



Report to the Chairman, Committee on
Commerce, Science, and
Transportation, U.S. Senate

October 2003

TELECOMMUNICATIONS

Issues Related to Competition and Subscriber Rates in the Cable Television Industry



G A O

Accountability * Integrity * Reliability



Highlights of [GAO-04-8](#), a report to Senator John McCain, Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

Over 70 million American households receive television service from a cable television operator. In recent years, rates for cable service have increased at a faster pace than the general rate of inflation. GAO agreed to (1) examine the impact of competition on cable rates and service, (2) assess the reliability of information contained in the Federal Communications Commission's (FCC) annual cable rate report, (3) examine the causes of recent cable rate increases, (4) assess the impact of ownership affiliations in the cable industry, (5) discuss why cable operators group networks into tiers, and (6) discuss options to address factors that could be contributing to cable rate increases.

What GAO Recommends

GAO recommends that the Chairman of the FCC

- take immediate steps to improve the cable rate survey and
- review the commission's process for maintaining the status of effective competition.

In commenting on GAO's report, FCC agreed to make changes to its annual cable rate survey, but FCC questioned, on a cost/benefit basis, the utility of revising its process to keep the status of effective competition up to date. GAO believes that FCC should examine whether cost-effective alternative processes could help provide the Congress with more accurate information.

www.gao.gov/cgi-bin/getrpt?GAO-04-8.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mark Goldstein at (202) 512-2834 or goldsteinm@gao.gov.

TELECOMMUNICATIONS

Issues Related to Competition and Subscriber Rates in the Cable Television Industry

What GAO Found

Competition leads to lower cable rates and improved quality. Competition from a wire-based company is limited to very few markets. However, where available, cable rates are substantially lower (by 15 percent) than in markets without this competition. Competition from direct broadcast satellite (DBS) companies is available nationwide, and the recent ability of these companies to provide local broadcast stations has enabled them to gain more customers. In markets where DBS companies provide local broadcast stations, cable operators improve the quality of their service.

FCC's cable rate report does not appear to provide a reliable source of information on the cost factors underlying cable rate increases or on the effects of competition. GAO found that cable operators did not complete FCC's survey in a consistent manner, primarily because the survey lacked clear guidance. In particular, GAO found that 84 of the 100 franchises it surveyed did not provide a complete or accurate accounting of their cost changes for the year. Also, GAO found that FCC does not initiate updates or revisions to its classification of competitive and noncompetitive areas. Thus, FCC's classifications might not reflect current conditions.

A variety of factors contribute to increasing cable rates. During the past 3 years, the cost of programming has increased considerably (at least 34 percent), driven by the high cost of original programming, among other things. Additionally, cable operators have invested large sums in upgraded infrastructures, which generally permit additional channels, digital service, and broadband Internet access.

Some concerns exist that ownership affiliations might indirectly influence cable rates. Broadcasters and cable operators own many cable networks. GAO found that cable networks affiliated with these companies are more likely to be carried by cable operators than nonaffiliated networks. However, cable networks affiliated with broadcasters or cable operators do not receive higher license fees, which are payments from cable operators to networks, than nonaffiliated networks.

Technological, economic, and contractual factors explain the practice of grouping networks into tiers, thereby limiting the flexibility that subscribers have to choose only the networks that they want to receive. An à la carte approach would facilitate more subscriber choice but require additional technology and customer service. Additionally, cable networks could lose advertising revenue. As a result, some subscribers' bills might decline but others might increase.

Certain options for addressing cable rates have been put forth. Although reregulation of cable rates is one option, promoting competition could influence cable rates through the market process. Policies to bring about lower cable rates could have other effects that would need to be considered.

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Abbreviations

ACA	American Cable Association
BLS	Bureau of Labor Statistics
CPI	consumer price index
DBS	direct broadcast satellite
FCC	Federal Communications Commission
LEC	local exchange carrier
MMDS	multichannel multipoint distribution service
MSA	metropolitan statistical area
MSO	multiple system operator
NATOA	National Association of Telecommunications Officers and Advisors
NBC	National Broadcasting Company
NCTA	National Cable and Telecommunications Association
YES	Yankees Entertainment and Sports Network

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United States General Accounting Office
Washington, DC 20548

October 24, 2003

The Honorable John McCain
Chairman, Committee on Commerce,
Science, and Transportation
United States Senate

Dear Mr. Chairman:

In recent years, cable television has become a major component of the American entertainment industry—today more than 70 million households receive their television service through a subscription to a cable television operator. As the industry has developed, it has been affected by regulatory and economic changes. Since 1992, the industry has undergone rate reregulation and then in 1999, partial deregulation. Additionally, competition to cable operators has emerged erratically. Companies emerged in some areas to challenge cable operators, only to halt expansion or discontinue service altogether. Conversely, competition from direct broadcast satellite (DBS) operators (such as DIRECTV and EchoStar)—which did not exist a decade ago—has emerged and grown rapidly in recent years. Nevertheless, cable rates continue to increase at a faster pace than the general rate of inflation.

You asked us to review several issues related to recent increases in cable rates and the competitiveness of the subscription video industry—an industry that includes cable television, satellite service (including DBS operators), and other technologies that deliver video services to customers' homes. We agreed to (1) examine the impact of competition in the subscription video industry on cable rates and service; (2) assess the reliability of the information contained in the Federal Communications Commission's (FCC) annual cable rate report on the cost factors underlying cable rate increases, FCC's current classification of cable franchises regarding whether they face effective competition, and FCC's related findings on the effect of competition; (3) examine the causes of recent cable rate increases; (4) assess whether ownership of cable networks (such as CNN and ESPN) may indirectly affect cable rates through such ownership's influence on cable network license fees or the carriage of cable networks; (5) discuss why cable operators group networks into tiers, rather than package networks so that customers can purchase only those networks they wish to receive; and (6) discuss options to address factors that could be contributing to cable rate increases.

To respond to the first objective on the impact of competition on cable rates and service, we used an empirical model (our cable-satellite model) that we previously developed that examines the effect of competition on cable rates and service.¹ Using data from 2001, the model considers the effect of various factors on cable rates, the number of cable subscribers, the number of channels that cable operators provide to subscribers, and DBS penetration rates for areas throughout the United States. We further developed the model to more explicitly examine whether varied forms of competition have differential effects on cable rates. We also discussed the degree and impact of competition in the subscription video industry with an array of industry stakeholders and experts (see below).

For the second objective on the reliability of data in FCC's annual cable rate report, we randomly sampled 100 of approximately 750 cable franchises that responded to FCC's 2002 cable rate survey.² We designed this sample to be representative of the universe of franchises that responded to FCC's survey. Using a telephone survey (our cable franchise survey), we asked these franchises a series of questions about how they completed a portion of FCC's survey that addresses cost factors underlying annual cable rate changes (see app. II). We also examined FCC's process for classifying cable franchises regarding whether they face *effective competition*, a term defined by statute (see app. III).

For the third, fourth, fifth, and sixth objectives addressing the causes of recent cable rate increases, the impact of ownership affiliations, why cable operators group networks into tiers, and possible options for addressing factors that may be contributing to rate increases, we interviewed officials and obtained documents and data from FCC and the Bureau of Labor Statistics. We also interviewed officials from several trade associations and other organizations: the National Cable and Telecommunications Association (NCTA), Consumers Union, the National Association of Broadcasters, the National Association of Telecommunications Officers and Advisors, the American Cable Association, the National Cable Television Cooperative, three major sports leagues, and the Cable Television Advertising Bureau. We also conducted semistructured

¹See U.S. General Accounting Office, *Telecommunications: Issues in Providing Cable and Satellite Television Service*, [GAO-03-130](#) (Washington, D.C.: Oct. 15, 2002).

²Each year, FCC samples between 700 and 800 of the universe of roughly 10,000 cable systems using a stratified sampling approach that is based on the status of effective competition and the size of the cable system.

interviews with a variety of companies: 11 cable operators, one DBS operator, four broadcast networks (such as ABC and NBC), 15 cable networks (such as CNN and ESPN), and representatives of five financial analysis firms. Furthermore, we used data on cable network revenues and programming expenses that we acquired from Kagan World Media, which is a private communications research firm that specializes in cable industry data. We used these data to develop models that examine whether ownership of cable networks by broadcasters or by cable operators influences (1) the level of license fee (our cable license fee model) or (2) the likelihood that the network will be carried (our cable network carriage model).

We conducted our review from December 2002 through September 2003 in accordance with generally accepted government auditing standards. For additional information on our scope and methodology, see appendix I.

Results in Brief

Competition from wire-based and DBS operators leads to lower cable rates and improved quality and service among cable operators. Competition from a wire-based provider—that is, a competitor using a *wire* technology, such as a second cable operator, a local telephone company, or an electric utility—is limited to very few markets. However, in those markets where this competition is present, cable rates are significantly lower—by about 15 percent—than cable rates in similar markets without wire-based competition. Since 1999, when DBS operators acquired the legal right to provide local broadcast stations (such as affiliates of ABC, CBS, Fox, and NBC), these companies have emerged as important competitors to cable operators. In particular, in areas where subscribers can receive local broadcast stations from both primary DBS operators, the DBS penetration rate—that is, the percentage of households that subscribe to satellite service—is approximately 40 percent higher than in areas where subscribers cannot receive local broadcast stations from both primary DBS operators. In addition, the DBS provision of local broadcast stations has induced cable operators to improve the quality of their service by providing their subscribers with approximately 5 percent additional cable networks.

FCC's cable rate report may not provide reliable information on the factors underlying recent cable rate increases or on the effect of competition. In particular, cable franchises responding to FCC's 2002 survey did not complete in a consistent manner the section pertaining to the factors underlying cable rate increases primarily because of a lack of clear guidance; 73 of 100 cable franchises whom we spoke with said that

the instructions included with FCC's survey were insufficient. These inconsistencies may have led to unreliable information in FCC's report on the relative importance of factors underlying recent cable rate increases. For example, we spoke with 83 franchises that reported zero for infrastructure investment to FCC, 33 of these franchises told us that they had incurred costs for such investments, thereby implying that they understated the contribution of infrastructure investment to their cable rate increases. Overall, we found that 84 of the 100 franchises we surveyed did not provide a complete or accurate accounting of their cost changes for the year. Regarding the effect of competition, because FCC's process does not provide for updates or revisions to the competitive classification of cable franchises unless specifically requested to do so, FCC's classifications of cable franchises as having (or not having) effective competition on the basis of the statutory definition do not always accurately reflect current competitive conditions. In our analysis of the impact of wire-based competition, we checked the current status of competition in each franchise. The changes we made as a result of this process may explain, in part, the differential findings regarding the impact of wire-based competition reported by FCC, which found a nearly 7 percent reduction in cable rates, and our finding of a 15 percent reduction in cable rates. Because the Congress and FCC use this information in their monitoring and oversight of the cable industry, the lack of reliable information in FCC's report on these two issues—factors underlying cable rate increases and the effect of competition—may compromise the ability of the Congress and FCC to fulfill these roles. Additionally, the potential for this information to be used in debate regarding important policy issues, such as media consolidation, also necessitates reliable information in FCC's report. To improve the quality and usefulness of the data FCC collects annually on cable television rates and competition in the subscription video industry, we recommend that the Chairman of FCC take steps to improve the reliability, consistency, and relevance of information on rates and competition in the subscription video industry.

Several key factors—including programming costs and infrastructure investments—are putting upward pressure on cable rates. Programming costs incurred by cable operators have risen considerably—on average by as much as 34 percent—in the last 3 years, and, in particular, programming costs associated with cable networks showing sporting events have risen even more—on average by 59 percent—during the same time frame. The cable industry has also spent billions of dollars in upgrading its infrastructure to enable new services, such as digital channels and broadband Internet access. While these upgrades benefit cable subscribers by expanding the number of cable networks available and improving

picture quality, some of this benefit accrues to subscribers who purchase new, advanced services, such as broadband Internet access. Additionally, cable operators have increased spending on customer service, which typically is now available 24 hours a day, 7 days a week. For the 9 cable operators³ that provided financial information to us, we found that programming expenses and infrastructure investment appear to be the primary cost factors that have been increasing in recent years.⁴

Several industry representatives whom we spoke with believe that certain factors related to the nature of ownership affiliations may also indirectly influence cable rates through their influence on cable operators' choice of which cable networks to carry and the cost to the cable operator for the right to carry the networks. We did not find that ownership affiliations between cable networks (such as CNN and ESPN) and broadcasters (such as NBC and CBS) or between cable networks and cable operators (such as Time Warner and Cablevision) are associated with the level of license fees—that is, the fees cable operators pay to carry cable networks. However, we did find that both forms of ownership affiliations are associated with the likelihood that a cable operator would carry a cable network. Holding constant certain other factors that might influence the likelihood of a cable network being carried by a cable operator—such as the popularity of the network or the type of programming the network carries—we found that operators were more likely to carry cable networks that were majority-owned by either cable operators or by broadcasters than to carry other cable networks. Moreover, cable operators were substantially more likely to carry cable networks that they directly own than to carry cable networks owned by other cable operators, broadcasters, or others.

Currently, technological, contractual, and economic factors lead cable operators to sell large numbers of networks on tiers. On average, a basic tier of service includes about 25 channels, including local broadcast stations, and the next tier provides, on average, 36 additional channels, including such popular cable networks as CNN and ESPN. Because

³These 9 cable operators that provided data to us serve approximately 62 percent of all cable subscribers in the United States as of 2002.

⁴While programming expenses are directly related to the cable rates, it is less clear how much of the infrastructure investment underlies cable rate increases since some of these costs are more directly related to the provision of digital cable tiers and cable modem service.

subscribers must buy *all* of the networks offered on a tier that they choose to purchase, they have little choice regarding the individual networks they receive. Greater subscriber choice might be provided if cable operators used an à la carte system, wherein subscribers would receive and pay for only the networks they want to watch. But, an à la carte system could impose additional costs on subscribers in the near term because additional equipment—which many subscribers do not currently have—will be required on every television attached to the cable system to unscramble networks the subscriber is authorized to receive. Moreover, an à la carte system could alter the current economics of the cable network industry, wherein cable networks derive significant revenues from advertising. In particular, cable networks experiencing a falloff in subscribers could also see an associated decline in advertising revenues, since the amount that companies are willing to pay for advertising spots is based on the number of potential viewers. Although cable networks may take steps to reduce their production costs to compensate for the decline in advertising revenue, cable networks may also raise the license fees charged to cable operators for the right to carry the networks. If license fees rise, some of the increase is likely to be passed on to subscribers. Because of the reliance on advertising revenues by the cable network industry, most cable networks require that cable operators place their networks on widely distributed tiers. A variety of factors—such as the pricing of à la carte service, consumers’ purchasing patterns, and whether certain niche networks would cease to exist with à la carte service—make it difficult to ascertain how many consumers would be better off and how many would be made worse off under an à la carte approach. Creating a separate tier for sports channels may be viable because this genre of programming has a loyal base of customers. However, sports leagues may be reluctant to have sporting events appear on cable networks that are placed on a separate sports tier because the programming would not be widely available.

Certain options for addressing factors that may be contributing to cable rate increases have been put forth. Although reregulation of cable rates stands as a possible option, taking steps to promote competition would help to reduce cable rates by leveraging the normal workings of the marketplace. Specific options include reviewing whether modifications to the program access rules would be beneficial, promoting wireless competition, and reviewing whether changes to the retransmission consent process should be considered. Any options designed to help bring down cable rates could have other unintended effects that would need to be considered in conjunction with the benefits of the lower rates. We are

not making any specific recommendations regarding the adoption of any of these options.

FCC provided comments on a draft of this report in which they stated that the agency is taking steps to redesign their survey questionnaire in an attempt to obtain more accurate information. However, FCC questioned, on a cost/benefit basis, the utility of adopting a revised process to keep the status of effective competition in franchises up to date. We believe that providing the Congress with reliable information on cable rates and competition is important, and that more accurate effective competition designations would help to accomplish this. Therefore, we believe that FCC should examine whether cost-effective alternative processes exist to enhance the accuracy of its effective competition designations. FCC's comments are contained in appendix VI, along with our responses to those comments. We also provided a draft of this report to several industry participants and other experts for their review and comment. The comments we received covered a broad range of issues and each groups' comments are summarized in appendix VII.

Background

Cable television emerged in the late 1940s to fill a need for television service in areas with poor over-the-air reception, such as mountainous or remote areas. By the late 1970s, cable operators began to compete more directly with free over-the-air television by providing new *cable networks*, such as HBO (introduced in 1972), Showtime (introduced in 1976), and ESPN (introduced in 1979). According to FCC, cable's penetration rate—as a percentage of television households—increased from 14 percent in 1975 to 24 percent in 1980 and to 67 percent today. Cable television is by far the largest segment of the subscription video market, a market that includes cable television, satellite service (including DBS operators such as DIRECTV and EchoStar), and other technologies that deliver video services to customers' homes.

To provide programming to their subscribers, cable operators (1) acquire the rights to carry cable networks from a variety of sources and (2) pay license fees—usually on a per-subscriber basis—for these rights. The three primary types of owners of cable networks are large media companies that also own major broadcast networks (such as Disney and Viacom), large cable operators (such as Time Warner and Cablevision), and independent programmers (such as Landmark Communications).

At the community level, cable operators obtain a franchise license under agreed-upon terms and conditions from a franchising authority, such as a

township or county.⁵ During cable's early years, franchising authorities regulated many aspects of cable television service, including franchise terms and conditions and subscriber rates. In 1984, the Congress passed the Cable Communications Policy Act, which imposed some limitations on franchising authorities' regulation of rates.⁶ However, 8 years later, in response to increasing rates, the Congress passed the Cable Television Consumer Protection and Competition Act of 1992. The 1992 Act required FCC to establish regulations ensuring reasonable rates for *basic service*—the lowest level of cable service, which includes the local broadcast stations—unless a cable system has been found to be subject to *effective competition*, which the act defined.⁷ The act also gave FCC the authority to regulate any unreasonable rates for upper tiers (often referred to as *expanded-basic service*), which include cable programming provided over and above that provided on the basic tier.⁸ Expanded-basic service typically includes such popular cable networks as USA Network, ESPN, and CNN. In anticipation of growing competition from satellite and wire-based operators, the Telecommunications Act of 1996 phased out all regulation of expanded-basic service rates by March 31, 1999. However, franchising authorities can regulate the basic tier of cable service where there is no effective competition.

As required by the 1992 Act, FCC annually reports on average cable rates for operators found to be subject to effective competition compared with operators not subject to effective competition. To fulfill this mandate, FCC annually surveys a sample of cable franchises regarding their cable rates. In addition to asking questions that are necessary to gather information to provide its mandated reports, FCC also typically asks questions to help the agency better understand the cable industry. For example, the 2002 survey included questions about a range of cable issues, including the cost factors

⁵In some cases, state public service commissions are also involved in cable regulation.

⁶The 1984 Act restricted regulation to only basic services for cable systems that were not subject to effective competition. In its rulemaking, FCC initially said that effective competition existed if three or more over-the-air broadcast signals existed in a given market. Under this definition, over 90 percent of all cable systems would be subject to effective competition and therefore not subject to rate regulation.

⁷Under statutory definitions in the 1992 Act, substantially more cable operators would be subject to rate regulations than had previously been the case.

⁸Basic and expanded-basic are the most commonly subscribed to service tiers—bundles of networks grouped into a package—offered by cable operators. In addition, customers in many areas can purchase digital tiers and also premium pay channels, such as HBO and Showtime.

underlying changes in cable rates, the percentage of subscribers purchasing other services (such as broadband Internet access and telephone service), and the specifics of the programming channels offered on each tier.

Some franchise agreements were initially established on an exclusive basis, thereby preventing wire-based competition to the initial cable operator. In 1992, the Congress prohibited the awarding of exclusive franchises, and, in 1996, the Congress took steps to allow telephone companies and electric companies to enter the video market. Initially unveiled in 1994, DBS served about 18 million American households by June 2002. Today, two of the five largest subscription video service providers are DIRECTV and EchoStar—the two primary DBS operators.

