## 8. Network Usage and Growth

To monitor use of the public switched telephone network, the National Exchange Carrier Association (NECA) provides quarterly reports to the Commission on the volume of interstate access minutes of use (MOU) passing through the local switches. To supplement this information, local telephone companies that settle on a cost basis also provide, on an annual basis, their dial equipment minutes (DEM) and factors. The Joint Board recognizes that much of this information is not otherwise collected by any single entity and that reports can be received and consolidated by NECA. The 1997 DEM data and revisions of earlier data were contained in the June 1999 Monitoring Report. The minutes reported here are those minutes that pass through the incumbent local exchange carriers' switches.

This report presents information different from prior monitoring reports. Local switching minutes are now reported instead of CCL minutes for non-NECA common line tariff participants. Also, only total minutes are being reported and we no longer receive monthly data. NECA now reports total local switching minutes quarterly instead of the monthly carrier common line (CCL) access minutes, which were previously reported and shown in prior monitoring reports. There are three reasons for this.

First, access reform changes that were implemented on January 1, 1998, have already caused the CCL rates for some price-cap incumbent local exchange carriers (ILECs) to go to zero, and will eventually cause the CCL rates for all price-cap ILECs to go to zero. Since ILECs derive their reported CCL rates by dividing the CCL revenue by the CCL rate, this presents a reporting problem where a price-cap ILEC's CCL rates are zero.

Second, the amount of non-premium minutes in the quarterly reports has declined to a level where it is no longer significant. Non-premium minutes for 1984, which was the first period for which data are available, represented 13% of the total access minutes. For 1998, non-premium minutes represented only 0.07% of the total minutes.

Third, quarterly data, rather than monthly data, are sufficient and less burdensome for the carriers to maintain.

Table 8.1 presents NECA's latest available information on local access switching minutes for interstate traffic that pass through the ILEC's switches. Quarterly data are shown individually for each of the tier 1 carriers' study areas<sup>2</sup>, along with totals for the non-tier 1 carriers, and totals for the industry.

A study area is usually an operating company's operations in one state. The first two digits of the NECA study area code identify the state, and the remaining four digits identify the study area. The numerical code for each state is shown in Table 8.2.

Preliminary summaries of the 1998 DEMs are expected to be filed by NECA in February, 2000, and the final 1998 DEMs are expected in March, 2000.

The following descriptions of minutes of use measures are based on information provided by NECA:

Access MOU are "earned MOU" which are derived by dividing the earned revenues by the corresponding rate. This definition of access minutes is in agreement with the tariff review plan and ARMIS reports. Access minutes of use generating revenues have been discounted, which can produce distortions in revenue amounts. Further, revenues are normalized to include changes in terminating/originating and percent interstate use factors, billing adjustments, and the imputations of access charges (where applicable). Revenues are also calendarized, which will change derived minutes.

Access MOU include the only the domestic portion of international calls. Similarly, WATS and 800/888/877 calls are counted only on one end of the call.<sup>3</sup> Finally, minutes include time for incomplete calls and setup time.

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WATS calls generate access minutes only at the terminating end of the call and 800/888/877 calls generate access minutes only at the originating end of the call; both types of minutes are counted in the terminating minutes.

