

# **Investigation into longitudinal placement of fiber-optic cable in Interstate right-of-way in Louisiana**

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by

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## **INTRODUCTION**

Fiber-optic cable is recognized as one of the most efficient and reliable mediums of telecommunication available today. The last decade has witnessed an enormous growth in this form of telecommunication. However, one of its major disadvantages is that it requires right-of-way in which to locate the cable. The Interstate Highway system's right-of-way represents an attractive network of corridors in which fiber-optic can, potentially, be located.

This study investigates the possibility of permitting fiber-optic cable to be placed in Interstate right-of-way in Louisiana. The study serves as a precursor to a possible Request for Proposals to install fiber-optic cable in Interstate right-of-way in the state.

In executing the study, we first reviewed existing conditions and regulations governing the placing of utilities in Interstate right-of-way in Louisiana. This was paralleled by a survey among all State Departments of Transportation and among telecommunications companies with ties in Louisiana regarding their opinions of permitting fiber-optic cable in Interstate highway right-of-way in the state. The information from the review of existing conditions and the survey were analyzed and evaluated to generate a recommended policy for the state.

## **REVIEW OF EXISTING CONDITIONS**

Several sources were consulted in gaining a background to the possibility of permitting the placing of fiber-optic cable in Interstate highway right-of-way in Louisiana. These include a review of literature, current practice in the state, legislation pertaining to the location of utilities in highway right-of-way and DOTD's plans for expansion of its own telecommunications system.

### **Literature review**

The literature reveals considerable interest in the subject of fiber-optic cable in highway right-of-way. The topics covered range from technical to legal matters.

On the technical side, it is noted that fiber-optic cable presents several advantages over other communications systems. The main advantages of fiber-optic cable are (Podmore and Faguy, 1986):

- (i) very large bandwidth,
- (ii) light weight,
- (iii) flexibility,
- (iv) strength,
- (v) difficulty to detect and tap into
- (vi) nonelectrical, and,
- (vii) cost competitiveness.

However, their disadvantages include (*Ibid.*):

- (i) cost of couplers and repeaters,
- (ii) cost of multiplexing,
- (iii) difficulties in attaching to conventional equipment, and,
- (iv) (the largest drawback of all) the need to acquire right-of-way to locate the cable.

The 1980's was the period in which communications companies scoured the countryside for strips of land to accommodate their fiber-optic cable (Kemezis, 1986). Private communication with some of the people in the industry indicate that, for the most part, the demand for right-of-way is past.

Regarding the position of fiber-optic cable within a highway right-of-way, it has been proved to be at the outer extremity, against the fence line (Najafi et.al., 1990). This conclusion was drawn following an evaluation involving criteria that considered safety of the traveling public, aesthetic impact, environmental impact and security of the system. The industry seems to support this view as evidenced in responses to a Federal Highway Administration (FHWA) Notice of Proposed Rulemaking (NPRM) announced on December 19, 1986 in which comments were solicited on proposed revisions to regulations on the accommodation of utility facilities and private lines in the right-of-way of Federal-aid and direct Federal highway projects (FHWA, 1988).

The FHWA NPRM (51 FR 45479, FHWA Docket No. 86-15) led to comments being received from 40 state Departments of Transportation, 15 utility companies, 4 governors, 4 contractors, 6 national organizations, 7 private citizens and 13 others including state agencies, local agencies and universities. On the issue of use of controlled access right-of-way for longitudinal utility installations, 32 commenters supported the notion while 42 opposed it. Of the 34 state DOTs who commented on this issue, 24 opposed it while 10 supported it. Of the 14 utility companies responding to the question, 8 supported it while 6 opposed it. Among the remainder of the commenters, the comments for and against the proposition were fairly evenly matched. These results seem to indicate that, at the time of the hearings, there was fairly evenly-divided opinion on the issue of the desirability of using controlled access right-of-way to locate utilities.

Among the commenters to the NPRM there was general recognition that fiber-optic cable requires very little maintenance and where maintenance is necessary, it is usually at repeater stations. It was suggested that repeater stations be located at non-strategic locations such as in interchange areas where access would be easy (*Ibid.*). Use of rest areas would also seem a desirable choice when conditions permit it.

The literature also reports on the economic aspects of laying fiber optic cable. If selected with care, the installation technique can reduce costs significantly (Sensney, 1987). Cable can be installed in a direct-bury procedure or housed in conduit which usually requires excavation and bury in two steps. The one exception to this is the flexible single-duct conduit which can be

installed with cable in a direct-bury operation. Rigid conduit can be multiduct to facilitate the installation and replacement of different cables after the conduit is positioned below the surface. The choice to use conduit or not is dependent on the conditions existing and the economics involved. Direct-bury can be less than half the cost of dig-and-bury but it precludes the opportunity of multiducting and, therefore, the use of multiple cables in the same conduit.

It is noted that various alternatives exist for laying fiber-optic cable besides the traditional highway right-of way. These include the use of railroad property, power line corridors, bicycle paths, canals, wetlands, national parks and unused pipelines. Apparently, unused pipelines represent the most cost-effective method of laying fiber-optic cable (*Ibid.*).

On the policy side and the matter of shared resources, several examples exist where communications companies have provided access to the fiber-optic cable network to the owners of the right-of-way in return for the use of their land. MCI Communications laid 398 miles of cable between northern and southern California along water canals and provided the state with a turnkey private telecommunications network in return for the use of their land (Kemezis, 1986). In 1983, MCI also came to an agreement with Amtrak to use railroad right-of-way between Washington DC and New York to accommodate fiber-optic cable and gave 4 fibers to Amtrak for their exclusive use in repayment for the use of their right-of-way (McLellan, 1986). MCI maintains the cable and demultiplexing equipment at each of the 82 drop sites along the length of the cable but Amtrak is responsible for providing and maintaining equipment beyond that point. A joint venture between CNCP Telecommunications and Canadian National Railways involving a \$100m, 1210 mile fiber-optic network serving eastern and western Canada is reported (Bradley, 1986). The cable was installed 4 feet below the surface and just beyond the ballast using a plow mounted on a railroad car (*Ibid.*). Each organization has its own separate fiber optic system.

The NPRM (FHWA, 1988) elicited 9 responses on the issue of whether a portion of a fiber-optic cable should be dedicated to the use of the state in return for the use of the right-of-way on controlled access facilities. Five of the respondents were in favor and four were opposed - all five in favor of the suggestion were from state DOTs while those opposed consisted of two utility companies and two state DOTs. On the question of whether a fee should be charged for the use of the right-of-way (in contrast to providing free access to the system), 27 organizations supported the notion while only 7 opposed it. Three states reported that state law prevented them from charging fees while one reported that laws prevented them from charging fees greater than administrative costs.

The NPRM led to state Departments of Transportation being granted the authority to allow or disallow the longitudinal location of utilities on Federal-aid and direct Federal highways. State DOT's are required, however, to submit an accommodation plan to the FHWA in which the following criteria are addressed when granting permission to install a utility in a controlled-access highway right-of-way:

- (i) highway safety,

- (ii) impact that denial of an application will have on the productivity of agricultural land,
- (iii) environmental impact, and,
- (iii) functioning of the highway.

A synthesis document on the longitudinal placement of utilities in limited or controlled access rights-of-way is under preparation under sponsorship of the National Cooperative Highway Research Program of the Transportation Research Board (NCHRP, 1995). The report is still in draft form and under limited circulation but the final version of the report should be available soon. The study reports on a survey conducted in 1992 among all the State Highway Departments of Transportation in the union (of which 47 responded) and also includes results of an informal survey conducted by Federal Highway Administration regional and district engineers at the same time. The survey was aimed at identifying current practice in the states and the perspectives of state highway officials regarding the use of right-of-way in limited or controlled access facilities. Approximately one in four states reported permitting longitudinal placement of utilities in freeway right-of-way at the time of the surveys. While fiber-optic cable is considered one of the most benign utilities, due to its low maintenance and inability to damage the environment, residual concern exists in state Highway Departments over the precedent of permitting one utility access to the right-of-way and denying another the same access.

Regarding legal issues, the literature records some interesting lawsuits between owners of right-of-way and those seeking to use it to locate fiber-optic cable. One case involves the city of Chicago and Western Union in which the city, after granting Western Union permission to use a system of underground utility ducts in the city, subsequently demanded a franchise fee (U.S. Court of Appeals, 1992). The franchise fee was suggested as 3 percent of revenue or, alternatively, an undisclosed fee per foot of cable. The case remained in litigation for several years and progressed from district court to the U.S. Court of Appeals. The final verdict was that the City of Chicago did not have the authority to impose the fee it suggested since it was a tax aimed at raising revenue rather than a fee used to cover the cost of providing the facility. If the fee had been authorized by the state or if the fee was a user-fee related to the cost of managing and maintaining the ducts in which the cable was housed, the franchise fee would have, reportedly, been granted.

Another interesting case involves the Iowa Department of Transportation and a company which installed a gas pipeline and an electric cable under state highways in Iowa (Supreme Court of Iowa, 1990). Both sites were within city limits and permission was obtained from the city and the Utilities Board to locate the lines where they were but the state Department of Transportation was not consulted. The Supreme Court of Iowa ruled that since the crossings were more or less at right angles to the roadway and the roads involved were not Interstate freeways, the permission of the state DOT was not required before such facilities were installed.



