

## **Down the Rabbit Hole: Sales Taxation of Digital Business Inputs**

by Karl A. Frieden, Fredrick J. Nicely, and Priya D. Nair

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In this article, the authors examine key issues regarding state sales taxation of digital commerce, focusing on

the absence of sales tax exemptions in most states for purchases of software and digital products by businesses.

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### Introduction

Most state sales taxes had their beginnings in the 1930s and 1940s and were drafted broadly to include all sales of tangible property in their tax bases, absent specific exemptions.<sup>1</sup> Most states did not initially impose sales taxes on services because consumer services were a small part of the economy. Moreover, because the enactment of sales tax statutes predated the widespread use of computers and the creation of the internet, early state statutes did not (and could not) address the taxation of digital goods and services.<sup>2</sup>

Over the last 25 years, however, the sales taxation of digital commerce has emerged as one of the most prominent and contentious issues in state taxation. This is a function of both the rapid growth of digital commerce and of the unique challenges of imposing transaction taxes on sales of non-tangible goods or services.

In analyzing digital goods and services (collectively referred to as digital products), this article focuses on products delivered to or accessed by a consumer electronically over the internet. These digital products include both goods previously sold to a purchaser in tangible form (for example, books, films, record albums, and software on a disk) and goods and services with no clear tangible equivalent (for example, computer applications, software as a service

<sup>1</sup>See SalesTaxHandbook.com, "History of Sales Taxes in the United States," which notes that 24 states began imposing sales taxes during the Depression. References to state sales taxes throughout this article encompass state and local sales and use taxes.

<sup>2</sup>Karl A. Frieden and Douglas L. Lindholm, "A Global Perspective on U.S. State Sales Tax Systems as a Revenue Source: Inefficient, Ineffective, and Obsolete," State Tax Research Institute, at 89-91 (Nov. 2021).

(SaaS, also referred to as remotely accessed software), digital information services, and data processing).<sup>3</sup>

During the early years of digital commerce, several significant issues emerged regarding the sales taxation of digital products, including (1) which digital goods and services should be included in (or excluded from) the sales tax base; (2) whether states have jurisdictional nexus over remote sellers; (3) how to define and categorize digital products for sales tax purposes; and (4) how to source sales of digital products.<sup>4</sup> All these issues have been widely discussed in tax policy circles, closely scrutinized in legislative or judicial forums, and extensively covered in the tax news media.

One central problem, however, regarding the sales taxation of digital commerce is generally ignored or underreported — the extent to which the sales tax base includes not only business-to-consumer (B2C) transactions but also business-to-business (B2B) transactions. This article focuses on the absence of sales tax exemptions in most states for purchases of software and digital products by businesses (digital business inputs), and the negative policy implications it creates for the efficiency and effectiveness of state sales tax systems. Currently, only one state (Iowa) grants a broad exemption for digital business inputs; three states allow partial exemptions (Maryland, New Jersey, and Washington); and one state imposes a reduced rate for business

purchases (Connecticut).<sup>5</sup> All other states that tax some or most digital products fail to exempt digital business inputs. In this regard, the states' approach to expanding the sales tax base to digital products exacerbates the long-standing structural flaw in state sales tax systems — the inefficient cascading of sales tax on both businesses and consumers.

## Part 1: Key Issues Regarding the Sales Taxation of Digital Products

### Sales Tax Base Expansion

Over the last several decades, states have gradually but inexorably expanded their sales tax bases to include more categories of digital products. This has been particularly evident with products previously sold in tangible form that are now transferred to or accessed by consumers electronically. For example, the number of states that tax “specified digital products” based in part on the Streamlined Sales and Use Tax Agreement — encompassing the transfer of audio, video, and books by digital means — has nearly doubled in the last 15 years.<sup>6</sup> In 2007, 18 states taxed a category encompassing specified digital products.<sup>7</sup> In 2022, 35 states taxed specified digital products (see Figure 1).<sup>8</sup>

<sup>3</sup>There are also important policy considerations regarding goods and services that are purchased over the internet but delivered as tangible products or in-person services. However, these concerns largely center on jurisdiction to tax remote sellers, and generally do not raise the additional issues discussed in this article relating to digital products.

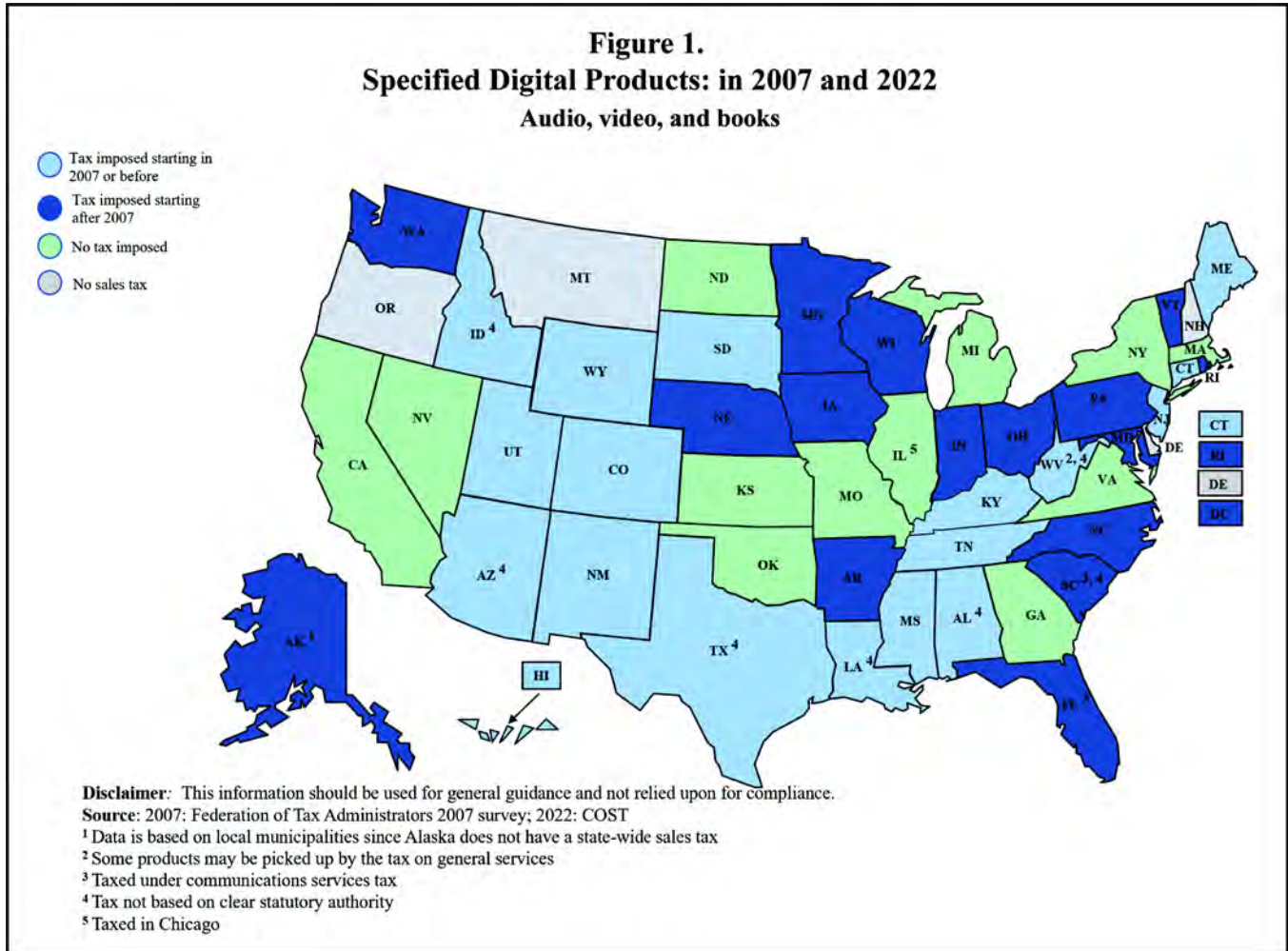
<sup>4</sup>COST does not take a position on the appropriate state or local sales tax rates imposed on digital products, nor on the optimal breadth or narrowness of a sales tax base inclusion of digital products purchased by consumers. However, COST does oppose including in the sales tax base digital products purchased by businesses (e.g., business inputs). (See COST, “Sales Taxation of Business Inputs: Policy Position.”) COST also maintains that if a state imposes sales tax on digital products purchased by consumers, it should do so only by using clear statutory provisions and reasonable and uniform sourcing rules. (See, e.g., COST, “Sourcing Sales and Use Taxes Should be Uniform and Approximate Where Products are Used.”)

