The telecommunications industry is undergoing rapid change due to technological advances and
deregulation. The industry that began with the telephone now includes cable, wireless and
satellite communications, and the Internet.

California’s tax system has not kept pace with the telecommunications industry. The myriad
taxes and charges on telecommunications in California were established for an industry that was
legally, technologically, and structurally very different than it is today. Many taxes remain
 targeted to a specific technology (e.g., telephone taxes or cable franchise fees), despite the
blurring of distinctions between technologies that provide similar services (e.g., the telephone
and Internet telephony). The convergence of formerly distinct communications technologies
renders the existing tax structure difficult to justify in terms of economic efficiency or equity.

This Brief summarizes our review and analysis of telecommunications taxes and fees in
California. The primary objectives of our research were (1) to provide a comprehensive overview
of the telecommunications tax system in the state, including all taxes, fees, and surcharges paid
by telecommunications service providers and their customers; and (2) to examine the economic
consequences of current tax policy, including inequity, inefficiency, and administrative
complexity.

As policymakers at all levels of government confront the challenge of reforming our tax system
to encourage new technology and broad access to various telecommunications services,
including Internet access, while at the same time addressing the needs of tax equity and revenue
sufficiency, they must first have a clear understanding of the current tax system and the
incentives it creates.

**Tax Rates**

We find that the cumulative tax rates (including all taxes, fees, and surcharges) are higher for
telecommunications services than other goods and services. The total tax rate on intrastate
services (e.g., within-state long-distance) ranges from 7.83 to 18.83% and comprises the federal
excise tax of 3%, various statewide taxes and surcharges totaling 4.83%, and a local tax that
varies across cities from zero to 11%.

The total tax rate on interstate services (e.g., long-distance calls to other states) is even higher,
ranging from 10.28 to 21.28% or higher. This rate consists of the 3% federal excise tax, a 7.28%
federal universal-service charge (which is sometimes passed on to consumers at a higher rate),
and the zero to 11% local tax.

**Equity**

The distribution of the burden of current telecommunications taxes is not equitable according to
any accepted equity principle. According to the benefit principle, the burden of a tax should be
distributed according to the benefits received from the governmental activities financed by the
Many of the taxes imposed on telecommunications are revenue-based, and companies pass them along to consumers in proportion to their expenditure. However, the benefit these taxpayers receive from goods and services financed by these taxes is not linked to their tax burden in any way, as would be required by the benefit principle.

Furthermore, since the share of household income spent on telecommunications decreases as household income increases, the telecommunications tax burden is distributed regressively with respect to income. This violates the ability-to-pay principle, which holds that tax burdens should be distributed among taxpayers according to their ability to pay, typically as measured by income.

Finally, horizontal equity requires that taxpayers of equal ability to pay bear equal tax burdens, which is impossible with revenue taxation because taxpayers with similar incomes may spend differing amounts on telecommunications.

**Taxation Differences Across Technologies**

Today there are many alternatives to the traditional wire line telephone call, including wireless service and voice communication over the Internet (Internet telephony). Our research shows that the tax burden varies across technologies. For example, traditional telephone companies are subject to a much broader range of federal, state, and local taxes than are some of their new competitors (e.g., cable or satellite providers).

Consumers of cable or satellite services do not pay the federal excise tax or federal and state taxes and charges to support universal service. The largest potential “leakage” with respect to voice communications is Internet telephony, which escapes federal and state universal-service taxes, the federal excise tax, and the local utility tax.

Other potential sources of discriminatory tax treatment are local franchise fees, which cable companies pay and local exchange carriers do not, and property-tax laws. The property of most telephone carriers is state-assessed annually at market value, while cable television companies are locally assessed with annual increases in assessed value limited to 2%.

There is little economic justification for these differences in treatment across technologies, because efficient taxes (which introduce the least distortion in consumer and producer decisions) depend on the demand for the final service produced, not on the technology underlying the service. Favoring one technology over another may reduce consumer and producer welfare over time.

**Efficiency**

Efficient economic outcomes maximize the total economic benefits received by consumers and firms. Excess burden, the term for the inefficiency caused by a tax, is the loss in a taxpayer’s well-being above and beyond the tax revenue collected. Taxation of revenue causes excess burden because the higher prices that result decrease consumption of telecommunications services. The decrease in consumption and subsequent excess burden will be greater when taxing services such as cellular as compared to local-access service because cellular consumers are more sensitive to price changes. Excess burden is a pure efficiency loss in the economy, reducing the consumers’ economic benefits by more than the amount of tax revenue that the taxing authority gains.
We estimate, very conservatively, that the current set of telecommunications taxes leads to at least a 4% efficiency loss, or excess burden, in California. We show that the efficiency loss can be reduced without affecting tax collections by raising the tax rate on revenue from local-exchange access (whose demand is relatively insensitive to price) and lowering the rates on other services, such as long-distance and wireless communication.

The existing tax structure may also result in efficiency losses that compound over time—dynamic efficiency losses. Discrimination among telecommunications firms or between telecommunications companies and other companies distorts the rates of return on investment across companies, thereby reducing the economic benefits realized from the growth of the telecommunications industry and its various components.

**Consumption Distortions**
Consumers’ choices between competing telecommunications services are affected by differences in taxes on these services. Consumers today have many avenues to avoid the taxes on traditional service. For example, Internet telephony services escape all telecommunications taxes, and consumers consequently have an added incentive to switch to Internet-based telephony. As consumers switch from taxed to untaxed services, federal, state, and local governments will see their tax revenues decline.

