

HAI Model Release 5.0a - Expense Module Density Zone Level Calculations																												
density zone (lines/sq mi)	feeder type	total lines	business lines	residential lines	special access lines	public lines	single line business lines	households	copper feeder cable u/g	copper feeder cable buried	copper feeder cable aerial	fiber feeder cable u/g	fiber feeder cable buried	fiber feeder cable aerial	feeder conduit	feeder manholes	copper feeder u/g placement	fiber feeder u/g placement	copper feeder buried placement	fiber feeder buried placement								
0	DLC																											
5	DLC	1,086	185	865	30	6	9	854	\$	-	\$	-	\$	-	\$	624,647	\$	30,777	\$	-	\$	-	\$	-	\$	133,551		
100	DLC	605	72	518	12	2	7	518	\$	-	\$	-	\$	-	\$	68,992	\$	3,406	\$	-	\$	-	\$	-	\$	92,544		
200	DLC	1,110	146	936	24	4	14	914	\$	-	\$	-	\$	-	\$	175,483	\$	8,806	\$	-	\$	-	\$	-	\$	110,163		
650	DLC																											
850	DLC																											
2550	DLC																											
5000	DLC																											
10000	DLC																											
0	non-DLC																											
5	non-DLC	8	-	8	-	-	-	8	\$	-	\$	19,776	\$	1,001	\$	-	\$	-	\$	-	\$	-	\$	15,715	\$	-		
100	non-DLC																											
200	non-DLC																											
650	non-DLC																											
850	non-DLC																											
2550	non-DLC																											
5000	non-DLC																											
10000	non-DLC																											
Totals/Avg		2,809	404	2,327	66	12	31	2,295	\$	-	\$	19,776	\$	1,001	\$	-	\$	869,122	\$	42,989	\$	-	\$	-	\$	15,715	\$	336,259

HA

density zone (lines/sq mi)	feeder type	feeder pole inv	distribution cable underground	distribution cable buried	distribution cable aerial	distribution conduit	distribution conduit placement	distribution buried placement	distribution poles	calc copper feeder fill	calc distribution fill	calc "mainframe fill"	DLC inv w/site	SAI inv	terminal inv	drop inv	NID inv	feeder distance
0	DLC																	
5	DLC	\$ 14,577	\$ -	\$ 957,623	\$ 48,463	\$ -	\$ -	\$ 1,091,713	\$ 59,879	0.00%	32.42%	0.00%	\$ 394,902	\$ 10,950	\$ 91,163	\$ 100,239	\$ 28,079	209,947
100	DLC	\$ 10,390	\$ -	\$ 399,502	\$ 20,218	\$ -	\$ -	\$ 320,167	\$ 20,433	0.00%	16.79%	0.00%	\$ 118,700	\$ 4,800	\$ 25,376	\$ 39,444	\$ 16,302	9,563
200	DLC	\$ 11,605	\$ -	\$ 517,473	\$ 26,188	\$ -	\$ -	\$ 477,545	\$ 27,939	0.00%	23.13%	0.00%	\$ 180,300	\$ 7,600	\$ 46,596	\$ 70,385	\$ 29,169	6,834
650	DLC																	
850	DLC																	
2550	DLC																	
5000	DLC																	
10000	DLC																	
0	non-DLC																	
5	non-DLC	\$ 141	\$ -	\$ 2,860	\$ 145	\$ -	\$ -	\$ 7,685	\$ 920	8.18%	34.06%	8.18%	\$ -	\$ 250	\$ 686	\$ 857	\$ 232	8,006
100	non-DLC																	
200	non-DLC																	
650	non-DLC																	
850	non-DLC																	
2550	non-DLC																	
5000	non-DLC																	
10000	non-DLC																	
Totals/Avg		\$ 36,712	\$ -	\$ 1,877,458	\$ 95,013	\$ -	\$ -	\$ 1,897,111	\$ 109,171				\$ 693,902	\$ 23,600	\$ 163,821	\$ 210,926	\$ 73,782	234,351

HA

density zone (lines/sq mi)	feeder type	total distribution distance	DLC lines	end office switching	MDF/protector inv	end office wire center	land	local tandem switching	local tandem wire center	OS tandem switching	OS tandem wire center	OS trunks	operator position	common transport, u/g	common transport, buried	common transport, aerial	common transport, poles	common transport, conduit
0	DLC																	
5	DLC	599,421	1,088 \$	304,390 \$	- \$	65,429 \$	11,836 \$	2,006 \$	2,639 \$	845 \$	1,056 \$	12,744 \$	1,548	\$	94,066 \$	2,793 \$	1,877 \$	-
100	DLC	190,406	605 \$	170,908 \$	- \$	36,737 \$	8,306 \$	1,126 \$	1,482 \$	474 \$	593 \$	6,766 \$	869	\$	46,479 \$	1,334 \$	949 \$	-
200	DLC	260,996	1,110 \$	313,221 \$	- \$	67,327 \$	9,743 \$	2,064 \$	2,716 \$	869 \$	1,086 \$	13,685 \$	1,593	\$	104,692 \$	3,176 \$	2,057 \$	-
650	DLC																	
850	DLC																	
2550	DLC																	
5000	DLC																	
10000	DLC																	
0	non-DLC																	
5	non-DLC	3,809	- \$	2,357 \$	- \$	507 \$	115 \$	16 \$	20 \$	7 \$	8 \$	93 \$	12	\$	629 \$	18 \$	13 \$	-
100	non-DLC																	
200	non-DLC																	
650	non-DLC																	
850	non-DLC																	
2550	non-DLC																	
5000	non-DLC																	
10000	non-DLC																	
Totals/Avgs		1,054,632	2,801 \$	790,876 \$	- \$	170,000 \$	30,000 \$	5,212 \$	6,857 \$	2,194 \$	2,743 \$	33,289 \$	4,022 \$	- \$	245,865 \$	7,321 \$	4,895 \$	-

HA																								
density zone (lines/sq mi)	feeder type	common transport, manholes	common transmission terminal inv	direct transport, u/g	direct transport, buried	direct transport, aerial	direct transport, poles	direct transport, conduit	direct transport, manholes	direct transmission terminal inv	dedicated transport, u/g	dedicated transport, buried	dedicated transport, aerial	dedicated transport, poles	dedicated transport, conduit	dedicated transport, manholes	dedicated transmission terminal inv	prop local direct trunks						
0	DLC																							
5	DLC	\$	48,662	\$	28,162	\$	834	\$	563	\$	-	\$	14,027	\$	48,096	\$	1,434	\$	957	\$	-	\$	26,118	11
100	DLC	\$	13,707	\$	15,785	\$	453	\$	322	\$	-	\$	4,655	\$	19,495	\$	550	\$	398	\$	-	\$	5,749	6
200	DLC	\$	69,136	\$	28,634	\$	869	\$	562	\$	-	\$	18,909	\$	59,717	\$	1,812	\$	1,173	\$	-	\$	39,436	12
650	DLC																							
850	DLC																							
2550	DLC																							
5000	DLC																							
10000	DLC																							
0	non-DLC																							
5	non-DLC	\$	185	\$	213	\$	6	\$	4	\$	-	\$	63	\$	264	\$	8	\$	5	\$	-	\$	78	0
100	non-DLC																							
200	non-DLC																							
650	non-DLC																							
850	non-DLC																							
2550	non-DLC																							
5000	non-DLC																							
10000	non-DLC																							
Totals/Avg		\$	-	\$	131,691	\$	-	\$	72,794	\$	2,162	\$	1,452	\$	-	\$	-	\$	-	\$	-	\$	71,380	29

HA															
density zone (lines/sq mi)	feeder type	prop local tandem trunks	prop intraLATA direct trunks	prop intraLATA tandem trunks	prop access dedicated trunks	prop access tandem trunks	prop operator trunks	SCP investment	SCP wire center inv	STP inv	signaling link inv	total public telephone inv	total residential annual DEMs	total business annual DEMs	Total Investment
0	DLC														-
5	DLC	2	1	17	33	45	7	2,639 \$	422 \$	5,806 \$	3,079 \$	3,487	13,422,051	4,315,774	4,272,076
100	DLC	2	1	8	12	19	4	1,482 \$	237 \$	3,260 \$	2,111 \$	1,845	8,042,847	1,685,505	1,486,159
200	DLC	2	1	19	43	54	8	2,716 \$	435 \$	5,975 \$	2,607 \$	4,046	14,531,941	3,391,987	2,447,508
650	DLC														-
850	DLC														-
2550	DLC														-
5000	DLC														-
10000	DLC														-
0	non-DLC														-
5	non-DLC	0	0	0	0	0	0	20 \$	3 \$	45 \$	29 \$	23	126,895	-	55,009
100	non-DLC														-
200	non-DLC														-
650	non-DLC														-
850	non-DLC														-
2550	non-DLC														-
5000	non-DLC														-
10000	non-DLC														-
Totals/Avg		6	2	45	89	119	19	6,857 \$	1,097 \$	15,086 \$	7,826 \$	9,201	36,123,734	9,393,266	8,260,752

Universal Service Calculation Sheet - monthly costs per line

Missouri
Granby Tel Co - Missouri

	0 - 5 lines/sq mi	5 - 100 lines/sq mi	100 - 200 lines/sq mi	200 - 650 lines/sq mi	650 - 850 lines/sq mi	850 - 2,550 lines/sq mi	2,550 - 5,000 lines/sq mi	5,000 - 10,000 lines/sq mi	> 10,000 lines/sq mi	Weighted Average
Local network costs										
Loop	\$ -	\$ 75.07	\$ 42.76	\$ 33.94	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51.80
Port	-	2.80	2.80	2.80	-	-	-	-	-	2.80
End office usage	-	3.71	3.71	3.71	-	-	-	-	-	3.71
Signaling	-	0.05	0.05	0.05	-	-	-	-	-	0.05
Transport	-	1.01	1.01	1.01	-	-	-	-	-	1.01
Local retail costs										
Billing/bill inquiries	\$ -	\$ 2.74	\$ 2.74	\$ 2.74	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.74
Directory listing	-	-	-	-	-	-	-	-	-	-
LNP expense (when available)	-	0.30	0.30	0.30	-	-	-	-	-	0.30
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Basic Local Service										
Avg monthly cost per line	\$ -	\$ 85.68	\$ 53.37	\$ 44.55	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62.41
@ Residence usage per line	\$ -	\$ 85.56	\$ 53.25	\$ 44.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 61.82
@ Business usage per line	\$ -	\$ 86.33	\$ 54.02	\$ 45.20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65.68
Total switched lines	-	1,064	593	1,086	-	-	-	-	-	2,743
Primary residence lines	-	862	518	914	-	-	-	-	-	2,295
Secondary residence lines	-	11	(0)	22	-	-	-	-	-	33
Single line business lines	-	9	7	14	-	-	-	-	-	31
Multiline business lines	-	176	65	131	-	-	-	-	-	373
Public lines	-	6	2	4	-	-	-	-	-	12
FEDERAL FUND ANALYSIS										
Annual Support for line types:										
	Specify	Bench mark								
Primary residence lines	X	\$31.00	\$ 0	\$ 564,541	\$ 138,368	\$ 147,381	\$ -	\$ -	\$ -	\$ 850,290
Secondary residence lines		\$31.00	\$ 0	\$ 6,989	\$ (1)	\$ 3,526	\$ -	\$ -	\$ -	\$ 10,514
Single line business lines	X	\$51.00	\$ 0	\$ 3,844	\$ 269	\$ -	\$ -	\$ -	\$ -	\$ 4,113
Multiline business lines		\$51.00	\$ 0	\$ 74,764	\$ 2,356	\$ -	\$ -	\$ -	\$ -	\$ 77,120
Public lines		\$51.00	\$ 0	\$ 2,358	\$ 79	\$ -	\$ -	\$ -	\$ -	\$ 2,437
Support cost if all lines supported			\$ 0	\$ 652,496	\$ 141,072	\$ 150,907	\$ -	\$ -	\$ -	\$ 944,474
Total annual support for specified lines										
@25% Federal allocation	\$ -	\$ 568,385	\$ 138,638	\$ 147,381	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 854,403
@Implied 75% State allocation	\$ -	\$ 142,096	\$ 34,659	\$ 36,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 213,601
	\$ -	\$ 426,289	\$ 103,978	\$ 110,535	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 640,803

Total Annual Support for Primary Residence Lines at Pre-Selected Monthly Benchmarks

\$20.00	\$ 0	\$ 678,357	\$ 206,768	\$ 268,078	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,153,204
\$30.00	\$ 0	\$ 574,888	\$ 144,587	\$ 158,353	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 877,828
\$40.00	\$ 0	\$ 471,419	\$ 82,405	\$ 48,628	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 602,452
\$50.00	\$ 0	\$ 367,949	\$ 20,223	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 388,173
\$60.00	\$ 0	\$ 264,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 264,480
\$70.00	\$ 0	\$ 161,010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161,010
\$80.00	\$ 0	\$ 57,541	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57,541

STATE FUND ANALYSIS															
Annual Support for line types:		Specify	Bench mark												
Primary residence lines	X	\$31.00	\$	0	\$	564,541	\$	138,368	\$	147,381	\$	-	\$	850,290	
Secondary residence lines		\$31.00	\$	0	\$	6,989	\$	(1)	\$	3,526	\$	-	\$	10,514	
Single line business lines	X	\$51.00	\$	0	\$	3,844	\$	269	\$	-	\$	-	\$	4,113	
Multiline business lines		\$51.00	\$	0	\$	74,764	\$	2,356	\$	-	\$	-	\$	77,120	
Public lines		\$51.00	\$	0	\$	2,358	\$	79	\$	-	\$	-	\$	2,437	
Support cost if all lines supported			\$	0	\$	652,496	\$	141,072	\$	150,907	\$	-	\$	944,474	
Total annual support for specified lines				\$	-	\$	568,385	\$	138,638	\$	147,381	\$	-	\$	854,403
@75% State allocation				\$	-	\$	426,289	\$	103,978	\$	110,535	\$	-	\$	640,803
@Implied 25% Federal allocation				\$	-	\$	142,096	\$	34,659	\$	36,845	\$	-	\$	213,601

TOTAL FUND ANALYSIS																
25% Federal allocation from Federal Fund Analysis	\$	-	\$	142,096	\$	34,659	\$	36,845	\$	-	\$	-	\$	-	\$	213,601
75% State allocation from State Fund Analysis	\$	-	\$	426,289	\$	103,978	\$	110,535	\$	-	\$	-	\$	-	\$	640,803
Total Federal + State fund	\$	-	\$	568,385	\$	138,638	\$	147,381	\$	-	\$	-	\$	-	\$	854,403

Module release date: 11/4/1997

COST OF NETWORK ELEMENTS

Missouri
Granby Tel Co - Missouri

Loop elements	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
NID										
Annual Cost	\$ -	\$ 7,233	\$ 4,186	\$ 7,482	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,901
Unit Cost/month	-	0.55	0.58	0.56	-	-	-	-	-	0.56
Loop Distribution (DLC)										
Annual Cost	\$ -	\$ 626,605	\$ 220,424	\$ 306,727	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,153,755
Unit Cost/month	-	48.09	30.38	23.03	-	-	-	-	-	34.33
Loop Distribution (non-DLC)										
Annual Cost	\$ -	\$ 3,545	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,545
Unit Cost/month	-	36.14	-	-	-	-	-	-	-	36.14
Loop Distribution (all)										
Annual Cost	\$ -	\$ 630,151	\$ 220,424	\$ 306,727	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,157,301
Unit Cost/month	-	48.00	30.38	23.03	-	-	-	-	-	34.34
Loop Concentration (DLC)										
Annual Cost	\$ -	\$ 113,252	\$ 34,434	\$ 52,394	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,080
Unit Cost/month	-	8.69	4.75	3.93	-	-	-	-	-	5.95
Loop Concentration (non-DLC)										
Annual Cost	\$ -	\$ 60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60
Unit Cost/month	-	0.61	-	-	-	-	-	-	-	0.61
Loop Concentration (all)										
Annual Cost	\$ -	\$ 113,311	\$ 34,434	\$ 52,394	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,140
Unit Cost/month	-	8.63	4.75	3.93	-	-	-	-	-	5.94
Loop Feeder (DLC)										
Annual Cost	\$ -	\$ 209,104	\$ 46,119	\$ 78,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 333,383
Unit Cost/month	-	16.05	6.36	5.87	-	-	-	-	-	9.92
Loop Feeder (non-DLC)										
Annual Cost	\$ -	\$ 9,724	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,724
Unit Cost/month	-	99.12	-	-	-	-	-	-	-	99.12
Loop Feeder (all)										
Annual Cost	\$ -	\$ 218,828	\$ 46,119	\$ 78,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 343,107
Unit Cost/month	-	16.67	6.36	5.87	-	-	-	-	-	10.18
Total Loop (DLC)										
Annual Cost	\$ -	\$ 956,140	\$ 305,164	\$ 444,763	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,706,066
Unit Cost/month	-	73.37	42.06	33.39	-	-	-	-	-	50.77
Total Loop (non-DLC)										
Annual Cost	\$ -	\$ 13,383	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,383
Unit Cost/month	-	136.42	-	-	-	-	-	-	-	136.42
Total Loop (all)										
Annual Cost	\$ -	\$ 969,523	\$ 305,164	\$ 444,763	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,719,449
Unit Cost/month	-	73.85	42.06	33.39	-	-	-	-	-	51.01
Total lines	-	1,094	605	1,110	-	-	-	-	-	2,809
Total lines served by DLC	-	1,086	605	1,110	-	-	-	-	-	2,801

	Annual Cost	Units	Unit Cost
End office switching	\$ 301,832		
Line Port	90,550	2,743 switched lines	\$ 2.75 per line/month
Non-Line Port	211,282	31,461,510 actual minutes	\$ 0.00672 per actual minute (for rate per DEM, see "Cost detail" sheet)
Signaling network elements	\$ 9,034		
Links	2,290	4 links	\$ 48.82 per link per month
STP	4,415	17,812,118 TCAP+ISUP msgs	\$ 0.00025 per signaling message
SCP	2,328	1,807,400 TCAP queries	\$ 0.00129 per query
Transport network elements			
<i>Dedicated</i>			
Sw+Sp Transport	\$ 36,740	89 trunks	\$ 34.41 per DS-0 equivalent per month
Switched	9,593	23 trunks	\$ 0.00343 per minute
Special	27,147	66 trunks	
Transmission Terminal	21,110	89 trunks	\$ 19.77 per DS-0 equivalent per month
			\$ 0.00197 per minute
			\$ 0.00539 total per minute
<i>Common</i>			
Transport	\$ 70,800	13,634,729 minutes	\$ 0.00346 per minute per leg (orig or term)
Transmission Terminal	38,945	13,634,729 minutes	\$ 0.00190 per minute
			\$ 0.00536 total per minute
<i>Direct</i>			
Transport	\$ 20,960	1,830,865 minutes	\$ 0.01145 per minute
Transmission Terminal	11,135	1,830,865 minutes	\$ 0.00608 per minute
			\$ 0.01753 total per minute
Tandem switch	\$ 4,047	11,897,503 minutes	\$ 0.00034 per minute
Operator systems	\$ 21,226		
Public Telephones	\$ 4,805		
Total (w/ Public)	\$ 2,260,084		
Total cost of switched network elements (w/o Public)	\$ 65.99 per line/month		

	interconnected at		
	end office	tandem	wtd average
Local interconnection			
EO switching	\$ 0.00672	\$ 0.00672	
ISUP	\$ 0.00045	\$ 0.00045	
Common Transport	\$ -	\$ 0.00536	
Tandem Switching	\$ -	\$ 0.00034	
TOTAL	\$ 0.00717	\$ 0.01286	n/a

IXC switched access			
EO switching	\$ 0.00672	\$ 0.00672	
ISUP	\$ 0.00045	\$ 0.00045	
Dedicated Transport	\$ 0.00539	\$ 0.00539	
Common Transport	\$ -	\$ 0.00536	
Tandem Switching	\$ -	\$ 0.00034	
TOTAL	\$ 0.01256	\$ 0.01826	\$ 0.01826

Signaling detail			
cost per 800 call attempt (TCAP)	\$ 0.0031		
ISUP cost/transaction	\$ 0.00235		
ISUP cost/completion	0.0034		
IXC switched access MOU/comp	7.45		
ISUP cost/min	\$ 0.000450		
D link per month	\$ -		

Switching detail

The HAI Model engineers switch capacity based on the number of times calls have to pass through a switch fabric. For intraswitch calls, this is once. Because some rate structures for unbundled switching may impose two switch charges -- even when the call only passes through the switch once, the appropriate way to calculate the level of such switch charges is to divide the total usage cost of switching by DEMs (rather than actual switched minutes), because two DEMs are counted even when a call originates and terminates on the same switch.

Switch non-line port annual cost	211,282
Total DEMs	45,517,000
Cost per DEM \$	0.00464

Dedicated Transport Costs Per Trunk

DS-0 per month	
Transport per month	\$ 34.41
Terminal per month *	\$ 245.19
TOTAL	\$ 279.61

DS-1 per month	
Transport per month	\$ 825.92
Terminal per month	\$ 474.57
TOTAL	\$ 1,300.49

DS-3 per month	
Transport per month	\$ 23,125.76
Terminal per month	\$ 1,342.20
TOTAL	\$ 24,467.96

Trunk Port Costs

per trunk port (DS-0 equivalent) per month	\$ 3.18
per trunk port minute	\$ 0.000317

total EO usage per minute	\$ 0.006716
trk port/min	\$ 0.000317
other	\$ 0.006399

	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	weighted average
calculated distribution fill (DLC)	0.0%	32.4%	16.8%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	25.4%
calculated distribution fill (non-DLC)	0.0%	34.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.1%
weighted average										25.4%

Per DS0 Transport Calculations

Entrance Facility Investment per Line	\$ -
Total Dedicated Terminal Investment	71,380
Total Lines	2,809
Total Dedicated Terminal Investment per line	\$ 25
Entrance Facility percent to total	\$ -
Terminal Investment per DS-0	\$ 802
Transport Investment per DS-0	\$ 1,505

