

# Perspective

## Tax Policy

Technological advancement has always outpaced state sales tax laws and policy, however we are now on the forefront of a new era in which technology-based services are growing at an exponential pace in relation to state sales tax guidance. Michael T. Dillon, Esq., founder and President of Dillon Tax Consulting, LLC has been tracking the potential sales tax issues surrounding a new wave of technology, telematics, or the Internet of Things.

## The ‘Internet of Things’: The Next Wild Frontier of Sales Tax A Primer on the Players, Transactions and Planning Points



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State revenue authorities were initially slow to enact laws and policies addressing the applicability of sales tax to technology-based services (e.g., cloud-based services, digital goods and services), creating a “wild frontier” for sales taxation in which taxpayers either did nothing while waiting for state guidance, or taxpayers took the reins and helped drive state tax policy by educating taxing authorities and legislators as to the appropriate classification and tax treatment for these services. Declining state tax revenues and the perceived revenue loss from growing consumer reliance on these cloud-based and digital services has many states racing to address these services through interpretation of existing sales tax laws, and more recently, enactment of new laws specifically addressing these technology-based services.

Most states have taken a stance on the taxability of digital products and services, as e-books, downloadable music and digital subscriptions have become a regular part of our economy. However, only 16 states and the District of Columbia have provided direct authority on

the taxability of cloud-based products and services. (See Table A, addressing state tax treatment of cloud-computing and digital products.) It is likely then, that sales tax guidance on the newest technological advancements may be a long time coming.

This article provides a brief overview of the state tax issues raised by the next wave of digital innovation, typically referred to as telematics or the “Internet of Things.” It identifies and describes the major components and players in these transactions and specifies the federal and state tax laws that are likely to be implicated. Scenarios are included to illustrate the tax result for different types of transactions. Also included are practical insights aimed at helping practitioners and state tax agencies determine the correct amount of tax owed on this emerging business model.

Machine-to-Machine (M2M) transmission, or Internet of Things, represents one of the fastest growing sectors of the Internet and our economy. Cisco’s Internet Business Service Group estimates that, as of 2013, 10 billion mobile objects were connected to the Internet, and that this number is expected to reach 50 billion by the year 2020.<sup>1</sup> While some research groups expect that this number may be somewhere around 30 billion mobile objects by the year 2020,<sup>2</sup> the overwhelming evidence supports that the “Internet of Things” is growing exponentially.

The “Internet of Things” was a major focus at this year’s Consumer Electronics Show, with virtually every company introducing more connected devices.<sup>3</sup> Even the global economic downturn of 2008-2009 demonstrated the potent commercial and residential appetite for mobile device delivery of digital goods and services, during which time “every single region worldwide saw an increase in both total annual mobile telephone subscriptions and Internet subscribers,” and the “global home possession of household durables such as broadband enabled PCs, pay-TV platforms, mobile telephones and even video cameras also maintained dynamic growth.”<sup>4</sup>

The forecast of the taxability of the “Internet of Things” is cloudy. Depending on the players involved, one prediction hinges on a federal, the future of which is also currently cloudy—the Internet Tax Freedom Act (ITFA). Set to expire Nov. 1, 2014, the ITFA prohibits states from imposing taxes on Internet access charges.<sup>5</sup> Because many telematic services require Internet access to complete related data transmissions over the In-

ternet, the usage charges could very likely fall within the definition of Internet access provided by the ITFA.

The entrance and explosive expansion of telematics provides a host of similar and new considerations for state tax practitioners, state taxing authorities, and businesses and consumers to consider. For example,

- How do we define telematics?
- Who are the players?
- What are the existing and potential telematics services?
- How do, and should, Telematics Service Providers charge for these services?
- How should these services be classified for state sales tax purposes? What existing technology-based services can we rely on in assessing the potential sales tax treatment of telematics?
- What is the future outlook for state sales taxation of telematics?

## What Is Telematics?

M2M communications are enabled by telematics, the integration of information systems and services, software applications and telecommunications technologies, that transmit information from mobile devices over communications and computer networks to enhance the provision of services to consumers and businesses, business operations and public services. “The most notable example of telematics may be the Internet itself, since it depends on a number of computer networks connected globally through telecommunication backbones.”<sup>6</sup>

While telematics got its start in the automobile industry (General Motors Corp. first popularized automotive telematics with its “OnStar” system),<sup>7</sup> the term has evolved to refer to the technology of sending, receiving and storing information that combines mobile sensors and devices, computers, information services, software platforms, and other communications services. Telematics is focused on the ability of sensors and other low-cost devices to, by connecting to the Internet using wired, cellular or satellite services, transmit small amounts of data, which are used in broader-based business information systems. This Internet access and the related data transmissions over the Internet are managed through a custom-designed and managed information services platform typically located in the Telematics Service Provider’s (TSP) data centers, ensuring the secure delivery of customer data, using specific applications.

## The Players

Typically, an M2M transmission will involve the following players:

**A Communications Service Provider (CSP)**—the CSP is a carrier (e.g., AT&T, Verizon) who provides wholesale landline or airtime capacity to a Telematics Service Provider to enable them to perform their services.

**A Telematics Service Provider (TSP)**—think of them as similar to an Internet Service Provider (ISP). The TSP is a provider who enables landline or wireless access for mobile devices to a computer network (i.e., the Inter-

<sup>1</sup> Dave Evans, Cisco White Paper, *The Internet of Things: How the Next Evolution of the Internet Is Changing Everything*, April 2011.

<sup>2</sup> <http://nishithsblog.wordpress.com/2014/04/> (OnlineMediaTrends.com: Analysis, Opinion & Case Studies on Global Digital and Social Media Trends); *Forecast: The Internet of Things, Worldwide*, 2013, <http://www.gartner.com/document/2625419?ref=QuickSearch&stkw=G00259115>.

<sup>3</sup> *Id.*

<sup>4</sup> *Euromonitor International from national statistics/Eurostat/OECD/UN/International Monetary Fund (IMF), World Economic Outlook (WEO)*, <http://blog.euromonitor.com/2014/02/why-demand-for-digital-goods-and-services-is-resoundingly-recession-proof.html#sthash.Qmockezu.dpuf>

<sup>5</sup> Internet Tax Freedom Act (ITFA), Sections 1101 *et seq.* (Pub. L. No. 105-277, 112 Stat. 2681, 47 U.S.C. Sec. 151 note, amended by Pub. L. No. 107-75, P.L. 108-435, and Pub. L. No. 110-108).

<sup>6</sup> <http://searchnetworking.techtarget.com/definition/telematics>.

<sup>7</sup> *Id.*

net), typically though the TSP's gateway and proprietary platform. This platform uses custom protocol and applications to direct, manage, secure and integrate the information with customer systems, ensuring information is transmitted to the customer's data centers in a secure, usable format. CSPs also provide telematics services to Institutional Users and Endusers as well, in essence becoming TSPs themselves.

**An Application Service or Solution Provider (ASP)** – the ASP is the company that develops, support and provides the specific solution for a user, whether this is an Enterprise User, an Institutional User, or an Enduser. For example, the application may enable a vending machine to “know” when it is running low on a certain item, or is out of refrigerant; or an ATM to “know” when it is running low on funds, or is not operating properly; or an security monitoring system to sense when there has been a breach, or a window has been left open. The applications manage the data and format it into a manner that may be communicated to the Enterprise or Institutional User. Without these applications, the “Internet of Things” would be nothing more than mobile devices connected to users with no means of conveying information in a usable format, much like the Internet Protocol has made the Internet into a World Wide Web of interconnected devices capable of sharing information. Some TSPs also provide applications to their customers, which compete with the applications provided by ASPs.

