Author's Acknowledgments

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The views presented here are the sole responsibility of the author and do not necessarily represent the official views of the Office of Tax and Revenue or the Office of the Chief Financial Officer.
Summary

The District currently assesses a wide range of taxes and charges on telecommunications services and providers. These taxes include a gross receipts tax, sales tax, corporate franchise tax, real property tax, a franchise fee (in the case of cable television), and a personal property tax. In addition, the District imposes a variety of regulatory fees and charges.

In some cases, District taxes are levied inconsistently, partly by design and partly based on outdated definitions and regulatory structures. As a result, companies offering similar services may not be subject to the same taxes — violating the principle of horizontal equity.

The District departs from consistent treatment of telecommunications firms in two ways with respect to the gross receipts tax. First, although the District has deregulated local telephone service, it is not clear that all companies offering local service must pay the gross receipts tax. Second, the District excludes the sale of prepaid phone cards from the gross receipts tax base.

MAJOR TRENDS IN THE TELECOMMUNICATIONS INDUSTRY

One reason for the change in the taxation of telecommunications is that much of the industry has been deregulated, creating opportunities for the development of new telecommunications firms and for the redefinition of the industry itself. This can be seen almost weekly in the announcement of mega mergers in the communications sector.

The telecommunications industry also is changing because the technologies used to provide services — including voice, data, and video — have become more standardized, opening up the opportunity to transmit a wider variety of communications over the same networks. Companies are increasingly in a position to offer these “bundled” communications services at lower prices.

CHALLENGE FOR TAXATION

The District’s tax laws for the telecommunications industry were established at the turn of the century and reflect an era when taxing telecommunications meant taxing
one regulated firm. In the past, it was sufficient to define the telecommunications industry in relation to its status as a public utility. When cable television began to be taxed, it too was seen as a separate industry, subject to regulation.

However, subject to market forces much the same as those facing other industries, the telecommunications industry is growing. Therefore, there is a need to examine the rationale for taxing telecommunications companies differently than other private businesses. These market developments raise questions of equity: Are equivalent telecommunications services taxed equally? Is the taxation of the telecommunications industry fair in relation to other industries? Is it equitable to tax telecommunications services provided to businesses but provide exemptions for services provided to residents?

These developments raise an even tougher issue — if the telecommunications industry were taxed like other industries, how much revenue would be lost and how much could be replaced? For example, if the District were to eliminate the gross receipts tax on telecommunications companies, the cost to the District would be $75 million annually. In order to remain revenue-neutral, other taxes would have to be raised.

In order to be able to effectively administer telecommunications taxes, the District also must consider the administrative complexities that will arise as companies offer more bundled services. Inconsistent taxation of bundled goods will lead to confusion among taxpayers and also could lead to inconsistent and arbitrary taxation of the component services.

**Telecommunications and the Local Economy**

The telecommunications industry plays an integral role in the economy of the District and the surrounding region. In addition to being major employers and economic engines in their own right, the region’s telecommunications firms provide basic infrastructure for the District’s service- and public sector-based economy. The 1992 Economic Census shows that District-based communications companies contributed about $1.7 billion to gross state product in 1992, or about $2,800 per capita, and employed approximately 6,900 people in the District.

One study of the importance of telecommunications to business location showed that the availability and price of telecommunications services are important considerations, although not as important as other factors, such as proximity to customers. This implies that the District should encourage the telecommunications industry to expand within its boundaries. It also suggests that — to the extent that taxes contribute to higher prices for telecommunications services in the District than in other jurisdictions — the District is a less attractive business location.

**Policy Perspectives**

The District needs to consider both the structure of taxes on telecommunications and the rates. As a general principle, the District ought to tax all telecommunications
providers in the same way and, to the extent that various telecommunications services are equivalent, subject them to similar taxation. This chapter presents a number of policy options that would increase the consistency of taxation of telecommunications services and firms.

The District also must balance the advantages of having a broad-based tax with relatively high rates, such as the current gross receipts tax, with the potential to discourage economic development. Significantly higher tax rates for telecommunications services compared to those in other jurisdictions may hinder economic development by inducing businesses and government agencies to locate telecommunications-intensive activities in lower-tax jurisdictions. On the other hand, a gross receipts tax on this service allows the District to tax sales to the federal government.

In many cases, the options presented in this chapter would result in a reduction in revenue. To implement them in a revenue-neutral manner would require increasing other taxes as an offset.

## Introduction

Taxation of telecommunications is an important issue across the nation, as states consider how to adapt tax laws to changes in technology and market structure. In states such as New York, Washington, and Florida, blue ribbon commissions have been formed to map out a sage course. While telecommunications was once seen as a natural monopoly, today's market is characterized by ever more entrants and services. Due to the rapid changes occurring in the telecommunications sector and the importance of this industry to the District's economy and tax revenue, the District must carefully consider whether changes in tax policy are required.

Many difficult legal and economic questions remain to be sorted out. Policymakers are concerned about maintaining revenues from taxation of telecommunications firms or from transactional taxes on telecommunications services. For others, the primary issue is competitiveness with other jurisdictions. Some are concerned about whether tax laws treat telecommunications firms fairly with respect to various segments within the industry and vis-a-vis other industries.

Experts express concern about electronic commerce and its potential to erode sales and use tax revenues and other important state revenue sources; while this is an important issue to consider, it is outside the scope of this report.

The definition of telecommunications is far more comprehensive and less clear-cut than "the plain old telephone system." Analysts are trying to define telecommunications services and have yet to develop a consensus. For example, is a personal communications service, with paging and other features included, the same as basic cellular service? Is a company that had its start as a cable company,
but now also provides phone service, still a cable company, a phone company, or something else?\footnote{1}

Governments must determine whether various telecommunications services are distinct enough to be taxed differently, while maintaining a level playing field. Policymakers also must address whether services should be taxed differently, even if distinctions can be made among services.

A look at the history of the telecommunications industry shows how governments have struggled to determine the best way to ensure that telecommunications services were widely available at reasonable prices.

**History of telecommunications**

**The era of the monopoly**

Alexander Graham Bell patented the telephone in 1876, providing an enduring change in communications. His Bell Telephone Company was an instant success, and the telephone was immediately recognized as a valuable, profitable invention. As the holder of Bell’s patents, the Bell company was the nation’s only telephone company until 1893, when many independent telephone companies were formed.

Technological and market barriers prevented the telephone companies from integrating their systems — a concept now commonly known as interconnection — and thus precluded the provision of long-distance telephone service to consumers. The primary problem was that the various telephone companies could not be compelled to serve each other’s customers; as a result, the usefulness of the telephone was limited by the capacity of individual companies. This structure favored the Bell Company, which dominated the market and serviced major metropolitan areas.

In 1907, Theodore Vail purchased the Bell Telephone Company and focused on increasing its geographic coverage as a strategy to increase market share. Creating American Telephone and Telegraph (AT&T) and providing local service through regional Bell companies, the company used access to its long-distance lines as an incentive to encourage — or cajole — incorporation of independent telephone companies into the Bell system.

By 1912, the federal government became sufficiently concerned about AT&T’s market power to launch an investigation of the company’s business practices, leading to the 1913 “Kingsbury Commitment” — an agreement to allow independent phone companies to hook into the AT&T network for a fee, thus achieving interconnection. The Kingsbury agreement also allowed AT&T to continue to acquire independent telephone companies, resulting in a 63 percent market share.\footnote{2}
By 1921, the federal government began to see AT&T’s market dominance as an asset — a view codified in the Willis-Graham Act, which exempted AT&T from powerful antitrust laws. Indeed, one of the bill’s sponsors claimed “it is believed to be better policy to have one telephone system in a community that serves all the people, even though it may be at an advanced rate, properly regulated by state boards or commissions, than it is to have two competing telephone systems.”

By the 1930s, AT&T monopolized the long-distance market, controlled most local service markets, and manufactured and sold almost all telecommunications equipment — illustrating both horizontal and vertical market dominance.

In 1934, the Federal Communications Commission (FCC) was established to regulate interstate communications and promote wide availability of communications services at reasonable rates. The commission was granted the power to regulate AT&T’s rates for interstate service. State public service commissions maintained authority over intrastate calls, including in-state toll service and local calling.

The end of an era — competition takes hold

In 1982, the “Modified Final Judgment” was issued by Judge Harold Greene, marking a settlement to a Justice Department antitrust suit filed in 1974. Under the terms of the judgment, AT&T was required to divest its local telephone business. The final split-up of AT&T occurred two years later with the establishment of seven regional Bell companies. The FCC also required AT&T to offer its services for resale on a nondiscriminatory basis, allowing hundreds of companies to become long-distance service resellers. Likewise, the local Bell operating companies were required to provide access to all long-distance carriers on a nondiscriminatory basis by 1986.