## Existing conditions in Louisiana

In keeping with the policy of many other states, Louisiana permits the laying of fiber-optic cable and other utilities in the right-of-way of non-Interstate highways. As of 1995, over 300,000 permits had been issued to companies in Louisiana to locate utilities of all types in the right-of-way of state highways. Because of the number involved and the fact that fiber optic utilities are not distinguished beyond being a "communications" utility (together with copper cable), it is difficult to identify the specific routes where fiber-optic cable is currently laid in the highway network of non-Interstate highways. However, the network of major highways shown in figure 1 demonstrates that in many corridors non-Interstate highways provide a viable alternative to Interstate highways in establishing a network of fiber-optic cable. Non-Interstate highways parallel a high proportion of the I-10, I-12, I-20, I-49 and I-55 corridors in Louisiana. On the other hand, Interstate right-of-way presents direct route, well-maintained, unexploited land for the location of utilities. Natural barriers, such as the Atchafalaya basin, are sometimes only traversed by Interstate facilities thus increasing their attractiveness.

Louisiana DOTD currently permits fiber-optic cable to be affixed to its bridges, including those forming part of the Interstate highway system. Figure 2 shows where bridges carrying fiber-optic cable are located within the state. Seven different companies have attached a total of 14 cables to the 10 bridges shown in figure 2. The bridge on I-10 over the Mississippi at Baton Rouge carries three cables, bridges on I-310 and US 90 over the Mississippi in New Orleans carry two cables each while the remainder all carry one fiber-optic cable each.

Legislation authorizing the use of highway structures to carry communication cable is found in Louisiana Revised Statute 36:504(B)(1)(d). DOTD regulations were promulgated in the Louisiana Register 10:90 (February 1984) governing the conditions under which such cable will be permitted to be affixed to bridge structures in Louisiana. One such requirement is that the cable must serve the public (i.e. it may not be for exclusive use of an individual or private concern) while another is that the owner of the cable is responsible for the maintenance of the cable. It is also stipulated that the owners of the cable will be required to pay a rental fee for the privilege of being able to use the bridge to carry their cable. The fee consists of a one-time lump sum plus an annual payment as shown below:

	<u>Lump sum fee</u>	<u>Annual rental fee</u>
Bridges > 300' long	\$1.25/ft./lb.of wt. (min.\$50,000)	\$0.15/ft./lb.wt. (min.\$5,000)
Bridges < 300' long	\$0.50/ft./lb.of wt. (min.\$5,000)	\$0.15/ft./lb.wt. (min.\$500)

The fees generated above are paid into the State's General Fund and do not accrue to the Department of Transportation directly. This is in contrast to the fees generated from permits issued to companies who have utilities in non-Interstate highway right-of-way as described

below.

**FIGURE 1**  
**MAJOR HIGHWAYS IN LOUISIANA**

**FIGURE 2**

**BRIDGES CARRYING FIBER OPTIC CABLE IN LOUISIANA**

Legislation permitting the use of non-Interstate right-of-way for utilities in Louisiana has existed for some time (R.S. 48:381). Recent amendments to Louisiana Revised Statute 48:381 have permitted the charging of modest permit fees based on the number of customers served by the facility as shown below:

<u>Number of customers</u>	<u>Maximum annual fee</u>
0-100	\$20
101-500	\$50
501-6000	\$200
>6000	\$700

These fees are deposited by the Secretary of the Department of Transportation and Development into the Right-Of-Way Permit Processing Fund. The proceeds of this fund are set aside for the use of the Right-Of-Way Permit Office of the DOTD to defray expenses associated with the issuance and processing of permits.

In 1995, the Louisiana legislature enacted legislation permitting joint use agreements between the state and other organizations (R.S. 48.381.1). It was intended to permit the joint use of highway right-of-way at isolated locations rather than for longitudinal installation of facilities although nothing in the legislation prohibited such use. However, the legislation does prohibit any company governed by the Public Service Commission from participating in a joint use agreement, thus precluding any of the major telecommunications companies such as AT&T, MCI and others.

#### **Planned expansion of DOTD's telecommunication system**

The DOTD has a Telecommunications section within its organization which owns and operates a telecommunications system which satisfies all the needs of the department. It is projected that this section saves the department in the order of \$1m annually in fees that otherwise would have been paid to telecommunication providers. Recently, the Telecommunications section of the DOTD gained approval to upgrade and expand its system from the current analog microwave system to a modern digital microwave system. This will be achieved with the support and participation of other state departments. The features of the planned system are described in greater detail in APPENDIX 1.

The planned microwave system is shown diagrammatically in figure 3. This shows how the microwave system will operate in three "rings"; the main ring covering the majority of the state from Baton Rouge in the southeast to Shreveport in the northwest. The second ring extends from Baton Rouge to New Orleans while the last connects Hammond with Baton Rouge.

The new system, which will be implemented over the next few years, is totally compatible with a fiber optic system. Thus, if fiber-optic cable is laid in Interstate right-of-way in Louisiana it will be able to complement and enhance the planned new system. The fiber-optic system will allow

increased capabilities of the telecommunications system including teleconferencing, video

**FIGURE 3**  
**PLANNED NEW MICROWAVE NETWORK FOR LOUISIANA**

transmission and opportunities for Intelligent Transportation System observation on highways.

### **Legislative milestones**

Authorization to locate telecommunications facilities in public right-of-way is the subject of pending legislation in the U.S. Senate and House of Representatives. In the Senate, the Committee on Commerce, Science and Transportation considered S. 652, the Telecommunications Competition and Deregulation Act of 1995. The Bill was aimed at preventing state or local authorities from refusing to permit telecommunication companies from using public right-of-way except where this would compromise public safety and welfare. In its prior form the Bill would have granted the Federal Communications Commission (FCC) authority to preempt any statute, regulation or legal requirement imposed by a state or local authority. The American Association of State Highway and Transportation Officials (AASHTO), with the support of the majority of the state Departments of Transportation, appealed to the Senate Committee to alter these requirements and the Bill approved by the Senate has no reference to such FCC preemptive powers. A copy of the approved Bill is attached as APPENDIX 2.

A counterpart Bill in the House of Representatives, H.R. 1555, was scheduled to come to a vote on the House floor in August, 1995, but was delayed. While this Bill does not suggest that the FCC have preemptive powers, AASHTO have submitted a similar petition to the chairman of the House Committee on Commerce in the House of Representatives as that submitted to the Senate Committee. A copy of Bill H.R. 1555 is attached as APPENDIX 3.

One of the legislative milestones in the longitudinal placement of fiber-optic cable in Interstate Highway right-of-way was reached when the Federal Highway Administration (FHWA), following its Notice on Proposed RuleMaking (NPRM), decided in 1988 to relegate total authority to states for permission to use highway right-of-way for utilities. Prior to this, the federal government had to approve every request by a utility company to use rights-of-way of freeway and Interstate highway even although the rights-of-way were owned by individual states. In a statement made on January 25, 1988, the Secretary of Transportation Jim Burnley stated (PR Newswire, 1988):

*"The states are perfectly capable of deciding whether utilities may use state-owned rights-of-way. So long as highway safety standards are maintained, there is no reason for the federal government to be involved in each and every decision".*

### **SURVEY**

As an added effort to gather information on the subject of fiber-optic cable in Interstate right-of-way, a survey was conducted as part of this study among State Departments of Transportation and among telecommunications companies involved with telecommunications in Louisiana. The

survey identified current practice, existing attitudes among respondents and sources of further information on the topic of fiber-optic cable in Interstate right-of-way.

### **Survey among state DOT's**

All state Departments of Transportation in the union were contacted by letter and asked to complete a short questionnaire, identify any relevant documentation and nominate a contact person within their department if such a person had further information that could be conveyed on the topic.

The questionnaire solicits both factual and attitudinal information. The factual information relates to existing conditions in the state while the attitudinal information relates to the opinion of the respondent (in official capacity) on the use of Interstate right-of-way for fiber-optic cable. A copy of the questionnaire distributed to the state Departments of Transportation is attached as APPENDIX 4.

Thirty-eight states responded to the survey. The results are summarized in table 1.

One of the interesting results to emerge from the survey is the positive response state highway officials gave regarding their intentions to permit the placement of fiber-optic cable in Interstate right-of-way. Table 1 shows 50% of the states felt they would permit the installation of fiber-optic cable in Interstate right-of-way in the future. Approximately one-third currently do permit it. These values are considerably higher than those obtained in the NCHRP study survey (NCHRP, 1995) where 19% of the states indicated, in 1992, that they would permit transmission-type utilities to locate in freeway right-of-way. However, the NCHRP survey results are for all telecommunications utilities collectively while the survey conducted as part of this study was for fiber-optic cable separately. In addition, hardship cases were omitted in the NCHRP values while they were implicitly included in the survey conducted in this study. The hearings which followed FHWA's Notice of Proposed Rulemaking in 1986 (FHWA, 1988) showed that 43% of the contributors to those hearings (32 of 74 commenters) supported the notion of using Interstate right-of-way to locate fiber-optic cable.

