### **taxanalysts**

### special report

### Wireless Taxes and Fees Continue Growth Trend

by Scott Mackey

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#### **Summary**

The tax and fee burden on wireless consumers continued its steady upward march between 2010 and 2012. The average burden on consumers increased from 16.26 percent in July 2010 to 17.18 percent in July 2012, a 5.5 percent increase in just two years. Wireless consumers now pay the highest combined tax and fee burden since I began tracking rates in 2003, more than 3 percentage points above the 14.13 percent rate in 2007, which marked the low point for wireless taxes and fees during the last decade. Wireless customers now pay taxes, fees, and surcharges nearly two and a half times higher than the average 7.33 percent general sales tax rate imposed on other taxable goods and services.

State and local wireless tax and fee burdens rose modestly from 2010 to 2012, from 11.21 percent to 11.36 percent. However, the primary source of the growing wireless consumer burden during the last two years is the continued increase in the federal Universal Service Fund (USF) contribution rate and the corresponding surcharge imposed on consumers to cover that obligation. The federal USF surcharge has nearly tripled over the last decade, from 2.07 percent in 2003 to 5.82 percent in 2012. In fact, the 5.82 percent federal USF rate in 2012 almost exceeds the combined federal rate imposed in 2005, when the 3 percent federal excise tax still applied to wireless service.

Even as average monthly wireless revenue per line continue to drop, taxes, fees, and surcharges on wireless consumers continue to rise. According to CTIA — The Wireless Association, the average wireless customer spent about \$47 per line per month in 2012, down from \$48.16 in 2010. Unfortunately for

wireless consumers, taxes went the other direction. The study found that the average wireless customer now pays about \$8.07 per line per month in wireless taxes, fees, and surcharges — up from \$7.84 per line per month in 2010.

Nebraska continues to have the highest combined wireless tax rates in the country — 24.49 percent. Washington state retained its number two position with a combined rate of 24.44 percent. Rounding out the top five highest states are New York (23.67 percent), Florida (22.41 percent), and Illinois (21.76 percent).

New data from the Centers for Disease Control and Prevention (CDC) show that record numbers of Americans "cut the cord" during the recent recession and its aftermath, giving up their landlines in favor of wireless service only. The same data also show that a disproportionately high percentage of wireless-only households are low-income households. Unfortunately, those wireless consumers bear a disproportionately high burden from these excessive taxes and fees on wireless service imposed by the federal government and many state and local governments. For that and other reasons, national organizations like the National Conference of State Legislatures have urged states to consider communications tax reform. Although study commissions are considering reforms in Delaware, Florida, and Maryland, this study shows that many states have a long way to go to reduce the wireless consumer tax burden to levels comparable to the sales taxes imposed on other goods and services sold in the competitive economy.

#### Introduction

This is the fourth in a series of reports that examines trends in the taxes, fees, and surcharges imposed by federal, state, and local governments on wireless service. The first three reports — published in 2004, 2008, and 2011 in *State Tax Notes*<sup>1</sup> — found

(Footnote continued on next page.)

<sup>&</sup>lt;sup>1</sup>State Tax Notes, July 19, 2004, p. 181, Doc 2004-13368, or 2004 STT 138-2; State Tax Notes, Feb. 18, 2008, p. 519, Doc

Table 1. U.S. Average Wireless and General Sales and Use Tax Rates									
	1/1/2003	4/1/2004	7/1/2005	7/1/2006	7/1/2007	7/1/2008	7/1/2009	7/1/2010	7/1/2012
Weighted Average									
Wireless — state/local tax and fee	10.20%	10.74%	10.94%	11.14%	11.00%	10.86%	10.74%	11.21%	11.36%
Wireless — federal tax and fee	5.07%	5.48%	5.91%	2.99%	4.19%	4.23%	4.79%	5.05%	5.82%
Wireless — federal/ state/local tax and fee	15.27%	16.22%	16.85%	14.13%	15.19%	15.09%	15.53%	16.26%	17.18%
Exhibit: General sales/use tax	6.87%	6.93%	6.94%	7.04%	7.07%	7.11%	7.26%	7.42%	7.33%
Disparity between general sales and wireless tax	3.33%	3.81%	4.00%	4.09%	3.93%	3.75%	3.48%	3.79%	4.03%

Source: Method derived from Committee On State Taxation, "50-State Study and Report on Telecommunications Taxation," May 2005. Updated from state statutes, FCC data, and local ordinances by Scott Mackey, KSE Partners LLP, Montpelier, Vt.

Federal includes 3 percent federal excise tax (until May 2006) and federal USF charge, which is set by the FCC and varies quarterly:

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Federal USF Jan. 1, 2003-28.5\% FCC "hold harmless" times FCC contribution factor of 7.3\%=2.07\% Federal USF Apr. 1, 2004-28.5\% FCC "hold harmless" times FCC contribution factor of 8.7\%=2.48\% Federal USF July 1, 2005-28.5\% FCC "hold harmless" times FCC contribution factor of 10.2\%=2.91\% Federal USF July 1, 2006-28.5\% FCC "hold harmless" times FCC contribution factor of 10.5\%=2.99\% Federal USF July 1, 2007-37.1\% FCC "hold harmless" times FCC contribution factor of 11.3\%=4.19\% Federal USF July 1, 2008-37.1\% FCC "hold harmless" times FCC contribution factor of 11.4\%=4.23\% Federal USF July 1, 2009-37.1\% FCC "hold harmless" times FCC contribution factor of 12.9\%=4.79\% Federal USF July 1, 2010-37.1\% FCC "hold harmless" times FCC contribution factor of 13.6\%=5.05\% Federal USF July 1, 2012-37.1\% FCC "hold harmless" times FCC contribution factor of 15.7\%=5.82\%
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Source: http://www.fcc.gov/omd/contribution-factor.html

that wireless consumers face excessive tax burdens compared with the tax burden on other goods and services purchased in the competitive marketplace. The trend in this series of reports shows that wireless taxes have continued to grow over the last decade, with state and local taxes growing rapidly in earlier years and federal surcharges growing rapidly in more recent years.

This report uses the method developed in 1999 by the Committee On State Taxation (COST — now the Council On State Taxation). Recognizing that it would be nearly impossible to aggregate tax rates from the over 10,000 taxing jurisdictions across the country, the COST study used an average of the most populated city and the capital city in each state as a proxy to compare tax rates across the states.<sup>2</sup> This method allows for time series comparisons of trends in wireless taxation.