The Bell companies, often called “Baby Bells,” continued to serve as local monopolies, but were barred from providing long-distance services. The long-distance market, on the other hand, became highly competitive.

During the 1980s, the cellular market also got off the ground. At about the same time, advances in computer technology were opening up opportunities to use the telephone network for new services such as call waiting and caller I.D. In addition, cable television service became widely available, and satellite television services developed.

By 1991, pressure for competition in the local service market was developing. A new class of providers, known as competitive access providers, sought through FCC rule-making to provide services linking consumers directly to long-distance carriers, bypassing the local Bell monopolies. Also in the early 1990s, the FCC began the rule-making process to allocate radio spectrum space for personal communications services; meanwhile, prices for mobile phones plunged, increasing the affordability of cellular service.

Because of the complexity of the issues and competing political claims, it was not until 1996, with the passage of the Telecommunications Act of 1996, that Congress
established ground rules for local competition and removed most limitations on the range of businesses in which telephone companies could participate.

The provisions of the Telecommunications Act of 1996 are broad and far-reaching, including almost all aspects of electronic communications, such as wire-based and wireless voice, video, and data transmission services. Most notably, the Telecommunications Act of 1996 prohibits the District or any state from establishing or maintaining regulatory barriers to competition in the local telecommunications market. Major provisions of the Telecommunications Act of 1996 are outlined in Figure K-1.

**Figure K-1**

**Major Provisions of the Telecommunications Act of 1996**

1. State and local laws that restrict competition in either the local or long-distance markets are preempted.
2. Bell companies are required to allow interconnection to all network facilities and services at reasonable, nondiscriminatory rates. State public service commissions are assigned the responsibility for mediating and approving interconnection agreements.
3. Electric utility holding companies are allowed to enter the telecommunication business through subsidiaries.
4. Cross-ownership of telephone and cable systems is permitted.
5. Cable companies are allowed to enter the telephone business and telephone companies are permitted to offer cable services.
7. Baby Bells are allowed to enter the long-distance market once certain conditions have been met regarding competition in the regional Bell company local service area.
8. Laws regarding telecommunication company mergers are eased.
9. Local jurisdictions are prohibited from taxing direct broadcast satellite. (The District is treated as a state and is not subject to this prohibition.)
10. Local governments are permitted to continue or commence charging fees on a nondiscriminatory basis for use of public rights of way.
11. The act does not prohibit gross receipts, utility taxes, or franchise fees on local telephone providers when they are applied on a nondiscriminatory basis.
In the District and across the nation, public service commissions have been working to deregulate local telephone service since passage of the Telecommunications Act of 1996. Although progress has been slower than anticipated, local competition is in place in states such as California, Michigan, and New York.

There are indications that competition for local phone service in the District will commence within the early part of 1998. The D.C. Public Service Commission had approved at least 20 applications as of the end of 1997 from firms wishing to provide local telephone service. Once these firms commence operations in the District, prices are likely to fall, along with revenues from telecommunications taxes.

History of telecommunications taxation in the District

Almost as long as there has been telephone service, the District has taxed it. Figure K-2 details the establishment of a gross receipts tax on telephone companies in 1902 and documents subsequent increases in both the rate of the gross receipts tax and the breadth of taxes applied to telecommunications firms.

While the gross receipts tax rate was unchanged for the first 70 years, it has been increased five times since 1972, and now is 250 percent higher than when first applied. Telecommunications firms have paid a variety of other taxes over the years, including franchise taxes, real estate taxes, personal property taxes, and sales taxes. However, telecommunications firms also have received exemptions from various business taxes other companies must pay and generally have not been taxed like other businesses operating in the District.

Technological convergence

Deregulation of the telecommunications industry is in part due to technological innovation and convergence. In recent years, companies operating in industries that often were considered separate and distinct have turned to similar technological solutions to provide service.

Because standardized technologies are in use, cable companies can transmit voice or data, telephone companies can transmit video or data, and wireless providers can deliver similar services from ground or satellite systems. Furthermore, electric and gas utilities are increasingly positioned to enter these markets, building off of private networks and other assets.

The new industries are becoming indistinguishable — particularly in the case of telephone and cable companies — due to the use of common technologies and the potential to sell similar services. For example, Jones Communications — an
### Significant Events in D.C. Taxation of Telecommunications

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1902</td>
<td>A gross receipts tax is imposed on telephone companies at a rate of 4 percent.</td>
</tr>
<tr>
<td>1939</td>
<td>The gross receipts tax is applied to companies providing “public utility commodities” at a rate of 4 percent. Real property, personal property, and corporate income taxes are enacted.</td>
</tr>
<tr>
<td>1956</td>
<td>Exemptions from the general sales and compensating-use taxes are adopted.</td>
</tr>
<tr>
<td>1972</td>
<td>The gross receipts tax rate is increased to 5 percent.</td>
</tr>
<tr>
<td>1975</td>
<td>Telephone companies are required to make declarations and estimated payments. The gross receipts tax rate is increased to 6 percent.</td>
</tr>
<tr>
<td>1983</td>
<td>The gross receipts tax rate is increased to 6.7 percent. Estimated payment and declaration provisions are repealed. Payments are required monthly instead of annually.</td>
</tr>
<tr>
<td>1987</td>
<td>The gross receipts tax is applied to all telecommunications service providers.</td>
</tr>
<tr>
<td>1989</td>
<td>Toll telecommunications tax is imposed in place of the public utility tax at a rate of 6.7 percent for telecommunications service providers other than those providing public utility services. Partial sales tax and personal property tax exemptions are enacted. Sale for resale is exempted from taxation.</td>
</tr>
<tr>
<td>1991</td>
<td>Toll telecommunications and public utility tax rates are increased temporarily from 6.7 percent to 9.7 percent.</td>
</tr>
<tr>
<td>1992</td>
<td>Toll telecommunications tax rate is increased permanently to 9.7 percent. The gross receipts tax is expanded to include cable TV, radio, video, and other services when customers pay for service. These firms pay tax on a quarterly basis.</td>
</tr>
<tr>
<td>1994</td>
<td>Toll telecommunications tax rate is increased to 10 percent. Gross receipts tax rate is increased to 10 percent.</td>
</tr>
<tr>
<td>1996</td>
<td>Wireless telecommunications service is subject to the same taxes and exemptions under provisions of the Telecommunications Competition Act of 1996. This includes a gross receipts tax imposed at a rate of 10 percent.</td>
</tr>
<tr>
<td>1997</td>
<td>Commercial Mobile Radio Service Tax Clarification Act is passed to clarify taxation of wireless services.</td>
</tr>
</tbody>
</table>
Alexandria, Va.-based cable franchise serving the District — markets local telephone services, cable service, and high-speed Internet access. The distinction between wire-based providers and wireless providers is likewise becoming obsolete in the Washington metropolitan area. For example, Metricom, Inc., markets wireless Internet access, a service traditionally provided via wire-based technology.

The pace of technological innovation and convergence will continue to change the telecommunications industry itself, implying that high tax burdens on particular services or on the industry could be risky in the years ahead. These developments suggest that governments everywhere will continue to find telecommunications tax policy challenging. Most tax reforms will be transitory, or superseded, as new types of services are brought to market.

Internet telephony provides an example of the challenges faced in keeping tax policy in line with technological change. While not quite ready for the mass market, this software allows long-distance calls to be made for a fraction of the cost of traditional phone service, regardless of distance. The revenue implications for governments such as the District, which rely on tax revenue based on charges for long distance, may be tremendous.

If telecommunications companies — some of which are historically known as cable companies, telephone companies, or wireless telephone companies — are all offering similar services, does there remain a justifiable reason to treat them differently
for tax purposes? In the long run, will governments be able to generate the same level of revenue from telecommunications taxes as they now do?

**Bundling of services**

Bundling of services poses another dilemma for tax authorities. Telecommunications firms are in the process of consolidating services. Whereas in the past, a consumer had separate providers for Internet access, wireless services, local telephone service, and long-distance telephone services; increasingly, individual companies are offering these services bundled together at a discount. Bundled service can offer the consumer the advantages of consolidated billing, better service, and lower prices.

However, for tax administrators, bundling can be a challenge to current tax policies — particularly when tax laws treat individual services differently and apply inconsistent rates. When service providers are taxed differently based on historic designations, tax administrators will have difficulty because new providers do not fit easily into the old categories. Likewise, service providers can be faced with increased tax-compliance costs because they may not know whether certain taxes apply or how to apply them.

