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STATE TAXATION OF THE INFORMATION SUPERHIGHWAY: A PROPOSAL FOR TAXATION OF INFORMATION SERVICES

R. Scot Grierson*

Our current information industries—cable, local telephone, long distance telephone, television, film, computers, and others—seem headed for a Big Crunch/Big Bang of their own. The space between these diverse functions is rapidly shrinking—between computers and televisions, for example, or interactive communication and video.1

I. INTRODUCTION

This Article addresses state taxation of telecommunications-based "information services."2 It is no secret that with the advent of the "Information Superhighway" we are ushering in a "new age" of telecommunications-based services. Every day we hear about new products and

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2. "Information services" are also referred to as electronic services. Information services do not include telecommunications services, which instead refer to the communication medium used, such as telephone, satellite, radio, cellular, and cable transmissions. It is important to distinguish between the medium of communication and the data transmitted. The transactional taxation of the data transmitted, i.e., the "information (or electronic) service" is the subject of this article. Accordingly, taxation of telecommunications is not discussed, except where necessary for illustration, technological description, or precedential value.
services that will soon be accessible via telephone lines, satellite, cable, personal computer, and perhaps other new and inventive technologies. For example, consumers presently can access a wide variety of databases simply by using a personal computer, a modem, and a telephone line. In the near future, more and more products and services, such as feature films and interactive television, will be available to purchasers using the information superhighway.

While the complexities of advanced computer and telecommunications technology seem incomprehensible to most, the information superhighway is not as mysterious as it seems. The information superhighway is quite simply the next generation of telecommunications services. This new generation in telecommunications is growing at a dramatic pace. In addition to the government sponsored Internet, there have been multiple announcements of plans to develop telecommunications-based service and product networks that will create more user-friendly systems, thereby enticing more people to pull onto the fast lane of the information cyber-highway. For example, software behemoth Microsoft has developed an online service based on its Windows environment. Meanwhile, upstart America Online has likewise indicated that it is prepared to expand its online service operations to match the demands of a fast-developing information services marketplace. The excitement over the highway and its possibilities is everywhere. Some herald the cyber-highway as the next industrial revolution, while others claim it is more important than construction of the interstate highway system. The explosion in the use

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3. See R. Scot Grierson, *ABA Tax Section Discusses State and Local Taxation of 'Information Superhighway,'* 8 STATE TAX NOTES 551, 552 (1995) (discussing state tax issues involving the information superhighway issues raised at the ABA Tax Section Midyear Meeting, Los Angeles, Cal., Jan. 27, 1995) [hereinafter Grierson, *ABA Tax Section*].
4. Id.
5. Id.
6. See infra part II.A.
8. Mark Berniker, *Online with Steve Case,* BROADCASTING & CABLE, Oct. 24, 1994, at 33, 36 (discussing America Online strategy and forecasting the online services industry, including a view of the competitive environment between interactive television, cable, and online services as they vie for customers on the highway).
9. See generally INST. FOR INFO. STUD., CROSSROADS ON THE INFORMATION HIGHWAY (1994) (a compilation of essays contending that the convergence of technologies such as telecommunications, cable television, and computers is collapsing the distinctions among communications, information, and entertainment paradigms, thereby spawning new patterns in the ways people work and live). The Institute for Information Studies is a cooperative effort between The Aspen Institute; Queensland, Australia; and Northern Telecom.
of telecommunications technology for conducting business has enormous implications for state and local tax departments in terms of both potential revenue losses and gains. However, state tax regimes all over the country face major challenges in attempting to tax the information highway. Most state sales and use tax structures currently in place were designed for the day when our nation's economy was primarily based on manufacturing and selling goods. As our economy becomes increasingly service oriented, a phenomenon accelerated by the advent of the information highway, state tax revenues will suffer. Due to the highway's complexity, the fundamental task of understanding its structure and redefining the tax regimes that apply to it will certainly be arduous for state tax administrators.

Despite the time required to devise and implement new tax structures addressing this explosive growth, the rewards are very real for those states willing to devote the resources necessary to develop a thoughtful tax regime that provides equitable treatment for both service providers and consumers. Further complicating the legal landscape is the need to address constitutionally imposed limitations on taxation in this area. Specifically, there is considerable difficulty inherent in applying Commerce Clause "nexus" standards to information services built on new and constantly changing technologies. Part of the reason for this entanglement is that, coinciding with lagging state law, recent Supreme Court decisions have not solved the question of nexus for information service providers. The nexus issue effectively adds to the difficulty of an already complex problem. Simply put, the advent of the information superhighway is possibly one of the greatest challenges facing state revenue departments today.¹⁰

Part II of this Article presents general background information important to the Article's main analytical focus: a proposal for taxation of information services sold over the information superhighway. This section describes selected aspects of the information superhighway and a few of the technologies that will be utilized in bringing an expanding universe of telecommunications-based information services to the consumer. By way of background, this portion of the Article also examines the outlook for state revenues given the current economic and political environment, providing the reader with a basic understanding of the fiscal pressures that will ultimately shape state tax policy affecting the information services industry.

Part III presents several policy arguments favoring the states' expansion of the sales tax to telecommunications-based information

¹⁰. Grierson, ABA Tax Section, supra note 3, at 552.
services. This section explains why the creation of such a tax scheme is justified as a matter of tax policy, as a tool to prevent conversion of taxable sales of tangible property through digitalization and electronic delivery, and as a forward-looking approach to deal with the economic realities of an increasingly service-oriented economy.

Part IV of this Article, offered in support of creating a taxing structure reaching information services, contains a comparison of the taxing regimes of Ohio and California, whose taxing structures are representative of the few states that have actually adopted statutes applying a sales tax to electronic or information services. As will be seen, California, at one end of the spectrum, taxes very few services and would not reach most information superhighway transactions, while Ohio, at the opposite end, taxes a broad range of information and telecommunications services.

When a state decides to tax telecommunications-based information services (or expand its current structure) the real task begins. Sales tax on information services raises complex legal and political questions concerning the appropriate structure and scope of the tax. Part V proposes a model statute and regulations, although they are not designed to provide a comprehensive taxing scheme, for states to consider in developing a structure for information service transactions. The proposed rules advocate "situs" information highway sales using a "billing address," and suggest a structure for maintaining a definitional distinction between "telecommunications" and "information services."

A state's decision to tax information services also raises multiple constitutional concerns. Using technology, businesses are adopting new ways of marketing that, under current Commerce Clause standards, potentially reduce a state's ability to tax. Specifically, sellers can establish a marketplace in a taxing state without ever having to establish an actual physical presence. These dynamic technologies impede state efforts to apply Commerce Clause "nexus" standards for purposes of imposing a duty on out-of-state sellers to collect use taxes. In an effort to include one of the most important (and perhaps most daunting) issues concerning the taxation of telecommunications-based services, Part VI of this Article examines the application of Commerce Clause "nexus" standards to the expanding realm of telecommunications-based information services. This discussion surveys applicable Supreme Court standards and suggests several arguments that states can use to overcome nexus obstacles.

11. Situs is defined as "the place where a thing is considered, for example, with reference to jurisdiction over it, or the right or power to tax it." BLACK'S LAW DICTIONARY 1244 (5th ed. 1979).
II. BACKGROUND

A. What Is the Highway and Where Does It Lead?

Obvious to anyone reading the papers or watching the news these days, the area of telecommunications-based services is currently undergoing a period of tremendous growth. Several communications, telephone, and cable companies have announced their intentions to develop telecommunications-based technologies that will allow consumers to access a wide variety of products by way of computer via telephone lines, satellite dish, cable, and other fast-developing mediums. The development of technologies that serve as the infrastructure of the information highway began over ten years ago. However, the prevailing rush toward commercial development and exploitation of telecommunications-based services began in earnest when the United States government announced its commitment to support the development of the "information superhighway" (also known as the "National Information Infrastructure") through the exercise of its legislative powers, and as a matter of social policy.\(^\text{12}\)

The information superhighway is primarily an idea more than anything else. In the simplest terms, the highway is the deregulation and expansion of existing telecommunications channels in furtherance of the interconnection of people, ideas, products, and services. Construction of the highway is perceived as economically and socially desirable because it is expected to foster job growth and bring people closer together. The concept of an information superhighway has captured global attention. Understanding that telecommunications is the industry of the future, the European Economic Union has announced its own intentions to lead development and construction of a "global" information highway.\(^\text{13}\)

12. See generally INFORMATION INFRASTRUCTURE TASK FORCE, THE NATIONAL INFORMATION INFRASTRUCTURE: AGENDA FOR ACTION (1993); Gore's Speech on Telecommunications, supra note 1.

13. Ray Mosely, Richest Nations To Speed Communication Competition, CHI. TRIB., Feb. 27, 1995, § 1, at 4; see also E.U. Leaders Discuss IT Revolution, DAILY TELEGRAPH (London), Feb. 24, 1995, at 25 (quoting a statement by European Union Commission president, Jacques Santer, concerning the goals of a Feb. 25, 1995, EU meeting in Brussels: "Europeans have to be the leaders, designers, builders, suppliers, repairers and financiers of the global information society, not hitchhikers stuck on the superhighways belonging to other parties.").
B. Technology and Products

Explosive growth in technology is the primary engine for the expansion of commerce over the information superhighway. Because of the scope of this growth, an exhaustive discussion of the proposed products and technology is not feasible here. However, to grasp a basic understanding of future information services and the technology by which these services will be delivered, the following have been selected for discussion.

1. National Commercial Online Services and Bulletin Board Systems

The information superhighway is part of a larger online world where people using personal computers can connect and share information electronically. There are many ways to electronically connect with others to share or obtain information. However, all of these electronic connections use telecommunications as a conduit. The three most prevalent consumer-oriented connection choices are: bulletin board systems ("BBS"); national commercial online information services such as CompuServe, Prodigy, and America Online; and the Internet.

BBSs are the simplest, in terms of technology, of the three consumer products. BBSs allow users to send e-mail messages, transfer files to the BBS computer, or download files or programs from the BBS computer. Some BBSs allow users to engage in interactive conversations with other users and receive the latest legislative, news, and economic reports. Many of the almost 50,000 BBSs in the United States are accessible free of charge.14 Commericially, however, the major players in the online world are the national online services.

For a price, national online services can be accessed by anyone with a computer and a modem. These highly popular services have been compared to large pay-for-use BBSs because callers can exchange public and private messages with other users, download programs, interactively chat with other callers, play online games, and read news articles. However, commercial online services also offer other products such as online shopping; stock market quotes; airline, hotel, and car rental reservations; encyclopaediae and other research resources.15 Commercial online services typically charge a monthly fee of about ten dollars, plus hourly connect charges ranging from two to six dollars. CompuServe,

15. Id.
Prodigy, GEnie, America Online, Delphi, eWorld, and ImagiNation are ranked as the major national online information service providers.\textsuperscript{16} Together, these information service providers have over six million subscribers.\textsuperscript{17}

2. The Internet

The Internet was created by a group of Department of Defense researchers in 1969 as a government-funded online clearinghouse of information primarily designed to facilitate the free flow of information and exchange of ideas between governmental, educational, and scientific agencies and other entities.\textsuperscript{18} In its early days, access to the Internet was initially restricted to certain government agencies and educational institutions for scientific and academic research. Recent innovations have made the Internet fully accessible to non-technical individuals and are producing a new wave of business applications. In some ways, the Internet is a small-scale model of the future information superhighway. For this reason, describing the Internet is fundamental to understanding the information highway of which it is soon to become an integral part.

The Internet is an interconnection between computer networks, which is more properly described as a process or event rather than a tangible thing. The foundations for this interconnectivity are telecommunications and a set of common languages, or more precisely, protocols that all Internet connected computers have in common.\textsuperscript{19} While almost everything currently offered over the Internet is free, its commercialization has begun. It is expected that significant commerce will occur on the Internet and over the various pathways of the cyber-highway, such as the interactive sale of books, stock reports, software, and other information based products. While no one owns the Internet, several companies operate as packagers of electronic services, providing among their menus of telecommunications-

\textsuperscript{16} Comparison of Online Service Features, PC GUIDE TO GOING ONLINE, June 1995, at 44-45.

\textsuperscript{17} Id.

\textsuperscript{18} Phil Patton, Life on the Net, ESQUIRE, Dec. 1994, at 131, 138 (generally describing the Internet and the myriad commercial services available).

based services, user-friendly access to the Internet and other information services.\textsuperscript{20}

The Internet's infrastructure was expanded in the mid-1980s when the National Science Foundation built high-speed long distance phone lines that connected supercomputing centers across the nation that eventually replaced the original network known as ARPAnet.\textsuperscript{21} In 1991, when the federal government announced it was lifting access restrictions, other Internet access providers created their own commercial networks dedicated to providing communications access to the commercial Internet.\textsuperscript{22} Early Internet access providers included Uunet, Performance Systems International, Inc., Sprintlink, and General Atomics' Cerfnet.\textsuperscript{23} These network access providers are essential to information highway sales as they effectively connect consumers to the core of the information services industry. As discussed in Part V, the structure of these access providers, their networks, and telecommunications, and their relationship to the delivery of information services may have a substantial impact on the subject of nexus.

3. Multimedia Technology

With advances in computer technology, computing power is approaching the size of a mainframe in a hand held device that will allow immediate access to a wealth of information and remote access to even greater amounts.\textsuperscript{24} Digitalization of products, such as music and movies, allows for their transportation using telecommunications.\textsuperscript{25} In turn, improvements in digital compression have vastly increased the capacity of existing networks by transmitting a greater volume of data, sound, and video.\textsuperscript{26} In the future, these and other technological innovations will work in unison to provide information and entertainment services.\textsuperscript{27} Multiple networks comprised of different transmission media, including satellite, radio, coaxial cable, copper wire, and fiber optic cable will transport a

\textsuperscript{20} The "Worldwide Web," for example, an expanded service noted for its graphics capability, has increased user demand for Internet capability among the major on-line service providers. See glossary, PC GUIDE TO GOING ONLINE, July 1995, at 175.

\textsuperscript{21} Rosalind Resnick, A Network to End All Networks, PC GUIDE TO GOING ONLINE, July 1995, at 112-13.

\textsuperscript{22} Id. at 113.

\textsuperscript{23} Id.

\textsuperscript{24} Gore's Speech on Telecommunications, supra note 1.

\textsuperscript{25} Id.

\textsuperscript{26} Id.

\textsuperscript{27} Id.
variety of information services and information application technologies into homes, businesses, and schools. Because these technologies will be used in concert to provide enhanced multimedia services, an examination of any one technology in isolation falls considerably short of describing the conceivable range of services that will be offered. It is clear, however, that we are at the beginning of a multimedia age in which computer, television, and telecommunications technology will have a tremendous impact on the way we live.

4. Interactive Television

Proponents of interactive television envision a myriad of interactive services delivered into a consumer's home using ordinary television equipped with smart set-top boxes. In the near future, smart set-top receiving devices will allow people to participate in interactive services offered as an adjunct to traditional television programming. For example, people will be able to receive more detailed information on advertised products, news topics, and political issues than otherwise is available on television. Similarly, some companies are considering original interactive programming that may offer discussion forums to talk about current issues. Like many of the recently devised telecommunications-based products announced by companies rushing to be the leaders in the development of the information highway, the ultimate success of interactive television is impossible to predict. However, according to Deloitte & Touche's Dwight Allen, a report assembled by his company in 1994 predicts interactive services will pervade at least forty percent of the U.S. residential and small business markets between the years 1998 and 2000.

