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CALLS Analysis

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Calls Model

This study compares access rates and revenues under the current rules (BASE CASE) with access rates and revenues that would occur under the Coalition for Affordable Local and Long Distance Service (CALLS) plan. The estimates utilize the Delphi-based programs and the spreadsheet quantity estimator discussed below. The analysis was performed individually for each of 70 Tariff Review Plan (TRP) areas.¹ Inputs reflect the January 1, 2000 access changes as well as current universal service funding levels. The CALLS plan implemented in the code is based on the version released on March 8, 2000 by DA 00-533. Appendix A lists the assumptions made to resolve ambiguities in the March 8 version of CALLS.

The central effort was the development of two special purpose tools. The first tool is an access rate calculator. Starting with historic information on rates, revenues, lines and minutes in each TRP area, this tool calculates the prices of dozens of access rate elements for each area. These individual “rate elements” were then combined into the eight broader aggregates summarized in the graphs and appendixes.² This calculator was constructed using Delphi-based programming. The calculator generates a different set of access prices for each alternative set of access charge rules.³

The second tool is a growth module. This is a Lotus spreadsheet that incorporates information on demand elasticities, universal service requirements and historical growth rates. This growth module is used to estimate how future demand levels will change as a result of access rate changes. Appendix B details the assumptions used in this spreadsheet.

Using these two tools to estimate changes over time requires a series of iterations. The results of the rate calculator are used in the growth module to estimate demand levels for the subsequent period. The resulting demand levels, in turn, are fed back into the calculator to determine the access rates for the next period. This process is repeated until the end of the study period. Combined, the tools are a cumbersome model that allows us to compare scenarios over a five-year period.

In many instances, existing rules allow carriers considerable flexibility in setting their access charges. Carriers may choose to calculate most rates using data for

¹The carriers subject to price cap regulations are allowed to file either by study area or by groups of study areas. The filings are called Tariff Review Plans (TRPs). Approximately 94% of the nation’s local telephone lines are in the 70 TRP areas covered in this analysis.

²The resulting aggregates are the Primary and Single Line Business Subscriber Line Charge (SLC); the Non-Primary SLC; the Multiline Business SLC; the Primary and Single Line Business Presubscribed Interexchange Carrier Charge (PICC); Non-Primary PICC; Multiline Business PICC; Total Charge per Originating Access Minute; and Total Charge per Terminating Access Minute.

³In actuality, the CALLS proposal is substantially different from existing access charge rules. Therefore, it was more efficient to develop two access calculators--one for analyzing the CALLS proposal and one to analyze the BASE CASE.

individual study areas or pooled for broad groupings of study areas. Thus, carriers evaluate many permutations of choices to maximize their potential profitability. As a result, for example, Bell Atlantic chooses to charge separate Subscriber Line Charge (SLC) rates for each of its Bell Atlantic South study areas, uniform SLC rates for each of its Bell Atlantic North study areas, and uniform Presubscribed Interexchange Carrier Charge (PICC) rates for all of its study areas. Carriers would continue to have flexibility under the CALLS rules.

While existing rules require some calculations to be made at the study area level, carriers are not required to file with the Commission all information underlying their calculations. This means that we had to construct models at the TRP level rather than at the more detailed state or study area level. We also are unable to evaluate the relative profitability of, or possible marketing strategies underlying, various choices carriers might make. These factors have required us to adopt a number of standardized interpretations of rules to limit the actual choices available. Similarly, these factors required us to assume that carriers rates of return would remain above 10.25%.rate that triggers the low end adjustment mechanism.

Access Scenarios

“BASE CASE”

The first scenario is termed the BASE CASE. It assumes that the annual productivity factor (“X Factor”) of 6.5 percent would remain in place. No changes are made in access rules except that, because of a recent court order,⁴ Universal Service Fund (USF) contributions are based only on interstate revenues.⁵

"CALLS"

The CALLS Coalition proposes a significant departure from the existing access rules for major carriers that are currently under price cap regulation rather than traditional rate of return regulation.⁶ In general, the plan increases fixed monthly charges for

⁴ *Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999).

⁵ Carriers may use other strategies to recover their USF responsibilities. All scenarios assume that LECs will recover contributions associated with subscriber line charges (SLCs) through percentage surcharges on end users. All scenarios also assume that toll carriers will recover contributions associated with toll charges through percentage surcharges on toll rates and that they will recover PICC charges through flat-rated PICC pass-through charges.

⁶ Under the CALLS proposal, some LECs could elect to remain under the existing price cap rules. The analytical effort in this study, however, applies the CALLS plan to all price cap carriers. In addition, some carriers will be eligible for the small rural carrier safeguard and the transitional safeguard for carriers with above average reductions in cost. based upon CCB-CPD discussions with the CALLS coalition See

primary residential and single line business access lines, but reduces fixed monthly charges for non-primary residential and multiline business access lines.⁷ At the same time, it reduces per minute charges. Under current rules, productivity improvements result in lower access charges. Under the CALLS plan, productivity offsets would be eliminated once the phase in of other proposed changes was completed. Finally, the CALLS plan employs a new Universal Service Fund Access payment of \$650 million per year to be redistributed among participating carriers⁸. The CALLS plan also would increase universal service outlays because the lifeline program benefits automatically would increase to match increases in the federal subscriber line charge.

Growth

The CALLS proposal was accompanied by 5-year projections. CALLS has not provided the underlying data and the formulas used to make these projections. It is clear, however, that the projections are based on the assumption that there will be no change in the number of lines or minutes provided by the ILECs. This "no growth" assumption is useful for highlighting mechanics of plans without considering changes that occur because of relative changes in the demand for service by region or by access rate element. Growth, however, has a tremendous impact on the level of access revenues and carrier profits that should be anticipated under the various scenarios.

The demand module uses trend growth rates along with information on base period rates to calculate percentage changes in local and toll rates for residential and business customers. Calculations by TRP area are made to determine how changes in SLCs, PICC pass-through charges, access reductions, and changes in universal service surcharges would translate to percentage changes in local and toll charges to end users. These percentage changes are compared with trend rate changes. Changes relative to the trend are combined with elasticity of demand information to estimate changes in quantities, again, relative to trend changes. For example, a reduction in local rates would tend to increase the number of primary residential lines. This, in turn, would tend to increase the number of toll minutes. Toll rates declining faster than the trend would also tend to increase minutes. New quantities are translated to key growth rates in lines and minutes, which are then used by the access rate calculators to determine access rates for the next period. The process is repeated until rates and quantities are projected through the end of the study period.

Appendix A. Access rates under CALLS would be higher if additional carriers qualified for these safeguards.

⁷ The fixed monthly charges consist of subscriber line charges (SLCs) and presubscribed interexchange carrier charges (PICCs). While the CALLS plan immediately eliminates residential PICCs and reduces the industry Multiline Business PICC cap, it raises the industry caps on residential SLCs. The CALLS plan calls for an immediate freeze on the Multiline Business industry SLC cap.

⁸ As discussed in Appendix A, we distributed the \$650 million by carrier based on the actual distributions shown in the spreadsheet associated with the original CALLS proposal. We distributed carrier amounts to the TRP level based on January 1, 2000 common line revenues. We use this distribution for all periods in the model. The \$650 million is funded by increasing the universal service contribution factor.

Figures and Appendixes

Chart 1 shows SLCs as a percentage of price cap LEC access revenues for 1984 through 1998, and projections based on the models. Chart 2 shows similar information for PICC charges and Chart 3 shows SLCs and PICCs combined. Graphs 1 through 27 present detailed comparisons of revenue, rates and usage under CALLS and the BASE CASE. Where amounts are discounted to the present, 11.25% was used as the discount rate because it is the authorized rate of return for price cap LEC interstate services. Appendix A summarizes assumptions made in modeling the CALLS proposal. Appendix B provides the assumptions that underlie the spreadsheet growth module. Appendix C shows estimates of the cost of telephone service for residential customers with different levels of assumed usage. Appendix D shows revenue estimates for individual carriers. Appendix E shows projected access rates by TRP for each July.

The five-year projections shown in the graphs and tables are solely intended to compare scenarios under a common set of assumptions. The results for future years should not in any way be taken as forecasts. No attempt has been made to assess how major structural changes in the industry might play out. Indeed, if local competition develops rapidly, market forces could lead to major changes in how both local and toll carriers price services.

Charts and Graphs

Chart 1: SLC Revenues as a Percentage of LEC Interstate Access Revenues *

| | Statistics of Communications Common Carriers | | | Base Case | | | CALLS | | |
|-----------|--|---------------------------|-------------|----------------------------|-------------------------|-------------|----------------------------|-------------------------|-------------|
| | Total Interstate Access Revenues | Interstate SLC * Revenues | Percent SLC | Interstate Access Revenues | Interstate SLC Revenues | Percent SLC | Interstate Access Revenues | Interstate SLC Revenues | Percent SLC |
| 1984 | \$15.1 | \$0.7 | 5% | | | | | | |
| 1985 | \$17.4 | \$1.8 | 10% | | | | | | |
| 1986 | \$18.7 | \$2.9 | 15% | | | | | | |
| 1987 | \$18.9 | \$3.7 | 20% | | | | | | |
| 1988 | \$19.5 | \$4.3 | 22% | | | | | | |
| 1989 | \$19.4 | \$5.3 | 27% | | | | | | |
| 1990 | \$19.2 | \$5.7 | 29% | | | | | | |
| 1991 | \$19.3 | \$5.9 | 30% | | | | | | |
| 1992 | \$19.8 | \$6.0 | 31% | | | | | | |
| 1993 | \$20.4 | \$6.4 | 31% | | | | | | |
| 1994 | \$21.4 | \$6.8 | 32% | | | | | | |
| 1995 | \$22.2 | \$7.1 | 32% | | | | | | |
| 1996 | \$23.3 | \$7.3 | 31% | | | | | | |
| 1997 | \$24.0 | \$7.7 | 32% | | | | | | |
| 1998 | \$25.4 | \$9.5 | 37% | | | | | | |
| 1999-2000 | | | | \$26.3 | \$10.1 | 38% | \$26.3 | \$10.1 | 38% |
| 2000-2001 | | | | \$25.3 | \$10.6 | 42% | \$24.6 | \$11.0 | 45% |
| 2001-2002 | | | | \$25.4 | \$10.8 | 42% | \$24.8 | \$12.2 | 49% |
| 2002-2003 | | | | \$25.6 | \$11.1 | 43% | \$25.5 | \$13.7 | 54% |
| 2003-2004 | | | | \$25.8 | \$11.5 | 45% | \$26.4 | \$14.7 | 56% |
| 2004-2005 | | | | \$26.0 | \$11.9 | 46% | \$27.7 | \$15.5 | 56% |

* SLC revenues for 1984 through 1998 are based on interstate end-user revenue reported by large incumbent local exchange carriers (ILECs), initially in FCC Form M and then in FCC ARMIS reports. In 1998, a minority of carriers reported PICC revenues in the end-user category. Carriers whose data are contained in the SOCC represent about 94% of the industry and roughly equate to the carriers subject to price caps and covered by this study. July 1999 through June 2000 estimates were based on model calculations.

Chart 2: PICC Revenues as a Percentage of LEC Interstate Access Revenues

| | Statistics of Communications Common Carriers | | | Base Case | | | CALLS | | |
|-----------|--|------------------|-----------------|----------------------------------|------------------|-----------------|----------------------------------|------------------|-----------------|
| | Total Interstate Access Revenues | PICC Revenues | Percent PICC | Interstate Access Revenues | PICC Revenues | Percent PICC | Interstate Access Revenues | PICC Revenues | Percent PICC |
| 1984 | \$15.1 | \$0.0 | 0% | | | | | | |
| 1985 | \$17.4 | \$0.0 | 0% | | | | | | |
| 1986 | \$18.7 | \$0.0 | 0% | | | | | | |
| 1987 | \$18.9 | \$0.0 | 0% | | | | | | |
| 1988 | \$19.5 | \$0.0 | 0% | | | | | | |
| 1989 | \$19.4 | \$0.0 | 0% | | | | | | |
| 1990 | \$19.2 | \$0.0 | 0% | | | | | | |
| 1991 | \$19.3 | \$0.0 | 0% | | | | | | |
| 1992 | \$19.8 | \$0.0 | 0% | | | | | | |
| 1993 | \$20.4 | \$0.0 | 0% | | | | | | |
| 1994 | \$21.4 | \$0.0 | 0% | | | | | | |
| 1995 | \$22.2 | \$0.0 | 0% | | | | | | |
| 1996 | \$23.3 | \$0.0 | 0% | | | | | | |
| 1997 | \$24.0 | \$0.0 | 0% | | | | | | |
| 1998 | \$25.4 | \$2.0 | 8% | | | | | | |
| 1999-2000 | | | | \$26.3 | \$2.7 | 10% | \$26.3 | \$2.7 | 10% |
| 2000-2001 | | | | \$25.3 | \$2.3 | 9% | \$24.6 | \$1.5 | 6% |
| 2001-2002 | | | | \$25.4 | \$2.3 | 9% | \$24.8 | \$1.1 | 4% |
| 2002-2003 | | | | \$25.6 | \$2.2 | 8% | \$25.5 | \$0.4 | 1% |
| 2003-2004 | | | | \$25.8 | \$1.9 | 7% | \$26.4 | \$0.2 | 1% |
| 2004-2005 | | | | \$26.0 | \$1.7 | 7% | \$27.7 | \$0.2 | 1% |

**Chart 3: Revenue Collected on a Per line Basis (SLC + PICC)
as a Percentage of LEC Interstate Access Revenues**

| | Statistics of Communications Common Carriers | | | Base Case | | | CALLS | | |
|-----------|--|--------|-------------|-----------|--------|-------------|----------|--------|-------------|
| | Revenues | Access | Line Access | Revenues | Access | Line Access | Revenues | Access | Line Access |
| 1984 | \$15.1 | \$0.7 | 5% | | | | | | |
| 1985 | \$17.4 | \$1.8 | 10% | | | | | | |
| 1986 | \$18.7 | \$2.9 | 15% | | | | | | |
| 1987 | \$18.9 | \$3.7 | 20% | | | | | | |
| 1988 | \$19.5 | \$4.3 | 22% | | | | | | |
| 1989 | \$19.4 | \$5.3 | 27% | | | | | | |
| 1990 | \$19.2 | \$5.7 | 29% | | | | | | |
| 1991 | \$19.3 | \$5.9 | 30% | | | | | | |
| 1992 | \$19.8 | \$6.0 | 31% | | | | | | |
| 1993 | \$20.4 | \$6.4 | 31% | | | | | | |
| 1994 | \$21.4 | \$6.8 | 32% | | | | | | |
| 1995 | \$22.2 | \$7.1 | 32% | | | | | | |
| 1996 | \$23.3 | \$7.3 | 31% | | | | | | |
| 1997 | \$24.0 | \$7.7 | 32% | | | | | | |
| 1998 | \$25.4 | \$11.5 | 45% | | | | | | |
| 1999-2000 | | | | \$26.3 | \$12.8 | 49% | \$26.3 | \$12.8 | 49% |
| 2000-2001 | | | | \$25.3 | \$12.9 | 51% | \$24.6 | \$12.5 | 51% |
| 2001-2002 | | | | \$25.4 | \$13.1 | 52% | \$24.8 | \$13.3 | 54% |
| 2002-2003 | | | | \$25.6 | \$13.3 | 52% | \$25.5 | \$14.1 | 55% |
| 2003-2004 | | | | \$25.8 | \$13.4 | 52% | \$26.4 | \$14.9 | 56% |
| 2004-2005 | | | | \$26.0 | \$13.6 | 52% | \$27.7 | \$15.7 | 57% |

Graph 1

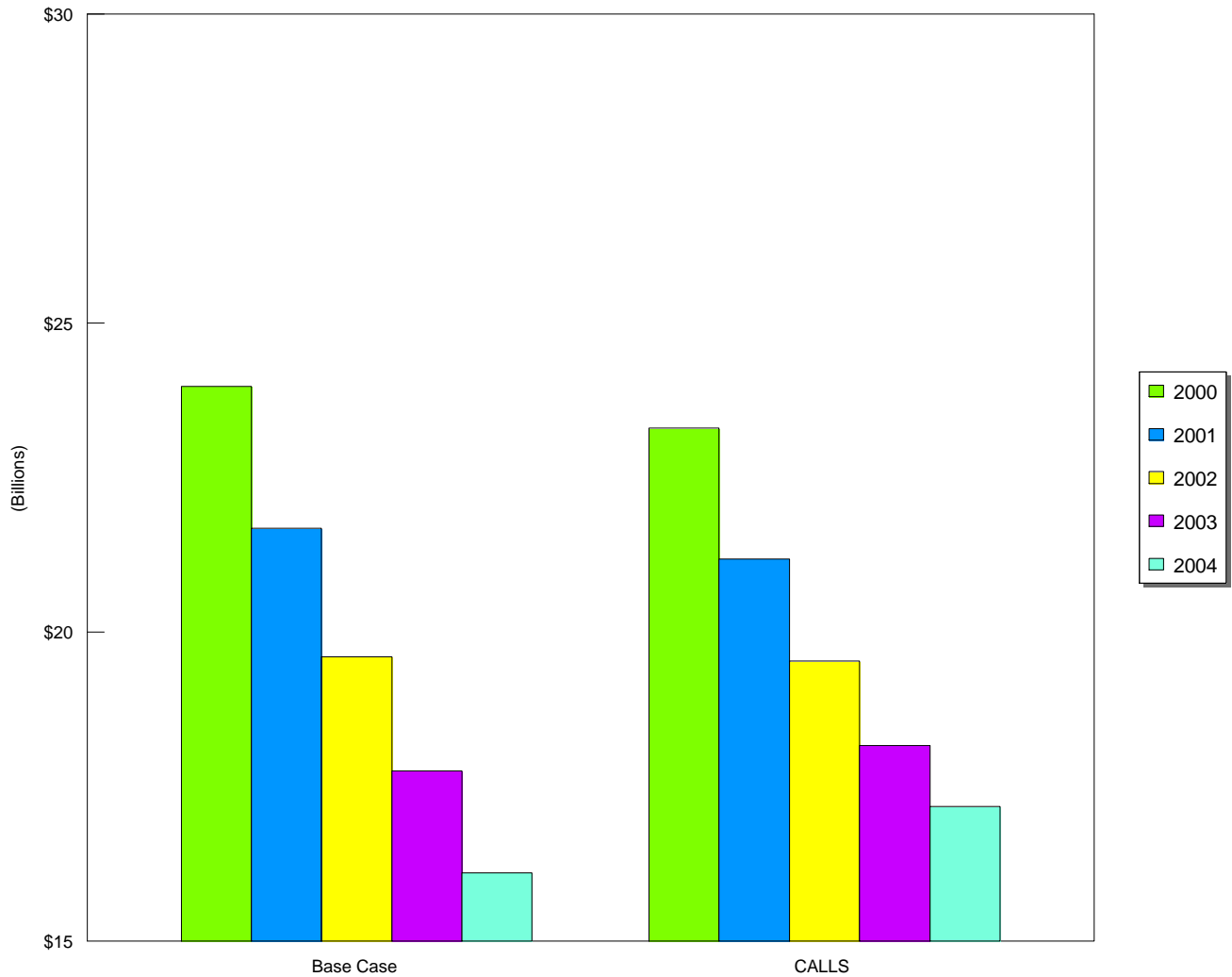
Total Access Revenue for Price Cap Carriers *
Discounted Present Values **

Graph 1

| | July 2000 to June 2001 (billions) | July 2001 to June 2002 (billions) | July 2002 to June 2003 (billions) | July 2003 to June 2004 (billions) | July 2004 to June 2005 (billions) | Total Present Value |
|-----------|---|---|---|---|---|---------------------------|
| Base Case | \$24.0 | \$21.7 | \$19.6 | \$17.8 | \$16.1 | \$99.1 |
| CALLS | \$23.3 | \$21.2 | \$19.5 | \$18.2 | \$17.2 | \$99.4 |

* CALLS totals include the proposed Access-USF payments, at \$650 million per year. All figures assume that no LEC qualifies for exogenous rate increases that can occur when the interstate rate of return falls below 10.25%.

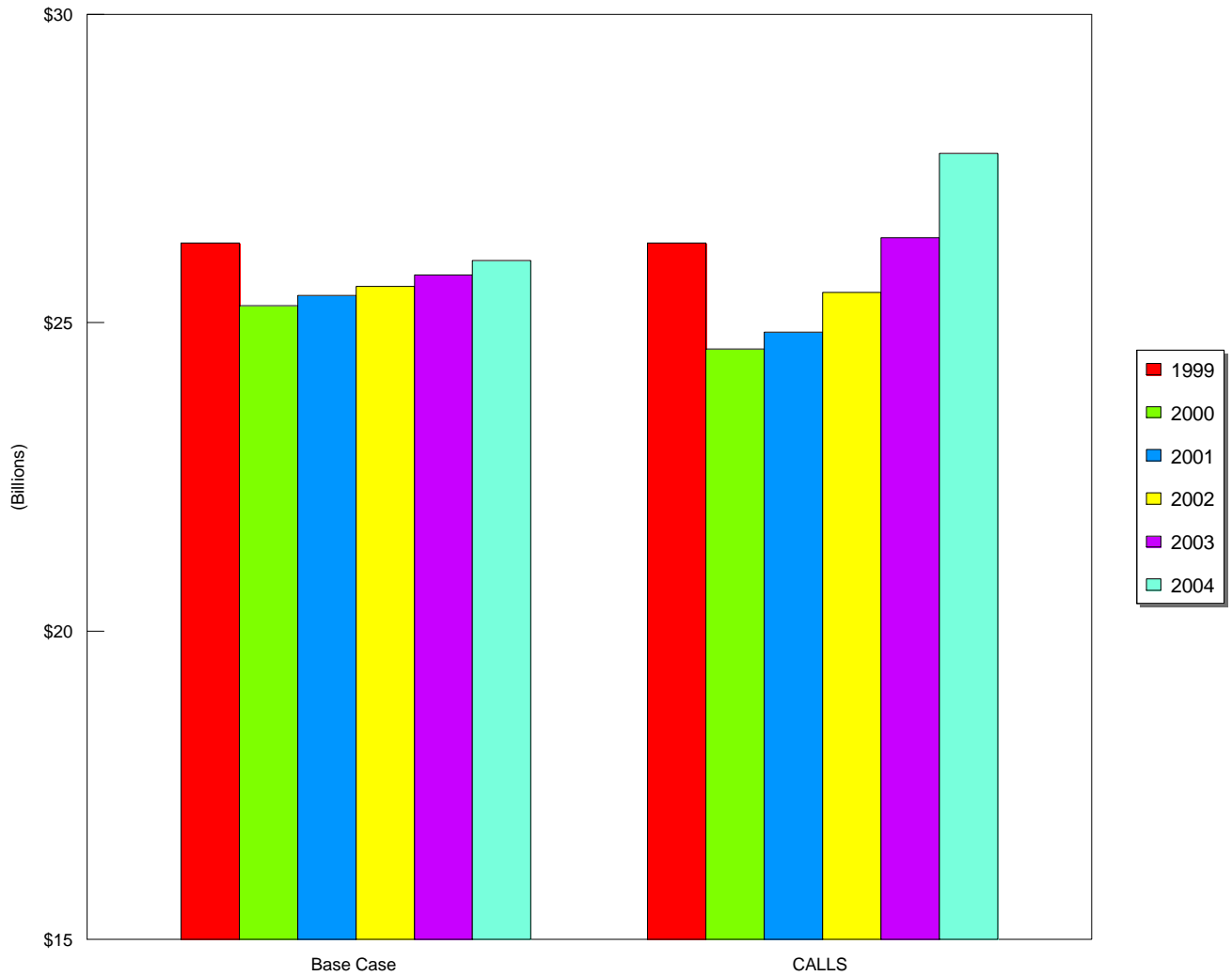
** Figures shown discounted to July 1, 2000 with an annual discount rate of 11.25%.



Total Access Revenue for Price Cap Carriers

| July 1999 to June 2000 (billions) \$26.3 | July 2000 to June 2001 (billions) | July 2001 to June 2002 (billions) | July 2002 to June 2003 (billions) | July 2003 to June 2004 (billions) | July 2004 to June 2005 (billions) | Total |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---------|
| Base Case | \$25.3 | \$25.4 | \$25.6 | \$25.8 | \$26.0 | \$128.1 |
| CALLS | \$24.6 | \$24.8 | \$25.5 | \$26.4 | \$27.7 | \$129.1 |

* CALLS totals include the proposed Access-USF payments, at \$650 million per year. All figures assume that no LEC qualifies for exogenous rate increases that can occur when the interstate rate of return falls below 10.25%.



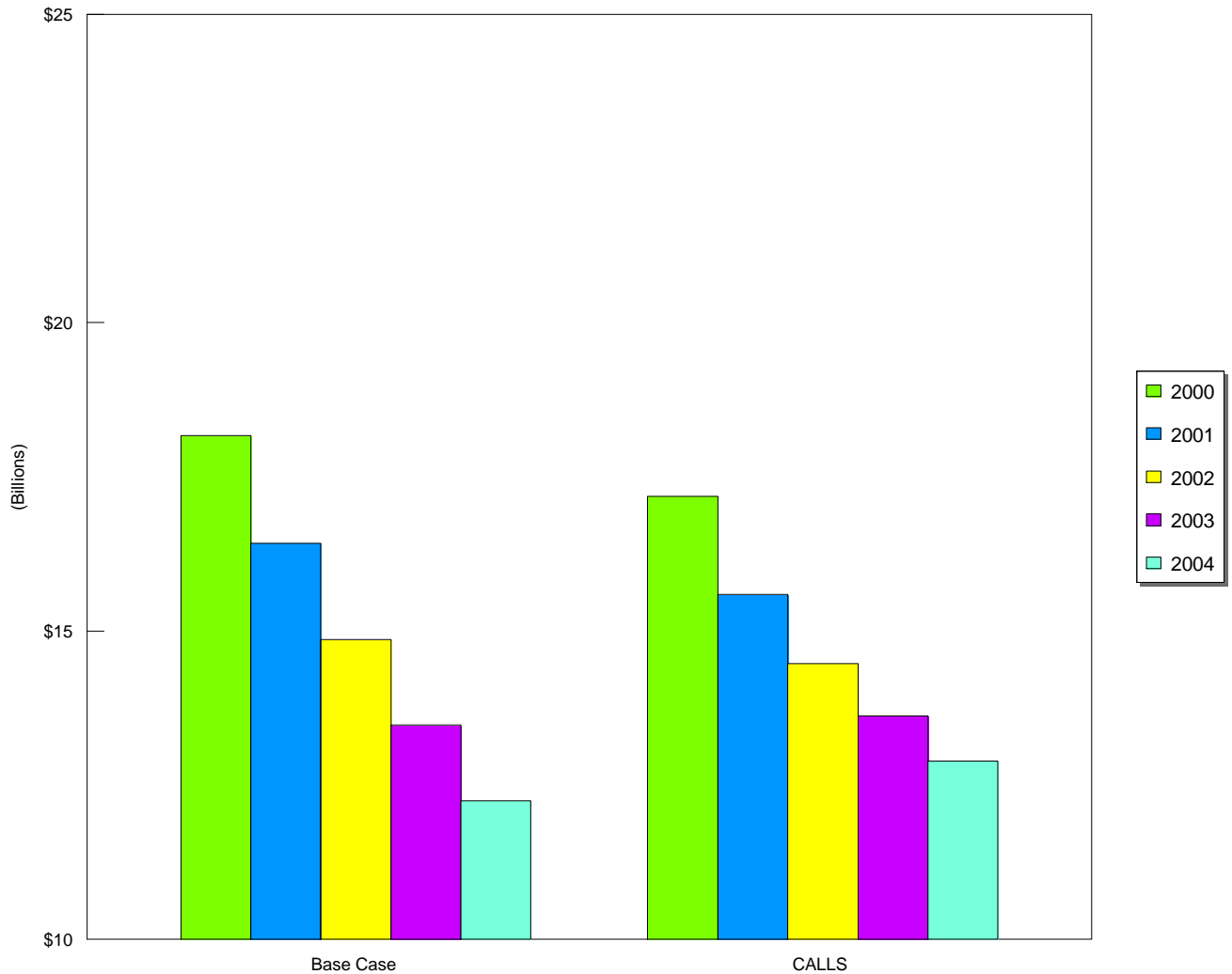
Total Switched Access Revenue for Price Cap Carriers

Discounted Present Values **

| | July 2000 to June 2001 (billions) | July 2001 to June 2002 (billions) | July 2002 to June 2003 (billions) | July 2003 to June 2004 (billions) | July 2004 to June 2005 (billions) | Total Present Value |
|-----------|---|---|---|---|---|---------------------------|
| Base Case | \$18.2 | \$16.4 | \$14.9 | \$13.5 | \$12.2 | \$75.2 |
| CALLS | \$17.2 | \$15.6 | \$14.5 | \$13.6 | \$12.9 | \$73.8 |

* CALLS totals include the proposed Access-USF payments, at \$650 million per year. All figures assume that no LEC qualifies for exogenous rate increases that can occur when the interstate rate of return falls below 10.25%.

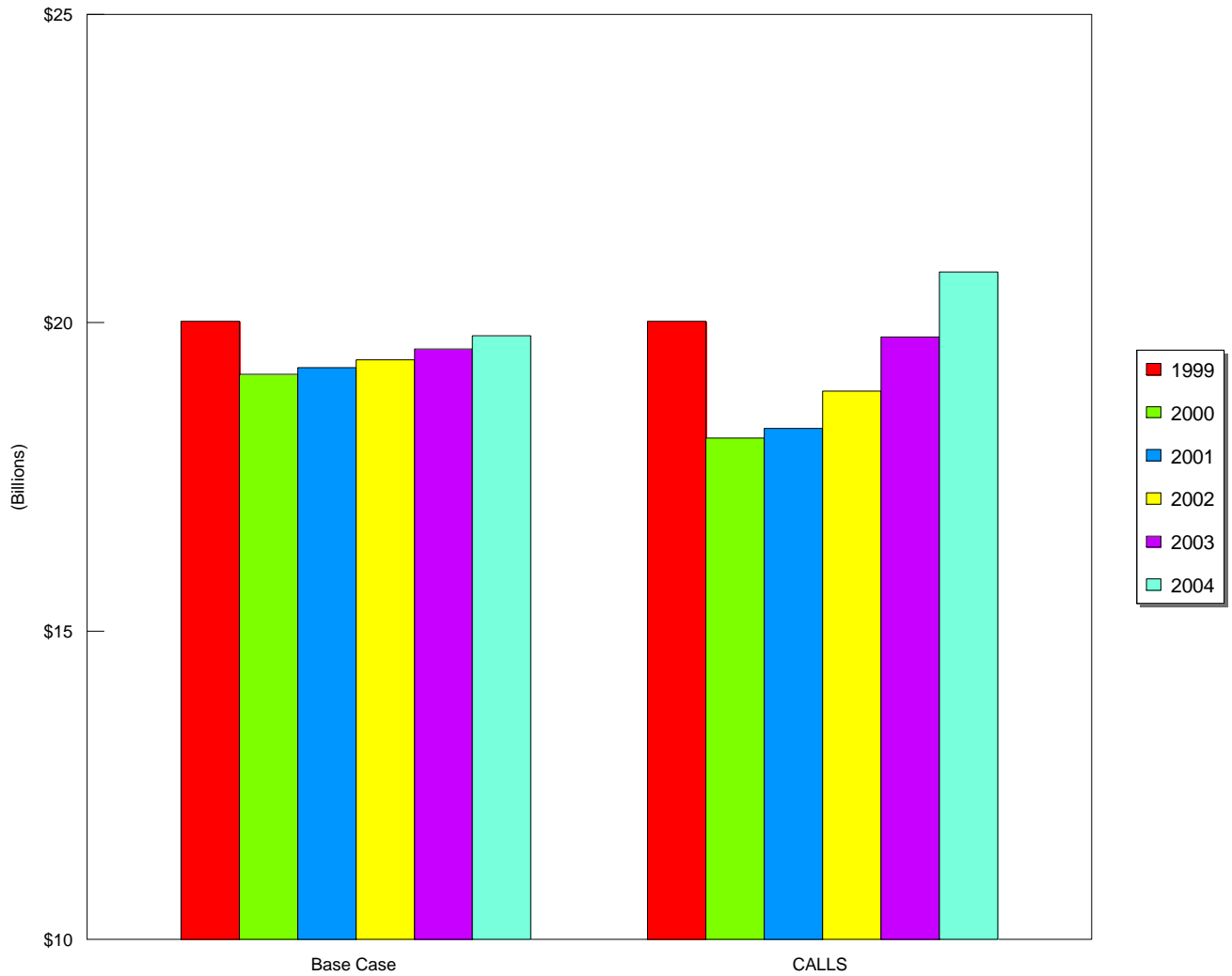
** Figures shown discounted to July 1, 2000 with an annual discount rate of 10.25%.



Total Switched Access Revenue for Price Cap Carriers

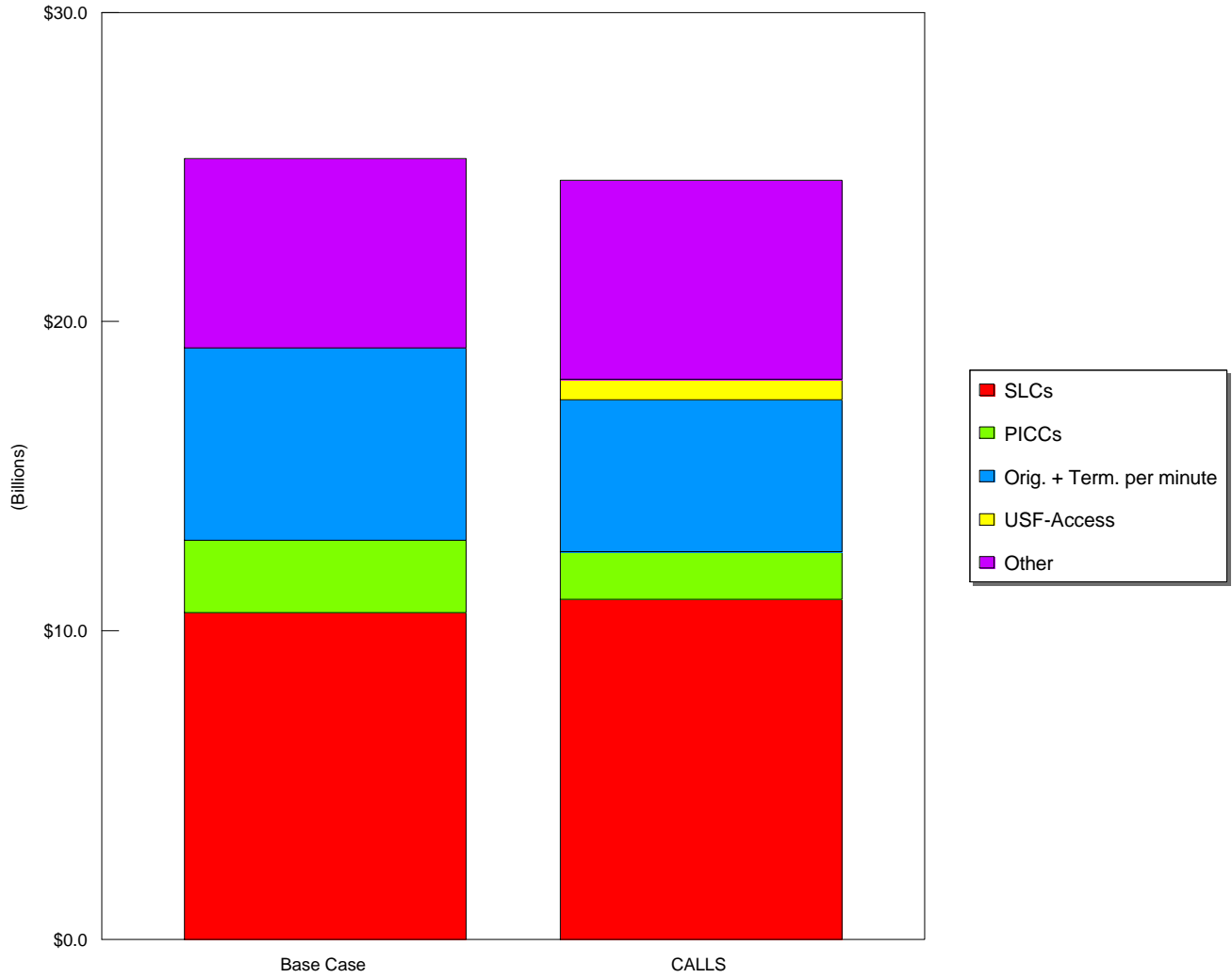
| July 1999 to June 2000 (billions) \$20.0 | July 2000 to June 2001 (billions) | July 2001 to June 2002 (billions) | July 2002 to June 2003 (billions) | July 2003 to June 2004 (billions) | July 2004 to June 2005 (billions) | Total |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------|
| Base Case | \$19.2 | \$19.3 | \$19.4 | \$19.6 | \$19.8 | \$97.2 |
| CALLS | \$18.1 | \$18.3 | \$18.9 | \$19.8 | \$20.8 | \$95.9 |

* CALLS totals include the proposed Access-USF payments, at \$650 million per year. All figures assume that no LEC qualifies for exogenous rate increases that can occur when the interstate rate of return falls below 10.25%.