Competition Leads to Lower Cable Rates and Improved Quality and Service among Cable Operators

Today, wire-based competition—that is, competition from a provider using a *wire* technology, such as a local telephone company or an electric utility—is limited to very few markets, with cable subscribers in about 2 percent of markets having the opportunity to choose between two or more wire-based video operators. However, in those markets where this competition is present, cable rates are significantly lower—by about 15 percent—than cable rates in similar markets without wire-based competition, according to our analysis of rates in 2001. DBS operators have emerged as a nationwide competitor to cable operators. This competition has been facilitated by the opportunity to provide local broadcast stations. Competition from DBS operators has induced cable operators to lower cable rates slightly, and DBS provision of local broadcast channels has induced cable operators to improve the quality of their service.

Wire-Based Competition Is Limited but, Where Available, Has a Downward Impact on Cable Rates

Although the Telecommunications Act of 1996 sought to increase wire-based competition, few customers have a choice among companies providing video service via wire-based facilities. In a recent report, FCC noted that very few markets—about 2 percent—have been found to have effective competition based on the presence of a wire-based competitor.⁹ Our interviews with 11 cable operators and five financial analysis firms

⁹See Federal Communications Commission, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Ninth Annual Report, FCC 02-338* (Washington, D.C.: Dec. 31, 2002).

yielded a similar finding—wire-based competition is limited. Local telephone companies are not providing widespread competition to cable, and FCC also reported in their 2002 video competition report that the four largest local telephone companies have largely exited the cable market. Also, electric and gas utilities—which can use their networks and rights of way to provide video services—are only providing competition to cable operators in scattered localities. Broadband service providers—a relatively new kind of entrant, such as Knology and WideOpenWest—are building new, advanced networks to provide a bundle of services (video, voice, and high-speed Internet access) and compete with cable operators as well as with telephone companies. However, the three largest broadband service providers only serve approximately 940,000 subscribers.

Although wire-based competition is limited, in those markets where it exists, this competition has a measurable impact. According to our cable-satellite model (see app. IV), in 2001, cable rates were approximately 15 percent lower in areas where a wire-based competitor was present.¹⁰ With an average monthly cable rate of approximately \$34 that year, this implies that subscribers in areas with a wire-based competitor had monthly cable rates about \$5 lower, on average, than subscribers in similar areas without a wire-based competitor. Our interviews with cable operators also revealed that these companies generally lower rates and/or improve customer service where a wire-based competitor is present. For example, 1 cable operator told us that it stopped raising rates 3 years ago in one market where a wire-based competitor had entered.¹¹

DBS Has Become an Important Competitor to Cable Operators Nationwide

In recent years, DBS has become the primary competitor to cable operators in the subscription video industry. As of June 2002, about 18 million households—roughly 20 percent of the total video subscribers—were served by DBS. Most cable operators that we interviewed described competition from DBS as substantial. The ability of DBS operators to compete against cable operators was bolstered in 1999 when they acquired the legal right to provide local broadcast stations—that is, to offer the

¹⁰Our model was based on data from 2001 since this was the most recent year for which we were able to acquire the required data on cable rates and services and DBS penetration rates when we began this analysis.

¹¹This cable operator also noted that current rates in the market are not sustainable given the increasing cost of programming.

signals of over-the-air broadcast stations, such as affiliates of ABC, CBS, Fox, and NBC—via satellite to their customers.¹² On the basis of our cable-satellite model, we found that in areas where subscribers can receive local broadcast stations from both primary DBS operators, the DBS penetration rate—that is, the percentage of housing units that have satellite service—is approximately 40 percent higher than in areas where subscribers cannot receive these stations from the DBS operators. In a recent report, FCC noted that in 62 of the 210 television markets in the United States, at least one DBS operator offered local broadcast stations.¹³ Both EchoStar and DIRECTV continue to roll out the provision of local broadcast stations in more markets.

DBS competition is associated with a slight reduction in cable rates as well as improved quality and service. In terms of rates, we found that a 10 percent higher DBS penetration rate in a franchise area is associated with a slight rate reduction—about 15 cents per month.¹⁴ Also, in areas where both primary DBS operators provide local broadcast stations, we found that the cable operators offer subscribers approximately 5 percent more cable networks than cable operators in areas where this is not the case. These results indicate that cable operators are responding to DBS competition and the provision of local broadcast stations by lowering rates slightly and improving their quality. During our interviews with cable operators, most operators told us that they responded to DBS competition through one or more of the following strategies: focusing on customer service, providing bundles of services to subscribers, and lowering prices and providing discounts.

¹²In 1999, the Congress passed the Satellite Home Viewer Improvement Act, which allows satellite operators to provide local broadcast stations to their customers. Prior to this act, satellite operators were limited to providing local broadcast signals to *unserved areas* where customers could not receive sufficiently high-quality, over-the-air signals. This practice had the general effect of preventing satellite operators from providing local broadcast stations directly to customers in most circumstances.

¹³See *Ninth Annual Report*, FCC 02-338.

¹⁴In our October 2002 report ([GAO-03-130](#)), we did not find that DBS competition was associated with lower cable rates. Although the parameter estimate was negative—indicating that DBS competition was associated with lower cable rates—the estimate was not statistically significant. As part of our analysis for this report, we further examined and refined our competition measures to more accurately reflect the true nature of competition in the franchise areas that were included in our analysis. Although the parameter estimate remains negative and the estimate is now statistically significant, the magnitude of estimate is very small.

Concerns Exist about the Reliability of FCC's Data for Cable Operator Cost Factors and Effective Competition

Responses to our cable franchise survey suggest that certain issues undermine the reliability of information in FCC's cable rate report, which provides information on cable rates and competition in the subscription video industry. In particular, we found that respondents did not fill out FCC's survey on factors underlying cable rate increases in a consistent manner. Additionally, FCC's designations of franchise areas as having (or not having) effective competition do not always accurately reflect current competitive conditions. For determinations of effective competition that are based on DBS service, local franchising authorities have raised concerns about the industry data used to substantiate these filings. Because the Congress and FCC use this information in their monitoring and oversight of the cable industry, the lack of reliable information in FCC's cable rate report may compromise the ability of the Congress and FCC to fulfill these roles. Additionally, the potential for this information to be used in debates on important policy decisions, such as media consolidation, also necessitates reliable information in FCC's report.

Weaknesses in FCC's Survey May Lead to Inaccuracies in the Relative Importance of Cost Factors

Results of our cable franchise survey indicated considerable variation in how cable franchises completed the section of FCC's 2002 cable rate survey on which they provide information about the factors underlying recent cable rate increases. Figure 1 shows the actual section of FCC's survey that franchises completed to provide their cost change information; see also appendix II for our cable franchise survey. We identified two key problems with FCC's survey, as follows: a lack of guidance on how the survey was to be completed, and the requirement that the sum of the cost and noncost factors equal the change in cable rates.

Figure 1: Section of FCC's 2002 Cable Rate Survey Covering Cable Franchises' Rate and Cost Changes

E. Programming Service Charges in Community

In the following, the "basic cable service tier" or **BST** is the service tier that includes the retransmission of over-the-air broadcast signals and may include a few satellite or regional channels. A "cable programming service tier" or **CPST** is any other tier containing programming other than that on the BST, pay-per-channel, or pay-per-view. **CPST1** refers to the major CPST and typically meets two criteria: It has the most channels and most subscribers among the CPST tiers (if more than one CPST is offered). Sometimes a "mini-tier" with considerably fewer channels has the most subscribers among the CPSTs. This mini-tier is considered **CPST2**, whether or not it has the most subscribers.

Monthly Charges for Programming Services		July 1, 2000	July 1, 2001	July 1, 2002
48	Monthly charge for BST			
49	Monthly charge for CPST1			
50	Monthly charge for BST plus CPST1 (rows 48 + 49)	\$0.00	\$0.00	\$0.00
51	Year-to-date change in monthly charge on row 50	----	\$0.00	\$0.00

For July 1, 2001 and July 1, 2002, allocate the change shown on row 51 by estimating the dollars and cents that each factor, below, contributed. The total of these factors (row 58) should equal the change on row 51.

52	License or copyright fees, <i>existing</i> programs	----		
53	License or copyright fees, <i>new</i> programs	----		
54	Headend or distribution facility investment	----		
55	General inflation, not included elsewhere	----		
56	Other cost changes (positive or negative)	----		
57	Non-cost-related factors (positive or negative)	----		
58	Total of rows 52-57 (must equal row 51)	----	\$0.00	\$0.00

Source: 2002 FCC cable rate survey.

Our telephone survey with 100 cable franchises indicated that a lack of specific guidance regarding this cost change section of the survey caused considerable confusion about how to complete the form.¹⁵ Every franchise that we surveyed said it was unclear what FCC expected for at least one of the six factors (five cost factors plus a noncost factor) listed in figure 1 above, and 73 of the 100 franchises said that the instructions were insufficient. In particular, several cable representatives we surveyed noted that there were no instructions or examples to show how to calculate investment, what types of cost elements should go into the "other cost" category, and what FCC meant by "non-cost-related factors." This lack of guidance created considerable variation in the approaches taken to develop the cost factors. For example, although 76 of the franchises left the noncost factors answer blank, other franchises included a number to

¹⁵See U.S. General Accounting Office, *Telecommunications: Data Gathering Weaknesses In FCC's Survey of Information on Factors Underlying Cable Rate Changes*, GAO-03-742T (Washington, D.C.: May 6, 2003), page 7, for a summary of the approaches used by cable operators to complete the form.

reflect a change in profit margin or the need to establish uniform rates across franchises.

Our cable franchise survey also indicated that another source of confusion for respondents was the requirement that the sum of the underlying cost and noncost factors (see fig. 1, lines 52-57) equal the change in the franchise's cable rates (see fig. 1, line 51). Because the expanded-basic service was deregulated in 1999, it is no longer necessary that the cost factors equal the yearly change in cable rates.¹⁶ FCC officials told us that, cable operators could use the noncost factor element to adjust the sum of the factors to ensure that they equal the change in annual rates. That is, FCC officials suggested that after accounting for all cost factors, any difference between the sum of these costs and the rate change—whether positive or negative—could be accounted for by the noncost factor. However, it appears that this information may not have been clearly communicated to the cable franchises. We found that only 10 of the 100 franchises that we surveyed took this approach and instead, most franchises told us that they chose to change their estimate of one or more of the cost factors in order to achieve the rate-cost balance. In most cases, cable representatives told us that this meant reducing other cost factors because most franchises told us that their actual annual cost increases for the year covered by the 2002 survey exceeded their rate change for expanded basic service.¹⁷ In fact, most franchises—84 of the 100 franchises we surveyed—did not provide a complete or accurate accounting of their cost changes for the year.¹⁸

According to FCC's 2002 cable rate report, cable franchises attributed 65 percent of their rate increases last year to the changes in the cost of new and existing programming. Comparatively, investment and other cost changes had a lesser role in the rate increases. However, our findings regarding how cable franchises responded to FCC's survey on these issues

¹⁶In unregulated markets, for example, costs are an important factor in price setting by companies, but several other key factors, such as consumer demand and the competitiveness of the market, also influence the market price. Thus, costs and prices need not move in tandem.

¹⁷Many cable franchises we surveyed said that their profit margins for basic and expanded-basic cable services decreased in 2002, but many also said that those decreases were offset by increased profits from other services, such as cable Internet and digital cable.

¹⁸For example, 15 cable franchises said that they entered dollar values in the factors until the entire rate increase was justified and did not consider the remaining cost factors; many others cited specific cost factors that were adjusted to reach a balance.

indicated that the survey findings may not accurately reflect the relative importance of these cost factors. In particular, we found that most franchises used real cost data to calculate the change in new or existing programming costs. However, franchises often understated their estimates for investments and other costs. For example, 33 of the 83 respondents who entered zero for infrastructure investment, noted in our survey discussions with them that there had been costs for such investments that year. Similarly, we found that 64 franchises entered a zero for the other cost category, even though half of these respondents told us during our survey that there were costs in that category during that year. Moreover, the investment and other cost factors were often used to adjust overall costs to equal the rate change for the year—these adjustments most often required downward adjustments in these cost factors. As such, an overall accurate picture of the relative importance of various cost factors, which may be important for FCC and congressional oversight, may not be reflected in FCC’s data.

FCC’s Cable Rate Report Does Not Appear to Provide a Reliable Source of Information on the Effect of Competition

FCC is required by statute to produce an annual report on the differences between average cable rates in areas that FCC has found to have *effective competition* compared with those that have not had such a finding. FCC reported that on July 1, 2001, competitive operators were charging an average monthly rate of \$34.93, while noncompetitive operators were charging \$37.13—a 6.3 percent differential for the combined basic and expanded-basic tiers of service and equipment.¹⁹ In another analysis, FCC looked at a subset of those areas that had been found to have effective competition—that is, areas in which effective competition had been granted on the basis of the existence of a wire-based competitor. Using a regression model, FCC found that cable rates were nearly 7 percent lower when such a competitor existed. Conversely, as previously mentioned, we found a greater impact of wire-based competition using a similar model, that is, rates were lower by 15 percent in locations where a wire-based competitor was operating, according to our cable-satellite model.

One possible explanation for the difference between FCC’s results and those of our cable-satellite model may be the differences in the criteria used to classify the status of competition. When reporting on differences

¹⁹See Federal Communications Commission, *Report on Cable Industry Prices* (Washington, D.C.: Apr. 1, 2002). This is the most recent FCC report that is consistent with the data used in our analysis.

between average rates for locations with and without effective competition, FCC is mandated to include in the group defined to have effective competition only those franchise areas that have had a finding by FCC that is based on the *statutory* definition of effective competition.²⁰ However, FCC's process for implementing this mandate may lead to situations in which the effective competition designation does not reflect the actual state of competition in the current time frame. In particular, key aspects of FCC's process are as follows:

- As set forth in FCC's rules, cable franchises are presumed not to face effective competition.
- Cable operators can petition FCC for a finding of effective competition, which would prohibit the franchising authority from regulating the rates for basic-tier service.²¹ If the cable franchise can show that at least one of the statutory criteria for effective competition is met, FCC classifies the cable franchise as facing effective competition.
- A franchising authority can file a petition for recertification to regulate rates for basic-tier service, if it believes that the conditions under which effective competition was granted no longer exist. If recertification is granted, the franchise will no longer be considered to have effective competition.

Our analysis of FCC's classification of cable franchises regarding effective competition revealed that FCC's process for maintaining this classification—namely, their reliance on external parties to file for

²⁰The 1992 Act established three conditions for a finding of effective competition, and a fourth was added in the 1996 Act. Specifically, a finding of effective competition in a franchise area requires that FCC has found one of the following conditions to exist: fewer than 30 percent of the households in the franchise area subscribe to cable service (low-penetration test); at least two companies unaffiliated with each other offer comparable video programming service (through a wire or wireless (e.g., DBS service)) to 50 percent or more of the households in the franchise area, and at least 15 percent of the households take service other than from the largest company (competitive provider test); the franchising authority offers video programming service to at least 50 percent of the households in the franchise area (municipal test); or a local telephone company or its affiliate (or any other company using the facilities of such a carrier or its affiliate) offers video programming, by means other than DBS, that is comparable to that offered by the cable provider in the franchise area (local exchange carrier (LEC) test). For the LEC test to be applicable, the telephone company and the cable provider must be unaffiliated.

²¹Without a finding of effective competition, the cable operator must also charge a uniform rate for cable services throughout the cable franchise.

changes in the classification—may lead to some classifications of the competitive status of franchises that do not reflect current conditions. Using data from FCC's 2002 cable rate survey, we conducted several tests to determine whether information contained in franchises' survey information—which was filed with FCC in mid-2002—was consistent with the classification of effective competition for the franchise in FCC's records. We found some discrepancies. We subsequently interviewed officials from local franchising authorities in a number of areas with seemingly inconsistent information to further investigate the nature of the discrepancies.

Of 86 franchises in FCC's 2002 survey classified as satisfying the low-penetration test²² for effective competition, we found that 48 franchises reported current information to FCC that indicate, on the basis of our calculations, the penetration rate exceeded the 30 percent threshold.²³ We spoke with officials from three local franchising authorities in areas having a low-penetration classification and found the following: a Maryland franchise with a current penetration rate of 75 percent, a Virginia franchise with a penetration rate of 76 percent, and a California franchise with a penetration rate of 97 percent. In the aforementioned franchise areas, the local officials told us that they did not know why the franchise was classified as low penetration. However, our review of FCC filings found that the cable operators in those franchise areas had filed for and received an effective competition finding that was based on the low-penetration test in the years between 1994 and 1997. Because there had never been a petition by the franchise authority to be recertified to regulate basic cable rates, the franchise area remained designated as having low penetration.

Under the statute, local franchising authorities do not have the authority to regulate cable rates in franchises found to have effective competition. Therefore, a franchise should not simultaneously be listed as facing effective competition and having regulation of basic rates. Of 262 franchises in FCC's survey classified as facing effective competition, 40 also reported that the franchising authority regulated their basic service rates. For example, FCC survey data include one franchise each in three

²²The low-penetration test of effective competition applies if fewer than 30 percent of the households in the franchise area subscribe to cable service.

²³We calculated the penetration rate by dividing the number of franchise subscribers by the number of households in the franchise area, as reported by the cable operator to FCC.

states—New Jersey, Kentucky, and California—that were identified as facing effective competition and also as subject to rate regulation. Officials from the franchising authorities in New Jersey and Kentucky told us that they indeed regulate the basic service tier, and that no competitor was present. The official in Kentucky said that the discrepancy could be the result of a wire-based competitor that was granted a franchise but has yet to enter the market due to a lawsuit filed by the incumbent cable operator attempting to block the competitor's entry. The official in New Jersey said there is no competition in the area and the discrepancy may be attributed to the fact that two cable operators hold franchise agreements in the community, but do not compete against each other because each serves a different area of the community. According to an official in the California franchise, the franchise is not regulated—implying that the cable operator incorrectly answered FCC's question. However, the official also told us that there is no competition in the area—that is, while two cable operators hold franchise agreements, they do not compete against each other. We also found one franchise each in two states—Texas and Illinois—that were identified as facing effective competition and also reporting that they are subject to rate regulation. The official in the Texas franchise said that the discrepancy may be attributed to the fact that the incumbent cable operator filed for a finding of effective competition, but a finding has not yet been granted. According to a local franchising authority official in the Illinois franchise, the discrepancy could be a result of a wire-based competitor that expressed an interest in entering the market, but never did.

When the information contained in FCC's database on effective competition conflicts with a cable operator's response on the annual survey, FCC uses the information in their database for the purpose of its analysis of the differences in prices in areas with and without effective competition. We found that the survey responses on effective competition were not in accord with FCC's files for 24 percent of all franchises—or 165 franchises—in its 2002 survey.

DBS Subscriber Information Used in Effective Competition Filings Has Not Been Independently Validated

In the last several years, there have been dozens of petitions for a determination of effective competition based on DBS competition. However, the data on subscriber counts by zip code, which are used to make these petitions, are considered proprietary business information by DBS companies. DBS providers EchoStar and DIRECTV, as well as big dish satellite provider Motorola, have agreed to make their individual market data available to SkyTRENDS—a market research and reporting firm for the satellite industry—which aggregates the information across

the providers.²⁴ SkyTRENDS subsequently makes the aggregated data available to cable operators for the purpose of making filings for effective competition to FCC. Although FCC has not verified the SkyTRENDS data or the method used by SkyTRENDS (and by cable operators) to calculate penetration levels at the franchise level, it nonetheless accepts SkyTRENDS data for these petitions.