Another issue that deserves specific mention regarding the results in table 1 is the payment received by state DOT's in compensation for the use of their Interstate right-of-way by fiber-optic cable. Table 1 shows an average compensation of \$2,446 per mile per year from data provided by four states. This is an average for urban and rural locations - if they are separated, an average of \$4945/mile/year for urban and \$1282/mile/year for rural freeways is obtained. An independent investigation by the New Mexico DOT determined that payments typically ranged between \$4,500 and \$9,000 per mile per year.

The charges for the use of Interstate right-of-way are considerably higher than those on non-Interstate highways. The last item in table 1 shows that most states (74%) do not charge at all. Some states have legislation preventing them from charging any fees. Some states charge a



nominal fee, usually only sufficient to cover administrative costs of the Permit Office handling the

QUESTION	RESPONSE (n=sample size)
Do you plan to install FO cable in Interstate ROW in the future?	yes = 50%, no = 21% do not know = 29% (n=38)
Is FO cable currently located in Interstate ROW in your state?	yes = 34% no = 66% (n=38)
How many miles of Interstate ROW carry FO cable in your state?	ave. = 70 miles (n=10)
How many companies have FO cable in Interstate ROW in your state?	ave. = 1.6 (n=9)
Have you permitted more than one company to lay FO cable in the same section of Interstate ROW?	27% do (n=11)
Has your department been given access to the FO cable system as repayment for use of Interstate ROW?	25% have (n=13)
Does your department receive any financial benefit from having FO cable in its Interstate ROW?	33% do (n=12)
How much does your department receive ?	ave. = \$2,446/mile/year (n=4)
Position of FO cables within highway cross-section?	85% exclusively between shoulder and fence (n=13)
How deep is the cable laid below the surface?	ave. = 3.5 feet (n=13)
Do you permit access for maintenance of the FO cable from the Interstate freeway?	62% do (n=13)
Do you require companies to indemnify the state for accidents associated with laying/maintaining FO cable?	100% do (n=13)
Do you permit FO cable in non-Interstate highways in your state?	97% do (n=37)
Cost to locate FO cable in non-Interstate right-of-way?	no charge = 74% one-time charge of \$0.16/lin.ft.=10% one-time charge of \$154 = 13% \$1,000-\$5,000/year = 3% (n=31)

## TABLE 1

### SUMMARY OF RESULTS FROM SURVEY AMONG STATE DOT'S

permit applications. Only one state in the survey conducted in this study imposed substantial charges; these varied between \$1000 and \$5000 per year depending on location (urban or rural) and traffic volume on the highway.

Almost two-thirds (62%) of the states having fiber-optic cable in their Interstate highway right-of-way, permit access to the cable for installation and maintenance purposes from the freeway itself. However, this is coupled with a strong preference to locate the cable within 10 feet of the fence of the right-of-way. In addition, most maintenance problems occur at repeater stations and there is the anticipation that these will be located, insofar as possible, at interchanges and rest stops where access is more easily accommodated.

#### **Survey among telecommunications companies**

All companies that have permits to locate communication cable (i.e. both fiber optic and copper cable) in the rights-of-way of Louisiana non-Interstate highways were surveyed by means of a questionnaire. This involved 57 different companies or branches of companies. The questionnaire identified demand and the company's attitudes regarding sharing of facilities. A copy of the questionnaire is attached as APPENDIX 5.

Sixteen companies responded to the questionnaire. The results of the survey are summarized in table 2. The responding companies include a reasonable cross section of large and small telecommunications companies in operation in the state. Responses from individual companies are not divulged; only aggregate statistics are shown.

Of the companies responding, 75% report currently having fiber-optic cable in the right-of-way of non-Interstate highways in Louisiana. The remainder have other communication cable in highway right-of-way.

The survey shows that 69% of the respondents are interested in installing fiber-optic cable in Interstate right-of-way. This is perhaps higher than would be expected following the finding in the literature review that most demand for fiber-optic cable has already been satisfied. However, the sample itself may be biased since those interested in installing fiber-optic cable are more likely to respond to the survey than those who are not. At the same time, the communications industry is constantly growing and there is, therefore, a sustained demand for new fiber-optic cable routes.

On the question of making fibers available to the Louisiana Department of Transportation and Development in repayment for the use of Interstate right-of-way, a positive response was obtained (82% of those responding to the question replied favorably) but 5 of the 16 responding

companies (31%) chose not to reply indicating a reticence on the question. The reluctance to respond to this question was further manifested when only two companies were prepared to suggest how many fibers they would be prepared to offer in exchange for the use of the right-of-way. Two others suggested that they would be prepared to negotiate the number. Overall, the responses seem to indicate that the industry is in favor of the idea of "joint use" but remains wary

QUESTION	RESPONSE (n=sample size)
Does your company currently have FO cable in the ROW of highways in Louisiana?	75% do (n=16)
Would your company be interested in installing FO cable in Interstate ROW in Louisiana?	69% are (n=16)
Would your company be prepared to make fibers available to the DOTD free of charge in return for the use of the ROW?	yes = 82%, no = 18% (n=11)
How many fibers would your company be prepared to make available to the DOTD free of charge in return for use of ROW?	ave. = 6 (n=2)
Would you be prepared to build in extra capacity to accommodate other users?	yes = 82%, no = 18% (n=11)
Would you be prepared to share the revenue generated from leasing extra capacity in the system?	yes = 36%, no = 64% (n=11)
Would you be prepared to lease duct space from other companies?	yes = 81%, no = 19% (n=16)
Would you be prepared to lease fibers from another company?	yes = 75%, no = 25% (n=16)
What are your views on permitting each company to locate its own FO cable in its own trench within the Interstate ROW?	desirable = 75% undesirable = 6% ambivalent = 19% (n=16)

**TABLE 2**

**SUMMARY OF SURVEY RESULTS FROM TELECOMMUNICATIONS COMPANIES**

regarding the details of such an agreement until a firm offer is being considered or, preferably, negotiations are opened on the issue.

An interesting feature of the survey responses is the willingness among telecommunications

companies to share facilities among themselves. This is shown in the fifth, seventh and eighth item in table 2 where 82%, 81% and 75% of the companies respectively were prepared to share facilities with competing companies. In private communications with some of the respondents the main reason for this appears to be the fact that it is often cheaper to share facilities than for each company to have their own and that they have proved over the last decade that they can share facilities without harmful effect. However, this viewpoint seems to be contradicted by the response to the last question in table 2 where companies indicate a strong preference to permit each company to lay its own cable in its own trenches. Perhaps the key lies in the word "permitting" in the question which implies that companies would prefer to have the freedom to choose their own cable and own trench, when desired, but this does not imply they will always choose to exercise that freedom. They may not have incorporated the impact of increased cost and the potential for damage to existing cables with the laying of multiple cables into the response to the question.

One issue which is clearly shown in the results in table 2 is the reluctance the industry has in sharing revenue with the DOTD. Only 36% of those responding to this question were prepared to share revenue generated from extra capacity in the system and 5 of the 16 companies (31%) chose not to respond to the question. When compared to the results of the "joint use" concept, it can be seen that the industry much prefers to share the facility with the DOTD than to share the revenues it generates. In private communication with some of the companies, the preference of the industry appears to be that a fixed fee is the most acceptable followed by the joint use concept with sharing revenue a poor third.

## ANALYSIS

Reviewing the information gathered through the inventory, the literature review, the survey and private communication with persons in the industry, it appears reasonable to draw the following conclusions:

- (i) The telecommunications industry is interested in using Interstate right-of-way to locate fiber-optic cable. While the greatest demand for right-of-way to locate fiber-optic cable is probably over, residual demand exists and appears sufficient to justify making corridors available to the industry.
- (ii) The telecommunications industry recognize that some repayment for the use of the Interstate right-of-way is appropriate but it is not clear what that level of payment is. They are particularly averse to revenue-sharing and appear to be more amenable to paying a fee. Providing access to fibers in return for use of the right-of-way appears to be less attractive to utility providers than paying a fee but is probably will be considered by the majority of providers.
- (iii) Telecommunications companies are prepared to share facilities in order to reduce

costs. Experience has shown they can share facilities without compromising the security of their system and the safety of their equipment.