**An Enterprise or Institutional User** – the Enterprise or Institutional User is the entity purchasing the end-to-end solution for resale to their Enduser customer, or for their own use (or employee's use) in managing and securing assets. Users of these telematics systems and the user applications provided thereon, operate in many business fields such as securing assets, improving medical diagnostics, performing financial services transactions or managing data more effectively. Typically these solutions are sold to enterprises, government organizations or as an integral part of an information system. Examples include the GM ‘On-Star’ service for automotive telematics; residential home security systems provided by vendors such as Honeywell or ADT; or the banking institution that uses a telematics solution to communicate the performance, security and proper funding of its ATMs. An Enterprise or Institutional User may develop and maintain its own application, thereby only requiring the connectivity and communications services of a CSP or TSP. Likewise, TSPs may bundle an application or platform with their connectivity and communications, thereby providing “one-stop shopping” for the telematics service solution to the customer.

**An EndUser** – the customer who benefits from the presence and use of the data transmitted. This can be an Enterprise or Institutional User, and it can be a residential consumer like you and me. For example, the consumer who uses an application on her smartphone to check a message from the home security system that she left a window open, or to set the system to “Alarm” mode; or the driver who relies on the vehicle's GPS system to navigate the vehicle; or the parents who use a service to track their teen's location and safety (one application can even track if teen's phone is travelling faster than a pre-determined speed, quite a powerful tool for attentive parents of teen-aged drivers).

While these players represent an overview of the types of participants in M2M communications, this is by

no means meant to be entirely representative. Many telematics applications are now produced and marketed for customization by the Enterprise User, so that the User, or customer, can own and maintain the application, thus eliminating the ASP from the equation. As such, the telematics industry, while constantly changing, is morphing into a model in which the players include only a TSP (providing the backbone, value-added network access, application, and transmissions), and a User (providing the mobile devices, to which “things” are connected). Users are also developing and/or purchasing their own applications. In addition to these players, there are numerous hardware providers developing the mobile devices, servers, routers and other devices necessary for the transmission of M2M communications.

As the evolution of telematics is towards wireless connectivity of all things over the Internet, wireless routers must be capable of taking in either or both CDMA and GSM. CDMA (Code Division Multiple Access) and GSM (Global System for Mobiles) are shorthand for the two major radio systems used in mobile wireless devices. Wireless routers are able to access the Internet wirelessly using the Subscriber Identification Module (SIM) powered by the TSP. TSPs provide wireless connectivity and Internet access to ASP and Enterprise User customers, enabling User's devices to connect through the wireless router to the Internet and to the User's data centers.

## Telematics Products and Solutions

While telematics is most commonly known with regard to Global Positioning System (GPS) technology integrated with computers and mobile communications technology in automobiles,<sup>8</sup> the uses for telematics has experienced explosive growth in recent years, with many more applications being developed on a daily basis. The primary solutions focus on security, analytics and management, all through the interconnection of mobile devices and their ability to gather and transmit usable information.

Some common telematics solution areas include:

- Automobiles
  - GPS and Mapping – solutions that provide accurate route information and vital information like speed limits, real-time traffic information codes and height restriction data.
  - Automobile and Driver Interface – solutions that enable voice-activated control systems and heads-up (i.e., eyes on road) display technology.
  - Traffic Information – solutions that provide live, accurate traffic information, and interface with your vehicle's GPS to provide alternate, safe routing.
  - Road and Weather Diagnostics – giving the regions and roads - including bridges and tunnels, on which we travel a sensory function, such as to temperature, pressure, vibration, light, moisture and stress.
  - Remote Diagnostics and Control – solutions that enable the driver or employer to remotely check the diagnostics of the car, perform updates to software and even remotely repair certain vehicle malfunctions or areas that require enhancement. Other solutions enable the user to remotely control certain

<sup>8</sup> <http://en.wikipedia.org/wiki/Telematics>.

features of the vehicle, including access to the vehicle if the keys are locked inside, and flashing the cars lights and sounds to locate the vehicle.

■ **Asset Monitoring and Tracking** – solutions that can be easily configured to monitor objects remotely, or enable self-monitoring, and send out e-mails and phone text messages at key times, for such objects as commercial vehicle fleets, ATMs, vending machines, livestock, pipelines, utilities, bridges, tunnels, buildings, towers, household appliances, even people, water supplies, shoes, trees and animals. Using telematics devices on their cows, European farmers can be notified automatically when calving begins or when a cow is in heat and ready for insemination!<sup>9</sup>

■ **Home Security and Home Asset Monitoring** – hardwired home security systems are evolving to wireless systems that combine video, still pictures, sensors, text messaging and voice-activated distress calling. Security providers can view locations in real time and respond accordingly. These same solutions are becoming available in all household appliances, including refrigerators, ovens and coffee-makers.

■ **Distance Learning** – solutions that connect teachers and students with one another in a collaborative environment, through a blend of satellite television, satellite data transmission, audio conferencing, various forms of computer-mediated communication and video conferencing.

■ **Health Care** – solutions that enable people to wear—externally or internally—devices that can monitor and transmit information regarding vital signs, organ function (e.g., pacemakers) and personal information to health care providers. Patients are even ingesting mobile devices into their own bodies to help doctors diagnose and determine the causes of certain diseases.<sup>10</sup> Other solutions enable hospitals and health care providers to monitor equipment and devices in the hospital and enable patients to move freely about the hospital, as opposed to being tethered to the equipment.<sup>11</sup>

■ **Infotainment** – solutions that enable homes, vehicles and other hardware to provide consumers with information, entertainment and multimedia content, integrating various information and media systems, through Bluetooth-enabled voice recognition technology.

gies. The solutions include the ability to convert voice to text and text to voice, enabling users to access the Web and send/receive e-mails and texts while keeping their eyes and hands free to perform other functions, such as driving.

■ **Internet Access and E-mail** – solutions that enable access to the Internet and e-mail functionality by hand or voice while in your automobile, or using a keypad or QWERTY board on a remote machine (vending or ATM) or a home appliance.

These are a mere sampling of some of the more popular current and evolving telematics solutions. As technology rapidly expands in the machine-to-machine transmission world, telematics services will begin to affect consumer behavior, employer behavior, employee behavior, driver behavior, even the behavior of parents and their children. As consumer demand has risen for telematics services, such as GPS and on-demand roadside assistance, the subscription-based business model for these services has changed to one in which such features will soon be standard features in all models of automobiles, regardless of price. Furthermore, in addition to Enterprise User solutions, residential consumer demand for, and the availability of, impulse or micropayment options for a feature on demand (one time use), or a-la-carte type models will enable users to customize their solutions. Some industry leaders anticipate certain telematics systems moving towards a standard protocol or platform, similar to Apple's iPhone Operating System (OS).<sup>12</sup> This will enable third parties to develop applications that are capable of performing on that OS, so that individuals can "subscribe" to, or purchase, these apps from a marketplace, enabling each telematics user to customize their experience.

The growth curve for telematics solutions is near vertical. According to Peter Hartwell, Senior Researcher at HP Labs, "With a trillion sensors embedded in the environment—all connected by computing systems, software, and services—it will be possible to hear the heartbeat of the Earth, impacting human interaction with the globe as profoundly as the Internet has revolutionized communication."<sup>13</sup>

By way of a simple example, let us assume that the Enterprise User desires to obtain a fleet logistics application to enable it to track and monitor the performance and navigation of its fleet of vehicles (GPS, hours of use, fuel economy, location, driver safety and vehicle function). The diagram below depicts an illustration of our example:

<sup>12</sup> See, e.g., *Market Overview Report: Machine-To-Machine (M2M) & Smart Systems Market Opportunity 2010-2014*, Harbor Research Inc., [http://www.windriver.com/m2m/edk/Harbor\\_Research-M2M\\_and\\_Smart\\_Sys\\_Report.pdf](http://www.windriver.com/m2m/edk/Harbor_Research-M2M_and_Smart_Sys_Report.pdf).

