond only uncollected sales and use tax revenues associated with lost retail sales revenues and determined that California in 2010 lost sales revenues (\$4.1 billion), jobs (18,300), payroll (\$790 million) and commercial real estate value (\$1 billion). The rate of growth in the calculated losses led to estimates that the losses would increase from 2010 to 2015 by 88 percent and then by another 85 percent by 2020.

The Economics Center at the University of Cincinnati estimated Ohio's lost sales and use tax revenues by online consumers by making "adjustments" to the Bruce, Fox and Luna methodology. Their approach estimated Ohio's lost sales and use tax revenues to total \$200 million in 2011 and \$1.2 billion for the years 2007 to 2012. Direct retail job losses totaled 11,000 and commercial rent losses totaled \$10 million annually.

The Direct Marketing Association in 2008 reported research conducted by Peter A. Johnson that asserted that some earlier estimates of the national total of sales and use tax revenues lost due to noncompliance were exaggerated. On the B2C online sales, Johnson argued that any attempt to estimate lost retail sales and related taxes should account for auto sales (for which compliance is virtually 100 percent), exempt products, compliance by remote sellers with nexus and voluntary consumer compliance. Johnson projected lost sales tax nationally and at state levels. His 2008 national estimate was based on the following percentages of all retail e-commerce for each category.

Automobiles	21.5%
Exempt Products	10.7%
Remote Sellers With Nexus	23.6%
Total Compliant	55.8%

Johnson estimated the share of online B2C commerce that was taxable and noncompliant was 44.2 percent of the total and that the voluntary compliance rate on those purchases was "de minimus" and only about 1 percent.

Valz in the state of Washington Department of Revenue reported in a 2008 compliance study that use tax noncompliance was 25.5 percent. That number was lowered to 23.0 percent in a 2010 compliance study. Those estimates were based on an analysis of a random sample of audits conducted between 2005 and 2008 and are asserted to be representative of the total population of registered taxpayers. The 23 percent rate of noncompliance in Washington accounted for more than \$89 million of unremitted use taxes. That rate of B2B noncompliance

was reported to be used by Bruce, Fox and Luna in their State Tax Notes paper in May 2009. (Valz, 2010, Bruce, et al., 2009.)

Value of U.S. B2C Online Sales

The Census Bureau estimates of B2C online sales are shown in Table 3 for 1998 to 2009. The recession in 2008 and 2009 significantly hindered sales growth but indications are that online retail sales are growing robustly once again. E-commerce retail sales grew from \$27.8 billion in 2000 to more than \$145 billion in 2009. Retail e-commerce during that period grew dramatically as a share of U.S. retail sales.

Table 3. Actual Online Retail Sales: 1998 - 2009

Year	Online Retail \$M	% of All Retail	Annual % Change
1998	4,988	0.19%	
1999	14,529	0.52%	191.28%
2000	27,763	0.93%	91.09%
2001	34,593	1.13%	24.60%
2002	45,212	1.44%	30.70%
2003	58,157	1.78%	28.63%
2004	74,175	2.13%	27.54%
2005	92,804	2.51%	25.11%
2006	114,912	2.96%	23.82%
2007	138,145	3.45%	20.22%
2008	142,281	3.60%	2.99%
2009	145,214	3.99%	2.06%

Source: U.S. Census Bureau.

According to the Census Bureau, adjusted quarterly retail e-commerce sales during the 12-month period from the fourth quarter of 2010 to the third quarter of 2011 totaled \$185.4 billion and have grown to about 4.5 percent of all retail sales. See Table 4.

Table 4. Recent Quarterly Online Retail Sales

Year Quarter	E-commerce Sales \$ M	Online % Total
2010 Q3	42,418.00	4.4
2010 Q4	44,517.00	4.4
2011 Q1	46,131.00	4.5
2011 Q2	47,352.00	4.5
2011 Q3	48,244.00	4.6

Source: U.S. Census Bureau News, November 17, 2011.

IBIS World reports that retail online sales annual growth from 2006 to 2011 was 11.1% and totaled about \$196 billion in 2011. That is expected to grow by 9.64% annually through 2016. (Shim, 2011.)

For this report, national B2C e-commerce sales were estimated to grow from 2009 through 2016 by two rates. First, national B2C sales were calculated to grow at the projected growth of U.S. Gross Domestic Product (GDP) from 2009 to 2016. Second, a linear regression model was estimated to determine the

general trend of U.S. B2C commerce from 1998 through 2009. The dependent variable is national B2C online retail sales and the independent variable is “year” (e.g., 2008). The linear model ($Y = a + bX$) forecast future sales with a constant of - \$28.12 million and a slope (b) of \$14,074.535 per year.

$$Y = -28,120,000 + 14,074.535 X \quad Y = \text{U.S. B2C E-commerce Sales} \quad X = \text{Year}$$

$$R^2 = .977 \quad F = 459.0 \quad \text{Sig.} = .000 \quad b = 14,074.535 \quad t = 21.434 \quad \text{Sig.} .000$$

Shown in Table 5 below in Column A are Census Bureau estimates of national online retail sales. In column B are reported estimates of online retail sales calculated to grow annually at 11.1 percent per year after 2005. That is the rate of growth IBISWorld asserts online retail sales to have grown in that period. The IBISWorld estimates fall below what the Census Bureau reported for the 2006-to-2008 period but are very close to the 2009 reported sales. In Column C are the online sales forecast for 2006 to 2012 by the regression model shown above. That model was based on the Census data and provides good estimates of actual sales. The mean absolute difference between actual sales and the model estimates is 4.5 percent. The mean absolute difference between the actual sales and the IBISWorld estimates is higher at 10.2 percent but those fell below actual sales reported for the 2006 to 2009 period.