Network-Related Expenses

		0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
		lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
NID											
Annual Capital Cost	\$	- \$	4,530 \$	2,608 \$	4,667 \$	- \$	- \$	- \$	- \$	- \$	11,806
Network Expenses	\$	- \$	909 \$	536 \$	951 \$	- \$	- \$	- \$	- \$	- \$	2,396
Direct expense	\$	- \$	5,439 \$	3,145 \$	5,618 \$	- \$	- \$	- \$	- \$	- \$	14,201
Investment	\$	- \$	28,311 \$	16,302 \$	29,169 \$	- \$	- \$	- \$	- \$	- \$	73,782
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	1,752 \$	1,013 \$	1,810 \$	- \$	- \$	- \$	- \$	- \$	4,575
Total	\$	- \$	7,191 \$	4,158 \$	7,428 \$	- \$	- \$	- \$	- \$	- \$	18,776
with carrier-to-carrier	\$	- \$	7,202 \$	4,168 \$	7,449 \$	- \$	- \$	- \$	- \$	- \$	18,820
Distribution (DLC)											
Annual Capital Cost	\$	- \$	378,506 \$	132,964 \$	184,883 \$	- \$	- \$	- \$	- \$	- \$	696,353
Network Expenses	\$	- \$	92,613 \$	32,607 \$	45,442 \$	- \$	- \$	- \$	- \$	- \$	170,662
Direct expense	\$	- \$	471,119 \$	165,571 \$	230,325 \$	- \$	- \$	- \$	- \$	- \$	867,014
Investment	\$	- \$	2,349,080 \$	825,141 \$	1,152,157 \$	- \$	- \$	- \$	- \$	- \$	4,326,377
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	151,777 \$	53,341 \$	74,202 \$	- \$	- \$	- \$	- \$	- \$	279,320
Total	\$	- \$	622,896 \$	218,912 \$	304,527 \$	- \$	- \$	- \$	- \$	- \$	1,146,334
with carrier-to-carrier	\$	- \$	623,888 \$	219,468 \$	305,397 \$	- \$	- \$	- \$	- \$	- \$	1,148,754
Distribution (non-DLC)											
Annual Capital Cost	\$	- \$	2,149 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,149
Network Expenses	\$	- \$	517 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	517
Direct expense	\$	- \$	2,666 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,666
Investment	\$	- \$	13,154 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	13,154
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	859 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	859
Total	\$	- \$	3,525 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	3,525
with carrier-to-carrier	\$	- \$	3,530 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	3,530
Distribution (all)											
Annual Capital Cost	\$	- \$	380,655 \$	132,964 \$	184,883 \$	- \$	- \$	- \$	- \$	- \$	698,501
Network Expenses	\$	- \$	93,130 \$	32,607 \$	45,442 \$	- \$	- \$	- \$	- \$	- \$	171,179
Direct expense	\$	- \$	473,784 \$	165,571 \$	230,325 \$	- \$	- \$	- \$	- \$	- \$	869,680
Investment	\$	- \$	2,362,234 \$	825,141 \$	1,152,157 \$	- \$	- \$	- \$	- \$	- \$	4,339,531
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	152,636 \$	53,341 \$	74,202 \$	- \$	- \$	- \$	- \$	- \$	280,179
Total	\$	- \$	626,420 \$	218,912 \$	304,527 \$	- \$	- \$	- \$	- \$	- \$	1,149,859
with carrier-to-carrier	\$	- \$	627,419 \$	219,468 \$	305,397 \$	- \$	- \$	- \$	- \$	- \$	1,152,284
Concentrator (DLC)											
Annual Capital Cost	\$	- \$	78,893 \$	23,955 \$	36,436 \$	- \$	- \$	- \$	- \$	- \$	139,284
Network Expenses	\$	- \$	6,257 \$	1,910 \$	2,908 \$	- \$	- \$	- \$	- \$	- \$	11,074
Direct expense	\$	- \$	85,149 \$	25,865 \$	39,344 \$	- \$	- \$	- \$	- \$	- \$	150,358
Investment	\$	- \$	405,852 \$	123,500 \$	187,900 \$	- \$	- \$	- \$	- \$	- \$	717,252
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	27,432 \$	8,333 \$	12,675 \$	- \$	- \$	- \$	- \$	- \$	48,440
Total	\$	- \$	112,581 \$	34,198 \$	52,019 \$	- \$	- \$	- \$	- \$	- \$	198,798
with carrier-to-carrier	\$	- \$	112,761 \$	34,285 \$	52,167 \$	- \$	- \$	- \$	- \$	- \$	199,213
Concentrator (non-DLC)											
Annual Capital Cost	\$	- \$	40 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	40
Network Expenses	\$	- \$	5 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	5
Direct expense	\$	- \$	45 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	45
Investment	\$	- \$	250 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	250
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	14 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	14
Total	\$	- \$	59 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	59
with carrier-to-carrier	\$	- \$	59 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	59
Concentrator (all)											
Annual Capital Cost	\$	- \$	78,933 \$	23,955 \$	36,436 \$	- \$	- \$	- \$	- \$	- \$	139,324
Network Expenses	\$	- \$	6,262 \$	1,910 \$	2,908 \$	- \$	- \$	- \$	- \$	- \$	11,079
Direct expense	\$	- \$	85,194 \$	25,865 \$	39,344 \$	- \$	- \$	- \$	- \$	- \$	150,403
Investment	\$	- \$	406,102 \$	123,500 \$	187,900 \$	- \$	- \$	- \$	- \$	- \$	717,502
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	27,446 \$	8,333 \$	12,675 \$	- \$	- \$	- \$	- \$	- \$	48,454
Total	\$	- \$	112,640 \$	34,198 \$	52,019 \$	- \$	- \$	- \$	- \$	- \$	198,857
with carrier-to-carrier	\$	- \$	112,820 \$	34,285 \$	52,167 \$	- \$	- \$	- \$	- \$	- \$	199,272
Feeder (DLC)											
Annual Capital Cost	\$	- \$	125,202 \$	27,719 \$	46,793 \$	- \$	- \$	- \$	- \$	- \$	199,714
Network Expenses	\$	- \$	32,015 \$	6,923 \$	11,899 \$	- \$	- \$	- \$	- \$	- \$	50,837
Direct expense	\$	- \$	157,216 \$	34,642 \$	58,692 \$	- \$	- \$	- \$	- \$	- \$	250,550
Investment	\$	- \$	803,552 \$	175,333 \$	300,255 \$	- \$	- \$	- \$	- \$	- \$	1,279,139
Support & Overhead per line	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$	- \$	50,649 \$	11,161 \$	18,908 \$	- \$	- \$	- \$	- \$	- \$	80,718
Total	\$	- \$	207,866 \$	45,803 \$	77,600 \$	- \$	- \$	- \$	- \$	- \$	331,269
with carrier-to-carrier	\$	- \$	208,197 \$	45,919 \$	77,822 \$	- \$	- \$	- \$	- \$	- \$	331,938
Feeder (non-DLC)											
Annual Capital Cost	\$	- \$	5,862 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	5,862
Network Expenses	\$	- \$	1,449 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	1,449
Direct expense	\$	- \$	7,311 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	7,311

Network-Related Expenses

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Investment	\$ - \$	36,632 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	36,632
Support & Overhead per line	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$ - \$	2,355 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,355
Total	\$ - \$	9,666 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	9,666
with carrier-to-carrier	\$ - \$	9,682 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	9,682
Feeder (all)										
Annual Capital Cost	\$ - \$	131,064 \$	27,719 \$	46,793 \$	- \$	- \$	- \$	- \$	- \$	205,576
Network Expenses	\$ - \$	33,463 \$	6,923 \$	11,899 \$	- \$	- \$	- \$	- \$	- \$	52,285
Direct expense	\$ - \$	164,527 \$	34,642 \$	58,692 \$	- \$	- \$	- \$	- \$	- \$	257,862
Investment	\$ - \$	840,183 \$	175,333 \$	300,255 \$	- \$	- \$	- \$	- \$	- \$	1,315,771
Support & Overhead per line	\$ - \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Support & Overhead per direct exp.	\$ - \$	53,005 \$	11,161 \$	18,908 \$	- \$	- \$	- \$	- \$	- \$	83,073
Total	\$ - \$	217,532 \$	45,803 \$	77,600 \$	- \$	- \$	- \$	- \$	- \$	340,935
with carrier-to-carrier	\$ - \$	217,879 \$	45,919 \$	77,822 \$	- \$	- \$	- \$	- \$	- \$	341,620
End Office Switching										
Annual Capital Cost	\$ - \$	61,607 \$	34,603 \$	62,494 \$	- \$	- \$	- \$	- \$	- \$	158,704
Network Expenses	\$ - \$	21,841 \$	12,169 \$	22,302 \$	- \$	- \$	- \$	- \$	- \$	56,313
Direct expense	\$ - \$	83,449 \$	46,772 \$	84,796 \$	- \$	- \$	- \$	- \$	- \$	215,017
Investment	\$ - \$	384,634 \$	215,951 \$	390,291 \$	- \$	- \$	- \$	- \$	- \$	990,876
Support expenses	\$ - \$	20,523 \$	12,919 \$	23,163 \$	- \$	- \$	- \$	- \$	- \$	56,605
Subtotal, with misc spt	\$ - \$	103,972 \$	59,891 \$	107,959 \$	- \$	- \$	- \$	- \$	- \$	271,621
Total, with var overhead	\$ - \$	114,785 \$	65,898 \$	119,186 \$	- \$	- \$	- \$	- \$	- \$	299,870
with carrier-to-carrier	\$ - \$	114,961 \$	66,056 \$	119,507 \$	- \$	- \$	- \$	- \$	- \$	300,523
Signaling										
Annual Capital Cost	\$ - \$	1,939 \$	1,141 \$	1,889 \$	- \$	- \$	- \$	- \$	- \$	4,969
Network Expenses	\$ - \$	572 \$	333 \$	562 \$	- \$	- \$	- \$	- \$	- \$	1,467
Direct expense	\$ - \$	2,510 \$	1,474 \$	2,451 \$	- \$	- \$	- \$	- \$	- \$	6,435
Investment	\$ - \$	12,045 \$	7,090 \$	11,732 \$	- \$	- \$	- \$	- \$	- \$	30,867
Support expenses	\$ - \$	617 \$	407 \$	669 \$	- \$	- \$	- \$	- \$	- \$	1,694
Subtotal, with misc spt	\$ - \$	3,128 \$	1,881 \$	3,120 \$	- \$	- \$	- \$	- \$	- \$	8,130
Total, with var overhead	\$ - \$	3,453 \$	2,077 \$	3,445 \$	- \$	- \$	- \$	- \$	- \$	8,975
with carrier-to-carrier	\$ - \$	3,458 \$	2,082 \$	3,454 \$	- \$	- \$	- \$	- \$	- \$	8,994
Dedicated Transport										
Annual Capital Cost	\$ - \$	7,910 \$	3,187 \$	9,769 \$	- \$	- \$	- \$	- \$	- \$	20,867
Network Expenses	\$ - \$	2,011 \$	810 \$	2,484 \$	- \$	- \$	- \$	- \$	- \$	5,304
Direct expense	\$ - \$	9,920 \$	3,997 \$	12,253 \$	- \$	- \$	- \$	- \$	- \$	26,171
Investment	\$ - \$	50,764 \$	20,452 \$	62,702 \$	- \$	- \$	- \$	- \$	- \$	133,918
Support expenses	\$ - \$	2,440 \$	1,104 \$	3,347 \$	- \$	- \$	- \$	- \$	- \$	6,891
Subtotal, with misc spt	\$ - \$	12,360 \$	5,101 \$	15,600 \$	- \$	- \$	- \$	- \$	- \$	33,062
Total, with var overhead	\$ - \$	13,646 \$	5,631 \$	17,223 \$	- \$	- \$	- \$	- \$	- \$	36,500
with carrier-to-carrier	\$ - \$	13,667 \$	5,645 \$	17,269 \$	- \$	- \$	- \$	- \$	- \$	36,581
Dedicated Transport Transmission										
Annual Capital Cost	\$ - \$	5,117 \$	1,123 \$	7,703 \$	- \$	- \$	- \$	- \$	- \$	13,944
Network Expenses	\$ - \$	401 \$	88 \$	603 \$	- \$	- \$	- \$	- \$	- \$	1,092
Direct expense	\$ - \$	5,518 \$	1,211 \$	8,307 \$	- \$	- \$	- \$	- \$	- \$	15,036
Investment	\$ - \$	26,195 \$	5,749 \$	39,436 \$	- \$	- \$	- \$	- \$	- \$	71,380
Support expenses	\$ - \$	1,357 \$	334 \$	2,269 \$	- \$	- \$	- \$	- \$	- \$	3,961
Subtotal, with misc spt	\$ - \$	6,875 \$	1,546 \$	10,576 \$	- \$	- \$	- \$	- \$	- \$	18,996
Total, with var overhead	\$ - \$	7,590 \$	1,706 \$	11,676 \$	- \$	- \$	- \$	- \$	- \$	20,972
with carrier-to-carrier	\$ - \$	7,601 \$	1,710 \$	11,707 \$	- \$	- \$	- \$	- \$	- \$	21,019
Direct Transport										
Annual Capital Cost	\$ - \$	4,641 \$	2,581 \$	4,684 \$	- \$	- \$	- \$	- \$	- \$	11,906
Network Expenses	\$ - \$	1,179 \$	656 \$	1,191 \$	- \$	- \$	- \$	- \$	- \$	3,026
Direct expense	\$ - \$	5,820 \$	3,236 \$	5,875 \$	- \$	- \$	- \$	- \$	- \$	14,932
Investment	\$ - \$	29,783 \$	16,561 \$	30,065 \$	- \$	- \$	- \$	- \$	- \$	76,408
Support expenses	\$ - \$	1,431 \$	894 \$	1,605 \$	- \$	- \$	- \$	- \$	- \$	3,930
Subtotal, with misc spt	\$ - \$	7,252 \$	4,130 \$	7,480 \$	- \$	- \$	- \$	- \$	- \$	18,862
Total, with var overhead	\$ - \$	8,006 \$	4,560 \$	8,258 \$	- \$	- \$	- \$	- \$	- \$	20,824
with carrier-to-carrier	\$ - \$	8,018 \$	4,571 \$	8,280 \$	- \$	- \$	- \$	- \$	- \$	20,869
Direct Transport Transmission										
Annual Capital Cost	\$ - \$	2,752 \$	909 \$	3,694 \$	- \$	- \$	- \$	- \$	- \$	7,355
Network Expenses	\$ - \$	216 \$	71 \$	289 \$	- \$	- \$	- \$	- \$	- \$	576
Direct expense	\$ - \$	2,968 \$	981 \$	3,983 \$	- \$	- \$	- \$	- \$	- \$	7,932
Investment	\$ - \$	14,090 \$	4,655 \$	18,909 \$	- \$	- \$	- \$	- \$	- \$	37,654
Support expenses	\$ - \$	730 \$	271 \$	1,088 \$	- \$	- \$	- \$	- \$	- \$	2,089
Subtotal, with misc spt	\$ - \$	3,698 \$	1,251 \$	5,071 \$	- \$	- \$	- \$	- \$	- \$	10,020
Total, with var overhead	\$ - \$	4,082 \$	1,382 \$	5,598 \$	- \$	- \$	- \$	- \$	- \$	11,062
with carrier-to-carrier	\$ - \$	4,089 \$	1,385 \$	5,613 \$	- \$	- \$	- \$	- \$	- \$	11,087
Common Transport										
Annual Capital Cost	\$ - \$	15,488 \$	7,599 \$	17,127 \$	- \$	- \$	- \$	- \$	- \$	40,214
Network Expenses	\$ - \$	3,936 \$	1,930 \$	4,355 \$	- \$	- \$	- \$	- \$	- \$	10,221
Direct expense	\$ - \$	19,424 \$	9,529 \$	21,482 \$	- \$	- \$	- \$	- \$	- \$	50,435
Investment	\$ - \$	99,395 \$	48,762 \$	109,924 \$	- \$	- \$	- \$	- \$	- \$	258,081
Support expenses	\$ - \$	4,777 \$	2,632 \$	5,868 \$	- \$	- \$	- \$	- \$	- \$	13,277
Subtotal, with misc spt	\$ - \$	24,201 \$	12,162 \$	27,350 \$	- \$	- \$	- \$	- \$	- \$	63,713
Total, with var overhead	\$ - \$	26,718 \$	13,426 \$	30,194 \$	- \$	- \$	- \$	- \$	- \$	70,339
with carrier-to-carrier	\$ - \$	26,759 \$	13,458 \$	30,275 \$	- \$	- \$	- \$	- \$	- \$	70,493

Network-Related Expenses

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Common Transport Transmission										
Annual Capital Cost	\$ - \$	9,542 \$	2,678 \$	13,505 \$	- \$	- \$	- \$	- \$	- \$	25,725
Network Expenses	\$ - \$	747 \$	210 \$	1,058 \$	- \$	- \$	- \$	- \$	- \$	2,015
Direct expense	\$ - \$	10,289 \$	2,887 \$	14,563 \$	- \$	- \$	- \$	- \$	- \$	27,739
Investment	\$ - \$	48,847 \$	13,707 \$	69,136 \$	- \$	- \$	- \$	- \$	- \$	131,691
Support expenses	\$ - \$	2,531 \$	798 \$	3,978 \$	- \$	- \$	- \$	- \$	- \$	7,306
Subtotal, with misc spt	\$ - \$	12,820 \$	3,685 \$	18,541 \$	- \$	- \$	- \$	- \$	- \$	35,045
Total, with var overhead	\$ - \$	14,153 \$	4,068 \$	20,469 \$	- \$	- \$	- \$	- \$	- \$	38,690
with carrier-to-carrier	\$ - \$	14,175 \$	4,078 \$	20,524 \$	- \$	- \$	- \$	- \$	- \$	38,777
Tandem Switching										
Annual Capital Cost	\$ - \$	729 \$	406 \$	744 \$	- \$	- \$	- \$	- \$	- \$	1,879
Network Expenses	\$ - \$	389 \$	217 \$	398 \$	- \$	- \$	- \$	- \$	- \$	1,004
Direct expense	\$ - \$	1,118 \$	623 \$	1,142 \$	- \$	- \$	- \$	- \$	- \$	2,883
Investment	\$ - \$	4,681 \$	2,608 \$	4,780 \$	- \$	- \$	- \$	- \$	- \$	12,069
Support expenses	\$ - \$	275 \$	172 \$	312 \$	- \$	- \$	- \$	- \$	- \$	759
Subtotal, with misc spt	\$ - \$	1,393 \$	795 \$	1,454 \$	- \$	- \$	- \$	- \$	- \$	3,642
Total, with var overhead	\$ - \$	1,538 \$	878 \$	1,605 \$	- \$	- \$	- \$	- \$	- \$	4,021
with carrier-to-carrier	\$ - \$	1,540 \$	880 \$	1,609 \$	- \$	- \$	- \$	- \$	- \$	4,029
Operator Systems										
Annual Capital Cost	\$ - \$	2,663 \$	1,424 \$	2,808 \$	- \$	- \$	- \$	- \$	- \$	6,895
Network Expenses	\$ - \$	3,487 \$	1,928 \$	3,583 \$	- \$	- \$	- \$	- \$	- \$	8,999
Direct expense	\$ - \$	6,150 \$	3,352 \$	6,392 \$	- \$	- \$	- \$	- \$	- \$	15,893
Investment	\$ - \$	16,312 \$	8,702 \$	17,234 \$	- \$	- \$	- \$	- \$	- \$	42,248
Support expenses	\$ - \$	1,131 \$	696 \$	1,379 \$	- \$	- \$	- \$	- \$	- \$	3,206
Subtotal, with misc spt	\$ - \$	7,281 \$	4,048 \$	7,771 \$	- \$	- \$	- \$	- \$	- \$	19,099
Total, with var overhead	\$ - \$	8,038 \$	4,469 \$	8,579 \$	- \$	- \$	- \$	- \$	- \$	21,086
with carrier-to-carrier	\$ - \$	8,051 \$	4,480 \$	8,603 \$	- \$	- \$	- \$	- \$	- \$	21,134
Public Telephone										
Annual Capital Cost	\$ - \$	718 \$	336 \$	827 \$	- \$	- \$	- \$	- \$	- \$	1,881
Network Expenses	\$ - \$	660 \$	310 \$	761 \$	- \$	- \$	- \$	- \$	- \$	1,731
Direct expense	\$ - \$	1,378 \$	646 \$	1,588 \$	- \$	- \$	- \$	- \$	- \$	3,612
Investment	\$ - \$	3,509 \$	1,645 \$	4,046 \$	- \$	- \$	- \$	- \$	- \$	9,201
Support expenses	\$ - \$	253 \$	134 \$	343 \$	- \$	- \$	- \$	- \$	- \$	730
Subtotal, with misc spt	\$ - \$	1,631 \$	780 \$	1,931 \$	- \$	- \$	- \$	- \$	- \$	4,342
Total, with var overhead	\$ - \$	1,801 \$	861 \$	2,132 \$	- \$	- \$	- \$	- \$	- \$	4,794
with carrier-to-carrier	\$ - \$	1,803 \$	863 \$	2,138 \$	- \$	- \$	- \$	- \$	- \$	4,805
Totals										
Annual Capital Cost	\$ - \$	708,287 \$	243,234 \$	398,024 \$	- \$	- \$	- \$	- \$	- \$	1,349,545
Network Expenses	\$ - \$	169,203 \$	60,698 \$	98,786 \$	- \$	- \$	- \$	- \$	- \$	328,686
Total	\$ - \$	877,490 \$	303,931 \$	496,810 \$	- \$	- \$	- \$	- \$	- \$	1,678,231
Investment	\$ - \$	4,327,085 \$	1,486,159 \$	2,427,736 \$	- \$	- \$	- \$	- \$	- \$	8,240,980
Supporting Network Expenses										
Capital Cost - Gent Support	\$ - \$	36,377 \$	12,494 \$	20,410 \$	- \$	- \$	- \$	- \$	- \$	69,281
Network Operations	\$ - \$	34,034 \$	18,806 \$	34,531 \$	- \$	- \$	- \$	- \$	- \$	87,370
Network Support	\$ - \$	2,515 \$	871 \$	1,424 \$	- \$	- \$	- \$	- \$	- \$	4,810
Other Taxes	\$ - \$	51,939 \$	18,354 \$	30,200 \$	- \$	- \$	- \$	- \$	- \$	100,493
Misc Expenses	\$ - \$	36,435 \$	12,620 \$	20,628 \$	- \$	- \$	- \$	- \$	- \$	69,683
Subtotal	\$ - \$	161,300 \$	63,144 \$	107,193 \$	- \$	- \$	- \$	- \$	- \$	331,638
Carrier-carrier customer svc	\$ - \$	1,849 \$	1,022 \$	1,876 \$	- \$	- \$	- \$	- \$	- \$	4,747
Interoffice/Switching Net Ops	\$ - \$	8,760 \$	4,840 \$	8,888 \$	- \$	- \$	- \$	- \$	- \$	22,487
Interoffice/Sw Exp	\$ - \$	141,017 \$	70,711 \$	154,852 \$	- \$	- \$	- \$	- \$	- \$	366,580
Total Network Costs										
	\$ - \$	1,047,550 \$	371,916 \$	612,891 \$	- \$	- \$	- \$	- \$	- \$	2,032,356
Other costs										
Other Taxes	\$ - \$	51,939 \$	18,354 \$	30,200 \$	- \$	- \$	- \$	- \$	- \$	100,493
Monthly Cost Factors										
Loop	-	0.02258	0.02267	0.02257	-	-	-	-	-	0.02257
Port	-	0.00774	0.00768	0.00779	-	-	-	-	-	0.00774
Switching	-	0.01027	0.01019	0.01033	-	-	-	-	-	0.01028
Signaling	-	0.00473	0.00447	0.00496	-	-	-	-	-	0.00476
Transport	-	0.00391	0.00530	0.00326	-	-	-	-	-	0.00383
Billing/Bill Inquiries (per line)	-	2.74	2.74	2.74	-	-	-	-	-	2.74
Directory Listing (per line)	-	-	-	-	-	-	-	-	-	-
LNP Expense (per line)	-	0.30	0.30	0.30	-	-	-	-	-	0.30
Inverse Carrier to Carrier Expense Factors	0.0000%	99.8470%	99.7620%	99.7321%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	99.7828%

Use this sheet to vary the proportion of expenses assigned to loop-related network elements on the basis of lines and on the basis of direct expenses, respectively. Change only the % assigned "per line" -- the "per direct cost" will be calculated.