An example helps to explain why bundling is problematic when inconsistent tax rates and bases apply. Suppose local telephone companies that are subject to regulation must pay a gross receipts tax on telephone services at 10 percent. On the other hand, Internet access is not subject to a gross receipts tax, but is subject to a sales tax at 5.75 percent. A provider sells these services together for a $5 discount and does not bill the services separately, meaning that the gross receipts tax and sales tax cannot be applied to each service. Should the taxing jurisdiction require the bundled package to be included in the gross receipts tax base? Or should the gross receipts tax and sales tax apply according to a formula? Should the provider be required to itemize bills and apply the taxes separately? If so, how should the discount be allocated: against telephone service, whereby the gross receipts tax liability would fall? Or should the discount be allocated toward Internet access, whereby the consumer would see a reduced sales tax liability? Perhaps the discount should apply to both services, but on what basis would such an allocation be made?

It may not be feasible or rational to tax telecommunications services at different rates within a bundled package. Some states have addressed this problem by ruling that if a single taxable service is included in a bundled package, the entire package may be subject to taxation, even if the tax would not be applied to all of the services if sold individually.
This situation is further complicated if service providers begin to become content providers as well — offering products or services that extend beyond voice, data, and video transmission services to include the actual sale of goods via electronic means. Such companies could offer discounts, through cash, credits, or other goods, in order to entice consumers to make purchases through the provider.

Taxing authorities may be forced to rely increasingly on use taxes, which the seller may or may not be required to collect. Use taxes are notoriously difficult to enforce, and compliance is relatively low for these taxes. Further, if electronic money or credit is used to lure customers, there is the added complexity of valuing the credits and establishing rules about when taxes would become due — when the credits are earned or when they are used.

The emergence of bundling suggests a need for consistency in the taxation of various telecommunications services and potentially in comparison to other taxable goods and services.

**Market participants in the District**

The D.C. Public Service Commission has authorized two public utilities to provide local telephone service. Following the requirements of the Telecommunications Act of 1996 and the District's own Telecommunications Competition Act of 1996, the D.C. Public Service Commission has approved more than 20 other companies to provide local telecommunications services as facilities-based or resellers of local telecommunications services. These new entrants are not subject to rate regulation by the D.C. Public Service Commission and are not public utilities.

As of the end of 1997, none of the recently approved competitive local phone service providers were actively marketing or providing local telephone service in the District. This is similar to most other states, in that local competition has developed more slowly than anticipated. More than 100 companies provide long-distance services to customers in the District; records dating back to 1989 indicate that there has been little change in the number of companies selling services.

The wireless industry also is significant in the District, where records indicate that there are at least 20 firms selling cellular, personal communications, paging, and other wireless services to consumers.

Between 15 and 25 cable television, subscription video or radio providers operate in the District. In addition to District Cablevision, the District's cable franchisee, companies such as hotels and music providers are subject to a gross receipts tax on this service. (The tax is described in a later section.)
The telecommunications sector's role in the District's economy

The telecommunications industry is an integral part of the economy of the District and the surrounding region. In addition to being major employers and economic engines in their own right, the region's telecommunications firms provide basic infrastructure for the District's service- and public sector-based economy. Figure K-4 provides some information about the telecommunications industry in the District.

Another way to measure the relative importance of telecommunications in the economy is to examine location quotients over time. A location quotient compares the relative share of employment in a sector within a jurisdiction to the share of employment in the same sector nationwide. A location quotient of one indicates that a jurisdiction has the average concentration of employment in that sector, relative to the nation. Numbers above one indicate that employment in the jurisdiction is more concentrated in that sector than in the nation as a whole; numbers below one suggest that sector is less concentrated for that area than in the nation as a whole.

The location quotient of the telecommunications sector in the District has been consistently above one since 1985. However, telecommunications employment in the District has been declining at a faster rate than in the nation as a whole.
Telecommunications employment in the District fell 33 percent from 1985 to 1995, compared to 15 percent nationally. Telecommunications jobs have proven to pay better, with workers consistently paid 35 percent to 40 percent more than the average private-sector employee in the District.

A number of telecommunications firms have headquarters in and around the District. Eleven of the region’s largest 100 locally based firms (by revenue) are telecommunications companies, data communications services, or Internet access providers. Three of those firms had revenues in excess of $1 billion during 1997.

Of the 11 telecommunications firms listed in Figure K-6, only MCI is headquartered in the District. Of the nine Virginia firms, eight are in Fairfax County. Comsat is located in Montgomery County, Md.

Two of the region’s largest employers are telecommunications companies based outside the metro area. Bell Atlantic employs 11,500 people in the region, and AT&T employs 5,870. Along with these direct measures of the contribution of the telecommunications sector to the District’s economy, it is important to note that other industries in the District rely heavily on telecommunications services to generate economic activity. Figure K-7 shows employment in some of these industries.
Economic development

Of central concern to many is the importance of telecommunications services to future economic development and business retention. In 1991, Deloitte and Touche surveyed businesses in New Jersey and nationwide to access the importance of a telecommunications infrastructure to location decisions. Surveys were sent to businesses that had recently relocated. The respondents were asked to rate 22 factors in their relocation decision on a scale of one to five, with one being unimportant and five being very important (Figure K-8). The fact that telecommunications prices and availability are rated as somewhat important suggests that — to the extent that taxes contribute to higher prices for telecommunications services in the District than in other jurisdictions — the District may be a less attractive business location.
District taxes on telecommunications services and providers

The District currently assesses a wide range of taxes and charges on telecommunications services and providers. These taxes include a gross receipts tax, sales tax, corporate franchise tax, real property tax, a franchise fee (in the case of cable television), and a personal property tax. In addition, the District imposes a variety of regulatory fees and charges not addressed in this chapter. Figure K-9 presents a matrix of taxes imposed by service provider type.
The District imposes a 10 percent gross receipts tax on providers of both local and interexchange (long-distance) wire-based services; subscription television, video, or radio services; and commercial mobile services (cellular service, personal communications services, paging, dispatch, or any other wireless telecommunications service). The District imposes the gross receipts tax in lieu of a personal property tax, although the personal property tax is

### Table

**Factors Important to Business Relocation**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Rank</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to major airports</td>
<td>1</td>
<td>3.57</td>
</tr>
<tr>
<td>Labor costs</td>
<td>2</td>
<td>3.54</td>
</tr>
<tr>
<td>Major highway access</td>
<td>3</td>
<td>3.53</td>
</tr>
<tr>
<td>Proximity to major markets</td>
<td>4</td>
<td>3.46</td>
</tr>
<tr>
<td>Market conditions</td>
<td>5</td>
<td>3.40</td>
</tr>
<tr>
<td>Skilled labor force</td>
<td>6</td>
<td>3.17</td>
</tr>
<tr>
<td><strong>Availability of telecommunications services</strong></td>
<td>7</td>
<td>3.03</td>
</tr>
<tr>
<td>Housing availability and costs</td>
<td>8</td>
<td>2.88</td>
</tr>
<tr>
<td>Cost of land</td>
<td>9</td>
<td>2.77</td>
</tr>
<tr>
<td>Proximity to suppliers</td>
<td>10</td>
<td>2.77</td>
</tr>
<tr>
<td>Energy availability and costs</td>
<td>11</td>
<td>2.71</td>
</tr>
<tr>
<td><strong>Price of telecommunications services and products</strong></td>
<td>12</td>
<td>2.66</td>
</tr>
<tr>
<td>Recreational opportunities</td>
<td>13</td>
<td>2.65</td>
</tr>
<tr>
<td>Availability of land</td>
<td>14</td>
<td>2.60</td>
</tr>
<tr>
<td>Crime rate</td>
<td>15</td>
<td>2.55</td>
</tr>
<tr>
<td>Cultural opportunities</td>
<td>16</td>
<td>2.55</td>
</tr>
<tr>
<td>Rating of public schools</td>
<td>17</td>
<td>2.53</td>
</tr>
<tr>
<td>Strength of labor unions</td>
<td>18</td>
<td>2.52</td>
</tr>
<tr>
<td>Colleges and universities in the area</td>
<td>19</td>
<td>2.35</td>
</tr>
<tr>
<td>Environmental regulations</td>
<td>20</td>
<td>2.34</td>
</tr>
<tr>
<td>Long-term financing</td>
<td>21</td>
<td>2.20</td>
</tr>
<tr>
<td>Proximity to technical universities</td>
<td>22</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Source: Deloitte and Touche (1991), cited by Richard McHugh in *The Taxation of Telecommunications*
applied to some telecommunications companies. Each gross receipts tax is described below.

