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July 23, 1996

FILE COPY

VIA FEDERAL EXPRESS

Mrs. Blanca S. Bayo
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

Re: Timothy T. Devine Testimony filed regarding
MFS Arbitration Petitions with GTE (Docket No. 960837-TP)
and Sprint (Docket No. 960838-TP)

Dear Mrs. Bayo:

Pursuant to my conversation with Don Strickland of your office, enclosed please find certain Exhibits to the Testimony referenced above, which were inadvertently mislabelled as Exhibits 6 and 9 and now are correctly labelled a Exhibits 4 and 5. Please remove the previous Exhibits filed with the Commission (under Exhibits Tabs 4 and 5) and replace with the enclosed Exhibits. I have enclosed an original and 15 copies for each case. Please contact the undersigned should you have any questions regarding this matter. We apologize for any confusion and inconvenience. Thank you.

- ACK
- AFA
- APP
- CAF
- CMU *Shaffer*
- CTR
- EAG
- LEG *1*
- LIN *5 + orig*
- OPC
- RCH
- SEC *DF/par*
- WAS *cc:*
- OTH

Sincerely,

Debra O. Fullem

Debra O. Fullem
Senior Legal Assistant

cc: Lawrence R. Freedman, Esq.
Anthony Gillman, Esq., Counsel for GTE - Via Express Mail
J. Jeffrey Wahlen, Esq., Counsel for Sprint - Via Federal Express

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FPSC-RECORDS/REPORTING

960838

Benchmark Cost Model:

A Joint Submission by

MCI Communications Inc.

NYNEX Corporation

Sprint Corporation

U S WEST, Inc.

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CC Docket No. 80-286
December 1, 1995

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FPSC-RECORDS/REPORTING

I. Executive Summary

On July 13, 1995, the Federal Communications Commission (FCC) issued a Notice of Proposed Rulemaking (NPRM) "...seeking comments on proposals and policy changes to improve...assistance mechanisms intended to provide funds necessary to promote universally available service at reasonable rates." The FCC identified four "primary principles" which should be considered in evaluating any proposals for addressing universal service. These principles provide that a plan should:

1. Be properly targeted so that support is given only to those service providers or users who need assistance to maintain local service.
2. Promote efficient investment and operation.
3. Not impose excessive subsidy costs upon interstate carriers and ratepayers.
4. Not impose barriers to competitive entry into local telecommunications.

Elsewhere in the NPRM, the FCC states:

- o "We tentatively conclude that Census Block Group is an appropriately-sized geographic area for disaggregating the costs of providing local service..."
- o "...we believe a proposal to use proxy factors to determine distribution of the Fund should receive serious consideration..."

In order that parties commenting in this proceeding may have a common source of data which utilizes both the concept of the Census Block Groups (CBGs)¹ and proxy costing, MCI, NYNEX, Sprint, and US West (Joint Sponsors) have worked together to develop a Benchmark Costing Model (BCM). This model will produce "benchmark" costs for the provision of basic telephone service² in each CBG within a state. The purpose of this study is to identify those CBGs in which the cost of providing basic telephone service is so high that some form of explicit high-cost support may be necessary as part of a universal service solution. The BCM is intended to provide the Commission, Joint Board, and other interested parties with information that can be used to evaluate the multiple proposals for the use of proxy methods set forth in the NPRM, including assessing the application of the proxy methodology to large companies only.

¹ A CBG is a geographic unit defined by the Bureau of the Census which contains approximately 400 households.

² Basic telephone service is defined as voice grade access to the public switched network with the ability to place and receive calls, residential one party service, touch tone, a white page directory listing (costs not included), and access to directory assistance, operator service, and emergency services, e.g., 911/E911.

In developing the BCM, the Joint Sponsors have further developed the previously-submitted proxy models which accounted for density and distance from the nearest central office as factors affecting the cost of service. The Joint Sponsors have also attempted to respond to the FCC's desire to see additional variables which could affect the cost of providing service, such as terrain, slope, surface characteristics, and climate included in the analysis.

The BCM presents monthly cost results using two alternative factors for determining expenses and overhead loadings associated with basic local service. One set of factors is based on historical accounting data, while the second is based on an estimate of costs and overheads using the methodology contained in the MCI/Hatfield study.

On September 12, 1995, the Joint Sponsors submitted a detailed description of the BCM Model and the results of the model for six states. On November 1, 1995, the Joint Sponsors made a second filing which provided model results for 17 additional states. In this filing the Joint Sponsors are presenting the results of this model for the remaining 26 states and the District of Columbia. (Model results are not being presented for Alaska due to data limitations). In order that this document may serve as complete summary of the BCM study, we are also including the 23 states' results and model documentation which have been submitted previously.

It is important to understand what the BCM is, and what it is not:

1. The purpose of the BCM is to identify areas where cost of service can reasonably be expected to be so high as to require explicit high cost support for the preservation of universal service.
2. The BCM produces a benchmark cost range for a defined set of basic residential telephone services assuming efficient engineering and design criteria and deployment of current state-of-the-art loop and switching technology, using the current national local exchange network topology.
3. The BCM does not define the actual cost of any telephone company, nor the embedded cost that a company might experience in providing telephone service today. Rather, the BCM provides a benchmark measurement of the relative costs of serving customers residing in given areas, i.e., the CBGs.
4. The BCM included only residential lines in the analysis, because business line source data was not readily available. However, because the primary purpose of the study is to identify high cost CBGs, the impact of excluding business lines from the calculation of the benchmark cost in those CBGs is de minimus.

The Joint Sponsors have held four workshops to describe the workings of the BCM, and to provide copies of the copyrighted model for use by interested parties.³ These workshops were held at the following locations:

| | |
|--------------------|-----------------|
| September 20, 1995 | Washington, DC |
| September 22, 1995 | Denver, CO |
| October 12, 1995 | Portsmouth NH |
| November 12, 1995 | New Orleans, LA |

By making the model publicly available, the Joint Sponsors hope that the Commission, Joint Board and other interested parties will be able to obtain facts, data, and policy recommendations which will assist in the timely resolution of the important issues relating to universal service.

³ The Joint Sponsors grant to all parties the right to use the BCM and its results. No right is granted to license or sell the BCM, or any portion thereof, or to reverse engineer or decompile the BCM, or any portion thereof. In addition, except for inputs intended to be modified by the user, no right is granted to modify the BCM, or any portion thereof.

II. Summary Model Results

Narrative

The model results summarized below show the annual benchmark cost and the aggregate support at various illustrative price points, and assuming two different annual cost factor assumptions.

Annual benchmark cost: The actual benchmark cost for each CBG in a particular state is multiplied by the number of households in each CF G. This monthly total benchmark cost for each CBG is multiplied by 12 to yield the annual benchmark cost for each CBG; all CBG benchmark costs in a state are summed to derive the statewide annual benchmark cost.

Aggregate support: The actual benchmark cost for each CBG is compared to illustrative price points of \$20, \$30, and \$40. The difference between the benchmark costs for each CBG that exceeds the illustrative price points and the illustrative price points themselves is multiplied by the number of households in that CBG, and annualized. The result is the aggregate support in excess of the price point(s).

Annual Cost Factors: Annual Cost Factor # 1 (31.6765%) is based on historical accounting data and total expense levels of the Tier 1 LECs utilizing 1994 ARMS Form 43-01. Annual Cost Factor # 2 (22.97%) is based on the Hatfield/MCI study approach and reflects limited expense categories and amounts.

Summary Model Results

National Total (excluding Alaska)

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 25,177,893,663 | 18,402,608,162 |
| Aggregate Support | | |
| at \$20 | 8,082,313,345 | 3,977,572,193 |
| at \$30 | 4,916,517,444 | 2,203,441,910 |
| at \$40 | 3,208,565,853 | 1,372,205,121 |
| Average Monthly Cost | 23.04 | 16.71 |

Alabama

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 478,219,936 | 346,777,956 |
| Aggregate Support | | |
| at \$20 | 188,638,903 | 93,725,107 |
| at \$30 | 112,776,003 | 38,823,453 |
| at \$40 | 58,728,461 | 16,627,173 |
| Average Monthly Cost | 26.46 | 19.19 |

Arkansas

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 359,110,029 | 260,406,212 |
| Aggregate Support | | |
| at \$20 | 182,192,180 | 102,449,522 |
| at \$30 | 129,645,111 | 61,443,344 |
| at \$40 | 89,397,329 | 35,006,911 |
| Average Monthly Cost | 33.56 | 24.34 |

Arizona

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 349,926,976 | 253,747,183 |
| Aggregate Support | | |
| at \$20 | 143,680,081 | 88,571,155 |
| at \$30 | 116,567,996 | 69,202,934 |
| at \$40 | 97,611,692 | 56,135,289 |
| Average Monthly Cost | 21.26 | 15.41 |

California

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 2,252,171,780 | 1,633,147,153 |
| Aggregate Support | | |
| at \$20 | 399,861,956 | 175,906,571 |
| at \$30 | 219,697,750 | 110,424,413 |
| at \$40 | 158,057,533 | 79,592,793 |
| Average Monthly Cost | 18.05 | 13.09 |

Colorado

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 397,796,384 | 288,459,360 |
| Aggregate Support | | |
| at \$20 | 145,584,796 | 82,500,786 |
| at \$30 | 107,384,348 | 61,352,402 |
| at \$40 | 86,837,762 | 48,949,217 |
| Average Monthly Cost | 25.80 | 18.71 |

Connecticut

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 277,481,627 | 201,213,927 |
| Aggregate Support | | |
| at \$20 | 45,297,251 | 9,885,361 |
| at \$30 | 9,092,329 | 911,711 |
| at \$40 | 1,560,121 | 130,686 |
| Average Monthly Cost | 18.80 | 13.63 |

Washington D.C.