	Total Annual Amount assigned to loops	% to be assigned per line	% to be assigned per direct cost	Annual Amount to be assigned per line	Annual Amount to be assigned per direct cost
General Support - Loops					
Furniture - Capital Costs	\$ 2,295	0%	100%	\$ -	\$ 2,295
Furniture - Expenses	\$ 1,762	0%	100%	\$ -	\$ 1,762
Office Equipment - Capital Costs	\$ 6,553	0%	100%	\$ -	\$ 6,553
Office Equipment - Expenses	\$ 3,734	0%	100%	\$ -	\$ 3,734
General Purpose Computer - Capital Costs	\$ 13,693	0%	100%	\$ -	\$ 13,693
General Purpose Computer - Expenses	\$ 36,099	0%	100%	\$ -	\$ 36,099
Motor Vehicles - Capital Costs	\$ 8,263	0%	100%	\$ -	\$ 8,263
Motor Vehicles - Expenses	\$ 2,887	0%	100%	\$ -	\$ 2,887
Buildings - Capital Costs	\$ 16,515	0%	100%	\$ -	\$ 16,515
Buildings - Expenses	\$ 12,057	0%	100%	\$ -	\$ 12,057
Garage Work Eqpt. - Capital Costs	\$ 242	0%	100%	\$ -	\$ 242
Garage Work Eqpt. - Expenses	\$ 84	0%	100%	\$ -	\$ 84
Other Work Eqpt. - Capital Costs	\$ 5,781	0%	100%	\$ -	\$ 5,781
Other Work Eqpt. - Expenses	\$ 732	0%	100%	\$ -	\$ 732
Total General Support	\$ 110,698			\$ -	\$ 110,698
Network Operations	\$ 67,270	0%	100%	\$ -	\$ 67,270
Other Taxes	\$ 77,374	0%	100%	\$ -	\$ 77,374
Variable Overhead	\$ 160,939	0%	100%	\$ -	\$ 160,939
Totals	\$ 255,343			\$ -	\$ 416,282

	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
Direct Costs										
Loop-related direct costs	\$ -	\$ 728,945	\$ 229,223	\$ 333,978	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,292,146
Non-Loop-related direct costs	\$ -	\$ 148,545	\$ 74,708	\$ 162,832	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 386,086
Total	\$ -	\$ 877,490	\$ 303,931	\$ 496,810	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,678,231
Loop Fraction	0.00%	83.07%	75.42%	67.22%	0.00%	0.00%	0.00%	0.00%	0.00%	76.99%
Network Operations	\$ -	\$ 34,034	\$ 18,806	\$ 34,531	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,370

	Total Annual Amount	Amount Assigned to Loops	Amount Assigned to Other UNEs
General Support - Totals			
Furniture - Capital Costs	\$ 2,981	\$ 2,295	\$ 686
Furniture - Expenses	\$ 2,289	\$ 1,762	\$ 527
Office Equipment - Capital Costs	\$ 8,511	\$ 6,553	\$ 1,958
Office Equipment - Expenses	\$ 4,850	\$ 3,734	\$ 1,116
General Purpose Computer - Capital Costs	\$ 17,784	\$ 13,693	\$ 4,091
General Purpose Computer - Expenses	\$ 46,885	\$ 36,099	\$ 10,786
Motor Vehicles - Capital Costs	\$ 10,732	\$ 8,263	\$ 2,469

Exp Assignment

Motor Vehicles - Expenses	\$ 3,749	\$ 2,887	\$ 863	
Buildings - Capital Costs	\$ 21,450	\$ 16,515	\$ 4,935	
Buildings - Expenses	\$ 15,659	\$ 12,057	\$ 3,602	
Garage Work Eqpt. - Capital Costs	\$ 314	\$ 242	\$ 72	
Garage Work Eqpt. - Expenses	\$ 109	\$ 84	\$ 25	
Other Work Eqpt. - Capital Costs	\$ 7,509	\$ 5,781	\$ 1,727	
Other Work Eqpt. - Expenses	\$ 951	\$ 732	\$ 219	
Total General Support	\$ 143,774	\$ 110,698	\$ 33,076	
Network Operations	\$ 87,370	\$ 67,270	\$ 20,100	
Other Taxes Calculation				
Total Direct Costs	\$ 1,678,231	\$ 1,292,146	\$ 386,086	\$ 1,678,231
Total Network Operations	\$ 87,370	\$ 67,270	\$ 20,100	\$ 87,370
Total General Support	\$ 143,774	\$ 110,698	\$ 33,076	\$ 174,986
Total	\$ 1,909,376	\$ 1,470,114	\$ 439,261	
Other Taxes	\$ 100,493	\$ 77,374	\$ 23,119	\$ 275,480
Total Expenses and Other Taxes	\$ 2,009,869	\$ 1,547,489	\$ 462,380	
Variable Overhead Calculation				
Variable Overhead	\$ 209,026	\$ 160,939	\$ 48,088	
Total Cost with Variable Overhead	2,218,895	1,708,427	510,468	

UNE Expense Assignment

Totals

NID

per line cost \$ -
per direct cost \$ 4,575
total \$ 4,575

Distribution (DLC)

per line cost \$ -
per direct cost \$ 279,320
total \$ 279,320

Distribution (non-DLC)

per line cost \$ -
per direct cost \$ 859
total \$ 859

Concentrator (DLC)

per line cost \$ -
per direct cost \$ 48,440
total \$ 48,440

Concentrator (non-DLC)

per line cost \$ -
per direct cost \$ 14
total \$ 14

Feeder (DLC)

per line cost \$ -
per direct cost \$ 80,718
total \$ 80,718

Feeder (non-DLC)

Exp Assignment

<i>per line cost</i>	\$	-
<i>per direct cost</i>	\$	2,355
<i>total</i>	\$	2,355

End Office Switching	\$	284,287
Signaling	\$	8,509
Dedicated Transport	\$	34,602
Dedicated Transport Transmission	\$	19,880
Direct Transport	\$	19,743
Direct Transport Transmission	\$	10,487
Common Transport	\$	66,684
Common Transport Transmission	\$	36,676
Tandem Switching	\$	3,812
Operator Systems	\$	21,014
Public Telephone	\$	4,776

COST SUMMARY

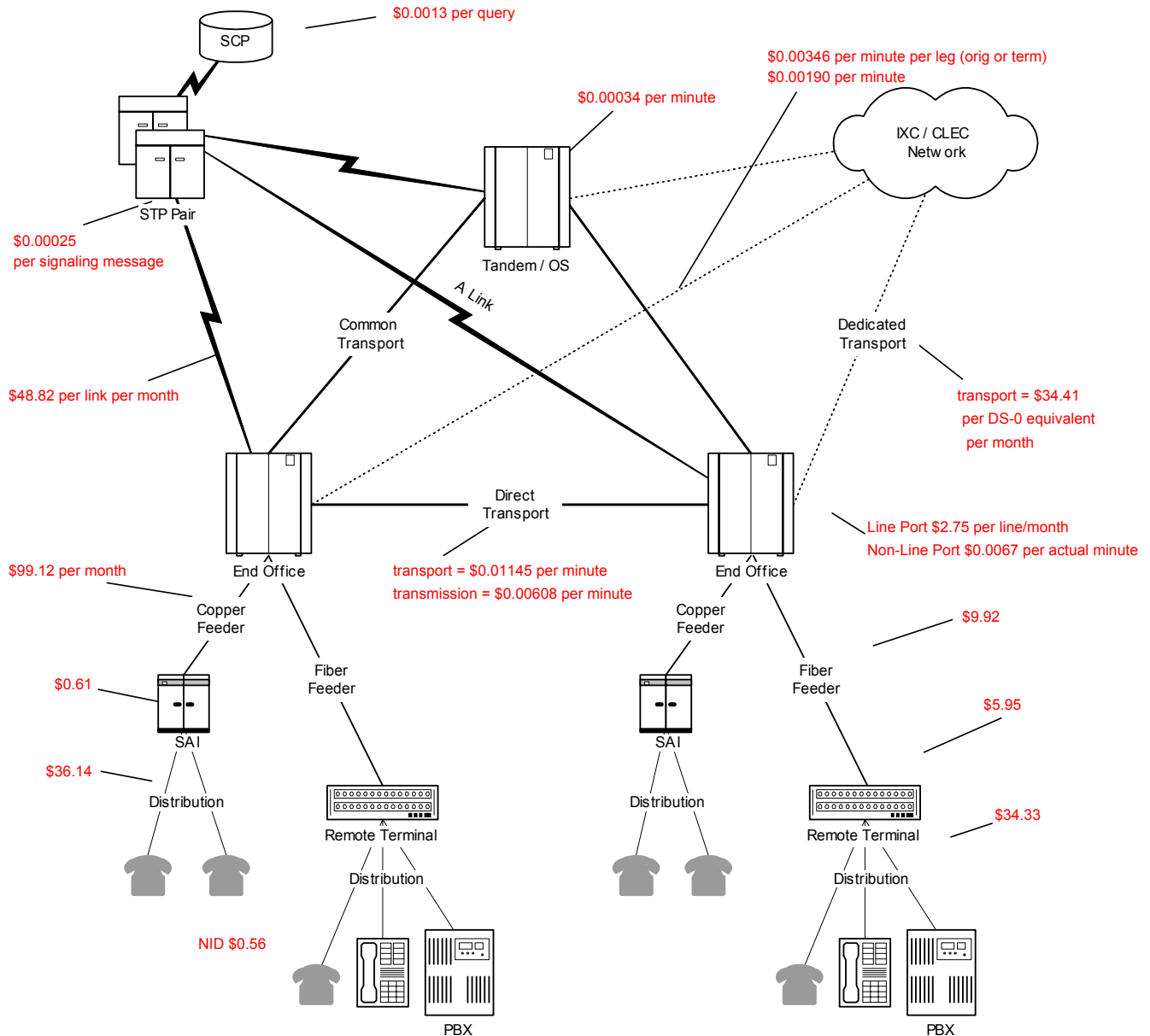
Missouri Granby Tel Co - Missouri

Network Element	Investment *	% of total investment	1	2	1 + 2	3	1 + 2 + 3	Total
			Annual Capital Cost	Network Expenses	Direct Expense	Support Expense	Subtotal (with misc support)	(with carrier-to-carrier)
NID	\$ 73,782	0.9%	\$ 11,806	\$ 2,396	\$ 14,201	\$ 4,575	\$ 18,776	\$ 18,820
<i>Distribution (DLC)</i>	4,326,377	52.5%	696,353	170,662	867,014	279,320	1,146,334	1,148,754
<i>Distribution (non-DLC)</i>	13,154	0.2%	2,149	517	2,666	859	3,525	3,530
Distribution (all)	4,339,531	52.7%	698,501	171,179	869,680	280,179	1,149,859	1,152,284
<i>Concentrator (DLC)</i>	717,252	8.7%	139,284	11,074	150,358	48,440	198,798	199,213
<i>Concentrator (non-DLC)</i>	250	0.0%	40	5	45	14	59	59
Concentrator (all)	717,502	8.7%	139,324	11,079	150,403	48,454	198,857	199,272
<i>Feeder (DLC)</i>	1,279,139	15.5%	199,714	50,837	250,550	80,718	331,269	331,938
<i>Feeder (non-DLC)</i>	36,632	0.4%	5,862	1,449	7,311	2,355	9,666	9,682
Feeder (all)	1,315,771	16.0%	205,576	52,285	257,862	83,073	340,935	341,620
End Office Switching	990,876	12.0%	158,704	56,313	215,017	56,605	271,621	300,523
Signaling	30,867	0.4%	4,969	1,467	6,435	1,694	8,130	8,994
Dedicated Transport	133,918	1.6%	20,867	5,304	26,171	6,891	33,062	36,581
Dedicated Transport Transmission	71,380	0.9%	13,944	1,092	15,036	3,961	18,996	21,019
Direct Transport	76,408	0.9%	11,906	3,026	14,932	3,930	18,862	20,869
Direct Transport Transmission	37,654	0.5%	7,355	576	7,932	2,089	10,020	11,087
Common Transport	258,081	3.1%	40,214	10,221	50,435	13,277	63,713	70,493
Common Transport Transmission	131,691	1.6%	25,725	2,015	27,739	7,306	35,045	38,777
Tandem Switching	12,069	0.1%	1,879	1,004	2,883	759	3,642	4,029
Operator Systems	42,248	0.5%	6,895	8,999	15,893	3,206	19,099	21,134
Public Telephone	9,201	0.1%	1,881	1,731	3,612	730	4,342	4,805
Total Network Cost								
Total	\$ 8,240,980	100%	\$ 1,349,545	\$ 328,686	\$ 1,678,231	\$ 516,729	\$ 2,194,960	\$ 2,250,307

* Post sharing

Unbundled Network Elements

Missouri / Granby Tel Co - Missouri



USOA Detail Breakdown of HAI Model Costs

**Granby Tel Co - Missouri
Missouri**

USOA	INVESTMENT DESCRIPTION	Cost \$(000)
Telecommunications Plant in Service		
2111	LAND	30
2112	MOTOR VEHICLES	56
2113	AIRCRAFT	
2114	SPECIAL PURPOSE VEHICLES	
2115	GARAGE WORK EQUIPMENT	2
2116	OTHER WORK EQUIPMENT	44
2121	BUILDINGS	323
2122	FURNITURE	19
2123.1	OFFICE SUPPORT EQUIPMENT	48
2123.2	COMPANY COMMUNICATIONS EQUIPMENT	
2124	GENERAL PURPOSE COMPUTERS	73
2110	TOTAL LAND & SUPPORT ASSETS	594
2212	DIGITAL ELECTRONIC SWITCHING	818
2220	OPERATOR SYSTEMS	6
2232	CIRCUIT EQUIPMENT	941
2351	PUBLIC TEL TERMINAL EQUIPMENT	9
2411	POLES	136
2421.1	AERIAL CABLE - METALLIC	107
2421.2	AERIAL CABLE - NonMETALLIC	58
2422.1	UNDERGROUND CABLE - METALLIC	0
2422.2	UNDERGROUND CABLE - NonMETALLIC	0
2423.1	BURIED CABLE - METALLIC	4,248
2423.2	BURIED CABLE - NonMETALLIC	1,706
2426.1	INTRABUILDING NETWORK CABLE - MET.	
2426.2	INTRABUILDING NETWORK CABLE - NonMET.	
2441	CONDUIT SYSTEMS	0
2410	TOTAL CABLE & WIRE FACILITIES	6,255
	Total TPIS (before amortizable assets)*	8,625

* This calculation of total plant includes GSF investment. GSF investment is not included in the total investment that is reported in the "Summary" sheet.

USOA	EXPENSE DESCRIPTION	Cost \$(000)
Plant Specific Expenses		
6112	MOTOR VEHICLES	4
6113	AIRCRAFT	1
6114	SPECIAL PURPOSE VEHICLES	0
6115	GARAGE WORK EQUIPMENT	0
6116	OTHER WORK EQUIPMENT	1
6110	NETWORK SUPPORT	6
6121	LAND & BUILDINGS	39
6122	FURNITURE	3
6123	OFFICE EQUIPMENT	6
6124	GENERAL PURPOSE COMPUTERS	56
6120	LAND & SUPPORT ASSETS	103
6212	DIGITAL ELECTRONIC SWITCHING	39
6220	OPERATOR SYSTEMS	7
6232	CIRCUIT EQUIPMENT	15
6351	PUBLIC TEL TERMINAL EQUIPMENT	2
6411	POLES	6
6421	AERIAL CABLE	10
6422	UNDERGROUND CABLE	0
6423	BURIED CABLE	230
6426	INTRABUILDING NETWORK CABLE	
6441	CONDUIT SYSTEMS	0
6410	TOTAL CABLE & WIRE FACILITIES	246
	Total Plant Specific Expenses	418
Plant Nonspecific Operations		
	TOTAL NETWORK OPERATIONS SUPPORT	110
6561	DEPRECIATION TPIS	512
6623	CUSTOMER SERVICES	5
	Total Plant Nonspecific Operations	627
	TOTAL CORPORATE OPERATIONS	211
	TOTAL OPERATING EXPENSES	1,257
7240	OPERATING OTHER TAXES	100
	TOTAL EXPENSES & OPERATING TAXES	1,357

USOA Depreciation Calculations

	<u>Depl life</u>	<u>DepFact</u>	<u>Dep Exp</u>
2111			
2112	10.45	0.09589	5
2113			
2114			
2115	9.97	0.10031	0
2116	13.92	0.07189	3
2121	48.73	0.02052	7
2122	18.36	0.05449	1
2123.1	12.44	0.08052	4
2123.2	7.99	0.12517	-
2124	6.61	0.15223	11
2110			
2212	17.17	0.05827	48
2220	9.25	0.10829	1
2232	9.90	0.10108	95
2351	8.98	0.11145	1
2411	8.38	0.11972	16
2421.1	13.61	0.07355	8
2421.2	18.92	0.05286	3
2422.1	17.88	0.05596	-
2422.2	20.14	0.04966	-
2423.1	18.36	0.05450	232
2423.2	21.97	0.04551	78
2426.1	13.57	0.07377	-
2426.2	21.37	0.04681	-
2441	46.15	0.02167	-
<i>Total Depreciation</i>			<i>512</i>

Network Element Disaggregations

<u>Investment Disaggregations:</u>		<u>Expense Disaggregations:</u>	
<i>Terminal, Drop, and NID</i>		<i>Terminal, Drop, and NID</i>	
Aerial-m portion	448,530	Aerial portion	16,921
Buried-m portion	11,013	Buried portion	815
	437,517		16,106
<i>OS Trks + Signaling links</i>		<i>OS Trks + Signaling links</i>	
Circuit Eqpt. portion	41,115	Circuit Eqpt. portion	1,594
Pole portion	6,852	Pole portion	266
Aerial-nm portion	650	Aerial-nm portion	26
Underground-nm portion	972	Underground-nm portion	60
Buried-nm portion	-	Buried-nm portion	-
Conduit portion	32,640	Conduit portion	1,242
	-		-
<i>SAI</i>		<i>SAI</i>	
Aerial-m portion	23,600	Aerial portion	463
Aerial-nm portion	18	Underground portion	16
Underground-m portion	790	Buried portion	-
Underground-nm portion	-		447
Buried-m portion	-		
Buried-nm portion	652		
	22,140		

General Support

	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
General Support Investment										
furniture	\$ -	\$ 9,816	\$ 3,371	\$ 5,507	\$ -	\$ -	\$ -	\$ -	\$ -	18,695
office equipment	-	25,089	8,617	14,076	-	-	-	-	-	47,781
general purpose computers	-	38,581	13,251	21,646	-	-	-	-	-	73,478
motor vehicles	-	29,520	10,139	16,562	-	-	-	-	-	56,221
buildings	-	74,562	25,609	41,833	-	-	-	-	-	142,004
garage work equipment	-	847	291	475	-	-	-	-	-	1,613
other work equipment	-	23,004	7,901	12,907	-	-	-	-	-	43,811
TOTAL	\$ -	\$ 201,419	\$ 69,178	\$ 113,007	\$ -	\$ -	\$ -	\$ -	\$ -	383,604
Levelized Cost of Capital										
furniture	\$ -	\$ 1,565	\$ 538	\$ 878	\$ -	\$ -	\$ -	\$ -	\$ -	2,981
office equipment	-	4,469	1,535	2,507	-	-	-	-	-	8,511
general purpose computers	-	9,338	3,207	5,239	-	-	-	-	-	17,784
motor vehicles	-	5,635	1,935	3,161	-	-	-	-	-	10,732
buildings	-	11,263	3,868	6,319	-	-	-	-	-	21,450
garage work equipment	-	165	57	93	-	-	-	-	-	314
other work equipment	-	3,943	1,354	2,212	-	-	-	-	-	7,509
TOTAL	\$ -	\$ 36,377	\$ 12,494	\$ 20,410	\$ -	\$ -	\$ -	\$ -	\$ -	69,281

Distribution

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-6000	6000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Fiber Feeder										
Distribution Investment										
buried cable	\$ -	\$ 957,623	\$ 399,502	\$ 517,473	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,874,598
aerial cable	-	48,463	20,218	26,188	-	-	-	-	-	94,868
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	1,091,713	320,167	477,545	-	-	-	-	-	1,889,425
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	59,879	20,433	13,970	-	-	-	-	-	94,281
terminal	-	91,163	25,376	48,596	-	-	-	-	-	163,135
drop	-	100,239	39,444	70,385	-	-	-	-	-	210,069
TOTAL	\$ -	\$ 2,349,080	\$ 825,141	\$ 1,152,157	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,326,377
	0.00%	54.30%	19.07%	26.63%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
buried cable	\$ -	\$ 152,719	\$ 63,711	\$ 82,525	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 298,956
aerial cable	-	8,368	3,491	4,522	-	-	-	-	-	16,380
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	174,103	51,059	76,158	-	-	-	-	-	301,320
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	12,691	4,331	2,961	-	-	-	-	-	19,982
terminal	-	14,587	4,060	7,456	-	-	-	-	-	26,102
drop	-	16,039	6,311	11,262	-	-	-	-	-	33,612
TOTAL	\$ -	\$ 378,506	\$ 132,964	\$ 184,883	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 696,353
Network Expenses										
buried cable	-	37,231	15,532	20,119	-	-	-	-	-	72,881
aerial cable	-	3,048	1,271	1,647	-	-	-	-	-	5,966
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	42,444	12,448	18,566	-	-	-	-	-	73,458
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	2,471	843	577	-	-	-	-	-	3,891
terminal	-	3,533	984	1,806	-	-	-	-	-	6,323
drop	-	3,885	1,529	2,728	-	-	-	-	-	8,142
TOTAL	\$ -	\$ 92,613	\$ 32,607	\$ 45,442	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,662
Summary										
Cost of Capital	\$ -	\$ 378,506	\$ 132,964	\$ 184,883	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 696,353
Network Expense	-	92,613	32,607	45,442	-	-	-	-	-	170,662
TOTAL	\$ -	\$ 471,119	\$ 165,571	\$ 230,325	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 867,014
Copper Feeder										
Distribution Investment										
buried cable	\$ -	\$ 2,860	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,860
aerial cable	-	145	-	-	-	-	-	-	-	145
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	7,685	-	-	-	-	-	-	-	7,685
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	920	-	-	-	-	-	-	-	920
terminal	-	686	-	-	-	-	-	-	-	686
drop	-	857	-	-	-	-	-	-	-	857
TOTAL	\$ -	\$ 13,154	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,154
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
buried cable	\$ -	\$ 456	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 456
aerial cable	-	25	-	-	-	-	-	-	-	25
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	1,226	-	-	-	-	-	-	-	1,226
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	195	-	-	-	-	-	-	-	195
terminal	-	110	-	-	-	-	-	-	-	110
drop	-	137	-	-	-	-	-	-	-	137
TOTAL	\$ -	\$ 2,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,149
Network Expenses										
buried cable	\$ -	\$ 111	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111
aerial cable	-	9	-	-	-	-	-	-	-	9

Distribution

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	\$ -	\$ 299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	299
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	38	-	-	-	-	-	-	-	38
terminal	-	27	-	-	-	-	-	-	-	27
drop	-	33	-	-	-	-	-	-	-	33
TOTAL	\$ -	\$ 517	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	517
Summary										
Cost of Capital	\$ -	2,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,149
Network Expense	-	517	-	-	-	-	-	-	-	517
TOTAL	\$ -	\$ 2,666	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,666

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Total Distribution Investment										
buried cable	\$ -	\$ 960,483	\$ 399,502	\$ 517,473	\$ -	\$ -	\$ -	\$ -	\$ -	1,877,458
aerial cable	\$ -	\$ 48,607	\$ 20,218	\$ 26,188	\$ -	\$ -	\$ -	\$ -	\$ -	95,013
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried trenching	\$ -	\$ 1,099,398	\$ 320,167	\$ 477,545	\$ -	\$ -	\$ -	\$ -	\$ -	1,897,111
conduit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
underground trenching	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
poles	\$ -	\$ 60,799	\$ 20,433	\$ 13,970	\$ -	\$ -	\$ -	\$ -	\$ -	95,202
terminal	\$ -	\$ 91,849	\$ 25,376	\$ 46,596	\$ -	\$ -	\$ -	\$ -	\$ -	163,821
drop	\$ -	\$ 101,097	\$ 39,444	\$ 70,385	\$ -	\$ -	\$ -	\$ -	\$ -	210,926
TOTAL	\$ -	\$ 2,362,234	\$ 825,141	\$ 1,152,157	\$ -	\$ -	\$ -	\$ -	\$ -	4,339,531
	0.00%	54.44%	19.01%	26.55%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
buried cable	\$ -	\$ 153,175	\$ 63,711	\$ 82,525	\$ -	\$ -	\$ -	\$ -	\$ -	299,412
aerial cable	\$ -	\$ 8,393	\$ 3,491	\$ 4,522	\$ -	\$ -	\$ -	\$ -	\$ -	16,405
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried trenching	\$ -	\$ 175,329	\$ 51,059	\$ 76,158	\$ -	\$ -	\$ -	\$ -	\$ -	302,546
conduit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
underground trenching	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
poles	\$ -	\$ 12,886	\$ 4,331	\$ 2,961	\$ -	\$ -	\$ -	\$ -	\$ -	20,177
terminal	\$ -	\$ 14,696	\$ 4,060	\$ 7,456	\$ -	\$ -	\$ -	\$ -	\$ -	26,212
drop	\$ -	\$ 16,176	\$ 6,311	\$ 11,262	\$ -	\$ -	\$ -	\$ -	\$ -	33,749
TOTAL	\$ -	\$ 380,655	\$ 132,964	\$ 184,883	\$ -	\$ -	\$ -	\$ -	\$ -	698,501
Network Expenses										
buried cable	\$ -	\$ 37,342	\$ 15,532	\$ 20,119	\$ -	\$ -	\$ -	\$ -	\$ -	72,993
aerial cable	-	3,057	1,271	1,647	-	-	-	-	-	5,975
underground cable	-	-	-	-	-	-	-	-	-	-
buried trenching	-	42,743	12,448	18,566	-	-	-	-	-	73,757
conduit	-	-	-	-	-	-	-	-	-	-
underground trenching	-	-	-	-	-	-	-	-	-	-
poles	-	2,509	843	577	-	-	-	-	-	3,929
terminal	-	3,560	984	1,806	-	-	-	-	-	6,350
drop	-	3,919	1,529	2,728	-	-	-	-	-	8,176
TOTAL	\$ -	\$ 93,130	\$ 32,607	\$ 45,442	\$ -	\$ -	\$ -	\$ -	\$ -	171,179
Summary										
Cost of Capital	\$ -	380,655	\$ 132,964	\$ 184,883	\$ -	\$ -	\$ -	\$ -	\$ -	698,501
Network Expense	-	93,130	32,607	45,442	-	-	-	-	-	171,179
TOTAL	\$ -	\$ 473,784	\$ 165,571	\$ 230,325	\$ -	\$ -	\$ -	\$ -	\$ -	869,680
NID Cost										
NID Investment	\$ -	\$ 28,311	\$ 16,302	\$ 29,169	\$ -	\$ -	\$ -	\$ -	\$ -	73,782
Levelized Cost of Capital	-	4,530	2,608	4,667	-	-	-	-	-	11,806
Network Expenses	-	909	536	951	-	-	-	-	-	2,396
TOTAL	\$ -	\$ 5,439	\$ 3,145	\$ 5,618	\$ -	\$ -	\$ -	\$ -	\$ -	14,201

