

EXHIBIT 7.5

DEVELOPMENT OF MONTHLY INVESTMENT CHARGE FACTOR

A.	Sample SS7 Capital Investment	\$100,000
B.	Average Interstate Investment (Line A x 0.516537)	\$51,654
C.	Average Interstate Depreciation Reserve (Line B x 0.470344)	\$24,295
D.	Average Net Interstate Investment (Line B – Line C)	\$27,359
E.	Return On Average Net Interstate Investment (Line D x 0.1125)	\$3,078
F.	State & Local Income Tax @ 7.8% (Line E x 0.084599)	\$260
G.	Federal Income Tax @ 32.8945% ¹² [(Line E – Line F) x 0.4901911]	\$1,381
H.	Interstate Depreciation Expense (Line B/8)	\$6,457
I.	Interstate Maintenance Expense (Line B x 0.076197)	\$3,936
J.	Interstate Corporate Operations Expense (Line B x 0.064881)	\$3,351
K.	Total Annual Interstate Cost (Lines E + F + G + H + I + J)	\$18,463
L.	Total Monthly Interstate Cost (Line W12)	\$1,539
M.	Monthly Investment Charge Factor (Line L/Line A)	0.015386

¹²

This factor is the average effective tax rate based on 2000 cost study data, as described in Section N. G.

ratio of accumulated depreciation of *SS7* equipment to total *SS7* investment. This ratio is based on initial **SS7** investment data reported by average schedule companies. Since the eight-year depreciation life is the norm for digital switching equipment, NECA has calculated annual *SS7* depreciation expense using an eight-year depreciation life for each SSP or CP. Accumulated depreciation is the sum of these expenses over the years each SSP or CP has been in service.

Companies that purchased **SS7** equipment eight or more years ago would have fully depreciated their initial investment, and would have upgraded their equipment with new equipment of the same functionality. Since some new equipment tends to be less expensive than it was eight years ago, NECA updated this data.

NECA estimated replacement costs for fully depreciated switches by: (1) contacting switch vendors for information on upgrade and replacement costs by switch model and type; (2) supplementing vendor data with replacement cost data from a sample of average schedule study areas; (3) determining what switch models and types have most likely been replaced, and estimating replacement costs for these switches; and (4) applying replacement cost data to those switches in NECA's **SS7** database. This method enabled replacement costs to be estimated without putting undue burden on companies by requesting complex *SS7* equipment cost data from every study area.

Cost study factors (used on Lines B, I and J of Exhibit 7.5) were used to allocate **SS7** costs to the interstate jurisdiction and to apply loadings for maintenance and corporate operations expenses. These factors were developed from weighted sample

cost company cost studies as shown in Section IV.G.

To calculate the average investment of an SSP, NECA used the SSP cost data reported by all study areas.

$$\begin{aligned} \text{Average Investment per SSP} &= \frac{\Sigma (\text{Investment Cost over all SSPs})}{\text{Total Number of SSPs}} \\ &= \frac{418,138.34}{584} \\ &= \$715.99 \end{aligned}$$

The investment cost associated with fully connected SSPs for each study area was then calculated as the number of fully connected SSPs multiplied by the Average Investment per SSP. Similarly, the investment cost associated with partially connected SSPs was calculated as the number of partially connected SSPs multiplied by the Average Investment per SSP. These adjusted investment amounts were used in the development of the fully and partially connected rates developed in Sections VII.J.1.d and VII.J.2.

h. Development of Monthly A-Link Costs

A-link pairs connect SSPs or CPs to a pair of STPs. A-links are configured with termination equipment at the SSP or CP and at a meet point, a cable facility connecting the terminations, and cable and ports connecting the meet point to the STPs. In this filing, NECA developed A-Link cost data representative of STP providers to whom average schedule companies are connected for SS7 signaling.

Port costs, mileage costs and termination costs are based on tariff rates currently in effect, or on reported costs for providers under contract.