- (iv) Federal legislation is aimed at removing restrictions to development of the telecommunications industry. Withholding certain highway right-of-way to fiber-optic cable can only be justified if its presence represents an impairment of highway safety, leads to damage of the environment or adversely affects the functioning of the highway. In addition, the regulations demand that if agricultural development is advanced by the provision of utilities within highway right-of-way, then provision of such services should be promoted.
- (v) The telecommunications section in the DOTD is upgrading its system in such a way as to be totally compatible with any fiber-optic system that may be made available to the DOTD. Fiber-optic cable will be of considerable advantage to the department in terms of enhanced telecommunications capabilities and capacity.
- (vi) Fiber-optic cable has been positioned aurally, on the surface and below the ground. Aerial installation, while cheap, presents greater maintenance problems due to the risk of falling trees and susceptibility to rodents, especially squirrels. Generally, aerial and surface installation are used in topography where subsurface installation is impossible or difficult. Thus, it would seem appropriate that in Louisiana where the topography is generally favorable for subsurface installation, that this be required in the specifications.
- (vii) The advantages of permitting the use of Interstate right-of-way for fiber-optic cable is that the Department stands to gain from the process (either in terms of fees or in terms of access to the cable) and the state would benefit from enhanced telecommunications capabilities. The only disadvantage would appear to be the hazard maintenance crews could present on the freeway. Since maintenance on fiber-optic cable is very low and, for the most part, restricted to repeater stations, special provision can be made to minimize the hazard this would present. These special provisions could involve encouraging companies to locate their repeater stations at strategically safe positions, specification of required hazard-warning equipment and establishing safe procedures to be followed by maintenance crew when operating on a freeway. Given that these precautions can be taken without great expense or difficulty, it would appear that to permit companies to locate fiber-optic cable in Interstate right-of-way provides advantages to the state and its residents that far outweigh the disadvantages.
- (viii) If the demand for right-of-way to accommodate fiber-optic cable has largely passed, a new demand in the telecommunications industry is currently at its peak. This is the need for facilities on which to mount antennae for the cellular phone industry. The Federal Communications Commission has recently sold off

additional bandwidth to the industry (reportedly at a cost of \$7bn) and these companies are now looking to exploit their investment. They are currently looking for facilities such as towers and buildings of at least 30 feet height on which to mount their antenna. The DOTD, and the state in general, should look to exploiting this potential since it will provide no intrusion to any of the functions to which existing towers and buildings are put.

#### **FORMULATION OF A RECOMMENDATION**

Since the location and extent of demand to locate fiber-optic cable in Interstate right-of-way is not known, it would seem appropriate to let the industry indicate where they would like to locate cable and what they would be prepared, in open bid setting, to pay for it. We therefore recommend that:

- (i) An RFP be prepared to permit bidding from private companies to provide fiber-optic cable in sections of Interstate right-of-way of their choice.
- (ii) The state reserve the right to grant one or more companies permission to use Interstate right-of-way on any individual or group of road sections.
- (iii) The RFP contain minimum specifications regarding the fiber-optic cable and its operating characteristics, standards maintained during construction, procedures followed during maintenance and features that must be contained within the contract between the DOTD and the company awarded permission to locate cable in the Interstate right-of-way..
- (iv) Responses to the RFP be in the form of a bid to install fiber-optic cable in one or more sections of Interstate highway in Louisiana. The responses will be evaluated in terms of what they offer in return for the use of the right-of-way.
- (v) An investigation be launched into accommodating cellular telephone service antennae on state buildings and towers.

#### **CONCLUDING NOTE**

Following the study reported above, Louisiana DOTD decided to proceed to prepare to offer the use of Interstate right-of-way for use by companies to locate fiber-optic cable. A Request For Proposals (RFP) is currently under development in cooperation with the Federal Highway Administration.

Since existing legislation was unable to accommodate the proposed system, draft legislation is being prepared which will allow a fee-based and/or joint use agreement to be established following an open bid process.

When the enabling legislation is passed and the RFP has been approved, the state will proceed to put the RFP out to bid. This is expected to occur in the first half of 1996.

## REFERENCES

Bradley, Robert T., "CNCP Telecommunications places FO cable alongside Canada's rails - with a little help from a friend", *Telephony*, vol. 210, iss. 7, February 17, 1986. pp. 42-51.

Federal Highway Administration, "Accommodation of utilities: Longitudinal utility use o freeway right-of-way", 23 CFR Part 645, 53 FR 2829, February 2, 1988.

Kemezis, Paul, "Which way's right? Fiber links skip the rails for bicycle paths", *Data Communications*, vol. 15, iss. 8, July, 1986. pp. 69-70.

Louisiana Revised Statutes, Title 48, Section 381, "Use and occupancy of highways", 1995.

McLellan, Pryor, "Switched access for Amtrak fiber network", *Telecommunications*, vol. 20, iss. 7, July, 1986. pp. 61-62.

Najafi, Fazil T., Nazef, Abdenour and Kaczorowski, Paul, "Location alternatives for fiber optic cable installation", *Logistics and Transportation Review*, vol. 26, iss. 2, June, 1990. pp. 171-178.

National Cooperative Highway Research Program, "Longitudinal occupancy of limited/controlled access rights-of-way by utilities", *Synthesis of Highway Practice, Final Draft*, NCHRP Project 20-5, Topic 24-08, Transportation Research Board, June, 1995.

Podmore, Christopher and Faguy, Denise, "The challenge of optical fibers", *Telecommunications Policy*, vol. 10, iss. 4, December, 1986. pp. 341-351.

Sensney, Ray, "Fiber goes under with ease when method is right", *Telephone Engineer and Management*, vol. 91, iss. 8, April 15, 1987. pp. 134-135.

Supreme Court of Iowa, *State of Iowa and Iowa Department of Transportation, Appellees versus Iowa Public Service Company, Appellant*, no. 89-214, filed April 18, 1990.

United States Court of Appeals for the Seventh Circuit, *Dignet Incorporated, Plaintiff versus Western Union ATS Incorporated, Defendant, Third-party-defendent-appellant versus City of Chicago, Defendant, Third-party-plaintiff-appellee*, no. 91-1658. Argued January 21, 1992. Decided March 9, 1992.



**APPENDIX 1**

**BRIEF DESCRIPTION OF DOTD'S PLANNED NEW TELECOMMUNICATIONS  
SYSTEM**

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**APPENDIX 2**

**S.652, THE TELECOMMUNICATIONS COMPETITION AND DEREGULATION ACT  
OF 1995**



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S.652            1 REVISED DIGEST AS OF 06/15/95            (C104) 03/30/95

Sen Pressler            Senate Commerce, Science, and Transportation

HOT LEGISLATION

ALL OPTIONS            ITEM 1 OF 171 IN SET 3

OFFICIAL TITLE(S):

AS INTRODUCED:            (DATA FURNISHED BY THE SENATE)

An original bill to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition, and for other purposes.

SHORT TITLE(S):

AS INTRODUCED:

Telecommunications Competition and Deregulation Act of 1995

Communications Decency Act of 1995

AS PASSED SENATE:

Telecommunications Competition and Deregulation Act of 1995

Communications Decency Act of 1995

National Education Technology Funding Corporation Act of 1995

Parental Choice in Television Act of 1995

COMMITTEE(S) OF ORIGIN:

Senate Commerce, Science, and Transportation

COMMITTEE(S) OF REFERRAL:

Senate Commerce, Science, and Transportation

DETAILED STATUS STEPS:

SENATE ACTIONS

Mar 23, 95 Committee on Commerce ordered to be reported an original measure.

Mar 30, 95 Committee on Commerce. Original measure reported to Senate by  
Senator Pressler. With written report No. 104-23. Additional and  
minority views filed.

Mar 30, 95 Placed on Senate Legislative Calendar under General Orders.  
Calendar No. 45.

Jun 7, 95 Measure laid before Senate.

Jun 7, 95 Amendment SP 1255 proposed by Senator Dole.

Jun 7, 95 Amendment SP 1256 proposed by Senator Stevens.

Jun 7, 95 Amendment SP 1257 proposed by Senator Pressler to Amendment SP  
1256.

Jun 7, 95 Amendment SP 1257 agreed to in Senate by Voice Vote.

Jun 7, 95 Amendment SP 1256 agreed to in Senate by Voice Vote.

Jun 7, 95 Amendment SP 1258 proposed by Senator Pressler.

Jun 8, 95 Considered by Senate.

Jun 8, 95 Amendment SP 1259 proposed by Senator Dorgan.

Jun 8, 95 Amendment SP 1259 agreed to in Senate by Voice Vote.

Jun 8, 95 Amendment SP 1260 proposed by Senator McCain.

Jun 8, 95 Amendment SP 1260 as modified agreed to in Senate by Voice Vote.

Jun 8, 95 Amendment SP 1261 proposed by Senator McCain.

Jun 8, 95 Motion to table SP 1261 agreed to in Senate by Yea-Nay Vote.

68-31. Record Vote No: 243.

Jun 8, 95 Amendment SP 1262 proposed by Senator McCain.

Jun 8, 95 Motion to table SP 1262 agreed to in Senate by Yea-Nay Vote.

58-36. Record Vote No: 244.

Jun 8, 95 Amendment SP 1263 proposed by Senator Cohen.

Jun 8, 95 Amendment SP 1258 as modified agreed to in Senate by Voice Vote.

Jun 8, 95 Amendment SP 1263 not agreed to in Senate by Yea-Nay Vote. 30-64.

Record Vote No: 245.

Jun 8, 95 Amendment SP 1264 proposed by Senator Dorgan.

Jun 8, 95 Amendment SP 1265 proposed by Senator Thurmond to Amendment SP

1264.

Jun 8, 95 Amendment SP 1266 proposed by Senator Hollings.

Jun 9, 95 Considered by Senate.

Jun 9, 95 Amendment SP 1267 proposed by Senator Santorum.