Concentrator

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
<i>Fiber Feeder</i>										
Concentrator Investment										
DLC Investment	\$ -	\$ 394,902	\$ 118,700	\$ 180,300	\$ -	\$ -	\$ -	\$ -	\$ -	693,902
SAI Investment	-	10,950	4,800	7,600	-	-	-	-	-	23,350
										\$ -
TOTAL	\$ -	\$ 405,852	\$ 123,500	\$ 187,900	\$ -	\$ -	\$ -	\$ -	\$ -	717,252
	0.00%	56.58%	17.22%	26.20%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
DLC	\$ -	\$ 77,140	\$ 23,187	\$ 35,220	\$ -	\$ -	\$ -	\$ -	\$ -	135,547
SAI	-	1,752	768	1,216	-	-	-	-	-	3,736
TOTAL	\$ -	\$ 78,893	\$ 23,955	\$ 36,436	\$ -	\$ -	\$ -	\$ -	\$ -	139,284
Network Expenses										
DLC	\$ -	\$ 6,042	\$ 1,816	\$ 2,759	\$ -	\$ -	\$ -	\$ -	\$ -	10,617
SAI	-	215	94	149	-	-	-	-	-	458
TOTAL	\$ -	\$ 6,257	\$ 1,910	\$ 2,908	\$ -	\$ -	\$ -	\$ -	\$ -	11,074
Summary										
Cost of Capital	\$ -	\$ 78,893	\$ 23,955	\$ 36,436	\$ -	\$ -	\$ -	\$ -	\$ -	139,284
Network Expense	-	6,257	1,910	2,908	-	-	-	-	-	11,074
TOTAL	\$ -	\$ 85,149	\$ 25,865	\$ 39,344	\$ -	\$ -	\$ -	\$ -	\$ -	150,358
	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
<i>Copper Feeder</i>										
Concentrator Investment										
DLC Investment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
SAI Investment	-	250	-	-	-	-	-	-	-	250
TOTAL	\$ -	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	250
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
DLC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
SAI	-	40	-	-	-	-	-	-	-	40
TOTAL	\$ -	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	40
Network Expenses										
DLC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
SAI	-	5	-	-	-	-	-	-	-	5
TOTAL	\$ -	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	5
Summary										
Cost of Capital	\$ -	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	40
Network Expense	-	5	-	-	-	-	-	-	-	5
TOTAL	\$ -	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	45
	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
<i>Total</i>										
Concentrator Investment										
DLC Investment	\$ -	\$ 394,902	\$ 118,700	\$ 180,300	\$ -	\$ -	\$ -	\$ -	\$ -	693,902
SAI Investment	-	11,200	4,800	7,600	-	-	-	-	-	23,600
TOTAL	\$ -	\$ 406,102	\$ 123,500	\$ 187,900	\$ -	\$ -	\$ -	\$ -	\$ -	717,502
	0.00%	56.60%	17.21%	26.19%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

Concentrator

	0-5 lines/sq m		5-100 lines/sq m		100-200 lines/sq m		200-650 lines/sq m		650-850 lines/sq m		850-2550 lines/sq m		2550-5000 lines/sq m		5000-10000 lines/sq m		>10000 lines/sq m		Totals	
Levelized Cost of Capital																				
DLC	\$	-	\$	77,140	\$	23,187	\$	35,220	\$	-	\$	-	\$	-	\$	-	\$	-	\$	135,547
SAI		-		1,792		768		1,216		-		-		-		-		-		3,776
TOTAL	\$	-	\$	78,933	\$	23,955	\$	36,436	\$	-	\$	-	\$	-	\$	-	\$	-	\$	139,324
Network Expenses																				
DLC	\$	-	\$	6,042	\$	1,816	\$	2,759	\$	-	\$	-	\$	-	\$	-	\$	-	\$	10,617
SAI		-		220		94		149		-		-		-		-		-		463
TOTAL	\$	-	\$	6,262	\$	1,910	\$	2,908	\$	-	\$	-	\$	-	\$	-	\$	-	\$	11,079
Summary																				
Cost of Capital	\$	-	\$	78,933	\$	23,955	\$	36,436	\$	-	\$	-	\$	-	\$	-	\$	-	\$	139,324
Network Expense		-		6,262		1,910		2,908		-		-		-		-		-		11,079
TOTAL	\$	-	\$	85,194	\$	25,865	\$	39,344	\$	-	\$	-	\$	-	\$	-	\$	-	\$	150,403

Feeder

	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Fiber Feeder										
Feeder Investment										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	-	-	-	-	-	-	-	-	-
copper aerial cable	-	-	-	-	-	-	-	-	-	-
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	624,647	68,992	175,483	-	-	-	-	-	869,122
fiber aerial cable	-	30,777	3,406	8,806	-	-	-	-	-	42,989
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	-	-	-	-	-	-	-	-	-
fiber buried placement	-	133,551	92,544	110,163	-	-	-	-	-	336,259
poles	-	14,577	10,390	5,803	-	-	-	-	-	30,769
TOTAL	\$ -	\$ 893,552	\$ 175,333	\$ 300,255	\$ -	\$ -	\$ -	\$ -	\$ -	1,279,139
	0.00%	62.82%	13.71%	23.47%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	-	-	-	-	-	-	-	-	-
copper aerial cable	-	-	-	-	-	-	-	-	-	-
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	96,584	10,668	27,134	-	-	-	-	-	134,386
fiber aerial cable	-	4,878	540	1,396	-	-	-	-	-	6,814
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	-	-	-	-	-	-	-	-	-
fiber buried placement	-	20,650	14,309	17,034	-	-	-	-	-	51,993
poles	-	3,089	2,202	1,230	-	-	-	-	-	6,521
TOTAL	\$ -	\$ 125,202	\$ 27,719	\$ 46,793	\$ -	\$ -	\$ -	\$ -	\$ -	199,714
Network Expenses										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	-	-	-	-	-	-	-	-	-
copper aerial cable	-	-	-	-	-	-	-	-	-	-
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	24,285	2,682	6,822	-	-	-	-	-	33,790
fiber aerial cable	-	1,935	214	554	-	-	-	-	-	2,703
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	-	-	-	-	-	-	-	-	-
fiber buried placement	-	5,192	3,598	4,283	-	-	-	-	-	13,073
poles	-	602	429	239	-	-	-	-	-	1,270
TOTAL	\$ -	\$ 32,015	\$ 6,923	\$ 11,899	\$ -	\$ -	\$ -	\$ -	\$ -	50,837
Summary										
Cost of Capital	\$ -	\$ 125,202	\$ 27,719	\$ 46,793	\$ -	\$ -	\$ -	\$ -	\$ -	199,714
Network Expense	-	32,015	6,923	11,899	-	-	-	-	-	50,837
TOTAL	\$ -	\$ 157,216	\$ 34,642	\$ 58,692	\$ -	\$ -	\$ -	\$ -	\$ -	250,550
	0-5	5-100	100-200	200-650	650-850	850-2550	2550-5000	5000-10000	>10000	Totals
	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	lines/sq mi	
Copper Feeder										
Feeder Investment										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	19,776	-	-	-	-	-	-	-	19,776
copper aerial cable	-	1,001	-	-	-	-	-	-	-	1,001
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	-	-	-	-	-	-	-	-	-
fiber aerial cable	-	-	-	-	-	-	-	-	-	-
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	15,715	-	-	-	-	-	-	-	15,715
fiber buried placement	-	-	-	-	-	-	-	-	-	-
poles	-	141	-	-	-	-	-	-	-	141
TOTAL	\$ -	\$ 36,632	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	36,632
	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	3,154	-	-	-	-	-	-	-	3,154
copper aerial cable	-	173	-	-	-	-	-	-	-	173
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	-	-	-	-	-	-	-	-	-
fiber aerial cable	-	-	-	-	-	-	-	-	-	-
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	2,506	-	-	-	-	-	-	-	2,506

Feeder

	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
fiber buried placement	-	-	-	-	-	-	-	-	-	-
poles	-	30	-	-	-	-	-	-	-	30
TOTAL	\$ -	\$ 5,862	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	5,862
Network Expenses										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	769	-	-	-	-	-	-	-	769
copper aerial cable	-	63	-	-	-	-	-	-	-	63
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	-	-	-	-	-	-	-	-	-
fiber aerial cable	-	-	-	-	-	-	-	-	-	-
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	611	-	-	-	-	-	-	-	611
fiber buried placement	-	-	-	-	-	-	-	-	-	-
poles	-	6	-	-	-	-	-	-	-	6
TOTAL	\$ -	\$ 1,449	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1,449
Summary										
Cost of Capital	\$ -	\$ 5,862	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	5,862
Network Expense	-	1,449	-	-	-	-	-	-	-	1,449
TOTAL	\$ -	\$ 7,311	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	7,311

	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
Total										
Feeder Investment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper u/g cable	-	-	-	-	-	-	-	-	-	-
copper buried cable	-	19,776	-	-	-	-	-	-	-	19,776
copper aerial cable	-	1,001	-	-	-	-	-	-	-	1,001
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	624,647	68,992	175,483	-	-	-	-	-	869,122
fiber aerial cable	-	30,777	3,406	8,806	-	-	-	-	-	42,989
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	15,715	-	-	-	-	-	-	-	15,715
fiber buried placement	-	133,551	92,544	110,163	-	-	-	-	-	336,259
poles	-	14,717	10,390	5,803	-	-	-	-	-	30,910
TOTAL	\$ -	\$ 840,183	\$ 175,333	\$ 300,255	\$ -	\$ 0.00%	\$ -	\$ -	\$ -	1,315,771
	0.00%	63.85%	13.33%	22.82%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	3,154	-	-	-	-	-	-	-	3,154
copper aerial cable	-	173	-	-	-	-	-	-	-	173
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	96,584	10,668	27,134	-	-	-	-	-	134,386
fiber aerial cable	-	4,878	540	1,396	-	-	-	-	-	6,814
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	2,506	-	-	-	-	-	-	-	2,506
fiber buried placement	-	20,650	14,309	17,034	-	-	-	-	-	51,993
poles	-	3,119	2,202	1,230	-	-	-	-	-	6,551
TOTAL	\$ -	\$ 131,064	\$ 27,719	\$ 46,793	\$ -	\$ -	\$ -	\$ -	\$ -	205,576
Network Expenses										
copper u/g cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
copper buried cable	-	769	-	-	-	-	-	-	-	769
copper aerial cable	-	63	-	-	-	-	-	-	-	63
fiber u/g cable	-	-	-	-	-	-	-	-	-	-
fiber buried cable	-	24,285	2,682	6,822	-	-	-	-	-	33,790
fiber aerial cable	-	1,935	214	554	-	-	-	-	-	2,703
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
copper u/g placement	-	-	-	-	-	-	-	-	-	-
fiber u/g placement	-	-	-	-	-	-	-	-	-	-
copper buried placement	-	611	-	-	-	-	-	-	-	611
fiber buried placement	-	5,192	3,598	4,283	-	-	-	-	-	13,073
poles	-	607	429	239	-	-	-	-	-	1,276
TOTAL	\$ -	\$ 33,463	\$ 6,923	\$ 11,899	\$ -	\$ -	\$ -	\$ -	\$ -	52,285
Summary										
Cost of Capital	\$ -	\$ 131,064	\$ 27,719	\$ 46,793	\$ -	\$ -	\$ -	\$ -	\$ -	205,576
Network Expense	-	33,463	6,923	11,899	-	-	-	-	-	52,285
TOTAL	\$ -	\$ 164,527	\$ 34,642	\$ 58,692	\$ -	\$ -	\$ -	\$ -	\$ -	257,862

End Office Switching

	0-5 lines/sq m		5-100 lines/sq m		100-200 lines/sq m		200-650 lines/sq m		650-850 lines/sq m		850-2550 lines/sq m		2550-5000 lines/sq m		5000-10000 lines/sq m		>10000 lines/sq m		Totals	
EO Switching Investment																				
end office switching	\$	-	\$	306,747	\$	170,908	\$	313,221	\$	-	\$	-	\$	-	\$	-	\$	-	\$	790,876
MDF/protector		-		-		-		-		-		-		-		-		-		-
wire center		-		65,936		36,737		67,327		-		-		-		-		-		170,000
land		-		11,951		8,306		9,743		-		-		-		-		-		30,000
TOTAL	\$	-	\$	384,634	\$	215,951	\$	390,291	\$	-	\$	-	\$	-	\$	-	\$	-	\$	990,876
		0.00%		38.82%		21.79%		39.39%		0.00%		0.00%		0.00%		0.00%		0.00%		100.00%
Levelized Cost of Capital																				
end office switching	\$	-	\$	49,637	\$	27,656	\$	50,685	\$	-	\$	-	\$	-	\$	-	\$	-	\$	127,977
MDF/protector		-		-		-		-		-		-		-		-		-		-
wire center		-		9,960		5,549		10,170		-		-		-		-		-		25,679
land		-		2,011		1,398		1,639		-		-		-		-		-		5,048
TOTAL	\$	-	\$	61,607	\$	34,603	\$	62,494	\$	-	\$	-	\$	-	\$	-	\$	-	\$	158,704
Network Expenses																				
end office switching	\$	-	\$	14,570	\$	8,118	\$	14,878	\$	-	\$	-	\$	-	\$	-	\$	-	\$	37,567
MDF/protector		-		-		-		-		-		-		-		-		-		-
wire center		-		7,271		4,051		7,424		-		-		-		-		-		18,746
land		-		-		-		-		-		-		-		-		-		-
TOTAL	\$	-	\$	21,841	\$	12,169	\$	22,302	\$	-	\$	-	\$	-	\$	-	\$	-	\$	56,313
Summary																				
Cost of Capital	\$	-	\$	61,607	\$	34,603	\$	62,494	\$	-	\$	-	\$	-	\$	-	\$	-	\$	158,704
Network Expense		-		21,841		12,169		22,302		-		-		-		-		-		56,313
TOTAL	\$	-	\$	83,449	\$	46,772	\$	84,796	\$	-	\$	-	\$	-	\$	-	\$	-	\$	215,017

Signaling

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Signaling Investment										
SCP	\$ -	\$ 2,660	\$ 1,482	\$ 2,716	\$ -	\$ -	\$ -	\$ -	\$ -	6,857
SCP wire center	-	426	237	435	-	-	-	-	-	1,097
STP	-	5,851	3,260	5,975	-	-	-	-	-	15,086
signaling links	-	3,108	2,111	2,607	-	-	-	-	-	7,826
TOTAL	\$ -	\$ 12,045	\$ 7,090	\$ 11,732	\$ -	\$ -	\$ -	\$ -	\$ -	30,867
	0.00%	39.02%	22.97%	38.01%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital										
SCP	\$ -	\$ 430	\$ 240	\$ 439	\$ -	\$ -	\$ -	\$ -	\$ -	1,110
SCP wire center	-	64	36	66	-	-	-	-	-	166
STP	-	947	528	967	-	-	-	-	-	2,441
signaling links	-	497	338	417	-	-	-	-	-	1,252
TOTAL	\$ -	\$ 1,939	\$ 1,141	\$ 1,889	\$ -	\$ -	\$ -	\$ -	\$ -	4,969
Network Expenses										
SCP	\$ -	\$ 126	\$ 70	\$ 129	\$ -	\$ -	\$ -	\$ -	\$ -	326
SCP wire center	-	47	26	48	-	-	-	-	-	121
STP	-	278	155	284	-	-	-	-	-	717
signaling links	-	120	82	101	-	-	-	-	-	303
TOTAL	\$ -	\$ 572	\$ 333	\$ 562	\$ -	\$ -	\$ -	\$ -	\$ -	1,467
Summary										
Cost of Capital	\$ -	\$ 1,939	\$ 1,141	\$ 1,889	\$ -	\$ -	\$ -	\$ -	\$ -	4,969
Network Expense	-	572	333	562	-	-	-	-	-	1,467
TOTAL	\$ -	\$ 2,510	\$ 1,474	\$ 2,451	\$ -	\$ -	\$ -	\$ -	\$ -	6,435

Dedicated Transport

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Dedicated Transport Investment										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	48,360	19,495	59,717	-	-	-	-	-	127,572
aerial cable	-	1,441	559	1,812	-	-	-	-	-	3,812
poles	-	962	398	1,173	-	-	-	-	-	2,534
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 50,764	\$ 20,452	\$ 62,702	\$ -	\$ -	\$ -	\$ -	\$ -	133,918
Levelized Cost of Capital										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	7,478	3,014	9,234	-	-	-	-	-	19,725
aerial cable	-	228	89	287	-	-	-	-	-	604
poles	-	204	84	249	-	-	-	-	-	537
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 7,910	\$ 3,187	\$ 9,769	\$ -	\$ -	\$ -	\$ -	\$ -	20,867
Network Expenses										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	1,880	758	2,322	-	-	-	-	-	4,960
aerial cable	-	91	35	114	-	-	-	-	-	240
poles	-	40	16	48	-	-	-	-	-	105
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 2,011	\$ 810	\$ 2,484	\$ -	\$ -	\$ -	\$ -	\$ -	5,304
Summary										
Cost of Capital	\$ -	\$ 7,910	\$ 3,187	\$ 9,769	\$ -	\$ -	\$ -	\$ -	\$ -	20,867
Network Expense	-	2,011	810	2,484	-	-	-	-	-	5,304
TOTAL	\$ -	\$ 9,920	\$ 3,997	\$ 12,253	\$ -	\$ -	\$ -	\$ -	\$ -	26,171
Transmission Terminal										
investment	\$ -	\$ 26,195	\$ 5,749	\$ 39,436	\$ -	\$ -	\$ -	\$ -	\$ -	71,380
levelized cost of capital	-	5,117	1,123	7,703	-	-	-	-	-	13,944
network expenses	-	401	88	603	-	-	-	-	-	1,092
TOTAL	\$ -	\$ 5,518	\$ 1,211	\$ 8,307	\$ -	\$ -	\$ -	\$ -	\$ -	15,036

Direct Transport

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Direct Transport Investment										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	28,375	15,785	28,634	-	-	-	-	-	72,794
aerial cable	-	840	453	869	-	-	-	-	-	2,162
poles	-	567	322	562	-	-	-	-	-	1,452
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 29,783	\$ 16,561	\$ 30,065	\$ -	\$ -	\$ -	\$ -	\$ -	76,408
Levelized Cost of Capital										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	4,387	2,441	4,427	-	-	-	-	-	11,256
aerial cable	-	133	72	138	-	-	-	-	-	343
poles	-	120	68	119	-	-	-	-	-	308
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 4,641	\$ 2,581	\$ 4,684	\$ -	\$ -	\$ -	\$ -	\$ -	11,906
Network Expenses										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	1,103	614	1,113	-	-	-	-	-	2,830
aerial cable	-	53	28	55	-	-	-	-	-	136
poles	-	23	13	23	-	-	-	-	-	60
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 1,179	\$ 656	\$ 1,191	\$ -	\$ -	\$ -	\$ -	\$ -	3,026
Summary										
Cost of Capital	\$ -	\$ 4,641	\$ 2,581	\$ 4,684	\$ -	\$ -	\$ -	\$ -	\$ -	11,906
Network Expense	-	1,179	656	1,191	-	-	-	-	-	3,026
TOTAL	\$ -	\$ 5,820	\$ 3,236	\$ 5,875	\$ -	\$ -	\$ -	\$ -	\$ -	14,932
Transmission Terminal										
investment	\$ -	\$ 14,090	\$ 4,655	\$ 18,909	\$ -	\$ -	\$ -	\$ -	\$ -	37,654
levelized cost of capital	-	2,752	909	3,694	-	-	-	-	-	7,355
network expenses	-	216	71	289	-	-	-	-	-	576
TOTAL	\$ -	\$ 2,968	\$ 981	\$ 3,983	\$ -	\$ -	\$ -	\$ -	\$ -	7,932

Common Transport

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Common Transport Investment										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	94,694	46,479	104,692	-	-	-	-	-	245,865
aerial cable	-	2,811	1,334	3,176	-	-	-	-	-	7,321
poles	-	1,889	949	2,057	-	-	-	-	-	4,895
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 99,395	\$ 48,762	\$ 109,924	\$ -	\$ -	\$ -	\$ -	\$ -	258,081
Levelized Cost of Capital										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	14,642	7,187	16,188	-	-	-	-	-	38,016
aerial cable	-	446	211	503	-	-	-	-	-	1,160
poles	-	400	201	436	-	-	-	-	-	1,038
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 15,488	\$ 7,599	\$ 17,127	\$ -	\$ -	\$ -	\$ -	\$ -	40,214
Network Expenses										
underground cable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
buried cable	-	3,682	1,807	4,070	-	-	-	-	-	9,559
aerial cable	-	177	84	200	-	-	-	-	-	460
poles	-	78	39	85	-	-	-	-	-	202
conduit	-	-	-	-	-	-	-	-	-	-
manholes	-	-	-	-	-	-	-	-	-	-
TOTAL	\$ -	\$ 3,936	\$ 1,930	\$ 4,355	\$ -	\$ -	\$ -	\$ -	\$ -	10,221
Summary										
Cost of Capital	\$ -	\$ 15,488	\$ 7,599	\$ 17,127	\$ -	\$ -	\$ -	\$ -	\$ -	40,214
Network Expense	-	3,936	1,930	4,355	-	-	-	-	-	10,221
TOTAL	\$ -	\$ 19,424	\$ 9,529	\$ 21,482	\$ -	\$ -	\$ -	\$ -	\$ -	50,435
Transmission Terminal										
investment	\$ -	\$ 48,847	\$ 13,707	\$ 69,136	\$ -	\$ -	\$ -	\$ -	\$ -	131,691
levelized cost of capital	-	9,542	2,678	13,505	-	-	-	-	-	25,725
network expenses	-	747	210	1,058	-	-	-	-	-	2,015
TOTAL	\$ -	\$ 10,289	\$ 2,887	\$ 14,563	\$ -	\$ -	\$ -	\$ -	\$ -	27,739

Tandem Switching

	0-5 lines/sq m		5-100 lines/sq m		100-200 lines/sq m		200-650 lines/sq m		650-850 lines/sq m		850-2550 lines/sq m		2550-5000 lines/sq m		5000-10000 lines/sq m		>10000 lines/sq m		Totals	
Tandem Switching Investment																				
tandem switching	\$	-	\$	2,021	\$	1,126	\$	2,064	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,212
wire center		-		2,660		1,482		2,716		-		-		-		-		-		6,857
TOTAL	\$	-	\$	4,681	\$	2,608	\$	4,780	\$	-	\$	-	\$	-	\$	-	\$	-	\$	12,069
Levelized Cost of Capital																				
tandem switching	\$	-	\$	327	\$	182	\$	334	\$	-	\$	-	\$	-	\$	-	\$	-	\$	843
wire center		-		402		224		410		-		-		-		-		-		1,036
TOTAL	\$	-	\$	729	\$	406	\$	744	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,879
Network Expenses																				
tandem switching	\$	-	\$	96	\$	53	\$	98	\$	-	\$	-	\$	-	\$	-	\$	-	\$	248
wire center		-		293		163		299		-		-		-		-		-		756
TOTAL	\$	-	\$	389	\$	217	\$	398	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,004
Summary																				
Cost of Capital	\$	-	\$	729	\$	406	\$	744	\$	-	\$	-	\$	-	\$	-	\$	-	\$	1,879
Network Expense		-		389		217		398		-		-		-		-		-		1,004
TOTAL	\$	-	\$	1,118	\$	623	\$	1,142	\$	-	\$	-	\$	-	\$	-	\$	-	\$	2,883

Operator Services

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Operator Investment										
OS Tandem Switching	\$ -	\$ 851	\$ 474	\$ 869	\$ -	\$ -	\$ -	\$ -	\$ -	2,194
OS Tandem Wire Center	-	1,064	593	1,086	-	-	-	-	-	2,743
OS Trunks	-	12,837	6,766	13,685	-	-	-	-	-	33,289
OS Position	-	1,560	869	1,593	-	-	-	-	-	4,022
TOTAL	\$ -	\$ 16,312	\$ 8,702	\$ 17,234	\$ -	\$ -	\$ -	\$ -	\$ -	42,248
Levelized Cost of Capital										
OS Tandem Switching	\$ -	\$ 138	\$ 77	\$ 141	\$ -	\$ -	\$ -	\$ -	\$ -	355
OS Tandem Wire Center	-	161	90	164	-	-	-	-	-	414
OS Trunks	0	1986.701717	1047.10931	2117.947102	0	0	0	0	0	5,152
OS Position	-	378	210	385	-	-	-	-	-	973
TOTAL	\$ -	\$ 2,663	\$ 1,424	\$ 2,808	\$ -	\$ -	\$ -	\$ -	\$ -	6,895
Network Expenses										
OS Tandem Switching	\$ -	\$ 40	\$ 23	\$ 41	\$ -	\$ -	\$ -	\$ -	\$ -	104
OS Tandem Wire Center	-	117	65	120	-	-	-	-	-	302
OS Trunks	-	498	262	530	-	-	-	-	-	1,290
OS Position	-	105	59	108	-	-	-	-	-	272
Operator Wages	-	2,727	1,519	2,784	-	-	-	-	-	7,030
TOTAL	\$ -	\$ 3,487	\$ 1,928	\$ 3,583	\$ -	\$ -	\$ -	\$ -	\$ -	8,999
Summary										
Cost of Capital	\$ -	\$ 2,663	\$ 1,424	\$ 2,808	\$ -	\$ -	\$ -	\$ -	\$ -	6,895
Network Expense	-	3,487	1,928	3,583	-	-	-	-	-	8,999
TOTAL	\$ -	\$ 6,150	\$ 3,352	\$ 6,392	\$ -	\$ -	\$ -	\$ -	\$ -	15,893