#### **Trends in Wireless Taxation**

Figure 1 shows national trends in state and local average tax rates on wireless service between 2003

and 2012. Between 2005 and 2006, wireless tax burdens dropped after a series of federal court decisions forced the IRS to end the imposition of the 3 percent federal excise tax (FET) on wireless service. However, since then, rates have climbed steadily. Rates in 2012 now exceed those in place in 2005, as increases in state and local taxes and the federal USF surcharge have fully offset the rate reduction from the FET repeal.

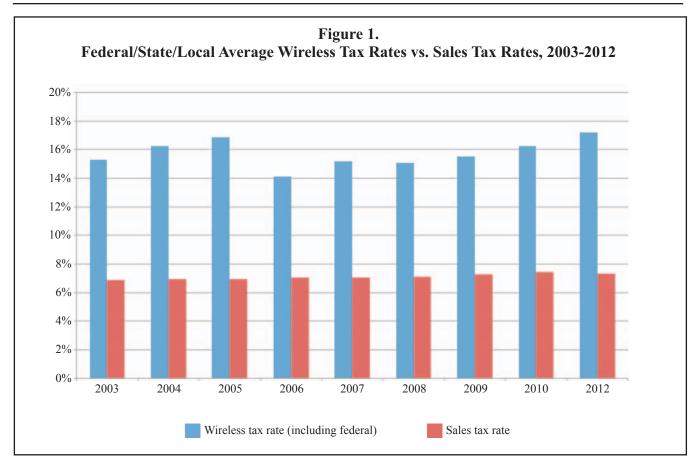
Table 1 shows the detail behind the trends highlighted in Figure 1, including state/local average rates as well as federal impositions. Between 2003 and 2012, state and local taxes, fees, and surcharges on wireless service increased by 1.16 percentage points — from 10.20 percent to 11.36 percent — while general state and local sales taxes increased by less than half as much, from 6.87 percent to 7.33 percent. Federal impositions increased from 5.07 percent to 5.82 percent.

The combined federal, state, and local burden on wireless consumers increased from 15.27 percent to 17.18 percent, or nearly 2 percentage points. Overall tax burdens on wireless consumers grew about four times faster than general sales taxes on other taxable goods and services.

The causes of the growth in the wireless tax burden are markedly different depending on the period considered. State and local impositions grew rapidly between 2003 and 2006, leveled off between

<sup>2008-1260,</sup> or 2008 STT 34-4; and State Tax Notes, Feb. 14, 2011, p. 475, Doc 2011-1122, or 2011 STT 30-1.

<sup>&</sup>lt;sup>2</sup>"50-State Study and Report on Telecommunications Taxation," Washington: Committee On State Taxation, 1999.



2007 and 2009, and then began increasing again from 2010 to 2012. However, federal impositions dropped dramatically in 2006 when the IRS concluded that the 3 percent federal excise tax no longer applied to wireless service. However, since 2007 the federal USF has experienced rapid growth.

The federal USF is administered by the Federal Communications Commission, with open-ended authority from Congress. The program subsidizes telecommunications services for schools, libraries, hospitals, and rural telephone companies operating in high-cost areas. The federal USF is assessed on a provider's interstate revenue, which the FCC deems to be 37.1 percent of the wireless bill for customers purchasing calling plans that do not distinguish between interstate and intrastate calls.<sup>3</sup> The notes

<sup>3</sup>FCC rules allow wireless providers to multiply this 37.1 percent safe harbor by the quarterly contribution percentage rate to determine the federal USF surcharge rate imposed on monthly contract plans that do not distinguish between interstate and intrastate calls. The FCC also allows carriers to use traffic studies showing the actual, network-wide percentage of interstate and intrastate calls as an alternative method for determining the federal USF contribution

at the bottom of Table 1 show the significant growth in the federal USF contribution rate from 7.3 percent in 2003 to 15.7 percent in 2012.

Table 2 (next page) provides a snapshot of wireless tax, fee, and surcharge burdens by state as of July 2012. Column 1 shows the state and local tax burden in each state, while column 3 shows the total tax, fee, and surcharge burden including the federal USF surcharge. Nebraska consumers pay the highest combined rate in the country at 24.49 percent, followed closely by Washington at 24.44 percent. In Olympia, Wash., where wireless services are subject to a 9 percent local utility tax, a wireless consumer with a typical \$47 monthly bill pays over \$12 per month in taxes, fees, and surcharges.

Figure 2 (p. 325) shows the states by average state and local rates, without including federal impositions. Consumers in five states pay rates in excess of 15 percent, and in another 22 states the rate is between 10 percent and 15 percent. Of the remaining 24 states with rates below 10 percent,

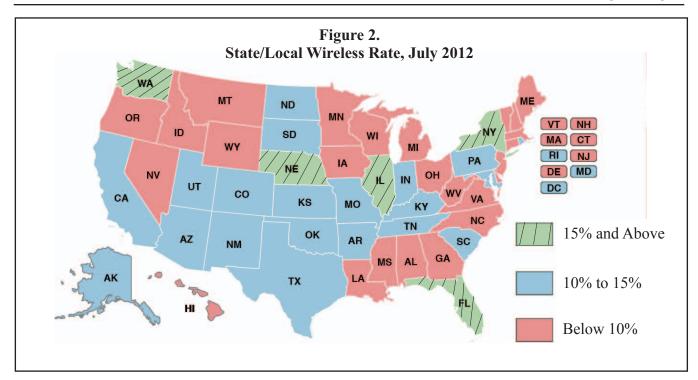
amounts and related surcharge rate. For the purposes of this study, the rates are calculated using the safe harbor method.

(Footnote continued in next column.)