**Tax on local telephone service**
The District's laws impose a gross receipts tax only on regulated local telephone companies operating as utilities in the District. Unregulated firms selling local telephone service in the District do not pay gross receipts taxes, unless they are selling “public utility services or commodities.” Generally speaking, revenues from District-regulated services, such as basic service and local private-line service, are subject to the gross receipts tax. Services that are not regulated, such as optional wire maintenance service, telephone installation, and voice mail, are not subject to the gross receipts tax.

Unregulated companies entering the local telephone market will not be subject to the gross receipts tax under current law. By the very nature of deregulated service, companies that have recently been approved by the D.C. Public Service Commission to provide local phone services are not utilities and will not sell “public utility services or commodities.” This loophole in the tax law has had no effect on District revenues through the end of 1997 because none of these companies were providing local telephone service. However, if these firms gain market share at the expense of the utility-designated companies, gross receipts tax revenue will decline.9

Due to confidentiality limitations, the D.C. Office of Tax and Revenue cannot reveal the amount of revenue collected from local telephone companies for gross receipts taxes.

**Toll telecommunications service tax**
The toll telecommunications service tax, established in 1989, is a broadly defined privilege tax on toll telecommunications service. This tax was developed in response to the breakup of AT&T, which opened the long-distance market to competition and removed this service from the definition of “public utility services and commodities.” Following accepted national practice to establish nexus — as legitimized by the Supreme Court decision in the case Goldberg v. Sweet — the District imposes the tax on “gross charges from the sale of toll telecommunications service that originates or terminates in the District, and for which the charge is made to a service address located in the District, regardless of where the charge is billed or paid.”10

The toll telecommunications tax represents a significant source of revenue for the District, ranking as the seventh-most revenue productive tax. Since 1990, the first full year the tax was collected, revenue from this source has grown by almost 100 percent in nominal terms — from $23 million to $46.5 million (Figure K-10).
## Major Taxes and Fees Applied to Telecommunications Services in D.C.

<table>
<thead>
<tr>
<th>Service Provider Type</th>
<th>Gross Receipts Taxes (10%)</th>
<th>Personal Property Tax (Franchise Tax, $3.40 per $100)</th>
<th>Sales Tax (5.75%)</th>
<th>Real Property Tax ($2.15 per $100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Franchise Tax (9.975%)</td>
<td>Public Utility Tax</td>
<td></td>
<td>On Services Purchases Sold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TV, Video, Radio and Telecom. Service Tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wireline/microwave telephone service (voice/data)

<table>
<thead>
<tr>
<th>Service Provider Type</th>
<th>Gross Receipts Taxes (10%)</th>
<th>Personal Property Tax (Franchise Tax, $3.40 per $100)</th>
<th>Sales Tax (5.75%)</th>
<th>Real Property Tax ($2.15 per $100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Franchise Tax (9.975%)</td>
<td>Public Utility Tax</td>
<td></td>
<td>On Services Purchases Sold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TV, Video, Radio and Telecom. Service Tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wireless services

<table>
<thead>
<tr>
<th>Service Provider Type</th>
<th>Gross Receipts Taxes (10%)</th>
<th>Personal Property Tax (Franchise Tax, $3.40 per $100)</th>
<th>Sales Tax (5.75%)</th>
<th>Real Property Tax ($2.15 per $100)</th>
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<td></td>
<td>Franchise Tax (9.975%)</td>
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<td></td>
<td></td>
<td>TV, Video, Radio and Telecom. Service Tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

- (A) Data transmission services subject to the gross receipts tax only if considered a public utility service. Otherwise, data transmission is subject to the sales tax.
- (B) Beginning October 1, 1998, revenues collected from consumers solely to cover the gross receipts liability of a commercial mobile provider are not subject to additional gross receipts taxation.
- (C) Sales of personal property purchased by a utility and used to produce receipts subject to the D.C. gross receipts tax are exempt, but sales of personal property in which the property is used to produce receipts that are subject to the gross receipts tax and other receipts not subject to the tax are only partially exempt.
- (D) Residential regulated services are exempt. Certain additional services not deemed public utility services might be subject to the sales and use taxes.
- (E) All personal property and purchases of personal property are exempt from taxation, except office furniture and equipment.
- (F) Prepaid phone cards are subject to 10 percent sales tax.
- (G) Residential sales are exempt.
This is partly due to increases in the tax rate (that occurred in 1991 on a temporary basis and permanently in 1992) from 6.7 percent to 9.7 percent, along with an increase to the current 10 percent rate in 1994. During this same period, the overall price level rose 17 percent.

The issue of nexus is of central concern to the states and a matter of controversy among tax experts, industry, and tax administrators, particularly in the context of electronic commerce. Legal scholars are attempting to sort out the implications of the Goldberg case, along with other recent cases, most notably Quill Corp. v. North Dakota, which revolve around the question of how to determine when a firm has established sufficient business activity within a jurisdiction, such that a state could subject a seller to taxation. Given the expected increase in electronic commerce, these discussions, federal legislation, and future Supreme Court cases will be critical to determining the circumstances under which firms selling goods over the Internet can be subject to the requirement to collect taxes from consumers on behalf of states.11

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**Figure K-10**

*History of Toll Telecommunications Tax Collections*

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>$ Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>$10,981</td>
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<tr>
<td>1990</td>
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<td>1991</td>
<td>$22,985</td>
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<td>1992</td>
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<td>1994</td>
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<tr>
<td>1995</td>
<td>$44,554</td>
</tr>
<tr>
<td>1996</td>
<td>$45,464</td>
</tr>
</tbody>
</table>

Source: Comprehensive Annual Financial Reports, various years.
Tax on subscription television, video, and radio services
The District collects a 10 percent gross receipts tax from providers of:

cable television service, satellite relay television service, and any and all other
distribution of television, video, or radio service with or without the use of
wires provided to subscribers or paying customers, whether for basic service,
ancillary service, or other special service, and any other charges related to pro-
viding the services within the District of Columbia, including, but not limit-
ed to, rental of signal receiving equipment.\textsuperscript{12}

Unlike other gross receipts taxes, the District collects this tax quarterly, rather
than monthly.

An exemption is provided from the gross receipts tax to nonprofit educational
institutions that provide programming to subscribers under an instructional television
fixed license issued by the FCC. The D.C. Office of Tax and Revenue does not
maintain records on such institutions, and no estimate is available as to the value of
this exemption. The District collects about $5 million per year from this group of
providers. However, there was insufficient data to provide additional details about
collections. For administrative and reporting purposes, collections for this tax are
reported along with taxes on public utilities.

Tax on commercial mobile radio services (wireless telecommunications)
Following the passage of the Telecommunications Competition Act of 1996 and
the Commercial Mobile Telecommunications Service Tax Clarification Amendment
Act of 1998 (the Clarification Act), the District began collecting a 10 percent
gross receipts tax on District-based cellular telephone services, personal commu-
nications services, specialized mobile radio services, paging services, dispatch,
and other wireless message or data transmission services. Due to the small size of
the District and the mobile nature of these services, the wireless providers were
given great flexibility in identifying whether service to a customer is District-
based, and often relied on information such as the billing address, service
address, or District telephone number to reach a determination.

The tax does not include charges associated with the sale, rental, mainte-
nance, repair, or other charges associated with wireless telecommunications
equipment. The District collected about $2.5 million from this tax during
the 1997 fiscal year, with collections beginning in May 1997. The District
will collect about $5 million in the 1998 fiscal year and will include the
receipts as toll telecommunications tax revenue in financial reports.
Statutory versus effective tax rates
The D.C. Council, when considering the Clarification Act, debated about the effective 11.1 percent rate of the gross receipts tax on commercial mobile services. In most cases, businesses subject to gross receipts taxes explicitly pass through the tax as a line-item charge on consumers' bills. Thus, while the statutory incidence is on the provider, the customer often bears the full cost of the tax. However, because the tax is imposed on the provider, the tax, if collected from customers through a line-item charge, is itself included as revenue for purposes of calculating tax liability. In most cases, this means that the consumer pays an effective tax rate of 11.1 percent on taxable charges — in essence a tax on a tax. The Council expressed a lack of comfort about the difference between the statutory rate (10 percent) and the effective rate for most consumers (11.1 percent). As a result, beginning in the 1999 fiscal year, the District will allow firms paying gross receipts taxes on commercial mobile services to exclude the revenues they collect from consumers to pay the tax, when determining tax liability. The effect of this change is to reduce revenue by about 10 percent, without changing the statutory rate. The tax on a tax remains in place for wire-based local telecommunications service and long-distance service, meaning that wire-based telecommunications services will be taxed at a higher effective rate beginning in the 1999 fiscal year.

Prepaid phone cards
Telecommunications services purchased through prepaid calling cards are not subject to the gross receipts tax, effective October 1, 1997. Rather, prepaid calling cards are subject to a 10 percent sales tax at the retail level. Thus, assuming that gross receipts taxes are passed through to consumers, the method of payment determines the effective tax rate (10 percent versus 11.1 percent).