Public Telephone

	0-5 lines/sq m	5-100 lines/sq m	100-200 lines/sq m	200-650 lines/sq m	650-850 lines/sq m	850-2550 lines/sq m	2550-5000 lines/sq m	5000-10000 lines/sq m	>10000 lines/sq m	Totals
Public Telephone Investment	\$ -	\$ 3,509	\$ 1,645	\$ 4,046	\$ -	\$ -	\$ -	\$ -	\$ -	9,201
	0.00%	38.14%	17.88%	43.98%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Levelized Cost of Capital	\$ -	\$ 718	\$ 336	\$ 827	\$ -	\$ -	\$ -	\$ -	\$ -	1,881
Network Expenses	\$ -	\$ 660	\$ 310	\$ 761	\$ -	\$ -	\$ -	\$ -	\$ -	1,731
Summary										
Cost of Capital	\$ -	\$ 718	\$ 336	\$ 827	\$ -	\$ -	\$ -	\$ -	\$ -	1,881
Network Expense	\$ -	\$ 660	\$ 310	\$ 761	\$ -	\$ -	\$ -	\$ -	\$ -	1,731
TOTAL	\$ -	\$ 1,378	\$ 646	\$ 1,588	\$ -	\$ -	\$ -	\$ -	\$ -	3,612

DeprecLife	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
CCF-Fact	0.15007	0.15004	0.15003	0.15005	0.15008	0.15013	0.15019	0.15026	0.15034	0.15044	0.15053	0.15064	0.15074	0.15085	0.15097	0.15108	0.15120	0.15132	0.15144	0.15156	0.15168	0.15179	0.15191	0.15203	0.15214	0.15226	0.15237	0.15248	0.15259	0.15270	0.15280	0.15290	0.15301
DeprecFact	0.02041	0.02057	0.02073	0.02090	0.02107	0.02124	0.02141	0.02158	0.02175	0.02192	0.02209	0.02226	0.02243	0.02260	0.02277	0.02294	0.02311	0.02328	0.02345	0.02362	0.02379	0.02396	0.02413	0.02430	0.02447	0.02464	0.02481	0.02498	0.02515	0.02532	0.02549	0.02566	0.02583
ROF-Fact	0.08481	0.08538	0.08593	0.08647	0.08699	0.08750	0.08799	0.08847	0.08894	0.08939	0.08983	0.09026	0.09068	0.09108	0.09147	0.09185	0.09222	0.09258	0.09293	0.09327	0.09360	0.09391	0.09423	0.09453	0.09482	0.09511	0.09538	0.09565	0.09592	0.09617	0.09642	0.09666	0.09690
Fut-GU-Fact	0.15085	0.15069	0.15063	0.15067	0.15077	0.15089	0.15102	0.15115	0.15128	0.15141	0.15154	0.15167	0.15180	0.15193	0.15206	0.15219	0.15232	0.15245	0.15258	0.15271	0.15284	0.15297	0.15310	0.15323	0.15336	0.15349	0.15362	0.15375	0.15388	0.15401	0.15414	0.15427	0.15440
COE																																	
COE																																	
NPV-EoP	1.29477	1.29808	1.30124	1.30426	1.30715	1.30991	1.31255	1.31508	1.31751	1.31984	1.32207	1.32421	1.32627	1.32825	1.33016	1.33199	1.33376	1.33546	1.33710	1.33868	1.34021	1.34168	1.34311	1.34448	1.34581	1.34710	1.34835	1.34955	1.35072	1.35185	1.35295	1.35402	1.35505
NPV-BoP	1.44043	1.44411	1.44763	1.45099	1.45420	1.45727	1.46021	1.46303	1.46573	1.46831	1.47080	1.47318	1.47548	1.47768	1.47980	1.48184	1.48380	1.48569	1.48752	1.48928	1.49098	1.49262	1.49420	1.49573	1.49721	1.49864	1.50003	1.50137	1.50267	1.50393	1.50515	1.50634	1.50749
Pmt-EoP	0.15806	0.15803	0.15802	0.15804	0.15807	0.15812	0.15819	0.15826	0.15833	0.15841	0.15848	0.15855	0.15862	0.15870	0.15878	0.15889	0.15901	0.15913	0.15925	0.15938	0.15950	0.15963	0.15975	0.15988	0.16000	0.16012	0.16025	0.16037	0.16049	0.16061	0.16073	0.16083	0.16094
Pmt-BoP	0.14208	0.14205	0.14204	0.14206	0.14209	0.14213	0.14219	0.14226	0.14234	0.14242	0.14252	0.14261	0.14272	0.14282	0.14293	0.14304	0.14315	0.14326	0.14337	0.14349	0.14360	0.14371	0.14382	0.14393	0.14404	0.14415	0.14426	0.14436	0.14446	0.14456	0.14466	0.14476	0.14486
Year																																	
1	0.18711	0.18633	0.18560	0.18491	0.18426	0.18364	0.18305	0.18249	0.18195	0.18144	0.18096	0.18049	0.18005	0.17962	0.17921	0.17882	0.17845	0.17809	0.17774	0.17741	0.17709	0.17678	0.17648	0.17619	0.17591	0.17564	0.17538	0.17513	0.17489	0.17465	0.17442	0.17420	0.17399
2	0.18240	0.18176	0.18116	0.18059	0.18005	0.17953	0.17905	0.17858	0.17814	0.17772	0.17732	0.17694	0.17657	0.17622	0.17588	0.17556	0.17525	0.17495	0.17466	0.17439	0.17412	0.17387	0.17362	0.17338	0.17315	0.17293	0.17271	0.17251	0.17231	0.17211	0.17192	0.17174	0.17156
3	0.17769	0.17719	0.17671	0.17626	0.17583	0.17543	0.17505	0.17468	0.17433	0.17400	0.17368	0.17338	0.17309	0.17281	0.17255	0.17229	0.17205	0.17181	0.17158	0.17137	0.17116	0.17096	0.17076	0.17057	0.17039	0.17022	0.17005	0.16988	0.16972	0.16957	0.16942	0.16928	0.16914
4	0.17298	0.17262	0.17227	0.17194	0.17162	0.17133	0.17104	0.17078	0.17052	0.17028	0.17004	0.16982	0.16961	0.16941	0.16921	0.16902	0.16885	0.16867	0.16851	0.16839	0.16829	0.16819	0.16809	0.16799	0.16789	0.16779	0.16769	0.16759	0.16749	0.16739	0.16729	0.16719	0.16709
5	0.16828	0.16804	0.16782	0.16761	0.16741	0.16722	0.16704	0.16687	0.16671	0.16656	0.16641	0.16627	0.16613	0.16600	0.16588	0.16576	0.16564	0.16553	0.16543	0.16533	0.16523	0.16514	0.16504	0.16496	0.16487	0.16479	0.16471	0.16464	0.16456	0.16449	0.16442	0.16435	0.16429
6	0.16357	0.16347	0.16337	0.16328	0.16320	0.16312	0.16304	0.16297	0.16290	0.16283	0.16277	0.16271	0.16265	0.16260	0.16254	0.16249	0.16244	0.16240	0.16235	0.16231	0.16227	0.16223	0.16219	0.16215	0.16211	0.16208	0.16204	0.16201	0.16198	0.16195	0.16192	0.16189	0.16186
7	0.15886	0.15890	0.15893	0.15896	0.15899	0.15901	0.15904	0.15907	0.15911	0.15913	0.15915	0.15917	0.15919	0.15921	0.15923	0.15924	0.15926	0.15927	0.15929	0.15930	0.15932	0.15933	0.15934	0.15935	0.15937	0.15938	0.15939	0.15940	0.15941	0.15942	0.15943	0.15944	0.15945
8	0.15416	0.15432	0.15448	0.15463	0.15478	0.15491	0.15504	0.15516	0.15528	0.15539	0.15549	0.15560	0.15570	0.15581	0.15592	0.15602	0.15612	0.15622	0.15632	0.15642	0.15652	0.15662	0.15672	0.15682	0.15692	0.15702	0.15712	0.15722	0.15732	0.15742	0.15752	0.15762	0.15772
9	0.14945	0.14975	0.15004	0.15031	0.15056	0.15081	0.15104	0.15126	0.15147	0.15167	0.15186	0.15204	0.15221	0.15238	0.15254	0.15269	0.15284	0.15298	0.15312	0.15325	0.15337	0.15350	0.15361	0.15373	0.15383	0.15394	0.15404	0.15414	0.15424	0.15434	0.15444	0.15454	0.15464
10	0.14474	0.14518	0.14559	0.14598	0.14635	0.14670	0.14704	0.14735	0.14769	0.14802	0.14834	0.14864	0.14893	0.14921	0.14943	0.14964	0.14984	0.15004	0.15023	0.15041	0.15059	0.15075	0.15092	0.15108	0.15123	0.15137	0.15152	0.15167	0.15182	0.15197	0.15212	0.15224	0.15236
11	0.14003	0.14061	0.14115	0.14166	0.14214	0.14260	0.14304	0.14345	0.14385	0.14424	0.14458	0.14493	0.14525	0.14557	0.14587	0.14616	0.14644	0.14671	0.14696	0.14721	0.14745	0.14768	0.14790	0.14811	0.14832	0.14853	0.14874	0.14895	0.14916	0.14937	0.14958	0.14979	0.14999
12	0.13533	0.13603	0.13670	0.13733	0.13793	0.13850	0.13903	0.13955	0.14004	0.14050	0.14094	0.14137	0.14178	0.14216	0.14254	0.14290	0.14324	0.14357	0.14388	0.14419	0.14448	0.14477	0.14504	0.14530	0.14556	0.14581	0.14606	0.14631	0.14656	0.14681	0.14706	0.14731	0.14756
13	0.13062	0.13146	0.13225	0.13301	0.13372	0.13439	0.13503	0.13564	0.13622	0.13678	0.13731	0.13781	0.13830	0.13876	0.13920	0.13963	0.14004	0.14043	0.14081	0.14117	0.14152	0.14186	0.14218	0.14249	0.14280	0.14309	0.14337	0.14365	0.14393	0.14417	0.14441	0.14465	0.14489
14	0.12591	0.12689	0.12781	0.12868	0.12951	0.13029	0.13104	0.13174	0.13241	0.13306	0.13367	0.13426	0.13482	0.13535	0.13587	0.13636	0.13684	0.13729	0.13773	0.13815	0.13855	0.13895	0.13932	0.13969	0.14004	0.14038	0.14070	0.14102	0.14133	0.14163	0.14191	0.14219	0.14246
15	0.12120	0.12231	0.12336	0.12435	0.12529	0.12618	0.12703	0.12784	0.12860	0.12933	0.13003	0.13070	0.13134	0.13195	0.13253	0.13310	0.13363	0.13415	0.13465	0.13513	0.13559	0.13604	0.13646	0.13688	0.13728	0.13766	0.13804	0.13840	0.13875	0.13909	0.13941	0.13973	0.14004
16	0.11650	0.11774	0.11892	0.12003	0.12108	0.12208	0.12303	0.12393	0.12479	0.12561	0.12640	0.12714	0.12786	0.12854	0.12920	0.12983	0.13043	0.13101	0.13157	0.13211	0.13263	0.13313	0.13361	0.13407	0.13452	0.13495	0.13537	0.13577	0.13617	0.13654	0.13691	0.13727	0.13761
17	0.11179	0.11317	0.11457	0.11570	0.11667	0.11748	0.11823	0.11893	0.11958	0.12018	0.12076	0.12132	0.12187	0.12240	0.12291	0.12341	0.12389	0.12436	0.12482	0.12527	0.12571	0.12614	0.12656	0.12697	0.12738	0.12778	0.12817	0.12855	0.12892	0.12929	0.12965	0.12999	0.13033
18	0.10708	0.10860	0.11002	0.11138	0.11266	0.11387	0.11503	0.11613	0.11717	0.11817	0.11912	0.12003	0.12090	0.12173	0.12253	0.12330	0.12403	0.12474	0.12542	0.12607	0.12670	0.12731	0.12789	0.12845	0.12900	0.12953	0.13003	0.13053	0.13100	0.13146	0.13191	0.13234	0.13276
19	0.10238	0.10402	0.10558	0.10705	0.10845	0.10977	0.11103	0.11222	0.11336	0.11445	0.11548	0.11647	0.11742	0.11833	0.11919	0.12003	0.12083	0.12160	0.12234	0.12305	0.12374	0.12440	0.12505	0.12569	0.12624	0.12681	0.12737	0.12790	0.12842	0.12892	0.12941	0.12988	0.13034
20	0.09767	0.09945	0.10113	0.10273	0.10423	0.10567	0.10702	0.10832	0.10955	0.11072	0.11185	0.11292	0.11394	0.11492	0.11586	0.11676	0.11763	0.11846	0.11926	0.12003	0.12077	0.12149	0.12217	0.12284	0.12348	0.12410	0.12470	0.12528	0.12584	0.12638	0.12691	0.12742	0.12791
21	0.09296	0.09488	0.09669	0.09840	0.09992	0.10136	0.10274	0.10406	0.10532	0.10654	0.10770	0.10881	0.10986	0.11086	0.11182	0.11275	0.11365																

Depreciated life	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81
CCFAct	0.15311	0.15320	0.15330	0.15339	0.15349	0.15358	0.15366	0.15375	0.15384	0.15392	0.15400	0.15408	0.15416	0.15423	0.15431
DeprecFact	0.01493	0.01471	0.01449	0.01429	0.01408	0.01389	0.01370	0.01351	0.01333	0.01316	0.01299	0.01282	0.01266	0.01250	0.01235
RORFact	0.09713	0.09735	0.09757	0.09778	0.09798	0.09818	0.09838	0.09857	0.09876	0.09894	0.09912	0.09929	0.09946	0.09962	0.09978
TaxGUFact	0.04106	0.04115	0.04124	0.04133	0.04142	0.04150	0.04159	0.04167	0.04174	0.04182	0.04190	0.04197	0.04204	0.04211	0.04218
COE															
COD															
NPV-EoP	1.35606	1.35703	1.35798	1.35890	1.35979	1.36066	1.36151	1.36234	1.36314	1.36392	1.36468	1.36542	1.36615	1.36685	1.36754
NPV-BuP	1.50861	1.50969	1.51075	1.51177	1.51277	1.51373	1.51468	1.51559	1.51649	1.51736	1.51820	1.51903	1.51983	1.52062	1.52138
Pmc-EoP	0.16126	0.16136	0.16146	0.16156	0.16166	0.16175	0.16185	0.16194	0.16203	0.16212	0.16220	0.16228	0.16237	0.16245	0.16253
Pmc-BuP	0.14495	0.14505	0.14514	0.14523	0.14531	0.14540	0.14548	0.14556	0.14564	0.14572	0.14580	0.14587	0.14595	0.14602	0.14609
Year															
1	0.17378	0.17358	0.17338	0.17319	0.17301	0.17283	0.17265	0.17248	0.17231	0.17215	0.17200	0.17184	0.17169	0.17155	0.17141
2	0.17139	0.17122	0.17106	0.17090	0.17075	0.17060	0.17046	0.17032	0.17018	0.17005	0.16992	0.16979	0.16967	0.16955	0.16943
3	0.16900	0.16887	0.16874	0.16862	0.16850	0.16838	0.16827	0.16816	0.16805	0.16794	0.16784	0.16774	0.16764	0.16755	0.16745
4	0.16661	0.16652	0.16642	0.16633	0.16624	0.16616	0.16607	0.16599	0.16591	0.16584	0.16576	0.16569	0.16562	0.16555	0.16548
5	0.16422	0.16416	0.16410	0.16405	0.16399	0.16393	0.16388	0.16383	0.16378	0.16373	0.16368	0.16364	0.16359	0.16355	0.16350
6	0.16184	0.16181	0.16178	0.16176	0.16173	0.16171	0.16169	0.16167	0.16165	0.16162	0.16160	0.16158	0.16156	0.16155	0.16153
7	0.15945	0.15946	0.15946	0.15947	0.15948	0.15949	0.15949	0.15950	0.15951	0.15952	0.15953	0.15954	0.15954	0.15955	0.15955
8	0.15706	0.15710	0.15714	0.15719	0.15723	0.15727	0.15730	0.15734	0.15738	0.15741	0.15745	0.15748	0.15751	0.15754	0.15757
9	0.15467	0.15475	0.15483	0.15490	0.15497	0.15504	0.15511	0.15518	0.15524	0.15531	0.15537	0.15543	0.15549	0.15554	0.15560
10	0.15228	0.15239	0.15251	0.15261	0.15272	0.15282	0.15292	0.15302	0.15311	0.15320	0.15329	0.15338	0.15346	0.15354	0.15362
11	0.14989	0.15004	0.15019	0.15033	0.15046	0.15060	0.15073	0.15085	0.15098	0.15109	0.15121	0.15132	0.15143	0.15154	0.15165
12	0.14750	0.14769	0.14787	0.14804	0.14821	0.14837	0.14853	0.14869	0.14884	0.14899	0.14913	0.14927	0.14941	0.14954	0.14967
13	0.14511	0.14533	0.14555	0.14575	0.14596	0.14615	0.14634	0.14653	0.14671	0.14688	0.14705	0.14722	0.14738	0.14754	0.14770
14	0.14273	0.14298	0.14323	0.14347	0.14370	0.14393	0.14415	0.14436	0.14457	0.14478	0.14498	0.14517	0.14536	0.14554	0.14572
15	0.14034	0.14063	0.14091	0.14118	0.14145	0.14171	0.14196	0.14220	0.14244	0.14267	0.14290	0.14312	0.14333	0.14354	0.14374
16	0.13795	0.13827	0.13859	0.13889	0.13919	0.13948	0.13976	0.14004	0.14031	0.14056	0.14082	0.14106	0.14130	0.14154	0.14177
17	0.13556	0.13592	0.13627	0.13661	0.13694	0.13726	0.13757	0.13788	0.13817	0.13846	0.13874	0.13901	0.13928	0.13954	0.13979
18	0.13317	0.13357	0.13395	0.13432	0.13468	0.13504	0.13538	0.13571	0.13604	0.13635	0.13666	0.13696	0.13725	0.13754	0.13782
19	0.13078	0.13121	0.13163	0.13204	0.13243	0.13281	0.13319	0.13355	0.13390	0.13425	0.13458	0.13491	0.13523	0.13554	0.13584
20	0.12839	0.12886	0.12931	0.12975	0.13018	0.13059	0.13099	0.13139	0.13177	0.13214	0.13250	0.13286	0.13320	0.13354	0.13386
21	0.12600	0.12656	0.12709	0.12766	0.12823	0.12877	0.12928	0.12976	0.13024	0.13069	0.13112	0.13154	0.13194	0.13233	0.13269
22	0.12362	0.12415	0.12467	0.12518	0.12567	0.12615	0.12661	0.12706	0.12750	0.12793	0.12835	0.12875	0.12915	0.12954	0.12991
23	0.12123	0.12180	0.12235	0.12289	0.12341	0.12392	0.12442	0.12490	0.12537	0.12582	0.12627	0.12670	0.12712	0.12753	0.12794
24	0.11884	0.11944	0.12003	0.12060	0.12116	0.12170	0.12222	0.12274	0.12323	0.12372	0.12419	0.12465	0.12510	0.12553	0.12596
25	0.11645	0.11709	0.11771	0.11832	0.11891	0.11948	0.12003	0.12057	0.12110	0.12161	0.12211	0.12260	0.12307	0.12353	0.12398
26	0.11406	0.11474	0.11539	0.11603	0.11665	0.11725	0.11784	0.11841	0.11897	0.11953	0.12008	0.12061	0.12113	0.12163	0.12210
27	0.11167	0.11238	0.11307	0.11374	0.11440	0.11503	0.11565	0.11625	0.11683	0.11740	0.11795	0.11849	0.11902	0.11953	0.12003
28	0.10928	0.11003	0.11075	0.11146	0.11214	0.11281	0.11345	0.11408	0.11470	0.11529	0.11588	0.11644	0.11699	0.11753	0.11806
29	0.10689	0.10768	0.10843	0.10917	0.10989	0.11058	0.11126	0.11192	0.11256	0.11319	0.11380	0.11439	0.11497	0.11553	0.11608
30	0.10450	0.10532	0.10611	0.10689	0.10763	0.10836	0.10907	0.10976	0.11043	0.11108	0.11172	0.11234	0.11294	0.11353	0.11410
31	0.10212	0.10297	0.10380	0.10460	0.10538	0.10614	0.10688	0.10760	0.10830	0.10898	0.10964	0.11029	0.11092	0.11153	0.11213
32	0.09973	0.10061	0.10148	0.10231	0.10313	0.10392	0.10469	0.10543	0.10616	0.10687	0.10756	0.10823	0.10889	0.10953	0.11015
33	0.09734	0.09826	0.09916	0.10003	0.10087	0.10169	0.10249	0.10327	0.10403	0.10476	0.10548	0.10618	0.10686	0.10753	0.10818
34	0.09495	0.09591	0.09684	0.09774	0.09862	0.09947	0.10030	0.10111	0.10189	0.10266	0.10340	0.10413	0.10484	0.10553	0.10620
35	0.09256	0.09355	0.09452	0.09545	0.09636	0.09725	0.09811	0.09894	0.09973	0.10055	0.10133	0.10208	0.10281	0.10353	0.10423
36	0.09017	0.09120	0.09220	0.09317	0.09411	0.09502	0.09592	0.09678	0.09763	0.09845	0.09925	0.10003	0.10079	0.10153	0.10225
37	0.08778	0.08885	0.08988	0.09088	0.09185	0.09280	0.09372	0.09462	0.09549	0.09634	0.09717	0.09797	0.09876	0.09953	0.10027
38	0.08539	0.08649	0.08756	0.08859	0.08960	0.09058	0.09153	0.09246	0.09336	0.09424	0.09509	0.09592	0.09673	0.09753	0.09830
39	0.08301	0.08414	0.08524	0.08631	0.08735	0.08836	0.08934	0.09029	0.09122	0.09213	0.09301	0.09387	0.09471	0.09553	0.09632
40	0.08062	0.08179	0.08292	0.08402	0.08509	0.08613	0.08715	0.08813	0.08909	0.09002	0.09093	0.09182	0.09269	0.09352	0.09435
41	0.07823	0.07943	0.08060	0.08173	0.08284	0.08391	0.08495	0.08597	0.08696	0.08792	0.08885	0.08977	0.09066	0.09152	0.09237
42	0.07584	0.07708	0.07828	0.07945	0.08058	0.08169	0.08276	0.08381	0.08482	0.08581	0.08678	0.08772	0.08863	0.08952	0.09039
43	0.07345	0.07472	0.07596	0.07716	0.07833	0.07946	0.08057	0.08164	0.08269	0.08371	0.08470	0.08566	0.08660	0.08752	0.08842
44	0.07106	0.07237	0.07364	0.07488	0.07608	0.07724	0.07838	0.07948	0.08055	0.08160	0.08262	0.08361	0.08458	0.08552	0.08644
45	0.06867	0.07002	0.07132	0.07259	0.07382	0.07502	0.07618	0.07732	0.07842	0.07949	0.08054	0.08156	0.08255	0.08352	0.08447
46	0.06628	0.06766	0.06900	0.07030	0.07157	0.07280	0.07399	0.07515	0.07629	0.07739	0.07846	0.07951	0.08053	0.08152	0.08249
47	0.06390	0.06531	0.06668	0.06802	0.06931	0.07057	0.07180	0.07299	0.07415	0.07528	0.07638	0.07746	0.07850	0.07952	0.08051
48	0.06151	0.06296	0.06436	0.06573	0.06706	0.06835	0.06961	0.07085	0.07202	0.07318	0.07430	0.07540	0.07648	0.07752	0.07854
49	0.05912	0.06060	0.06204	0.06344	0.06480	0.06613	0.06741	0.06867	0.06988	0.07107	0.07223	0.07335	0.07445	0.07552	0.07656
50	0.05673	0.05825	0.05972	0.06116	0.06255	0.06390	0.06522	0.06650	0.06775	0.06896	0.07015	0.07130	0.07242	0.07352	0.07459
51	0.05434	0.05589	0.05740	0.05887	0.06030	0.06168	0.06303	0.06434	0.06562	0.06686	0.06807	0.06925	0.07040	0.07152	0.07261
52	0.05195	0.05354	0.05508	0.05658	0.05804	0.05946	0.06084	0.06218	0.06348	0.06475	0.06599	0.06720	0.06837	0.06952	0.07063
53	0.04956	0.05119	0.05277	0.05430	0.05579	0.05724	0.05864	0.06001	0.06135	0.06265	0.06391	0.06514	0.06635	0.06752	0.06866
54	0.04717	0.04883	0.05045	0.05201	0.05353	0.05501	0.05645	0.05785	0.05921	0.06054	0.06183	0.06309	0.06432	0.06552	0.06668
55	0.04479	0.04648	0.04813	0.04973	0.05128	0.05279	0.05426	0.05569							