TABLE 8.1

TOTAL INTERSTATE ACCESS MINUTES

State	Study Area ID	Study Area - Abbreviation	Tier	01/01/1999 To 03/31/1999	04/01/1999 To 06/30/1999	07/01/1999 To 09/30/1999
Alabama	250281	CONTEL AL DBA GTE AL	1	56,633,096	108,400,666	82,133,354
Alabama	250293	GTE SOUTH INC AL	1	124,981,467	134,490,319	137,412,500
Alabama	255181	SO CENTRAL BELL-AL	1	1,433,977,412	1,500,069,339	1,459,904,656
Arizona	452302	CONTEL CALIF - AZ	1	9,419,379	9,043,719	8,670,646
Arizona	455101	U S WEST INC AZ	1	2,721,180,432	2,711,856,920	2,673,904,635
Arkansas	402080	GTE SOUTHWEST INC-AR	1	64,287,768	66,132,458	68,095,621
Arkansas	405211	SOUTHWESTERN BELL-AR	1	777,008,539	818,387,170	821,327,893
California	542302	CONTEL OF CALIFORNIA	1	205,814,519	202,911,799	204,425,250
California	542319	GTC OF CALIFORNIA	1	2,256,746,443	2,437,195,787	2,386,230,322
California	542344	WEST COAST TEL OF CA	1	9,471,248	9,270,368	10,234,783
California	545170	PACIFIC BELL	1	10,070,408,264	9,944,071,295	10,253,487,862
Colorado	465102	U S WEST INC CO	1	2,714,081,600	2,735,095,700	2,767,336,891
Connecticut	135200	SOUTHERN NEW ENGLAND	1	2,257,363,376	2,248,734,031	2,292,830,051
Delaware	565010	DIAMOND STATE TEL.	1	571,677,173	571,795,044	587,292,794
District of Columbia	575020	C & P TEL CO OF WASH	1	745,096,415	799,924,419	777,149,784
Florida	210328	GTE FLORIDA INC.	1	1,971,268,482	2,094,314,491	1,889,826,819
Florida	210341	SPRINT-FLORIDA ,INC.	1	1,763,895,458	1,719,408,464	1,612,897,882
Florida	215191	SOUTHERN BELL - FL	1	5,709,830,978	5,756,270,722	5,387,599,690
Georgia	223037	ALLTEL GEORGIA COMM.	1	194,442,272	213,182,345	200,282,279
Georgia Hawaii	225192 623100	SOUTHERN BELL- GA GTE HAWAIIAN TEL. CO	1	3,810,179,721	3,936,465,854	3,721,004,738 516,281,038
Idaho	472416	GTE NORTHWEST INC-ID	1	573,182,018	527,060,848	146,337,267
Idaho	475103	U S WEST INC ID	1	142,613,114 464,185,094	140,248,573 474,744,925	483,956,281
Idaho	475162	U S WEST INC ID		27,911,521	28,543,339	28,759,986
Illinois	341015	GTE NORTH INC IL	1	441.368.232	443,974,633	437,939,398
Illinois	341036	CONTEL IL DBA GTE IL	1	134,599,653	126,310,196	128,249,701
Illinois	343035	GTE SOUTH- IL	li	26,495,888	24,743,211	27,057,835
Illinois	345070	ILLINOIS BELL TEL CO	1	5,251,072,103	5,302,480,982	5,322,446,495
Indiana	320772	GTE NORTH INC IN	1	604,121,386	605,523,076	609,454,270
Indiana	320779	CONTEL-IN DBA GTE IN	1	123,023,475	123,343,065	127,075,910
Indiana	320832	UTC OF INDIANA	1	157,461,635	160,029,943	160,107,909
Indiana	323034	CONTEL SOUTH- GTE IN	1	6,200,234	6,080,108	6,239,581
