

**EXTENDED AREA SERVICE STUDY
REPORT
OF THE
STATE CORPORATION COMMISSION**

**TO
THE GOVERNOR
AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 13

**COMMONWEALTH OF VIRGINIA
Department of Purchases and Supply
Richmond
1974 , 975**

REPORT
OF
THE STATE CORPORATION COMMISSION

Richmond, December 2, 1974

TO

THE HONORABLE MILLS E. GODWIN, JR., Governor of Virginia

and

THE GENERAL ASSEMBLY OF VIRGINIA

The State Corporation Commission submits this
Report of the results of a study directed by

HOUSE JOINT RESOLUTION NO. 217

1973 SESSION

directing the State Corporation Commission to study the desir-
ability and feasibility of requiring toll-free telephone ser-
vice within counties, normally referred to as Extended Area
Service.

HJR 217 was introduced on January 22, 1973 by the
Honorable Vivian Earl Dickinson of Mineral, Virginia, Louisa
County. The following members of the House of Delegate were
patrons:

| | |
|-------------------------------------|--------------|
| Honorable Thomas Jefferson Rothrock | Fairfax |
| Honorable Alexander B. McMurtrie | Chesterfield |
| Honorable C. D. Dunford | Tazewell |

| | |
|------------------------------------|-------------|
| Honorable Richard W. Elliott | Campbell |
| Honorable Lewis W. Parker, Jr. | Mecklenburg |
| Honorable Frank M. Slayton | Halifax |
| Honorable Robert B. Ball, Sr. | Henrico |
| Honorable Robert E. Quinn | Hampton |
| Honorable Robert Gwathmey, III | Hanover |
| Honorable John D. Gray | Hampton |
| Honorable Richard M. Bagley | Hampton |
| Honorable D. French Slaughter, Jr. | Culpeper |
| Honorable Raymond R. Guest, Jr. | Warren |
| Honorable Arthur R. Giesen, Jr. | Augusta |
| Honorable Warren E. Barry | Fairfax |

The Resolution was approved by the Committee on Corporations, Insurance, and Banking at a hearing on February 1, 1973, and was passed by the House of Delegates on February 7, 1973, and by the Senate on February 20, 1973.

In the 1974 Session, Senate Bill No. 17 was introduced by Senator William E. Fears of Accomac for a similar purpose, but it was passed over upon motion of the sponsor because of the prior passage of HJR 217.

HJR 217 required that a study be made by the State Corporation Commission, to be completed and reported by December 1, 1974, of the desirability and feasibility, including its economic aspects, of toll free telephone service within certain metropolitan areas and within the boundaries of all the counties in the State.

GENERAL

Telephone service is the dedication of the property and service of telephone utilities to public use for the transmission of intelligence by voice, picture and signal, on a local, national and international scale. Exchange and toll service are the two broad categories of telephone service.

A telephone exchange is a fixed geographical area. For calls made from point to point within this area, a single, uniform set of charges is applied. An exchange area should be designed to recognize the mutual interest which the inhabitants of a given area have in exchanging calls on a regular, routine basis. However, the cost of providing exchange service operates as a limitation on the area which can be incorporated within an exchange. The uniform charges to all telephone subscribers within the exchange are based in part on the cost of satisfying intraexchange calling requirements. The cost of providing exchange service increases as exchange boundaries are widened, necessarily resulting in increased charges to customers. If exchange boundaries are unreasonably expanded to accommodate the calling requirements of any minority, a majority of the patrons will subsidize the expanded service through the uniform rates.

A telephone exchange is also the geographical area established for the measure of toll calls. Toll service refers to calls made to points outside the exchange area. Each exchange has an identified point known as the toll rate center from which the distance to other exchanges is measured. Historically, a

subscriber calling to any other exchange area in the State, or in the Nation, has a toll or long distance charge added to his bill for monthly exchange service. A telephone subscriber using call service beyond the exchange boundaries pays a charge for each long distance call.

Exchange and toll services are not separate and distinct undertakings of the telephone companies. Nearly all the revenues of a telephone company are derived from toll and exchange service. Exchange service is provided at a charge dictated by a level of service most consistent with the calling requirements common to all inhabitants of an exchange. Toll service is provided at a charge per long distance call to those individuals who have calling requirements to a multitude of exchanges located throughout the state or nation. Toll and exchange service, when properly designed, are intended to distribute equitably the revenue requirements of a company among its subscribers.

Extended Area Service (EAS) refers to calling between two or more exchanges without paying a long distance charge. EAS service is often mistakenly and incorrectly referred to as "toll free" calling. The providing of EAS service between exchanges requires the installation of additional plant and results in loss to the company of prior toll revenue. The revenue to cover the cost of installing the additional plant and to replace the lost toll revenue is recovered in principal part from the exchange

subscribers who benefit from EAS. This additional needed revenue from the affected exchanges normally results in an increase in the basic, uniform charges to the subscribers. If an unreasonably small number of subscribers are benefited by EAS then again the majority would be subsidizing the calling requirements of the few.

HISTORY

Calling between exchanges has been a problem since the establishment of telephone service. In 1910, the State Corporation Commission listed 213 telephone companies operating in Virginia. By 1915, the Commission began to hold hearings in the field on the need to provide for interconnection between telephone companies. The Commission's efforts were soon interrupted. In 1918, the Postmaster General took over the operation of all telephone companies in the country as a war measure. As a part of that operation, the Postmaster General abolished all "free calling" between telephone exchanges.

The telephone companies were returned to their owners after World War I and there was an immediate demand by the public for a return of toll free calling. The Commission's action in response to this public demand is set forth in the 1920 Annual Report of the S.C.C., beginning at Page 29. Some illustrative orders appearing in the 1920 Report are as follows:

Page 58 - Chesapeake and Potomac Telephone Co. -
December 23, 1920

"it is ordered. That from and after the first day of January, 1921, subscribers to the exchanges of Chesapeake and Potomac Telephone Company in the Counties of Accomac and Northampton shall be given by said company free service to all subscribers with each exchange in Virginia to the north and south of the home exchange of the subscribers; and"

Page 67 - February 12, 1920

"Peoples Telephone Company pay Surry exchange \$60.00 per year for unlimited calls into Surry, but with toll upon messages outside of Surry.

County party lines connected to Surry exchange, located east of Surry, get Smithfield free over a party line but pay toll to Smithfield if using the clear trunk line from Surry to Smithfield.

Similar subscribers west of Surry get Dendron and Wakefield without toll."

Page 71 - Culpeper Telephone Co. - April 29, 1920

"Free service is to be given in the Madison switchboard between the lines of the Culpeper Telephone Company and lines of the Criglersville and Madison Mutual Telephone Company."

During the 54 years since 1920, numerous arrangements have been proposed, and some adopted, for toll-free calling.

Population trends in Virginia, from rural to urban areas during the first half of this Century, and more recently from urban to suburban, have affected the scope of telephone service expected and demanded.

The period between World Wars was characterized by the mechanization of telephone service and by the introduction of various EAS plans. Some of these plans were optional, but they were generally replaced by non-optional plans after World War II. Introduction of EAS between adjacent exchanges after World War II was still possible without severe economic penalties because of toll operator savings. Since that time, however, the establishment of Extended Area Service has become economically unsatisfactory for at least two basic reasons:

1. Improvements in technology and equipment, such as Direct Distance Dialing and automated billing, have reduced the economies in earlier EAS plans by eliminating manual record keeping and billing of short distance toll.

2. The substantial increase in the number of calls and longer holding times on each call have caused and are causing increases in the cost of central office switching and facilities.

In the 1971 C & P Telephone Company rate case, the first application for a general increase since 1957, the Company proposed the establishment of 37 EAS routes. Costs were estimated and rates proposed for the additional toll free calling. In accordance with accepted practice, the subscribers affected were polled to determine if a substantial majority desired to pay the higher cost for EAS. No route received the approval of a sufficient number of subscribers and the proposal was withdrawn from the case.

In the 1972 C & P rate case, no further extension of Extended Area Service was proposed, although additional offerings of Teleplan and other features were included. A number of interveners advocated Extended Area Service, but developed no evidence of acceptable rates to cover additional costs. These interveners included representatives of Hanover, Halifax, Campbell, Dickinson, Accomac, and Warren Counties. The Commission ruled not to consider EAS in that case, but directed a statewide EAS study by the Commission Staff.

This was followed by passage of HJR 217.

The passage of the Utility Facilities Act in 1950 served to increase the pressure on telephone companies for EAS. As a result of this Act, all land areas of the State were certificated to a particular telephone company. This division was made upon the basis of then existing service or, in the absence thereof, unserved areas was assigned to the nearest and most advantageously situated company. This geographical carving up of the State necessarily found numerous persons living in close physical proximity to each other who were served by different telephone exchanges -- or even by different telephone companies. Obviously, these neighbors wanted to talk among themselves by phone without paying a toll charge, which is another way of saying that they were demanding EAS.

OVERVIEW

From 213 telephone companies in 1910, our present state-wide system of telephone service is furnished by 27 companies. At the end of 1973, the companies ranged in size from 51 telephones served by the Burkes Garden Telephone Exchange to 2,331,000 telephones served by the Chesapeake and Potomac Telephone Company of Virginia. In June, 1974, with a State population of about four and one-half million, the 3,000,000th telephone was installed in Virginia.

Telephone companies now serving Virginia are grouped as follows:

| <u>Parent Company</u> | <u>Virginia Company</u> |
|--|---|
| <u>Bell System</u> | |
| American Telephone & Telegraph Co. | Chesapeake & Potomac Tele Co. of Va. |
| <u>National Independents</u> | |
| Central Telephone & Utilities Corp. | Central Telephone Co. of Va. Southern Telephone Co. |
| Continental Telephone Corp. | Continental Tel.Co. of Va. Commonwealth Tel. Co. of Va. First Colony Telephone Co. Tidewater Telephone Co. |
| General Telephone & Electronics Corp. | General Tel. Co. of the Southeast |
| United Telecommunications Inc. | United Inter-Mountain Tel. Co. |
| Telephone and Data Systems Inc. | Amelia Telephone Co. |

Local Larger Independents

Clifton Forge-Waynesboro Tel. Co.
The Merchants & Farmers Tel. Co.
Mountain Grove-Williamsville Tel. Co.
The Norfolk and Carolina Tel. & Tel. Co.
Peoples Mutual Telephone Co.
Roanoke & Botetourt Tel. Co.
Shenandoah Telephone Co.

Cooperatives, Mutuels and Small Independents

Buggs Island Telephone Cooperative
Burkes Garden Telephone Exchange
Citizens Telephone Cooperative
Deerfield Telephone Company
Mutual Telephone of Highland, Inc.
New Hope Telephone Co.
North River Telephone Cooperative
Pembroke Telephone Cooperative
Prince George Telephone Co.
Scott County Telephone Cooperative
Virginia Hot Springs Telephone Co.

Service is provided within the State through 370 exchanges, or zones, of which 128 are owned by the C&P Telephone Co. of Va. and 242 are owned by the 26 independent companies. With their 242 exchanges, the Independent Companies serve about two-thirds of the land area of Virginia, while the 128 exchanges of the C&P serve about 78% of the total telephones in Virginia.

The growth in number and usage of telephones has been substantial during the last 40 years. This is illustrated by a comparison of 1935 statistics, when detailed message data was first available, with statistics for 1973, which was the last full year for which reports were available:

| | <u>1935</u> | <u>1973</u> |
|-----------------------------|-------------|---------------|
| Total Telephones | 203,471 | 2,980,274 |
| % Households with Service | 27.6% | 93.4% |
| Annual Toll Messages | 7,867,671 | 180,081,067 |
| Toll Messages Per Telephone | 38.5 | 60.4 |
| Annual Local Messages | 298,635,329 | 2,724,026,933 |
| Total Messages Local & Toll | 306,503,000 | 2,904,108,000 |

An indication of the trend in investment and revenue is shown in the following statistics of C&P:

| | 1935 | 1973 |
|---|--------------|-----------------|
| Total Plant Investment | \$33,541,144 | \$1,462,465,716 |
| Plant Investment per Average Telephone | 214.85 | 627.37 |
| Operating Revenues per Average Telephone | | |
| Local | 38.34 | 111.68 |
| Toll | 13.58 | 83.68 |
| Miscellaneous | 2.67 | 8.15 |
| Uncollectable | <u>(.22)</u> | <u>(1.03)</u> |
| Total | 53.37 | 202.49 |

Since 1935, total plant investment by C&P increased 43.6 times; total telephones increased in number 14.7 times; and toll messages increased 22.9 times. Substantially all households in Virginia now have telephone service. Today's service is better because of improvements in transmission, conversion to dial, and upgrading of party line service.

Of the 370 exchanges, or zones, 322 have EAS to one or more other exchanges, for a total of 1,183 EAS routes. It has been estimated that if the existing EAS routes were converted to toll service there would be 106,757,000 additional toll messages per year, or 59.2% above the present total.

The existing EAS routes provide toll free calling to the county seat for substantially all of the citizens of the following 22 counties:

| | | | |
|-----------|-----------|----------------|--------------|
| Arlington | Henrico | Northampton | Rockingham |
| Clarke | Henry | Northumberland | Shenandoah |
| Craig | Highland | Nottoway | Westmoreland |
| Culpeper | Lancaster | Prince William | York |
| Fairfax | Madison | Pulaski | |
| Floyd | Matthews | Richmond | |

In the metropolitan area of Washington (which includes Alexandria, Arlington, and Fairfax), the metropolitan area of Norfolk (which includes Virginia Beach, Portsmouth and Chesapeake), and the Peninsula Metropolitan Area (which includes Newport News and Hampton), EAS is provided among all exchanges and zones. Richmond and Roanoke have EAS to most adjacent exchanges. Fredericksburg, Lynchburg, Danville, Galax, Bristol, and Bluefield have EAS to some adjacent exchanges.

GUIDELINES FOR EAS

It has been obvious for years that there must be some criteria for establishing EAS routes to justify this expensive addition to telephone costs. Many indicators have been used in the past to determine if the subscriber needed the service, was willing to pay for it, and if the service was economically feasible. With the possibility of over 50,000 routes between present exchanges, established guidelines were necessary for this study.

In the fall and winter of 1972-73, the Commission's staff met with representatives of the telephone industry to discuss development of EAS guidelines. The Guidelines developed by the staff and approved by the Commission were used as the basis for this study. (See Exhibit-1)

The primary factor in determining a need for an EAS route is the community of interest among the subscribers of the exchanges. Community of interest between telephone exchanges may be measured in a variety of ways, based on business, social and political relationships, distances between rate centers, contiguity of exchange boundaries, judgment of experienced personnel, projection of future growth and change, etc. However, the most important objective measure is the actual calling patterns between exchanges. These patterns reflect the number of toll calls, the number of subscribers, the number of subscribers calling, the frequency of calling by subscribers, unusual

calling by transients at pay stations and hotels, and any significant calling on foreign exchange services. Since it is normal and preferable to have EAS between contiguous exchanges, it would be logical to eliminate from the study consideration of routes between noncontiguous exchanges except for calling in metropolitan areas and in unusual situations.

Where subjective measures indicate a significant demand for EAS calling between exchanges, studies should be made of the calling pattern. These studies should consist of a one month sample of all toll calls in both directions over the route. The total number of calls, and the percentage of subscribers making such calls should be determined. If obtainable, it is helpful to determine the number of subscribers making no calls, one call, two calls, etc. From this study the following data can be computed:

1. The percent of subscribers making calls per exchange during the test month.
2. The calling rate or number of calls per subscriber per exchange for that month.

A substantial community of interest is indicated where the average calling rate equals or exceeds three calls per subscriber and where fifty percent or more of the subscribers make one or more toll calls over the route under study. This standard need only be met in one direction in order to qualify the route for further study.

All exchanges in Virginia were reviewed to determine the number and location of routes necessary to establish EAS calling to the respective County Seat of each subscriber. There also was compiled a list of exchanges with an indicated interest to an urban center. Special request routes were also considered. (See Exhibit 2)

As a result of the review, it was determined that the community of interest study would cover the following three groups:

1. Routes between each County Seat and all exchanges having a significant number of telephones in the county.
2. Certain metropolitan routes to exchanges respectively surrounding Richmond, Roanoke, Lynchburg, Suffolk, Galax, and Fredericksburg.
3. Routes, not included above, involving requests and petitions which were presented to the Commission and to the companies.

Each Company was requested to make the study, whenever possible, to determine the calling rates from their exchanges under consideration. In some cases, the necessary information to determine the calling rates in both directions was available from computers. Any month other than December and January during the period October, 1973 to June, 1974 was acceptable as a test period

The telephone companies responded to this request and completed their studies on the routes allocated to each of them. Information was also secured on Foreign Exchange and Wide Area Telephone Service as it might affect any of the routes. The tabulation of these studies is shown in Exhibit-3.

A study of the community of interest results shows that a majority of the routes do not meet the adopted standard of an average of 3 calls per customer with 50% or more of the customers making one or more toll calls. With reference to county seat calling there are many reasons why the standard was not met. An analysis was made of the services available at the county seat which could influence telephone calling to that area. (See Exhibit 4). In Albemarle County, there is a high community of interest with Charlottesville since it not only is the county seat, but it is also a business, industrial, health and educational center. In contrast, Hanover Courthouse has a separate telephone exchange, but calling is low since only county offices are in the area.

Boundaries of telephone exchanges rarely follow political boundaries. Therefore, exchanges often include telephones in more than one political subdivision. This means that the community of interest with one county seat is not shared by all subscribers in the exchange. As an example, the Clover Exchange has subscribers in both Halifax and Charlotte Counties. The Clover-Charlotte Court House route generates .4 calls per Clover customer per month and the Clover-Halifax route generates 1.6

calls per month. If EAS were provided at a higher monthly rate solely because of calling to the county seat of Halifax County, a number of customers in Charlotte County would be penalized.

Those routes that met the adopted standards were scheduled for further study and for the preparation of cost estimates to evaluate the economic impact of further extension of EAS.

Several factors peculiar to the localities were considered in the studies. For example, Burkes Garden has a high calling rate to Tazewell, the county seat, but the president of the phone company serving the area, which is a mutual telephone association, reports by letter that the subscribers are not interested in EAS. Hanover is the county seat of Hanover County, but its subscribers have a greater interest in calling Richmond than the other exchanges of that County. The Hanover County offices do have Foreign Exchange service to the other exchanges in the County. Tangier is an island with no contiguous exchange so they have a low community of interest even with their county seat of Accomac. The City of Suffolk was formed by incorporation of the County of Nansemond which had 5 exchanges. The interest for city-wide service is high, but there is relatively little calling between some of these exchanges, as between Whaleyville and Crittenden. The examination indicates that the community of interest generally is with trading centers and not with county seats

After determining the routes that met the community of interest standard, it was necessary to determine the cost of establishing EAS on these routes. Each telephone company has levels of costs depending on type of equipment used, method of establishing this service, and facilities presently available in the plant. Therefore a conference was held with the representatives of companies affected and tasks were assigned for engineering and cost estimating of plant in the territory of each company. The responsibility of coordination was determined where two or more companies were involved in one system. It is estimated that 7,000 man hours were contributed by the telephone companies to this part of the study. The SCC staff spent about 2,000 man hours on the total study.

In order that the statewide cost studies be on a comparable basis, certain guidelines were established for use. These are summarized to give a background for the results. Of prime importance, the added revenue from EAS must equal lost toll revenue, plus the increase in costs, to retain the same revenue-cost relationship before and after conversion to EAS. Computation of cost increase is in terms of incremental cost as opposed to fully distributed costs. The cost study assumes that the volume of messages and minutes carried under toll will be carried by the same plant, at the same costs, when EAS is provided. There will be no allocation of plant, buildings, etc., when existing facilities are used without expansion to establish EAS routes.

The necessary added investment is estimated on the basis of the additional switching and trunking facilities which will be required to carry the incremental usage each year. Estimates of incremental usage involve call stimulation factors and holding time effects because of EAS. When tolls are dropped, subscribers call more often and talk longer. The appropriate annual charges were applied to the added investment.

Since additional revenue will be required in the future to support EAS, the study should cover estimates over a reasonable number of years following implementation of EAS. Five to eight years is a reasonable range. Since the studies are estimates, and involve judgment, they should be backed up with reasonable support

The incremental annual costs are determined by adding the annual charges on the incremental investment to the toll revenue loss, reduced by the amount of cost savings and known added revenues resulting from EAS. Toll revenue loss includes estimates of the number of toll messages for each year of the study multiplied by the average revenue per message.

Cost savings attributable to EAS must be identified as a credit, and include such items of expense as billing, operator, facility and business office costs. Additional revenues must be projected to offset costs for items such as increased local coin facilities and regrouping. Regrouping must be based on estimated station growth and generally revenue therefrom is not included in the projected revenue to simplify the determination of the added monthly cost per station. The incremental annual

costs may be reduced to the equated costs to the Company for each of the years in the study by using standard time value of money techniques.

The purpose of the foregoing methodology is to determine the true cost of additional EAS. It will identify the proper amount to be passed on to the EAS applicant if he is to pay all costs, and it identifies the amount of subsidy by the general rate payers when the cost is not passed on to those who benefit.

The cost studies were made by exchange. For example, the study for Fredericksburg identifies an estimate of the cost to Fredericksburg subscribers for calling to Bowling Green, Brokenburg and King George. If one point were dropped from the study, the cost characteristics would be changed and a new study required. In the consideration of county seats, only the routes meeting the guidelines were studied and any additional routes would mean additional costs.

The costs have been summarized in three sections. See Exhibit 5.

Section I. Cost of EAS by exchanges. This shows the exchanges studied, the routes for EAS from that exchange, total investment at end of study period, the added annual cost, and cost per main station per month to prevent subsidy.

Section II. Cost of EAS by counties. For county wide calling via guideline routes. Section I exchange costs are used.

Section III. Cost of EAS for Urban and Special Areas. Section I exchange costs are used. An exception was made for the Northern Virginia Area of C&P Telephone Company and exchanges of Continental Telephone Company included in this Section. These were estimated on a Gross Order of Magnitude basis for this study, due to complexity, within the time frame.

ANALYSIS OF COST STUDIES

The total statewide estimated incremental investment required to provide EAS for the routes studied is \$73,421,806. The total additional annual revenue required to support EAS is \$22,911,880. The magnitude of these figures raises the question of feasibility of dedication of capital resources for this purpose and the imposition of additional rates to pay for it. This Commission is familiar with the problems of the public utility industry in raising new capital in this inflationary

There is concern about requiring additional investment to support this type of service improvement at this time.

The analysis of costs among exchanges will show no consistency. Each exchange has different cost characteristics. One exchange building will have room for the additional equipment, while another will be so crowded that a building addition is necessary. C&P exchanges will have Western Electric switching equipment, while independent companies will have switching equipment of independent manufacturers. Some EAS trunks can be provided by additions to present routes, while others will require entirely new routes.

Outside plant is a term describing the links between central offices. It may be a circuit composed of wire, cable, carrier equipment or microwave radio. The basic link is called a trunk. One trunk can handle one telephone conversation at a time.

EAS trunks or circuits between exchanges are provided separately from toll trunks and are dedicated to EAS service. The two basic facilities requiring investment to establish EAS are central office and outside plant. For the central office there must be added investment to handle and switch the calling ("build up") and to make the office compatible with the other offices or exchanges with which it may have EAS ("build out"). There are several different types of equipment in central offices with different characteristics which must be made compatible when processing calls between the offices.

Carrying charges are applied to investment to determine the annual revenue requirements. These charges include factors for maintenance, depreciation, administration, local and income taxes and return. They are developed by each telephone company by study of historic relationship between investment and the specific factor studied. The factors vary depending on the company's types of property and financing.

Toll revenue loss varies both with distance between exchanges and with volume of calling. Long distance rates are related to the distance between exchanges. As a general rule, when local dialing is provided over a Bell-Independent toll route, the Bell Company's settlement effect is a saving of expense and the Independents result is loss of revenue or negative saving.