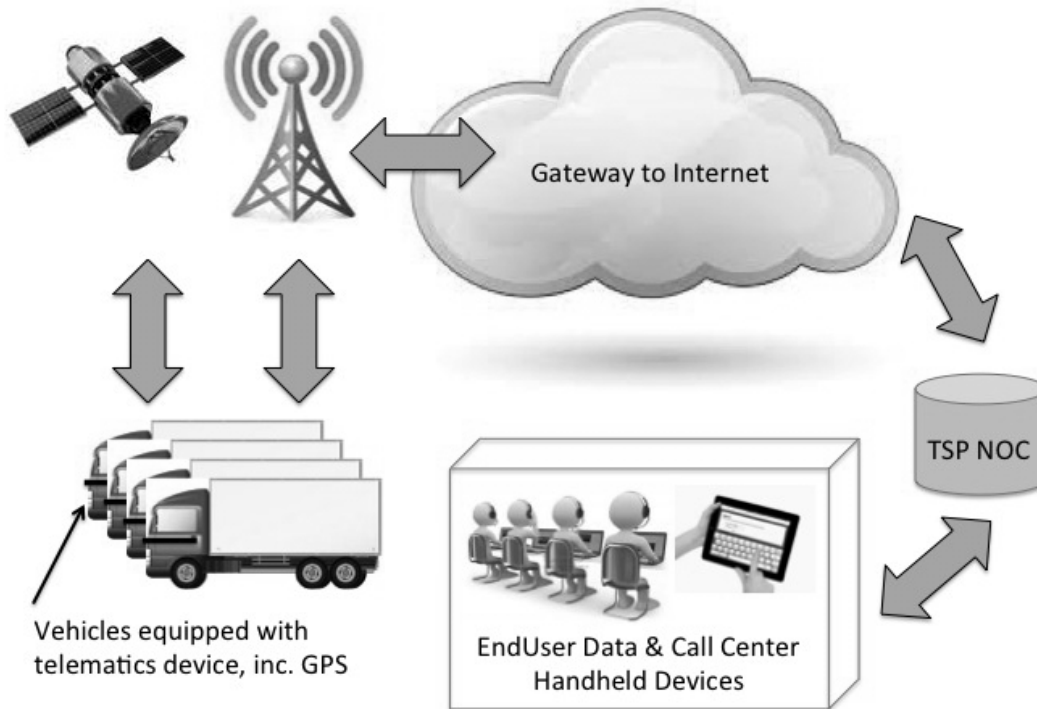
<sup>13</sup> Dave Evans, Cisco White Paper, *The Internet of Things: How the Next Evolution of the Internet Is Changing Everything*, April 2011.

<sup>9</sup> <http://www.machinetomachinemagazine.com/2012/10/19/cows-can-text-with-m2m/>.

<sup>10</sup> Dave Evans, Cisco White Paper, *The Internet of Things: How the Next Evolution of the Internet Is Changing Everything*, April 2011, citing "The Networked Pill," Michael Chorost, MIT Technology Review, March 20, 2008, <http://www.technologyreview.com/biomedicine/20434/?a=f>.

<sup>11</sup> When my wife was recently in the hospital for the birth of our son, the nurse asked if we preferred a telematics monitor, that would enable her to move freely about the hospital, without being tethered by wires to the various monitors they typically use for patients.

## How Telematics Works



The Enterprise User would contract with a Telematics Service Provider for the provision of a telematics solution. Typically, an Application Service Provider specializing in fleet tracking, performance and management solutions will provide the fleet logistics application that facilitates importation and integration of required data elements into reporting that can be provided to the Enterprise User. The TSP and the Enterprise User will coordinate the acquisition of an application from an ASP with the User's management information systems, fleet of vehicles and with the TSP's custom information platform. Alternatively, the Enterprise User will develop or customize the application and maintain the platform itself.

The TSP acquires wholesale airtime capacity from leading Communications Service Providers to perform these services. The TSP provides the mobile devices that are connected to each fleet vehicle of the User. Each mobile device is equipped with a SIM card. SIM cards store network-specific information used to authenticate and identify subscribers on the network. All active SIMs and devices have an IP address, and all data transmissions are sent from this IP address to a destination IP address, allowing solely for Internet data transmission. As such, all TSP services through Enterprise User devices require Internet access through the TSP's gateway, and provide for transmission over the Internet and over an Internet protocol.

The mobile devices will monitor pre-configured data elements and attributes of the vehicle, such as location, fuel economy, speed, direction, stopping, starting, erratic driving, engine performance. At pre-configured times or events, such as when a vehicle diverts off of a

delivery route, the device's SIM will transmit key data over a wireless signal to an Internet router. The router will identify the SIM as one that transmits over the TSP's "network". The data will access the Internet through the TSP's gateway to the TSP's Network Operations Center (NOC), where the TSP platform will verify the integrity and completeness of the data, and then transmit the data to the User's data center. The User's data center can then transmit the information in a usable format via a message to the User or personnel entrusted to respond to these messages. Now that we know how telematics work, let's take a closer look at some of the relevant tax considerations.

### Telematics Charges

Nexus considerations impacting the various players in a typical telematics service transaction can have a material impact on the tax treatment of each transaction. "Nexus" generally means the threshold of contact that must exist between a taxpayer and a state before the state has jurisdiction to tax the taxpayer. The U.S. Commerce Clause requires that there be a "substantial nexus" between the taxed activity and the taxing state to trigger the duty to collect taxes on behalf of the state. In the context of sales and use taxes, the U.S. Supreme Court in *Quill v. North Dakota*, 504 U.S. 298 (1992) held that "substantial nexus" means that the taxpayer must have physical presence in the state before a state may impose tax compliance obligations on the taxpayer. The type and the amount of physical presence has been the subject of state and taxpayer debate and litigation ever since.

The physical presence requirement established by *Quill* seems to be eroding, however, due to the increasingly aggressive enforcement measures of state taxing authorities against out-of-state taxpayers, and the growing trend of state's enacting laws triggering the presumption of nexus based on an affiliate's activities within their borders.<sup>14</sup> Nevertheless, the obligation of a provider to collect and remit a tax on a taxable transaction, and the ability of a provider to accept—or their customer to provide—a resale or exemption certificate on a taxable transaction will continue to be an important consideration for the tax treatment of a telematic service transaction. These nexus considerations in a telematics transaction are so extensive as to be beyond the scope of this article, as they alone warrant discussion under a separate article, and will certainly be the topic of a substantial amount of administrative and judicial advocacy for years to come.

Within the scope of this article is consideration of the typical charges that a Telematics Service Provider faces, with respect to its purchases of underlying backbone connectivity, and the provision of a telematics solution to its customers. As with everything in the sales and transaction tax area, the form of the transaction—that is, the contractual description of what is being provided, and the invoice literal language used to describe what is being provided—has a significant impact on the tax treatment of the transaction.