The SkyTRENDS data used to make effective competition petitions that are based on DBS competition are generally not available to government regulators. According to government regulators and a SkyTRENDS official, SkyTRENDS will not provide local franchising authorities with the underlying data used to support these filings, unless (in accordance with agreements with the satellite providers) the cable operator authorizes that dissemination. However, franchising authorities do have access to the data provided by cable franchises in their submissions for effective competition to FCC. According to FCC officials, the agency has not obtained detailed SkyTRENDS data since 1999. Some local franchise authorities have questioned the accuracy and validity of the DBS data and methods used by SkyTRENDS and cable operators for developing DBS penetration levels used to support effective competition determinations. Nevertheless, FCC has reiterated that it finds the SkyTRENDS data reliable for purposes of effective competition determinations, and that these data are the only available source for determining DBS penetration.

The Lack of Reliable Information May Compromise Monitoring and Oversight of the Cable Industry

FCC's annual cable rate report provides an important source of information about the cable industry. This report provides an extensive analysis of the cable industry, including such important factors as cable rates, factors underlying changes in cable rates, and provision of advanced services (such as cable modem Internet access). FCC's findings provide the Congress with information relevant to important policy decisions, including the regulation of cable rates and/or services and media consolidation and the convergence of video, voice, and data services. The lack of reliable information in FCC's cable rate report may compromise the ability of the Congress to make these important policy decisions and of FCC to monitor and provide oversight of the cable industry. As such, it is important for FCC's report to provide accurate, current, and relevant information about the cable industry.

²⁴The provision of DBS data for effective competition has recently been transferred to the Satellite Broadcasting and Communications Association.

A Variety of Factors Contribute to Cable Rate Increases

During the preceding 5 years, cable rates have increased approximately 40 percent—well in excess of the approximately 12 percent increase in the general rate of inflation. We found that a number of factors contributed to the increase in cable rates. These factors include increased expenditures on programming, infrastructure investments, and costs associated with customer service. On the basis of data from 9 cable operators, programming expenses and infrastructure investment appear to be the primary cost factors that have been increasing in recent years.

Rates for Cable Service Have Increased Rapidly, Far Outpacing the General Rate of Inflation

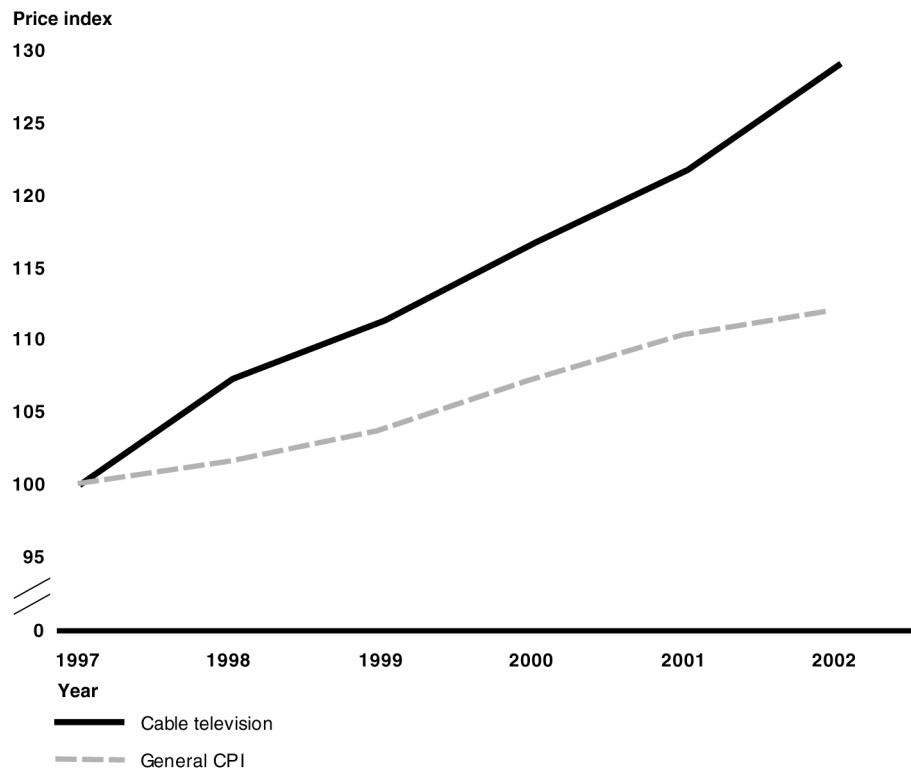
FCC data indicate that the average monthly rate subscribers are charged for the combined basic and expanded-basic tiers of service rose from \$26.06 in 1997 to \$36.47 in 2002—a 40 percent increase over the 5 years. This rate of increase is much greater than the general rate of inflation, as measured by the Consumer Price Index (CPI), which rose 12 percent over the same period. The CPI cable television subcategory index also shows cable rates increasing much faster than inflation, although the rise is somewhat less than the rise in rates as reported by FCC, likely because the Bureau of Labor Statistics (BLS) calculates this index in a way that takes into account the increasing number of channels offered over time. As figure 2 shows, the CPI cable television subcategory index rose just under 30 percent in the same 5-year time frame.

Several cable industry officials told us that the general rate of inflation is not an appropriate gauge for evaluating cable rates. In particular, these officials told us that a more appropriate comparison against which to evaluate the price increases for cable television would be other services that have the same kind of cost factors, such as other forms of entertainment media and services, which have also experienced significant price increases in recent years. Moreover, several cable industry representatives told us that on a per-channel basis, the increase in cable rates has not been as dramatic because cable operators are providing additional cable networks.²⁵ However, it is not clear how meaningful cable rates reported on a per-channel basis are since subscribers cannot purchase cable service on a per-channel basis. Alternatively, in a recent analysis, a researcher found that because the number of hours subscribers

²⁵In addition to the BLS cable television subcategory index, FCC also reports the price per channel over time. Contrary to the BLS index indicating that cable prices increased just under 30 percent, FCC found that the price per channel rose by about 5 percent during this 5-year span.

view cable networks has increased, cable rates, adjusted for this additional viewing, have actually declined.²⁶

Figure 2: Change in the General and Cable Television Consumer Price Indexes, 1997 – 2002



Source: U.S. Bureau of Labor Statistics.

Increases in Expenditures on Cable Programming Contribute to Higher Cable Rates

As discussed in the previous section, one important factor contributing to higher cable rates is cable operators' increased costs to purchase programming from cable networks. Ten of the 11 cable operators, 8 of the 15 cable networks, and all of the financial analysts we interviewed told us that higher programming costs contribute to rising cable rates. On the basis of financial data supplied to us by 9 cable operators, we found that these operators' yearly programming expenses, on a per-subscriber basis, increased from \$122 in 1999 to \$180 in 2002—a 48 percent increase. Using

²⁶See Wildman, S.S. *Assessing Quality-Adjusted Changes in the Real Price of Basic Cable Service*. Michigan State University: September 10, 2003.

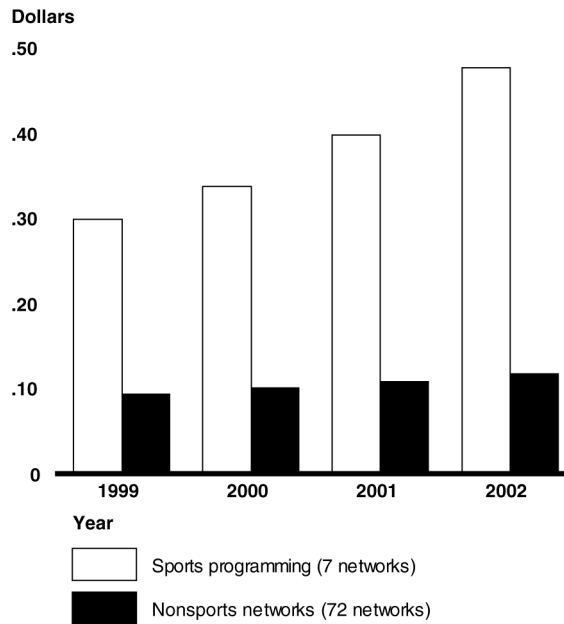
data from Kagan World Media, we found that the average fees cable operators must pay to purchase programming (referred to as license fees) increased by 34 percent from 1999 to 2002.²⁷ Although these estimated increases are somewhat different—which probably occurs because the data underlying these analyses are from different sources—both methods appear to reflect a substantial rise in programming expenses over the past few years.

Almost all of the cable operators we interviewed cited *sports* programming as a major contributor to higher programming costs. On the basis of our analysis of Kagan World Media data, the average license fees for a cable network that shows almost exclusively sports-related programming increased by 59 percent in the 3 years between 1999 and 2002.²⁸ Conversely, for the 72 nonsports networks, the average increase in license fees for the same period was approximately 26 percent. Further, the average license fees for the sports networks were substantially higher than the average for other networks. See figure 3 for a comparison of the average license fees for sports programming networks compared with nonsports networks from 1999 to 2002.

²⁷Since the rates that cable networks negotiate with their clients/affiliates are confidential, we do not know the actual fees cable operators pay to carry the networks. We thus relied on license fee data compiled by Kagan World Media.

²⁸The seven national sports networks that we included in our analysis were ESPN, ESPN Classic, ESPN2, FOX Sports Net, The Golf Channel, The Outdoor Channel, and the Speed Channel.

Figure 3: Average Monthly License Fees per Subscriber—Sports Programming Networks v. Nonsports Networks, 1999 – 2002



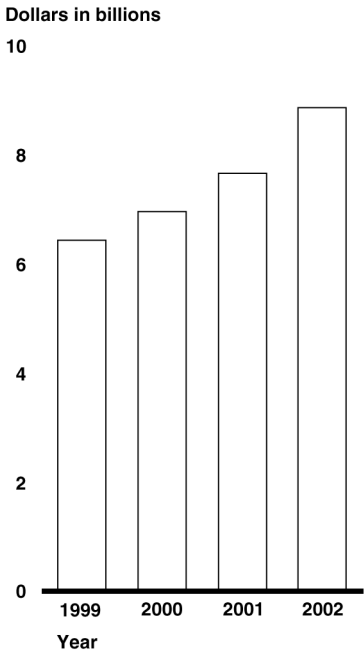
Source: GAO analysis of Kagan World Media data.

The cable network executives we interviewed cited several reasons for increasing programming costs. We were told that competition among networks to produce and show content that will attract viewers has become more intense. This competition, we were told, has bid up the cost of key inputs (such as talented writers and producers) and has sparked more investment in programming. Most notably, these executives told us that networks today are increasing the amount of original content and improving the quality of programming generally. Also, some executives cited the increased cost of sports rights²⁹ and increased competition among networks for the broadcast rights of existing programming (such as syndicated situation comedies). As figure 4 shows, data from Kagan World

²⁹Two of the three sports leagues with whom we spoke told us that the cost of sports rights, paid by networks to the leagues, has not increased faster than the cost of other network programming in the last couple of years. However, representatives of the leagues did note that the cost to sports networks of producing sports programming is increasing because these are live events that require complex and costly production.

Media indicate that of 79 cable networks we analyzed, expenditures by these networks to produce programming increased from \$6.47 billion in 1999 to \$8.90 billion in 2002, or by about 38 percent.³⁰

Figure 4: Expenditures by 79 Cable Networks to Produce Programming, 1999 – 2002



Source: GAO analysis of Kagan World Media data.

Although programming is a major expense for cable operators, several cable network executives we interviewed also pointed out that cable operators offset some of the cost of programming through advertising revenues. In fact, 3 cable networks with whom we spoke said that they believe at least *half* of the license fees cable operators pay to carry their networks are recouped through the sale of the local advertising time that cable networks allow the cable operators to sell, which typically amounts to 2 minutes per hour. According to industry data, cable operators received over \$3 billion from the sale of local advertising time in recent

³⁰For this analysis, we only used networks included in the Kagan publication that had financial data for the years 1999 to 2002. Later in this report, we have other analyses that use more of the networks included in the Kagan publication. In those analyses, we did not need 4 historical years of data.

years. Local advertising dollars account for about 7 percent of the total revenues in the 1999 to 2002 time frame for the 9 cable operators that supplied us with financial data. For these 9 cable operators, gross local advertising revenues—before adjusting for the cost of inserting and selling advertising—amounted to about \$55 per subscriber in 2002 and offset approximately 31 percent of their total programming expenses.³¹ However, we were told that only the larger cable operators gain significant revenues from the sale of advertising, and that smaller cable operators generally do not sell as much local advertising because it is not always cost-effective for them to do so. In fact, even the larger cable operators do not sell all of the local advertising time that is available to them because there are significant costs of selling television ads.

Several Other Factors Appear to Contribute to Higher Rates for Cable Service

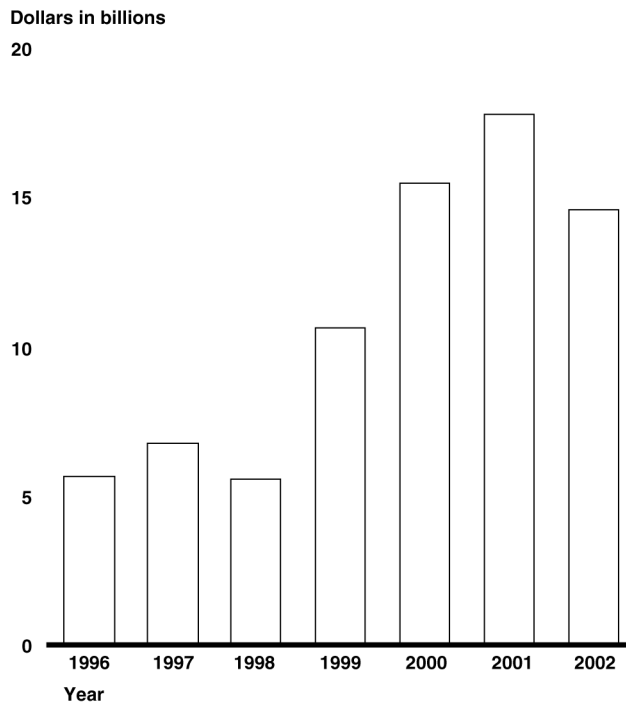
In addition to higher programming costs, the cable industry has incurred other increased costs. For example, according to industry sources, the cable industry spent over \$75 billion between 1996 and 2002 to upgrade its infrastructure by replacing degraded coaxial cable with fiber optics and adding digital capabilities (see fig. 5). As a result of these expenditures, FCC reported that there have been increases in channel capacity; the deployment of digital transmissions; and nonvideo services, such as Internet access and telephone service.³² Five of the 11 cable operators, 9 of the 15 cable networks, and three of the five financial analysts we interviewed said investments in system upgrades contributed to increases in consumer cable rates. For example, one network with whom we spoke said that the major cause of recent cable rate increases is the cable industry's capital improvements. Although these upgrades benefit cable subscribers by expanding the number of cable networks available and improving picture quality, much of the benefit of infrastructure improvements accrue to subscribers who purchase new, advanced services, such as broadband Internet access. One expert who commented on our report noted that there is no need for cable operators to pass on costs associated with infrastructure upgrades to subscribers purchasing basic and expanded-basic service because, by his calculations, these costs

³¹ Advertising sales revenues net of expenses incurred to insert and sell local advertising would offset a lower percentage of cable operators' programming expenses.

³² For example, FCC reported that approximately 74 percent of cable systems had system capacity of at least 750 MHz, and that approximately 70 percent of cable subscribers were offered high-speed Internet access by their cable operator in 2002.

are almost fully offset by increases in revenues for digital tier and advanced (e.g., cable modem) services.

Figure 5: Cable Industry Infrastructure Expenditures, 1996 – 2002



Source: Kagan World Media data as reprinted on NCTA's Web site.

Another factor contributing to higher cable rates is cable operators' increased expenditures on customer service. NCTA said that the industry is paying more in labor costs because it has sought better-educated and more highly trained employees to provide customer support for the new services that the cable operators are offering. Additionally, customer service is now typically available to cable subscribers 24 hours a day, 7 days a week. Three of the five financial analysts we interviewed agreed that increased customer service costs contributed to increases in cable rates, while 5 of the 11 cable operators we interviewed said increases in customer service, labor costs, or both contributed to higher cable rates.

Programming Expenses and Infrastructure Investment Appear to Be Primary Contributors to Cable Rate Increases

On the basis of financial data from 9 cable operators, we found that annual subscriber video-based revenues—that is, revenues from basic, expanded-basic, and digital tiers; pay-per-view; installation charges; and other revenues such as equipment rental—increased approximately \$79 per subscriber from 1999 to 2002. By 2002, revenues per subscriber averaged \$561, or \$47 per month. During this same period, programming expenses increased approximately \$57 per subscriber. Depreciation expenses on cable-based property, plant, and equipment—an indicator of expenses related to infrastructure investment—increased approximately \$80 per subscriber during the same period. Although this may indicate that the marginal profits for the video business have been declining—which is consistent with what we were told during our interviews with financial analysts—there are two important caveats to this conclusion. First, depreciation expenses (and therefore infrastructure investment) represent a joint (or common) expense for both video-based and Internet-based services. Because these expenses are associated with more than one service, it is unclear how much of this cost should be attributed to video-based services. Second, cable operators are enjoying increased revenues from these nonvideo sources. For example, revenues from Internet-based services increased approximately \$74 per subscriber during the same period. Thus, even if video profit margins have been in decline, this does not imply that overall profitability of cable operators has declined.

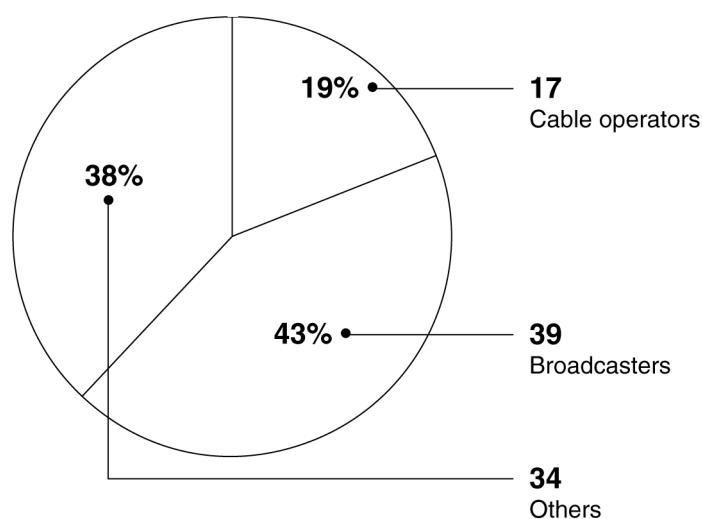
Some View Ownership Affiliations as an Important Indirect Influence on Cable Rates

Several industry representatives and experts we interviewed told us that they believe ownership affiliation may also influence the cost of programming and thus, indirectly, the rates for cable service. We found that there are two primary ownership relationships that some believe influence the cost of cable programming: relationships between cable networks and cable operators, and relationships between cable networks and broadcasters. To understand the nature of these ownership relationships, we analyzed the ownership of 90 cable networks that are carried most frequently on cable operators' basic or expanded-basic tier (see fig. 6). Of these 90 cable networks, we found that approximately 19 percent were majority-owned (i.e., at least 50 percent owned) by a cable operator.³³ For example, cable operators have ownership interests of at

³³We also performed the analysis reported in this section with a 20 percent ownership affiliation threshold—that is, we considered a network as “owned” by a broadcast network or cable operator if the network was at least 20 percent owned by either of these types of providers. With this ownership threshold, our findings were nearly identical to those reported here.

least 50 percent in such widely distributed cable networks as TBS, TNT, CNN, AMC, and the Cartoon Network.³⁴ We also found that approximately 43 percent of the 90 networks were majority-owned by a broadcaster. For example, broadcasters have ownership interests of at least 50 percent in such widely distributed cable networks as ESPN, FX, MSNBC, and MTV. The remaining 38 percent of the networks are not majority-owned by broadcasters or cable operators.

Figure 6: Ownership Affiliation of the 90 Most Carried Cable Networks



Source: GAO analysis of Kagan World Media data.

Note: Cable networks were assumed affiliated if the ownership interest was 50 percent or greater.