Table 5. Comparison of Estimates of Past Online Sales

	A Census Bureau	B IBISWorld	C Regression	Percent Difference	Percent Difference	Percent Difference
Year	Reports	11.1%/Year	Forecast	B to A	C to B	C to B
2006	114,912	103,012	112,444	-10.4%	-2.15%	9.16%
2007	138,145	114,447	126,518	-17.2%	-8.42%	10.55%
2008	142,281	127,150	140,592	-10.6%	-1.19%	10.57%
2009	145,214	141,264	154,666	-2.7%	6.51%	9.49%
2010	n.a. ¹	156,944	168,740	n.a.	n.a.	7.52%
2011	n.a.	174,365	182,814	n.a.	n.a.	4.85%
2012	n.a.	193,720	196,888	n.a.	n.a.	1.64%

¹ The Census Bureau provides no final report of annual retail e-commerce sales for these years.

The estimated levels of B2C retail e-commerce in the United States through 2016 by GDP growth and the trend model are shown in Table 6. The GDP-driven estimates are lower and are conservative. The annual average growth is 2.62 percent. The regression-model growth forecasts are higher but much lower than many other estimates that B2C online retail sales are likely to grow by a greater rate. (See for example Shim, 2011.)

Table 6. Forecast of U.S. Online Retail Sales 2011 to 2016 (\$ Billions)

Year	GDP Growth Rate	Regression Model Growth
2011	\$150.73	\$183.89
2012	\$153.68	\$197.96
2013	\$157.34	\$212.04
2014	\$162.77	\$226.11
2015	\$168.19	\$240.19
2016	\$172.98	\$254.26

Alabama Total Retail Sales

Nationally, B2C online sales totaled \$145.214 billion in 2009. What percentage of that was made by Alabamians? And, how much of the taxes owed was not remitted?

The Alabama Department of Revenue reported sales and use tax collections for fiscal years 2004 through 2011. For each year, Alabama’s reported retail sales were determined by dividing the tax revenue by 4 percent. In 2011, Alabama collected \$2.18 billion in sales and use dollars. Those taxes were collected on \$54.37 billion in sales. Those amounts were adjusted by the reported annual rates of e-commerce penetration by the Census Bureau (such as 2.13 percent in 2004 through 3.99 percent in 2011) that estimated Alabama consumers’ purchases from remote sellers on which only a portion of the applicable tax was remitted. Those sales were determined to average 1.45 percent of the reported U.S. estimated annual retail sales. (U.S. Census Bureau, Annual Retail Trade Survey: 2009.)

Alabama’s online retail purchases in 2009 were estimated to be 1.45 percent of the U.S. total of B2C e-commerce or \$145.214 billion. That amounts to \$2.105 billion. It was assumed that Alabama’s share of the U.S. total retail e-commerce sales would remain at 1.45 percent through 2016 and that was the basis for the estimates in Table 7 of Alabama’s online retail sales for 2011 to 2016.

Table 7. Alabama Online Retail Sales Forecasts (\$ Billions)

Year	GDP Growth	Regression Growth
2011	2.18	2.66
2012	2.22	2.86
2013	2.28	3.07
2014	2.35	3.27
2015	2.43	3.47
2016	2.50	3.68

Two approaches were used to estimate Alabama’s lost tax revenues on the online retail sales. First, the approach used by Arduin *et al.* to estimate Florida’s sales tax losses was applied. They adopted the National Conference of State Legislatures’ estimate that 50.6 percent of online sales are taxable and noncompliant. (Arduin, *et al.*, 2011.) The second approach was employed by John Peterson for the Direct Marketing Association in 2008. Johnson determined that after adjusting for sales of autos (which are nearly 100 percent compliant), exempt products, sales by sellers with nexus and voluntary compliance, about 45 percent of B2C online retail sales are taxable and noncompliant.

The results are reported in Table 8 for future sales estimated to grow by the forecast rate of GDP growth for the United States and by the rate projected by the regression model which represents sustained growth equal to the recent past. The NCLS loss estimates are greater for both the Low and Sustained Growth sets of forecasts. Tax revenue losses are provided for both the NCSL/Arduin and the DMA approaches for both sales growth forecasts.

Table 8. Forecasts of Alabama's Tax Revenue Losses on Online Retail Sales (\$ Millions)

\$ Millions	Low GDP Growth		Sustained Growth	
	NCSL/Arduin	DMA	NCSL/Arduin	DMA
2011	91.89	79.91	112.11	97.49
2012	93.69	81.47	120.69	104.95
2013	95.93	83.41	129.27	112.41
2014	99.24	86.29	137.85	119.87
2015	102.54	89.17	146.43	127.33
2016	105.46	91.70	155.02	134.80

Alabama's Tax Revenue Losses on B2B Sales

Most B2B online transactions are exempt from sales and use taxes. Further, compliance on the payment of taxes owed on B2B sales is considerably higher than on B2C sales. Still, because B2B commerce accounts for trillions of dollars of commerce, the small percentage of taxable and noncompliant sales represents a sizable amount of potential lost tax revenue. U.S. B2B e-commerce in 2009 for manufacturing and merchant wholesale transactions exceeded \$3 trillion. Those two sectors accounted for 65.4% of all e-commerce sales. The taxable share of those transactions is estimated to be \$400 billion or 13 percent of the total. The rate of noncompliance has been estimated to be rather low and to range from 15 to 25 percent.

B2B online sales were estimated to have grown by 2 percent in 2010 and for 2011 to 2016 to grow by the projected growth in U.S. GDP. That produced the estimates reported in Table 9. Alabama's share of total U.S. B2B sales was 1 percent based on the state's historical record of value of shipments relative to the national values. The B2B online sales estimate for Alabama in 2011 is \$31.98 billion.