	State	State/Local Wireless Rate	Federal Rates (USF)	Combined Federal State/Local Rate
1	Nebraska	18.67%	5.82%	24.49%
2	Washington	18.62%	5.82%	24.44%
3	New York	17.85%	5.82%	23.67%
4	Florida	16.59%	5.82%	22.41%
5	Illinois	15.94%	5.82%	21.76%
6	Rhode Island	14.68%	5.82%	20.50%
7	Missouri	14.29%	5.82%	20.11%
8	Pennsylvania	14.13%	5.82%	19.95%
9	South Dakota	13.13%	5.82%	18.95%
10	Kansas	13.11%	5.82%	18.93%
11	Arizona	12.98%	5.82%	18.80%
12	Maryland	12.77%	5.82%	18.59%
13	Utah	12.67%	5.82%	18.49%
14	Texas	12.15%	5.82%	17.97%
15	Alaska	12.09%	5.82%	17.91%
16	Tennessee	11.63%	5.82%	17.45%
17	District of Columbia	11.62%	5.82%	17.44%
18	Arkansas	11.54%	5.82%	17.36%
19	Oklahoma	11.48%	5.82%	17.30%
20	New Mexico	11.08%	5.82%	16.90%
21	North Dakota	10.96%	5.82%	16.78%
22	California	10.95%	5.82%	16.77%
23	Indiana	10.86%	5.82%	16.68%
24	Colorado	10.82%	5.82%	16.64%
25	Kentucky	10.54%	5.82%	16.36%
26	South Carolina	10.07%	5.82%	15.89%
27	Minnesota	9.53%	5.82%	15.35%
28	Mississippi	9.23%	5.82%	15.05%
29	New Jersey	9.25% 8.91%	5.82%	14.73%
30	Georgia	8.78%	5.82%	14.75%
31	North Carolina	8.51%	5.82%	14.33%
32		8.51% 8.21%	5.82%	14.33%
	New Hampshire			
33	Vermont	8.10%	5.82%	13.92%
34	Ohio	8.04%	5.82%	13.86%
35	Iowa	7.95%	5.82%	13.77%
36	Massachusetts	7.85%	5.82%	13.67% 13.61%
37	Wyoming	7.79%	5.82%	
38	Michigan	7.69%	5.82%	13.51%
39	Hawaii Alabama	7.53%	5.82%	13.35%
40	Alabama Connecticut	7.49%	5.82%	13.31%
41 42	Maine	7.41% 7.27%	5.82% 5.82%	13.23% 13.09%
	Wisconsin			
43		7.24%	5.82%	13.06%
44	Louisiana	7.21%	5.82%	13.03%
45	Virginia	6.60%	5.82%	12.42%
46	West Virginia	6.38%	5.82%	12.20%
47	Delaware	6.28%	5.82%	12.10%
48	Montana	6.09%	5.82%	11.91%
49	Idaho	2.28%	5.82%	8.10%
50	Nevada	2.13%	5.82%	7.95%
		1 950%	5.82%	7 670%
51	Oregon U.S. Simple Average	1.85% 10.15%	5.82%	7.67% <b>15.97</b> %

 $\label{eq:final_contribution} Federal~USF~July~1,~2012-37.1~percent~FCC~"hold~harmless"~times~contribution~factor~of~15.7~percent~=~5.82~percent~For~flat~monthly~taxes~and~fees,~average~monthly~bill~is~estimated~at~\$47~per~line~per~month~per~CTIA.$ 

Source: Method from COST, 50-State Study and Report on Telecommunications Taxation, May 2005. Updated July 2012 using state statutes and regulations.



only three — Idaho, Nevada, and Oregon — have rates below 5 percent. Oregon wireless consumers are charged the lowest combined state and local rates in the country, at just 1.85 percent.

One of the long-standing arguments for reform of wireless taxation is the disparity in the tax burdens on wireless services compared with the tax burdens on other goods and services.

One of the long-standing arguments for reform of wireless taxation is the disparity in the tax burdens on wireless services compared with the tax burdens on other goods and services subject to state sales and use taxes. Table 3 (next page) ranks the states by measuring the disparity in state and local tax rates between the wireless tax rate and the general sales and use rate. Nebraska is the only state that has a disparity of greater than 10 percentage points between its wireless rate and the general sales tax rate. Other states with large disparities include New York, Florida, and Washington. Despite having a relatively low rate on wireless service, New Hampshire ranks sixth in the disparity between wireless taxes and sales taxes. That is because New Hampshire does not have a broad-based sales tax, yet it imposes a 7 percent communications tax and a 57-cent monthly 911 fee on wireless service. Two other states that impose taxes on wireless but do not

have sales taxes — Delaware and Montana — also rank relatively high on this disparity scale despite their low rates on wireless consumers.

Appendix A (p. 330) provides a detailed breakdown of the types of taxes, fees, and surcharges imposed in each state and their relative rates. As mentioned earlier, to facilitate interstate comparisons, local rates imposed in the most populated city and the capital city of each state are averaged into a single local rate. In states or localities where taxes, fees, or surcharges are imposed on a flat per-line basis — for example, \$1 per line per month — the imposition is converted into a percentage by dividing the flat amount by the industry's average revenue per line of \$47.

The following represent some major trends since the last report in 2010.

#### 911 Fees

Most states impose 911 fees to fund capital expenses for the 911 system, and in some cases the fees fund 911 operations as well. Wireless 911 fees vary greatly by state, from a low of zero in Missouri to a high of \$3 per line per month in West Virginia. Connecticut, Kansas, Indiana, Minnesota, South Dakota, and Washington increased 911 fees between 2010 and 2012. The increases in Connecticut, Kansas, and Minnesota were relatively modest. However, South Dakota increased its 911 fee from 75 cents per month to \$1.25 per month, while Washington increased its combined state and local 911 fee from 70 cents to 95 cents per month. Indiana on July

Table 3.
Taxes and Fees on Wireless Service, July 2012
Compared With General Sales Tax Rate

