

Switched Access customer locations are based on a PNR national access-line model, census household data, and a road surrogate algorithm used to place that data uniformly along roads in census blocks.²² Special access lines are assigned to particular customer locations based on a Synthesis model algorithm.

When it adopted the customer location algorithm, the Commission found that the preferred method of determining customer locations was to obtain the actual geo-coded customer locations from the carriers.²³ At that time, the Commission concluded that it could not obtain the relevant information from the carriers. However such information is now regularly maintained and available for the carriers. In several cases, parties have been able to obtain the geo-coded customer information from carriers. Appendix B contains the data request that AT&T propounded on Verizon, and that Verizon responded to in the Verizon California UNE case. That data request became a template for securing similar information in other cases.²⁴ Given that carriers are maintaining the relevant geo-coded customer location data for both switched and special access lines, OPA recommends that the Commission secure that information once a year in conjunction with the carriers filing of their December lines.²⁵ OPA further recommends that the newly obtained customer location data, together with December line counts, should be immediately entered into the Synthesis model, and used to re-run the model. Such action will enhance the accuracy of the model output, and does not have to wait for the Commission to adopt a revised Synthesis model.

²² Inputs Order, §§ 36-62.

²³ *Id.*, § 36.

²⁴ CLEC Data Request No. CL-VZN-049, MI PSC Case No. U-15210; Staff Data Request No. 2-2, DE PSC Docket No. 08-194; OCA Data Request Set III-2, PA PUC Docket NO. I-00040105.

²⁵ The December line counts filed on July 31 of the following year. 47 C.F.R. 36.611(h).

E. Equipment Costs

The Commission adopted costs associated with the purchase of equipment and facilities in November 1999.²⁶ The adopted costs most likely reflect actual 1998 equipment and facility cost. Obviously, those costs are out of date. The OPA recommends that the Commission adopt a two-step approach to update the equipment and facilities costs. First, the Commission can trend those costs into current values by using the C.A. Turner Telephone Plant Indices. These Indices are commonly used by telephone carriers. The new cost values, along with the new line counts and customer-location data could be used to generate an immediate model run. Second, the Commission should obtain information regarding the current prices of the equipment and facilities used by the model. Given the Commission's work load, OPA recommends that every three years the Commission obtain the prices of the equipment and facilities used in the model, and during the intervening years, use the Plant Indices to update these costs.

VI. COMMENTS OF THE VERMONT PUBLIC SERVICE BOARD, THE VERMONT DEPARTMENT OF PUBLIC SERVICE AND THE MAINE PUBLIC UTILITIES COMMISSION (VERMONT-MAINE)

The Vermont-Maine comments identify a number of important issues. In particular, those comments attempt to define a reasoned starting-point for determining support, i.e., the net subscriber cost methodology. However, because of substantial data problems, the OPA recommends that the Commission not adopt the net subscriber cost methodology. Importantly, the Vermont-Maine comments highlight the need to support not only rate comparability, but also service comparability. The Vermont-Maine comments point out that the current forward-looking mechanism does not provide carriers with an incentive to provide advanced services to consumers. Hence, the current forward-looking mechanism must be modified in order to create

²⁶ Inputs Order.

an incentive to provide advance broadband services. OPA agrees with the Vermont-Maine observations regarding broadband services and urges the Commission to adopt the OPA recommendations and establish a broadband service provision prerequisite for obtaining model support.

A. Net Subscriber Cost Methodology

The Vermont-Maine comments define the net subscriber cost as the difference between total cost and other revenue, divided by switched access lines. According to the comments, total cost could equal total network embedded or total network forward-looking cost. Other revenue is all non-basic local exchange revenue. Other revenue includes net intercarrier revenue, special access revenue and customer revenue for non-USF services such as Caller ID or Call Waiting. Support would be a function of the difference between a carrier's net subscriber cost and a benchmark. The purpose of the net subscriber cost calculation is to establish a net amount that would need to be supported from universal service funds. It is calculated as 'cost net of revenue from other services' because the revenue from other services that use the network should be relied upon to pay for the network before requesting universal service funding. The Vermont-Maine comments argue that, as compared to a rate comparison, it is preferable to use the net subscriber cost estimates -- because a rate comparison can be biased by a number of state rate actions, such the level of access charges, the size of the calling area, contribution from state toll services, the amount of broadband service cost collecting through local rates, and any requirements to bundle vertical features with basic service. While we agree with the Vermont-Maine comments that local rates should not be the starting point for support calculations -- due to the fact that rates are affected by decisions regarding the list of items provided by the comments -- we need to point out that other revenue used to determine the net subscriber cost is also