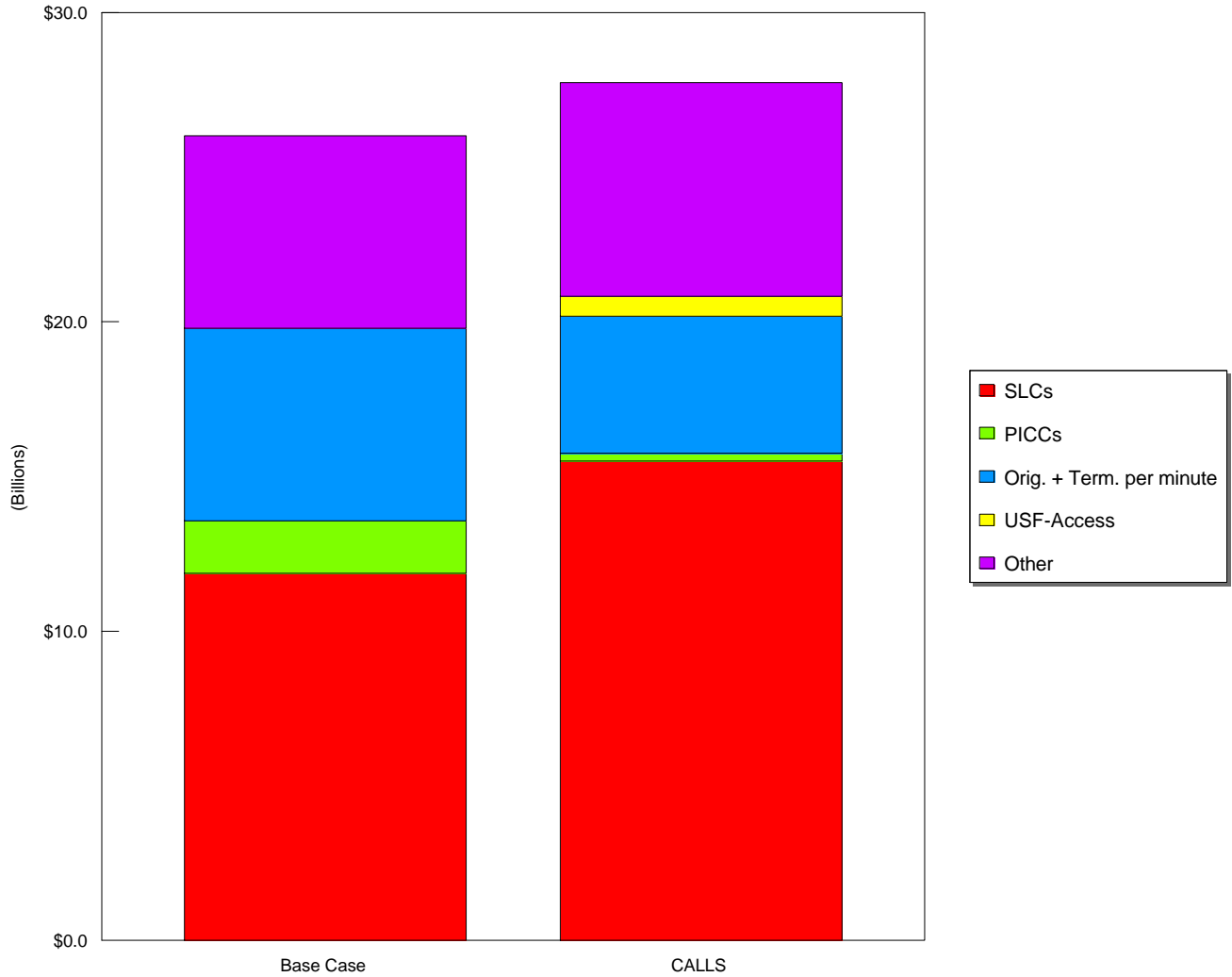
**Components of LEC Access Revenue: July 2000 to June 2001
(\$ Billions)**

| Plan | SLCs | PICCs | Orig. + Term. | USF - Access | Other | Total |
|-----------|--------|-------|---------------|--------------|-------|--------|
| Base Case | \$10.6 | \$2.3 | \$6.2 | \$0.0 | \$6.1 | \$25.3 |
| CALLS | \$11.0 | \$1.5 | \$4.9 | \$0.7 | \$6.5 | \$24.6 |



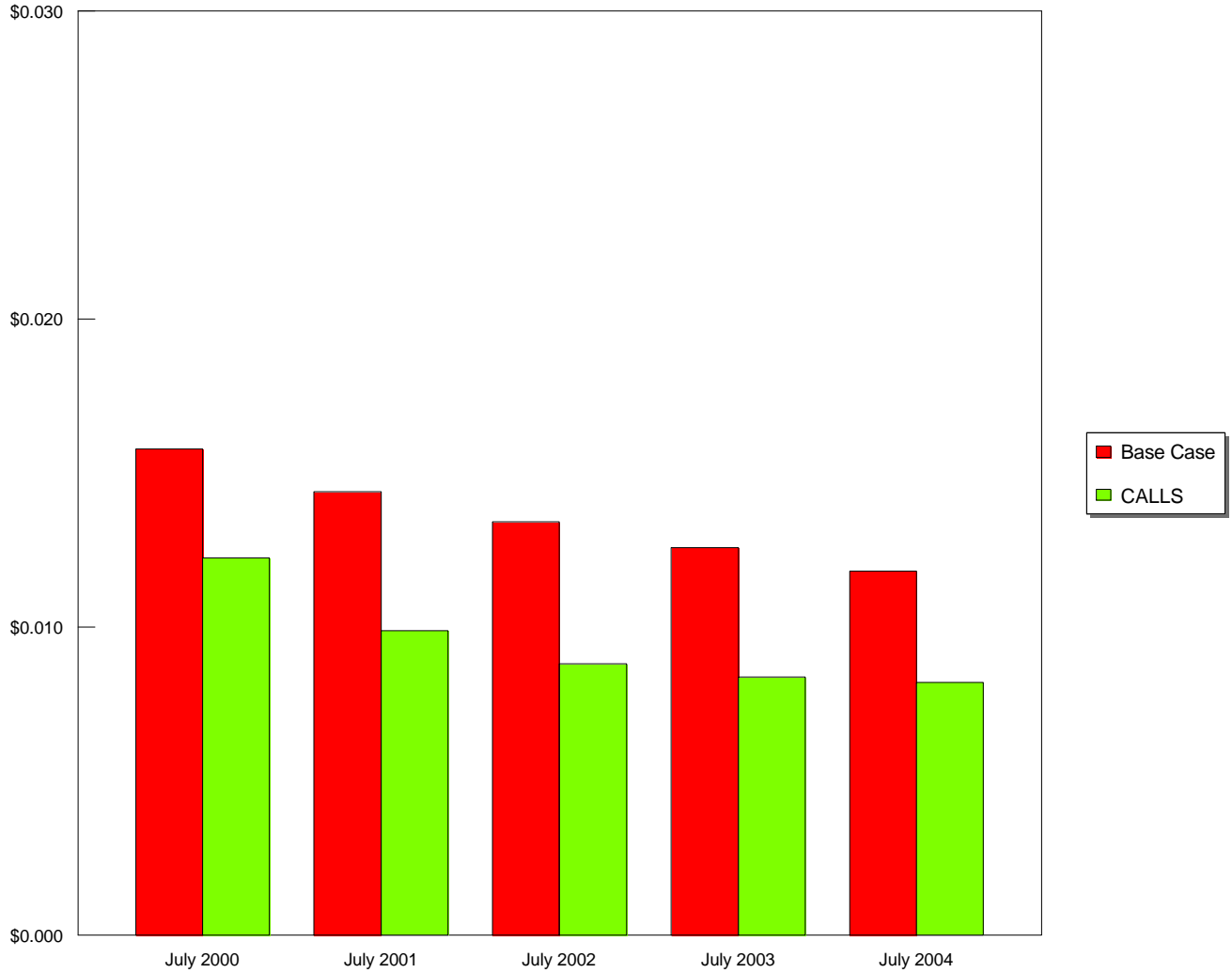
**Components of LEC Access Revenue: July 2004 to June 2005
(\$ Billions)**

| Plan | SLCs | PICCs | Orig. + Term. | USF - Access | Other | Total |
|-----------|--------|-------|---------------|--------------|-------|--------|
| Base Case | \$11.9 | \$1.7 | \$6.2 | \$0.0 | \$6.2 | \$26.0 |
| CALLS | \$15.5 | \$0.2 | \$4.4 | \$0.7 | \$6.9 | \$27.7 |



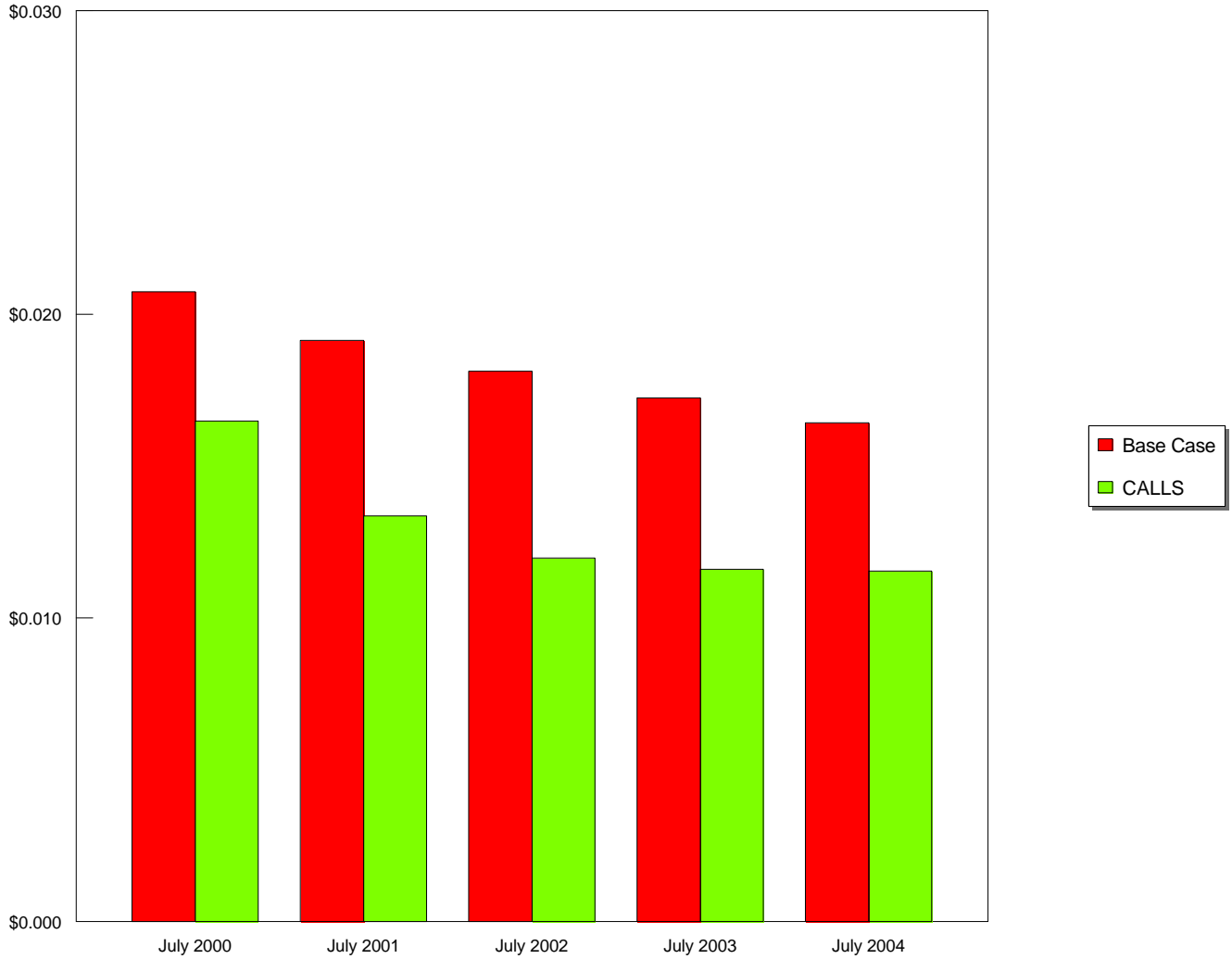
Originating & Terminating Access Charge For an Average Interstate & International Toll Minute

| Plan | July 1999 \$0.0186 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$0.0158 | \$0.0144 | \$0.0134 | \$0.0126 | \$0.0118 |
| CALLS | | \$0.0123 | \$0.0099 | \$0.0088 | \$0.0084 | \$0.0082 |



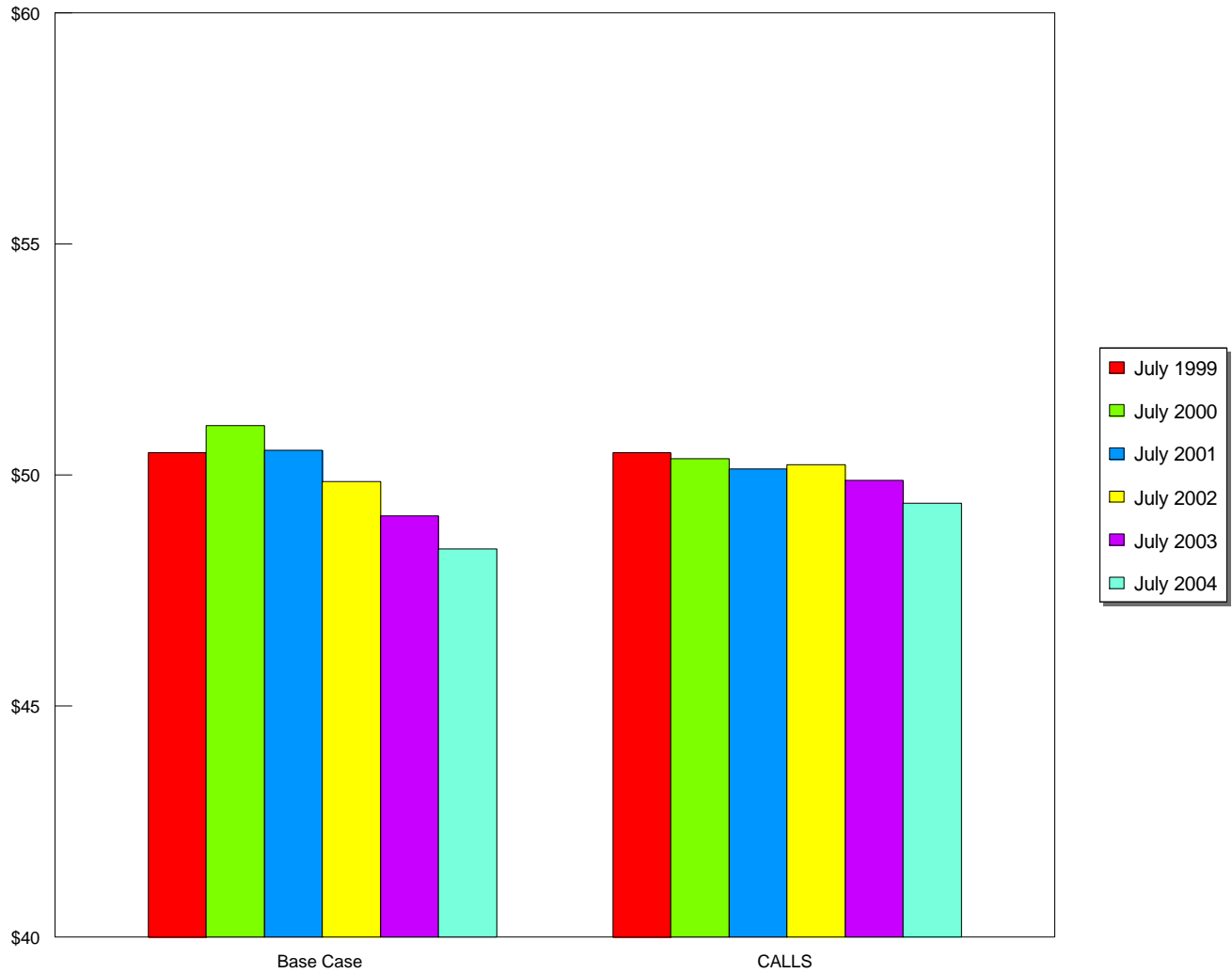
Originating & Terminating Access Charge for a Two-ended Interstate Toll Minute

| Plan | July 1999 \$0.0245 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$0.0207 | \$0.0191 | \$0.0181 | \$0.0172 | \$0.0164 |
| CALLS | | \$0.0165 | \$0.0134 | \$0.0120 | \$0.0116 | \$0.0115 |



Residential Customers With One Line: Average Monthly Bill

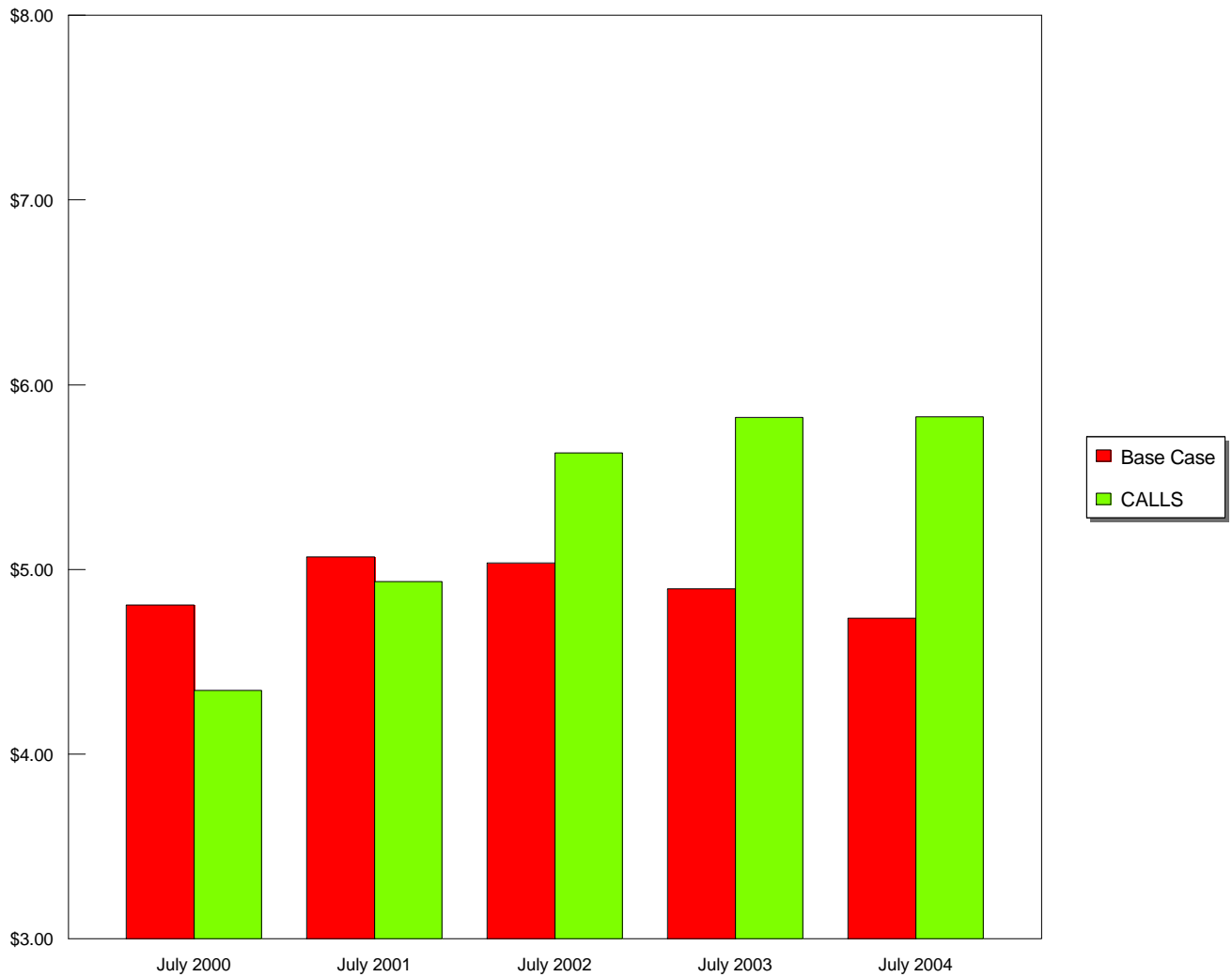
| Plan | July 1999 \$50.88 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$51.07 | \$50.54 | \$49.86 | \$49.12 | \$48.41 |
| CALLS | | \$50.35 | \$50.14 | \$50.23 | \$49.89 | \$49.39 |



LEC Per-Line Access Revenue * for a Primary Residential Line

| Plan | July 1999 \$4.45 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$4.81 | \$5.07 | \$5.04 | \$4.90 | \$4.73 |
| CALLS | | \$4.35 | \$4.93 | \$5.63 | \$5.82 | \$5.83 |

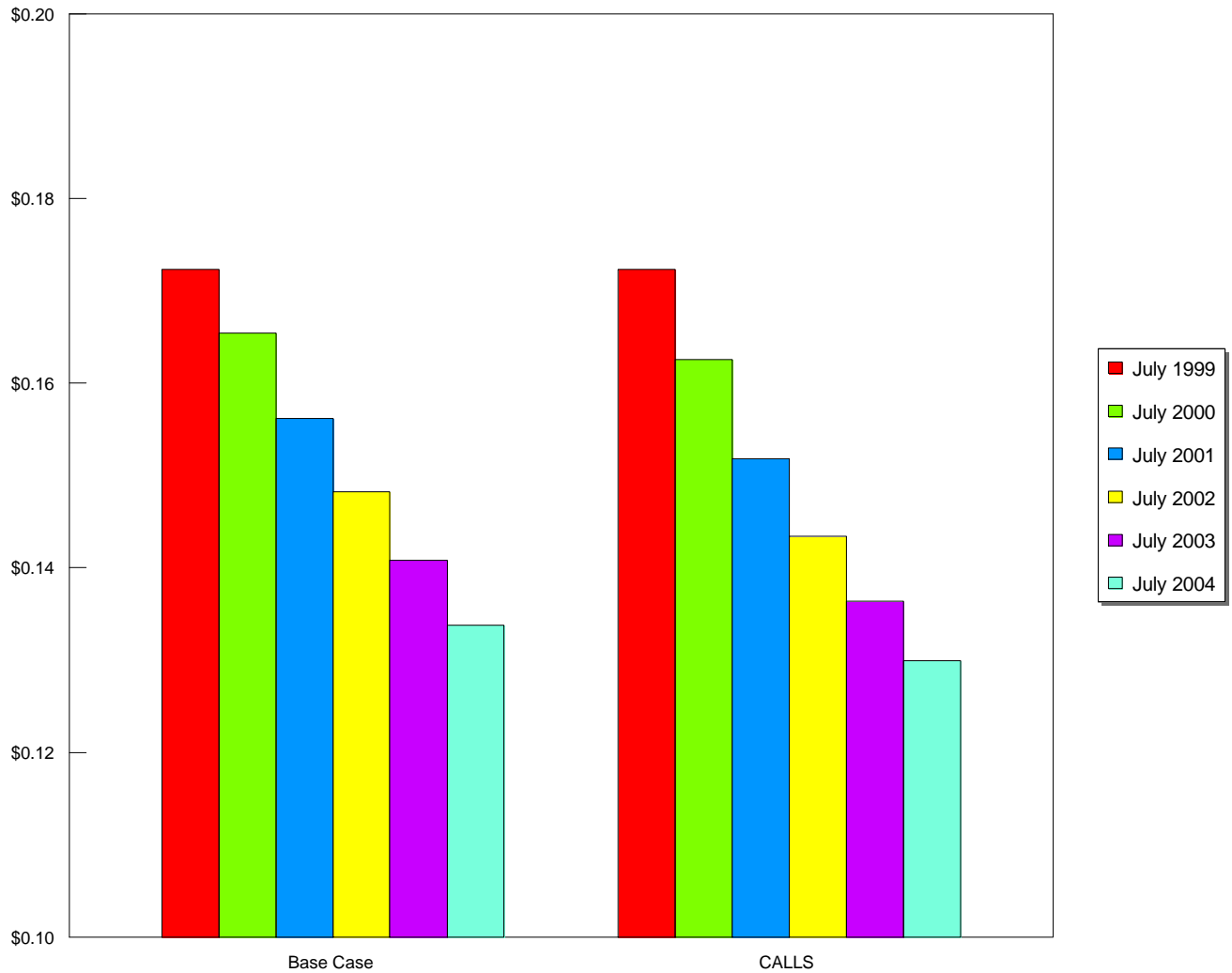
* Figures represent the sum of the primary line SLC (charged to end users) and the primary line PICC charge (charged to carriers). Most residential customers pay IXC PICC pass-through charges on an account basis rather than on a per-line basis. The amount shown in Graph 10 is the amount the LEC charges to the IXC and not the amount actually charged to customers. The latter is shown in Graph 12



Toll Prices Per Minute * for Residential Customers

| Plan | July 1999 \$0.172 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$0.165 | \$0.156 | \$0.148 | \$0.141 | \$0.134 |
| CALLS | | \$0.163 | \$0.152 | \$0.143 | \$0.136 | \$0.130 |

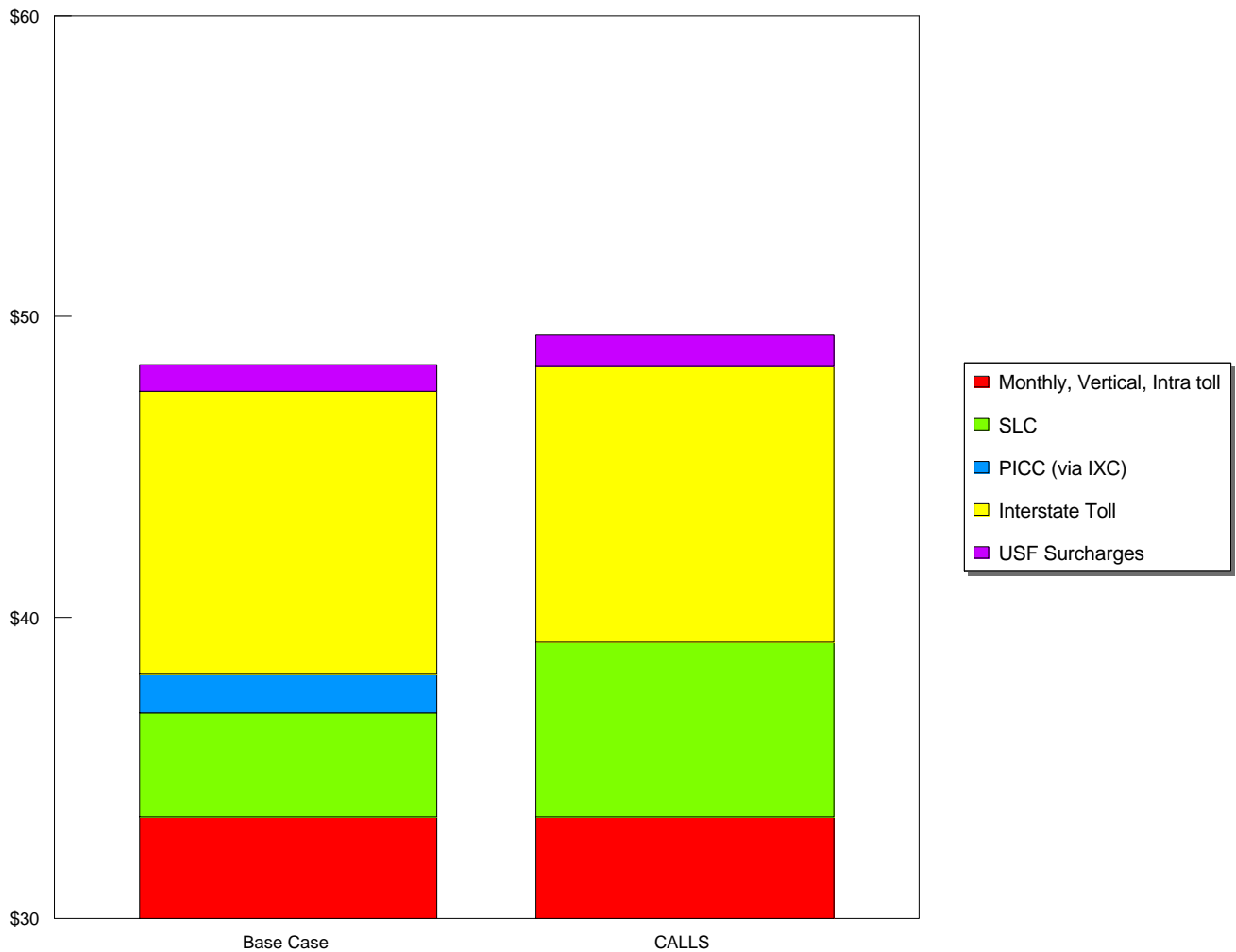
* The amounts shown represent average revenue per minute, including all IXC charges except PICC pass-through and USF surcharges.



Components of Monthly Bill -- Single Line Residential July 2004

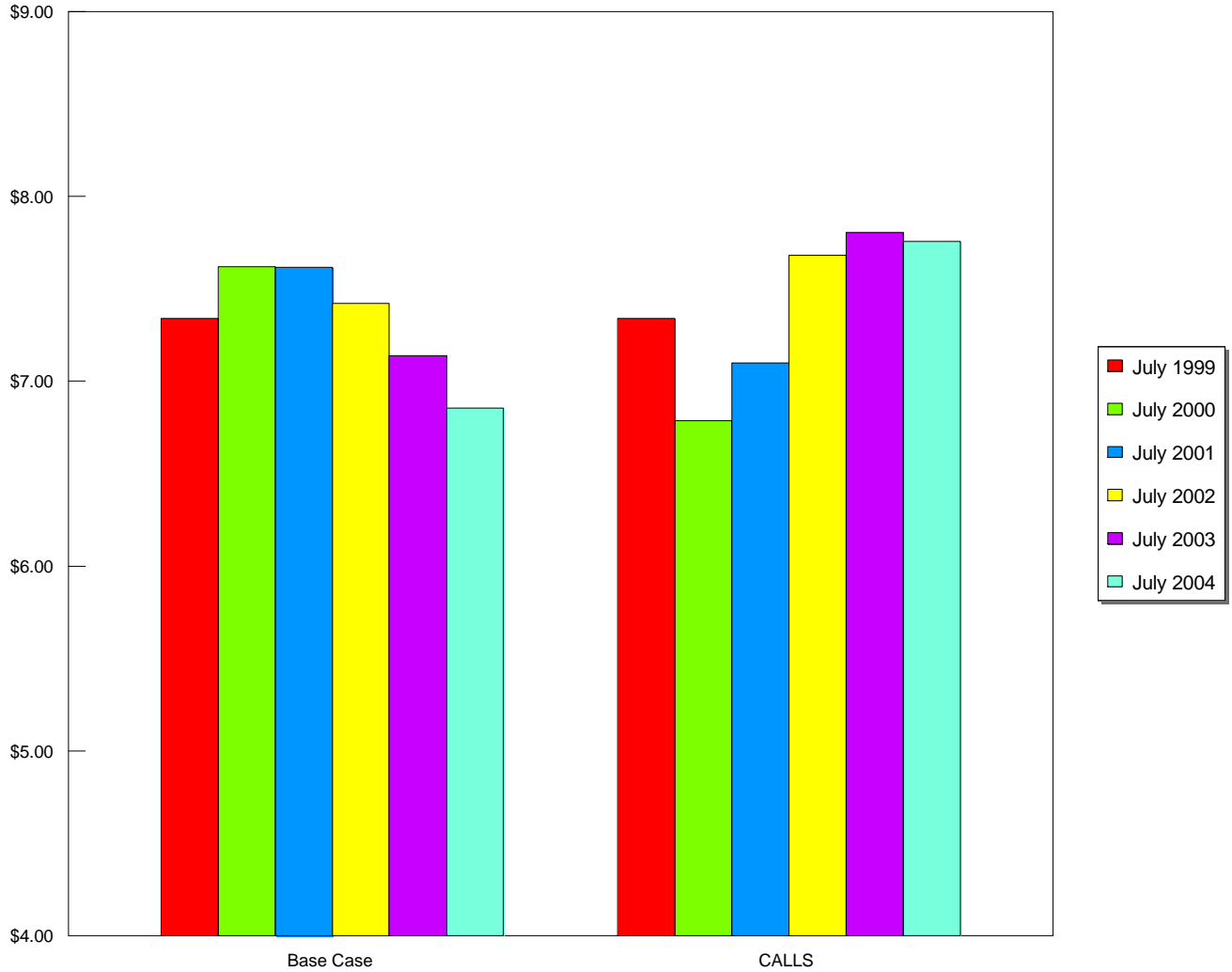
| Plan | Monthly Vertical Features & Intrastate Toll | SLC * | IXC PICC Pass-through ** | Interstate Toll *** | Direct & Indirect USF Contribution **** | Total |
|-----------|---|--------|--------------------------|---------------------|---|---------|
| Base Case | \$33.36 | \$3.47 | \$1.27 | \$9.42 | \$0.88 | \$48.41 |
| CALLS | \$33.36 | \$5.83 | \$0.00 | \$9.15 | \$1.06 | \$49.39 |

- * LECs do not collect SLCs from lifeline customers. Instead, LECs collect from universal service.
- ** Reflects the assumption that toll carrier PICC pass-through charges for primary residential lines recover toll carrier costs for primary line and secondary line PICCs.
- *** Calculated as the toll rates shown in Graph 11 times average minutes of calling.
- **** Reflects the assumption that ILECs will recover their universal service contributions using percentage surcharges. ILECs have the option of using flat-rated per-line charges, which could increase charges to residential customers.