EXPENSE MODULE INPUTS

	User Inputs	Calculations
State	Missouri	
Company	Granby Tel Co - Missouri	
Cost of Capital Inputs		
Cost of Debt	8.80%	
Debt fraction	44.20%	
Cost of Equity	13.19%	
Equity fraction		55.80%
Weighted equity fraction		65.42%
Overall Cost of Capital		11.25%
Traffic Inputs		
local DEMs, thousands	31,957	
intrastate DEMs, thousands	6,823	
interstate DEMs, thousands	6,737	45,517 total DEMs, thousands
Local call completion fraction	70.00%	
Total local calls attempted	7,241	5,069 Total local calls completed
Total intraLATA calls completed	433	
Total interLATA calls completed - intrastate	436	
Total interLATA calls completed - interstate	927	
local DEM fraction	68.21%	
local interoffice traffic fraction	12.03%	
D link investment, per link	\$ -	
Bus/Res DEMs ratio (local, state, interstate)	110%	200% 300%
entrance facility investment per line	-	
local direct-routed fraction	98.00%	
tandem-routed intraLATA fraction	100.00%	
tandem-routed access fraction	100.00%	
maximum trunk usage, CCS	27.5	
ISUP msgs per i/o call attempt	6	
avg ISUP msg length, octets	25	
TCAP msgs per transaction	2	
TCAP msg length, octets	100	
fraction of calls requiring TCAP	10.00%	
trunk port investment, per port	\$ 100	
Switch line circuit offset per DLC line	\$ -	
Total signaling links	4	
Average trunk utilization	30.00%	
Cost Parameters		
tax rate	39.25%	
corporate overhead factor	10.40%	
other taxes factor	5.00%	
billing/bill inquiry per line per month	\$ 2.30	
directory listing per line per month	\$ -	
forward-looking network operations factor	100.00%	
alternative CO switching factor	4.75%	
alternative circuit equipment factor	1.53%	
EO non-port fraction	70.00%	
per-line monthly LNP cost	\$ 0.25	
Carrier-carrier customer service, per line per year	\$ 1.69	
NID expense per line per year	\$ 1.00	
DS-0/DS-1 terminal factor	12.4	
DS-1/DS-3 terminal factor	9.9	
Average lines per business location	4.00	

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Account	USOA Category	Economic Lives	Net Salvage Percent	Adjusted Projection Lives (years)	Investment
2112	Motor Vehicles	9.28	0.1121	10.45	
2115	Garage Work Equipment	11.04	-0.1071	9.97	
2116	Other Work Equipment	13.47	0.0321	13.92	
2121	Buildings	47.82	0.0187	48.73	
2122	Furniture	17.1	0.0688	18.36	
2123.1	Office Support Equipmen	11.58	0.0691	12.44	
2123.2	Company Comm Equipm	7.69	0.0376	7.99	
2124	Computers	6.36	0.0373	6.61	
2212	Digital Switching	16.66	0.0297	17.17	
2220	Operator Systems	9.33	-0.0082	9.25	
2232.2	Digital Circuit Equipment	10.07	-0.0169	9.90	
2351	Public Telephone	8.26	0.0797	8.98	
	NID, SAI			18.06	Calculated
2411	Poles	15.92	-0.8998	8.38	
2421-m	Aerial Cable - Metallic	16.75	-0.2303	13.61	\$ 96,014
2421-nm	Aerial Cable - Non-Metall	22.24	-0.1753	18.92	\$ 50,310
2422-m	Underground - Metallic	21.14	-0.1826	17.88	\$ -
2422-nm	Underground - Non-Meta	23.08	-0.1458	20.14	\$ -
2423-m	Buried - Metallic	19.9	-0.0839	18.36	\$ 1,897,234
2423-nm	Buried - Non-Metallic	23.86	-0.0858	21.97	\$ 1,315,353
2426-m	Intrabuilding - Metallic	15.71	-0.1674	13.57	
2426-nm	Intrabuilding - Non-Metall	23.62	-0.1052	21.37	
2441	Conduit Systems	50.92	-0.1034	46.15	
Average Metallic Cable (calculated)				18.06	\$ 1,993,248
Average Non-Metallic Cable (calculated)				21.84	\$ 1,365,663

\$ 7,052
\$ 2,659
\$ -
\$ -
\$ 103,337
\$ 59,858
\$ 110,390
\$ 62,517

Structure fraction assigned to telephone

density range	dist aerial	dist buried	dist underground	fdr aerial	fdr underground	fdr buried
0-5	100%	100%	100%	100%	100%	100%
5-100	100%	100%	100%	100%	100%	100%
100-200	100%	100%	100%	100%	100%	100%
200-650	50%	100%	100%	50%	100%	100%
650-850	50%	100%	100%	50%	100%	100%
850-2550	50%	100%	100%	50%	100%	100%
2550-5000	50%	100%	100%	50%	100%	100%
5000-10000	50%	100%	100%	50%	100%	100%
>10000	50%	100%	100%	50%	100%	100%

Usage Calculations

Intrastate Toll DEMs	6,823,000	
Interstate Toll DEMs	6,737,000	
trunk port usage	78,371,744	
trk-min/mo	10,044	
interLATA ded. trunks	113	
Common Transport MOU		
Local	74,729	w/o OS usage
Intrastate Toll	6,823,000	
Interstate Toll	6,737,000	
	13,634,729	
Intrastate IntraLATA Calls	433	49.83% SOCCC message counts
Intrastate InterLATA Calls	436	50.17%
	869	

Calculation of EO Usage

Local DEMs, incl OS	31,957,000	70.2% of total DEMs
Intraoffice Local DEMs	28,110,981	
Intraoffice Local Actual Min	14,055,490	
Interoffice Local Actual Min	3,846,019	per end
Intrastate Toll Actual Min	6,823,000	
Interstate Toll Actual Min	<u>6,737,000</u>	
	31,461,510	
Tandem Switch MOU		
Local	37,365	Dedicated Trunk-SW
IntraLATA Toll	1,699,861	128
InterLATA Toll	<u>10,160,277</u>	
	11,897,503	

TRANSFORMED REGULATED		1995 COMPANY NAME:	ICO	
		OTHER TAXES & UNCOLLECTIBLES CALCULATION	EXPENSES	NET REVENUES
		7230 OPERATING STATE & LOCAL INCOME TAX-NET	18	
		7240 OPERATING OTHER TAXES	75	
		5300 UNCOLLECTIBLE REVENUES		28
		530 NET REVENUES		1,798
		GROSS REVENUES (5300 + 530)		1,819
		UNCLL GROSS REV		0.015532
		(5300-4040(p.r)) / (5081+5; UNCLL RETAIL RATE		2.27%
		(4040(p)) / (5082 .5084) UNCLL WHOLESALE RATE		0.43%
EXP	INV	PLANT SPECIFIC OPERATIONS EXPENSES	A. EXPENSES	B. INVESTMENTS
		TPIS GENERAL SUPPORT		C. EXP/INV (A/B)
		2111 LAND		24
		2121 BUILDINGS		355
6121	2121	TOTAL LAND & BUILDINGS	39	389
				0.183188
6112	2112	2112 MOTOR VEHICLES	2	61
6113	2113	2113 AIRCRAFT	1	3
6114	2114	2114 SPECIAL PURPOSE VEHICLES	0	0
6115	2115	2115 GARAGE WORK EQUIPMENT	0	2
6116	2116	2116 OTHER WORK EQUIPMENT	1	48
6122	2122	2122 FURNITURE	3	23
6123	2123	2123 OFFICE EQUIPMENT	6	68
6124	2124	2124 GENERAL PRUPOSE COMPUTERS	59	92
6120	2110	2110 TOTAL LAND & SUPPORT ASSETS	107	669
				0.15965268
		TPIS - CENTRAL OFFICE SWITCHING		
		-		
6211	2211	2211 ANALOG ELECT SWITCH	2	39
6212	2212	2212 DIGITAL ELECTRONIC SWITCHING	67	1,169
6220	2220	2220 OPERATOR SYSTEMS	1	18
6210	2210	22102210221022102210 CENTRAL OFFICE SWITCH	70	1,227
		TPIS - CENTRAL OFFICE TRANSMISSION		
		-		
6232	2232	2232 CIRCUIT EQUIPMENT	13	806
6230	2230	2230 TRANSMISSION	14	843
				0.016263483
		0.01663194		
		TPIS - INFORMATION ORIG/TERM		
		-		
6311	2311	2311 STATION APPARATUS	0	1
		2321 CUSTOMER PREMISES WIRING	0	0
6341	2341	2341 LARGE PRIVATE BRANCH EXCHANGE	0	0
6351	2351	2351 PUBLIC TEL TERMINAL EQUIPMENT	5	26
6362	2362	2362 OTHER TERMINAL EQUIPMENT	8	44
6310	2310	2310 TOTAL INFORMATION ORIG/TERM	13	70
				0.182377792
		TPIS - CABLE & WIRE FACILITIES		
		-		
6411	2411	2411 POLES	6	139
6421	2421	2421 AERIAL CABLE	41	655
6422	2422	2422 UNDERGROUND CABLE	8	417
6423	2423	2423 BURIED CABLE	45	1,159
6441	2441	2441 CONDUIT SYSTEMS	1	236
6410	2410	2410 TOTAL CABLE & WIRE FACILITIES	102	2,633
				0.038842
		240 TOTAL TPIS(BEFORE AMORTIZABLE ASSETS)	203	5,482
		(2110+2210+2220+2230+2310+2410)		0.037062996
		PLANT NON-SPECIFIC OPERATIONS EXPENSES	A. EXPENSES	B. TPIS INVESTMENT
		=	=	C. EXP/INV (A/B)
6512	240	6512 PROVISIONING EXPENSES	2	5,482
				0.088388
6531	240	6531 POWER EXPENSES	9	5,482
6532	240	6532 NETWORK ADMINISTRATION	22	5,482
6533	240	6533 TESTING	23	5,482
6534	240	6534 PLANT OPERATIONS ADMINISTRATION	35	5,482
6535	240	6535 ENGINEERING	18	5,482
6540	240	6540 ACCESS EXPENSE	31	5,482
6530	240	6530 TOTAL NETWORK OPERATIONS EXPENSES	108	5,482
6561	240	6561 DEPRECIATION - TPIS	382	5,482
		65616561656165616561 DEPRECIATION - TPIS	382	5,482
		NETWORK SUPPORT FACTOR CALCULATION	A. EXPENSES	B. CABLE & WIRE INV
		=	=	C. EXP/INV (A/B)
		2112 MOTOR VEHICLES	2	
6113		2113 AIRCRAFT	1	
6114		2114 SPECIAL PURPOSE VEHICLES	0	
6115		2115 GARAGE WORK EQUIPMENT	0	
6116		2116 OTHER WORK EQUIPMENT	1	
		TOTAL NETWORK SUPPORT (EXCL 2113)	3	2,633
				0.001041087
		CUSTOMER OPERATIONS EXPENSES	A. EXPENSES	B. NET REVENUES
		=	=	C. EXP/NET REV (A/B)
6611		6611 PRODUCT MANAGEMENT	16	CALC
6612		6612 SALES	29	CALC
6613		6613 PRODUCT ADVERTISING	10	CALC
6610		6610 TOTAL MARKETING EXPENSES	55	CALC
6621		6621 CALL COMPLETION SERVICE	12	CALC
6622		6622 NUMBER SERVICES	39	CALC
6623		6623 CUSTOMER SERVICES	98	CALC

6620	6620 TOTAL SERVICES EXPENSES	140	CALC
-	700 TOTAL CUSTOMER OPERATIONS EXPENSE (6610 + 6620)	195	CALC
	CORPORATE OPERATIONS EXPENSES	A. EXPENSES	B. REVENUES
			C. EXP/REV (A/B)
6711	6711 EXECUTIVE	7	CALC
6712	6712 PLANNING	4	CALC
6710	6710 TOTAL EXECUTIVE & PLANNING	11	CALC
6721	6721 ACCOUNTING & FINANCE	22	CALC
6722	6722 EXTERNAL RELATIONS	13	CALC
6723	6723 HUMAN RESOURCES	16	CALC
6724	6724 INFORMATION MANAGEMENT	61	CALC
6725	6725 LEGAL	5	CALC
6726	6726 PROCUREMENT	3	CALC
6727	6727 RESEARCH & DEVELOPMENT	4	CALC
6728	6728 OTHER GENERAL & ADMINISTRATIVE	52	CALC
6720	6720 TOTAL GENERAL & ADMINISTRATIVE	177	CALC
	710 TOTAL CORPORATE OPERATIONS EXPENSE (6710 + 6720 + 6790)	232	CALC
	720 TOTAL OPERATING EXPENSES		CALC
	DEM - LOCAL	31,958	
	DEM - INTRASTATE	6,824	
	DEM - INTERSTATE	6,737	
	MESSAGES - INTRALATA	434	
	MESSAGES - INTERLATA - interstate	928	
	MESSAGES - INTERLATA - intrastate	436.293528	
4308 (EC)	LOCAL CALL ATTEMPTS	7,241	
	LINES - BUSINESS	703	
	RESIDENTIAL	1,906	
	PUBLIC	22	
	SPECIAL	174	
	TOTAL	2,809	
	5081 END USER		119
	5082 SWITCHED ACCESS		267
	5083 SPECIAL ACCESS		49
	TOTAL INTER ACCESS		435
	5084 END USER		
	5084 SWITCHED ACCESS		
	5084 SPECIAL ACCESS		
	STATE ACCESS		224
	TOTAL ACCESS REVENUES		659
	LD MESSAGE REVENUE		
	5100 INTERSTATE MESSAGE		
	5100 INTRASTATE MESSAGE		
	5100 INTERSTATE CALLING PLAN		
	5100 INTRASTATE CALLING PLAN		
	LD MSG REV (CLASS A)		189
	UNIDIRECTIONAL LD		
	5110 INTERSTATE		
	INTRASTATE		
	TOTAL		7
	5120 LD PRIVATE NETWORK		16
	OTHER LD		
	5160 INTERSTATE		
	INTRASTATE		
	TOTAL		2
	TOTAL LD NETWORK REVENUE		
	INTERSTATE		
	INTRASTATE		
	TOTAL		214
	BASIC LOCAL SERVICE		
	5001 BASIC AREA		580
	5002 OPTIONAL EXTEND AREA		18
	5003 CELLAR MOBIL		14
	5004 OTHER MOBIL SVC		1
	TOTAL BASIC SVC		613
	PUBLIC TELEPHONE REVENUE		
	5010 LOCAL PUBLIC MSG		
	UNIVERSAL		
	PB EXCHANGE IX CARRIER		
	CC COINLESS		
	PUBLIC EXH		

	SEMI-PUBLIC OTHER PUBLIC PHONE REV TOTAL PUBLIC PHONE REVENUE				17
	5040 LOCAL PRIVATE LINE				20
	CUSTOMER PREMISE 5050 STATION APP CUSTOMER PREMISE WIRING TOTAL CUSTOMER PREMISES				1
	OTHER LOCAL EXCHANGE 5060 CO FEATURES INFO TRANSPORT DIRECTORY ASSIST INTERCEPT SRVC OTHER LOC EXCH TOTAL OTHER				143
	TOTAL LOCAL NETWORK SRVC REVENUE INTERSTATE INTRASTATE			794.1623243	
	TOTAL REVENUE			1667.057042	
	CAPITAL STRUCTURE PARAMETERS DEBT/EQUITY RATIO COST OF DEBT COST OF EQUITY				
		BALANCE SHEET 43-02, B-1 AVG=(ab+af)/2 A	ACCRUEL 43-02, B-5 (col 2C) B	DEPR LIFE (ASSUMING STRAIGHT LIFE) C = (A/C)	
		-	-	-	
	ECONOMIC LIFE				
(2422,21,22,23,41)	FEEDER				
(2422,21,22,23,41)	DISTRIBUTION				
	2121 BUILDINGS				
	2232 DLC ELECTRONIC EQUIPMENT				
	2212 EO SWITCHING				
	2212 TANDEM SWITCHING				
	2220 OS POSITIONS				
	2220 OS TANDEM				
	2232 TRANSMISSION SYSTEMS				
	2351 PUBLIC TELEPHONE EQUIPMENT				
2122,2124	FURNITURE + GP COMPUTERS				
DATA SOURCEDATA SOURCEDATA SOURCEDATA SOURCEDATA SOURCESum checksum checksum checksum checksum checksum checksum check					
ARMIS 4303	Jan 1996 to Dec 1996		28215	495	
ARMIS 4304	GEORGIA		9007 (EJ)	9010	
ARMIS 4308		0 (EJ)			
DEM			0		
=	=	=	=	=	
UNCOLL RATE:	BA Lcl Svc	4303.Ln 520			794.1816605
	LD Ntwk Svs Rev	4303.Ln 525			215.3567137
	End User	4303.Ln 5081			119.175359
	Sw Acc	4303.Ln 5082			266.8229015
	Spcl Acc	4303.Ln 5083			49.10211971
	St Acc	4303.Ln 5084			224.1266436
	Uncoll Rev	4303.Ln 5300			28.24602303
	Tot Acc	4304.Ln4040 (P)			2.341298391
	B&C	4304.Ln4040 (Q)			0.229955403
	IX	4304.Ln4040 (R)			0.00831273
	Ln4040 (P+Q+R)	Calc (P+Q+R)			2.579566524
Uncoll -Acc	5300-(4040p..r)	1a			25.66645651
End User+ Rvrs	5081+520+525	1b			1128.713733
Uncoll Retail Rate		1c=(a/b)			0.022739563
Uncoll Wholesale rate	4040p/(5082..5084)	2a			0.004335323

Actuals for 1996 (\$000s)

	Investments	Expenses	Calculated Factor	
Plant-Specific Operations Expenses				
TPIS - General Support				
2111 Land	\$ 24	\$ -	-	
2112 Motor Vehicles	\$ 61	\$ 2	0.0348	
2113 Aircraft	\$ 3	\$ 1	0.3125	
2114 Special Purpose Vehicles	\$ 0	\$ 0	0.0142	
2115 Garage Work Equipment	\$ 2	\$ 0	0.0353	
2116 Other Work Equipment	\$ 48	\$ 1	0.0113	
2121 Buildings	\$ 355	\$ 39	0.1103	Land & Bldg Exp Applied to Bldgs
2122 Furniture	\$ 23	\$ 3	0.1224	
2123 Office Equipment	\$ 60	\$ 6	0.1015	
2124 General Purpose Computers	\$ 92	\$ 59	0.6381	
2110 Total Land & Support Assets	\$ 669	\$ 110	0.1650	
TPIS - Central Office Switching				
2211 Analog Electronic Switching	\$ 39	\$ 2	0.0453	
2212 Digital Electronic Switching	\$ 1,169	\$ 67	0.0569	4.75% NET CO Switch Factor
2210 Total Central Office Switching	\$ 1,208	\$ 68	0.0565	
2220 Operator Systems	\$ 18	\$ 1	0.0675	
TPIS - Central Office Transmission				
2231 Satellite & Earth Station Facilities				
2231 Other Radio Facilities				
2231 Radio Systems				
2232 Circuit Equipment	\$ 806	\$ 13	0.0163	1.53% alternative factor
2230 Total Central Office Transmission	\$ 806	\$ 13	0.0163	
TPIS - Information Orig/Term				
2311 Station Apparatus	\$ 1	\$ 0	0.3824	
2321 Customer Premises Wiring	\$ -	\$ -	0.0000	
2341 Large Private Branch Exchange	\$ 0	\$ 0	4.5000	
2351 Public Telephone Terminal Equipment	\$ 26	\$ 5	0.1881	
2362 Other Terminal Equipment	\$ 44	\$ 8	0.1763	
2310 Total Information Orig/Term	\$ 70	\$ 13	0.1824	
TPIS - Cable & Wire Facilities				
2411 Poles	\$ 139	\$ 6	0.0413	
2421 Aerial Cable	\$ 655	\$ 41	0.0629	0.0629
2422 Underground Cable	\$ 417	\$ 8	0.0196	0.0196
2423 Buried Cable	\$ 1,159	\$ 45	0.0389	0.0389
2424 Submarine Cable				Alternative fiber cable maintenance factors
2425 Deep Sea Cable				
2426 Intrabuilding Network Cable				
2431 Aerial Wire				
2441 Conduit Systems	\$ 236	\$ 1	0.0037	
2410 Total Cable & Wire Facilities	\$ 2,606	\$ 101	0.0388	
240 Total TPIS (before amortizable assets)	\$ 4,708	\$ 307	0.0652	
Plant Non-Specific Operations Expenses				
	Expenses	Investment	Factor	
6512 Provisioning Expenses	\$ 2	\$ 4,708	0.0003	
6531 Power Expenses	\$ 9	\$ 4,708	0.0019	8.10% all
6532 Network Administration	\$ 22	\$ 4,708	0.0048	20.47% switching, interoffice
6533 Testing	\$ 23	\$ 4,708	0.0050	21.22% all
6534 Plant Operations Administration	\$ 35	\$ 4,708	0.0074	31.89% all
6535 Engineering	\$ 18	\$ 4,708	0.0039	16.83% all
6540 Access Expense				
6530 Total Network Operations Expenses (includes provisioning)	\$ 110	\$ 4,708	0.0233	per line network operations
Network Support Factor Calculation				total lines (from net. invest. inputs)
	Expenses	Cable & Wire Inv	Factor	annual net ops per line
6112 Motor Vehicles	\$ 2			
6113 Aircraft	\$ 1			
6114 Special Purpose Vehicles	\$ 0			
6115 Garage Work Equipment	\$ 0			
6116 Other Work Equipment	\$ 1			
Aircraft & Special Purpose Vehicles	\$ 3	\$ 2,606	0.0011	(=total ARMIS 6530/total lines)
				2,809
				\$ 39.11

Customer Operations Expenses

	Expenses		Net Revenues		Factor			
6611 Product Management *	\$	16	\$	0.4638	\$	940	0.0166	
6612 Sales *	\$	29	\$	0.8522	\$	940	0.0306	
6613 Product Advertising	\$	10			\$	940	0.0110	
6610 Total Marketing Expenses	\$	55					0.0582	
6621 Call Completion Service	\$	12			\$	940	0.0131	
6622 Number Services	\$	30	\$	0.8863	\$	940	0.0318	
6623 Customer Services	\$	98	\$	2.9168	\$	940	0.1046	
6620 Total Services Expenses	\$	140	\$	4.23			0.1495	
Billing/bill inquiry (per line/month)	\$	2.30						
Directory listing (per line/month)		-						
700 Total Customer Operations Expenses	\$	195.22			\$	940	0.2078	0.2442

Corporate Operations Expenses

Corporate Operations Expense		Expenses	Revenues	Factor		
6711 Executive	\$	7	\$	940	0.0079	
6712 Planning	\$	4	\$	940	0.0039	
6710 Total Executive & Planning	\$	11	\$	940	0.0117	
6721 Accounting & Finance	\$	22	\$	940	0.0237	
6722 External Relations	\$	13	\$	940	0.0144	
6723 Human Resources	\$	16	\$	940	0.0171	
6724 Information Management	\$	61	\$	940	0.0653	
6725 Legal	\$	5	\$	940	0.0055	
6726 Procurement	\$	3	\$	940	0.0030	
6727 Research & Development	\$	4	\$	940	0.0038	
6728 Other General & Administrative	\$	52	\$	940	0.0554	
6720 Total General & Administrative	\$	177	\$	940	0.1880	
710 Total Corporate Operations Expense	\$	188	\$	940	0.1040	0.2347
720 Total Operating Expenses	\$	799				47.89% Total Operations General Support Allocator
note: does not include dep/amort						45.55% "Office Worker" General Support Allocator

Misc Expenses Calculation	2122 Furniture	2123 Office Equipment	2124 GP Computer	2112 Motor Vehicles	2121 Buildings	2115 Garage Work Equipment	2116 Other Work Equipment
Investment	\$ 23	\$ 60	\$ 92	\$ 61	\$ 178	\$ 2	\$ 48
Investment/TPIS	0.005	0.013	0.020	0.013	0.038	0.000	0.010
Expense	\$ 3	\$ 6	\$ 59	\$ 2	\$ 20	\$ 0	\$ 1
Expense Factor	0.122	0.101	0.638	0.035	0.110	0.035	0.011
Model TPIS	\$ 8,261	\$ 8,261	\$ 8,261	\$ 8,261	\$ 8,261	\$ 8,261	\$ 8,261
Calculated Investment	\$ 41	\$ 105	\$ 161	\$ 108	\$ 312	\$ 3	\$ 84
Calculated Expense	\$ 5	\$ 11	\$ 103	\$ 4	\$ 34	\$ 0	\$ 1
Subtotal (\$s)	\$ 69,683						
Total Misc Expense	\$ 69,683						