<sup>5</sup>While Iowa is noteworthy for its broad business inputs exemption for digital products, the Iowa legislature considered narrowing its exemption during the 2022 session with H.F. 2583.

<sup>6</sup>For the SSUTA definition of specified digital products, see sections 332 and 333 of the SSUTA.

<sup>7</sup>Federation of Tax Administrators, *Sales Taxation of Services, Actual Survey Data — 2007*, at lines 118-120 (rev. Mar. 2010). Of note, it appears that some state tax administrators took aggressive positions that their definition of tangible personal property encompassed these digital products.

<sup>8</sup>Karl A. Frieden, Fredrick J. Nicely, and Priya D. Nair, “The Best and Worst of State Sales Tax Systems: COST Scorecard on Sales Tax Simplification, Uniformity, and Exemption of Business Inputs” (forthcoming Sept. 2022). For simplicity purposes in describing the results of the COST Scorecard in figures 1 through 10, we categorize the District of Columbia and the Alaska municipalities as “states.”



While the digital sales tax base has steadily expanded, the number of digital products included or excluded from sales tax varies widely among states. About three-quarters of the states with sales taxes include software transferred electronically and specified digital products in the sales tax base (see figures 2, 7).

By contrast, only about two-fifths of the states with sales taxes include software accessed remotely (SaaS) and digital information services in the sales tax base, and about one-fifth include data processing in the sales tax base (see figures 4, 5, and 6). While there is no consistent pattern, states more frequently impose sales tax on digital products that were previously sold in tangible form (for example, prewritten software, books, movies, and music),

and less frequently on digital goods and services that were not (for example, SaaS and data processing).<sup>9</sup>

<sup>9</sup> The imposition of sales tax on digital products previously taxed in tangible form does not always translate into equivalent levels of sales tax revenue. The preference of consumers for digital downloads and streaming is based not just on convenience, but also on significant savings in purchasing some of those products, especially music. Revenue from the retail sale of music in the United States peaked at around \$21.5 billion in 1999 (mostly compact disc sales with some cassette sales); see Kristina Osterman, "Music Streaming Services vs. Buying Tangible Music," *The Current*, Dec. 27, 2019. Streaming of music (including MP3 sales) started around 2003 and has grown to account for 83 percent of music purchases in 2020. However, overall retail music revenue in the United States was only \$12.2 billion in 2020, down more than 40 percent from its peak in 1999; see Joshua P. Friedlander, "Year-End 2020 RIAA Revenue Statistics," Recording Industry Association of America. Purchases of consumer books is more of a mixed bag. In 2018 59.2 percent of book revenue was from paperback or hardback sales and 18.6 percent was related to e-books and audio. The remaining percentage was from miscellaneous categories. However, in January 2022 the percentage of revenue from paperback and hardback sales increased to 71.1 percent, while e-books and audio only slightly increased to 19.9 percent of total revenue; see Julia Stoll, "Home Transactional Video Revenue U.S. 2014-2021, by Type," Statista.

Sales taxation of digital products was also the catalyst for the U.S. Congress to use its commerce clause powers to impose restrictions on state taxation of the internet. First with the Internet Tax Freedom Act in 1999, and later with the Permanent Internet Tax Freedom Act (PITFA), Congress imposed limitations on states' ability to tax digital products.<sup>10</sup> PITFA prevents states from imposing sales taxes on internet access and from imposing discriminatory taxes on digital products. For instance, if a state does not tax advertising but seeks to impose a tax on digital advertising, such a tax arguably violates PITFA. That type of tax scheme is being litigated in Maryland.<sup>11</sup>

### Jurisdiction to Tax

Another hotly debated issue relating to the sales taxation of digital products is whether a state has the jurisdiction to require remote sellers without a physical presence in the consumer's state to collect sales or use tax. This issue arose in the pre-digital era with mail-order sales by remote sellers. In two U.S. Supreme Court cases, *National Bellas Hess v. Illinois*, 386 U.S. 753 (1967), and *Quill Corp. v. North Dakota*, 504 U.S. 298 (1992), the Court ruled that requiring remote sellers to collect sales and use tax on mail-order sales in a state where the seller had no physical presence was constitutionally impermissible because of violations of the due process clause (only in *National Bellas Hess*) and the commerce clause (in both cases). The *Quill* rationale was grounded on the burdens on interstate commerce arising from the lack of uniformity among the 45 states (and the District of Columbia) and the thousands of local jurisdictions with disparate sales and use tax bases and administrative rules.<sup>12</sup>

<sup>10</sup> PITFA, 47 U.S.C. section 151.

<sup>11</sup> *Chamber of Commerce of the United States v. Franchot*, Case 1:21-cv-00410-DKC, Civ. No. 21-cv-410 (D. Md. Feb. 18, 2021); *Comcast of California/Maryland/Pennsylvania/Virginia/West Virginia LLC v. Comptroller of Maryland*, C-02-CV-21-000509 (Cir. Ct. Ann Arundel Cty. 2021).

<sup>12</sup> The Supreme Court limited its decision in *Quill* to the commerce clause, which Congress could address with its plenary legislative authority. If the Court had ruled that imposing state sales taxes on sellers with no physical presence violates the due process clause, Congress would have greater difficulty addressing the issue. Some members of Congress post-*Wayfair* in 2018 pursued legislation in this area, especially those representing states without a sales tax. See, e.g., Online Sales Tax Simplicity and Small Business Relief Act of 2018 (S.B. 3275); Protecting Small Business from Burdensome Compliance Cost Act (H.R. 6724); and No Retroactive Online Taxation Act of 2018 (H.R. 7184).

The sales taxation of digital products, especially with sellers having no physical presence in the taxing state, was dramatically changed by the Supreme Court's landmark decision in *South Dakota v. Wayfair*, 138 S. Ct. 2080 (2018). That decision modified the substantial nexus prong derived from the Court's decision in *Complete Auto*<sup>13</sup> to allow states to tax based on a "virtual or economic" basis. As a result, the states' obstacles to imposing a sales tax collection responsibility on remote sellers of digital products almost immediately disappeared. The *Wayfair* decision not only overturned the long-standing jurisdictional rules for sales taxes, but simultaneously expanded digital sales tax revenues by imposing a new collection responsibility on hundreds of thousands of remote sellers. While *Wayfair* helped open doors to allow states to require sellers to collect tax on the sale of digital products, complex issues with defining and sourcing those sales, addressed below, still present significant problems.

### Tax Base Definitions and Sourcing

The sales taxation of digital commerce has also engendered significant policy considerations regarding the categorization and sourcing of digital products. The Streamlined Sales and Use Tax Project, initiated in March 2000, was one of the first and most expansive efforts to address some of the administrative complexities of imposing a sales tax on digital products.

The streamlined sales tax states began to look at the taxation of some digital products soon after their agreement officially took effect in 2005. The SSUTA does not take a position on the inclusion or exclusion of digital products from the state sales tax base. Rather, it provides uniform definitions and sourcing rules for a state to adopt should it decide to tax digital products.

In 2007 the SSUTA was amended to address specified digital products, primarily digital books, audio, and video and a catchall for products "transferred electronically."<sup>14</sup> The

<sup>13</sup> *Complete Auto Transit Inc. v. Brady*, 430 U.S. 274 (1977). The Court in *Wayfair* did not address the constitutionality of South Dakota's law under the commerce clause for the three other prongs (fairly apportioned, discriminatory, or fairly related to services) or the due process clause. The case was remanded, and later settled, without those issues being addressed.

<sup>14</sup> See sections 332 and 333 of the SSUTA, *supra* note 6.

agreement mandates that if a streamlined state includes these digital products in its sales tax base, it must adopt the SSUTA's uniform language and not include digital products under the state's definition of tangible personal property.<sup>15</sup>

The SSUTA also has sourcing provisions that apply to the retail sales of products, including digital products. Section 310(A)(1)-(A)(5) of the agreement establishes a five-step hierarchy for the sourcing of sales that streamlined states must follow to remain in substantial compliance.<sup>16</sup> The sourcing rules in the SSUTA continue to evolve and focus on new issues, recently addressing products not requiring a delivery address for a customer to purchase them. Both the states and some sellers have concerns over sellers trying to avoid obtaining purchaser address information that approximates a purchaser's consumption location and thereby avoid correctly imposing the sales tax on digital products.<sup>17</sup> The SSUTA states and the business community are mutually trying to address this issue to reduce the chances that foreign sellers or sellers located in a state not imposing a tax on digital products can avoid collecting tax. Limiting liability relief for sourcing with no customer address information or requiring a purchaser to provide at least a five-digit ZIP code are some options being explored.