Table 9. Alabama Lost Tax Revenues on B2B Sales

Year	U.S. B2B \$ M	Alabama B2B \$ M	Alabama Lost Tax		
			20%	25.50%	Average
2011	3,197,877	31,979	69.3	88.3	78.8
2012	3,261,835	32,618	70.6	90.1	80.4
2013	3,327,072	33,271	72.1	91.9	82.0
2014	3,393,613	33,936	73.5	93.7	83.6
2015	3,461,485	34,615	75.0	95.6	85.3
2016	3,530,715	35,307	76.5	97.5	87.0

A 13 percent taxable rate and rates of noncompliance of 20 to 25.5 percent yield estimates of Alabama's tax revenue losses on B2B e-commerce. In 2011, estimates range from \$69.3 million to \$88.3 million. They rise modestly through 2016 to reach \$76.5 million to \$97.5 million. The average of those two annual estimates rises from \$78.8 million in 2011 to \$87.0 million in 2016.

Combined B2C and B2B Tax Revenue Losses

The sum totals of Alabama's tax revenue losses estimated for 2011 through 2016 are provided for the low growth B2C estimates and the average B2B estimates are in Table 10. The losses amount to \$164.68 million in 2011 and grow to \$185.56 million in 2016.

Table 10. Sum of Low Growth B2C and Average B2B Lost Tax Revenues (\$ Millions)

Year	B2C Average	B2B Average	Low Growth Total Tax Revenue Lost
2011	85.90	78.8	164.68
2012	87.58	80.4	167.94
2013	89.67	82.0	171.64
2014	92.76	83.6	176.37
2015	95.86	85.3	181.13
2016	98.58	87.0	185.56

The sum totals of Alabama's tax revenue losses estimated for 2011 through 2016 for the sustained growth B2C estimates and the average B2B estimates are in Table 11. The combined B2C and B2B losses amount to \$183.58 million in 2011 and grow to \$231.89 million in 2016. The low growth B2C estimates are very conservative estimates. It is unlikely that retail e-commerce sales will grow by the anticipated low rates of U.S. GDP growth between 2011 and 2016. Those low rates yield "worst case" or most conservative estimates of future tax revenue losses. The sustained growth B2C scenario is much more likely to be realized.

Table 11. Sum of Sustained Growth B2C and Average B2B Lost Tax Revenues

Year	B2C Average	B2B Average	Sustained Growth B2C Total
2011	104.80	78.8	183.58
2012	112.82	80.4	193.18
2013	120.84	82.0	202.81
2014	128.86	83.6	212.47
2015	136.88	85.3	222.16
2016	144.91	87.0	231.89

Other Impacts of Retail Online Sales and Tax Revenue Losses on Alabama

The loss of retail sales revenues from Alabama to other states and countries affects the state beyond lost sales and use tax revenues. Lost sales revenues affect the state's gross output or gross domestic product. That affects employment and household income. Lost income is reflected in lower state income tax revenues. The lost jobs and household income also lowers consumers' disposable income and that leads to a secondary loss of retail sales and the sales or use taxes owed on those amounts.

The applicable indirect impact multipliers associated with lost sales revenues are these:

Gross State Product	1.8553
Earnings	0.5800
Employment	22.5153

(U.S. Department of Commerce and Center for Business and Economic Research, University of Alabama.)

Table 12. Estimated Indirect Impacts of Low B2C Growth of Online Sales in Alabama

Year	\$ Billions Lost B2C Retail Revenues	\$ Billions Additional Lost AL Output	\$ Billions Lost Alabama Income	\$ Millions Additional Lost Retail Sales	\$ Millions Additional Lost Retail Sales Tax	\$ Millions Lost Alabama Income Tax
2011	2.18	4.04	1.26	424.9	33.6	63.2
2012	2.22	4.12	1.29	433.2	34.3	64.5
2013	2.28	4.22	1.32	443.5	35.1	66.0
2014	2.35	4.37	1.37	458.8	36.3	68.3
2015	2.43	4.51	1.41	474.1	37.5	70.6
2016	2.50	4.64	1.45	487.6	38.6	72.6
Totals 12-16	11.79	21.87	6.84	2297.23	181.79	341.85

Table 13. Estimated Indirect Impacts of Sustained Growth of Online Sales in Alabama

Year	\$ Billions Lost B2C Retail Revenues	\$ Billions Additional Lost AL Output	\$ Billions Lost Alabama Income	\$ Millions Additional Lost Retail Sales	\$ Millions Additional Lost Retail Sales Tax	\$ Millions Lost Alabama Income Tax
2011	2.66	4.93	1.54	518.3	41.0	77.1
2012	2.86	5.31	1.66	558.0	44.2	83.0
2013	3.07	5.69	1.78	597.7	47.3	88.9
2014	3.27	6.07	1.90	637.4	50.4	94.8
2015	3.47	6.45	2.02	677.0	53.6	100.8
2016	3.68	6.82	2.13	716.7	56.7	106.7
Totals 12 - 16	16.35	30.34	9.48	3,186.85	252.19	474.23

According to the U.S. Department of Commerce, the addition of \$1 million in retail sales in Alabama is estimated to create 22.5 jobs and add \$580,000 in household income (CBER, University of Alabama). That is a household income rate of \$25,778. The lowest estimate of remote online retail sales for 2011 is \$2.18 billion. That is the amount of retail sales in 2011 that Alabama consumers are estimated to have spent with remote online retailers.

If B2C online sales grow from 2011 to 2016 in Alabama at conservative rates equal to projected gross domestic product growth, additional indirect impacts will be as shown in Table 12. A \$2.18 billion loss of retail sales revenue in 2011 created a reduction in the state's gross output of \$4 billion (1.8553 times \$2.18) and the loss of household income of \$1.26 billion (0.58 times \$2.18). The loss of that much income deflated retail sales in Alabama by an additional \$425 million after accounting for state and federal income tax effects. About 30 percent of gross income is spent on retail purchases and the loss of \$1.26 billion in income reduced retail spending by 30 percent of that amount. The loss of that additional sales revenue led to an additional loss of \$33.6 million in Alabama sales tax revenue (assuming that 5% of those sales were made out of

state). Finally, the loss of income impacted Alabama's income tax revenue by about 5 percent or \$63.2 million in 2011.