**SLC, PICC Pass-through, USF Surcharges, & Per-Minute Access
on Interstate Toll: for an Average Residential Customer with One Line**

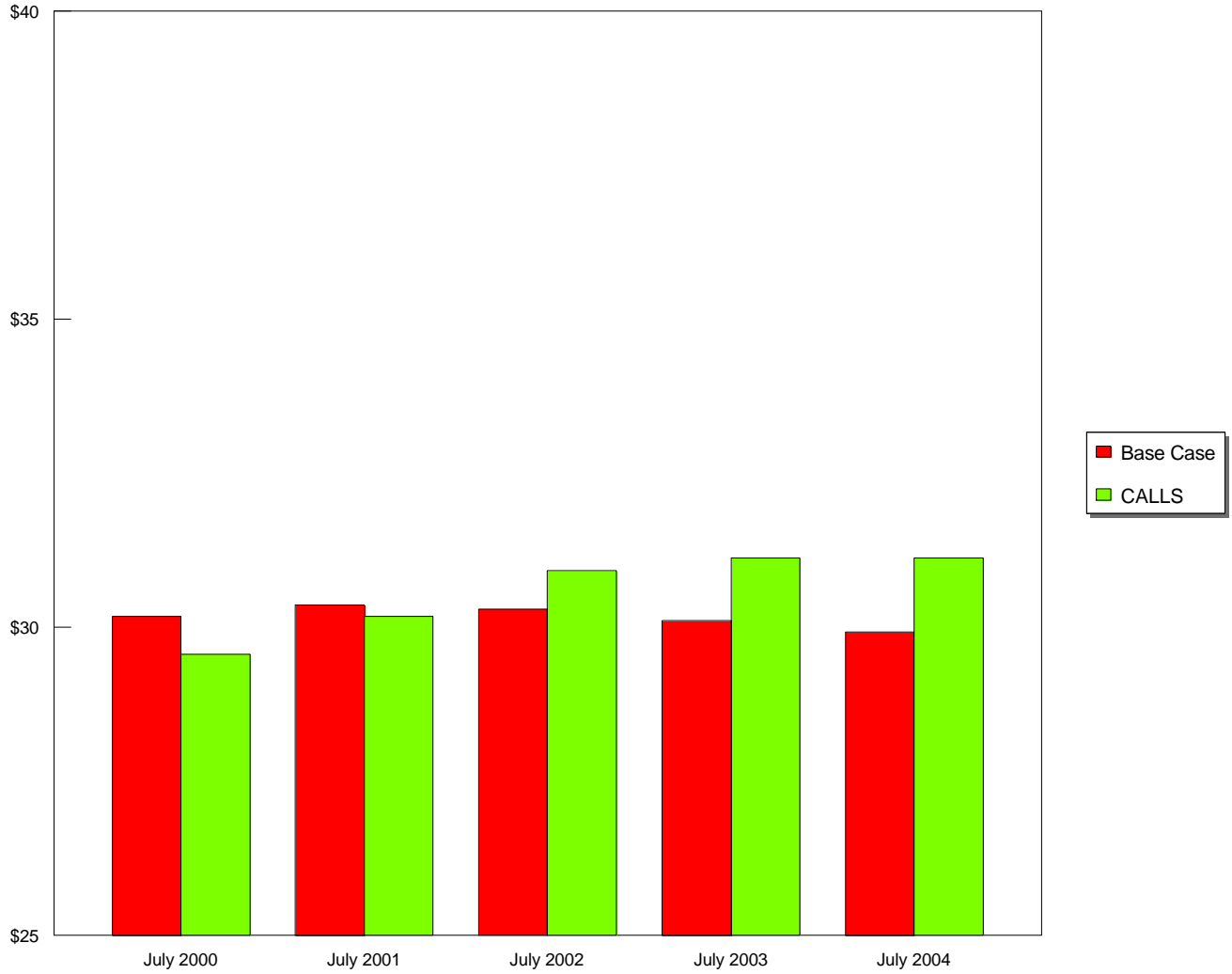
| Plan | July 1999 \$7.34 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$7.62 | \$7.62 | \$7.42 | \$7.14 | \$6.85 |
| CALLS | | \$6.79 | \$7.10 | \$7.68 | \$7.80 | \$7.75 |



**Residential Customers Who Make No Interstate Toll Calls
and Who have One Line: Average Monthly Bill ***

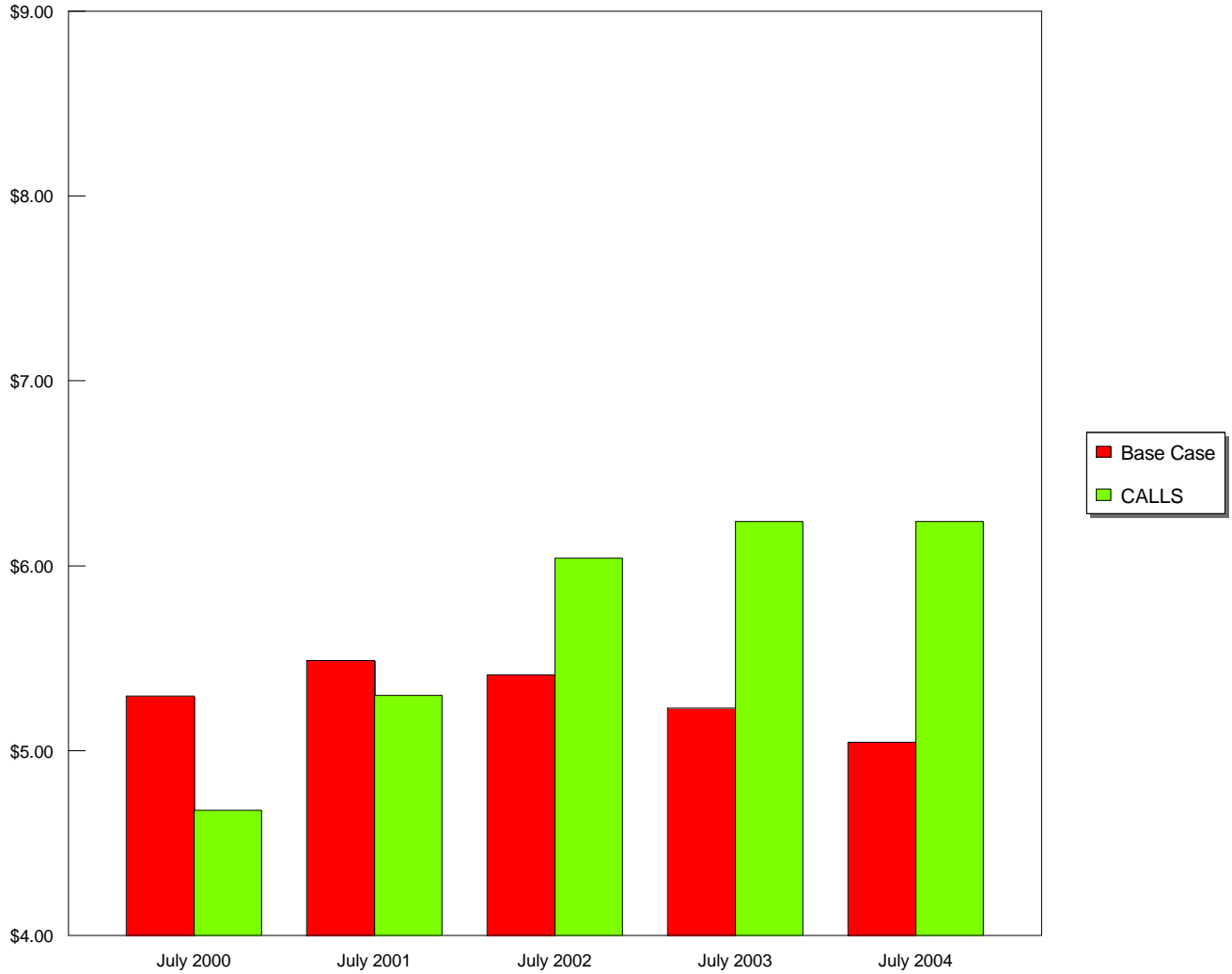
| Plan | July 1999 \$29.78 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$30.17 | \$30.36 | \$30.29 | \$30.11 | \$29.92 |
| CALLS | | \$29.55 | \$30.18 | \$30.92 | \$31.12 | \$31.12 |

* The amounts shown include charges for 20 intrastate toll minutes. The amounts do not include the \$3 monthly minimum amounts charged by some toll carriers or flat rated USF charges, but does include PICC pass-through charge, including the USF contribution associated with that charge.



**Average Monthly Bill: Residential Customers with One Line,
and no Interstate or International Calls: SLCs, PICC Pass-throughs
& USF Surcharges**

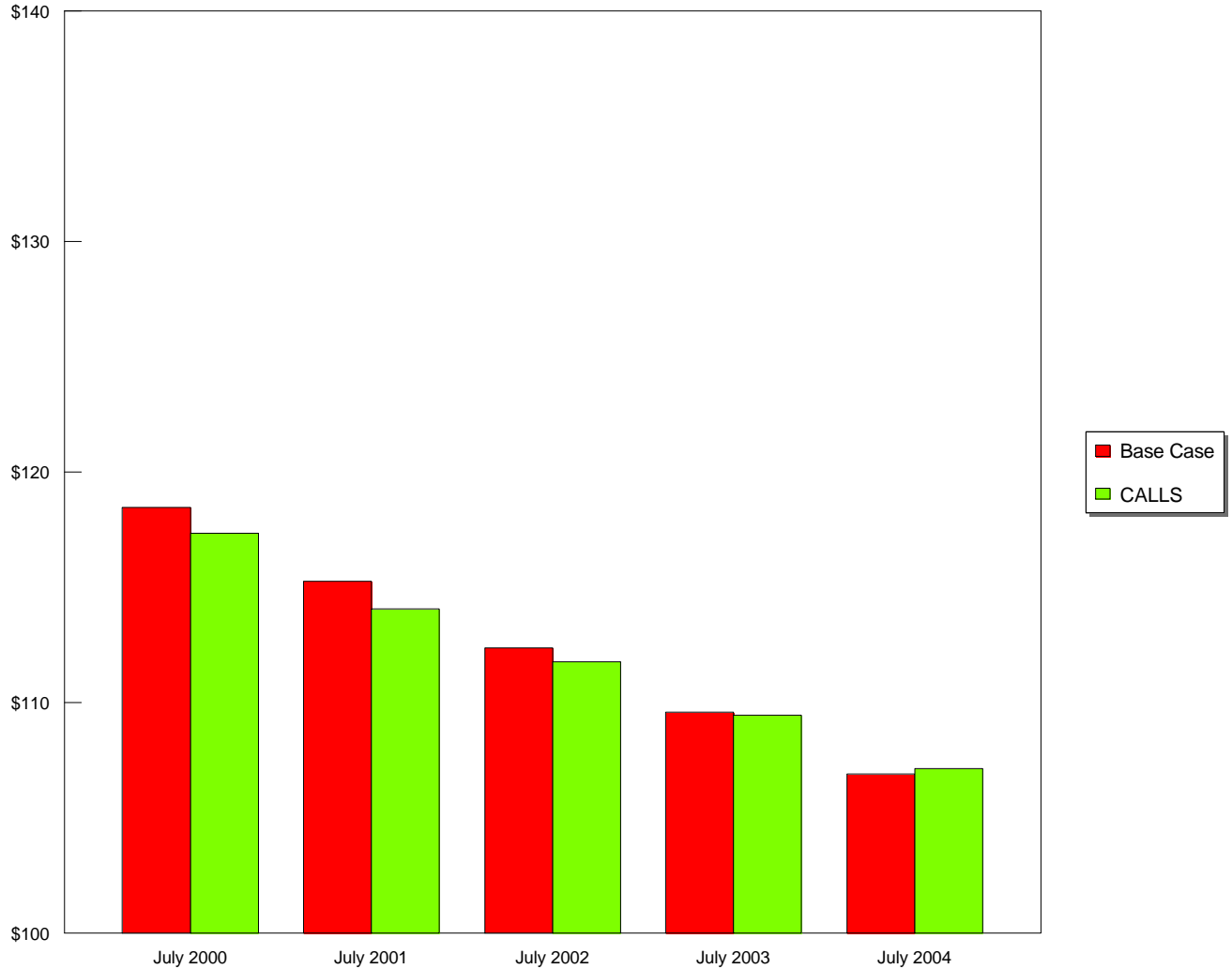
| Plan | July 1999 \$5.04 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$5.29 | \$5.49 | \$5.41 | \$5.23 | \$5.04 |
| CALLS | | \$4.68 | \$5.30 | \$6.04 | \$6.24 | \$6.24 |



Residential Customers Who Make The Most Toll Calls * and have One Line: Average Monthly Bill

| Plan | July 1999 \$118.99 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$118.46 | \$115.26 | \$112.38 | \$109.58 | \$106.92 |
| CALLS | | \$117.35 | \$114.08 | \$111.78 | \$109.45 | \$107.13 |

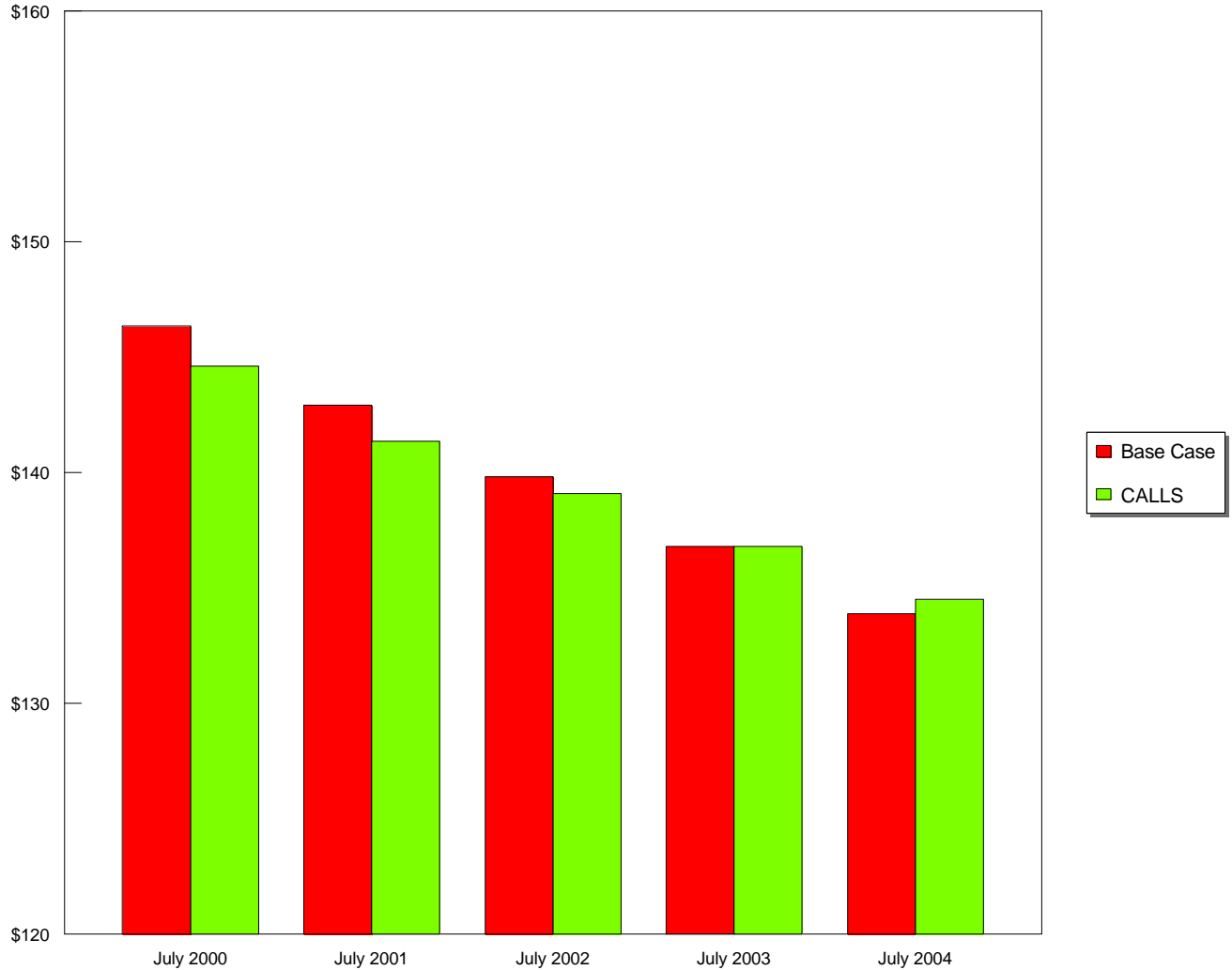
* This graph covers households who make 6 1/2 hours or more of interstate and international calls in a month and also includes the cost of three hours of intrastate toll calling.



Residential Customers Who Make The Most Toll Calls * and have Two Lines: Average Monthly Bill

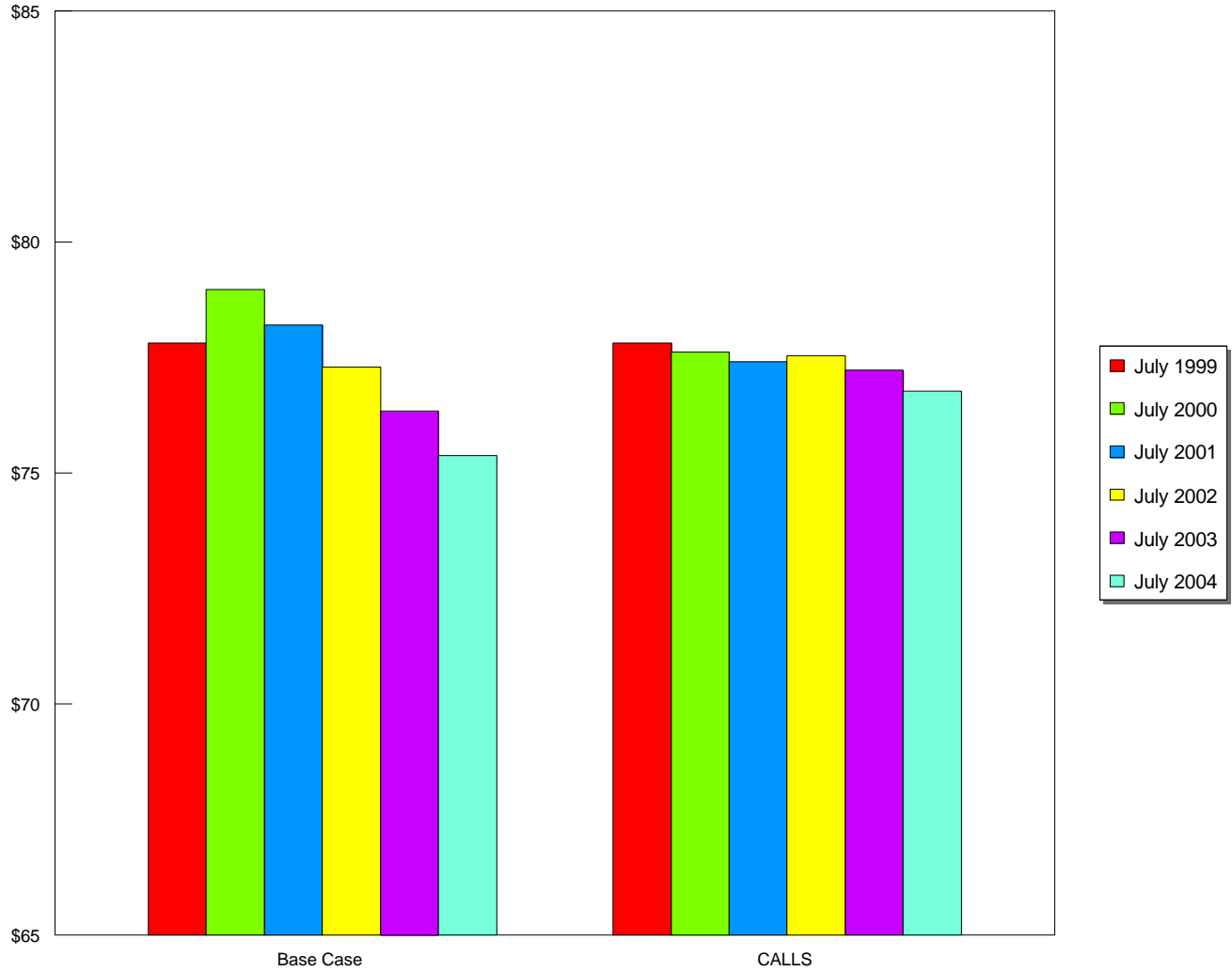
| Plan | July 1999 \$145.93 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$146.36 | \$142.92 | \$139.81 | \$136.81 | \$133.89 |
| CALLS | | \$144.62 | \$141.36 | \$139.09 | \$136.79 | \$134.51 |

* This graph covers households who make 6 1/2 hours or more of interstate and international calls in a month and also includes the cost of three hours of intrastate toll calling.



Residential Customers With Two Lines: Average Monthly Bill

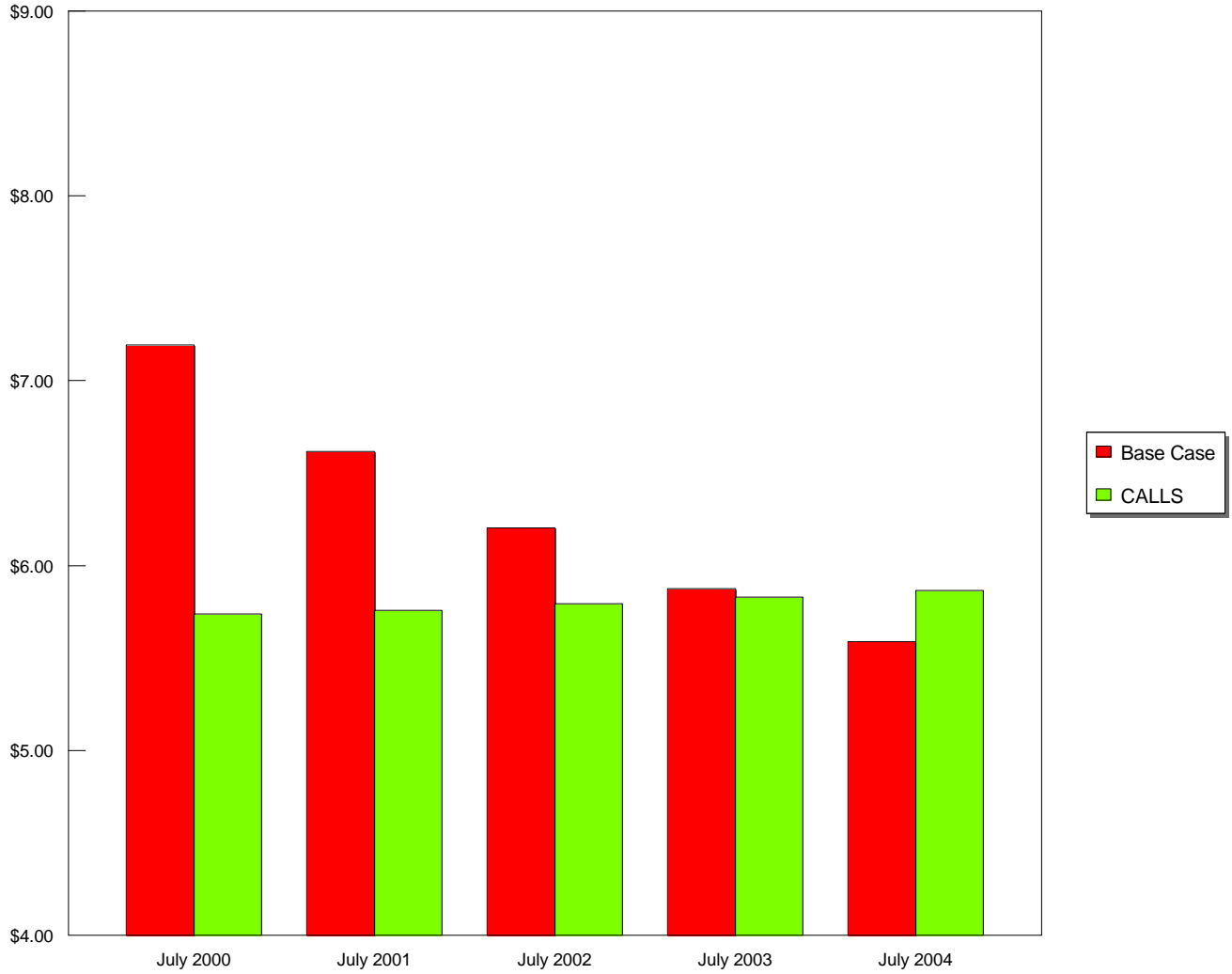
| Plan | July 1999 \$77.82 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$78.98 | \$78.20 | \$77.30 | \$76.35 | \$75.38 |
| CALLS | | \$77.62 | \$77.42 | \$77.54 | \$77.23 | \$76.77 |



**LEC Per-Line Access Revenue *
for a Second Residential Line**

| Plan | July 1999 \$7.34 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$7.19 | \$6.62 | \$6.20 | \$5.88 | \$5.59 |
| CALLS | | \$5.74 | \$5.76 | \$5.79 | \$5.83 | \$5.86 |

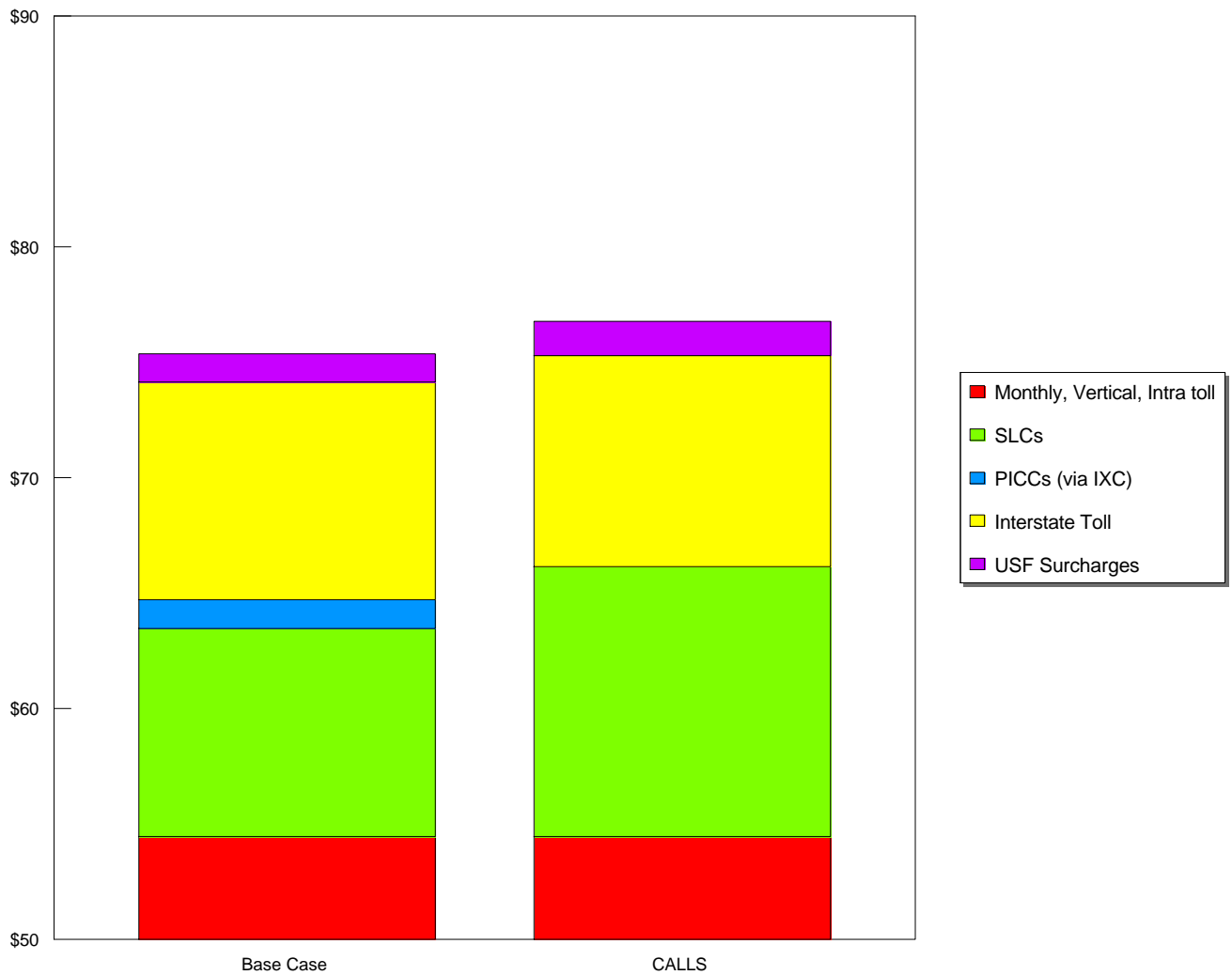
* Figures represent the sum of the second line SLC (charged to end users) and the second line PICC charge (charged to carriers). Most residential customers pay IXC PICC pass-through charges only on the first line. Therefore, the total of LEC revenue for a second line differs from the charges to residential customers as shown in Graph 20.



Residential Customer with Two Lines: Components of the Average Monthly Bill for July 2004

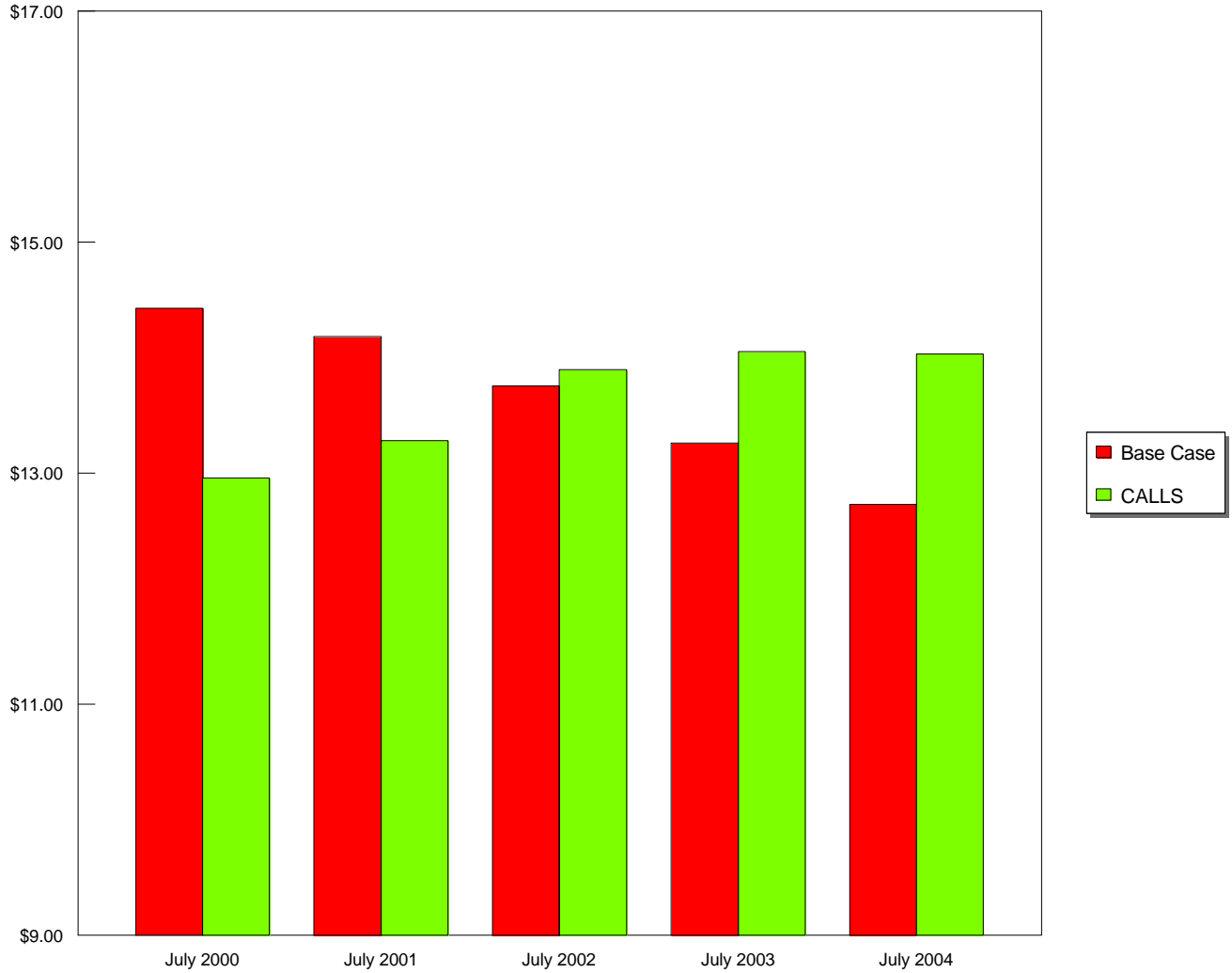
| Plan | Monthly Vertical Features & Intrastate Toll | SLC | IXC PICC Pass-through * | Interstate Toll | Direct & Indirect USF Contribution | Total |
|-----------|---|---------|-------------------------|-----------------|------------------------------------|---------|
| Base Case | \$54.46 | \$9.00 | \$1.27 | \$9.42 | \$1.22 | \$75.38 |
| CALLS | \$54.46 | \$11.69 | \$0.00 | \$9.15 | \$1.47 | \$76.77 |

* Reflects the assumption that toll carrier PICC pass-through charges for primary residential lines recover toll carrier costs for primary line and secondary line PICCs. There is no additional PICC pass-through for the second line.



SLC, PICC pass-through, USF Surcharges, & Per-Minute Access on Interstate Toll: for an Average Residential Customer with Two Lines

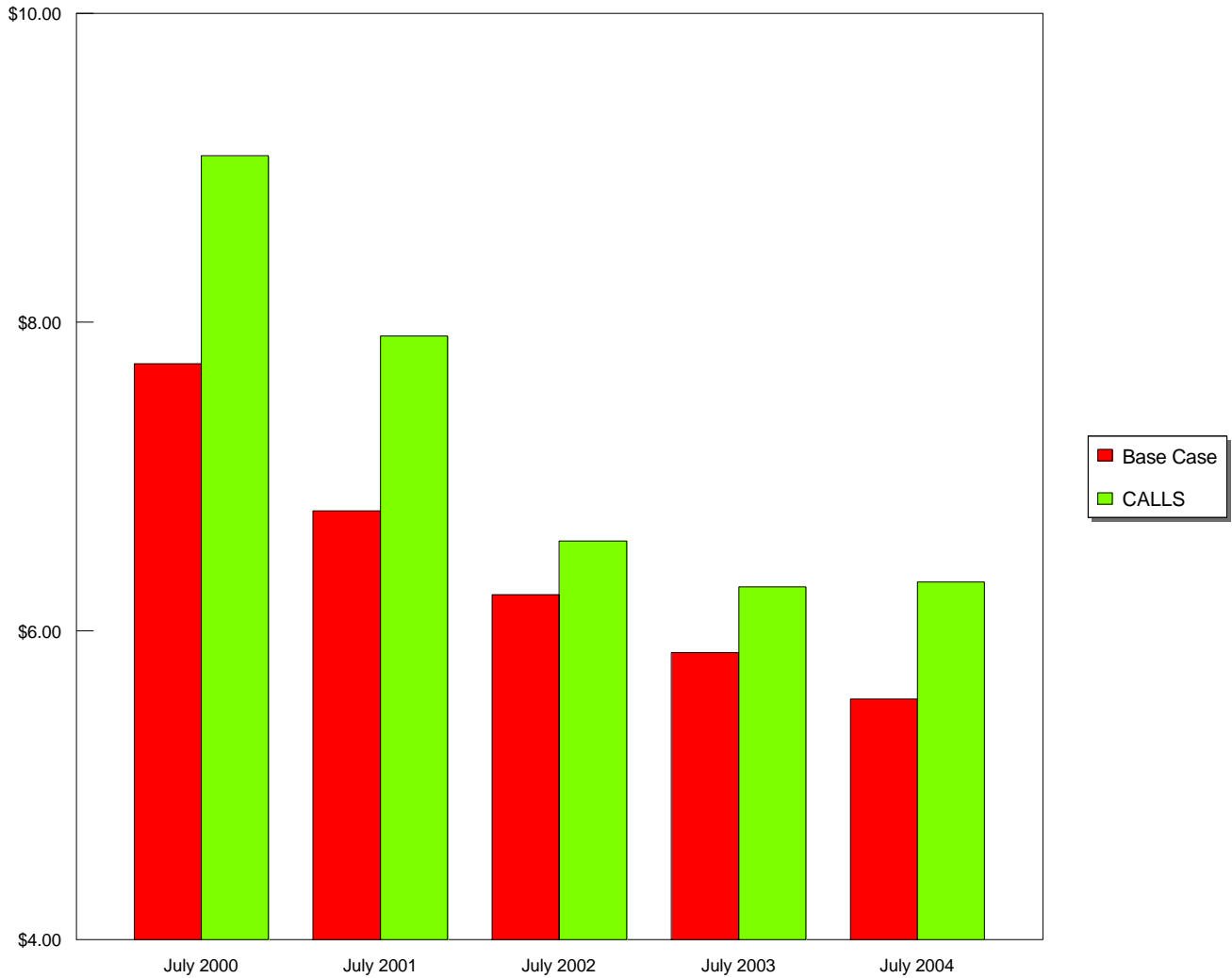
| Plan | July 1999 \$13.42 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$14.43 | \$14.18 | \$13.76 | \$13.26 | \$12.73 |
| CALLS | | \$12.96 | \$13.28 | \$13.89 | \$14.05 | \$14.03 |



**LEC Per-Line Access Revenue *
for a Multi-line Business Line**

| Plan | July 1999 \$9.97 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$7.73 | \$6.78 | \$6.24 | \$5.86 | \$5.56 |
| CALLS | | \$9.08 | \$7.91 | \$6.58 | \$6.28 | \$6.32 |

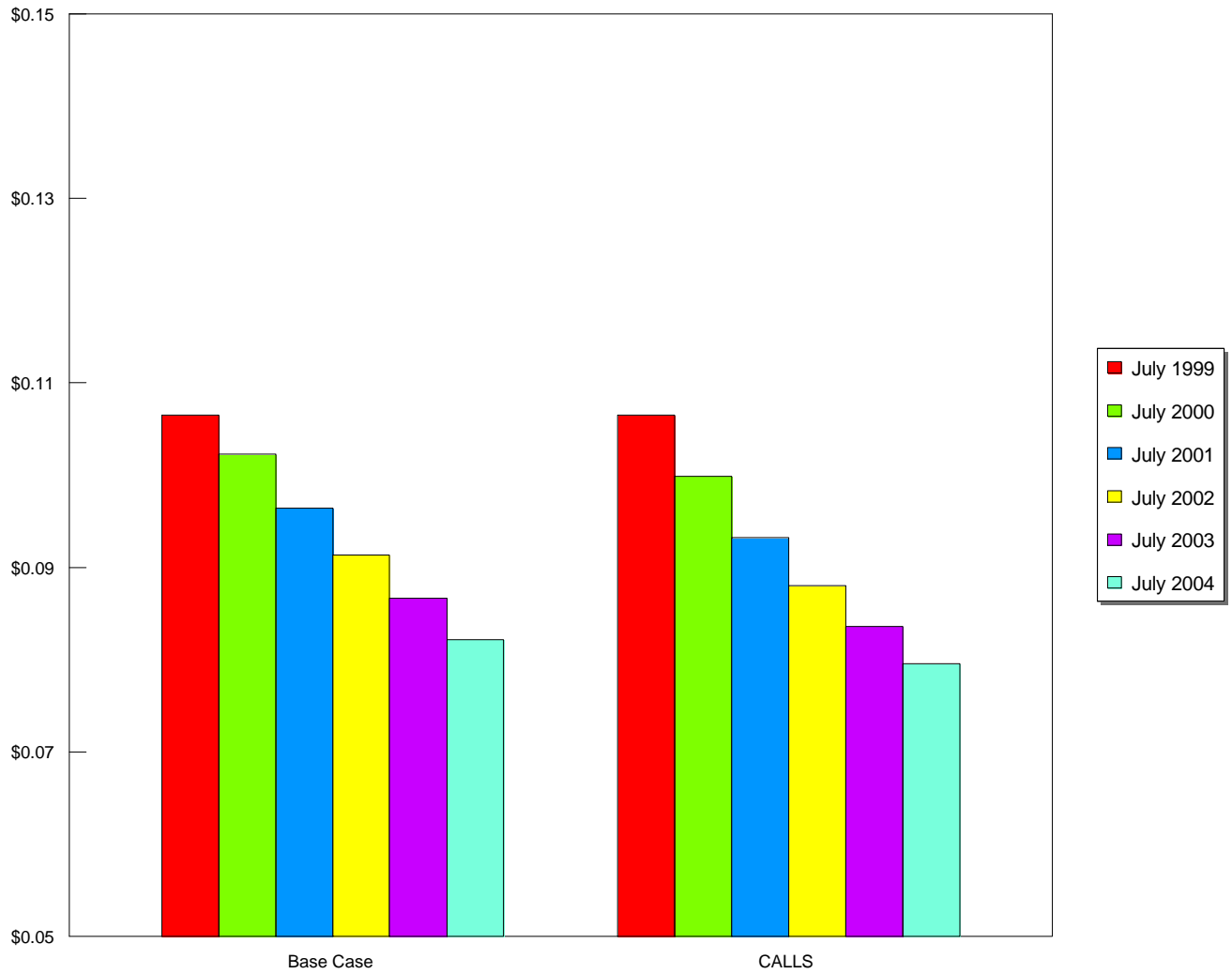
* Figures represent the sum of the multi-line SLC (charged to end users) and the Multi-line PICC (charged to carriers). The Multi-line SLCs and PICCs cannot be less than the respective second line charges in any TRP. The overall averages in Graph 20 can be lower than the charges in Graph 19. However, because the ratio of multi-lines and second lines differs from TRP to TRP and the figures shown in the graphs are weighted averages.