Sales and use tax
Sales and use taxes need to be viewed through two different lenses with respect to telecommunications. Telecommunications firms can act either as the purchaser or the seller. As sellers, telecommunications firms collect sales taxes from customers and remit these payments to the District, to the extent that tangible goods and taxable services are sold. As purchasers, telecommunications firms purchase goods and services that may be subject to taxation.

The sale of telecommunications services
The District imposes sales and use taxes on local telecommunications services at the general sales tax rate of 5.75 percent. However, a general exemption is made for those residential telecommunications services that are classified as public utility services or commodities, and cable television service for residential customers. Long-distance services also are exempt from the sales tax. Further, the Clarification Act
removed wireless telecommunications services from the sales tax base. Because a sales tax generally cannot be imposed on the federal government, in practice this means that only business customers face the burden of the combined gross receipts and sales taxes, assuming pass-through of the gross receipts tax.

As a result of the way in which the D.C. Code is structured, the sale of local telecommunications services by firms other than utilities are not subject to the gross receipts tax but are subject to sales and use taxes. It is not clear whether services provided by a regulated telecommunications provider, but resold through an unregulated provider, would constitute “public utility services” and would be subject to the gross receipts tax. Assuming that the entire gross receipts tax is passed through to business consumers, the combined effective tax rate on local wire-based telecommunications services purchased by businesses located in the District is 16.85 percent.

Some services that are not considered to be public utility services or commodities are subject to taxation, regardless of whether the purchaser is a business or resident. Services that fall into this category include answering services, voice mail, and other services not subject to regulation by the D.C. Public Service Commission. Pay-per-call services (such as those using 900 numbers) are subject to the sales and use taxes, along with telephone answering services and coin-operated telephones, if these services are not already subject to the gross receipts tax. As previously noted, prepaid telephone cards are subject to a 10 percent sales and use tax but are not subject to a gross receipts tax.

Data on the total sales tax revenue remitted by telecommunications companies were not available. However, a rough estimate, based on the author’s calculations, suggests that telecommunications firms remitted between 1.5 percent and 3 percent ($7 million to $14 million) of District sales tax revenue in FY 1996.

Telecommunications firms as purchasers
For most classes of telecommunications providers, the District grants sales tax exemptions for the sale of personal property used to provide telecommunications services in the city. Long-distance carriers and wireless telecommunications providers are granted an exemption from sales and use taxes on the sale of personal property used to furnish telecommunications services. However, these companies pay sales and use taxes on office furniture and equipment. A telecommunications firm selling local regulated services is eligible for an exemption from the sales tax on the purchase of all personal property used to produce receipts that are subject to the gross receipts tax. When a provider in this class purchases equipment that produces receipts, only a portion of which are subject to the gross receipts tax, the District provides only a partial exemption. A business not classified as a utility that provides local telecommunications service is subject to the sales and use taxes for all purchases of tangible personal property and services, to the extent that purchases are taxable under the general statutes for these taxes.\textsuperscript{14}
While sales and use taxes and personal property taxation of telecommunications equipment have been seen in some states as a deterrent to capital investment, this has not emerged as a significant issue in the District due to the broad exemptions. The D.C. Office of Tax and Revenue does not maintain records on the value of the exemption to telecommunications firms.

**Corporate Franchise Tax**
Telecommunications firms are subject to the District's general corporate franchise tax, which, including surtaxes, is 9.975 percent. Telecommunications firms paid between 4 percent and 8 percent ($4 million–$9.8 million) of the corporate franchise tax revenue in the 1996 fiscal year.

**Real Property Tax**
To the extent that telecommunications firms own real property in the District, they are subject to the real property tax. Currently, the Class 4 property tax rate (general commercial rate) is $2.15 per $100 assessed value.

Data on the total real property tax revenue paid by the telecommunications sector was not readily available. However, data from the D.C. Office of Tax and Revenue on the assessed value of real property in the District owned by Bell Atlantic for assessment year 1998 showed that the company owns real property valued at $88.5 million, with an associated tax liability of about $1.9 million for assessment year 1998.

To the extent that technology allows, District consumers may be serviced by equipment located in Maryland and Virginia. If real property taxes are higher than in surrounding jurisdictions, there may be some disincentive to locate facilities in the District. However, this would be only one of many factors, and the author has not determined whether telecommunications firms are servicing District customers from locations outside the jurisdiction.

**Personal Property Tax**
The extent of personal property taxation varies across sectors of the telecommunications industry. Local regulated telecommunications companies and cable television companies, if the District has granted a franchise, are exempt from the personal property tax — so long as the company is subject to a gross receipts tax. Wireless companies and long-distance providers generally are exempt from the personal property tax, except on office furniture and equipment.

As structured, if a telecommunications firm is not subject to a gross receipts tax, it is subject to the personal property tax. Local telephone companies, other than regulated utilities, are not required to pay a gross receipts tax, and therefore would be subject to the full personal property tax, without exemption. Wireless cable service providers are subject to the full personal property tax as well.
OTHER TAXES, FEES, AND CONTRIBUTIONS
The District's cable company is subject to additional requirements. These include: an annual franchise fee; public access fee; operation of community access channels and associated production; wiring of public buildings; a public infrastructure user charge; permit fees; and a Boxing and Wrestling Commission fee. The 5 percent cable company franchise fee can be stacked on top of the gross receipts tax to yield an effective tax rate of 16.66 percent to which all customers — residential and business — are subjected.

The local exchange carriers and interexchange carriers are subject to regulatory fees associated with operations of the D.C. Public Service Commission and Office of the People's Counsel. Telephone companies may also be required to provide duct space for police, fire, and EMS services.

RIGHT-OF-WAY FEE
The Department of Public Works commissioned a valuation study of public right of way and is now considering imposition of a right-of-way charge. A number of telecommunications companies and the District's cable franchisee have cables running through the District, either underground or on telephone polls. As such, it is likely that these users would be subject to a right-of-way charge should one be implemented.

Tax burden on the telecommunications industry and consumers
Although the D.C. Office of Tax and Revenue could not release information about the actual tax liabilities of the major telecommunications firms in the District, it is estimated (only as a rough estimate) that telecommunications firms or their customers pay the District between $90 million and $110 million annually, including revenue from gross receipts taxes, sales taxes, franchise fees (corporate and cable), real property, and other liabilities. To place this in perspective, this amount represents 4 percent to 5 percent of total tax revenues collected in the 1996 fiscal year.

The District taxes telecommunications services more broadly and at higher rates than other types of taxable services. This is probably the result of several factors. First, telephone services were historically provided by a monopoly, which was subject to rate regulation and was generally guaranteed a profit. As a result of these conditions, higher fees and taxes could be passed through to consumers. Second, gross receipts taxes on telecommunications companies have been common practice in other states. Third, because the statutory burden of the gross receipts tax falls on the service providers, this provided an indirect mechanism to tax the federal government and other classes of consumers that are generally exempt from sales taxes.
Recent District legislative actions

There have been several major developments in telecommunications taxation since 1996, including the expansion of the gross receipts tax to include cable and related services; passage of the Telecommunications Competition Act of 1996 and the Commercial Mobile Telecommunications Service Tax Clarification Amendment Act of 1998; and the possible adoption of a right-of-way charge. (Rate changes are noted in Figure K-2, page 450.)

Omnibus Budget Support Act of 1992

In addition to increasing the gross receipts tax rate from 6.7 percent to 9.7 percent, this legislation extended the gross receipts tax to include cable television, satellite relay television service, and any and all other distribution of subscription television, video, or radio service.16

Telecommunications Competition Act of 1996

Passed over the veto of the mayor, the law was intended to provide guidelines to the D.C. Public Service Commission for opening the local telecommunications market to competition. This act contained the following section addressing taxation of telecommunications:

Not withstanding any other provision of law, each local exchange carrier in the District of Columbia shall be subject to the same District of Columbia taxes and fees and shall be entitled to the same exemptions, including, but not limited to, personal property taxes. For purposes of District of Columbia taxation only, a local exchange carrier shall include a telephone company that sells public utility services. For the taxation purposes of this act, the term “public utility services” shall include all local telecommunications services sold to the public irrespective of the technology used to provide the services, including, but not limited to, local commercial mobile services.