## Part 2. The Absence of Exemptions for Digital Business Inputs

Over the last quarter-century, the sales taxation of digital commerce has accounted for some of the most complex and compelling state

tax issues. During that span, states grappled with the breadth of the digital sales tax base, the jurisdiction to tax remote sellers, definitional issues regarding categorizing digital products, and the sourcing of sales. Much less noticed, let alone addressed, was the disturbing trend of states imposing the sales tax on not just consumer purchases of digital products, but on business inputs as well.

As part of the 2022 update of the Council On State Taxation's Scorecard of State Sales Tax Systems,<sup>18</sup> we analyzed sales tax exemptions for business inputs in each state that imposed a sales tax on six software and digital product categories: (1) prewritten (canned) software, including by electronic delivery; (2) custom software; (3) digital software accessed remotely (SaaS); (4) digital information services; (5) data processing services; and (6) specified digital products. In total, only three states (Iowa, New Jersey, and Washington) allow any kind of exemption for business purchases of software or digital products; and one state (Connecticut) imposes a reduced rate for business purchases. Only Iowa has an exemption that covers most taxable digital commerce.

### Prewritten Software

Prewritten software is taxed by every state that imposes a sales tax. Thirty-six states impose a sales tax on prewritten software both in tangible form and delivered electronically. Eleven states impose a sales tax on prewritten software sold in tangible form, but not if the same software is delivered electronically. Of these states, Iowa exempts business purchases of prewritten software, New Jersey exempts business purchases of prewritten software delivered electronically, and Connecticut applies a reduced rate of 1 percent to business purchases of prewritten software delivered electronically (see Figure 2).<sup>19</sup>

<sup>15</sup> While the SSUTA addresses many digital products, the taxation of SaaS and other computer services is not fully addressed in section 332. The SSUTA also has limitations on state taxation of digital products on a nonpermanent basis or based on continued payment if a state does not have a statutory provision to tax these products on that basis.

<sup>16</sup> The SSUTA has two sourcing provisions. The first, section 310, provides a hierarchy for sourcing sales to a state: (1) over-the-counter location, (2) delivery address, (3) home/business address, (4) billing address, and (5) default to seller's location. The second is for SSUTA states with local taxes (section 305), which provides liability relief if a seller or certified service provider uses state-provided database information to determine local tax rates by street address and five- and nine-digit ZIP codes.

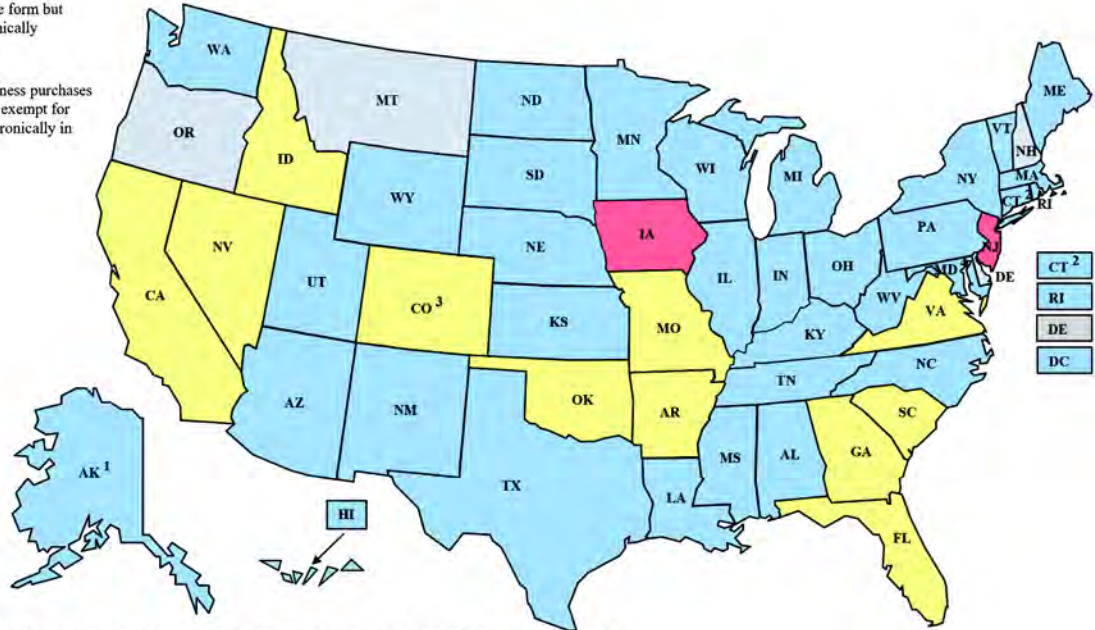
<sup>17</sup> While many sellers capture purchaser address and payment information to conveniently (and quickly) make future sales to purchasers and for marketing purposes, the use of gift certificates, cryptocurrency, or other payment methods may not require a purchaser to provide address information. Under the SSUTA, this can lead to sales sourced to the seller's location (section 310(A)(5)) rather than approximating the purchaser's location.

<sup>18</sup> Frieden, Nicely, and Nair, *supra* note 8. All data used in figures 1 through 10 in this article, except as noted on figures 1 and 8, are derived from COST staff research and surveys of state departments of revenue and practitioners in each state.

<sup>19</sup> N.J. Rev. Stat. section 54:32B-8.56; New Jersey Division of Taxation, "Taxability of Software," TB-51(R) (July 5, 2011).

**Figure 2.**  
**Prewritten Software**

- Tax imposed both in tangible form and when delivered electronically
- Tax imposed in tangible form but not if delivered electronically
- No sales tax
- Tax is imposed but business purchases are exempt in Iowa and exempt for software delivered electronically in New Jersey



**Disclaimer:** This information should be used for general guidance and not relied upon for compliance.

**Source:** COST

<sup>1</sup> Data is based on local municipalities since Alaska does not have a state-wide sales tax

<sup>2</sup> Software delivered electronically is taxed at a 1% rate for businesses

<sup>3</sup> Tax may be imposed by some localities on electronic delivery

<sup>4</sup> Maryland has a limited exemption for enterprise software

### Custom Software

Unlike prewritten software, the majority of states do not impose sales tax on custom software. Only 15 states include custom software in the sales tax base. Of these states, Iowa exempts the business purchase of custom software, and Connecticut applies a reduced rate of 1 percent (see Figure 3).

### Software Accessed Remotely (SaaS)

The taxation of software accessed remotely, also known as SaaS, reflects a more even split among the states than for the prewritten and custom software categories. Twenty-two states impose a sales tax on SaaS and two states have no clear position on whether a tax is imposed. Of these states, only Iowa provides an exemption for business purchases, and