Another innovation involves piggybacking extra digital data within television signals, allowing regular television program signals to serve as a "double-duty digital information hauler," through the use of technology that will have no effect on the resolution of the pictures or the quality of

28. Id.

29. Bemiker, supra note 8, at 34. A set-top box converts incoming digital video to a format compatible with TVs and VCRs. Most boxes will provide a digital interface allowing the consumer to connect a personal computer through which the consumer can access information services such as Prodigy and CompuServe, but at much higher speeds than today's modems. Id.; see also Highway Lingo, PC GUIDE TO GOING ONLINE, July 1995, at 30 (defining "set-top box" and its potential uses).

30. Bemiker, supra note 8, at 33, 36.

Some believe this technology is more cost efficient and therefore more competitive than other systems, such as fiber optic cable, which require more expensive initial infrastructure outlays.\textsuperscript{33}

5. Integrated Services Digital Network

Integrated Services Digital Network (ISDN) technology may ultimately serve as the consumer and business gateway to the information highway. This technology sends digital signals over ordinary telephone wires, allowing someone to engage in a telephone conversation while simultaneously sending and receiving data, such as faxes, all using a single telephone line.\textsuperscript{34} ISDN technology has been available for over ten years. Until recently, however, widespread use of ISDN was limited due to high cost and installation/operational complexities intimidating to the ordinary user. Recent developments, such as Motorola's "plug-and-play," should spur the use of this technology.\textsuperscript{35} Plug-and-play, as its name connotes, is an easily installed terminal gateway to the digital phone network that provides users with rapid Internet access, telephone recording, and other services using a customer's personal computer.\textsuperscript{36} Plug-and-play is also about one-third the cost of the original ISDN equipment. ISDN technology is quickly becoming the public-switched network's information highway connection for hosts, file servers, and personal computers.\textsuperscript{37}

6. Direct Broadcast Satellites: Delivery Without Presence

In the future, most of the information services available through land-based telecommunications (e.g., the national online information services and interactive television previously discussed) may be transmitted by direct uplinkage to satellites. A permutation of this service, also known as "beaming and billing," potentially allows service providers to complete in-state sales without being physically present. Using satellite transmission, the service provider may transfer a digitized movie, books, or other data to a customer without establishing stores, offices, warehouses, or other in-state presences. Current technology permits a consumer to receive direct broadcast satellite transmissions through a home-based dish of

\textsuperscript{32} Jon Van, \textit{TV Execs Race to Deliver Data Along With Video Fare}, CHI. TRIB., Feb. 13, 1995, Business Section, at 1.
\textsuperscript{33} \textit{Id.} at 4.
\textsuperscript{34} \textit{Id.}
\textsuperscript{35} \textit{Id.}
\textsuperscript{36} \textit{Id.}
approximately eighteen inches in diameter. This prevents the need for extensive land-based communications equipment. Beaming and billing thus prevents an out-of-state seller from having to collect or pay sales taxes because the seller arguably lacks the "substantial nexus" or physical presence required under the Commerce Clause of the United States Constitution. The author submits alternative theories for finding the "substantial nexus" for this technology in Part V.

C. The Outlook for State Revenues

The outlook for state revenues is an all-important backdrop to any policy discussion concerning taxation of information services for the obvious reason that without a need for revenue, there is no purpose for proposing a tax. Simultaneous with the surge in telecommunications-based services, both through the Internet and other telecommunications resources, is a developing atmosphere of concern within state and local governments. The cause of this concern is the current political climate which promises a future marked by shrinking revenues and chronic budgetary shortfalls.

The most recent concerns over state revenue began with the outcome of the November 1994 elections which resulted in the Republican takeover of both the House and Senate as well as the simultaneous election of Republicans to many state governorships and legislatures. The expected effects of the Republican "Contract with America" and the prospect of a balanced budget amendment create substantial changes in the fiscal outlook of state and local governments because of, among other concerns, planned reductions in federal aid to the states. While the net effect of proposals

38. Quill Corp. v. North Dakota, 504 U.S. 298, 311-12 (1992) (holding that a mail-order seller must have substantial and physical presence in the taxing state before a duty to collect use tax can constitutionally be imposed).

39. The 104th Congress opened with high expectations for passage of a federal balanced budget amendment which, assuming it was ratified by the requisite number of states, would have amended the Constitution to require the legislature to balance the budget through a series of spending cuts. After passing the House, the bill failed in the Senate by one vote. Recently, Senate Majority Leader Bob Dole (R-Kan.) indicated the legislation would be re-introduced later in the 104th Congress.

Passage of the balanced budget amendment, while it will depend on the final version of the bill, will likely result in a reduction in aid to state and local governments of "considerably more than 14.4 percent." Steven D. Gold, Impact of New Federal Policies on State Governments, 8 STATE TAX NOTES 558, 559 (1995). The reason, according to Gold, Director of the Center for Study of the States, is that certain federal programs such as Defense and Social Security will probably be spared, leaving only $1.128 trillion to be cut out of a projected budget of $2.209 trillion for fiscal year 2002. The remaining budget would have to be cut by 29% to eliminate the federal deficit. State and local governments are expected to receive $231 billion in federal aid in the 1995 fiscal year. If federal aid were cut by 29% this year, projections indicate that federal
pending at both the federal and state level is difficult to predict, there is evidence that Contract with America policies, coupled with tax cuts at the state level, will have very real effects on the states' fiscal outlook. To illustrate, the U.S. Treasury Department estimates that Contract with America tax cuts would cost $189 billion in taxes in its first five years and approximately $630 billion in taxes over ten years. Cuts in the capital gains tax, imposition of "neutral cost recovery" allowing for larger depreciation deductions, and the creation of a new type of IRA are three tax cut items expected to affect state revenues. According to Steven D. Gold, Director of the Center for the Study of the States, most of the forty-one states with income taxes and forty-six states with corporate taxes would be affected because these states usually define gross income for state tax purposes using the same method adopted by the federal government. Assuming these tax cuts are mirrored in the state taxing schemes, lower revenues would result, thereby adding to the fiscal tightening created by the reduced federal aid contributions previously mentioned.

The concept of unfunded mandates also affects state fiscal concerns. Mandates are federal laws that increase state and local fiscal burdens by imposing certain compliance obligations at the state and local level. States were understandably concerned that Congress was shifting the costs of a balanced federal budget on state and local governments and successfully lobbied for legislation that prohibits, at least prospectively, unchecked future enactment of unfunded mandates if they exceed $50 million.

40. In the current political and economic environment, many state legislators are finding they lack the political fortitude to overcome the temptation to join the throng advocating a reduction in taxes. In fact, although California, New York, and Massachusetts are facing significant budget deficits for the current fiscal year, they are all planning tax cuts to give a supply-side boost to their state economies. Amy Hamilton, 1995 May Be Difficult—But Full of Opportunity, State Tax Experts Say, TAX ANALYSTS, HIGHLIGHTS & DOCUMENTS, Dec. 29, 1994, at 4008 (Harley T. Duncan, Director, Federation of Tax Administrators, and Steven D. Gold examining status of proposed state tax cuts).


42. Gold, supra note 39, at 559.

43. Id.

44. Id.; see also Amy Hamilton, 'Contract With America' Could Cost States $390 Billion, Study Says, 8 STATE TAX NOTES 551 (1995).

While it is difficult to predict by how much, it is becoming increasingly clear that Republican initiatives will result in a significant reduction in federal aid and will require states to take on more financial responsibility for providing services and entitlements. Although states are currently enjoying the positive revenue effects of economic growth, the current political climate creates an atmosphere of long-run fiscal uncertainty.

III. SALES AND USE TAX ON TELECOMMUNICATIONS-BASED INFORMATION SERVICES: POLICY CONSIDERATIONS FAVORING THE TAX

This section offers arguments favoring the imposition of a sales tax on telecommunications-based information services, explaining that the creation of an equitable tax scheme is justified: (1) as a matter of tax policy; (2) as a tool to prevent conversion of taxable sales by electronic delivery; and (3) as a realistic approach that deals with the economic realities of an increasingly service-oriented economy.

The author encourages states to adopt a forward-looking approach that considers the taxation of telecommunications-based information services, an expanding area and a potentially rich source of revenue. In doing so, the author urges the modernization of current taxing structures designed for a manufacturing oriented economy.

A. Effect of Technology on Sales Tax Revenues: The Need to Address a Changing Economy

In the 1980s and 1990s, the service sector, and particularly the information, telecommunications, and entertainment service industries, have experienced substantial growth relative to manufacturing. In 1970, sales and use tax revenues produced nearly 57% of the $48 billion in state tax revenues.\(^{46}\) Of the approximately $311 billion of revenues collected in 1991, almost 50% were derived from tax on general sales, gross receipts, motor fuels, alcoholic beverages, and tobacco.\(^{47}\) By 1991, the sales tax portion of state revenues decreased by almost 8%.\(^{48}\) Conversely, revenue from individual income taxes have increased by nearly 80%.\(^{49}\) Evidence shows that one of the reasons for this change is that the national economy

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47. Id.
49. Id.
has become increasingly service-oriented. Because of early expansions in the service industry, it was widely anticipated that the yields from a sales tax on services would rise faster than the revenues from a sales tax on tangible goods. The information superhighway adds further momentum to the expanding services industry due to the geometric growth in the availability of service products offered through telecommunications.

The revenue-producing potential of an expanding information services industry is one of the primary reasons supporting the tax. Consider the magnitude of the expected growth in the information superhighway related industries. In a recent policy statement, FCC Commissioner Reed Hundt explained that the “information and entertainment sector of our economy will be as much as a sixth of the gross domestic product by 1997, and will be the world’s largest single industry with worldwide revenues exceeding two trillion dollars.”

Given the uncertainties created by the current atmosphere of unfunded mandates, tax cuts, and expanding social welfare burdens, states must, at some point, recognize the need to address a changing economy, and take a realistic stance concerning the expansion of their sales tax structures to encompass these services. Careful attention to the development of these industries is important not only for producing revenue through transaction taxes, but also for dealing with income tax apportionment and sourcing issues.

B. Conversion of Tangible Personal Property

The primary focus of state sales tax schemes is on retail sales of tangible personal property. As stated earlier, the digitalization of products such as music compact discs, movies, and all manner of textual and graphical materials has led to the ability to sell and package these items for direct delivery to the consumer over the information highway using telecommunications. Digitalizing these products converts them from

50. See generally John F. Due & John L. Mikesell, Sales Taxation: State and Local Structure and Administration (2d ed. 1994).
51. Id.
52. See, e.g., Grierson, ABA Tax Section, supra note 3, at 552.
54. For example, Blockbuster Entertainment Corporation is currently using a network of 486 personal computers in its stores to download video game programs after a customer places an order, illustrating the ease by which a sale of otherwise taxable personal property can occur using the proper telecommunications and computer hardware. In all, it takes about sixty seconds to download the game and its documentation from the network. In-store sales can be easily
what is traditionally considered tangible personal property into an intangible electronic form. Because the sales tax generally applies only to sales of tangible personal property, conversion of these items into an intangible digital form for sale via the information highway will, absent legislative or administrative action, circumvent the sales tax. Computer users are already purchasing a significant amount of canned software by downloading programs from databases accessible for a small fee, thereby eluding the tax many states have imposed on these items, by applying the theory that these programs constitute tangible personal property, rather than services.55

While the volume of lost revenues is difficult to estimate, no one can doubt that this scenario will have a very real impact. As consumers begin to engage in commerce on the information superhighway in increasing numbers, it is inevitable that in addition to services, more and more products will be delivered online and by various other telecommunications pathways. The information highway may eventually become the electronic equivalent of an information, entertainment, and communications convenience store. Accordingly, developing a taxing scheme for information services is necessary to recapture lost sales transactions where electronic conversion has occurred.

C. Policy Supporting Expansion of Sales Tax to Information Services

In their recent text on state and local tax administration, Professors Due and Mikesell suggest several policy arguments favoring the imposition of a comprehensive sales tax on all services.56 Specifically, Professors Due and Mikesell emphasize that a comprehensive sales tax on services would increase state revenues, eliminate unjustifiable discriminatory

55. The taxability of software depends on its classification as tangible or intangible personal property. State sales tax typically only applies to tangible personal property. Early on, the IRS concluded that software was intangible for federal tax purposes. A series of cases treated software as intangible for various tax purposes. Subsequently, states have distinguished between "canned," or prepackaged mass-produced software, and custom software made to a particular customer's specifications. Even if software is considered taxable tangible property, the sale of a custom program (in contrast to "canned" software) may often be a nontaxable service transaction due to the high degree of personal services required to create the software. Robert L. Cowdrey, *Software and Sales Taxes: The Illusory Intangible*, 63 B.U. L. Rev. 181 (1983). At the present time, states are increasing taxation of software either by statute or by expanding the definition of "tangible property." See, e.g., South Cent. Bell Tel. Co. v. Barthelemy, 643 So. 2d 1240 (La. 1994) (holding that all software, whether canned or custom, was tangible personal property for Louisiana use tax purposes); Navistar Int'l Transp. v. State Bd. of Equalization, 884 P.2d 108 (Cal. 1994) (holding that trade secrets embodied in drawings and designs were tangible personal property).

56. DUE & MIKESELL, supra note 50, at 343.
Due and Mikesell emphasize that a comprehensive sales tax on services would increase state revenues, eliminate unjustifiable discriminatory treatment between service and commodity consumption sales, reduce regressivity in application of the tax, and eliminate operational problems created by application of the “true object test” to mixed transactions involving the transfer of services and tangible personal property.57

Jerome and Walter Hellerstein (“Hellerstein & Hellerstein”), noted tax scholars, have also opined on this subject. In their treatise, Hellerstein & Hellerstein observe that “[a]s a matter of economic theory, there appears to be no distinction between goods and services that justifies a tax on goods but not on services.”58 In a similar vein, Professors Due and Mikesell explain that states have apparently avoided taxation of services partly because of the “notion that taxation of services constitutes taxation of labor.”59 Whatever the reason, the difference between tangible goods and services is considered economically indistinguishable because “consumers gain satisfaction from services just as they do from commodities.”60 Because there is very little distinction, Hellerstein & Hellerstein further contend that drawing a line between services and commodities is considered “highly arbitrary” and creates administrative difficulties.61

Central to the argument that there is no reason for taxing tangible personal property without taxing services is the notion that production of both “goods” requires a service. Tangible property and services both have a service component, that is, services are an integral part of a tangible product as it takes a certain amount of services to develop and manufacture. Drawing a line at tangible property is purely arbitrary: it ignores that services are an integral part of any good, without regard to form.62 Indeed, the distinction is predominantly a matter of historical accident rather than theoretical basis.63

57. Id. at 350.
59. DUE & MIKESELL, supra note 50, at 374.
60. Id.
61. HELLERSTEIN & HELLERSTEIN, supra note 58, at 12-17.
62. As Professors Due and Mikesell point out, “[t]he acquisition of each [a service or a tangible good] constitutes a consumption expenditure.” DUE & MIKESELL, supra note 50, at 384.
63. The sales tax was introduced in the 1930s to compensate for declining income tax revenues during the Great Depression. See HELLERSTEIN & HELLERSTEIN, supra note 58, ¶ 12.02[2] at 12-14. The tax was originally restricted to sales of tangible personal property out of concern that a tax on services would be inappropriate. States’ use of the sales tax spread because the tax has an easily measured tax base and is convenient to collect. Id.
Regressivity is also an issue in the discriminatory treatment of tangible property and services, consistent with the nature of sales tax. The argument is that because tangible goods usually make up a greater portion of fundamental goods, individuals and families spend a greater percentage of their income on tangible goods and, therefore, on taxes. By contrast, persons in higher income groups spend a larger proportion of their wealth on services and a smaller proportion of their income on sales tax. Accordingly, a comprehensive sales tax on services would aid in eliminating the disparity, from a tax perspective, among income groups.\(^6\)

As previously mentioned, the commentators contend that there are administrative difficulties in taxing tangible property while exempting services. The difficulty lies in discerning the distinction between sales of commodities and services in the context of mixed goods/services transactions. To distinguish between the sale of a commodity and the sale of services and intangibles, courts have fashioned the "true object test," also known as the "essence of the transaction" or "dominant purpose test."\(^6\) In many cases, the true object test leads to strange and unexpected results.\(^6\) The test entails difficult and often dubious inquiries into the minds of buyers and sellers after a transaction to determine whether the parties' "true object" was the rendition of services or sale of property. The vagaries of the true object test would be made obsolete by a comprehensive sales tax on services. In a nondiscriminatory transaction tax scheme, the concept of mixed service/commodities transactions simply disappears.