Despite the view held by some industry representatives with whom we spoke that license fees for cable networks owned by either cable operators or broadcasters tend to be higher than fees for other cable networks, we did not find this to be the case. In particular, we found that cable networks that have an ownership affiliation with a broadcaster did not have, on average, higher license fees (i.e., the fee the cable operator pays to the cable network) than cable networks that were not majority-

³⁴Only 3 of the large cable operators are majority owners of national cable networks.

owned by broadcasters or cable operators.³⁵ We did find that license fees were statistically higher for cable networks owned by cable operators than was the case for cable networks that were not majority-owned by broadcasters or cable operators. However, when using a regression analysis (our cable license fee model) to hold constant other factors that could influence the level of the license fee, we found that ownership affiliations—with broadcasters or with cable operators—had no influence on cable networks' license fees.³⁶ We did find that networks with higher advertising revenues per subscriber (a proxy for popularity) and sports networks received higher license fees.

Industry representatives we interviewed also told us that cable networks owned by cable operators or broadcasters are more likely to be carried by cable operators than other cable networks. There was a particular concern expressed to us regarding *retransmission consent agreements*. These agreements often include, as part of the agreement between cable operators and broadcasters for the right of the cable operator to carry the broadcast station, a simultaneous agreement to carry one or more broadcast-owned cable networks. Many representatives from cable operators and several independent (nonbroadcast) cable networks told us that because the terms of retransmission consent agreements often include carriage of broadcast-owned cable networks, cable operators sometimes carry networks they might otherwise not have carried, and this practice can make it difficult for independent cable networks to be carried by cable operators. Alternatively, representatives of the broadcast networks told us that, to their knowledge, cable networks had not been dropped nor were independent cable networks unable to be carried by cable operators because of retransmission consent agreements. Further, these representatives told us that they accept cash payment for carriage of the broadcast station, but that cable operators prefer to carry broadcast-owned cable networks in lieu of a cash payment.

³⁵License fees received by broadcaster-affiliated networks were higher than those received by cable networks that were not majority-owned by broadcasters or cable operators, but the difference was not statistically significant. Moreover, when sports networks were eliminated from the analysis, the average level of license fee was almost identical across these two groups.

³⁶In the cable license fee model, we regressed the average monthly license fee for 90 cable networks on a series of variables that might influence the license fee. See appendix I for a list of variables included in that model.

On the basis of our cable network carriage model—a model designed to examine the likelihood of a cable network being carried—we found that cable networks affiliated with broadcasters or with cable operators are more likely to be carried than other cable networks. In particular, we found that networks owned by a broadcaster or by a cable operator were 46 percent and 31 percent, respectively, more likely to be carried than a network without majority ownership by either of these types of companies. Additionally, we found that cable operators were much more likely to carry networks that they themselves own. A cable operator is 64 percent more likely to carry a cable network it owns than to carry a network with any other ownership affiliation. Appendix V provides a detailed discussion of this model.

Several Factors Generally Lead Cable Operators to Offer Large Tiers of Networks Instead of Providing À La Carte or Minitier Service

Most cable operators with whom we spoke provide subscribers with similar tiers of networks, typically the basic and expanded-basic tiers, which provide subscribers with little choice regarding the specific networks they purchase. Adopting an à la carte approach, where subscribers could choose to pay for only those networks they desire, would provide consumers with more individual choice, but could require additional technology and impose additional costs on both cable operators and subscribers. Additionally, this approach could alter the current business model of the cable network industry wherein cable networks obtain roughly half of their overall revenues from advertising. A move to an à la carte approach could result in reduced advertising revenues and might result in higher per-channel rates and less diversity in program choice. Because of this reliance on advertising revenues by cable networks, most cable networks require cable operators to place their network on widely distributed tiers. A variety of factors—such as the pricing of à la carte service, consumers’ purchasing patterns, and whether certain niche networks would cease to exist with à la carte service—make it difficult to ascertain how many consumers would be better off and how many would be made worse off under an à la carte approach. Creating a greater number of smaller tiers could cause many of the same technological and economic concerns as an à la carte approach.

Most Cable Operators Offer Similar Bundles of Networks

The 11 cable operators that we interviewed adopt very similar strategies for bundling networks into tiers of service. These cable operators offer their subscribers the following tiers of service: basic tier (11 operators), expanded-basic tier (11 operators), digital tier (11 operators), and premium services (7 operators). Five of the 11 cable operators offer the same or similar tiers of service to subscribers in all their franchise areas. The remaining 6 cable operators offer different tiers of service among their

franchise areas; we were told that these differences are generally the result of the cable operators acquiring franchises with different tiering strategies.

Using data from FCC's 2002 cable rate survey, we also examined the networks included in the basic, expanded-basic, and digital tiers of service. With basic tier service, subscribers receive, on average, approximately 25 channels, which include the local broadcast stations.³⁷ The expanded-basic tier provides, on average, an additional 36 channels. With a digital tier, subscribers receive, on average, 104 channels. In general, to have access to the most widely distributed cable networks—such as ESPN, TNT, and CNN—most subscribers must purchase the expanded-basic tier of service.

Concerns Exist about a Lack of Subscriber Choice

The manner in which cable networks are currently packaged has raised concern among policy makers and consumer advocates about the lack of consumer choice in selecting the programming they receive. Under the current approach, it is likely that many subscribers are receiving cable networks that they do not watch. In fact, a 2000 Nielsen Media Research Report indicated that households receiving more than 70 networks only watch, on average, about 17 of these networks. The current approach has sparked calls for more flexibility in the manner that subscribers receive cable service, including the option of à la carte service, in which subscribers receive only the networks that they choose and for which they are willing to pay. Additionally, an organization representing small cable operators recently released a report advocating an à la carte approach because they believe it will mitigate the ability of broadcast networks to gain carriage agreements for their cable networks through the retransmission consent process.³⁸

³⁷Representatives of a broadcast organization told us that the digital local broadcast signals are sometimes carried on a digital tier.

³⁸See The Carmel Group, *The Telecom Future of Independent Cable: ACA Member Concerns and Issues* (Carmel-by-the-Sea, CA: May 2003), a report prepared for the American Cable Association.

An À La Carte Network Offering Could Impose Costs on Cable Subscribers and Operators

If cable operators were to offer all networks on an à la carte basis—that is, if consumers could select the individual networks they wish to purchase—additional technology upgrades would be necessary in the near term. In particular, subscribers would need to have an *addressable converter* box on every television set attached to the cable system. Today, the networks included on the basic and expanded-basic tiers are usually transmitted throughout the cable system in an unscrambled fashion. Because most televisions in operation today are *cable ready*, a cable wire can usually be connected directly into the television and the subscriber can view all of the networks on those tiers. An addressable converter box—which serves to unscramble any scrambled networks—is only needed if the subscriber chooses to purchase networks that the cable operator transmits in a *scrambled* fashion, as is usually the case for networks placed on digital tiers, certain premium movie channels, and pay-per-view channels.³⁹

If all networks were offered on an à la carte basis, cable operators would need to scramble all of the networks they transmit to ensure that subscribers are unable to view networks they are not paying to receive. Under such a scenario, addressable converter boxes, which enable the operator to send messages from the cable facility to the box to indicate which networks the subscriber is purchasing and thus allowed to watch, would need to be connected to all television sets attached to the cable system. The addressable converter box would unscramble the signals of the networks that the subscriber has agreed to purchase. The need for an addressable converter box deployment could be costly. According to FCC's 2002 survey data, of the franchises that responded to the survey and provided cost data on addressable converter boxes, the average monthly rental price for a box is approximately \$4.39. For homes that have multiple television sets, the expense for these boxes could add up—the extra cost for a home that needs to add three addressable converter boxes would be about \$13.17 a month at current prices.

Although cable operators have been placing addressable converter boxes in the homes of customers who subscribe to scrambled networks, many homes do not currently have addressable converter boxes or do not have them on all of the television sets attached to the cable system. For example, a representative of 1 cable operator we interviewed indicated

³⁹ Sometimes certain cable networks are transmitted unscrambled and *trapping* devices are used outside of the customer's home to keep networks that the home has not purchased from transmitting to the customer's televisions. This trapping technology would not be economically viable in an à la carte regime.

that most of its subscribers do not have addressable converter boxes. A representative of another cable operator stated that only 40 percent of its subscribers have addressable converter boxes. Conversely, 1 operator told us that nearly three out of four of its subscribers do have at least one addressable converter box in place, and that the number of homes with a box will only continue to increase. Addressable converter boxes are becoming more commonly deployed as more customers subscribe to digital tiers. Since cable operators may move toward having a greater portion of their networks provided on a digital tier in the future, these boxes will need to be deployed in greater numbers. Moreover, consumer electronic manufacturers have recently submitted plans to FCC regarding specifications for new television sets that will effectively have the functionality of an addressable box within the television set. Once most customers have addressable converter boxes or these new televisions in place, the technical difficulties of an à la carte approach would be mitigated. Several experts that we spoke with offered a wide divergence of views on how long it would be before addressable converter boxes and/or new televisions with built-in boxes are fully deployed in all American homes.

In addition to the subscriber costs of converter boxes, cable operators also would incur costs to monitor and manage an à la carte approach. Cable operators likely would have to add additional customer service and technical staff to deal with the increased number of transactions that would occur under an à la carte regime. One cable network representative we interviewed indicated that an à la carte regime would be a substantial undertaking for the cable operators. For example, this network representative told us that a cable operator offering 150 channels of à la carte programming could have its subscribers choosing all different numbers of networks, which would mean that subscribers would be spending much longer periods of times on the telephone with customer service staff.

Cable Networks Often Specify Placement on the Basic or Expanded-Basic Tier

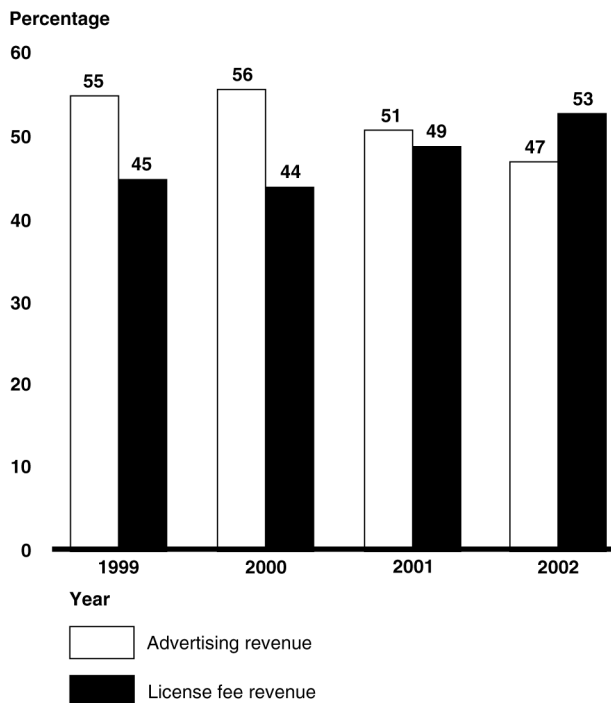
Even if cable operators desired to offer customers a wider variety of bundles of services or even à la carte service, most contracts negotiated between cable networks and cable operators prohibit these alternatives. All 11 cable operators and four of five financial analysts that we interviewed told us that program contracts generally specify the tier that the network must appear on, or the contract establishes a threshold percentage of subscribers that must be able to see a network—which effectively requires the same tier placements. For example, one individual responsible for negotiating program contracts for cable operators noted

that all of the top 40 to 50 networks specify that their networks appear on either the basic or expanded-basic tier. We also reviewed sample contracts for 2 cable networks, one contract specified that the network appear on the basic or expanded-basic tier and the other contract specified “the most widely subscribed level of service.” We were told that cable networks include these provisions in their contracts because their business models are developed on the basis of a wide distribution of their network.

Economic Characteristics of the Cable Network Market Are a Constraint to an À La Carte Approach

If cable subscribers were allowed to choose networks on an à la carte basis, the economics of the cable network industry could be altered, and, if this were to occur, it is possible that cable rates could actually increase for some consumers. In particular, we found that cable networks earn much of their revenue from the sale of advertising that airs during their programming. For example, 3 of the 15 cable network representatives we interviewed indicated that they receive approximately 60 percent of their revenue from advertising. Our analysis of information on 79 networks from Kagan World Media indicates that these cable networks received nearly half of their revenue from advertising in 2002. The majority of the remaining revenue is derived from the license fees that cable operators pay to networks for the right to carry their signals. Figure 7 provides a breakdown of the relationship in recent years between advertising revenues and license fee revenues on the basis of data from Kagan.

Figure 7: Percentage of Cable Network Advertising Revenue Compared with License Fee Revenues for 79 Cable Networks, 1999 – 2002



Source: GAO analysis of Kagan World Media data.

Note: Although cable networks have other sources of revenues, advertising and license fee revenues comprise the vast majority of cable network revenues.

To receive the maximum revenue possible from advertisers, cable networks strive to be on cable operators' most widely distributed tiers. In other words, advertisers will pay more to place an advertisement on a network that will be viewed, or have the potential to be viewed, by the greatest number of people. According to cable network representatives we interviewed, any movement of networks from the most widely distributed tiers to an à la carte format could result in a reduced amount that advertisers are willing to pay for advertising time because there would be a reduction in the number of viewers available to watch the networks. To compensate for any decline in advertising revenue, network representatives contend that cable networks would likely increase the license fees they charge to cable operators. In particular, we were told by many cable networks that under an à la carte system, the cost burden of cable television would become less reliant on advertising revenues and much more reliant on *license fees* that would likely be passed on to

consumers. For example, one cable network representative estimated that to compensate for the loss of advertising revenue in an à la carte scenario, the network would have to raise its monthly license fee from the current monthly rate of \$0.25 per subscriber to a level several fold higher—possibly as much as a few dollars per subscriber per month. Additionally, four of the five financial analysts we interviewed also stated that license fees would increase under an à la carte approach. At the same time, if cable networks see advertising revenues decline, they will also likely take steps to reduce production costs, because cable operators might be unwilling to accept increases in license fees to fully offset the decline in advertising revenues. As such, it is not clear whether license fees would need to completely offset any declines in advertising revenues.

Because increased license fees, to the extent that they occur, are likely to be passed on to subscribers, it appears that subscribers' monthly cable bills would not necessarily decline under an à la carte system. The cable networks that we interviewed generally told us that they believe that an à la carte approach would not reduce cable rates for most subscribers. In fact, representatives of 7 cable networks noted that costs to subscribers could actually increase under an à la carte system, while 6 networks said that subscribers might pay about the same monthly bill but would likely receive far fewer channels. Conversely, for subscribers who purchase only a few cable networks, rates would likely decline under this approach because they would only have to pay for the limited number of networks that they choose to purchase. Thus, an à la carte approach would provide consumers with greater control over their cable choices, even if, on average, consumer bills did not decline.

Most of the cable networks we interviewed also believe that programming diversity would suffer under an à la carte system because some cable networks, especially small and independent networks, would not be able to gain enough subscribers to support the network. For example, one network told us that under an à la carte system, fewer networks would remain financially viable and new networks would be less likely to be developed. Three of the cable operators and four of the five financial analysts we interviewed also said that smaller networks or those providing *specialty* programming would be hurt the most by an à la carte system. A number of the cable networks indicated that launching a new network under an à la carte system would be very difficult. Similarly, according to NCTA, an à la carte approach could result in the disappearance of many networks and could undermine the prospects for any new basic cable networks. Further, if an à la carte system resulted in limited subscribers

and decreased advertising revenue, several networks said the quality of programming available might be adversely impacted.

The manner in which an à la carte approach might impact advertising revenues, and ultimately the cost of cable service, rests on assumptions regarding customer choice and pricing mechanisms. In particular, the cable operators and cable networks that discussed these issues with us appeared to assume that many—if not most—customers, if faced with an à la carte selection of networks, would choose to receive only a limited number of networks. This assumption is consistent with the data on viewing habits—as previously mentioned, a recent study has shown that most people, on average, watch only about 17 networks. Nevertheless, under an à la carte scenario, cable companies may price large packages of networks in a way that provides an incentive for subscribers to choose a wide number of networks. Additionally, under this approach, cable operators may choose to price cable services in an entirely different way. One option suggested was that, similar to common pricing schemes in the electric and natural gas industries, subscribers might pay a flat charge for the connection to the cable operator’s system plus additional charges for each network the subscriber chooses to purchase. This could result in subscribers purchasing only a few channels paying a higher rate per channel than subscribers purchasing many channels. One of the issues that some industry representatives discussed with us concerned the *value* consumers place on networks they do not typically watch. While two experts suggested that it is not clear whether more networks are a benefit to subscribers, others noted that subscribers place value in having the opportunity to occasionally watch networks they typically do not watch. Thus, there are a variety of factors that make it difficult to ascertain how many consumers would be made better off and how many would be made worse off under an à la carte approach. These factors include how cable operators would price their services under an à la carte system; the distribution of consumers’ purchasing patterns; whether niche networks would cease to exist, and, if so, how many would exit the industry; and consumers’ true valuation of networks they typically do not watch.

Creating Additional Tiers of Service Is More Feasible, but Economic and Technological Constraints Would Also Apply

Another alternative to the à la carte approach that has been discussed is a move to minitiers, under which subscribers would choose small tiers of programming that are grouped by genre (such as sports, news and information, and general entertainment). Although industry representatives told us that this approach might be more viable than an à la carte approach, we were also told that all of the issues associated with an à la carte regime would also apply to minitiers. Representatives of 8 of

the 15 cable networks we interviewed indicated that the creation of additional tiers would be a disadvantage to the cable industry. Four cable network representatives stated that increasing the number of tiers would result in the same outcome as an à la carte system: a decline in cable network advertising revenue that would force networks to increase their license fees to cable operators, which would result in higher cable rates. Six of the 11 cable operators we interviewed also noted that a minitier approach would also require more deployment of addressable converter boxes. Finally, a representative of 1 cable operator told us that after experimenting with genre tiers in the past, the operator determined that this was not a successful strategy. This representative stated that subscribers felt the cable operator was forcing them to buy many tiers, since a typical household wanted to see one or more networks in several of the tiers.

However, officials representing 5 of the 11 cable operators we interviewed indicated that the tier concept might be viable in the case of sports programming. A representative of 1 cable operator indicated that a sports tier would be appropriate because sport fans are loyal customers and the cost of sports programming is very high. A representative of another cable operator noted that creating a sports tier should be an option, but that other types of programming would not work on separate tiers. Recently, several regional sports networks have been placed on sports-only tiers in the New York City metropolitan area.⁴⁰

Alternatively, representatives from two major sports leagues and a sports network do not believe that a sports-only tier is necessary, and some of these representatives did not believe such a tier would be viable. One important objective of the major sports leagues is to obtain the widest distribution of their games as possible. Therefore, many games appear either on broadcast television or on cable networks carried on the basic or expanded-basic tier. To ensure this wide distribution of their games, the major sports leagues include provisions in their contracts with cable networks that specify carriage of their games on a tier with broad distribution. A representative of a sports network said that if their network were offered on a sports-only tier, the nature of the network would

⁴⁰Recently, the Yankees Entertainment and Sports (YES) network was placed on a sports-only tier, with Madison Square Garden and FOX Sports Net New York, on selected Cablevision systems in the New York City metropolitan area following a lengthy dispute between YES and Cablevision. Subsequently, YES was offered on an à la carte basis on Time Warner Cable franchises in New York.

change. In fact, representatives of the three leagues with whom we spoke said that if sports networks were on a sports-only tier, the leagues would not want to sell the right to carry certain events on those networks since it would likely not be available to most viewers.⁴¹ One of these three representatives said that under this scenario, sports-only networks might cease to exist and any sports on cable would only be placed on general entertainment networks that provide variety programming—similar to broadcast networks. Finally, representatives from two of the sports leagues and a sports network said that there is no reason to believe that removing the sports networks from the expanded-basic tier would result in any substantial reduction in the rate for expanded-basic tier cable service. When two cable operators in the New York City metropolitan area moved regional sports networks to a separate tier, these companies lowered the expanded-basic cable rate by only 50 cents to a dollar.⁴²

Industry Participants Have Cited Certain Options That May Address Factors Contributing to Rising Cable Rates

In recent years, there has been concern about the rapidity of cable rate increases. As we previously noted, cable rates have risen by about 40 percent in the last 5 years, far outstripping increases in the general rate of inflation. Several approaches for addressing the rise in cable rates have been put forth. These approaches can be grouped into the following two main categories: (1) the control of rates through regulation and (2) the promotion of lower rates through market mechanisms, such as through greater competition.