1. Provider Mileage Costs

Tariff and contract rates were used to develop monthly mileage costs as follows.

$$\begin{aligned} \textit{Total Monthly Mileage Cost} &= \\ & \quad (\textit{NECA Mileage Rate}) \\ & \quad \times (\textit{Average Airline Miles from SSPs to the Meet Point}) \\ & \quad + \textit{A Mileage Cost Component Based on the Provider's Rate Structure} \\ & \quad \quad \textit{and Average Airline Miles from the Meet Point to the STP} \end{aligned}$$

Average Airline Miles from the SSP to the Meet Point was determined by using one of three methods, explained below.

The first method was used for most study areas. NECA analyzed its Line Haul database and retrieved all route data having a start and end location CLLI code matching a CLLI code in the Tariff 4 database. The vertical and horizontal coordinates of the start and end location of each route were retrieved. The airline distance between the start and end location of each route was calculated. The weighted mean of all airline distances was calculated, weighted by interstate circuits. The resulting average weighted route mile distance between the SSP and Meet Point was 23.55 miles.

The second method NECA used to calculate SSP to Meet Point distance was used for one provider that reported an average distance of 56.6 miles from the SSP end office to the point of interface (meet point). This distance was used in developing mileage costs for SSPs served by that provider. In this case, no remaining costs are incurred for distances from the meet point to the STP.

NECA used a third method to calculate SSP to Meet Point distance when the meet point was specified to have DDS capability. Average airline miles to DDS hubs in the same LATA (86.20 miles) were used as airline miles from the SSP to the meet point. Terminating costs were included at the SSP and DDS locations, both computed at the NECA tariff rate. No remaining costs are incurred from the meet point to the STP.

Average Airline Miles from the Meet Point to the STP (62.65 miles) is the difference between the average SSP to STP distance (86.20) and the average SSP to meet point distance (23.55 miles). Average mileage from the SSP to the STP was determined using the V and H coordinates of STP and SSP locations.

Mileage costs for this component are based on the provider's rate structure as shown in Exhibit 7.6.

ii. Provider Termination Costs

Total termination costs are the sum of a termination charge at the NECA

EXHIBIT 7.6
DEVELOPMENT OF SS7 MONTHLY INTERSTATE A-LINK RATES (PER PAIR)

Provider	[A] Meet Point To STP Fixed Charge	[B] Meet Point To STP Per Mile Charge	[C] Termination Rate At Meet Point (Per Link)	[D] Port cost (Per Pair)	[E'''] Monthly A-Link Rate (Per Pair)	[F] (E x 0.516537⁽²⁾) Monthly Interstate A-linkcost
A	\$0.00	\$3.50	\$0.00	\$1,800.00	\$2,507.35	\$1,295.14
B	\$0.00	\$0.00	\$155.00	\$674.10	\$1,252.90	\$647.17
C	\$0.00	\$1.11	\$14.27	\$760.00	\$1,196.42	\$618.00
D	\$25.60	\$0.26	\$0.00	\$930.00	\$1,282.58	\$662.50
E	\$30.25	\$0.99	\$86.00	\$828.20	\$1,453.55	\$750.81
F	\$69.15	\$1.35	\$118.00	\$858.10	\$1,670.36	\$862.80
G	\$25.20	\$0.90	\$64.40	\$748.00	\$1,308.77	\$676.03
H	\$100.16	\$0.91	\$0.00	\$1,000.00	\$1,583.14	\$817.75
I	N/A	N/A	N/A	\$1,350.00	\$1,883.20	\$972.74
J	\$66.44	\$2.50	\$0.00	\$859.94	\$1,574.87	\$813.48
K	N/A	NIA	N/A	\$2,000.00	\$2,000.00	\$1,033.07
L	N/A	N/A	N/A	\$800.00	\$1,650.40	\$852.49
M	\$182.22	\$2.33	N/A	\$1,598.00	\$2,523.19	\$1,303.32
N	N/A	N/A	N/A	\$3,000.00	\$3,850.40	\$1,988.87
O	N/A	N/A	NIA	\$750.00	\$1,018.80	\$526.25
P	N/A	N/A	N/A	\$1,425.00	\$1,425.00	\$736.07
Q	\$107.80	\$2.17	\$32.67	\$1,440.00	\$2,261.64	\$1,168.22
R	\$96.00	\$0.60	\$0.00	\$1,629.00	\$2,164.98	\$1,118.29
S	N/A	N/A	N/A	\$1,200.00	\$1,468.80	\$758.69
T	\$30.12	\$1.98	\$71.48	\$900.00	\$1,620.09	\$836.84