Despite numerous justifications for application of sales and use tax to services, recent attempts to impose broad-based sales taxes on services have been met with discouraging results. The Florida\(^6\) and Massachusetts\(^8\) situations demonstrate the difficulty connected with imposing sales tax on

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64. DUE & MIKESELL, supra note 50, at 374.
65. California's version of the "true object" test is as follows:

The basic distinction in determining whether a particular transaction involves a sale of tangible personal property or the transfer of tangible personal property incidental to the performance of a service is one of the true objects of the contract; that is, is the real object sought by the buyer the service per se or the property produced by the service. If the true object of the contract is the service per se, the transaction is not subject to tax even though some tangible personal property is transferred. CAL. CODE REGS. tit. 18, § 1501 (1995).

66. See HELLERSTEIN & HELLERSTEIN; supra note 58, ¶ 12.07(2), at 12-30 (also suggesting that the "community interest method" is a better method of distinguishing between services and goods).
an expansive number of services. Florida's ill-fated tax scheme imposed a sales tax on a wide range of services in one piece of legislation.\textsuperscript{69} Powerful lobbies, including attorneys and other professional and nonprofessional groups, brought the Florida system to early ruin.\textsuperscript{70} In many ways, the Florida experience was a case of too much too soon. Similarly, Massachusetts's short-lived taxation of services lasted two days before it was retroactively repealed by the state legislature.\textsuperscript{71} The Massachusetts's tax, much like Florida's, sought to bring a wide range of services into the fold within a short period.\textsuperscript{72}

The message of the Florida and Massachusetts debacles is that any extension of a sales tax to services should adopt a piecemeal approach that would limit the economic and political friction created by expansion of taxing activities to an entire state economy. A piecemeal approach to service taxation produces revenue to meet fiscal needs without political suicide. As a relatively new growth industry with less entrenched social and business practices, the emerging information services industry is uniquely situated for application of the tax.

IV. AN OVERVIEW AND COMPARISON OF THE CALIFORNIA AND OHIO TAX REGIMES AFFECTING INFORMATION SERVICES

A. An Overview

Under traditional sales and use tax schemes, sales of tangible personal property are typically taxable, and sales of services and intangibles are usually nontaxable. Using this approach, sales of electronic information services normally would fall under the latter classification and thus would be nontaxable. Despite the traditional distinction between taxable sales of tangible goods and nontaxable sales of services, approximately half of the states currently apply sales tax to information services.\textsuperscript{73} The taxing regimes vary greatly among the states and often tax only certain information, electronic, and computer services, while leaving most of the

\begin{itemize}
\item 69. Weber, supra note 67, at 624 (services subject to the tax were broadly defined as those functions "engaged in . . . for a consideration" by certain establishments enumerated in the Standard Industrial Classification Manual and include most services provided in the state).
\item 70. See id. at 663-65.
\item 71. Id. at 649-50.
\item 72. Id. The statute listed 23 general categories of taxable services typically defined by reference to the 1987 U.S. Standard Industrial Classification code.
\item 73. See generally J. Elaine Bialczak, Sales and Use Taxes: Information Services, Tax Mgmt. (BNA), Multistate Tax § 1320 (1994).
\end{itemize}
information highway related transactions untouched. Most states, without imposing a tax on information services, create an exemption based on the traditional distinction between sales of tangible personal property and sales of services.

The following comparison between Ohio and California exemplifies just how differently states deal with information services. Ohio, with comprehensive statutes and regulations concerning information services, is one of the few states that has developed comprehensive statutes and regulations on the topic. In addition to Ohio, Connecticut, Texas, and the District of Columbia have relatively well-developed laws imposing sales tax on information services. California's laissez-faire approach to taxation of information services is representative of the majority of states that impose few, if any, taxes on services and, by extension, information services.

1. California

California falls into a category of states that taxes services only in very limited situations. Because of its basic policy of exempting services from taxation, California naturally abstains from taxing information services except for under narrowly defined circumstances. The framework for California's taxation of information services is found in the California Revenue Code Regulation under sections 1501 and 1502. The regulation, however, does not specifically address the taxation of information services; instead, California is one of six states that taxes information services such as automatic data processing.


76. D.C. Code Ann. § 47-2001(n)(1)(N)(ii) (1990). The D.C. definition of taxable "information service" mirrors the Texas definition and then lists certain services such as real estate listings, credit, stock market, and bond rating reports.

77. See infra part V (discussing the tax imposed by these states).

78. Other states within this general category are Alabama, Colorado, Georgia, Indiana, Illinois, Idaho, Kentucky, Massachusetts, Missouri, Minnesota, Nebraska, North Dakota, Nevada, Oklahoma, Rhode Island, Virginia, and Vermont.

79. The other states are Iowa, Minnesota, Wisconsin, North Carolina, and Rhode Island. See Bialczak, supra note 73, § 1320.03.A.
In keeping with the policy of avoiding taxation of services, California regulations impose a tax on the transfer of information only when the information is converted into tangible personal property. This situation occurs when a seller receives consideration from a customer for “producing, fabricating, processing, printing, imprinting or otherwise physically altering, modifying or treating consumer-furnished tangible personal property.” The sales tax applies even if the production is in response to a customer’s special order.

California exempts from taxation a seller’s production of original information from data provided by the consumer and the processing of such data. The distinction is apparently made on the basis that the production of original information is a pure service, rather than production of tangible personal property. California is one of a number of states that applies the “true object test” to determine whether the true object of a sale is a taxable transfer of tangible personal property or the performance of an exempt service, with the tangible personal property merely being incidental to performance of the service.

The basis for taxation under the California sales tax framework is a transfer of tangible personal property, with any services rendered being merely incidental to the sale. For example, contracts for data entry or providing a proof list are taxable. In an apparent break from this theory, using a computer to address material or producing labels with or without using a computer is not taxable. Regulations 1502(d)(1) and 1502(d)(5)(B)(3) require the consumer to pay sales tax on the conversion of data from one medium to another.

2. Ohio

Ohio is among the three jurisdictions that specifically use the term “information services” in their statutory regimes. In Ohio, the statutory definition of a “sale” includes automatic data processing, computer services,

81. Id. § 1502(c)(3).
82. Id. § 1502(d)(1).
83. Id. § 1502(c)(5).
84. Id. § 1501.
85. CAL. CODE REGS. tit. 18, § 1502(d)(2).
86. Id. § 1502(d)(3).
87. Id. §§ 1502(d)(1), 1502(d)(5)(B)(3).
and electronic information services. A taxable sale is defined as electronic information services unless the true object of the transaction is "the receipt of personal or professional services to which automatic data processing, computer services, or electronic information services are incidental or supplemental." This definition constitutes broad taxation of computer and information services, limited only by an exemption where the "true object" of the transaction is the receipt of services.

"Electronic information services" are defined as services "providing access to computer equipment by means of telecommunications equipment" for purposes of either "[e]xamining or acquiring data stored in or accessible to the computer equipment," or "[p]lacing data into the computer equipment to be retrieved by designated recipients with access to the computer equipment." This regulation would apply to a commercial online service such as CompuServe, which uses telecommunications to provide access to the information databases. The tax would presumably apply to the databases maintained by CompuServe and to information services owned by third-party information providers available through CompuServe. A notable limitation of the reach of the tax is that it applies only to information services purchased for use in business. Accordingly, not all nonbusiness information highway sales are taxed.

The Ohio statutes also reach a number of information highway related services such as automatic data processing and computer processing services. "Automatic data processing" services are defined as processing data for another or allowing access to a computer so that data can be processed. "Computer services" are limited to programming and training.

B. A Comparison

The Ohio rules adeptly define "information services" to include providing access to computer equipment by means of telecommunications equipment for the purpose of examining or retrieving data accessible to the

89. OHIO REV. CODE ANN. § 5739.01(B)(3)(c).
90. Id.
91. Id. § 5739.01(Y)(1)(c).
92. See, e.g., Quotron Sys. v. Limbach, 584 N.E.2d 658 (Ohio 1992) (holding that a computer service that provided its customers access to computer equipment enabling the customer to examine or acquire stock price information was subject to use tax under OHIO REV. CODE ANN. § 5739.01(Y)(1)(c)); Bunker-Ramo Corp. v. Porterfield, 257 N.E.2d 365 (Ohio 1970) (sales tax imposed on stock market quotes accessed by electronic equipment).
94. Id. § 5739.01(Y)(1)(b).
computer equipment or putting data into the computer equipment for retrieval by designated entities with access to the computer equipment.\textsuperscript{95} This definition, if expanded to nonbusiness transactions, would be broad enough to encompass services that provide access to databases, such as bulletin board systems and legal research services. Further, the definition also would reach the sale of digitized products converted from tangible form and delivered electronically, and accordingly would recapture lost sales tax caused by conversion of tangible property into digital format for electronic delivery.

Conversely, California's tax scheme is inadequately structured to reach most information highway transactions and does not address conversion. However, existing rules may nevertheless make some transactions taxable. Regulations 1502(d)(1) and 1502(d)(5)(B)(3) read together obligate a consumer to pay sales tax on the conversion of data from one medium to another.\textsuperscript{96} This provision may provide authority for taxation of a number of potential transactions using the information highway. For example, if a consumer downloads software or textual materials such as stock and credit reports from a database, server, or network to a disk, computer hard drive, or printed format, the regulation would potentially bring the transaction within the scope of the tax. However, administration of such a statute is difficult because the service provider is not cognizant of whether the consumer intends to download or otherwise convert the data conveyed into tangible medium or simply enjoy the service using a multimedia system and sign-off the service.

Further, the entire process often will occur in the consumer's home. Unless the service provider collects the tax on every transaction, the taxpayer's payment of the tax will be voluntary. In many instances, the taxpayer may not even be aware of the duty to pay the tax. Under these circumstances, it is unlikely the tax will be paid. The provisions of the regulation also would leave unaffected many other information highway purchases, such as interactive television or home movies, which in some cases will not result in conversion of data to another medium.

Overall, the California system leaves untouched the vast revenue potential created by the expanding information services industry. The downside of the California system is that it fails to recapture the lost sales tax revenues caused by the conversion of tangible property into an intangible digital form.

\textsuperscript{95} Id. § 5739.01(Y)(1)(c).
The Ohio statutes, among the most comprehensive regimes developed by the states, are better positioned to deal with taxing the growing onslaught of economic activity cruising the information highway. Despite the drawbacks of any system developed without full knowledge of future technology, the Ohio rules provide a sound basis for the development of a comprehensive taxing scheme. Accordingly, a state desiring to implement its own scheme could borrow heavily from the Ohio experience.

C. Defining the Subject of the Transaction: The "True Object" Test

Since states traditionally impose sales tax on tangible personal property and only a limited number of services and intangibles, courts have fashioned the "true object" test, also known as the "essence of the transaction" or "dominant purpose" test. Generally, where based on the parties' intent, if the object is primarily a transfer of tangible personal property, with the transfer of services being merely incidental, the transaction will be treated as a taxable sale. Electronically delivered information services, in contrast to information services using tangible media, such as stock reports provided in book form, usually avoid the issue of whether the sale constitutes a service or the sale of tangible personal property. Issues of great complexity arise, however, when a sale involves a mixed transfer of property and services, such as the sale of customized software or engineering services that produce blueprints and drawings. In mixed transactions, the courts' attempts to identify the "true object" of the transaction have proven to be daunting and confusing exercises.

97. See, e.g., Amerestate, Inc. v. Tracy, 648 N.E.2d 1336, 1337 (Ohio 1995) (holding that "true object" of service providing electronic access to "PaceNet" real estate information database is taxable tangible property in form of printed reports); Accountants Computer Serv. v. Kosydar, 298 N.E.2d 519, 528 (Ohio 1973) ("real object" of transaction was not the computer printout but the service); Emery Indus. v. Limbach, 539 N.E.2d 608, 613 (Ohio 1989) (where purchaser's overriding purpose is to obtain property, rather than a service from a skilled person, the transfer of property is consequential, thereby rendering the entire transaction taxable; property need not be tangible); Haroldsen, Inc. v. State Tax Comm'n, 805 P.2d 176 (Utah 1990) ("essence of transaction" test applied to sale of mailing lists). See generally Bialczak, The True Object Test Applied to States' Sales Tax on Information Services, 10 J. St. Tax'n 46 (1991).

98. See, e.g., Department of Revenue v. Quotron, 615 So. 2d 774 (Fla. 1993). In this case, the Department of Revenue argued that computer transmission of financial information displayed on a video screen that could be printed at the subscriber's option was the sale of tangible personal property, where Florida law defined tangible personal property as property that could be "seen, weighed, measured, or touched or is in any manner perceptible to the senses." Id. at 775. The court rejected this argument explaining that images on a screen, incapable of being touched or possessed, transient and with no enduring existence, did not constitute tangible personal property under the statute. Id. at 777.
The Ohio statute and the California regulations specifically adopt the "true object" test in determining whether the provision of tangible personal property in connection with performing a service is taxable or whether it is merely incidental to performance of a nontaxable service. The Ohio statute incorporates the true object test by defining as taxable all transactions in which:

[E]lectronic information services are or are to be provided for use in business when the true object of the transaction is the receipt by the consumer of . . . electronic information services rather than the receipt of personal or professional services to which automatic data processing, computer services or electronic information are incidental or supplemental.

As stated earlier, the test was criticized because it ignores the reality that services are used in producing every consumable good. Observing the doctrinal difficulties courts have had applying the test, Hellerstein & Hellerstein remarked that the test was subject to willy-nilly application according to the "'gut' reaction" of the courts.