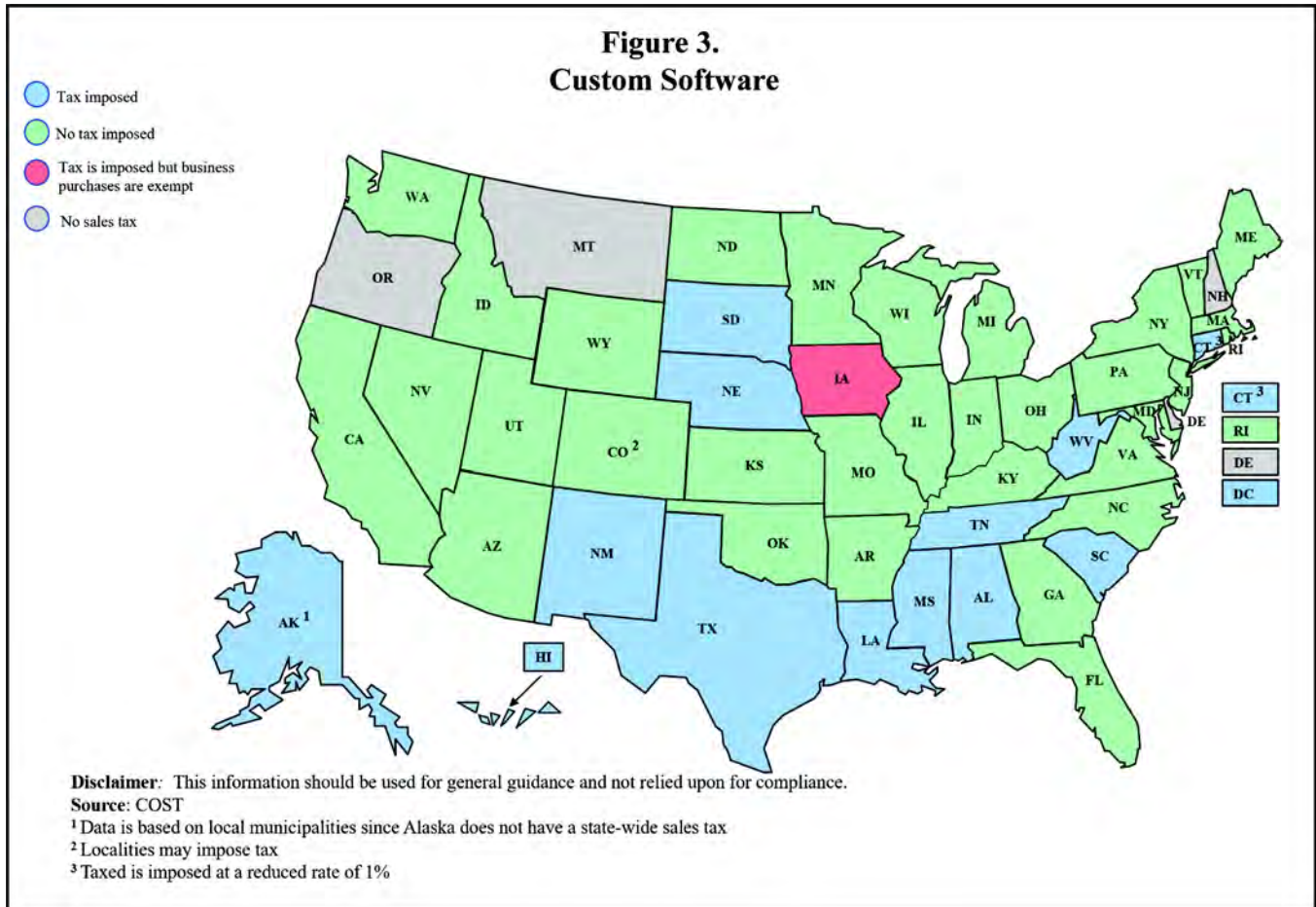
Connecticut applies a reduced rate of 1 percent for business purchases (see Figure 4).

Conversely, Ohio, for SaaS, digital information services, and data processing, imposes the tax on such digital products *only if* they are purchased for business use.<sup>20</sup>

### Digital Information Services

The majority of states do not impose a sales tax on digital information services. Of the 19 states that do, only Iowa exempts business purchases. Connecticut applies a reduced rate of 1 percent to purchases of digital information services (see Figure 5).

<sup>20</sup> See Ohio Rev. Code section 5739.01(B)(3)(e).



## Data Processing Services

Most states do not impose sales tax on data processing services. Of the eight states that do, none exempt business purchases, but Connecticut imposes a reduced rate of 1 percent (see Figure 6).

## Specified Digital Products

Thirty-five states impose a sales tax on specified digital products (audio, video, and books) while 12 states do not impose such a tax. Compared with the other categories of digital commerce, specified digital products consists primarily of B2C purchases. Of the states that impose the sales tax, only Iowa and Washington exempt business purchases (see Figure 7).

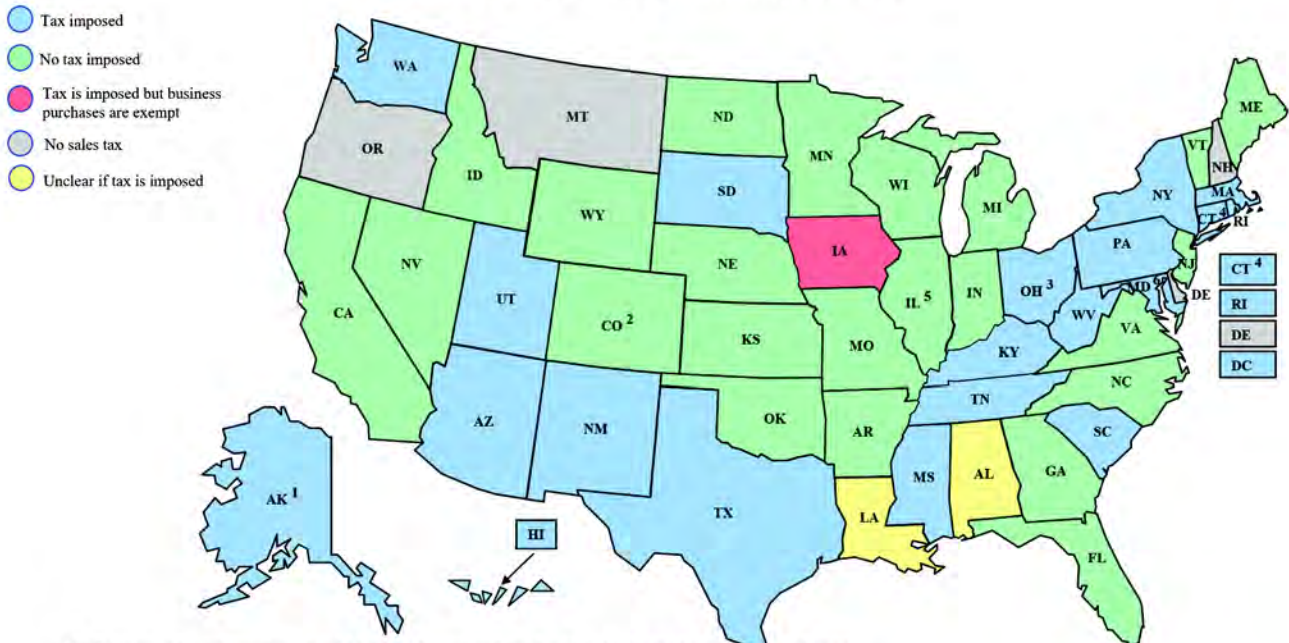
## Summary of Business Inputs Exemptions for Digital Products

As reflected above, only three states (Iowa, New Jersey, and Washington) provide a partial or full business exemption for the purchase of taxable digital products; and only Connecticut imposes a reduced rate of 1 percent. Of the three states with exemptions, Iowa grants the broadest B2B exemption, while the New Jersey and Washington exemptions each cover only one type of digital commerce. Also, Maryland has a limited commercial purposes exemption for some but not all computer software or software as a service.<sup>21</sup>

<sup>21</sup> Effective July 1, 2022, S.B. 723 and H.B. 791 amended Maryland's tax on digital products (Tax-General Article section 11-101(c-4)(3)). This change provides an exclusion for certain products purchased for commercial purposes, including an enterprise computer system that is housed or maintained on an enterprise server, cloud server, or end users' computers. For more information, see Comptroller of Maryland, "Business Tax Tip #29: Sales of Digital Products and Digital Codes."



**Figure 4.**  
**Software Accessed Remotely (SaaS)**



**Disclaimer:** This information should be used for general guidance and not relied upon for compliance.  
**Source:** COST  
<sup>1</sup> Data is based on local municipalities since Alaska does not have a state-wide sales tax  
<sup>2</sup> Tax may be imposed by some localities  
<sup>3</sup> Tax only applies to businesses  
<sup>4</sup> Electronically accessed software is taxed at a 1% rate for businesses  
<sup>5</sup> Taxed in Chicago  
<sup>6</sup> Maryland has a limited exemption for enterprise software

New Jersey’s business exemption for prewritten software is in N.J. Rev. Stat. section 54:32B-8.56. It states that “receipts from sales of prewritten software delivered electronically and used directly and exclusively in the conduct of the purchaser’s business, trade or occupation are exempt” from sales and use tax.<sup>22</sup> The exemption does not extend to sales of prewritten software delivered by a load-and-leave method or other tangible forms.<sup>23</sup> Guidance issued by the state explains that before October 1, 2006, software transmitted electronically “was not treated as taxable tangible personal property . . . subject to sales or use tax.”<sup>24</sup> Legislation enacted in 2006<sup>25</sup> amended the definition of tangible personal

property to include “prewritten computer software delivered electronically,” but also allowed “an exemption for sales of electronically delivered prewritten software only when it is to be used directly and exclusively in the conduct of the purchaser’s business, trade, or occupation.”<sup>26</sup>

In 2009 Washington enacted one of the most comprehensive and detailed statutes for the sales taxation of digital commerce.<sup>27</sup> Washington taxes three digital commerce categories: digital goods, digital automated services, and SaaS.<sup>28</sup> However, the state allows an exemption only for business purchases in one of the three categories – digital

<sup>22</sup> N.J. Rev. Stat. section 54:32B-8.56.