### Classification for State Sales Tax Purposes

Telematics Service Providers can provide wired or wireless/satellite connectivity for the transmission of different types of communication (e.g., voice, packet data (GSM and CDMA),<sup>15</sup> SMS messaging) over the Internet, public switched networks, private network or virtual private networks. And no set of Players in a telematics service transaction will contract with and invoice one another in the same manner. As such, the Players to the transaction will be left to ask themselves several questions, such as:

1. Am I purchasing and reselling telecommunications?
2. Am I purchasing and consuming telecommunications?
3. Am I providing Internet access?
4. Am I providing an information service?
5. Am I providing a data processing service?
6. Am I providing some other service (e.g., security or SAAs)?
7. Am I providing all or many of these in a single transaction?

As these services and their definitions continue to evolve for state sales and transaction tax purposes, the answers to these questions will continue to emerge and even change. Though, as we have previously noted, the technological changes will occur at a rate exponentially faster than the changes to sales tax laws and policies. As such, while there are a myriad of potential transactions that may occur in the provision of a telematics so-

lution, the taxability of which must be considered, the two we will address herein include:

1. The TSP's wholesale purchases of underlying communications to provide wired or wireless/satellite connectivity to the TSP's network: When the TSP purchases wholesale airtime capacity from a CSP, the TSP may be contractually limited to the usage of the capacity for the purpose of providing telematics services, or access to the Internet. As such, the TSP may consider that it is purchasing backbone communications services in providing Internet access to its customers. Alternatively, the TSP may consider it to be consuming telecommunications in providing an information or data processing service, or something entirely undefined by a taxing authority. Alternatively, the TSP may consider this to be the resale of telecommunications to its customer.

2. The Enterprise User or customer's purchase of a telematics service solution from the TSP, which may include (i) access and connectivity over a network, and (ii) voice, messaging, or data transmission charges:

**Access and Connectivity Charge** - this may include the right to access the Internet, a public switched telecom network, a private network or a virtual private network via the TSP's gateway, using TSP custom protocol and platforms to direct, manage, secure and integrate the information with customer systems;

**Voice, Messaging or Data Transmission Charge** - depending on the carrier platform and the device, these airtime, messaging or data usage fees are typically based on the volume of bits transmitted over the network, the number of transmissions, or the volume of airtime consumed in transmitting voice signals over the network. For example, if the device is using GPRS (general packet radio service), a packet-oriented mobile data service, network usage is typically charged based on volume of data transferred, contrasting with typical circuit switched data, which is usually billed per minute of connection time. If the device is using SMS, Internet usage is billed based on the number of transmissions.

From a state tax practitioner's perspective, the classification of these TSP charges for state sales and transaction (excise) tax purposes seems relatively straightforward, but then again, getting my infant son to go to sleep once seemed like it should be a simple task as well. For example, one might conclude that the underlying backbone communications should be classified as "Internet access", a charge generally exempt from state taxation under federal law. Alternatively, one might conclude that the backbone communications are consumed by the TSP in providing something other than Internet access; that the TSP should pay applicable sales or excise tax on these charges. Yet another might conclude that the backbone communications are resold by the TSP, and that the TSP may issue a resale certificate to the CSP. However, this may require that the TSP be registered as a telecommunications service provider, a point worthy of contest.

The TSP's charges for usage, however, will likely encounter many of the same classification and taxation issues that states are addressing in the cloud computing and digital services arena. With the exception of one Illinois letter ruling<sup>16</sup>, one Iowa letter ruling<sup>17</sup>, and a

<sup>14</sup> See, e.g., <http://performancemarketingassociation.com/nexus-tax/affiliate-nexus-tax-the-states>; <http://taxfoundation.org/article/marketplace-fairness-act-primer>.

<sup>15</sup> CDMA (Code Division Multiple Access) and GSM (Global System for Mobiles) are shorthand for the two major radio systems used in mobile wireless devices.

<sup>16</sup> Illinois Dept. of Rev., General Information Letter ST 12-0041-GIL (July 27, 2012).

Texas Comptroller audit hearing decision<sup>18</sup>, the taxation of each of these charges has not been specifically addressed by state legislatures or taxing authorities, and as such, remains a 'wild frontier'. In each of these cases, the transmissions were not made over a public switched network. Given the name "Internet of Things", the trend is towards machine-to-machine transmission over Internet protocol, with backbone connectivity utilized to provide the access to the Internet for the devices. Furthermore, all of these cases involved the taxpayer provision or purchase of vehicle telematics services, such as vehicle tracking and directional assistance (GPS), emergency and roadside assistance, and location-based traffic information. As such, many new and evolving telematics service platforms and applications have yet to be considered. Taxpayers are advised to proceed cautiously, seeking the guidance of state tax practitioners and the written advice from state taxing authorities through letter ruling requests and tax advisory opinions.

Let us turn to the potential tax treatment of the two categories of charges previously set forth:

1. The TSP's wholesale purchases of underlying communications to provide wired or wireless/satellite connectivity to the TSP's network.

Potential tax treatment:

i. the TSP's purchase of underlying communications to provide connectivity to the Internet will be classified as Internet access, and therefore exempt from tax under current federal law; or

ii. the TSP using or consuming underlying communications to provide data or information services that may be subject to sales or excise tax; or

iii. the TSP is reselling underlying communications services, however, the TSP may be eligible to issue a resale certificate to the CSP.

To the extent the TSP or a taxing authority deems the TSP's purchase of underlying communications to be used to provide connectivity to the Internet, such purchases should be classified as "backbone" Internet services. The purchase of Internet backbone services should qualify as exempt from state sales and transaction tax purposes under the ITFA.<sup>19</sup> Under the ITFA, state and local governments are barred from imposing multiple or discriminatory taxes on electronic commerce and taxes on Internet access, except for Internet access taxes allowed under grandfather clauses.<sup>20</sup> This moratorium expires on Nov. 1, 2014. No uniform description of Internet access taxes is possible; they fall within the category of sales taxes in some states, and telecommunications taxes in others; and they are considered service charges, which are usually exempt from taxation, in still other states.

<sup>17</sup> Iowa Revenue Policy Letter No. 12300035 (August 14, 2012).

<sup>18</sup> Texas Comptroller's Decision, Hearing No. 108,095 (Feb. 2014).

<sup>19</sup> Internet Tax Freedom Act (ITFA), §§1101 *et seq.* (P.L. 105-277, 112 Stat. 2681, 47 U.S.C. §151 note, amended by P.L. 107-75, P.L. 108-435, and P.L. 110-108).

<sup>20</sup> Ten states (which were grandfathered under the Internet Tax Freedom Act as part of a political compromise) are allowed to provide for some manner of taxation on ISP charges. The 10 states are Hawaii, New Hampshire, New Mexico, North Dakota, Ohio, South Dakota, Tennessee, Texas, Washington and Wisconsin.

Pursuant to § 1105(5) of the ITFA, the term "Internet access" means a "service that enables users to connect to the Internet to access content, information, or other services offered over the Internet, and includes telecommunications purchased by or provided by a vendor to provide Internet access or to otherwise enable users to access content, information or other services offered over the Internet."<sup>21</sup> Under the latest amendments to the ITFA in 2007, the definition of "Internet access" in § 1105(5)(B)(ii) was intentionally revised to end state and local taxation of Internet "backbone" service. As such, wired and wireless services that enable connectivity to the Internet, and charges for access to the Internet, including access by a TSP, should constitute Internet access charges. As one TSP representative who asked to remain nameless states, "We are responsible to provide the 'pipe' to enable the router to access Internet."