Rank	State	Wireless Over/Under General Rate	State/Local Wireless Rate	Sales Tax State/Local
1	Nebraska	11.67%	18.67%	7.00%
2	Washington	9.52%	18.62%	9.10%
3	New York	9.60%	17.85%	8.25%
4	Alaska	9.59%	12.09%	2.50%
5	Florida	9.34%	16.59%	7.25%
6	New Hampshire	8.21%	8.21%	0.00%
7	Rhode Island	7.68%	14.68%	7.00%
8	South Dakota	7.13%	13.13%	6.00%
9	Pennsylvania	7.13%	14.13%	7.00%
10	Illinois	7.06%	15.94%	8.88%
11	Maryland	6.77%	12.77%	6.00%
12	Missouri	6.71%	14.29%	7.58%
13	Delaware	6.28%	6.28%	0.00%
14	Montana	6.09%	6.09%	0.00%
15	Utah	5.87%	12.67%	6.80%
16	Arizona	5.78%	12.98%	7.20%
17	District of Columbia	5.27%	11.62%	6.35%
18	Kansas	4.98%	13.11%	8.13%
19	North Dakota	4.71%	10.96%	6.25%
20	Kentucky	4.54%	10.54%	6.00%
21	Texas	3.90%	12.15%	8.25%
22	Indiana	3.86%	10.86%	7.00%
23	Hawaii	3.53%	7.53%	4.00%
			11.08%	
24	New Mexico	3.48%		7.60%
25	Colorado	3.31%	10.82%	7.51%
26	Oklahoma	3.03%	11.48%	8.45%
27	California	2.70%	10.95%	8.25%
28	Arkansas	2.66%	11.54%	8.88%
29	Tennessee	2.38%	11.63%	9.25%
30	South Carolina	2.32%	10.07%	7.75%
31	Wyoming	2.29%	7.79%	5.50%
32	Maine	2.27%	7.27%	5.00%
33	Mississippi	2.23%	9.23%	7.00%
34	New Jersey	1.91%	8.91%	7.00%
35	Oregon	1.85%	1.85%	0.00%
36	Minnesota	1.82%	9.53%	7.71%
37	Wisconsin	1.69%	7.24%	5.55%
38	Vermont	1.60%	8.10%	6.50%
39	Massachusetts	1.60%	7.85%	6.25%
40	Virginia	1.60%	6.60%	5.00%
41	North Carolina	1.51%	8.51%	7.00%
42	Iowa	1.45%	7.95%	6.50%
43	Michigan	1.69%	7.69%	6.00%
44	Georgia	1.28%	8.78%	7.50%
45	Connecticut	1.06%	7.41%	6.35%
46	Ohio	0.79%	8.04%	7.25%
47	West Virginia	0.38%	6.38%	6.00%
48	Louisiana	-1.79%	7.21%	9.00%
49	Alabama	-2.01%	7.49%	9.50%
50	Idaho	-3.72%	2.28%	6.00%
51	Nevada	-5.66%	2.13%	7.79%
	TIC Cimula America	9.70%	10.15%	0.440
	U.S. Simple Average	3.70%	10.15%	6.44%
	U.S. Weighted Average	4.03%	11.36%	7.33%

For flat monthly taxes and fees, average monthly consumer bill is estimated at \$47 per month per CTIA.

Source: Method from COST, "50-State Study and Report on Telecommunications Taxation," May 2005. Updated July 2012 using state statutes and regulations.

Table 4. Discriminatory State Wireless Taxes by Type					
State Gross Receipts Tax in Addition to Sales Tax	Higher Rate in Lieu of Sales Tax	Wireless Tax but No Sales Tax			
Indiana	District of Columbia	Delaware			
Kentucky	Florida	Montana			
New York	Illinois	New Hampshire			
North Dakota					
Pennsylvania					
Rhode Island					
South Dakota					

1, 2012, raised wireless 911 fees from 50 cents per month to 90 cents per month.

In addition to these increases, the Louisiana Legislature passed a bill that would allow Orleans Parish (New Orleans) to raise its wireless 911 fee from 85 cents per month to \$1.26 per month with voter approval. In Alabama the Legislature delegated authority to a new board to increase wireless 911 fees without limitation from the 70-cent monthly rate set under previous law. The Maine Legislature passed a bill to increase 911 fees from 45 cents per month to 50 cents per month, but the bill was vetoed by the governor.

#### State Universal Service Funds

Some states have their own USFs that provide subsidies for many of the same purposes as the federal USF. State USF surcharges are imposed on revenue from intrastate telecommunications services, while the federal USF applies to revenues from interstate services. In states like Alaska, Kansas, and Nebraska, state USF surcharge rates add significantly to the overall burden on wireless consumers. Between 2010 and 2012, Alaska increased the effective rate of its state USF eightfold, from 0.66 percent to 5.98 percent. That is the highest effective rate of any state USF, exceeding both Nebraska's (4.37 percent) and Kansas's (3.86 percent). Other states that increased the rates of their state USF between 2010 and 2012 include California, Colorado, Indiana, Louisiana, New Mexico, Oklahoma, and Utah. Maryland implemented a new USF beginning on July 1, 2012. Texas restructured its USF surcharge and 911 equalization surcharge in a way that lowered overall rates for wireless consumers, while Vermont and Wyoming lowered the rates of their USF surcharges.

#### State-Level Wireless Taxes

In addition to 911 fees and state USF charges, a total of 13 states impose taxes on wireless service at the state level that are imposed either in addition to sales taxes or in lieu of sales taxes but at a higher rate than the state sales tax. Table 4 shows those states.

#### Local Wireless Taxes

Local governments also impose discriminatory taxes on wireless consumers. Many of those are legacy taxes established during the regulated telephone monopoly era that existed before the 1980s. Local governments in some states have had long-standing authority to impose right-of-way fees on telephone companies for placing poles, wires, and other landline infrastructure on public property. In other states, local governments had the authority to impose franchise fees on telephone companies in exchange for an exclusive franchise agreement to provide service within that municipality.

In the late-1990s and early 2000s, when wireless service began to displace landline service, some localities sought to extend these legacy impositions to wireless services and providers, even though wireless providers did not receive the same benefits for which the fees were established. A wireless provider is not given access to the public rights of way for infrastructure placement. Instead, it must negotiate a rental agreement for any use of public property similar to the agreements it negotiates for use of private property. Also, Congress determined that wireless service should develop competitively in the United States, eliminating the need for exclusive franchise agreements with local governments.

Local governments in 12 states impose some type of local tax or fee on wireless consumers. With the exception of California, which does not impose a sales tax on wireless service, those local taxes are in addition to any applicable state-level tax on wireless service. Table 5 (next page) provides a breakdown of those local taxes.