affected by those same concerns. That is, if loop cost is assigned to local service, then a carrier could reduce the revenue from DSL service. If some vertical services are included in the basic package, then the amount of vertical service revenue is affected. If an affiliate of a carrier is providing video services, it is necessary to determine the rate that video affiliate should pay the carrier for the use of the loop; and if local and other services are bundled together then it is necessary to make an administrative decision on how much of the bundle revenue should be counted as other revenue. For these reasons, OPA asserts that it will be administratively extremely difficult to adopt the net subscriber methodology plan. Instead, OPA has recommended adopting the HCL loop support algorithm for large carriers. That algorithm, in principle, recognizes, if imperfectly, revenue from other services. More importantly, it is administratively easy to adopt and use. Hence, the OPA's recommendation recognizes the same issues that the net subscriber cost methodology was designed to address. However, the OPA recommendation can be implemented easily, whereas the Vermont-Maine recommendation is difficult, if not impossible, to implement.

B. Service Comparability

OPA agrees with the Vermont-Maine comments regarding the need to address service comparability. Furthermore, OPA agrees with the suggestion in those comments that the model support mechanism creates lag in the provision of advanced services because "when a non-rural carrier upgrades loop or feeder plant to provide DSL, none of the model inputs is affected and the company must recover all incremental costs from the consumers. Consequently, non-rural carriers have an incentive to derive as much revenue as possible from existing plant, rather than to upgrade to provide access to advanced services."²⁷ Moreover, OPA has also observed that rural Maine companies have significantly more DSL deployment in Maine than

²⁷ Vermont-Maine Comments, March 27, 2006, page 13.

Verizon/FairPoint. A similar pattern has also been observed in Michigan, and we believe that pattern is the same across the United States.²⁸

To ensure that service comparability will be achieved, OPA has recommended that a service comparability prerequisite be added to the model mechanism. The Vermont-Maine comments include a rationale and evidence that supports the OPA recommendation.

VII. SHOULD THE COMMISSION DEFINE REASONABLE COMPARABILITY BY USING COSTS (OR COSTS AND REVENUE) AS A PROXY FOR RATES? IF SO, HOW CAN WE EXPLAIN THE RELATIONSHIP BETWEEN COSTS AND THE RESULTING RATES TO THE SATISFACTION OF THE COURT?

The OPA recommends that the Commission should define reasonable comparability by using costs and revenue, rather than relying on rates. The rationale for using costs and revenue is that rate comparability depends on the ability to offset cost differentials with either with universal service funds, or with revenue from other sources. Since the passage of the 1996 Telecommunications Act, the history of rate comparability has been one of substituting explicit universal support flows for implicit support flows. That is, rate comparability prior to the Act was maintained mostly through rate averaging at the state and federal levels supplemented by access charge revenue and a small but significant universal service program. Since the Act, support from federal access charge revenue has been transferred into the Interstate Common Line Support (ICLS) and the Interstate Access Support (IAS) mechanisms.

Support from rate averaging still exists at the federal and state levels. At the federal level, rate averaging appears in the form of maintaining the SLC rate per study area for all

²⁸ Initial testimony of Dr. Robert Louhe on behalf of TelNet Worldwide, Inc., ACD Telecom, Inc., TC3 Telecom, Inc., Michigan Access, Inc., JAS Networks, Inc., DayStarr, LLC, Clear Rate Communications, Inc., and Arialink Telecom. (the "CLECs"), in the matter on the Commission's own motion, to review the total element long-run incremental costs and the total service long-run incremental costs for Verizon North Inc. and Contel of the South, Inc. d/b/a Verizon North Systems, to provide telecommunications services, Michigan PSC Case No. U-15210, filed April 7. The FCC staff can confirm this pattern by analyzing the Form 477 data.

residential and single-line business customers. This one-rate policy has been maintained by carriers even though the carriers have the right to de-average SLC rates. The Commission anticipated that that de-averaging would occur when it allowed the residential and single-line business rate cap to increase to \$6.50.²⁹ During that proceeding, it was shown that where the SLC rate was greater than the SLC cost, residential and single-line business customers provided carriers with revenue above cost of \$1.13 billion; and in areas where the SLC rate was below the SLC cost, revenues were less than cost by \$472 million. Thus, under rate averaging, low-cost customers completely covered the revenue needs of high-cost customers, and supplied the carriers with an additional \$641 million of revenue to use for other purposes.³⁰

At the state level, state rate-making principles include average rates for all customers within each study area, rates increasing with the number of customers in the local calling areas (value of service pricing), and small rate increases associated with high-cost areas. In our experience, only one state, Wyoming, has substantially higher rates in rural areas than in its non-rural areas. In Pennsylvania, for example, the Verizon-Pennsylvania's basic local service residential rates in Philadelphia and Pittsburgh are either \$16.06 or \$16.36. In all areas of the state, rates vary from \$11.69 to \$15.14, with the lower rates associated with the more rural areas and the higher rates associated with the suburbs in the metropolitan areas and the medium-sized cities. A comparison of Verizon-Pennsylvania rates to the Synthesis model cost is shown in Appendix C. The rate curve has a gradual upper drift, while the cost curve exhibits very high cost in rural areas, declining sharply and becoming flat at a cost slightly below the rate curve in

²⁹ See 47 C.F.R. § 69.104(r); and In the Matter of Cost Review Proceeding for Residential and Single-Line Business Subscriber Line Charge (SLC) Caps and Access Charge Reform, CC Docket No. 96-262, *Order*, FCC 02-161, released June 5, 2002 (SLC Costing Order), ¶ 18.