Some consumer groups have pointed to the lack of competition as evidence that reregulation needs to be considered. One representative of a consumer group noted that regulation might be the only alternative to mitigate increasing cable rates and cable operators' market power. For example, one consumer group has recommended, among a variety of options, returning authority to reregulate cable rates to local and state governments. However, some experts expressed concerns about cable regulation after the 1992 Act. First, some academic critics believe that cable regulation lowered the quality of programming, discouraged investment in new facilities, and imposed administrative burdens on the

⁴¹One sports league also requires its cable network carriers to arrange for all cablecast games to be simulcast (subject to league sell-out rules) on free over-the-air television in the home cities of the participating clubs.

⁴²In one case, the cable operator simultaneously added one or two other networks to the expanded-basic tier.

industry and regulators. Second, according to these same critics, there is no strong evidence that cable rates were significantly constrained during that regulated era. Finally, regulation today could be considerably more complex than it was 11 years ago. Today, video providers use varied platforms (cable, DBS) to provide an array of communication services, including video service, Internet access, and video on demand. A regulatory scheme would need to consider which services and providers to regulate, and how to allocate the common costs of a communications network in a regulatory context across the various services provided.

Alternatively, taking steps to promote competition could help to reduce or slow the growth of cable rates by leveraging the normal workings of the marketplace. In those few local markets where a second wire-based provider exists, we found that cable rates are about 15 percent lower than local markets without this competition. Moreover, even though the influence of DBS on cable rates is minor, our current finding—in contrast to our earlier study and earlier studies by FCC that did not find such an effect—is that the presence of DBS does help to lower cable rates slightly. This may indicate that as more households subscribe to DBS service, cable operators will ultimately respond by reducing rates. Below, we discuss options that have been suggested for addressing the cable rate issue. We note that in this overview, we are neither making any specific recommendations regarding the adoption of any of these options, nor suggesting that this list is a necessarily comprehensive review of possible options.

Program access issues. The 1992 Act includes provisions aimed at, among other things, enhancing competition in the subscription video industry. As required by the act, FCC developed rules—commonly referred to as the *program access rules*—which were designed in part to ensure that cable networks that have ownership relationships with cable operators (i.e., vertically integrated cable operators) generally make their satellite-delivered programming available to competitors. Since 1992, some entering companies and consumer groups have stated that current program access rules are not broad enough to provide assurances that entrants can obtain necessary programming. In particular:

- Some have expressed concern that the law is too narrow because it applies only to the *satellite-delivered programming* of vertically integrated cable operators. In recent years, some regional cable networks owned by cable operators have been delivered to their cable facilities through wires—that is, they are not satellite delivered. When this is the case, the cable operator need not make the programming available to

competitors. Additionally, although it is not clear how widespread this practice is in local markets across the country, a recent report by a consumer group raised concerns that it could become more prominent at a national level.⁴³ Although questions have been raised about this issue—which has come to be called the terrestrial loophole—FCC has pointed out that the statute is specific in that the program access rules apply only to satellite-delivered programming.

- Although the program access rules generally prohibit exclusive contracts for programming of vertically integrated cable operators, these rules do not prohibit exclusive contracts between a cable operator and an independent cable network.⁴⁴ Some operators entering the market believe that some programming may not be available to them because large incumbent cable operators have secured such exclusive arrangements. Given these concerns, some have suggested that changes in the statutory program access provisions might enhance the ability of other providers to compete with the incumbent cable operators. However, others have noted that altering these provisions could reduce the incentive for companies to develop innovative programming. That is, we were told that companies may have less incentive to invest in certain new programming if they are not able to market that programming through their own distribution channels on an exclusive basis.⁴⁵

Promoting wireless competition. The medium used to provide video services over wireless platforms—radio spectrum—is a scarce and congested resource. DBS operators have stated that they are currently not able to provide local broadcast stations in all 210 television markets in the United States because they do not have adequate spectrum to do so while still providing a wide variety of national networks.⁴⁶ DBS companies

⁴³U.S. Public Interest Research Group, *The Failure of Cable Deregulation: A Blueprint for Creating a Competitive, Pro-Consumer Cable Television Marketplace* (Washington, D.C.: August 2003).

⁴⁴Under the Communications Act, the prohibition on exclusive contracts enacted as part of the program access provisions in the 1992 Act were set to sunset in October 2002 unless FCC determined the rules were still necessary. In 2002, FCC extended the prohibition until October 2007 because the commission determined that the prohibition continues to be necessary.

⁴⁵In July 2003, FCC adopted a Notice of Inquiry asking for comment on a variety of issues related to competition in the video market. One of the issues related to program access issues.

⁴⁶Recently, DIRECTV announced that it would provide local broadcast stations in all 210 television markets by 2008.

gained the right to provide these local stations in 1999, and this has been important in enabling them to compete more effectively with locally based cable operators. However, as part of the so-called *carry one, carry all* provisions, these companies are required to provide *all* local broadcast stations in markets where they provide any of those stations. According to executives at the two primary DBS companies, if DBS companies only provided the local stations that they view as desired by their subscribers, they might more quickly provide local broadcast stations in more markets, thereby rendering DBS a more effective competitor to cable. However, any modifications to the DBS carry one, carry all rules would need to be examined in the context of why those rules were put into place—that is, to ensure that all broadcast stations are available in markets where DBS providers choose to provide local stations. In fact, a U.S. Court of Appeals found that certain government interests promoted by the carry one, carry all provisions applicable to DBS providers are sufficient to justify this requirement under a First Amendment analysis.⁴⁷ Additionally, any review of these rules would need to take into account how they relate to other similar requirements, including, for example, *must-carry* requirements for the cable industry as well as how must carry will be applied to cable and DBS in the coming digital age. As with many complex policy issues, balancing what are often conflicting considerations is very complex.

Retransmission consent issues. In the 1992 Act, the Congress created a mechanism, known as retransmission consent, through which local broadcast station owners (such as local ABC, CBS, Fox, and NBC stations) could receive compensation from cable operators in return for the right to carry their broadcast stations. Prior to the 1992 Act, cable operators could retransmit local broadcast stations without approval of the broadcasters and without compensation. As cable operators began to carry more cable networks that competed with broadcast networks for viewers and associated advertising revenues, broadcasters argued that it was important for them to be able to receive compensation for retransmission of their stations. The retransmission consent provisions included in the 1992 Act allow local broadcast stations and cable operators to negotiate for

⁴⁷ *Satellite Broadcasting and Communications Association v. FCC*, 275 3d 337 (4th Cir. 2001) cert. Denied 536 U.S. 922 (2002).

payment or some other form of compensation in exchange for the cable operator's right to carry broadcast networks.⁴⁸

Today, few retransmission consent agreements include cash payment for carriage of the local broadcast station; rather, agreements between some large broadcast groups and cable operators generally include provisions for carriage of broadcaster-owned cable networks. We were told that, after the passage of the 1992 Act, the cable industry indicated its reluctance to pay for carriage of local broadcast stations—which they had previously been carrying free of charge. The negotiations for retransmission consent at that time quickly turned to examining carriage of broadcaster-owned cable networks as compensation for the right to carry the local broadcast station. Both the Congress and FCC had indicated that carriage of broadcast-owned cable networks would be a possible way for broadcasters to receive compensation for carriage of broadcasters' over-the-air stations. A variety of parties with whom we spoke mentioned specific broadcast-owned cable networks (such as ESPN2 and MSNBC) that were launched as part of retransmission consent agreements during the 1990s.

One concern that was expressed to us regarding retransmission consent relates to its influence on the carriage decisions of cable operators. In particular, many representatives from cable operators and several independent (nonbroadcast) cable networks told us that because the terms of retransmission agreements often include the carriage of broadcast-owned cable networks, cable operators sometimes carry networks they otherwise might not have carried. Several of the cable networks we spoke with noted that this practice can make it difficult for independent cable networks to gain carriage, particularly in the case of new networks. Alternatively, representatives of the broadcast networks told us that they did not believe that cable networks had been dropped or that independent cable networks could not gain carriage because of retransmission consent agreements. Further, these representatives told us that they accept cash payment for carriage of the broadcast signal, but that cable operators tend to prefer carriage options in lieu of a cash payment. Broadcast executives also told us that the retransmission process has been very important in preserving free over-the-air television.

⁴⁸Each local broadcast station has the right to negotiate for retransmission or to assert must-carry status. Under must carry, the cable operator is required to carry a local broadcast station, but can do so without paying any compensation.

Several of the industry representatives with whom we met also expressed concern that ownership relationships between broadcast networks and cable networks could lead to higher cable rates for consumers. Although we did not find that license fees are higher when such an ownership relationship exists, we did find that cable networks owned by broadcast networks are more likely to be carried on cable systems than networks not owned by broadcasters or by cable operators.⁴⁹ (See app. V for a discussion of our carriage model). As such, the influence of retransmission consent on consumer rates is not clear, since these rates could be affected by the carriage patterns.

Certain parties with whom we met advocated the removal of the retransmission consent provisions and told us that this may have the effect of lowering cable rates.⁵⁰ However, other parties have stated that such provisions serve to enable television stations to obtain a fair return for the retransmitted content they provide—which they believe was not the case prior to 1992. Moreover, these industry representatives noted that retransmission rules help to ensure the continued availability of free television for all Americans. Currently, there is a petition pending before FCC that asks for a review of the impact of retransmission consent.

Conclusions

In the last decade, the subscription video industry has undergone dramatic changes. The regulatory and competitive environments have both evolved; cable rates have been regulated and later partially deregulated; and limited wire-based competition has been supplanted by nationwide competition from satellite-based companies. It appears that this evolution has created problems for FCC's monitoring and reporting on the industry. As mandated by the Congress, FCC prepares a yearly report on cable rates in the United States. But, aspects of how information for the report is collected—such as the cost factors underlying cable rate increases—are closely associated with the earlier, regulated era of the cable industry. For example, information on cost changes underlying cable rate increases are reported to FCC on a survey form that requires the cost factors and rate changes to balance. Because rates and costs need not balance in an unregulated environment, cable franchise representatives filing out the

⁴⁹We also found that cable networks owned by cable operators are also more likely to be carried than networks not owned by broadcasters or cable operators.

⁵⁰One possible option would be to replace the retransmission consent provisions with a must-carry right.

form made accommodations in their answers that may have compromised the accuracy of the cost data they were reporting. Similarly, maintaining current information on the effective competition status of cable operators under FCC's current process has proven difficult. Some expected competitors have emerged but did not fully deploy their networks and, in some cases, discontinued service altogether, and DBS companies—which were not yet providing service in 1992—have thrived, but information on their market participation is not readily available on a local level. We found that because FCC's current process does not provide for updates to the status of effective competition, some designations do not appear to reflect current competitive conditions.

In the face of the rapid evolution of the subscription video industry, it remains important for accurate, current, and relevant information to be available to the Congress and FCC. Both the Congress and FCC monitor and provide oversight of this industry, for which FCC's report can serve as an important input. Additionally, FCC's report can provide information relevant to the Congress, as it considers important policy decisions, including the regulation of cable rates and/or services, media consolidation, and the convergence of video, voice, and data services. Lacking reliable information, the Congress and FCC face the challenge of performing monitoring and oversight, as well as making important policy decisions, without the benefit of important price, cost, and competition information. As such, it is important for FCC's report to provide accurate, current, and relevant information about the cable industry.

Recommendations for Executive Action

To improve the quality and usefulness of the data that FCC collects on cable television rates and competition in the subscription video industry, we recommend that the Chairman of the FCC take the following actions:

- take immediate steps to improve the cable rates survey by (1) including more detailed, standardized instructions and examples for how to calculate the cost changes that the cable operators experienced in the previous year and (2) eliminating the requirement for the cost increases to sum to the change in rates and
- review the commission's process for maintaining the status of effective competition among franchises in order to keep these designations more up to date.

Agency Comments and Our Evaluation

We provided a draft of this report to FCC for comment. FCC had two key comments on the draft report. First, FCC stated that they are taking steps to redesign their survey questionnaire in an attempt to obtain more accurate information. Second, FCC questioned on a cost/benefit basis the utility of adopting a revised process to keep the status of effective competition in franchises up to date. We believe that providing the Congress with reliable information on cable rates and competition is important, and that improving the accuracy of effective competition designations would help to accomplish this. We recognize that there are costs associated with FCC's cable price survey, and we recommend that FCC examine whether cost-effective alternative processes exist that would enhance the accuracy of its effective competition designations. FCC's comments are contained in appendix VI, along with our responses to those comments.

We also provided a draft of this report to several industry participants and other experts for their review and comment. In particular, we provided the draft to representatives of Consumers Union, the Consumer Federation of America, the American Cable Association, the National Association of Telecommunications Officers and Advisors, the National Association of Broadcasters, the National Cable and Telecommunications Association, the Satellite Broadcasting and Communications Association, Walt Disney Company, the National Broadcasting Company, Viacom, and the News Corporation. The comments received covered a broad range of issues and each groups' comments are summarized in appendix VII. In addition, these groups provided clarifications to the draft report. As appropriate, we made changes in our report that are based on the broad comments summarized in appendix VII as well as the technical clarification provided to us by these parties.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to interested congressional committees; the Chairman, FCC; and other interested parties. We will also make copies available to others upon request. In addition, this report will be available at no cost on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me on (202) 512-6670 or at goldsteinm@gao.gov. Key contacts and major contributors to this report are listed in appendix VIII.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'M. Goldstein', with a long horizontal flourish extending to the right.

Mark L. Goldstein
Director, Physical Infrastructure Issues

Appendix I: Scope and Methodology

To respond to the first objective of this report—examine the impact of competition on cable rates—we used an empirical model (our cable-satellite model) that we previously developed that examines the effect of competition on cable rates and services.¹ Using data from the Federal Communications Commission’s (FCC) 2001 cable rate survey, the model considers the effect of various factors on cable rates, the number of cable subscribers, the number of channels that cable operators provide to subscribers, and direct broadcast satellite (DBS) penetration rates for areas throughout the United States. We further developed the model to more explicitly examine whether varied forms of competition—such as wire-based, DBS, multipoint multichannel distribution systems (MMDS) competition—have differential effects on cable rates. See appendix IV for a further discussion of this model. In addition, we spoke with an array of industry stakeholders and experts (see below) to gain further insights on these issues.

The second objective of this report consists of two parts. To respond to part one—assess the reliability of the cost justifications for rate increases provided by cable operators to FCC, we conducted a telephone survey (our cable franchise survey), from January 2003 through March 2003, of cable franchises that responded to FCC’s 2002 cable rate survey (see app. II). We drew a random sample of 100 of these cable franchises; the sample design was intended to be representative of the 755 cable franchises that responded to FCC’s survey. We used data from FCC, and conversations with company officials, to determine the most appropriate staff person at the franchise to complete our survey. To ensure that our survey gathered information that addressed this objective, we conducted telephone pretests with several cable franchises and made the appropriate changes on the basis of the pretests. We asked cable franchises a series of open-ended questions regarding how the franchise staff calculated cost and noncost factors on FCC’s 2002 cable rate survey, how well the franchise staff understood what FCC wanted for those factors, and franchise staff’s suggestions for improving FCC’s cable rate survey. All 100 franchises participated in our survey, for a 100 percent response rate. In conducting this survey, we did not independently verify the answers that the franchises provided to us.

¹See U.S. General Accounting Office, *Telecommunications: Issues in Providing Cable and Satellite Television Services*, [GAO-03-130](#) (Washington, D.C.: Oct. 15, 2002).

Additionally, to address part two of the second objective—assess FCC’s classifications of effective competition—we examined FCC’s classification cable franchises regarding whether they face effective competition. Using responses to FCC’s 2002 cable rate survey, we tested whether the responses provided by cable franchises were consistent with the various legal definitions of effective competition, such as the low-penetration test. Further, we reviewed documents from FCC proceedings addressing effective competition filings and contacted franchises to determine whether the conditions present at the time of the filing remain in effect today. We also reviewed filings for effective competition that were based on DBS subscribership to assess how data from SkyTRENDS are used in these filings.

To address the third, fourth, fifth, and sixth objectives (examine reasons for recent rate increases, examine whether ownership relationships between cable networks and cable operators and/or broadcasters influence the level of license fees for the cable networks or the likelihood that a cable network will be carried, examine why cable operators group networks into tiers rather than sell networks individually, and discuss options to address factors that could be contributing to cable rate increases), we took several steps, as follows:

- We conducted semistructured interviews with a variety of industry participants. We interviewed officials and obtained documents from FCC and the Bureau of Labor Statistics. We interviewed 15 cable networks—12 national and 3 regional—from a listing published by the National Cable and Telecommunications Association (NCTA), striving for a mixture of networks that have a large and small number of subscribers and that provide varying content, such as entertainment, sports, music, and news. We interviewed 11 cable operators, which included the 10 largest publicly traded cable operators and 1 medium-sized, privately held cable operator. In addition, we interviewed the four largest broadcast networks, one DBS operator, representatives from three major professional sports leagues, and five financial analysts that cover the cable industry. Finally, we interviewed officials from NCTA, Consumers Union, the National Association of Broadcasters, the National Association of Telecommunications Officers and Advisors, the American Cable Association, the National Cable Television Cooperative, and the Cable Television Advertising Bureau.
- We solicited the 11 cable operators we interviewed to gather financial and operating data and reviewed relevant Securities and Exchange Commission filings for these operators. Nine of the 11 cable operators

provided the financial and operating data we sought. We also acquired data from Kagan World Media,² which is a private communications research firm that specializes in the cable industry. These data provided us with revenue and programming expenses for over 75 cable networks.³

- We compared the average license fees among three groups of networks: those that are majority-owned by a broadcaster, those that are majority-owned by a cable operator, and all others. We performed t-tests on the significance of these differences. We also ran a regression (our cable license fee model) in which we regressed the license fee across 90 cable networks on the age of the network, the advertising revenues per subscriber (a measure of network popularity), dummy variables for sports and news programming, and a variety of factors about each franchise.
- We conducted several empirical tests on the channel lineups of cable operators as reported to FCC in its 2002 cable rate survey. We developed an empirical model (our cable network carriage model) that examined the factors that influence the probability of a cable network being carried on a cable franchise, including factors such as ownership affiliations and the popularity of the network. This model is discussed in greater detail in appendix V. Further, we developed descriptive statistics on the characteristics of various tiers of service and the channels included in the various tiers.

²Kagan World Media, *Economics of Basic Cable Networks 2003* (Carmel, CA: 2003).

³Due to the confidential requirement of industry contracts, we could not independently verify the data from Kagan World Media. To assess the reliability of these data, we asked cable networks that we interviewed about the Kagan data. Eight of the 12 national cable networks we interviewed said that Kagan data on license fees, revenues, and programming expenses were fairly accurate.

Appendix II: GAO Survey of Cable Franchises

GAO Telephone Interview Template

Page 1

Entered by _____ Date _____
Verified by _____ Date _____

Community Unit Identification (CUID) Number:
Franchise and Parent Company:
Cable Company Survey Contact:
Date of Interview:

According to FCC's 2002 Cable Price Survey, you submitted the figures included in the last column of the table below. We will be referring to this table in our questions.

Row Monthly Charges for Programming Services July 1, 2002

51	Year-to-date change in monthly charge on row 50	
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Allocate the year-to-date change in monthly charge for cable television by estimating the dollars and cents that each factor, below, contributed.