Indiana	325080	INDIANA BELL TEL CO	1	1,533,691,438	1,582,010,684	1,600,323,160
Iowa	351186	GTE NORTH INC IA	1	81,554,812	78,803,006	81,218,496
Iowa	351207	CONTEL IA DBA GTE IA	1	54,357,184	54,850,081	55,182,669
Iowa	351790	CONTEL KS DBA GTE IA	1	55,318,161	54,601,759	55,793,229
Iowa	355141	U S WEST INC IA	1	909,955,907	910,940,791	917,523,289
Kansas	415214	SOUTHWESTERN BELL-KS	1	1,149,273,657	1,187,097,134	1,180,508,658
Kentucky	260407	GTE SOUTH INC KY	1	326,026,467	355,293,992	353,318,515
Kentucky	260410	CONTEL KY DBA GTE KY	1	46,933,625	59,094,127	60,477,779
Kentucky	265061	CINCINNATI BELL - KY	1	123,798,528	122,763,209	122,361,833
Kentucky	265182	SO CENTRAL BELL -KY	1	938,341,485	967,362,057	973,973,870
Louisiana	275183	SO CENTRAL BELL - LA	1	1,674,800,188	1,733,422,709	1,713,511,616
Maine	105111	NEW ENGLAND TEL-ME	1	514,956,179	534,799,208	597,863,892
Maryland Massachusetts	185030 115112	C & P TEL CO OF MD NEW ENGLAND TEL-MA	1	3,069,539,260 3,657,336,018	3,097,539,351 3,714,024,676	3,169,413,525 3,757,849,900
Michigan	310695	GTE NORTH INC MI	1	373,915,309	376,954,641	388,308,402
			1			
Michigan Michigan	313033 315090	MICHIGAN BELL TEL CO	1	33,257,884 3,076,510,434	32,613,232 3,184,557,887	36,315,867 3,182,110,025
Minnesota	365142	U S WEST INC MN	1	1,816,285,341	1,816,864,878	1,822,025,866
Mississippi	285184	SO CENTRAL BELL -MS	1	1,071,778,090	1,119,062,971	1,132,829,914
Missouri	421186	GTE NORTH INC MO	1	91,946,733	93,451,389	92,685,502
Missouri	421789	KS ST DBA GTE E. MO	1	2,574,770	2,546,825	2,492,696
Missouri	421846	CONT MO DBA GTE MO	1	41,656,825	41,181,634	41,614,823
Missouri	421922	CONTEL MO DBA GTE MO	1	186,606,837	196,514,751	204,404,664
Missouri	425213	SOUTHWESTERN BELL-MO	1	1,970,450,062	2,033,669,001	2,044,404,035
Montana	485104	U S WEST INC MT	1	358,444,434	369,160,127	377,992,672
Nebraska	371186	GTE NORTH INC NE	1	40,169,243	39,741,023	39,673,465
Nebraska	371568	ALIANT COMM. CO	1	202,589,217	202,881,304	205,507,539
Nebraska	375143	U S WEST INC NE	1	503,795,957	504,356,407	498,842,550
Nevada	552302	CONTEL OF CALIF- NV	1	42,717,857	40,936,696	41,305,441
Nevada	552348	CENTEL OF NV	1	960,343,415	981,930,826	975,672,576
Nevada	555173	NEVADA BELL	1	231,705,351	228,555,935	240,838,589
New Hampshire	125113	NEW ENGLAND TEL-NH	1	881,461,472	874,872,071	888,136,252
New Jersey	160138	UNTED TEL - NJ. INC	1	198,442,324	197,180,596	192,693,911
New Jersey	165120	NEW JERSEY BELL	1	5,731,678,810	5,785,253,644	5,867,611,885