Jun 9, 95 Amendment SP 1267 agreed to in Senate by Yea-Nay Vote. 83-4.

Record Vote No: 247.

Jun 9, 95 Amendment SP 1255 as modified agreed to in Senate by Yea-Nay Vote.

77-8. Record Vote No: 248.

Jun 9, 95 SP 1266 fell when its provisions were accepted as a modification  
to SP 1255.

Jun 12, 95 Considered by Senate.

Jun 12, 95 Amendment SP 1269 proposed by Senator Feinstein.

Jun 12, 95 Amendment SP 1269 agreed to in Senate by Yea-Nay Vote. 91-0.

Record Vote No: 249.

Jun 12, 95 Amendment SP 1270 proposed by Senator Feinstein.

Jun 12, 95 Cloture motion presented in Senate.

Jun 13, 95 Considered by Senate.

Jun 13, 95 Amendment SP 1276 proposed by Senator McCain.

Jun 13, 95 Amendment SP 1277 proposed by Senator Gorton to Amendment SP 1270.

Jun 13, 95 Amendment SP 1278 proposed by Senator Dorgan.

Jun 13, 95 Motion to table SP 1265 agreed to in Senate by Yea-Nay Vote.

57-43. Record Vote No: 250.

Jun 13, 95 Proposed amendment SP 1264 withdrawn in Senate.

Jun 13, 95 Amendment SP 1275 proposed by Senator Conrad.

Jun 13, 95 Amendment SP 1347 proposed by Senator Lieberman to Amendment SP

1275.

Jun 13, 95 Amendment SP 1348 proposed by Senator Bumpers.

Jun 13, 95 Amendment SP 1335 proposed by Senator Kerrey.

Jun 13, 95 Amendment SP 1276 not agreed to in Senate by Yea-Nay Vote. 18-82.

Record Vote No: 251.

Jun 13, 95 Motion to table SP 1348 agreed to in Senate by Yea-Nay Vote.

52-48. Record Vote No: 252.

Jun 13, 95 Amendment SP 1278 as modified agreed to in Senate by Yea-Nay Vote.

51-48. Record Vote No: 253.

Jun 13, 95 Motion by Senator D'Amato to reconsider the vote (No. 253) by

which SP 1278 was agreed to made in Senate.

Jun 13, 95 Motion to table the motion to reconsider Vote No. 253 was rejected

by Yea-Nay Vote. 48-52. Record Vote No: 254.

Jun 13, 95 Motion to reconsider Vote No. 253 agreed to in Senate by Voice

Vote.

Jun 13, 95 Amendment SP 1278 not agreed to in Senate by Yea-Nay Vote. 47-52.

Record Vote No: 255.

Jun 13, 95 Amendment SP 1349 proposed by Senator Simon.

Jun 13, 95 Motion to table SP 1275 rejected in Senate by Yea-Nay Vote. 26-73.

Record Vote No: 256.

Jun 13, 95 Amendment SP 1347 as modified agreed to in Senate by Voice Vote.

Jun 13, 95 Amendment SP 1275 agreed to in Senate by Voice Vote.

Jun 13, 95 Amendment SP 1349 agreed to in Senate by Yea-Nay Vote. 100-0.

Record Vote No: 257.

Jun 13, 95 Amendment SP 1335 agreed to in Senate by Voice Vote.

Jun 13, 95 Amendment SP 1350 proposed by Senator Pressler for Senator Exon.

Jun 13, 95 Amendment SP 1351 proposed by Senator Pressler for Senator Byrd to  
Amendment SP 1350.

Jun 13, 95 Amendment SP 1351 agreed to in Senate by Voice Vote.

Jun 13, 95 Amendment SP 1350 agreed to in Senate by Voice Vote.

Jun 13, 95 Second cloture motion presented in Senate.

Jun 14, 95 Considered by Senate.

Jun 14, 95 Amendment SP 1270 not agreed to in Senate by Yea-Nay Vote. 44-56.

Record Vote No: 258.

Jun 14, 95 Amendment SP 1277 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1284 proposed by Senator Pressler for Senator Simon.

Jun 14, 95 Amendment SP 1282 proposed by Senator Pressler for Senator  
Moseley-Braun.

Jun 14, 95 Amendment SP 1284 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1282 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Cloture invoked in Senate by Yea-Nay Vote. 89-11. Record Vote No:  
259.

Jun 14, 95 Amendment SP 1306 proposed by Senator Kerrey.

Jun 14, 95 Amendment SP 1306 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1344 proposed by Senator Kerrey.

Jun 14, 95 Amendment SP 1313 proposed by Senator Kerrey.

Jun 14, 95 Motion to table SP 1344 agreed to in Senate by Yea-Nay Vote. 55-45. Record Vote No: 260.

Jun 14, 95 Amendment SP 1313 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1310 proposed by Senator Kerrey.

Jun 14, 95 Proposed amendment SP 1310 withdrawn in Senate.

Jun 14, 95 Amendment SP 1307 proposed by Senator Kerrey.

Jun 14, 95 Motion to table SP 1307 agreed to in Senate by Yea-Nay Vote. 79-21. Record Vote No: 261.

Jun 14, 95 Amendment SP 1340 proposed by Senator Boxer.

Jun 14, 95 Amendment SP 1354 proposed by Senator Boxer to Amendment SP 1340.

Jun 14, 95 SP 1354 fell when its provisions were accepted as a modification to SP 1340.

Jun 14, 95 Motion to table SP 1340 agreed to in Senate by Yea-Nay Vote. 60-38. Record Vote No: 262.

Jun 14, 95 Amendment SP 1310 repropoed, as modified, by Senator Kerrey.

Jun 14, 95 Amendment SP 1310 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1288 proposed by Senator Leahy.

Jun 14, 95 Amendment SP 1362 proposed by Senator Exon to Amendment SP 1288.

Jun 14, 95 Amendment SP 1362 agreed to in Senate by Yea-Nay Vote. 84-16.

Jun 14, 95 Amendment SP 1288 agreed to in Senate by Voice Vote.



Jun 14, 95 Amendment SP 1421 proposed by Senator Breaux.

Jun 14, 95 Amendment SP 1421 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1317 proposed by Senator Brown.

Jun 14, 95 Amendment SP 1318 proposed by Senator Brown.

Jun 14, 95 Amendment SP 1317 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1272 proposed by Senator Dorgan.

Jun 14, 95 Amendment SP 1272 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1294 proposed by Senator Specter.

Jun 14, 95 Amendment SP 1294 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1343 proposed by Senator Dorgan.

Jun 14, 95 Proposed amendment SP 1343 withdrawn in Senate.

Jun 14, 95 Amendment SP 1318 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1299 proposed by Senator Hollings for Senator Breaux.

Jun 14, 95 Amendment SP 1285 proposed by Senator Pressler for Senator McCain.

Jun 14, 95 Amendment SP 1323 proposed by Senator Harkin.

Jun 14, 95 Amendment SP 1323 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1322 proposed by Senator Harkin.

Jun 14, 95 Amendment SP 1322 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1324 proposed by Senator Harkin.

Jun 14, 95 Amendment SP 1324 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1342 proposed by Senator Kerry.

Jun 14, 95 Amendment SP 1342 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1283 proposed by Senator Simon.

Jun 14, 95 Amendment SP 1367 proposed by Senator Heflin.

Jun 14, 95 Amendment SP 1341 proposed by Senator Pressler for Senator Dole.

Jun 14, 95 Amendment SP 1325 proposed by Senator Warner.

Jun 14, 95 Amendment SP 1298 proposed by Senator Lieberman.

Jun 14, 95 Amendment SP 1292 proposed by Senator Rockefeller.

Jun 14, 95 Amendment SP 1300 proposed by Senator Stevens.

Jun 14, 95 Amendment SP 1301 proposed by Senator Stevens.

Jun 14, 95 Amendment SP 1302 proposed by Senator Stevens.

Jun 14, 95 Amendment SP 1304 proposed by Senator Stevens.

Jun 14, 95 Amendment SP 1280 proposed by Senator Inouye for Senator Robb.

Jun 14, 95 Amendment SP 1303 proposed by Senator Stevens.

Jun 14, 95 Amendment SP 1301 as modified agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1302 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1304 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1280 agreed to in Senate by Voice Vote.

Jun 14, 95 Amendment SP 1300 as modified agreed to in Senate by Voice Vote.

Jun 15, 95 Considered by Senate.

Jun 15, 95 Amendment SP 1325 as modified agreed to in Senate by Voice Vote.

Jun 15, 95 Amendment SP 1285 agreed to in Senate by Yea-Nay Vote. 98-1.

Record Vote No: 264.

Jun 15, 95 Motion to table SP 1283 agreed to in Senate by Yea-Nay Vote.

64-34. Record Vote No: 265.

Jun 15, 95 Motion to table SP 1298 agreed to in Senate by Yea-Nay Vote.

67-31. Record Vote No: 266.

Jun 15, 95 Proposed amendment SP 1292 withdrawn in Senate.

Jun 15, 95 Proposed amendment SP 1303 withdrawn in Senate.

Jun 15, 95 Amendment SP 1367 agreed to in Senate by Voice Vote.