Other Taxes & Uncollectibles Calculation

	Expenses		Net Revenues		Factor
7230 Operating State & Local Income Tax	\$	18	\$	(91)	
7240 Operating Other Taxes	\$	75	\$	(91)	0.0500
5300 Uncollectible Revenues	\$	28	\$	940	0.0301
retail					0.0227
wholesale					0.0043
Ratio of Net Plant to TPIS					
TPIS	\$	4,708			
Net Plant	\$	4,708			
Ratio	\$	1			
Model Investment	\$	-			
Model % of Net Plant	\$	-			
Model % of TPIS		0%			

Actual 1996 Revenue

		% of total
Interstate Access		
5081 End User	\$ 119	8.26%
5082 Switched Access	\$ 267	18.49%
5083 Special Access	\$ 49	3.40%
Total Inter Access	\$ 435	30.15%
State Access Revenue		
5084 End User	\$ -	0.00%
5084 Switched Access	\$ -	0.00%
5084 Special Access	\$ -	0.00%
Total State Access	\$ -	0.00%
Total Access Revenue	\$ 435	30.15%
Long Distance Network Revenue		
5100 Interstate Message	\$ -	0.00%
5100 Intrastate Message	\$ -	0.00%
5100 Interstate Calling Plan	\$ -	0.00%
5100 Intrastate Calling Plan	\$ -	0.00%
Total LD Msg Revenue	\$ 189	13.08%
Unidirectional LD Revenue		
5110 Interstate	\$ -	0.00%
Intrastate	\$ -	0.00%
Total	\$ 7	0.48%
LD Private Network Revenue		
5120 Interstate	\$ -	0.00%
Intrastate	\$ -	0.00%
Total	\$ 16	1.08%
Other Long Distance Revenue		
5160 Interstate	\$ -	0.00%
Intrastate	\$ -	0.00%
Total	\$ 2	0.17%
Total Long Distance Network Rev		
Interstate	\$ -	0.00%
Intrastate	\$ -	0.00%
Total	\$ 214	14.81%

Basic Local Service		
5001 Basic Area	\$ 580	40.21%
5002 Optional Extended Area	\$ 18	1.23%
5003 Cellular Mobile	\$ 14	0.95%
5004 Other Mobile Svcs	\$ 1	0.08%
Total Basic Local Service	\$ 613	42.47%
Public Telephone Revenue		
5010 Local Public Msgs	\$ -	0.00%
Universal Public Phone	\$ -	0.00%
Public Exchange - IX Carrier	\$ -	0.00%
Credit Card Coinless	\$ -	0.00%
Public Exchange - CPE	\$ -	0.00%
Semi-Public Msgs	\$ -	0.00%
Other Public Phone Revenue	\$ -	0.00%
Total Public Phone Revenue	\$ 17	1.18%
Local Private Line Revenue		
5040 Interstate	\$ -	0.00%
Intrastate	\$ -	0.00%
Total Private Line	\$ 20	1.40%
Customer Premises Revenue		
5050 Station Apparatus	\$ -	0.00%
Customer Premises Wiring	\$ -	0.00%
Total Customer Premises	\$ 1	0.10%
Other Local Exchange Revenue		
5060 Central Office Features	\$ -	0.00%
Information Transport	\$ -	0.00%
Directory Assistance	\$ -	0.00%
Intercept Services	\$ -	0.00%
Other Loc Exchg	\$ -	0.00%
Total Other	\$ 143	9.89%
Total Local Network Service Revenue		
Interstate	\$ -	0.00%
Intrastate	\$ 794	55.04%
Total Revenue	\$ 1,443	100.00%

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Expense Module Release 5.0a

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Users making modifications to non-user adjustable inputs of
the HAI Model may not represent generated calculations as
those of the HAI Model.

Scenario Inputs

NOTE: This sheet displays all user adjustable inputs which vary from HM 5.0a default settings

Workfile Name: C:\Program Files\HM50\WORKFILES\HMWKMO4218871.XLS
Distribution Module Name: C:\Program Files\HM50\MODULES\R50a_distribution.xls
Feeder Module Name: C:\Program Files\HM50\MODULES\R50a_feeder.xls
Switching Module Name: C:\Program Files\HM50\MODULES\R50a_switching_io-Dt-HRInd-TransForm-Fiber-Sharing.xls
Expense Module Name: C:\Program Files\HM50\MODULES\R50a_expense_density.xls

Module/Table	Scenario Input	Scenario Value	Default Value
Switching	Use host - remote assignments	TRUE	FALSE

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User Adjustable Inputs

Distribution Input	Current Scenario Value	Default Scenario Value	Feeder Input	Current Scenario Value	Default Scenario Value
Distribution Cable Fill - 0	0.50	0.50	Copper Feeder Fill - 0	0.65	0.65
Distribution Cable Fill - 5	0.55	0.55	Copper Feeder Fill - 5	0.75	0.75
Distribution Cable Fill - 100	0.55	0.55	Copper Feeder Fill - 100	0.80	0.80
Distribution Cable Fill - 200	0.60	0.60	Copper Feeder Fill - 200	0.80	0.80
Distribution Cable Fill - 650	0.65	0.65	Copper Feeder Fill - 650	0.80	0.80
Distribution Cable Fill - 850	0.70	0.70	Copper Feeder Fill - 850	0.80	0.80
Distribution Cable Fill - 2550	0.75	0.75	Copper Feeder Fill - 2550	0.80	0.80
Distribution Cable Fill - 5000	0.75	0.75	Copper Feeder Fill - 5000	0.80	0.80
Distribution Cable Fill - 10000	0.75	0.75	Copper Feeder Fill - 10000	0.80	0.80
Buried Fraction - 0	0.95	0.95	Fiber Feeder Strand Fill - 0	1.00	1.00
Buried Fraction - 5	0.95	0.95	Fiber Feeder Strand Fill - 5	1.00	1.00
Buried Fraction - 100	0.95	0.95	Fiber Feeder Strand Fill - 100	1.00	1.00
Buried Fraction - 200	0.95	0.95	Fiber Feeder Strand Fill - 200	1.00	1.00
Buried Fraction - 650	0.95	0.95	Fiber Feeder Strand Fill - 650	1.00	1.00
Buried Fraction - 850	0.85	0.85	Fiber Feeder Strand Fill - 850	1.00	1.00
Buried Fraction - 2550	0.85	0.85	Fiber Feeder Strand Fill - 2550	1.00	1.00
Buried Fraction - 5000	0.86	0.86	Fiber Feeder Strand Fill - 5000	1.00	1.00
Buried Fraction - 10000	0.85	0.85	Fiber Feeder Strand Fill - 10000	1.00	1.00
Aerial Cable Fraction - 0	0.05	0.05	Copper Aerial Fraction - 0	0.05	0.05
Aerial Cable Fraction - 5	0.05	0.05	Copper Aerial Fraction - 5	0.05	0.05
Aerial Cable Fraction - 100	0.05	0.05	Copper Aerial Fraction - 100	0.05	0.05
Aerial Cable Fraction - 200	0.05	0.05	Copper Aerial Fraction - 200	0.05	0.05
Aerial Cable Fraction - 650	0.05	0.05	Copper Aerial Fraction - 650	0.05	0.05
Aerial Cable Fraction - 850	0.05	0.05	Copper Aerial Fraction - 850	0.05	0.05
Aerial Cable Fraction - 2550	0.05	0.05	Copper Aerial Fraction - 2550	0.05	0.05
Aerial Cable Fraction - 5000	0.05	0.05	Copper Aerial Fraction - 5000	0.05	0.05
Aerial Cable Fraction - 10000	0.05	0.05	Copper Aerial Fraction - 10000	0.05	0.05
Pole Spacing, feet - 0	250	250	Copper Buried Fraction - 0	0.95	0.95
Pole Spacing, feet - 5	250	250	Copper Buried Fraction - 5	0.95	0.95
Pole Spacing, feet - 100	200	200	Copper Buried Fraction - 100	0.95	0.95
Pole Spacing, feet - 200	200	200	Copper Buried Fraction - 200	0.95	0.95
Pole Spacing, feet - 650	175	175	Copper Buried Fraction - 650	0.95	0.95
Pole Spacing, feet - 850	175	175	Copper Buried Fraction - 850	0.85	0.85
Pole Spacing, feet - 2550	150	150	Copper Buried Fraction - 2550	0.01	0.01
Pole Spacing, feet - 5000	150	150	Copper Buried Fraction - 5000	0.85	0.85
Pole Spacing, feet - 10000	150	150	Copper Buried Fraction - 10000	0.85	0.85
Drop Distance, feet - 0	150	150	Copper Manhole Spacing, feet - 0	800	800
Drop Distance, feet - 5	150	150	Copper Manhole Spacing, feet - 5	800	800
Drop Distance, feet - 100	100	100	Copper Manhole Spacing, feet - 100	800	800
Drop Distance, feet - 200	100	100	Copper Manhole Spacing, feet - 200	800	800
Drop Distance, feet - 650	50	50	Copper Manhole Spacing, feet - 650	600	600
Drop Distance, feet - 850	50	50	Copper Manhole Spacing, feet - 850	600	600
Drop Distance, feet - 2550	50	50	Copper Manhole Spacing, feet - 2550	600	600
Drop Distance, feet - 5000	50	50	Copper Manhole Spacing, feet - 5000	400	400
Drop Distance, feet - 10000	50	50	Copper Manhole Spacing, feet - 10000	400	400
Aerial Drop Placement (total) - 0	23.33	23.33	Fiber Aerial Fraction - 0	0.05	0.05
Aerial Drop Placement (total) - 5	23.33	23.33	Fiber Aerial Fraction - 5	0.05	0.05
Aerial Drop Placement (total) - 100	17.50	17.50	Fiber Aerial Fraction - 100	0.05	0.05
Aerial Drop Placement (total) - 200	17.50	17.50	Fiber Aerial Fraction - 200	0.05	0.05
Aerial Drop Placement (total) - 650	11.67	11.67	Fiber Aerial Fraction - 650	0.05	0.05
Aerial Drop Placement (total) - 850	11.67	11.67	Fiber Aerial Fraction - 850	0.00	0.00
Aerial Drop Placement (total) - 2550	11.67	11.67	Fiber Aerial Fraction - 2550	0.05	0.05

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User Adjustable Inputs

Distribution Input	Current Scenario Value	Default Scenario Value	Feeder Input	Current Scenario Value	Default Scenario Value
Aerial Drop Placement (total) - 5000	11.67	11.67	Fiber Aerial Fraction - 5000	0.05	0.05
Aerial Drop Placement (total) - 10000	11.67	11.67	Fiber Aerial Fraction - 10000	0.05	0.05
Buried Drop Placement (total) - 0	0.60	0.60	Fiber Buried Fraction - 0	0.95	0.95
Buried Drop Placement (total) - 5	0.60	0.60	Fiber Buried Fraction - 5	0.95	0.95
Buried Drop Placement (total) - 100	0.60	0.60	Fiber Buried Fraction - 100	0.95	0.95
Buried Drop Placement (total) - 200	0.60	0.60	Fiber Buried Fraction - 200	0.95	0.95
Buried Drop Placement (total) - 650	0.60	0.60	Fiber Buried Fraction - 650	0.95	0.95
Buried Drop Placement (total) - 850	0.60	0.60	Fiber Buried Fraction - 850	0.01	0.01
Buried Drop Placement (total) - 2550	0.75	0.75	Fiber Buried Fraction - 2550	0.85	0.85
Buried Drop Placement (total) - 5000	1.50	1.50	Fiber Buried Fraction - 5000	0.85	0.85
Buried Drop Placement (total) - 10000	5.00	5.00	Fiber Buried Fraction - 10000	0.85	0.85
Buried Drop Sharing Fraction - 0	1.00	1.00	Fiber Pullbox Spacing, feet - 0	2,000.00	2,000.00
Buried Drop Sharing Fraction - 5	1.00	1.00	Fiber Pullbox Spacing, feet - 5	2,000.00	2,000.00
Buried Drop Sharing Fraction - 100	1.00	1.00	Fiber Pullbox Spacing, feet - 100	2,000.00	2,000.00
Buried Drop Sharing Fraction - 200	1.00	1.00	Fiber Pullbox Spacing, feet - 200	2,000.00	2,000.00
Buried Drop Sharing Fraction - 650	1.00	1.00	Fiber Pullbox Spacing, feet - 650	2,000.00	2,000.00
Buried Drop Sharing Fraction - 850	1.00	1.00	Fiber Pullbox Spacing, feet - 850	2,000.00	2,000.00
Buried Drop Sharing Fraction - 2550	1.00	1.00	Fiber Pullbox Spacing, feet - 2550	2,000.00	2,000.00
Buried Drop Sharing Fraction - 5000	1.00	1.00	Fiber Pullbox Spacing, feet - 5000	2,000.00	2,000.00
Buried Drop Sharing Fraction - 10000	1.00	1.00	Fiber Pullbox Spacing, feet - 10000	2,000.00	2,000.00
Buried Drop Fraction - 0	0.95	0.95	Fiber Feeder Investment per foot - 216	13.10	13.10
Buried Drop Fraction - 5	0.95	0.95	Fiber Feeder Investment per foot - 144	9.50	9.50
Buried Drop Fraction - 100	0.95	0.95	Fiber Feeder Investment per foot - 96	7.10	7.10
Buried Drop Fraction - 200	0.95	0.95	Fiber Feeder Investment per foot - 72	5.90	5.90
Buried Drop Fraction - 650	0.95	0.95	Fiber Feeder Investment per foot - 60	5.30	5.30
Buried Drop Fraction - 850	0.95	0.95	Fiber Feeder Investment per foot - 48	4.70	4.70
Buried Drop Fraction - 2550	0.95	0.95	Fiber Feeder Investment per foot - 36	4.10	4.10
Buried Drop Fraction - 5000	0.95	0.95	Fiber Feeder Investment per foot - 24	3.50	3.50
Buried Drop Fraction - 10000	0.95	0.95	Fiber Feeder Investment per foot - 18	3.20	3.20
Pole Investment	201.00	201.00	Fiber Feeder Investment per foot - 12	2.90	2.90
Pole Labor	216.00	216.00	Copper Feeder Investment per foot - 4200	29.00	29.00
Buried Cable Jacketing Multiplier	1.04	1.04	Copper Feeder Investment per foot - 3600	26.00	26.00
Conduit Investment per foot	0.60	0.60	Copper Feeder Investment per foot - 3000	23.00	23.00
Spare Tubes per route	1.00	1.00	Copper Feeder Investment per foot - 2400	20.00	20.00
Regional Labor Adjustment Factor (see Labor Inputs)	1.00	1.00	Copper Feeder Investment per foot - 1800	16.00	16.00
Residential NID case, no protector	10.00	10.00	Copper Feeder Investment per foot - 1200	12.00	12.00
Residential NID basic labor	15.00	15.00	Copper Feeder Investment per foot - 900	10.00	10.00
spare	-	-	Copper Feeder Investment per foot - 600	7.75	7.75
Residential Protection Block, per pair	4.00	4.00	Copper Feeder Investment per foot - 400	6.00	6.00
Business NID case, no protector	25.00	25.00	Copper Feeder Investment per foot - 200	4.25	4.25
Business NID basic labor	15.00	15.00	Copper Feeder Investment per foot - 100	2.50	2.50
Business Protection Block, per pair	4.00	4.00	Buried Copper Cable Sheath Multiplier	1.04	1.04
Average Lines per business location	4.00	4.00	Buried Fiber Sheath Addition per foot	0.20	0.20
Terminal and Splice per line, buried	42.50	42.50	Pole Materials	201.00	201.00
Terminal and Splice per line, aerial	32.00	32.00	Pole Labor	216.00	216.00
Drop cable investment per foot buried	0.14	0.14	Conduit Material Investment per foot	0.60	0.60
Drop cable buried pairs	3.00	3.00	Inner Duct Investment per foot	0.30	0.30
Drop cable investment per foot aerial	0.095	0.095	Spare Tubes per section	1.00	1.00
Drop cable aerial pairs	2.00	2.00	Regional Labor Adjustment Factor (see Labor	1.00	1.00
DS-0 fraction	1.00	1.00	Pole Spacing, feet - 0	250.00	250.00
DS-1 fraction	-	-	Pole Spacing, feet - 5	250.00	250.00
DS-0 pair equivalent	1.00	1.00	Pole Spacing, feet - 100	200.00	200.00

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User Adjustable Inputs

Distribution Input	Current Scenario Value	Default Scenario Value	Feeder Input	Current Scenario Value	Default Scenario Value
DS-1 pair equivalent	2.00	2.00	Pole Spacing, feet - 200	200.00	200.00
DS-3 pair equivalent	56.00	56.00	Pole Spacing, feet - 650	175.00	175.00
Indoor NID case	5.00	5.00	Pole Spacing, feet - 850	175.00	175.00
Buried fraction available for shift - 0	-	-	Pole Spacing, feet - 2550	150.00	150.00
Buried fraction available for shift - 5	-	-	Pole Spacing, feet - 5000	150.00	150.00
Buried fraction available for shift - 100	-	-	Pole Spacing, feet - 10000	150.00	150.00
Buried fraction available for shift - 200	-	-	Buried fraction available for shift - 0	-	-
Buried fraction available for shift - 650	-	-	Buried fraction available for shift - 5	-	-
Buried fraction available for shift - 850	-	-	Buried fraction available for shift - 100	-	-
Buried fraction available for shift - 2550	-	-	Buried fraction available for shift - 200	-	-
Buried fraction available for shift - 5000	-	-	Buried fraction available for shift - 650	-	-
Buried fraction available for shift - 10000	-	-	Buried fraction available for shift - 850	-	-
Wireless Investment Cap Enabled	FALSE	FALSE	Buried fraction available for shift - 2550	-	-
Wireless Point to Point Inv cap - distribution, per line	7,500.00	7,500.00	Buried fraction available for shift - 5000	-	-
Wireless Common inv, broadcast	112,500.00	112,500.00	Buried fraction available for shift - 10000	-	-
Wireless per line inv, broadcast	500.00	500.00	Fiber investment/strand - foot	0.1000	0.10
Maximum broadcast lines for common inv	30.00	30.00	Copper investment/pair - foot	0.0075	0.01
High Density DLC Site and Power	3,000.00	3,000.00	Copper Manhole Materials - 0	1865	1,865.00
High Density DLC Maximum Lines/Increment	672.00	672.00	Copper Manhole Materials - 5	1865	1,865.00
High Density DLC RT Fill Factor	0.90	0.90	Copper Manhole Materials - 100	1865	1,865.00
High Density DLC Basic Common Eqpt Invest + initial lines	66,000.00	66,000.00	Copper Manhole Materials - 200	1865	1,865.00
High Density DLC POTS Channel Unit Investment	310.00	310.00	Copper Manhole Materials - 650	1865	1,865.00
High Density DLC POTS Lines per CU	4.00	4.00	Copper Manhole Materials - 850	1865	1,865.00
High Density DLC Coin Channel Unit Investment	250.00	250.00	Copper Manhole Materials - 2550	1865	1,865.00
High Density DLC Coin Lines per CU	2.00	2.00	Copper Manhole Materials - 5000	1865	1,865.00
High Density DLC 303/LD crossover, lines	480.00	480.00	Copper Manhole Materials - 10000	1865	1,865.00
High Density DLC Fibers per RT	4.00	4.00	Copper Manhole Frame and Cover - 0	350.00	350.00
High Density DLC Optical Patch Panel	1,000.00	1,000.00	Copper Manhole Frame and Cover - 5	350.00	350.00
High Density DLC Copper Feeder Max Distance, ft	9,000.00	9,000.00	Copper Manhole Frame and Cover - 100	350.00	350.00
High Density DLC Common Eqpt Invest per additional 672 lines	18,500.00	18,500.00	Copper Manhole Frame and Cover - 200	350.00	350.00
High Density DLC Maximum Number of additional line modules/R	2.00	2.00	Copper Manhole Frame and Cover - 650	350.00	350.00
Low Density DLC Site and Power	1,300	1,300	Copper Manhole Frame and Cover - 850	350.00	350.00
Low Density DLC Maximum Lines/Increment	120.00	120.00	Copper Manhole Frame and Cover - 2550	350.00	350.00
Low Density DLC RT Fill Factor	0.90	0.90	Copper Manhole Frame and Cover - 5000	350.00	350.00
Low Density DLC Basic Common Eqpt Invest + initial lines	16,000.00	16,000.00	Copper Manhole Frame and Cover - 10000	350.00	350.00
Low Density DLC POTS Channel Unit Investment	600.00	600.00	Copper Manhole Site Delivery - 0	125.00	125.00
Low Density DLC POTS Lines per CU	6.00	6.00	Copper Manhole Site Delivery - 5	125.00	125.00
Low Density DLC Coin Channel Unit Investment	600.00	600.00	Copper Manhole Site Delivery - 100	125.00	125.00
Low Density DLC Coin Lines per CU	6.00	6.00	Copper Manhole Site Delivery - 200	125.00	125.00
Low Density DLC Fibers per RT	4.00	4.00	Copper Manhole Site Delivery - 650	125.00	125.00
Low Density DLC Optical Patch Panel	1,000.00	1,000.00	Copper Manhole Site Delivery - 850	125.00	125.00
Low Density DLC Common Eqpt Invest per additional 96 lines	9,400.00	9,400.00	Copper Manhole Site Delivery - 2550	125.00	125.00
Low Density DLC Maximum Number of additional line modules/R	1.00	1.00	Copper Manhole Site Delivery - 5000	125.00	125.00
Distribution Cable Size 1	2,400.00	2,400.00	Copper Manhole Site Delivery - 10000	125.00	125.00
Distribution Cable Size 2	1,800.00	1,800.00	Copper Manhole Excavate and Backfill - 0	2,800	2,800
Distribution Cable Size 3	1,200.00	1,200.00	Copper Manhole Excavate and Backfill - 5	2,800	2,800
Distribution Cable Size 4	900.00	900.00	Copper Manhole Excavate and Backfill - 100	2,800	2,800
Distribution Cable Size 5	600.00	600.00	Copper Manhole Excavate and Backfill - 200	2,800	2,800
Distribution Cable Size 6	400.00	400.00	Copper Manhole Excavate and Backfill - 650	3,200	3,200
Distribution Cable Size 7	200.00	200.00	Copper Manhole Excavate and Backfill - 850	3,500	3,500
Distribution Cable Size 8	100.00	100.00	Copper Manhole Excavate and Backfill - 2550	3,500	3,500
Distribution Cable Size 9	50.00	50.00	Copper Manhole Excavate and Backfill - 5000	5,000	5,000