**Differences Across Locations**
Telecommunication costs vary among cities and counties in California due to variations in the local utility user tax (UUT) and local franchise fees. The UUT rate ranges from zero to 11% across cities; the UUT tax base also varies.

Our comparison to neighboring and other large states shows that California has a greater number of state telecommunications taxes, which raises administrative and compliance costs for telecommunications companies doing business in the state. California, however, does not impose relatively higher tax rates on telecommunications. Telecommunications taxes, therefore, probably play a negligible role in business or household decisions to locate in California, but may influence the siting choices of some heavy users of telecommunications within the state.

**Conclusions and Recommendations**
Telecommunications represents a major path by which future economic growth will continue to travel. Although the telecommunications industry is currently a relatively small part of California’s overall economy—about 2% (measured by income)—it has been growing rapidly and contributed significantly to economic growth as it raises the productivity of a wide range of other industries. Hence, its total impact on the economy is much greater than its size suggests.

As noted, California’s tax system has not kept pace with the telecommunications industry. Technological developments and deregulation have resulted in new entities that do not fit the traditional definition of telecommunications providers under state tax laws. This situation results in differing treatment of businesses competing to provide the same service. The current treatment of the industry violates basic principles of good taxation, in that it is inefficient, inequitable, and creates excessive administrative and compliance costs.

If developing the telecommunications infrastructure, and hence the economy as whole, is a goal of state economic policy, then tax policy should support this goal by encouraging (or at least not discouraging) investment in California’s telecommunications industry.
Although our chief objective has been to present information rather than to advocate particular reforms, we conclude by suggesting a few improvements our analysis points to. These may lay the groundwork for potential reform of California’s telecommunications tax system. Some of these recommendations can be implemented unilaterally by the state. Others require California to cooperate with local governments or with other states.

- **California should extend the Manufacturer’s Investment Credit (MIC) and sales-tax exemption for new equipment purchases to telecommunication companies.** The primary purpose of the MIC and sales-tax exemption on equipment purchases is to avoid the pyramiding of taxes that can occur when both the inputs used to produce goods and services and the goods and services themselves are subject to the sales tax. While not subject to the sales tax, telecommunications services are subject to other taxes that total more than the sales tax. Since the MIC is intended to encourage investment, there is no reason for excluding telecommunications, given their importance in the new economy.

- **California should examine whether the income apportionment rules for its corporate franchise and income taxes are appropriate for telecommunications services.** All states must cooperate to ensure that multistate income is being apportioned to the proper states to avoid double taxation.

- **California should work with other states and the federal government to establish new nexus guidelines for the Information Age.** Federal Public Law 86-272 limits a state’s power to tax an out-of-state company’s income from sales of tangible property within the state, when the property is shipped from out of state. This law should be broadened to cover intangibles, such as telecommunications and Internet services, and extended to other types of taxes.

- **California should, in cooperation with its local governments, simplify and consolidate the various taxes and charges imposed on end-user revenues by local jurisdictions and the Public Utilities Commission.** California telecommunications customers currently pay seven different statewide taxes, fees, or surcharges in addition to the federal excise tax and universal-service charges, and possibly a local utility user tax on their purchases of telecommunications services. Consolidation of statewide charges would significantly reduce the administrative burden of telecommunications companies in the state. Switching to a simple per-line charge to fund universal-service programs would result in fewer consumption distortions, less excess burden from taxation, and greater efficiency. If nonuniform rates are desired, long-distance service should be taxed less than local service to minimize the efficiency loss caused by taxation (which is the opposite of the current tax structure).

- **California should encourage local jurisdictions to unify the local utility user tax.** The compliance burden on telecommunications companies could be significantly reduced if local jurisdictions were to adopt a uniform rate and base for the utility user tax.

- **California should establish uniform assessment of business property.** Neither the assessed value of business property nor the allocation of the property-tax revenue from a particular property should be dependent upon who assesses it. Market-value assessment would be the most equitable and efficient method.
California should urge local governments to examine their local franchise fees. Local franchise fees should be set to cover no more than the costs to local governments of managing public rights-of-way, and not to fund general municipal budgets. All providers of telecommunication services should be equally subject to these minimal franchise fees so as to avoid competitive advantages that influence the future development of new technologies.

California and other states should urge the federal government to clarify issues regarding Internet and cable telephony. Currently telephone calls placed over the Internet are not subject to federal, state, or local taxes, and thus enjoy a competitive advantage. As the quality of such calls improves, more consumers will switch, which may lead to decreased economic efficiency and reduced government revenues. Certain forms of cable telephony raises unresolved issues regarding the applicability of the franchise fee and whether the property is subject to state or local assessment.

California and other states should monitor and work with the federal government in its efforts to restrict state and local tax systems. Maintaining a competitively neutral tax system in California may require expanding the tax base to include previously untaxed services such as Internet access. Currently, federal and state moratoria prevent such reforms.

California should work with local governments to provide uniform relief for low-income individuals and households. The taxes currently imposed on telecommunications services are regressive: Taxes represent a larger percentage of a low-income household’s income than a high-income household’s. A few cities offer UUT exemptions for low-income individuals and some relief from statewide surcharges exists, but the relief is not uniform.

James E. Prieger is assistant professor of economics at UC Davis. Terri A. Sexton is professor and chair of economics at California State University, Sacramento, and associate director of The Center for State and Local Taxation at UC Davis. Annette Nellen is professor of accounting and finance in the College of Business at San Jose State University.

This Brief is based on a study funded by CPRC’s Policy Research Program. The authors’ detailed research findings of the same title are available on the Web at http://www.ucop.edu/cprc/documents/telecomtaxrpt.pdf. This Brief may be copied without permission.