Jun 15, 95 Amendment SP 1299 as modified agreed to in Senate by Voice Vote.

Jun 15, 95 The amendment (SP 1313) as previously agreed to was modified by

Unanimous Consent.

Jun 15, 95 Amendment SP 1422 proposed by Senator Pressler.

Jun 15, 95 Amendment SP 1422 agreed to in Senate by Voice Vote.

Jun 15, 95 Amendment SP 1423 proposed by Senator Pressler.

Jun 15, 95 Amendment SP 1423 agreed to in Senate by Voice Vote.

Jun 15, 95 Amendment SP 1341 agreed to in Senate by Yea-Nay Vote. 59-39.

Record Vote No: 267.

Jun 15, 95 Passed Senate with amendments by Yea-Nay Vote. 81-18. Record Vote

No: 268.

Jun 20, 95 Message on Senate action sent to the House.

Jun 23, 95 Senate ordered measure printed as passed.

REVISED DIGEST: (AS OF 06/15/95)

Passed Senate, amended

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Title I: Transition to Competition

Title II: Removal of Restrictions to Competition

    Subtitle A: Removal of Restrictions

    Subtitle B: Termination of Modification of Final  
            Judgement

Title III: An End to Regulation

Title IV: Obscene, Harassing, and Wrongful Utilization of  
    Telecommunications Facilities

Title V: Parental Choice in Television

Title VI: National Education Technology Funding Corporation

Title VII: Miscellaneous Provisions

Telecommunications Competition and Deregulation Act of 1995 - Title I:  
Transition to Competition - Amends the Communications Act of 1934 (the Act)  
to require a local telephone exchange carrier (or class of such carriers) that  
is determined by the Federal Communications Commission (FCC) to have market  
power in providing telephone exchange service or telephone exchange access  
service to: (1) enter into good faith negotiations within 15 days with any  
telecommunications carrier requesting interconnection with the telephone  
exchange carrier in order to provide telephone exchange or exchange access

service; and (2) provide such interconnection at reasonable, nondiscriminatory rates and in accordance with requirements of this title. Provides minimum standards for any interconnection agreement entered into, including nondiscriminatory access and high-quality interconnection between the carriers. Allows a local exchange carrier, upon receiving a request for interconnection, to negotiate and enter into a binding agreement with the telecommunications carrier without regard to such standards, as long as such agreement: (1) includes a schedule of itemized charges for each service, facility, or function included; and (2) is submitted to the State for approval. Provides for agreement: (1) arbitration by a State at any time during negotiations; and (2) intervention by a State when more than 135 days have passed since the original intervention request. Outlines duties and rights of parties in an intervention proceeding, including the duty to provide all appropriate information and the opportunity to respond. Requires the State proceeding to be conducted in accordance with rules promulgated by the FCC. Requires the State action to be completed no later than ten months after the date on which the local exchange carrier received the original interconnection request. Outlines provisions concerning: (1) the determination during arbitration or intervention of the charges by the local exchange carrier for an unbundled (no unreasonable conditions on resale or sharing) element of the interconnection; (2) State approval or rejection of an interconnection agreement; (3) the required availability of an interconnection

agreement to other telecommunications carriers on the same terms and conditions; (4) the collocation of equipment necessary for interconnection at the premises of the carrier at reasonable charges; (5) FCC promulgation of implementing regulations; (6) FCC authority to act if a State fails to carry out its arbitration or intervention responsibilities; (7) waiver or modification by the FCC or a State of minimum interconnection standards with respect to a rural telephone company; (8) a State's authority to impose requirements on a telecommunications carrier for intrastate services to further competition in telephone exchange service or exchange access service; (9) triennial review and appropriate modification of the standards and requirements for interconnection agreements; and (10) the inapplicability of these provisions to commercial mobile service providers unless the FCC determines such providers to have market power in the provision of such services.

(Sec. 102) Prohibits a Bell operating company (BOC) (including any affiliate) which is a local telephone exchange service from providing information services, manufacturing services, or interLATA (local access and transport area) services (with exceptions), unless it provides that service through an affiliate that: (1) is separate from any BOC entity that provides telephone exchange service; and (2) meets specified structural and transactional requirements, including requirements regarding books, records, officers, directors and employees separate from the BOC. Prohibits any

discrimination between a BOC, its affiliate, and any other entity in the provision of goods, services, facilities, and information or in the establishment of standards. Directs a company required to operate a separate affiliate to pay for a joint Federal-State independent audit every two years to determine regulatory compliance. Requires audit results to be submitted to the FCC and the appropriate State commissions. Prohibits a BOC affiliate from marketing or selling telephone exchange services provided by the BOC unless that company permits other entities offering the same or similar services to market and sell its telephone exchange services. Outlines additional requirements for the provision of interLATA services by a BOC. Requires each BOC and its affiliate to protect the confidentiality of proprietary information relating to other common carriers, equipment manufacturers, and customers, with certain exceptions such as bill collection. Authorizes the FCC to grant an exception from any requirement of this section when determined necessary for the public interest, convenience, and necessity. Requires public utility companies which are registered holding companies that provide telecommunications services to provide such services through a separate subsidiary. Directs each State to determine whether public utility companies which provide such service but are not registered holding companies will be required to provide such service through a separate subsidiary.

(Sec. 103) Directs the FCC to institute and refer to a Federal-State joint board a proceeding to recommend rules regarding the implementation of

provisions with regard to universal service (intra- and inter-state telecommunications services that the FCC determines should be provided at reasonable rates to all Americans, including those in rural and high-cost areas and those with disabilities). Requires the periodic (at least every four years) review of such implementation. Provides Joint Board and FCC deadlines with regard to the provision and implementation of appropriate recommendations. Requires the Joint Board and the FCC to base policies for the preservation and enhancement of universal service on specified principles, including quality services, affordable rates, and access in all regions of the country. Requires all telecommunications providers to participate in the advancement of universal service. Prohibits telecommunications carriers from subsidizing competitive services with revenues from services that are not competitive. Requires the FCC to notify specified congressional committees before requiring a carrier to participate in universal service and before modifying its rules to increase support for the preservation and advancement of such service. Directs the FCC to prohibit any telecommunications carrier from excluding from any of its services any high-cost area, or any other area on the basis of its rural location or the median income of its residents, with exceptions.

(Sec. 104) Directs the FCC (in the case of interstate service) or a State (in the case of intrastate service), when more than one telecommunications carrier serves a geographic area, to determine which carrier is best able to



provide universal service to the community and to designate that carrier as an essential telecommunications carrier (ETC) for that community. Sets forth ETC obligations in the provision of such service. Allows multiple ETC designations for an area. Directs the FCC or a State, as appropriate, to establish rules for the resale of universal service, requiring the carrier whose facilities are being resold to be adequately compensated for their use. Allows, under specified rules, an ETC to relinquish such designation if another ETC is designated for the same area. Provides for: (1) enforcement proceedings against an ETC refusing to provide appropriate universal service; and (2) the designation of an ETC for interexchange services for any unserved community or portion thereof requesting such services.

(Sec. 105) Makes provisions of the Act prohibiting foreign investment and ownership in telecommunications licenses, facilities, and equipment inapplicable to foreign representatives when the FCC determines that the foreign country of such representative provides equivalent market opportunities for common carriers to the United States or its citizens and the President does not object to such determination within 15 days. Repeals such exemption when such equal opportunity ceases.

(Sec. 106) Directs the FCC to prescribe regulations that require certain local telephone exchange carriers to make available to any qualifying carrier (an ETC) such public switched network infrastructure, technology, information, and telecommunications facilities and functions as may be requested for the

provision of telecommunications services, or access to such services, in the service area of an ETC which provides universal service by means of its own facilities. Requires a local exchange carrier entering into an agreement under this section to provide to each party of the agreement timely information on the planned deployment of telecommunications services and equipment, including necessary software.

(Sec. 107) Authorizes the FCC to participate in the development by appropriate voluntary industry standards-setting organizations of the promotion of telecommunications network-level interoperability (the exchange of information without degeneration).

Title II: Removal of Restrictions to Competition - Subtitle: A:  
Removal of Restrictions - Amends the Act to prohibit any State or local statute or regulation from diminishing the ability of any entity to provide any interstate or intrastate telecommunications services. Authorizes the FCC to immediately preempt the enforcement of any statute that is found to so interfere. Protects the rights of any cable operator engaged in the provision of telecommunications services, prohibiting any franchise or additional conditions from being imposed on such operator for such services.

(Sec. 202) Provides that any telecommunications carrier, including a BOC, which carries or provides video programming provided by others through a common carrier video platform shall not be considered a cable operator providing cable service and therefore shall not be subject to certain

cross-ownership restrictions under the Act. Requires BOCs, in order to receive such exemption, to: (1) provide facilities, services, or information to all programmers on the same terms and conditions as provided to its own video programming operations; and (2) not subsidize its video programming with revenues from its telecommunications services. Outlines provisions concerning rates, access, and certain procedural safeguards (through FCC regulations) and enforcement provisions with respect to the provision of video programming through a common carrier video platform. Prohibits a local exchange carrier (LEC) from acquiring more than a ten percent financial interest, or any management interest, in any cable operator providing cable service within the LEC's telephone service area, and vice versa. Prohibits any joint ventures between such parties in order to provide video programming directly to subscribers or to provide telecommunications services within such market. Specifies exceptions to such prohibitions. Authorizes the FCC to waive such prohibitions upon certain findings (economic distress or inviability and the public interest). Authorizes the joint use of certain property between the telecommunications carrier and a cable operator.