Row July 1, 2002

52	License or copyright fees, <i>existing</i> programs	
53	License or copyright fees, <i>new</i> programs	
54	Head-end or distribution facility investment	
55	General inflation, not included elsewhere	
56	Other cost changes (positive or negative)	
57	Non-cost related factors (positive or negative)	
58	Total of rows 52-57 (must equal row 51)	

- 1 Does the data in the table accurately reflect the information you submitted to FCC? ☐ Yes ☐ No *[please explain the differences]*

- 2 At what level of your company was the information for this section of FCC's survey compiled? Was it completed...
☐ Primarily at the headquarters MSO level?
☐ Primarily at the regional MSO level?
☐ Primarily at the franchise/system level?
☐ Or A combination of levels?

Page 2

3 Briefly describe how you calculated each of the factors. For those factors to which you did not allocate any of your change in monthly charges, please describe why.

- (52) License or copyright fees, *existing* programs

- (53) License or copyright fees, *new* programs

- (54) Head-end or distribution facility investment

- (55) General inflation, not included elsewhere

- (56) Other cost changes

- (57) Non-cost related factors

Did the factors naturally add up to your change in rates, or did you need to adjust one or more of the factors? Which factor(s) did you adjust?

4 What type of records did you use to support the calculations for the estimates of the factors in lines 52 through 57?

- 5 For which of the following reasons did you not fully understand what to submit to the FCC? Please say yes or no in response to each of the following possible reasons.
- ☐ It was unclear what some or all of the factors meant. *(Please list the unclear factors)*

 - ☐ The factors provided did not fit our company's situation
 - ☐ There were insufficient instructions or examples
 - ☐ It was unclear how to make the sum of the factors equal the change in monthly charge
 - ☐ Are there any other reasons that you did not fully understand what to submit for these factors?

- 6 How long did it take you to complete the entire FCC rates survey? How long did it take you to complete this section?
- _____

- 7 How could the FCC rates survey be improved?

Appendix III: GAO's Modifications to FCC's Competition Classification

To determine the status of competition from a wire-based competitor for our cable-satellite model, we took steps to review the accuracy of FCC's classification of effective competition for the cable franchises surveyed in 2001—the year of data used in our model. For those cases in which a finding of effective competition had been made because of the presence of a local exchange carrier (LEC) or a competitive overbuilder, we took steps to determine if that competition was still present as of 2001. For cases without a designation of effective competition, we checked to see if there was a possible LEC or overbuilder operating in the areas. This process was only designed to check the status of competition *other than* that provided by DBS. This is because we did not rely on FCC's competitive classifications related to DBS because information on DBS for our model was obtained from a different source, and we did not use FCC's classification at all in that case.

Our sample contained 705 cable franchises, of which 133 had been found to face effective competition from a LEC or overbuilder, and 572 had not. In most cases in which a finding of effective competition had been made (95 of the 133), we found evidence that, in fact, a nonsatellite provider was competing with the incumbent cable provider. In the other 38 cases, we found evidence suggesting that a nonsatellite provider was not present in 2001.¹ To make these determinations, we used various sources of information, including FCC's master list of cable franchises. We noted that if there were competitive cable franchises, we would expect to find two franchises operated by different companies in the same geographic area. If, for example, we found only one operating franchise in an area but that franchise was listed as having effective competition, we investigated further. Also, if we found two franchises operating in an area that were classified as having effective competition, but both were operated by the same company, we also investigated further. Also, in some cases, we made attempts to determine if the nonsatellite competitor was operating as an MMDS, which is sometimes referred to as wireless cable. This further investigation usually involved Web research and information obtained through contacts with local franchising authorities. In those instances for which we were able to gather information indicating that an incumbent cable provider that once faced a nonsatellite competitor no longer did in 2001, we defined our nonsatellite competition variable accordingly.

¹In the course of our review, we also identified some cable franchises that were apparently sampled because of clerical-type mistakes, such as the transposition of a franchise identification number or an inconsistency between franchises identified in the effective competition report and the franchises ultimately sampled.

To check whether franchise areas without a designation of effective competition might have nonetheless faced nonsatellite competition in 2001, we used lists of service areas of cable overbuilders and compared these areas with the list of sampled franchises. We also examined FCC's master franchise list for areas in which more than one company appeared to operate an active franchise. We investigated these lists further by calling local franchising authorities to determine whether those franchise areas were geographically distinct or whether this pattern could represent competition. We also attempted to identify areas where wireless cable companies provided video service and whether any of those areas overlapped sampled franchises. In all, we found a number of cases where a nonsatellite provider appeared to be offering service in areas where no filings for effective competition had been made. In these cases, we defined our variable to reflect this competition. Of the 572 franchises without a designation of effective competition, we found that 28 were facing some form of nonsatellite competition in 2001.

Finally, we made a distinction between those franchises that were found to face effective competition because of the availability of MMDS versus areas with a wire-based overbuilder. We separated these kinds of competition into distinct variables under the assumption that they may have a differential effect on cable operators. We believed that this might be the case because many MMDS providers have been modifying their business plans and placing less emphasis on their video businesses. For example, FCC noted that "MMDS has never become a significant competitor in the market for the delivery of video programming, rather many MMDS providers are focusing on data transmission rather than video service."²

²See Federal Communications Commission, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Ninth Annual Report, FCC 02-338* (Washington, D.C.: Dec. 31, 2002).

Appendix IV: Cable-Satellite Model

This appendix provides a brief description of our model of cable-satellite competition. With this model, we estimate the influence of wire-based, MMDS, and DBS competition, along with other variables, on cable prices and services through a system of structural equations in which certain variables that may be simultaneously determined are estimated jointly. The model includes equations for cable prices, the number of cable subscribers, the number of cable channels, and the DBS penetration rate. Our October 2002 report provides a more detailed discussion of the data sources, our process for merging various data into a single dataset, and the specification of our model.¹

Definitions and Sources for Variables

Table 1 includes a list of all the variables included in our model, with the definition and source identified for each variable.

Table 1: Definition and Source for Variables

Variable	Definition	Source
Cable price	The monthly rate charged for the Basic Service Tier, Cable Programming Service Tier, and rental of a converter box and remote control.	FCC 2001 Cable Rate Survey
Number of subscribers	The number of subscribers to the Basic Service Tier and Cable Programming Service Tier.	FCC 2001 Cable Rate Survey
Number of channels	The number of channels provided with the Basic Service Tier and Cable Programming Service Tier (the most commonly purchased tier).	FCC 2001 Cable Rate Survey
Direct broadcast satellite (DBS) penetration rate	The fraction of housing units in a cable franchise area that have satellite service.	<i>SkyREPORT</i>
DBS provision of local stations	A binary variable that equals 1 if both DBS operators offer local broadcast stations in the cable franchise area.	National Association of Broadcasters
Television market size	The number of television households in the market.	Neilsen Media Research
Horizontal concentration	A binary variable that equals 1 if 1 of the 10 largest national multiple system operators (MSO) provides service in the franchise area.	FCC 2001 Cable Rate Survey
Vertical relationship	A binary variable that equals 1 if the cable operator is affiliated with an MSO that has an ownership interest in a national or regional video programming service.	FCC 2001 Cable Rate Survey and 2001 Annual Video Report
Presence of a wire-based competitor	A binary variable that equals 1 if a second wireline company provides cable service (including, for example, a local exchange telephone carrier offering video services) in the franchise area.	FCC 2001 Cable Rate Survey and GAO analysis

¹See [GAO-03-130](#).

Variable	Definition	Source
Presence of multichannel multipoint distribution system (MMDS) competitor	A binary variable that equals 1 if a company provides cable service via MMDS technology in the franchise area.	FCC 2001 Cable Rate Survey and GAO analysis
Average wage	The average weekly wage for telecommunications equipment installers and repairers in the state where the cable franchise is located.	Bureau of Labor Statistics
Population density	The ratio of population to square miles in the franchise area.	U.S. Census Bureau
Number of broadcast stations	The number of over-the-air broadcast stations in the television market.	BIA MEDIA AccessPro
Urbanization	The percentage of the county's population that is classified as urban by the U.S. Census Bureau.	U.S. Census Bureau
Age of cable franchise	The number of years between when the cable franchise began operation and 2001.	FCC Master List of Cable Franchises
Homes passed by cable system	The number of homes passed by the cable system that serves the franchise area, including homes outside of the franchise area.	FCC 2001 Cable Rate Survey
Median per-capita income	The median per-capita income in the franchise area.	U.S. Census Bureau
System megahertz	The capacity, measured in megahertz, of the cable system that serves the franchise area.	FCC 2001 Cable Rate Survey
Percentage of multiple dwelling units	The percentage of housing units accounted for by structures with five or more housing units.	U.S. Census Bureau
Nonmetropolitan areas	A binary variable that equals 1 if the franchise area is outside of a metropolitan statistical area (MSA).	U.S. Census Bureau
Angle (or "elevation") of satellite dish	The angle relative to the ground that a DBS subscriber must mount the satellite dish to "see" the satellite.	Web pages of DIRECTV and EchoStar
Regulation	A binary variable that equals 1 if the cable franchise is subject to regulation of the rate charged for the Basic Service Tier.	FCC 2001 Cable Rate Survey

Source: GAO (2003).

Estimation Methodology and Results

We employed the three-stage least squares method to estimate our model.² Table 2 includes the descriptive statistics for the variables included in our model, and table 3 includes the estimation results for each of the four structural equations. All of the variables, except dummy variables,³ are expressed in natural logarithmic form, so coefficients can be interpreted as *elasticities*—which is the percentage change in the value of the dependent variable associated with a 1 percent change in the value of an

²See [GAO-03-130](#) for a discussion of why we use the three-stage least squares method, rather than the two-stage least squares method.

³A dummy variable takes a value of 1 if a certain characteristic is present and a value of 0 otherwise.

independent, or explanatory, variable.⁴ The coefficients on the dummy variables are elasticities in decimal form.

Table 2: Descriptive Statistics

Variable	Mean	Standard deviation	Minimum value	Maximum value
Cable price	36.15	5.02	14.00	47.84
Cable price per channel	0.66	0.19	0.30	1.80
Cable subscribers	21,460.68	43,673.73	4.00	302,964.00
Cable channels	58.17	14.06	10.00	99.00
DBS penetration	15.91	11.31	1.59	63.64
DBS provision of local stations	0.52	0.50	0.00	1.00
Regulation	0.36	0.48	0.00	1.00
Number of broadcast stations	12.00	5.64	1.00	25.00
Median income	43,965.25	16,202.17	13,529.00	139,997.00
Horizontal concentration	0.85	0.36	0.00	1.00
Vertical relationship	0.55	0.50	0.00	1.00
Presence of wire-based competitor	0.16	0.37	0.00	1.00
Presence of MMDS competitor	0.01	0.10	0.00	1.00
Nonmetropolitan areas	0.25	0.43	0.00	1.00
Urbanization	73.53	28.12	0.00	100.00
Percentage of multiple dwelling units	14.38	13.70	0.00	98.12
Age of cable franchise	24.11	9.52	2.00	50.00
Homes passed by cable system	181,024.81	235,085.38	30.00	1,260,734.00
Cable system megahertz	638.98	172.13	216.00	870.00
Television market households	1,459.89	1,664.50	50.00	7,301.00
Population density	2,888.92	7,144.36	2.25	87,139.78
State-level wages	788.91	102.28	575.38	1,045.58
Dish angle or elevation	40.29	6.67	27.19	57.28

Source: GAO (2003).

⁴The dummy variables in the model include the following: horizontal concentration of cable systems, vertical relationship, regulation, presence of a wire-based competitor, presence of a MMDS competitor, DBS provision of local channels, and nonmetropolitan area. Also, because the natural log of 0 is undefined, we added 1 to the observed value of any continuous variable that can take the value of 0.

Table 3: Three-Stage Least Squares Model Results

Variable	Cable prices equation	Cable subscribers equation	Cable channels equation	DBS penetration equation
Cable price per channel		-1.5368 [0.0001] ^a		0.7839 [0.0001] ^a
Cable subscribers	0.0079 [0.3938]		0.0603 [0.0001] ^a	
Cable channels	0.2428 [0.0001] ^a			
DBS penetration	-0.0441 [0.0898] ^c	-2.2403 [0.0001] ^a	-0.0174 [0.5933]	
DBS provision of local stations	-0.0063 [0.7285]	0.4276 [0.0800] ^c	0.0527 [0.0408] ^b	0.3386 [0.0001] ^a
Regulation	-0.0213 [0.1157]			
Number of broadcast stations		0.5896 [0.0081] ^a		
Median income		-0.3772 [0.0813] ^c	0.0672 [0.0032] ^a	0.1903 [0.0023] ^a
Horizontal concentration	0.0528 [0.0006] ^a			
Vertical relationship	-0.0051 [0.6682]		-0.0335 [0.0351] ^b	
Presence of wire-based competitor	-0.1636 [0.0001] ^a	-1.2766 [0.0001] ^a	0.0339 [0.1832]	-0.3797 [0.0001] ^a
Presence of MMDS competitor	0.0420 [0.3697]	-0.2247 [0.7350]	0.0426 [0.5391]	-0.1350 [0.4596]
Nonmetropolitan areas				0.4456 [0.0001] ^a
Urbanization		0.0541 [0.5117]		
Percentage of multiple dwelling units			-0.0228 [0.0261] ^b	-0.2162 [0.0001] ^a
Age of cable franchise		0.3027 [0.0463] ^b		-0.1778 [0.0001] ^a
Homes passed by cable system		0.2918 [0.0001] ^a		

Variable	Cable prices equation	Cable subscribers equation	Cable channels equation	DBS penetration equation
Cable system megahertz			0.5038 [0.0001] ^a	-0.0434 [0.5304]
Television market households	0.0072 [0.3639]	-0.2902 [0.0670] ^c	-0.0023 [0.8489]	-0.1195 [0.0001] ^a
Population density	-0.0120 [0.0256] ^b			
State-level wages	0.0392 [0.3676]			
Dish angle or elevation				0.6028 [0.0001] ^a
Intercept	2.4077 [0.0001] ^a	14.1843 [0.0001] ^a	-0.3218 [0.3259]	0.5324 [0.5601]
Sample size	705	705	705	705

Source: GAO (2003).

Note: System-weighted R-square: 0.65. P-values are shown in square brackets.

^aSignificance at the 1 percent level.

^bSignificance at the 5 percent level.

^cSignificance at the 10 percent level.

We found that competition has an effect on the subscription video market. Competition from a second wire-based operator appears to significantly lower cable prices—cable prices were approximately 15 percent lower in areas where a second wire-based operator provides service.⁵ Yet, this competition had no effect on the quality of cable service, as measured by the number of channels the cable operator provides. Additionally, we found that higher DBS penetration rates were associated with a slight reduction in cable prices; a 10 percent higher DBS penetration rate was

⁵For dummy variables (those variables that can take a value of 0 or 1 depending on the presence of a condition (e.g., presence of wire-based competitor, DBS providers offering local broadcast stations)), we report the percentage change arising from a discrete change from 0 to 1. We calculated this percentage change as: $[\exp(\text{parameter estimate}) - 1]$ times 100.

associated with a 15 cent reduction in cable rates.⁶ In areas where both DBS operators provide local broadcast stations, we found that cable operators offer subscribers approximately 5 percent more channels than cable operators in areas where both DBS operators do not provide local stations. Unlike wire-based and DBS competition, we found that the presence of a company providing video service via MMDS technology was not associated with a different level of cable rates or number of channels provided to subscribers.⁷

We found that a variety of other factors affect the level of cable prices and the quality of cable service. Cable prices are higher in areas where the cable operator provides more channels, indicating that some consumers may be willing to pay for additional channels and that providing additional channels raises a cable company's costs. We found that cable prices were 5 percent higher when the cable operator was affiliated with 1 of the 10 largest MSOs. Finally, we found that cable operators affiliated with a cable network provided their subscribers with 3 percent fewer basic and expanded-basic cable networks than similar cable operators unaffiliated with a cable network.

DBS operators' provision of local broadcast stations is associated with significantly higher DBS penetration rates. As shown in table 3, our model results indicate that in cable franchise areas where these local stations are available from both DBS operators, the DBS penetration rate is approximately 40 percent higher than in areas where local stations are not available via satellite from both DBS operators. This finding suggests that in areas where local broadcast stations are available from both DBS operators, consumers are more likely to subscribe to DBS service; therefore, DBS appears to be more competitive with cable than in areas where local stations are not available from both DBS operators.

⁶In our October 2002 report ([GAO-03-130](#)), we did not find that DBS penetration was associated with lower cable rates. As part of our analysis for this report, we further refined our measure of competition to more accurately reflect the actual status of competition at the time our data were gathered. These refinements contributed to our finding that DBS penetration was associated with lower cable rates.

⁷In our October 2002 report([GAO-03-130](#)), MMDS competitors were included in our variable that measured nonsatellite competition. For this report, we removed MMDS competitors from the nonsatellite competition variable, thereby creating a wire-based only competition variable, and created a separate variable for MMDS competition. We made this adjustment because (1) MMDS relies on a different technology than either wire-based or DBS competitors and (2) many MMDS operators are scaling back or discontinuing video service.

Several additional factors also influence the DBS penetration rate. Our model results indicate that the DBS penetration rate is greater in nonmetropolitan areas and also tends to increase as the size of the television market decreases. Additionally, the DBS penetration rate is higher in areas that require a relatively higher angle or elevation at which the satellite dish is mounted and is lower in areas where there are more multiple dwelling units. These two factors can be associated with the need of DBS satellite dishes to “see” the satellite. That is, a dish aimed more toward the horizon (as opposed to aimed higher in the sky) is more likely to be blocked by a building or foliage, and people in multiple dwelling units often have fewer available locations to mount their dish.

Appendix V: Cable Network Carriage Model

This appendix describes our model of cable network carriage that we developed to test whether ownership affiliations influence cable operators' decisions about what networks they will carry. Specifically, we discuss (1) the set-up of our model, (2) the data sources and descriptive statistics, (3) the estimation methodology and results, and (4) an alternative specification.

Set-up of Our Cable Network Carriage Model

A cable operator will carry a cable network if, on the margin, the network increases the operator's profit or increases its profits more than an alternative cable network. Cable operators receive revenue associated with cable networks from both subscriber fees and local advertising. Therefore, the addition of a popular cable network will likely increase the operator's revenues by allowing the operator to impose higher monthly cable rates on subscribers and sell additional local advertising at higher rates than would be possible with a less popular network. At the same time, the cable operator will incur programming costs associated with the cable network. Thus, the cable operator will balance these various revenue and cost factors when deciding whether to carry a given cable network.

In interviews with 11 cable operators, we were told that broadcast networks often link carriage of cable networks to retransmission of local broadcast stations. In addition to these broadcaster affiliations with cable networks, some cable operators are also affiliated with cable networks. In fact, several studies have indicated that cable ownership of cable networks influences the carriage of cable networks—so there is some precedent that ownership, albeit of a different form, influences carriage decisions.¹ To examine whether these ownership affiliations—broadcaster and cable operator ownership of cable networks—influence the carriage of cable networks by cable franchises, we employed a model that tests whether certain variables increase or decrease the probability of a cable network being carried on a particular cable franchise. To empirically test

¹For example, see Waterman, D. and A.W. Weiss, "The Effects of Vertical Integration Between Cable Television Systems and Pay Cable Networks," *Journal of Econometrics*, 72 (1996): 357-395 and Chipty, T., "Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry," *American Economic Review*, 91(3) (2001): 428-453. These studies found that cable operators were more likely to carry networks that they owned. These studies, however, did not test whether cable operators were more likely to carry a network owned by a broadcaster.

these hypotheses, we estimated the following. Carriage of a cable network on a cable franchise is a function of

- the age of the cable network,
- the popularity of the cable network as measured by advertising revenues per subscriber,
- whether the cable network primarily distributes news- or sports-related programming,
- whether the cable network is affiliated with a broadcast network or a cable operator,
- cable system capacity in terms of megahertz,
- the number of households passed by the cable system,
- the percentage of people in the franchise area between ages 25 and 65,
- the percentage of households in the franchise area that own their homes, and
- whether the cable franchise is owned by a cable multiple system operator.