TABLE 8.1

TOTAL INTERSTATE ACCESS MINUTES

State	Study	Chudu Avec Al-	T;	01/01/1999 To	04/01/1999 To	07/01/1999 To
State	Area ID	Study Area - Abbreviation	Tier	03/31/1999	06/30/1999	09/30/1999
New Mexico New Mexico	492080 492177	GTE SOUTHWEST INC-NM CON. WEST DBA GTE NM	1	40,268,035 33,340,083	41,631,249 33,335,022	41,587,181 34,954,348
New Mexico	492177	U S WEST INC NM	1	755,180,755	791,873,689	813,403,398
New York	150121	FRONTIER- ROCHESTER	1	341,734,281	307,935,949	321,360,705
New York	154532	CITIZENS TELECOM-NY	1	165,474,667	165,643,710	179,965,972
New York	154532	CITIZENS RED HOOK	1	' '	, ,	, ,
			1	9,510,039	9,519,753	10,342,873
New York	154534 155130	CITIZENS-WEST. CNTY NEW YORK TEL CO		15,216,061	15,231,606	16,548,595
New York			1	8,790,078,217	9,002,855,608	8,864,239,467
North Carolina	230470	CAROLINA TEL & TEL	1	885,290,342	944,641,271	953,919,939
North Carolina	230479	GTE SOUTH INC - NC	1	197,631,634	220,030,438	217,058,994
North Carolina	230509	CONTEL NC DBA GTE NC	1	88,863,880	100,279,659	112,392,012
North Carolina	235193	SOUTHERN BELL - NC	1	2,030,147,179	1,975,279,191	2,096,449,713
North Dakota	385144	U S WEST INC ND	1	207,241,601	212,282,433	214,314,634
Ohio	300615	GTE NORTH INC OH	1	549,755,090	562,235,140	560,486,048
Ohio	300661	UTC OF OHIO	1	374,004,169	376,178,916	365,856,824
Ohio	305062	CINCINNATI BELL -OH	1	490,585,364	503,990,225	501,876,825
Ohio	305150	OHIO BELL TEL. CO	1	2,571,082,604	2,638,857,759	2,639,762,794
Oklahoma	432080	GTE SOUTHWEST INC-OK	1	99,445,960	98,507,483	98,428,876
Oklahoma	435215	SOUTHWESTERN BELL-OK	1	1,189,805,554	1,258,738,956	1,245,106,686
Oregon	532416	GTE NORTHWEST INC-OR	1	424,608,431	436,158,320	429,708,398
Oregon	535163	U S WEST INC OR	1	1,193,483,685	1,211,298,577	1,236,391,312
Pennsylvania	170169	GTE NORTH INC PA	1	349,704,173	354,289,793	356,880,350
Pennsylvania	170170	CONTEL PA DBA GTE PA	1	46,071,415	46,347,949	49,084,749
Pennsylvania	170201	GTE NORTH INC PA	1	36,697,965	34,009,315	40,143,370
Pennsylvania	170209	UTC OF PENNSYLVANNIA	1	239,783,738	241,136,385	239,983,506
Pennsylvania	175000	BELL OF PENNSYLVANIA	1	4,484,002,744	4,488,711,755	4,455,959,200
Puerto Rico	633200	PRTC - CENTRAL	1	76,716,321	88,570,987	90,467,517
Puerto Rico	633201	PUERTO RICO TEL CO	1	549,367,562	582,180,755	614,037,469
Rhode Island	585114	NEW ENGLAND TEL - RI	1	611,383,922	624,059,609	628,855,843
South Carolina	240479	GTE SOUTH INC SC	1	159,878,901	183,711,295	205,385,623
South Carolina	240526	CONTEL-SC DBA GTE SC	1	16,392,366	34,472,195	25,123,534
South Carolina	245194	SOUTHERN BELL -SC	1	1,261,864,941	1,281,792,023	1,306,315,905
South Dakota	395145	U S WEST INC SD	1	284,372,454	288,883,120	289,968,151
Tennessee	290567	UNITED INTER-MT-TN	1	172,463,635	176,088,240	173,051,770
Tennessee	295185	SO CENTRAL BELL - TN	1	2,145,161,342	2,184,515,924	2,136,411,018
Texas	442080	GTE SOUTHWEST INC-TX	1	1,202,960,264	1,242,951,272	1,231,378,544
Texas	442154	CONTEL TX DBA GTE TX	1	109,363,361	120,255,210	130,076,884
Texas	445216	SOUTHWESTERN BELL-TX	1	6,195,858,278	6,469,121,808	6,422,592,544
Utah	505107	U S WEST INC UT	1	999,092,339	1,002,522,650	1,008,228,631
Vermont	145115	NEW ENGLAND TEL-VT	1	347,033,615	337,686,234	348,892,698
Virginia	190233	CONTEL VA DBA GTE VA	1	524,607,818	531,812,247	542,977,749
Virginia	190479	GTE SOUTH INC VA	1	28,912,658	30,342,739	30,550,737
Virginia	190567	UNITED INTER-MT-VA	1	74,764,035	76,251,787	76,251,987
Virginia	195040	C & P TEL CO OF VA	1	3,315,504,892	3,435,822,795	3,448,508,713
Washington	522416	GTE NORTHWEST INC-WA	1	622,831,223	649,453,740	689,403,218
Washington	522449	CONTEL NW DBA GTE-WA	1	59,716,580	59,849,388	62,776,141
Washington	525161	U S WEST INC WA	1	2,143,044,668	2,144,167,910	2,125,335,379
West Virginia	205050	C & P TEL OF WV	1	667,357,338	675,022,905	684,946,882
Wisconsin	330886	GTE NORTH INC WI	1		, ,	316,800,457
Wisconsin			1	285,314,027	290,359,113	
	335220	WISCONSIN BELL		1,379,418,970	1,402,407,613	1,379,128,969
Wyoming	515108	U.S. WEST INC WY	1	269,350,435	281,463,145	296,972,858
		NON-TIER 1		9,165,049,420	9,400,472,301	9,580,722,334
		Total Tier 1		126,483,951,280	128,819,757,286	128,611,387,216
		Total Industry		135,649,000,700	138,220,229,587	138,192,109,550