1. Navistar

A prime example of the confusion created by the "true object" test is the decision of the California Supreme Court in Navistar International Transportation Corp. v. State Board of Equalization. In Navistar, the taxpayer (previously known as International Harvester) sold its solar division to Solar Turbines Incorporated (Solar) for $505 million. At the time of the sale, Navistar was one of the leading producers of industrial turbines. As part of the sale, Navistar and Solar agreed to allocate the purchase price among the assets, with various amounts being allocated to drawings and designs, manuals and procedures, and computer

99. See supra notes 81-88 and accompanying text for the California regulation.
100. OHIO REV. CODE ANN. § 5739.01(B)(3)(e) (Anderson 1996).
101. HELLERSTEIN & HELLERSTEIN, supra note 58, ¶ 12.07[2] at 12-30. In criticizing the taxing of only tangible goods, Hellerstein & Hellerstein observe:

[T]here is no article, fabricated by a machine or fashioned by the human hand, that is not the fruit of the exercise and application of individual ability and skill. And few, indeed, are the instances where the greater part of the cost thereof is not chargeable, to personal service directly or remotely applied.

Id. ¶ 12.07[1][a].
102. Id. at 12-31 to 12-32 (citations omitted).
103. 884 P.2d 108 (Cal. 1994).
104. Id. at 109.
105. Id.
The drawings and designs contained Navistar’s proprietary information developed for use in the manufacture of turbine systems, as well as trade secrets and patented components of Navistar’s turbine technology. The California State Board of Equalization (“SBE”) assessed sales and use taxes on both the transfer of the drawings and designs, and computer software after determining that these items constituted tangible personal property.

Navistar argued that the “true object” of its sale of drawings and designs was the transfer of a nontaxable intangible asset (i.e., trade secrets and intellectual property), rather than a sale of the tangible property on which the intangibles were recorded. In support, Navistar pointed to the “true object” test in California Regulation section 1501 and the “manuscript example” found therein. Navistar asserted that the manuscript example confirmed that the sale of intangible personal property recorded on paper as drawings and designs is nontaxable provided the “true object” of the transaction is to obtain intangible rights rather than the documents themselves. Thus, Navistar argued that Solar purchased the documents for the rights they embodied, not for the tangible documents themselves.

In concluding the drawings and designs were subject to sales tax, the court rejected Navistar’s application of Regulation 1501 to the transfer of intangible personal property, instead finding that the true object test was

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106. Id.
107. Id.
108. 884 P.2d at 110.
109. Id. at 110-11.
110. Id. at 111. The pertinent portion of Regulation 1501 cited by Navistar provides:

[A]n idea may be expressed in the form of tangible personal property and that property may be transferred for a consideration from one person to another; however, the person transferring the property may still be regarded as the consumer of the property. Thus, the transfer to a publisher of an original manuscript by the author thereof for the purpose of publication is not subject to taxation. The author is the consumer of the paper on which he has recorded the text of his creation. However, the tax would apply to the sale of mere copies of an author’s works or the sale of manuscripts written by other authors where the manuscript itself is of particular value as an item of tangible personal property and the purchaser’s primary interest is in the physical property. Tax also would apply to the sale of artistic expressions in the form of paintings and sculptures even though the work of art may express an original idea since the purchaser desires the tangible object itself; that is, since the true object of the contract is the work of art in its physical form.

Id. (citing CAL. CODE REGS. tit. 18, § 1501 (West 1995)) (emphasis added).
111. Id.
112. Id.
limited to distinguishing between sales of services and goods.\textsuperscript{113} Citing *Simplicity Pattern Co. v. State Board of Equalization*,\textsuperscript{114} the court emphasized that it "rejected the contention that the 'true object' test renders the sale of a physical object exempt from taxation whenever the item is purchased or acquired primarily for its intellectual content."\textsuperscript{115} The court then distinguished the manuscript example by suggesting that "an author's sale of a manuscript to a publisher for purposes of publication does transfer something of value other than the manuscript itself. The author is thereby granting the publisher some or all of the author's rights in the copyright of the literary work embodied in the manuscript."\textsuperscript{116} The court concluded that the conveyance of a "separate and distinct" right embodied in the tangible property, specifically the "right" to publish the manuscript, renders the sale free from the sales tax.\textsuperscript{117}

The court recognized the drawings and designs included Navistar's "trade secrets"\textsuperscript{118} (from which it logically follows that Navistar thereby transferred the intangible "right" to use those proprietary secrets). Notwithstanding, the court ruled that "Caterpillar purchased the documents in question for their own sake,"\textsuperscript{119} and further concluded that there "was [no] separate and distinct transfer of an intangible property right" similar to the author's transfer of a copyright in his or her literary work.\textsuperscript{120}

Despite rejecting the application of the true object test to intangibles, the court slipped into a decidedly true object-like inquiry in terms of whether there was a transfer of tangible property or of an intangible property right.\textsuperscript{121} Moreover, the court never reconciles why the exclusive right evidenced by Navistar's drawings and designs, specifically Solar's exclusive right to use Navistar's trade secrets in the manufacture of solar turbines, did not constitute the transfer of a separate and distinct intangible right under its analysis.\textsuperscript{122}

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\textsuperscript{113} Id. at 112.
\textsuperscript{114} 27 Cal. 3d 900, 909 (1980).
\textsuperscript{115} *Navistar*, 884 P.2d at 111-12. The court disapproved *Simplicity* to the extent it suggested the true object test applied to "anything of value" other than services. *Id.* at 112 n.4.
\textsuperscript{116} *Id.* at 112.
\textsuperscript{117} *Id.*
\textsuperscript{118} *Id.* at 109.
\textsuperscript{119} *Id.* at 112.
\textsuperscript{120} 884 P.2d at 112.
\textsuperscript{121} *Id.* at 112-13.
\textsuperscript{122} *Id.* California's true object test was also applied in General Business Sys. v. State Bd. of Equalization, 162 Cal. App. 3d 50 (1984). In *General Business Systems*, the State Board of Equalization claimed a right to tax sales General Business Systems made that resulted in the delivery of computer punch cards to its customers, with the punch cards representing software.
\end{flushleft}
In *Navistar*, proper application of the true object test would have led to the correct result. If the court had looked to the true object of the transfer, it would logically have concluded that Solar acquired the designs and drawings for the intangible rights they represented with the tangible property on which they were fixed being merely incidental to the transfer.

The *Navistar* decision requires careful planning for California entities involved in the purchase and sale of intangibles. After *Navistar*, the sale of an intangible trade secret (or any similar property short of a patent or a copyright) should be structured to avoid being subject to sales tax by having the sale occur outside the state\(^{123}\) or by conveying drawings and designs electronically.\(^{124}\) Locating the sale in a state without sales tax would eliminate the possibility of another state adopting a *Navistar*-oriented decision.

*Navistar* also teaches that taxpayers should always consider the state tax consequences of their transactions in addition to federal tax consequences. For example, in a similar situation a taxpayer may allocate substantial value to the trade secret asset to allow for amortization of the intangible’s value under Internal Revenue Code ("IRC") section 197.\(^{125}\) Blind consideration of the federal tax consequences of a transaction, however, might lead to a *Navistar*-like debacle requiring payment of sales tax on $47.5 million, plus interest and penalties.

custom designed by General for each customer's specialized use. *Id.* at 52. “The trial court found the true object of the transactions to be the rendition of services and concluded that the application of section 1502(f)(2) was arbitrary, capricious, [and] an abuse of discretion.” *Id.* Applying the true object test, the Court of Appeals agreed and affirmed the judgment. *Id.*

123. The location of the sale is determined based on where the property is physically located at the time the sale takes place. See CAL. REV. & TAX. CODE § 6010.5 (West 1996).

124. However, taxpayers should be careful in this area because the SBE may take the position that even electronically transmitted documents (such as faxes) are subject to tax.

125. Section 197 was enacted in 1993 and permits amortization of certain intangibles over a fifteen year period beginning with the date on which the asset was acquired. Section 197(c)(2) typically allows only the amortization of assets acquired by the taxpayer in an acquisition from another person. Prior to its enactment, intangibles generally were not subject to depreciation unless the taxpayer could prove the useful life of the property—a difficult and expensive undertaking. Proving the value of the intangible was costly and led to a great deal of litigation with the Service. Current § 197 would allow depreciation of Navistar's drawings and designs as property held for use in the taxpayer's business. Allocation of greater value to other assets included in the acquisition could result in, from the taxpayer's perspective, less favorable treatment such as capitalization or depreciation at slower rates.
2. WBNS TV, Inc. v. Tracy

Consider a recent case from Ohio, *WBNS TV, Inc v. Tracy*, which further illustrates application of the "true object" test. WBNS-TV, a commercial television station serving the Columbus area executed a contract with A.C. Neilsen Company under which Neilsen would compile and calculate viewer ratings from the WBNS market area and provide WBNS with periodic reports. The agreement provided that the reports would remain the property of Neilson.

Central to the dispute before the Ohio Board of Tax Appeals (Board) was whether Neilsen was providing a nontaxable service or whether the transaction was a "sale" of the reports, i.e., taxable tangible personal property, to WBNS. Drawing from *Avco Broadcasting Corp. v. Lindley* and *Andrew Jergens Co. v. Kosydar*, the taxpayer argued that the primary object of the contract was a personal service transaction with the transfer of tangible personal property being an inconsequential element of the transfer.

In *AVCO Broadcasting Corp.*, the Ohio Supreme Court found transactions with Broadcast Advertisers Reports, Inc., as well as other companies, such as Associated Press, A.C. Nielsen Company, and American Research Bureau, were service transactions with only an inconsequential transfer of tangible personal property. The commissioner in *WBNS TV*, however, countered that the precedential value of *Avco* was undermined by the Ohio Supreme Court's decision in *Emery Industries v. Limbach*. The commissioner argued that *Emery* redefined "personal service," as used in R.C. 5739.01(B), as any intellectual or manual act involving a recognized skill performed by a person who is specifically engaged by the purchaser to perform the act. Under this definition, the commissioner reasoned that the claimant purchased tangible personal property, not personal services, because the seller was not

127. Id. at *3.
128. Id. at *4.
129. Id. at *1.
131. 298 N.E.2d 519 (Ohio 1973).
134. 539 N.E.2d 608 (Ohio 1989).
"specifically engaged" by the claimant to gather the information.\textsuperscript{136} The Board rejected the commissioner's argument explaining that the commissioner's emphasis on the "specifically engaged" language was misplaced.\textsuperscript{137} Applying the true object test, the Board concluded that the transaction was tax-exempt because the report "functioned merely to aid in the communication of the results of the Neilsen study and statistical research" and was "merely an inconsequential element" of the overall transaction.\textsuperscript{138}

As discussed in Part III.C, commentators have expressed concern over the administrability of the true object test in distinguishing between services and tangible property for purposes of the sales tax. Accordingly, these scholars advocate imposing the tax on both goods \textit{and} services, thereby eliminating the need for the distinction. However, given the Florida and Massachusetts experiences previously discussed, this author does not go so far, although an all-inclusive approach to taxation of services is doctrinally supportable.

Expansion of sales tax to less than all services will not eliminate the true object test entirely. However, taxation of information services should simplify the true object test even if only by eliminating the sheer volume of instances in which it is applied. Despite disparate application of the test, it still has its usefulness when properly applied. For our purposes, the focus of the true object test will, in all likelihood, merely shift from a service versus tangible or intangible property inquiry to an exempt service versus taxable information service inquiry.

\textbf{V. THE PROPOSAL: BROAD SCOPE TAXATION OF INFORMATION SERVICES}

The following section suggests a basic tax structure applying sales tax to information services. Due to significant inroads made by states with tax systems currently in effect, such as the Ohio regime already mentioned, a state devoted to implementing a system can draw heavily from those existing statutory and regulatory schemes. Texas, the District of Columbia, Connecticut, and Pennsylvania also have relatively advanced taxing regimes affecting information services. Texas imposes a tax on certain services, \textsuperscript{136} Id.
\textsuperscript{137} Id. at *7.
\textsuperscript{138} Id. at *11.
including "information services." By regulation, Texas defines "information services" as:

Furnishing general or specialized news or other current information including financial information, by printed, mimeographic, electronic, or electrical transmission, or by using wires, cable, radio waves, microwaves, satellites, fiber optics, or any other method currently in existence or which may be devised in the future, and electronic data retrieval or research.

The District of Columbia taxes "data processing and information services" and adopts the Texas definition of "information services" essentially verbatim. The District of Columbia statute also incorporates provisions of the Texas regulations listing specific services subject to the tax. Connecticut taxes "computer and data processing services." Connecticut further defines "computer and data processing" in part as "providing computer time, storing and filing of information, [and] retrieving or providing access to information . . . ." Pennsylvania has indicated that its revenue system taxes information retrieval services.

The following proposal adopts the Texas definition of an "information service" and suggests specific ideas for "unbundling," such as separately stating charges outside the definition of an information service, to prevent these other items from becoming part of the tax base. The proposal also suggests a rule for distinguishing content-based information services from telecommunications transmission services, and suggests guidelines for determining the location of an information highway sale using the concept of billing addresses.

144. CONN. AGENCIES REGS. § 12-426-27(b)(1) (1994). To observe how Connecticut has applied its tax on information services, see Hartford Parkview Assocs. v. Groppo, 558 A.2d 993 (Conn. 1989); Cummings & Lockwood v. Commissioner of Revenue Servs., No. CV-92-0510759-S, Conn. Super. LEXIS 1798 (Conn. Super. Ct. July 20, 1994) (true object of the transactions was access to the multitude of data found in certain information services).
A. The Statute

PROPOSED MODEL STATUTE APPLYING THE SALES AND USE TAX TO INFORMATION SERVICES

Section 1:
A sales and use tax of X percent is hereby imposed on all taxable services. Taxable services include information services, [insert any additional enumerated services the jurisdiction desires to tax].

Section 2:
“Information services” are defined as:
Furnishing general, specialized, or current information or data, including financial information, by printed, mimeographic, electronic, or electrical transmission, or by using wires, cable, radio waves, microwaves, satellites, fiber optics, or any other method currently in existence or that may be devised in the future, and electronic database research.

Section 3:
Where the provider furnishes the information service by electronic delivery using telecommunications, the tax on information services described in section 2 shall not be applied to the amount, if any, charged to the customer for telecommunications used in the transmission of the information service if such charges are separately stated and are reasonable. The reasonableness of the telecommunications charge shall be determined by considering the prevailing pricing practice in the industry for the type of telecommunications used, and any other factors which are shown by the taxpayer to be relevant to the inquiry. If the telecommunications charge is not stated separately, the entire consideration paid for the service shall be presumed to be attributable to the sale of the taxable information service.

Section 4: Exemptions From the Tax.
[Some suggested exemptions include provisions for sales to governmental units, educational institutions, nonprofit organizations, sales for resale, and occasional sales.]