The cost study results show little consistency due to the individual effect of each variable over any specified route studied.

It was found that 25 routes have a calling rate in excess of 6 calls per month per main station. A majority of these are in the Richmond, Lynchburg and Charlottesville area. To establish these routes would require investment of at least \$16,030,000.

RATES FOR EXTENDED AREA SERVICE

Many requests for EAS have been based on the mistaken belief that it is free service or at most only a small incremental increase when tolls are removed. Appendix 5, Cost by Exchanges, shows the cost per main station per month. This gives an indication of the increment that would be added to basic monthly rates for each local exchange line in each exchange to cover the costs of providing the EAS shown. The increased rates would be applied if the principle is established of passing on the costs to the customers who benefit. If the increase is not passed on, the amount thereof will constitute a subsidy from other rate payers to the beneficiary of EAS.

Unfortunately, but unavoidably, none of the tariffs of the 27 telephone companies are the same and their basic rates vary. Telephone rate structures serve the purpose of generating revenues which will cover each Company's expenses and provide a reasonable return on its investment. To this extent, the rate structures are cost related.

Two major categories of service, previously mentioned, generate most of the revenue for telephone companies, namely, toll, or long distance, and local exchange calling. The establishment of EAS substitutes local exchange for toll. Rates are established in each category to generate the total required revenue. Factors considered in setting the level of rates are value of service, costs, stimulation of use, growth and development of service, stability of rates, rate relationship between services, consideration of competitive alternatives, ease of understanding, economic,

market and investment risk, encouragement of more efficient use of facilities, and a fair distribution of charges.

In applying the foregoing factors, an almost universal rate structure for basic exchange service has developed, which includes these features:

1. Differential between residence, business, and other classes.
2. Differential between grades of service, i.e. 1-Party, 2-Party, 4-Party, etc.
3. Differential between rates of 1 and 2 Party Service in the center of the exchange and the same service in the extremities of the exchange.

Beyond the basic exchange service, the local exchange rates become more sophisticated. Flat rate service has been and is normal, although since 1920 telephone companies have advocated charging on a measured basis. (Optional message rate services are offered by C&P Telephone Company and, for certain areas, business rates must be the message rate.) Timing of messages is also being introduced as equipment becomes available to accomplish it. From the larger companies, the policy is to fix uniform rates on a statewide basis with a grouping of exchanges based on potential calling. Distance is recognized in the C&P rate grouping for those exchanges having EAS.

The rate structures in each of the telephone companies have evolved over the years, with reductions and increases, accompanied by changes in the service offered. Rates vary widely for individual equipment offerings and services, both between and within companies, depending on local factors. The analysis of cost revealed

inconsistent effects in each exchange where EAS was proposed. If it is assumed that present rates produce the revenue required for each company to meet its expenses and fair return, then increased rates will be necessary to protect each company's earnings if a program of EAS extension is started.

Basically, there are two approaches to increasing rates. The first is to raise all rates in each company to cover the increased revenue requirements even though some subscribers would receive no benefit from the change. The second approach to the additional revenue requirement would be to charge an adder to the subscriber benefiting in those exchanges going EAS.

In the first approach, a large company such as C & P might cover their requirements by an additional charge of 50¢ per month to all subscribers, although a majority would receive no benefit from the change. In a small company such as Prince George Telephone Company, subscribers would pay \$11.89 additional per station per month, and for Burkes Garden Telephone Exchange, subscribers would pay around \$19.00 per month to have EAS. This illustrates the inconsistency of this approach.

In the second approach, the amount necessary to establish EAS is added to the basic service rate either as a flat sum to each subscriber or spread over the various grades of service proportionately so as to equal the total. Those who benefit would pay. For small exchanges near a larger metropolitan area this approach results in very high costs. Examples are \$46.04 per month per main station to the Hanover-Richmond Area, and \$27.42 per month, per main station, for Big Island to the

Lynchburg-Bedford Area. As shown by Exhibit 5 a few routes would have a negative requirement, but this illustrates the variations possible in this approach.

The approaches outlined above would apply to the County groups or Metropolitan groups summarized in Section II and III of Exhibit 5. The same principles would apply at Suffolk or in Augusta County.

ALTERNATIVES

Since the subsidized or non-subsidized local rates do not give a satisfactory statewide answer, it is proper to discuss possible alternatives to meet some of the demands.

The following alternatives have been considered and are outlined briefly:

1. Timed message rate in, or between, exchanges
2. Tele-Plan
3. Foreign Exchange Service (FX)
4. Wide Area Telephone Service (WATS)
5. Intrastate Toll Tariff

Equipment has been developed whereby a timed message unit rate which varies by distance could be applied to local calls between exchanges. This assessment of costs to actual users would be ideal, but could result in higher charges. Since the message rate must cover the toll displaced, plus cost of EAS facilities, it would result in a higher charge than the toll now used in many instances.

Tele-Plan was introduced and is available over many routes in the state for customers who originate a large number of calls. For a flat monthly charge, added to the monthly rate, the customer has one half hour of calling to the designated exchange. Each minute of use in excess of the first half hour is charged at an amount less than toll. This is a one-way service.

Foreign Exchange Service (FX) was made uniform throughout the state in 1973. A subscriber in one exchange desiring to make calls to, and to receive calls from, any other exchange in the

state may subscribe to service on the foreign exchange service by paying the basic rate of the foreign exchange, plus a mileage charge of \$3.75 per mile for the airline distance between exchanges. A variation of charges for this service by some companies has been the establishment of a maximum mileage charge for county governments of \$25.00 per month, per line, connecting county governments with exchanges serving citizens of the county. Under this arrangement, citizens can call the county seat, or county offices can call the citizens, without a toll.

Wide Area Telephone Service offers either inward or outward calling to any exchange in the state at a flat rate or at a measured time rate. The measured rate is so high that it is not economical for short distances when compared with standard toll rates, but does give calling without individual toll charges.

Intrastate toll rates are currently based on (1) the distance called in blocks, (2) the time of day of the call, (3) customer dialing or operator assistance, and (4) person-to-person requirements. For most calls, there is a three minute minimum charge whether the time is used or not. Each minute over the initial minimum carries an additional charge. Each call is billed separately to the subscriber. Present minimums for a dialed call is \$.15 during the day and \$.10 at night. Some states have placed toll rates on a one minute schedule and bulk bill for minutes on a particular route. This type of toll billing requires no change, or cost, other than the normal growth of toll demand and billing.

Rates can be designed either by changes in toll or exchange charges to produce the additional revenue necessary to support an

investment of the magnitude of the EAS routes studied. This is in addition to the requirement for other investments necessary to maintain the growing present service. The public expects the increases to be within reason and equitable. In some areas, the alternatives presently available may be more reasonable than EAS additions

EXHIBIT I

GUIDELINES USED IN STUDY

GUIDELINES FOR EXTENDED AREA TELEPHONE SERVICE

In the past few years the Commission has received an increasing number of requests for extended area telephone service (EAS). When there is a demonstrated need for this service and the affected subscribers are willing to pay the associated costs, the Commission is of the opinion that telephone companies should undertake to provide such service. Frequently EAS service is needed by a minority of customers within a local exchange. In these cases, the best solution may be in an alternative calling plan which will substantially meet the need for EAS requested by the minority, and not cause an increase in rates to the majority which has no need for the service.

The following guidelines have been adopted in order to identify the need for EAS, determine the costs associated with providing the service, and to obtain an indication of the subscribers' willingness to pay for the service. The guidelines will assure that each request is handled in a uniform manner and furnish information to aid in determining if EAS should be provided.

1. To receive consideration for EAS, a substantial community of interest must be indicated by a monthly calling rate that equals or exceeds three calls per customer with 50% or more of the customers in a given exchange calling over the route. These criteria need only be met in one direction in order to qualify the route for further study.
2. If a substantial community of interest exists the cost of providing EAS will then be determined. This is the annual incremental cost required to provide EAS rather than toll. It is determined by adding the toll revenue loss and the annual charges on the incremental investment, reduced by the amount of cost savings and additional revenues resulting from providing EAS.
3. With the above information, a determination can be made of what rates will be required to provide EAS. Where increases in rates are necessary say to provide EAS, the affected customers will be surveyed by mail to determine whether EAS is wanted at the rates proposed for the service. If more than 50% of all subscribers favor EAS at the rates proposed, the Company will be requested to file appropriate tariffs for the further consideration of the Commission.

EXHIBIT 2

STUDIES OF PRESENT EXCHANGES

1. Routes required-all subscribers call county seat on EAS.
2. Other requested routes - not county seat.
3. Present local calling - all exchanges
4. Exchanges without EAS.

Exhibit 2

REVIEW OF TELEPHONE EXCHANGES

C & P TELEPHONE COMPANY EXCHANGES

| | EXCHANGE | COUNTY | COUNTY SEAT | |
|----|---------------|------------------------------|-------------------------------|-------------------------|
| 1 | Appalachia | Wise Lee | Wise Jonesville | c-54,122 o-78,83 |
| 2 | Ashland | Hanover | Hanover CH | c-238 o-140,234,283 |
| 3 | Bedford | Bedford | Bedford | c-8,60,69,126 o-93 |
| 4 | Belle Haven | Accomack | Accomac | c- o-17 |
| 5 | Bent Mountain | Roanoke Floyd Franklin | Salem Floyd Rocky Mount | c-97,216,317 o- |
| 6 | Berryville | Clarke | Berryville | c-104,112 |
| 7 | Bethia | Chesterfield | Chester | c- o-84,53 |
| 8 | Big Island | Bedford Amherst | Bedford Amherst | c-3,129 o-60 |
| 9 | Big Stone Gap | Wise Lee | Wise Jonesville | c-54,122 o-78,83 |
| 10 | Blacksburg | Montgomery Craig | Christiansburg Newcastle | c- o-293,99 |
| 11 | Bluemont | Loudoun | Leesburg | c-57 o-66,121,112,57 |
| 12 | Boyce | Clarke | Berryville | c-221 o-104 |
| 13 | Braddock | Fairfax | Fairfax City | c- o-274,190,203,297 |
| 14 | Brokenburg | Spotsylvania | Spotsylvania CH | c- o-44 |
| 15 | Buchanan | Botetourt Rickbridge | Fincastle Lexington | c-215,267 o-93,345 |
| 16 | Calverton | Fauquier | Warrenton | c- o-274,33,49 |
| 17 | Cape Charles | Northampton | Eastville | c- o-4 |

Note: c-EAS required for calling County Seat-Exchange Number
o-Other EAS requested-Exchange Number

Exhibit 2

| | | | | |
|----|------------------|---|--------------------------------------|--|
| 18 | Cartersville | Cumberland Powhatan | Cumberland Powhatan | c-87 o- |
| 19 | Catoctin | Loudoun | Leesburg | c- o-66,112 |
| 20 | Chancellor (C&P) | Orange | Orange | c-80 o-33 |
| 21 | Charles City | Charles City | Charles City | c-113 o-92,120 |
| 22 | Chatham | Pittsylvania | Chatham | c-37,135,136,231,249, 312,322,356,236 o- |
| 23 | Chester | Chesterfield | Chester | c-67,128 o- |
| 24 | Chincoteague | Accomack | Accomack | c-79 o- |
| 25 | Christiansburg | Montgomery Floyd | Christiansburg Floyd | c-290,269 o- |
| 26 | Clinch Co | Dickenson | Clintwood | c-27 o-50,29,38,36 |
| 27 | Clintwood | Dickenson | Clintwood | c-26,29,36,38,50,122, 279,86 o-78 |
| 28 | Clover | Halifax Charlotte | Halifax CH Charlotte CH | c-171,236 o-327 County Study |
| 29 | Coeburn | Wise Dickenson | Wise Clintwood | c-27,122 o-78,96,26,36,38,50 |
| 30 | Concord | Appomattox Campbell | Appomattox Rustburg | c-130,319 o- |
| 31 | Craigsville | Augusta Bath Rockbridge | Staunton Warm Spring Lexington | c-103,247,267 o- |
| 32 | Criglersville | Madison | Madison | c- o-101 |
| 33 | Culpeper | Culpeper Orange Rappahannock | Culpeper Orange Washington | c-80,353 o-91,111,114,20 |
| 34 | Cumberland | Cumberland Powhatan Prince Edward | Cumberland Powhatan Farmville | c-87,211 o- |

Exhibit 2

| | | | |
|----------------|--------------------------------------|---|---------------------------------|
| Cumberland Gap | Lee | Jonesville | c-54 o-56 |
| Dante | Dickenson Russell Wise | Clintwood Lebanon Wise | c-27,55,122 o-29,26,38,50,52 |
| Danville | Pittsylvania Halifax | Chatham Halifax | c-22,236 o- |
| Davenport | Buchanan Dickenson | Grundy Clintwood | c-27,233 o-26,29,36,50,52 |
| Dinwiddie | Dinwiddie Amelia | Dinwiddie Amelia | c-128,334 o-53 |
| Dublin | Pulaski | Pulaski | c- o- |
| Eastville | Northampton | Eastville | c- o- |
| Engleside | Fairfax | Fairfax | c- o-203,190 |
| Fife | Goochland | Goochland | c- o- |
| Fredericksburg | Stafford Caroline Spotsylvania | Stafford Bowling Green Spotsylvania | c-151 o-14,260 |
| Gainesboro | Frederick | Winchester | c- o-229 |
| Goochland | Goochland Powhatan Louisa | Goochland Powhatan Louisa | c-58,87,92,217, 301,94 |
| Gordonsville | Orange Albemarle Louisa | Orange Charlottesville Louisa | c-58,172 o- |
| Greenwood | Albemarle Nelson | Charlottesville Lovingston | c-59,172 o-188,354,103 |
| Hartwood | Stafford Fauquier | Stafford Warrenton | c-114 o-16,91 |
| Haysi | Dickenson | Clintwood | c-27 o-26,233,29,36,38 |
| 51 Herndon | Fairfax Loudoun | Fairfax Leesburg | c- o-132,190,270 |

Exhibit 2

| | | | | |
|----|----------------|--------------------------------|--------------------------------|---|
| 52 | Honaker | Russell | Lebanon | c-55 o-313,38,36 |
| 53 | Hopewell | Prince George Chesterfield | Prince George Chester | c- o-7,67,92,39 |
| 54 | Jonesville | Lee | Jonesville | c-1,9,35,95 o- |
| 55 | Lebanon | Russell | Lebanon | c-36,52,96 o-123,313 |
| 56 | Lee | Lee | Jonesville | c- o-35,83 |
| 57 | Leesburg | Loudoun | Leesburg | c-132,203,241,112 o-11,115-Vienna, Falls Church |
| 58 | Louisa | Louisa | Louisa | c-46,47,102,301 o- |
| 59 | Lovingston | Nelson | Lovingston | c-48,225,310,323, o-354 |
| 60 | Lynchburg | Campbell Bedford Amherst | Rustburg Bedford Amherst | c-3,129,319 o-8,126,339 |
| 61 | Madison | Madison | Madison | c-100,101,332 o- |
| 62 | Manakin | Goochland | Goochland | c- o- |
| 63 | Marshal | Fauquier | Warrenton | c-353 o-66,221 |
| 64 | McKenney | Dinwiddie Brunswick | Dinwiddie Lawrenceville | c-266 o-84 |
| 65 | Mechanicsville | Hanover | Hanover CH | c-238 o- |
| 66 | Middleburg | Loudoun Fauquier | Leesburg Warrenton | c-114 o-11,63,70,132 |
| 67 | Midlothian | Chesterfield Powhatan | Chester Powhatan | c-23 o-53,84 |
| 68 | Mineral | Louisa | Louisa | c- o- |
| 69 | Montvale | Bedford | Bedford | c-3 o- |

Exhibit 2

| | | | | |
|----|-------------------------|-------------------------------|--------------------------|----------------------------|
| 70 | Mount Gilead | Loudoun | Leesburg | c- o-66,112 |
| 71 | Narrows | Giles | Pearisburg | c- o- |
| 72 | Hampton | City | | o-120 |
| 73 | Newport News | City | | o-120 |
| 74 | Peninsula Zone | York James City | Yorktown Williamsburg | c- o- |
| 75 | Poquoson Zone | York | Yorktown | c- o-120 |
| 76 | Norfolk City | City | | c- o-106 |
| 77 | Portsmouth City Zone | Nansemond | Suffolk | c-106 o-187,246,175,118 |
| 78 | Norton | Wise | Wise | c- o-1,9,29,86,27 |
| 79 | Onancock | Accomack | Accomack | c-24,107,108 o- |
| 80 | Orange | Orange | Orange | c-20,33,170 o- |
| 81 | Parksley | Accomack | Accomack | c- o- |
| 82 | Pearisburg | Giles | Pearisburg | c-293 o- |
| 83 | Pennington Gap | Lee | Jonesville | c- o-56,1,9 |
| 84 | Petersburg | Chesterfield Prince George | Chester Prince George | c-176,198 o-64,92,7,67 |
| 85 | Piney River | Nelson Amherst | Lovingston Amherst | c-129 o- |
| 86 | Pound | Wise | Wise | c-122 o-78,27 |
| 87 | Powhatan | Powhatan | Powhatan | c-18,34,46 o-92 |

Exhibit 2

| | | | | |
|-----|------------------|--------------------------|---------------------------|--|
| 88 | Providence Forge | Charles City New Kent | Charles City New Kent | c-110,117,298 o-92,98,120 |
| 89 | Pulaski | Pulaski Wythe | Pulaski Wytheville | c-90,363 o- |
| 90 | Radford | Montgomery Pulaski | Christiansburg Pulaski | c-89 o-99 |
| 91 | Remington | Fauquier | Warrenton | c- o-33,49 |
| 92 | Richmond City | City | | c-46 o-21,87,88,140,238, 234,283,298,84,53 |
| 93 | Roanoke | Roanoke | Salem | c-215,317,3 o-15,105,290,150 |
| 94 | Rockville | Hanover | Hanover CH | c-238 o-46 |
| 95 | St. Charles | Lee | Jonesville | c-54 o- |
| 96 | St. Paul | Wise | Wise | c-55,122 o-29 |
| 97 | Salem | Roanoke | Salem | c-5 o- |
| 98 | Sandston | Henrico | Richmond | c- o-88 |
| 99 | Shawsville | Montgomery | Christiansburg | c- o-90,10,93. |
| 100 | Shenandoah Park | Page | Luray | c- o- |
| 101 | Sperryville | Rappahannock | Washington | c-61 o-32,221 |
| 102 | Spotsylvania | Spotsylvania | Spotsylvania | c-58,111,264 o- |
| 103 | Staunton | Augusta | Staunton | c-31,154,194,232,285, 310,354,355 o-48 |
| 104 | Stephens City | Frederick Warren | Winchester Front Royal | c-6,221 o-335,12 |
| 105 | Stone Mountain | Bedford | Bedford | c- o-93 |

Exhibit 2

| | | | | |
|-----|-----------------|---------------------------------|-----------------------------|-----------------------------|
| 106 | Suffolk City | Nansemond | Suffolk | c-77,187 o-76 |
| 107 | Tangier Island | Accomack | Accomack | c-79 o- |
| 108 | Temperanceville | Accomack | Accomack | c-79 o- |
| 109 | The Plains | Fauquier | Warrenton | c- o-112,274 |
| 110 | Toano | James City New Kent | Williamsburg New Kent CH | c-88 o-117 |
| 111 | Unionville | Orange Spotsylvania | Orange Spotsylvania | c-102 o-33,20,170 |
| 112 | Upperville | Fauquier | Warrenton | c-6,57,114 o-70,109,11, |
| 113 | Varina | Henrico Charles City | Richmond Charles City | c-21 o- |
| 114 | Warrenton | Fauquier | Warrenton | c-49,66,221,241,112 o-33 |
| 115 | WMEA Zones -7- | Alexandria, Arlington & Fairfax | | c- o-190,297 |
| 116 | Waverly | Sussex | Sussex | c-338,334 o-351 |
| 117 | West Point | King William New Kent | King William New Kent | c-88,261 o-110 |
| 118 | Whaleyville | Nansemond | Suffolk | c- o-77 |
| 119 | White Sulphur | Alleghany | Covington | c-184 o- |
| 120 | Williamsburg | James City | Williamsburg | c- o-21,75,88,72,73 |
| 121 | Winchester | Frederick | Winchester | c-11,229 o- |
| 122 | Wise | Wise | Wise | c-1,9,29,36,27,86,96 o- |

Exhibit 2

| | | | | |
|-----|--------------------------|--------------------------|--------------------------|--|
| 141 | Beechwood | Mecklenburg | Boydton | c-152 0- |
| 142 | Bergton | Rockingham | Harrisonburg | c- 0- |
| 143 | Big Prater | Buchanan | Grundy | c- 0- |
| 144 | Big Rock | Buchanan | Grundy | c- 0- |
| 145 | Blackridge | Brunswick | Lawrenceville | c-266,152 0- |
| 146 | Blackstone | Nottoway | Nottoway | c- 0- |
| 147 | Bland | Bland | Bland | c-316 0-363 |
| 148 | Bluefield | Tazewell | Tazewell | c-342 0-313,304 |
| 149 | Blue Grass | Highland | Monterey | c- 0- |
| 150 | Boones Mill | Franklin | Rocky Mount | c- 0-93 |
| 151 | Bowling Green | Caroline | Bowling Green | c-44,192,200 0- |
| 152 | Boydton | Mecklenburg | Boydton | c-138,141,177,157,263 329,145 0- |
| 153 | Boykins | Southampton | Courtland | c-183 0- |
| 154 | Bridgewater | Rockingham | Harrisonburg | c-103 0- |
| 155 | Bristol (Va.) | Washington | Abingdon | c-123 0- |
| 156 | Broadway- Timberville | Rockingham | Harrisonburg | c-361 0- |
| 157 | Broadnax | Brunswick Mecklenburg | Lawrenceville Boydton | c-152,266 0- |

Exhibit 2

| | | | | |
|-----|--------------------------|--------------------------|--------------------------|--|
| 141 | Beechwood | Mecklenburg | Boydton | c-152 0- |
| 142 | Bergton | Rockingham | Harrisonburg | c- 0- |
| 143 | Big Prater | Buchanan | Grundy | c- 0- |
| 144 | Big Rock | Buchanan | Grundy | c- 0- |
| 145 | Blackridge | Brunswick | Lawrenceville | c-266,152 0- |
| 146 | Blackstone | Nottoway | Nottoway | c- 0- |
| 147 | Bland | Bland | Bland | c-316 0-363 |
| 148 | Bluefield | Tazewell | Tazewell | c-342 0-313,304 |
| 149 | Blue Grass | Highland | Monterey | c- 0- |
| 150 | Boones Mill | Franklin | Rocky Mount | c- 0-93 |
| 151 | Bowling Green | Caroline | Bowling Green | c-44,192,200 0- |
| 152 | Boydton | Mecklenburg | Boydton | c-138,141,177,157,263 329,145 0- |
| 153 | Boykins | Southampton | Courtland | c-183 0- |
| 154 | Bridgewater | Rockingham | Harrisonburg | c-103 0- |
| 155 | Bristol (Va.) | Washington | Abingdon | c-123 0- |
| 156 | Broadway- Timberville | Rockingham | Harrisonburg | c-361 0- |
| 157 | Broadnax | Brunswick Mecklenburg | Lawrenceville Boydton | c-152,266 0- |