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 33,429,915 | 24,241,477 |
| Aggregate Support | | |
| at \$20 | 386,284 | 11,299 |
| at \$30 | 8,112 | 2,415 |
| at \$40 | 3,495 | 1,350 |
| Average Monthly Cost | 11.19 | 8.11 |

Delaware

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 65,040,648 | 47,163,786 |
| Aggregate Support | | |
| at \$20 | 14,434,908 | 4,238,120 |
| at \$30 | 4,293,345 | 478,815 |
| at \$40 | 836,378 | 41,326 |
| Average Monthly Cost | 21.93 | 15.90 |

Florida

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,257,649,880 | 911,976,315 |
| Aggregate Support | | |
| at \$20 | 229,450,680 | 82,382,867 |
| at \$30 | 97,122,412 | 37,334,524 |
| at \$40 | 55,246,242 | 19,978,268 |
| Average Monthly Cost | 20.40 | 14.79 |

Georgia

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 780,627,398 | 566,066,685 |
| Aggregate Support | | |
| at \$20 | 267,771,343 | 119,069,714 |
| at \$30 | 141,619,901 | 50,891,484 |
| at \$40 | 76,553,683 | 21,630,212 |
| Average Monthly Cost | 27.49 | 19.93 |

Hawaii

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 81,958,248 | 59,431,470 |
| Aggregate Support | | |
| at \$20 | 22,284,469 | 11,262,366 |
| at \$30 | 14,241,027 | 7,100,703 |
| at \$40 | 10,163,664 | 4,877,087 |
| Average Monthly Cost | 19.14 | 13.88 |

Iowa

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 403,637,170 | 292,694,767 |
| Aggregate Support | | |
| at \$20 | 199,546,468 | 116,562,460 |
| at \$30 | 150,158,735 | 77,297,749 |
| at \$40 | 111,343,467 | 47,148,066 |
| Average Monthly Cost | 31.58 | 22.90 |

Idaho

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 177,553,490 | 128,751,714 |
| Aggregate Support | | |
| at \$20 | 103,131,867 | 63,763,202 |
| at \$30 | 83,829,221 | 49,526,409 |
| at \$40 | 69,852,699 | 40,482,749 |
| Average Monthly Cost | 40.94 | 29.69 |

Illinois

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,044,152,034 | 757,159,794 |
| Aggregate Support | | |
| at \$20 | 268,441,873 | 126,016,370 |
| at \$30 | 156,359,606 | 68,211,635 |
| at \$40 | 100,477,083 | 32,918,173 |
| Average Monthly Cost | 20.73 | 15.03 |

Indiana

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 509,868,562 | 369,727,744 |
| Aggregate Support | | |
| at \$20 | 163,189,750 | 78,217,366 |
| at \$30 | 92,882,504 | 27,723,246 |
| at \$40 | 43,399,413 | 6,343,097 |
| Average Monthly Cost | 29.58 | 14.93 |

Kansas

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 374,112,071 | 271,284,841 |
| Aggregate Support | | |
| at \$20 | 180,378,119 | 105,488,778 |
| at \$30 | 136,217,572 | 73,798,477 |
| at \$40 | 105,155,722 | 53,941,480 |
| Average Monthly Cost | 33.01 | 23.94 |

Kentucky

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 421,412,669 | 305,584,350 |
| Aggregate Support | | |
| at \$20 | 167,195,395 | 82,163,174 |
| at \$30 | 97,677,858 | 28,285,108 |
| at \$40 | 44,434,754 | 6,097,407 |
| Average Monthly Cost | 25.45 | 18.46 |

Louisiana

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 475,583,988 | 344,866,517 |
| Aggregate Support | | |
| at \$20 | 169,784,334 | 81,494,865 |
| at \$30 | 99,608,332 | 40,846,170 |
| at \$40 | 60,337,002 | 21,400,941 |
| Average Monthly Cost | 26.45 | 19.18 |

Massachusetts

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 353,429,526 | 256,287,033 |
| Aggregate Support | | |
| at \$20 | 33,687,989 | 11,160,712 |
| at \$30 | 11,869,456 | 2,308,502 |
| at \$40 | 3,667,359 | 621,926 |
| Average Monthly Cost | 13.12 | 9.52 |

Maryland

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 389,661,614 | 282,560,487 |
| Aggregate Support | | |
| at \$20 | 66,366,464 | 19,666,656 |
| at \$30 | 20,298,815 | 3,487,514 |
| at \$40 | 5,729,236 | 850,440 |
| Average Monthly Cost | 18.56 | 13.46 |

Maine

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 191,360,857 | 138,764,033 |
| Aggregate Support | | |
| at \$20 | 91,511,997 | 46,459,613 |
| at \$30 | 56,594,204 | 21,991,367 |
| at \$40 | 32,734,996 | 11,678,148 |
| Average Monthly Cost | 34.24 | 24.83 |

Michigan

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 943,057,540 | 683,851,505 |
| Aggregate Support | | |
| at \$20 | 257,219,226 | 108,343,921 |
| at \$30 | 126,511,571 | 41,068,364 |
| at \$40 | 62,266,095 | 18,759,626 |
| Average Monthly Cost | 22.95 | 16.64 |

Minnesota

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 582,640,216 | 422,497,617 |
| Aggregate Support | | |
| at \$20 | 251,057,721 | 138,762,089 |
| at \$30 | 177,348,577 | 91,139,188 |
| at \$40 | 130,923,818 | 60,126,516 |
| Average Monthly Cost | 29.46 | 21.36 |

Missouri

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|------------------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 669,081,764 | 485,180,122 |
| Aggregate Support | | |
| at \$20 | 272,671,535 | 147,318,862 |
| at \$30 | 176,488,015 | 90,000,883 |
| at \$40 | 1,042,260 | 53,958,868 |
| Average Monthly Cost | 28.43 | 20.61 |

Mississippi

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|------------------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 350,124,060 | 203,890,097 |
| Aggregate Support | | |
| at \$20 | 167,296,837 | 90,535,873 |
| at \$30 | 112,687,214 | 46,260,187 |
| at \$40 | 68,893,152 | 20,428,355 |
| Average Monthly Cost | 32.04 | 23.24 |

Montana

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|------------------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 201,120,278 | 145,841,011 |
| Aggregate Support | | |
| at \$20 | 137,543,648 | 89,722,277 |
| at \$30 | 120,056,275 | 76,350,482 |
| at \$40 | 106,884,249 | 66,063,197 |
| Average Monthly Cost | 54.58 | 39.58 |

North Carolina

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 825,143,477 | 598,347,219 |
| Aggregate Support | | |
| at \$20 | 277,776,407 | 107,179,114 |
| at \$30 | 118,281,404 | 27,405,883 |
| at \$40 | 43,540,614 | 7,446,739 |
| Average Monthly Cost | 27.32 | 19.81 |

North Dakota

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 146,812,703 | 106,460,240 |
| Aggregate Support | | |
| at \$20 | 96,802,522 | 62,169,500 |
| at \$30 | 82,827,192 | 51,199,145 |
| at \$40 | 71,977,605 | 41,956,643 |
| Average Monthly Cost | 50.60 | 36.69 |

Nebraska

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 264,249,705 | 191,618,889 |
| Aggregate Support | | |
| at \$20 | 143,806,566 | 87,092,457 |
| at \$30 | 113,769,610 | 64,930,437 |
| at \$40 | 92,052,732 | 49,280,510 |
| Average Monthly Cost | 36.53 | 26.49 |

New Hampshire

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 139,777,010 | 101,358,355 |
| Aggregate Support | | |
| at \$20 | 52,122,769 | 22,416,755 |
| at \$30 | 25,872,915 | 8,246,125 |
| at \$40 | 12,567,163 | 3,306,598 |
| Average Monthly Cost | 28.31 | 20.53 |

New Jersey

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 565,502,313 | 410,070,182 |
| Aggregate Support | | |
| at \$20 | 66,633,260 | 15,651,652 |
| at \$30 | 15,225,239 | 2,035,160 |
| at \$40 | 3,448,143 | 574,861 |
| Average Monthly Cost | 16.86 | 12.23 |

New Mexico

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 226,245,135 | 164,060,131 |
| Aggregate Support | | |
| at \$20 | 122,422,130 | 76,856,659 |
| at \$30 | 101,823,826 | 62,386,523 |
| at \$40 | 87,644,588 | 52,586,908 |
| Average Monthly Cost | 34.67 | 25.14 |

Nevada

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 163,643,391 | 118,664,899 |
| Aggregate Support | | |
| at \$20 | 78,117,234 | 49,893,909 |
| at \$30 | 66,730,979 | 42,737,556 |
| at \$40 | 59,764,714 | 37,566,658 |
| Average Monthly Cost | 29.17 | 21.15 |

New York

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,319,717,516 | 956,984,242 |
| Aggregate Support | | |
| at \$20 | 262,283,383 | 107,288,678 |
| at \$30 | 123,530,926 | 34,783,168 |
| at \$40 | 54,031,815 | 11,597,610 |
| Average Monthly Cost | 16.58 | 12.02 |

Ohio

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,049,913,978 | 761,338,029 |
| Aggregate Support | | |
| at \$20 | 263,233,990 | 101,837,376 |
| at \$30 | 115,005,171 | 28,342,180 |
| at \$40 | 45,063,834 | 4,825,394 |
| Average Monthly Cost | 21.49 | 15.52 |

Oklahoma

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 385,269,452 | 279,375,541 |
| Aggregate Support | | |
| at \$20 | 177,458,956 | 101,447,067 |
| at \$30 | 129,459,076 | 63,644,073 |
| at \$40 | 92,077,577 | 39,784,401 |
| Average Monthly Cost | 26.59 | 19.28 |