Data Sources and Descriptive Statistics

We required several data elements to build the dataset used to estimate this model. The following is a list of our primary data sources. In addition, we list all of the variables, definitions, and sources in table 4 and basic statistical information on all of the variables in table 5.

- We obtained data on the carriage of individual cable networks on cable franchises from FCC's 2002 survey of cable franchises. FCC's survey asked a sample of cable franchises whether the franchise carried various cable networks. We used the survey to define a variable representing whether a given cable network was carried on either the basic or expanded-basic tier. In addition, we used the survey to define variables measuring (1) the system megahertz (the capacity of the cable system in megahertz), (2) the number of households passed by the cable system, (3) the affiliation of the cable franchise with a multiple system operator, and (4) the ownership affiliation of the cable operator.
- From Kagan World Media, we obtained data on cable networks, including (1) the year the cable network launched, (2) the number of cable

subscribers that received the cable network in 2002, (3) the advertising revenue the cable network received in 2002, and (4) the ownership affiliation of the cable network.

- We used the most recent data from the U.S. Census Bureau to obtain the following demographic information for each franchise area: proportion of the population between ages 25 and 65 and the percentage of the households that reside in owner-occupied housing.

Table 4: Definitions and Sources of Variables

Variable	Definition	Source
Carry	A binary variable that equals 1 if the cable network is carried on the basic or expanded-basic tier.	FCC 2002 cable rate survey
Age	2003 minus the launch year of the cable network.	Kagan World Media
Advertising revenue per subscriber	The cable network's advertising revenues divided by the number of subscribers that could receive the cable network in 2002.	Kagan World Media
News	A binary variable that equals 1 if the cable network primarily delivers news-related programming.	GAO analysis
Sports	A binary variable that equals 1 if the cable network primarily delivers sports-related programming.	GAO analysis
Broadcaster affiliation	A binary variable that equals 1 if the cable network is affiliated with a broadcast network group (Disney/ABC, Viacom/CBS, News Corporation/Fox, General Electric/NBC, or Scripps), and the cable network began operation in 1992 or later.	Kagan World Media
Cable affiliation	A binary variable that equals 1 if the cable network is affiliated with a cable operator (Time Warner, Cablevision, or Comcast).	Kagan World Media
Homes passed by cable system	The number of households passed by the cable system that serves the franchise, including homes outside of the franchise area.	FCC 2002 cable rate survey
Cable system megahertz	The capacity, measured in megahertz, of the cable system that serves the franchise area.	FCC 2002 cable rate survey
Multiple system operator	A binary variable that equals 1 if the cable franchise is affiliated with a cable multiple system operator.	FCC 2002 cable rate survey
Population between ages 25 and 65	The percentage of the population in a franchise area between ages 25 and 65.	U.S. Census Bureau
Home ownership	The percentage of households in the franchise area residing in owner-occupied housing units.	U.S. Census Bureau

Source: GAO (2003).

Table 5: Descriptive Statistics

Variable	Mean	Standard deviation	Minimum value	Maximum value
Carry	0.43	0.50	0.00	1.00
Age	10.68	6.61	1.00	27.00
Advertising revenue per subscriber	1.91	2.19	0.00	10.98
News	0.06	0.24	0.00	1.00
Sports	0.09	0.28	0.00	1.00
Broadcaster affiliation	0.25	0.43	0.00	1.00
Cable affiliation	0.20	0.40	0.00	1.00
Homes passed by cable system	178,212.05	244,160.35	73.00	1,286,698.00
Cable system megahertz	672.57	171.08	212.00	870.00
Multiple system operator	0.95	0.23	0.00	1.00
Population between ages 25 and 65	52.09	2.92	37.26	62.94
Home ownership	68.16	10.02	19.46	84.90

Source: GAO (2003).

Estimation Methodology and Results

Because we are estimating a binary choice model—that is, the cable franchise either carries or does not carry a given cable network—we employed the logit method to estimate our reduced-form equation of cable network carriage.² We present the estimation results for our reduced-form equation in table 6.

²An alternative method to estimate the reduced-form equation is the probit model. In a binary choice model, the differences between the logistic and probit models are generally not significant. Differences can arise in the multinomial model, where there are three or more choices, because the logistic model imposes independence conditions that sometimes do not reflect the conditions being modeled. Such was not the case in our model, since we estimated a binary choice equation.

Table 6: Logistic Model Results

Variable	Parameter estimate and [p-value]
Age	0.1558 [0.0001] ^a
Advertising revenue per subscriber	0.7537 [0.0001] ^a
News	0.6769 [0.0001] ^a
Sports	0.0812 [0.0472] ^b
Broadcaster affiliation	0.8265 [0.0001] ^a
Cable affiliation	0.5817 [0.0001] ^a
Homes passed by cable system	0.0000 [0.0011] ^a
Cable system megahertz	0.0029 [0.0001] ^a
Population between ages 25 and 65	0.0061 [0.1191]
Home ownership	0.0068 [0.0001] ^a
Multiple system operator	0.3059 [0.0001] ^a
Intercept	-6.5658 [0.0001] ^a
Sample size	55,728
Rescaled R-square	0.5075

Source: GAO (2003).

^aSignificance at the 1 percent level.^bSignificance at the 5 percent level.

Our model results indicate that ownership affiliation does influence the carriage of cable networks, as both broadcaster affiliation and cable operator affiliation are associated with a greater probability of a cable network being carried on a cable franchise. When calculated at the mean values for all of the variables in the model, cable networks affiliated with broadcast networks are 46 percent more likely to be carried than networks

that do not have broadcast ownership.³ Similarly, when calculated at mean values for all of the variables included in the model, cable networks affiliated with a cable operator are 31 percent more likely to be carried on a cable franchise than noncable-affiliated networks.

The remaining variables generally had the expected impact on the likelihood of a cable network being carried on a cable franchise. Popular networks—as represented by high levels of advertising revenues per subscriber—and news- and sports-related networks were more likely to be carried on franchises than less popular networks and networks primarily delivering other program genres. Also, cable franchises with larger capacity were more likely to carry any given cable network, and franchises with a high percentage of people residing in owner-occupied housing were also more likely to carry any given network.

Alternative Specification

In addition to the above specification, we also considered a narrower definition of cable affiliation. In this specification, a cable network was only considered to be cable affiliated if the cable operator that owned the cable network also owned the cable franchise. For example, a cable network owned by Comcast would be considered cable affiliated when it appeared on a Comcast cable franchise, but not on another cable company's franchise, such as a Time Warner franchise. In this specification, cable networks affiliated with a cable operator are 64 percent more likely to be carried on the affiliated cable franchise than a nonaffiliated cable network. Cable networks affiliated with broadcast networks remain more likely to be carried than cable networks not affiliated with broadcasters. We present the estimation results for this alternative specification in table 7.

³We calculated these percentages by taking the mean values of all variables included in the model and deriving a predicted value of carriage for a broadcast-affiliated network and a nonbroadcast-affiliated network. We then took the percentage differences in these predicted values. The same methodology was used for determining the relative likelihood that a cable-affiliated network would be carried.

Table 7: Logistic Model Results

Variable	Parameter estimate and [p-value]
Age	0.1558 [0.0001] ^a
Advertising revenue per subscriber	0.7360 [0.0001] ^a
News	0.6495 [0.0001] ^a
Sports	0.1558 [0.0001] ^a
Broadcaster affiliation	0.6877 [0.0001] ^a
Cable network owned by operator	1.4091 [0.0001] ^a
Homes passed by cable system	0.0000 [0.0131] ^b
Cable system megahertz	0.0029 [0.0001] ^a
Population between ages 25 and 65	0.0054 [0.1677]
Home ownership	0.0069 [0.0001] ^a
Multiple system operator	0.2915 [0.0001] ^a
Intercept	-6.3393 [0.0001] ^a
Sample size	55,728
Rescaled R-square	0.5065

Source: GAO (2003).

^aSignificance at the 1 percent level.

^bSignificance at the 5 percent level.

Appendix VI: Comments from the Federal Communications Commission

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



Federal Communications Commission
Washington, D.C. 20554

September 24, 2003

Mr. Mark Goldstein
Acting Director, Physical Infrastructure Issues
United States General Accounting Office
Washington, DC 20548

Dear Mr. Goldstein:

Thank you for the opportunity to review GAO's draft report entitled *Telecommunications: Issues Related to Competition and Subscriber Rates in the Cable Television Industry* (GAO-04-8). It is my understanding that your staff has met with Commission staff and has received data, comments, and assistance from them.

There are two primary areas of the draft report that are seriously misleading and upon which we would like to comment. The first relates to the statutory framework that the Commission is legally obligated to adhere to in making effective competition determinations. The second relates to the Commission's use of estimates provided by cable operators to determine the relative importance of factors that explain cable television rate increases.

The GAO Report states that the "FCC's designations of franchise areas as having (or not having) effective competition do not always accurately reflect current competitive conditions and, in the case of effective competition based on DBS service, FCC has not sought to validate the industry data used to substantiate these filings." Our Annual Price Survey is not an independent inquiry into competitive conditions, but rather a statutorily defined survey based on a legal framework -- adopted by Congress -- which specifies the definition of effective competition and the administrative process through which cable operators file petitions seeking findings of effective competition.

The rate regulation provisions enacted by Congress require participation by the local franchising authorities (LFAs) to work effectively. An LFA may regulate basic rate increases if the local cable system is not subject to effective competition. An LFA must be certified to regulate basic rates, if it would like to do so. A cable operator seeking effective competition status files a petition with the Commission providing data to demonstrate that it meets one of the four statutory tests for effective competition. The cable operator is required to serve its petition on the LFA, which provides an opportunity for the LFA to oppose the petition and provide countervailing evidence for Commission review.

In making determinations of effective competition, the statutory process allows the Commission to rely on data from external sources, for example DBS penetration data from SkyTRENDS. Because copies of the petitions for determination of effective competition filings -- including

See comment 1.

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See comment 2.

copies of the full SkyTRENDS reports for the relevant communities -- are available to the LFAs under the statutory framework, the LFAs have an opportunity to file objections in the effective competition proceedings if they believe the data are inaccurate. No LFA has ever made a serious charge that the SkyTRENDS data were not sufficiently accurate for these purposes; nor are we aware of a better source for such data.

See comment 1.

If circumstances change and the criteria for "effective competition" as defined by our governing statute are no longer present, the statute provides LFAs have an opportunity to file for recertification, but they are under no obligation to do so. If an LFA chooses not to file for recertification, the Commission has no legal basis upon which to act to change a cable operator's effective competition status for purposes of rate regulation. In situations where a cable operator has met the definition of effective competition and a finding to that effect has been made, the cable operator has no obligation under the statute to inform the LFA or the Commission of changed circumstances. In addition, there may be situations in which LFAs may be aware of changed circumstances and for various reasons choose not to file for recertification.

See comment 1.

See comment 3.

The statutory framework establishes no mechanism -- other than recertification by the LFA -- for the Commission to become cognizant of changes in competitive conditions. Further, as a practical matter, the Commission does not have the resources that would be needed to monitor the entire cable industry and update designations of effective competition on a rolling basis. Indeed, even if the FCC were to do so based on some independent authority, it is not clear that this information could be used in an annual cable rate survey. The Commission is required to report annually on cable rates, comparing cable systems subject to "effective competition" with those not subject to "effective competition" as defined in the statute. Even if the Commission could determine changes in competitive status, the law would require that we continue to report cable rates pursuant to the legal definition of effective competition. Thus, to the extent the report suggests that the FCC should update periodically its view of the competitive situation in individual franchise areas, such an effort would not only be *ultra vires* and beyond the limits of the Commission's resources, it ultimately would not provide the data needed to fulfill our legal obligation to report on cable industry prices.

See comment 1.

See comment 4.

By making ad hoc determinations of competitive status based on current market conditions and using an econometric model, GAO found a 15% differential in cable rates between wire-based competitors and noncompetitive operators. In the 2002 Price Survey Report, also using an econometric model, the Commission found a 7% differential between wire-based competitors and noncompetitive operators. The GAO report may be misleading in this regard because it draws a comparison between these two percentages even though they were estimated based on two different sets of competitive cable operators. As mentioned in the report, GAO sought to determine the current status of competition in each franchise. The Commission, on the other hand, followed the statutory framework and included only those operators where a finding of effective competition has been made.¹

See comment 5.

See comment 6.

¹ Although both GAO and the Commission use simultaneous equation models estimated via three-stage least squares, GAO uses a different set of explanatory variables than the Commission. This could explain some of the (continued....)

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With respect to the Commission's use of estimates to explain rate increases, the GAO report suggests that our Price Survey Report may not provide "a reliable source of information" on the factors that underlie recent cable rate increases because the cable operators participating in our survey did not respond to these questions in a consistent manner. The report further observes that many cable operators responding to our survey may have underestimated the importance of certain factors, and by so doing, would have overestimated the importance of programming costs as a factor contributing to rate increases.

We acknowledge in our 2002 Price Survey Report that the responses to these particular questions may not have the same degree of accuracy as, for example, the responses to questions regarding monthly rates. We also observe that because the survey requires the factors to equal the amount of the rate increases that are being explained, if one or more factors are underestimated, then the remaining factors will be overestimated. Despite these shortcomings, we provided the estimates because we believed that, on balance, they provide information that helps put the changes in rates in perspective with reported cost increases. It is instructive to note that GAO's findings, which were arrived at through an independent survey, appear to corroborate the estimates provided in our Price Survey Report. For example, we reported that cable operators attributed 65.8% of their rate increases for 2002 to increases in programming costs. Using information in GAO's report, we can calculate that your survey finds that programming cost increases would explain about 60% of rate increases for 2002.² Although these results differ by approximately 5.8 percentage points, on balance, our estimates provide useful information that helps put the

(...continued from previous page)

difference between GAO's and the Commission's findings. In addition, we believe that multicollinearity is present among the explanatory variables included in the GAO model, i.e., the explanatory variables influence each other as well as the variables being explained. This makes the GAO model sensitive to even small changes in the choice of explanatory variables, i.e., a small change in the list of variables selected as explanatory variables will result in a large change in the result. This also could explain why some of the estimates in the GAO model are statistically not significant and have the opposite sign from that which would be intuitively expected.

² The GAO report observes that for the nine operators included in GAO's survey (which covers 62% of all cable subscribers) annual programming expenses on a per subscriber basis increased from \$122 in 1999 to \$180 in 2002, a 48% increase over three years. On a monthly basis, that equals \$10.16 in 1999 and \$15.00 in 2002, a \$4.84 increase over three years, or an average increase of \$1.61 per year. An increase in programming costs of \$1.61 (per month per subscriber) would explain 60% of the \$2.66 by which basic and expanded basic cable service rates increased in 2002. We note that 60% falls within the confidence interval around the 65.8% estimate provided in our report. Several caveats are necessary for comparison of these two percentages. First, the GAO survey covers a particular segment of the industry -- nine of the larger MSOs -- while our survey covers a random sample of the entire industry. Typically, smaller cable operators pay somewhat more than larger operators for their programming, and thus may face larger cost increases. Therefore, the GAO sample may understate the importance of programming cost increases from the perspective of the entire industry. Second, the 60% figure derived from GAO's survey is based on an average over the three years covered by GAO's data -- 1999 to 2002, while our data covers a two year period, 2001 and 2002, and reports each year separately. If programming cost increases were accelerating during those three years, the increase in 2002 would be greater than average. Similarly, if decelerating, the increase in 2002 would be less than average. The GAO report provides some information, particularly in the charts on pages 23 and 24, that suggests that programming cost increases accelerated in 2002 in comparison with the trend of the prior three years.

See comment 7.

See comment 6.

See comment 7.

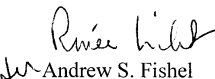
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change in rates in perspective and are consistent with your findings.

Finally, based on discussions with GAO staff, we have redesigned our survey questionnaire for 2003 to eliminate questions that rely on estimates and to substitute other questions for which we believe cable operators can provide more accurate information. We also provide more complete explanations for these questions in our 2003 questionnaire, as recommended by the GAO.

We very much appreciate the opportunity to review and comment on this draft report, and thank GAO staff for their helpful suggestions that we are incorporating in our next Price Survey questionnaire.

Sincerely,


for Andrew S. Fishel
Managing Director



Federal Communications Commission
Washington, D.C. 20554

October 9, 2003

Mr. Mark Goldstein
Acting Director, Physical Infrastructure Issues
United States General Accounting Office
Washington, DC 20548

Dear Mr. Goldstein:

This is in response to our discussion regarding the Commission's statutory authority to modify its findings of effective competition or establish new procedures to account for changed circumstances with respect to effective competition adjudications in particular local franchise areas ("LFAs").

Pursuant to Section 623 of the Communications Act, the Commission is authorized to make findings of effective competition and has established rules to do so. In accordance with the authority granted to the Commission in Section 623, the procedure for making a decision as to the presence or absence of effective competition is necessarily an adjudicatory one. As currently promulgated, the Commission's rules do not contemplate a reassessment of an effective competition adjudication, except through the LFA recertification procedure. The Communications Act neither explicitly authorizes the Commission to, nor prohibits the Commission from, revising its rules to limit the duration of such findings or require a cable operator to periodically certify that it continues to meet the specific standard which was the basis of its grant of effective competition status. In today's increasingly competitive environment and from a cost/benefit perspective, however, we seriously question the utility of such an approach for several reasons.

First, based upon our experience, it is unlikely that such a mechanism would significantly change our findings with respect to the comparison of rates charged by competitive and noncompetitive cable operators. We have examined various combinations of competitive operators and at the possibility of reformulating the competitive list in various ways and find that the end result would be an almost negligible change in the average rate found for the competitive group.

In this regard, we note that there are other considerations and issues that must be taken into account in the context of our price survey and effective competition findings. Although the Commission could possibly modify the procedural rules associated with findings of effective competition, it is not clear that it could, for purposes of comparing the rates of competitive and noncompetitive operators, by-pass the due process requirements involved in order to properly evaluate those communities that have never been the subject of an effective competition finding. In other words, shifting from a comparison that is based on the legal status of the communities in question as is done now, to a comparison based on an updated review of only those communities subject to a previous adjudication would not appear to improve the overall process. This would

See comment 8.

See comment 9.

See comment 10.

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particularly appear to be the case where the level of competition is increasing year-to-year so that the number of communities reverting to a non-competitive status is likely to be limited and the number of communities facing effective competition for the first time is likely to be significant. Any attempt to reevaluate the effective competition findings formally while looking at the lack of effective competition situations informally would involve mixing two entirely different types of decision making. Such an effort also would increase the level of resources that would have to be devoted to the price survey process without necessarily improving the value of the work product significantly.

Second, it appears that the under the new procedures you suggest we would only reexamine those cable systems determined to face effective competition, a process that does not address the very large number of "noncompetitive" cable systems where the conditions for "effective competition" are actually present but there has been no formal determination. For example, DBS penetration has reached an average of 15% or more (the threshold for a finding of effective competition) in at least 40 states, suggesting that there are many cable systems in those states that would meet the "effective competition" test should a petition come before us. There are more than 33,400 franchise areas registered with the Commission. In order to update our list of "noncompetitive" operators for current circumstances, we would have to review virtually all of those franchise areas for the current status of competition. This would represent a burden that would be significantly beyond our resources. Moreover, as we have noted in previous discussions, the data necessary for this exercise is not readily available to us.

Third, many effective competition decisions, particularly those involving LEC competition pursuant to Section 623(l)(1)(D), are not objectively clear cut such that parties could reliably certify or recertify the existence or non-existence of effective competition periodically. By their very nature, LEC effective competition decisions are not reducible to neat equations by which cable operators can periodically self-certify. Decisions under the LEC test often turn on Commission value judgments based on variables such as build-out schedules, performance bonds, incumbent response and lack of obstacles to construction. It would be extraordinarily difficult for the Commission to rely on an operator's decision to certify that the circumstances underlying a LEC adjudication are unchanged. Only through the adjudicatory process can the decisional import of such factors be determined, i.e., the process intended by Congress as reflected in the statutory scheme.