(Sec. 203) Authorizes the FCC to consider a rate for cable programming services as unreasonable only if it substantially exceeds the national average rate for comparable services provided by cable systems other than small cable systems. Includes as "effective competition" under the Act a situation where an LEC offers video programming services directly to subscribers, either over

a common carrier video platform or as a cable operator, in the franchise area of an unaffiliated cable operator which is also providing cable service in that franchise area. Exempts from certain cable rate regulation provisions of the Act small cable operators (serving fewer than one percent of all cable subscribers in the United States and not affiliated with any entity whose gross annual revenues exceed \$250 million) with respect to cable programming services or a basic service tier subject to regulation as of December 31, 1994, in any franchise in which such operator serves 35,000 or fewer subscribers. Requires a request for the determination of a broadcasting station's market to be granted or denied by the FCC within 120 days. (Currently, only expedited consideration is required.)

(Sec. 204) Authorizes a cable television system to use utility pole attachments to provide cable service or any other telecommunications service. Requires a utility owning a pole to provide a cable television system with nondiscriminatory access to such pole for such purposes. Directs the FCC to prescribe regulations to ensure that such utilities charge just, reasonable, and nondiscriminatory rates for the pole attachments. Allows a utility to apportion the cost of providing space on a pole. Requires any increase in the rates for pole attachments to be phased in over a five-year period. Allows a utility company providing electric service to deny a cable television system or telecommunications carrier access to such poles when there is insufficient capacity and for reasons of safety, reliability, and generally applicable

engineering purposes.

(Sec. 205) Authorizes any utility and its subsidiary or affiliate (other than a public utility holding company that is an associate company of a registered holding company) to engage in any activity necessary or appropriate for the provision of telecommunications services, information services, or other services or products subject to FCC jurisdiction under the Act. Prohibits the Securities and Exchange Commission from regulating such activities. Allows the Federal Energy Regulatory Commission or a State commission to exercise its authority to prohibit the cross-subsidization of such activities. Requires the maintenance of separate books and accounts with regard to such activities by any associate company of a registered holding company. Requires prior approval by a State commission before an associated company of a registered holding company may either issue securities for financing the operation of services under this section or pledge the assets of the public utility or any of its subsidiaries for such activities. Allows for independent audits, upon State request, of such public utility companies with respect to such activities. Provides for: (1) selection of the firm to conduct such audits (on at least an annual basis); (2) notices required with respect to the presence of affiliate contracts between a public utility and an associated company with respect to such activities, as well as the acquisition by a registered holding company of an interest in an associate company engaged in such activities; and (3) FCC implementation of such provisions.

(Sec. 206) Authorizes the FCC, under certain conditions, to allow licensees to make use of the advanced television spectrum for the transmission of ancillary or supplementary services. Authorizes the FCC to collect fees for the use of such spectrum from licensees that charge subscribers for advanced television spectrum services. Requires such licensee to establish that such services are in the public interest.

Increases from 25 to 35 percent the amount of national audience a single broadcast licensee may reach, and eliminates current restrictions on the number of television stations that may be owned by such licensee. Authorizes the FCC to eliminate any Federal regulations which limit the number of AM or FM broadcast stations which may be owned by one entity either nationally or locally. Allows the FCC to refuse a broadcast license if it finds that an entity would obtain an undue concentration of control or would harm competition. Requires the FCC to biennially review its ownership rules.

Increases the term of renewal for television licenses from five to ten years and for radio licenses from seven to ten years. Revises the broadcast license renewal procedures to allow such renewal if the FCC finds that: (1) the station has served the public interest, convenience, and necessity; (2) there have been no serious violations by the licensee of the Act or FCC rules and regulations; and (3) there have been no other violations which, taken together, would constitute a pattern of abuse. Requires, with respect to commercial TV applicants, an attachment to its license application of comments

received from viewers with respect to violent programming.

Subtitle B: Termination of Modification of Final Judgment - Establishes the criteria to be used by the FCC to determine when a BOC may provide interLATA services in the region in which it is the dominant provider of wireless telephone exchange service or exchange access service. Allows such BOC to provide such services only if it has reached an interconnection agreement which meets the requirements of a competitive checklist, including nondiscriminatory access to specified services. States that, until a BOC is authorized to provide interLATA services in a telephone exchange area where that company is the dominant provider of telephone exchange or exchange access service, or until 36 months after the enactment of this Act, whichever is later, a telecommunications carrier that serves greater than five percent of the country's presubscribed access lines may not jointly market in such exchange area telephone exchange or exchange access service purchased from such a BOC with interLATA services offered by that telecommunications carrier. Prohibits the FCC from limiting or extending the requirements of the competitive checklist. Outlines provisions concerning: (1) a BOC application for the provision of interLATA services in an appropriate area; (2) FCC determination and approval of such application and publication of results in the Federal Register; and (3) judicial review and judgment with respect to an approval. Requires a BOC granted such approval to provide interLATA toll dialing parity throughout the market area coincident with its

exercise of authority. Allows any State to implement an order requiring toll dialing parity in an interLATA area before a BOC has been authorized to provide interLATA services in that area or 36 months after the enactment of this Act, whichever is later, with specified conditions. Authorizes a BOC or its affiliate to provide interLATA services in an area where it is not the dominant provider of telephone exchange or exchange access service. Authorizes such BOC to provide certain incidental services, with limitations. Authorizes a BOC to provide interLATA commercial mobile services except where such service is a replacement for land line telephone exchange service for a substantial portion of such service in a State. Treats certain BOC applications to provide 800 service and private line service as an in-region service application for purposes of this section. Provides that a person engaged in the provision of commercial mobile services shall not be required to provide equal access to interexchange telecommunications carriers unless required to do so under the Act, with a specified exception.

(Sec. 222) Provides that a BOC authorized to provide interLATA services under this Act shall be authorized by the FCC to: (1) manufacture and provide telecommunications equipment; and (2) manufacture customer premises equipment, subject to specified requirements and related regulations, except that neither a BOC nor any of its affiliates may engage in such activities in conjunction with another BOC not so affiliated or any of its affiliates. Requires such manufacturing to be carried out through a separate affiliate of such BOC, with



appropriate requirements of separation (books, accounts, officers, and employees) maintained. Requires a manufacturing affiliate of a BOC to make available to LECs telecommunications equipment and related software that is manufactured by such affiliate as long as there is demand for such equipment. Prohibits a BOC from discriminating among such LECs with respect to bids for services or equipment, the standards or certification of equipment, or the sale of telecommunications equipment and software. Requires the protection of proprietary information. Allows a BOC to engage in close collaboration with manufacturers of customer premises or telecommunications equipment not affiliated with a BOC during the design and development of equipment hardware and software. Requires the FCC to prescribe regulations which require each BOC to maintain and file with the FCC full and complete information with respect to the protocols and technical requirements for connection with and use of its telephone exchange service facilities. Provides for the administration and enforcement of such requirements through FCC regulations and appropriate civil actions.

(Sec. 223) States that nothing in this Act is intended to prohibit a BOC from engaging in any activity authorized by an order pursuant to the Modification of Final Judgment, if such order was entered on or before the date of enactment of this Act.

(Sec. 224) Provides specified penalties for violations of provisions of this Act relating to interconnection authority, separate subsidiary and

safeguard requirements, and the authority of a BOC to provide interLATA telecommunications services. Prohibits any penalties or damages assessed against an LEC due to violations under these provisions from being charged directly or indirectly to the LEC's rate payers.

(Sec. 225) Authorizes a BOC to provide alarm monitoring services three years after the date of enactment of this Act if it has been authorized by the FCC to provide interLATA services. Requires the FCC to establish rules governing the provision of such services by a BOC. Provides an exception to the three-year waiting requirement in the case of alarm monitoring services provided by a BOC that was engaged in the provision of such services as of December 31, 1994, as long as certain conditions are met.

(Sec. 226) Prohibits any person from being subject to the provisions of the Modification of Final Judgment solely by reason of having acquired commercial mobile service or private mobile service assets or operations previously owned by a BOC or a BOC affiliate.

Title III: An End to Regulation - Directs the FCC and the States to:

- (1) provide telecommunications carriers with pricing flexibility in the rates charged to consumers for telecommunications services;
- (2) ensure that residential telephone rates remain just, reasonable, and affordable as competition develops for telephone exchange service and telephone exchange access service; and
- (3) adopt alternative forms of regulation for Tier 1 telecommunications carriers as part of a plan that includes the advancement of

competition and other measures designed to protect the consumer. Authorizes the FCC and the States to establish: (1) rates for services included within universal service; and (2) a residential telephone rate until sufficient competition exists in a market, but to cease such rate regulation when determined no longer necessary for the protection of consumers. Provides for a transition plan. Requires LECs to provide subscriber list information for directory publishing purposes to anyone, upon request, on a timely, unbundled, and nondiscriminatory basis. Outlines confidentiality requirements for telecommunications carriers under this section. Requires FCC hearings concerning new charges, classifications, regulations, complaints, or practices to be concluded within five (currently, 12) months after their commencement. Directs the FCC to permit any LEC to: (1) be exempt from FCC precertification with respect to the extension of a line for telecommunications purposes; and (2) file cost allocation manuals and specified reports annually.