#### Why Should Policymakers Care?

The rising popularity of wireless service, and the explosive growth in the number of wireless subscribers, has led some to question whether wireless taxes matter to wireless consumers and the wireless industry. However, there are two compelling reasons why policymakers should be cautious about expanding wireless taxes, fees, and surcharges. First, discriminatory taxes may slow investment in wireless

Table 5. Discriminatory Local Taxes by Type					
Privilege, License, or User Taxes	State-Authorized Telecom Taxes	<b>School District Taxes</b>			
Arizona	Florida	Kentucky			
California	Illinois	New York			
Maryland	Maryland				
Missouri	New York				
Nebraska	Utah				
South Carolina					
Washington					

infrastructure. Ample evidence exists that investments in wireless networks provide economic benefits to the broader economy because many sectors — transportation, healthcare, energy, education, even government — use wireless networks to boost productivity and efficiency. Second, discriminatory wireless taxes have a disproportionately large impact on low- and moderate-income Americans, reducing consumer access to and adoption of wireless services.

#### **Economic Effect of Wireless Taxes**

Consumer demand for wireless service is price sensitive. According to the most recent study on the price elasticity of demand for wireless service, each 1 percent increase in the price of wireless service reduces consumer demand for wireless service by about 1.2 percent.<sup>4</sup> Using that estimate, the 10 percentage point disparity between rates on wireless service and other taxable goods and services would suppress demand for wireless service by almost 12 percent below what it would be if the tax and fee burden on wireless was equivalent to that imposed on other taxable goods and services.

The recent growth in the prepaid wireless segment reinforces economic evidence that consumers are indeed sensitive to price when purchasing wireless service. The average monthly revenue per prepaid wireless subscriber is estimated to be a little over half of the monthly revenue from traditional postpaid customers on contract plans. The rapid growth in the number of prepaid subscribers, from roughly 16 percent of the market in 2007 to nearly 22 percent at the end of 2011, suggests strongly that many wireless consumers are price sensitive.<sup>5</sup>

Wireless carriers invested about \$25 billion in their wireless networks in 2011, or roughly 15 percent of their gross revenue.<sup>6</sup> If wireless service were subject to the same tax treatment as other taxable goods and services, increased carrier revenue could make as much as \$3 billion more per year available to invest in network expansion and improvements.

Network investment is important not only to consumers and businesses that use those networks but also to the entire American economy. A report by the International Chamber of Commerce (ICC) in Paris surveyed the evidence not only from the United States and Europe but from the developing world as well. Economists that have examined the relationship between investments in communications and information technology infrastructure and economic growth have consistently found a strong link. Simply put, wireless infrastructure investment enables an entire entrepreneurial culture to focus on creating applications and devices to make businesses more productive and to improve the lives of consumers. Those tools in turn make businesses more productive and profitable so that they can create new jobs that generate economic activity and tax revenue for governments.

Although most infrastructure investments create these types of multiplier effects, the multiplier effects for telecommunications infrastructure are higher than for other industries because communications and information technology are so deeply embedded in business processes. These infrastructure investments also benefit the government and nonprofit sectors in ways that do not necessarily show up directly in economic statistics but nonetheless make these sectors more efficient and enable them to lower the cost of providing government services.

<sup>&</sup>lt;sup>4</sup>Allan T. Ingraham and J. Gregory Sidak, "Do States Tax Wireless Services Inefficiently? Evidence on the Price Elasticity of Demand," *Virginia Tax Review*, Fall 2004, pp. 249-261.

<sup>&</sup>lt;sup>5</sup>Robert Roche and Liz Dale, "CTIA's Wireless Industry Indices: Semi-Annual Data Survey Results: A Comprehensive Report From CTIA Analyzing the U.S. Wireless Industry, Year-End 2011 Results," p. 8 (May 16, 2012).

 $<sup>^{6}</sup>Ia$ 

<sup>&</sup>lt;sup>7</sup>International Chamber of Commerce, "ICC Discussion Paper on the Adverse Effects of Discriminatory Taxes on Telecommunications Service" (Paris: Oct. 26, 2010), available at http://www.iccindiaonline.org/downloads/disscusstion-pape r-28-oct.pdf.

As noted in the ICC report, "Remedying the discriminatory tax treatment of telecom goods and services may reduce tax receipts in the short-term, but the longer-term increase in the use of advanced capability devices, service demand, and network deployment resulting from these tax reductions is likely to counteract this loss of revenue over time." Policymakers need to weigh the trade-offs between the short-term revenue benefits of excessive wireless taxes versus the long-term economic impact on the state from reduced infrastructure investment.

#### **Wireless Taxes Are Regressive**

Excessive and discriminatory taxes on wireless service are unfair to consumers, especially lowincome consumers who rely on wireless service much more heavily than higher-income consumers. Studies by the Pew Foundation and federal agencies surveying households about wireless use reveal that low-income populations rely much more heavily on wireless service for voice service as well as access to the Internet. For example, in the most recent report from 2011, the CDC found that 47 percent of adults living in wireless-only households were poor, compared with 28 percent of adults in wireless-only households who were not poor. Low-income families spend much more of their disposable incomes on wireless service than do middle- and high-income families, so tax policies that place excessive burdens on wireless consumers are regressive and punitive

for poorer Americans. Increasingly, both in America and abroad, wireless services are recognized as a critical tool in allowing consumers and businesses to participate in, and successfully compete in, the 21st century economy.

#### Conclusion

Wireless consumers continue to be burdened with excessive and discriminatory taxes, fees, and surcharges in many states and localities across the United States. With state and local governments continuing to face revenue challenges, the wireless industry and its customers continue to be at risk as an attractive target for raising new revenue.

Targeting wireless consumers, however, disproportionately affects poorer families and may have ramifications for long-term state economic development and growth. Higher taxes on wireless service, coupled with increased taxes on wireless investments, may lead to slower deployment of wireless network infrastructure, including 4G wireless broadband technologies that an increasingly mobile workforce relies on for economic success.

States should study their existing communications tax structure and consider policies that transition their tax systems away from narrowly based wireless taxes and toward broad-based tax sources that do not distort consumer purchasing decisions and do not slow investment in critical infrastructure like wireless broadband. These studies are underway in Delaware, Florida, and Maryland. Reform of communications taxes in states with excessive tax rates would position those states to attract additional wireless infrastructure investments that generate economic growth through the new jobs and revenue growth they produce while helping provide relief to low-income wireless users.

<sup>&</sup>lt;sup>8</sup>ICC Discussion Paper, p. 2.