³⁰ In the Matter of Access Charge Reform, CC Docket No. 96-262, Comments of the National Association of State Utility Consumer Advocates (NASUCA), filed January 24, 2002, pages 42-43.

the urban areas. The upshot of that relationship is that urban customers are supporting rural customers.

Rate averaging and value-of-service pricing can support rate comparability when there is a monopoly provider of local service. However, if alternative providers of local service enter the low-cost areas, the support flow generated by rate averaging and value-of-service pricing would no longer be sustainable. These principles were the rationales for changes in many universal service programs. But, because of the ILEC line growth that occurred immediately following the passage of the Telecommunications Act of 1996 and the boom and bust of UNE-P competition, rate averaging appeared to be sustainable. Currently, however, an alternative provider -- the cable telephone company -- appears to be making significant inroads into the basic service market. ILECs are losing market share. Therefore, it has now become necessary to move away from rate averaging as the support for rate comparability, and to increase the size of the universal service fund. That increase should be sized according to the cost differential between urban and rural areas, while also taking into account alternative revenue flows that should also support network costs. Thus, it is the cost differentials that must be the immediate basis for determining support. Moreover, while it is theoretically correct to measure the alternative revenue flows directly and subtract those alternative revenue flows from the cost differential -- as the OPA has noted above -- there are many administrative difficulties in measuring the alternative revenue flows. Therefore, in order to consider those alternative revenue flows, OPA has recommended that the Commission adopt the HCL loop large-carrier support algorithm.

VIII. CONCLUSION

For the foregoing reasons, the Maine Office of Public Advocate recommends that the Commission modify the non-rural support mechanism as specified in these comments.

Respectfully submitted,
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Dated: May 8, 2009

State	SAC	NON-RURAL STUDY AREAS	rural lines	support per line	total support
NC	230491	N.ST. DBA N. ST.COMM	-	-	-
ak	613000	ACS OF ANCHORAGE	-	-	-
AL	259789	CENTURYTEL-AL-NORTH	7,527	57.83	5,223,600
AL	259788	CENTURYTEL-AL-SOUTH	6,718	55.55	4,478,368
AL	255181	SO CENTRAL BELL-AL	61,047	28.32	20,748,276
AR	405211	SOUTHWESTERN BELL-AR	60,432	25.91	18,787,232
AZ	455101	QWEST CORP-AZ	158,661	7.06	13,434,520
CA	542302	VERIZON CA(CONTEL)	155	316.71	589,073
CA	542319	VERIZON-CA (GTE)	907	60.59	659,432
CA	545170	PACIFIC BELL	1,272,051	0.89	13,657,060
CA	542334	SUREWEST TEL.	-	-	-
CO	465102	QWEST CORP-CO	-	-	-
CT	135200	SOUTHERN NEW ENGLAND	207,978	1.89	4,726,982
DC	575020	VERIZON WA, DC INC.	-	-	-
DE	565010	VERIZON DELAWARE INC	101,020	1.78	2,153,313
FL	210328	VERIZON FLORIDA	329,909	0.49	1,934,734
FL	215191	SOUTHERN BELL-FL	627,102	0.84	6,349,693
GA	225192	SOUTHERN BELL-GA	365,156	5.55	24,340,928
HI	623100	HAWAIIAN TELCOM, INC	3,593	22.44	967,685
IA	355141	QWEST CORP-IA	155,089	2.49	4,628,224
ID	475103	QWEST CORP-ID	-	-	-
IL	341036	VERIZON N-IL(CONTEL)	30,781	24.89	9,192,513
IL	341015	VERIZON NORTH-IL	93,361	26.42	29,600,493
IL	345070	ILLINOIS BELL TEL CO	655,059	0.51	4,012,773
IN	320779	VERIZON N-IN(CONTEL)	129,571	9.35	14,540,730
IN	320772	VERIZON N-IN	110,035	14.25	18,822,267
IN	325080	INDIANA BELL TEL CO	629,008	0.81	6,144,866
KS	415214	SOUTHWESTERN BELL-KS	142,752	6.90	11,814,059
KY	265061	CINCINNATI BELL-KY	15,964	15.92	3,050,070
KY	269690	WINDSTREAM LEXINGTON	19,845	33.64	8,009,854
KY	265182	SO CENTRAL BELL-KY	304,042	12.05	43,971,854
LA	275183	SO CENTRAL BELL-LA	117,603	29.04	40,984,650
MA	115112	VERIZON MASS	194,043	1.53	3,556,515
MD	185030	VERIZON MARYLAND INC	342,828	1.52	6,264,097
ME	105111	NORTHERN NEW ENGLAND TELEPHONE OPERATIONS L	329,656	5.70	22,543,844