Channel Miles Termination Rate Per Termination CMT = \$40.20⁽³⁾

Channel Miles Facility Rate Per Mile: CMF = \$4.00⁽³⁾

Average SSP to HUB Distance = 86.20⁽⁴⁾

Average SSP to Meet Point Distance = 23.55 **

Average Airline Mile From The Meet Point To The STP = 86.20 - 23.55 = 62.65

- (1) Provider I: $E = 2 \times (CMT + CMF \times 56.60) + D$
 Providers L & N: $E = 2 \times (CMT \times 2 + CMF \times 86.20) + D$
 Provider K & P: $E = D$ (Transport costs are included in Port Cost)
 All Other Providers: $E = 2 \times (CMT + CMF \times 23.55 + A + 62.65 \times B + C) + D$

(2) Interstate COE Factor (See Exhibit IV.G)

(3) 2002 Annual Access Tariff Filing

(4) See Section VII.J.1.b.i

tariff rate (\$40.20) for the link between the SSP and the meet point and another termination charge at the meet point. For each provider, termination cost was included at the NECA tariff rate of \$40.20, one at the SSP and one at the meet point. See Exhibit 7.6, Column E and Note 1.

iii. Provider Monthly Interstate A-Link Costs

For each provider, monthly A-Link rates were multiplied by Interstate COE Factor (0.516537) to calculate Monthly Interstate A-Link Cost. See Exhibit 7.6, Column F.

iv. Average Schedule Company A-Link Costs

For each study area, the monthly interstate A-Link cost of its provider (corresponding row in Column F in Exhibit 7.6) was multiplied by the number of A-Link pairs to produce the monthly A-Link cost component shown in Column G of Appendix G (SS7 Costs with Full Connectivity).

c. Development of Monthly CP Data Link Costs

Consolidation Point switches are often used to consolidate links from a group of SSPs, to allow the group to be served by a single pair of A-Links. When Consolidation Point equipment is provided, CP Data Link cost is incurred by each of the SSPs.

A monthly average cost per CP data link was developed as shown in Exhibit 7.7. These calculations use NECA's Tariff rates for data channel miles (\$4.00), and for

EXHIBIT 7.7

MONTHLY CP DATA LINK RATE DEVELOPMENT

A.	19.12 Miles x \$4.00 Per 56 Kbps CMF	\$76.48
B.	2 Terminations x \$40.20 Per 56 Kbps CMT	\$80.40
C.	Total (Line A + Line B)	\$156.88
D.	Average COE Factor (see Exhibit 4.8)	0.516537
E.	Monthly Average Cost Per CP Data Link (Line C x Line D)	\$81.03

data channel terminations (\$40.20). Average Length of Haul of 19.12 miles was calculated using V&H coordinates of SSP and CP locations. For each study area, monthly CP Data Link costs equal the product of the number of data links and the monthly average cost. Resulting CP Data Link Costs are shown in Column I of Appendix G (SS7 Costs with Full Connectivity).

d. Settlement Formula Calculation

The proposed settlement formula for a SSP with full connectivity is:

$$\text{Settlement for SSP With Full Connectivity} = \frac{\sum \text{Total Monthly Costs}}{\sum \text{Number of SSPs}}$$

where the sum is taken over all SSPs that have full connectivity, and

$$\begin{aligned} \text{Total Monthly Costs} &= \text{Monthly Investment Cost} + \text{Monthly A-Link Costs} \\ &+ \text{Monthly CP Data Link Costs} \end{aligned}$$

Appendix G shows the calculation, for each study area, of Monthly Investment Costs, Monthly A-Link Costs and Monthly CP Data Link Costs. Total Monthly Costs and the total number of SSPs from the study in Appendix G are used to calculate the proposed settlement rate.

$$\begin{aligned} \text{Settlement For SSP} &= \frac{\text{Total Monthly Cost}}{\text{Total Count of SSPs}} \\ \text{With Full Connectivity} &= \frac{\$761.937}{566} \\ &= \$1,346 \end{aligned}$$

2. Development of Settlement Formula for SSPs Not Yet Fully Connected

The monthly settlement for those SSPs not yet connected to the nationwide signaling network was developed using a methodology that was similar to that previously described for the full connectivity scenario.