Exhibit 2

| | | | | |
|-----|-----------------|--|--|------------------------------------|
| 158 | Brookneal | Campbell Halifax Charlotte | Rustburg Halifax Charlotte C.H. | c-171,236,319 0- |
| 159 | Brownsburg | Rockbridge | Lexington | c- 0- |
| 160 | Buckingham | Buckingham | Buckingham | c-225,308,324 0- |
| 161 | Buena Vista | Rockbridge | Lexington | c- 0- |
| 162 | Burke's Garden | Tazewell | Tazewell | c-342 0- |
| 163 | Burkeville | Nottoway Prince Edward | Nottoway Farmville | c-211 0- |
| 164 | Burnt Chimney | Franklin | Rocky Mount | c- 0- |
| 165 | Callao | Northumberland | Heathville | c- 0- |
| 166 | Cana | Carroll Patrick | Hillsville Stuart | c-336 0- |
| 167 | Capron | Southampton | Courtland | c-183 0- |
| 168 | Ceres | Bland | Bland | c-275 0- |
| 169 | Chancellor I | Spotsylvania | Spotsylvania | c- 0- |
| 170 | Chancellor II | Spotsylvania | Spotsylvania | c-80 0- |
| 171 | Charlotte C.H. | Charlotte | Charlotte C.H. | c-28,138,158,237 257A,302 0- |
| 172 | Charlottesville | Albemarle Louisa Green Fluvanna | Charlottesville Louisa Standardsville Palmyra | c-47,48,323,332,301 0- |
| 173 | Chase City | Mecklenburg | Boydton | c- 0-138,177 |
| 174 | Chilhowie | Smyth | Marion | c- 0- |
| 175 | Chuckatuck | Nansemond Isle of Wight | Suffolk Smithfield | c- 0-77 |

Exhibit 2

| | | | | |
|-----|----------------------------|--------------------------|-------------------------------|--------------------------|
| 176 | Claremont | Surry | Surry | c-84,338 0 |
| 177 | Clarksville | Mecklenburg | Boydton | c-152 0-173 |
| 178 | Clifton Forge | Alleghany Bath | Covington Warm Springs | c-247 0- |
| 179 | Clinchport | Scott | Gate City | c- 0- |
| 180 | Collinsville | Henry | Martinsville | c- 0- |
| 181 | Colonial Beach | Westmoreland | Montross | c- 0- |
| 182 | Comer's Rock- Elk Creek | Grayson | Independence | c- 0-222 |
| 183 | Courtland | Southampton | Courtland | c-167,253,153 0- |
| 184 | Covington | Alleghany | Covington | c-119,215 0- |
| 185 | Crewe | Nottoway | Nottoway | c- 0- |
| 186 | Cripple Creek | Wythe | Wytheville | c- 0- |
| 187 | Crittenden | Isle of Wight | Smithfield | c- 0-77 |
| 188 | Crozet | Albemarle | Charlottesville | c- 0-48 |
| 189 | Dahlgren | King George | King George | c- 0- |
| 190 | Dale City | Prince William | Manassas | c- 0-115,241,42,51,13 |
| 191 | Damascus | Washington | Abingdon | c- 0- |
| 192 | Dawn | Caroline King William | Bowling Green King William | c-151,261 0- |

Exhibit 2

| | | | | |
|-----|---------------|---|---------------------------------------|----------------------------------|
| 193 | Dayton | Rockingham | Harrisonburg | c- 0- |
| 194 | Deerfield | Augusta | Staunton | c-103,247 |
| 195 | Deltaville | Middlesex | Saluda | c- 0-0- |
| 196 | Dendron | Surry Isle of Wight | Surry Smithfield | c-326 0- |
| 197 | Dillwyn | Buckingham | Buckingham | c- 0- |
| 198 | Disputanta | Prince George | Prince George | c-84 0- |
| 200 | Doswell | Hanover Caroline | Hanover C.H. Bowling Green | c-151 0- |
| 201 | Drakes Branch | Charlotte | Charlotte C.H. | c- 0- |
| 202 | Duffield | Scott | Gate City | c- 0- |
| 203 | Dulles | Loudoun Fairfax | Leesburg Fairfax | c-57 0-42,13 |
| 204 | Dungannon | Scott | Gate City | c- 0- |
| 205 | Dwight | Buchanan | Grundy | c- 0- |
| 206 | Eagle Rock | Botetourt | Fincastle | c- 0- |
| 207 | Edinburg | Shenandoah | Woodstock | c- 0- |
| 208 | Edom | Rockingham | Harrisonburg | c- 0- |
| 209 | Elkton | Rockingham Page | Harrisonburg Luray | c-271 0- |
| 210 | Emporia | Greenville | Emporia | c-254 0- |
| 211 | Farmville | Prince Edward Buckingham Cumberland | Farmville Buckingham Cumberland | c-34,160,163 257-A, 302 0- |
| 212 | Farmham | Richmond | Warsaw | c- 0- |

Exhibit 2

| | | | | |
|-----|----------------|------------------------------------|--|----------------------------------|
| 213 | Ferrum | Franklin | Rocky Mount | c- 0- |
| 214 | Fieldale | Henry | Martinsville | c- 0- |
| 215 | Fincastle | Botetourt | Fincastle | c-15,93,299,184 0- |
| 216 | Floyd | Floyd | Floyd | c-5, 281 0- |
| 217 | Fork Union | Goochland Fluvana | Goochland Palmyra | c-46 0- |
| 218 | Fort Blackmore | Scott | Gate City | c- 0- |
| 219 | Franklin | Southampton Nansemond | Courtland Suffolk | c- 0- |
| 220 | Fries | Grayson Carroll | Independence Hillsville | c-244,250 0- |
| 221 | Front Royal | Fauquier Rappahannock Warren | Warrenton Washington (Va.) Front Royal | c-104,114,335,353,12 0-63,101 |
| 222 | Galax | Grayson Carroll | Independence Hillsville | c-244,250 0-182,288 |
| 223 | Gate City | Scott | Gate City | c- 0- |
| 224 | Glade Spring | Washington | Abingdon | c- 0- |
| 225 | Gladston | Nelson | Lovingston | c-59,129,130,160 0- |
| 226 | Gladys | Campbell | Rustburg | c- 0- |
| 227 | Glasgow | Rockbridge | Lexington | c- 0- |
| 228 | Gloucester | Gloucester | Gloucester | c-321 0-259 |
| 229 | Gore | Frederick | Winchester | c-121 0-45 |
| 230 | Great Bridge | Chesapeake | City | c- 0- |
| 231 | Gretna | Pittsylvania | Chatham | c-22 0- |
| 232 | Grottoes | Rockingham Augusta | Harrisonburg Staunton | c-103 0- |

Exhibit 2

| | | | | |
|-----|----------------|----------------------------|-----------------------------|---------------------------------------|
| 233 | Grundy | Buchanan | Grundy | c-38,255 0-50 |
| 234 | Gum Tree | Hanover | Hanover C.H. | c-238 0-2,92 |
| 235 | Hague | Westmoreland | Montross | c- 0- |
| 236 | Halifax | Halifax | Halifax | c-22,37,28,158 0- |
| 237 | Hampden-Sydney | Charlotte Prince Edward | Charlotte C.H. Farmville | c-171 0- |
| 238 | Hanover | Hanover | Hanover | c-2,65,94,140,234, 283,298 0-92 |
| 239 | Harrisonburg | Rockingham | Harrisonburg | c-292 0- |
| 240 | Hayes | Gloucester | Gloucester | c- 0- |
| 241 | Haymarket | Prince William Loudoun | Manassas Leesburg | c-114,57 0-190,251,297,344 |
| 242 | Heathsville | Northumberland | Heathville | c- 0-258 |
| 243 | Hickory | Chesapeake | Chesapeake | c- 0- |
| 244 | Hillsville | Carroll | Hillsville | c-220,222,359 0- |
| 245 | Hinton | Rockingham | Harrisonburg | c- 0- |
| 246 | Holland | Nansemond | Suffolk | c- 0-77, |
| 247 | Hot Springs | Bath | Warm Springs | c-31,178,194,358 0- |
| 248 | Hurley | Buchanan | Grundy | c- 0- |
| 249 | Hutt | Pittsylvania | Chatham | c-22 0- |
| 250 | Independence | Grayson | Independence | c-220,222,262 0- |

Exhibit 2

| | | | | |
|-------|------------------|------------------------------|------------------------------|------------------------|
| 251 | Independent Hill | Prince William | Manassas | c-0-241 |
| 252 | Irvington | Lancaster | Lively | c-0- |
| 253 | Ivor | Southampton | Courtland | c-183 0- |
| 254 | Jarratt | Sussex Greensville | Sussex Emporia | C-210,334 0- |
| 255 | Jewell Ridge | Tazewell | Tazewell | c-233,342 0- |
| 256 | Keezletown | Rockingham | Harrisonburg | c-0- |
| 257 | Kenbridge | Lunenburg | Lunenburg | c-266 0- |
| 257-A | Keysville | Charlotte Lunenburg | Charlotte C.H. Lunenburg | c-171,211,348 0- |
| 258 | Kilmarnock | Lancaster | Lively | c-0-242 |
| 259 | King and Queen | King and Queen | King and Queen | c-261 0-228 |
| 260 | King George | King George | King George | c-0-44 |
| 261 | King William | King William King & Queen | King William King & Queen | c-117,192,259 0- |
| 262 | Konnarock | Washington Grayson | Abingdon Independence | c-250 0- |
| 263 | La Crosse | Mecklenburg | Boydton | c-152 0- |
| 264 | Ladysmith | Caroline | Bowling Green | c-0- |
| 265 | Laurel Fork | Carroll | Hillsville | c-0- |
| 266 | Lawrenceville | Brunswick | Lawrenceville | c-64,145,157,257 0- |
| 267 | Lexington | Rockbridge | Lexington | c-15,31,310 0 |
| 268 | Lively | Lancaster | Lancaster | c-0- |

Exhibit 2

| | | | | |
|-------|----------------|----------------|--------------|--------------------|
| 269 | Locust Grove | Floyd | Floyd | c-25 0- |
| 270 | Lorton | Fairfax | Fairfax | c- 0-51 |
| 271 | Luray | Page | Luray | c-209 0- |
| 271-A | McClung | Bath | Hot Springs | c- 0- |
| 272 | McDowell | Highland | Monterey | c- 0- |
| 273 | McGaheysville | Rockingham | Harrisonburg | c- 0- |
| 274 | Manassas | Prince William | Manassas | c- 0-13,112, 16 |
| 275 | Marion | Smyth | Marion | c-168 0-318 |
| 276 | Martinsville | Henry | Martinsville | c- 0- |
| 277 | Mathews | Mathews | Mathews | c- 0- |
| 278 | Max Meadows | Wythe | Wytheville | c- 0- |
| 279 | Maxie | Buchanan | Grundy | c-27 0- |
| 280 | Meadowview | Washington | Abingdon | c- 0- |
| 281 | Meadows of Dan | Patrick | Stuart | c-216 0-137 |
| 282 | Monterey | Highland | Monterey | c-358 0- |
| 283 | Montpelier | Hanover | Hanover C.H. | c-238 0-2,92 |
| 284 | Montross | Westmoreland | Montross | c- 0- |
| 285 | Mount Solon | Augusta | Staunton | c-103 0- |
| 286 | Mount Jackson | Shenandoah | Woodstock | c- 0- |

Exhibit22

| | | | | |
|-----|-----------------|--|--|-----------------------|
| 287 | Mountain Grove | Bath | Warm Spring | c- 0- |
| 288 | Mount of Wilson | Grayson | Independence | c- 0-222 |
| 289 | Natural Bridge | Rockbridge | Lexington | c- 0- |
| 290 | New Castle | Craig | New Castle | c-25 0-93 |
| 291 | New Hope | Augusta | Staunton | c- 0-354 |
| 292 | New Market | Shenandoah | Woodstock | c-239 0- |
| 293 | Newport | Giles Craig | Pearisburg New Castle | c-82 0-10 |
| 294 | Nickelsville | Scott | Gate City | c- 0- |
| 295 | Nokesville | Prince William | Manassas | c- 0- |
| 296 | Oakwood | Buchanan | Grundy | c- 0- |
| 297 | Occoquan | Prince William | Manassas | c- 0-115,241,13 |
| 298 | Old Church | Hanover New Kent | Hanover C.H. New Kent, C.H. | c-88,238 0-92 |
| 299 | Oriskany | Botetourt | Fincastle | c-215 0- |
| 300 | Paint Bank | Craig | New Castle | c- 0- |
| 301 | Palmyra | Goochland Louisa Fluvanna | Goochland Louisa Palmyra | c-46,58,324,172 0- |
| 320 | Pamplin | Appomattox Charlotte Prince Edward | Appomattox, C.H. Charlotte, C.H. Farmville | c-171,211 0- |
| 303 | Pembroke | Giles | Pearisburg | c- 0- |
| 304 | Pocahontas | Tazewell | Tazewell | c-342 0-148,313 |
| 305 | Port Royal | Caroline | Bowling Green | c- 0- |

Exhibit 2

| | | | | |
|-----|---------------|---------------------------------|--------------------------------|---------------------------|
| 306 | Potts Creek | Alleghany | Covington | c- 0- |
| 307 | Princess Anne | Va. Beach | Va. Beach | c- 0- |
| 308 | Prospect | Buckingham Prince Edward | Buckingham Farmville | c-160 0- |
| 309 | Pungo | Va. Beach | Va. Beach | c- 0- |
| 310 | Raphine | Rockbridge | Lexington | c-59,103,267 0- |
| 311 | Reedville | Northumberland | Heathville | c- 0- |
| 312 | Renan | Pittsylvania | Chatham | c-22 0- |
| 313 | Richlands | Tazewell | Tazewell | c-342 0-52,148,304 |
| 314 | Rich Valley | Smyth | Marion | c- 0- |
| 315 | Ridgeway | Henry | Martinsville | c- 0- |
| 316 | Rocky Gap | Bland Giles | Bland Pearisburg | c-147 0- |
| 317 | Rocky Mount | Franklin | Rocky Mount | c-5,93,139 0- |
| 318 | Rural Retreat | Wythe Smyth | Wytheville Marion | c-275 0- |
| 319 | Rustburg | Campbell | Rustburg | c-30,60,126,130,158 0- |
| 320 | Saltville | Smyth Washington Tazewell | Marion Abingdon Tazewell | c-123,342 0- |
| 321 | Saluda | Middlesex Gloucester | Saluda Gloucester | c-228 0- |
| 322 | Sandy Level | Pittsylvania | Chatham | c-22 0- |
| 323 | Schuyler | Nelson Albemarle | Lovingston Charlottesville | c-59,172 0- |

Exhibit 2

| | | | | |
|-----|-----------------|-------------------------------------|--|---------------------|
| 324 | Scottsville | Buckingham Fluvanna Albemarle | Buckingham Palmyra Charlottesville | c-160,301 0- |
| 325 | Shenandoah | Page | Luray | c- 0- |
| 326 | Smithfield | Isle of Wight | Smithfield | c-196,360 0- |
| 327 | South Boston | Halifax | Halifax | c- 0-28 |
| 328 | South Brunswick | Brunswick | Lawrenceville | c- 0- |
| 329 | South Hill | Lunenburg Mecklenburg | Lunenburg Boynton | c-152,348 0- |
| 330 | Spencer | Henry | Martinsville | c-336 0- |
| 331 | Stafford | Stafford | Stafford | c- 0- |
| 332 | Standardsville | Albemarle Madison Green | Charlottesville Madison Standardsville | c-61 0- |
| 333 | Stanley | Page | Luray | c- 0- |
| 334 | Stoney Creek | Sussex Dinwiddie | Sussex Dinwiddie | c-39,351,254 0- |
| 335 | Strasburg | Shenandoah Frederick Warren | Woodstock Winchester Front Royal | c-221,121 0-104 |
| 336 | Stuart | Patrick | Stuart | c-137,166,330 0- |
| 337 | Sugar Grove | Smyth | Marion | c- 0- |
| 338 | Surry | Surry | Surry | c-116,176 0- |
| 339 | Sweet Briar | Amherst | Amherst | c- 0-60 |
| 340 | Sylvatus | Carroll | Hillsville | c- 0- |

Exhibit 2

| | | | | |
|-----|------------------|-----------------------|--------------------------|------------------------------|
| 341 | Tappahannock | Essex | Tappahannock | c- 0-352 |
| 342 | Tazewell | Tazewell | Tazewell | c-148,162,255,304 313,320 |
| 343 | Toms Brook | Shenandoah | Woodstock | c- 0- |
| 344 | Triangle | Prince William | Manassas | c- 0- |
| 345 | Troutville | Botetourt | Fincastle | c- 0-15 |
| 346 | Turbeville | Halifax | Halifax | c- 0- |
| 347 | Union Hall | Franklin | Rocky Mount | c- 0- |
| 348 | Victoria | Lunenburg | Lunenburg | c-257-A, 329 0- |
| 349 | Virgilina | Halifax | Halifax | c- 0- |
| 350 | Volens | Halifax | Halifax | c- 0- |
| 351 | Wakefield | Sussex | Sussex | c-116,334 0- |
| 352 | Warsaw | Richmond | Warsaw 0-341 | c- 0-341 |
| 353 | Washington (Va.) | Rappahannock | Washington | c-33,221,63 0- |
| 354 | Waynesboro | Augusta | Staunton | c-103 0-48,291,59 |
| 355 | Weyers Cave | Augusta Rockingham | Staunton Harrisonburg | c-103 0- |
| 356 | Whitmell | Pittsylvania | Chatham | c-22 0- |
| 357 | Williams Mill | Scott | Gate City | c- 0- |
| 358 | Williamsville | Bath | Warm Spring | c-282 0- |

Exhibit 2

| | | | | |
|-----|------------|---------------|---------------|---------------|
| 359 | Willis | Floyd | Floyd | c-244 0- |
| 360 | Windsor | Isle of Wight | Isle of Wight | c-326 0- |
| 361 | Woodstock | Shenandoah | Woodstock | c-156 0- |
| 362 | Woolwine | Patrick | Stuart | c- 0- |
| 363 | Wytheville | Wythe | Wytheville | c-89 0-147 |

Local Calling Areas
Virginia Telephone Exchanges

| <u>Exchange or Zone</u> | <u>Exchanges or Zones Included in Local Service Area</u> | <u>Exchange or Zone</u> | <u>Exchanges or Zones Included in Local Service Area</u> |
|-------------------------|---|-------------------------|---|
| Abingdon | Damascus Glade Spring Konarock Meadowview | Axton | Bassett Collinsville Fieldale Martinsville Ridgeway Spencer |
| Alberta | Lawrenceville | | |
| Alexandria Zone | Wash. Met. Exch. Area * Braddock Engleside Herndon Lorton | Bachelors Hall | Danville Whitmell |
| Altavista | Hurt | Ballard | Alum Ridge Floyd Locust Grove Willis |
| Alum Ridge | Ballard Floyd Locust Grove Willis | Bassett | Axton Collinsville Fieldale Martinsville Ridgeway Spencer |
| Amherst | Sweet Briar | | |
| Appalachia | Big Stone Gap | Basye | Edinburg Mount Jackson New Market Strasburg Toms Brook Woodstock |
| Appomattox | Pamplin | | |
| Ararat | Meadows of Dan Stuart Woolwine | Beaverdam | Gum Tree Montpelier |
| Arcola | Dulles Haymarket | Bedford | Stone Mountain |
| Arvonnia | Buckingham Dillwyn | Beechwood | Blackridge Brodnax LaCrosse South Hill |
| Ashland | Mechanicsville Richmond Rockville | Belle Haven | Eastville Onancock |
| Austinville | Cripple Creek Max Meadows Rural Retreat Wytheville | Bent Mountain | Locust Grove Roanoke |

* See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|--|------------------|---|
| Bergton | Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville Timberville Weyers Cave | Bluemont | Berryville Catoctin Mount Gilead |
| | | Bowling Green | Ladysmith Port Royal |
| | | Boyce | Berryville Winchester |
| | | Boydton | Chase City |
| Berryville | Bluemont Boyce Winchester | Braddock | Alexandria Daleview Elmwood Engleside Fairfax Falls Church Herndon Lorton Oxford Vienna Wash. D.C. |
| Bethia | Chester Midlothian Richmond | | |
| Big Prater | Big Rock Dwight Grundy Hurley Maxie Oakwood | Bridgewater | Bergton Dayton Edom Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville Mount Solon Timberville Weyers Cave |
| Big Rock | Big Prater Dwight Grundy Hurley Maxie Oakwood | | |
| Big Stone Gap | Appalachia | | |
| Blackridge | Beechwood Brodnax LaCrosse South Hill | Bristol | Blountville, Tenn. Bluff City, Tenn. Bristol, Tenn. |
| Blacksburg | Christiansburg Radford | Broadnax | Beechwood Blackridge LaCrosse South Hill |
| Blackstone | Crewe Burkeville | Brokenburg | Spotsylvania |
| Bland | Ceres | Brookneal | Gladys Volens |
| Bluefield | Rocky Gap | | |
| Blue Grass | McDowell Monterey | | |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|---------------------|---|---------------------------|--|
| Brownsburg | Buena Vista Glasgow Lexington Natural Bridge | Charlottesville | Crozet Scottsville |
| Buckingham | Arvonnia Dillwyn | Chase City | Boydton |
| Buena Vista | Brownsburg Glasgow Lexington Natural Bridge | Chester | Bethia Hopewell Petersburg Richmond Varina |
| Burkeville | Blackstone Crewe | Chilhowie | Marion Rich Valley Sugar Grove |
| Burnt Chimney | Boones Mill Ferrum Rocky Mount Union Hall | Chincoteague | Temperanceville |
| Callao | Heathsville Reedville | Christiansburg | Blacksburg Radford Shawsville |
| Calverton | Remington Warrenton | Chuckatuck | Crittenden Suffolk |
| Cana | Hillsville Laurel Fork Sylvatus | Clifton Forge | Covington Potts Creek |
| Cape Charles | Eastville | Clinchport, Va. | Clinchport, Tenn. Duffield Dungannon Fort Blackmore Gate City Nickelsville Williams Mill |
| Cartersville | Cumberland Fife | Collinsville | Axton Bassett Fieldale Martinsville Ridgeway Spencer |
| Catoctin | Bluemont Leesburg Mount Gilead | Colonial Beach | Hague Montross |
| Ceres | Bland | Comers Rock- Elk Creek | Independence Mouth of Wilson |
| Chancellor | Fredericksburg Spotsylvania | | |
| Charles City | Providence Forge | | |
| Charlotte Ct. House | Drakes Branch | | |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|------------------|---|
| Concord | Lynchburg | Dante | St. Paul |
| Courtland | Franklin | Danville | Bachelors Hall Gatewood, N.C. Milton, N.C. Whitmell |
| Covington | Clifton Forge Potts Creek | | |
| Crewe | Blackstone Burkeville | Dawn | Doswell Hanover |
| Criglersville | Culpeper Madison | Dayton | Bergton Bridgewater Edom Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville Timberville Weyers Cave |
| Cripple Creek | Austinville Max Meadows Rural Retreat Wytheville | | |
| Crittenden | Chuckatuck Smithfield | | |
| Crozet | Charlottesville | | |
| Culpeper | Criglersville Madison Sperryville | Daltaville | Saluda |
| Cumberland | Cartersville | Dendron | Surry |
| Cumberland Gap | Cumberland Gap, Tenn. Middlesboro, Ky. New Tazwell, Tenn. Sharpe's Chapel, Tenn. | Dillwyn | Arvon Buckingham |
| Dahlgren | King George | Dinwiddie | McKenney Petersburg |
| Dale City | Independent Hill Lorton Manassas Nokesville Occoquan Triangle | Doswell | Dawn Hanover |
| Daleview Zone | Wash. Met. Exch. Area Braddock Engleside Herndon | Drakes Branch | Charlotte Ct. House |
| Damascus | Abingdon Glade Spring Konarock Meadowview | Dublin | Pulaski Radford |
| | | Duffield | Clinchport, Va. & Tenn. Dungannon Fort Blackmore Gate City Nickelsville Williams Mill |
| | | Dulles | Arcola Haymarket Herndon |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|---|---|
| Dungannon | Clinchport, Va. & Tenn. Duffield Fort Blackmore Gate City Nickelsville Williams Mill | Elmwood Zone Engleside | Wash. Met. Exch. Area* Braddock Engleside Herndon Alexandria Braddock Daleview Elmwood Fairfax Falls Church Herndon Lorton Occoquan Oxford Vienna Wash. D.C. |
| Dwight | Big Prater Big Rock Grundy Hurley Maxie Oakwood | | |
| Eagle Rock | Fincastle Oriskany Troutville | | |
| Eastville | Belle Haven Cape Charles | Fairfax Zone | Wash. Met. Exch. Area* Braddock Engleside Herndon Lorton |
| Edinburg | Basye Mount Jackson New Market Strasburg Toms Brook Woodstock | Falls Church Zone | Wash. Met. Exch. Area * Braddock Engleside Herndon Lorton |
| Edom | Bergton Bridgewater Dayton Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville Timberville Weyers Cave | Farmville Farnham Ferrum | Hampden Sydney Prospect Warsaw Boones Mill Burnt Chimney Rocky Mount Union Hall |
| Elkton | Bergton Bridgewater Dayton Edom Grottoes Harrisonburg Hinton Keezletown McGaheysville Shenandoah Timberville Weyers Cave | Fieldale Fife | Axton Bassett Collinsville Martinsville Ridgeway Spencer Cartersville Goochland |