Toll Prices Per Minute* for Multi-line Business

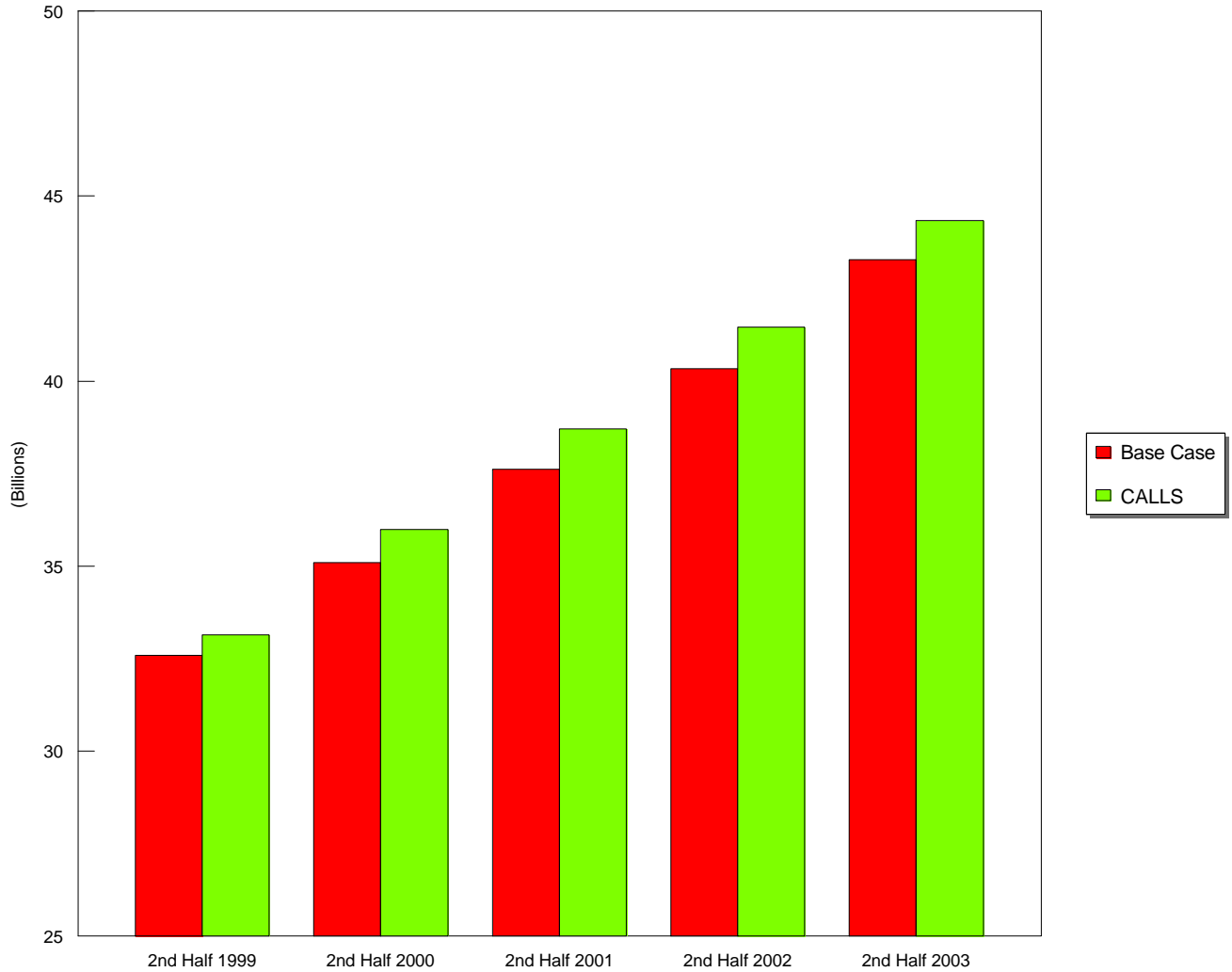
| Plan | July 1999 \$0.107 | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Base Case | | \$0.102 | \$0.096 | \$0.091 | \$0.087 | \$0.082 |
| CALLS | | \$0.100 | \$0.093 | \$0.088 | \$0.084 | \$0.080 |

* The amounts shown represent average revenue per minute, including all IXC charges except PICC pass-through and USF surcharges.



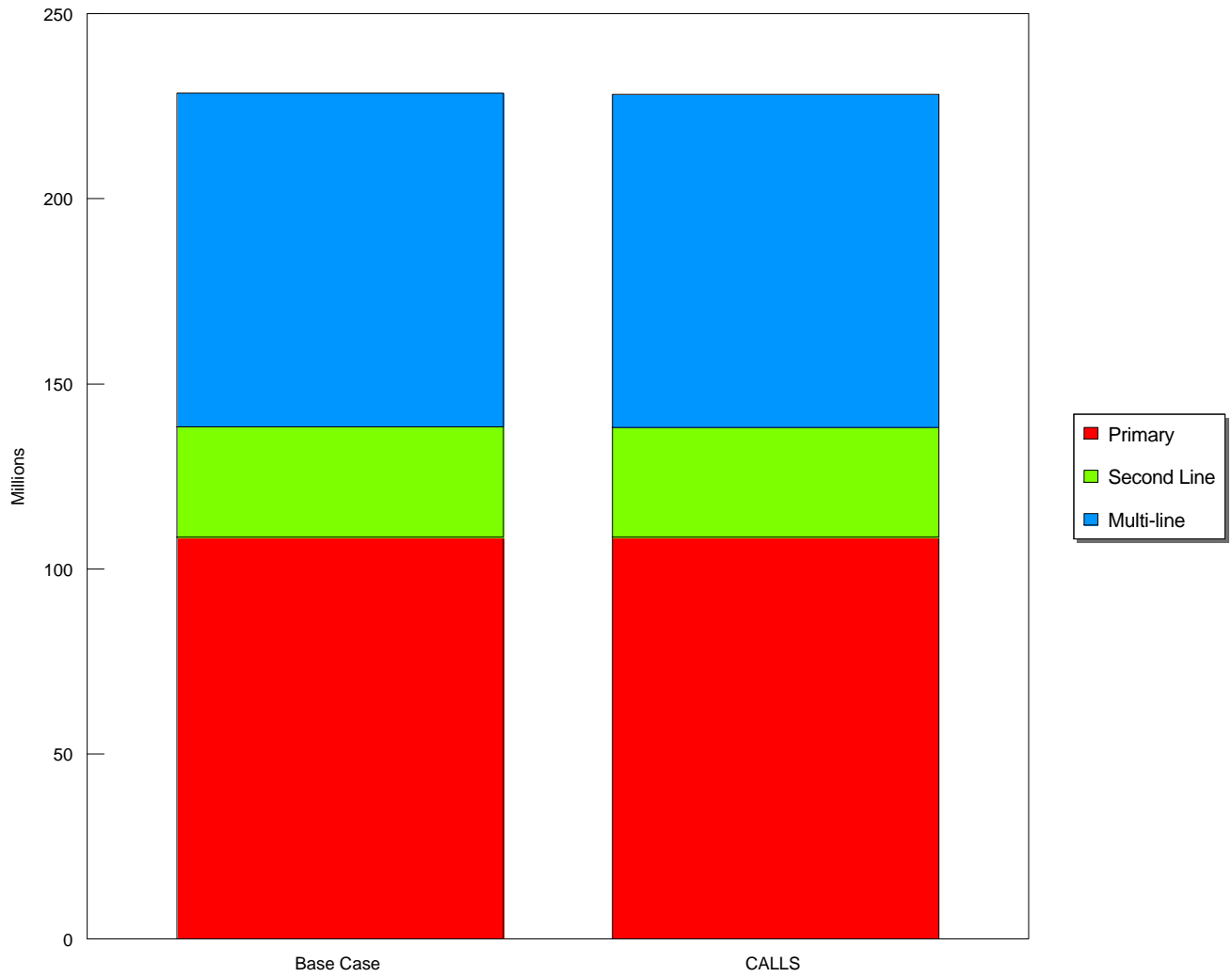
Interstate & International Toll Minutes Per Month (Billions)

| Plan | 2nd Half 1999 29.5 | 2nd Half 2000 | 2nd Half 2001 | 2nd Half 2002 | 2nd Half 2003 | 2nd Half 2004 |
|-----------|-----------------------|---------------|---------------|---------------|---------------|---------------|
| Base Case | | 32.6 | 35.1 | 37.6 | 40.3 | 43.3 |
| CALLS | | 33.1 | 36.0 | 38.7 | 41.5 | 44.3 |



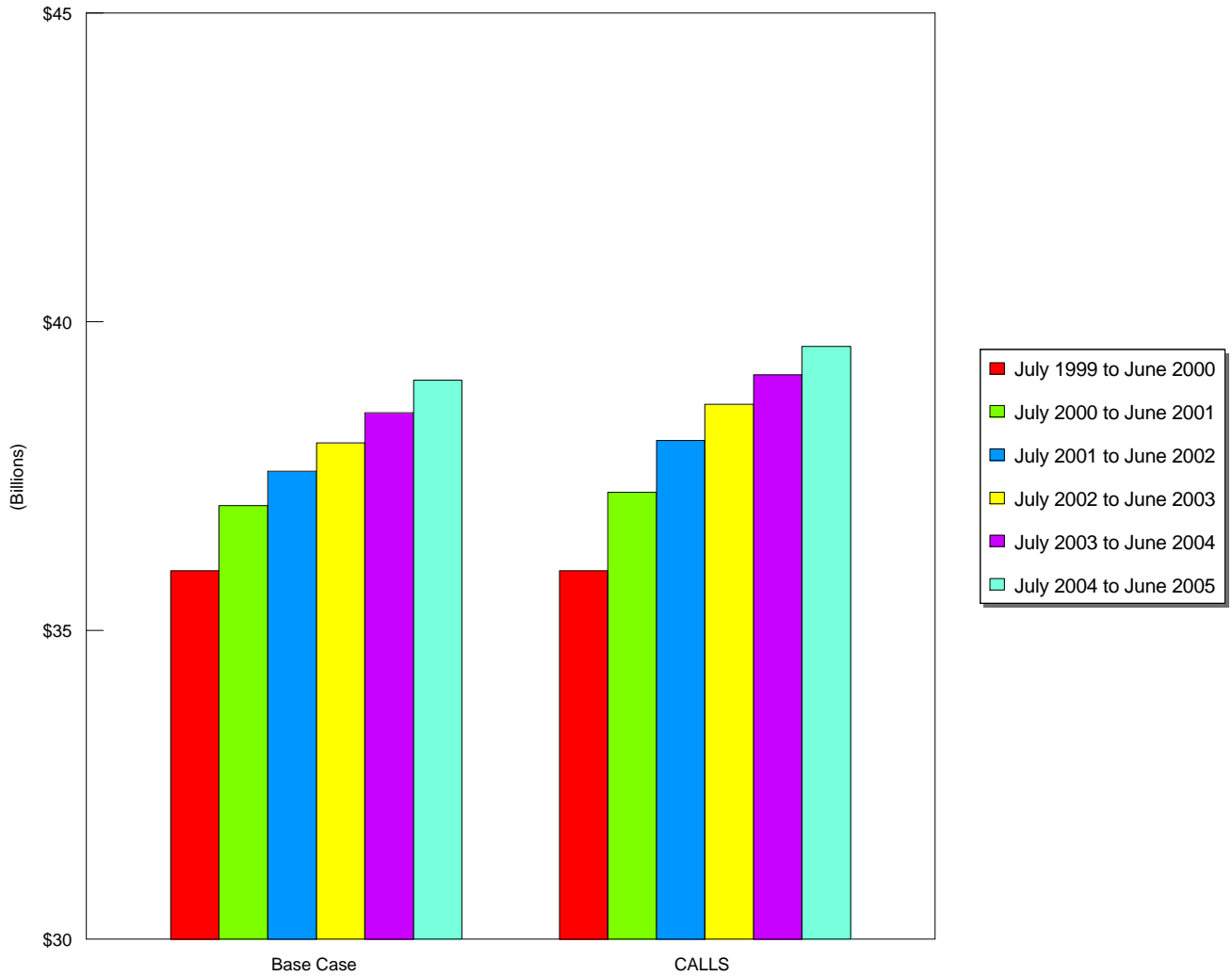
**Access Lines -- Second Half 2004
(Millions)**

| Plan | Primary Residential & Single Line Business | Residential Second Line | Multi-line | Total |
|-----------|--|-------------------------|------------|-------|
| Base Case | 108.7 | 29.7 | 90.2 | 228.6 |
| CALLS | 108.6 | 29.5 | 90.0 | 228.2 |



**Interstate Toll End-User Revenue Net of Access Payments
(IXCs and other providers of MTS)**

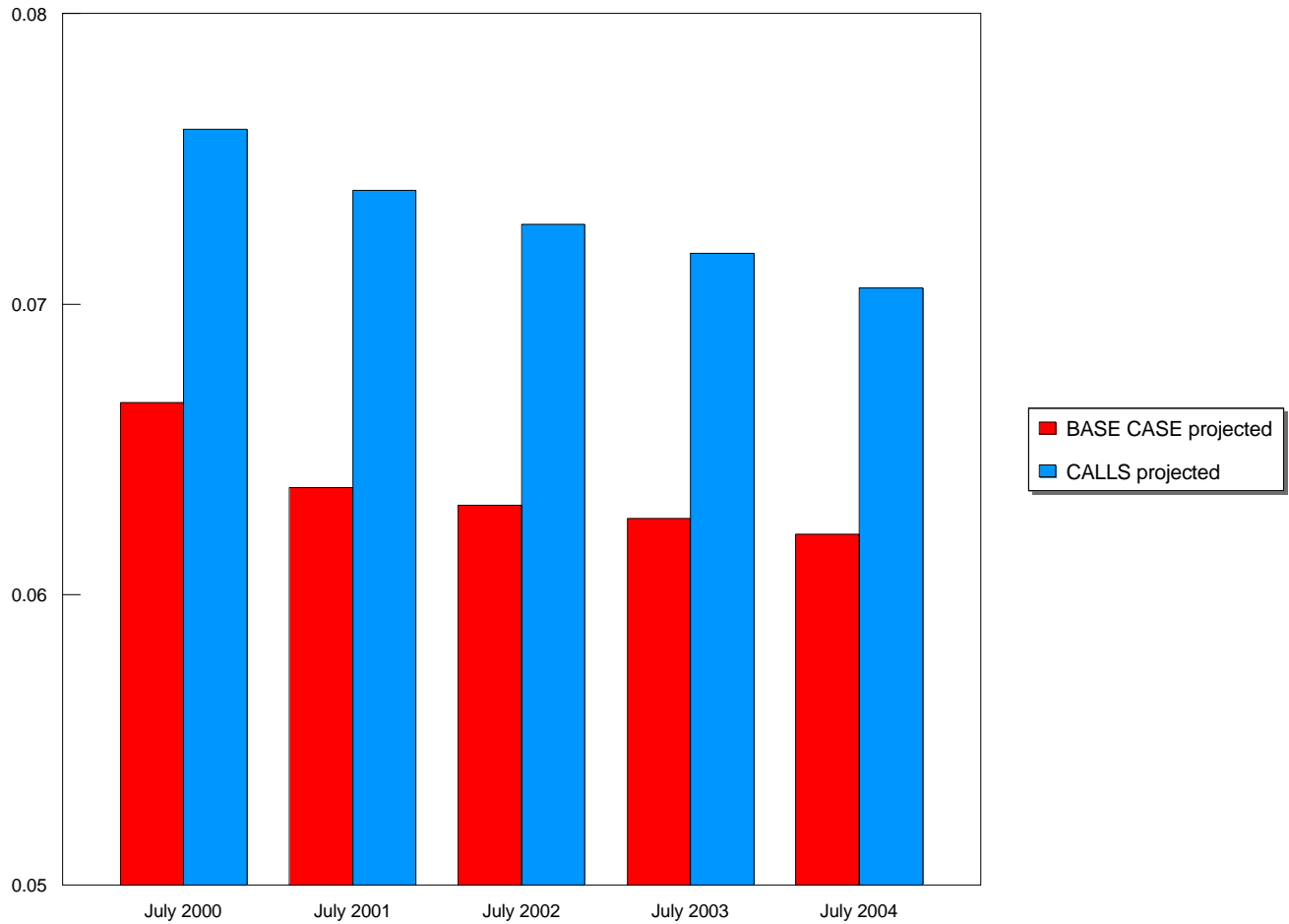
| Plan | July 1999 to June 2000 (\$ billions) \$36.0 | July 2000 to June 2001 (\$ billions) | July 2001 to June 2002 (\$ billions) | July 2002 to June 2003 (\$ billions) | July 2003 to June 2004 (\$ billions) | July 2004 to June 2005 (\$ billions) |
|-----------|---|---|---|---|---|---|
| Base Case | | \$37.0 | \$37.6 | \$38.0 | \$38.5 | \$39.1 |
| CALLS | | \$37.2 | \$38.1 | \$38.7 | \$39.1 | \$39.6 |



Projected Universal Service Contribution Rates *

| Plan | | July 2000 | July 2001 | July 2002 | July 2003 | July 2004 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Base Case | projected | 0.06661 | 0.06368 | 0.06308 | 0.06263 | 0.06209 |
| CALLS | projected | 0.07601 | 0.07391 | 0.07274 | 0.07176 | 0.07056 |

* All rates shown are based on requirements projected for the first quarter of 2000 plus an estimate of requirements for the new non-rural high cost program, plus additional low income expenditures that would be caused by increases in subscriber line charges. The contribution base is based on the contribution base for the first quarter of 2000, adjusted for changes in interstate end-user revenue projected by the model.



Appendix A

Two independent rate calculators were used to project the access rates charged by the ten local exchange carriers subject to price cap regulation during the first half of 2000. The “base case” plan calculator reflects, to the extent possible, the access rules effective on 1/1/2000 found in parts 54, 61, and 69 of the Commission’s rules. The “CALLS” plan calculator reflects, to the extent possible, modifications to parts 54, 61, and 69 of the Commission’s rules as proposed by the CALLS coalition. The following list outlines common key assumptions made in the programming of each of the rate calculators.

- ❑ The inputs used in both calculators were drawn from Tariff Review Plans (TRPs) filed by the carriers in December of 1999. The inputs drawn from these filings represent charges effective beginning on January 1, 2000 and demand data for 1998. Charges reflect average revenue per minute based upon rates effective January 1, 2000 and demand for 1998. Charges reflect actual charges reported in the RTE-1 portion of the carrier TRPs, rather than allowable charges as reported in the CAP-1 portion of the carrier TRPs. Base growth rates are estimated based upon historical growth rates as computed from carrier TRPs and Common Carrier Bureau Industry Analysis Division (IAD) staff estimates. All rates, demands, and growth rates going forward are projections.
- ❑ Carriers access charges were calculated based upon the levels of aggregation selected by the companies when filing TRPs. Because carriers are given considerable flexibility in determining what level of aggregation to use when calculating rates, actual rates may be calculated at a level of aggregation that differs from that selected when filing TRPs. As a result, the charges projected by the access calculators may depart from those computed by carriers and reported in their TRPs.
- ❑ Both calculators assume that carriers remove all traditional USF contributions, or “flowback”, from access rates on July 1, 2000. Estimates of USF contributions removed from holding company access charge rates were based upon data supplied by staff of the Common Carrier Bureau’s Competitive Pricing Division (CPD). Removals by TRP were calculated based upon proportional removals of the amounts provided in the CPD holding company estimates. For example, CPD provided estimates of the amount of USF to be removed from the combined allowable Marketing Baskets of the Sprint companies. In order to achieve this reduction, an equal percentage of revenues was removed from each of the Sprint TRP level Marketing Baskets.
- ❑ Both calculators assume that the annual inflation rate as measured by the fixed weight GDP-PI will be 1.95% for all years between 1999 and 2005. The “Base Case” calculator assumes an initial inflation rate for 1998 of 1.41%.
- ❑ Both calculators assume that carriers currently charge the maximum rates allowable under the appropriate price cap rules and continue to do so for the life of the CALLS plan. No provision is made for potential low end adjustments, increases in competition, or changes associated with pricing flexibility.

The following are key assumptions made in the programming of the “CALLS” plan rate calculator.

- ❑ For the “CALLS” plan calculator, all 10 carriers currently under price cap regulation are assumed to adopt the “CALLS” plan rules.
- ❑ Access-USF is distributed to holding companies according to estimates submitted by the CALLS coalition. TRP level distributions within holding companies were calculated assuming proportional allocations based on TRP level Common Line Basket revenues as of January 1, 2000. Following the CALLS estimates, distributions totaled \$650 million each year of the plan, and allocations were held constant over time.
- ❑ The CALLS plan proposes certain benefits to carriers after average traffic sensitive (ATS) rates reach specified targets. Targets for all carriers match those proposed in the CALLS submission except for targets for Citizens, which are set at \$0.0095.

- ❑ The CALLS plan proposes a reduction in the sum of ATS and carrier common line (CCL) rates on July 1, 2000 (as measured based on 1999 demand) equal to \$2.1 billion. Staff estimates that the removal of flowback, distribution of access-USF, and X-factor targeting proposed in the CALLS, must be supplemented by a one time reduction of local switching revenue of 37% in order to achieve the approximate \$2.1 billion reduction. The CALLS calculator assumes the local switching revenues are removed prior to X-factor targeting. Alternatively, if the local switching revenue were removed after targeting, the percentage removal necessary to achieve the \$2.1 billion reduction would increase slightly.
- ❑ All reductions in ATS revenue due to targeting are assumed to be removed proportionately from all elements included in the ATS. Under the CALLS plan, however, ILECs are given flexibility in reductions are distributed. Therefore, some carriers may reduce some rate elements in the ATS by more than others.
- ❑ For carriers that are allowed to move revenue removed from the local switching element to the carrier common line basket, and who are required to reduce these extra common line revenues over time, it is assumed that ATS and extra common line revenues are reduced proportionately by targeting. Therefore, for carriers required to reduce extra common line revenues, extra common line revenue will be eliminated at the same time ATS targets are met.
- ❑ Revenues moved by carriers from the local switching element to the common line basket are assumed to flow within the same TRP entity where they were generated to the multiline business subscriber line charge (SLC) to the extent permitted by industry caps, then to the multiline business presubscribed interexchange carrier charge (PICC) to the extent permitted by industry caps. For carriers that are allowed to collect additional revenues, not collectable under the industry caps, from other areas within their holding company, collections are assumed to come first from the multiline business SLC in the TRP area with highest SLC to the extent permitted by industry caps, then from the multiline business PICC in the TRP area with highest SLC to the extent permitted by industry caps. If revenues remain, the carrier is assumed to collect additional revenues from the multiline business SLC in the TRP area with second highest SLC to the extent permitted by industry caps, then from the multiline business PICC in the TRP area with second highest SLC to the extent permitted by industry caps. and so on, until all permitted revenues have been collected or all multiline business industry caps have been reached.
- ❑ Part 61 A, 48(m)(I)(i) is assumed to apply to SBC and US West. Part 61 A, 48(m)(I)(ii) is assumed to apply to Sprint, Frontier, and Citizens. These assumptions are based upon CPD discussions with the CALLS coalition. IAD staff has not, based upon model results, verified qualification status.

Assumptions

Appendix B

GROWTH30.WK4 Module estimates changes in key growth rates as a result of changes in access rates.

Inputs The Delphi- based Access Calculators produce cap price levels for access charges that are aggregated to the following broad levels.

Subscriber Line Charges: [by TRP area]
Residential and Single Line Business
non-primary residential
multi-line business

PICC charges [nationwide averages]
Residential and Single Line Business
non-primary residential
multi-line business

Access minute charges [nationwide averages]
originating
terminating

Special Access & IX charges [nationwide per switched minute charge
even if actual charges are flat rated.]

Amount added (nationwide) for new USF program.
Change in Lifeline due to changes in SLCs.

Outputs:

This module estimates growth rates for:
primary residential and single line business access lines
non-primary residential access lines
multi-line business access lines
originating access minutes
terminating access minutes
switching access minutes

These growth rates are used by the Delphi-based Access Rate Calculators.
This Module also produces summary statistics.

Base Growth Annual growth rates are predicted as the prior year growth rate plus or minus demand changes stimulated/repressed by price changes.

In order to avoid use of iterative techniques, trend amounts are calculated for key quantities. These amounts are used in determining demand stimulation and then final quantities are based on the trends plus or minus the stimulated amounts.

For example, the weighted average primary and non-primary PICC charge for a period is based on the trend numbers of primary and non-primary lines. Changes in the average PICC may, in turn, effect the number of lines for the period. The after stimulate numbers for lines are then used to determine ILEC revenue and become the base amount for the next period.

Prior period second line quantities are used for calculating weighted average second line PICC charges.

1 Assumption (1) 1999 growth rates are based on changes in quantities reported in the TRPs for 1997 through 1999.

The base growth rate for primary lines is slightly higher than the rate of household formation [1.4% per year compared with 1.0% to 1.1%] because:

1) penetration has been increasing; 2) residential lines at second homes are counted as primary lines and the percentage of households with vacation homes has been increasing by almost 5% per year; and 3) Primary lines include single line business access lines. Also, tax returns from non-farm sole proprietorships have been increasing at over 2% per year.

The use of constant growth rates for each TRP creates a slight upward bias in the weighted average for growth over time. This is because areas with faster growth become relatively larger, and therefore more important in the averages. This increases the effective growth rates for second lines from 8% to 9% per year, over five years. This does not bias the model with respect to CALLS vs. the BASE CASE.

1 Assumption (2) All PICC charges are billed to IXCs. While some PICC charges are paid by customers that do not have a presubscribed IXC, we do not know how many of these customers exist in each TRP area. Since we would have to use nationwide average changes in PICC rates, the price effect is the same whether or not it is passed through an IXC.

1 Assumption (3) IXCs will pass PICC charges through to customers in the form of nationwide average monthly charges. We know that large multi-line customers in states with low PICCs are able to negotiate with IXCs so as not to pay a nationwide average amount. Since actual PICCs are used to calculate TRP revenue, the only bias created is in determining elasticity effects. Growth for low-PICC states will be slightly understated and for high-PICC states will be slightly overestimated. Nationwide totals should be unbiased.

1 Assumption (4) We assume that IXCs recover 100% of PICC charges by placing flat monthly charges on their customers. For residential customers, we assume that carriers use a single weighted average charge customer account. (Calculated as primary and secondary PICC revenue divided by primary lines) We assume that carriers use a separate PICC pass through charge for multi-lines, averaged for all lines.. Actual IXC practices vary.

1 Assumption (5) We assume that customer's treat all flat monthly charges as part of the monthly rate for local telephone service.

1 Assumption (6) Elasticities of demand: monthly service [no lag]
 Note: changes in fixed monthly toll charges are treated as changes in local service cost.

| | |
|---------|--|
| -0.0080 | Primary residential & single line business |
| -0.4000 | Secondary residential |
| -0.1000 | multi-line business |

The primary residential & single line business elasticity is based on work by Hausman, Tardiff & Belinfante. The second line elasticity is based on work by Eisner & Waldon. The multi-line elasticity is assumed to be somewhat higher than the primary residential figure but significantly less than the second residential line figure.

1 Assumption (7) Elasticity of demand for toll service

Appendix B

Same period
-0.8

The elasticity effect is based on the change in the average interstate and international toll charge per minute for both business and residential customers, adjusted to take out trend changes in toll rates (since an average decline in toll rates is built into the trend growth in minutes.) The average toll rate for the first half 1999 is assumed to be the amount estimated for 1998 in the Telecommunications Industry Revenue Report adjusted using trend change from Assumption (9) and Less PICC pass through, which is treated as part of local service revenue

\$0.135 Interstate & international calls

Note: The elasticity effect should be based on per minute charges rather than on average revenue per minute including flat rated elements. The PICC pass through charges are treated as part of the local bill and have been removed from the overall toll ARPM and from imputed residential bill. Nonetheless, some USF pass through was flat rated in 1998 and toll revenue includes other flat rated elements. Since an access charge would represent a greater percentage change measured against actual per minute charges, a relatively high elasticity has been specified to reduce the bias.

1 Assumption (8) Note: the weighted average per minute toll rates in Workpaper 3 ignore the fact that some IXC toll charges are flat rated. However, we have no information on flat rated elements for business customers. This creates a slight bias because changes in per minute access charges will have a greater percentage effect on toll rates than assumed by the model.

The module treats PICC flow through as a part of local rates rather than as a per minute toll charge. The analysis of interstate toll rates starts with estimates that include all IXC charges including PICC flow-through charges. In order to avoid double counting, the following per minute adjustments are used:

| | |
|---|-----------------|
| Average PICC rate in 1998 for residential | \$0.82 |
| Average residential toll minutes (see below) | 73.2 |
| PICC per Minute residential & SLB | \$0.0116 |
| weighted average all minutes (Telecommunications Industry Revenue, Table 10) | \$0.0058 |
| Average Multi-line billed minutes (see below) | 380.9 |
| PICC per minute - multi-line | \$0.0047 |

For most IXCs, residential customers are subject to monthly minimums. This has no price effect for customers with high or average usage, but results in a flat \$3 charge added to no toll customers. In theory, this amount should be added to the average monthly charge for these customers before considering elasticity effects. However, the growth module evaluates elasticity effects for average customers, not by customer groups. However, there would also be an offsetting and perhaps greater effect, since eliminating the \$3 minimums means that carriers would have to increase per minute rates to collect the same amount of revenue. Workpaper 5 uses data from Bill harvesting data, to show that the elimination of the \$3 minimums would result in a 5.5% decrease in IXC revenue. Residential rates would have to increase approximately \$.011 to offset this amount.

1 Assumption (9) Trend growth in access minutes reflects demand stimulation in prior years due to toll price decreases. Prices have declined because of access reductions as well as other factors. Workpaper 4 estimates that interstate & international rates declined each six months between 1992 and 1998 by:

-2.7%

Workpaper 4 also estimates the semi-annual decline in per minute access cost to IXCs

-3.4%

Workpaper 4 also estimates the amount that rates declined for reasons other than access charge reductions.

-2.5%

This represents the reduction every six months in the non-access portion of toll rates. (i.e. the average rate minus the average cost of access)

- 1 Assumption (10) Stimulation of local access lines due to lower per minute charges:
 The average total bill effect of a change in toll rates (average minutes per line times change in rate) is subject to a different elasticity effect than local rate changes.
 Note that the change in access is adjusted to reflect trend changes in access. Thus, if access rates are constant, for example, there should be a slight reduction in growth rates in access lines. The elasticity's are:

| | Same period |
|-------------|-------------|
| Residential | -0.0100 |
| business | -0.0100 |

- 1 Assumption (11) Total nationwide conversation minutes are equal to terminating access minutes.
- 1 Assumption (12) Inflation for 2000 through 2005 is assumed to be the same as inflation for the years used to calculate base growth. Accordingly, we assume that demand changes due to changes in general price levels are already factored into the base growth rates
- 1 Assumption (13) For simplicity, this module starts with originating and terminating access minute rates that include switching. Since switching minutes differs slightly from originating plus terminating, multiplying the originating & terminating minutes and composite rates will not precisely equal actual revenue
 (orig mins * orig rate + term mins * term rate + switch mins * switch rate)
 However, this should not create any bias for various options.

Appendix B

- 1 Assumption (14) Base growth rates for originating, terminating and switching minutes already include minutes associated with base growth in primary and multi-line business lines. Where line growth is above or below the trend, the change in lines translates to changes in access minutes. In order to estimate changes in access minutes per primary line vs multi-line, we use the average base period originating and switching minutes per line, assume that Primary lines originate 73 minutes per month, and that all lines terminate an equal number of minutes. This permits the following table to be calculated:

| | Same period (interstate & international toll) | | |
|------------|---|-------------|-----------|
| | originating | terminating | switching |
| primary | 73 | 176 | 249 |
| multi-line | 164 | 176 | 340 |
| overall | 104 | 176 | 282 |

- 1 Assumption (15) The preceding assumptions permit calculation of billed interstate and international toll minutes per line per month. We assume that Primary is equal to the primary originating conversation minutes. Overall is based on total terminating minutes. Multi-line = [total minutes minus total residential minutes (primary lines X 73)] / # of multi-lines

percentage interstate & international toll conversation minutes originating from:

| | | |
|------------|-------|--------------------------------|
| primary | 27.6% | (Based on originating minutes) |
| multi-line | 72.4% | (calculated from overall) |

Initial conversation minutes per line

| | |
|------------|-------|
| primary | 73.2 |
| multi-line | 380.9 |

- 1 Assumption (16) We assume that minutes per primary line and minutes per multi-line grow at the same rate. Since multi-line lines are growing faster than primary lines and since these have more minutes, on average, this rate of growth is less than the growth in total minutes per primary plus multi-lines.

- 1 Assumption (17) Overall access charges per conversation minute can be calculated from the rates times originating and terminating minutes. To estimate the rate for residential & SLB conversation minutes, we assume that all residential conversation minutes have one originating and one terminating access minute, and that the percentage of residential and SLB minutes does not vary from TRP area to TRP area. An international call has access minutes on only one end. However, we assume that for the purpose of setting residential rates, carriers will presume that residential customers get a foreign billed (i.e. terminating) minute for each outgoing minute.
- 1 Assumption (18) First half 1999 totals for lines and minutes are equal to 1998 base year demand plus base growth for 3/4th of a year.
- 1 Assumption (19) Local rates for first half 1999 were based on 1998 revenue and rate data.

Workpaper 1 uses SOCC data for Tier 1 carriers to calculate the average basic revenue (Local exchange, extended area, vertical features & connection, subscriber line & PICCs) per access line by operating company. The relative amount of basic revenue per line is used to translate nationwide average residential and single line business, and nationwide multi-line business average monthly charges into rates for each TRP area. Workpaper 2 develops the average monthly charges for residential and single line business, and multi-line monthly line charges.

IXC PICC charges to end users have been subject to universal service contribution since 1998. Those surcharges for 1998 were included in switched toll revenue for 1998 and therefore are already captured in the toll revenue per-minute estimates. The PICCs and associated universal service charges are removed from per-minute charges above.

1 Assumption (20) Local Number Portability surcharges are added by TRP area for first half 1999. Actually, only about half of subscribers are served by LNP capable offices and therefore pay the charge. However, most will by the end of the study and for simplicity, the charges are added up front. PBX trunks are assessed 9 LNP charges per trunk and PRI ISDN channels are also subject to a multiple charge. We do not have reliable information on PBX vs PRI vs key system multi-lines. LNP rates were formulated to collect an average of \$760 million per year. Accordingly, we subtracted from this amount the total that would be generated by the LNP rate times (primary + secondary lines) and divided the remainder by multi-lines. This yields the average collections per multi-line. Dividing this average by the nationwide average LNP charge for all lines (approximately 28 cents for all lines) gives a factor representing average LNP payments per multi-line.

$$63.8 / 27.5 = \boxed{2.32}$$

1 Assumption (21) The analysis assumes that local rates and toll rates change by similar amounts in the future as they changed over the period on which base growth rates were based. In fact, some IXCs raised fixed monthly charges in 1999 through greater use of minimums and lowered per minute charges. No attempt has been made to estimate how these changes effect the levels of monthly or per minute charges or to project these trends into the future.

We assume that ILECs will recover universal service contributions from end users starting in January, rather than through per-minute access rates. Since SLCs represent almost all of ILEC end user revenues, we assume that ILECs will apply USF pass-through surcharges starting first half, 2000. Thereafter, base local rates remain unchanged. However, SLCs change by TRP, PICCs flow through to end users (through IXC nationwide average flat rated charges), and USF contribution rates change (due to changes in SLC, PICC & interstate toll revenue). These are the changes that lead to elasticity effects.

1 Assumption (22) the weighted average access cost per minute is based on the originating and terminating rates times prior period quantities.

1 Assumption (23) Independent of other factors, residential conversation minutes for each of the six usage factors are growing by 1.5% per period. (Based on the growth in terminating access minutes minus the overall growth rate for primary plus multi-line lines)

1 Assumption (24) Workpaper 3 develops 1998 average rate per minute for primary residential and SLB lines and for multi-line business lines. Residential interstate rates are based on bill harvesting. Residential international rates are based on the Revenue report. A weighted average is based on the overall estimates of interstate and international conversation minutes. This weighted average is then removed from the overall average revenue per minute estimated in the Revenue Report to yield the multi-line business estimate.

1 Assumption (25) All scenarios in the study assume that access charges will not flow through LEC contributions to the maintenance of universal service. We assume that all LECs will recover Universal Service Contributions through direct percentage surcharges on end-users starting January 1, 2000
Other changes in contribution rates are:
a) introduction of new payments for non-rural high cost. (\$300 million annual)
b) all requirements met with contribution on interstate & international
c) CALLS proposal to fund some access from universal service
d) increased low income program that automatically would happen if residential SLCs increase.