## TABLE 8.2 STATE CODE REFERENCE

SORTED BY STATE ALPHABE	TICALLY	SORTED BY STATE CODE NUMERICALLY		
	STATE	STATE		
STATE	CODE	CODE	STATE	
ALABAMA	25	10	MAINE	
ALASKA	61	11	MASSACHUSETTS	
ARIZONA	45	12	NEW HAMPSHIRE	
ARKANSAS	40	13	CONNECTICUT	
CALIFORNIA	54	14	VERMONT	
COLORADO	46	15		
CONNECTICUT		_	NEW YORK	
	13	16	NEW JERSEY	
DELAWARE	56	17	PENNSYLVANIA	
DISTRICT OF COLUMBIA	57	18	MARYLAND	
FLORIDA	21	19	VIRGINIA	
GEORGIA	22	20	WEST VIRGINIA	
GUAM	66	21	FLORIDA	
HAWAII	62	22	GEORGIA	
IDAHO	47	23	NORTH CAROLINA	
ILLINOIS	34	24	SOUTH CAROLINA	
INDIANA	32	25	ALABAMA	
IOWA	35	26		
		_	KENTUCKY	
KANSAS	41	27	LOUISIANA	
KENTUCKY	26	28	MISSISSIPPI	
LOUISIANA	27	29	TENNESSEE	
MAINE	10	30	OHIO	
MARYLAND	18	31	MICHIGAN	
MASSACHUSETTS	11	32	INDIANA	
MICHIGAN	31	33	WISCONSIN	
MINNESOTA	36	34	ILLINOIS	
MISSISSIPPI	28	35	IOWA	
MISSOURI	42	36	MINNESOTA	
MONTANA	48	37	NEBRASKA	
	37	38		
NEBRASKA			NORTH DAKOTA	
NEVADA	55	39	SOUTH DAKOTA	
NEW HAMPSHIRE	12	40	ARKANSAS	
NEW JERSEY	16	41	KANSAS	
NEW MEXICO	49	42	MISSOURI	
NEW YORK	15	43	OKLAHOMA	
NORTH CAROLINA	23	44	TEXAS	
NORTH DAKOTA	38	45	ARIZONA	
NORTHERN MARIANA ISLANDS	65	46	COLORADO	
OHIO	30	47	IDAHO	
OKLAHOMA	43	48	MONTANA	
OREGON	53	49	NEW MEXICO	
PENNSYLVANIA	17	50	UTAH	
PUERTO RICO	63	51	WYOMING	
RHODE ISLAND	58	52	WASHINGTON	
SOUTH CAROLINA	24	53	OREGON	
SOUTH DAKOTA	39	54	CALIFORNIA	
TENNESSEE	29	55	NEVADA	
TEXAS	44	56	DELAWARE	
UTAH	50	57	DISTRICT OF COLUMBIA	
VERMONT	14	58	RHODE ISLAND	
VIRGIN ISLANDS	64	61	ALASKA	
VIRGINIA	19	62	HAWAII	
WASHINGTON	52	63	PUERTO RICO	
WEST VIRGINIA	20	64	VIRGIN ISLANDS	
WISCONSIN	33	65	NORTHERN MARIANA ISLAND	
WYOMING	51	66	GUAM	