* See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|------------------|---|
| Fincastle | Eagle Rock Troutville | Gloucester | Hayes Mathews |
| Floyd | Alum Ridge Ballard Locust Grove Willis | Goochland | Fife Manakin |
| Fork Union | Palmyra | Gordonsville | Orange |
| Fort Blackmore | Clinchport, Va. & Tenn. Duffield Dungannon Gate City Nickelsville Williams Mill | Great Bridge | Norf. Met. Exch. Area* Knotts Island, N.C. |
| Franklin | Courtland | Gretna | Hurt Renan Sandy Level |
| Fredericksburg | Chancellor Hartwood Spotsylvania Stafford | Grottoes | Bergton Bridgewater Dayton Edom Elkton Harrisonburg Hinton Keezletown McGaheysville New Hope Timberville Weyers Cave |
| Fries | Galax | | |
| Gainesboro | Winchester | | |
| Galax | Fries | Grundy | Big Prater Big Rock Dwight Hurley Maxie Oakwood |
| Gate City | Clinchport, Va. & Tenn. Duffield Dungannon Fort Blackmore Nickelsville Williams Mill | Gum Tree | Beaverdam Montpelier |
| | | Hague | Colonial Beach Montross |
| Glade Spring | Abingdon Damascus Konnarock Meadowview | Halifax | South Boston Virgilina Virgilina, N.C. Turbeville Volens |
| Gladys | Brookneal Rustburg Volens | Hampden Sydney | Farmville Prospect |
| Glasgow | Brownburg Buena Vista Lexington Natural Bridge | Hampton Zone | N. News Met. Exch. Area |

* See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|------------------|---|
| Hanover | Dawn Doswell | Holland | Suffolk Whaleyville |
| Harrisonburg | Bergton Bridgewater Dayton Edom Elkton Grottoes Hinton Keezletown McGaheysville Timberville Weyers Cave | Hopewell | Chester Petersburg |
| Hayes | Gloucester Mathews | Hot Springs | McClung |
| Haymarket | Arcola Dulles Manassas Nokesville | Hurley | Big Prater Big Rock Dwight Grundy Maxie Oakwood |
| Heathsville | Callao Reedville | Hurt | Altavista Gretna Renan Sandy Level |
| Herndon | Alexandria Braddock Daleview Dulles Elmwood Engleside Fairfax Falls Church Leesburg Oxford Vienna Wash. D.C. | Independence | Comers Rock- Elk Creek Mouth of Wilson |
| Hickory | Norf. Met. Exch. Area* Knotts Island, N.C. | Independent Hill | Occoquan Lorton Triangle Quantico Dale City Manassas Nokesville |
| Hillsville | Canal Laurel Fork Sylvatus | Irvington | Kilmarnock Lively |
| Hinton | Bergton Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Keezletown McGaheysville Timberville Weyers Cave | Jewell Ridge | Richlands |
| | | Jonesville | Lee Pennington Gap |
| | | Keezletown | Bergton Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Hinton McGaheysville Timberville Weyers Cave |
| | | Kenbridge | Victoria |

* See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|------------------|---|
| Kilmarnock | Irvington Lively | Lorton | Alexandria Braddock Dale City Engleside Fairfax Falls Church Independent Hill |
| King & Queen | West Point | | Manassas Nokesville Occoquan Oxford |
| King George | Dahlgren | | |
| Konnarock | Abingdon Damascus Glade Spring Meadowview | | |
| LaCrosse | Beechwood Blackridge Brodnax South Hill | Louisa | Mineral |
| Ladysmith | Bowling Green Port Royal | Lovingston | Piney River |
| Laurel Fork | Cana Hillsville Sylvatus | Luray | Shenandoah Shenandoah Park Stanley |
| Lawrenceville | Alberta South Brunswick | Lynchburg | Concord |
| Lee | Jonesville | Madison | Criglersville Culpeper Orange |
| Leesburg | Catoctin Herndon Middleburg Mount Gilead | Manakin | Goochland Midlothian Richmond Rockville |
| Lexington | Brownsburg Buena Vista Glasgow Natural Bridge | Manassas | Dale City Haymarket Independent Hill |
| Lively | Irvington Kilmarnock | Marion | Lorton Nokesville Occoquan Triangle |
| Locust Grove | Alum Ridge Ballard Bent Mountain Floyd Willis | Marshall | Chilhowie Rich Valley Sugar Grove |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|--|------------------|---|
| Martinsville | Axton Bassett Collinsville Fieldale Ridgeway Spencer | Mechanicsville | Ashland Old Church Richmond Sandston |
| Mathews | Gloucester Hayes | Middleburg | Leesburg The Plains Upperville |
| Maxie | Big Prater Big Rock Dwight Grundy Hurley Oakwood | Midlothian | Bethia Manakin Richmond Powhatan |
| Max Meadows | Austinville Cripple Creek Rural Retreat Wytheville | Mineral | Louisa |
| McClung | Hot Springs Williamsville | Monterey | Blue Grass McDowell |
| McDowell | Blue Grass Monterey | Montpelier | Beaverdam Gum Tree |
| McGaheysville | Bergton Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Hinton Keezletown Timberville Weyers Cave | Montross | Colonial Beach Hague |
| McKenney | Dinwiddie | Montvale | Roanoke |
| Meadows of Dan | Ararat Stuart Woolwine | Mount Gilead | Bluemont Catoclin Leesburg |
| Meadowview | Abingdon Damascus Glade Spring Konnarock | Mount Jackson | Basye Edinburg New Market Strasburg Toms Brook Woodstock |
| | | Mount Solon | Bridgewater |
| | | Mouth of Wilson | Comers Rock- Elk Creek Independence |
| | | Narrows | Pearisburg Peterstown, W.Va. |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------------|---|------------------|--|
| Natural Bridge | Brownsburg Buena Vista Glasgow Lexington | Occoquan | Dale City Engleside Independent Hill Lorton Manassas Nokesville Triangle |
| New Castle | Newport Oriskany Paint Bank | Old Church | Mechanicsville |
| New Hope | Grottoes Staunton Weyers Cave | Onancock | Belle Haven Parksley |
| New Market | Basye Edinburg Mount Jackson Strasburg Timberville Toms Brook Woodstock | Orange | Gordonsville Madison Unionville |
| Newport | New Castle Pembroke | Oriskany | Eagle Rock New Castle |
| Newport News Zone | N. News Met. Exch. Area * | Oxford | Wash. Met. Exch. Area Braddock Engleside Herndon Lorton |
| Nickelsville | Clinchport, Va. & Tenn. Duffield Dungannon Fort Blackmore Gate City Williams Mill | Paint Bank | New Castle |
| Nokesville | Dale City Haymarket Independent Hill Lorton Manassas Occoquan-Woodbridge Triangle | Palmyra | Fork Union |
| Norfolk-Va. Beach Zone | Norf. Met. Exch. Area * Knotts Island, N.C. | Pamplin | Appomattox |
| Norton | Wise | Parksley | Onancock Temperanceville |
| Oakwood | Big Prater Big Rock Dwight Grundy Hurley Maxie | Pearisburg | Narrows Pembroke |
| | | Pembroke | Newport Pearisburg |
| | | Peninsula Zone | *N. News Met. Exch. Area Toano Williamsburg |
| | | Pennington Gap | Jonesville Saint Charles |
| | | Petersburg | Chester Dinwiddie Hopewell |

*See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|-------------------------|---|-----------------------------|---|
| Piney River | Lovington | Rich Valley | Chilhowie Marion Sugar Grove |
| Poquoson Zone | N. News Met. Exch. Area * | | |
| Port Royal | Bowling Green Ladysmith | Ridgeway | Axton Bassett Collinsville Fieldale Martinsville Spencer |
| Portsmouth Zone | N. News. Met. Exch. Area * | | |
| Potts Creek | Clifton Forge Covington | | |
| Powhatan | Midlothian | Roanoke | Bent Mountain Montvale Salem Troutville |
| Princess Anne and Pungo | Norf. Met Exch. Area * Knotts Island, N.C. | | |
| Prospect | Farmville Hamden Sydney | Rockville | Ashland Manakin Richmond |
| Providence Forge | Charles City | Rocky Gap | Bluefield |
| Pulaski | Dublin | Rocky Mount | Boones Mill Burnt Chimney Ferrum Union Hall |
| Radford | Blacksburg Christiansburg Dublin | | |
| Reedville | Callao Heathsville | Rural Retreat | Austinville Cripple Creek Max Meadows Wytheville |
| Remington | Calverton Warrenton | Rustburg | Gladys |
| Renan | Gretna Hurt Sandy Level | Saint Charles Saint Paul | Pennington Gap Dante |
| Richlands | Jewell Ridge | Salem | Roanoke Shawsville |
| Richmond | Ashland Bethia Manakin Mechanicsville Midlothian Rockville Sandston Varina | Saluda Sandston | Deltaville Mechanicsville Richmond Varina |

* See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|--|---------------------------------|--|
| Sandy Level | Gretna Hurt Renan | Stephens City Stone Mountain | Winchester Bedford |
| Scottsville | Charlottesville | Strasburg | Basye Edinburg Mount Jackson New Market Toms Brook Woodstock |
| Shawsville | Christiansburg Salem | | |
| Shenandoah | Elkton Luray Stanley | Stuart | Ararat Meadows of Dan Woolwine |
| Shenandoah Park | Luray Stanley | | |
| Smithfield | Crittenden | Suffolk | Chuckatuck Holland Whaleyville |
| South Boston | Halifax Virgilina Virgilina, N.C. Volens Turbeville | Sugar Grove | Chilhowie Marion Rich Valley |
| South Brunswick | Lawrenceville | Surry | Dendron |
| South Hill | Beechwood Blackridge Brodnax LaCrosse | Sweet Briar | Amherst |
| Spencer | Axton Bassett Collinsville Fieldale Martinsville Ridgeway | Sylvatus | Cana Hillsville Laurel Fork |
| Sperryville | Culpeper Washington, Va. | Temperanceville | Chincoteague Parksley Pocomoke, Md. |
| Spotsylvania | Brokenburg Chancellor | The Plains | Marshall Middleburg Warrenton |
| Stafford | Fredericksburg Hartwood Triangle | Timberville | Bergton Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville New Market Weyers Cave |
| Stanley | Luray Shenandoah Shenandoah Park | | |
| Staunton | New Hope | | |

| Exchange or Zone | Exchanges or Zones Included in Local Service Area | Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|-------------------------------|--|
| Toano | Peninsula Zone Toano Williamsburg | Volens | Brookneal Gladys Halifax South Boston Turbeville Virgilina Virgilina, N.C. |
| Toms Brook | Basye Edinburg Mount Jackson New Market Strasburg Woodstock | Warrenton | Calverton Marshall Remington The Plains |
| Triangle | Dale City Independent Hill Manassas Nokesville Occoquan Stafford | Warsaw | Farnham |
| Troutville | Eagle Rock Fincastle | Washington, Va. West Point | Sperryville King and Queen |
| Turbeville | South Boston Halifax Virgilina Virgilina, N.C. Volens | Weyers Cave | Bergton Bridgewater Dayton Edom Elkton Grottoes Harrisonburg Hinton Keezletown McGaheysville New Hope Timberville |
| Union Hall | Boones Mill Burnt Chimney Ferrum Rocky Mount | Whaleyville | Holland Suffolk |
| Unionville | Orange | White Sulphur Springs | White Sulphur Springs, W. Va. |
| Upperville | Marshall Middleburg | Whitmell | Bachelors Hall Danville |
| Varina | Chester Richmond Sandston | Williamsburg | Peninsula Toano |
| Victoria | Kenbridge | Williams Mill | Clinchport, Va. & Tenr Duffield Dungannon Fort Blackmore Gate City Nickelsville |
| Vienna Zone | Wash. Met. Exch. Area* Braddock Engleside Herndon | Williamsville | McClung |
| Virgilina, Va. | Halifax South Boston Turbeville Virgilina, N.C. Volens | | |

See Page 15

| Exchange or Zone | Exchanges or Zones Included in Local Service Area |
|------------------|---|
| Willis | Alum Ridge Ballard Floyd Locust Grove |
| Winchester | Berryville Boyce Gainesboro Stephens City |
| Wise | Norton |
| Woodstock | Basye Edinburg Mount Jackson New Market Strasburg Toms Brook |
| Woolwine | Ararat Meadows of Dan Stuart |
| Wytheville | Austinville Cripple Creek Max Meadows Rural Retreat |

Metropolitan Exchange Areas

The Newport News Metropolitan Exchange Area

includes the Zones of Hampton, Newport News, Peninsula and Poquoson.

The Norfolk Metropolitan Exchange Area

includes the Zones of Norfolk-Virginia Beach, Portsmouth, Princess Anne, Great Bridge and Hickory.

The Washington Metropolitan Exchange Area

includes the Zones of Alexandria, Va., Berwyn, Md., Bethesda, Md., Bowie-Glenn Dale, Md., Capitol Heights, Md., Clinton, Md., Daleview, Va., Elmwood, Va., Fairfax, Va., Falls Church, Va., Hyattsville, Md., Kensington, Md., Layhill, Md., Marlboro, Md., Oxford, Va., Oxon Hill, Md., Rockville, Md., Silver Spring, Md., Vienna, Va., and Washington, D.C.

The following 4~~5~~ exchanges do not have Extended Area Service to any other exchange in Virginia:

| | |
|---------------|----------------|
| Allwood | Greenwood |
| Amelia | Haysi |
| Barnesville | Honaker |
| Big Island | Ivor |
| Boykins | Jarratt |
| Buchanan | Keysville |
| Burkes Garden | King William |
| Capron | Lebanon |
| Chatham | Pocahontas |
| Claremont | Pound |
| Clarksville | Raphine |
| Clinchco | Schuyler |
| Clintwood | Standardsville |
| Clover | Stoney Creek |
| Coeburn | Tangier |
| Craigsville | Tappahannock |
| Davenport | Tazewell |
| Deerfield | Wakefield |
| Disputanta | Waverly |
| Emporia | Waynesboro |
| Front Royal | Windsor |
| Gladstone | |
| Gore | |

EXHIBIT 3

COMMUNITY OF INTEREST STUDIES

1. Calling rates per month and percentage of subscribers calling between exchanges.
2. Working sketches at certain county seat exchanges and urban exchanges.