<sup>&</sup>lt;sup>9</sup>Steven J. Blumberg, et al. "Wireless Substitution: Early Release Estimates From the National Health Interview Survey, January-June 2011." Atlanta: Centers for Disease Control, Dec. 21, 2011, available at http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201112.pdf.

State and I	Local Transaction Taxes, Fees, and July 1,	. Government ( 2012	Charges on Wireless Service
State	Type of Tax	Rate	Comments
Alabama	Ala. cell service tax	6.00%	Access, interstate, and intrastate
	E911	1.49%	70 cents per month
	<b>Total Transaction Tax</b>	7.49%	
Alaska	Local sales tax	2.50%	Average of Juneau (5%) and Anchorage (0%)
	Local E911	3.62%	Anchorage \$1.50; Juneau \$1.90
	State USF	5.98%	9.5% times FCC safe harbor
	<b>Total Transaction Tax</b>	12.09%	
Arizona	State sales (transaction priv.)	6.60%	Intrastate telecommunications service
	County sales (transaction priv.)	0.60%	Phoenix (Maricopa City) 0.7%; Tucson (Pima City) 0.5%
	City telecommunications	3.35%	Average of Phoenix (4.7%) and Tucson (2.0%)
	City utility license tax	2.00%	Average of Phoenix (0%) and Tucson (4.0%)
	911	0.43%	20 cents per month
	<b>Total Transaction Tax</b>	12.98%	
Arkansas	State sales tax	6.00%	6% effective Mar. 1, 2004
	Local sales taxes	2.88%	Average of Little Rock (2.5%) and Fayetteville (3.25%)
	State High Cost Fund	1.26%	2% times FCC safe harbor
	Wireless 911	1.38%	65 cents per month statewide
	TRS service and TRS equipment	0.02%	1 cent per line per month
	Total Transaction Tax	11.54%	
California	Local utility user tax	8.00%	Average of Los Angeles (9%) and Sacramento (7%)
	State 911	0.50%	intrastate
	PUC fee	0.18%	intrastate
	ULTS (lifeline)	1.15%	intrastate
	Deaf/CRS	0.20%	intrastate
	High cost funds A and B	0.70%	intrastate
	Teleconnect fund	0.08%	intrastate
	CASF — advanced services fund	0.14%	
	<b>Total Transaction Tax</b>	10.95%	
Colorado	State sales tax	2.90%	Access and intrastate
	Local sales tax — city/county	3.56%	Average of Denver (3.62%) and Colorado Springs (3.5%)
	Local sales tax — RTD, CD, BS	1.05%	Denver (1.1%)/Colorado Springs (1%)
	911	1.49%	Denver (70 cents)/Colorado Springs (7 cents)
	USF	1.82%	2.9% times FCC safe harbor
	<b>Total Transaction Tax</b>	10.82%	

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State	Type of Tax	Rate	Comments
Connecticut	State sales tax	6.35%	Access, interstate, and intrastate
	911	1.06%	50 cents per line
	<b>Total Transaction Tax</b>	7.41%	
Delaware	Public utility gross receipts tax	5.00%	Access and intrastate
	Local 911 tax	1.28%	60 cents per month
	<b>Total Transaction Tax</b>	6.28%	
District of Columbia	Telecommunication privilege tax	10.00%	Monthly gross charge — residential rate
	911	1.62%	76 cents per month;
	Total Transaction Tax	11.62%	
Florida	State communications services	9.17%	Access, interstate, and intrastate
1 101 144	Local communications services	6.36%	Jacksonville 5.82%; Tallahassee 6.9%
	911	1.06%	50 cents month statewide
	Total Transaction Tax	16.59%	50 cents month statewide
	Total Transaction Tax	10.55%	
Georgia	State sales tax	2.98%	4% of "access charge" — assume \$35
S	Local sales tax	2.61%	Average rate Atlanta (4%) and Augusta (3%)
	Local 911	3.19%	Altanta \$1.50 per line; Augusta \$1.50 per line
	<b>Total Transaction Tax</b>	8.78%	-
Hawaii	Public service county tax	4.00%	
220 17 002	Additional county tax	1.88%	
	PUC Fee	0.25%	0.25% of intrastate
	Wireless 911	1.40%	66 cents per month
	Total Transaction Tax	7.53%	oo cento per month
	13 W 11 W 13 W 13 W 1	1,00%	
Idaho	Telephone service asst. program	0.15%	Set annually by PUC — currently 7 cents per month
	Statewide wireless 911	2.13%	Boise \$1 per month
	<b>Total Transaction Tax</b>	2.28%	
Illinois	State telecom excise tax	7.00%	Access, interstate, and intrastate
	Simplified municipal tax	5.50%	Average of Chicago (7%) and Springfield (4%)
	Wireless 911	3.44%	Chicago \$2.50 per month; others 73 cents per month
	<b>Total Transaction Tax</b>	15.94%	

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State	Type of Tax	Rate	Comments
Indiana	State sales tax	7.00%	Access and intrastate
	Utility receipts tax	1.40%	Same base as sales tax
	Wireless 911	1.91%	90 cents per month
	State USF	0.33%	0.52% times FCC safe harbor
	State TRS fee	0.06%	3 cents per line
	PUC fee	0.15%	
	Total Transaction Tax	10.86%	
Iowa	State sales tax	6.00%	
	Local option sales taxes	0.50%	Average of Cedar Rapids (1%) and Des Moines (0%)
	Wireless 911	1.38%	65 cents per month
	Dual party relay service fee	0.06%	3 cents per month
	<b>Total Transaction Tax</b>	7.95%	
Kansas	State sales tax	6.30%	Intrastate and interstate
	Local option sales taxes	1.83%	Average of Wichita (1.0%) and Topeka (2.65%)
	USF	3.86%	6.13% x FCC safe harbor
	Wireless 911	1.13%	53 cents per month per line
	<b>Total Transaction Tax</b>	13.11%	
Kentucky	State sales tax	6.00%	Access, interstate, and intrastate
	School utility gross receipts	1.50%	Average of Frankfort (3%) and Louisville (0%)
	Kentucky USF	0.17%	8 cents per month
	Kentucky TAP and TRS	0.09%	4 cents per month
	Wireless 911	1.49%	70 cents per month
	Communications gross receipts tax	1.30%	Access, interstate, and intrastate
	<b>Total Transaction Tax</b>	10.54%	
Louisiana	State sales tax	3.00%	Intrastate rate
	Wireless 911	1.81%	New Orleans 85 cents per month; Baton Rouge 85 cents per month
	State USF	2.40%	May vary by carrier
	<b>Total Transaction Tax</b>	7.21%	
Maine	State service provider tax	5.00%	Intrastate
	911 tax	0.96%	45 cents per month
	Maine USF	0.94%	1.49% times FCC safe harbor
	MTEAF	0.38%	0.6% times FCC safe harbor
	Total Transaction Tax	7.27%	<u> </u>