These companies incur SSP costs, and sometimes costs of CPs and CP data links, but do not incur A-Link Costs. The total costs of these companies are the total monthly SSP, CP and CP data link cost from average schedule companies that have installed SSP equipment, but are not yet connected to the nationwide signaling network. These data are displayed in Appendix G. The total monthly costs for these SSPs were summed (\$12,888) and divided by the total number of SSPs (18) to produce the \$716 monthly settlement amount.

K. Rate of Return Factor Formulas

Rate of Return Factor formulas are used **by NECA** each month to adjust settlements to average schedule companies to conform to the rates of return achieved **by** the NECA pools. Without these adjustments, average schedule settlements would correspond to the authorized rate of return, currently 11.25%. The Rate of Return Factor measures the relative effect **on** revenue requirement caused by changes in the pool's achieved rate of return. Current and proposed formulas have identical structures.

These formulas, therefore, derive their structure from the revenue requirement calculation method, which has an expense component that is not sensitive to rate of return, and Return and Federal Income Tax Components that are sensitive to rate of return. The intercepts of the formulas correspond to the expense component, while the slopes correspond to the Return and Federal Income Tax components.

The development of the Rate of Return Factor adjustment formulas involved three **steps**. First, total sample revenue requirements were computed corresponding to each of several test rates of return. In each case, the methods described in Section VI.F were used to calculate revenue requirements. Second, a revenue requirement ratio was computed corresponding to each of these rates of return. Third, a regression model was developed relating the revenue requirement ratio to the rate of return.

The revenue requirement ratio equals the quotient of revenue requirement at a test rate of return divided by the revenue requirement at the authorized rate of return. Exhibit 7.8 displays the ratios

underlying the regression models

The data in Exhibit 7.8 are interpreted as follows: if the Common Line Pool achieves a rate of return of 10.5 percent, then the revenues will be 98.1427 percent of the revenue requirement at the authorized rate of 11.25 percent. Similarly, an achieved rate of 12.5 percent corresponds to revenues that are 103.0974 percent of the revenue requirement at 11.25 percent.

The final step in the derivation of these formulas computed straight line regression models relating the revenue requirement ratios to the test rates of return. The revenue requirement models were constrained to equal 1.0 at the Rate of Return coordinate of 0.1125. These models fit the data perfectly, yielding the following formulas:

$$\text{Common Line Factor} = 0.722393 + 2.467618x \text{ ROR} \quad R^2 = 1.00$$

$$\text{Traffic Sensitive Factor} = 0.752116 + 2.203413x \text{ ROR} \quad R^2 = 1.00$$

L. Equal Access Settlements

Many average schedule companies incur costs for the provision of equal access to competing interexchange carriers. **Part 36** rules include special methods of separating these costs to jurisdictions. These methods apply only in cases that meet the **Part 36** prerequisites for equal access. Correspondingly, NECA provides an average schedule settlement formula that targets locations with equal access. The current and proposed formulas have identical structures. Equal access costs include initial expenses for customer presubscription balloting, education, some software expenses, and capitalized hardware and software costs.

EXHIBIT 7.8

REVENUE REQUIREMENT RATIOS UNDERLYING ROR FORMULAS

<u>Test Rate Of Return</u>	<u>Common Line Ratio</u>	<u>Traffic Sensitive Ratio</u>
0.0700	0.895803	0.906993
0.0725	0.901893	0.912425
0.0750	0.907986	0.917858
0.0775	0.914080	0.923293
0.0800	0.920173	0.928737
0.0825	0.926267	0.934186
0.0850	0.932361	0.939634
0.0875	0.938469	0.945085
0.0900	0.944578	0.950540
0.0925	0.950686	0.955998
0.0950	0.956823	0.961475
0.0975	0.962970	0.966962
0.1000	0.969119	0.972450
0.1025	0.975270	0.977940
0.1050	0.981427	0.983437
0.1075	0.987615	0.988952
0.1100	0.993807	0.994475
0.1125	1.000000	1.000000
0.1150	1.006193	1.005529
0.1175	1.012387	1.011062
0.1200	1.018583	1.016596
0.1225	1.024779	1.022130
0.1250	1.030974	1.027665
0.1275	1.037170	1.033199
0.1300	1.043365	1.038733
0.1325	1.049561	1.044268
0.1350	1.055757	1.049802
0.1375	1.061953	1.055337
0.1400	1.068150	1.060873
0.1425	1.074349	1.066410
0.1450	1.080547	1.071949
0.1475	1.086745	1.077488
0.1500	1.092943	1.083028
0.1525	1.099142	1.088567
0.1550	1.105340	1.094106