146. Other services taxed by states include: interstate telephone; personal services such as barber, dating, and laundry; telecommunications services; and admissions and amusements. See generally Federation of Tax Administrators, Sales Taxation of Services: An Update, 6 STATE TAX NOTES 1649 (1994).
147. TEX. ADMIN. CODE tit. 34, § 3.342 (1996).
B. Analysis of the Statute

Section 1 is designed to allow for taxation of any enumerated service. This allows for the expansion of the sales tax to any other service as the legislature deems fit. Section 2 defines the object of the tax—an “information service,” and Section 3 sets forth the measure of the tax. The measure only reaches charges over and above the consideration included in the price of the information service representing a charge for the telecommunications utilized to convey the data or information. Notably, the statute will reach sales using tangible means of delivery, as well as telecommunications-based electronic delivery. The following proposed regulation provides a more precise and detailed description of the taxable information products within reach of the tax.

Proposed Regulation 1-1
.01 Measure of the Tax. The measure of the tax on information services shall be any charge imposed by an information service provider on the consumer which is attributable to the information service. For example, charges for information services shall include, but are not limited to: (1) any amounts related to subscription fees for access to information networks, databases, or other computer equipment for purposes of sending and receiving data or information; (2) any amounts charged measured by the time the consumer is accessing or sending and receiving data or information, using the service provider’s database or computer equipment; (3) any amounts charged for information services whereby the customer receives the permanent or temporary use of (a) canned software (as defined under state law), (b) films or movies in digital or other transmission forms, (c) all textual materials, including books, reports, magazines, newspapers, or (d) other electronic information resources such as online information and data resources.

The tax is intended to reach all telecommunications-based information services in whatever form, whether digital, analog, or otherwise. Accordingly, all charges attributable to the sale of an information service shall be included in the tax base unless it is a separately stated telecommunications charge under section 3 of the act, or otherwise specifically exempted from tax under section 4 of the act.
Section 3 provides for "unbundling" the telecommunications charges from the charge attributable to the information service. If the seller fails to state the charges separately in the invoice, or if the taxpayer consumer fails to request that they be separately stated, the entire charge is presumed to be attributable to the taxable information service. "Unbundling" the telecommunications charge is allowed because telecommunications are not subject to the tax. The presumption that the entire consideration paid is subject to the tax unless separately stated facilitates administration and assures taxpayers that separately stated charges will, if "reasonable," generally be respected.

Section 4 reminds state administrators that exemptions from the sales tax are important and justifiable as a matter of economic and social policy. For example, typical sales tax provisions include exemptions for governmental units, educational institutions, nonprofit organizations, sales for resale, occasional sales, and other exemptions designed to support basic social policy goals. The scope of exemptions from the sales tax is, of course, a matter for legislative determination by the particular state.

A state should consider separately whether it wants to impose sales tax on "automatic data processing" or "computer services." The definitions of a computer service or automatic data processing service may be drawn from the definition in the Ohio provisions set forth above.\(^{148}\) Expanding the tax to those items would bring a large number of computer-based service transactions within the scope of the tax. Development of relevant rules would be relatively easy because they can be modeled after the detailed Ohio and Texas regulations.

C. Content v. Transmission: Distinguishing "Information Services" from "Telecommunications Services"

The distinction between telecommunications services and information services is important to the proposed taxing scheme because of the inevitable blurring of the lines between information services and their means of conveyance—telecommunications.\(^{149}\) As most telecommunications companies will agree, information services and telecommunications, although closely related, are two distinct industries

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149. See generally R. Scot Grierson, California FTB Symposium on Telecommunications Apportionment Raises Many Questions, 8 STATE TAX NOTES 1394, 1395 (1995) [hereinafter Grierson, California FTB Symposium]; Grierson, ABA Tax Section, supra note 3.
with very different products and customers. Simply put, "telecommunications" encompasses the medium used to convey the signals, while "information services" constitutes the information or data being conveyed.  

Recent indications from practitioners suggest that states are arguing that their sales tax rules governing telecommunications should apply to information services utilizing telecommunications for delivery. At a February 20, 1995, conference, a GE Capital Corporation  \(^{5}\) ("GE") representative responded to this trend by conceding "that there is an unclear line between telecommunications and information services."  \(^{5}\) However, the GE representative defended the need for a distinction between the two by arguing that GE, as a provider of information services, is "not a telecommunications company," but rather, "telecommunications support [GE's] business."  \(^{5}\) The question of whether a line should be drawn between information services and telecommunications and information services is becoming an increasingly important issue.

The information services industry infrastructure described in Part II is very new and highly technical, making it difficult for most laypersons to understand. With the numerous new pure telecommunications services being offered, state administrators face a truly confusing melee. Moreover, because information services and their mode of transmission (telecommunications) are linked in every imaginable information highway transaction, a debate over their identities is inevitable. The statutory scheme proposed here distinguishes between the two industries based on transmission and content, with transmission-based services treated as telecommunications and content-based services treated as information services.  

The following proposed regulation suggests a scheme defining "telecommunications" not subject to the tax as encompassing "ordinary"

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150. See Grierson, *ABA Tax Section*, supra note 3 (describing the significance of the distinction between "information services" and "telecommunications").


153. Id.

154. Members of the telecommunications industry recently advocated separating transmission from content suggesting that it "can be critical to determining who must pay, collect and remit the particular tax." Information Highway State and Local Tax Study Group, *Supporting the Information Highway: A Framework for State and Local Taxation of Telecommunications and Information Services*, 8 *STATE TAX NOTES* 57, 63 (1995).
telecommunications services, as well as certain "enhanced" telecommunications services "directly linked" to the transmission of signals. "Ordinary" telecommunications services include basic telephone services and other services listed in Proposed Regulation 1-1.02(a) below. "Enhanced" services encompass any specialized form of telecommunications beyond basic service. To illustrate the distinction, consider the following proposed regulation and its attendant examples.

Proposed Regulation 1-1
.02 Distinguishing Telecommunications Services From Information Services.

a) Section 2 of the act generally defines the information services that are subject to the tax. As defined, the tax on information services does not extend to "telecommunications services." For purposes of this act, "telecommunications services" are defined as those services directly linked to the transmission, conveyance, or transfer of signals using telephone, telegraph, cable, cellular, fiber optic, radio, broadcast, and all other telecommunications pathways. A telecommunications service involves the medium used but does not include the portion of the service relating to content. Stated another way, "telecommunications" is the conveyance or transmission of signals without regard to content.

b) "Enhanced telecommunications services"

The state recognizes that it may be difficult to distinguish some "enhanced telecommunications" services from information services subject to the tax. Therefore, the following test shall be applied in generally distinguishing information services from "enhanced telecommunications." In distinguishing between an "enhanced telecommunications service" and a taxable information service, the first inquiry is whether the service is directly related to the transmission, transfer, or conveyance of signals using telephone, telegraph, cable, cellular, fiber optic, radio, broadcast and all other telecommunications pathways. This includes services involving the conveyance or transmission of signals without regard to content.

The second test deems that all telecommunications transmission services possess a separate taxable "information

155. Note that some states may have previously enacted legislation taxing traditional and enhanced telecommunications services.
service" component if the telecommunications service provider adds some value to the transmission that is substantially unrelated to the conveyance or transmission of signals. A service component substantially relates to transmission if it adds to or affects the content of the transmission (other than to augment the quality of the transmission). This includes the telecommunications service provider furnishing access to original information or data proprietary to the telecommunications service provider or a third party, or adding information or data to the signal being transmitted, or receiving data or information and studying, analyzing, interpreting, or adjusting the data or information in exchange for consideration. The following example illustrates the application of these principles.

Example 1:
Telecommunications provider X has recently introduced a new telephone mail service utilizing basic telephone lines. The service is capable of sending pre-recorded messages to other telephone mailboxes, and the information can be retrieved by touching a few numbers on the recipient's telephone after the recipient receives a signal after picking up the receiver. The service sends a message by phone but does not make the phone ring. This allows people to listen to their messages at their convenience upon receiving a signal that a message has been received. The key feature of this service is that a person can send the same message to up to seventy-five telephone mailboxes in one call, all using basic telephone service. X charges twenty-five cents per telephone mailbox for this message service.

The service is a nontaxable enhanced telecommunications service. Because the service directly relates to providing a telecommunications service—the transmission of signals—and the provider does not affect the content of the information provided by the consumer or provide access to original information, the telephone mail service is not taxable as an information service.

To illustrate further, consider the following service recently announced by Kodak. According to a recent report, Eastman Kodak has negotiated with AT&T and Sprint about joining forces to convey high-quality images
over telephone lines using digital transmission.\textsuperscript{156} The technology provided by Kodak will be used by the telecommunication companies to upgrade their equipment so that images, including photographs and medical x-rays, can be accessed and transmitted almost instantly by computer.\textsuperscript{157} Partnership with long distance telephone carriers, however, is only part of the picture.\textsuperscript{158} Kodak is also pursuing this technology as a means of providing images on demand.\textsuperscript{159} Kodak plans to provide its clients, such as health care institutions, publishing houses, and ad agencies, instant access to a database of digitally stored images.\textsuperscript{160}

If the definitional distinction between telecommunications and information services is applied to Kodak's proposed service, the result is two separate services. The images-on-demand service permits consumers to access and retrieve digitally stored information from Kodak's network computer. This service clearly qualifies as an information service taxable under the proposed regime because it is the information conveyed that is sought by the purchaser. On the other hand, the service performed by the long distance carrier is the act of transmission which is subject to taxation, if at all, under state laws affecting telecommunications. Here, the service involves the conveyance of enhanced digital signals that produce high-quality images. Thus, furnishing access to the digital information that comprises the images involves "furnishing data" within the scope of the tax, while the telecommunications technology (the software enhanced digital transmission) allowing for rapid transfer of high-quality images is a telecommunications service.

\textit{D. Situsing the Sale: "Billing Address"}

The incidence of the tax proposed here would fall on the sale or use within the state of taxable information services.\textsuperscript{161} This raises the question: Where does the sale occur? In dealing with tangible personal property, the sale is deemed to occur in the state in which the property is located when the last act constituting the sale occurs.\textsuperscript{162} However, sales

\textsuperscript{157} \textit{Id.}
\textsuperscript{158} \textit{Id.}
\textsuperscript{159} \textit{Id.}
\textsuperscript{160} \textit{Id.}
\textsuperscript{161} A state's sales and use taxes are applied only to sales within the state or on the beneficial use of a good or service within the state.
\textsuperscript{162} See, e.g., CAL. REV. & TAX. CODE § 6016.5 (West 1996).
on the information highway can take place anywhere a person has access to a computer with a modem or any of the other recently announced access vehicles.\textsuperscript{163} It is obvious that locating the sale of an information service is far more difficult than locating a sale of tangible personal property, or, for that matter, most garden-variety services that involve the performance of labor that can be physically located. Several companies were recently surveyed about where an Internet transaction takes place. The response was often "in cyberspace."\textsuperscript{164}

Consider the method for locating the sale of a service adopted under Massachusetts's short-lived sales tax on services.\textsuperscript{165} Under Massachusetts' scheme, a sale would be deemed to occur in Massachusetts if a greater proportion of the service occurred in the commonwealth than in any other state, based on costs of performance.\textsuperscript{166} Services not directly related to tangible personal property or real property were presumed to be used within Massachusetts if the services were performed for an individual within Massachusetts or for businesses "engaged . . . in business primarily within the commonwealth or whose principal place of business is within the commonwealth."\textsuperscript{167}

It would be unrealistic to apply the Massachusetts rule to cyberspace transactions for the simple reason that the typical information service provider's mainframes and data collection personnel will be located predominantly in one state.\textsuperscript{168} Accordingly, the service provider's greater cost of performance will deem all sales to occur in the service provider's home state and would fail to reflect accurately the location where delivery of the services occurs and the benefit of the service is realized.

While the Massachusetts statute suggests an option for situsing information highway sales, the Supreme Court decision in \textit{Goldberg v.}
Sweet provides a more workable framework for determining the location of a sale of information services. In Goldberg, the Court considered a Commerce Clause challenge to a tax imposed on an interstate telephone call. The Illinois statute imposed a five percent tax on the gross charges of an interstate or intrastate telephone call that originated or terminated in the state and was charged to an in-state service address or billing address. After considering the constitutionality of the tax under the fair apportionment prong of the Complete Auto test, the Court upheld the tax, concluding that it was internally consistent because it was structured so that if every state imposed an identical tax, it would not result in multiple taxation, and it was externally consistent because the tax operated like a sales tax and reasonably reflected the way consumers purchase interstate calls. While Goldberg was significant because it applied the Complete Auto test to telecommunications, the approval of the concept of billing address for situsing a sale of a telecommunications service for purposes of the Illinois tax significantly aids in locating the sale of an information service.

For administrative purposes, a statutory presumption that a sale occurs in the state of the individual consumer’s billing address (i.e., state of residence) and in the state of a corporation’s billing address (i.e., principal place of business or state of incorporation) is an option, supported by the Goldberg decision, that states should explore when situsing the information service sale for purposes of constructing a taxing system. The Goldberg concept of “billing address” should be adopted as the presumed location of an information highway sale as it will generally encompass an individual taxpayer’s residence or a corporate taxpayer’s principal place of business and, more importantly, will generally reflect the location at which the benefit of the service is realized. For typical commercial online access services, as well as Internet and direct broadcast satellite sales, “billing address” fairly depicts where an information highway sale occurs.

169. 488 U.S. 252 (1989) (upholding an excise tax on an interstate telephone call originating or terminating in the taxing state provided the charge was billed or paid through an in-state service or “billing address”).
170. Id.
171. “Service address” is the address where the telephone equipment is located and to which the telephone number is assigned. Id. at 257.
172. Id. at 256.
173. Complete Auto Transit v. Brady, 430 U.S. 274 (1977). To withstand a Commerce Clause challenge, a state tax must: (1) apply to an activity with a substantial nexus with the taxing state; (2) be fairly apportioned; (3) not discriminate against interstate commerce; and (4) be fairly related to the services provided by the state. Id. at 279.
Goldberg situsing approach is quite practical and significantly decreases the administrative burden for information service providers who, under a different situsing system, might otherwise be required to determine the exact location of every consumer at the time they access the service.\footnote{175}{In most cases, determining the actual location of a cyberspace purchaser would probably be impossible.}

The Supreme Court’s decision in \textit{Oklahoma Tax Commission v. Jefferson Lines} \footnote{176}{115 S. Ct. 1331 (1995).} revisited the Goldberg principle when it addressed the concept of a taxable “sale” and stated that the “analysis should not lose touch with the common understanding of a sale.”\footnote{177}{\textit{Id.} at 1341 (citing \textit{Goldberg}, 488 U.S. at 262).} No one can doubt that for most online service subscribers, whether business or individual, the sale is understood to occur upon accessing the service from one’s home or place of business. Thus, even though the service may involve an interstate component, a presumption that a service occurs in the billing address state conforms to the consumer’s “common understanding” of the location of the sale.\footnote{178}{See generally \textit{Goldberg}, 488 U.S. at 262.}

Situsing on the basis of one’s billing address, however, is subject to manipulation. To avoid the tax, a purchaser might designate an out-of-state post office box, or the address of an out-of-state corporate subsidiary or branch, as the billing address even though the benefit of the service is being realized in the taxing state. From a practical perspective, it is more likely that corporate purchasers with multiple offices would manipulate their billing addresses, given their relative sophistication. As a fallback measure, however, a state could implement a secondary catch-all rule providing that if a billing address is shown to be in a state different from the state where the benefit of the service is being received, a corporation’s principal place of business becomes the designated billing address.