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route | A | B | A To B | | B To A | |
|---------------|---|-----------------|------------|-----------|------------|-----------|
| | | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| ALEXANDRIA | | Manassas | .184 | 7 | - | - |
| | | Dulles | .002 | 0 | .432 | 7 |
| | | Daie City | .192 | 7 | - | - |
| | | Occoquan | .336 | 11 | - | - |
| APPALACHIA | | Wise | 1.082 | 35 | .634 | 20 |
| | | Jonesville | .241 | 9 | .135 | 6 |
| | | Norton | 2.724 | 59 | 1.359 | 33 |
| | | Pennington Gap | .764 | 23 | .446 | 18 |
| ASHLAND | | Hanover | .225 | 9 | 6.036 | 96 |
| | | Beaverdam | .294 | 10 | 3.293 | 76 |
| | | Gun Tree | .437 | 15 | 8.381 | 96 |
| | | Montpelier | .887 | 25 | 4.735 | 83 |
| BEDFORD | | Big Island | .347 | 11 | 3.469 | 79 |
| | | Lynchburg | 3.246 | 58 | .382 | 13 |
| | | Montvale | .354 | 11 | 3.102 | 65 |
| | | Alta Vista | .075 | 3 | .162 | 8 |
| | | Roanoke | 2.680 | 52 | .162 | 7 |
| BELLE HAVEN | | Chincoteague | .152 | 6 | .513 | 19 |
| | | Temperanceville | .508 | 17 | 1.024 | 28 |
| | | Parksley | .801 | 28 | 1.429 | 47 |
| | | Cape Charles | 1.451 | 34 | 3.025 | 65 |
| BENT MOUNTAIN | | Salem | 1.672 | 44 | .059 | 2 |
| | | Floyd | .765 | 28 | .220 | 11 |
| | | Rocky Mt. | .410 | 14 | - | - |
| BERRYVILLE | | Stephens City | .686 | 23 | .406 | 17 |
| | | Upperville | .140 | 6 | .980 | 28 |
| BETHIA | | Petersburg | .645 | 22 | .017 | 1 |
| | | Hopewell | .079 | 5 | .006 | 0 |
| BIG ISLAND | | Bedford | 3.469 | 79 | .347 | 11 |
| | | Amherst | .171 | 7 | - | - |
| | | Lynchburg | 6.955 | 99 | .097 | 3 |
| BIG STONE GAP | | Jonesville | .329 | 13 | .428 | 16 |
| | | Wise | 1.165 | 34 | 1.490 | 35 |
| | | Norton | 2.531 | 55 | 2.747 | 49 |
| | | Pennington Gap | .982 | 27 | 1.193 | 33 |
| BLACKSBURG | | Newport | .148 | 6 | 5.325 | 90 |
| | | Shawsville | .183 | 7 | 1.697 | 42 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route <u>A</u> | B | A To B | | B To A | |
|-------------------|-----------------|---------------|--------------|---------------|--------------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| BLUEMONT | Leesburg | 2.926 | 53 | .288 | 11 |
| | Middleburg | 1.285 | 32 | .558 | 20 |
| | Winchester | 1.246 | 38 | .032 | 1 |
| | Upperville | 1.059 | 20 | .951 | 28 |
| BOYCE | Front Royal | 1.534 | 34 | .170 | 7 |
| | Stephens City | 1.375 | 38 | .308 | 11 |
| BRADDOCK | Manassas | 2.885 | 55 | | |
| | Dale City | 1.125 | 7 | | |
| | Dulles | .015 | 1 | .098 | 3 |
| | Occoquan | .251 | 11 | | |
| BROKENBURG | Fredericksburg | 6.060 | 94 | .158 | 7 |
| BUCHANAN | Fincastle | 1.143 | 36 | 1.988 | 42 |
| | Lexington | .369 | 14 | | |
| | Roanoke | 5.009 | 76 | .082 | 3 |
| | Troutville | .986 | 35 | .629 | 22 |
| CALVERTON | Manassas | 3.807 | 68 | | |
| | Culpeper | 1.673 | 46 | .145 | 5 |
| | Hartwood | .300 | 11 | .230 | 10 |
| CAPE CHARLES | Chincoteague | .097 | 3 | .151 | 5 |
| | Temperanceville | .186 | 7 | .217 | |
| | Parksley | .211 | 8 | .200 | 7 |
| | Onancock | 1.395 | 41 | .692 | 16 |
| | Belle Haven | 3.025 | 65 | 1.451 | 34 |
| CARTERSVILLE | Powhatan | 1.576 | 40 | .290 | 11 |
| CATOCTIN | Middleburg | .226 | 9 | .298 | 11 |
| | Upperville | .057 | 3 | .323 | 11 |
| CHANCELLOR | Orange | .404 | 9 | .101 | 5 |
| | Culpeper | .620 | 18 | .112 | 5 |
| | Unionville | .471 | 17 | .580 | 20 |
| CHARLES CITY | Varina | .520 | 19 | .364 | 11 |
| | Richmond | 7.060 | 91 | .035 | 1 |
| | Williamsburg | 1.936 | 40 | .203 | 8 |
| CHATHAM | Danville | 6.454 | 91 | .635 | 17 |
| | Axton | .027 | 1 | - | - |
| | Bachelors Hall | .131 | 6 | .373 | 15 |
| | Gretna | 1.550 | 42 | 2.243 | 49 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| County | B | A To B | | B To A | |
|------------------|----------------|------------|-----------|------------|-----------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| CHATHAM (Cont'd) | Hurt | .164 | 6 | .393 | 16 |
| | Renan | .187 | 6 | 1.748 | 46 |
| | Sandy Level | .151 | 6 | 1.610 | 48 |
| | Whitmell | .707 | 22 | 1.806 | 44 |
| | Halifax | .084 | 3 | .149 | 6 |
| CHESTER | Midlothian | .222 | 9 | .594 | 22 |
| CHINCOTEAGUE | Parksley | .389 | 15 | .222 | 9 |
| | Onancock | 1.164 | 31 | .384 | 9 |
| | Belle Haven | .513 | 19 | .152 | 6 |
| | Eastville | .016 | 1 | .020 | 1 |
| | Cape Charles | .151 | 5 | .097 | 3 |
| CHRISTIANSBURG | Floyd | .331 | 13 | 1.141 | 35 |
| | New Castle | .025 | 1 | .178 | 9 |
| CLINCHCO | Clintwood | 4.808 | 88 | 2.579 | 56 |
| | Haysi | 2.487 | 57 | 3.650 | 67 |
| | Coeburn | .875 | 28 | .501 | 16 |
| | Davenport | .215 | 8 | .365 | 14 |
| | Dante | .701 | 23 | 1.330 | 36 |
| CLINTWOOD | Clinchco | 2.579 | 56 | 4.808 | 88 |
| | Coeburn | .874 | 26 | .724 | 20 |
| | Dante | .302 | 9 | 1.194 | 36 |
| | Davenport | .067 | 3 | .307 | 14 |
| | Haysi | .783 | 19 | 2.712 | 65 |
| | Wise | 1.007 | 33 | .710 | 17 |
| | Maxie | .013 | 1 | - | - |
| | Norton | 1.083 | 32 | .575 | 11 |
| | Pound | 1.069 | 32 | 1.589 | 40 |
| CLOVER | Charlotte C.H. | .445 | 13 | .385 | 18 |
| | Halifax | 1.589 | 46 | .908 | 27 |
| | South Boston | 4.338 | 81 | .710 | 20 |
| | Turbeville | .061 | 3 | .101 | 6 |
| | Virgilina | .056 | 2 | .101 | 5 |
| | Volens | .373 | 16 | .307 | 15 |
| COEBURN | Clintwood | .724 | 20 | .874 | 26 |
| | Wise | 2.531 | 59 | 2.042 | 48 |
| | Norton | 3.617 | 69 | 2.518 | 46 |
| | St. Paul | 1.501 | 40 | 1.396 | 35 |
| | Clinchco | .501 | 16 | .875 | 28 |
| | Dante | .269 | 10 | 1.042 | 33 |
| | Davenport | .011 | 1 | .043 | 2 |
| | Haysi | .046 | 2 | .174 | 9 |
| | CONCORD | Appomattox | 2.579 | 61 | .700 |
| Rustburg | | .987 | 33 | .787 | 28 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| <u>Route</u> | B | <u>A To B</u> | | <u>B To A</u> | |
|----------------|-----------------|-------------------|------------------|-------------------|------------------|
| | | <u>Avg. Calls</u> | <u>% Calling</u> | <u>Avg. Calls</u> | <u>% Calling</u> |
| CRAIGSVILLE | Staunton | 5.252 | 86 | .281 | 9 |
| | Hot Springs | .453 | 16 | | |
| | Lexington | .728 | 23 | | |
| CRIGLERSVILLE | Sperryville | .429 | 18 | .430 | 17 |
| CULPEPER | Orange | 1.335 | 26 | 3.013 | 49 |
| | Washington, Va. | .226 | 8 | 3.840 | 68 |
| | Remington | .536 | 15 | 4.042 | 73 |
| | Unionville | .258 | 7 | 1.722 | 41 |
| | Warrenton | 1.301 | 27 | 2.613 | 49 |
| | Chancellor | .112 | 5 | .620 | 18 |
| | Calverton | .145 | 5 | 1.673 | 46 |
| CUMBERLAND | Powhatan | 1.169 | 33 | .552 | 19 |
| | Farmville | 3.851 | 76 | .641 | 20 |
| CUMBERLAND GAP | Jonesville | | | .014 | 1 |
| | Lee | | | .292 | 13 |
| DALEVIEW | Manassas | .404 | 13 | | |
| | Lorton | .015 | | | |
| | Dulles | .016 | 1 | .018 | |
| | Dale City | .040 | 2 | | |
| | Occoquan | .122 | 4 | | |
| DANTE | Clintwood | 1.194 | 32 | .302 | 8 |
| | Lebanon | 1.756 | 47 | .289 | 9 |
| | Wise | .331 | 13 | .089 | 3 |
| | Coeburn | 1.042 | 29 | .269 | 9 |
| | Clinchco | 1.330 | 32 | .701 | 20 |
| | Haysi | .231 | 9 | .132 | 6 |
| | Honaker | .076 | 3 | .009 | 1 |
| DANVILLE | Chatham | .635 | 17 | 6.454 | 91 |
| | Halifax | .075 | 3 | 1.399 | 44 |
| DAVENPORT | Clintwood | .307 | 14 | .067 | 3 |
| | Grundy | 1.107 | 43 | | |
| | Clinchco | .365 | 14 | .215 | 8 |
| | Coeburn | .043 | 2 | .011 | 1 |
| | Dante | .099 | 6 | .151 | 8 |
| | Haysi | 1.392 | 40 | 1.058 | 31 |
| | Honaker | 1.104 | 43 | .512 | 16 |
| | Lebanon | .913 | 35 | .145 | 5 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route A | B | A To B | | B To A | |
|----------------|-----------------|---------------|--------------|---------------|--------------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| DINWIDDIE | Amelia | .192 | 9 | .168 | 8 |
| | Stoney Creek | .411 | 15 | | |
| | Hopewell | .519 | 20 | .112 | 5 |
| EASTVILLE | Chincoteague | .020 | 1 | .016 | 1 |
| | Temperanceville | .272 | 10 | .102 | 5 |
| | Parksley | .358 | 14 | .145 | 5 |
| | Onancock | 1.906 | 42 | .616 | 14 |
| ELMWOOD | Manassas | .397 | 13 | | |
| | Lorton | .015 | 1 | | |
| | Dale City | .084 | 5 | | |
| | Dulles | .023 | 1 | .802 | 6 |
| | Occoquan | .163 | 7 | - | - |
| ENGLESIDE | Dale City | .618 | 19 | | |
| | Dulles | .005 | 0 | .002 | 0 |
| | Manassas | .250 | 10 | | |
| FAIRFAX | Dale City | .147 | 6 | | |
| | Dulles | .010 | 0 | .447 | 6 |
| | Manassas | .910 | 20 | - | - |
| | Occoquan | .266 | 10 | | |
| FALLS CHURCH | Dale City | .167 | 7 | | |
| | Manassas | .348 | 10 | | |
| | Leesburg | .081 | 3 | 1.385 | 35 |
| | Dulles | .006 | 0 | .904 | 8 |
| | Occoquan | .296 | 10 | | |
| FREDERICKSBURG | Bowling Green | .498 | 15 | 3.739 | 73 |
| | Brokenburg | .158 | 7 | 6.060 | 94 |
| | King George | .640 | 19 | 7.601 | 87 |
| GAINESBORO | Gore | .168 | 9 | | |
| GOOCHLAND | Louisa | .423 | 18 | .249 | 10 |
| | Powhatan | .569 | 17 | .523 | 19 |
| | Richmond | 7.493 | 100 | .046 | 2 |
| | Fork Union | .066 | 3 | | |
| | Rockville | .442 | 15 | .892 | 31 |
| | Palmyra | .140 | 8 | - | - |
| GORDONSVILLE | Louisa | 1.281 | 33 | 1.089 | 33 |
| | Charlottesville | 4.802 | 79 | | |
| GREENWOOD | Lovingston | 1.019 | 34 | .432 | 17 |
| | Charlottesville | 7.530 | 88 | | |
| | Crozet | 3.134 | 64 | | |
| | Waynesboro | 5.098 | 81 | | |
| | Staunton | 1.626 | 36 | .043 | |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route A | B | A To B | | B To A | |
|------------|----------------|---------------|--------------|---------------|--------------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| HAMPTON | Norfolk | 1.929 | 33 | .413 | 11 |
| | Williamsburg | .374 | 11 | 1.700 | 41 |
| HARTWOOD | Warrenton | .191 | 9 | .040 | 2 |
| | Calverton | .230 | 10 | .300 | 11 |
| | Remington | .278 | 11 | .262 | 9 |
| HAYSI | Clintwood | 2.712 | 65 | .783 | 19 |
| | Clinchco | 3.650 | 67 | 2.487 | 57 |
| | Grundy | 1.573 | 43 | | |
| | Coeburn | .174 | 9 | .046 | 2 |
| | Dante | .132 | 7 | .231 | 10 |
| | Davenport | 1.058 | 31 | 1.392 | 40 |
| HERNDON | Manassas | .645 | 19 | | |
| | Arcola | .162 | 6 | 3.002 | 59 |
| | Dale City | .058 | 3 | | |
| | Lorton | .019 | 0 | | |
| | Occoquan | .092 | 5 | | |
| HONAKER | Lebanon | 3.305 | 71 | 1.397 | 31 |
| | Richlands | 2.318 | 58 | | |
| | Davenport | .512 | 16 | 1.104 | 43 |
| HOPEWELL | Bethia | .006 | 0 | .079 | 5 |
| | Midlothian | .017 | 1 | .084 | 3 |
| | Richmond | 2.895 | 60 | .163 | 6 |
| JONESVILLE | Appalachia | .135 | 6 | .241 | 9 |
| | Big Stone Gap | .428 | 16 | .329 | 13 |
| | Cumberland Gap | .014 | 1 | | |
| | St. Charles | .335 | 11 | 2.081 | 63 |
| LEBANON | Dante | .289 | 10 | 1.756 | 53 |
| | Honaker | 1.397 | 31 | 3.305 | 71 |
| | St. Paul | 1.616 | 35 | 2.782 | 61 |
| | Abingdon | 1.199 | 38 | | |
| | Richlands | .914 | 25 | | |
| | Davenport | .145 | 5 | .913 | 35 |
| LEE | Cumberland Gap | .292 | 13 | | |
| | Pennington Gap | .791 | 34 | .245 | 10 |
| LEESBURG | Arcola | .839 | 20 | 5.417 | 82 |
| | Upperville | .166 | 7 | 2.197 | 44 |
| | Dulles | .116 | 5 | 1.650 | 16 |
| | Haymarket | .140 | 6 | .440 | 14 |
| | Bluemont | .288 | 11 | 2.926 | 53 |
| | Vienna | 1.331 | 34 | .388 | 13 |
| | Falls Church | 1.385 | 35 | .081 | 3 |
| | Oxford | .645 | 22 | .050 | 2 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| A | Route | B | A To B | | B To A | |
|----------------|-------|-----------------|------------|-----------|------------|-----------|
| | | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| LOUISA | | Goochland | .249 | 10 | .423 | 18 |
| | | Gordonsville | 1.089 | 33 | 1.281 | 33 |
| | | Spotsylvania | .040 | 2 | .096 | 3 |
| | | Palmyra | .676 | 23 | - | - |
| LOVINGSTON | | Greenwood | .432 | 17 | 1.019 | 34 |
| | | Gladstone | .123 | 5 | - | - |
| | | Raphine | .025 | 1 | - | - |
| | | Schuyler | .253 | 10 | - | - |
| | | Waynesboro | .861 | 27 | - | - |
| LYNCHBURG | | Amherst | .435 | 14 | - | - |
| | | Rustburg | .288 | 10 | 13.114 | 100 |
| | | Bedford | .382 | 13 | 3.246 | 58 |
| | | Big Island | .097 | 3 | 6.955 | 99 |
| | | Alta Vista | .283 | 9 | 5.217 | 81 |
| | | Sweet Briar | .057 | 2 | - | - |
| MADISON | | Sperryville | .104 | 6 | .438 | 19 |
| | | Stanardsville | .659 | 23 | - | - |
| MARSHALL | | Washington, Va. | .110 | 6 | .325 | 14 |
| | | Middleburg | 1.913 | 39 | 2.509 | 51 |
| | | Front Royal | 1.522 | 40 | .281 | 9 |
| MCKENNEY | | Lawrenceville | .838 | 25 | - | - |
| | | Petersburg | 4.601 | 84 | .102 | 5 |
| MECHANICSVILLE | | Hanover | .097 | 3 | 4.073 | 79 |
| MIDDLEBURG | | Warrenton | 2.194 | 46 | .420 | 13 |
| | | Bluemont | .558 | 20 | 1.285 | 32 |
| | | Marshall | 2.509 | 51 | 1.913 | 39 |
| | | Mt. Gilead | 2.083 | 50 | .794 | 22 |
| | | Arcola | 1.092 | 31 | 1.731 | 30 |
| MIDLOTHIAN | | Chester | .594 | 25 | .222 | 10 |
| | | Hopewell | .084 | 3 | .017 | 1 |
| | | Petersburg | .312 | 13 | .026 | 1 |
| MONTVALE | | Bedford | 3.102 | 65 | .354 | 11 |
| MT. GILEAD | | Middleburg | .794 | 22 | 2.083 | 50 |
| | | Upperville | .254 | 8 | 1.979 | 46 |
| NEWPORT NEWS | | Williamsburg | .544 | 16 | 2.584 | 52 |
| | | Norfolk | 1.920 | 33 | .372 | 10 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route | B | A To B | | B To A | |
|-------------------|-----------------|------------|-----------|------------|-----------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| NORFOLK-VA. BEACH | Suffolk | .197 | 7 | 3.784 | 56 |
| | Peninsula | .132 | 5 | 1.522 | 31 |
| | Poquoson | .007 | 0 | .625 | 19 |
| | Newport News | .372 | 10 | 1.920 | 33 |
| | Hampton | .413 | 11 | 1.929 | 33 |
| NORTON | Appalachia | 1.359 | 33 | 2.724 | 59 |
| | Big Stone Gap | 2.747 | 49 | 2.531 | 55 |
| | Coeburn | 2.518 | 46 | 3.617 | 69 |
| | Pound | 1.070 | 26 | 2.855 | 63 |
| | Clintwood | .575 | 11 | 1.083 | 32 |
| ONANCOCK | Chincoteague | .384 | 10 | 1.169 | 35 |
| | Temperanceville | 1.592 | 33 | 2.986 | 58 |
| | Eastville | .616 | 14 | 1.906 | 42 |
| | Cape Charles | .692 | 16 | 1.395 | 41 |
| | Tangier Island | .118 | 3 | 1.961 | 63 |
| ORANGE | Culpeper | 3.013 | 49 | 1.335 | 26 |
| | Chancellor | .101 | 5 | .404 | 9 |
| OXFORD | Manassas | .167 | 6 | | |
| | Dale City | .097 | 5 | | |
| | Dulles | .005 | 0 | .784 | 6 |
| | Occoquan | .152 | 6 | | |
| PARKSLEY | Chincoteague | .222 | 10 | .389 | 17 |
| | Belle Haven | 1.429 | 47 | .801 | 28 |
| | Eastville | .145 | 5 | .358 | 14 |
| | Cape Charles | .200 | 7 | .211 | 8 |
| PEARISBURG | Newport | .225 | 9 | 1.665 | 46 |
| PENINSULA | Norfolk | 1.522 | 31 | .132 | 5 |
| PENNINGTON GAP | Appalachia | .446 | 18 | .764 | 23 |
| | Big Stone Gap | 1.193 | 33 | .982 | 27 |
| | Lee | .245 | 10 | .791 | 34 |
| PETERSBURG | McKenney | .102 | 5 | 4.598 | 84 |
| | Claremont | .023 | 1 | 2.326 | 61 |
| | Disputanta | .089 | 3 | 15.059 | 100 |
| | Richmond | 3.551 | 51 | .488 | 14 |
| | Bethia | .017 | 1 | .695 | 22 |
| | Midlothian | .026 | 1 | .312 | 13 |
| PINEY RIVER | Amherst | 2.340 | 57 | | |
| POQUOSON | Williamsburg | .291 | 13 | .077 | 3 |
| | Norfolk | .625 | 19 | .007 | 0 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route A | B | A To B | | B To A | |
|------------------|------------------|---------------|--------------|---------------|--------------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| PORTSMOUTH | Suffolk | .661 | 17 | 2.845 | 52 |
| | Crittenden | .088 | 3 | - | - |
| | Chuckatuck | .044 | 2 | - | - |
| | Holland | .010 | 1 | - | - |
| | Whaleyville | .017 | 1 | 1.176 | 40 |
| | Franklin | .064 | 2 | - | - |
| POUND | Wise | 4.282 | 81 | 1.969 | 46 |
| | Norton | 2.855 | 63 | 1.070 | 26 |
| | Clintwood | 1.589 | 40 | 1.069 | 32 |
| POWHATAN | Cartersville | .290 | 11 | 1.576 | 40 |
| | Cumberland | .552 | 19 | 1.169 | 33 |
| | Goochland | .523 | 19 | .569 | 17 |
| | Richmond | 8.978 | 100 | .080 | 3 |
| PROVIDENCE FORGE | Toano | .744 | 22 | 1.110 | 30 |
| | West Point | .816 | 27 | .798 | 26 |
| | Old Church | .127 | 6 | .405 | 14 |
| | Richmond | 9.015 | 100 | .075 | 3 |
| | Sandston | 1.493 | 42 | .442 | 14 |
| | Williamsburg | .992 | 27 | .172 | 7 |
| PULASKI | Radford | 1.980 | 43 | 1.666 | 34 |
| | Wytheville | .731 | 19 | - | - |
| RADFORD | Pulaski | 1.666 | 34 | 1.980 | 43 |
| | Shawsville | .124 | 6 | .864 | 30 |
| REMINGTON | Culpeper | 4.042 | 73 | .536 | 15 |
| | Hartwood | .262 | 9 | .278 | 11 |
| RICHMOND | Goochland | .046 | 2 | 7.493 | 100 |
| | Charles City | .035 | 1 | 7.060 | 100 |
| | Powhatan | .080 | 3 | 8.978 | 100 |
| | Providence Forge | .075 | 3 | 9.015 | 100 |
| | Beaverdam | .010 | 0 | 4.954 | 100 |
| | Hanover | .011 | 1 | 13.862 | 100 |
| | Gum Tree | .011 | 1 | 9.468 | 100 |
| | Montpelier | .035 | 2 | 7.614 | 100 |
| | Old Church | .041 | 2 | 12.559 | 100 |
| | Petersburg | .488 | 14 | 3.551 | 57 |
| | Hopewell | .163 | 6 | 2.895 | 60 |
| ROANOKE | Fincastle | .089 | 5 | 8.430 | 96 |
| | Rocky Mt. | .218 | 8 | - | - |
| | Bedford | .162 | 7 | 2.680 | 52 |
| | Buchanan | .082 | 3 | 5.009 | 76 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| <u>Route</u> | <u>B</u> | A To B | | B To A | |
|------------------|------------------|-------------------|------------------|-------------------|------------------|
| | | <u>Avg. Calls</u> | <u>% Calling</u> | <u>Avg. Calls</u> | <u>% Calling</u> |
| ROANOKE (Cont'd) | Stone Mt. | .088 | 3 | 3.589 | 66 |
| | New Castle | .049 | 2 | 5.209 | 86 |
| | Boones Mill | .093 | 3 | | |
| | Shawsville | .067 | 2 | 4.822 | 76 |
| ROCKVILLE | Hanover | .026 | 2 | .126 | 3 |
| | Goochland | .892 | 31 | .442 | 15 |
| ST. CHARLES | Jonesville | 2.081 | 63 | .335 | 11 |
| ST. PAUL | Lebanon | 2.782 | 61 | 1.616 | 35 |
| | Wise | .521 | 18 | .411 | 13 |
| | Coeburn | 1.396 | 35 | 1.501 | 40 |
| SALEM | Bent Mountain | .059 | 2 | 1.672 | 44 |
| SANDSTON | Providence Forge | .422 | 14 | 1.493 | 42 |
| SHAWSVILLE | Floyd | .085 | 5 | .076 | 5 |
| | Blacksburg | 1.697 | 42 | .183 | 7 |
| | Bedford | .864 | 30 | .124 | 6 |
| | Roanoke | 4.822 | 76 | .067 | 2 |
| SPERRYVILLE | Madison | .438 | 19 | .104 | 6 |
| | Criglersville | .430 | 17 | .429 | 18 |
| | Front Royal | 1.053 | 28 | .108 | 5 |
| SPOTSYLVANIA | Louisa | .096 | 3 | .040 | 2 |
| | Unionville | .292 | 13 | .214 | 11 |
| | Ladysmith | 1.016 | 31 | .885 | 30 |
| STAUNTON | Craigsville | .281 | 9 | 5.252 | 86 |
| | Bridgewater | .142 | 6 | | |
| | Deerfield | .085 | 5 | 7.746 | 100 |
| | Grottoes | .113 | 5 | | |
| | Mount Solon | .172 | 7 | 5.361 | 77 |
| | Raphine | .303 | 10 | | |
| | Waynesboro | 2.862 | 51 | | |
| | Weyers Cave | .280 | 11 | | |
| Greenwood | .043 | 1 | 1.626 | 36 | |
| STEPHENS CITY | Berryville | .406 | 17 | .686 | 23 |
| | Front Royal | 1.746 | 35 | .716 | 24 |
| | Strasburg | 1.099 | 30 | | |
| | Boyce | .308 | 11 | 1.375 | 38 |
| STONE MOUNTAIN | Roanoke | 3.589 | 66 | .088 | 3 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| Route | | A To B | | B To A | |
|-----------------|------------------|------------|-----------|------------|-----------|
| | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| SUFFOLK | Portsmouth | 2.845 | 52 | .661 | 17 |
| | Crittenden | .132 | 6 | - | - |
| | Norfolk | 3.784 | 56 | .197 | 7 |
| | Franklin | .863 | 20 | - | - |
| TANGIER ISLAND | Onancock | 1.961 | 62 | .118 | 3 |
| TEMPERANCEVILLE | Onancock | 2.986 | 58 | 1.592 | 33 |
| | Belle Haven | 1.024 | 28 | .508 | 17 |
| | Eastville | .102 | 5 | .248 | 10 |
| | Cape Charles | .217 | 7 | .189 | 7 |
| THE PLAINS | Upperville | 1.083 | 26 | 1.377 | 39 |
| | Manassas | 1.177 | 32 | .009 | 0 |
| TOANO | Providence Forge | 1.110 | 30 | .744 | 22 |
| | West Point | 1.130 | 32 | .802 | 23 |
| UNIONVILLE | Spotsylvania | .214 | 11 | .292 | 13 |
| | Culpeper | 1.722 | 41 | .258 | 7 |
| | Chancellor | .580 | 20 | .471 | 17 |
| UPPERVILLE | Berryville | .980 | 28 | .140 | 6 |
| | Leesburg | 2.197 | 44 | .166 | 7 |
| | Warrenton | 2.100 | 49 | .163 | 7 |
| | Bluemont | .951 | 28 | 1.059 | 20 |
| | Mt. Gilead | 1.979 | 46 | .254 | 8 |
| | The Plains | 1.377 | 39 | 1.083 | 26 |
| VARINA | Charles City | .364 | 11 | .520 | 19 |
| VIENNA | Manassas | .741 | 19 | - | - |
| | Leesburg | .388 | 13 | 1.331 | 34 |
| | Lorton | .022 | 1 | - | - |
| | Dulles | .031 | 1 | 1.036 | 8 |
| | Dale City | .090 | 5 | - | - |
| | Occoquan | .170 | 7 | - | - |
| WARRENTON | Hartwood | .040 | 2 | .191 | 9 |
| | Middleburg | .420 | 13 | 2.194 | 46 |
| | Upperville | .163 | 7 | 2.100 | 49 |
| | Front Royal | .281 | 10 | .204 | 8 |
| | Haymarket | 1.193 | 32 | 3.439 | 56 |
| | Culpeper | 2.613 | 49 | 1.301 | 27 |
| | | | | | |
| WAVERLY | Stoney Creek | .999 | 26 | - | - |
| | Surry | .494 | 16 | - | - |
| | Wakefield | 2.254 | 53 | - | - |

COMMUNITY OF INTEREST
OCTOBER 1973

| A | Route | B | A To B | | B To A | |
|--------------------------|-------|------------------|---------------|--------------|---------------|--------------|
| | | | Avg. Calls | % Calling | Avg. Calls | % Calling |
| WEST POINT | | Providence Forge | .798 | 26 | .816 | 27 |
| | | King William | .921 | 26 | 1.248 | 38 |
| | | Toano | .802 | 23 | 1.130 | 32 |
| WHALEYVILLE | | Chuckatuck | .141 | 6 | | |
| | | Franklin | .728 | 27 | | |
| | | Crittenden | .041 | 2 | | |
| | | Portsmouth | 1.176 | 40 | .017 | |
| WHITE SULPHUR SPRINGS | | Covington | | | | |
| WILLIAMSBURG | | Charles City | .203 | 8 | 1.936 | 40 |
| | | Poquoson | .077 | 3 | .291 | 13 |
| | | Providence Forge | .172 | 7 | .922 | 27 |
| | | Hampton | 1.700 | 41 | .374 | 11 |
| | | Newport News | 2.584 | 52 | .544 | 16 |
| WINCHESTER | | Bluemont | .032 | 1 | 1.246 | 38 |
| | | Gore | .124 | 5 | | |
| WISE | | Appalachia | .634 | 20 | 1.082 | 35 |
| | | Big Stone Gap | 1.490 | 35 | 1.165 | 34 |
| | | Coeburn | 2.042 | 48 | 2.531 | 59 |
| | | Dante | .089 | 3 | .331 | 15 |
| | | Clintwood | .710 | 17 | 1.007 | 33 |
| | | Pound | 1.969 | 46 | 4.282 | 81 |
| | | St. Paul | .411 | 13 | .521 | 18 |

COMMUNITY OF INTEREST
OCTOBER, 1973

| A | Route | B | A To B | | B To A | |
|-------------|-------|-------------|---------------|---------------|---------------|---------------|
| | | | Avg. Calls | % Callinc. | Avg. Calls | % Callinc. |
| AMELIA | | Bethia | .11 | 5 | .40 | 16 |
| | | Chester | .17 | 7 | .05 | 2 |
| | | Dinwiddie | .168 | 8 | .192 | 9 |
| DEERFIELD | | Staunton | 7.746 | 100 | .085 | 5 |
| | | Hot Springs | 1.0 | 6 | - | - |
| BEAVERDAM | | Hanover | .07 | 3 | .13 | 6 |
| | | Ashland | 3.2 | 93 | .294 | 10 |
| | | Richmond | 4.954 | 100 | .010 | 0 |
| GUM TREE | | Hanover | .07 | 4 | .20 | 12 |
| | | Ashland | 8.381 | 96 | .437 | 15 |
| | | Richmond | 9.468 | 100 | .011 | 1 |
| MONTPELIER | | Hanover | .07 | 3 | .33 | 11 |
| | | Ashland | 4.735 | 83 | .887 | 25 |
| | | Richmond | 7.614 | 100 | .035 | 2 |
| NEW HOPE | | Waynesboro | 3.34 | 65 | - | - |
| MOUNT SOLON | | Staunton | 5.361 | 77 | .172 | 7 |
| DISPUTANTA | | Petersburg | 15.059 | 100 | .089 | 13 |



virginia telephone & telegraph company

2211 HYDRAULIC ROAD • CHARLOTTESVILLE, VIRGINIA MAIL ADDRESS: P. O. BOX 788 • CHARLOTTESVILLE, VA. 22902

April 10, 1974

Mr. Frank S. Givens, Jr.
Chief Engineer
Commonwealth of Virginia
State Corporation Commission
Box 1197
Richmond, Virginia 23209

Dear Mr. Givens:

Attached is a study of the various extended area service points which we discussed several weeks ago. As you will note, the study shows the average calls per customer and the percent of customers calling for each of the routes indicated. It is our understanding that you will review this study and advise us of any E.A.S. routes which will need further study.