Equal access costs are separated according to Part 36 rules on the basis of relative state and interstate equal access traffic. Settlements for interstate equal access costs are currently recovered by average schedule companies in two portions. The interstate portion of initial incremental equal access expenses are reported to the pool and recovered in the period incurred. The interstate portion of initial incremental investment is recovered using a monthly carrying charge factor of 0.0247, applied over an eight-year period.

Exhibit 7.9 displays the development of the monthly carrying charge factor (0.0247).

M. Adjustments for the MAG Order

NECA further adjusted the formulas described in Sections VII.B through VII.L to account for new allocation rules described in the MAG Order. NECA made adjustments to account for two changes: (1) Reallocation of Switching Line **Port** costs from the Central Office to the Common Line access category; and (2) Reallocation of Transport Interconnection Charge costs from Transport to Common Line.

NECA developed “shift factors” to move amounts from one access category to another. The description of the development and use of each shift factor is described in the following sections.

EXHIBIT 7.9

**CALCULATION OF THE EQUAL ACCESS INVESTMENT
MONTHLY CARRYING CHARGE FACTOR**

A.	Illustrative Interstate Equal Access Investment	\$10,000
B.	Average Interstate Depreciation Reserve Over First Year (8 yr.) [(Line A/8)/2]	\$ 625
C.	Average Net Interstate Investment (Line A - Line B)	\$ 9,375
D.	Interstate Authorized Rate of Return	11.25%
E.	Return on Average Net Interstate Investment (Line C x Line D)	\$ 1,055
F.	Federal Income Tax @ 35% (Line E x 0.538462)	\$ 568
G.	State Income Tax @ 7.8% (Line E x 0.084599)	\$ 89
H.	Interstate Depreciation Expense (8 yr.) (Line A/8)	\$ 1,250
I.	Total Interstate Return, Taxes and Depreciation (Lines E + F + G + H)	\$2,962
J.	Monthly Interstate Return, Taxes and Depreciation (Line I/12)	\$ 247
K.	Monthly Interstate Carrying Charge Factor (Line J/Line A)	0.0247

1. Switching Line Ports

The MAG Order specifies that costs associated with Switching Line Ports be allocated to Common Line rather than to CO.¹³ The MAG Order allows companies to use **30%** as the amount of Local Switching revenue requirements, excluding local switching support amounts, to be reallocated.

a. Development of Line Port Shift Factor

Using the population of average schedule study areas, NECA retrieved total central office settlements from the 2002 Annual Access Tariff Filing. The line port component of settlements was calculated according to Commission rules as **30%** of the difference between CO settlements and local switching support amounts. The Line Port Shift Factor was calculated as the line port component of settlements, divided by total central office settlements.

$$\begin{aligned} \textit{Line Port Shift Factor} &= \frac{\textit{Line Port Component}}{\textit{Total Central Office Settlements}} \\ &= \frac{\$33,902,068}{\$189,401,866} \\ &= 0.178995 \end{aligned}$$

¹³

MAG Order at ¶ 90.

b. Application of Line Port Shift Factor

Each month, NECA will calculate the line port component of settlements for each average schedule study area by multiplying the Line Port Shift Factor by each study area's total central office settlements. This study area line port component will now be recovered **through** the common line pool. While this change did not impact Common Line Access Line or CO formula coefficients displayed in Section VIII of this Filing, Section VIII includes a Common Line Line Port Formula based on the central office formula. Similarly, Section VIII also includes a residual Traffic Sensitive Central Office Formula.