To be fair, and to prevent the possibility of multiple taxation, the state’s taxing structure should permit taxpayers to demonstrate that the benefit of the information service is being realized out-of-state, even though the charge is billed to an in-state address. Under this rule, corporate taxpayers, for example, would be permitted to demonstrate that the $10,000 per month their companies spend on information services is used in several branches both within and outside the state, and allocation between branches according to use would be permitted.\footnote{179}{Texas, for example, permits taxpayers to identify and allocate the benefit of an information service to its in-state and out-of-state concerns using “any reasonable method for allocation which is supported by business records.” \textit{Tex. Admin. Code} tit. 34, § 3.342(h) (1996).}
Another problem raised by billing address is that, at least for individual consumers, a billing address may not be readily available. In the typical Direct Broadcast Satellite or commercial online service transaction, the seller will have the purchaser’s billing information. Internet sales, however, raise a different problem due to security concerns about credit card information and the fact that often the seller has no idea who the purchaser is. “Cybercash” is one of a number of new companies designed to serve as third-party intermediaries who provide encrypted codes for Internet sales, thereby avoiding the risk that an Internet user will inadvertently obtain a purchasers’ credit card information. Cybercash receives information from the buyer and seller and simply validates the transaction for both parties. The Internet seller never sees the credit card number. In this instance, information service providers may argue that the billing address is impossible to determine because of the third-party firewall placed between them and the Internet purchaser. To obtain billing address information in an Internet transaction (and for information services using other types of telecommunications), the state could impose a duty on the seller to acquire the billing address information through the third-party intermediary. Third-party intermediaries are in a perfect position to obtain billing address information without compromising security because the credit card number is never divulged.

Sellers understandably will balk at this type of requirement by claiming it is administratively cumbersome because it requires them to coordinate tax collection with the billing intermediary. However, this type of arrangement is not uncommon. The typical 900 number service, for example, uses the telephone company as a third-party billing intermediary, just as Internet sellers will use Cybercash. The telephone company bills the 900 service customer by including the charge in the phone bill. Under such a requirement, the seller would contract with the intermediary for collection of the charge, the intermediary would determine the state according to billing address, and the appropriate sales tax would be collected, passed on to the seller, and remitted by the seller to the state.

180. See Murphy, supra note 164, at 121. “With 20 million users, Cybercash is considered a global service.” Id.
181. Id.
182. New York serves as an extreme example of this approach by imposing tax collection and payment obligation directly on the party billing on behalf of the seller of information or entertainment services. N.Y. TAX LAW § 1101(b)(8)(ii)(B) (McKinney 1996). The proposed rule would only require the seller to obtain the billing address information without putting the burden of collection and remittance on the billing party.
Ultimately, Goldberg's theory for situsing a tax on telecommunications is the most efficient and practical means for situsing information superhighway transactions because of the difficulty in locating a sale in cyberspace. As the following section discusses, Goldberg may also hold the key to solving the elusive Commerce Clause "nexus" questions for commerce conducted over the information superhighway.

VI. CONSTITUTIONAL LIMITATIONS: APPLYING TRADITIONAL "NEXUS" STANDARDS TO OUT-OF-STATE INFORMATION SERVICE PROVIDERS

A. The Issue

A use tax complements the sales tax insofar as it reaches sales occurring outside state borders where tax cannot constitutionally be imposed. The incidence of the use tax falls on the use, consumption, or storage of the good within the taxing jurisdiction. The use tax puts in-state and out-of-state sellers on equal terms by neutralizing the in-state consumer's incentive to purchase the same good out-of-state to avoid the sales tax and thus pay a lesser price. As a practical matter, it is impossible for states to efficiently identify purchasers who buy out-of-state goods for in-state use. Therefore, states must rely on voluntary compliance or impose a duty on out-of-state sellers to collect the use tax and remit it to the state. However, to impose a use tax collection duty, states must first satisfy standards prescribed by the Commerce Clause of the United States Constitution.

Article I, section 8 of the United States Constitution authorizes the Congress to "regulate commerce with foreign nations, and among the several States ..." This enumerated power has a "negative sweep" that "prohibits certain state actions that interfere with interstate commerce." At one point, the Supreme Court held that the Commerce Clause entirely prohibited states from taxing an interstate transaction.

183. McLeod v. J.E. Dilworth Co., 322 U.S. 327 (1944) (holding that a sales tax could not be imposed where title passed before tangible goods and before shipment into the state because the sale was already complete).
184. See, e.g., K.Y. REV. STAT. ANN. § 139.310 (Baldwin 1990); N.LV. REV. STAT. ANN. § 372.185 (Michie 1993).
185. U.S. CONST. art. I, § 8, cl. 3.
That concept experienced periods of general decline\textsuperscript{188} and revival,\textsuperscript{189} but met its most recent demise in \textit{Complete Auto Transit, Inc. v. Brady}.\textsuperscript{190} In acknowledging states' rights to impose a direct tax on interstate commerce, \textit{Complete Auto} established a four-prong test to determine whether a state tax violates the Commerce Clause.\textsuperscript{191} To withstand a Commerce Clause challenge, the state tax must: (1) apply to an activity with a substantial nexus with the taxing state; (2) be fairly apportioned; (3) not discriminate against interstate commerce; and (4) be fairly related to the services provided by the state.\textsuperscript{192}

The "substantial nexus" prong of the test was most recently applied to strike down a state law requiring out-of-state mail-order sellers to collect use tax on in-state sales in \textit{Quill Corp. v. North Dakota}.\textsuperscript{193} \textit{Quill} revived the "physical presence" standard which must be met before a state can impose a duty on an out-of-state mail-order seller to collect use tax on purchases from in-state customers.\textsuperscript{194}

The fundamental issue created by the proposed tax is when and how an information provider, with potentially all of its mainframe computers, offices, and data collection and entry activities located solely in one state, might acquire "substantial nexus"\textsuperscript{195} with the taxing state in which its product is used. In the typical information highway scenario involving direct broadcast satellite ("DBS"), the Internet, or commercial online information services, the information provider may have no physical presence in the state and thus arguably cannot be charged with the responsibility of tax collection. In the case of a service using DBS technology, as previously discussed,\textsuperscript{196} the signal is beamed directly to the customer's home-based dish which has even less contact with the taxing jurisdiction than the online provider whose signal may pass through an in-

\begin{itemize}
  \item \textsuperscript{188} Sanford v. Poe, 69 F. 546 (6th Cir. 1895), aff'd sub nom., Adams Express Co. v. Ohio State Auditor, 165 U.S. 194, 220 (1897) (distinguishing between taxes which are direct and indirect burdens on interstate commerce); Western Live Stock v. Bureau of Revenue, 303 U.S. 250, 256-58 (1938) (rejecting formal categorical analysis and adopting a "risk of multiple taxation doctrine").
  \item \textsuperscript{189} See, e.g., Freeman v. Hewit, 329 U.S. 249, 256 (1946) (adopting a formal distinction between "direct" and "indirect" taxation of interstate commerce, disallowing the former).
  \item \textsuperscript{190} 430 U.S. 274 (1976).
  \item \textsuperscript{191} \textit{Id.}
  \item \textsuperscript{192} \textit{Id.} at 279.
  \item \textsuperscript{193} 504 U.S. 290, 315 n.8 (1992).
  \item \textsuperscript{194} \textit{Id.} at 317.
  \item \textsuperscript{195} Recognizing that Due Process requirements will be met if the more exacting Commerce Clause nexus standard is satisfied, this discussion focuses only on the latter.
  \item \textsuperscript{196} See supra part II.B.6 for a brief description of Direct Broadcast Satellite technology.
\end{itemize}
state computer system and local telephone lines. These examples generally illustrate the difficulty in applying the physical presence standard to telecommunications-based information highway sales. Simply put, the problem is that technology has outpaced the standard.

Information service providers should be forewarned that states will aggressively pursue alternative arguments in order to acquire a nexus with out-of-state sellers, despite the apparent "safe harbor" provided under the physical presence standard. States will argue that given changes in technology and the imminent social and economic changes produced by the information highway, it is unrealistic to apply the physical presence rule to information highway transactions.

Before turning to existing Commerce Clause standards and analysis, it is helpful to consider an example describing a typical information highway transaction. This example focuses on transactions occurring through the major commercial online providers—America Online, GEnie, Prodigy, and CompuServe—which together currently serve over six million subscribers.\(^\text{197}\)

The sale and delivery of an information service through a "commercial gateway" (as the major online information sellers are often called) typically occurs as follows: Consumer logs on to his/her home computer and dials up the service through a telecommunications network and a proprietary interface (effectively software) supplied by the commercial gateway service. The computer modem calls the service and initiates identification and transmission protocols, with the modem alternatively sending and receiving information. After Consumer's password is verified, he/she "enters" the service. At this point, the charges for the service begin. Such charges usually include an initial subscription fee and a by-the-minute or hourly charge. During this transmission, Consumer has accessed the gateway service's local node.\(^\text{198}\)

The node, which recognizes the transmission and in this case sends it to the commercial gateway's mainframe computer, is likely to be physically present in the taxing jurisdiction, as is the telecommunications network the service uses. Consumer then accesses a broad variety of information services, including News, Sports, Weather, Travel, Entertainment, and Games. In some instances, the gateway service will provide the

\(^{197}\) Comparison of Online Service Features, PC GUIDE TO GOING ONLINE, June 1995, at 44-45 (providing a table breaking down major online services, their subscribers, and fees).

\(^{198}\) A node operates like a modem and routes the transmissions between the server and the consumer in computer readable form. The consumer must first log onto the commercial online service provider's local node before it can access the network. Resnick, supra, note 19, at 24-25.
information; in others, the commercial gateway acts as a conduit through which Consumer accesses third-party information services or the Internet.199

With this in mind, this Article now turns to the Commerce Clause analysis of information highway transactions that will undoubtedly trouble some information service providers.


The physical presence requirement for "substantial nexus" under the Commerce Clause was first expressed in National Bellas Hess, Inc. v. Department of Revenue of Illinois200 and reaffirmed in Quill Corp. v. North Dakota.201 National Bellas Hess held that the Due Process and Commerce Clauses of the Constitution prohibit a state from imposing a use tax collection and payment duty on a "seller whose only connection with customers in the State is by common carrier or the United States mail."202

Over twenty years later, in Quill, the state of North Dakota argued that it rightfully imposed a use tax collection duty on an out-of-state seller whose only contact with the state was by mail or common carrier and in-state advertisements.203 The state court found that Supreme Court jurisprudence had since rendered National Bellas Hess' bright-line rule obsolete,204 and that the Supreme Court's use of a flexible method of inquiry focusing on the "practical effect of [the] challenged tax" indicated that the Commerce Clause no longer required meeting a strict physical presence standard.205 The state court further found that the "substantial nexus" inquiry of the four-prong Complete Auto test required meeting only the "minimal connection" requirement of the Due Process Clause.206

As its first task, the Supreme Court declared that Due Process and Commerce Clause remained two distinct lines of inquiry, with Due Process requiring "some definite link, some minimum connection, between a state and the person, property or transacttion it seeks to tax."207 Although noting that "interstate commerce may be required to pay its fair share of

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199. See, e.g., id. at 23-27.
202. 386 U.S. at 758.
203. 504 U.S. at 302.
204. Id. at 303 (citing Quill, 470 N.W.2d 203, 208 (1991)).
205. Id. at 304 (quoting Mobil Oil Corp. v. Commissioner of Taxes of Vt., 445 U.S. 425, 443 (1980)).
206. Id. (citing Quill, 470 N.W.2d at 216).
207. Id. at 306 (quoting Miller Bros. Co. v. Maryland, 347 U.S. 340, 344-45 (1954)).
state taxes," the Court next held that the National Bellas Hess standard was not rendered obsolete, as the standard applied to mail-order sellers. The Supreme Court rejected the state court's determination and ruled that the substantial nexus prong of the Complete Auto test was not met by the mail-order seller's contact with the taxing state only through common carriers and the mail.

Under the physical presence standard, an information service seller with employees, equipment, or other property in the state will have a sufficient nexus to be subject to the duty to collect use tax. In the simplest case, an information seller will have nexus wherever property is owned, and wherever offices, employees, plant, and equipment are located. Because all these items potentially are located in one state, states will pursue alternative nexus theories to impose a use tax collection duty on out-of-state information service providers.

C. Agency: "The Hook By Which They Pull You In"

1. The Standard

In National Geographic Society v. California Board of Equalization, the Supreme Court addressed whether the National Geographic Society, an out-of-state mail-order seller with two offices in California conducting business unrelated to its mail-order line, could be held responsible for collection of use tax on its mail-order sales delivered into the state by common carrier. The issue, as stated by the Court, was "whether the Society's activities at the offices in California provided sufficient nexus between the out-of-state seller and the State—as required by the Due Process Clause . . . and the Commerce Clause—to support the imposition upon the Society of a use-tax-collection liability."

The Society argued that its contacts with California customers were related only to its out-of-state mail-order sales by means of common carrier

208. Quill, 504 U.S. at 317.
209. Id. at 315 n.8.
210. A harbinger of things to come, Joe Huddleston, former Tennessee Director of Revenue, warned information highway sellers at the American Bar Association Tax Section's 1995 midyear meeting in Los Angeles, to closely scrutinize their relationships with a taxing state, explaining that agency relationships "may well be the hook [by] which the jurisdictions will want to pull you in." Grierson, ABA Tax Section, supra note 3, at 552.
212. Id. at 554 (footnotes omitted).
or mail,\textsuperscript{213} and its activities were insufficient to establish nexus under the rule set forth in \textit{National Bellas Hess}.\textsuperscript{214} The Court disagreed with this contention, emphasizing that:

the relevant constitutional test to establish the requisite nexus for requiring an out-of-state seller to collect and pay the use tax is not whether the duty to collect the use tax relates to the seller's activities carried on within the State, but simply whether the facts demonstrate 'some definite link, some minimum connection, between [the State and] the \textit{person} . . . it seeks to tax.'\textsuperscript{215}

The Court ultimately held that "the Society's continuous presence in California in offices that solicit advertising for its magazine provide[d] a sufficient nexus to justify that State's imposition . . . of the duty to act as collector of the use tax."\textsuperscript{216} In arriving at its decision, the Court suggested that it would not find substantial nexus to exist merely by way of a seller's "slightest presence" in the taxing jurisdiction.\textsuperscript{217} The Court explained that the Society's in-state presence unrelated to mail-order activities justified finding nexus was supported by cases where nexus "was held to be shown . . . by the seller's local agents working in the taxing State, . . . and in cases of maintenance in the State of local retail store outlets by out-of-state mail-order sellers."\textsuperscript{218}

Among the agency cases cited in \textit{National Geographic} were \textit{Scripto, Inc. v. Carson},\textsuperscript{219} \textit{Standard Pressed Steel v. Department of Revenue of Washington},\textsuperscript{220} \textit{Felt & Tarrant Manufacturing Co. v. Gallagher},\textsuperscript{221} and \textit{General Trading Co. v. State Tax Commission of Iowa}.\textsuperscript{222} These cases provide the substantive backbone for the agency/representative nexus doctrine. In \textit{Scripto}, the Court found that a nexus existed where a Georgia-based company had "ten wholesalers, jobbers or 'salesmen' conducting

\textsuperscript{213} The Society's two in-state offices were primarily engaged in soliciting advertising for its magazine.
\textsuperscript{214} \textit{National Geographic}, 430 U.S. at 560 (citing \textit{National Bellas Hess v. Dep't of Revenue}, 386 U.S. 753 (1967)).
\textsuperscript{216} \textit{Id.} at 562.
\textsuperscript{217} \textit{Id.} at 556.
\textsuperscript{218} \textit{Id.} at 556-57 (citing \textit{Nelson v. Sears, Roebuck & Co.}, 312 U.S. 359 (1941); \textit{Nelson v. Montgomery Ward}, 312 U.S. 373 (1941)).
\textsuperscript{219} 362 U.S. 207 (1960).
\textsuperscript{220} 419 U.S. 560 (1975).
\textsuperscript{221} 306 U.S. 62 (1939).
\textsuperscript{222} 322 U.S. 355 (1944).
continuous local solicitation" in the taxing jurisdiction. In *Standard Pressed Steel*, the Court upheld a tax on an out-of-state company's gross receipts from sales to an in-state customer where the seller maintained an agent in the taxing state in the form of a single employee. In so holding, the Court concluded that the existence of a single employee in the state established a sufficient relation to activities within the state producing the gross receipts as to support imposition of the tax. In *Felt & Tarrant*, the Court was persuaded that an out-of-state seller using exclusive distributorship agreements with persons who maintained an in-state place of business could be required to collect use tax. Finally, in *General Trading*, the Court determined that an out-of-state seller using traveling salespersons to conduct business in a state has a sufficient use tax nexus for the state to require collection of the tax.