If online sales in Alabama grow by a "sustained rate of growth" equal to the recent past average annual growth estimated by the regression model, then higher indirect effects will be brought about. The sustained-growth-related indirect losses are in Table 13.

The loss of more than \$2 billion in retail sales in 2011 and the annual losses suffered in preceding years that have been lost to remote sellers at the expense of Alabama retailers caused the state to lose many thousands of jobs. That is the basis for the estimates of \$1.26 billion to \$1.54 billion in household income in Alabama. That is based on the jobs lost in the past and those jobs are not recoverable.

Continued annual losses of more than \$2 billion in retail sales revenue will continue to add to the total jobs lost. The low and sustained growth estimates of future online sales will be related to additional job losses in Alabama. Future lost job estimates are reported for the low annual rate of growth forecast of online retail sales in Tables 14. The annual rates of job loss growth are equal to the GDP growth rates that estimate online sales revenue growth.

Table 14. Additional Annual Job Losses if Online Retail Sales Grow by GDP Growth

Year	Low Growth B2C Sales Lost	Total Jobs Lost	Retail Jobs Lost	Other Jobs Lost
2012	2.18	906	113	793
2013	2.22	1,122	140	982
2014	2.28	1,664	208	1,456
2015	2.35	1,662	208	1,455
2016	2.43	1,465	183	1,282

Similar estimates of Alabama job loss estimates for the future if online retail sales continue to grow at the sustained growth rate of the past, based on the regression model, are reported in Table 15.

Table 15. Additional Annual Job Losses if Recent Online Retail Sales Growth is Sustained

Year	Sustained Growth B2C Sales Lost	Total Jobs Lost	Retail Jobs Lost	Other Jobs Lost
2012	2.66	4,314	539	3,775
2013	2.86	4,314	539	3,775
2014	3.07	4,314	539	3,775
2015	3.27	4,314	539	3,775
2016	3.47	4,314	539	3,775

The GDP-based sales forecasts are calculated with a variable annual rate of GDP growth. The regression model forecasts reported in Table 15 are based on a fixed annual rate of growth equal to the slope of the linear regression model. Hence, those estimates increase at constant annual rates through 2016.

Nothing can be done to capture sales revenues, jobs, household income, sales tax revenue or income tax revenue that Alabama has lost. What we can do is to give Alabama retailers a fair chance to make sales to Alabama consumers and to lower somewhat the future growth of remote sellers' online sales to Alabama consumers that yields little benefits to the state.

In Appendices B and C are reported estimates of how the losses of sales revenues to remote online retailers affect communities across the state. Estimates of the losses of sales revenues and household income by metropolitan area and the rest of Alabama are in Appendix B. Those allocations are based on the distribution of GDP by metropolitan area as estimated by the U.S. Bureau of Economic Analysis for 2010.

Estimates of the losses of sales revenues and household income for each county in Alabama are in Appendix C. Those allocations are based on the distribution of personal income by county as estimated by the U.S. Bureau of Economic Analysis for 2009. Estimates of county level GDP are not available as they are for the MSAs. The county-level estimates based on personal income distribution are somewhat less reliable than the MSA estimates that are based on the distribution of GDP; but, they are reasonable approximations.

In Appendices B and C are reported the amounts of lost sales tax revenues in each MSA or county "per 1 percent" of their sales tax rate. For Jefferson County, the forecast loss of retail sales in 2012 is \$392 million at the low GDP forecast growth rate and \$505 million at the sustained online sales forecast growth rate. Appendix C shows

that Jefferson County loses \$3.9 to \$5.1 million in sales tax revenue for each percent of county tax. Jefferson County has a 2 percent general sales tax; thus, the 2012 forecast of lost tax revenue is two times \$3.9 million to \$5.1 million which is \$7.8 million to 10.2 million.

Conclusions

E-commerce buying and selling is driving a significant amount of "business" – retail, commercial and industrial buying and selling – out of Alabama and to online sellers who do not collect and remit applicable sales or use tax. Every purchase made by a consumer or business with sellers located outside of Alabama impacts the Alabama economy. Products purchased by consumers and businesses in Alabama are limited by households' disposable income and businesses' operating budgets. Many purchases from out-of-state sellers are purchases that might be, but are not, made in Alabama.

Not every dollar spent online with an out-of-state seller can be expected to shift automatically to an in-state retailer if Alabama sales and use taxes were imposed on those sales. Some funds not spent with remote sellers may shift across retail sectors. For example, more may be spent in restaurants instead of on a discretionary purchase of an electronic product from a remote electronics retailer. Some unspent funds could be "saved." Given the low savings rates in households, however, it is likely that some of the money would be spent in-state rather than saved. This is likely if Alabama's in-state retailers offer the products that are desired at competitive prices with good service support.

Some have questioned if the imposition of a sales or use tax on all out-of-state purchases may diminish some consumers' total retail purchases. If sellers' delivered prices rise due to the imposition of Alabama's sales or use tax rates, then buyers' abilities to spend might fall by an amount equal to the taxes charged. However, it is also likely that remote sellers would act to retain online customer purchases by lowering their selling prices by some portion of the amount of tax added. That would lower online sellers' profit margins but also "level the playing field" for Alabama retailers who now suffer a competitive price differential disadvantage.

In 2011, Alabama consumers spent more than \$2 billion on retail Internet purchases. Those purchases represent more than \$2 billion of sales revenue lost by Alabama-based retailers. Sales of clothing, footwear, toys, electronics, cosmetics, jewelry, sporting goods, artwork, office equipment, supplies, pet foods and many other types of products were made by remote sellers into Alabama and those sales revenues and the related profit on those were lost by Alabama retailers. That is not all that was lost, however.