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

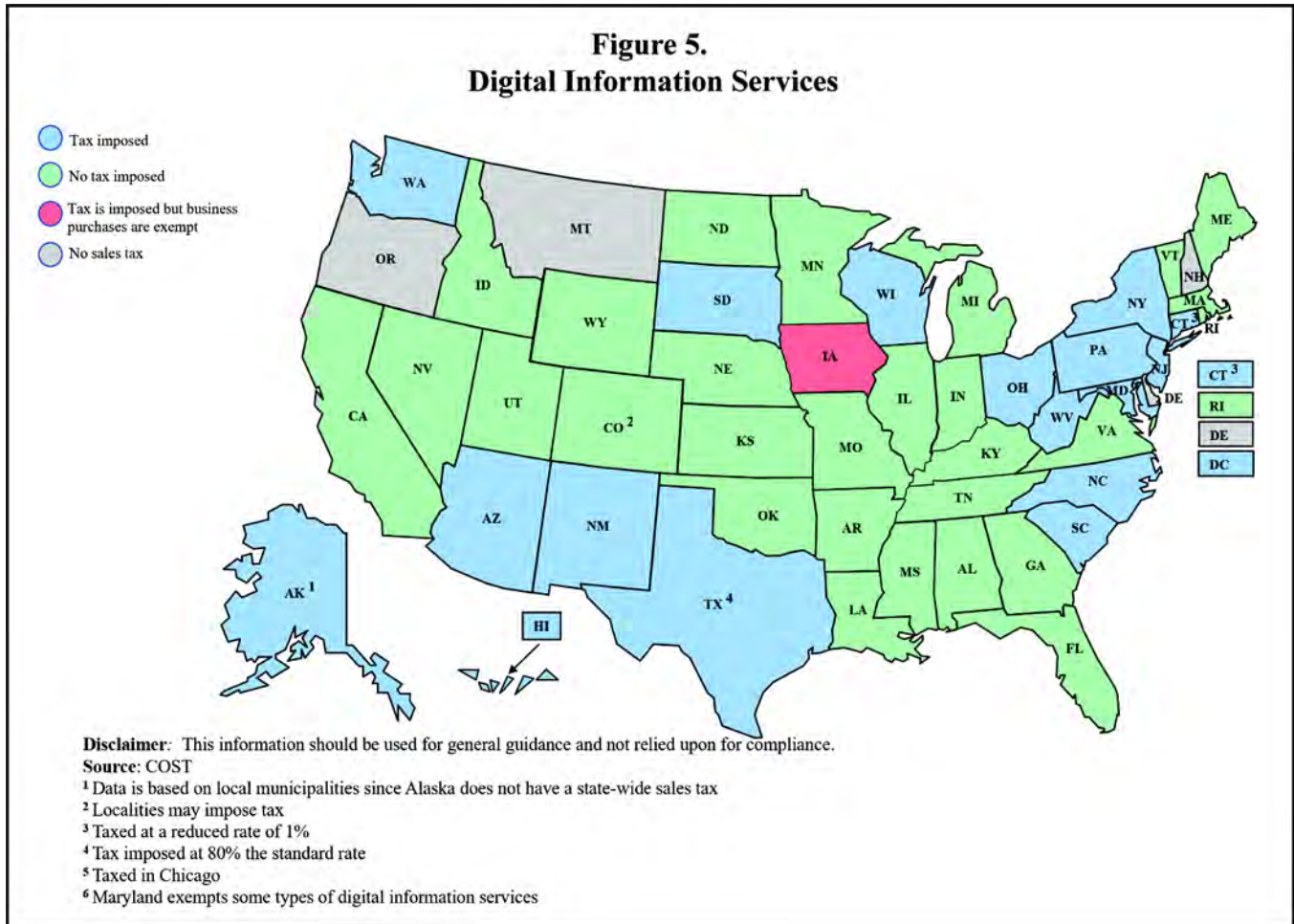
<sup>24</sup> New Jersey Division of Taxation, *supra* note 19.

<sup>25</sup> A. 4901 (Laws 2006).

<sup>26</sup> New Jersey Division of Taxation, *supra* note 19. N.J. Rev. Stat. section 54:32B-2(g); section 54:32B-8.56.

<sup>27</sup> Washington Department of Revenue, “Digital Products Including Digital Goods.”

<sup>28</sup> *Id.*



goods.<sup>29</sup> Washington provides that sales tax does not apply to the sale of digital goods to a business (and services rendered for those products), if purchased solely for a business purpose.<sup>30</sup> “Business purpose” is defined as “any purpose relevant to the business needs of the taxpayer claiming an exemption” but does not include any personal, family, or household purpose or any activity conducted by a government entity.<sup>31</sup>

Like New Jersey and Washington, Connecticut provides relief for some business

purchases of digital commerce.<sup>32</sup> The state provides for a reduced 1 percent rate for computer and data processing services, including electronically accessed or transferred canned software that is “sold to a business for use by the business.”<sup>33</sup> The reduced rate is lost, however, if the “software is provided with any tangible personal property (such as a box, plastic container, or CD), even if such tangible personal property only authorizes the electronic access or transfer of the software.”<sup>34</sup>

<sup>29</sup> *Id.* Wash. Rev. Code section 82.08.020. See also Wash. Rev. Code section 82.12.020 (use tax); Washington DOR, “Digital Products and Remote Access Software Exemption Certificate” (revised Oct. 11, 2021).

<sup>30</sup> Wash. Rev. Code section 82.08.0208(3)(a).

<sup>31</sup> Wash. Rev. Code section 82.08.0208(3)(b)(i).

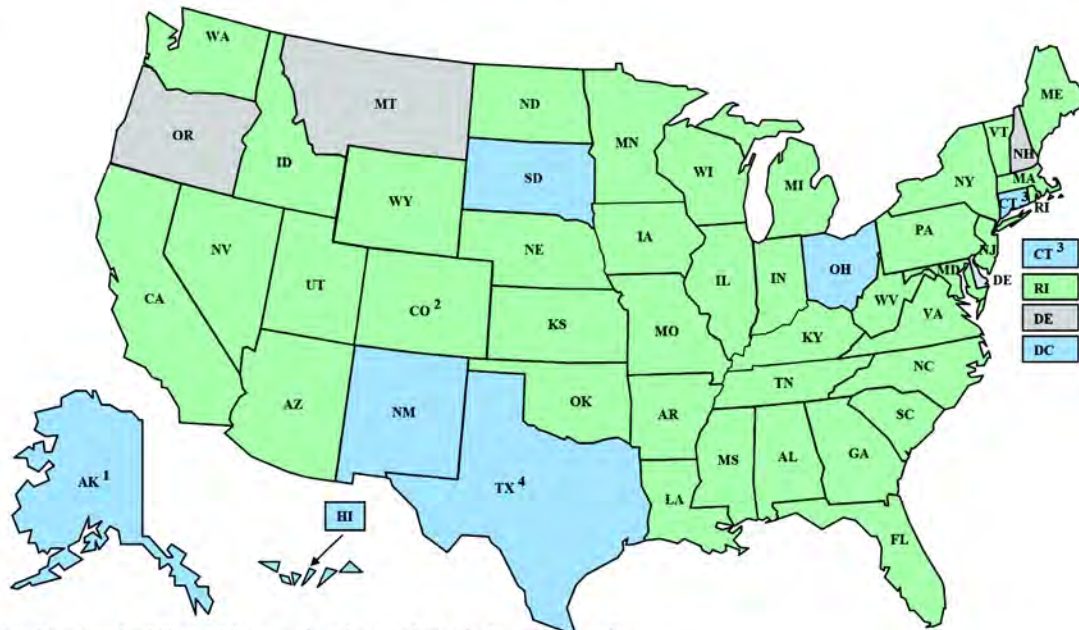
<sup>32</sup> Connecticut Department of Revenue Services, “Sales and Use Taxes on Digital Goods and Canned or Prewritten Software,” SN 2019(8) (Sept. 4, 2019).

<sup>33</sup> *Id.* Conn. Gen. Stat. section 12-407(a)(13).

<sup>34</sup> Connecticut Department of Revenue Services, *supra* note 32.