Toll rates are assumed to already fully incorporate an interstate contribution requirement of

0.03987 Initial Fourth Quarter Factors 1999.

Assuming an interstate and international end user revenue funding base of \$37,910 millions (from DA 99-2780) First Quarter Fund Factor less 1% uncollectibles)

The contribution base in is moved forward, starting second half 2000, using changes in LEC SLC revenue and changes in IXC toll revenue, for second half 1999
No adjustments are made for other changes in interstate revenues.

Appendix B

Future fund contribution factors will be based on requirements of

| | | |
|--|--------|---|
| Existing High Cost | 499.1 | Projected 1st quarter 2000 program + Admin (DA 99-2780) |
| New Non Rural | 51.25 | based on \$205 projected increase |
| Schools & Libraries | 565.5 | Projected 1st quarter 2000 program + Admin (DA 99-2780) |
| Low Income | 129 | Note that this is based on current SLC levels |
| New universal service to access transfer | inputs | CALLS plan only |
| Change Low Income | inputs | results from changes in SLCs |

Note that the New Non Rural is expected to be implemented the first half of 2000. We implement it on Jan 1.

Note that all scenarios assume that LEC USF contributions will be recovered by a direct end user percentage charge on SLCs starting January 1, 2000. (It would not matter if LECs recovered the same amount of money using fixed amount surcharges since this is treated as part of the local rate in either case.)

- 1 Assumption (26) The PN&R Associates bill harvesting study for 1998 provides a breakdown of residential customer bills by average usage per month. These usage levels are assumed for both residential accounts and for single line business lines. Intrastate usage has been smoothed.

| Usage Group | Sample Size | Intrastate & Other Per Month | Interstate & intl. Per Month | |
|-------------|-------------|------------------------------|------------------------------|---------|
| 1 | 7023 | 20 | 0 | 140460 |
| 2 | 6236 | 40 | 9 | 249440 |
| 3 | 6572 | 60 | 41 | 394320 |
| 4 | 4998 | 80 | 94 | 399840 |
| 5 | 2783 | 120 | 175 | 333960 |
| 6 | 2378 | 180 | 384 | 428040 |
| Total | 29990 | 64.9 | 73 | 64.8903 |

1 Assumption (27) In order to show the effect of the various access scenarios on total bills, Interstate average revenue per minute (first half 1999) is used as the average intrastate charge per minute for all periods. In addition, the toll minutes per line and the number of lines in each group (i.e., the weights) are held constant. Thus, the intrastate toll amounts do not vary from period-to-period and all bill effects shown in the results are due to changes in scenario. Average amount of intrastate toll: \$13.02

1 Assumption (28) No usage data is available for multi-line business lines. Interstate usage per month is based on total less residential & single line business. Intrastate is assumed to be proportion to average residential usage from Bill Harvesting. Again, the Second Half interstate toll rates (for multi-line traffic) are used as a surrogate for intrastate toll rates and are held constant for all periods.

| | Intrastate & Other Per Month | Interstate & intl. Per Month |
|-------------------------------|------------------------------------|------------------------------------|
| For Multi-line business lines | 338 | 381 |

1 Assumption (29) Centrex lines make up approximately 1/3 of multi-line business lines. Customers play a multi-line SLC on each centrex line. Carriers, however, pay 1 multi-line PICC for customers with up to 9 Centrex lines, and 1/9th of the multi-line PICC charge for each additional Centrex line. We assume that 10% of lines are taken by customers with less than 9 total lines and that These customers have an average of 4 lines. Accordingly, multi-line PICC revenue is calculated as multi-line lines X multi-line PICC times the following factor:

$$0.7037037037037 \times \boxed{0.71}$$

At the moment, we assume that centrex lines are distributed evenly across all TRPs. Since the module assumes that customers end up paying nationwide avg. PICCs, this assumption has no impact on demand effects. It does add some uncertainty to revenue totals by TRP.

1 Assumption (30) Low Volume customers pay higher per minute rates.
Based on information in the Bill Harvesting Study, we use the following factors to calculate residential bills

| | | | |
|-----------|------|----------------|----------|
| 0 | n.a. | | 0 |
| 1 - 30 | 1.72 | Times the ARPM | 96279.24 |
| 31 - 75 | 1.24 | " | 334039 |
| 76 - 180 | 1.04 | " | 487977.6 |
| 181 - 300 | 0.95 | " | 463429.5 |
| 301 - up | 0.89 | " | 813839.6 |
| | | | 73.2099 |

1 Assumption (31) Both the Delphi-based Access Rate calculators and the demand module assume that some households qualify for Lifeline assistance on monthly rates. This is not factored into the estimate of demand stimulation because Lifeline take rates are already included in the trend growth in lines. This creates a slight bias because a change in SLCs will not elicit a response in Lifeline customers. Instead, the model simplifies and assumes that the following percent of total primary lines will be for Lifeline service

5.32%

This percentage of customers do not pay SLCs. Accordingly, SLCs for these customers are not included in average household bill calculations.

Workpaper 1: Relative amounts of basic area revenue per access line (1998)

| | Statistics of Communications Common Carriers (SOCC) Table 2.9 | | | | | SOCC 2.10 | | |
|-----------------|---|---------------------------------|-------------------------------|-------------------|-----------------------|-----------------------------|--|-----------------|
| | (a) | (b) | (c) | (d) | (a)+(b)+(c)+(d) | TOTAL SWITCHED ACCESS LINES | Local Service Revenue per Switched Access Line | Relative Factor |
| | BASIC AREA REVENUES | OPTIONAL EXTENDED AREA REVENUES | OTHER LOCAL EXCHANGE REVENUES | END USER REVENUES | Local Service Revenue | | | |
| Ameritech | \$4,906,110 | \$7,436 | \$1,629,282 | \$1,200,296 | \$7,743,124 | 20,510,770 | \$31.46 | 1.024 |
| Bell Atlantic | \$9,668,996 | \$167,472 | \$2,983,543 | \$2,318,395 | \$15,138,406 | 40,963,743 | \$30.80 | 1.002 |
| Bell South | \$5,029,752 | \$1,188,096 | \$2,601,784 | \$1,409,680 | \$10,229,312 | 23,688,031 | \$35.99 | 1.171 |
| TPNV | \$52,823 | \$633 | \$20,246 | \$19,524 | \$93,226 | 341,508 | \$22.75 | 0.740 |
| PTCA | \$3,323,047 | \$45,045 | \$903,745 | \$923,225 | \$5,195,062 | 17,915,591 | \$24.16 | 0.786 |
| SWCT | \$498,162 | (\$3) | \$105,693 | \$120,333 | \$724,185 | 2,311,014 | \$26.11 | 0.850 |
| SWTR | \$3,677,475 | \$173,832 | \$1,474,822 | \$915,191 | \$6,241,320 | 15,976,814 | \$32.55 | 1.059 |
| USW | \$4,181,720 | (\$5) | \$1,246,212 | \$1,021,561 | \$6,449,488 | 16,859,395 | \$31.88 | 1.037 |
| CINCINNATI BELL | \$258,805 | \$45,088 | \$96,291 | \$53,044 | \$453,228 | 1,032,640 | \$36.58 | 1.190 |
| Aliant | \$65,132 | \$9,492 | \$11,972 | \$13,210 | \$99,806 | 339,755 | \$24.48 | 0.797 |
| Citizens | \$59,269 | \$5,010 | \$11,780 | \$16,227 | \$92,286 | 302,027 | \$25.46 | 0.829 |
| Frontier | \$121,639 | \$0 | \$32,808 | \$24,945 | \$179,392 | 577,694 | \$25.88 | 0.842 |
| GTE | \$4,366,489 | \$126,147 | \$1,230,023 | \$952,336 | \$6,674,995 | 18,872,083 | \$29.47 | 0.959 |
| Sprint | \$1,363,991 | \$3,572 | \$512,533 | \$375,004 | \$2,255,100 | 7,103,197 | \$26.46 | 0.861 |
| Total Reporting | 38,204,946 | 1,775,464 | 12,959,279 | 9,471,576 | 62,411,265 | 169,235,266 | \$30.73 | |

Workpaper 1: Relative amounts of basic area revenue per access line (1998)

| | Statistics of Communications Common Carriers (SOCC) Table 2.9 | | | | | SOCC 2.10 | | |
|-----------------|---|---------------------------------|-------------------------------|-------------------|-----------------------|-----------------------------|--|-----------------|
| | (a) | (b) | (c) | (d) | (a)+(b)+(c)+(d) | TOTAL SWITCHED ACCESS LINES | Local Service Revenue per Switched Access Line | Relative Factor |
| | BASIC AREA REVENUES | OPTIONAL EXTENDED AREA REVENUES | OTHER LOCAL EXCHANGE REVENUES | END USER REVENUES | Local Service Revenue | | | |
| Ameritech | \$4,906,110 | \$7,436 | \$1,629,282 | \$1,200,296 | \$7,743,124 | 20,510,770 | \$31.46 | 1.024 |
| Bell Atlantic | \$9,668,996 | \$167,472 | \$2,983,543 | \$2,318,395 | \$15,138,406 | 40,963,743 | \$30.80 | 1.002 |
| Bell South | \$5,029,752 | \$1,188,096 | \$2,601,784 | \$1,409,680 | \$10,229,312 | 23,688,031 | \$35.99 | 1.171 |
| TPNV | \$52,823 | \$633 | \$20,246 | \$19,524 | \$93,226 | 341,508 | \$22.75 | 0.740 |
| PTCA | \$3,323,047 | \$45,045 | \$903,745 | \$923,225 | \$5,195,062 | 17,915,591 | \$24.16 | 0.786 |
| SWCT | \$498,162 | (\$3) | \$105,693 | \$120,333 | \$724,185 | 2,311,014 | \$26.11 | 0.850 |
| SWTR | \$3,677,475 | \$173,832 | \$1,474,822 | \$915,191 | \$6,241,320 | 15,976,814 | \$32.55 | 1.059 |
| USW | \$4,181,720 | (\$5) | \$1,246,212 | \$1,021,561 | \$6,449,488 | 16,859,395 | \$31.88 | 1.037 |
| CINCINNATI BELL | \$258,805 | \$45,088 | \$96,291 | \$53,044 | \$453,228 | 1,032,640 | \$36.58 | 1.190 |
| Aliant | \$65,132 | \$9,492 | \$11,972 | \$13,210 | \$99,806 | 339,755 | \$24.48 | 0.797 |
| Citizens | \$59,269 | \$5,010 | \$11,780 | \$16,227 | \$92,286 | 302,027 | \$25.46 | 0.829 |
| Frontier | \$121,639 | \$0 | \$32,808 | \$24,945 | \$179,392 | 577,694 | \$25.88 | 0.842 |
| GTE | \$4,366,489 | \$126,147 | \$1,230,023 | \$952,336 | \$6,674,995 | 18,872,083 | \$29.47 | 0.959 |
| Sprint | \$1,363,991 | \$3,572 | \$512,533 | \$375,004 | \$2,255,100 | 7,103,197 | \$26.46 | 0.861 |
| Total Reporting | 38,204,946 | 1,775,464 | 12,959,279 | 9,471,576 | 62,411,265 | 169,235,266 | \$30.73 | |

Workpaper 2: Estimating the average local charges for Multi-line Business

| | |
|--|--------------|
| Average basic service revenue per line from Workpaper1 | \$30.73 |
| Base Period access lines | |
| Primary | 98,005,688 |
| non-primary residential | 16,720,682 |
| Multi-line business | 49,215,264 |
| Total | 163,941,635 |
| Residential Monthly Local Service --Unlimited Calling rate including SLC & Touch Tone (Reference Book, June 1999, Table 1.1. Amount excludes taxes.) | \$17.75 |
| PICC Primary (January 1999) | 0.53 |
| PICC Secondary (January 1999) | 1.38 |
| Weighted Average (1998 lines) | \$0.65 |
| features, connection, and some other services) in thousands | \$12,959,279 |
| Assumed percentage residential & single line business | 70% |
| Vertical Feature & Connection Charge per line per month | \$6.59 |
| Average IXC fixed charge (in addition to any PICC pass through charges.) | \$0.65 |
| Total charge per residential and single line business line (Monthly charge plus vertical feature & connection) | \$24.99 |
| Average SLC for primary lines | \$3.50 |
| Average SLC for secondary lines (Jan 1, 1999) | \$5.88 |
| Average Monthly charge W/O SLCs | \$21.14 |
| Average monthly charge for primary lines | \$24.64 |
| average monthly charge for non-primary lines | \$27.02 |
| Total local charge per multi-line business line | \$44.11 |

**Workpaper 3: dividing average revenue per minute between Residential
(incl. single line business) vs. Multi-line business**

Bill Harvesting: Average residential payment per interstate minute 1998

| | |
|---|---------|
| Including fixed charges on bill | \$0.180 |
| Average fixed toll charge per residential bill including PICC pass through, Account maintenance and monthly plan charges and some monthly USF pass through charges | \$1.96 |
| incremental per minute charges | \$0.150 |

Average international per minute rate for 1998
(Telecommunications Industry Revenue Report)

| | |
|--|---------|
| All interstate and international minutes | \$0.144 |
| International minutes | \$0.584 |

Conversation Minutes (Telecommunications Industry Revenue Report)

| | |
|---------------|---------|
| interstate | 336,696 |
| international | 22,950 |

Weighted Average Residential Rate
Including all flat charges

\$0.206

Percentage of interstate & international minutes
primary lines (residential & SLB)
multi-line business

27.6%

72.4%

Average multi-line business toll charge per minute

\$0.120

Workpaper 4: Estimating trend changes in ARPM & Access cost

| Y=ln(revenue per minute net of access) | | | | | |
|--|--------------------|----------|----------|-----------|-------------|
| Regression Regression Output: | | | | | |
| Constant | | | 0 | | Annual |
| Std Err of Y Est | | | 0.033639 | | -0.0498 |
| R Squared | | | 0.909815 | | |
| No. of Observations | | | 6 | | semi-annual |
| Degrees of Freedom | | | 4 | | |
| | | | | | -0.02522 |
| X Coefficient(s) | -0.05108 | -1.92069 | | | |
| Std Err of Coef. | 0.008041 | 0.031316 | | | |
| t Statistic | -6.35 | -61.33 | | | |
| | ln (ARPM - access) | Trend | Constant | predicted | trend |
| 1992 | -2.0030 | -0.0511 | -1.9207 | -1.9718 | 0.1392 |
| 1993 | -1.9827 | -0.1022 | -1.9207 | -2.0229 | 0.1323 |
| 1994 | -2.0835 | -0.1532 | -1.9207 | -2.0739 | 0.1257 |
| 1995 | -2.1290 | -0.2043 | -1.9207 | -2.1250 | 0.1194 |
| 1996 | -2.1436 | -0.2554 | -1.9207 | -2.1761 | 0.1135 |
| 1997 | -2.2550 | -0.3065 | -1.9207 | -2.2272 | 0.1078 |
| 1998 | -2.1440 | -0.3576 | -1.9207 | -2.2783 | 0.1025 |

Bill Harvesting Study First Quarter 1999

| Households | Minutes of IXC toll | Total minutes | Revenue with \$3 minimum | Revenue without \$3 minimum | |
|---|---------------------|---------------|--------------------------|-----------------------------|---------|
| 0 | 1461 | 0 | \$4,383 | \$0 | 23.6% |
| 1 | 70 | 70 | \$210 | \$14 | 1.1% |
| 2 | 73 | 146 | \$219 | \$30 | 1.2% |
| 3 | 70 | 210 | \$210 | \$43 | 1.1% |
| 4 | 54 | 216 | \$162 | \$44 | 0.9% |
| 5 | 41 | 205 | \$123 | \$42 | 0.7% |
| 6 | 46 | 276 | \$138 | \$57 | 0.7% |
| 7 | 39 | 273 | \$117 | \$56 | 0.6% |
| 8 | 30 | 240 | \$90 | \$49 | 0.5% |
| 9 | 46 | 414 | \$138 | \$85 | 0.7% |
| 10 | 35 | 350 | \$105 | \$72 | 0.6% |
| 11 | 42 | 462 | \$126 | \$95 | 0.7% |
| 12 | 42 | 504 | \$126 | \$104 | 0.7% |
| 13 | 29 | 377 | \$87 | \$78 | 0.5% |
| 14 | 27 | 378 | \$81 | \$78 | 0.4% |
| 15 | 35 | 525 | \$108 | \$108 | 0.6% |
| 16 or more | 4055 | 448,889 | \$92,382 | \$92,382 | 65.5% |
| Total | 6195 | 453,535 | \$98,805 | \$93,338 | |
| Percentage loss of revenue from eliminating \$3 minimum | | | | | 5.5% |
| Increase in Per minute charges | | | | | \$0.011 |

Appendix C: Residential Customer Bills *

Base Case

| Total Monthly Bill for Households with a Single Line | | | | | | | | | | | | | | |
|--|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| Interstate minutes per month | % Households | 1999 | 2000 | | 2001 | | 2002 | | 2003 | | 2004 | | 2005 | |
| | | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | |
| 0 | 23.4% | \$29.78 | \$29.92 | \$30.17 | \$30.17 | \$30.36 | \$30.36 | \$30.29 | \$30.29 | \$30.11 | \$30.11 | \$29.92 | \$29.92 | |
| 1 - 30 | 20.8% | \$36.22 | \$36.42 | \$36.57 | \$36.50 | \$36.61 | \$36.55 | \$36.41 | \$36.35 | \$36.11 | \$36.06 | \$35.81 | \$35.76 | |
| 31 - 75 | 21.9% | \$46.10 | \$46.42 | \$46.35 | \$46.12 | \$46.04 | \$45.85 | \$45.55 | \$45.37 | \$44.98 | \$44.81 | \$44.42 | \$44.26 | |
| 76 - 180 | 16.7% | \$57.94 | \$58.43 | \$58.07 | \$57.63 | \$57.30 | \$56.92 | \$56.42 | \$56.08 | \$55.49 | \$55.16 | \$54.60 | \$54.29 | |
| 181 - 300 | 9.3% | \$77.37 | \$78.11 | \$77.31 | \$76.57 | \$75.86 | \$75.23 | \$74.42 | \$73.83 | \$72.96 | \$72.40 | \$71.57 | \$71.04 | |
| 301 - up | 7.9% | \$118.99 | \$120.36 | \$118.46 | \$116.93 | \$115.26 | \$113.97 | \$112.38 | \$111.17 | \$109.58 | \$108.43 | \$106.92 | \$105.82 | |
| Weighted Avg. | | \$50.88 | \$51.28 | \$51.07 | \$50.74 | \$50.54 | \$50.26 | \$49.86 | \$49.61 | \$49.12 | \$48.88 | \$48.41 | \$48.17 | |
| Components of the Average bill | | | | | | | | | | | | | | |
| Local & vertical | | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | |
| Intrastate toll, D.A., etc | | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | |
| SLC & PICC pass through | | \$4.85 | \$4.73 | \$4.96 | \$4.97 | \$5.16 | \$5.16 | \$5.09 | \$5.09 | \$4.92 | \$4.92 | \$4.75 | \$4.75 | |
| Interstate toll (less USF) | | \$12.13 | \$12.09 | \$11.64 | \$11.36 | \$10.99 | \$10.74 | \$10.43 | \$10.20 | \$9.91 | \$9.69 | \$9.42 | \$9.20 | |
| USF contributions | | \$0.53 | \$1.10 | \$1.11 | \$1.05 | \$1.03 | \$1.00 | \$0.98 | \$0.95 | \$0.93 | \$0.91 | \$0.88 | \$0.86 | |

| Total Monthly Bill for Households with Two Lines | | | | | | | | | | | | | | |
|--|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| Interstate minutes per month | % Households | 1999 | 2000 | | 2001 | | 2002 | | 2003 | | 2004 | | 2005 | |
| | | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | |
| 0 | 23.4% | \$56.72 | \$57.16 | \$58.08 | \$58.07 | \$58.03 | \$58.04 | \$57.72 | \$57.74 | \$57.33 | \$57.35 | \$56.89 | \$56.91 | |
| 1 - 30 | 20.8% | \$63.16 | \$63.65 | \$64.48 | \$64.40 | \$64.27 | \$64.23 | \$63.84 | \$63.81 | \$63.33 | \$63.30 | \$62.78 | \$62.75 | |
| 31 - 75 | 21.9% | \$73.04 | \$73.66 | \$74.26 | \$74.02 | \$73.71 | \$73.53 | \$72.98 | \$72.82 | \$72.20 | \$72.05 | \$71.39 | \$71.25 | |
| 76 - 180 | 16.7% | \$84.88 | \$85.67 | \$85.98 | \$85.53 | \$84.96 | \$84.61 | \$83.85 | \$83.53 | \$82.72 | \$82.41 | \$81.57 | \$81.28 | |
| 181 - 300 | 9.3% | \$104.31 | \$105.35 | \$105.22 | \$104.47 | \$103.52 | \$102.91 | \$101.85 | \$101.28 | \$100.19 | \$99.65 | \$98.54 | \$98.03 | |
| 301 - up | 7.9% | \$145.93 | \$147.60 | \$146.36 | \$144.83 | \$142.92 | \$141.65 | \$139.81 | \$138.62 | \$136.81 | \$135.68 | \$133.89 | \$132.82 | |
| Weighted Avg. | | \$77.82 | \$78.52 | \$78.98 | \$78.64 | \$78.20 | \$77.94 | \$77.30 | \$77.06 | \$76.35 | \$76.12 | \$75.38 | \$75.16 | |
| Components of the Average bill | | | | | | | | | | | | | | |
| Local & vertical | | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | |
| Intrastate toll, D.A., etc | | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | |
| SLC & PICC pass through | | \$10.69 | \$10.49 | \$11.35 | \$11.36 | \$11.33 | \$11.35 | \$11.05 | \$11.08 | \$10.69 | \$10.71 | \$10.28 | \$10.30 | |
| Interstate toll (less USF) | | \$12.13 | \$12.09 | \$11.64 | \$11.36 | \$10.99 | \$10.74 | \$10.43 | \$10.20 | \$9.91 | \$9.69 | \$9.42 | \$9.20 | |
| USF contributions | | \$0.58 | \$1.48 | \$1.53 | \$1.46 | \$1.42 | \$1.39 | \$1.36 | \$1.33 | \$1.29 | \$1.26 | \$1.22 | \$1.20 | |

* Unlike data presented in some graphs, toll usage is held constant over time in this table..

Appendix C: Residential Customer Bills *

CALLS

| Total Monthly Bill for Households with a Single Line | | | | | | | | | | | | | | |
|--|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Interstate minutes per month | % Households | 1999 | 2000 | | 2001 | | 2002 | | 2003 | | 2004 | | 2005 | |
| | | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | |
| 0 | 23.4% | \$29.78 | \$29.92 | \$29.55 | \$29.54 | \$30.18 | \$30.17 | \$30.92 | \$30.91 | \$31.12 | \$31.11 | \$31.12 | \$31.11 | \$31.11 |
| 1 - 30 | 20.8% | \$36.22 | \$36.42 | \$35.93 | \$35.85 | \$36.38 | \$36.30 | \$36.98 | \$36.92 | \$37.07 | \$37.01 | \$36.96 | \$36.91 | \$36.91 |
| 31 - 75 | 21.9% | \$46.10 | \$46.42 | \$45.66 | \$45.42 | \$45.70 | \$45.49 | \$45.99 | \$45.80 | \$45.82 | \$45.64 | \$45.47 | \$45.31 | \$45.31 |
| 76 - 180 | 16.7% | \$57.94 | \$58.43 | \$57.31 | \$56.85 | \$56.82 | \$56.42 | \$56.70 | \$56.33 | \$56.18 | \$55.84 | \$55.52 | \$55.20 | \$55.20 |
| 181 - 300 | 9.3% | \$77.37 | \$78.11 | \$76.46 | \$75.68 | \$75.18 | \$74.50 | \$74.45 | \$73.83 | \$73.42 | \$72.84 | \$72.29 | \$71.75 | \$71.75 |
| 301 - up | 7.9% | \$118.99 | \$120.36 | \$117.35 | \$115.76 | \$114.08 | \$112.68 | \$111.78 | \$110.52 | \$109.45 | \$108.27 | \$107.13 | \$106.02 | \$106.02 |
| Weighted Avg. | | \$50.88 | \$51.28 | \$50.35 | \$50.00 | \$50.14 | \$49.83 | \$50.23 | \$49.96 | \$49.89 | \$49.63 | \$49.39 | \$49.15 | \$49.15 |
| Components of the Average bill | | | | | | | | | | | | | | |
| Local & vertical | | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 | \$21.10 |
| Intrastate toll, D.A., etc | | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 |
| SLC & PICC pass through | | \$4.85 | \$4.73 | \$4.35 | \$4.35 | \$4.93 | \$4.93 | \$5.63 | \$5.63 | \$5.82 | \$5.82 | \$5.83 | \$5.83 | \$5.83 |
| Interstate toll (less USF) | | \$12.13 | \$12.09 | \$11.44 | \$11.16 | \$10.69 | \$10.43 | \$10.10 | \$9.85 | \$9.60 | \$9.37 | \$9.15 | \$8.93 | \$8.93 |
| USF contributions | | \$0.53 | \$1.10 | \$1.20 | \$1.14 | \$1.15 | \$1.11 | \$1.14 | \$1.11 | \$1.11 | \$1.08 | \$1.06 | \$1.03 | \$1.03 |

| Total Monthly Bill for Households with Two Lines | | | | | | | | | | | | | | |
|--|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Interstate minutes per month | % Households | 1999 | 2000 | | 2001 | | 2002 | | 2003 | | 2004 | | 2005 | |
| | | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | H-2 | H-1 | |
| 0 | 23.4% | \$56.72 | \$57.16 | \$56.82 | \$56.81 | \$57.46 | \$57.45 | \$58.23 | \$58.23 | \$58.46 | \$58.47 | \$58.49 | \$58.50 | \$58.50 |
| 1 - 30 | 20.8% | \$63.16 | \$63.65 | \$63.20 | \$63.12 | \$63.66 | \$63.59 | \$64.29 | \$64.24 | \$64.41 | \$64.36 | \$64.34 | \$64.30 | \$64.30 |
| 31 - 75 | 21.9% | \$73.04 | \$73.66 | \$72.93 | \$72.68 | \$72.99 | \$72.78 | \$73.31 | \$73.12 | \$73.16 | \$73.00 | \$72.85 | \$72.69 | \$72.69 |
| 76 - 180 | 16.7% | \$84.88 | \$85.67 | \$84.58 | \$84.12 | \$84.10 | \$83.70 | \$84.01 | \$83.65 | \$83.52 | \$83.19 | \$82.89 | \$82.58 | \$82.58 |
| 181 - 300 | 9.3% | \$104.31 | \$105.35 | \$103.73 | \$102.95 | \$102.47 | \$101.79 | \$101.76 | \$101.15 | \$100.76 | \$100.20 | \$99.67 | \$99.14 | \$99.14 |
| 301 - up | 7.9% | \$145.93 | \$147.60 | \$144.62 | \$143.03 | \$141.36 | \$139.96 | \$139.09 | \$137.84 | \$136.79 | \$135.63 | \$134.51 | \$133.41 | \$133.41 |
| Weighted Avg. | | \$77.82 | \$78.52 | \$77.62 | \$77.27 | \$77.42 | \$77.12 | \$77.54 | \$77.28 | \$77.23 | \$76.99 | \$76.77 | \$76.54 | \$76.54 |
| Components of the Average bill | | | | | | | | | | | | | | |
| Local & vertical | | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 | \$42.20 |
| Intrastate toll, D.A., etc | | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 | \$12.26 |
| SLC & PICC pass through | | \$10.69 | \$10.49 | \$10.08 | \$10.10 | \$10.69 | \$10.70 | \$11.42 | \$11.44 | \$11.65 | \$11.67 | \$11.69 | \$11.71 | \$11.71 |
| Interstate toll (less USF) | | \$12.13 | \$12.09 | \$11.44 | \$11.16 | \$10.69 | \$10.43 | \$10.10 | \$9.85 | \$9.60 | \$9.37 | \$9.15 | \$8.93 | \$8.93 |
| USF contributions | | \$0.58 | \$1.48 | \$1.64 | \$1.56 | \$1.58 | \$1.53 | \$1.57 | \$1.53 | \$1.52 | \$1.49 | \$1.47 | \$1.44 | \$1.44 |

* Unlike data presented in some graphs, toll usage is held constant over time in this table..

Appendix D: Access Revenue by Carrier

Base Case

(Amounts shown in \$Millions)

| | July 1999 to June 2000 | July 2000 to June 2001 | July 2001 to June 2002 | July 2002 to June 2003 | July 2003 to June 2004 | July 2004 to June 2005 |
|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| ALIAN T | \$45 | \$46 | \$49 | \$51 | \$54 | \$58 |
| BELL ATLANTIC | \$6,172 | \$6,010 | \$6,001 | \$5,936 | \$5,870 | \$5,806 |
| BELLSOUTH | \$4,011 | \$4,013 | \$4,101 | \$4,142 | \$4,183 | \$4,227 |
| CINCINNATI BELL | \$143 | \$142 | \$144 | \$146 | \$148 | \$151 |
| CITIZENS | \$223 | \$222 | \$225 | \$227 | \$233 | \$240 |
| FRONTIER | \$151 | \$152 | \$148 | \$151 | \$153 | \$158 |
| GTE | \$3,451 | \$3,441 | \$3,517 | \$3,611 | \$3,715 | \$3,835 |
| SBC | \$7,264 | \$7,098 | \$7,034 | \$7,019 | \$7,018 | \$7,032 |
| SPRINT | \$1,260 | \$1,263 | \$1,274 | \$1,300 | \$1,328 | \$1,360 |
| U S WEST | \$2,869 | \$2,898 | \$2,951 | \$3,010 | \$3,075 | \$3,147 |
| RBOC | \$20,317 | \$20,019 | \$20,087 | \$20,107 | \$20,146 | \$20,212 |
| Year-over-year change | | -1.5% | 0.3% | 0.1% | 0.2% | 0.3% |
| non-RBOC | \$5,272 | \$5,266 | \$5,357 | \$5,486 | \$5,633 | \$5,801 |
| Year-over-year change | | -0.1% | 1.7% | 2.4% | 2.7% | 3.0% |
| Total | \$25,589 | \$25,285 | \$25,444 | \$25,592 | \$25,779 | \$26,014 |
| Year-over-year change | | -1.2% | 0.6% | 0.6% | 0.7% | 0.9% |
| Detail for Totals | | | | | | |
| SLC: Primary Line | \$4,204 | \$4,264 | \$4,324 | \$4,385 | \$4,437 | \$4,481 |
| SLC: Secondary Line | \$1,298 | \$1,543 | \$1,572 | \$1,655 | \$1,751 | \$1,842 |
| SLC: Multi Line | \$4,553 | \$4,772 | \$4,894 | \$5,064 | \$5,315 | \$5,550 |
| PICC: Primary Line | \$1,192 | \$1,593 | \$1,939 | \$1,927 | \$1,787 | \$1,625 |
| PICC: Secondary Line | \$374 | \$206 | \$115 | \$75 | \$38 | \$22 |
| PICC: Multi Line | \$1,177 | \$538 | \$285 | \$159 | \$72 | \$48 |
| per Minute | \$6,612 | \$6,245 | \$6,143 | \$6,135 | \$6,169 | \$6,221 |
| Special & Other | \$6,179 | \$6,124 | \$6,173 | \$6,193 | \$6,209 | \$6,224 |

Appendix D: Access Revenue by Carrier (Excluding new USF Access)

CALLS

(Amounts shown in \$Millions)

| | July 1999 to June 2000 | July 2000 to June 2001 | July 2001 to June 2002 | July 2002 to June 2003 | July 2003 to June 2004 | July 2004 to June 2005 |
|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| ALIAN T | \$45 | \$44 | \$46 | \$48 | \$50 | \$52 |
| BELL ATLANTIC | \$6,172 | \$5,720 | \$5,773 | \$5,893 | \$6,014 | \$6,213 |
| BELLSOUTH | \$4,011 | \$3,723 | \$3,809 | \$3,993 | \$4,176 | \$4,413 |
| CINCINNATI BELL | \$143 | \$138 | \$145 | \$152 | \$159 | \$168 |
| CITIZENS | \$223 | \$194 | \$196 | \$191 | \$187 | \$195 |
| FRONTIER | \$151 | \$150 | \$147 | \$154 | \$164 | \$178 |
| GTE | \$3,451 | \$3,146 | \$3,256 | \$3,391 | \$3,571 | \$3,840 |
| SBC | \$7,264 | \$6,921 | \$6,868 | \$6,911 | \$7,079 | \$7,402 |
| SPRINT | \$1,260 | \$1,144 | \$1,160 | \$1,212 | \$1,276 | \$1,369 |
| U S WEST | \$2,869 | \$2,749 | \$2,800 | \$2,901 | \$3,059 | \$3,268 |
| RBOC | \$20,317 | \$19,113 | \$19,249 | \$19,699 | \$20,328 | \$21,295 |
| Year-over-year change | | -5.9% | 0.7% | 2.3% | 3.2% | 4.8% |
| non-RBOC | \$5,272 | \$4,815 | \$4,950 | \$5,148 | \$5,406 | \$5,802 |
| Year-over-year change | | -8.7% | 2.8% | 4.0% | 5.0% | 7.3% |
| Total | \$25,589 | \$23,928 | \$24,200 | \$24,847 | \$25,734 | \$27,097 |
| Year-over-year change | | -6.5% | 1.1% | 2.7% | 3.6% | 5.3% |
| Detail for Totals | | | | | | |
| SLC: Primary Line | \$4,204 | \$5,295 | \$6,096 | \$7,056 | \$7,401 | \$7,516 |
| SLC: Secondary Line | \$1,298 | \$1,413 | \$1,478 | \$1,616 | \$1,771 | \$1,946 |
| SLC: Multi Line | \$4,553 | \$4,290 | \$4,656 | \$5,049 | \$5,511 | \$6,046 |
| PICC: Primary Line | \$1,192 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PICC: Secondary Line | \$374 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PICC: Multi Line | \$1,177 | \$1,546 | \$1,080 | \$379 | \$212 | \$238 |
| per Minute | \$6,612 | \$4,931 | \$4,330 | \$4,144 | \$4,228 | \$4,431 |
| Special & Other | \$6,179 | \$6,451 | \$6,559 | \$6,602 | \$6,611 | \$6,919 |

Appendix D: New USF Access by Carrier

CALLS

(Amounts shown in \$Millions)

| | July 1999 to June 2000 | July 2000 to June 2001 | July 2001 to June 2002 | July 2002 to June 2003 | July 2003 to June 2004 | July 2004 to June 2005 |
|-----------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| ALIAN T | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| BELL ATLANTIC | \$0 | \$69 | \$69 | \$69 | \$69 | \$69 |
| BELLSOUTH | \$0 | \$125 | \$125 | \$125 | \$125 | \$125 |
| CINCINNATI BELL | \$0 | \$1 | \$1 | \$1 | \$1 | \$1 |
| CITIZENS | \$0 | \$21 | \$21 | \$21 | \$21 | \$21 |
| FRONTIER | \$0 | \$1 | \$1 | \$1 | \$1 | \$1 |
| GTE | \$0 | \$244 | \$244 | \$244 | \$244 | \$244 |
| SBC | \$0 | \$36 | \$36 | \$36 | \$36 | \$36 |
| SPRINT | \$0 | \$92 | \$92 | \$92 | \$92 | \$92 |
| U S WEST | \$0 | \$60 | \$60 | \$60 | \$60 | \$60 |
| Total | | \$650 | \$650 | \$650 | \$650 | \$650 |

Appendix D: Access Revenue by Carrier (Including new USF Access)

CALLS

(Amounts shown in \$Millions)

| | July 1999 to June 2000 | July 2000 to June 2001 | July 2001 to June 2002 | July 2002 to June 2003 | July 2003 to June 2004 | July 2004 to June 2005 |
|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| ALIAN T | \$45 | \$44 | \$46 | \$48 | \$50 | \$52 |
| BELL ATLANTIC | \$6,172 | \$5,788 | \$5,841 | \$5,962 | \$6,083 | \$6,281 |
| BELLSOUTH | \$4,011 | \$3,849 | \$3,934 | \$4,118 | \$4,301 | \$4,538 |
| CINCINNATI BELL | \$143 | \$138 | \$146 | \$152 | \$159 | \$169 |
| CITIZENS | \$223 | \$215 | \$217 | \$212 | \$208 | \$216 |
| FRONTIER | \$151 | \$151 | \$149 | \$156 | \$165 | \$180 |
| GTE | \$3,451 | \$3,390 | \$3,501 | \$3,636 | \$3,815 | \$4,084 |
| SBC | \$7,264 | \$6,957 | \$6,904 | \$6,948 | \$7,115 | \$7,438 |
| SPRINT | \$1,260 | \$1,236 | \$1,253 | \$1,304 | \$1,368 | \$1,461 |
| U S WEST | \$2,869 | \$2,810 | \$2,860 | \$2,962 | \$3,119 | \$3,328 |
| RBOC | \$20,317 | \$19,403 | \$19,539 | \$19,989 | \$20,618 | \$21,585 |
| Year-over-year change | | -4.5% | 0.7% | 2.3% | 3.1% | 4.7% |
| non-RBOC | \$5,272 | \$5,174 | \$5,310 | \$5,508 | \$5,766 | \$6,161 |
| Year-over-year change | | -1.9% | 2.6% | 3.7% | 4.7% | 6.9% |
| Total | \$25,589 | \$24,578 | \$24,850 | \$25,497 | \$26,384 | \$27,747 |
| Year-over-year change | | -4.0% | 1.1% | 2.6% | 3.5% | 5.2% |
| Detail for Totals | | | | | | |
| SLC: Primary Line | \$4,204 | \$5,295 | \$6,096 | \$7,056 | \$7,401 | \$7,516 |
| SLC: Secondary Line | \$1,298 | \$1,413 | \$1,478 | \$1,616 | \$1,771 | \$1,946 |
| SLC: Multi Line | \$4,553 | \$4,290 | \$4,656 | \$5,049 | \$5,511 | \$6,046 |
| PICC: Primary Line | \$1,192 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PICC: Secondary Line | \$374 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PICC: Multi Line | \$1,177 | \$1,546 | \$1,080 | \$379 | \$212 | \$238 |
| per Minute | \$6,612 | \$4,931 | \$4,330 | \$4,144 | \$4,228 | \$4,431 |
| Special & Other | \$6,179 | \$6,451 | \$6,559 | \$6,602 | \$6,611 | \$6,919 |
| New Access USF | \$0 | \$650 | \$650 | \$650 | \$650 | \$650 |
| Total | \$25,589 | \$24,578 | \$24,850 | \$25,497 | \$26,384 | \$27,747 |