Please feel free to contact us if you have any questions regarding the attached.

Yours very truly,


Henry L. Burton
Division Commercial Manager

HLB:chg

Attachment

cc: Messrs.: D.H. Reid
I.L. Grogan

Received 4/11/74

| <u>Exchange A</u> | <u>Exchange B</u> | <u>A to B</u> | | <u>B to A</u> | |
|---------------------------|----------------------|---|--|---|--|
| | | <u>Average Calls Per Customer</u> | <u>Percent Customers Calling</u> | <u>Average Calls Per Customer</u> | <u>Percent Customers Calling</u> |
| Altavista | - Bedford | .13 | 6.5 | | |
| | - Rustburg | .23 | 7.4 | .72 | 24.0 |
| Axton | - Lynchburg | 4.39 | 68.7 | | |
| | - Chatham | .13 | 6.4 | | |
| Bachelors Hall | - Chatham | .38 | 14.9 | | |
| Bassett | - Rocky Mount | .71 | 19.4 | .41 | 13.4 |
| Boones Mill | - Roanoke | .88 | 27.9 | | |
| Brodnax | - Lawrenceville | 2.17 | 60.5 | | |
| | - Boydton | .10 | 6.0 | | |
| Brookneal | - Charlotte Ct. Hse. | .56 | 19.6 | | |
| | - Halifax | .28 | 11.8 | .29 | 10.4 |
| | - Rustburg | .47 | 18.9 | .92 | 29.9 |
| Buckingham | - Lovingston | .28 | 11.4 | | |
| | - Prospect | .16 | 7.7 | .20 | 8.6 |
| | - Scottsville | .70 | 23.6 | .34 | 12.7 |
| Burkeville | - Farmville | 4.36 | 77.5 | .56 | 16.7 |
| Charlottesville | - Gordonsville | .22 | 8.1 | | |
| | - Schuyler | .04 | 1.9 | 5.38 | 77.3 |
| | - Stanardsville | .32 | 11.3 | 7.57 | 82.3 |
| | - Palmyra | .26 | 9.9 | 7.80 | 81.7 |
| | - Greenwood | .13 | 5.7 | | |
| Crozet | - Greenwood | 1.58 | 35.5 | | |
| Farmville | - Cumberland | .63 | 19.3 | | |
| | - Buckingham | .21 | 8.0 | 1.51 | 43.8 |
| | - Keysville | .39 | 12.5 | | |
| | - Pamplin | .27 | 8.9 | | |
| | - Goochland | .12 | 5.8 | | |
| Fork Union Front Royal | - Stephens City | .63 | 19.6 | | |
| | - Warrenton | .14 | 5.9 | | |
| | - Boyce | .18 | 5.8 | | |
| | - Strasburg | .48 | 15.4 | | |
| | - Washington | .30 | 10.4 | 4.60 | 73.2 |
| | - Marshall | .21 | 7.3 | | |
| | - Sperryville | .09 | 3.6 | | |
| | - Chatham | .12 | 6.7 | | |
| | - Clover | .95 | 26.3 | | |
| Halifax | - Danville | 1.22 | 39.9 | | |
| | - Charlotte Ct. Hse. | .45 | 13.1 | | |
| Hampden Sydney | - Lawrenceville | .41 | 14.1 | | |
| Kenbridge | - Boydton | .42 | 16.2 | | |
| LaCrosse | - Buchanan | .10 | 4.1 | | |
| Lexington | - Raphine | .31 | 12.5 | | |
| | - Craigsville | .001 | .1 | | |
| | - Elkton | .55 | 17.8 | | |
| Luray | - Ballard | .70 | 28.8 | | |
| | - Meadows of Dan | .33 | 16.0 | | |
| | - Floyd | .53 | 16.0 | | |
| Palmyra | - Goochland | .17 | 6.0 | | |
| | - Louisa | 1.18 | 28.1 | | |
| Rocky Mount | - Scottsville | .75 | 21.1 | .69 | 22.2 |
| | - Bent Mountain | .03 | 1.4 | | |
| | - Roanoke | 3.53 | 71.9 | | |

| Exchange A | <u>Exchange B</u> | <u>A to B</u> | | <u>B to A</u> | |
|---------------|-------------------|----------------------------------|--|----------------------------------|--|
| | | Average Calls Per Customer | Percent Customers <u>Calling</u> | Average Calls Per Customer | Percent Customers <u>Calling</u> |
| Rustburg | - Concord | .67 | 23.1 | | |
| | - Lynchburg | 12.12 | 96.5 | | |
| | - Appomattox | .41 | 15.3 | | |
| Schuyler | - Lovington | 2.02 | 40.5 | | |
| South Boston | - Clover | .74 | 20.2 | | |
| South Hill | - Boydton | .63 | 20.3 | | |
| | - Victoria | .20 | 6.5 | .37 | 16.3 |
| Spencer | - Stuart | .82 | 26.0 | .46 | 17.2 |
| Stanardsville | - Madison | 1.05 | 33.4 | | |
| Stuart | - Ballard | .05 | 2.3 | | |
| | - Cana | .04 | 1.2 | | |
| Victoria | - Keysville | .54 | 19.5 | | |
| Washington | - Culpeper | 1.72 | 44.6 | | |
| | - Marshall | .27 | 12.3 | | |
| Whitmell | - Chatham | 1.80 | 48.0 | | |



GENERAL TELEPHONE COMPANY OF THE SOUTHEAST

3632 ROXBORO ROAD, P.O. BOX 1412, DURHAM, NORTH CAROLINA 27702 • 919 477-9373

March 29, 1974

Mr. Frank S. Givens, Jr.
Chief Engineer
State Corporation Commission of Virginia
Box 1197, Elanton Building
Richmond, Virginia 23209

Dear Mr. Givens:

In reply to your letter dated March 19, 1974, we have found that there were 910 calls to Tazewell made by 47 of the 49 customers in Burkes Garden. This gives a Community of Interest Factor (CIF) of 18.571. This information was furnished to us by Mr. Ed Greever of the Burkes Garden Telephone Company.

Should you have any further questions, please give us a call.

Sincerely,

F. G. MAXSON
Vice President-Revenue Requirements

cc: Mr. L. C. Tate
Mr. E. P. Greever



GENERAL TELEPHONE COMPANY OF THE SOUTHEAST

3632 ROXBORO ROAD, P.O. BOX 1412, DURHAM, NORTH CAROLINA 27702 • 919 477-9373

March 15, 1974

Mr. Frank S. Givens, Jr.
Chief Engineer
State Corporation Commission of Virginia
Box 1197, Blanton Building
Richmond, Virginia 23209

Dear Mr. Givens:

Attached is the information requested in your phone call of March 4, 1974. The information was taken from our EAS point-to-point study and our toll message data study for the month of July, 1973. In addition to the information which you specifically asked for, we reviewed all of our Virginia studies. We found three cases where the Community of Interest Factor (CIF) exceeded 1.0. These have been included following the requested data.

The exchanges listed are all in Virginia except for Bluefield, West Virginia which is identified as such.

Column 4 in the attachment shows the total number of calls made from the originating exchange (Column 1) to the receiving exchange (Column 2) during the study month. Column 5 indicates the percent of the total customers that made the calls. For example, there were 2,697 calls from Bluefield, Virginia to Tazewell. These calls were generated by 840 customers which constituted 21.4% of the 3,917 customers we have in Bluefield.

The data for Jewell Ridge to Grundy was not printed out. This was probably a computer error, but it is conceivable that during the study period, there were no calls made from Jewell Ridge to Grundy in which case there would have been no report.

Should you have any further questions, please give me a call.

Sincerely,

F. G. MAXSON
Vice President-Revenue Requirements

Attachment

cc: Mr. Logan C. Tate

Part of General Telephone & Electronics

Received March 18, 1974

BURKE'S GARDEN TELEPHONE EXCHANGE

Burke's Garden, Virginia

July 24, 1974

Mr. Kenneth M. Wells
Business Relations Manager
General Telephone Company of the Southeast
Box 1412
Durham, N. C. 27702

Dear Mr. Wells,

Thank you for sending us the results of your study of first costs which would result from the inauguration of EAS between Burke's Garden and Tazewell. We appreciate the time and effort which your Company has put into this study.

As expected, these first cost estimates are quite high. We believe that the annual cost per subscriber as indicated by your estimate is probably more than some of our subscribers would be willing to pay since our experience has shown that some subscribers have virtually no interest in EAS.

This, of course, does not take into account the loss of toll revenue which we would sustain from EAS. We estimate that our loss of revenue would amount to between \$4500.00 and \$6000.00 per year which would have to be made up by our subscribers through monthly assessments if we are to continue our present program of improving and expanding our service. The cost of this loss of revenue plus the cost of additional equipment for EAS means an additional annual cost to our subscribers of between \$200.00 and \$230.00. This, I believe, would cause an unnecessary hardship on our subscribers.

I trust you will convey to the authorities of the State Corporation Commission our belief that EAS is not in the best interest of our Company and our subscribers and that we sincerely hope that the Commission will agree with our view of this matter.

With kindest personal regards, I remain,

Yours very truly,


E. P. Greever
President

RECEIVED
JUL 26 1974

BUSINESS RELATIONS

| Attachment | | | | |
|---------------------|---------------------|---------------|-------------------------|-----------------------------------|
| (1) | (2) | (3) | (4) | (5) |
| From Exchange | To Exchange | <u>CIF</u> | Number Of Calls Made | Percent Customers Making Calls |
| Bluefield, Virginia | Tazewell | .689 | 2,697 | 21.44% |
| Pocahontas | Richlands | .157 | 215 | 5.10% |
| Grundy | Davenport | .077 | 251 | 3.38% |
| Grundy | Haysi | .145 | 473 | 5.60% |
| Grundy | Jewell Ridge | .034 | 111 | 1.81% |
| Jewell Ridge | Grundy | Not Available | | |
| Jewell Ridge | Tazewell | .505 | 230 | 26.09% |
| Jewell Ridge | Maxie | .021 | 8 | .78% |
| Jewell Ridge | Clintwood | .029 | 2 | .26% |
| Pocahontas | Tazewell | .519 | 712 | 20.48% |
| Pocahontas | Bluefield | .950 | 1,303 | 33.97% |
| Richlands | Tazewell | .882 | 4,787 | 25.93% |
| Richlands | Honaker | .379 | 2,059 | 12.36% |
| Richlands | Bluefield, Virginia | .133 | 724 | 5.43% |
| Richlands | Pocahontas | .023 | 126 | .94% |
| Richlands | Lebanon | .261 | 1,418 | 10.17% |
| Rocky Gap | Bland | 1.111 | 550 | 43.84% |
| Tazewell | Bluefield, Virginia | .641 | 2,779 | 19.69% |
| Tazewell | Burkes Garden | .054 | 233 | 2.24% |
| Tazewell | Jewell Ridge | .039 | 169 | 1.64% |
| Tazewell | Pocahontas | .175 | 759 | 6.14% |
| Tazewell | Richlands | 1.165 | 5,046 | 30.79% |
| Tazewell | Saltville | .029 | 127 | 1.45% |
| Gore | Winchester (662) | 2.798 | 596 | 84.98% |
| Gore | Winchester (667) | 1.765 | 376 | 69.48% |
| Gore | Gainesboro | .413 | 88 | 22.54% |
| | | | | |
| Pocahontas | Bluefield, W. Va. | 2.051 | 2,814 | 54.59% |
| Oakwood | Richlands | 1.627 | 1,907 | 40.78% |
| Dwight | Richlands | 1.212 | 612 | 43.36% |
| | | | | |
| Burkes Garden | Tazewell | 18.571 | 910 | 96.102 |

**Continental Telephone
of Virginia**

Virginia Area

Post Office Box 155
Haymarket, Virginia 22069
(703) 754-4041

April 18, 1974

Mr. Frank S. Givens, Jr.
Chief Engineer
State Corporation Commission
Box 1197
Richmond, Virginia 23209

Dear Mr. Givens:

I visited you on March 6 at your request and we discussed EAS studies that you wanted made before the end of April. Your request was divided into county seat calling and urban areas.

Attached to this letter are summaries of the so-called county seat group based on March, 1974, billing cycles as indicated.

We are now proceeding with the urban area studies and expect to have them to you before the end of the month as you requested.

truly yours,



Conrad J. Logan, Director
Intercompany and Regulatory Affairs

CJL:pds

Attachment

First Colony
Virginia E. A. S. Study
March 1974 Billing Cycle

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|-----------------------|--|--|---|
| Allwood to | | | |
| Amherst | 283 | 68.6% | 4.99 |
| Amherst to | | | |
| Big Island | 1,559 | 1.4 | .04 |
| Lynchburg | | 82.2 | 10.85 |
| Piney River | | 30.4 | 1.29 |
| Allwood | | 21.4 | .97 |
| Gladstone | | .12.4 | .61 |
| Appomatox to | | | |
| Concord | 2,090 | 19.6 | .57 |
| Gladstone | | 14.4 | .44 |
| Rustburg | | 6.4 | .16 |
| Arcola to | | | |
| Herndon | 778 | 52.8 | 3.12 |
| Leesburg | | 65.7 | 4.85 |
| Middleburg | | 29.0 | 1.46 |
| Chancellor II to | | | |
| Orange | 1,037 | 6.3 | .37 |
| Gladstone to | | | |
| Appomatox | 386 | 57.8 | 3.09 |
| Lovingston | | 21.0 | .73 |
| Amherst | | 38.3 | 2.83 |
| Buckingham | | .14.2 | .41 |
| Haymarket to | | | |
| Leesburg | 2,375 | 10.2 | .33 |
| Warrenton | | 41.2 | 2.90 |
| Dale City | | 5.8 | .19 |
| Ind. Hill | | 10.7 | .26 |
| Occoquan | | 8.9 | .24 |
| Triangle | | 5.3 | .13 |
| Pamplin to | | | |
| Charlotte Ct. Hs. | 750 | 26.8 | 1.07 |
| Farmville | | 41.3 | 1.42 |

Tidewater
Virginia E. A. S. Study
March 1974 Billing Cycle

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|-----------------------|--|--|---|
| Bowling Green to | | | |
| Fredericksburg | 1,899 | 56.0% | 3.05 |
| Dawn | | 16.0 | .54 |
| Doswell | | 3.6 | .09 |
| Gloucester to | | | |
| Saluda | 2,295 | 23.1 | .87 |
| King & Queen | | 12.5 | .30 |
| Heathsville to | | | |
| Kilmarnock | 1,010 | 46.3 | 2.10 |
| Kilmarnock to | | | |
| Heathsville | 2,019 | 29.0 | 1.00 |
| King & Queen to | | | |
| King William | 766 | 20.0 | .64 |
| Gloucester | | 32.1 | .94 |
| King George to | | | |
| Fredericksburg | 1,710 | 75.2 | 5.89 |
| King William to | | | |
| West Point | 1,350 | 27.4 | .90 |
| Dawn | | 17.2 | .52 |
| King & Queen | | 14.6 | .35 |
| Old Church to | | | |
| Hanover | 695 | 1.0 | .01 |
| Providence Forge | | 2.2 | .08 |
| Saluda to | | | |
| Gloucester | 1,690 | 30.8 | 1.17 |
| Tappahanock to | | | |
| Warsaw | 2,429 | 35.9 | 1.54 |
| Warsaw to | | | |
| Tappahanock | 1,331 | 52.0 | 2.71 |

CTC-Virginia
Virginia E. A. S. Study
March 1974 Billing Cycle

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|--------------------------|--|--|---|
| Barnesville to | | | |
| Boydton | 443 | 10.8 % | .21 |
| Charlotte Ct, Hs. | | 26.4 | .82 |
| Chase City | | 77.7 | 4.95 |
| Boydton to | | | |
| Barnesville | 534 | 6.2 | .09 |
| Beechwood | | 23.4 | .66 |
| Blackridge | | 5.1 | .12 |
| Broadnax | | 1.0 | .01 |
| Clarksville | | 49.4 | 2.26 |
| La Crosse | | 8.4 | .28 |
| South Hill | | 52.1 | 2.84 |
| Boykins to | | | |
| Courtland | 892 | 47.8 | 1.79 |
| Bridgewater to | | | |
| Staunton | 1,861 | 22.3 | .66 |
| Broadway/Timberville to | | | |
| Woodstock | 2,908 | 6.2 | .13 |
| Capron to | | | |
| Courtland | 509 | 66.6 | 3.47 |
| Charlotte Court House to | | | |
| Clover | 767 | 16.7 | .47 |
| Barnesville | | 11.2 | .36 |
| Brookneal | | 33.5 | 1.09 |
| Hampden Sydney | | 12.8 | .42 |
| Keysville | | 49.5 | 2.27 |
| Pamplin | | 26.9 | 1.15 |
| Chase City to | | | |
| Barnesville | 2,453 | 18.7 | .65 |
| Clarksville | | 34.7 | 1.42 |

CTC-Virginia (Cont'd.)
Page 2

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|-----------------------|--|--|---|
| Claremont to | | | |
| Petersburg | 315 | 42.2 | 1.61 |
| Surry | | 39.4 | 1.36 |
| Clarksville to | | | |
| Boydton | 1,887 | 23.6 | .75 |
| Chase City | | 40.6 | 1.96 |
| Courtland to | | | |
| Boykins | 879 | 39.8 | 1.70 |
| Capron | | 40.8 | 2.04 |
| Ivor | | 16.6 | .60 |
| Dawn to | | | |
| Bowling Green | 575 | 43.1 | 2.22 |
| King William | | 26.8 | 1.37 |
| Dendron to | | | |
| Smithfield | 273 | 50.5 | 2.37 |
| Doswell to | | | |
| Bowling Green | 196 | 30.1 | 1.24 |
| Elkton to | | | |
| Luray | 1,942 | 9.1 | .29 |
| Emporia to | | | |
| Jarratt | 4,302 | 19.3 | .73 |
| Grottoes to | | | |
| Staunton | 1,190 | 38.6 | 1.55 |
| Hanover to | | | |
| Ashland | 177 | 71.2 | 5.50 |
| Mechanicsville | | 57.1 | 3.44 |
| Rockville | | 2.8 | .05 |
| Beaverdam | | 4.0 | .08 |
| Gum Tree | | 7.3 | .14 |

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|-----------------------|--|--|---|
| Hanover to | | | |
| Montpelier | 177 | 10.2 | .19 |
| Old Church | | 7.3 | .09 |
| Richmond | | 84.7 | 9.98 |
| Harrisonburg to | | | |
| New Market | 10,283 | 7.6 | .24 |
| Ivor to | | | |
| Courtland | 448 | 42.2 | 1.24 |
| Jarratt to | | | |
| Emporia | 596 | 74.2 | 5.91 |
| Stony Creek | | 43.5 | 2.16 |
| Keysville to | | | |
| Charlotte Court House | 1,099 | 33.7 | 1.24 |
| Farmville | | 39.1 | 1.38 |
| Victoria | | 21.7 | .61 |
| Lawrenceville to | | | |
| McKenny | 1,778 | 8.9 | .24 |
| Blackridge | | 12.4 | .38 |
| Broadnax | | 9.2 | .24 |
| Kenbridge | | 10.3 | .28 |
| New Castle to | | | |
| Christiansburg | 850 | 6.9 | .22 |
| Roanoke | | 69.8 | 3.90 |
| Newport to | | | |
| Pearisburg | 353 | 37.1 | 1.50 |
| Blacksburg | | 68.8 | 4.31 |
| Smithfield to | | | |
| Dendron | 3,359 | 6.7 | .17 |
| Windsor | | 22.1 | 1.84 |

| <u>Calling Points</u> | <u>Number of Main Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|-----------------------|--|--|---|
| Stony Creek to | | | |
| Dinwiddie | 937 | 23.1 | .63 |
| Jarratt | | 36.0 | 1.28 |
| Wakefield | | 10.8 | .39 |
| Surry to | | | |
| Waverly | 594 | 28.5 | .97 |
| Claremont | | 24.1 | .66 |
| Wakefield to | | | |
| Waverly | 661 | 58.9 | 3.00 |
| Stony Creek | | 16.5 | .42 |
| Weyers Cave to | | | |
| Staunton | 803 | 60.9 | 4.87 |
| Windsor to | | | |
| Smithfield | 936 | 49.1 | 2.64 |



**Continental Telephone
of Virginia**

Virginia Area

Post Office Box 155
Haymarket, Virginia 22069
(703) 754-4041

April 25, 1974

Mr. Frank S. Givens, Jr.
Chief Engineer
State Corporation Commission
Box 1197
Richmond, Virginia 23209

Dear Mr. Givens:

On April 18, 1974, I sent to you the results of a number of
EAS community of interest studies made at your request.

Attached to this letter are the remaining routes you asked for
generally described as the urban studies with one exception.
Dale City to the Northern Virginia Washington Metro exchanges
has not yet been completed but will follow promptly.