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User Adjustable Inputs

Distribution Input	Current Scenario Value	Default Scenario Value	Feeder Input	Current Scenario Value	Default Scenario Value
Distribution Cable Size 10	25.00	25.00	Copper Manhole Excavate and Backfill - 1000	5,000	5,000
Distribution Cable Size 11	12.00	12.00	Fiber Pullbox Materials - 0	280.00	280.00
Distribution Cable Size 12	6.00	6.00	Fiber Pullbox Materials - 5	280.00	280.00
Distribution Cable Investment per foot 1	20.00	20.00	Fiber Pullbox Materials - 100	280.00	280.00
Distribution Cable Investment per foot 2	16.00	16.00	Fiber Pullbox Materials - 200	280.00	280.00
Distribution Cable Investment per foot 3	12.00	12.00	Fiber Pullbox Materials - 650	280.00	280.00
Distribution Cable Investment per foot 4	10.00	10.00	Fiber Pullbox Materials - 850	280.00	280.00
Distribution Cable Investment per foot 5	7.75	7.75	Fiber Pullbox Materials - 2550	280.00	280.00
Distribution Cable Investment per foot 6	6.00	6.00	Fiber Pullbox Materials - 5000	280.00	280.00
Distribution Cable Investment per foot 7	4.25	4.25	Fiber Pullbox Materials - 10000	280.00	280.00
Distribution Cable Investment per foot 8	2.50	2.50	Fiber Pullbox Installation - 0	220.00	220.00
Distribution Cable Investment per foot 9	1.63	1.63	Fiber Pullbox Installation - 5	220.00	220.00
Distribution Cable Investment per foot 10	1.19	1.19	Fiber Pullbox Installation - 100	220.00	220.00
Distribution Cable Investment per foot 11	0.76	0.76	Fiber Pullbox Installation - 200	220.00	220.00
Distribution Cable Investment per foot 12	0.63	0.63	Fiber Pullbox Installation - 650	220.00	220.00
Distribution Riser Cable Size 1	2,400.00	2,400.00	Fiber Pullbox Installation - 850	220.00	220.00
Distribution Riser Cable Size 2	1,800.00	1,800.00	Fiber Pullbox Installation - 2550	220.00	220.00
Distribution Riser Cable Size 3	1,200.00	1,200.00	Fiber Pullbox Installation - 5000	220.00	220.00
Distribution Riser Cable Size 4	900.00	900.00	Fiber Pullbox Installation - 10000	220.00	220.00
Distribution Riser Cable Size 5	600.00	600.00	Dewatering factor manhole excavation (additi	0.20	0.20
Distribution Riser Cable Size 6	400.00	400.00	Water table depth for dewatering, ft	5.00	5.00
Distribution Riser Cable Size 7	200.00	200.00			
Distribution Riser Cable Size 8	100.00	100.00			
Distribution Riser Cable Size 9	50.00	50.00			
Distribution Riser Cable Size 10	25.00	25.00			
Distribution Riser Cable Size 11	12.00	12.00			
Distribution Riser Cable Size 12	6.00	6.00			
Distribution Riser Cable Investment per foot 1	25.00	25.00			
Distribution Riser Cable Investment per foot 2	20.00	20.00			
Distribution Riser Cable Investment per foot 3	15.00	15.00			
Distribution Riser Cable Investment per foot 4	12.50	12.50			
Distribution Riser Cable Investment per foot 5	10.00	10.00			
Distribution Riser Cable Investment per foot 6	7.50	7.50			
Distribution Riser Cable Investment per foot 7	5.30	5.30			
Distribution Riser Cable Investment per foot 8	3.15	3.15			
Distribution Riser Cable Investment per foot 9	2.05	2.05			
Distribution Riser Cable Investment per foot 10	1.50	1.50			
Distribution Riser Cable Investment per foot 11	0.95	0.95			
Distribution Riser Cable Investment per foot 12	0.80	0.80			
Distance Multiplier for difficult terrain	1.00	1.00			
Rock Depth Threshold, inches	24.00	24.00			
Hard Rock Placement Multiplier	3.50	3.50			
Soft Rock Placement Multiplier	2.00	2.00			
Sidewalk/Street Fraction	0.20	0.20			
Local RT - Maximum Total Distance	18,000.00	18,000.00			
SAI Cable Size 1	7,200.00	7,200.00			
SAI Cable Size 2	5,400.00	5,400.00			
SAI Cable Size 3	3,600.00	3,600.00			
SAI Cable Size 4	2,400.00	2,400.00			
SAI Cable Size 5	1,800	1,800			
SAI Cable Size 6	1,200	1,200			
SAI Cable Size 7	900	900			

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User Adjustable Inputs

Distribution Input	Current Scenario Value	Default Scenario Value	Feeder Input	Current Scenario Value	Default Scenario Value
SAI Cable Size 8	600	600			
SAI Cable Size 9	400	400			
SAI Cable Size 10	200	200			
SAI Cable Size 11	100	100			
SAI Cable Size 12	50	50			
SAI Indoor Investment 1	9,656	9,656			
SAI Indoor Investment 2	7,392	7,392			
SAI Indoor Investment 3	4,928	4,928			
SAI Indoor Investment 4	3,352	3,352			
SAI Indoor Investment 5	2,464.00	2,464.00			
SAI Indoor Investment 6	1,776.00	1,776.00			
SAI Indoor Investment 7	1,232.00	1,232.00			
SAI Indoor Investment 8	888.00	888.00			
SAI Indoor Investment 9	592.00	592.00			
SAI Indoor Investment 10	296.00	296.00			
SAI Indoor Investment 11	148.00	148.00			
SAI Indoor Investment 12	98.00	98.00			
SAI Outdoor Investment 1	10,000.00	10,000.00			
SAI Outdoor Investment 2	8,200.00	8,200.00			
SAI Outdoor Investment 3	6,000.00	6,000.00			
SAI Outdoor Investment 4	4,300.00	4,300.00			
SAI Outdoor Investment 5	3,400.00	3,400.00			
SAI Outdoor Investment 6	2,400.00	2,400.00			
SAI Outdoor Investment 7	1,900.00	1,900.00			
SAI Outdoor Investment 8	1,400.00	1,400.00			
SAI Outdoor Investment 9	1,000.00	1,000.00			
SAI Outdoor Investment 10	600.00	600.00			
SAI Outdoor Investment 11	350.00	350.00			
SAI Outdoor Investment 12	250.00	250.00			
Repeater Investment, installed	527.00	527.00			
Integrated COT, installed	420.00	420.00			
Remote Multiplexer Common Equip Inv, installed	8,200.00	8,200.00			
Channel Unit Investment, per subscriber	125.00	125.00			
COT investment per RT, installed	1,170.00	1,170.00			
Remote Terminal fill factor	0.90	0.90			
Maximum T1s per cable	8.00	8.00			
T1 repeater spacing, dB	32.00	32.00			
Aerial T1 attenuation, dB/kft	6.30	6.30			
Buried T1 attenuation, dB/kft	5.00	5.00			
Feeder steering enable	FALSE	FALSE			
Main feeder route/air multiplier	1	1			
Rectangular cluster switch	FALSE	FALSE			

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User Adjustable Inputs

Switching Input	Current Scenario Value	Default Scenario Value	Expense Input	Current Scenario Value	Default Scenario Value
Constant EO Switching Investment Term, small ICO	520.14	520.14	Cost of Debt	0.088	0.088
Constant EO Switching Investment Term, BOC and large ICO	242.73	242.73	Debt Fraction	0.442	0.442
Switch Capacity Real-Time (BHCA) - 1	10,000	10,000	Cost of Equity	0.132	0.132
Switch Capacity Real-Time (BHCA) - 2	50,000	50,000	Average Trunk Utilization	0.300	0.300
Switch Capacity Real-Time (BHCA) - 3	200,000	200,000	Tax Rate	0.393	0.393
Switch Capacity Real-Time (BHCA) - 4	600,000	600,000	Corporate Overhead Factor	0.104	0.104
Switch Capacity Traffic (BHCCS) - 1	30,000	30,000	Other Taxes Factor	0.050	0.050
Switch Capacity Traffic (BHCCS) - 2	150,000	150,000	Billing/Bill Inquiry per line per month	2.300	2.300
Switch Capacity Traffic (BHCCS) - 3	600,000	600,000	Directory Listing per line per month	-	-
Switch Capacity Traffic (BHCCS) - 4	1,800,000	1,800,000	Forward-looking Network Operations Factor	1.000	1.000
Initial Switch Maximum Equipped Line Size	80,000	80,000	Alternative CO Switching Factor	0.048	0.048
Switch Port Administrative Fill	0.94	0.94	Alternative Circuit Equipment Factor	0.015	0.015
Switch Maximim Processor Occupancy	0.90	0.90	EO Traffic Sensitive Fraction	0.700	0.700
Processor Feature Loading Multiplier - normal	1.20	1.20	Monthly LNP cost, per line	0.250	0.250
Processor Feature Loading Multiplier - heavy business	2.00	2.00	Carrier to Carrier Customer Service, per line per ye	1.69	1.69
Processor Feature Loading Multiplier - business penetration threshold	0.30	0.30	NID Expense per line per year	1.00	1.00
MDF/Protector Investment per line	-	-	DS-0/DS-1 Terminal Factor	12.4	12.4
Analog Line Circuit Offset for DLC lines, per line	-	-	DS-1/DS-3 Terminal Factor	9.9	9.9
Switch Installation Multiplier	1.00	1.00	Average Lines per Business Location	4	4
Operator Traffic Fraction	0.02	0.02	Distribution Aerial Shring Fraction - 0	1.00	1.00
Total Interoffice Traffic Fraction	0.40	0.40	Distribution Aerial Shring Fraction - 5	1.00	1.00
Maximum Trunk Occupancy, CCS	27.50	27.50	Distribution Aerial Shring Fraction - 100	1.00	1.00
Trunk Port, per end	100.00	100.00	Distribution Aerial Shring Fraction - 200	0.50	0.50
Entrance Facility Distance, miles	0.50	0.50	Distribution Aerial Shring Fraction - 650	0.50	0.50
Direct-routed Fraction of Local Interoffice	0.98	0.98	Distribution Aerial Shring Fraction - 850	0.50	0.50
POPs per Tandem Location	5.00	5.00	Distribution Aerial Shring Fraction - 2550	0.50	0.50
Tandem-routed Fraction of Total IntraLATA Traffic	1.00	1.00	Distribution Aerial Shring Fraction - 5000	0.50	0.50
Tandem-routed Fraction of Total InterLATA Traffic	1.00	1.00	Distribution Aerial Shring Fraction - 10000	0.50	0.50
Local Call Attempts	7,241	7,241	Distribution Buried Shring Fraction - 0	1.00	1.00
Call Completion Factor	0.70	0.70	Distribution Buried Shring Fraction - 5	1.00	1.00
IntraLATA Calls Completed	433	433	Distribution Buried Shring Fraction - 100	1.00	1.00
InterLATA intrastate Calls Completed	436	436	Distribution Buried Shring Fraction - 200	1.00	1.00
InterLATA interstate Calls Completed	927	927	Distribution Buried Shring Fraction - 650	1.00	1.00
Local DEMs, thousands	31,957	31,957	Distribution Buried Shring Fraction - 850	1.00	1.00
Intrastate DEMs, thousands	6,823	6,823	Distribution Buried Shring Fraction - 2550	1.00	1.00
Interstate DEMs, thousands	6,737	6,737	Distribution Buried Shring Fraction - 5000	1.00	1.00
Local Business/Residence DEMs	1.10	1.10	Distribution Buried Shring Fraction - 10000	1.00	1.00
Intrastate Business/Residence DEMs	2.00	2.00	Distribution Underground Shring Fraction - 0	1.00	1.00
Interstate Business/Residence DEMs	3.00	3.00	Distribution Underground Shring Fraction - 5	1.00	1.00
BH Fraction of Daily Usage	0.10	0.10	Distribution Underground Shring Fraction - 100	1.00	1.00
Annual to Daily Usage Reduction Factor	270.00	270.00	Distribution Underground Shring Fraction - 200	1.00	1.00
Residential Holding Time Multiplier	1.00	1.00	Distribution Underground Shring Fraction - 650	1.00	1.00
Business Holding Time Multiplier	1.00	1.00	Distribution Underground Shring Fraction - 850	1.00	1.00
Residential Call Attempts per BH	1.30	1.30	Distribution Underground Shring Fraction - 2550	1.00	1.00
Business Call Attempts per BH	3.50	3.50	Distribution Underground Shring Fraction - 5000	1.00	1.00
ICO STP Investment, per line (equipment)	5.50	5.50	Distribution Underground Shring Fraction - 10000	1.00	1.00
ICO Local Tandem Investment, per line	1.90	1.90	Feeder Aerial Shring Fraction - 0	1.00	1.00
ICO OS Tandem Investment, per line	0.80	0.80	Feeder Aerial Shring Fraction - 5	1.00	1.00
ICO SCP Investment per line (equipment)	2.50	2.50	Feeder Aerial Shring Fraction - 100	1.00	1.00
ICO SCP - STP per line (wirecenter)	0.40	0.40	Feeder Aerial Shring Fraction - 200	0.50	0.50
ICO Local Tandem Investment, per line (wirecenter)	2.50	2.50	Feeder Aerial Shring Fraction - 650	0.50	0.50
ICO OS Tandem Investment, per line (wirecenter)	1.00	1.00	Feeder Aerial Shring Fraction - 850	0.50	0.50

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User Adjustable Inputs

Switching Input	Current Scenario Value	Default Scenario Value	Expense Input	Current Scenario Value	Default Scenario Value
ICO Tandem A Links and C Links per line (wirecenter)	0.30	0.30	Feeder Aerial Shring Fraction - 2550	0.50	0.50
Real-time Limit, BHCA	750,000	750,000	Feeder Aerial Shring Fraction - 5000	0.50	0.50
Port Limit, trunks	100,000	100,000	Feeder Aerial Shring Fraction - 10000	0.50	0.50
Common Equipment Investment	1,000,000	1,000,000	Feeder Underground Shring Fraction - 0	1.00	1.00
Maximum Port Fill	0.90	0.90	Feeder Underground Shring Fraction - 5	1.00	1.00
Maximum Real-time Occupancy	0.90	0.90	Feeder Underground Shring Fraction - 100	1.00	1.00
Common Equipment Intercept Factor	0.50	0.50	Feeder Underground Shring Fraction - 200	1.00	1.00
STP Link Capacity	720	720	Feeder Underground Shring Fraction - 650	1.00	1.00
STP Maximum Link Fill	0.80	0.80	Feeder Underground Shring Fraction - 850	1.00	1.00
Maximum STP Investment, per pair	5,000,000	5,000,000	Feeder Underground Shring Fraction - 2550	1.00	1.00
Minimum STP Investment, per pair	1,000,000	1,000,000	Feeder Underground Shring Fraction - 5000	1.00	1.00
Link Termination, both ends	900	900	Feeder Underground Shring Fraction - 10000	1.00	1.00
Signaling Link Bit Rate	56,000	56,000	Feeder Buried Shring Fraction - 0	1.00	1.00
Link Occupancy	0.40	0.40	Feeder Buried Shring Fraction - 5	1.00	1.00
C Link Cross Section	24.00	24.00	Feeder Buried Shring Fraction - 100	1.00	1.00
ISUP Messages per Interoffice BHCA	6.00	6.00	Feeder Buried Shring Fraction - 200	1.00	1.00
ISUP Message Length, bytes	25.00	25.00	Feeder Buried Shring Fraction - 650	1.00	1.00
TCAP Messages per transaction	2.00	2.00	Feeder Buried Shring Fraction - 850	1.00	1.00
TCAP Message length, bytes	100.00	100.00	Feeder Buried Shring Fraction - 2550	1.00	1.00
Fraction of BHCA requiring TCAP	0.10	0.10	Feeder Buried Shring Fraction - 5000	1.00	1.00
SCP Investment/Transaction/Second	20,000	20,000	Feeder Buried Shring Fraction - 10000	1.00	1.00
Operator Investment per position	6,400	6,400	Motor Vehicles - Economic Life	9.28	9.28
Operator Maximum Utilization, per position, CCS	32	32	Garage Work Equipment - Economic Life	11.04	11.04
Operator Intervention Factor	10	10	Other Work Equipment - Economic Life	13.47	13.47
Public Telephone Investment, per station	760	760	Buildings - Economic Life	47.82	47.82
Lot Size, Multiplier of Switch Room Size	2	2	Furniture - Economic Life	17.10	17.10
Tandem/EO Wire Center Common Factor	0.40	0.40	Office Support Equipment - Economic Life	11.58	11.58
Power Investment 1	-	-	Company Comm. Equipment - Economic Life	7.69	7.69
Power Investment 2	-	-	General Purpose Computer - Economic Life	6.36	6.36
Power Investment 3	-	-	Digital Electronic Switching - Economic Life	16.66	16.66
Power Investment 4	-	-	Operator Systems - Economic Life	9.33	9.33
Power Investment 5	-	-	Digital Circuit Equipment - Economic Life	10.07	10.07
Switch Room Size, sq ft 1	500	500	Public Telephone Terminal Equipment - Economic	8.26	8.26
Switch Room Size, sq ft 2	1,000	1,000	Poles - Economic Life	15.92	15.92
Switch Room Size, sq ft 3	2,000	2,000	Aerial Cable - metallic - Economic Life	16.75	16.75
Switch Room Size, sq ft 4	5,000	5,000	Aerial Cable - non metallic - Economic Life	22.24	22.24
Switch Room Size, sq ft 5	10,000	10,000	Underground Cable - metallic - Economic Life	21.14	21.14
Construction Investment, sq ft 1	75.00	75.00	Underground Cable - non metallic - Economic Life	23.08	23.08
Construction Investment, sq ft 2	85.00	85.00	Buried - metallic - Economic Life	19.90	19.90
Construction Investment, sq ft 3	100.00	100.00	Buried - non metallic - Economic Life	23.86	23.86
Construction Investment, sq ft 4	125.00	125.00	Intrabuilding Cable - metallic - Economic Life	15.71	15.71
Construction Investment, sq ft 5	150.00	150.00	Intrabuilding Cable - non metallic - Economic Life	23.62	23.62
Land Investment, sq ft 1	5	5	Conduit Systems - Economic Life	50.92	50.92
Land Investment, sq ft 2	8	8	Motor Vehicles - Net Salvage %	0.1121	0.1121
Land Investment, sq ft 3	10	10	Garage Work Equipment - Net Salvage %	-0.1071	-0.1071
Land Investment, sq ft 4	15	15	Other Work Equipment - Net Salvage %	0.0321	0.0321
Land Investment, sq ft 5	20	20	Buildings - Net Salvage %	0.0187	0.0187
OC-48 ADM, installed, 48 DS-3s	50,000	50,000	Furniture - Net Salvage %	0.0688	0.0688
OC-48 ADM, installed, 12 DS-3s	40,000	40,000	Office Support Equipment - Net Salvage %	0.0691	0.0691
OC-3/DS-1 Terminal Multiplexer, installed, 84 DS-1s	26,000	26,000	Company Comm. Equipment - Net Salvage %	0.0376	0.0376
Investment per 7 DS-1s	500	500	General Purpose Computer - Net Salvage %	0.0373	0.0373
Number of Fibers	24	24	Digital Electronic Switching - Net Salvage %	0.0297	0.0297

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User Adjustable Inputs

Switching Input	Current Scenario Value	Default Scenario Value	Expense Input	Current Scenario Value	Default Scenario Value
Pigtrails, per strand	60	60	Operator Systems - Net Salvage %	-0.0082	-0.0082
Optical Distribution Panel	1,000	1,000	Digital Circuit Equipment - Net Salvage %	-0.0169	-0.0169
EF&I, per hour	55	55	Public Telephone Terminal Equipment - Net Salvage %	0.0797	0.0797
EF&I hours	32	32	Poles - Net Salvage %	-0.8998	-0.8998
Regional Labor Adjustment Factor (see Labor Inputs)	1	1	Aerial Cable - metallic - Net Salvage %	-0.2303	-0.2303
Channel Bank Investment, per 24 lines	5,000	5,000	Aerial Cable - non metallic - Net Salvage %	-0.1753	-0.1753
Fraction of SA Lines Requiring Multiplexing	-	-	Underground Cable - metallic - Net Salvage %	-0.1826	-0.1826
Regenerator, installed	15,000	15,000	Underground Cable - non metallic - Net Salvage %	-0.1458	-0.1458
Regenerator spacing, miles	40	40	Buried - metallic - Net Salvage %	-0.0839	-0.0839
DCS installed, per DS-3	30,000	30,000	Buried - non metallic - Net Salvage %	-0.0858	-0.0858
Transmission Terminal Fill (DS-0 level)	0.90	0.90	Intrabuilding Cable - metallic - Net Salvage %	-0.1574	-0.1574
Fiber Investment, fiber cable	3.50	3.50	Intrabuilding Cable - non metallic - Net Salvage %	-0.1052	-0.1052
Fiber, number of strands per ADM	4.00	4.00	Conduit Systems - Net Salvage %	-0.1034	-0.1034
Fiber Investment, buried fraction	0.95	0.95	Furniture - Capital Costs - % assigned per line	0.0000	0.0000
Fiber Investment, buried placement	1.77	1.77	Furniture - Expenses - % assigned per line	0.0000	0.0000
Fiber Investment, buried sheath addition	0.20	0.20	Office Equipment - Capital Costs - % assigned per line	0.0000	0.0000
Fiber Investment, conduit	0.60	0.60	Office Equipment - Expenses - % assigned per line	0.0000	0.0000
Fiber, spare tubes per route	1.00	1.00	General Purpose Computer - Capital Costs - % assigned per line	0.0000	0.0000
Fiber Investment, conduit placement	16.40	16.40	General Purpose Computer - Expenses - % assigned per line	0.0000	0.0000
Fiber, pullbox spacing	2,000.00	2,000.00	Motor Vehicles - Capital Costs - % assigned per line	0.0000	0.0000
Fiber Investment, pullbox investment	500.00	500.00	Motor Vehicles - Expenses - % assigned per line	0.0000	0.0000
Fiber, aerial fraction	0.05	0.05	Buildings - Capital Costs - % assigned per line	0.0000	0.0000
Fiber, pole spacing, feet	150.00	150.00	Buildings - Expenses - % assigned per line	0.0000	0.0000
Fiber Investment, pole material	201.00	201.00	Garage Work Eqpt. - Capital Costs - % assigned per line	0.0000	0.0000
Fiber Investment, pole labor (basic)	216.00	216.00	Garage Work Eqpt. - Expenses - % assigned per line	0.0000	0.0000
Fraction Poles and Buried/Underground Placement Common with Feed	0.75	0.75	Other Work Eqpt. - Capital Costs - % assigned per line	0.0000	0.0000
Fraction of Aerial Structure Assigned to Telephone	0.50	0.50	Other Work Eqpt. - Expenses - % assigned per line	0.0000	0.0000
Fraction of Buried Structure Assigned to Telephone	1.00	1.00	Network Operations - % assigned per line	0.0000	0.0000
Fraction of Underground Structure Assigned to Telephone	1.00	1.00	Other Taxes - % assigned per line	0.0000	0.0000
Multiplicative EO Switching Investment Term	-14.922	(14.92)	Variable Overhead - % assigned per line	0.0000	0.0000
Threshold value for off-ring wire centers, total lines	1	1.00			
Remote-host fraction of interoffice traffic -- remote	0.1	0.10			
Host-remote fraction of interoffice traffic -- host	0.05	0.05			
Maximum nodes per ring	16	16.00			
Use host - remote assignments	TRUE	FALSE			
Ring transiting traffic factor	0.4	0.40			
Intertandem fraction of tandem trunks (additive)	0.1	0.10			
Equivalent facility investment, per DS-0	138.08	138.08			
Equivalent terminal investment, per DS-0	111.62	111.62			
Switch line size - 1	0	-			
Switch line size - 2	640	640.00			
Switch line size - 3	5000	5,000.00			
Switch line size - 4	10000	10,000.00			
BOC standalone fixed inv - 1	428296	428,296.00			
BOC standalone fixed inv - 2	428296	428,296.00			
BOC standalone fixed inv - 3	428296	428,296.00			
BOC standalone fixed inv - 4	428296	428,296.00			
BOC host fixed inv - 1	428296	428,296.00			
BOC host fixed inv - 2	468700	468,700.00			
BOC host fixed inv - 3	468700	468,700.00			
BOC host fixed inv - 4	468700	468,700.00			
BOC remote fixed inv - 1	142384	142,384.00			

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User Adjustable Inputs

Switching Input	Current Scenario Value	Default Scenario Value	Expense Input	Current Scenario Value	Default Scenario Value
BOC remote fixed inv - 2	142384	142,384.00			
BOC remote fixed inv - 3	142384	142,384.00			
BOC remote fixed inv - 4	142384	142,384.00			
BOC standalone per line inv - 1	76.56	76.56			
BOC standalone per line inv - 2	76.56	76.56			
BOC standalone per line inv - 3	76.56	76.56			
BOC standalone per line inv - 4	76.56	76.56			
BOC host per line inv - 1	76.56	76.56			
BOC host per line inv - 2	76.56	76.56			
BOC host per line inv - 3	76.56	76.56			
BOC host per line inv - 4	76.56	76.56			
BOC remote per line inv - 1	76.56	76.56			
BOC remote per line inv - 2	76.56	76.56			
BOC remote per line inv - 3	76.56	76.56			
BOC remote per line inv - 4	76.56	76.56			
ICO standalone fixed inv - 1	428296	428,296.00			
ICO standalone fixed inv - 2	468700	468,700.00			
ICO standalone fixed inv - 3	428296	428,296.00			
ICO standalone fixed inv - 4	428296	428,296.00			
ICO host fixed inv - 1	468700	468,700.00			
ICO host fixed inv - 2	468700	468,700.00			
ICO host fixed inv - 3	468700	468,700.00			
ICO host fixed inv - 4	468700	468,700.00			
ICO remote fixed inv - 1	142384	142,384.00			
ICO remote fixed inv - 2	142384	142,384.00			
ICO remote fixed inv - 3	142384	142,384.00			
ICO remote fixed inv - 4	142384	142,384.00			
ICO standalone per line inv - 1	76.56	76.56			
ICO standalone per line inv - 2	76.56	76.56			
ICO standalone per line inv - 3	76.56	76.56			
ICO standalone per line inv - 4	76.56	76.56			
ICO host per line inv - 1	76.56	76.56			
ICO host per line inv - 2	76.56	76.56			
ICO host per line inv - 3	76.56	76.56			
ICO host per line inv - 4	76.56	76.56			
ICO remote per line inv - 1	76.56	76.56			
ICO remote per line inv - 2	76.56	76.56			
ICO remote per line inv - 3	76.56	76.56			
ICO remote per line inv - 4	76.56	76.56			

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Switching Input	Current Scenario		Expense Input	Current Scenario	
	Value	Default Scenario Value		Value	Default Scenario Value