To the extent the TSP or a taxing authority deems the TSP to be consuming the underlying communications in providing something other than Internet access (*i.e.*, data service or information services), the TSP may be required to pay the applicable sales or excise taxes on its purchases. The Illinois Department of Revenue provides one of the only administrative rulings addressing the taxability of a Telematics Service Provider's purchases of telecommunications services for use in providing telematics services.<sup>22</sup> In this ruling, the department determined that a TSP was subject to the Illinois Telecommunications Excise Tax on its purchase of communications services used in providing telematics services (voice and data communications between a customer vehicle and a call center) to its customers.<sup>23</sup> The taxpayer noted that it provides vehicle telematics services, which enable a vehicle (equipped with a pre-installed telematics device) to summon help or information as the need arises. To provide this service, the taxpayer noted that it purchases " 'as the end user or consumer' lines of communication from COMPANY2 or COMPANY3. These lines are not connected to the public switch network."<sup>24</sup> The customer's telematics devices only communicate information to the call/data center. "If the call center needs to contact the customer they can only do so by calling the contact number that the customer has provided. In addition, the customer does not have the ability to make outbound calls or receive inbound calls as the telematics unit is not connected to the Public Switched Telephone Network."<sup>25</sup>

The department noted that " 'Telecommunications' do not include 'value added services in which computer processing applications are used to act on the form, content, code and protocol of the information for purposes other than transmission.' See 35 ILCS 630/2(a) and 2(c)."<sup>26</sup> The department ruled that "Telematic services that allow only voice and data communications between a customer vehicle and a call center and do not permit the customer to make calls to, or receive calls from, the public switched telephone network are con-

<sup>21</sup> (emphasis added) Internet Tax Freedom Act, §§1105(5)(A) and (B)(ii).

<sup>22</sup> Illinois Dept. of Rev., General Information Letter ST 12-0041-GIL (July 27, 2012).

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

sidered information services and are not subject to Telecommunications Excise Tax. In those situations, the telematics service provider would be liable for Telecommunications Excise Tax on telecommunications services purchased from vendors and used by it to provide telematic services.<sup>27</sup>

To the extent the TSP or a taxing authority deems the TSP to be reselling the backbone communications services, in states in which the TSP maintains a taxable physical presence—or nexus—TSPs may seek to issue a resale certificate to the CSP, on the basis that the TSP will be reselling the backbone connectivity in providing telematics services.<sup>28</sup> However, the resale exemption may be limited in states that require the TSP to be registered as a telecommunications service provider. To the extent they are not registered as such, they may not be qualified to issue a certificate to resell communications services.<sup>29</sup>

2. The Enterprise User or customer's purchase of a telematics service solution from the TSP.

Potential tax treatment:

- i. access fees charged for access to the TSP's network may be considered charges for Internet access, and therefore not subject to tax under current federal law; or
- ii. access fees charged for access to the TSP's network may be considered a data transmission or information service, that may subject to tax.
- iii. usage or transmission charges over the TSP's network may be considered charges for Internet access, and therefore not subject to tax under current federal law; or
- iv. usage or transmission charges over the TSP's network may be considered a data transmission or information service, that may subject to tax.

**Access and Connectivity Charge**

A TSP may charge customers a subscription fee for access to the TSP's network (the Internet, a private network or a virtual private network) using an invoice line item literal that indicates, for example, a Subscription Fee or an Access Fee. This is the right to access the Internet via the TSP's gateway. For TSP's that are in the business of providing Internet access, the mobile devices with active SIMS have an IP address, and all data transmissions are sent from this IP address to a destination IP address, allowing solely for Internet transmission. Accordingly, TSP access fees should be classified as charges for Internet access. As previously mentioned, pursuant to ITFA § 1105(5)(A), the term "Internet access" means a "service that enables users to connect to the Internet to access content, information, or other services offered over the Internet.

<sup>27</sup> *Id.*

<sup>28</sup> While beyond the scope of this article to address the potential nexus consideration of Telematics Service Providers, TSP physical presence is generally limited to the states in which they maintain a headquarters, other offices, sends employees or representatives, or owns/leases servers.

<sup>29</sup> For example, in Florida, to be able to issue a resale certificate to be exempt from Florida's Communications Service Tax, the purchaser must be registered for the Communications Service Tax, in essence, certifying to the state that they are providing communications services. This may be problematic for a TSP who takes a position that they are selling Internet access, or information services, as opposed to communications services.

Alternatively, to the extent the TSP provides connectivity and transmissions over a communications network other than the Internet (a public switched network, a private or virtual private voice or data network) some states may classify the telematics access fee as a data transmission or an information service. For example, the Illinois Department of Revenue has issued a General Information Letter stating that telematics services that allow only voice and data communications between a customer vehicle and a call center are information services not subject to telecommunications excise tax, when sold by the telematics service provider.<sup>30</sup> According to the department, the telematics services must not allow customers to make calls to, or receive calls from, the public switched telephone network. As noted previously, the telematics service provider, however, would be liable for the tax on telecommunications services it purchased from vendors and used to provide telematics services. The Illinois Department of Revenue determined that the underlying backbone service provider's services were taxable telecommunications services. However, the manner in which these transmissions were provisioned was not provided. As such, it is not clear if the transmissions involved the Internet, or if the provider invoiced Internet access or network access fees. However, they presumably did not, or the exemptions afforded under the Internet Tax Freedom Act should have been addressed and should have prevailed in exempting such charges.

**Voice, Messaging or Data Transmission Charge**

As previously noted, the transmission charges or usage fees that Telematics Service Providers charge their customers represent what may likely be the most problematic area, similar to the issues with which states are addressing in classifying, defining and determining taxation of cloud computing and digital services. (See Table A, addressing state taxation of cloud-computing, and digital products). These issues will likely only compound as the on-demand apps, service features and pricing models continue to evolve for TSPs and their customers. The definitions provided in the Streamlined Sales and Use Tax Agreement do not specifically address telematics services. As such, there is no current definition of telematics within a state statutory or regulatory sales tax system.

The transmission or usage fee is typically based on the volume of information or amount of airtime that the TSP's customer's devices transmit over the network. For data, depending on the carrier platform and the device, this fee may be based on the volume of bits transmitted over the Internet (e.g., general packet radio service or GPRS), or the number of transmissions (e.g., SMS). The customer's usage fees may be deemed Internet Access services, information services, data processing services, or some other service, such as security services. While Internet access fees may be exempt from tax in most states, TSPs should consult a state tax practitioner to determine the appropriate tax treatment under their facts in a specific state.

**Transmission or Usage Fees as Internet Access**

For a TSP that provides transmissions over the Internet, all active SIMS and devices have an IP address, and all data transmissions are sent from this IP address to a destination IP address, allowing solely for Internet

<sup>30</sup> Illinois Dept. of Rev., General Information Letter ST 12-0041-GIL (July 27, 2012).



transmission. As such, for TSP services requiring Internet access, and Internet protocol to complete the related data transmissions over the Internet, an argument can be made that these usage charges should fall squarely within the definition of Internet access under §1105(5) of the Internet Tax Freedom Act. Pursuant to §1105(5), the term “Internet access” not only includes telecommunications that enable users “to access content, information or other services offered over the Internet,” but also includes services “that utilize Internet protocol or any successor protocol and for which there is a charge, regardless of whether such charge is separately stated or aggregated with the charge for [Internet access] services.”<sup>31</sup>

The definition of Internet access includes underlying communications services – e.g., GPRS and SMS – to the extent these services are purchased or sold by the Company to otherwise enable the TSP’s customers to access the Internet, or other services offered over the Internet. The TSP’s variable usage services would likewise enable the telematics customers to access the Internet and access content, information and other services offered over the Internet.<sup>32</sup> Furthermore, pursuant to §1105(5)(D), even though the TSP’s charges for usage are separately stated and include the sale of telecommunications-type services, usage fees are “Internet access” services because they “otherwise enable users to access content, information or other services offered over the Internet,” and “utilize Internet protocol.” Internet Service Providers typically classify their customer’s variable usage fees—or burst fees—as a nontaxable part of the customer’s Internet access fee. To date, no state has addressed the treatment of telematics service charges as exempt pursuant to the Internet Tax Freedom Act.