**Figure 6.**  
**Data Processing Services**

- Tax imposed
- No tax imposed
- No sales tax



**Disclaimer:** This information should be used for general guidance and not relied upon for compliance.

**Source:** COST

<sup>1</sup> Data is based on local municipalities since Alaska does not have a state-wide sales tax

<sup>2</sup> Localities may impose tax

<sup>3</sup> Taxed at a reduced rate of 1%

<sup>4</sup> Tax imposed at 80% the standard rate

<sup>5</sup> Taxed in Chicago

Of the states discussed above, Iowa provides the broadest exemption for business purchases of digital commerce.<sup>35</sup> Iowa Code section 423.3(104) provides an exemption that covers specified digital products, prewritten computer software, and some enumerated services<sup>36</sup> furnished to a commercial enterprise for use exclusively by the enterprise.<sup>37</sup> Included in the enumerated services

are information services, custom software, and SaaS.<sup>38</sup> “Commercial enterprise” is broadly defined to include: (1) businesses and manufacturers operating for profit; (2) insurance companies (for-profit and nonprofit); (3) financial institutions (for-profit and nonprofit); (4) professions and occupations; and (5) public utilities.<sup>39</sup> As summarized by the Iowa Department of Revenue in a guidance document, specified digital products, prewritten computer software, information services, and SaaS are exempt “when purchased by a commercial enterprise and used exclusively by or furnished to that commercial enterprise.”<sup>40</sup> Furthermore, to

<sup>35</sup> Iowa Code section 423.2. The legislature recently considered (but did not enact) legislation imposing limitations on the breadth of the commercial enterprise exemption to exclude professions and occupations. See S.F. 2372 and H.F. 2583.

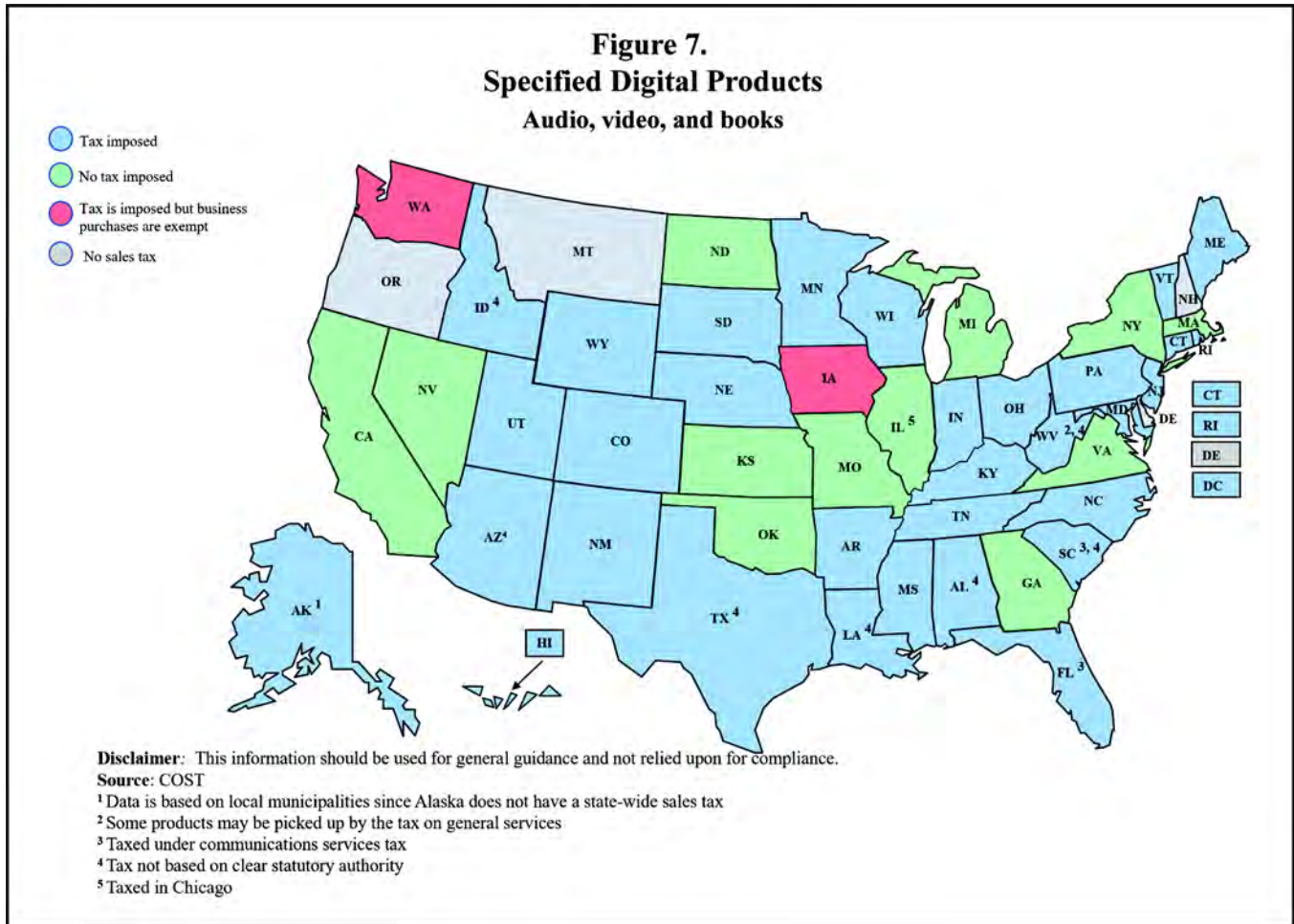
<sup>36</sup> Enumerated services are those contained in Iowa Code section 423.2(1)(a)(5) — sales of optional service or warranty contracts for computer software maintenance or support services; section 423.2(6)(bq) — storage of tangible or electronic files, documents, or other records; section 423.2(6)(br) — information services; section 423.2(6)(bs) — services arising from or related to installing, maintaining, servicing, repairing, operating, upgrading, or enhancing either specified digital products or software sold as tangible personal property; and section 423.2(6)(bu) — SaaS.

<sup>37</sup> Iowa DOR, “Taxation of Specified Digital Products, Software, and Related Services.”

<sup>38</sup> Iowa Code section 423.2(6)(br); section 423.2(6)(bu).

<sup>39</sup> Iowa Code section 423.3(47); section 423.3(104)(b)(1); S.F. 2367 (Laws 2022); Iowa DOR, *supra* note 37.

<sup>40</sup> Iowa DOR, *supra* note 37.



qualify for “use exclusively by the commercial enterprise,” the use for noncommercial purposes must not be more than de minimis.<sup>41</sup>

### Part 3. The Tax Policy Implications of the Sales Taxation of Digital Business Inputs

The sales taxation of digital business inputs is not just commonplace but is the overwhelming norm among states that tax software and digital products. In each of the categories discussed above — canned software, custom software, digital software accessed remotely (SaaS), digital information services, data processing services, and specified digital products — over 90 percent of the taxing states include both business and consumer purchases

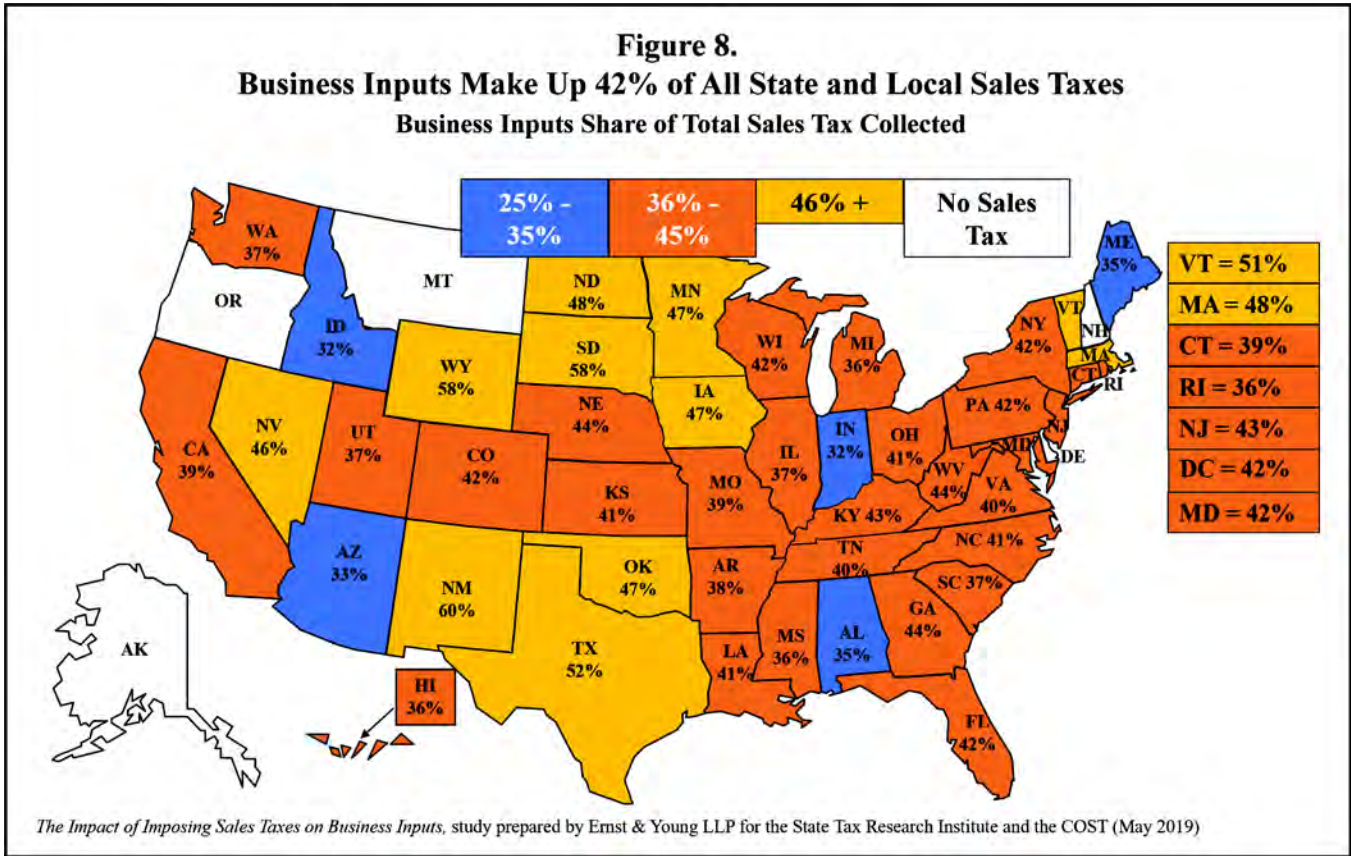
in the sales tax base. In each category, no more than two states provide an exemption for digital products used by businesses.