Oregon

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 371,228,402 | 269,193,768 |
| Aggregate Support | | |
| at \$20 | 149,614,035 | 82,401,012 |
| at \$30 | 105,849,712 | 57,091,736 |
| at \$40 | 81,237,329 | 44,193,044 |
| Average Monthly Cost | 27.99 | 20.29 |

Pennsylvania

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,091,050,041 | 791,167,567 |
| Aggregate Support | | |
| at \$20 | 268,676,086 | 101,534,865 |
| at \$30 | 111,900,283 | 27,767,054 |
| at \$40 | 43,619,805 | 8,154,254 |
| Average Monthly Cost | 20.24 | 14.67 |

Rhode Island

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 79,973,763 | 57,992,434 |
| Aggregate Support | | |
| at \$20 | 9,946,681 | 2,171,061 |
| at \$30 | 2,006,640 | 165,630 |
| at \$40 | 277,591 | 27,645 |
| Average Monthly Cost | 17.67 | 12.82 |

South Carolina

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 431,266,937 | 312,730,306 |
| Aggregate Support | | |
| at \$20 | 156,897,627 | 66,996,775 |
| at \$30 | 77,581,928 | 23,517,038 |
| at \$40 | 36,152,774 | 7,626,747 |
| Average Monthly Cost | 28.55 | 20.70 |

South Dakota

| | Annual Cost Factor #1 | Annual Cost Factor #2 |
|-----------------------|--------------------------|--------------------------|
| Annual Benchmark Cost | 159,230,001 | 115,464,560 |
| Aggregate Support | | |
| at \$20 | 103,918,136 | 65,008,292 |
| at \$30 | 85,592,469 | 50,592,673 |
| at \$40 | 71,437,397 | 40,271,848 |
| Average Monthly Cost | 51.02 | 37.00 |

Tennessee

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 606,503,620 | 439,802,003 |
| Aggregate Support | | |
| at \$20 | 210,868,030 | 89,856,583 |
| at \$30 | 104,685,235 | 31,546,029 |
| at \$40 | 48,862,492 | 9,385,469 |
| Average Monthly Cost | 27.27 | 19.77 |

Texas

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 1,834,191,976 | 1,330,051,922 |
| Aggregate Support | | |
| at \$20 | 614,793,792 | 320,505,220 |
| at \$30 | 407,350,031 | 208,430,060 |
| at \$40 | 299,254,547 | 142,862,708 |
| Average Monthly Cost | 25.14 | 18.23 |

Utah

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 180,531,167 | 130,910,956 |
| Aggregate Support | | |
| at \$20 | 76,062,725 | 45,322,483 |
| at \$30 | 59,883,425 | 36,850,370 |
| at \$40 | 51,749,255 | 31,362,068 |
| Average Monthly Cost | 28.01 | 20.31 |

Virginia

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 546,405,997 | 396,222,618 |
| Aggregate Support | | |
| at \$20 | 168,790,330 | 81,488,401 |
| at \$30 | 96,459,863 | 26,969,156 |
| at \$40 | 42,412,542 | 6,777,592 |
| Average Monthly Cost | 19.85 | 14.39 |

Vermont

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 91,034,804 | 66,013,273 |
| Aggregate Support | | |
| at \$20 | 45,617,584 | 23,623,979 |
| at \$30 | 28,814,995 | 10,607,622 |
| at \$40 | 16,025,642 | 4,903,358 |
| Average Monthly Cost | 36.02 | 26.12 |

Washington

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 527,310,355 | 382,375,542 |
| Aggregate Support | | |
| at \$20 | 161,030,897 | 79,175,608 |
| at \$30 | 99,668,494 | 51,566,769 |
| at \$40 | 73,615,579 | 38,317,516 |
| Average Monthly Cost | 23.48 | 17.02 |

Wisconsin

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 595,045,512 | 431,493,234 |
| Aggregate Support | | |
| at \$20 | 230,674,953 | 117,769,157 |
| at \$30 | 145,460,822 | 61,250,999 |
| at \$40 | 90,485,173 | 29,263,954 |
| Average Monthly Cost | 27.18 | 19.71 |

West Virginia

| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 259,851,902 | 188,429,851 |
| Aggregate Support | | |
| at \$20 | 113,295,618 | 53,915,812 |
| at \$30 | 64,033,087 | 21,365,155 |
| at \$40 | 32,502,772 | 7,907,421 |
| Average Monthly Cost | 31.44 | 22.80 |

Wyoming

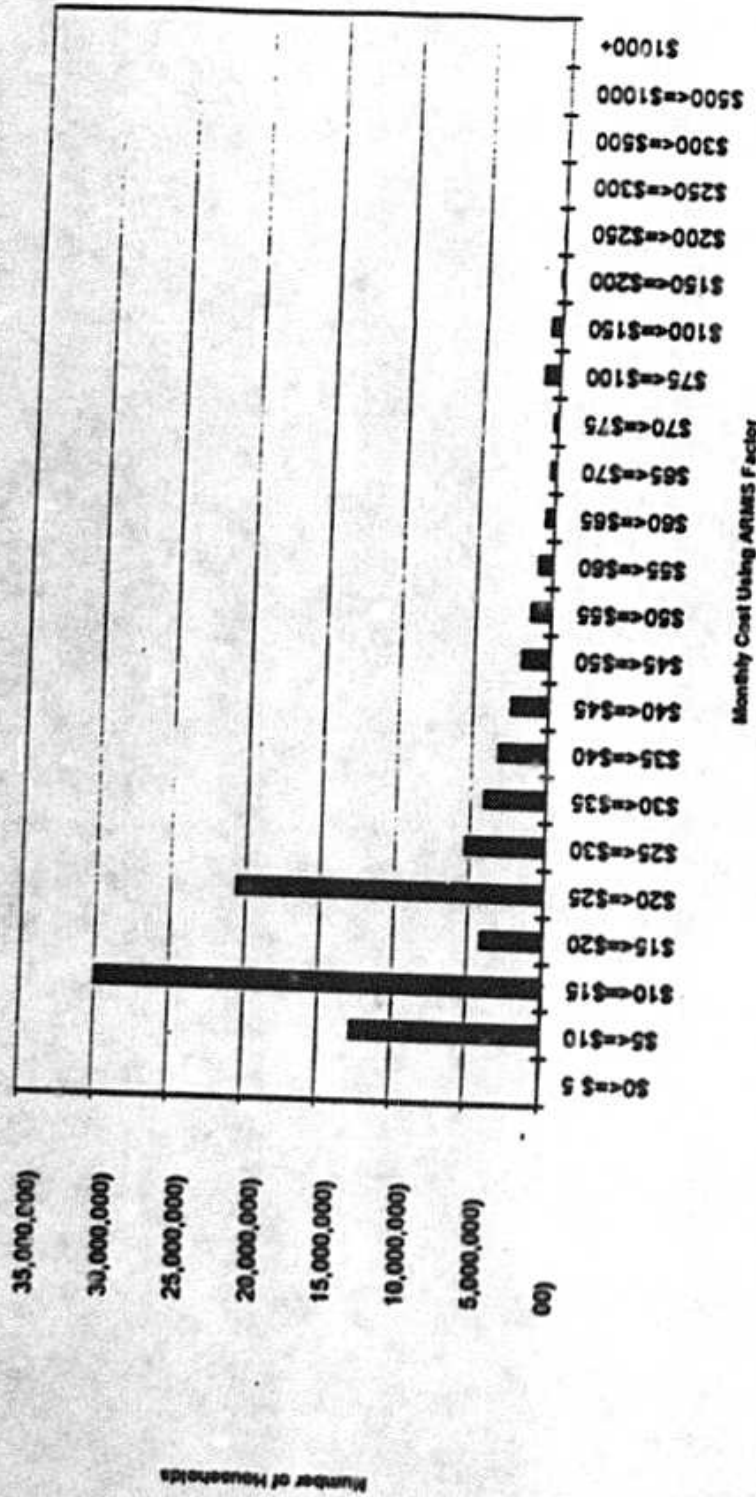
| | <u>Annual Cost Factor #1</u> | <u>Annual Cost Factor #2</u> |
|-----------------------|----------------------------------|----------------------------------|
| Annual Benchmark Cost | 97,785,846 | 70,908,746 |
| Aggregate Support | | |
| at \$20 | 62,863,560 | 40,290,691 |
| at \$30 | 53,675,833 | 33,749,892 |
| at \$40 | 47,281,605 | 29,342,775 |
| Average Monthly Cost | 48.14 | 34.91 |