The more than \$2 billion in sales revenue and related profit lost in 2011 is not available for Alabama businesses to hire, retain and pay Alabama workers. It is not available to invest in expanded inventory that offers more convenience and shopping efficiency for Alabama consumers. That \$2 billion in lost revenue is not available to build new or expand local retail units that employ tradesmen and provide financial support for their families. It is not available to fund the renting and leasing of unoccupied or under-occupied commercial buildings that would in turn help commercial real estate investors and commercial realtors across Alabama, especially in the present depressed real estate market. That lost revenue causes retail banking account balances to be lower and local and statewide advertising expenditures to be lower. Retail owners and their employees' incomes are lower and their spending of that income to purchase other goods

and services as well as their charitable contributions are lowered.

If more workers in Alabama are unemployed because of the high volume of sales by remote sellers who lack nexus with Alabama, those workers are buying less and will also pay less in state income tax. Some will move to other states in pursuit of better economic conditions. There will be a naturally occurring set of negative economic consequences greater than the loss of \$2 billion or more in Alabama retailers' sales revenues.

Do we favor constraining or discouraging retail e-commerce? We do not advocate that. We celebrate the new technologies that provide greater access to information and products that are demanded by customers throughout Alabama and the United

States. We encourage Alabama retailers to adapt their operations as appropriate to compete effectively for Alabama consumers' online retail purchases.

The retail world is in the midst of a dramatic transformation. Retailers must learn exactly how the new online retailing formats are affecting both buyers and sellers throughout our state. We must do our best to ensure a level "playing field," one that does not afford a significant competitive advantage to the "away team," *i.e.*, remote e-commerce sellers who have no presence in Alabama and no obligation to collect and remit sales taxes or pay state income taxes that are owed by brick-and-mortar businesses throughout the state. I advocate fair competition.

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APPENDIX A

Summary of U.S. Shipments, Sales, Revenues, and E-commerce: 2000-2009

[Estimates are based on data from the 2009 Annual Survey of Manufactures, 2007 Economic Census - Manufacturing, 2009 Annual Wholesale Trade Survey, 2009 Annual Retail Trade Survey, and 2009 Service Annual Survey. Shipments, sales, and revenues are shown in millions of dollars]

Year		\$ Millions Value of -					TOTALS
		Manufacturing Shipments ¹	Merchant Wholesale Trade Sales ¹		Retail Trade Sales ³	Selected Services Revenues ⁴	
			Excluding MSBOs ²	Including MSBOs ²			
2009	Total	4,436,196	3,706,945	5,165,629	3,638,471	6,773,726	20,014,022
	E-commerce	1,862,493	728,663	1,211,219	145,214	153,007	3,371,933
	% of Total	42.0	19.7	23.4	4.0	2.3	16.85%
2008	Total	5,468,093	4,435,208	6,162,159	3,952,933	6,886,995	22,470,180
	E-commerce	2,170,818	739,314	1,311,496	142,281	149,668	3,774,263
	% of Total	39.7	16.7	21.3	3.6	2.2	16.80%
2007	Total	5,338,307	4,174,286	5,888,989	4,005,798	6,858,630	22,091,724
	E-commerce	1,879,424	725,141	1,297,751	138,145	131,553	3,446,873
	% of Total	35.2	17.4	22.0	3.4	1.9	15.60%
2006	Total	5,015,553	3,904,006	5,612,133	3,880,136	6,434,839	20,942,661
	E-commerce	1,566,799	669,432	1,242,098	114,912	110,463	3,034,272
	% of Total	31.2	17.1	22.1	3.0	1.7	14.49%
2005	Total	4,742,076	3,615,355	5,262,720	3,696,691	5,973,700	19,675,187
	E-commerce	1,343,852	609,933	1,173,757	92,804	93,299	2,703,712
	% of Total	28.3	16.9	22.3	2.5	1.6	13.74%
2004	Total	4,308,971	3,320,014	4,851,241	3,480,430	5,565,502	18,206,144
	E-commerce	996,174	497,961	1,020,854	74,175	82,103	2,173,306
	% of Total	23.1	15.0	21.0	2.1	1.5	11.94%
2003	Total	4,015,081	2,973,573	4,373,356	3,268,154	NA	11,656,591
	E-commerce	842,666	441,911	925,072	58,157	NA	1,825,895
	% of Total	21.0	14.9	21.2	1.8	NA	15.66%
2002	Total	3,920,632	2,835,528	4,162,169	3,134,322	NA	11,217,123
	E-commerce	751,985	374,551	844,737	45,212	NA	1,641,934
	% of Total	19.2	13.2	20.3	1.4	NA	14.64%
2001⁵	Total	3,970,500	2,785,152	N/A	3,067,725	NA	9,823,377
	E-commerce	724,228	327,693	N/A	34,593	NA	1,086,514
	% of Total	18.2	11.8	N/A	1.1	NA	11.06%
2000⁵	Total	4,208,582	2,814,554	N/A	2,988,756	NA	10,011,892
	E-commerce	755,807	277,818	N/A	27,763	NA	1,061,388
	% of Total	18.0	9.9	N/A	0.9	NA	10.60%

NA Not applicable.

Note: Estimates are not adjusted for price changes and are subject to revision. For additional information on confidentiality protection, sampling error, sample design, and definitions see <<http://www.census.gov/eos/www/sm.html>>.

¹ Estimates include data only for businesses with paid employees.

² Manufacturers' Sales Branches and Offices.