(Sec. 302) Directs the FCC (with respect to Federal regulations) and a Federal-State Joint Board (with respect to State regulations) to biennially review and make appropriate determinations with respect to all regulations applicable to telecommunications services. Directs the FCC, in classifying telecommunications carriers and establishing reporting requirements, to adjust the revenue requirements to account for inflation as of the date of release of a specified FCC report and annually thereafter.

Eliminates or reduces specified FCC functions, regulation, or authority

with respect to: (1) depreciation charges for telecommunications carrier property; (2) independent audits of carrier books and accounts; (3) simplification of the Federal-State coordination process concerning communications matters; (4) the privatization of ship radio inspections; (5) broadcasting station construction permit requirements; (6) limitations on authorizations for stations that have failed to transmit a broadcast signal for a 12- month period; (7) instructional television fixed service processing; (8) home electronic equipment testing and certification; (9) license modification; (10) the operation of domestic ship and aircraft radios without FCC licenses; (11) licensing for fixed microwave service; (12) jurisdiction over government-owned ship radio stations; (13) amateur radio examination procedures; and (14) non-broadcast radio license renewals.

(Sec. 303) Directs the FCC, upon making certain determinations, to forbear applying any regulation or provision of the Act to a telecommunications carrier or service in any or some geographic markets. Requires the FCC to consider whether such forbearance will promote competitive market conditions. Authorizes such a carrier to petition the FCC for such regulatory forbearance.

(Sec. 304) Requires the FCC and each State telecommunications commission to encourage the deployment of advanced telecommunications capability to all Americans. Requires the FCC to regularly initiate a notice of inquiry concerning such availability.

(Sec. 305) Directs the FCC to undertake the termination or modification of

regulations and provisions of the Act as necessary to implement the changes made under this Act.

(Sec. 306) Provides that any ship documented under U.S. laws operating under the Global Maritime Distress and Safety System provisions of the Safety of Life at Sea Convention shall not be required to be equipped with a radio telegraphy station operated by one or more radio officers or operators.

(Sec. 307) Requires LECs to make available: (1) interim telecommunications number portability beginning on the date of enactment of this Act; and (2) final number portability when the FCC determines such to be technically feasible. Requires the neutral administration of a nationwide numbering system, with costs to be borne by all telecommunications carriers.

(Sec. 308) Requires the manufacturer of telecommunications and customer premises equipment or a provider of telecommunications service to ensure that such equipment is designed, developed, and fabricated to be accessible to and usable by individuals with disabilities, if readily achievable. Sets forth guidelines. Requires closed captioning when readily achievable. Provides exemptions. Provides for: (1) regulations; and (2) enforcement.

(Sec. 309) Prohibits a State, except for the adoption of specified minimally restrictive statutes or regulations, from waiving or modifying the requirements of this Act concerning interconnection agreements. Authorizes the FCC to preempt any State statute or regulation found to be inconsistent with FCC regulations or unreasonably discriminatory in its application.

(Sec. 310) Requires telecommunications carriers, upon request, to provide:

(1) at affordable and reasonable rates, telecommunications services necessary for the provision of health care services to persons residing in rural areas; and (2) at rates less than amounts charged for similar services to other parties, universal service to elementary and secondary schools and libraries for the provision or receipt of educational services. Directs the FCC to:

(1) consider the lower rates provided to public institutional telecommunications users within any universal service requirements established under title I of this Act; and (2) establish rules for the enhanced availability of advanced telecommunications and information services to elementary and secondary school classrooms, health care providers, and libraries. Requires appropriate interconnection.

(Sec. 311) Prohibits any BOC that provides payphone or telemessaging service from: (1) subsidizing such service with revenues from its telephone exchange or exchange access service; or (2) preferring or discriminating in favor of its payphone or telemessaging service.

(Sec. 312) Includes the protection of direct broadcast satellite signals within Federal law providing civil and criminal penalties against persons manufacturing or distributing devices used for the unauthorized decryption of satellite signals.

Title IV: Obscene, Harassing, and Wrongful Utilization of  
Telecommunications Facilities - Communications Decency Act of 1995 - Amends

the Act to prohibit: (1) the use of any telecommunications device (currently, only the telephone) by a person not disclosing his or her identity in order to annoy, abuse, threaten, or harass another; (2) the repeated use of a telecommunications device solely for harassment purposes; (3) allowing the use of any telecommunications facility in his or her control for such purposes; and (4) the use of a telecommunication device for making indecent communications to persons under age 18. Increases the fine and maximum sentence for such violations. Provides defenses to such violations, including one for persons whose actions are limited solely to the provision of access to certain communications.

(Sec. 403) Increases from \$10,000 to \$100,000 the maximum fine for: (1) transmission over a cable system of obscene or otherwise unprotected material; and (2) broadcasting obscene language on the radio.

(Sec. 405) Provides constitutional separability for the various provisions of this title.

(Sec. 406) Prohibits a party calling a toll-free telephone number from being assessed a charge by virtue of being asked to connect or otherwise transfer to a pay-per-call service.

(Sec. 407) Requires cable television operators, upon subscriber request and at no charge, to fully scramble or otherwise block the audio and video portions of programs unsuitable for children.

(Sec. 408) Requires a multichannel video programming distributor to fully

scramble or otherwise block the video and audio portion of a sexually explicit adult video channel which is primarily dedicated to sexually-oriented programming. Provides transition provisions.

(Sec. 409) Authorizes a cable operator to refuse to transmit any public access or leased access program or portion thereof which contains obscenity, indecency, or nudity.

(Sec. 410) Directs the Secretary of Commerce to take appropriate steps to make available to the public information on tags voluntarily used to identify obscene, indecent, or mature text or graphics on public information networks in order to help prevent access to such material by children. Requires a report from the Comptroller General to the Congress on the tags established and utilized in voluntary compliance with this provision.

Title V: Parental Choice in Television - Parental Choice in Television Act of 1995 - Encourages: (1) appropriate representatives of the broadcast and cable television industries to voluntarily establish rules for the rating of violence or other objectionable content in television programming; (2) such representatives to consult with appropriate public interest groups and individuals from the private sector when establishing such rules; and (3) television broadcasters and cable operators to comply voluntarily with the rules so established. Provides that if such representatives do not establish such rules within one year after the enactment of this Act, there shall be established the Television Rating Commission for such purpose. Authorizes



appropriations for Commission purposes.

(Sec. 504) Directs the FCC to require television sets manufactured in or imported into the United States and having screen sizes of 13 inches or greater to be equipped with circuitry designed to enable viewers to block the display of: (1) channels during a particular time; and (2) all programs with a common rating.

(Sec. 505) Prohibits any person from manufacturing, shipping, or importing televisions that do not meet the display blocking requirements. Requires FCC rules to provide performance standards for such blocking technology and to update such standards as new video technology is developed.

Title VI: National Education Technology Funding Corporation - National Education Technology Funding Corporation Act of 1995 - Recognizes the National Education Technology Funding Corporation as a nonprofit corporation independent of the Federal Government and operating under the laws of the District of Columbia. Authorizes the Corporation to receive discretionary grants, contracts, gifts, contributions, or technical assistance from any Federal department or agency.

(Sec. 605) Requires audits of the Corporation by independent certified public accountants. Provides reporting and recordkeeping requirements. Requires the accessibility of Corporation books for audit and examination. Directs the Corporation to report annually to the President and the Congress on operations and activities of the previous fiscal year. Requires

Corporation members to be available to testify before the Congress concerning such operations and activities.

Title VII: Miscellaneous Provisions - Amends the Act to state that certain competitive bidding requirements of the Act shall not apply to licenses or construction permits issued by the FCC for public safety radio services or for licenses or construction permits for new terrestrial digital television services assigned by the FCC to existing terrestrial broadcasting licensees to replace their current television licenses. Extends through FY 2000 the authority of the FCC to grant such licenses or permits.

Amends the National Telecommunications and Information Administration (NTIA) Act to authorize any Federal entity which operates a Government station to accept reimbursement from any person for the costs of relocating the operations of such stations from one or more radio spectrum frequencies to any other frequency. Authorizes any person seeking to relocate a Government station that has been assigned a frequency of mixed Federal and non-Federal use to petition the NTIA for such relocation. Provides relocation requirements. Allows such a relocated station up to one year to reclaim its former station if it finds the new facilities or spectrum (radio frequency) to be inferior. Provides for the expedited transfer to Federal spectrum use of a station currently on a mixed Federal and non-Federal spectrum or the consolidation of its spectrum use with other Government stations in a manner that maximizes the spectrum available for non-Federal use. Directs the