12/1/95

Detailed Model Results

National Rollup

National Household Distribution By Residential Service Monthly Cost

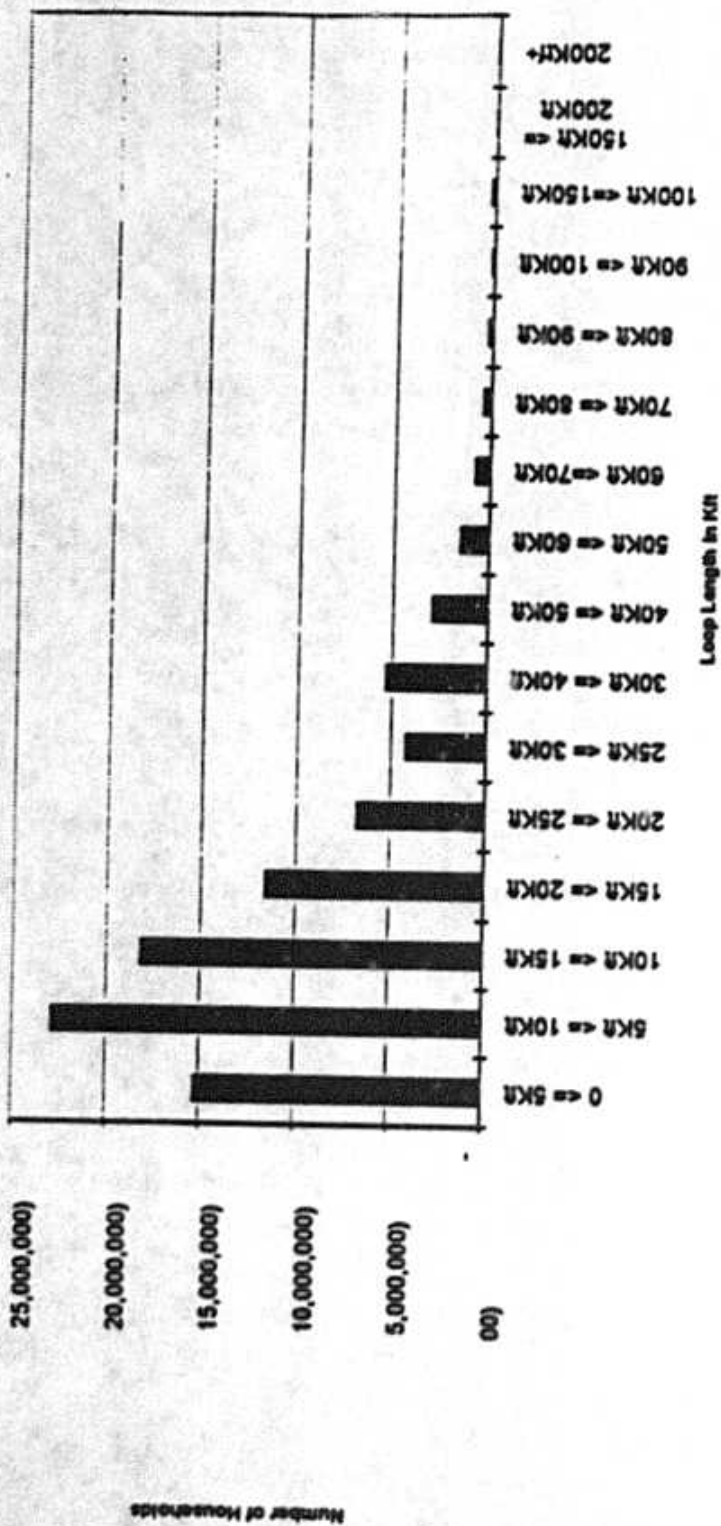


12/1/95

Detailed Model Results

National Rollup

National Household Distribution By Loop Length

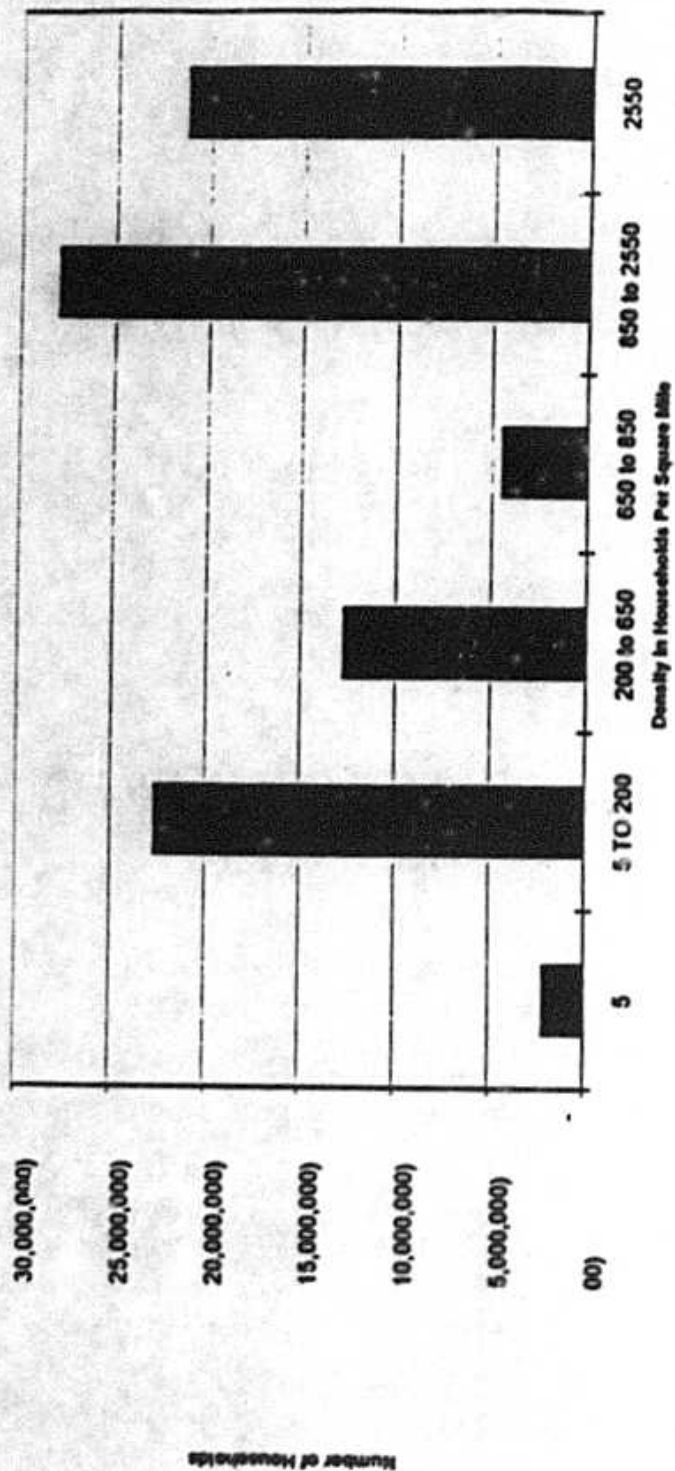


12/1/95

Detailed Model Results

National Rollup

National Household Distribution By Density Group

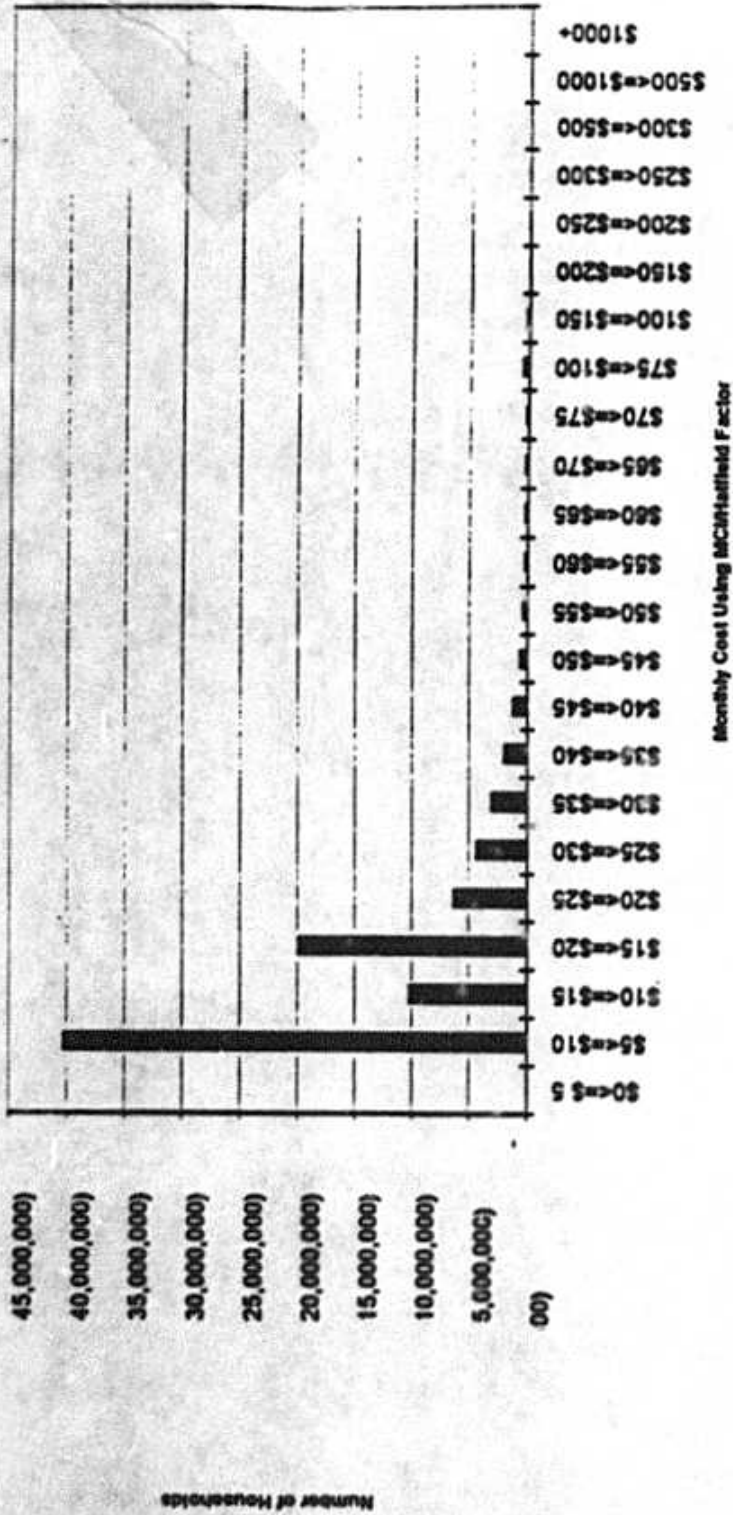


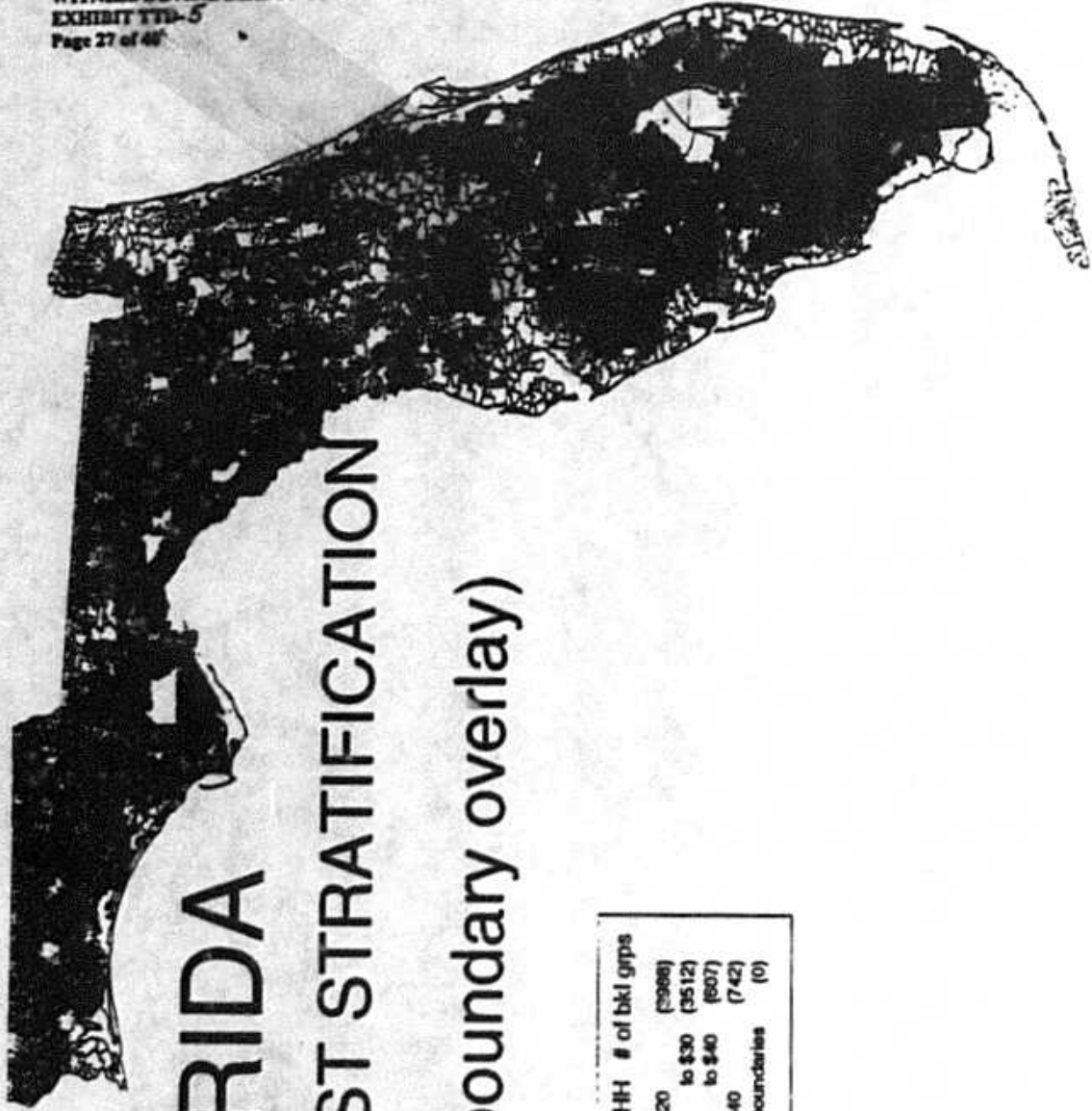
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Detailed Model Results

National Rollup

National Household Distribution By Residential Service Monthly Cost





FLORIDA

MONTHLY COST STRATIFICATION

(exchange boundary overlay)

| monthly \$ / HH | # of bld grps |
|-----------------|---------------|
| <\$20 | (2988) |
| \$20 to \$30 | (3512) |
| \$30 to \$40 | (607) |
| >\$40 | (742) |
| each boundaries | (0) |

| Density | Data | Total | | | | |
|-------------|-----------------------------|-----------|--|--|--|---|
| <=5 | Sum of # Households | 42,546 | | | | |
| | Average of Loop Length | 75,547.62 | | | | |
| | Average of Loop \$ per HH | 5,066.72 | | | | |
| | Average of Total Investm/Ln | 5,477.65 | | | | DIRECT \$ 82,382,867 |
| 5 TO 200 | Sum of # Households | 769,152 | | | | |
| | Average of Loop Length | 32,822.70 | | | | |
| | Average of Loop \$ per HH | 1,085.54 | | | | |
| | Average of Total Investm/Ln | 1,394.25 | | | | APRMS \$ 229,450,880 |
| 200 to 650 | Sum of # Households | 831,200 | | | | |