State	SAC	NON-RURAL STUDY AREAS	rural lines	support per line	total support
MI	310695	VERIZON NORTH-MI	682,745	3.03	24,838,375
MI	315090	MICHIGAN BELL TEL CO	1,194,036	1.16	16,556,482
MN	365142	QWEST CORP-MN	597,201	0.89	6,403,853
MO	429784	CENTURYTEL-MO CEN	1,733	38.47	800,040
MO	429787	CENTURYTEL-MO SW	20,892	49.99	12,531,604
MO	425213	SOUTHWESTERN BELL-MO	198,069	10.69	25,403,033
MS	285184	SO CENTRAL BELL-MS	94,292	27.67	31,303,829
MT	485104	QWEST CORP-MT	-	-	-
NC	230509	VERIZON S-NC(CONTEL)	25,958	19.77	6,157,827
NC	230479	VERIZON SOUTH-NC	614	19.63	144,606
NC	235193	SOUTHERN BELL-NC	109,851	8.23	10,850,510
ND	385144	QWEST CORP-ND	11,941	26.13	3,743,513
NE	371568	WINDSTREAM NE	92,153	15.63	17,289,669
NE	375143	QWEST CORP-NE	39,974	23.73	11,382,927
NH	125113	NORTHERN NEW ENGLAND TELEPHONE OPERATIONS L	114,033	9.37	12,816,811
NJ	165120	VERIZON NEW JERSEY	1,797,388	-	-
NM	495105	QWEST CORP-NM	1,400	94.77	1,592,129
NV	552348	EMBARQ (NV)	3,852	50.22	2,321,556
NV	555173	NEVADA BELL	12,362	111.09	16,479,984
NY	155130	VERIZON NEW YORK	3,018,586	0.20	7,199,394
NY	150121	FRONTIER-ROCHESTER	-	-	-
OH	305062	CINCINNATI BELL-OH	24,540	4.09	1,204,065
OH	300615	VERIZON NORTH-OH	17,645	37.52	7,943,594
OH	305150	OHIO BELL TEL CO	658,112	0.78	6,158,997
OH	300665	WINDSTREAM OH	-	-	-
OK	435215	SOUTHWESTERN BELL-OK	300,766	3.21	11,599,662
OR	532416	VERIZON N'WEST-OR	-	-	-
OR	535163	QWEST CORP-OR	10,284	40.33	4,977,542
PA	175000	VERIZON PENNSYLVANIA	1,624,889	0.55	10,653,438
PA	170169	VERIZON NORTH-PA	258,081	2.84	8,780,234
PR	633200	P R T C - CENTRAL	-	-	-
PR	633201	PUERTO RICO TEL CO	-	-	-
RI	585114	VERIZON RHODE ISLAND	67,654	1.03	835,567
SC	240479	VERIZON SOUTH-SC	-	-	-
SC	245194	SOUTHERN BELL-SC	149,198	4.34	7,754,784

State	SAC	NON-RURAL STUDY AREAS	rural lines	support per line	total support
SD	395145	QWEST CORP-SD	131,265	1.29	2,027,685
TN	295185	SO CENTRAL BELL -TN	457,487	4.34	23,848,522
TX	442154	GTE-SW VERIZON-TX	32,685	39.32	15,423,783
TX	442080	GTE SW VERIZON-TX	54,159	45.68	29,689,148
TX	445216	SOUTHWESTERN BELL-TX	1,520,267	1.13	20,607,715
UT	505107	QWEST CORP-UT	161,331	0.42	822,180
VA	195040	VERIZON VIRGINIA INC	364,482	6.66	29,142,937
VA	190233	VERIZON S-VA(CONTEL)	141,970	15.75	26,827,972
VT	145115	TELEPHONE OPERATION COMPANY OF VERMONT LLC	84,936	19.64	20,016,427
WA	522416	VERIZON N'WEST-WA	8,196	43.96	4,323,673
WA	525161	QWEST CORP-WA	73,741	11.32	10,021,372
WA	522449	VERIZON N'WEST-WA	-	-	-
WI	330886	VERIZON NORTH-WI	209,238	11.75	29,513,737
WI	335220	WISCONSIN BELL	501,154	0.42	2,549,192
WV	205050	VERIZON W VA INC.	187,418	16.33	36,733,327
WY	515108	QWEST CORP-WY	-	-	-
		Total	21,528,481		864,469,401