The sales taxation of business inputs is not unique to the area of digital commerce. For the last four decades, the sales tax on business inputs contributed slightly over 40 percent of all state and local sales tax revenue.<sup>42</sup> In fiscal 2020, the sales taxation of business inputs accounted for 42 percent of all sales tax revenue and over one-fifth of *all* state and local taxes paid by businesses.<sup>43</sup> The business inputs share of sales tax revenue ranged from a low of 32 percent (Idaho and

<sup>41</sup> *Id.* The department also advised that it is “finalizing administrative rules implementing this exemption.” The commercial enterprise exemption is relatively new, having begun January 1, 2019.

<sup>42</sup> Frieden and Lindholm, *supra* note 2, at 47 (Figure 16).

<sup>43</sup> EY, COST, and the State Tax Research Institute, “Total State and Local Business Taxes: State-by-State Estimates for FY20,” at figures 2, 4 (Oct. 2021).



Indiana) to a high of 58 to 60 percent (South Dakota, Wyoming, and New Mexico) (see Figure 8).<sup>44</sup>

This structural flaw of state sales tax systems — the widespread taxation of business purchases (excluding resale) — is of long-standing origin.<sup>45</sup> The shortcomings of this deviation from the norms of a well-designed consumption tax are well documented.<sup>46</sup> The pyramiding of sales tax at multiple stages of the supply chain creates a number of distortions because it affects business choices of input purchases, location of jobs and investments, and organization of business structures. A well-designed broad-based consumption tax on household goods and services can provide an efficient way to raise revenue for government with a minimal impact on economic

growth. However, the cascading of taxes on business inputs can undermine this advantage and penalize both domestic business investment and the competitiveness of U.S. exports.<sup>47</sup>

**The Sales Taxation of Digital Business Inputs Exacerbates the Cascading Problem**

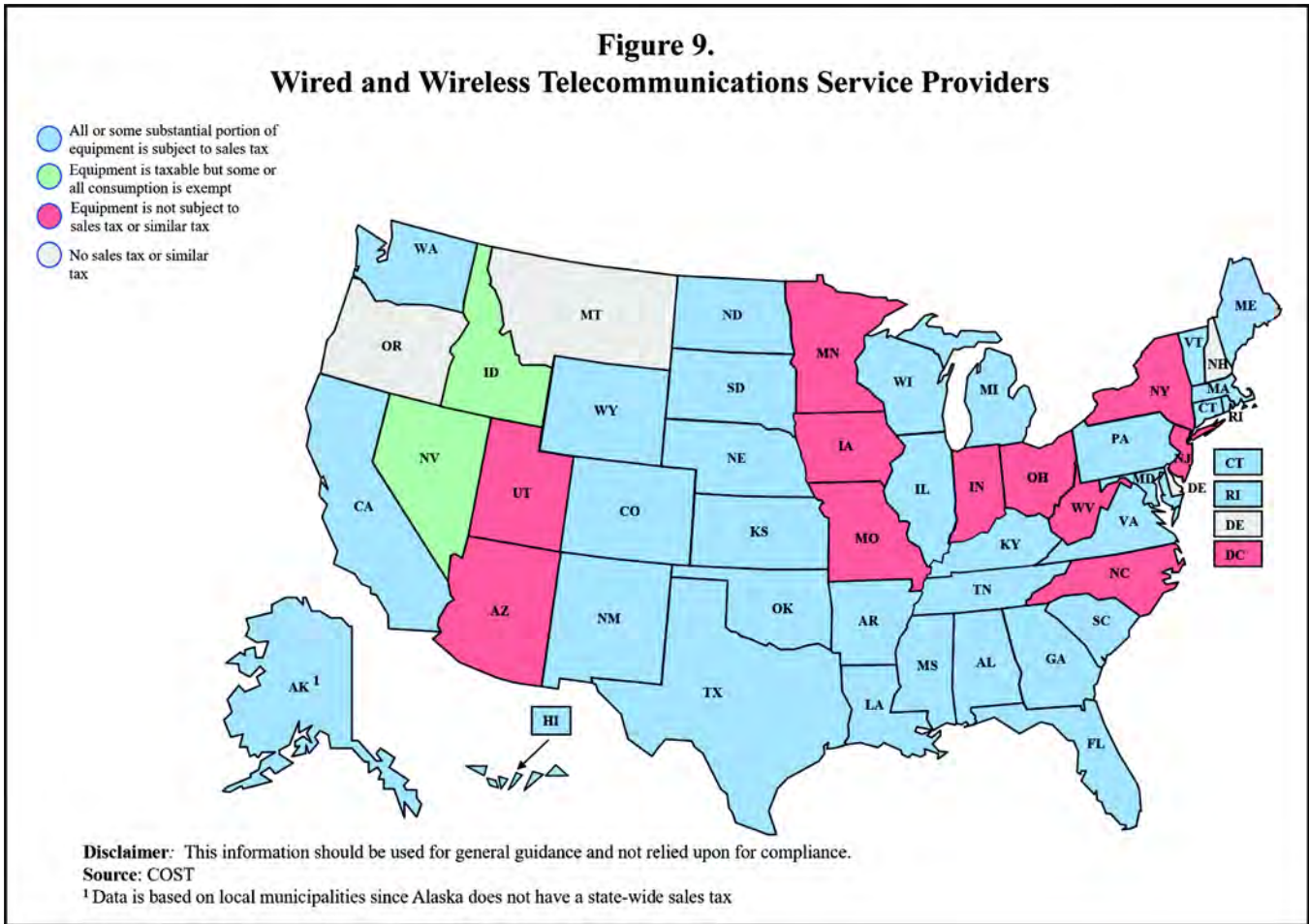
What is troubling about the states’ approach to expanding the sales tax base to digital products is that it is exacerbating, and not diminishing, the cascading problem associated with the sales taxation of business inputs. As noted, only three states among the 45 states (plus the District of Columbia and the Alaska municipalities) that include some portion of software and digital products in the sales tax base have any type of business exemption (and one state has a reduced tax rate for business purchases). Moreover, only one of these three states with exemptions, Iowa, provides a broad exemption that applies to most taxable digital commerce.

<sup>44</sup> Andrew Phillips and Muath Ibaid, “The Impact of Imposing Sales Taxes on Business Inputs,” Study prepared by EY for the State Tax Research Institute and COST, at 8 (May 2019).

<sup>45</sup> John F. Due, *Sales Taxation* 298-300, 312 (1957).

<sup>46</sup> Frieden and Lindholm, *supra* note 2, at Section 2B; Phillips and Ibaid, *supra* note 44, at 10-15.

<sup>47</sup> Frieden and Lindholm, *supra* note 2, at 12-13.