To calculate the settlement effects **of** proposed formulas (See Section VII.N below), current Common Line Line Port settlements were calculated using the current Line Port Shift Factor of 0.184771, **as** documented in the 2002 Filing. Proposed Common Line Line Port settlements were calculated using the proposed factor of 0.178995. The Common Line Line Port settlement is included in the total common line settlement and the Traffic Sensitive CO settlement is included in the total traffic sensitive settlement for the development **of** Appendix E and exhibits 7.10, 7.11 and 7.12. For the average schedule population, this reallocation assigned \$2,848,723 of the current central office settlement to the common line pool, and \$3,039,674 of the proposed central office settlement **to** the common line **pool**.

2. Transport Interconnection Charge

According to the MAG Order, the Transport Interconnection Charge (TIC) was eliminated

and the costs that were recovered through this rate element were reapportioned to all the other access elements.¹⁴ For average schedule formula development, part of the transport revenue requirement was shifted to other access categories. The part of the transport revenue requirement that would have been shifted to other traffic sensitive revenue requirements was not calculated, since by study area, total common line and traffic sensitive settlements would remain the same despite such a reallocation. However, the shift from the transport category to the common line category was determined as cost recovery is shifted from one pool to the other.

a. Development of Common Line TIC Shift Factors

From the 2002 Annual Access Tariff Filing, NECA used TIC revenues and total Transport settlements for each study area. Total Transport settlements include settlements produced by the Line Haul Distance Sensitive, Line Haul Non-Distance Sensitive, and Intertoll Switching formulas.

NECA allocated TIC revenues to the Common Line access category in proportion to the fraction of total settlements derived from Common Line. For this purpose, Common Line settlements excluded Universal Service Contribution (USC) amounts, and traffic sensitive settlements excluded local switching support and TIC revenues. The fraction of total settlements derived from the Common Line formula was multiplied by TIC revenues to produce Common Line TIC revenues. Finally, the sum of Common Line TIC revenues was divided by the sum of total Transport settlements for the population to produce the Common Line (CL) TIC Shift Factor.

¹⁴

MAG Order at ¶ 98.

$$CL\ TIC\ Revenues = \frac{(CL\ Settlements\ Excluding\ USC) \times TIC\ Revenues}{Total\ Settlements\ (Excluding\ LSS\ and\ TIC\ Revenues)}$$

$$\begin{aligned}
 CL\ TIC\ Shift\ Factor &= \frac{\Sigma CL\ TIC\ Revenues}{\Sigma Transport\ Settlements} \\
 &= \frac{\$26,656,215}{\$79,082,528} \\
 &= 0.337068
 \end{aligned}$$

b. Application of TIC Shift Factors

Each month, NECA will calculate the amount of transport settlements to be allocated to Common Line using the CL TIC Shift Factor. For each study area, the total transport settlement will be multiplied by the CL TIC Shift Factor to produce the amount to now be recovered from the Common Line Pool. While this change does not impact Common Line or Transport formula coefficients displayed in Section VIII of this Filing, Section VIII includes a Common Line Transport Formula based on the transport formulas. Similarly, Section VIII also includes a residual Traffic Sensitive Transport Formula.

To calculate the settlement effects of proposed formulas (See Section VII.N below), current Common Line Transport settlements were calculated using the current CL TIC Shift Factor of 0.281651, as documented in the 2002 Filing. Proposed Common Line Transport settlements were calculated using the proposed factor of 0.337068. In developing Appendix E and exhibits 7.10, 7.11 and 7.12, the Common Line Transport settlement is included in the total common line

settlement, and the Traffic Sensitive Transport settlement is included in the total Traffic Sensitive settlement. For the average schedule population, this reallocation assigned \$1,802,839 of current transport settlements to the common line pool, and \$2,213,465 of proposed transport settlements to the common line pool.¹⁵

N. Impact of Proposed Formulas

This section analyzes settlement effects of the proposed formulas that carriers can expect to realize on the day of implementation. These effects take into account settlements based on formulas presented in sections VII.B through VII.L, along with the shift factors described in section VII.M.

Beginning July 2003, carriers can expect, on average, an overall settlement increase of 3.97 percent as a result of the new formulas. This figure is based on a comparison of changes in settlements produced to become effective July 1, 2003 relative to those that became effective July 1, 2002, with demand held constant at the July 2002 level.