Appendix E

January 1 2000

| Company | Access Revenue * (\$Billions) | January 1, 2000 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|-----------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$6.07 | \$6.91 | \$1.04 | \$2.34 | \$2.34 | \$0.0097 | \$0.0097 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$6.07 | \$7.77 | \$1.04 | \$2.53 | \$4.31 | \$0.0104 | \$0.0098 |
| SBC | amtr | \$2.7 | \$3.50 | \$5.15 | \$5.15 | \$1.04 | \$0.66 | \$0.66 | \$0.0103 | \$0.0103 |
| SBC | swfr | \$2.2 | \$3.50 | \$6.07 | \$7.30 | \$0.62 | \$0.21 | \$0.21 | \$0.0110 | \$0.0110 |
| SBC | ptca | \$1.9 | \$3.50 | \$4.80 | \$4.80 | \$0.55 | \$0.00 | \$0.00 | \$0.0119 | \$0.0119 |
| SBC | snct | \$0.4 | \$3.50 | \$6.07 | \$7.91 | \$0.87 | \$0.47 | \$0.47 | \$0.0147 | \$0.0147 |
| SBC | ptrv | \$0.1 | \$3.50 | \$6.07 | \$7.40 | \$1.04 | \$0.84 | \$0.84 | \$0.0159 | \$0.0159 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$6.07 | \$7.86 | \$1.04 | \$2.21 | \$2.21 | \$0.0098 | \$0.0098 |
| ALIAN | ltne | ** | \$3.50 | \$6.07 | \$6.71 | \$0.61 | \$0.14 | \$0.14 | \$0.0174 | \$0.0174 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$6.07 | \$6.22 | \$1.04 | \$0.35 | \$0.35 | \$0.0090 | \$0.0090 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0457 | \$0.0302 |
| CITIZENS | ctc2 | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0671 | \$0.0402 |
| CITIZENS | ctog | ** | \$3.50 | \$4.73 | \$4.73 | \$0.85 | \$0.00 | \$0.00 | \$0.0212 | \$0.0212 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$5.30 | \$5.30 | \$0.84 | \$0.00 | \$0.00 | \$0.0114 | \$0.0114 |
| FRONTIER | rtcs | ** | \$3.50 | \$6.07 | \$8.30 | \$1.04 | \$2.53 | \$4.31 | \$0.0418 | \$0.0225 |
| FRONTIER | vitc | ** | \$3.50 | \$5.79 | \$5.79 | \$1.04 | \$2.53 | \$4.31 | \$0.0339 | \$0.0183 |
| GTE | gtca | \$0.6 | \$3.50 | \$6.07 | \$7.47 | \$1.04 | \$2.53 | \$4.31 | \$0.0178 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$3.50 | \$6.07 | \$8.92 | \$1.04 | \$2.53 | \$4.31 | \$0.0201 | \$0.0064 |
| GTE | gttx | \$0.3 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0286 | \$0.0109 |
| GTE | gain | \$0.2 | \$3.50 | \$6.07 | \$8.54 | \$1.04 | \$2.53 | \$4.31 | \$0.0355 | \$0.0191 |
| GTE | gtwa | \$0.2 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0311 | \$0.0146 |
| GTE | gtoh | \$0.2 | \$3.50 | \$6.07 | \$8.13 | \$1.04 | \$2.53 | \$4.31 | \$0.0337 | \$0.0135 |
| GTE | gthi | \$0.1 | \$3.50 | \$6.07 | \$9.15 | \$1.04 | \$2.53 | \$4.16 | \$0.0169 | \$0.0169 |
| GTE | gail | \$0.1 | \$3.50 | \$6.07 | \$8.78 | \$1.04 | \$2.53 | \$4.31 | \$0.0352 | \$0.0140 |
| GTE | gami | \$0.1 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0264 | \$0.0145 |
| GTE | cova | \$0.1 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0244 | \$0.0277 |
| GTE | gtor | \$0.1 | \$3.50 | \$6.07 | \$8.87 | \$1.04 | \$2.53 | \$4.31 | \$0.0334 | \$0.0171 |
| GTE | gtky | \$0.1 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0370 | \$0.0178 |
| GTE | gtwi | \$0.1 | \$3.50 | \$6.07 | \$9.03 | \$1.04 | \$2.53 | \$4.31 | \$0.0347 | \$0.0152 |
| GTE | gtpa | \$0.1 | \$3.50 | \$6.07 | \$8.06 | \$1.04 | \$2.53 | \$4.31 | \$0.0277 | \$0.0090 |
| GTE | coca | \$0.1 | \$3.50 | \$6.07 | \$8.52 | \$1.04 | \$2.53 | \$4.31 | \$0.0418 | \$0.0180 |
| GTE | comt | \$0.1 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0334 | \$0.0182 |
| GTE | gtnc | \$0.1 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0333 | \$0.0174 |
| GTE | gtid | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0482 | \$0.0429 |
| GTE | gtst | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0325 | \$0.0179 |
| GTE | cotx | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0364 | \$0.0299 |
| GTE | coil | ** | \$3.50 | \$6.07 | \$8.11 | \$1.04 | \$2.53 | \$4.31 | \$0.0279 | \$0.0259 |
| GTE | coin | ** | \$3.50 | \$6.07 | \$8.17 | \$1.04 | \$2.53 | \$4.31 | \$0.0297 | \$0.0277 |
| GTE | gtal | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0363 | \$0.0207 |
| GTE | coit | ** | \$3.50 | \$6.07 | \$8.94 | \$1.04 | \$2.53 | \$4.31 | \$0.0313 | \$0.0261 |
| GTE | gtia | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0424 | \$0.0280 |
| GTE | coat | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0301 | \$0.0223 |
| GTE | conc | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0250 | \$0.0225 |
| GTE | gtok | ** | \$3.50 | \$6.07 | \$8.84 | \$1.04 | \$2.53 | \$4.31 | \$0.0297 | \$0.0130 |
| GTE | gtmo | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0285 | \$0.0109 |
| GTE | copt | ** | \$3.50 | \$6.07 | \$7.94 | \$1.04 | \$2.53 | \$4.31 | \$0.0305 | \$0.0216 |
| GTE | cowa | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0403 | \$0.0326 |
| GTE | comn | ** | \$3.50 | \$6.07 | \$8.35 | \$1.04 | \$2.53 | \$4.31 | \$0.0283 | \$0.0225 |
| GTE | coal | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0245 | \$0.0191 |
| GTE | coky | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0242 | \$0.0259 |
| GTE | gtar | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0311 | \$0.0159 |
| GTE | conm | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0819 | \$0.0273 |
| GTE | gtne | ** | \$3.50 | \$6.07 | \$8.21 | \$1.04 | \$2.53 | \$4.31 | \$0.0385 | \$0.0197 |
| GTE | gtnm | ** | \$3.50 | \$6.07 | \$9.12 | \$1.04 | \$2.53 | \$4.31 | \$0.0376 | \$0.0142 |
| GTE | conv | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0324 | \$0.0160 |
| GTE | gtva | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0213 | \$0.0057 |
| GTE | gtmc | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0446 | \$0.0225 |
| GTE | gtak | ** | \$3.50 | \$6.07 | \$9.15 | \$1.04 | \$2.53 | \$4.31 | \$0.0206 | \$0.0144 |
| GTE | coaz | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0433 | \$0.0264 |
| GTE | gnca | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0418 | \$0.0184 |
| GTE | gtmn | ** | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0524 | \$0.0434 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$6.07 | \$7.19 | \$1.04 | \$2.53 | \$4.31 | \$0.0188 | \$0.0119 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$6.07 | \$7.47 | \$1.04 | \$2.53 | \$4.31 | \$0.0119 | \$0.0105 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$6.07 | \$9.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0355 | \$0.0200 |
| SPRINT | cenv | \$0.1 | \$3.50 | \$4.57 | \$4.57 | \$0.27 | \$0.00 | \$0.00 | \$0.0076 | \$0.0076 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$6.07 | \$7.93 | \$1.04 | \$2.53 | \$4.31 | \$0.0131 | \$0.0090 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$6.07 | \$7.40 | \$1.04 | \$2.53 | \$4.31 | \$0.0278 | \$0.0176 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$6.07 | \$7.45 | \$1.04 | \$1.79 | \$1.79 | \$0.0131 | \$0.0131 |
| SPRINT | utin | ** | \$3.50 | \$6.07 | \$7.20 | \$1.04 | \$2.53 | \$4.31 | \$0.0319 | \$0.0174 |
| SPRINT | utnw | ** | \$3.50 | \$6.07 | \$8.46 | \$1.04 | \$2.53 | \$4.31 | \$0.0472 | \$0.0263 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

Base Case

| Company | 1999 Access Revenue * (\$Billions) | July 1,2000 | | | | | | Total Charge per Access Minute (incl. Switching) | | |
|-----------------|------------------------------------|-------------|---------------|----------------|--------------|----------------|-----------------|--|-------------|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$6.86 | \$6.86 | \$1.56 | \$0.40 | \$0.40 | \$0.0092 | \$0.0092 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$7.24 | \$7.70 | \$1.56 | \$1.93 | \$1.93 | \$0.0093 | \$0.0093 |
| SBC | amtr | \$2.7 | \$3.50 | \$5.34 | \$5.34 | \$0.86 | \$0.00 | \$0.00 | \$0.0098 | \$0.0098 |
| SBC | swfr | \$2.2 | \$3.50 | \$5.51 | \$5.51 | \$1.38 | \$0.00 | \$0.00 | \$0.0105 | \$0.0105 |
| SBC | ptca | \$1.9 | \$3.50 | \$5.03 | \$5.03 | \$0.01 | \$0.00 | \$0.00 | \$0.0114 | \$0.0114 |
| SBC | snct | \$0.4 | \$3.50 | \$6.28 | \$6.28 | \$1.32 | \$0.00 | \$0.00 | \$0.0140 | \$0.0140 |
| SBC | ptnv | \$0.1 | \$3.50 | \$7.24 | \$7.34 | \$0.81 | \$0.04 | \$0.04 | \$0.0152 | \$0.0152 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$7.24 | \$7.82 | \$1.56 | \$0.27 | \$0.27 | \$0.0094 | \$0.0094 |
| ALIANT | ltne | ** | \$3.50 | \$5.35 | \$5.35 | \$0.98 | \$0.00 | \$0.00 | \$0.0166 | \$0.0166 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$5.48 | \$5.48 | \$1.25 | \$0.00 | \$0.00 | \$0.0086 | \$0.0086 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0384 | \$0.0231 |
| CITIZENS | ctc2 | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0664 | \$0.0288 |
| CITIZENS | ctog | ** | \$3.50 | \$4.36 | \$4.36 | \$0.50 | \$0.00 | \$0.00 | \$0.0202 | \$0.0202 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$4.67 | \$4.67 | \$0.93 | \$0.00 | \$0.00 | \$0.0109 | \$0.0109 |
| FRONTIER | rtcs | ** | \$3.50 | \$7.24 | \$8.25 | \$1.56 | \$3.58 | \$5.89 | \$0.0236 | \$0.0214 |
| FRONTIER | vitc | ** | \$3.50 | \$5.75 | \$5.75 | \$1.56 | \$3.58 | \$5.89 | \$0.0206 | \$0.0175 |
| GTE | gtca | \$0.6 | \$3.50 | \$7.24 | \$7.40 | \$1.56 | \$3.58 | \$4.69 | \$0.0051 | \$0.0051 |
| GTE | gtfl | \$0.4 | \$3.50 | \$7.24 | \$8.98 | \$1.56 | \$3.58 | \$5.89 | \$0.0077 | \$0.0061 |
| GTE | gttx | \$0.3 | \$3.50 | \$7.24 | \$9.25 | \$1.56 | \$3.58 | \$5.89 | \$0.0117 | \$0.0104 |
| GTE | gain | \$0.2 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0258 | \$0.0141 |
| GTE | gtwa | \$0.2 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0218 | \$0.0105 |
| GTE | gtoh | \$0.2 | \$3.50 | \$7.24 | \$8.01 | \$1.56 | \$3.58 | \$5.89 | \$0.0183 | \$0.0115 |
| GTE | gthi | \$0.1 | \$3.50 | \$7.24 | \$9.11 | \$1.56 | \$1.61 | \$1.61 | \$0.0161 | \$0.0161 |
| GTE | gail | \$0.1 | \$3.50 | \$7.24 | \$8.68 | \$1.56 | \$3.58 | \$5.89 | \$0.0169 | \$0.0134 |
| GTE | gami | \$0.1 | \$3.50 | \$7.24 | \$9.34 | \$1.56 | \$3.58 | \$3.63 | \$0.0138 | \$0.0138 |
| GTE | cova | \$0.1 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0242 | \$0.0202 |
| GTE | gtor | \$0.1 | \$3.50 | \$7.24 | \$8.70 | \$1.56 | \$3.58 | \$5.89 | \$0.0289 | \$0.0115 |
| GTE | gtky | \$0.1 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0276 | \$0.0136 |
| GTE | gtwi | \$0.1 | \$3.50 | \$7.24 | \$8.49 | \$1.56 | \$3.58 | \$5.89 | \$0.0182 | \$0.0145 |
| GTE | gtpa | \$0.1 | \$3.50 | \$7.24 | \$8.16 | \$1.56 | \$3.58 | \$5.89 | \$0.0095 | \$0.0085 |
| GTE | coca | \$0.1 | \$3.50 | \$7.24 | \$8.40 | \$1.56 | \$3.58 | \$5.89 | \$0.0279 | \$0.0148 |
| GTE | comt | \$0.1 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0226 | \$0.0136 |
| GTE | gtnc | \$0.1 | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0279 | \$0.0120 |
| GTE | gtid | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0478 | \$0.0345 |
| GTE | gtst | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0296 | \$0.0109 |
| GTE | cotx | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0363 | \$0.0153 |
| GTE | coil | ** | \$3.50 | \$7.24 | \$7.94 | \$1.56 | \$3.58 | \$5.89 | \$0.0277 | \$0.0164 |
| GTE | coin | ** | \$3.50 | \$7.24 | \$7.99 | \$1.56 | \$3.58 | \$5.89 | \$0.0294 | \$0.0169 |
| GTE | gtal | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0351 | \$0.0123 |
| GTE | coit | ** | \$3.50 | \$7.24 | \$8.82 | \$1.56 | \$3.58 | \$5.89 | \$0.0311 | \$0.0160 |
| GTE | gtia | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0416 | \$0.0181 |
| GTE | coat | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0299 | \$0.0121 |
| GTE | conc | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0248 | \$0.0122 |
| GTE | gtok | ** | \$3.50 | \$7.24 | \$8.75 | \$1.56 | \$3.58 | \$5.89 | \$0.0173 | \$0.0110 |
| GTE | gtmo | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.69 | \$0.0104 | \$0.0104 |
| GTE | copt | ** | \$3.50 | \$7.24 | \$7.92 | \$1.56 | \$3.58 | \$5.89 | \$0.0304 | \$0.0105 |
| GTE | cowa | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0400 | \$0.0207 |
| GTE | comn | ** | \$3.50 | \$7.24 | \$8.32 | \$1.56 | \$3.58 | \$5.89 | \$0.0281 | \$0.0117 |
| GTE | coal | ** | \$3.50 | \$7.24 | \$9.23 | \$1.56 | \$3.58 | \$5.89 | \$0.0244 | \$0.0084 |
| GTE | coky | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0240 | \$0.0145 |
| GTE | gtar | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0253 | \$0.0097 |
| GTE | conm | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0717 | \$0.0215 |
| GTE | gtne | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0200 | \$0.0150 |
| GTE | gtnm | ** | \$3.50 | \$7.24 | \$8.93 | \$1.56 | \$3.58 | \$5.89 | \$0.0262 | \$0.0128 |
| GTE | conv | ** | \$3.50 | \$7.24 | \$9.13 | \$1.56 | \$3.58 | \$5.89 | \$0.0323 | \$0.0087 |
| GTE | gtva | ** | \$3.50 | \$7.24 | \$9.44 | \$1.56 | \$3.58 | \$5.89 | \$0.0111 | \$0.0055 |
| GTE | gtmc | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0331 | \$0.0215 |
| GTE | gtak | ** | \$3.50 | \$7.24 | \$9.15 | \$1.56 | \$2.83 | \$2.83 | \$0.0138 | \$0.0138 |
| GTE | coaz | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0324 | \$0.0252 |
| GTE | gnca | ** | \$3.50 | \$7.24 | \$9.15 | \$1.56 | \$3.58 | \$5.89 | \$0.0261 | \$0.0176 |
| GTE | gtmn | ** | \$3.50 | \$7.24 | \$9.46 | \$1.56 | \$3.58 | \$5.89 | \$0.0522 | \$0.0321 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$7.13 | \$7.13 | \$1.56 | \$3.58 | \$3.78 | \$0.0114 | \$0.0114 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$6.86 | \$6.86 | \$1.56 | \$2.14 | \$2.14 | \$0.0101 | \$0.0101 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$7.24 | \$9.09 | \$1.56 | \$3.58 | \$5.89 | \$0.0241 | \$0.0153 |
| SPRINT | cenv | \$0.1 | \$3.50 | \$4.36 | \$4.36 | \$0.10 | \$0.00 | \$0.00 | \$0.0073 | \$0.0073 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$7.24 | \$7.89 | \$1.56 | \$2.50 | \$2.50 | \$0.0086 | \$0.0086 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$7.24 | \$7.34 | \$1.56 | \$3.58 | \$3.86 | \$0.0168 | \$0.0168 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$7.24 | \$7.42 | \$1.24 | \$0.06 | \$0.06 | \$0.0125 | \$0.0125 |
| SPRINT | utin | ** | \$3.50 | \$7.11 | \$7.11 | \$1.56 | \$3.58 | \$5.30 | \$0.0166 | \$0.0166 |
| SPRINT | utnw | ** | \$3.50 | \$7.24 | \$9.16 | \$1.56 | \$3.58 | \$5.89 | \$0.0273 | \$0.0251 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

Base Case

| Company | Access Revenue * (\$Billions) | July 1, 2001 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$6.19 | \$6.19 | \$1.82 | \$0.00 | \$0.00 | \$0.0088 | \$0.0088 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$7.65 | \$7.65 | \$2.09 | \$0.19 | \$0.19 | \$0.0089 | \$0.0089 |
| SBC | amtr | \$2.7 | \$3.50 | \$5.09 | \$5.09 | \$0.66 | \$0.00 | \$0.00 | \$0.0094 | \$0.0094 |
| SBC | swfr | \$2.2 | \$3.50 | \$5.26 | \$5.26 | \$1.15 | \$0.00 | \$0.00 | \$0.0100 | \$0.0100 |
| SBC | ptca | \$1.9 | \$3.50 | \$4.42 | \$4.42 | \$0.24 | \$0.00 | \$0.00 | \$0.0109 | \$0.0109 |
| SBC | snct | \$0.4 | \$3.50 | \$6.00 | \$6.00 | \$1.10 | \$0.00 | \$0.00 | \$0.0134 | \$0.0134 |
| SBC | ptnv | \$0.1 | \$3.50 | \$5.77 | \$5.77 | \$1.51 | \$0.00 | \$0.00 | \$0.0145 | \$0.0145 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$6.59 | \$6.59 | \$2.08 | \$0.00 | \$0.00 | \$0.0090 | \$0.0090 |
| ALIAN T | ltne | ** | \$3.50 | \$5.11 | \$5.11 | \$0.78 | \$0.00 | \$0.00 | \$0.0159 | \$0.0159 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$5.23 | \$5.23 | \$1.04 | \$0.00 | \$0.00 | \$0.0082 | \$0.0082 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0271 | \$0.0220 |
| CITIZENS | ctc2 | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0555 | \$0.0253 |
| CITIZENS | ctog | ** | \$3.50 | \$4.16 | \$4.16 | \$0.31 | \$0.00 | \$0.00 | \$0.0193 | \$0.0193 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$4.46 | \$4.46 | \$0.72 | \$0.00 | \$0.00 | \$0.0104 | \$0.0104 |
| FRONTIER | rtcs | ** | \$3.50 | \$8.19 | \$8.19 | \$2.09 | \$2.86 | \$2.86 | \$0.0205 | \$0.0205 |
| FRONTIER | vitc | ** | \$3.50 | \$5.72 | \$5.72 | \$2.09 | \$4.06 | \$4.06 | \$0.0167 | \$0.0167 |
| GTE | gtca | \$0.6 | \$3.50 | \$7.34 | \$7.34 | \$2.09 | \$2.66 | \$2.66 | \$0.0048 | \$0.0048 |
| GTE | gtfl | \$0.4 | \$3.50 | \$8.38 | \$8.76 | \$2.09 | \$3.30 | \$3.30 | \$0.0058 | \$0.0058 |
| GTE | gttx | \$0.3 | \$3.50 | \$8.38 | \$9.19 | \$2.09 | \$3.25 | \$3.25 | \$0.0099 | \$0.0099 |
| GTE | gain | \$0.2 | \$3.50 | \$8.38 | \$8.42 | \$2.09 | \$4.65 | \$7.29 | \$0.0135 | \$0.0135 |
| GTE | gtwa | \$0.2 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$5.18 | \$0.0101 | \$0.0101 |
| GTE | gtoh | \$0.2 | \$3.50 | \$7.92 | \$7.92 | \$2.09 | \$4.16 | \$4.16 | \$0.0110 | \$0.0110 |
| GTE | gthi | \$0.1 | \$3.50 | \$8.38 | \$9.07 | \$1.73 | \$0.18 | \$0.18 | \$0.0154 | \$0.0154 |
| GTE | gail | \$0.1 | \$3.50 | \$8.38 | \$8.59 | \$2.09 | \$3.43 | \$3.43 | \$0.0128 | \$0.0128 |
| GTE | gami | \$0.1 | \$3.50 | \$8.38 | \$9.26 | \$2.09 | \$0.29 | \$0.29 | \$0.0132 | \$0.0132 |
| GTE | cova | \$0.1 | \$3.50 | \$8.38 | \$9.49 | \$2.09 | \$4.65 | \$7.51 | \$0.0240 | \$0.0122 |
| GTE | gtor | \$0.1 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0123 | \$0.0109 |
| GTE | gtky | \$0.1 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0143 | \$0.0130 |
| GTE | gtwi | \$0.1 | \$3.50 | \$8.10 | \$8.10 | \$2.09 | \$3.40 | \$3.40 | \$0.0139 | \$0.0139 |
| GTE | gtpa | \$0.1 | \$3.50 | \$7.89 | \$7.89 | \$2.09 | \$2.72 | \$2.72 | \$0.0081 | \$0.0081 |
| GTE | coca | \$0.1 | \$3.50 | \$8.30 | \$8.30 | \$2.09 | \$4.65 | \$6.65 | \$0.0141 | \$0.0141 |
| GTE | comt | \$0.1 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.57 | \$4.57 | \$0.0129 | \$0.0129 |
| GTE | gtnc | \$0.1 | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0131 | \$0.0115 |
| GTE | gtid | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0475 | \$0.0253 |
| GTE | gtst | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0162 | \$0.0104 |
| GTE | cotx | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0156 | \$0.0124 |
| GTE | coil | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0188 | \$0.0093 |
| GTE | coin | ** | \$3.50 | \$7.87 | \$7.87 | \$2.09 | \$4.65 | \$7.51 | \$0.0200 | \$0.0115 |
| GTE | gtal | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0197 | \$0.0117 |
| GTE | coit | ** | \$3.50 | \$8.38 | \$8.73 | \$2.09 | \$4.65 | \$7.51 | \$0.0213 | \$0.0108 |
| GTE | gtia | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0233 | \$0.0173 |
| GTE | coat | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0182 | \$0.0082 |
| GTE | conc | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0172 | \$0.0072 |
| GTE | gtok | ** | \$3.50 | \$8.38 | \$8.65 | \$2.09 | \$4.32 | \$4.32 | \$0.0105 | \$0.0105 |
| GTE | gtmo | ** | \$3.50 | \$8.38 | \$9.51 | \$2.09 | \$1.90 | \$1.90 | \$0.0099 | \$0.0099 |
| GTE | copt | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0137 | \$0.0067 |
| GTE | cowa | ** | \$3.50 | \$8.38 | \$9.34 | \$2.09 | \$4.65 | \$7.51 | \$0.0377 | \$0.0101 |
| GTE | comn | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0122 | \$0.0083 |
| GTE | coal | ** | \$3.50 | \$8.38 | \$9.20 | \$2.09 | \$4.65 | \$7.51 | \$0.0125 | \$0.0062 |
| GTE | coky | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0171 | \$0.0066 |
| GTE | gtar | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0117 | \$0.0093 |
| GTE | conm | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0513 | \$0.0205 |
| GTE | gtne | ** | \$3.50 | \$8.04 | \$8.04 | \$2.09 | \$4.65 | \$5.44 | \$0.0143 | \$0.0143 |
| GTE | gtnm | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$6.73 | \$0.0122 | \$0.0122 |
| GTE | conv | ** | \$3.50 | \$8.38 | \$9.08 | \$2.09 | \$4.65 | \$7.51 | \$0.0253 | \$0.0055 |
| GTE | gtva | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$4.77 | \$0.0052 | \$0.0052 |
| GTE | gtmc | ** | \$3.50 | \$8.38 | \$9.36 | \$2.09 | \$4.65 | \$7.51 | \$0.0242 | \$0.0205 |
| GTE | gtak | ** | \$3.50 | \$8.38 | \$9.15 | \$2.06 | \$0.00 | \$0.00 | \$0.0132 | \$0.0132 |
| GTE | coaz | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.26 | \$0.0241 | \$0.0241 |
| GTE | gnca | ** | \$3.50 | \$8.38 | \$8.89 | \$2.09 | \$4.65 | \$6.11 | \$0.0168 | \$0.0168 |
| GTE | gtmn | ** | \$3.50 | \$8.38 | \$9.64 | \$2.09 | \$4.65 | \$7.51 | \$0.0519 | \$0.0208 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$7.07 | \$7.07 | \$2.09 | \$1.86 | \$1.86 | \$0.0108 | \$0.0108 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$7.39 | \$7.39 | \$1.79 | \$0.00 | \$0.00 | \$0.0096 | \$0.0096 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$8.38 | \$9.52 | \$2.09 | \$4.50 | \$4.50 | \$0.0146 | \$0.0146 |
| SPRINT | cenv | \$0.1 | \$3.44 | \$4.16 | \$4.16 | \$0.00 | \$0.00 | \$0.00 | \$0.0070 | \$0.0070 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$7.85 | \$7.85 | \$2.09 | \$0.07 | \$0.07 | \$0.0082 | \$0.0082 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$7.25 | \$7.25 | \$2.09 | \$1.04 | \$1.04 | \$0.0160 | \$0.0160 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$5.84 | \$5.84 | \$1.63 | \$0.00 | \$0.00 | \$0.0119 | \$0.0119 |
| SPRINT | utin | ** | \$3.50 | \$7.03 | \$7.03 | \$2.09 | \$1.88 | \$1.88 | \$0.0159 | \$0.0159 |
| SPRINT | utnw | ** | \$3.50 | \$8.35 | \$8.35 | \$2.09 | \$4.04 | \$4.04 | \$0.0239 | \$0.0239 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

Base Case

| Company | 1999 Access Revenue * (\$Billions) | July 1, 2002 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|------------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$5.91 | \$5.91 | \$1.58 | \$0.00 | \$0.00 | \$0.0084 | \$0.0084 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$6.85 | \$6.85 | \$2.30 | \$0.00 | \$0.00 | \$0.0085 | \$0.0085 |
| SBC | amtr | \$2.7 | \$3.50 | \$4.86 | \$4.86 | \$0.47 | \$0.00 | \$0.00 | \$0.0089 | \$0.0089 |
| SBC | swfr | \$2.2 | \$3.50 | \$5.02 | \$5.02 | \$0.94 | \$0.00 | \$0.00 | \$0.0096 | \$0.0096 |
| SBC | ptca | \$1.9 | \$3.50 | \$4.22 | \$4.22 | \$0.07 | \$0.00 | \$0.00 | \$0.0104 | \$0.0104 |
| SBC | snct | \$0.4 | \$3.50 | \$5.72 | \$5.72 | \$0.89 | \$0.00 | \$0.00 | \$0.0128 | \$0.0128 |
| SBC | ptnv | \$0.1 | \$3.50 | \$7.27 | \$7.27 | \$0.33 | \$0.00 | \$0.00 | \$0.0139 | \$0.0139 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$6.29 | \$6.29 | \$1.82 | \$0.00 | \$0.00 | \$0.0086 | \$0.0086 |
| ALIANT | ltne | ** | \$3.50 | \$4.88 | \$4.88 | \$0.58 | \$0.00 | \$0.00 | \$0.0152 | \$0.0152 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$4.99 | \$4.99 | \$0.83 | \$0.00 | \$0.00 | \$0.0078 | \$0.0078 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$9.54 | \$9.69 | \$2.63 | \$5.74 | \$7.34 | \$0.0210 | \$0.0210 |
| CITIZENS | ctc2 | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$9.16 | \$0.0425 | \$0.0242 |
| CITIZENS | ctog | ** | \$3.50 | \$3.97 | \$3.97 | \$0.14 | \$0.00 | \$0.00 | \$0.0184 | \$0.0184 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$4.25 | \$4.25 | \$0.53 | \$0.00 | \$0.00 | \$0.0099 | \$0.0099 |
| FRONTIER | rtcs | ** | \$3.50 | \$7.85 | \$7.85 | \$2.63 | \$0.67 | \$0.67 | \$0.0195 | \$0.0195 |
| FRONTIER | vitc | ** | \$3.50 | \$5.69 | \$5.69 | \$2.63 | \$2.18 | \$2.18 | \$0.0159 | \$0.0159 |
| GTE | gtca | \$0.6 | \$3.50 | \$7.28 | \$7.28 | \$2.63 | \$1.07 | \$1.07 | \$0.0046 | \$0.0046 |
| GTE | gtfl | \$0.4 | \$3.50 | \$8.70 | \$8.70 | \$2.63 | \$1.13 | \$1.13 | \$0.0055 | \$0.0055 |
| GTE | gttx | \$0.3 | \$3.50 | \$9.14 | \$9.14 | \$2.63 | \$1.39 | \$1.39 | \$0.0095 | \$0.0095 |
| GTE | gain | \$0.2 | \$3.50 | \$8.36 | \$8.36 | \$2.63 | \$3.99 | \$3.99 | \$0.0128 | \$0.0128 |
| GTE | gtwa | \$0.2 | \$3.50 | \$9.15 | \$9.15 | \$2.63 | \$2.86 | \$2.86 | \$0.0096 | \$0.0096 |
| GTE | gtoh | \$0.2 | \$3.50 | \$7.86 | \$7.86 | \$2.63 | \$1.47 | \$1.47 | \$0.0105 | \$0.0105 |
| GTE | gthi | \$0.1 | \$3.50 | \$9.03 | \$9.03 | \$1.20 | \$0.00 | \$0.00 | \$0.0147 | \$0.0147 |
| GTE | gail | \$0.1 | \$3.50 | \$8.52 | \$8.52 | \$2.63 | \$0.73 | \$0.73 | \$0.0122 | \$0.0122 |
| GTE | gami | \$0.1 | \$3.50 | \$7.18 | \$7.18 | \$2.50 | \$0.00 | \$0.00 | \$0.0126 | \$0.0126 |
| GTE | cova | \$0.1 | \$3.50 | \$9.38 | \$9.38 | \$2.63 | \$5.74 | \$9.16 | \$0.0226 | \$0.0064 |
| GTE | gtor | \$0.1 | \$3.50 | \$8.42 | \$8.42 | \$2.63 | \$5.63 | \$5.63 | \$0.0104 | \$0.0104 |
| GTE | gtky | \$0.1 | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$4.08 | \$4.08 | \$0.0124 | \$0.0124 |
| GTE | gtwi | \$0.1 | \$3.50 | \$7.82 | \$7.82 | \$2.63 | \$0.88 | \$0.88 | \$0.0132 | \$0.0132 |
| GTE | gtpa | \$0.1 | \$3.50 | \$7.84 | \$7.84 | \$2.63 | \$0.10 | \$0.10 | \$0.0077 | \$0.0077 |
| GTE | coca | \$0.1 | \$3.50 | \$8.51 | \$8.51 | \$2.63 | \$2.96 | \$2.96 | \$0.0135 | \$0.0135 |
| GTE | comt | \$0.1 | \$3.50 | \$9.54 | \$9.83 | \$2.45 | \$1.51 | \$1.51 | \$0.0124 | \$0.0124 |
| GTE | gtnc | \$0.1 | \$3.50 | \$9.31 | \$9.31 | \$2.63 | \$5.42 | \$5.42 | \$0.0110 | \$0.0110 |
| GTE | gtid | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$9.16 | \$0.0472 | \$0.0177 |
| GTE | gtst | ** | \$3.50 | \$9.44 | \$9.44 | \$2.63 | \$5.74 | \$6.93 | \$0.0099 | \$0.0099 |
| GTE | cotx | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$3.16 | \$3.16 | \$0.0119 | \$0.0119 |
| GTE | coil | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$6.11 | \$0.0088 | \$0.0088 |
| GTE | coin | ** | \$3.50 | \$7.76 | \$7.76 | \$2.63 | \$5.74 | \$7.31 | \$0.0110 | \$0.0110 |
| GTE | gtal | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$6.40 | \$0.0112 | \$0.0112 |
| GTE | coit | ** | \$3.50 | \$8.63 | \$8.63 | \$2.63 | \$5.74 | \$8.16 | \$0.0103 | \$0.0103 |
| GTE | gtia | ** | \$3.50 | \$9.54 | \$9.82 | \$2.63 | \$5.09 | \$5.09 | \$0.0165 | \$0.0165 |
| GTE | coat | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$6.98 | \$0.0078 | \$0.0078 |
| GTE | conc | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$8.67 | \$0.0069 | \$0.0069 |
| GTE | gtok | ** | \$3.50 | \$8.61 | \$8.61 | \$2.63 | \$2.35 | \$2.35 | \$0.0100 | \$0.0100 |
| GTE | gtmo | ** | \$3.50 | \$9.45 | \$9.45 | \$2.26 | \$0.00 | \$0.00 | \$0.0094 | \$0.0094 |
| GTE | copt | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.59 | \$5.59 | \$0.0064 | \$0.0064 |
| GTE | cowa | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$9.16 | \$0.0199 | \$0.0096 |
| GTE | comn | ** | \$3.50 | \$8.21 | \$8.21 | \$2.63 | \$5.74 | \$5.88 | \$0.0079 | \$0.0079 |
| GTE | coal | ** | \$3.50 | \$9.03 | \$9.03 | \$2.63 | \$5.57 | \$5.57 | \$0.0059 | \$0.0059 |
| GTE | coky | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$5.83 | \$0.0063 | \$0.0063 |
| GTE | gtar | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$3.75 | \$3.75 | \$0.0088 | \$0.0088 |
| GTE | conm | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$9.16 | \$0.0331 | \$0.0196 |
| GTE | gtne | ** | \$3.50 | \$7.97 | \$7.97 | \$2.63 | \$2.84 | \$2.84 | \$0.0137 | \$0.0137 |
| GTE | gtnm | ** | \$3.50 | \$8.69 | \$8.69 | \$2.63 | \$5.21 | \$5.21 | \$0.0117 | \$0.0117 |
| GTE | conv | ** | \$3.50 | \$9.01 | \$9.01 | \$2.63 | \$5.74 | \$9.16 | \$0.0157 | \$0.0052 |
| GTE | gtva | ** | \$3.50 | \$9.54 | \$9.83 | \$2.41 | \$2.00 | \$2.00 | \$0.0050 | \$0.0050 |
| GTE | gtmc | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$3.10 | \$3.10 | \$0.0196 | \$0.0196 |
| GTE | gtak | ** | \$3.50 | \$6.81 | \$6.81 | \$2.63 | \$0.85 | \$0.85 | \$0.0126 | \$0.0126 |
| GTE | coaz | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$3.92 | \$3.92 | \$0.0230 | \$0.0230 |
| GTE | gnca | ** | \$3.50 | \$8.68 | \$8.68 | \$2.63 | \$3.80 | \$3.80 | \$0.0160 | \$0.0160 |
| GTE | gtmn | ** | \$3.50 | \$9.54 | \$9.83 | \$2.63 | \$5.74 | \$9.16 | \$0.0517 | \$0.0115 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$7.21 | \$7.21 | \$2.57 | \$0.00 | \$0.00 | \$0.0103 | \$0.0103 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$6.36 | \$6.36 | \$1.94 | \$0.00 | \$0.00 | \$0.0092 | \$0.0092 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$9.50 | \$9.50 | \$2.63 | \$1.77 | \$1.77 | \$0.0139 | \$0.0139 |
| SPRINT | cenv | \$0.1 | \$3.28 | \$3.97 | \$3.97 | \$0.00 | \$0.00 | \$0.00 | \$0.0066 | \$0.0066 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$6.87 | \$6.87 | \$2.23 | \$0.00 | \$0.00 | \$0.0079 | \$0.0079 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$6.94 | \$6.94 | \$2.19 | \$0.00 | \$0.00 | \$0.0153 | \$0.0153 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$5.57 | \$5.57 | \$1.39 | \$0.00 | \$0.00 | \$0.0114 | \$0.0114 |
| SPRINT | utin | ** | \$3.50 | \$7.23 | \$7.23 | \$2.23 | \$0.00 | \$0.00 | \$0.0151 | \$0.0151 |
| SPRINT | utnw | ** | \$3.50 | \$8.28 | \$8.28 | \$2.63 | \$1.75 | \$1.75 | \$0.0229 | \$0.0229 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