State	Type of Tax	Rate	Comments
Maryland	State sales tax	6.00%	"Mobile telecommunications service"
	Local telecom excise	4.26%	\$4 per month in Baltimore; no tax in Annapolis
	State 911	0.53%	25 cents per month
	County 911	1.60%	75 cents per month in Baltimore and Anne Arundel counties
	State USF	0.38%	18 cents per month effective July 1, 2012
	Total Transaction Tax	12.77%	
Massachusetts	State sales tax	6.25%	Interstate and intrastate
	Wireless 911	1.60%	75 cents per month
	Total Transaction Tax	7.85%	
Michigan	State sales tax	6.00%	Interstate and intrastate
wnemgan	State sales tax State wireless 911	0.40%	19 cents per month
	County wireless 911	0.40%	Detroit and Lansing both 42 cents per month
	Intrastate toll restructuring fund	0.39%	0.62% times FCC safe harbor
	<b>Total Transaction Tax</b>	7.69%	
Minnesota	State sales tax	6.88%	Interstate and intrastate
Winnesota	Local sales tax	0.83%	Minneapolis (0.9%) and St. Paul
	Local sales tax	0.83%	(0.75%)
	911	1.70%	Increased from 75 cents to 80 cents July 1, 2011
	Telecom access Minn. fund	0.13%	Set by PUC — currently 6 cents per month
	Total Transaction Tax	9.53%	
Mississippi	State sales tax	7.00%	Access, interstate, and intrastate
	Wireless 911	2.13%	\$1 per month per line
	911 training surcharge	0.11%	5 cents per month per line
	<b>Total Transaction Tax</b>	9.23%	
Missouri	State sales tax	4.23%	Access and intrastate
	Local sales taxes	3.57%	Average of Jefferson City (3.5%) and Kansas City (3.63%)
	Local business license tax	6.50%	Jefferson City (7%); Kansas City (6% residential)
	<b>Total Transaction Tax</b>	14.29%	
Montana	Telecom excise tax	3.75%	Access, interstate, and intrastate
	911 and E911 tax	2.13%	\$1 per number per month
	TDD tax	0.21%	10 cents per number per month
	Total Transaction Tax	6.09%	

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State	Type of Tax	Rate	Comments
Nebraska	State sales tax	5.50%	Access and intrastate
	Local sales tax	1.50%	Lincoln (1.5%) and Omaha (1.5%)
	City business and occupation tax	6.13%	Average of Omaha (6.25%) and Lincoln (6%)
	State USF	4.37%	6.95% times FCC safe harbor
	Wireless 911	1.06%	Up to 70 cents per month effective July 1, 2006; currently 50 cents
	TRS	0.11%	4 cents per month effective July 1, 2012
	Total Transaction Tax	18.67%	
Nevada	Local framchica/amaga magaint-	1 600/	5% of first \$15 intrastate revenue
Nevada	Local franchise/gross receipts	1.60%	<u>'</u>
	Local 911 tax	0.53%	Up to 25 cents per month — imposed by counties
	State deaf relay charge	0.06%	7 cents per month
	Nevada USF	0.10%	0.155% times FCC safe harbor
	Total Transaction Tax	2.13%	
New Hampshire	Communication services tax	7.00%	Access, interstate, and intrastate
	911 tax	1.21%	57 cents per month
	Total Transaction Tax	8.21%	
New Jersey	State sales tax	7.00%	Increased to 7% effective July 15, 2006
	Wireless 911	1.91%	90 cents per month effective July 1, 2004
	<b>Total Transaction Tax</b>	8.91%	
New Mexico	State gross receipts (sales) tax	5.13%	5% intrastate; 4.25% interstate
TIOW INCAICO	City and county gross receipts tax	2.47%	Average of Santa Fe (3.0625%) and
			Albuquerque (1.875%)
	Wireless 911	1.09%	51 cents per month per subscriber
	TRS surcharge	0.33%	Intrastate charges
	State USF	2.08%	3.3% times FCC safe harbor
	Total Transaction Tax	11.08%	

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State	Type of Tax	Rate	Comments
New York	State sales tax	4.00%	Intrastate and monthly access
	Local sales taxes	4.25%	New York City (4.5%); Albany (4%)
	MCTD sales tax	0.19%	New York City 0.375%; Albany 0%
	State excise tax (186e)	2.50%	Mobile telecom service — includes interstate
	MCTD excise/surcharge (186e)	0.30%	New York City and surrounding counties 0.6%; Albany 0%
	Local utility gross receipts tax	1.49%	New York City 84% of 2.35%; Albany 1%
	State wireless 911	2.55%	\$1.20 per month
	Local wireless 911	0.64%	30 cents per month — New York City and most counties
	MCTD surcharge (184)	0.07%	New York City 0.13%; Albany — no tax
	N.Y. franchise tax (184)	0.38%	
	School district utility sales tax	1.50%	Albany 3%; New York City no tax
	<b>Total Transaction Tax</b>	17.85%	
North Carolina	State sales tax	4.75%	Access, interstate, and intrastate
	Local sales tax	2.25%	Imposed statewide
	Wireless 911	1.28%	Reduced from 70 cents to 60 cents on July 1, 2010
	TRS Charge	0.23%	11 cents per month
	Total Transaction Tax	8.51%	
North Dakota	Chaha aalaa haas	5,000	A
North Dakota	State sales tax	5.00%	Access and intrastate
	Local sales taxes	1.25%	Average of Fargo (1.5%) and Bismarck (1%)
	State gross receipts tax	2.50%	Interstate and intrastate
	Local 911 tax	2.13%	\$1 in Bismarck and Fargo
	TRS	0.09%	Up to 11 cents per month — currently 4 cents
	Total Transaction Tax	10.96%	
Ohio	State sales tax	5.50%	Access, interstate, and intrastate
	Local sales taxes	1.75%	Columbus (1.25%) and Cleveland (2.25%)
	Regulatory fee	0.13%	Intrastate gross revenue
	State/local wireless 911	0.60%	28 cents per month
	TRS charge	0.06%	3 cents per month
	<b>Total Transaction Tax</b>	8.04%	-
Oklahoma	State sales tax	4.50%	Access, interstate, and intrastate
CAMMIVIIIU	Local sales taxes	3.95%	Average of Oklahoma City (3.875%) and Tulsa (4.017%)
	Local 911	1.06%	50 cents per month in Oklahoma City and Tulsa
	USF	1.98%	3.14% times FCC safe harbor
	OSF	1.0070	5.11% times 1 ee saie narsor

