

ICC Docket No. 09-0315
AT&T Communications of Illinois, Inc.
Exhibit 2.0
Dr. Kent A. Currie Direct Testimony

Schedule KAC-10

PUBLIC

Identifying Volume Drivers for Access Node Costs

Analysis at the Access Node Level

Regression Equation:

$$Cost = \alpha_0 + \alpha_1 DS0$$

where *Cost* is monthly cost for Access Node Aggregation Equipment at Access Node
DS0 is count of local loops at Access Node

Results:

Null Hypothesis (H_0): $\alpha_1 = 0$; rejected at 5% significance level, since p-value = 0.**** < 0.05

Identifying Volume Drivers for Access Node Costs

Analysis at the Service Node Level

Regression Equation:

$$Cost = \beta_0 + \beta_1 DS0$$

where *Cost* is monthly cost for Access Node Aggregation Equipment at all Access Nodes served by Service Node

DS0 is count of local loops at all Access Nodes served by Service Node

Results:

Null Hypothesis (H_0): $\alpha_1 = 0$; rejected at 5% significance level, since p-value = 0.**** < 0.05

Identifying Volume Drivers for Access Node Costs

Analysis at the Service Node Level (continued)

Omitted Variable Tests:

Alternative Regression:

$$Cost = \beta_0 + \beta_1 DS0 + \beta_2 ANAMOU$$

where *ANAMOU* is MOUs at all Access Nodes served by Service Node

t-test:

Prob. t-statistic = 0.**** > 0.05 implies cannot reject hypothesis that $\beta_2 = 0$ at 5% significance level

F-test:

Prob. F(1,34) = 0.**** > 0.05 implies inclusion of ANAMOU is not statistically significant at 5% significance level

Likelihood Ratio (LR) test:

Prob. $\chi^2(1) = 0.**** > 0.05$ implies inclusion of ANAMOU is not statistically significant at 5% significance level