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Rulemaking on the Commission's Own Motion to
Govern Open Access to Bottleneck Services and
Establish A Framework for Network Architecture
Development of Dominant Carrier Networks

Rulemaking 93-04-003
(Filed April 7, 1993)

Investigation on the Commission's Own Motion into
Open Access and Network Architecture Development of
Dominant Carrier Networks

Investigation 93-04-002
(Filed April 7, 1993)

(Verizon Permanent UNE Phase)

**FIRST SET OF DATA REQUESTS OF
AT&T COMMUNICATIONS OF CALIFORNIA, INC.
AND WORLDCOM INC. TO
VERIZON CALIFORNIA, INC.**

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**FIRST SET OF DATA REQUESTS OF
AT&T COMMUNICATIONS OF CALIFORNIA, INC.
AND WORLDCOM INC. TO
VERIZON CALIFORNIA, INC.**

AT&T Communications of California, Inc. ("AT&T") and WorldCom, Inc. ("WorldCom") hereby submit their 1st set of data requests to Verizon California, Inc. ("Verizon") in the above-captioned proceeding. Please provide any objections to, and an indication of whether Verizon will respond to, these data requests no later than March 27, 2003. Please provide full and complete responses to these data requests no later than April 3, 2003.

1. **DEFINITIONS AND INSTRUCTIONS**

A. **Definitions**

Unless a specific request indicates otherwise, the following definitions are applicable in providing the requested information:

1. "Verizon" means Verizon California, Inc., its subsidiaries, affiliates and parent companies, agents, servants, attorneys, investigators, employees, ex-employees, other representatives, individuals providing declarations or testimony on behalf of Verizon, and others who are in possession of, or who may have obtained information for or on behalf of, any of the above-mentioned persons or entities.
2. "You," "your" or "your organization" means Verizon and includes every person and/or entity acting with or on behalf of the person or entity to whom the data requests are directed, including, without limitation, all parent, subsidiary, affiliate, and other corporations of Verizon.
3. "Describe," when used with respect to an occurrence, event, activity, or any transaction, means to provide a complete and detailed list of its nature, its time and place and to identify the persons present and involved. The term "describe," when used with respect to a document, means to provide a complete and detailed description of its nature and contents. The term "describe," when used with respect to a communication other than a document, means to provide a complete and detailed description of its nature and contents.
4. "Document," "documents" and/or "documentation" means all written, recorded or graphic matters, however produced or reproduced, whether or not privileged. This definition includes, but is not limited to, any and all originals, copies, or drafts of any and all of the following: records, notes, electronic mail, summaries, schedules, contracts or diaries, reports, forecasts or appraisals, memoranda of telephone or in person conversations by or with any person, or any other memoranda, letters, telegraphs, telexes or cables prepared, drafted, received or sent, tapes, transcripts or recordings, photographs, pictures, or film, computer programs, retrievable information in computer storage, computer data, or other graphic, symbolic, recorded or written materials of any nature whatsoever. Any document or documentation which contains any comment, notation, addition, insertion, or marking of any kind which is not part of another document, or any document or documentation which does not contain any comment, notation,

addition, insertion, or marking of any kind which is part of another document, is to be considered a separate document. This definition includes, but is not limited to, all "documents" as defined in California Evidence Code Section 250. All electronic mail and any other retrievable information in computer storage should be produced in printed form. Verizon should specify any instances where it withholds material that it does not consider to be a "document" and/or "documentation."

5. "Identify," "identity" or "identification," when used in reference to a document, means to state the type of document (e.g., computer stored information, microfilm, letter, memorandum, policy circular, minute book, telegram, chart, etc.), or some other means of identifying it, its present location and custodian, a description and the date on which it was made, prepared or received. The term "identify" when used with respect to an individual means to state the person's full name, present position and business affiliation, the current business address and telephone number, or if not known, the person's current home address and telephone number (if unknown, then last known address and telephone number). The term "identify" when used with respect to a business entity means to furnish the business entity's name and address.
6. "Person" means, in the plural as well as the singular, any natural person, association, partnership, corporation, or other form of legal entity, including all representatives of any such person.
7. "Refer to" or "relate to," or any form of those words, means to analyze, appraise, assess, characterize, comment on, concern, consider, constitute, contain, deliberate, delineate, describe, discuss, embody, evaluate, evidence, explicate, identify, memorialize, mention, substantiate, refer to, pertain to, recommend, record, reflect, report on, set forth, show, summarize, or study, in whole or in part, the subject matter of the request.
8. "The Act" as used herein shall mean the Telecommunications Act of 1996.