We appreciate the opportunity to engage in this dialog.

Sincerely,



W. Kenneth Ferree
Chief, Media Bureau

See comment 10.

The following are GAO's comments on the Federal Communications Commission's letters dated September 24 and October 9, 2003.

GAO Comments

1. In a letter dated September 24, 2003, FCC contended that under the statutory framework to which the commission is legally obligated to adhere in making effective competition determinations, it would be *ultra vires* for the commission to update designations of effective competition on a periodic basis. In other words, FCC stated that it did not have the legal authority to update periodically its view of the competitive situation in individual franchise areas. We disagree that the commission's authority is so limited. In order to better understand the view that the commission stated in its letter (i.e., it was prohibited from modifying its rules to ensure that effective competition designations are reflective of current conditions and continue to meet the statutory definition to the maximum extent possible), we contacted FCC. On the basis of a conversation between commission staff and GAO staff, FCC provided us with a second letter dated October 9, 2003, that modified its views as expressed in the September 24 letter. In the second letter, FCC acknowledged that it was not statutorily prohibited from revising its process (see GAO's comment 8).
2. Although local franchising authorities do see the information that a cable franchise provides to FCC in an application for effective competition, from filings that we reviewed, we found that these authorities at times question the validity of the data and/or estimation methodologies. For example, some have noted that reliance on 2000 census data on housing units can lead to an overstatement of DBS penetration because in areas with growing populations, housing estimates from 2000 will understate the current number of housing units in an area. Such an understatement will result in an overstatement of the DBS penetration rate. Moreover, under FCC's rules, local franchising authorities have limited time to review such information after it is submitted.
3. Resources could clearly be an issue for taking steps to update the status of effective competition, and FCC should consider this issue when revising its process to keep the status of effective competition up to date. FCC could consider requiring cable operators to certify on a periodic basis that they still meet the statutory definition and if no certification is provided, the finding would be removed. Alternatively, as part of the cable rate survey, FCC could ask any franchise having a designation of effective competition to provide information if that

status has changed and, under modified rules, use this as a basis for changing the effective competition finding.

4. To develop our measure of competition, we reviewed many sources of information, including information from FCC, information from and about particular providers, as well as information gathered through discussions we had with local franchising authorities. We were not attempting to determine which franchises would have effective competition under the legal definition. Instead, we focused on establishing when meaningful competition, from an economic perspective, was likely to exist.
5. We cite FCC's finding on the difference in prices in places with and without effective competition, but the more direct comparison for our model is FCC's output from its econometric model contained in its 2002 Cable Pricing report. In that model, FCC tests for the price reduction that occurs where there is *wireline* competition. Although FCC did not explicitly define this term in their report, our review of that analysis led us to believe that this measure is equivalent or very close in concept to our definition of wire-based competition. That is, FCC is attempting to measure how prices differ when a cable franchise faces a direct wireline overbuilder in the area, which does not include all places that have effective competition. Thus, we believe that the two measures of wireline competition—that is FCC's and GAO's—did not differ in *concept*.
6. We performed standard statistical tests for the evidence of multicollinearity in our model and did not find a significant problem. Moreover, we tested FCC's variable for wireline competition in our model, and we tested our measure of wireline competition on FCC's model. Since we know the findings from each agencies' variable on its own model, we were able to discern whether the differences in the findings from the two models were caused by differences in the two models or by the measure of wireline competition. We found that using FCC's measure of wireline competition in our model produced a finding similar to that reported by FCC, and using our measure of competition in FCC's model produced a finding similar to that found in our model. From these findings, we have concluded that any differences between the findings of FCC and those of GAO are not caused by differences in the two models, but are due to differences in how the wireline variable was measured. Further, the GAO and FCC models have much overlap in the independent variables specified in the model, and, as such, the degree to which there are concerns about multicollinearity, this would be true of both models.

7. We agree that FCC's estimate of the percentage of the yearly rate increase that can be attributed to programming costs is relatively accurate because, as we note in our report, most of the 100 cable franchises we interviewed noted that they used actual data when calculating these costs. However, we did find that other cost items, such as infrastructure investment, were reported with less accuracy and, in some instances, were simply "plugs" to ensure that the cost and rate increases were equal. In fact, while FCC found that in 2002 about 6.2 percent of the rate increase was attributable to infrastructure costs, the findings from our survey of 9 large cable operators shows that overall infrastructure costs increased by \$2.23 per month per subscriber—or about 84 percent of the average rate increase reported in 2002. While these estimates of infrastructure costs vary considerably, we recognize that our reported infrastructure cost are not directly comparable to the average rate increase since the average cost of \$2.23 per month per subscriber includes some infrastructure costs not attributable to the basic and expanded-basic tiers of video service. We believe that these findings are consistent with a major point in our report: that is, the data reported on cost increases for programming were largely accurate, but the requirement that the sum of cost increases equal the average rate increase may have caused reduced estimates for other cost factors.
8. In its October 9 letter, FCC recognizes that while the statute authorizes it to make findings of effective competition, the commission implements this authority through the rules it has established. The commission notes that its current rules do not contemplate a reassessment of effective competition adjudication, except through the Local Franchise Authority recertification process. However, FCC states that the statute neither explicitly prohibits nor authorizes the commission from revising its rules. Accordingly, FCC now acknowledges that it could possibly modify the procedural rules associated with findings of effective competition, although the commission notes that it is unclear, in its view, whether this would work in communities lacking an effective competition designation.
9. We believe that when effective competition designations more accurately reflect current conditions, the resulting analysis provides a better measure of the impact of competition on cable rates. As we note in our report, we found that wire-based competition was associated with 15 percent lower cable rates, while FCC's report found that cable rates were approximately 7 percent lower with this competition. We believe the difference in these results is primarily the result of steps

we took to update FCC's wire-based competition variable (see GAO's comment 6).

10. In our subsequent conversation with FCC staff, they asked us to identify possible ways that effective competition determinations could be kept more up to date. We identified a number of possible options that the commission could consider, recognizing that the commission would be the appropriate party to determine how this could best be done. We made a number of suggestions including (1) having effective competition determinations be time limited, (2) having the cable operator periodically certify that the circumstances under which the effective competition determination had been made had not changed, and (3) utilizing the information gathered as part of its Annual Price Survey to update the effective competition determinations. In its October 9 letter, the commission questions from a cost/benefit perspective the utility of such approaches.

FCC's underlying concerns about these approaches is that the market has changed. The commission notes that the level of competition is increasing year to year so that the number of communities reverting to a noncompetitive status is likely to be limited, while the number of communities facing effective competition for the first time is likely to be significant. For example, the commission provides that DBS penetration has reached an average of 15 percent or more (the threshold for a finding of effective competition) in at least 40 states. In our view, these changes in the market *emphasize* the need for FCC to review its process for making effective competition determinations. Moreover, as FCC emphasizes, the commission has a statutory mandate to report on average prices comparing cable systems that it has found are subject to effective competition with cable systems that it has found are not subject to effective competition. We believe that this report should, to the maximum extent possible, reflect the current conditions in order to ensure its utility.

Appendix VII: Comments from Industry Participants

Below we summarize the written and oral comments that we received from industry participants that reviewed a draft of our report. Because many of these comments are opinion-based, we are not offering our views on them. In one case, however, we provide some clarifying information about the GAO model on cable rates.

American Cable Association

The American Cable Association (ACA) noted that because we focused much of our analysis on larger cable operators, the report does not address issues of great importance to ACA and its membership, which are mostly small cable operators. ACA noted that for smaller cable operators, DBS providers are highly competitive, and programming costs are an even higher percentage of overall costs than is the case for larger cable operators. As a result, ACA disagreed with our suggestion that greater competition is a potential solution to increasing cable rates.

ACA provided, in its comments, a number of policy solutions that would address, in their view, the level of programming costs. Such options include mandating public disclosure of programming rates, requiring an à la carte or minitier regime, overhauling of the retransmission consent process, and requiring similar regulatory obligations for the DBS and the cable industries. Additionally, ACA disagreed with our conclusion that an à la carte system would impose additional technical costs and not cause cable rates to generally decline. Further, ACA did not believe that we adequately addressed the link between increased carriage of cable networks affiliated with broadcasters and higher cable rates.

Consumer Federation of America

A representative of the Consumer Federation of America suggested that the costs associated with infrastructure upgrades were recouped from revenues generated by advanced services, such as the digital tier and cable modem service, and should not influence cable rates for the basic and expanded-basic tiers. Therefore, this representative believes that we overstate the contribution of infrastructure costs to increasing cable rates. Moreover, this representative noted that we do not fully account for the revenue obtained from advertising, which in this representative's view, should mitigate the need for increasing cable rates.

This representative also provided several comments on GAO's cable network carriage econometric model. First, this representative suggested that advertising revenues per subscriber could be treated as an endogenous variable—that is, it is a variable that is codetermined with other dependent variables in the model. Second, this representative

suggested that we include a table reporting the results for the alternative specification, in which we consider cable networks owned by a cable operator.

Consumers Union

A representative of Consumers Union believes that our finding that cable rates are 15 percent lower where a second wire-based competitor is present is evidence of cable operators' market power. He believes that we should measure the savings to American consumers that would accrue if cable rates were 15 percent lower in all franchises throughout the country. Additionally, this representative believes that our draft overstated the negative aspects of regulation. He stated that regulation may be the only viable option for addressing cable operators' market power because wire-based competition may not be feasible on a widespread basis.

Regarding our analysis of ownership affiliations, this representative believes that we should test for the impact of lower ownership thresholds, in addition to the analysis of majority-owned networks.

This representative made numerous comments regarding an à la carte system. First, he suggested that we overstated the costs of equipment associated with an à la carte system, and he noted that (1) the necessary equipment is currently being deployed and (2) the Congress is pushing the cable industry toward a digital conversion. Second, he noted that our discussion assumed that cable operators would pay any increases in license fees arising from a decline in cable networks' advertising revenues. But, he believes cable operators will exercise their market power and therefore refuse to fully pay the higher license fees that cable networks will seek. Moreover, this representative did not accept that advertising revenues would dramatically decline in an à la carte regime, and he stated that advertising revenues for the most popular cable networks might increase because advertisers will be able to clearly target subscribers viewing these networks. Third, he stated that GAO understates how many subscribers could benefit from an à la carte approach. He also stated that a substantial percentage of subscribers—perhaps as many as 40 percent—could see their monthly bill decline because most subscribers do not watch many networks. Finally, he noted that fundamentally there is tremendous uncertainty regarding the outcome under an à la carte regime.

National Association of Broadcasters

National Association of Broadcasters officials identified several issues associated with the cable industry. First, they stated that while our report implies that a greater number of channels are a benefit to subscribers, it is not clear whether this is the case. Second, they also noted a concern about how we measured the popularity of cable networks for the cable network carriage model.

These officials noted that in discussing pricing under an à la carte system, we should include the possibility of cable operators implementing a pricing scheme wherein subscribers are charged a flat monthly fee for access to the cable network and additional fees for each network selected. They believe that this would be the pricing structure implemented because cable operators must be able to recoup costs associated with their networks and overhead that are currently imbedded in the price for the basic and expanded-basic tiers.

Regarding retransmission consent, these officials do not believe there was sufficient discussion in our report of the history of retransmission consent. In particular, the option for cable network carriage in lieu of cash payment for retransmission of the broadcast station was largely supported by the cable industry. Additionally, they noted that our discussion regarding how retransmission consent is used was too broad because it implied that all broadcast stations use retransmission consent to gain carriage, while there are only a limited number of stations that do so.

National Association of Telecommunications Officers and Advisors

The National Association of Telecommunications Officers and Advisors (NATOA) noted that the focus of our review was cable rates for the basic and expanded-basic service tiers, but equipment rental—such as converter boxes—are also rising. NATOA noted that we correctly pointed out that the benefits of infrastructure investment may confer largely to subscribers of advanced services, but it noted that FCC rules continue to allow these costs to be allocated to basic rates and rates for equipment.

NATOA also raised concerns about the lack of government data on cable rates and related issues. NATOA expressed concerns that we relied on FCC data—which we have noted may not be of high reliability—as well as on data from Kagan World Media, a cable industry data vendor. For example, NATOA expressed concern that we had no hard data on expenditures on customer service. NATOA noted that we should recommend to the Congress that some responsible agency (such as the Department of Justice) conduct an audit of the cable industry, including

an examination of the contracts between cable networks and cable operators for the purchase of programming.

NATOA also raised concerns about how we analyzed the effect of ownership relationships on the cost of programming. NATOA's comments noted that our analysis of the effect of "majority-owned" programming was too limited, and that we should have included a broader definition of ownership affiliations, including, for example, agreements between companies that are separately owned, for this analysis.

According to NATOA, infrastructure investments are largely a benefit to subscribers of advanced services and, to the extent that basic and expanded-basic rates rise due to these investments, it represents a cross-subsidy.

NATOA also pointed out that, as we have noted, DBS penetration data used for *effective competition* filings have not been fully validated and are generally not available to stakeholders other than the cable operators. Moreover, NATOA noted that the Congress should reevaluate the 15 percent penetration level required under law for a finding of effective competition when the basis is competition from DBS providers. NATOA also noted that our finding of a 15 percent price reduction in areas with a wire-based competitor may be the result of temporary price discounts by new companies. Finally, NATOA noted that we do not fully discuss in this report the ramifications of a finding of effective competition. In particular, NATOA noted that we did not discuss that cable franchises with such a finding no longer have to price uniformly across the franchise area and are no longer subject to the tier buy-through provisions of the Cable Television Consumer Protection and Competition Act of 1992.

Lastly, NATOA noted that it is critical for us to make it clear that, on the basis of the model results, there is only a *slight* reduction in cable rates due to the level of DBS penetration.

National Broadcasting Company

National Broadcasting Company (NBC) officials suggested that we explain why broadcaster-owned cable networks are more frequently carried than other cable networks. In their view, cable operators, as a rule, do not pay any license fees for the right to carry a local broadcast station, notwithstanding the value of that programming to the cable operator. They also noted that, according to our data, cable operators also do not pay higher license fees for the right to carry these broadcaster-affiliated networks. Instead, NBC officials said that the sole compensation that

broadcasters receive in exchange for retransmission of the local broadcast stations' programming is an arguably higher penetration of cable carriage for their affiliated programming networks.

National Cable and Telecommunications Association

The National Cable and Telecommunications Association (NCTA) had serious concerns about the finding from our econometric model, which indicates that cable rates are 15 percent lower in markets with a second wire-based competitor. NCTA officials noted that only about 45 franchise communities have such an overbuilder compared with about 10,000 cable systems nationwide. They also noted that the number of such overbuilders has declined in recent years, and the type of companies operating these businesses has been changing. As such, they believe that it is not appropriate to extrapolate these findings for the vast majority of markets that currently have no wireline competition. In its written comments, NCTA noted that "given the limited nature of wireline overbuild competition, it is important not to overstate its importance to determining a 'competitive' rate."¹

NCTA officials stated that there is no link between the possible exercise of market power and the increase in cable rates. They noted that, according to FCC's survey, rates for areas with effective competition have actually risen in the last 2 years at a slightly faster pace, on a percentage basis, than rates in areas without effective competition.

These officials also noted that our study did not take into account the rise in the quality of cable programming. In particular, they noted that a recent study by Professor Wildman, of Michigan State University, found that when analyzed on a price per-viewing-hour basis, cable rates have declined significantly in recent years. Additionally, they noted that there have been enormous benefits from the upgraded infrastructure of cable systems. They also noted that important benefits to those upgrades accrue to video subscribers (even if they do not take advanced services) in the form of better picture quality and more reliable cable service.

¹In our model, we included approximately 100 franchises that were classified as facing wire-based competition—we believe that FCC's number of only 45 overbuilders, as cited by NCTA, does not include all wire-based competitors. Moreover, the sample of franchises included in our model was only about 720, which were randomly selected by FCC to be representative of the universe of franchises. As such, approximately 16 percent of the franchises included in our model were classified as having a wire-based competitor.

NCTA officials had two comments related to cable operators ownership of cable networks. First, they stated that our discussion of program access rules implied that there could be a significant problem for entrants' gaining access to programming. Conversely, they noted that program access concerns have always been minimal and that, if anything, these problems have declined in recent years, in part because few cable networks are owned by cable operators. Second, in terms of the carriage benefits that accrue to cable networks owned by cable operators, these officials noted that few cable networks are owned by cable operators. As such, they believe that while these cable networks may have an advantage in carriage, this is not a serious concern.

News Corporation

Regarding programming costs, News Corporation (Fox) officials stated that the 59 percent increase in the cost of sports programming that we reported seemed high, and they suggested that we mention that the analysis did not include regional sports networks. Further, these officials also noted that the 72 networks that we compared with the sports programming networks include some networks that are not widely distributed. They said that our inclusion of such networks could exacerbate the difference in programming costs between the sports and nonsports networks because some of the less distributed networks would have low license fees.

News Corporation officials noted that one reason the sports leagues might have told us that the cost of sports rights has not increased much in the past year is because the leagues are in the middle of multiyear contracts. These officials noted, however, that when compared with previous multiyear contracts, there has been a large increase in the cost of sports rights.

Regarding retransmission consent, News Corporation officials noted that broadcast networks are highly valuable to consumers. Further, they noted that there are important objectives served by the retransmission provisions that should be more fully discussed in the body of our report.

These officials cited two concerns regarding our cable network carriage model. First, they indicated that we should include an explanatory variable for the price, or license fee, for each cable network. Second, they believe our model should include a variable that incorporates launch fees.

News Corporation officials believe that it is important to note that even if people only watch 17 channels, consumers value having access to more

than 17 channels. Moreover, they indicated that consumers may not choose to watch the same 17 channels in any given year.

Satellite Broadcasting and Communications Association

The Satellite Broadcasting and Communications Association chose to provide no comments.

Viacom

Viacom (CBS) chose to provide no comments.

Walt Disney Company

Walt Disney Company (ABC) officials said that our draft provided extensive information on how programming costs have increased over time, but did not provide enough coverage of how infrastructure costs have changed over time. Additionally, they believe the figures for programming costs that we reported are too high, and similarly that advertising revenues offset a greater portion of programming costs than we reported.

Disney officials noted that the value of cable service today is much greater than it was in the past in terms of the number of networks and quality of programming that subscribers receive. As evidence, they said that subscribers are watching cable networks more and broadcast networks less. They referred to a study prepared by Professor Wildman, of Michigan State University, which estimated the “real” cost of cable by considering viewing hours; the study finds that the value of cable service to subscribers has risen dramatically in recent years.

Regarding a sports tier, these officials noted that a sports tier only exists in New York, and that it has been bitterly fought-over, involved mediation, and is only a 1-year agreement. Moreover, they believe we should emphasize that the Yankees Entertainment and Sports (YES) network agreement only applies to *regional sports* networks, not ESPN. They said that the YES arrangement does not represent a trend and noted, for example, that cable operators continue to place *cable*-affiliated sports networks on the expanded-basic tier.

Regarding retransmission consent, Disney officials said that we should provide more discussion about why the Congress passed this provision. They believe that without retransmission consent, free over-the-air television would be undermined. Moreover, they said that, prior to

retransmission consent, broadcasters were required to provide content free of charge to cable operators that they subsequently sold to subscribers. Additionally, they said that it is important to note that the option of carriage of broadcaster-affiliated cable networks instead of payment for retransmission was discussed by Congress and has been endorsed by FCC. More importantly, according to these officials, Disney always offers a cash option to cable operators—their most recent offer was 70 cents per subscriber per month.

Appendix VIII: GAO Contacts and Staff Acknowledgments

GAO Contacts

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Staff Acknowledgments

In addition to those named above, Stephen Brown, Julie Chao, Andy Clinton, Keith Cunningham, Michele Fejfar, Sally Moino, Tina Sherman, Wendy Turrene, Mindi Weisenbloom, and Carrie Wilks made key contributions to this report

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