Changes in the formula levels result from the effects of cost and demand growth. The proposed formulas are expected to produce settlements during the test period that will match test period revenue requirements.

A small group of study areas will experience an overall formula decrease, due primarily to the decrease in Common Line settlements for companies in the 500 to 1,000 lines per exchange band, and to decreases in Line Haul Distance Sensitive settlements. Another small group of study areas

¹⁵

From average schedule study areas not in NECA's Traffic Sensitive Pool, NECA used line port and TIC shifts to common line according to the December 2001 view of their tariff data. These amounts are included in their common line settlements in Appendix E.

will experience overall formula increases greater than 10%. These companies tend to have a larger fraction of their settlements derived from the Common Line and CO formulas, which are increasing for most study areas. Of the 506 study areas in the analysis, 495 will experience settlement increases.

Exhibit 7.10 summarizes the average change to each formula and the resulting fraction of total settlements from each proposed formula. Exhibit 7.11 summarizes the effects of these changes for average schedule companies by access line grouping.

Exhibit 7.12 summarizes settlements by formula. The values reflect the proposed formula changes and are based on demand levels taken from the October 2002 view **of** the July 2002 settlement **month**. Settlement effects for individual study areas **are** shown in Appendix E.

EXHIBIT 7.10

SUMMARY OF PROPOSED FORMULA AVERAGE CHANGES

	Proposed Formula Change	Formula Percent Of Total
Common Line Basic	3.03%	43.31%
CL Universal Service	0.00%	1.79%
Central Office	10.15%	31.40%
CL Central Office		6.16%
TS Central Office		25.24%
Distance Sensitive	-4.79%	6.20%
Non-Distance Sensitive	13.98%	4.98%
Intertoll Dial	0.05%	0.71%
Total Transport		12.26%
CL Transport		4.37%
TS Transport		7.88%
Special Access	-5.94%	9.61%
Signaling System 7	1.03%	1.58%
Equal Access	0.00%	0.06%
Overall CL Average	4.44%	55.63%
Overall TS Average	3.38%	44.37%
Overall Average	3.97%	100.00%

EXHIBIT 7.1 1

SETTLEMENT EFFECTS OF PROPOSED AVERAGE SCHEDULES

<u>Access Line Sue Group</u>	<u>Number Of ECs</u>	<u>% Change Common Line</u>	<u>% Change Traffic</u>	<u>% Change Total</u>	<u>Per Line Change Total</u>
<500	64	5.72%	7.34%	6.70%	\$3.17
501 - 1000	91	1.67%	4.48%	3.18%	\$0.99
1001 - 2500	163	2.26%	2.92%	2.60%	\$0.72
2501 - 5000	75	2.39%	2.35%	2.37%	\$0.58
5001 - 10000	65	3.32%	3.14%	3.25%	\$0.66
10001 - 20000	28	4.67%	4.31%	4.53%	\$0.83
<u>> 20000</u>	<u>20</u>	<u>6.37%</u>	<u>3.40%</u>	<u>5.12%</u>	<u>\$0.89</u>
TOTAL	506	4.44%	3.38%	3.91%	\$0.81

EXHIBIT 7.12

SETTLEMENTS BY MAJOR SETTLEMENT ELEMENT

Common Line Basic		\$23,923,099
CL Universal Service		\$989,454
Central Office		\$17,342,164
<u>Central Office Line Port Shifts</u>		
CL Central Office	\$3,399,947 ⁶	
TS Central Office	\$13,942,217	
Distance Sensitive Transport		\$3,423,590
Non-Distance Sensitive Transport		\$2,753,209
Intertoll Dial Transport		\$390,022
CL Transport Not in TS Pool		\$203,015
Total Transport		\$6,769,836
<u>TIC Reallocation Shifts</u>		
CL Transport	\$2,416,481	
TS Transport	\$4,353,355	
Special Access		\$5,307,997
Signaling System 7		\$870,118
Equal Access		\$34,182
Overall CL Total		\$30,728,198
Overall TS Total		\$24,507,187
Overall Total		\$55,236,850