The legislation appears to espouse the general principle of horizontal equity among local telecommunications providers, regardless of whether services are provided via wire-based or wireless technology. However, in the author’s view — due to an absence of discussion about the intent of this provision of the law by the Council and a lack of clarity flowing from a plain reading of the language of the statute — the District lacks the authority to collect taxes from local telephone companies not classified as utilities in the manner that they tax utilities providing regulated services. The District will require additional legislation if officials wish to achieve equity in the tax treatment of providers of local telecommunications.
Commercial Mobile Telecommunications Service Tax Clarification Amendment Act of 1998
Passed in permanent form in April 1998, this legislation was crafted by the D.C. Office of Tax and Revenue to provide clear rules regarding the taxation of wireless telecommunications companies, reflecting unique aspects of wireless service. The D.C. Office of Tax and Revenue developed this legislation with the support of the wireless industry because the Telecommunications Competition Act of 1996 was not clear regarding the intent of the Council to tax wireless services. As Section 8 of the Telecommunications Competition Act indicates, the Council sought to provide parity for all local telecommunications providers. However, in a previous section of the law, the Council appeared to exempt wireless service providers from the act.17

Fiscal Year 1997 Budget Support Emergency Act of 1996
In July 1996, the Council passed legislation that would allow the Department of Public Works to impose a charge on users of public rights of way.

Recent litigation
There is currently no litigation in either the District courts or federal courts regarding the specific telecommunications tax laws of the District. The most significant telecommunications tax case in the District since 1990 is the so-called “Sprint” case. The Sprint case was resolved in 1994 in favor of long-distance telephone companies located outside the District. The case involved the legality of an allocation formula used to apportion the personal property tax on equipment that was used to produce receipts subject to the toll telecommunications tax. The Court found that the District was unfairly discriminating against businesses located outside the District. As a result, the District replaced the allocation formula with the current general personal property tax exemption for long-distance companies.

Taxation scheme as viewed through tax principles

Efficiency
The District taxes similar services differently and applies different taxes to the same service based on method of payment, potentially creating losses in efficiency. Most taxes lead entities to make a different set of choices than they would have made if there were no tax. The ability to substitute between goods and services — especially between those that are taxed, untaxed, and differentially taxed — shapes the distortion brought about by a tax.
In the past, there were few close substitutes for telephone service. However, substitutes are emerging within the telecommunications sector. Emerging options alter the elasticity of demand for traditional telephone services, making it more likely that differential taxation across services will distort the market. In other words, having different taxes apply to similar services may induce some individuals to alter their purchases.

Distortion also can result from differential taxation of the same service. For example, by purchasing prepaid telephone cards in another state, a buyer may avoid District sales tax, although a use-tax obligation would exist. The ability to avoid taxes may encourage some individuals to alter the channels through which they acquire goods and services.

**Equity**

Equity can be considered both horizontally — across similar providers or similar types of goods — and vertically — across income groups.

The District generally assesses gross receipts taxes on the telecommunications sector. However, as Figure K-9 shows, local nonregulated telephone service currently is not subject to the gross receipts tax. Further, there is inconsistency in the application of sales and personal property tax exemptions. These differences represent departures from horizontal equity that should not be sustained in a deregulated environment.

Taxes on local telephone service tend to be more regressive than taxes on long-distance service. Richard McHugh reported that analysis of telephone bills from a national sample of 40,000 households in 1993 indicated that there is some regressivity associated with intrastate and interstate toll service. However, as income rises, expenditures for interstate service tend to increase.

The vertical equity of the gross receipts tax is difficult to assess. On the one hand, the basic line charge does not rise with income. On the other, the tariff structure does allow households to choose more and less costly local service. Bell Atlantic provides residence service plans that range from $1–$14.15 per month. The lowest cost service is available to customers who meet certification requirements of the D.C. Energy Office: $11,835 annual income for a one-person household and $15,915 for a two-person household. Flat Rate Economy II Service is available to those age 65 and older. Younger household heads qualify for Message Rate Economy II Service for $3 per month, with up to 120 local calls per month. (Service for those who do not apply for or qualify for the certification requirements of the D.C. Energy Office begins at $4.35 per month, with each local call billed at 6.5 cents.) These programs mitigate the regressive effects of taxes on local telephone service for the poorest households.


**Revenue stability and adequacy**

The telecommunications sector has provided a stable source of revenue in the District for decades. However, once the local telephone market in the District is deregulated, it is likely that prices and associated tax revenue will fall. This trend may be offset by the increase in second phone lines in many households.

In the long-distance market, lower prices were accompanied by increases in consumption, limiting the effect of long-distance deregulation on gross receipts tax revenues. The long-distance market is the fastest growing segment of the market, and therefore taxes on this service are likely to be more stable.

**Administrative ease**

It is likely that the D.C. Office of Tax and Revenue will be required to devote additional staff to the collection of gross receipts taxes within the next few years — reflecting growth in the number of returns filed. In the days of monopoly telephone service, telecommunications taxation typified administrative ease: a single regulated firm remitted, in regular payments, most of the revenue received from the industry. Compliance was near perfect and administrative issues few. Now in the era of competition, the number of firms subject to the tax is increasing, and the administrative complexities are growing.

**Economic growth**

Telecommunications taxes are an important input cost for telecommunications-intensive businesses. To the extent that telecommunications-intensive activities can be relocated and significantly lower taxes apply in other jurisdictions, some firms will locate operations elsewhere. One approach to mitigating the impact of taxes on telecommunications-intensive firms is to exempt long-distance services from the sales tax. Eight of the 17 states currently taxing interstate long-distance service exempt wide-area telephone service (WATS lines) and toll-free services from the sales tax base.

**Policy perspectives**

Is the current tax scheme flawed?

As a general principle, the District ought to tax all telecommunications providers in the same manner. To the extent that various telecommunications services are equivalent, these services ought to be subject to similar taxation. The D.C. Council appeared to take a step in this direction in the Telecommunications Competition Act of 1996, but additional legislation will be necessary. Whether a company was classified as a cable provider, local telephone company, long-distance market participant, or wireless service company in the past is not relevant. As shown in Figure K-9 (page
460), District tax laws are inconsistent regarding taxation of telecommunications services and providers.

By applying equal rates to services, the District can avoid problems in determining how to tax bundled telecommunications. Furthermore, if all types of services are subject to a single rate, there would be no discrimination against a particular method of service delivery — for example, wire-based versus wireless.

The District may be at risk of litigation due to inconsistent laws regarding the purchase of equipment that is used to produce receipts subject to gross receipts taxes. In addition, obligations under the personal property tax are inconsistent.

Is 10 percent the right gross receipts tax rate for the District?
Significantly higher tax rates for telecommunications services compared to other jurisdictions may hinder economic development by inducing businesses and government agencies to locate telecommunications-intensive activities in lower-tax jurisdictions.

A number of factors could be considered when determining whether the current gross receipts tax rate is the best rate for the District, including: impacts on economic development; equity for residents and businesses; equity for telecommunications providers compared to other industries; the revenue requirements of the District; and the potential to substitute lower-taxed services for higher-taxed telecommunications services.

Is it appropriate to tax telecommunications firms and services differently than other industries or services?
Telecommunications firms are, or soon will be, subject to the same market forces and pressures that other industries must face. These firms generally are not guaranteed to make a profit and may be less able to pass through gross receipts taxes than in the past. New technology such as Internet telephony may have a profound effect on the long-distance market by creating close substitutes at a substantially lower price. Long-distance firms would be forced to lower prices to compete and might cease to generate profits — yet would continue to face gross receipts tax liabilities that they may not be able to recover from consumers. Other types of companies not earning a profit in the District — since they are subject to the franchise tax, which is a tax on net income — would pay only the minimum franchise tax.

On the other hand, one could argue that the gross receipts tax produces greater horizontal equity than other taxes (such as the sales tax) because the tax base is larger for this tax than for other business taxes. One also may conclude that the tax is equitable because only people who use telephones bear the cost and the tax burden increases with use of the service.

Clearly, an advantage of a gross receipts tax is that it allows the District to expand the tax base to include sales to the federal government and other generally tax-exempt
Definitions of Service Categories

**Local regulated services** — Traditional local wire-based telephone service subject to regulation by the District Public Service Commission.

**Local nonregulated service** — Local wire-based telephone service provided by competitive service providers such as resellers. Competitors of established local regulated exchange carriers.

**Long-distance service** — Generally defined to be interstate or international carriers or IXCs that provide telephone services beyond the local calling area.

**Cellular** — A wireless telecommunication service that generally has greater range but less capacity than PCS service. Signals may be transmitted in analog or digital formats.

**PCS (personal communications service)** — A wireless telecommunication service with greater capacity than cellular. Signals are transmitted in a digital format.