Significantly, the *National Geographic* Court suggested that the type of tax, i.e., use tax as opposed to gross receipts tax, lessened the quantum of nexus a state was required to show because "[t]he out-of-state seller becomes liable... only by failing or refusing to collect" the tax from the in-state customer, and "the sole burden imposed upon the out-of-state seller... is the administrative one of collecting it."

On June 23, 1987, the Supreme Court decided *Tyler Pipe Industries v. Washington State Department of Revenue* and held that the existence of a single sales representative in the taxing state, without regard to status as agent or independent contractor, adequately supports jurisdiction to tax wholesale sales to in-state customers, thereby reaffirming the agency/representative doctrine set forth in *National Geographic, Standard Pressed Steel*, and *Scripto*.

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223. *Scripto*, 362 U.S. at 211. In *Scripto*, a heavily agency-oriented decision, the Court rejected the seller's attempts to distinguish the in-state solicitors as independent contractors, stating that "the contractual tagging of the salesman as 'independent' neither results in changing his local function of solicitation nor bears upon its effectiveness in securing a substantial flow of goods into Florida." *Id.*

224. 419 U.S. at 561-62.
225. *Id.*
226. 306 U.S. at 68.
227. 322 U.S. at 338.
228. 430 U.S. at 558.
230. *Id.* at 233.
2. The Analysis

Understandably, states have adopted a broad reading of what constitutes "nexus" and appear to impose a use tax collection duty on a wide range of contacts that push the outer limits of nexus jurisprudence. Typically, in addition to certain specifically enumerated contacts, state statutes include a catch-all provision imposing a use tax collection duty on all sellers to the extent permitted by the Constitution.

While it is difficult to predict the viability of all the provisions of these statutes, the states' trump card lies in the above-described line of cases. The holdings in Scripto, Standard Pressed Steel, Tyler Pipe, and the cases cited therein, illustrate the ease by which an out-of-state seller may acquire nexus by virtue of agency/representative relationships within the taxing state.

a. Commercial Online Services

States can apply the express rule of these agency/representative or "market maintenance" cases to persuade courts and administrative tribunals to find substantial nexus for commercial online service providers. Indeed, most information service sellers will almost always require such a conclusion. The argument is that telecommunications providers essentially act as in-state agents or distributors for information service sellers. Thus, in-state physical presence of the telecommunications service sellers create nexus for information service providers.

231. For example, Ohio statutes declare that nexus exists where the seller licenses software for use in the state, the seller's purchasing agent enters the state to buy tangible goods, or advertises in the state using local media. OHIO REV. CODE ANN. §§ 5739.01, 5739.17 (Anderson 1996). Kansas statutes conclude that nexus exists where the seller simply mails catalogs to in-state consumers, rents customer lists to in-state vendors, licenses software for in-state use, or the seller advertises using local media, national media, or satellite broadcast. KAN. STAT. ANN. § 79-3602 (1989). See generally Vol. II, MULTISTATE CORP. TAX GUIDE, at II-147 to II-163 (1995) (providing tables with state-by-state illustrations of the scope of state nexus statutes).

232. See, e.g., OHIO REV. CODE ANN. § 5739.01, 5739.17 (Anderson 1996).

233. Decisions at the state level provide further illustration on this point. See, e.g., Scholastic Book Clubs, Inc. v. State Bd. of Equalization, 207 Cal. App. 3d 734 (1989) (holding that teachers who solicited book orders from their students were agents of the seller, thereby rendering the remote seller liable for use tax collection); see also Amway Corp. v. Director of Revenue, 794 S.W.2d 666 (Mo. 1990) (ruling that Amway's in-state independent distributors who solicited new distributorships created substantial nexus).
Consider the example, described in Part VI.A, of the typical transaction whereby Consumer accesses information services through a commercial online provider such as Prodigy, CompuServe, America Online, GEnie, or the Microsoft Network. These online service sellers typically supplement the reach of their own networks through agreements with other telecommunications providers to ensure delivery of their product in the taxing jurisdiction. The telecommunications provider effectively acts as the conduit through which the service must travel to take advantage of the benefits of the market state. According to Tyler Pipe, "the crucial factor governing nexus is whether the activities performed in this state on behalf of the taxpayer are significantly associated with the taxpayer's ability to establish and maintain a market in this state for the sales." In the context of the information highway, the relationship between telecommunications and the information service is singularly important because delivery of the information service is impossible without the telecommunications vehicle. Here, the close relationship between the information service and the telecommunications provider, who essentially acts as the information seller's in-state distributor, is the potential "hook" by which nexus is acquired.

Consider a specific example involving the decidedly agency/representative nature of local dial access service. Typical commercial online service networks are accessed using a local dial access service (also known as bulk dial dedicated line access). Local dial access service permits users to access digital networks by dialing a local telephone number or a toll-free 800 access number using a modem on a personal computer. Specialized telecommunications companies that provide

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235. See Grierson, California FTB Symposium, supra note 149, at 1395 (An information service company characterizes itself as engaged in the "assemblage, packaging and transmission of information or data using telecommunications as a conduit."). See generally Grierson, ABA Tax Section, supra note 3, at 552.

236. 483 U.S. at 250.

237. Recall from our example that in some cases the consumer must first log onto the commercial online service provider's local node before it can access the network. Resnick, supra note 19, at 24-25. Ownership of the in-state node and any attendant equipment would arguably establish nexus. If the commercial online service instead contracted with a telecommunications provider for access to an in-state node (or to a communications network between the node and the provider) the agency analysis applied above would provide nexus even though the online service lacked title to any in-state property, unless the telecommunications provider could be classified as and treated as a "common carrier."

238. Local dial network access services may use conventional telephone lines, or may bypass the public telephone system entirely where switching equipment can corrupt data
local dial access to various digital computer networks worldwide include: Telenet, Infonet, and Tymnet. Tymnet, for example, which has two million daily users, provides access to digital networks (such as CompuServe) through local dial access, uniform number access, and wireless access for an expanding number of mobile users using laptop computers. In the United States, Tymnet’s network provides users local access to information and other services from over 1000 cities through 4500 points of presence located in 520 unique access locations. Under this essential agency/representative or, to paraphrase Tyler Pipe, “market maintenance” relationship, the unequivocal physical presence of the in-state telecommunications equipment inures to the information seller, thereby creating the requisite substantial nexus.

Notably, the close relationship between network access and information service providers has not gone unrecognized. For example, Mark Pomeroy, corporate counsel for CompuServe, admits that eighty percent of CompuServe’s customers can access the CompuServe network using local dial access. He accordingly concedes that CompuServe is present in all fifty states, but questions whether such presence is taxable.\textsuperscript{239} Ron Bamberg, vice-president for BT North America (the parent company of Tymnet), proclaims that Tymnet’s “[n]etwork access is the most critical and core component of any network service offered by a carrier or service provider.”\textsuperscript{240}

The Quill decision accepted that under the Court’s current Commerce Clause jurisprudence, state taxation of interstate commerce could be justified by the benefits and protections conferred by the taxing state.\textsuperscript{241} Nonetheless, the Court reluctantly upheld the physical presence standard for mail-order sellers for two carefully noted reasons. First, a bright-line rule benefits commerce by avoiding inefficient litigation-provoking standards.\textsuperscript{242} Second, and perhaps most significantly, adherence to the physical presence requirement for mail-order sellers satisfied important stare decisis principles, reaffirming a legal principle that had “become part of the basic framework of a sizable [mail-order] industry.”\textsuperscript{243}

\begin{footnotes}
\item[240] See BT Speeds Up Customer Access to Its U.S. Data Network, BUS. WIRE, Mar. 1, 1993 (describing Tymnet’s local dial, uniform number, and wireless network access services).
\item[241] 504 U.S. at 298.
\item[242] Id. at 315.
\item[243] Id. at 317.
\end{footnotes}
Given the circumstances of Quill, it is doubtful that information service providers can use the substantial physical presence standard as a safe harbor. There are significant distinctions between the mail-order sellers in Quill, with only temporary contacts in a state through common carriers, and telecommunications-based information service sellers, with continuous unequivocal presence in a state through a fixed communications infrastructure. The constant in-state presence of fixed telecommunications equipment furnishes greater weight to the argument that information sellers obtain nexus through their telecommunications service partners because of the significant benefits and protections conferred thereon by the taxing state.

Furthermore, under the agency/representative nexus analysis just described, a third-party information provider offering its service through the CompuServe network may have nexus with a given jurisdiction because of its relationship with CompuServe—because CompuServe is acting as the seller’s in-state representative. In this instance, the third-party information seller’s relationship with CompuServe is directly “associated with the taxpayer’s ability to establish and maintain a market in [the] state for the sales.” Accordingly, as the third-party information seller’s in-state representative, CompuServe’s physical presence establishes the requisite nexus for taxation. In this scenario, the CompuServe network, just like the telecommunications network utilized by CompuServe, serves as an essential link in the information service provider’s core business.

An information seller may also acquire a nexus through CompuServe even where CompuServe has not established a physical presence in the state. Taking the “market maintenance” analysis one step further, CompuServe’s relationship with in-state telecommunications providers may create a nexus for CompuServe by attribution, thereby producing a nexus...
for the third-party information service provider who delivers its service through CompuServe. The same agency/representative principles supporting attribution of CompuServe’s direct presence to the information seller, support imputing CompuServe’s indirect presence acquired through its agency relationship with a telecommunications provider. In both cases, CompuServe is merely acting as the conduit through which the information seller may tap the state’s market.  

As information superhighway sellers expand, it is increasingly likely that they will have established a physical presence in the jurisdiction through ownership of in-state property such as a network, a local in-state node, leased transmission lines, mainframe computers, substantial proprietary software, or other equipment. Thus, state administrators should not overlook the possibility that CompuServe and its ilk may have an actual physical presence in a given jurisdiction at the outset.

b. Direct Broadcast Satellites

Information sellers that use direct broadcast satellite (DBS or “beaming and billing”) technology to beam their product to the consumer’s home-based receiving dish avoid physical presence altogether because the technology allows the sellers to avoid establishing an actual physical presence in the state. However, information sellers using this telecommunications medium may nevertheless have a nexus with a taxing jurisdiction using the same “market maintenance” theory applied to commercial online services.

The obvious distinction between commercial online services and DBS is that the online provider’s land based communications equipment increases the possibility of a finding of physical presence and, accordingly, the opportunity to acquire a substantial nexus. DBS, on the other hand, involves beaming from a satellite to the consumer’s home based dish. As an alternative to land-based telecommunications equipment, states will look to other in-state presence. For example, beaming and billing may require consumers to use specialized descrambling software to receive the service.

247. In considering whether a court is likely to adopt the “market maintenance” view espoused above, one must consider whether, if given the opportunity, the Supreme Court would apply the same bright line rule. The cases described above stand for the proposition that an out-of-state seller must have at least a certain amount of activity in the taxing state. Given the advances in technology and the tremendous social and economic changes taking place because of the creation of an electronic marketplace, it is realistic to anticipate that the Supreme Court (and state courts) would decline to hold steadfastly to a rule that has become obsolete.

248. See supra part II.B.6.
In *Quill*, the Court recognized that "'a few floppy diskettes' present in a State might constitute some minimal nexus . . . ."\(^{249}\) States will seize on the Court's concession that software might create nexus and, where the volume of software is substantially more than a few disks, argue that the "presence" of the software rises to the level of substantial nexus under the Commerce Clause. This argument is viable since software licensed by an information service provider to in-state consumers is certainly a significant presence to the extent that it is critically important to delivery of the seller's information products in the taxing jurisdiction.\(^{250}\)

States will also scrutinize the information sellers' agency/representative relationships with other in-state vendors, in addition to telecommunications companies. In the case of beaming and billing, the DBS descrambling software and the receiving satellite dish are sometimes sold together by an in-state retailer. The retailer may also solicit subscriptions to the DBS-based information service as part of an overall marketing strategy. Under this scenario, the in-state retailer's in-state solicitation and sales of DBS software and/or information subscriptions by the retailer will likely produce a sufficient nexus to require collection of tax.\(^{251}\)

c. Interactive Television

The potential menu of information services offered through interactive television is difficult to imagine. However, as previously discussed in Part II of this Article, proposed products include interactive services available as an adjunct to traditional television programming, such as detailed information on advertised products, news topics, and movies, all on-demand through a programmable set-top box.\(^{252}\) The proposed tax would apply to charges for all on-demand information services accessed through this medium.\(^{253}\) The nexus analysis for this technology bears some similarity


\(^{250}\) This analysis could be particularly applicable to the Microsoft Network online service offered through Microsoft's Windows 95 software product.


\(^{252}\) See *supra* part II.B.4.

\(^{253}\) The service would be taxable as "furnishing data or information" using broadcast transmission. Model Stat. § 2. The tax would be imposed on all charges, if any, exacted for the "permanent or temporary use of . . . films or movies . . . textual materials . . . or other electronic information resources." Proposed Regulation 1-1.01.
to that for direct broadcast satellites because broadcast transmission lessens the amount of land-based communications infrastructure required for a transaction. Nonetheless, to the extent that land-based communications equipment is physically present in the state, the nexus of the telecommunications provider, or in this case the broadcaster, can be imputed to the information service seller on the grounds that the broadcaster is acting as the critically important conduit for completion of in-state sales.  