#### **Transmission or Usage Fees as Information Services**

To the extent the TSP or a taxing authority deems the TSP’s services to be information services, such services may be taxed in accordance with state guidance on cloud-based, or electronic information services. (See Table A, addressing state taxation of cloud-computing, and digital products). For example, many state sales tax definitions of electronic information service typically include generating, acquiring, collecting, compiling, storing, transforming, processing, retrieving, analyzing, using, or making available information via access to communications services.<sup>33</sup> TSP services enable access to a network and interconnected communications devices for related data transmissions over communications devices and networks that are integrated through managed information service platforms located in the TSP’s data centers, ensuring the secure delivery of customer data, using specific applications. As such, TSPs provide a conduit for generating, acquiring, collecting, compiling, storing, transforming, processing, retrieving, analyzing, using, or making available information via access to communications services.

For example, Virginia Code Ann. §58.1-609.5(1) provides an exemption from the retail sales and use tax for “services not involving an exchange of tangible personal property which provide access to or use of the in-

ternational network of computer systems commonly known as the Internet and any other related electronic communications service, including software, data, content and other information services delivered electronically via the Internet.” Based on this statutory exemption, transactions for the access of data online or for information sent via the Internet are nontaxable service transactions. Arguably, this includes charges for access to data transmissions via telematics services.

The Iowa Department of Revenue ruled on a ruling request involving the provision of telematics services in which information is compiled and delivered to the customer through an account he or she can access on a computer or smartphone. The Iowa Department determined that TSP’s services that enabled the “driver to monitor vehicle diagnostics and quickly obtain assistance during emergencies” were not taxable services, regardless of whether they constitute data processing or information services.<sup>34</sup> The Department determined that the TSP’s services did not constitute taxable security services as envisioned by the Iowa sales tax code. Though the Department did not consider the taxability of the provider’s purchase of underlying communications services, the Department noted that the services did not constitute taxable telecommunications services within the state, because the call centers that receive and transmit the information between the vehicles and the TSP’s computer centers were not located in the state, and therefore “the telecommunication that takes place does not take place “in this state” and is not taxable.” It should be noted that data processing services and information services are not subject to sales tax in Iowa. However, it would be interesting what the Department would conclude with regard to the telecommunications service issue if the call centers were located in Iowa.

As previously noted, the Illinois Department of Revenue has ruled that “Telematic services that allow only voice and data communications between a customer vehicle and a call center and do not permit the customer to make calls to, or receive calls from, the public switched telephone network are considered information services and are not subject to Telecommunications Excise Tax. In those situations, the telematics service provider would be liable for Telecommunications Excise Tax on telecommunications services purchased from vendors and used by it to provide telematic services.”<sup>35</sup> Notably Illinois does not impose sales tax on information services and electronic data services. No mention was made of the Internet Tax Freedom Act (ITFA), nor of the classification of the charges as Internet access or usage charges. What if the charges for the telematics service involved an Internet gateway or access charged and usage fees? Would the underlying communication charges remain taxable, or would they be exempt under ITFA?

#### **Transmission or Usage Fees as Data Processing Services**

To the extent the TSP or a taxing authority deems the TSP’s services to be data processing services, such services may be taxed in accordance with state guidance on cloud-based, or electronic data processing ser-

<sup>31</sup> ITFA, §1105(5)(B)(ii), (D).

<sup>32</sup> *Id.*

<sup>33</sup> See, e.g., Florida Code §202.11(5), Florida Rule 12A-1.062(3)(a); N.Y. Tax Law §1105(c)(1); Texas Code §151.0038; N.J. Rev. Stat. §54:32B-3(b)(12).

<sup>34</sup> Iowa Revenue Policy Letter No. 12300035 (Aug. 14, 2012).

<sup>35</sup> *General Information Letter ST 12-0041-GIL*, Illinois Department of Revenue (July 27, 2012).

vices. (See Table A, addressing state taxation of cloud-computing, and digital products) For example, many state sales tax definitions of electronic data processing services typically include the computerized gathering, compiling, entry, processing, retrieval, producing, and storage of data and information.<sup>36</sup> TSPs provide a conduit for generating, gathering, compiling, storing, transforming, processing, retrieving, using, producing or making available data or information via access to communications services. To the extent these services do not constitute Internet access service, or electronic information service, a state may assert that they may constitute data processing services.

Texas provides another of the few decisions addressing a TSP's provision of services. In a recent Texas audit hearing decision, the Taxpayer appealed an audit assessment on its purchases of telematics services provided through the GPS devices it purchased from the TSP, which were placed on Taxpayer's delivery trucks for tracking purposes.<sup>37</sup> The Comptroller determined that "[i]n this case, the invoices, which characterize the monthly charge as a data service, provided sufficient evidence to allow the auditor to schedule the services as a taxable data processing or information service."<sup>38</sup> The Comptroller reviewed the definitions of taxable data processing, as well as taxable information services, and determined that "[t]he description on the invoice more likely approximates a data processing service, compiling data accumulated by the GPS device." Interestingly, Texas provides an exemption for telematics services that meet the requirements set forth in Texas Occupational Code §1702.332(c). The Comptroller, however, determined that the taxpayer was found to have purchased what appeared on the purchase invoices to be taxable data processing services, as opposed to exempt telematics services, in part because the taxpayer failed to demonstrate that the service provider met the stringent requirements to qualify as an exempt telematics service provider.

It is also worth noting that the definition of information service does not include Internet access service or information services that are provided in conjunction with, and merely incidental to, the provision of Internet access service when provided for a single charge. This decision demonstrates the importance of invoice literal language and the weight that states may give to what the service contract and invoice indicate is being provided. For example, query whether the Comptroller

would have determined the telematics usage charges to be exempt if the TSP had contractually defined and invoiced for Internet access and/or information services, as opposed to what appeared to be taxable data processing services.

### **In Conclusion: The Future Outlook For State Taxation of Telematics**

There are many noteworthy points that tax practitioners can take from this brief overview of telematics services and state sales taxation thereof. To this practitioner, the following are apparent:

1. from the absence of any legislative or administrative guidance regarding telematics services, coupled with the very few examples that currently exist regarding state taxation of telematics services, states have only begun to address the vehicular telematics service platforms. Many new and evolving telematics service platforms and applications have yet to be considered;

2. from this practitioner's work with TSPs, and from the facts provided in the tax decisions set forth herein, TSP's contract for, define, and invoice their provision of telematics services differently from one another;

3. states will vary in their treatment of the TSP's purchase of underlying communications services, depending on whether they tax telecommunications services, as well as whether they tax information services and data processing services;

4. state taxation of the TSP's access and usage charges is only beginning to be defined administratively, much as cloud-based and digital goods and services have been in recent years. As such, in defining and taxing telematics services, states will likely turn to their historical and evolving treatment of cloud-based and electronic information and data processing services;

5. the description of, and invoice literal description of the telematics services can impact the state sales tax treatment of the provision of telematics services;

6. technology will, as always, dramatically outpace state tax administration and policy, as well as legislative treatment of that technology. Just as proponents of the ITFA and the Digital Goods and Services Fairness Act have stated, states should not rush to define or tax something before we know what it is, or will become.