Very truly yours,

Conrad J. Logan, Director
Intercompany and Regulatory Affairs

Attachment

CJL:pds

Received 4/29/74

CTC - VA

Virginia E.A.S. Study

March/April Billing Cycle

| <u>Calling Points</u> | <u>Number of Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community Of Int. Factor</u> | |
|-----------------------|---|--|-------------------------------------|------|
| Crittenden to | Suffolk | 793 | 47.3% | 2.09 |
| | Holland | | 1.0 | .01 |
| | Whaleyville | | 2.3 | .03 |
| | Portsmouth | | 67.3 | 5.34 |
| Chuckatuck to | Holland | 639 | 3.8 | .07 |
| | Whaleyville | | 6.9 | .15 |
| | Crittenden | | 1.1 | .01 |
| | Portsmouth | | 55.2 | 2.87 |
| Franklin to | Holland | 4,688 | 19.5 | .65 |
| | Whaleyville | | 3.6 | .08 |
| | Suffolk | | 43.1 | 1.96 |
| | Crittenden | | .7 | .01 |
| | Chuckatuck | | 2.2 | .04 |
| | Portsmouth | | 22.5 | .67 |

COMMONWEALTH

Virginia E. A. S. Study

March/April Billing Cycle

| <u>Calling Points</u> | <u>Number of Stations- Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community Of Int. Factor</u> |
|-----------------------|---|--|-------------------------------------|
| Lorton to | 421 | 13.8% | .55 |
| Herndon | | 1.9 | .04 |
| Daleview | | 12.1 | .36 |
| Elmwood | | | |
| Manassas to | 15,754 | 32.8 | 1.61 |
| Braddock | | 8.0 | .25 |
| Calverton | | .4 | .01 |
| Upperville | | | |
| Dale City to | 7,136 | 18.6 | .66 |
| Braddock | | 35.9 | 1.44 |
| Engleside | | 8.5 | .24 |
| Herndon | | | |

Exhibit 3

COMMUNITY OF INTEREST STUDIES

| <u>Calling Points</u> | <u>Number of Main Stations Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|--|---|--|---|
| United Inter-Mountain Telephone Company (March 1974) | | | |
| Abingdon to Bristol Va. Saltville Lebanon | 5043 | 59.9% 9.2 15.8 | 2.72 .27 .52 |
| Bristol, Va. to Abingdon | 9971 | 37.5 | 1.70 |
| Bland to Wytheville Rocky Gap | 713 | 73.3 30.8 | 3.48 1.11 |
| Cana to Stuart | 769 | 4.9 | .10 |
| Ceres to Marion | 223 | 42.1 | 1.44 |
| Comers Rock to Galax | 446 | 55.4 | 1.80 |
| Fries to Hillsville Independence | 1261 | 14.4 27.3 | .33 .79 |
| Gate City to Kingsport, Tenn. | 2901 | 99.4 | 6.18 |
| Galax to Comers Rock Hillsville Independence Mouth of Wilson | 5327 | 5.05 40.6 14.1 1.9 | .11 1.77 .43 .04 |
| Hillsville to Fries Galax Willis | 2808 | 7.7 71.1 8.5 | .18 3.64 .22 |
| Independence to Konnarock Galax Fries | 951 | 4.8 65.8 25.9 | .14 2.92 .79 |
| Konnarock to Independence | 350 | 18.0 | .43 |

| <u>Calling Points</u> | <u>Number of Main Stations Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|--|---|--|---|
| <u>United Inter-Mountain Telephone Company (Contd)</u> | | | |
| (March 1974) | | | |
| Marion to Rural Retreat Cares | 4972 | 14.7 1.6 | .38 .03 |
| Rural Retreat to Marion | 1410 | 51.1 | 1.76 |
| Mouth of Wilson to Galax | 532 | 35.5 | 1.06 |
| Saltville to Abingdon Tazewell | 1917 | 33.8 4.8 | 1.01 .15 |
| Wytheville to Bland | 3605 | 11.6 | .36 |

| <u>Calling Points</u> | <u>Number of Main Stations Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|---|---|--|---|
| <u>Citizens Telephone Cooperative</u> (February 1974) | | | |
| Ballard to Meadows of Dan Stuart | 195 | 43.08 45.6 | 1.6 1.5 |
| Floyd to Meadows of Dan Bent Mountain | 1364 | 4.0 7.0 | .096 .152 |
| Locust Grove to Christiansburg | 530 | 37.9 | 1.4 |
| Willis to Hillsville | 747 | 30.3 | .983 |
| <u>Roanoke & Botetourt Telephone Co.</u> (March, 1974) | | | |
| Fincastle to Oriskany Covington Buchanan | 1016 | 1.1 7.0 29.0 | .039 .123 1.53 |
| Oriskany to Fincastle | 53 | 20.7 | .70 |
| Troutville to Buchanan | 3256 | 12.1 | .41 |
| <u>Peoples Mutual Telephone Company, Inc.</u> (February, 1974) | | | |
| Gretna to Chatham | 1948 | 98.5 | 2.1 |
| Hurt to Chatham | 1643 | 22.9 | .4 |
| Renan to Chatham | 387 | 72.4 | 1.4 |
| Sandy Level to Chatham | 312 | 79.9 | 1.7 |

(Note: FX from County offices at Chatham)

| <u>Calling Points</u> | <u>Number of Main Stations Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|--|---|--|---|
| <u>Amelia Telephone Co.</u> (November 1973) | | | |
| Amelia to Chester | 1726 | 6 | .13 |
| Amelia to Dinwiddie | 1726 | 6 | .15 |
| <u>Buggs Island Telephone Cooperative</u> (October 1973) | | | |
| Beechwood to Boydton | 605 | 13.7 | .95 |
| Blackridge to Boydton | 578 | 10.4 | .25 |
| Blackridge to Lawrenceville | 578 | 33.0 | 1.55 |
| <u>Merchants & Farmers Telephone Co.</u> (March 1974) | | | |
| Gum Tree to Hanover | 245 | 2.85 | .06 |
| Beaverdam to Hanover | 409 | 3.42 | .05 |
| Montpelier to Hanover | 844 | 2.84 | .05 |
| <u>North River Telephone Cooperative</u> (December 1973) | | | |
| Mount Solon to Staunton | 510 | 66.2 | 4.0 |
| Mount Solon to Harrisonburg | 510 | 62.7 | 3.9 |

| <u>Calling Points</u> | <u>Number of Main Stations Originating Exchange</u> | <u>Percent of Main Stations Calling Over Route</u> | <u>Community of Interest Factor</u> |
|--|---|--|---|
| <u>Shenandoah Telephone Company</u> (February 1974) | | | |
| Newmarket to Harrisonburg | 1122 | 50.6 | 3.4 |
| Strasburg to Winchester | 2021 | 50.0 | 2.9 |
| Strasburg to Stephens City | 2021 | 29.5 | 1.3 |
| Strasburg to Front Royal | 2021 | 32.5 | 1.5 |
| Woodstock to Broadway-Timberville | 2438 | 7.5 | .19 |

| | | | | | |
|--|----------------------|-----------------------------|---|--------------------------------|--------------------------|
| Working Sketches 50-County Seat Exchanges | | | Temperan- ceville C&P. | EAS | Chinco- teague C&P |
| | Tangier C&P | 1.181 65.5 | Parksley C&P | 2986 557 1592 338 | 1.164 3190 |
| | | 1.181 65.5 * 1.18 390 | Onanock C&P | 354 990 | |
| | | | Belle Haven C&P | | |
| Accomack County | | | | | |
| | Green wood C&P | 7.530 8690 | | Standard sville Va. Tel. | |
| | | 113 5790 | | 7.57 8230 32 11.38 | |
| | | 3.134 1.58 6490 3550 | Crozet Va. Tel. | | |
| | Schuyler Va. Tel. | 5.39 77.30 | Charlottesville Exchange Va. Tel. | .22 870 | 4.802 790 |
| | | .04 1.970 | Scotts- ville Va. Tel. | .26 9.990 780 81.70 | |
| ALBEMARLE COUNTY | | .69 22.290 | | Palmyra Va. Tel. | |
| | | .75 21.170 | | | |

| | | | | | | |
|-------------------------|--------------------------|------------------------------|-----------------------------|---|--|------------------|
| | | | | White Sulphur C&P | | |
| | | Potts Creek CF-W | | 2.24 ^{35%} 17 ^{735⁰⁰} | | |
| | | | Covington CF-W. Tel. Co. | | | |
| | Fincastle Roan & Bot. | 12 ^{17%} | | Clifton Forge CF-W | | |
| Alleghany County | | | | | | |
| | | | | | 117 ²⁵ 2% 790 | Chester C&P |
| | | | Amelia Amelia Tel. Co. | | | |
| | | | | 86 ¹⁶⁸ 192 970 | | Dinwiddie C&P |
| Amelia County | | | | | | |

| | | | | | | |
|-------------------|-------------------|---------------|---------------|------------------|-----------------|-----------------|
| | | | | Piney River C&P | | |
| | Big Island C&P | | | 2570 129 | 570 30.0 | Allwood Cont. |
| | | 171 790 | 0.04 1.43 | | | |
| | | 435 14 | 10.85 32.2 | Amherst Cont. | | |
| | Lynchburg C&P | | | | 767 1243 | Gladstone Cont. |
| | | | | | 2.83 38.3% | |
| Amherst County | | | | | | |
| | Concord C&P | | | | | Gladstone Cont. |
| | | 2,579 6190 | .57 19.69% | Appomattox Cont. | 1,444 14.47% | |
| | Rustburg Va. Tel. | 141 15.39% | .107 6.89% | Pamplin Cont. | | |
| Appomattox County | | | | | | |

| | | Bridge-water Cont. | | Weyers Cave Cont. | | Grottoes Cont. | |
|----------------------------------|---------------|-----------------------|------------------------------|---------------------------|----------------------|------------------------|--------------------------|
| Mount Solon Coop. | 5361 77% | 166 22% 172 7% | | 487 61% 280 11% | | 155 39% 113 5% | |
| | | 7% | Staunton C&P | | 2,862 51% 75% | 5,071 75% | Waynesboro Cf. W. Co. |
| Deerfield Mutual | 7,746 100% | 1085 5% 5252 86% | 251 9% 303 10% 486 68% | | New Hope Mutual | 1,043 19% 1,626 36% | |
| q Augusta County Bath-None | | Craigsville C&P | | Raphine Cont. | | | Greenwood C&P |
| | | | Montvale C&P | | Big Island | | |
| | | | 3212 65% 354 11% | | 3,469 79% 347 11% | | |
| Stone Mountain C&P | | EAS | Bedford C&P | | 3,246 55% 1,390 | 3,822 1,390 | Lynchburg C&P |
| | | | 2,680 52% 162 7% | | .075 3% 162 8% | | |
| | | Roanoke C&P | | Alta Vista Va. Tel. | | | |
| Bedford County | | | | | | | |

| | | | | | | |
|-------------------------|-----------------|-----------------------|-------------------------|------------------------|--------------------------|-------------------|
| | | | | | | Rocky Gap Genl |
| | | | | | 1.11 / 4 3.8% | |
| | | | | | 1.11 / 3.8% | |
| | Ceres United | EAS | Bland United | | | |
| Bland County | | | | | | |
| | | Oriskany R-B Co. | | | Buchanan C&P | |
| | | 1.11 / 20% | Eagle Rock R-B Co. | | 1.143 / 5.6% | |
| | | 1.10 / 4% | | 1.983 / 12% | | |
| | | | Fincastle R-B Co. | | Troutville R-B Co. | |
| | Roanoke C&P | 1.039 / 5% | 8,430 / 9.6% | | 1.123 / 7% | Covington CF-W |
| Botetourt County | | | | | | |

| | | | | | | | |
|-------------------|--------------------|-----------------|------|-----------------------------|-------------|-------------|--------------------------|
| | | McKenney C&P | | | | | |
| | | .838 | 2570 | Alberta Cent. | | | |
| | | | .21 | | | | |
| | Kenbridge Cont. | 141 141.5 | 103 | Lawrenceville Cont. | 124 237 | 1217 658 | Broadnax Cont. |
| | | | | South Brunswick Cont. | .38 | 12.490 | |
| | | | | | | 1.27 | 27% |
| | | | | | | | Black- ridge Coop. |
| Brunswick County | | | | | | | |
| Buchanan County | | | | | Scottsville | | |
| | | | | | Va. Tel | | |
| | | | | | 134 | 12.7% | |
| | | | | | .70 | 23.6% | |
| | Gladstone Cont. | 141 142.2 | | Buckingham Va. Tel | | | Dillwyn Va. Tel. |
| | | | | | .16 | 7.7% | |
| | | | | | .20 | 8.6 | |
| Buckingham County | | | | Prospect Va. Tel. | | | |

| | | | | | | | |
|--|--|--|-------------------------|------------------------|----------------------------|-------------------------------|-----------------------|
| | | Galax UIM | | | | | |
| | | 6.77 | 40.6% | Laurel Fork UIM | | Willis Citizens | |
| | | 3.64 | 71.1% | | | | |
| | | Sylvatus UIM | Hillsville UIM | | 2.983 27 calls 8.590 | 30.3% | |
| | | | .181 77% | Cana UIM | | | |
| | | | .33 14.4% | | | | |
| | | Fries UIM | | | | | |
| | | Carroll County UIM | | | | | |
| | | Charles City County - Varina - No sketch | | | | | |
| | | | | Keysville Cont. | | Hampden Sydney Va. Tel. | |
| | | Pamplin Cont. | 26.890 1.07 1.15 | 124 33.7 2.27 49.5% | 42 12.8% | 145 13.1% | |
| | | | 26.990 | | 1.09 33.5% | 1.56 19.6% | Brookneal Va. Tel. |
| | | | Charlotte C.H. Cont. | | | | |
| | | Clover C&P | 1.445 13% | 385 15% | .36 11.2% | .82 26.4% | |
| | | | | Drakes Branch Cont. | | | |
| | | | | | | Barnesville Cont. | |

| | | | | | | | |
|-------------------|--|--|--|---------------------|-------------------------------|-------------|------------------|
| | | | | | | | |
| | | | | Cartersville C&P | | | |
| | | | | Cumberland C&P | 1.169 33% 55% | 1970 | Powhatan C&P |
| | | | | | 385 | 76% | |
| | | | | | .641 | 20% | |
| | | | | Farmville Va Tel | | | |
| Cumberland County | | | | | | | |
| | | | | Maxie Gen Tel | | | Clinchco C&P |
| | | | | | | | Haysi C&P |
| | | | | | 4.808 / 88% | 2.712 / 65% | |
| | | | | | 2.579 / 56% | 783 / 19% | |
| | | | | | .013 | 1% | |
| | | | | Pound C&P | 1.589 40% 1.069 | 32% | Clintwood C&P |
| | | | | | .067 | 3% | .307 / 14% |
| | | | | | .302 | 9% | Davenport C&P |
| | | | | | 1.007 / 33% | | |
| | | | | | .874 | 26% | |
| | | | | | .710 | 17% | .724 / 20% |
| | | | | | | | 1.194 / 36% |
| | | | | Wise C&P | | | Coeburn C&P |
| Dickenson County | | | | | | | Dante C&P |

| | | | | | | | |
|--|----------------------------|-----------------------------|--------------------------|-----------------------------|-------------------------------|------------------------------|--------------------------|
| | | | | | | | |
| | Amelia Amelia Tel | | | Petersburg C&P | | | |
| | | .168 | 8 1/2 9 1/2 19 1/2 | Dinwiddie C&P | | | |
| | | | | McKenney C&P | .411 | 1590 2310 163 | Stoney Creek Cont. |
| Dinwiddie County | | | | | | | |
| Essex County - None; Fairfax County-Wash. Met | | | | Upper- ville C&P | | Middle- burg C&P | |
| | | | | 2,100 / 4,990 .163 / 770 | 2,194 / 4,670 .420 / 1,390 | | |
| | Front Royal Va. Tel. | 200 / 9 1/2 281 / 10 1/2 | | Warrenton C&P | 1,193 / 32 1/2 | 3,439 / 56 1/2 | Haymarket Cont. |
| | | | | Calverton C&P | Marshall C&P | .040 / 2 1/2 .191 / 9 1/2 | |
| | | | | Remington C&P | The Plains C&P | | Hartwood C&P |

| | | | | | | |
|------------------|--|------------------------------|---------------------------------|------------------------|--------------------------------|-----------------|
| | | | Bent Mountain C&P | | Roanoke C&P | |
| | | | .410 / 14% X .63 / 1.4 | | .218 / 8% X 3.53 / 71.9% | |
| | | Ferrum Va. Tel. | Rocky Mount Va. Tel. | | Boone Mill Va. Tel. | |
| | | | .41 / 13.4% X .71 / 19.4% | Union Hall Va. Tel. | Burnt Chimney Va. Tel. | |
| Franklin County | | Bassett Va. Tel. | | | | |
| | | | | | | |
| | | Gore Gen. Tel. | | Gainesboro C&P | | |
| | | 8.798 1.765 X 1.124 | Winchester C&P | | | |
| | | Strasburg Shen. | Stephen City C&P | .032 | 1.90 X .246 | Bluemont C&P |
| Frederick County | | | | | | |

| | | | | | | |
|------------------|------------------------|----------------------|-----------------------------|-----------------------|-------------------------------|--------------|
| | | Fork Union Va Tel | | | Louisa C&P | |
| | | .12 5.23 1.55 | | | .249 1.03 1423 1.593 | |
| | | Cartersville C&P | Goochland C&P | | Manakin C&P | |
| | | | .567 1.97 523 1.97 | 9.493 | 1009.0 1.046 1.970 | |
| | | | Powhatan C&P | | Richmond C&P | |
| Goochland County | | | | | | |
| | Konna-rock UIM | | | | | |
| | .43 | | | | | |
| | | .14 | Comers Rock UIM | | Fries UIM | |
| | | | | .79 1.73 25.970 | | |
| | Mouth of Wilson UIM | | Independence UIM | | | |
| | | | 2.92 | 65.870 | 14.190 1.43 | Galax UIM |
| Grayson County | | | | | | |

| | | | | | | | |
|-------------------|-------------------|----------------------|---------------------|------------------------|-------------------|----------------|-----------------------|
| | Chatham C&P | | | | | | |
| | | 1084 | 390 | | Volens Va Tel | | Clover C&P |
| | | | 12 | 6170 | | 195 | 1589 |
| | | | | | | 26370 | 4650 |
| Danville C & P | 1075 390 | | 122 | 3990 | Halifax Va Tel | | |
| | | | | | | 129 | |
| | | | | | | 1135 | |
| | | Turbeville Va Tel | Virgilina Va Tel | South Boston Va Tel | | 28 | Brookneal Va Tel |
| | | | | | | 1180 | |
| Halifax County | | | | | | | |
| | | | | Dawn Cont | Doswell Cont | | |
| | Gum Tree M&F | 390 | 214 | 930 | EAS | EAS | Old Church Cont |
| | Beaverdam M&F | 390 | 128 | 400 | Hanover Cont | 344 | Mechanicsville C&P |
| | | 135 | | | | 51190 | 1097 |
| | | | | | | 370 | |
| | Montpelier M&F | 208 | 179 | 110220 | 550 | 71290 | 998 |
| | | | | | 05 | 2870 | 84700 |
| | | | | | 026 | 290 | 125 |
| | | | | | | 990 | 1011 |
| | | | | | | | 170 |
| | | | | | Rockville C&P | Ashland C&P | Richmond C&P |
| Hanover County | | | | | | | |

#9

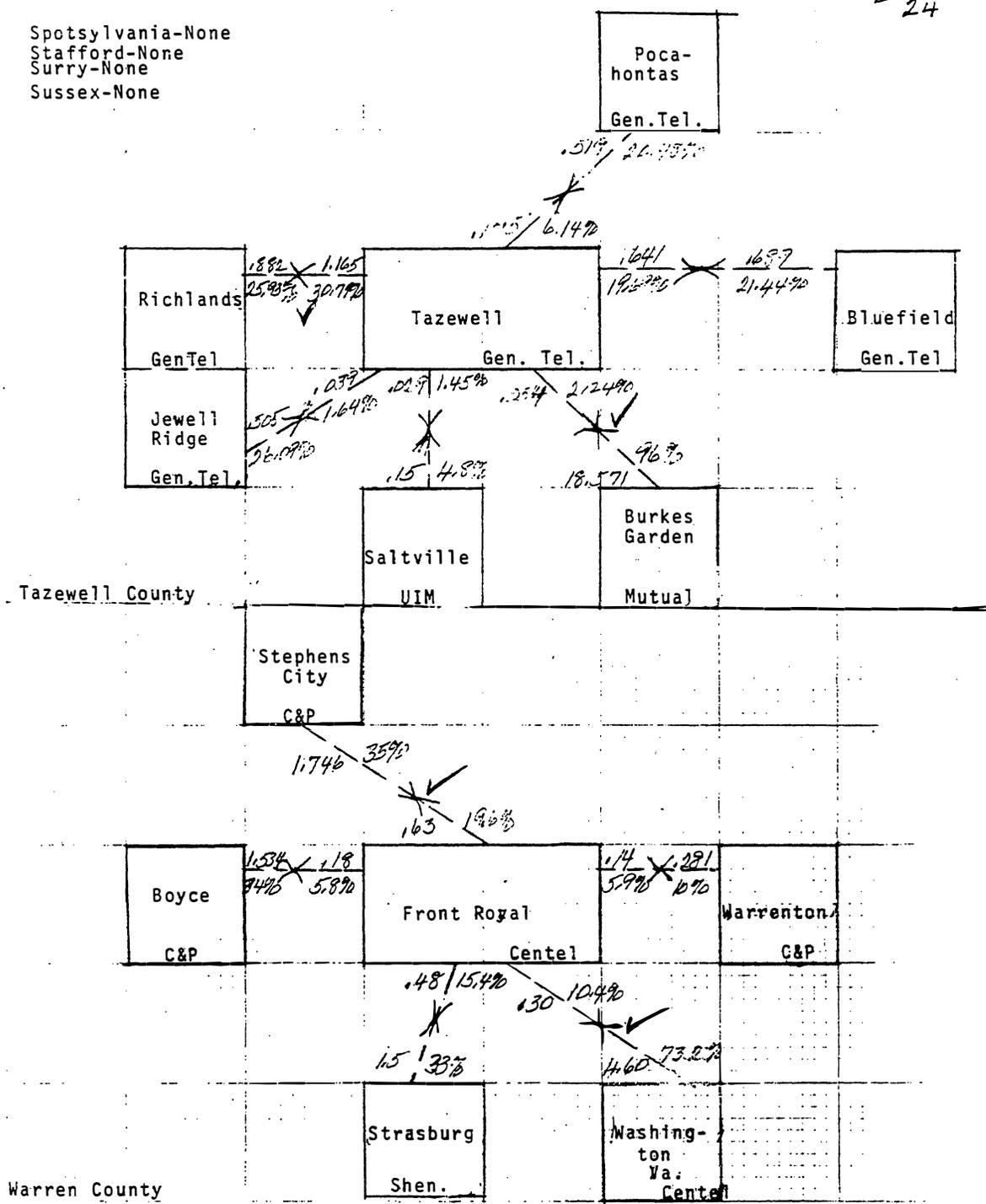
| | | | | | | |
|--------------------|------------------------------------|--|--------------------|--|--|-------------------|
| Lancaster - None | | | | | | Appalachia |
| | | | | | | C&P |
| St. Charles C&P | 11% 1335 | 63% 21081 | Pennington Gap C&P | 241/7% 135/5% 329 | | Big Stone Gap C&P |
| | | | Jonesville C&P | 428 16% 19% | | |
| Cumberland Gap C&P | 104 12% | | Lee C&P | | | |
| Lee County | | | | | | |
| Bluemont C&P | 1021 53% | Catoctin C&P 1288 1190 | Mount Gilead C&P | Herndon C&P 116/5% | | Dulles Cont |
| | 2197 114% | 165 7% | Leesburg C&P | 1839 20% 8% | | Arcola Cont |
| Upperville C&P | | | Middleburg C&P | 140 6% 14% 1440 | | Haymarket Cont |
| Loudoun County | | | | | | |

| | | | | | | | |
|--|----------------------|--|---|--------------------|--|--------------------------|--------------------------|
| | | | | | | | |
| | Spottsylvania C&P | | | Mineral C&P | | | |
| | | $\begin{matrix} 0.96 \\ 3.9\% \end{matrix}$ $\begin{matrix} 0.40 \\ 2.7\% \end{matrix}$ | | Louisa C&P | $\begin{matrix} 6.76 \\ 23.7\% \end{matrix}$ $\begin{matrix} 1.13 \\ 2.9\% \end{matrix}$ | Palmyra Central | |
| | Gordonsville C&P | $\begin{matrix} 1.20 \\ 3.5\% \end{matrix}$ $\begin{matrix} 1.00 \\ 3.3\% \end{matrix}$ | $\begin{matrix} 1.49 \\ 10.9\% \end{matrix}$ $\begin{matrix} 1.75 \\ 18.3\% \end{matrix}$ | | | | |
| | | | Goochland C&P | | | | |
| Louisa County | | | | | | | |
| Lunenburg - None Madison - None Mathews - None | | | | | | | Blackridge Coop |
| | Barnesville Cont | $\begin{matrix} .21 \\ 10.8\% \end{matrix}$ $\begin{matrix} .109 \\ 6.2\% \end{matrix}$ | | Chase City Cont | $\begin{matrix} .25 \\ 10.4\% \end{matrix}$ $\begin{matrix} .19 \\ 5.1\% \end{matrix}$ | | |
| | | | Boydton Cont | | $\begin{matrix} .66 \\ 23.4\% \end{matrix}$ $\begin{matrix} .95 \\ 13.7\% \end{matrix}$ | Beechwood Coop | |
| | La Crosse Central | $\begin{matrix} .28 \\ 8.4\% \end{matrix}$ $\begin{matrix} .01 \\ 1.9\% \end{matrix}$ $\begin{matrix} .10 \\ 6.9\% \end{matrix}$ | $\begin{matrix} 2.26 \\ 49.4\% \end{matrix}$ $\begin{matrix} 2.34 \\ 52.1\% \end{matrix}$ | | $\begin{matrix} .63 \\ 20.3\% \end{matrix}$ | | |
| | | | Broadnax Central | | $\begin{matrix} 1.75 \\ 23.6\% \end{matrix}$ | Clarks- ville Cont | South Hill Central |
| Mecklenburg County | | | | | | | |