**d. Nexus Through Subsidiaries**

A number of cases and administrative rulings demonstrate that states are actively pursuing out-of-state sellers using alter ego and agency theories to attribute nexus to a parent company through its in-state subsidiary. For example, the New York State Tax Commission issued an advisory opinion which concludes that when the affairs of a subsidiary are dominated or controlled by its parent or a related company it will be considered its "alter ego," and the presence of the related company will be imputed to the other for use tax collection purposes. As a general rule, the same "control" or "domination" standard, or a derivative, is applied in most of these subsidiary nexus decisions.

States that successfully argue for a subsidiary nexus are significantly rewarded. With the advent of the information highway, worldwide information and entertainment industry revenues are forecasted to exceed $2 trillion. Because of the vast profit potential, practically every major telecommunications, information, and entertainment company is working

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254. See Tyler Pipe Indus., 483 U.S. at 232; National Geographic Soc'y, 430 U.S. at 551; Scripto, 362 U.S. at 207.


257. See Reader's Digest Ass'n v. Mahin, 255 N.E.2d 458, 460 (Ill. 1970) (presence of subsidiary found attributable to out-of-state parent where parent's business benefitted from subsidiary's in-state presence); see also SFA Folio Collections, Inc. v. Bannon, 585 A.2d 666 (Conn. 1991) (ruling in-state presence of an affiliate corporation operating independently did not create constitutionally sufficient nexus for parent); Bloomingdale's By Mail, Ltd. v. Commonwealth Dep't. of Revenue, 567 A.2d 773, 777-78 (Pa. 1979) (holding the presence of in-state retail stores operated by a parent corporation could not be imputed to its remote wholly owned subsidiary's mail-order operations where the parent did not solicit mail-order sales, even though customers sometimes returned merchandise to the parent's in-state retail stores).

258. Hundt, supra note 53.
furiously to participate in construction of the highway's infrastructure and to develop the applications that will drive along it. In all likelihood, companies in this class will have a nexus in almost every state in the nation. On the other hand, most companies, for regulatory and financial reasons, will drop their information services division into a subsidiary corporation. Accordingly, states that successfully argue that the subsidiary is merely the alter ego of the parent company or another related entity, will significantly expand their ability to impose a tax collection duty on out-of-state sellers.


Until recently, Goldberg v. Sweet was perhaps the most underrated case concerning the issue of substantial nexus under the Commerce Clause. This oversight was not without reason. The primary issue in Goldberg was whether a tax on the entire charge of a telephone call that either originated or terminated in the taxing state, and that was charged to an in-state service address or billing address, was contrary to the fair apportionment prong of the Complete Auto test. Accordingly, attention was focused on what Goldberg added to the fair apportionment analysis under the Commerce Clause, rather than on the Court's nexus dicta. Goldberg's immediate impact on nexus issues was further depreciated because the parties had stipulated that a substantial nexus was present.

The problem with ignoring Goldberg's nexus ramifications is that the Court used the nexus concept as the linchpin for its analysis of whether the tax on an interstate telephone call was fairly apportioned. In examining fair apportionment, the Court explained that it must examine whether the tax was internally and externally consistent. To be externally consistent, the focus is "whether the State has taxed only that portion of the revenues from the interstate activity which reasonably reflects the in-state component of the activity being taxed." Appellants Goldberg and McTigue argued

259. See Rosalind Resnick, Building the Highway, PC GUIDE TO GOING ONLINE, June 1995, at 28 (listing some of the companies involved in development of information highway infrastructure and services, including: Sony, AT&T, GTE, GE, MCI, the Regional Bell Operating Companies, CBS, NBC, ABC, and Time Warner).
261. Id. at 254.
262. Id. at 258 n.9.
263. Id. at 261.
264. Id. at 262.
that the tax on the gross receipts of a telephone call was unapportioned because the tax was assessed on the gross charge of an interstate activity, and that taxing the gross charge of the call created a certainty of multiple taxation. The Court's response was two-fold. First, it concluded that the tax resembled a sales tax on the retail purchase of a telephone call that, even though it triggered simultaneous transmission in several states, "reasonably reflects the way that consumers purchase interstate telephone calls." Second, and directly on point in this nexus discussion, the Court found:

Appellants have exaggerated the extent to which the tax creates a risk of multiple taxation. We doubt that States through which the telephone call's electronic signals merely pass have a sufficient nexus to tax that call. We also doubt that termination of an interstate telephone call, by itself, provides a substantial enough nexus for a State to tax a call. . . . We believe that only two States have a nexus substantial enough to tax a consumer's purchase of an interstate telephone call. The first is a State like Illinois which taxes the origination or termination of an interstate telephone call charged to a service address within that State. The second is a State which taxes the origination or termination of an interstate telephone call billed or paid within that State.

The Court, therefore, concluded that the actual risk of multiple taxation, an indicator of whether the tax was externally consistent, was virtually eliminated. Any residual risk of multiple taxation, such as when taxpayers split their billing and service addresses between two different states, was alleviated by the presence of a mechanism calling for a credit against the tax for taxes that have been paid in other states.

As stated previously, Goldberg's nexus analysis, in the six years since the decision, has been generally overlooked. However, the recent Supreme Court decision in Oklahoma Tax Commission v. Jefferson Lines, and its application of the nexus principles in Goldberg, has potentially redefined nexus theory as it could be applied to telecommunications, and particularly to the information service providers described herein.

266. Id. at 262.
267. Id. at 262-63 (citations omitted).
268. Id. at 264.
Jefferson Lines involved a sales tax on the entire price of a bus ticket purchased in Oklahoma where the bus service originated in the state, even though a portion of the service would be performed out-of-state. Thus, the Oklahoma tax would apply to the entire consideration paid for bus services rendered on a trip from Oklahoma to California, even if the service originated on the Oklahoma border and required only a few hundred yards of in-state travel. Jefferson Lines challenged the tax arguing that it failed the fair apportionment prong of the Commerce Clause test because Oklahoma was taxing the portion of receipts attributable to services realized outside the state’s borders.

In addressing the taxpayer’s argument that the tax was not fairly apportioned, the Court reaffirmed its decision in Goldberg, and in discussing “substantial nexus,” drew an interesting analogy between nexus for delivery of a tangible good and nexus for an interstate service transaction:

It has long been settled that a sale of tangible goods has a sufficient nexus to the State in which the sale is consummated to be treated as a local transaction taxable by that State. So, too, in addressing the interstate provision of services, we recently held that a State in which an interstate telephone call originates or terminates has the requisite Commerce Clause nexus to tax a customer’s purchase of that call as long as the call is billed or charged to a service address, or paid by an addressee, within the taxing State. Oklahoma’s tax falls comfortably within these rules. Oklahoma is where the ticket is purchased, and the service originates there. These facts are enough for concluding that “[t]here is ‘nexus’ aplenty here.”

In examining fair apportionment, the Court elaborated on the concept that a sale of services can be treated as a purely local event just as a sale of tangible personal property can be:

As we put it in Berwind-White, a necessary condition for imposing the tax was the occurrence of “a local activity, delivery of goods within the State upon their purchase for consumption.” Conversely, we held that a sales tax could not validly be imposed if the purchaser already had

270. Id. at 1335.
271. Id.
272. Id. at 1337-38 (citations omitted).
obtained title to the goods as they were shipped from outside the taxing State into the taxing State by common carrier.274

The Court then viewed the sale of services as being similar to the sale of goods:

A sale of services can ordinarily be treated as a local state event just as readily as a sale of tangible goods can be located solely within the State of delivery. Although our decisional law on sales of services is less developed than on sales of goods, one category of cases dealing with taxation of gross sales receipts in the hands of a seller of services supports the view that the taxable event is wholly local. Thus we have held that the entire gross receipts derived from sales of services to be performed wholly in one State are taxable by that State, notwithstanding that the contract for performance of the services had been entered into across state lines with customers who reside outside the taxing State.275

Thus characterizing the sale of services performed in the taxing state as a “wholly local” event, the Court, apparently mirroring its multiple taxation analysis in Goldberg, explained that multiple taxation could not occur because the taxable event, such as agreement, payment, and delivery of some of the services, could only occur in one state:

The taxable event comprises agreement, payment, and delivery of some of the services in the taxing State; no other State can claim to be the site of the same combination. The economic activity represented by the receipt of the ticket for “consumption” in the form of commencement and partial provision of the transportation thus closely resembles Berwind-White’s “delivery of goods within the State upon their purchase for consumption,” especially given that full “consumption” or “use” of the purchased goods within the taxing State has never been a condition for taxing a sale of those goods.276

The taxpayer sought to distinguish services from goods, arguing that a sale does not occur until delivery of the service is made.277 The Court rejected this claim, stating the case law did not support the view that:

274. Id. (citations omitted).
275. Id. at 1340 (citing Western Live Stock v. Bureau of Revenue, 303 U.S. 250 (1938)).
276. Id. at 1341 (citation omitted).
277. Id.
when delivery is made by services provided over time and through space a separate sale occurs at each moment of delivery, or when each State's segment of transportation state-by-state is complete. The analysis should not lose touch with the common understanding of a sale; the combined events of payment of a ticket and its delivery for present commencement of a trip are commonly understood to suffice for a sale.

Perhaps the most significant issue for telecommunications-based information services is the Court's expansive reference to Goldberg as support for nexus from a sale of services. In dealing with the purchase of a bus "service," Jefferson Lines thus appears to have broadened the holding of Goldberg by recognizing the applicability of its nexus analysis (previously considered dicta) to "interstate services." Accordingly, state administrators may argue that nexus exists where the circumstances of Goldberg are met. Essentially, this means that a state in which a telecommunications-based information service either originates or terminates (where the service is performed by in-state delivery or access) has the requisite Commerce Clause nexus to tax a consumer's purchase of that service, provided the service is charged or paid for through an in-state billing or service address. In the case of an information service provider that uses telecommunications as a conduit, which often may appear indistinguishable from the telecommunications, extension of Goldberg's nexus analysis is clearly appropriate. Even before Jefferson Lines' apparent expansion, or perhaps mere clarification, of the relevance of Goldberg's two-part test to other types of services, logic required considering Goldberg's applicability to information services delivered telephonically. Recall the example involving the Consumer previously described in Part V.A. Under the proposed taxing scheme, using Goldberg as a model, a sale (be it a sale of an information service or a digitized movie) is deemed to occur in the state of the Consumer's billing address. Jefferson Lines suggests that the seller of the information service to the Consumer acquires a nexus with the Consumer's home state, i.e., billing address, because "that is where the [service] is purchased, and the service originates there." Accordingly, the situsing mechanism of

279. Id.
280. Id.
281. See supra part V.E.
the proposed scheme may also hold the key to nexus for information service providers.\textsuperscript{283} It may well be that the state in which the service is performed (the state in which the taxpayer accesses and receives delivery of the service) may impose a sales tax collection duty on an out-of-state information service provider for the "wholly local" event of performance within the state, thereby distinguishing these service transactions from use tax collection cases (such as Quill) involving the sale of tangible goods by mail-order sellers.

\textit{Jefferson Lines} also supports the finding that the situsing sales using the proposed billing address presumption survives the fair apportionment prong of Complete Auto. Agreement, payment, and delivery of some of the services will almost invariably take place in the state of billing address. Furthermore, the proposed mechanism allowing taxpayers to demonstrate that the service was used entirely outside the billing address state appropriately deals with the issue not addressed by \textit{Jefferson Lines}—whether agreement and payment is sufficient when none of the service will be performed in the taxing state.\textsuperscript{284}

Another issue in a discussion of nexus is legislation commonly known as the Main Street Protection Act of 1995,\textsuperscript{285} which would authorize states to require use tax collection by persons subject to the personal jurisdiction of the state. Thus, the bill would overrule Quill's physical presence standard for mail-order sellers by authorizing each state to require collection and remittance of its sales tax by persons subject to the personal jurisdiction of the state under Due Process standards. The bill recently received the endorsement of the New York State Bar Association Tax Section Committee on Multistate Issues.\textsuperscript{286} If passed, the bill would eliminate a considerable amount of debate on nexus issues and would bolster state revenues. A shortcoming of the bill is that it only authorizes states to apply a Due Process nexus standard to sales of tangible personal

\textsuperscript{283} See Radio Common Carriers v. State, 601 N.Y.S.2d 513, 516 (N.Y. Sup. Ct. 1993) (Applying Goldberg's nexus rationale, the court held that tax on paging services was unconstitutional where the activity lacked substantial nexus with the state because out-of-state customers did not have a New York billing address, paging services were never used in the state, and the pager signals did not originate or terminate within the state.).

\textsuperscript{284} See, e.g., David Brunori et al., Experts Discuss State Tax Incentives, LLC's, Intangibles at Georgetown Conference, 8 STATE TAX NOTES 2222 (1995).

\textsuperscript{285} S. 545, 104th Cong., 1st Sess. § 3 (1995).

\textsuperscript{286} NYSBA Reports on Bill To Require Out-of-State Vendors to Collect Sales Taxes, TAX ANALYSTS' DAILY TAX HIGHLIGHTS AND DOCUMENTS, Apr. 18, 1995, at 818. The NYSBA report states: "[v]iewing the current state of affairs from our perspective as tax practitioners, we see no good reason for the continued blanket exemption of out-of-state vendors from compliance with that state's sales and use tax laws, based simply on a test of physical presence." \textit{Id.} at 887.
property and, therefore, would not apply to intangibles such as information services. To distinguish tangible personal property by applying a wholly different nexus standard to services and intangibles would serve no apparent purpose.

VI. CONCLUSION

If the information superhighway comes anywhere close to generating the revenues experts have predicted, it will rank among the most prolific industries in the world within a few years. In furtherance of state interests, among them, preventing the outflow of sales and use tax revenues from conversion of tangible personal property through digital technology and electronic delivery, and accessing a potentially rich source of revenue in a time of fiscal uncertainty, this Article has proposed a model statute and simple regulations designed to deal with certain information highway issues. In doing so, the Article points out several policy arguments justifying a tax on information services, not the least of which include: (1) the gradual elimination of the distinction between services and tangible personal property for sales tax purposes; (2) imposing the tax at the inception of this industry before custom and business practices become entrenched and difficult to change; and (3) modernization of antiquated taxing schemes not designed for information highway technology. The proposed statute and rules are intended to evoke thoughtful consideration of the issues faced by a taxing jurisdiction and, where possible, assist in finding a justifiable solution to the problem.

Nexus is always the first line of inquiry in a discussion of the states’ ability to require use tax collection by out-of-state sellers. In the information services industry, given the ability of technology to avoid physical presence in all but one state, the first-line nexus inquiry becomes all-important for the state. This Article suggests alternative theories by which taxing jurisdictions can constitutionally impose a tax collection duty. In the final analysis, it is difficult to prophesy the outcome of the “nexus wars” on information highway transactions, either from an income tax or

287. Id. at 890 (The NYSBA discusses § 7 of the Act, which would require taxpayers to collect and remit taxes when required by applicable state law except where limited by the Act. Section 7(b)(3) further limits the scope of the Act by explaining that “nothing in this [act] shall be construed to permit a State to subject any person to State taxes not related to the sales of tangible personal property.” (emphasis added)).

288. This standard is supported by the suggested analysis of National Geographic, Scripto, and Tyler Pipe discussed supra part VI.C.
transactional tax viewpoint. However, one thing is certain—we have hardly scratched the surface of an ongoing nexus debate.