Base Case

| Company | 1999 Access Revenue * (\$Billions) | July 1, 2003 | | | | | | | | |
|-----------------|------------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|--|-------------|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Total Charge per Access Minute (incl. Switching) | | |
| Company | cosa | | | | | | | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$5.64 | \$5.64 | \$1.35 | \$0.00 | \$0.00 | \$0.0080 | \$0.0080 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$6.53 | \$6.53 | \$2.04 | \$0.00 | \$0.00 | \$0.0081 | \$0.0081 |
| SBC | amtr | \$2.7 | \$3.50 | \$4.64 | \$4.64 | \$0.29 | \$0.00 | \$0.00 | \$0.0085 | \$0.0085 |
| SBC | swfr | \$2.2 | \$3.50 | \$4.79 | \$4.79 | \$0.74 | \$0.00 | \$0.00 | \$0.0092 | \$0.0092 |
| SBC | ptca | \$1.9 | \$3.41 | \$4.03 | \$4.03 | \$0.00 | \$0.00 | \$0.00 | \$0.0099 | \$0.0099 |
| SBC | snct | \$0.4 | \$3.50 | \$5.46 | \$5.46 | \$0.69 | \$0.00 | \$0.00 | \$0.0122 | \$0.0122 |
| SBC | ptnv | \$0.1 | \$3.50 | \$5.47 | \$5.47 | \$1.28 | \$0.00 | \$0.00 | \$0.0132 | \$0.0132 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$6.00 | \$6.00 | \$1.58 | \$0.00 | \$0.00 | \$0.0082 | \$0.0082 |
| ALIAN T | ltne | ** | \$3.50 | \$4.66 | \$4.66 | \$0.40 | \$0.00 | \$0.00 | \$0.0145 | \$0.0145 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$4.77 | \$4.77 | \$0.63 | \$0.00 | \$0.00 | \$0.0075 | \$0.0075 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$9.65 | \$9.65 | \$3.18 | \$3.25 | \$3.25 | \$0.0201 | \$0.0201 |
| CITIZENS | ctc2 | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$6.85 | \$10.83 | \$0.0287 | \$0.0231 |
| CITIZENS | ctog | ** | \$3.48 | \$3.79 | \$3.79 | \$0.00 | \$0.00 | \$0.00 | \$0.0176 | \$0.0176 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$4.06 | \$4.06 | \$0.35 | \$0.00 | \$0.00 | \$0.0095 | \$0.0095 |
| FRONTIER | rtcs | ** | \$3.50 | \$7.53 | \$7.53 | \$2.64 | \$0.00 | \$0.00 | \$0.0186 | \$0.0186 |
| FRONTIER | vitc | ** | \$3.50 | \$6.76 | \$6.76 | \$2.64 | \$0.00 | \$0.00 | \$0.0152 | \$0.0152 |
| GTE | gtca | \$0.6 | \$3.50 | \$7.44 | \$7.44 | \$2.66 | \$0.00 | \$0.00 | \$0.0044 | \$0.0044 |
| GTE | gtfl | \$0.4 | \$3.50 | \$8.65 | \$8.65 | \$2.74 | \$0.00 | \$0.00 | \$0.0053 | \$0.0053 |
| GTE | gttx | \$0.3 | \$3.50 | \$9.08 | \$9.08 | \$3.16 | \$0.00 | \$0.00 | \$0.0090 | \$0.0090 |
| GTE | gain | \$0.2 | \$3.50 | \$8.30 | \$8.30 | \$3.18 | \$1.58 | \$1.58 | \$0.0123 | \$0.0123 |
| GTE | gtwa | \$0.2 | \$3.50 | \$9.07 | \$9.07 | \$3.18 | \$1.04 | \$1.04 | \$0.0092 | \$0.0092 |
| GTE | gtoh | \$0.2 | \$3.50 | \$7.66 | \$7.66 | \$2.87 | \$0.00 | \$0.00 | \$0.0100 | \$0.0100 |
| GTE | gthi | \$0.1 | \$3.50 | \$6.96 | \$6.96 | \$2.38 | \$0.00 | \$0.00 | \$0.0140 | \$0.0140 |
| GTE | gail | \$0.1 | \$3.50 | \$7.78 | \$7.78 | \$2.80 | \$0.00 | \$0.00 | \$0.0117 | \$0.0117 |
| GTE | gami | \$0.1 | \$3.50 | \$6.85 | \$6.85 | \$2.23 | \$0.00 | \$0.00 | \$0.0120 | \$0.0120 |
| GTE | cova | \$0.1 | \$3.50 | \$9.29 | \$9.29 | \$3.18 | \$6.85 | \$10.83 | \$0.0129 | \$0.0061 |
| GTE | gtor | \$0.1 | \$3.50 | \$8.33 | \$8.33 | \$3.18 | \$3.74 | \$3.74 | \$0.0100 | \$0.0100 |
| GTE | gtky | \$0.1 | \$3.50 | \$9.79 | \$9.79 | \$3.18 | \$1.51 | \$1.51 | \$0.0118 | \$0.0118 |
| GTE | gtwi | \$0.1 | \$3.50 | \$7.50 | \$7.50 | \$2.68 | \$0.00 | \$0.00 | \$0.0126 | \$0.0126 |
| GTE | gtpa | \$0.1 | \$3.50 | \$7.16 | \$7.16 | \$2.55 | \$0.00 | \$0.00 | \$0.0074 | \$0.0074 |
| GTE | coca | \$0.1 | \$3.50 | \$8.20 | \$8.20 | \$3.18 | \$0.85 | \$0.85 | \$0.0129 | \$0.0129 |
| GTE | comt | \$0.1 | \$3.50 | \$10.02 | \$10.02 | \$1.86 | \$1.44 | \$1.44 | \$0.0118 | \$0.0118 |
| GTE | gtnc | \$0.1 | \$3.50 | \$10.00 | \$10.00 | \$3.18 | \$2.70 | \$2.70 | \$0.0105 | \$0.0105 |
| GTE | gtid | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$6.85 | \$10.83 | \$0.0392 | \$0.0155 |
| GTE | gtst | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$3.59 | \$3.59 | \$0.0095 | \$0.0095 |
| GTE | cotx | ** | \$3.50 | \$9.91 | \$9.91 | \$3.18 | \$0.10 | \$0.10 | \$0.0113 | \$0.0113 |
| GTE | coil | ** | \$3.50 | \$7.46 | \$7.46 | \$3.18 | \$5.62 | \$5.62 | \$0.0084 | \$0.0084 |
| GTE | coin | ** | \$3.50 | \$7.66 | \$7.66 | \$3.18 | \$4.25 | \$4.25 | \$0.0105 | \$0.0105 |
| GTE | gtal | ** | \$3.50 | \$9.56 | \$9.56 | \$3.18 | \$3.24 | \$3.24 | \$0.0107 | \$0.0107 |
| GTE | coit | ** | \$3.50 | \$8.54 | \$8.54 | \$3.18 | \$4.38 | \$4.38 | \$0.0099 | \$0.0099 |
| GTE | gtia | ** | \$3.50 | \$9.73 | \$9.73 | \$3.18 | \$1.75 | \$1.75 | \$0.0158 | \$0.0158 |
| GTE | coat | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$3.09 | \$3.09 | \$0.0075 | \$0.0075 |
| GTE | conc | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$2.75 | \$2.75 | \$0.0065 | \$0.0065 |
| GTE | gtok | ** | \$3.50 | \$8.36 | \$8.36 | \$3.18 | \$0.90 | \$0.90 | \$0.0096 | \$0.0096 |
| GTE | gtmo | ** | \$3.50 | \$7.35 | \$7.35 | \$2.81 | \$0.00 | \$0.00 | \$0.0090 | \$0.0090 |
| GTE | copt | ** | \$3.50 | \$7.72 | \$7.72 | \$3.18 | \$5.30 | \$5.30 | \$0.0061 | \$0.0061 |
| GTE | cowa | ** | \$3.50 | \$8.86 | \$8.86 | \$3.18 | \$6.85 | \$10.58 | \$0.0092 | \$0.0092 |
| GTE | comn | ** | \$3.50 | \$8.12 | \$8.12 | \$3.18 | \$2.10 | \$2.10 | \$0.0075 | \$0.0075 |
| GTE | coal | ** | \$3.50 | \$8.98 | \$8.98 | \$3.18 | \$2.36 | \$2.36 | \$0.0056 | \$0.0056 |
| GTE | coky | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$2.04 | \$2.04 | \$0.0060 | \$0.0060 |
| GTE | gtar | ** | \$3.50 | \$10.02 | \$10.02 | \$3.01 | \$0.96 | \$0.96 | \$0.0084 | \$0.0084 |
| GTE | conm | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$6.85 | \$9.72 | \$0.0187 | \$0.0187 |
| GTE | gtne | ** | \$3.50 | \$7.91 | \$7.91 | \$3.18 | \$0.64 | \$0.64 | \$0.0131 | \$0.0131 |
| GTE | gtnm | ** | \$3.50 | \$8.59 | \$8.59 | \$3.18 | \$3.67 | \$3.67 | \$0.0111 | \$0.0111 |
| GTE | conv | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$6.85 | \$9.98 | \$0.0050 | \$0.0050 |
| GTE | gtva | ** | \$3.50 | \$10.02 | \$10.02 | \$1.84 | \$1.90 | \$1.90 | \$0.0048 | \$0.0048 |
| GTE | gtmc | ** | \$3.50 | \$6.97 | \$6.97 | \$3.18 | \$0.37 | \$0.37 | \$0.0187 | \$0.0187 |
| GTE | gtak | ** | \$3.50 | \$6.51 | \$6.51 | \$3.02 | \$0.00 | \$0.00 | \$0.0120 | \$0.0120 |
| GTE | coaz | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$1.31 | \$1.31 | \$0.0219 | \$0.0219 |
| GTE | gnca | ** | \$3.50 | \$8.42 | \$8.42 | \$3.18 | \$2.01 | \$2.01 | \$0.0153 | \$0.0153 |
| GTE | gtmn | ** | \$3.50 | \$10.02 | \$10.02 | \$3.18 | \$6.85 | \$10.83 | \$0.0464 | \$0.0047 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$6.89 | \$6.89 | \$2.30 | \$0.00 | \$0.00 | \$0.0099 | \$0.0099 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$6.07 | \$6.07 | \$1.69 | \$0.00 | \$0.00 | \$0.0088 | \$0.0088 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$9.46 | \$9.46 | \$2.95 | \$0.00 | \$0.00 | \$0.0133 | \$0.0133 |
| SPRINT | cenv | \$0.1 | \$3.13 | \$3.79 | \$3.79 | \$0.00 | \$0.00 | \$0.00 | \$0.0063 | \$0.0063 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$6.55 | \$6.55 | \$1.97 | \$0.00 | \$0.00 | \$0.0075 | \$0.0075 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$6.62 | \$6.62 | \$1.93 | \$0.00 | \$0.00 | \$0.0146 | \$0.0146 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$5.32 | \$5.32 | \$1.17 | \$0.00 | \$0.00 | \$0.0109 | \$0.0109 |
| SPRINT | utin | ** | \$3.50 | \$6.90 | \$6.90 | \$1.97 | \$0.00 | \$0.00 | \$0.0144 | \$0.0144 |
| SPRINT | utnw | ** | \$3.50 | \$7.97 | \$7.97 | \$3.12 | \$0.00 | \$0.00 | \$0.0218 | \$0.0218 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

Base Case

| Company | Access Revenue * (\$Billions) | July 1, 2004 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntr | \$6.3 | \$3.50 | \$5.38 | \$5.38 | \$1.13 | \$0.00 | \$0.00 | \$0.0077 | \$0.0077 |
| BELLSOUTH | bstr | \$4.0 | \$3.50 | \$6.24 | \$6.24 | \$1.78 | \$0.00 | \$0.00 | \$0.0078 | \$0.0078 |
| SBC | amtr | \$2.7 | \$3.50 | \$4.43 | \$4.43 | \$0.12 | \$0.00 | \$0.00 | \$0.0081 | \$0.0081 |
| SBC | swfr | \$2.2 | \$3.50 | \$4.58 | \$4.58 | \$0.54 | \$0.00 | \$0.00 | \$0.0087 | \$0.0087 |
| SBC | ptca | \$1.9 | \$3.25 | \$3.85 | \$3.85 | \$0.00 | \$0.00 | \$0.00 | \$0.0094 | \$0.0094 |
| SBC | snct | \$0.4 | \$3.50 | \$5.21 | \$5.21 | \$0.50 | \$0.00 | \$0.00 | \$0.0116 | \$0.0116 |
| SBC | ptnv | \$0.1 | \$3.50 | \$5.22 | \$5.22 | \$1.06 | \$0.00 | \$0.00 | \$0.0126 | \$0.0126 |
| U S WEST | ustr | \$3.0 | \$3.50 | \$5.73 | \$5.73 | \$1.35 | \$0.00 | \$0.00 | \$0.0078 | \$0.0078 |
| ALIANT | ltne | ** | \$3.50 | \$4.44 | \$4.44 | \$0.22 | \$0.00 | \$0.00 | \$0.0138 | \$0.0138 |
| CINCINNATI BELL | cbtc | \$0.1 | \$3.50 | \$4.55 | \$4.55 | \$0.44 | \$0.00 | \$0.00 | \$0.0071 | \$0.0071 |
| CITIZENS | ctc1 | \$0.2 | \$3.50 | \$9.62 | \$9.62 | \$3.74 | \$0.08 | \$0.08 | \$0.0192 | \$0.0192 |
| CITIZENS | ctc2 | ** | \$3.50 | \$10.22 | \$10.22 | \$3.74 | \$7.99 | \$8.25 | \$0.0220 | \$0.0220 |
| CITIZENS | ctog | ** | \$3.32 | \$3.61 | \$3.61 | \$0.00 | \$0.00 | \$0.00 | \$0.0168 | \$0.0168 |
| FRONTIER | rtny | \$0.1 | \$3.50 | \$3.88 | \$3.88 | \$0.17 | \$0.00 | \$0.00 | \$0.0091 | \$0.0091 |
| FRONTIER | rtns | ** | \$3.50 | \$7.18 | \$7.18 | \$2.36 | \$0.00 | \$0.00 | \$0.0178 | \$0.0178 |
| FRONTIER | vitc | ** | \$3.50 | \$6.45 | \$6.45 | \$2.36 | \$0.00 | \$0.00 | \$0.0145 | \$0.0145 |
| GTE | gtca | \$0.6 | \$3.50 | \$7.10 | \$7.10 | \$2.39 | \$0.00 | \$0.00 | \$0.0042 | \$0.0042 |
| GTE | gtfl | \$0.4 | \$3.50 | \$7.56 | \$7.56 | \$2.90 | \$0.00 | \$0.00 | \$0.0051 | \$0.0051 |
| GTE | gttx | \$0.3 | \$3.50 | \$8.24 | \$8.24 | \$3.48 | \$0.00 | \$0.00 | \$0.0086 | \$0.0086 |
| GTE | gain | \$0.2 | \$3.50 | \$8.20 | \$8.20 | \$3.45 | \$0.00 | \$0.00 | \$0.0117 | \$0.0117 |
| GTE | gtwa | \$0.2 | \$3.50 | \$8.71 | \$8.71 | \$3.53 | \$0.00 | \$0.00 | \$0.0087 | \$0.0087 |
| GTE | gtoh | \$0.2 | \$3.50 | \$7.31 | \$7.31 | \$2.58 | \$0.00 | \$0.00 | \$0.0096 | \$0.0096 |
| GTE | gthi | \$0.1 | \$3.50 | \$6.65 | \$6.65 | \$2.11 | \$0.00 | \$0.00 | \$0.0134 | \$0.0134 |
| GTE | gail | \$0.1 | \$3.50 | \$7.43 | \$7.43 | \$2.51 | \$0.00 | \$0.00 | \$0.0111 | \$0.0111 |
| GTE | gami | \$0.1 | \$3.50 | \$6.54 | \$6.54 | \$1.97 | \$0.00 | \$0.00 | \$0.0115 | \$0.0115 |
| GTE | cova | \$0.1 | \$3.50 | \$9.21 | \$9.21 | \$3.74 | \$7.99 | \$9.25 | \$0.0058 | \$0.0058 |
| GTE | gtor | \$0.1 | \$3.50 | \$8.25 | \$8.25 | \$3.74 | \$2.00 | \$2.00 | \$0.0095 | \$0.0095 |
| GTE | gtky | \$0.1 | \$3.50 | \$9.72 | \$9.72 | \$3.37 | \$0.00 | \$0.00 | \$0.0113 | \$0.0113 |
| GTE | gtwi | \$0.1 | \$3.50 | \$7.15 | \$7.15 | \$2.40 | \$0.00 | \$0.00 | \$0.0120 | \$0.0120 |
| GTE | gtpa | \$0.1 | \$3.50 | \$6.84 | \$6.84 | \$2.28 | \$0.00 | \$0.00 | \$0.0070 | \$0.0070 |
| GTE | coca | \$0.1 | \$3.50 | \$7.86 | \$7.86 | \$3.25 | \$0.00 | \$0.00 | \$0.0123 | \$0.0123 |
| GTE | comt | \$0.1 | \$3.50 | \$7.84 | \$7.84 | \$3.00 | \$0.00 | \$0.00 | \$0.0113 | \$0.0113 |
| GTE | gtnc | \$0.1 | \$3.50 | \$9.22 | \$9.22 | \$3.74 | \$2.02 | \$2.02 | \$0.0100 | \$0.0100 |
| GTE | gtid | ** | \$3.50 | \$10.22 | \$10.22 | \$3.74 | \$7.99 | \$12.55 | \$0.0290 | \$0.0148 |
| GTE | gtst | ** | \$3.50 | \$9.27 | \$9.27 | \$3.74 | \$2.16 | \$2.16 | \$0.0091 | \$0.0091 |
| GTE | cotx | ** | \$3.50 | \$8.63 | \$8.63 | \$3.26 | \$0.00 | \$0.00 | \$0.0108 | \$0.0108 |
| GTE | coil | ** | \$3.50 | \$7.36 | \$7.36 | \$3.74 | \$3.06 | \$3.06 | \$0.0081 | \$0.0081 |
| GTE | coin | ** | \$3.50 | \$7.56 | \$7.56 | \$3.74 | \$1.88 | \$1.88 | \$0.0100 | \$0.0100 |
| GTE | gtal | ** | \$3.50 | \$9.20 | \$9.20 | \$3.74 | \$0.76 | \$0.76 | \$0.0102 | \$0.0102 |
| GTE | coit | ** | \$3.50 | \$8.45 | \$8.45 | \$3.74 | \$1.47 | \$1.47 | \$0.0094 | \$0.0094 |
| GTE | gtia | ** | \$3.50 | \$8.98 | \$8.98 | \$3.54 | \$0.00 | \$0.00 | \$0.0150 | \$0.0150 |
| GTE | coat | ** | \$3.50 | \$10.22 | \$10.22 | \$3.42 | \$0.77 | \$0.77 | \$0.0071 | \$0.0071 |
| GTE | conc | ** | \$3.50 | \$10.22 | \$10.22 | \$3.28 | \$0.62 | \$0.62 | \$0.0063 | \$0.0063 |
| GTE | gtok | ** | \$3.50 | \$8.04 | \$8.04 | \$3.54 | \$0.00 | \$0.00 | \$0.0091 | \$0.0091 |
| GTE | gtmo | ** | \$3.50 | \$7.01 | \$7.01 | \$2.53 | \$0.00 | \$0.00 | \$0.0086 | \$0.0086 |
| GTE | copt | ** | \$3.50 | \$7.64 | \$7.64 | \$3.74 | \$2.70 | \$2.70 | \$0.0058 | \$0.0058 |
| GTE | cowa | ** | \$3.50 | \$8.76 | \$8.76 | \$3.74 | \$6.66 | \$6.66 | \$0.0088 | \$0.0088 |
| GTE | comn | ** | \$3.50 | \$8.52 | \$8.52 | \$3.19 | \$0.00 | \$0.00 | \$0.0072 | \$0.0072 |
| GTE | coal | ** | \$3.50 | \$8.93 | \$8.93 | \$3.58 | \$0.00 | \$0.00 | \$0.0054 | \$0.0054 |
| GTE | coky | ** | \$3.50 | \$10.22 | \$10.22 | \$2.91 | \$1.19 | \$1.19 | \$0.0058 | \$0.0058 |
| GTE | gtar | ** | \$3.50 | \$8.13 | \$8.13 | \$3.65 | \$0.00 | \$0.00 | \$0.0081 | \$0.0081 |
| GTE | conm | ** | \$3.50 | \$10.22 | \$10.22 | \$3.74 | \$6.03 | \$6.03 | \$0.0179 | \$0.0179 |
| GTE | gtne | ** | \$3.50 | \$7.90 | \$7.90 | \$2.97 | \$0.00 | \$0.00 | \$0.0125 | \$0.0125 |
| GTE | gtnm | ** | \$3.50 | \$8.50 | \$8.50 | \$3.74 | \$2.32 | \$2.32 | \$0.0106 | \$0.0106 |
| GTE | conv | ** | \$3.50 | \$8.91 | \$8.91 | \$3.74 | \$7.91 | \$7.91 | \$0.0048 | \$0.0048 |
| GTE | gtva | ** | \$3.50 | \$8.33 | \$8.33 | \$3.00 | \$0.00 | \$0.00 | \$0.0045 | \$0.0045 |
| GTE | gtmc | ** | \$3.50 | \$6.65 | \$6.65 | \$2.93 | \$0.00 | \$0.00 | \$0.0178 | \$0.0178 |
| GTE | gtak | ** | \$3.50 | \$6.22 | \$6.22 | \$2.72 | \$0.00 | \$0.00 | \$0.0114 | \$0.0114 |
| GTE | coaz | ** | \$3.50 | \$10.22 | \$10.22 | \$2.68 | \$0.91 | \$0.91 | \$0.0209 | \$0.0209 |
| GTE | gnca | ** | \$3.50 | \$10.22 | \$10.22 | \$2.33 | \$0.44 | \$0.44 | \$0.0146 | \$0.0146 |
| GTE | gtmn | ** | \$3.50 | \$10.22 | \$10.22 | \$3.74 | \$7.99 | \$12.55 | \$0.0215 | \$0.0044 |
| SPRINT | ucfl | \$0.4 | \$3.50 | \$6.57 | \$6.57 | \$2.03 | \$0.00 | \$0.00 | \$0.0094 | \$0.0094 |
| SPRINT | ucnc | \$0.2 | \$3.50 | \$5.79 | \$5.79 | \$1.46 | \$0.00 | \$0.00 | \$0.0084 | \$0.0084 |
| SPRINT | ucmw | \$0.2 | \$3.50 | \$7.72 | \$7.72 | \$3.53 | \$0.00 | \$0.00 | \$0.0127 | \$0.0127 |
| SPRINT | cenv | \$0.1 | \$2.99 | \$3.62 | \$3.62 | \$0.00 | \$0.00 | \$0.00 | \$0.0061 | \$0.0061 |
| SPRINT | ucse | \$0.1 | \$3.50 | \$6.26 | \$6.26 | \$1.72 | \$0.00 | \$0.00 | \$0.0072 | \$0.0072 |
| SPRINT | utoh | \$0.1 | \$3.50 | \$6.32 | \$6.32 | \$1.68 | \$0.00 | \$0.00 | \$0.0139 | \$0.0139 |
| SPRINT | uteg | \$0.1 | \$3.50 | \$5.08 | \$5.08 | \$0.96 | \$0.00 | \$0.00 | \$0.0104 | \$0.0104 |
| SPRINT | utin | ** | \$3.50 | \$6.58 | \$6.58 | \$1.72 | \$0.00 | \$0.00 | \$0.0138 | \$0.0138 |
| SPRINT | utnw | ** | \$3.50 | \$7.61 | \$7.61 | \$2.82 | \$0.00 | \$0.00 | \$0.0208 | \$0.0208 |

* Filed 1999 rates times estimated quantities

** Amounts less than \$50 million

Appendix E

CALLS

| Company | Access Revenue * (\$Billions) | July 1,2000 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|-------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntn | \$6.3 | \$4.35 | \$6.07 | \$6.07 | \$0.00 | \$0.00 | \$4.31 | \$0.0066 | \$0.0064 |
| BELLSOUTH | bstr | \$4.0 | \$4.35 | \$6.54 | \$6.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0088 | \$0.0066 |
| SBC | amtr | \$2.7 | \$4.35 | \$4.96 | \$5.20 | \$0.00 | \$0.00 | \$1.31 | \$0.0070 | \$0.0070 |
| SBC | swtr | \$2.2 | \$4.35 | \$5.28 | \$5.64 | \$0.00 | \$0.00 | \$2.03 | \$0.0078 | \$0.0078 |
| SBC | ptca | \$1.9 | \$4.35 | \$4.40 | \$4.60 | \$0.00 | \$0.00 | \$0.10 | \$0.0088 | \$0.0088 |
| SBC | snct | \$0.4 | \$4.35 | \$5.52 | \$6.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0113 | \$0.0104 |
| SBC | ptnv | \$0.1 | \$4.35 | \$5.84 | \$6.27 | \$0.00 | \$0.00 | \$4.31 | \$0.0121 | \$0.0120 |
| U S WEST | ustr | \$3.0 | \$4.35 | \$6.13 | \$6.43 | \$0.00 | \$0.00 | \$3.95 | \$0.0070 | \$0.0070 |
| ALIANT | ltne | ** | \$4.35 | \$4.99 | \$4.99 | \$0.00 | \$0.00 | \$1.98 | \$0.0131 | \$0.0131 |
| CINCINNATI BELL | cbtc | \$0.1 | \$4.35 | \$5.19 | \$5.19 | \$0.00 | \$0.00 | \$2.32 | \$0.0065 | \$0.0065 |
| CITIZENS | ctc1 | \$0.2 | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0326 | \$0.0184 |
| CITIZENS | ctc2 | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0560 | \$0.0195 |
| CITIZENS | ctog | ** | \$3.48 | \$3.48 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0128 | \$0.0128 |
| FRONTIER | rtny | \$0.1 | \$4.35 | \$4.62 | \$6.66 | \$0.00 | \$0.00 | \$0.64 | \$0.0079 | \$0.0079 |
| FRONTIER | rtcs | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0355 | \$0.0152 |
| FRONTIER | vitc | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0213 | \$0.0104 |
| GTE | gtca | \$0.6 | \$4.35 | \$6.84 | \$6.84 | \$0.00 | \$0.00 | \$4.31 | \$0.0100 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$4.35 | \$7.00 | \$7.40 | \$0.00 | \$0.00 | \$4.31 | \$0.0153 | \$0.0055 |
| GTE | gttx | \$0.3 | \$4.35 | \$7.00 | \$7.58 | \$0.00 | \$0.00 | \$4.31 | \$0.0189 | \$0.0066 |
| GTE | gain | \$0.2 | \$4.35 | \$7.00 | \$8.17 | \$0.00 | \$0.00 | \$4.31 | \$0.0286 | \$0.0104 |
| GTE | gtwa | \$0.2 | \$4.35 | \$7.00 | \$8.30 | \$0.00 | \$0.00 | \$4.31 | \$0.0264 | \$0.0069 |
| GTE | gtoh | \$0.2 | \$4.35 | \$6.87 | \$6.87 | \$0.00 | \$0.00 | \$4.31 | \$0.0239 | \$0.0078 |
| GTE | gthi | \$0.1 | \$4.35 | \$6.53 | \$6.53 | \$0.00 | \$0.00 | \$4.31 | \$0.0135 | \$0.0123 |
| GTE | gail | \$0.1 | \$4.35 | \$6.95 | \$6.95 | \$0.00 | \$0.00 | \$4.31 | \$0.0240 | \$0.0097 |
| GTE | gami | \$0.1 | \$4.35 | \$6.12 | \$6.12 | \$0.00 | \$0.00 | \$4.31 | \$0.0206 | \$0.0105 |
| GTE | cova | \$0.1 | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0185 |
| GTE | gtor | \$0.1 | \$4.35 | \$7.00 | \$9.10 | \$0.00 | \$0.00 | \$4.31 | \$0.0286 | \$0.0078 |
| GTE | gtyk | \$0.1 | \$4.35 | \$7.00 | \$8.22 | \$0.00 | \$0.00 | \$4.31 | \$0.0304 | \$0.0102 |
| GTE | gtwi | \$0.1 | \$4.35 | \$6.61 | \$6.61 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0098 |
| GTE | gtpa | \$0.1 | \$4.35 | \$6.64 | \$6.64 | \$0.00 | \$0.00 | \$4.31 | \$0.0190 | \$0.0055 |
| GTE | coca | \$0.1 | \$4.35 | \$7.00 | \$7.46 | \$0.00 | \$0.00 | \$4.31 | \$0.0309 | \$0.0103 |
| GTE | comt | \$0.1 | \$4.35 | \$7.00 | \$7.39 | \$0.00 | \$0.00 | \$4.31 | \$0.0298 | \$0.0099 |
| GTE | gtnc | \$0.1 | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0271 | \$0.0079 |
| GTE | gtid | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0467 | \$0.0238 |
| GTE | gst | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0283 | \$0.0073 |
| GTE | cotx | ** | \$4.35 | \$7.00 | \$7.98 | \$0.00 | \$0.00 | \$4.31 | \$0.0353 | \$0.0125 |
| GTE | coil | ** | \$4.35 | \$7.00 | \$8.56 | \$0.00 | \$0.00 | \$4.31 | \$0.0267 | \$0.0112 |
| GTE | coin | ** | \$4.35 | \$7.00 | \$8.32 | \$0.00 | \$0.00 | \$4.31 | \$0.0282 | \$0.0130 |
| GTE | gtal | ** | \$4.35 | \$7.00 | \$8.55 | \$0.00 | \$0.00 | \$4.31 | \$0.0348 | \$0.0093 |
| GTE | coit | ** | \$4.35 | \$7.00 | \$8.47 | \$0.00 | \$0.00 | \$4.31 | \$0.0299 | \$0.0120 |
| GTE | gtia | ** | \$4.35 | \$7.00 | \$8.04 | \$0.00 | \$0.00 | \$4.31 | \$0.0412 | \$0.0116 |
| GTE | coat | ** | \$4.35 | \$7.00 | \$8.68 | \$0.00 | \$0.00 | \$4.31 | \$0.0290 | \$0.0101 |
| GTE | conc | ** | \$4.35 | \$7.00 | \$8.42 | \$0.00 | \$0.00 | \$4.31 | \$0.0242 | \$0.0121 |
| GTE | gtok | ** | \$4.35 | \$7.00 | \$7.52 | \$0.00 | \$0.00 | \$4.31 | \$0.0214 | \$0.0072 |
| GTE | gtmo | ** | \$4.35 | \$7.00 | \$7.12 | \$0.00 | \$0.00 | \$4.31 | \$0.0204 | \$0.0067 |
| GTE | copt | ** | \$4.35 | \$7.00 | \$9.04 | \$0.00 | \$0.00 | \$4.31 | \$0.0304 | \$0.0088 |
| GTE | cowa | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0381 | \$0.0173 |
| GTE | comn | ** | \$4.35 | \$7.00 | \$7.90 | \$0.00 | \$0.00 | \$4.31 | \$0.0275 | \$0.0093 |
| GTE | coal | ** | \$4.35 | \$7.00 | \$7.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0244 | \$0.0100 |
| GTE | coky | ** | \$4.35 | \$7.00 | \$7.94 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0159 |
| GTE | gtar | ** | \$4.35 | \$7.00 | \$7.49 | \$0.00 | \$0.00 | \$4.31 | \$0.0281 | \$0.0058 |
| GTE | conm | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0698 | \$0.0167 |
| GTE | gtne | ** | \$4.35 | \$7.00 | \$7.61 | \$0.00 | \$0.00 | \$4.31 | \$0.0296 | \$0.0092 |
| GTE | gtnm | ** | \$4.35 | \$7.00 | \$8.59 | \$0.00 | \$0.00 | \$4.31 | \$0.0272 | \$0.0107 |
| GTE | conv | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0324 | \$0.0089 |
| GTE | gtva | ** | \$4.35 | \$6.90 | \$6.90 | \$0.00 | \$0.00 | \$4.31 | \$0.0161 | \$0.0055 |
| GTE | gtmc | ** | \$4.35 | \$7.00 | \$8.37 | \$0.00 | \$0.00 | \$4.31 | \$0.0306 | \$0.0172 |
| GTE | gtak | ** | \$4.35 | \$7.00 | \$7.69 | \$0.00 | \$0.00 | \$4.31 | \$0.0100 | \$0.0094 |
| GTE | coaz | ** | \$4.35 | \$7.00 | \$7.96 | \$0.00 | \$0.00 | \$4.31 | \$0.0343 | \$0.0239 |
| GTE | gnca | ** | \$4.35 | \$7.00 | \$7.80 | \$0.00 | \$0.00 | \$4.31 | \$0.0305 | \$0.0159 |
| GTE | gtmn | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0523 | \$0.0312 |
| SPRINT | ucfl | \$0.4 | \$4.35 | \$6.11 | \$7.74 | \$0.00 | \$0.00 | \$4.31 | \$0.0096 | \$0.0079 |
| SPRINT | ucnc | \$0.2 | \$4.35 | \$5.28 | \$6.02 | \$0.00 | \$0.00 | \$3.35 | \$0.0070 | \$0.0070 |
| SPRINT | ucmw | \$0.2 | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0262 | \$0.0101 |
| SPRINT | cenv | \$0.1 | \$3.53 | \$3.53 | \$3.54 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucse | \$0.1 | \$4.35 | \$5.56 | \$6.15 | \$0.00 | \$0.00 | \$4.28 | \$0.0065 | \$0.0065 |
| SPRINT | utoh | \$0.1 | \$4.35 | \$5.70 | \$6.70 | \$0.00 | \$0.00 | \$4.31 | \$0.0152 | \$0.0119 |
| SPRINT | uteg | \$0.1 | \$4.35 | \$4.92 | \$8.08 | \$0.00 | \$0.00 | \$1.95 | \$0.0088 | \$0.0088 |
| SPRINT | utin | ** | \$4.35 | \$5.86 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0179 | \$0.0118 |
| SPRINT | utnw | ** | \$4.35 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0299 | \$0.0185 |