B. Instructions

1. In response to each data request, furnish all information in the possession, custody or control of Verizon including, but not limited to, information possessed by your attorneys and any other person or entity acting in your interest or on your behalf, and not merely information known of your own personal knowledge.
 2. In response to each data request, please restate the entire data request on an individual page preceding the information or document(s) responsive to that request.
 3. If any document is withheld on the ground of privilege, please produce a log setting forth the date of the document, the author(s), the recipient(s), a summary of the document generally describing its contents, the basis for the privilege asserted, and such additional information as is necessary to demonstrate the privileged nature of the document.
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4. Identify each person providing information used in answering each data request. Such information shall include the full name, present business address, occupation title, employer and organization for each such person. Please also indicate the information provided by each identified person.
 5. These data requests shall be deemed to be continuing in character so as to require supplementary answers to the requests and further production of documents if you obtain additional information or documents between the initial production or response and the time of hearing.
 6. Where the response includes documents please supply both paper and **electronic formats** when available. When a request pertains to one or more cost studies and asks for original source documents and complete underlying work papers, please provide support for all the underlying assumptions, including subject matter expert opinions and any underlying source documents relied on or referred to by them, relied on or referred to in any way to support the inputs and/or outputs of the study. When the request calls for data and that data is maintained in a database, please include the database, all queries run against the database, all extracts from the database and documentation that explains the meaning of the data (*i.e.*, documentation that describes the meaning of the various fields in the database, all acronyms used, etc.). If data is available in an electronic format, such data should be provided in an electronic format that allows data manipulation (*e.g.*, spreadsheet, database, not pdf).
 7. If any material or information is redacted from a document please so indicate on the document and in your written response. Please produce a log identifying the document, generally describing the redacted material, providing the basis for the privilege asserted, and providing such additional information as is necessary to demonstrate the privileged nature of the redacted material.
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DATA REQUESTS

Data Request No. 1: For ALL loops that are part of Verizon's outside plant in California, regardless of service type (i.e., regardless of whether the loop is Verizon's retail service, private line, special access, Official Company Service, UNE, wholesale, etc.), please provide the data described below. Please provide the requested data in a single file, preferably in database format. Please note that the file should include a unique record of the number of lines for each customer/location for each service type. I.e., If a single customer has multiple services, please identify each service on a separate line identified with the same CustomerID. Please also note that each loop should be reported once and only once.

The following data should be produced for each loop, in the following fields:

Name	Field Format	Description
CustomerID*	Alphanumeric	Customer identification for rolling up records. Could be name or other identification.
Street	Alphanumeric	Street address (service address)
City	Alpha	Full city name
State	2 letter abbreviation	State
Zip	5 digit numeric	Zip code
CLLI	8 digit alphanumeric	Serving wire center that loop physically terminates at as an 8 digit CLLI code. For foreign exchange lines, the CLLI should be for the location of the physical termination of the loop on the MDF or its equivalent – not the wire center that is providing dial tone.
Switched	True/False	Logical identifier indicating if the service is a switched service (switched = true, nonswitched = false)
FX Indicator	True/False	Logical identifier indicating if the service is a foreign exchange service (fx = true, otherwise = false)
Special Access Indicator	True/False	Logical identifier indicating if the non-switched service is a special access service (special access = true, otherwise = false)
IOT Indicator	True/False	Logical identifier indicating if the service requires Verizon interoffice transport (including UNE transport) (requires IOT = true, otherwise = false)
Fiber Premise Terminator Indicator	True/False	Logical identifier indicating if the service terminates on fiber at the customer premises (terminates fiber at the customer premises = true, otherwise = false)
Intra-building Indicator	True/False	Indicates whether the FDI (feeder-distribution interface) serving the customer is within or immediately adjacent to the building within which the customer is located such that the distribution cable is non-existent or consists entirely of intra-building wiring. (Intra-building wiring /no

Name	Field Format	Description
		distribution = true; distribution = false).
Distribution Facility Indicator	True/False	When the Intra-building indicator is true, indicates whether Verizon-owned intrabuilding cable is part of the service. (Verizon owned = true; otherwise = false.)
Multiple Service Indicator	True/False	Logical identifier applicable to services terminating fiber at the customer premises that indicates if the same physical terminating fiber(s) are used to carry multiple services (fiber terminating at the customer premises carries multiple services = true, otherwise = false)
DSL Indicator	True/False	Logical identifier indicating if DSL services are provided on the loop in combination with POTS. (DSL = True; no DSL = not true).
NlinesType	Numeric	Number of lines for this Ltype for this customer and location
Ltype	Alpha	Service type indicator. Indicate which of descriptions a-y below identifies the type of service provided on the loop.