| | Average of Loop Length | 17,529.44 | | | | |
| | Average of Loop \$ per HH | 470.24 | | | | |
| | Average of Total Investm/Ln | 744.45 | | | | \$ 97,122,412 |
| 650 to 850 | Sum of # Households | 353,174 | | | | |
| | Average of Loop Length | 14,584.89 | | | | |
| | Average of Loop \$ per HH | 355.81 | | | | |
| | Average of Total Investm/Ln | 625.80 | | | | \$ 55,249,242 |
| 850 to 2550 | Sum of # Households | 2,109,849 | | | | |
| | Average of Loop Length | 11,825.11 | | | | |
| | Average of Loop \$ per HH | 334.77 | | | | |
| | Average of Total Investm/Ln | 508.81 | | | | Annual Benchmark Cost = \$ 1,257,848,880 |
| >2550 | Sum of # Households | 942,551 | | | | |
| | Average of Loop Length | 9,185.26 | | | | |
| | Average of Loop \$ per HH | 251.89 | | | | |
| | Average of Total Investm/Ln | 513.81 | | | | State Average Monthly Cost = \$ 20.40 |
| Density | Data | Total | | | | |
| <=5 | Average of Monthly Cost1 | 144.59 | | | | |
| | Average of Monthly Cost2 | 104.85 | | | | |
| 5 TO 200 | Average of Monthly Cost1 | 36.80 | | | | |
| | Average of Monthly Cost2 | 28.69 | | | | |
| 200 to 650 | Average of Monthly Cost1 | 19.65 | | | | |
| | Average of Monthly Cost2 | 14.25 | | | | |
| 650 to 850 | Average of Monthly Cost1 | 16.52 | | | | |
| | Average of Monthly Cost2 | 11.98 | | | | |
| 850 to 2550 | Average of Monthly Cost1 | 15.81 | | | | |
| | Average of Monthly Cost2 | 11.46 | | | | |
| >2550 | Average of Monthly Cost1 | 13.56 | | | | |
| | Average of Monthly Cost2 | 9.83 | | | | |