³ Estimates include data for businesses with or without paid employees

⁴ Estimates include data for businesses with paid employees except for Accommodation and Food Services, which also includes businesses without paid employees. Includes NAICS 4849x (Selected Transportation and Warehousing), NAICS 51 (Information), NAICS 523x (Selected Finance), NAICS 532 (Rental and Leasing Services), NAICS 54 (Selected Professional, Scientific, and Technical Services), NAICS 56 (Administrative and Support and Waste Management and Remediation Services), NAICS 62 (Health Care and Social Assistance Services), NAICS 71 (Arts, Entertainment, and Recreation Services), NAICS 72 (Accommodation and Food Services), and NAICS 81 (Selected Other Services). Estimates for 2000-2003 are not comparable due to the change in the 2002 NAICS and detailed NAICS level inclusions. Estimates for 2002 and 2003 exclude NAICS 561730 (Landscaping Services), NAICS 54132 (Landscape Architectural Services), NAICS 54194 (Veterinary Services) and NAICS 81291 (Pet Care Services).

⁵ Estimates of total E-Commerce for 2000 and 2001 include Merchant Wholesale Trade Excluding Manufacturers' Sales Branches and Offices. For all other years, Manufacturers' Sales Branches and Offices sales are included.

Source: U.S. Census Bureau, 2009 Annual Survey of Manufactures, 2007 Economic Census - Manufacturing, 2009 Annual Wholesale Trade Survey, 2009 Annual Retail Trade Survey, and 2009 Service Annual Survey.

APPENDIX B

2012 Lost Retail Sales and Household Income Estimates by Alabama Metropolitan Area

2012 Alabama Metropolitan Areas and the Rest of the State	Percent of Alabama GDP % Total	2012 Lost Retail Sales Revenues \$ Millions		2012 Lost Sales Tax Revenue per 1% of Sales Tax Rate ¹ \$000		2012 Lost Household Income \$ Millions	
		Growth Rate Low	Growth Rate Sustained	Growth Rate Low	Growth Rate Sustained	Growth Rate Low	Growth Rate Sustained
		Anniston-Oxford	2.16%	\$ 48	\$ 62	\$ 480	\$ 619
Birmingham-Hoover	31.20%	\$ 693	\$ 892	\$ 6,926	\$ 8,922	\$ 402	\$ 518
Decatur	2.83%	\$ 63	\$ 81	\$ 628	\$ 809	\$ 36	\$ 47
Dothan	2.67%	\$ 59	\$ 76	\$ 593	\$ 763	\$ 34	\$ 44
Florence-Muscle Shoals	2.38%	\$ 53	\$ 68	\$ 529	\$ 681	\$ 31	\$ 40
Gadsden	1.53%	\$ 34	\$ 44	\$ 340	\$ 438	\$ 20	\$ 25
Huntsville	12.11%	\$ 269	\$ 346	\$ 2,689	\$ 3,464	\$ 156	\$ 201
Mobile	9.18%	\$ 204	\$ 262	\$ 2,037	\$ 2,624	\$ 118	\$ 152
Montgomery	8.65%	\$ 192	\$ 248	\$ 1,921	\$ 2,475	\$ 112	\$ 144
Tuscaloosa	5.13%	\$ 114	\$ 147	\$ 1,140	\$ 1,468	\$ 66	\$ 85
All MSAs	77.85%	\$ 1,728	\$ 2,226	\$ 17,282	\$ 22,264	\$ 1,004	\$ 1,292
Rest of Alabama	22.15%	\$ 492	\$ 634	\$ 4,918	\$ 6,336	\$ 286	\$ 368
All Alabama	100.00%	\$ 2,220	\$ 2,860	\$ 22,200	\$ 28,600	\$ 1,290	\$ 1,660

¹ Lost sales tax revenues per MSA are reported here per 1 percentage point of the actual sales tax in each MSA. For example, if the average sales tax rate throughout the Tuscaloosa MSA is 8.5%, then the loss of retail sales tax revenue to the County and Municipal operations throughout that MSA is 4.5% of \$114 million to \$147 million. That amounts to a loss of \$5.13 million to \$6.62 million in lost sales and use tax revenue.

Source: Current Dollar GDP by Metropolitan Area, U.S. Bureau of Economic Analysis

Appendix C

2012 Lost Retail Sales and Household Income Estimates by Alabama County (\$ Millions)

County	2009 Personal Income % of AL	Lost Retail Sales \$ M		Lost Income \$ M		Loss of Sales Tax Revenue per 1% of Sales Tax	
		Low Growth	Sustained Growth	Low Growth	Sustained Growth	- \$ Dollars	- \$ Dollars
		Sales Loss	Sales Loss	Sales Loss	Sales Loss	Low Growth Estimate	Sustained Growth Estimate
Alabama	100.0%	2,220.0	2,860.0	1,290.0	1,660.0		
Autauga	1.06%	23.5	30.3	13.7	17.6	- \$ 235,320	- \$ 303,160
Baldwin	3.94%	87.5	112.7	50.8	65.4	- \$ 874,680	- \$ 1,126,840
Barbour	0.45%	10.0	12.9	5.8	7.5	- \$ 99,900	- \$ 128,700
Bibb	0.33%	7.3	9.4	4.3	5.5	- \$ 73,260	- \$ 94,380
Blount	0.94%	20.9	26.9	12.1	15.6	- \$ 208,680	- \$ 268,840
Bullock	0.15%	3.3	4.3	1.9	2.5	- \$ 33,300	- \$ 42,900
Butler	0.36%	8.0	10.3	4.6	6.0	- \$ 79,920	- \$ 102,960
Calhoun	2.32%	51.5	66.4	29.9	38.5	- \$ 515,040	- \$ 663,520
Chambers	0.58%	12.9	16.6	7.5	9.6	- \$ 128,760	- \$ 165,880
Cherokee	0.42%	9.3	12.0	5.4	7.0	- \$ 93,240	- \$ 120,120
Chilton	0.74%	16.4	21.2	9.5	12.3	- \$ 164,280	- \$ 211,640
Choctaw	0.25%	5.6	7.2	3.2	4.2	- \$ 55,500	- \$ 71,500
Clarke	0.49%	10.9	14.0	6.3	8.1	- \$ 108,780	- \$ 140,140
Clay	0.23%	5.1	6.6	3.0	3.8	- \$ 51,060	- \$ 65,780
Cleburne	0.27%	6.0	7.7	3.5	4.5	- \$ 59,940	- \$ 77,220
Coffee	1.08%	24.0	30.9	13.9	17.9	- \$ 239,760	- \$ 308,880
Colbert	1.03%	22.9	29.5	13.3	17.1	- \$ 228,660	- \$ 294,580
Conecuh	0.22%	4.9	6.3	2.8	3.7	- \$ 48,840	- \$ 62,920
Coosa	0.17%	3.8	4.9	2.2	2.8	- \$ 37,740	- \$ 48,620
Covington	0.67%	14.9	19.2	8.6	11.1	- \$ 148,740	- \$ 191,620
Crenshaw	0.26%	5.8	7.4	3.4	4.3	- \$ 57,720	- \$ 74,360