* Service type indicator (Verizon can use any unique numeric indicator for each of the following service types as long as it provides a key to those indicators):

- a. Switched Basic Residential lines (all voice grade service lines including retail, UNE (all types including UNE-P) and resale and including lines with DSL service and POTS on the same loop)
- b. Switched Basic Business lines (all voice grade service lines other than Centrex lines including retail, OCS, UNE (all types including UNE-P) and resale and including lines with DSL service and POTS on the same loop)
- c. Centrex lines
- d. Switched digital lines at below DS-1 rates (if more than one service rate is provided, identify each rate provided and indicate which rate is applicable to the corresponding loop).
- e. Switched DS-1 lines served by conventional T1 technology (other than ISDN PRI)
- f. Switched DS-1 lines served by HDSL (other than ISDN PRI)
- g. Switched DS-1 lines served by HDSL2 (other than ISDN PRI)
- h. Switched DS-1 lines served by g.shdsl (other than ISDN PRI)
- i. Switched DS-1 lines served by Fiber (other than ISDN PRI)
- j. All other switched DS-1 lines
- k. Payphone lines
- l. ISDN-PRI lines
- m. ISDN-BRI lines (or equivalent IDSL)
- n. Non-switched non-multiplexed digital (DS-0 or lower) and analog 2-wire lines
- o. Non-switched non-multiplexed digital (DS-0 or lower) and analog 4-wire lines
- p. Non-switched 2-wire UNE-L lines (including lines used to support xDSL)
- q. Non-switched 4-wire UNE-L Lines (including lines used to support xDSL)
- r. Non-switched DS-1 lines served by conventional T1 technology
- s. Non-switched DS-1 lines served by HDSL

- t. Non-switched DS-1 lines served by HDSL2
- u. Non-switched DS-1 lines served by g.shdsl
- v. Non-switched DS-1 lines served by Fiber
- w. All other non-switched DS-1 lines
- x. Switched DS-3 services
- y. Non-switched DS-3 services
- z. Analog PBX trunks
- aa. OCn (SONET) services
- bb. High-capacity optical services other than SONET and those included under "switched DS-3 services" and "nonswitched DS-3 services"
- cc. Other (with a basic service description)

Please note that all line counts should be provided on a service/physical facility basis (i.e., the total should not reflect voice grade equivalent line counts). Each physical pair should be counted once and only once. Each "other" service identified should have a unique numeric "Ltype."

Data Request No. 2: Please produce all queries, intermediate files, and work papers you used to obtain the data responsive to Data Request No. 1.

Data Request No. 3: Please produce any and all geocoded longitude and latitude data that can be used to determine customer locations, or can be used as a reasonable proxy for customer locations, in the territory served by Verizon in California (for example, actual customer locations, points on the street in front of customer locations, and/or drop terminals). For each location identified by the geocoded data, please provide the following data. Please provide the requested data in a single file, preferably in database format. Please note that the file should include a unique record of the number of lines for each location for each service type. I.e., if a single location has multiple services, please identify each service on a separate line identified with the same RecordID. Please also note that each loop should be reported once and only once.

The following data should be produced for each loop, in the following fields:

Name	Field Format	Description
RecordID*	Alphanumeric	Unique identification for rolling up records. Could be name or other identification.
Longitude	Numeric	The longitude associated with the customer location or proxy for the customer location
Latitude	Numeric	The latitude associated with the customer location or proxy for the customer location
CLLI	8 digit alphanumeric	Serving wire center that loop physically terminates at as an 8 digit CLLI code. For foreign exchange lines, the CLLI should be for the location of the physical termination of the loop on the MDF or its equivalent - not the wire center that is providing dial tone.
Switched	True/False	Logical identifier indicating if the service is a switched service (switched = true, nonswitched = false)
FX Indicator	True/False	Logical identifier indicating if the service is a foreign exchange service (fx = true, otherwise = false)

Name	Field Format	Description
Special Access Indicator	True/False	Logical identifier indicating if the non-switched service is a special access service (special access = true, otherwise = false)
IOT Indicator	True/False	Logical identifier indicating if the service requires Verizon interoffice transport (including UNE transport) (requires IOT = true, otherwise = false)
Fiber Premise Terminator Indicator	True/False	Logical identifier indicating if the service terminates on fiber at the customer premises (terminates fiber at the customer premises = true, otherwise = false)
Intra-building Indicator	True/False	Logical identifier indicating if the FDI (feeder-distribution interface) serving the customer is within or immediately adjacent to the building within which the customer is located such that the distribution cable is non-existent or consists entirely of intra-building wiring. (Intra-building wiring /no distribution = true; distribution = false).
Distribution Facility Indicator	True/False	When the Intra-building indicator is true, indicates whether Verizon-owned intrabuilding cable is part of the service. (Verizon owned = true; otherwise = false.)
Multiple Service Indicator	True/False	Logical identifier applicable to services terminating fiber at the customer premises that indicates if the same physical terminating fiber(s) are used to carry multiple services (fiber terminating at the customer premises carries multiple services = true, otherwise = false)
DSL Indicator	True/False	Logical identifier indicating if DSL services are provided on the loop in combination with POTS services. (DSL = True; no DSL = not true).
NlinesType	Numeric	Number of lines for this Ltype for this customer and location
Ltype	Alpha	Service type indicator. Indicate which of descriptions a-y below identifies the type of service provided on the loop.