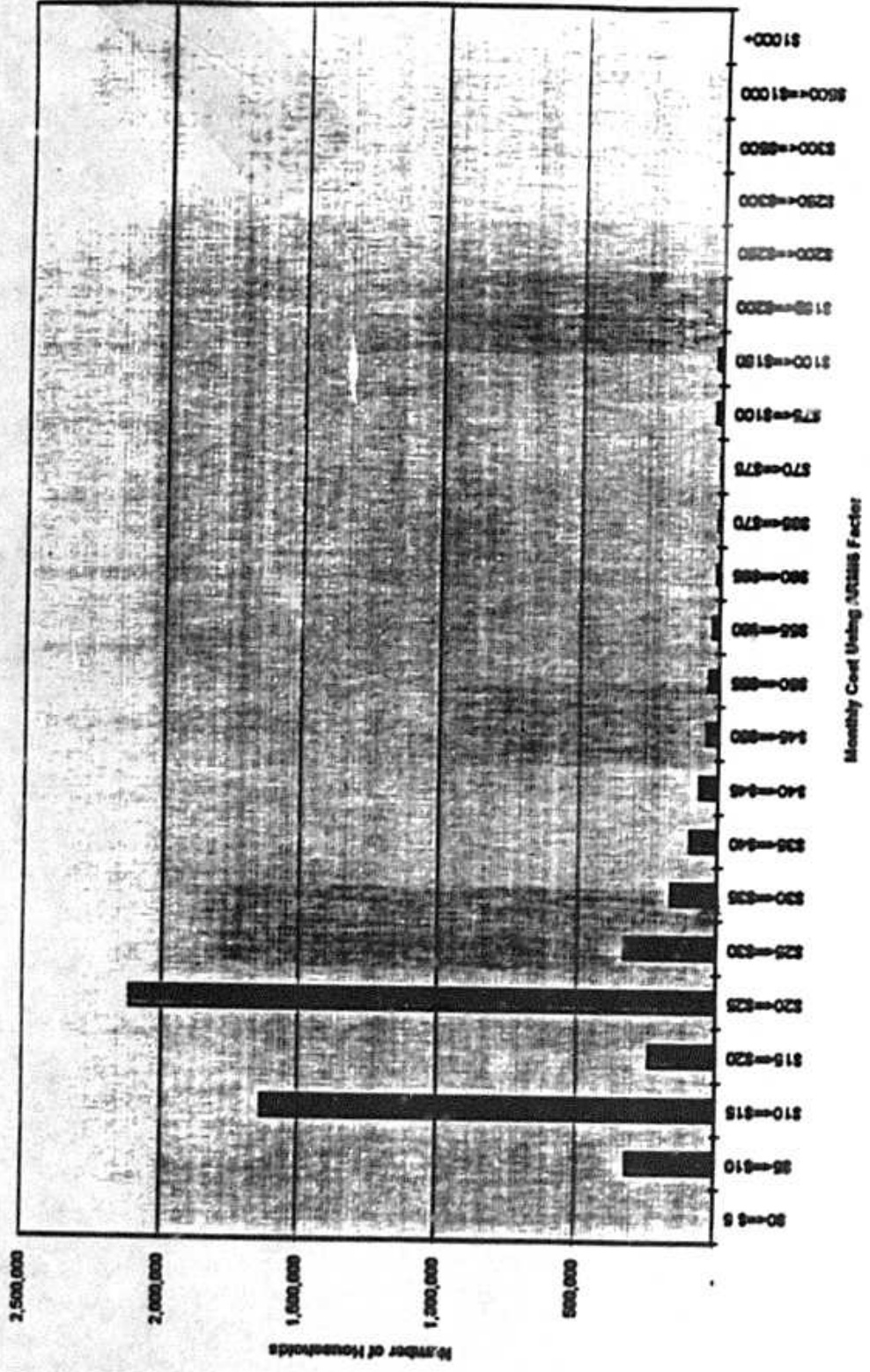
FLORIDA

| Cell Category - #Calls | # Hours/Minutes | Loop Category | # Hours/Minutes | Density | # Hours/Minutes | Cell Category - Halfhour | # Hours/Minutes |
|---------------------------|-----------------|---------------------|-----------------|-------------|-----------------|--------------------------|-----------------|
| 1000-1100 | 318,178 | SPR on 100A | 279,521 | \$ 10.700 | 43,648 | 1000-1100 | 1,617,446 |
| 1100-1200 | 1,254,856 | 1000 on 100A | 1,187,406 | 200 to 400 | 769,182 | 1100-1200 | 771,141 |
| 1200-1300 | 238,178 | 1000 on 100B | 1,219,421 | 400 to 600 | 631,268 | 1200-1300 | 1,645,255 |
| 1300-1400 | 2,114,747 | 2000 on 200A | 808,734 | 600 to 800 | 543,171 | 1300-1400 | 712,344 |
| 1400-1500 | 153,867 | 2000 on 200B | 488,448 | 800 to 2000 | 2,189,848 | 1400-1500 | 153,868 |
| 1500-1600 | 183,864 | 2000 on 200C | 298,642 | 2000 | 842,851 | 1500-1600 | 76,334 |
| 1600-1700 | 88,379 | 3000 on 300A | 331,367 | Total | 6,138,369 | 1600-1700 | 49,343 |
| 1700-1800 | 87,351 | 3000 on 300B | 158,543 | | | 1700-1800 | 30,877 |
| 1800-1900 | 4,521 | 3000 on 300C | 85,652 | | | 1800-1900 | 12,766 |
| 1900-2000 | 26,085 | 4000 on 400A | 41,868 | | | 1900-2000 | 7,914 |
| 2000-2100 | 30,721 | 4000 on 400B | 21,288 | | | 2000-2100 | 9,643 |
| 2100-2200 | 13,191 | 4000 on 400C | 16,187 | | | 2100-2200 | 7,683 |
| 2200-2300 | 13,191 | 5000 on 500A | 8,162 | | | 2200-2300 | 6,688 |
| 2300-2400 | 7,176 | 5000 on 500B | 11,313 | | | 2300-2400 | 4,176 |
| 2400-2500 | 4,528 | 5000 on 500C | 1,374 | | | 2400-2500 | 1,811 |
| 2500-2600 | 27,485 | 6000 | 639 | | | 2500-2600 | 2,651 |
| 2600-2700 | 16,303 | Total Hours/Minutes | 6,138,369 | | | 2600-2700 | 83 |
| 2700-2800 | 1,308 | Minimum Loop Length | 829 | | | 2700-2800 | 268 |
| 2800-2900 | 67 | Maximum Loop Length | 224,731 | | | 2800-2900 | 63 |
| 2900-3000 | 21 | Minimum Loop Length | 13,367 | | | 2900-3000 | 1 |
| 3000-3100 | 24 | | | | | 3000-3100 | 1 |
| 3100-3200 | 1 | | | | | 3100-3200 | 1 |
| Total Hours/Minutes | 8,138,369 | | | | | Total Hours/Minutes | 6,138,369 |
| Minimum Monthly Cost | 37.61 | | | | | Minimum Monthly Cost | 8.21 |
| Maximum Monthly Cost | 11,481.26 | | | | | Maximum Monthly Cost | 1,618.14 |
| Average Monthly Cost | 13.66 | | | | | Average Monthly Cost | 14.68 |
| 31 Average 1000 Loop Cost | 18.26 | | | | | Average Monthly Cost | \$14.78 |

10/01/95

Detailed Model Results

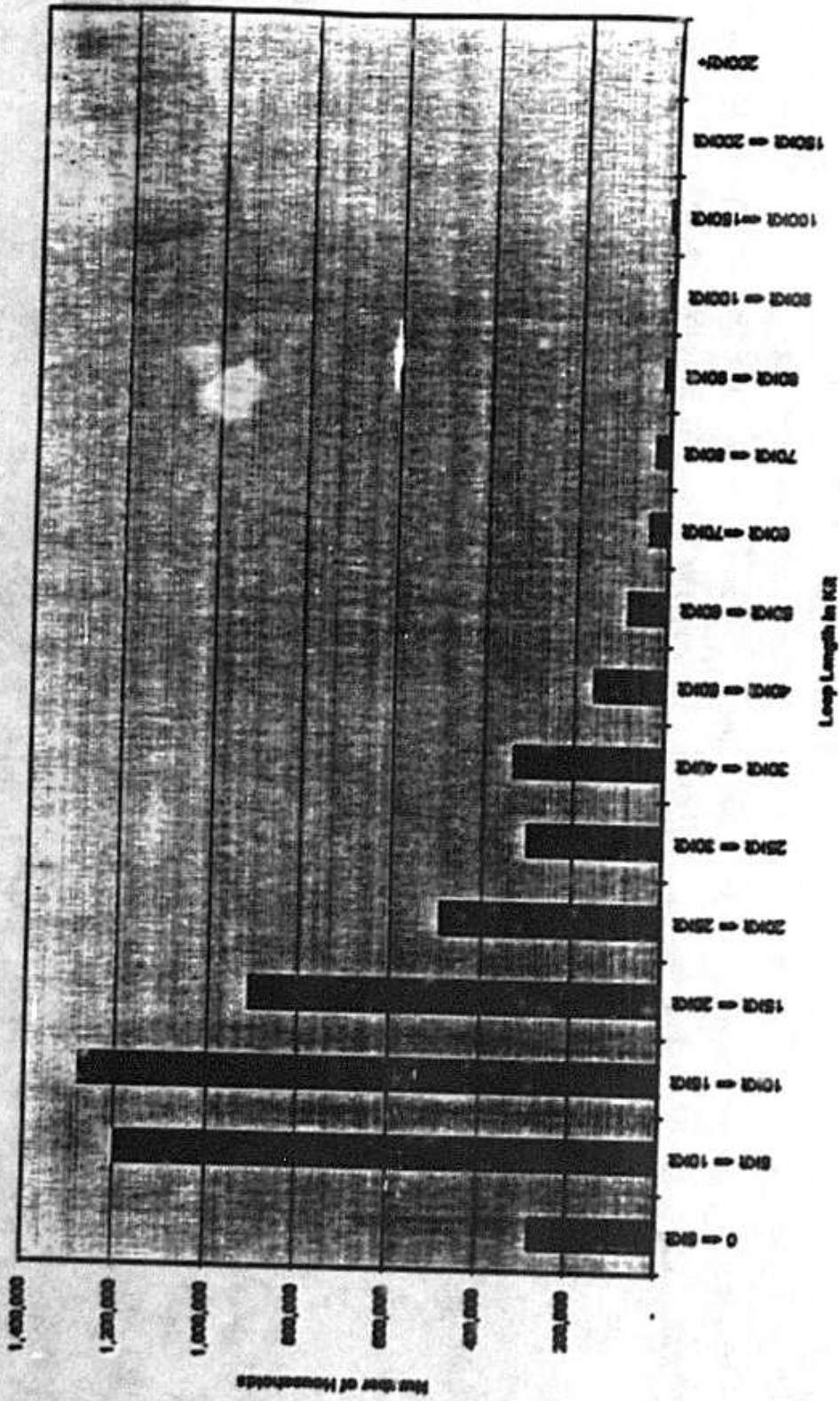
FL Household Distribution By Residential Service Monthly Cost