Appendix C Continued

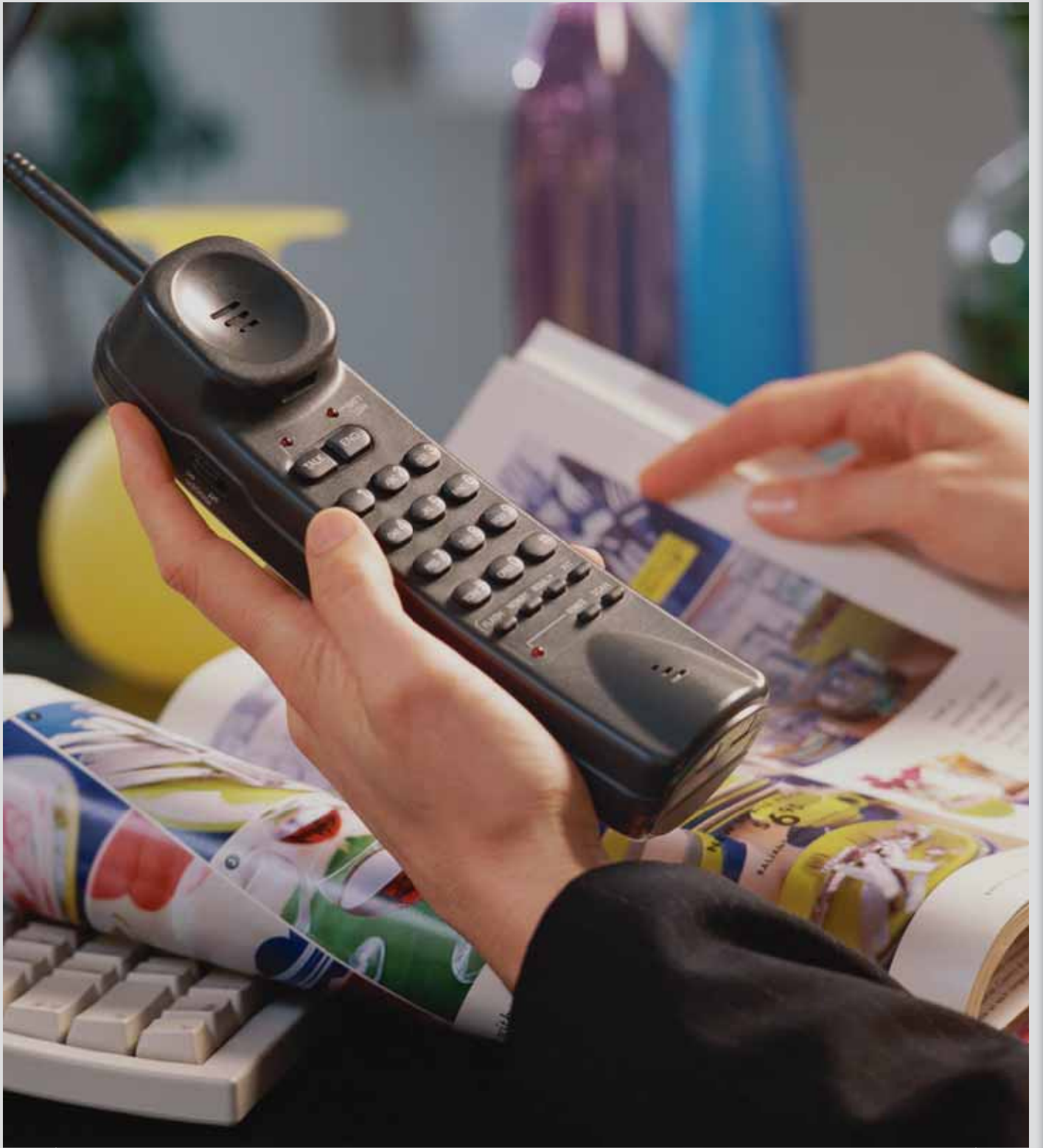
County	2009 Personal Income % of AL	Lost Retail Sales - \$ M		Lost Income - \$ M		Loss of Sales Tax Revenue per 1% of Sales Tax	
		Low Growth Sales Loss	Sustained Growth Sales Loss	Low Growth Sales Loss	Sustained Growth Sales Loss	- \$ Dollars	
						Low Growth	Sustained Growth
						Estimate	Estimate
Cullman	1.51%	33.5	43.2	19.5	25.1	- \$ 335,220	- \$ 431,860
Dale	0.94%	20.9	26.9	12.1	15.6	- \$ 208,680	- \$ 268,840
Dallas	0.77%	17.1	22.0	9.9	12.8	- \$ 170,940	- \$ 220,220
DeKalb	1.15%	25.5	32.9	14.8	19.1	- \$ 255,300	- \$ 328,900
Elmore	1.59%	35.3	45.5	20.5	26.4	- \$ 352,980	- \$ 454,740
Escambia	0.64%	14.2	18.3	8.3	10.6	- \$ 142,080	- \$ 183,040
Etowah	1.98%	44.0	56.6	25.5	32.9	- \$ 439,560	- \$ 566,280
Fayette	0.28%	6.2	8.0	3.6	4.6	- \$ 62,160	- \$ 80,080
Franklin	0.52%	11.5	14.9	6.7	8.6	- \$ 115,440	- \$ 148,720
Geneva	0.49%	10.9	14.0	6.3	8.1	- \$ 108,780	- \$ 140,140
Greene	0.18%	4.0	5.1	2.3	3.0	- \$ 39,960	- \$ 51,480
Hale	0.30%	6.7	8.6	3.9	5.0	- \$ 66,600	- \$ 85,800
Henry	0.31%	6.9	8.9	4.0	5.1	- \$ 68,820	- \$ 88,660
Houston	2.20%	48.8	62.9	28.4	36.5	- \$ 488,400	- \$ 629,200
Jackson	0.97%	21.5	27.7	12.5	16.1	- \$ 215,340	- \$ 277,420
Jefferson ¹	17.65%	391.8	504.8	227.7	293.0	- \$ 3,918,300	- \$ 5,047,900
Lamar	0.24%	5.3	6.9	3.1	4.0	- \$ 53,280	- \$ 68,640
Lauderdale	1.79%	39.7	51.2	23.1	29.7	- \$ 397,380	- \$ 511,940
Lawrence	0.61%	13.5	17.4	7.9	10.1	- \$ 135,420	- \$ 174,460
Lee	2.39%	53.1	68.4	30.8	39.7	- \$ 530,580	- \$ 683,540