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State	Type of Tax	Rate	Comments
Oregon	Local utility tax	0.00%	No tax on wireless in Portland or Salem
	911 tax	1.60%	75 cents per month
	RSPF surcharge	0.26%	12 cents per month
	<b>Total Transaction Tax</b>	1.85%	
Pennsylvania	State sales tax	6.00%	Access, interstate, and intrastate
•	State gross receipts tax	5.00%	Access, interstate, and intrastate
	Local sales tax	1.00%	Philadelphia 2%; Harrisburg 0%
	Statewide wireless 911	2.13%	\$1 per month
	<b>Total Transaction Tax</b>	14.13%	-
Rhode Island	State sales tax	7.00%	Access, interstate, and intrastate
	Gross receipts tax	5.00%	Access, interstate, and intrastate
	911 fee	2.13%	\$1 per month
	Additional wireless 911 fee	0.55%	26 cents per month
	<b>Total Transaction Tax</b>	14.68%	
G 41 G 11	G. J. J.	0.000	1
South Carolina	State sales tax  Local sales tax	6.00% 1.75%	Access, interstate, and intrastate  Average of Charleston (2.5%) and
	M. Calling to	1.00%	Columbia (1%) Charleston (1%) and Columbia (1%)
	Municipal license tax	1.32%	
	911 tax  Total Transaction Tax	1.32%	62 cents per month
	Total Transaction Tax	10.07%	
South Dakota	State sales tax	4.00%	Access, interstate and intrastate
	State gross receipts tax	4.00%	Wireless only effective July 1, 2003
	Local option sales tax	2.00%	Average of Pierre (2%) and Sioux Falls (2%)
	911 excise	2.66%	Statewide \$1.25 effective July 1, 2012
	TRS fee	0.32%	15 cents per month
	PUC fee	0.15%	Intrastate receipts
	<b>Total Transaction Tax</b>	13.13%	
Tennessee	State sales tax	7.00%	Access, interstate, and intrastate
	Local sales tax	2.50%	Statewide local rate for intrastate
	911 tax	2.13%	\$1/month
	<b>Total Transaction Tax</b>	11.63%	
Texas	State sales tax	6.25%	Access, interstate, and intrastate
	Local sales tax	2.00%	Austin (2%) and Houston (2%)
	Telecom Infrastructure Fund	0.00%	Repealed effective October 1, 2008
	Wireless 911 tax	1.06%	50 cents per line per month
	Texas USF	2.70%	4.3% times FCC safe harbor
	911 equalization surcharge	0.13%	6 cents per line
	<b>Total Transaction Tax</b>	12.15%	

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State	Type of Tax	Rate	Comments		
Utah	State sales tax	4.70%	Access and intrastate		
	Local sales taxes	2.10%	Average of Salt Lake City (2.15%) and Provo (2.05%)		
	Local utility wireless	3.50%	Levied at 3.5% max. in SLC and Provo		
	Local 911	1.30%	61 cents per month		
	State 911	0.17%	8 cents per month		
	Poison Control	0.15%	7 cents per month		
	State USF	0.63%	1% rate times FCC safe harbor		
	State TRS	0.13%	6 cents per line		
	<b>Total Transaction Tax</b>	12.67%			
Vermont	State sales tax	6.00%	Access, interstate, and intrastate		
	Local sales tax	0.50%	Average of Montpelier (0%) and Burlington (1%)		
	State USF (includes 911)	1.60%			
	<b>Total Transaction Tax</b>	8.10%			
Virginia	State communications sales tax	5.00%			
	Wireless 911	1.60%	75 cents per month		
	<b>Total Transaction Tax</b>	6.60%			
Washington	State sales tax	6.50%	Access, interstate, and intrastate		
	Local sales taxes	2.60%	Average of Olympia (2.2%) and Seattle (3%)		
	B&O/Utility Franchise — local	7.50%	Olympia (9%) and Seattle (6%) avg.		
	911 — state	0.53%	25 cents per month		
	911 — local	1.49%	70 cents per month		
	<b>Total Transaction Tax</b>	18.62%			
West Virginia	Wireless 911	6.38%	\$3 per month		
	<b>Total Transaction Tax</b>	6.38%			
Wisconsin	State sales tax	5.00%	Access, intrastate, and interstate		
	Local sales tax	0.55%	Average of Milwaukee (0.6%) and Madison (0.5%)		
	Wireless 911 fee	0.00%	Reduced from 92 cents per month to \$0 effective July 1, 2008		
	Police and Fire Protection Fee	1.60%	75 cents per month effective September 1, 2009		
	State USF	0.10%	0.158% times FCC safe harbor		
	Total Transaction Tax	7.24%			

State	Type of Tax	Rate	Comments
Wyoming	State sales tax	4.00%	Access and intrastate
	Local sales tax	1.50%	Average of Cheyenne (2%) and Casper (1%)
	TRS	0.06%	Up to 25 cents per month — 3 cents currently
	USF	0.63%	1% times FCC safe harbor
	911 tax	1.60%	75 cents per month — levied locally at uniform rate
	Total Transaction Tax	7.79%	
ARPU = \$47			
FCC Safe Harbor = 62.9%			

Sources: Method from COST, "50-State Study and Report on Telecommunications Taxation," May 2005. Updated July 2012 by Scott Mackey, KSE Partners LLP, using state statutes and regulations. Average revenue per unit (ARPU): \$47 per Cellular Telephone and Internet Association, June 2012.