**Ricochet data service** — A wireless data service allowing Internet access, e-mail, and other transmission services.

**Standard cable** — Wire-based television provided by either coaxial cable or fiber optic cable to subscribers.

**Open video systems** — This type of system is allowed under the Telecommunications Act of 1996 and permits telephone companies to operate video programming systems as common carriers. The OVS operator can provide programming but must offer access on a nondiscriminatory basis. A competitive service of standard cable. (This service is not available yet.)

**Direct broadcast satellite** — A satellite-based video service. This service competes with standard cable television.

**SMATV (satellite master antenna television)** — Essentially a private cable television network. This is primarily used in hotels and large apartment complexes.

**MMDS (multichannel, multipoint distribution service)** — A wireless cable television service using ground-based transmission rather than satellites. (This service is not available in D.C.)
institutions. This has allowed the District to maintain lower rates for other taxes. Robert Ebel and Barbara Libman noted in a 1988 study of District telecommunications taxes that as much as 50 percent of long-distance charges and 45 percent of local telephone revenues came from governments and others with tax-exempt status.

The gross receipts tax is simple for the District to administer. Due to the limited number of payers, few resources need to be devoted to these taxes. However, deregulation and expansion of the gross receipts tax base are increasing the workload associated with administration of these taxes.

Many states still impose gross receipts taxes on telecommunications, but the national trend is toward elimination of these levies. According to a study by the state of New York, in 1986, 30 states imposed a gross receipts tax, while only 20 did in 1996. Only seven states impose a gross receipts tax on long-distance providers, and four states impose a gross receipts tax on cable television (excluding the District). A gross receipts tax on telecommunications services remains an attractive option for the District, even though it is being eliminated in many states.

Should the District impose sales taxes on residential local telephone service? Beyond equity concerns, there is little rationale for granting a residential exemption from the sales tax. However, programs are in place to ensure that low-income residents have access to telephone service.

Of the 45 states that impose sales taxes, 39 states impose a sales or excise tax on local telecommunications services. Of these states, only four exempt residential services, including Florida, Pennsylvania, Washington, and the District.

Should the District exempt all telecommunications sales from the sales tax? A minority of states do not apply a sales tax to telecommunications services. In some cases, the state does not have any sales tax. Given the inability to apply the sales and use taxes to governmental sales and the existing exemptions for long-distance service and local residential cable and telephone service, extension of the exemption to all telecommunications services would allow consistency for all consumer classes. An exemption for business customers may encourage economic development.

Should the District subject long-distance service to the sales tax? Most states do not apply a sales tax to long-distance service. Of the 19 states that do, 11 make an allowance for large users and 10 exempt toll-free services.

Should prepaid phone cards be subject to a retail sales and use tax or be treated like other telecommunications services? An issue of great interest to the telecommunications industry and the states in the last few years has been the taxation of prepaid telephone cards. These cards allow a
consumer to purchase “units” of telephone service in advance. Revenue from the sale of prepaid phone cards is in excess of $1 billion per year nationally and growing. Some industry observers envision the use of these cards expanding beyond telephone service to include other products, services, or goods.

There is no clear single national trend regarding the taxation of prepaid phone cards, although many industry advocates have urged the states to enact one standard. There are two general policy options: 1) subject telecommunications services purchased with prepaid phone cards to telecommunications taxes on the value of the service at the time of use, or 2) tax prepaid phone cards as tangible personal property, subjecting the value of the cards to taxation through sales and use taxes.

Several states, including the District, tax the cards as tangible personal property, but a majority of the states require taxes to be paid on the value of the telecommunications services at the time the card is used. Richard McHugh reported that in 1996, prepaid phone cards were taxed at the point of sale in 11 states, at the time of use in 30 states, at the discretion of the seller in one state, and not at all in nine states.

Taxing prepaid phone cards at the retail level in the District and requiring retailers to collect the tax creates an additional tax burden on retailers. Prepaid phone cards are taxed at the 10 percent rate rather than the general 5.75 percent tax rate, creating confusion for retailers and the public.

Generally, a retail sales and use tax is more difficult to administer than a gross receipts tax (although not necessarily for the telephone providers). In the event that prepaid phone cards are purchased in a state with no sales tax such as Delaware, and the cards are used in the District, the District has few tools available to monitor and collect use taxes. Further, since the cards are not used in the state in which they were purchased, it is not likely the requisite nexus would exist to tax the cards. On the other hand, some telecommunications providers have argued that states are better off under a retail sales tax, noting that taxation at the time of use raises nexus issues and that the state can collect taxes on the prepaid phone card, regardless of whether or where the card is actually used.

Should the District tax Internet access?

Not to be confused with taxation of electronic commerce, taxation of Internet access has been the subject of national debate. While electronic commerce is the selling and buying of goods and services through electronic means, taxation of Internet access is somewhat akin to taxation of the on-ramp to the information superhighway. Internet access differs from electronic commerce in that access consists of linking a user to the Internet, rather than the content of the Internet itself, although it is possible for a vendor to provide access and offer products or services in conjunction.
A number of states have held that Internet access is a taxable communications service. For example, North Dakota includes “interactive electromagnetic communications, including voice, image, data, and any other information” as taxable. Illinois subjects Internet access to telecommunications excise taxes. The District also taxes Internet access.

Most states are not taxing Internet access. For example, Virginia treats Internet access as a nontaxable service. In Nebraska, Internet access is taxed only as part of a connection service if access software is included, but additional access charges are not subject to taxation. Several justifications are given for not taxing Internet access: First, some policymakers have been concerned that access would be taxed once at the retail level and again at the provider level. Second, many states have been persuaded that the Internet industry needs protection from legislation in order to grow.

**Should the District levy a tax on use of public rights of way?**

The question of how much (if any) the District should charge utilities for use of public space was raised by the Budget Support Emergency Act of 1996 covering the 1997 fiscal year. That legislation permitted fees to be imposed on users of public rights of way. Some users of public space, such as sidewalk cafes and vaults built beneath sidewalks, are charged for their use; others, such as utilities placing pipes, conduits, and ducts below street level and poles in District-owned rights of way are not.

Two sets of issues are involved. The first relates to direct-cost recovery. Direct costs are of two types. The first direct cost is the cost of issuing permits to make pavement cuts and to inspect repairs. The second cost is the loss of value due to the reduced life span of pavement into which cuts are made. The District’s direct-cost recovery is today limited to permits for underground excavations, constructing manholes, and connecting sewers, conduits, and mains. Most rates were established in 1980. A consultant to the Department of Public Works has recommended updating permit fees to reflect actual costs. In addition, the consultant has proposed charging utilities that make pavement cuts for diminishing pavement quality faster than was expected under the original design.

The second set of issues is more complex: What is the economic value associated with allowing businesses to use public property for private purposes? The government can choose to capture a portion of this value. The simplest approach administratively is to avoid computing the economic value of private use of public rights of way using a method that accounts for the cost of each pole and linear foot of pipe, conduit, and duct; and instead impose either a fee based on gross receipts or a flat fee. In some cities, the fee takes the form of a franchise fee paid by the utility in exchange for the privilege of doing business in the city. The District imposes one franchise fee — on the cable television service provider.

However, the District already imposes a 10 percent gross receipts tax on telecommunications companies and a sizable right-of-way tax would still constitute
a tax increase. As an economic matter and from a taxpayer perspective, a franchise fee and gross receipts tax are equivalent.

Both franchise fees and gross receipts taxes lack the precision that prices have for allocating resources and ensuring that an efficient level of public space is used in providing utility services. For example, because no charge is made for the use of public space, a firm intending to lay a fiber optic network in the District may decide to build its own set of conduits rather than rent space from an entity that already has built an underground network (for example, the Washington Metropolitan Area Transit Authority, which receives $1.8 million per year for renting such space in Metro tunnels). But the normal reference point for prices — opportunity cost — is lacking in pricing rights of way (at least until the point that so many firms wanted to build underground networks or install utility poles that physical space limitations arose). Because right of way is priced at zero, some distortions arise. For example, market share of cellular service versus hard-wired telephone service would be different if the provider of wired service had to pay for use of rights of way to erect the poles that connect users to the network.

The approaches suggested for pricing right-of-way access on a unit basis are crude. They generally involve devising a generic value of land in the District and multiplying that value by the amount of space assumed to be used. If the District were to adopt unit pricing of right-of-way use, there would be significant costs associated with setting up a system to establish a baseline for current right-of-way use and future changes.

Should the District tax direct-broadcast satellite services and satellite master antenna television?

Under current law, the District subjects all subscription video services to the 10 percent gross receipts tax. Conceptually, this is appropriate because all such services are taxed equally, regardless of whether the services are provided by a cable company or through wireless means. Further, this means that traditional telecommunications services and cable are treated similarly, avoiding future complications if the cable franchisee begins offering telephone service or if a phone company offers video services.