¹ Lost sales tax revenues per county are reported here per 1 percentage point of the actual sales tax rate in each county. For Jefferson County, for example, if the average county and municipal sales tax rate is 5%, then the loss of retail sales tax revenue to the County and Municipal operations is 5% of \$391.8 million to \$504.8 million. This is five times the amounts shown at the 1% rate in the last two columns of the table. That amounts to a loss of \$19.59 million to \$25.24 million in lost sales tax revenue.

Appendix C Continued

County	2009 Personal Income % of AL	Lost Retail Sales - \$ M		Lost Income - \$ M		Loss of Sales Tax Revenue per 1% of Sales Tax	
		Low	Sustained	Low	Sustained	- \$ Dollars	
		Growth Sales Loss	Growth Sales Loss	Growth Sales Loss	Growth Sales Loss	Low Growth Estimate	Sustained Growth Estimate
Limestone	1.60%	35.5	45.8	20.6	26.6	- \$ 355,200	- \$ 457,600
Lowndes	0.22%	4.9	6.3	2.8	3.7	- \$ 48,840	- \$ 62,920
Macon	0.36%	8.0	10.3	4.6	6.0	- \$ 79,920	- \$ 102,960
Madison	8.31%	184.5	237.7	107.2	137.9	- \$ 1,844,820	- \$ 2,376,660
Marengo	0.41%	9.1	11.7	5.3	6.8	- \$ 91,020	- \$ 117,260
Marion	0.50%	11.1	14.3	6.5	8.3	- \$ 111,000	- \$ 143,000
Marshall	1.75%	38.9	50.1	22.6	29.1	- \$ 388,500	- \$ 500,500
Mobile	8.08%	179.4	231.1	104.2	134.1	- \$ 1,793,760	- \$ 2,310,880
Monroe	0.39%	8.7	11.2	5.0	6.5	- \$ 86,580	- \$ 111,540
Montgomery	5.49%	121.9	157.0	70.8	91.1	- \$ 1,218,780	- \$ 1,570,140
Morgan	2.47%	54.8	70.6	31.9	41.0	- \$ 548,340	- \$ 706,420
Perry	0.18%	4.0	5.1	2.3	3.0	- \$ 39,960	- \$ 51,480
Pickens	0.36%	8.0	10.3	4.6	6.0	- \$ 79,920	- \$ 102,960
Pike	0.65%	14.4	18.6	8.4	10.8	- \$ 144,300	- \$ 185,900
Randolph	0.37%	8.2	10.6	4.8	6.1	- \$ 82,140	- \$ 105,820
Russell	0.95%	21.1	27.2	12.3	15.8	- \$ 210,900	- \$ 271,700
St. Clair	1.57%	34.9	44.9	20.3	26.1	- \$ 348,540	- \$ 449,020
Shelby	5.15%	114.3	147.3	66.4	85.5	- \$ 1,143,300	- \$ 1,472,900
Sumter	0.21%	4.7	6.0	2.7	3.5	- \$ 46,620	- \$ 60,060
Talladega	1.53%	34.0	43.8	19.7	25.4	- \$ 339,660	- \$ 437,580
Tallapoosa	0.78%	17.3	22.3	10.1	12.9	- \$ 173,160	- \$ 223,080
Tuscaloosa	4.01%	89.0	114.7	51.7	66.6	- \$ 890,220	- \$ 1,146,860
Walker	1.35%	30.0	38.6	17.4	22.4	- \$ 299,700	- \$ 386,100
Washington	0.28%	6.2	8.0	3.6	4.6	- \$ 62,160	- \$ 80,080
Wilcox	0.18%	4.0	5.1	2.3	3.0	- \$ 39,960	- \$ 51,480
Winston	0.40%	8.9	11.4	5.2	6.6	- \$ 88,800	- \$ 114,400

Source: 2009 Estimates of Personal Income, U.S. Bureau of Economic Analysis



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