* Filed 1999 rates times estimated quantities
 ** Amounts less than \$50 million

Appendix E

CALLS

| Company | Access Revenue * (\$Billions) | July 1, 2001 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntc | \$6.3 | \$5.00 | \$6.08 | \$6.08 | \$0.00 | \$0.00 | \$2.69 | \$0.0055 | \$0.0055 |
| BELLSOUTH | bstr | \$4.0 | \$5.00 | \$6.56 | \$6.56 | \$0.00 | \$0.00 | \$3.46 | \$0.0055 | \$0.0055 |
| SBC | amtr | \$2.7 | \$4.96 | \$4.96 | \$5.04 | \$0.00 | \$0.00 | \$0.00 | \$0.0060 | \$0.0060 |
| SBC | swtr | \$2.2 | \$5.00 | \$5.28 | \$5.47 | \$0.00 | \$0.00 | \$0.59 | \$0.0067 | \$0.0067 |
| SBC | ptca | \$1.9 | \$4.40 | \$4.40 | \$4.52 | \$0.00 | \$0.00 | \$0.00 | \$0.0075 | \$0.0075 |
| SBC | snct | \$0.4 | \$5.00 | \$5.52 | \$6.33 | \$0.00 | \$0.00 | \$2.09 | \$0.0094 | \$0.0094 |
| SBC | ptnv | \$0.1 | \$5.00 | \$5.84 | \$6.16 | \$0.00 | \$0.00 | \$2.61 | \$0.0103 | \$0.0103 |
| U S WEST | ustr | \$3.0 | \$5.00 | \$6.14 | \$6.24 | \$0.00 | \$0.00 | \$2.29 | \$0.0060 | \$0.0060 |
| ALIANT | ltne | ** | \$4.99 | \$4.99 | \$4.99 | \$0.00 | \$0.00 | \$0.00 | \$0.0117 | \$0.0117 |
| CINCINNATI BELL | cbtc | \$0.1 | \$5.00 | \$5.20 | \$5.20 | \$0.00 | \$0.00 | \$0.51 | \$0.0065 | \$0.0065 |
| CITIZENS | ctc1 | \$0.2 | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0243 | \$0.0156 |
| CITIZENS | ctc2 | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0504 | \$0.0159 |
| CITIZENS | ctog | ** | \$3.50 | \$3.50 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0111 | \$0.0111 |
| FRONTIER | rtny | \$0.1 | \$4.62 | \$4.62 | \$6.86 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| FRONTIER | rtcs | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0220 | \$0.0129 |
| FRONTIER | vitc | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0120 | \$0.0083 |
| GTE | gtca | \$0.6 | \$5.00 | \$6.89 | \$6.89 | \$0.00 | \$0.00 | \$3.83 | \$0.0053 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$5.00 | \$7.00 | \$7.43 | \$0.00 | \$0.00 | \$4.31 | \$0.0112 | \$0.0055 |
| GTE | gttx | \$0.3 | \$5.00 | \$7.00 | \$7.68 | \$0.00 | \$0.00 | \$4.31 | \$0.0110 | \$0.0055 |
| GTE | gain | \$0.2 | \$5.00 | \$7.00 | \$8.21 | \$0.00 | \$0.00 | \$4.31 | \$0.0210 | \$0.0086 |
| GTE | gtwa | \$0.2 | \$5.00 | \$7.00 | \$8.38 | \$0.00 | \$0.00 | \$4.31 | \$0.0202 | \$0.0055 |
| GTE | gtoh | \$0.2 | \$5.00 | \$6.92 | \$6.92 | \$0.00 | \$0.00 | \$4.31 | \$0.0145 | \$0.0059 |
| GTE | gthi | \$0.1 | \$5.00 | \$6.53 | \$6.53 | \$0.00 | \$0.00 | \$3.19 | \$0.0106 | \$0.0106 |
| GTE | gail | \$0.1 | \$5.00 | \$6.99 | \$6.99 | \$0.00 | \$0.00 | \$4.31 | \$0.0149 | \$0.0079 |
| GTE | gami | \$0.1 | \$5.00 | \$6.15 | \$6.15 | \$0.00 | \$0.00 | \$4.31 | \$0.0108 | \$0.0085 |
| GTE | cova | \$0.1 | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0155 |
| GTE | gtor | \$0.1 | \$5.00 | \$7.00 | \$9.16 | \$0.00 | \$0.00 | \$4.31 | \$0.0228 | \$0.0059 |
| GTE | gthy | \$0.1 | \$5.00 | \$7.00 | \$8.27 | \$0.00 | \$0.00 | \$4.31 | \$0.0224 | \$0.0084 |
| GTE | gtwi | \$0.1 | \$5.00 | \$6.65 | \$6.65 | \$0.00 | \$0.00 | \$4.31 | \$0.0140 | \$0.0077 |
| GTE | gtpa | \$0.1 | \$5.00 | \$6.68 | \$6.68 | \$0.00 | \$0.00 | \$4.31 | \$0.0116 | \$0.0055 |
| GTE | coca | \$0.1 | \$5.00 | \$7.00 | \$7.51 | \$0.00 | \$0.00 | \$4.31 | \$0.0212 | \$0.0078 |
| GTE | comt | \$0.1 | \$5.00 | \$7.00 | \$7.44 | \$0.00 | \$0.00 | \$4.31 | \$0.0218 | \$0.0081 |
| GTE | gtnc | \$0.1 | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0218 | \$0.0061 |
| GTE | gtid | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0453 | \$0.0173 |
| GTE | gst | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0216 | \$0.0056 |
| GTE | cotx | ** | \$5.00 | \$7.00 | \$8.02 | \$0.00 | \$0.00 | \$4.31 | \$0.0335 | \$0.0055 |
| GTE | coil | ** | \$5.00 | \$7.00 | \$8.61 | \$0.00 | \$0.00 | \$4.31 | \$0.0267 | \$0.0066 |
| GTE | coin | ** | \$5.00 | \$7.00 | \$8.36 | \$0.00 | \$0.00 | \$4.31 | \$0.0263 | \$0.0061 |
| GTE | gtal | ** | \$5.00 | \$7.00 | \$8.60 | \$0.00 | \$0.00 | \$4.31 | \$0.0273 | \$0.0069 |
| GTE | coit | ** | \$5.00 | \$7.00 | \$8.50 | \$0.00 | \$0.00 | \$4.31 | \$0.0284 | \$0.0055 |
| GTE | gtia | ** | \$5.00 | \$7.00 | \$8.06 | \$0.00 | \$0.00 | \$4.31 | \$0.0305 | \$0.0098 |
| GTE | coat | ** | \$5.00 | \$7.00 | \$8.71 | \$0.00 | \$0.00 | \$4.31 | \$0.0290 | \$0.0059 |
| GTE | conc | ** | \$5.00 | \$7.00 | \$8.47 | \$0.00 | \$0.00 | \$4.31 | \$0.0242 | \$0.0077 |
| GTE | gtok | ** | \$5.00 | \$7.00 | \$7.60 | \$0.00 | \$0.00 | \$4.31 | \$0.0140 | \$0.0055 |
| GTE | gtmo | ** | \$5.00 | \$7.00 | \$7.15 | \$0.00 | \$0.00 | \$4.31 | \$0.0136 | \$0.0055 |
| GTE | copt | ** | \$5.00 | \$7.00 | \$9.08 | \$0.00 | \$0.00 | \$4.31 | \$0.0287 | \$0.0055 |
| GTE | cowa | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0372 | \$0.0110 |
| GTE | comn | ** | \$5.00 | \$7.00 | \$7.88 | \$0.00 | \$0.00 | \$4.31 | \$0.0249 | \$0.0055 |
| GTE | coal | ** | \$5.00 | \$7.00 | \$7.59 | \$0.00 | \$0.00 | \$4.31 | \$0.0220 | \$0.0055 |
| GTE | coky | ** | \$5.00 | \$7.00 | \$7.98 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0102 |
| GTE | gtar | ** | \$5.00 | \$7.00 | \$7.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0204 | \$0.0055 |
| GTE | conm | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0597 | \$0.0139 |
| GTE | gtne | ** | \$5.00 | \$7.00 | \$7.66 | \$0.00 | \$0.00 | \$4.31 | \$0.0199 | \$0.0073 |
| GTE | gtnm | ** | \$5.00 | \$7.00 | \$8.69 | \$0.00 | \$0.00 | \$4.31 | \$0.0194 | \$0.0087 |
| GTE | conv | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0324 | \$0.0065 |
| GTE | gtva | ** | \$5.00 | \$6.97 | \$6.97 | \$0.00 | \$0.00 | \$4.31 | \$0.0108 | \$0.0055 |
| GTE | gtmc | ** | \$5.00 | \$7.00 | \$8.36 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0153 |
| GTE | gtak | ** | \$5.00 | \$7.00 | \$7.66 | \$0.00 | \$0.00 | \$3.50 | \$0.0077 | \$0.0077 |
| GTE | coaz | ** | \$5.00 | \$7.00 | \$8.00 | \$0.00 | \$0.00 | \$4.31 | \$0.0276 | \$0.0216 |
| GTE | gnca | ** | \$5.00 | \$7.00 | \$7.84 | \$0.00 | \$0.00 | \$4.31 | \$0.0212 | \$0.0136 |
| GTE | gtmn | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0523 | \$0.0256 |
| SPRINT | ucfl | \$0.4 | \$5.00 | \$6.17 | \$7.78 | \$0.00 | \$0.00 | \$3.02 | \$0.0065 | \$0.0065 |
| SPRINT | ucnc | \$0.2 | \$5.00 | \$5.33 | \$6.07 | \$0.00 | \$0.00 | \$0.97 | \$0.0065 | \$0.0065 |
| SPRINT | ucmw | \$0.2 | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0171 | \$0.0079 |
| SPRINT | cenv | \$0.1 | \$3.56 | \$3.56 | \$3.57 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucse | \$0.1 | \$5.00 | \$5.59 | \$6.18 | \$0.00 | \$0.00 | \$1.71 | \$0.0065 | \$0.0065 |
| SPRINT | utoh | \$0.1 | \$5.00 | \$5.73 | \$6.73 | \$0.00 | \$0.00 | \$2.76 | \$0.0099 | \$0.0099 |
| SPRINT | uteg | \$0.1 | \$4.93 | \$4.93 | \$8.09 | \$0.00 | \$0.00 | \$0.00 | \$0.0074 | \$0.0074 |
| SPRINT | utin | ** | \$5.00 | \$5.90 | \$9.20 | \$0.00 | \$0.00 | \$4.24 | \$0.0097 | \$0.0097 |
| SPRINT | utnw | ** | \$5.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0214 | \$0.0159 |

* Filed 1999 rates times estimated quantities
 ** Amounts less than \$50 million

Appendix E

CALLS

| Company | Access Revenue * (\$Billions) | July 1, 2002 | | | | | | | | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|--|-------------|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Total Charge per Access Minute (incl. Switching) | | |
| Company | cosa | | | | | | | Originating | Terminating | |
| BELL ATLANTIC | bntn | \$6.3 | \$6.00 | \$6.08 | \$6.08 | \$0.00 | \$0.00 | \$0.20 | \$0.0055 | \$0.0055 |
| BELLSOUTH | bstr | \$4.0 | \$6.00 | \$6.58 | \$6.58 | \$0.00 | \$0.00 | \$1.18 | \$0.0055 | \$0.0055 |
| SBC | amtr | \$2.7 | \$4.96 | \$4.96 | \$4.96 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | swtr | \$2.2 | \$5.28 | \$5.28 | \$5.32 | \$0.00 | \$0.00 | \$0.00 | \$0.0057 | \$0.0057 |
| SBC | ptca | \$1.9 | \$4.41 | \$4.41 | \$4.45 | \$0.00 | \$0.00 | \$0.00 | \$0.0062 | \$0.0062 |
| SBC | snct | \$0.4 | \$5.52 | \$5.52 | \$6.13 | \$0.00 | \$0.00 | \$0.00 | \$0.0084 | \$0.0084 |
| SBC | ptnv | \$0.1 | \$5.84 | \$5.84 | \$6.05 | \$0.00 | \$0.00 | \$0.00 | \$0.0086 | \$0.0086 |
| U S WEST | ustr | \$3.0 | \$6.00 | \$6.16 | \$6.16 | \$0.00 | \$0.00 | \$0.29 | \$0.0055 | \$0.0055 |
| ALIANT | ltne | ** | \$4.99 | \$4.99 | \$4.99 | \$0.00 | \$0.00 | \$0.00 | \$0.0105 | \$0.0105 |
| CINCINNATI BELL | cbtc | \$0.1 | \$5.20 | \$5.20 | \$5.20 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| CITIZENS | ctc1 | \$0.2 | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0164 | \$0.0130 |
| CITIZENS | ctc2 | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0433 | \$0.0123 |
| CITIZENS | ctog | ** | \$3.53 | \$3.53 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0096 | \$0.0096 |
| FRONTIER | rtny | \$0.1 | \$4.63 | \$4.63 | \$6.39 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| FRONTIER | rtcs | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0107 | \$0.0107 |
| FRONTIER | vitc | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| GTE | gtca | \$0.6 | \$6.00 | \$6.94 | \$6.94 | \$0.00 | \$0.00 | \$1.71 | \$0.0053 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$6.00 | \$7.00 | \$7.47 | \$0.00 | \$0.00 | \$4.31 | \$0.0057 | \$0.0055 |
| GTE | gttx | \$0.3 | \$6.00 | \$7.00 | \$7.78 | \$0.00 | \$0.00 | \$3.49 | \$0.0055 | \$0.0055 |
| GTE | gain | \$0.2 | \$6.00 | \$7.00 | \$8.25 | \$0.00 | \$0.00 | \$4.31 | \$0.0128 | \$0.0069 |
| GTE | gtwa | \$0.2 | \$6.00 | \$7.00 | \$8.45 | \$0.00 | \$0.00 | \$4.31 | \$0.0140 | \$0.0055 |
| GTE | gtoh | \$0.2 | \$6.00 | \$6.97 | \$6.97 | \$0.00 | \$0.00 | \$3.90 | \$0.0055 | \$0.0055 |
| GTE | gthi | \$0.1 | \$6.00 | \$6.54 | \$6.54 | \$0.00 | \$0.00 | \$1.06 | \$0.0091 | \$0.0091 |
| GTE | gail | \$0.1 | \$6.00 | \$7.00 | \$7.02 | \$0.00 | \$0.00 | \$3.49 | \$0.0062 | \$0.0062 |
| GTE | gami | \$0.1 | \$6.00 | \$6.19 | \$6.19 | \$0.00 | \$0.00 | \$0.81 | \$0.0068 | \$0.0068 |
| GTE | cova | \$0.1 | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0120 |
| GTE | gtor | \$0.1 | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0169 | \$0.0055 |
| GTE | gthy | \$0.1 | \$6.00 | \$7.00 | \$8.32 | \$0.00 | \$0.00 | \$4.31 | \$0.0132 | \$0.0066 |
| GTE | gtwi | \$0.1 | \$6.00 | \$6.69 | \$6.69 | \$0.00 | \$0.00 | \$2.75 | \$0.0058 | \$0.0058 |
| GTE | gtpa | \$0.1 | \$6.00 | \$6.71 | \$6.71 | \$0.00 | \$0.00 | \$2.53 | \$0.0055 | \$0.0055 |
| GTE | coca | \$0.1 | \$6.00 | \$7.00 | \$7.58 | \$0.00 | \$0.00 | \$4.31 | \$0.0099 | \$0.0055 |
| GTE | comt | \$0.1 | \$6.00 | \$7.00 | \$7.49 | \$0.00 | \$0.00 | \$4.31 | \$0.0122 | \$0.0066 |
| GTE | gtnc | \$0.1 | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0167 | \$0.0055 |
| GTE | gtid | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0438 | \$0.0120 |
| GTE | gst | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0156 | \$0.0055 |
| GTE | cotx | ** | \$6.00 | \$7.00 | \$8.07 | \$0.00 | \$0.00 | \$4.31 | \$0.0212 | \$0.0055 |
| GTE | coil | ** | \$6.00 | \$7.00 | \$8.66 | \$0.00 | \$0.00 | \$4.31 | \$0.0191 | \$0.0055 |
| GTE | coin | ** | \$6.00 | \$7.00 | \$8.41 | \$0.00 | \$0.00 | \$4.31 | \$0.0160 | \$0.0055 |
| GTE | gtal | ** | \$6.00 | \$7.00 | \$8.65 | \$0.00 | \$0.00 | \$4.31 | \$0.0181 | \$0.0055 |
| GTE | coit | ** | \$6.00 | \$7.00 | \$8.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0183 | \$0.0055 |
| GTE | gtia | ** | \$6.00 | \$7.00 | \$8.10 | \$0.00 | \$0.00 | \$4.31 | \$0.0187 | \$0.0083 |
| GTE | coat | ** | \$6.00 | \$7.00 | \$8.74 | \$0.00 | \$0.00 | \$4.31 | \$0.0208 | \$0.0055 |
| GTE | conc | ** | \$6.00 | \$7.00 | \$8.52 | \$0.00 | \$0.00 | \$4.31 | \$0.0199 | \$0.0055 |
| GTE | gtok | ** | \$6.00 | \$7.00 | \$7.68 | \$0.00 | \$0.00 | \$4.31 | \$0.0063 | \$0.0055 |
| GTE | gtmo | ** | \$6.00 | \$7.00 | \$7.19 | \$0.00 | \$0.00 | \$4.31 | \$0.0059 | \$0.0055 |
| GTE | copt | ** | \$6.00 | \$7.00 | \$9.11 | \$0.00 | \$0.00 | \$4.31 | \$0.0205 | \$0.0055 |
| GTE | cowa | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0372 | \$0.0058 |
| GTE | comn | ** | \$6.00 | \$7.00 | \$7.86 | \$0.00 | \$0.00 | \$4.31 | \$0.0146 | \$0.0055 |
| GTE | coal | ** | \$6.00 | \$7.00 | \$7.64 | \$0.00 | \$0.00 | \$4.31 | \$0.0124 | \$0.0055 |
| GTE | coky | ** | \$6.00 | \$7.00 | \$8.04 | \$0.00 | \$0.00 | \$4.31 | \$0.0197 | \$0.0055 |
| GTE | gtar | ** | \$6.00 | \$7.00 | \$7.59 | \$0.00 | \$0.00 | \$4.31 | \$0.0112 | \$0.0055 |
| GTE | conm | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0487 | \$0.0114 |
| GTE | gtne | ** | \$6.00 | \$7.00 | \$7.71 | \$0.00 | \$0.00 | \$4.31 | \$0.0080 | \$0.0056 |
| GTE | gtnm | ** | \$6.00 | \$7.00 | \$8.79 | \$0.00 | \$0.00 | \$4.31 | \$0.0100 | \$0.0067 |
| GTE | conv | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0306 | \$0.0055 |
| GTE | gtva | ** | \$6.00 | \$7.00 | \$7.05 | \$0.00 | \$0.00 | \$4.18 | \$0.0055 | \$0.0055 |
| GTE | gtmc | ** | \$6.00 | \$7.00 | \$8.35 | \$0.00 | \$0.00 | \$4.31 | \$0.0182 | \$0.0137 |
| GTE | gtak | ** | \$6.00 | \$7.00 | \$7.64 | \$0.00 | \$0.00 | \$2.11 | \$0.0062 | \$0.0062 |
| GTE | coaz | ** | \$6.00 | \$7.00 | \$8.05 | \$0.00 | \$0.00 | \$4.31 | \$0.0210 | \$0.0194 |
| GTE | gnca | ** | \$6.00 | \$7.00 | \$7.88 | \$0.00 | \$0.00 | \$4.26 | \$0.0115 | \$0.0115 |
| GTE | gtmn | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0523 | \$0.0204 |
| SPRINT | ucfl | \$0.4 | \$6.00 | \$6.23 | \$7.79 | \$0.00 | \$0.00 | \$0.52 | \$0.0065 | \$0.0065 |
| SPRINT | ucnc | \$0.2 | \$5.37 | \$5.37 | \$6.11 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucmw | \$0.2 | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0070 | \$0.0065 |
| SPRINT | cenv | \$0.1 | \$3.60 | \$3.60 | \$3.60 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucse | \$0.1 | \$5.61 | \$5.61 | \$6.20 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utoh | \$0.1 | \$5.76 | \$5.76 | \$6.76 | \$0.00 | \$0.00 | \$0.00 | \$0.0081 | \$0.0081 |
| SPRINT | uteg | \$0.1 | \$4.94 | \$4.94 | \$8.10 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utin | ** | \$5.93 | \$5.93 | \$9.20 | \$0.00 | \$0.00 | \$0.45 | \$0.0078 | \$0.0078 |
| SPRINT | utnw | ** | \$6.00 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0135 | \$0.0135 |

* Filed 1999 rates times estimated quantities
 ** Amounts less than \$50 million

Appendix E

CALLS

| Company | Access Revenue * (\$Billions) | July 1, 2003 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntc | \$6.3 | \$6.09 | \$6.09 | \$6.09 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| BELLSOUTH | bstr | \$4.0 | \$6.50 | \$6.60 | \$6.60 | \$0.00 | \$0.00 | \$0.18 | \$0.0055 | \$0.0055 |
| SBC | amtr | \$2.7 | \$4.97 | \$4.97 | \$4.97 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | swtr | \$2.2 | \$5.28 | \$5.28 | \$5.28 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | ptca | \$1.9 | \$4.41 | \$4.41 | \$4.41 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | snct | \$0.4 | \$5.52 | \$5.52 | \$5.94 | \$0.00 | \$0.00 | \$0.00 | \$0.0075 | \$0.0075 |
| SBC | ptnv | \$0.1 | \$5.84 | \$5.84 | \$5.94 | \$0.00 | \$0.00 | \$0.00 | \$0.0069 | \$0.0069 |
| U S WEST | ustr | \$3.0 | \$6.17 | \$6.17 | \$6.17 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| ALIANT | ltne | ** | \$4.99 | \$4.99 | \$4.99 | \$0.00 | \$0.00 | \$0.00 | \$0.0094 | \$0.0094 |
| CINCINNATI BELL | cbtc | \$0.1 | \$5.20 | \$5.20 | \$5.20 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| CITIZENS | ctc1 | \$0.2 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0118 | \$0.0105 |
| CITIZENS | ctc2 | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0402 | \$0.0095 |
| CITIZENS | ctog | ** | \$3.55 | \$3.55 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0095 | \$0.0095 |
| FRONTIER | rtny | \$0.1 | \$4.63 | \$4.63 | \$5.71 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| FRONTIER | rtcs | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0084 | \$0.0084 |
| FRONTIER | vitc | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| GTE | gtca | \$0.6 | \$6.50 | \$6.99 | \$6.99 | \$0.00 | \$0.00 | \$0.79 | \$0.0053 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$6.50 | \$7.00 | \$7.51 | \$0.00 | \$0.00 | \$3.04 | \$0.0055 | \$0.0055 |
| GTE | gttx | \$0.3 | \$6.50 | \$7.00 | \$7.87 | \$0.00 | \$0.00 | \$2.33 | \$0.0055 | \$0.0055 |
| GTE | gain | \$0.2 | \$6.50 | \$7.00 | \$8.30 | \$0.00 | \$0.00 | \$4.31 | \$0.0081 | \$0.0055 |
| GTE | gtwa | \$0.2 | \$6.50 | \$7.00 | \$8.52 | \$0.00 | \$0.00 | \$4.31 | \$0.0110 | \$0.0055 |
| GTE | gtoh | \$0.2 | \$6.50 | \$7.00 | \$7.02 | \$0.00 | \$0.00 | \$1.88 | \$0.0055 | \$0.0055 |
| GTE | gthi | \$0.1 | \$6.50 | \$6.55 | \$6.55 | \$0.00 | \$0.00 | \$0.09 | \$0.0078 | \$0.0078 |
| GTE | gail | \$0.1 | \$6.50 | \$7.00 | \$7.06 | \$0.00 | \$0.00 | \$1.75 | \$0.0055 | \$0.0055 |
| GTE | gami | \$0.1 | \$6.23 | \$6.23 | \$6.23 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| GTE | cova | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0104 |
| GTE | gtor | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0144 | \$0.0055 |
| GTE | gthy | \$0.1 | \$6.50 | \$7.00 | \$8.37 | \$0.00 | \$0.00 | \$4.31 | \$0.0084 | \$0.0055 |
| GTE | gtwi | \$0.1 | \$6.50 | \$6.74 | \$6.74 | \$0.00 | \$0.00 | \$0.85 | \$0.0055 | \$0.0055 |
| GTE | gtpa | \$0.1 | \$6.50 | \$6.75 | \$6.75 | \$0.00 | \$0.00 | \$0.80 | \$0.0055 | \$0.0055 |
| GTE | coca | \$0.1 | \$6.50 | \$7.00 | \$7.64 | \$0.00 | \$0.00 | \$4.31 | \$0.0059 | \$0.0055 |
| GTE | comt | \$0.1 | \$6.50 | \$7.00 | \$7.54 | \$0.00 | \$0.00 | \$4.31 | \$0.0075 | \$0.0055 |
| GTE | gtnc | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0146 | \$0.0055 |
| GTE | gtid | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0433 | \$0.0110 |
| GTE | gst | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0127 | \$0.0055 |
| GTE | cotx | ** | \$6.50 | \$7.00 | \$8.11 | \$0.00 | \$0.00 | \$4.31 | \$0.0157 | \$0.0055 |
| GTE | coil | ** | \$6.50 | \$7.00 | \$8.72 | \$0.00 | \$0.00 | \$4.31 | \$0.0143 | \$0.0055 |
| GTE | coin | ** | \$6.50 | \$7.00 | \$8.46 | \$0.00 | \$0.00 | \$4.31 | \$0.0113 | \$0.0055 |
| GTE | gtal | ** | \$6.50 | \$7.00 | \$8.71 | \$0.00 | \$0.00 | \$4.31 | \$0.0143 | \$0.0055 |
| GTE | coit | ** | \$6.50 | \$7.00 | \$8.57 | \$0.00 | \$0.00 | \$4.31 | \$0.0133 | \$0.0055 |
| GTE | gtia | ** | \$6.50 | \$7.00 | \$8.13 | \$0.00 | \$0.00 | \$4.31 | \$0.0124 | \$0.0070 |
| GTE | coat | ** | \$6.50 | \$7.00 | \$8.78 | \$0.00 | \$0.00 | \$4.31 | \$0.0162 | \$0.0055 |
| GTE | conc | ** | \$6.50 | \$7.00 | \$8.58 | \$0.00 | \$0.00 | \$4.31 | \$0.0165 | \$0.0055 |
| GTE | gtok | ** | \$6.50 | \$7.00 | \$7.76 | \$0.00 | \$0.00 | \$3.12 | \$0.0055 | \$0.0055 |
| GTE | gtmo | ** | \$6.50 | \$7.00 | \$7.22 | \$0.00 | \$0.00 | \$2.73 | \$0.0055 | \$0.0055 |
| GTE | copt | ** | \$6.50 | \$7.00 | \$9.15 | \$0.00 | \$0.00 | \$4.31 | \$0.0164 | \$0.0055 |
| GTE | cowa | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0338 | \$0.0055 |
| GTE | comn | ** | \$6.50 | \$7.00 | \$7.84 | \$0.00 | \$0.00 | \$4.31 | \$0.0096 | \$0.0055 |
| GTE | coal | ** | \$6.50 | \$7.00 | \$7.70 | \$0.00 | \$0.00 | \$4.31 | \$0.0078 | \$0.0055 |
| GTE | coky | ** | \$6.50 | \$7.00 | \$8.09 | \$0.00 | \$0.00 | \$4.31 | \$0.0142 | \$0.0055 |
| GTE | gtar | ** | \$6.50 | \$7.00 | \$7.64 | \$0.00 | \$0.00 | \$4.31 | \$0.0067 | \$0.0055 |
| GTE | conm | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0425 | \$0.0089 |
| GTE | gtne | ** | \$6.50 | \$7.00 | \$7.76 | \$0.00 | \$0.00 | \$3.45 | \$0.0055 | \$0.0055 |
| GTE | gtnm | ** | \$6.50 | \$7.00 | \$8.89 | \$0.00 | \$0.00 | \$3.96 | \$0.0055 | \$0.0055 |
| GTE | conv | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0293 | \$0.0055 |
| GTE | gtva | ** | \$6.50 | \$7.00 | \$7.11 | \$0.00 | \$0.00 | \$2.23 | \$0.0055 | \$0.0055 |
| GTE | gtmc | ** | \$6.50 | \$7.00 | \$8.34 | \$0.00 | \$0.00 | \$4.31 | \$0.0150 | \$0.0123 |
| GTE | gtak | ** | \$6.50 | \$7.00 | \$7.61 | \$0.00 | \$0.00 | \$1.40 | \$0.0055 | \$0.0055 |
| GTE | coaz | ** | \$6.50 | \$7.00 | \$8.10 | \$0.00 | \$0.00 | \$3.93 | \$0.0173 | \$0.0173 |
| GTE | gnca | ** | \$6.50 | \$7.00 | \$7.92 | \$0.00 | \$0.00 | \$2.88 | \$0.0094 | \$0.0094 |
| GTE | gtmn | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0523 | \$0.0184 |
| SPRINT | ucfl | \$0.4 | \$6.28 | \$6.28 | \$7.35 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucnc | \$0.2 | \$5.41 | \$5.41 | \$6.15 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucmw | \$0.2 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| SPRINT | cenv | \$0.1 | \$3.62 | \$3.62 | \$3.63 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucse | \$0.1 | \$5.64 | \$5.64 | \$6.23 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utoh | \$0.1 | \$5.79 | \$5.79 | \$6.79 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | uteg | \$0.1 | \$4.94 | \$4.94 | \$8.11 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utin | ** | \$5.97 | \$5.97 | \$9.20 | \$0.00 | \$0.00 | \$0.50 | \$0.0065 | \$0.0065 |
| SPRINT | utnw | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0113 | \$0.0113 |

* Filed 1999 rates times estimated quantities
 ** Amounts less than \$50 million

Appendix E

CALLS

| Company | Access Revenue * (\$Billions) | July 1, 2004 | | | | | | | Total Charge per Access Minute (incl. Switching) | |
|-----------------|-------------------------------|--------------|---------------|----------------|--------------|----------------|-----------------|-------------|--|----------|
| | | Primary SLC | Secondary SLC | Multi-line SLC | Primary PICC | Secondary PICC | Multi-line PICC | Originating | Terminating | |
| BELL ATLANTIC | bntn | \$6.3 | \$6.09 | \$6.09 | \$6.09 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| BELLSOUTH | bstr | \$4.0 | \$6.50 | \$6.61 | \$6.61 | \$0.00 | \$0.00 | \$0.20 | \$0.0055 | \$0.0055 |
| SBC | amtr | \$2.7 | \$4.97 | \$4.97 | \$4.97 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | swtr | \$2.2 | \$5.29 | \$5.29 | \$5.29 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | ptca | \$1.9 | \$4.41 | \$4.41 | \$4.41 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| SBC | snct | \$0.4 | \$5.52 | \$5.52 | \$5.76 | \$0.00 | \$0.00 | \$0.00 | \$0.0067 | \$0.0067 |
| SBC | ptnv | \$0.1 | \$5.84 | \$5.84 | \$5.84 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| U S WEST | ustr | \$3.0 | \$6.19 | \$6.19 | \$6.19 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| ALIANT | ltne | ** | \$4.99 | \$4.99 | \$4.99 | \$0.00 | \$0.00 | \$0.00 | \$0.0083 | \$0.0083 |
| CINCINNATI BELL | cbtc | \$0.1 | \$5.20 | \$5.20 | \$5.20 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| CITIZENS | ctc1 | \$0.2 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0109 | \$0.0095 |
| CITIZENS | ctc2 | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0447 | \$0.0095 |
| CITIZENS | ctog | ** | \$3.58 | \$3.58 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0095 | \$0.0095 |
| FRONTIER | rtny | \$0.1 | \$4.64 | \$4.64 | \$5.68 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| FRONTIER | rtcs | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| FRONTIER | vitc | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| GTE | gtca | \$0.6 | \$6.50 | \$7.00 | \$7.05 | \$0.00 | \$0.00 | \$0.79 | \$0.0053 | \$0.0053 |
| GTE | gtfl | \$0.4 | \$6.50 | \$7.00 | \$7.55 | \$0.00 | \$0.00 | \$3.19 | \$0.0055 | \$0.0055 |
| GTE | gttx | \$0.3 | \$6.50 | \$7.00 | \$7.96 | \$0.00 | \$0.00 | \$2.08 | \$0.0055 | \$0.0055 |
| GTE | gain | \$0.2 | \$6.50 | \$7.00 | \$8.34 | \$0.00 | \$0.00 | \$4.31 | \$0.0080 | \$0.0055 |
| GTE | gtwa | \$0.2 | \$6.50 | \$7.00 | \$8.58 | \$0.00 | \$0.00 | \$4.31 | \$0.0114 | \$0.0055 |
| GTE | gtoh | \$0.2 | \$6.50 | \$7.00 | \$7.07 | \$0.00 | \$0.00 | \$1.95 | \$0.0055 | \$0.0055 |
| GTE | gthi | \$0.1 | \$6.50 | \$6.56 | \$6.56 | \$0.00 | \$0.00 | \$0.10 | \$0.0065 | \$0.0065 |
| GTE | gail | \$0.1 | \$6.50 | \$7.00 | \$7.10 | \$0.00 | \$0.00 | \$1.74 | \$0.0055 | \$0.0055 |
| GTE | gami | \$0.1 | \$6.27 | \$6.27 | \$6.27 | \$0.00 | \$0.00 | \$0.00 | \$0.0055 | \$0.0055 |
| GTE | cova | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0238 | \$0.0109 |
| GTE | gtor | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0152 | \$0.0055 |
| GTE | gky | \$0.1 | \$6.50 | \$7.00 | \$8.42 | \$0.00 | \$0.00 | \$4.31 | \$0.0081 | \$0.0055 |
| GTE | gtwi | \$0.1 | \$6.50 | \$6.78 | \$6.78 | \$0.00 | \$0.00 | \$0.93 | \$0.0055 | \$0.0055 |
| GTE | gtpa | \$0.1 | \$6.50 | \$6.78 | \$6.78 | \$0.00 | \$0.00 | \$0.84 | \$0.0055 | \$0.0055 |
| GTE | coca | \$0.1 | \$6.50 | \$7.00 | \$7.69 | \$0.00 | \$0.00 | \$4.31 | \$0.0063 | \$0.0055 |
| GTE | comt | \$0.1 | \$6.50 | \$7.00 | \$7.60 | \$0.00 | \$0.00 | \$4.31 | \$0.0081 | \$0.0055 |
| GTE | gtnc | \$0.1 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0150 | \$0.0055 |
| GTE | gtid | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0433 | \$0.0135 |
| GTE | gst | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0128 | \$0.0055 |
| GTE | cotx | ** | \$6.50 | \$7.00 | \$8.16 | \$0.00 | \$0.00 | \$4.31 | \$0.0160 | \$0.0055 |
| GTE | coil | ** | \$6.50 | \$7.00 | \$8.77 | \$0.00 | \$0.00 | \$4.31 | \$0.0140 | \$0.0055 |
| GTE | coin | ** | \$6.50 | \$7.00 | \$8.51 | \$0.00 | \$0.00 | \$4.31 | \$0.0110 | \$0.0055 |
| GTE | gtal | ** | \$6.50 | \$7.00 | \$8.75 | \$0.00 | \$0.00 | \$4.31 | \$0.0142 | \$0.0055 |
| GTE | coit | ** | \$6.50 | \$7.00 | \$8.61 | \$0.00 | \$0.00 | \$4.31 | \$0.0125 | \$0.0055 |
| GTE | gtia | ** | \$6.50 | \$7.00 | \$8.16 | \$0.00 | \$0.00 | \$4.31 | \$0.0111 | \$0.0059 |
| GTE | coat | ** | \$6.50 | \$7.00 | \$8.81 | \$0.00 | \$0.00 | \$4.31 | \$0.0158 | \$0.0055 |
| GTE | conc | ** | \$6.50 | \$7.00 | \$8.63 | \$0.00 | \$0.00 | \$4.31 | \$0.0168 | \$0.0055 |
| GTE | gtok | ** | \$6.50 | \$7.00 | \$7.84 | \$0.00 | \$0.00 | \$2.94 | \$0.0055 | \$0.0055 |
| GTE | gtmo | ** | \$6.50 | \$7.00 | \$7.26 | \$0.00 | \$0.00 | \$2.88 | \$0.0055 | \$0.0055 |
| GTE | copt | ** | \$6.50 | \$7.00 | \$9.19 | \$0.00 | \$0.00 | \$4.31 | \$0.0156 | \$0.0055 |
| GTE | cowa | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0347 | \$0.0055 |
| GTE | comn | ** | \$6.50 | \$7.00 | \$7.82 | \$0.00 | \$0.00 | \$4.31 | \$0.0086 | \$0.0055 |
| GTE | coal | ** | \$6.50 | \$7.00 | \$7.75 | \$0.00 | \$0.00 | \$4.31 | \$0.0075 | \$0.0055 |
| GTE | coky | ** | \$6.50 | \$7.00 | \$8.14 | \$0.00 | \$0.00 | \$4.31 | \$0.0143 | \$0.0055 |
| GTE | gtar | ** | \$6.50 | \$7.00 | \$7.69 | \$0.00 | \$0.00 | \$4.31 | \$0.0066 | \$0.0055 |
| GTE | conm | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0413 | \$0.0066 |
| GTE | gtne | ** | \$6.50 | \$7.00 | \$7.81 | \$0.00 | \$0.00 | \$3.32 | \$0.0055 | \$0.0055 |
| GTE | gtnm | ** | \$6.50 | \$7.00 | \$8.98 | \$0.00 | \$0.00 | \$3.59 | \$0.0055 | \$0.0055 |
| GTE | conv | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0301 | \$0.0055 |
| GTE | gtva | ** | \$6.50 | \$7.00 | \$7.18 | \$0.00 | \$0.00 | \$2.31 | \$0.0055 | \$0.0055 |
| GTE | gtmc | ** | \$6.50 | \$7.00 | \$8.33 | \$0.00 | \$0.00 | \$4.31 | \$0.0133 | \$0.0111 |
| GTE | gtak | ** | \$6.50 | \$7.00 | \$7.58 | \$0.00 | \$0.00 | \$1.34 | \$0.0055 | \$0.0055 |
| GTE | coaz | ** | \$6.50 | \$7.00 | \$8.14 | \$0.00 | \$0.00 | \$3.76 | \$0.0153 | \$0.0153 |
| GTE | gnca | ** | \$6.50 | \$7.00 | \$7.98 | \$0.00 | \$0.00 | \$2.56 | \$0.0075 | \$0.0075 |
| GTE | gtmn | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0523 | \$0.0193 |
| SPRINT | ucfl | \$0.4 | \$6.34 | \$6.34 | \$7.37 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucnc | \$0.2 | \$5.47 | \$5.47 | \$6.21 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucmw | \$0.2 | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0065 | \$0.0065 |
| SPRINT | cenv | \$0.1 | \$3.65 | \$3.65 | \$3.66 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | ucse | \$0.1 | \$5.68 | \$5.68 | \$6.27 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utoh | \$0.1 | \$5.82 | \$5.82 | \$6.82 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | uteg | \$0.1 | \$4.95 | \$4.95 | \$8.12 | \$0.00 | \$0.00 | \$0.00 | \$0.0065 | \$0.0065 |
| SPRINT | utin | ** | \$6.01 | \$6.01 | \$9.20 | \$0.00 | \$0.00 | \$0.55 | \$0.0065 | \$0.0065 |
| SPRINT | utnw | ** | \$6.50 | \$7.00 | \$9.20 | \$0.00 | \$0.00 | \$4.31 | \$0.0091 | \$0.0091 |

* Filed 1999 rates times estimated quantities
 ** Amounts less than \$50 million