By comparison, if we look at several other industries where business inputs are frequently taxed, the track records of the states are mixed, but not as abysmal as with digital products. For instance, most states tax both equipment used in providing wired and wireless telecommunications (business inputs) and the telecommunications services sold to consumers. However, even in this industry where the cascading of tax is widespread, 12 states exempt business purchases of telecommunications equipment, and two other states tax the equipment but exempt some or all of the sales to consumers (see Figure 9).<sup>48</sup>

Similarly, most states tax both equipment used in providing electric and gas service, and the electricity and gas sold to consumers. Nonetheless, 13 states still exempt business

purchases of equipment used in electric and gas service, and six other states tax the equipment but exempt some or all of the sales to consumers (see Figure 10).<sup>49</sup>

### The Different Approaches to Exempting Digital Business Inputs

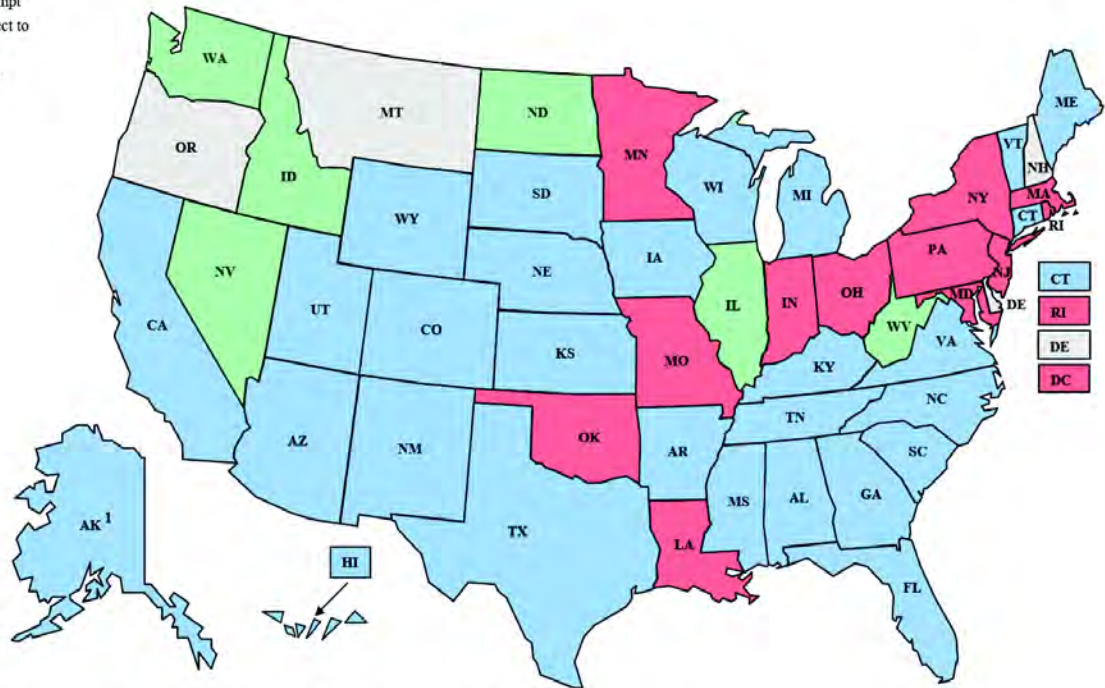
The U.S. approach to imposing a sales tax on digital products, without a broad exemption for business inputs, is unique among the major consumption taxes in the world. Virtually all other advanced nations use a value added tax that avoids tax pyramiding through a credit provision. Under a VAT, digital products are included in the tax base for business and consumer purchases. However, the VAT has a built-in mechanism that gives a business a credit for any VAT paid on digital products, at

<sup>48</sup> Frieden, Nicely, and Nair, *supra* note 8.

<sup>49</sup> *Id.*

**Figure 10.**  
**Electric and Gas Service Providers**

- All or some substantial portion of equipment is subject to sales tax
- Equipment is taxable but some or all consumption is exempt
- Equipment is not subject to sales tax or similar tax
- No sales tax or similar tax



**Disclaimer:** This information should be used for general guidance and not relied upon for compliance.

**Source:** COST

<sup>1</sup> Data is based on local municipalities since Alaska does not have a state-wide sales tax

least to the extent the business charges VAT on its sales to consumers or is not required to charge VAT (for example, exports). Thus, the VAT effectively exempts most digital products purchased by businesses, including manufacturers, wholesalers, and retailers that make taxable sales to end-use consumers.<sup>50</sup>

The U.S. state sales tax has no similar structural tool to automatically exempt (or credit) business inputs. Instead, to address the cascading problem, a state must categorically enact business input exemptions for some or all taxable digital products. Unfortunately, as

documented above, business input exemptions for digital products, such as the one in Iowa, are an aberration and not the norm. As a result, the expansion of the sales tax base to digital products worsens the design flaw of taxing business inputs that already creates inefficiencies in state sales tax systems.

The escalation of the sales taxation of both business inputs and consumer purchases is particularly worrisome given the scale and rapid growth of the digital economy. For instance, in 2021 the U.S. business software and services market, virtually all of which is digitally based, totaled \$77.8 billion. Moreover, the market is growing at a compound annual rate of 10.6 percent and is projected to total about \$200 billion by 2030. The primary

<sup>50</sup> EY, "Worldwide VAT, GST and Sales Tax Guide," at 434-444 (2020). Generally, a registered business customer applies a reverse-charge VAT (the equivalent of a self-assessed use tax) to the purchase of taxable digital products, and then claims an input VAT credit for that amount when it charges output VAT on its own sales. See also Frieden and Lindholm, *supra* note 2, at 40-43, 55.

business uses of software and related services are for the finance, sales and marketing, human resources, and supply chain functions.<sup>51</sup>

The Multistate Tax Commission recently initiated a project, through its Uniformity Committee, to write a white paper on digital products taxation.<sup>52</sup> The MTC is proceeding in a thorough manner, eliciting comments from representatives of government, businesses, tax practitioners, and academic organizations. By its own description, the scope of the MTC project is sweeping, including a review of the rationales for taxing digital products, current state digital products tax bases, definitional issues, reliance on B2B purchases, administrative concerns, and sourcing rules.<sup>53</sup>

One of the states that the MTC has highlighted thus far both in public presentations and in its initial commentary is Washington. After reviewing the Washington model, the MTC commented: “Washington state is a good model among the states as to how to tax digital items given the broad definitions and clear guidance.”<sup>54</sup> As noted earlier, in 2009 Washington enacted a statute that broadly includes most digital products within several taxable categories. However, Washington is far from perfect because it provides a business exemption for only one of the three categories of digital products. This is the category — digital goods — that includes primarily B2C purchases such as streaming movies, music, and books. As a result, most B2B digital product purchases by business, including all software and automated digital services, remain subject to tax under Washington’s sales tax.<sup>55</sup>

We certainly hope that the MTC (and other organizations such as the SSUTA Governing Board and the National Conference of State Legislatures), in full consideration of the rules in Washington and other states, will balance any praise for a broad and clearly defined sales

tax base for digital products with criticism for the absence of an exemption for business purchases. Any model rules proposed by the MTC (or other organizations) should include a recommendation that states tax only digital products purchased by consumers (B2C), and not those purchased by businesses (B2B).

### Conclusion

There is a clear trend toward states broadening their sales tax bases to include additional categories of digital products. The expansion of the digital sales tax base is largely a response to both the acceleration of digital commerce economy and the realization that many of the new categories of digital products were previously included (and taxable) in the tangible sales tax base (for example, software, books, videos, or music albums).

Our primary concern is not so much the expansion of the sales tax base to digital products for end-user consumer purchases, but the near-total failure of state laws to provide exemptions for digital products purchased for business use. This development makes a long-standing systemic flaw of state sales tax systems worse — the pyramiding of tax on business inputs.

As states continue to evaluate the appropriate level of inclusion of digital products in their sales tax bases, it is important that they take steps to avoid taxing both business inputs and consumer purchases. As this article highlights, current precedents for excluding business purchases of digital products are generally limited in scope and applied by few states. Every state that taxes some or all digital products should adopt a broad statutory exemption for business purchases. Otherwise, states risk making the sales tax even more inefficient than it already is, diverging further from the norms of an optimal consumption tax. ■

<sup>51</sup> Grandview Research, “Business Software and Services Market Report, 2030.”

<sup>52</sup> MTC, “Sales Tax on Digital Goods & Services Uniformity Project” (Nov. 9, 2021).

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* at 8.

<sup>55</sup> Wash. Rev. Code section 82.08.020.