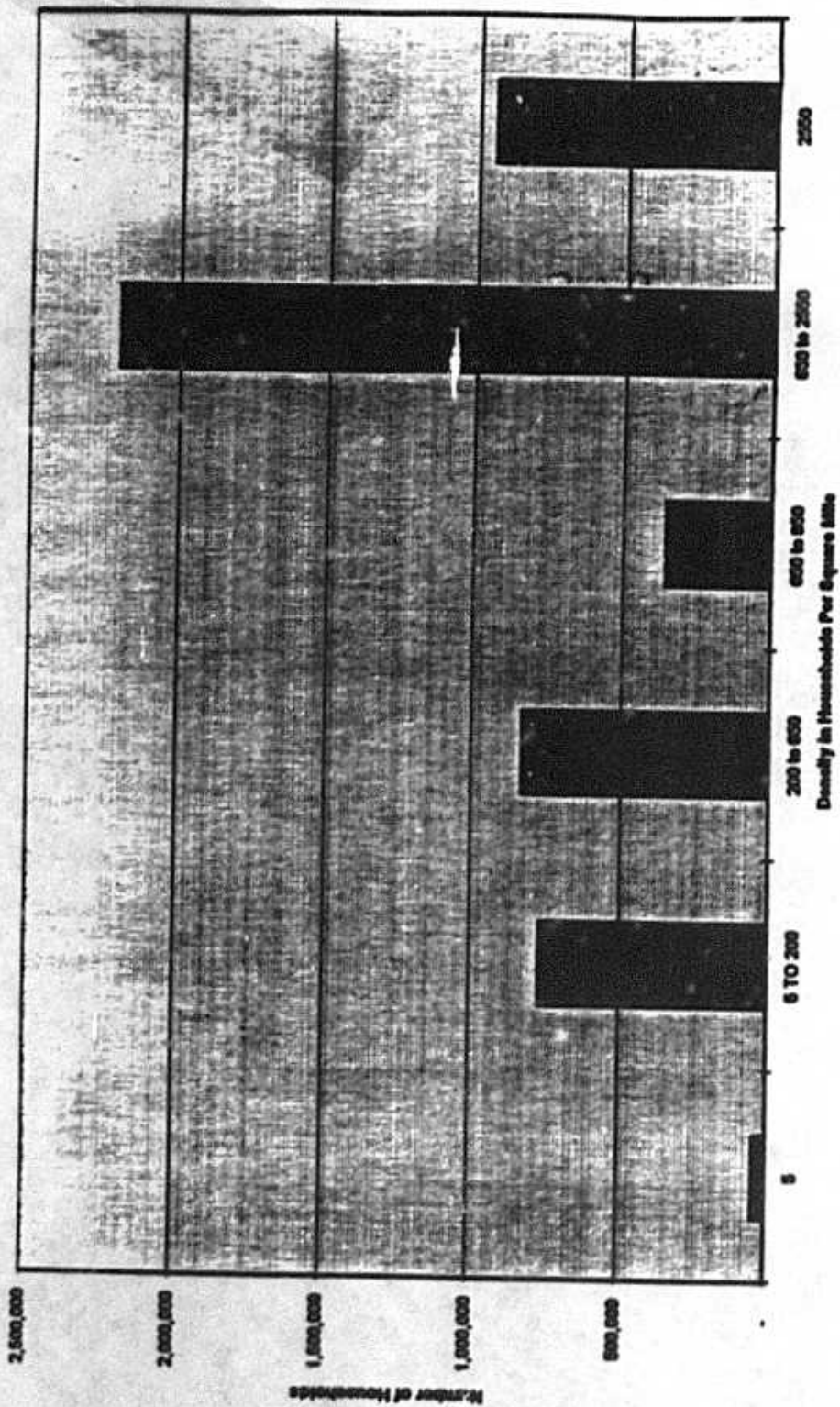
10/9/85

Detailed Model Results

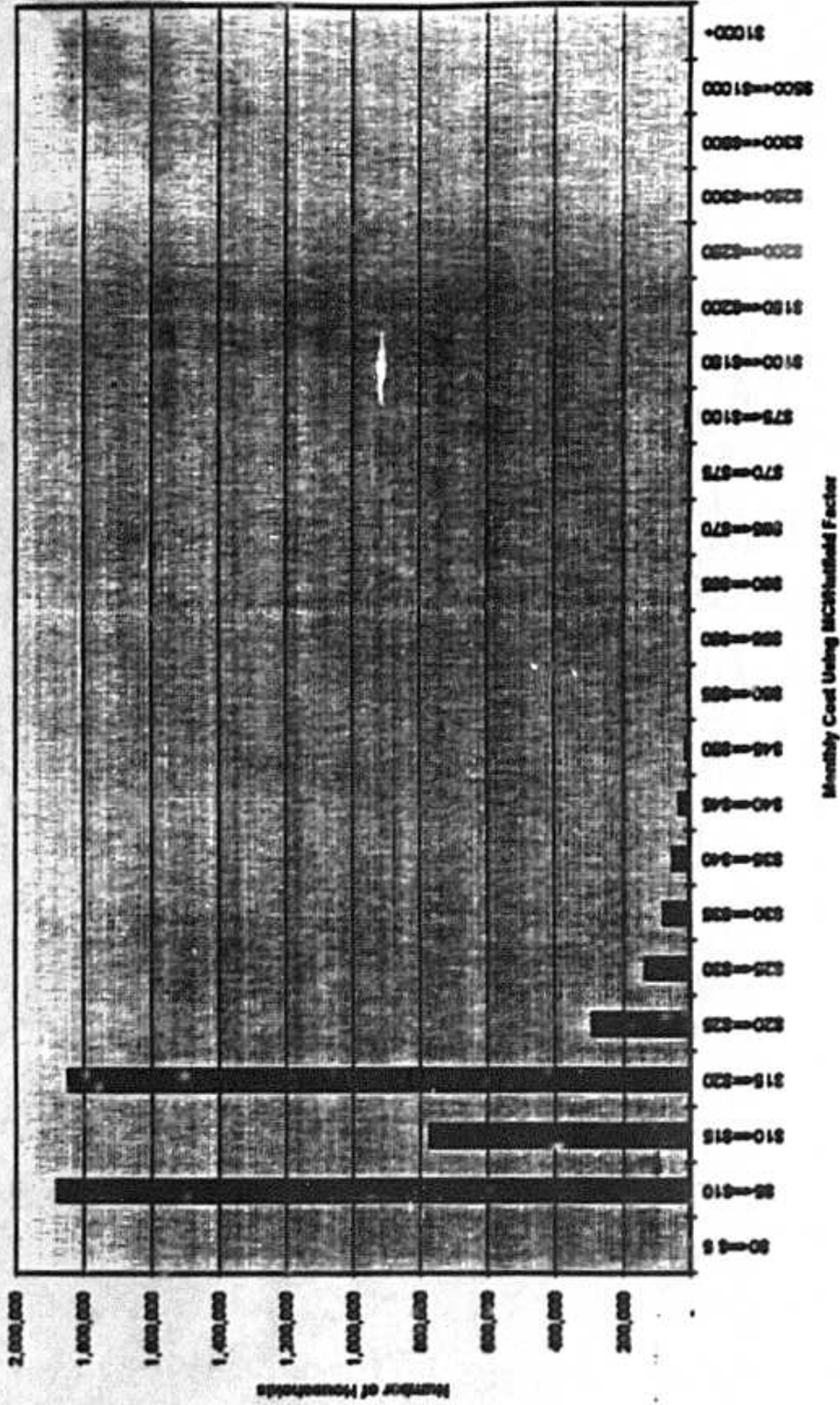
FL Household Distribution By Loop Length



FL Household Distribution By Density Group



FL Household Distribution By Residential Service Monthly Cost

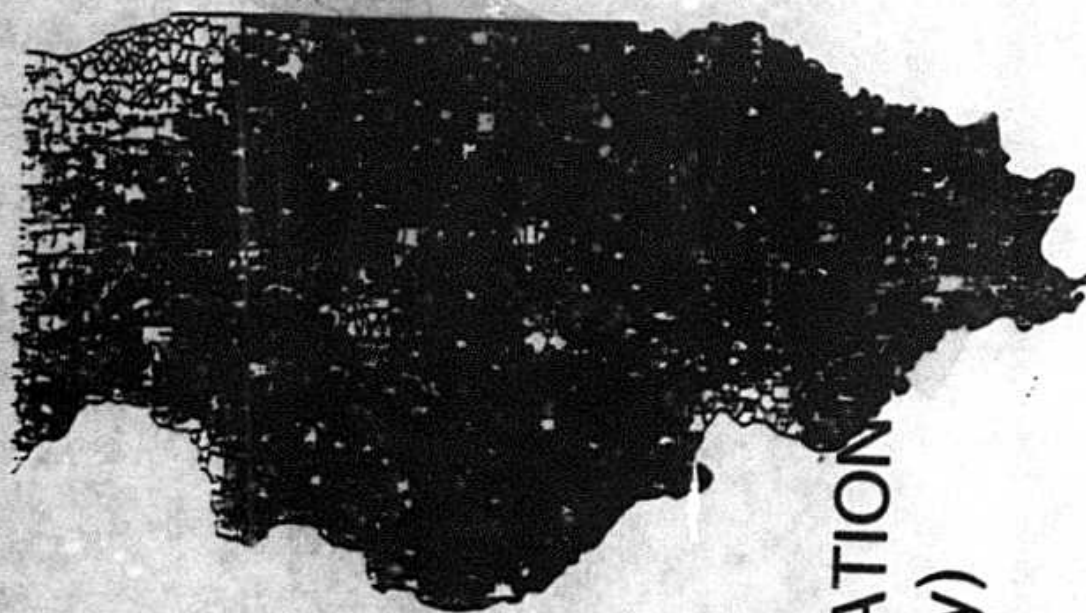


Monthly \$/HH # of talk units

| | |
|-------------------|--------|
| < \$20 | (2854) |
| \$20 to \$30 | (2854) |
| \$30 to \$40 | (474) |
| > \$40 | (1303) |
| each boundary (0) | |

ILLINOIS

MONTHLY COST STRATIFICATION (exchange boundary overlay)