The District's inclusion of digital broadcast satellite and other video service is consistent with practices in other states that tax cable. Twenty-three states tax cable television, while 28 exempt these services from transactional taxes. However, the District is unique in comparison with other municipalities: All other local governments are forbidden from taxing digital broadcast satellite services under provisions of the Telecommunications Act of 1996.

Should the District impose a tax on telecommunications services for 911 services?

The advent of 911 as an emergency response and dispatch service has been accompanied by a variety of ways to finance the telephone lines, specialized equipment,
and personnel required. In the District, the costs of the 911 system are divided between those borne by the District government and those borne by the local exchange company, Bell Atlantic-D.C., which owns and operates the lines between the central office and the dispatch center. It recovers these costs through a per-line charge of 16 cents per month on business and residential lines and 2 cents per month on Centrex lines. The D.C. Public Service Commission has allowed Bell Atlantic to include this cost in its line charge; no separate amount for the service appears on customer bills. The District’s costs include the equipment, equipment maintenance, and personnel who answer calls. The personnel are part of the Communications Division of the Metropolitan Police Department, and the District pays these costs from general revenue funds. The District’s 911 system setup is unusual in that a component of the emergency communications system is owned by the local exchange carrier rather than by the government.

Among 46 states surveyed on emergency communications financing, only two, Connecticut and New Jersey, do not rely on sources other than general revenue for a component of the operating costs. While all states with specialized revenue sources use general revenue funds for capital costs associated with emergency response, 38 states also use specialized sources to pay some or all of the system’s operating costs. These nongeneral revenue sources take a variety of forms, the most common of which is a flat amount charged per access line. Among the 18 states with flat amounts, the monthly fee ranges from 25 cents to $2, with 15 states imposing flat fees of less than $1 per month. The next-most common approach for funding emergency communications services is to earmark a percentage of the rate charged for local service. Other funding mechanisms include a property tax surcharge (Nevada) and a surcharge on heavy users of directory assistance (Massachusetts, with a 34 cents per-call charge for calls in excess of 10 per month).

The costs attributable to 911 in the District are difficult to identify. Operating costs are incurred through the Metropolitan Police Department’s Communications Division, which, in addition to 911, handles dispatch and internal police communications. The 1998 fiscal year budget for the communications division is $11.3 million, of which $9.8 million is allocated for personnel and related costs.

Issues and options

In this section, options and ideas are presented for consideration. Where possible, an estimate of the annual revenue impact associated with each option is included.
Gross receipts tax, sales tax, or both
- Eliminate the gross receipts tax for all telecommunications services and replace with a sales tax (revenue loss of $75 million).
- Eliminate sales tax on local telecommunications for businesses (revenue loss of $8 million).
- Eliminate the sales tax exemption for local residential service (revenue gain of $5 million).

The gross receipts tax rate
Note: The following three options are mutually exclusive.
- Leave the gross receipts tax rate at 10 percent (no expected revenue impact).
- Reduce the gross receipts tax rate to a level equivalent to the 5.75 percent sales tax rate without deductions, which would equal an approximate effective tax rate on telecommunications services of 6.1 percent if the tax is passed through to customers (revenue loss of $45 million).
- Increase the gross receipts tax rate for telecommunications services from 10 percent to 13 percent. Without deductions, this would yield an effective tax rate of 14.9 percent, assuming tax is passed through to customers (revenue gain of $32 million).

Note: The following two options are mutually exclusive.
- Eliminate the “tax on a tax,” changing the effective rate from 11.1 percent to 10 percent for all telecommunications providers (revenue loss of $10 million).
- Reincorporate the “tax on a tax” into the tax base for wireless service providers (revenue gain of $500,000).

Expansion of the gross receipts tax base/equal treatment of providers
- Include all providers of wire-based local telecommunications under the same tax scheme (revenue-neutral under existing market conditions, where all local wire-based service is provided by regulated utilities).

Prepaid telephone cards
- Tax prepaid phone cards as tangible personal property at 10 percent (no revenue impact).
- Revert to taxation of prepaid phone cards as telecommunications services (revenue gain of less than $1 million).

Taxation of Internet access
- Include Internet access in the sales tax base.
- Include Internet access in the gross receipts tax base.
- Do not tax Internet access.
Imposition of a 911 fee
- Impose a monthly 911 fee on telephone bills to pay for 911 service (revenue impact dependent on amount of fee).

Application of the personal property tax
- Exempt all telecommunications companies from the personal property tax.
- Exempt all telecommunications companies from the personal property tax, except for taxes on office furniture and equipment.
- Subject all personal property located in the District to the personal property tax.

Exempt personal property purchased by a telecommunications company from sales and use taxes
- Exempt sales of personal property purchased by a telecommunications company if the company is subject to a gross receipts tax in the District.
- Exempt sales of personal property purchased by a telecommunications company (except for office furniture and equipment), where the equipment is used to provide telecommunications service subject to a gross receipts tax in the District.
- Subject all sales of personal property purchased by a telecommunications company used in the District to the sales tax.

Imposition of a right-of-way tax or regulatory fee
- Impose a nondiscriminatory right-of-way tax, using gross receipts as a basis, on all users of public rights of way.
- Impose a nondiscriminatory right-of-way tax based on linear feet of occupied space.
- Do not impose right-of-way tax, but impose maintenance cost recovery fees as necessary.

Terms and definitions

**Cellular service** — A wireless telecommunications service. The technology permits greater range than personal communications services, but cannot support as many features.

**Competitive access provider** — A company that provides access to long-distance carriers, bypassing established local exchange carriers. Competitive access providers directly compete with local exchange carriers.

**Electronic commerce** — There is no generally accepted definition of electronic commerce. However, in the most basic of terms, it is the sale of goods and services
via electronic means — generally via computer. Some people extend this definition to include not only the transactions, but also the technology and software used.

**Interconnection** — The integration of independent telecommunications providers into a single network, including rules for origination and termination of telephone calls among providers.

**Interexchange carrier** — A company that provides telephone service from one local calling area to another.

**Local exchange carrier** — A company that provides local telephone service that can include intrastate toll service and local service.

**Personal communications service** — A wireless telecommunications service that can include voice, messaging, and other services, and data transmission services.

**Endnotes**

1 A broad list of the types of services classified as telecommunications is presented in Figure K-11 (page 472). For purposes of this chapter, telecommunications includes local and long-distance communications services, wireless communications services, cable, and other video services. The chapter does not address taxation of Internet content providers, radio or television broadcasters, or other industries that supply information. Thus, the types of businesses discussed here are carriers of information only.


3 Ibid.

4 As of July 1998, no company had entered the local telecommunications market in the District.

5 Richard J. McHugh, “The Telecommunications Industry: Implications for State and Local Taxation,” State Tax Notes (January 6, 1997). (Since drafting this chapter, the District’s electric utility entered a partnership with RCN Corporation to provide telecommunications services in the District under the name “Starpower Communications.”)

6 Recent market entrant Starpower is a good example. This company was formed as a partnership between PEPCO and RCN Corporation. Starpower is not a regulated utility. It does plan to offer local and long-distance voice telephone service, Internet access, and cable television. The company does not fit well into the historic designations such as toll telecommunications company, public utility, cable television company, or information service provider.


8 The data in Figure K-7 includes all persons working in the District of Columbia
in industries deemed to be telecommunications-intensive in the New York state report “Improving New York State’s Telecommunications Taxes: A Background Study and Status Report.” The employment data is by place of work, rather than residency. It is probable that nonresidents working in the District hold a significant portion of these jobs.

Subsequent to the release of the draft report, the author has had additional discussions with D.C. Office of Tax and Revenue legal staff regarding this point. The legal staff disputes the author's conclusion and maintains that the District would be able to collect the gross receipts tax from any company selling local telephone service, regardless of the designation of the company as a public utility or not. The legal staff relies upon provisions of the Telecommunications Competition Act of 1996.

An excellent concise review of the relevant cases was written by Richard McHugh and is included in his study “Sales Taxation of Telecommunications Service in the State of Utah,” available from Georgia State University.

Residential cable television service is exempt from the sales tax, but the sale or rental of property such as descrambling devices may be taxable.

See endnote 9.

See endnote 9.

D.C. Code 47-2501.1(a)

D.C. Act 11-300 Section 7(b) states: “Pursuant to the federal Telecommunications Act of 1996, this act shall not apply to licensed or unlicensed wireless services authorized by the Federal Communications Commission operating in the District of Columbia.”


Since the draft of this chapter was released, the D.C. Office of Tax and Revenue has added staff resources for the administration of the gross receipts taxes.

McHugh, op. cit., p. 36.


Ibid.

McHugh, op. cit.

Ibid.

Ibid.

Ibid.