* Service type indicator (Verizon can use any unique numeric indicator for each of the following service types as long as it provides a key to those indicators):

- a. Switched Basic Residential lines (all voice grade service lines including retail, UNE (all types including UNE-P) and resale and including lines with DSL service and POTS on the same loop)
- b. Switched Basic Business lines (all voice grade service lines other than Centrex lines including retail, UNE (all types including UNE-P) and resale and including lines with DSL service and POTS on the same loop)
- c. Centrex
- d. Switched digital lines at below DS-1 rates (if more than one service rate is provided, identify each rate provided and indicate which rate is applicable to the corresponding loop).

- e. Switched DS-1 lines served by conventional T1 technology (other than ISDN PRI)
- f. Switched DS-1 lines served by HDSL (other than ISDN PRI)
- g. Switched DS-1 lines served by HDSL2 (other than ISDN PRI)
- h. Switched DS-1 lines served by g.shdsl (other than ISDN PRI)
- i. Switched DS-1 lines served by Fiber (other than ISDN PRI)
- j. All other switched DS-1 lines
- k. Payphone lines
- l. ISDN-PRI lines
- m. ISDN-BRI lines (or equivalent IDSL)
- n. Non-switched non-multiplexed digital (DS-0 or lower) and analog 2-wire lines
- o. Non-switched non-multiplexed digital (DS-0 or lower) and analog 4-wire lines
- p. Non-switched 2-wire UNE-L lines (including lines used to support xDSL)
- q. Non-switched 4-wire UNE-L Lines (including lines used to support xDSL)
- r. Non-switched DS-1 lines served by conventional T1 technology
- s. Non-switched DS-1 lines served by HDSL
- t. Non-switched DS-1 lines served by HDSL2
- u. Non-switched DS-1 lines served by g.shdsl
- v. Non-switched DS-1 lines served by Fiber
- w. All other non-switched DS-1 lines
- x. Switched DS-3 services
- y. Non-switched DS-3 services
- z. Analog PBX trunks
- aa. OCn (SONET)services
- hb. High-capacity optical services other than SONET and those included under "switched DS-3 services" and "nonswitched DS-3 services"
- cc. Other (with a basic service description)

Please note that all line counts should be provided on a service/physical facility basis (i.e., the total should not reflect voice grade equivalent line counts). Each physical pair should be counted once and only once. Each "other" service identified should have a unique numeric "Type."

Data Request No. 4: Please describe in detail what the geocoded locations identified by Verizon in response to Data Request 3 are intended to represent (i.e. N ID location; corner of lot; center of street; drop, etc.).

Data Request No. 5: Please describe in detail the process that Verizon used to geocode the customer locations, or proxies for customer locations, it provided in response to Data Request No. 3..

Data Request No. 6: Please provide wire center boundaries in MapInfo format that match up with the customer locations and CLLI codes provided in Verizon's Response to Data Requests Nos. 1-3.

Data Request No. 7: For each and every customer location provided in Verizon's Response to Data Requests Nos. 1-3 that is identified as being terminated at a specific central office (represented by the CLLI code) but falls outside of that wire center's boundary file as provided in Verizon's Response to Data Request No. 6, please explain why the customer location is outside the boundary.

Data Request No. 8:
California:

Please provide the following for every Verizon switch in

- (a) 11-digit CLLI Code
- (b) Street address
- (c) City (full city name)
- (d) State
- (e) Zip code
- (f) geocoded longitude
- (g) geocoded latitude
- (h) switch type (i.e., host, remote, stand-alone, tandem)
- (i) identification of the host for each remote switch
- (j) identification of the tandem for each host or stand-alone switch
- (k) switch manufacturer
- (l) switch model

Data Request No. 9: For each California central office identify each inter-office facility by facility type (i.e. DS3, OCn) and state whether the facility is handling switched or non-switched services. The response should include the CLLI code for each office connected by the IOF.

Data Request No. 10:
data:

Please identify the Verizon databases that contain the following

- (a) Customer addresses (including but not limited to zip codes) for switched services
- (b) Customer addresses (including but not limited to zip codes) for non-switched services
- (c) Estimates of the cost of performing planned outside plant construction projects.
- (d) Design specifications for new outside plant construction projects.
- (e) Actual costs of performing outside plant construction projects.
- (f) Vendor prices for outside plant construction projects.
- (g) The current cost of procuring material and equipment (for each type of material).
- (h) A listing of all contracts governing the purchasing of materials and the use of outside contractors and engineers.
- (i) Detailed financial information (i.e. investment, expenses, etc.) regarding Verizon's network.
- (j) Labor rates

Verizon PA Rate Cost Comparison