111-19

111-90

Benchmark
Summary Results

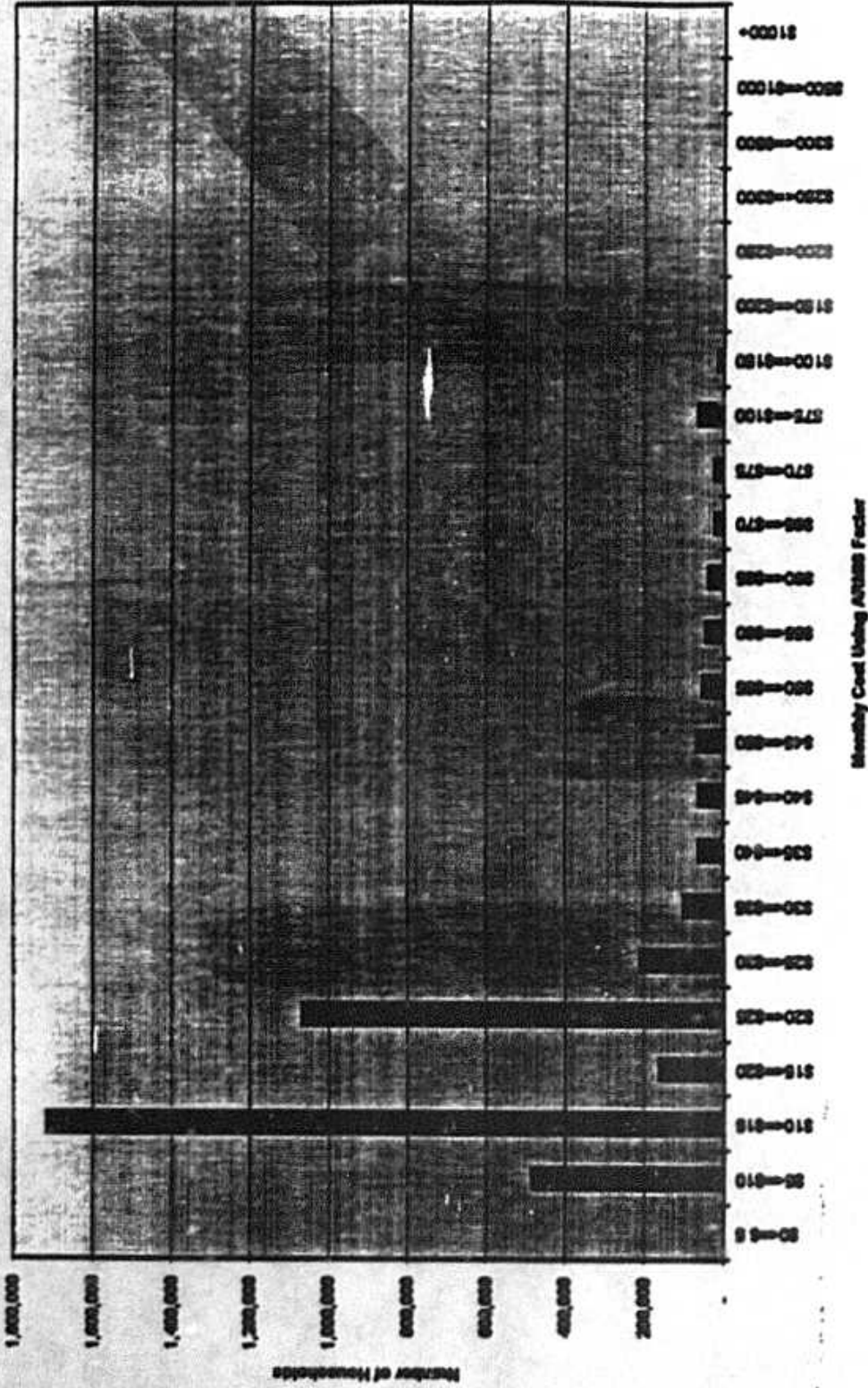
11/2/05

| Density | Data | Total | ARJIS | DIRECT |
|----------------|--------------------------------|-----------|------------------|----------------|
| c<5 | Sum of # Households | 61,356 | | |
| | Average of Loop Length | 47,439.68 | | |
| | Average of Loop \$ per HH | 2,784.41 | | |
| | Average of Total Investment/ln | 3,488.30 | | |
| | Sum of # Households | 687,740 | \$ 288,441,873 | \$ 128,018,370 |
| | Average of Loop Length | 45,733.67 | \$ 158,359,000 | \$ 68,211,035 |
| | Average of Loop \$ per HH | 1,168.64 | \$ 100,477,083 | \$ 32,818,173 |
| 5 TO 200 | Average of Total Investment/ln | 1,825.65 | \$ 1,044,152,034 | \$ 757,158,794 |
| | Sum of # Households | 471,837 | \$ 20.73 | \$ 15.03 |
| 200 to 650 | Average of Loop Length | 13,052.77 | | |
| | Average of Loop \$ per HH | 308.66 | | |
| 650 to 850 | Average of Total Investment/ln | 788.41 | | |
| | Sum of # Households | 187,843 | | |
| 850 to 2550 | Average of Loop Length | 11,654.05 | | |
| | Average of Loop \$ per HH | 314.89 | | |
| >2550 | Average of Total Investment/ln | 685.21 | | |
| | Sum of # Households | 1,257,890 | | |
| c<5 | Average of Loop Length | 10,138.30 | | |
| | Average of Loop \$ per HH | 314.17 | | |
| 5 TO 200 | Average of Total Investment/ln | 685.40 | | |
| | Sum of # Households | 1,621,837 | | |
| 200 to 650 | Average of Loop Length | 8,501.73 | | |
| | Average of Loop \$ per HH | 244.82 | | |
| 650 to 850 | Average of Total Investment/ln | 602.82 | | |
| | Sum of # Households | | | |
| 850 to 2550 | Average of Monthly Cost1 | 82.03 | | |
| | Average of Monthly Cost2 | 86.73 | | |
| 2550 to 5000 | Average of Monthly Cost1 | 42.91 | | |
| | Average of Monthly Cost2 | 31.12 | | |
| 5000 to 7500 | Average of Monthly Cost1 | 18.48 | | |
| | Average of Monthly Cost2 | 13.41 | | |
| 7500 to 10000 | Average of Monthly Cost1 | 15.71 | | |
| | Average of Monthly Cost2 | 11.39 | | |
| 10000 to 15000 | Average of Monthly Cost1 | 15.48 | | |
| | Average of Monthly Cost2 | 11.21 | | |
| >15000 | Average of Monthly Cost1 | 13.28 | | |
| | Average of Monthly Cost2 | 9.83 | | |

11/2/95

Detailed Model Results

II. Household Distribution By Residential Service Monthly Cost



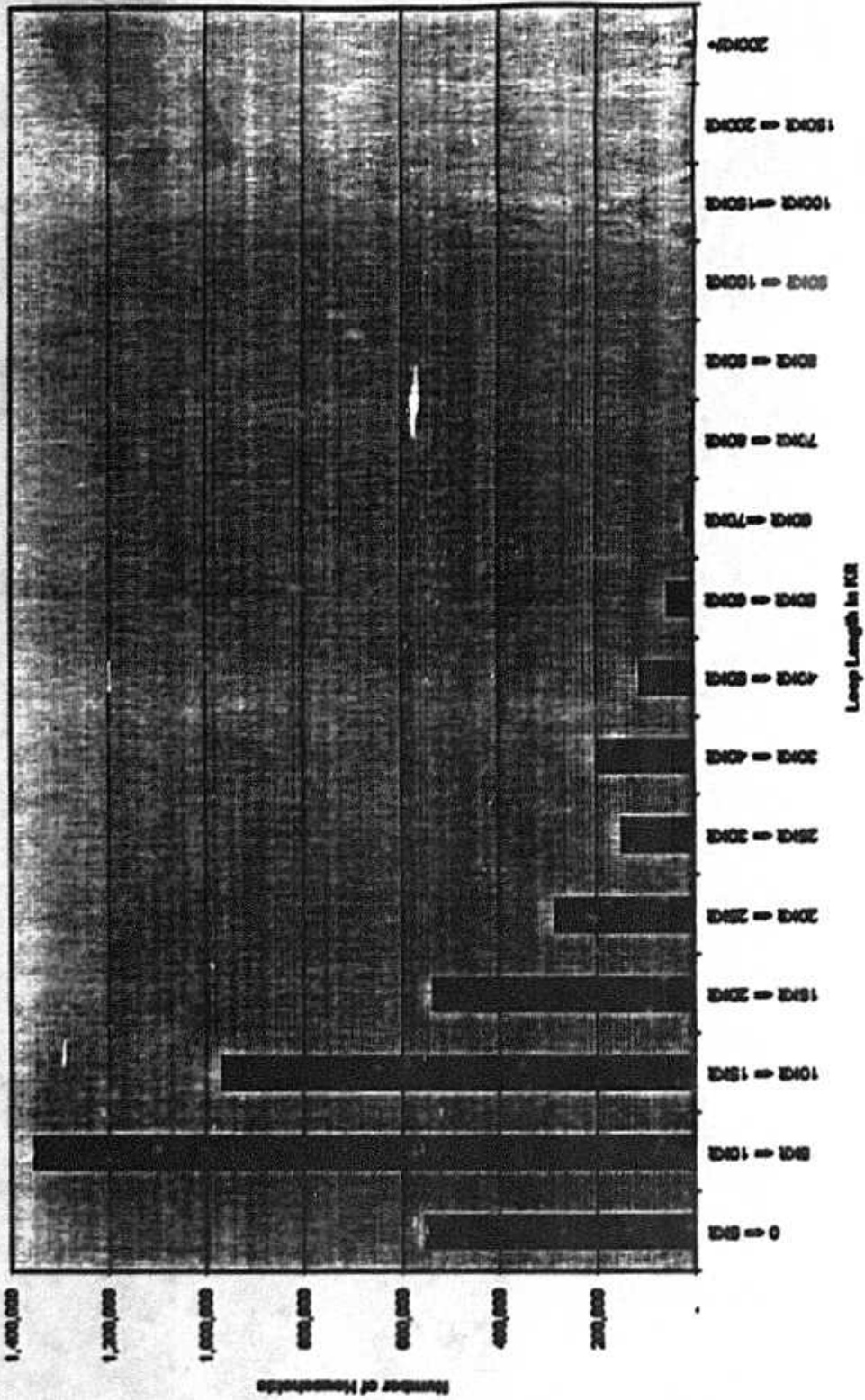
111-92

Illinois

11/2/95

Detailed Model Results

II. Household Distribution By Loop Length



11/2/95

Detailed Model Results

II. Household Distribution By Density Group