As such, it is incumbent on state tax practitioners and industry representatives to be the guardians of these issues, seeking to shepherd the issues towards tax laws and policies that promote, among other things, equity, certainty, transparency, simplicity, neutrality, efficiency and economic growth for all interested parties. It is equally important that telematics service providers seek the expertise and guidance of state tax experts, in order to apply their specific facts to the existing and evolving sales tax laws in each state.

<sup>36</sup> See, e.g., Texas Code §151.0035; Texas Admin. Code §3.330(a); Ohio Code §5739.01(Y)(1)(d); D.C. Code §47-2001(n)(1)(N); D.C. Regulation §474.2; Idaho Rule 35.01.02.027.09.

<sup>37</sup> Texas Comptroller's Decision, Hearing No. 108,095 (February 2014).

<sup>38</sup> *Id.*

**Table A- State Tax Treatment of Cloud Computing and Digital Products**

<b>State</b>	<b>Cloud Computing</b>	<b>Authorities</b>	<b>Digital Products</b>	<b>Authorities</b>
<b>Alabama</b>	No direct authority, however, licenses to use prewritten software are taxable regardless of the delivery method.	Ala. Admin. Code r. 810-6-1-.37(4).	Taxable.	Smith v. Alabama Dept. of Rev., Admin. Law Div., No. S. 05-1240, 11/17/06.
<b>Alaska</b>	No sales tax.	Not Applicable.	No sales tax.	Not Applicable.
<b>Arizona</b>	No direct authority.	Not applicable.	Taxable.	Ariz. Admin. Code 15-5-154(B).
<b>Arkansas</b>	No direct authority, however, charges to remotely access prewritten software hosted on a server is nontaxable.	2014 Bloomberg BNA Survey of State Tax Departments.	Nontaxable if the end user has rights for permanent use.	Ark. Code Ann. §26-52-103(21); Ark. Code Ann. §26-52-301(1); Ark. Code Ann. §26-53-106(a).
<b>California</b>	No direct authority, however, the electronic delivery of prewritten computer software is nontaxable.	Cal. Tax Pub. 109.	Nontaxable when transmitted to customers over the Internet or "by modem."	Cal. Tax Pub. 109.
<b>Colorado</b>	Nontaxable.	Colo. Rev. Stat. §39-26-102(15)(c)(I); Colo. Rev. Stat. §39-26-102(15)(c)(II)(A); Colorado FYI Sales 89.	Generally, taxable.	Colorado GIL-11-014.
<b>Connecticut</b>	No direct authority.	Not Applicable.	Nontaxable.	Conn. Gen. Stat. §12-407(a)(26)(A)(xii).
<b>Delaware</b>	No sales tax.	Not Applicable.	No sales tax.	Not Applicable.
<b>District of Columbia</b>	Taxable.	D.C. Mun. Regs. tit. 9, §474.1; D.C. Code Ann. §47-2001(n)(1)(N)(i).	Nontaxable.	D.C. Code Ann. §47-2001(s); D.C. Code Ann. §47-2201(j).
<b>Florida</b>	No direct authority, however, charges for access to software hosted on a remote service via the Internet are nontaxable.	Florida Technical Assistance Advisement 05A-026.	Nontaxable.	Florida Technical Assistance Advisement 98A-081.
<b>Georgia</b>	No direct authority, however, prewritten computer software delivered either electronically or by the "load and leave" method is nontaxable.	Ga. Code Ann. §48-8-2(9); Ga. Code Ann. §48-8-3(91); Ga. Comp. R. & Regs. r. 560-12-2-.111(4)(a).	Nontaxable.	Ga. Code Ann. §48-8-2(33)(A).

**Table A- State Tax Treatment of Cloud Computing and Digital Products – Continued**

<b>State</b>	<b>Cloud Computing</b>	<b>Authorities</b>	<b>Digital Products</b>	<b>Authorities</b>
<b>Hawaii</b>	No direct authority, however, prewritten computer software delivered electronically is taxable.	Haw. Rev. Stat. §237-13.	Taxable.	Haw. Rev. Stat. §237-13.
<b>Idaho</b>	Nontaxable.	Idaho Code §63-3616(b).	Taxable.	Streamlined Sales Tax Tangible Personal Property Issue Paper (April 15, 2002).
<b>Illinois</b>	No direct authority.	Not applicable.	Nontaxable	Ill. Admin. Code tit. 86, §130.2105(a)(3).
<b>Indiana</b>	No direct authority, however, access to prewritten software on computer servers outside of the workplace is taxable.	Indiana Tax Information Sales Tax Bulletin 8.	Taxable.	Ind. Code Ann. §6-2.5-4-16.4.
<b>Iowa</b>	No direct authority, however, prewritten computer software and training services accessed online are nontaxable; electronically delivered software is also nontaxable.	Iowa Code Ann. §423.3(67); Iowa Dept. of Rev., Policy Letter: Sales Taxability of Hosted Software and Related Training Services (Jan. 1, 2012).	Nontaxable.	Iowa Code Ann. §423.3(67).
<b>Kansas</b>	Nontaxable.	Kansas Information Guide EDU-71R.	Nontaxable if the end user has rights for permanent use.	Kan. Stat. Ann. §79-3602(aaa)(9); Kan. Stat. Ann. §79-3703; Kan. Stat. Ann. §79-3667.
<b>Kentucky</b>	No direct authority, however, the sale, lease, or license of prewritten computer software is taxable, regardless of the delivery method.	Ky. Rev. Stat. Ann. §139.010(22); Ky. Rev. Stat. Ann. §139.200; Ky. Rev. Stat. Ann. §139.310.	Taxable.	Ky. Rev. Stat. Ann. §139.010; Ky. Rev. Stat. Ann. §139.200; Ky. Rev. Stat. Ann. §139.310.
<b>Louisiana</b>	No direct authority, however, perpetual remote access to files via the Internet constitutes a nontaxable service.	Louisiana Private Letter Ruling 05-003.	Taxable.	Louisiana Private Letter Ruling 05-003.
<b>Maine</b>	No direct authority.	Not applicable.	Taxable.	Me. Rev. Stat. Ann. §1752(17); Me. Rev. Stat. Ann. §1811; Me. Rev. Stat. Ann. §1861; Maine Instructional Bulletin, 7/28/14.

**Table A- State Tax Treatment of Cloud Computing and Digital Products – Continued**

<b>State</b>	<b>Cloud Computing</b>	<b>Authorities</b>	<b>Digital Products</b>	<b>Authorities</b>
<b>Maryland</b>	No direct authority, however, prewritten computer software delivered electronically is nontaxable.	Md. Code Ann., Tax-Gen §11-102(a); Md. Code Ann., Tax-Gen §11-101(k), (m).	Nontaxable.	E-mail Response From Comptroller of Maryland, Esther Dutton, received July 29, 2010.
<b>Massachusetts</b>	Taxable.	Mass. Regs. Code tit. 830 §64H.1.3(3)(a); Mass. Regs. Code tit. 830 §64H.1.3(14)(a).	Nontaxable.	Mass. Regs. Code tit. 830, §64H.1.3(2).
<b>Michigan</b>	Nontaxable.	<i>Auto-Owners Insurance Company v. Michigan Dept. of Treas.</i> , Mich. Ct. Cl., No. 12-00082-MT, 3/20/14.	Nontaxable.	Mich. Comp. Laws §205.51a(q); Mich. Comp. Laws §205.52(1); Mich. Comp. Laws §205.92(k); Mich. Comp. Laws §205.93(1).
<b>Minnesota</b>	No direct authority, however, prewritten computer software delivered electronically is taxable.	Minnesota Sales Tax Fact Sheet 134.	Taxable.	Minn. Stat. §297A.61(3)(l); Minnesota Sales Tax Fact Sheet 177.
<b>Mississippi</b>	Nontaxable.	Miss. Regs. §35.IV.05.06.300.	Taxable.	Miss. Code Ann. §27-65-26(1).
<b>Missouri</b>	Nontaxable if no tangible form of the software program is received.	Missouri Letters LR6991, LR7001 and LR5753.	Nontaxable, provided there is no transfer of tangible personal property to the purchaser.	Mo. Rev. Stat. §144.020.1; Missouri Letter LR7338.
<b>Montana</b>	No sales tax.	Not Applicable.	No sales tax.	Not Applicable.
<b>Nebraska</b>	Nontaxable.	Nebraska Information Guide No. 6-511-2011.	Taxable.	Neb. Rev. Stat. §77-2701.16(9); Nebraska Revenue Ruling 01-11-3.
<b>Nevada</b>	No direct authority, however, prewritten computer software delivered via the “load and leave” method or electronically is nontaxable.	Nev. Rev. Stat. §360B.420; Nev. Rev. Stat. §360B.250.	Nontaxable.	Nev. Rev. Stat. §360B.483; Nev. Rev. Stat. §360B.485; Nev. Rev. Stat. §372.105.
<b>New Hampshire</b>	No sales tax.	Not Applicable.	No sales tax.	Not Applicable.
<b>New Jersey</b>	Hosted services where software is only accessed, but not delivered or transferred to the user are nontaxable.	New Jersey Letter Ruling 2012-4-SUT.	Taxable.	N.J. Rev. Stat. §54:32B-3(a); N.J. Rev. Stat. §54:32B-6.

**Table A- State Tax Treatment of Cloud Computing and Digital Products – Continued**

<b>State</b>	<b>Cloud Computing</b>	<b>Authorities</b>	<b>Digital Products</b>	<b>Authorities</b>
<b>New Mexico</b>	Taxable.	New Mexico Ruling 401-97-6.	Taxable if the seller has nexus with the state.	N.M. Stat. Ann. §7-9-3.5.A(1); New Mexico Property Tax Code §7.35.2.
<b>New York</b>	No direct authority, however, prewritten computer software transferred electronically is taxable.	New York TSB-A-11(17)S; New York TSB-A-09(44)S.	Nontaxable.	N.Y. Tax Law §1105(b); N.Y. Comp. Codes. R. & Regs. tit. 20, §526.7; New York TSB-A-11(14)S; New York TSB-A-08(63)S.
<b>North Carolina</b>	No direct authority, however, the sale, lease, or license of prewritten computer software is taxable, regardless of how it is delivered.	N.C. Gen. Stat. §105-164.4; N.C. Gen. Stat. §105-164.3(29a).	Taxable.	N.C. Gen. Stat. §105-164.4(a)(6b); N.C. Gen. Stat. §105-164.4(a)(6b)c.
<b>North Dakota</b>	No direct authority, however, the sale, lease, or rental of prewritten software is taxable, regardless of how it is delivered.	N.D. Cent. Code §57-39.2-02.1(1)(g).	Nontaxable.	N.D. Cent. Code §57-39.2-04(54).
<b>Ohio</b>	Use by a customer of a provider's services to perform computations, run programs, or store data is taxable if used for business purposes.	Ohio Admin. Code Ann. §5703-9-46(B)(1)-(2); Ohio Rev. Code Ann. §5739.01(B)(3)(e).	Taxable.	Ohio Rev. Code Ann. §5739.01(B)(12).
<b>Oklahoma</b>	No direct authority, however, the sale of prewritten software delivered electronically is exempt from tax.	Okla. Admin. Code §710:65-19-52(b).	Nontaxable.	Okla. Stat. Ann. tit. 68, §1354(A)(4)(a)(9).
<b>Oregon</b>	No sales tax.	Not Applicable.	No sales tax.	Not Applicable.
<b>Pennsylvania</b>	Taxable.	Pennsylvania Letter Ruling No. SUT-12-001.	Generally, taxable.	72 Pa. Stat. §7201(m).
<b>Rhode Island</b>	No direct authority, however, the sale of prewritten software delivered electronically is taxable.	R.I. Regs. §SU 11-25 Rule 7(3).	Nontaxable if the end user has rights for permanent use.	Rhode Island Streamlined Sales Tax Section 328 Taxability Matrix.
<b>South Carolina</b>	No direct authority, however, prewritten computer software delivered electronically is taxable.	S.C. Code Ann. §12-36-60; S.C. Code Ann. §12-36-910; South Carolina Revenue Ruling No. 05-13.	Nontaxable.	S.C. Code Ann. §12-36-60; S.C. Code Ann. §12-36-910; South Carolina Revenue Ruling No. 05-13.

**Table A- State Tax Treatment of Cloud Computing and Digital Products – Continued**

<b>State</b>	<b>Cloud Computing</b>	<b>Authorities</b>	<b>Digital Products</b>	<b>Authorities</b>
<b>South Dakota</b>	No direct authority, however, tax is imposed on charges for access to software, programs or computer systems.	South Dakota Tax Facts, Internet (March 2011).	Taxable.	S.D. Codified Laws Ann. §10-45-2.4.
<b>Tennessee</b>	Nontaxable.	Tennessee Revenue Ruling No. 07-05; Tennessee Letter Rulings Nos. 11-58, 13-12 and 13-15.	Taxable.	Tenn. Code Ann. §67-6-233(a).
<b>Texas</b>	Taxable.	Texas Comptroller's Decision, Hearing No. 43,965; Texas Comptroller's Letters Nos. 200812241L and 200805095L.	Taxable.	Tex. Tax Code Ann. §151.010.
<b>Utah</b>	No direct authority.	Not applicable.	Taxable.	Utah Code Ann. §59-12-103(1)(m), 2008 H.B. 206.
<b>Vermont</b>	Nontaxable before July 1, 2013, however taxable thereafter.	2012 VT H.B. 782.	Taxable.	Vt. Stat. Ann. tit. 32, §9771(8); Vt. Stat. Ann. tit. 32, §9773(4).
<b>Virginia</b>	No direct authority, however, computer software delivered electronically or remote access to software is taxable.	Virginia Rulings of the Commissioner PD 99-7; 12-215; and PD 13-236.	Nontaxable.	Va. Code Ann. §58.1-603; Va. Code Ann. §58.1-604; Virginia Ruling of the Commissioner PD 13-236.
<b>Washington</b>	Taxable	Wash. Rev. Code §82.04.050(6)(b)(i).	Taxable.	Wash. Rev. Code §82.04.050(8)(a).
<b>West Virginia</b>	No direct authority, however, the service of providing access to computer equipment for processing, examining or acquiring data is exempt from tax.	W. Va. Code R. tit. 110, §110-15-76.1.2	Nontaxable if the end user has rights for permanent use.	W. Va. Code §11-15B-2b(b)(1)(B)(v).
<b>Wisconsin</b>	No direct authority, however, prewritten computer software is taxable regardless of whether it is delivered electronically.	Wis. Stat. §77.51(20).	Taxable.	Wis. Stat. §77.52(1)(d).
<b>Wyoming</b>	Nontaxable, provided the customer does not receive any tangible personal property or enumerated service embedded within the service.	Wyo. Dept. of Rev., Computer Sales and Services, 8/1/14.	Taxable if the end user has rights for permanent use.	Wyo. Stat. §39-15-103(a)(i)(P); Wyo. Stat. §39-16-103(a)(i) and (c)(i).