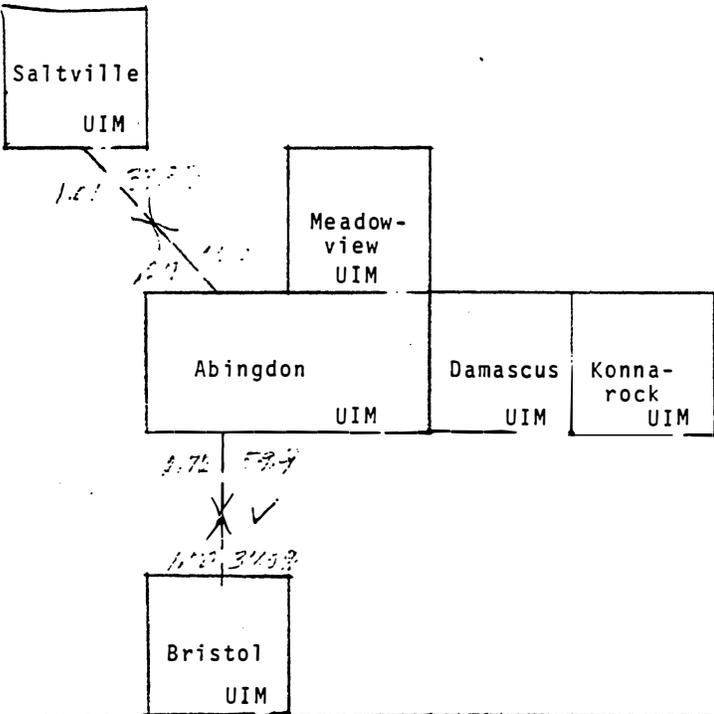
| | | | | | | |
|---|-----------------|---------------------------|------------------|--|--------------|--------------------------|
| Richmond-None Roanoke-None Rockbridge-None Rockingham-None | | | | | | Claremont Cont. |
| Powhatan-None Prince Edward-None | | Chester C&P | | | 1023 142 | 2326/6170 |
| | Hopewell C&P | Peters- burg C&P | | | 1089 390 | 15029 10090 |
| | | | Dinwiddie C&P | | | Disputanta PG Tel. |
| Prince George County Prince William-None Pulaski-None | | | | | | |
| | | | | | | Front Royal Centel |
| | Culpeper C&P | Washington, Va. Centel | | | 1216 890 | 13840 6890 |
| | | Sperry- ville C&P | | | 1325 1490 | 17320 110 |
| Rappahannock County | | | | | | |

| | | | | | | |
|--------------------|---------|---------------------------------------|---------------------|-------------------------------------|----------|--|
| Richmond - None | | | | | | |
| Roanoke - None | | | | | | |
| Rockbridge - None | | | | | | |
| Rockingham - None | | | | | | |
| | | | | | | |
| | | | | | | |
| | Dante | 1720 / 530 1500 1070 | Lebanon | 1397 / 315 1525 71.00 | Honaker | |
| | C&P | | | C&P | C&P | |
| | | | 1616 / 3590 X V | | | |
| | | | 2.782 / 61.90 | | | |
| | | | St. Paul | | | |
| Russell County | | | C&P | | | |
| Scott-None | | | | | Ivor | |
| Shenandoah-None | | | | | Cont. | |
| Smyth-None | | | | | | |
| | | | | 6.24 / 42.20 X | | |
| | | | | 1.60 / 16.60 | | |
| | Boykins | 1.79 / 47.80 1.70 39.80 | Courtland | | Franklin | |
| | Cont. | | | Cont. | Cont. | |
| | | | 2.04 / 40.80 X V | | | |
| | | | 3.47 / 66.60 | | | |
| | | | Capron | | | |
| Southampton County | | | Cont. | | | |

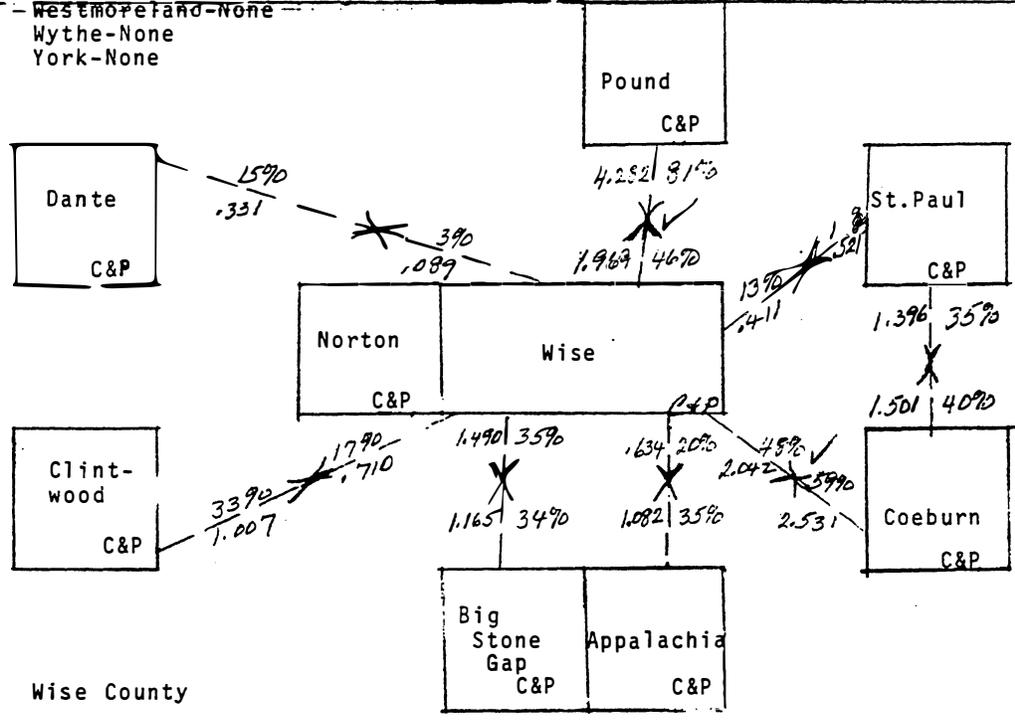
Spotsylvania-None
 Stafford-None
 Surry-None
 Sussex-None



Warren County



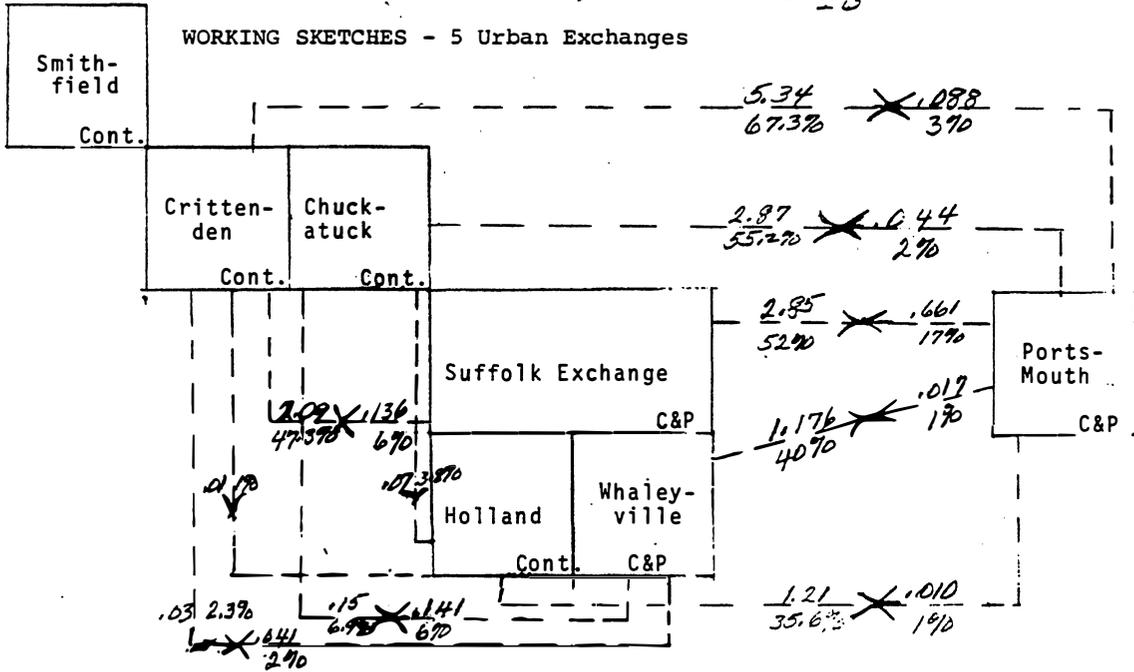
Washington County
 Westmoreland-None
 Wythe-None
 York-None



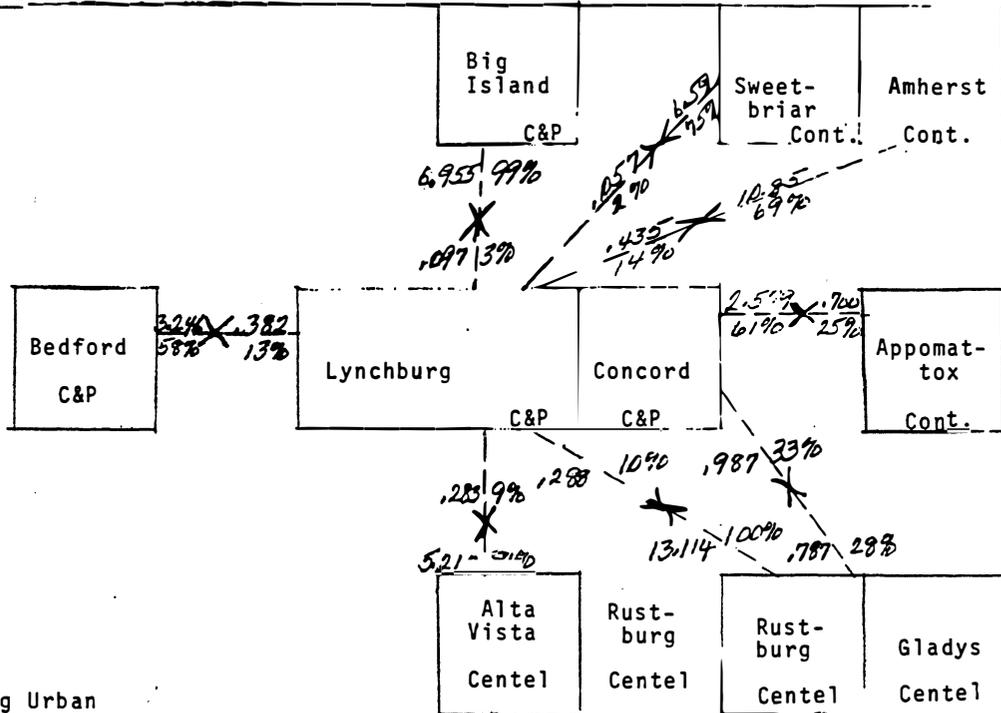
Wise County

26

WORKING SKETCHES - 5 Urban Exchanges

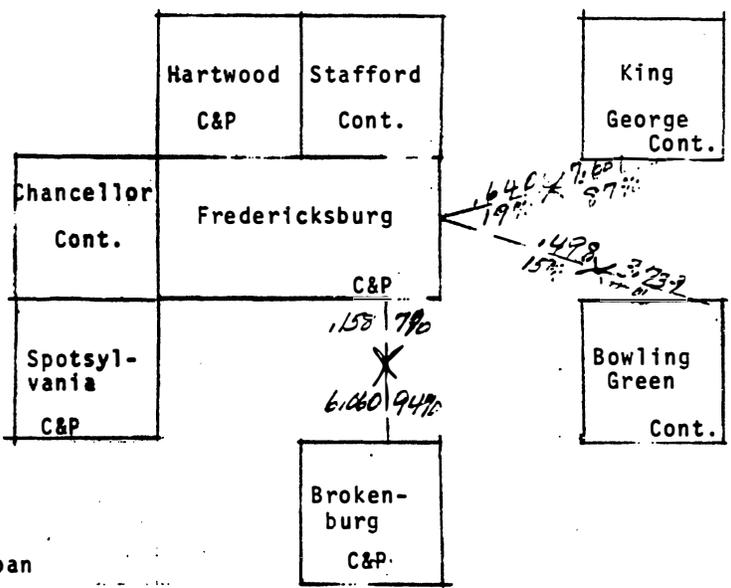
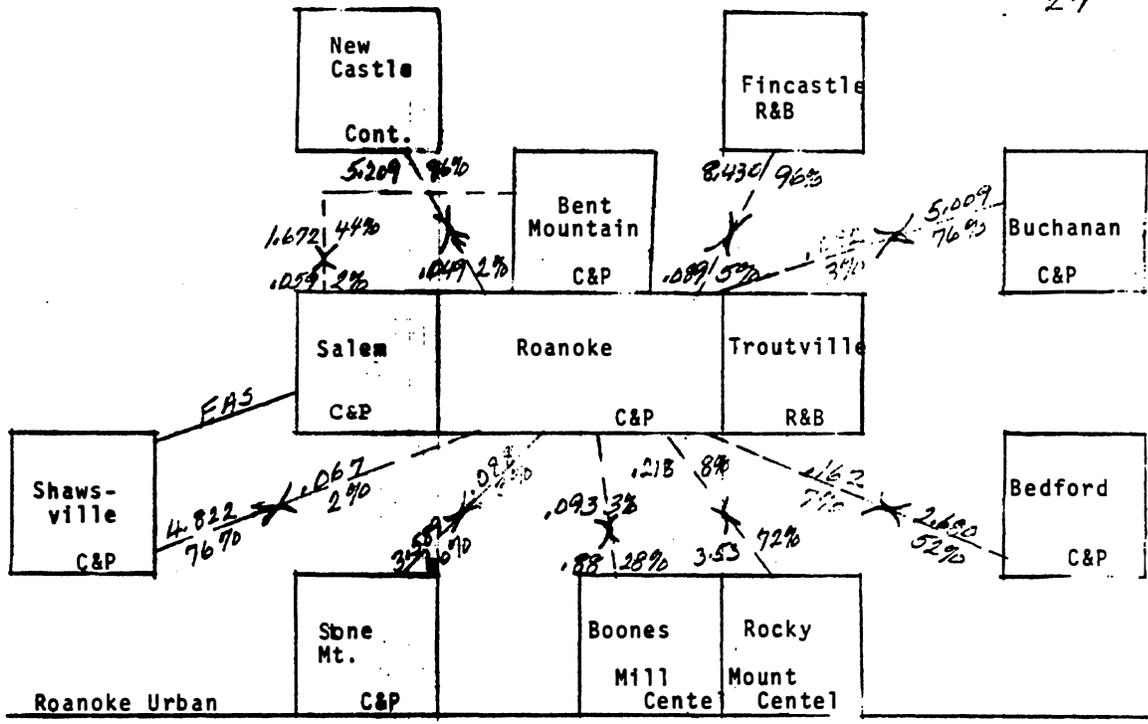


City of Suffolk



Lynchburg Urban

#27



Fredericksburg Urban

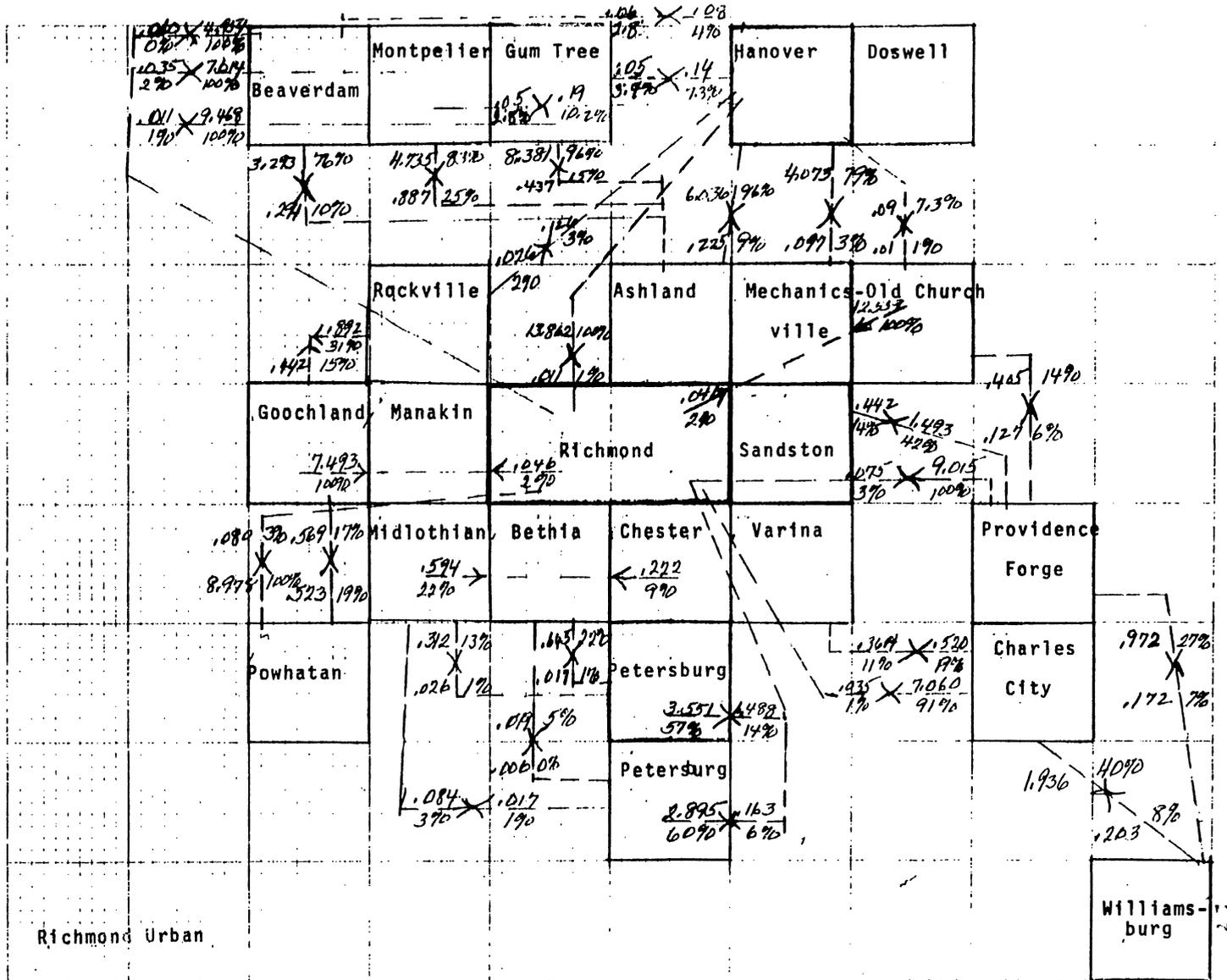


EXHIBIT 4

COUNTY SEAT STUDIES

| <u>County</u> | <u>County Seat</u> | <u>Exchange</u> | (A) <u>CG</u> | (B) <u>OG</u> | (C) <u>Col.</u> | (D) <u>CHS</u> | (E) <u>Hosp.</u> | (F) <u>Ind.</u> | (G) <u>TC</u> | (H) <u>Other</u> | (I) <u>Tel. Co.</u> |
|--------------------------------------|------------------------|-----------------|------------------|------------------|--------------------|-------------------|---------------------|--------------------|------------------|---------------------|------------------------|
| 1. Accomac | Accomac | Onancock | X | | | X | | | | X | C&P |
| 2. Albemarle | <u>Charlottesville</u> | Same | X | X | X | X | X | X | X | X | Va. Tel |
| 3. Alleghany | <u>Covington</u> | Covington | X | X | | X | X | X | X | | CFW |
| 4. Amelia | Amelia | Amelia | X | | | X | | | | | Am. Tel. |
| 5. Amherst | Amherst | Amherst | X | | | X | | | X | | Cont. ? |
| 6. Appomattox | Appomattox | Same | x | | | X | | | X | | Cont. |
| 7. Arlington-Washington Metropolitan | | | | | | | | | | | C&P |
| 8. Augusta | <u>Staunton</u> | Staunton | X | X | X | | X | X | X | X | C&P |
| 9. Bath | Warm Springs | Hot Springs | X | | | X | | | | X | Va. Hot Spr. |
| 10. Bedford | <u>Bedford</u> | Bedford | X | X | | X | | X | X | X | C&P |
| 11. Bland | Bland | Bland | X | | | X | | | | | Un. Im. |
| 12. Botetourt | Fincastle | Fincastle | X | | | | | | X | | R-B Tel. |
| 13. Brunswick | Lawrenceville | Same | X | | X | X | | | X | | Cont. |
| 14. Buchanan | Grundy | Grundy | X | | | X | | | X | | Gen. Tel |
| 15. Buckingham | Buckingham | Same | X | | | | | | | | Va. Tel. |
| 16. Campbell | Rustburg | Rustburg | X | | | X | | | | | Va. Tel. |
| 17. Caroline | Bowling Green | Same | X | X | | X | | | | | Cont. |
| 18. Carroll | Hillsville | Hillsville | X | X | | X | | X | | | Un. Im. |

| <u>County</u> | <u>County Seat</u> | <u>Exchange</u> | (A) <u>CG</u> | (B) <u>OG</u> | (C) <u>Col.</u> | (D) <u>CHS</u> | (E) <u>Hosp.</u> | (F) <u>Ind.</u> | (G) <u>TC</u> | (H) <u>Other</u> | (I) <u>Tel.Co.</u> |
|------------------|--------------------|-----------------|------------------|------------------|--------------------|-------------------|---------------------|--------------------|------------------|---------------------|-----------------------|
| 19. Charles City | Charles City | Same | X | | | X | | | | | C&P |
| 20. Charlotte | Charlotte CH | Same | X | | | X | | | | | Cont. |
| 21. Chesterfield | Chesterfield CH | Chester | X | | X | X | | | | X | C&P |
| 22. Clarke | Berryville | Same | X | | | X | | X | | | C&P |
| 23. Craig | Newcastle | Newcastle | X | | | X | | | | | Cont. |
| 24. Culpeper | <u>Culpeper</u> | Culpeper | X | | X | X | | X | X | | C&P |
| 25. Cumberland | Same | Same | X | | | X | | | | | C&P |
| 26. Dickenson | Clintwood | Clintwood | X | | | X | | | X | | C&P |
| 27. Dinwiddie | Dinwiddie | Same | X | | | X | | | | | C&P |
| 28. Essex | Tappahannock | Same | X | X | | X | X | | X | | Cont. |
| 29. Fairfax | Fairfax Wash. | Metropolitan | | | | | | | | | C&P |
| 30. Fauquier | Warrenton | Warrenton | X | X | X | X | X | X | X | | C&P |
| 31. Floyd | Floyd | Floyd | X | | | X | | X | X | | Citizens |
| 32. Fluvanna | Palmyra | Palmyra | X | | | X | | | | | Va. Tel. |
| 33. Franklin | Rocky Mount | Same | X | X | | X | X | X | X | | Va. Tel. |
| 34. Frederick | <u>Winchester</u> | Same | X | X | | X | X | X | X | | Va. Tel. |
| 35. Giles | Pearisburg | Same | X | | | X | X | X | X | | C&P |
| 36. Gloucester | Gloucester | Same | X | | | X | | | X | | Cont. |

| <u>County</u> | County Seat | Exchange | (A) CG | (B) OG | (C) Col. | (D) CHS | (E) <u>Hosp.</u> | (F) Ind. | (G) TC | (H) Other | (I) Tel. Co. |
|-------------------|----------------|-------------|-----------|-----------|-------------|------------|---------------------|-------------|-----------|--------------|-----------------|
| 37. Goochland | Goochland | Same | X | | | X | | | | | C&P |
| 38. Grayson | Independence | Same | X | | | X | | | | | UIM |
| 39. Greene | Standardsville | Same | X | | | X | | | | | Va. Tel |
| 40. Greensville | Emporia | Emporia | X | X | | X | X | X | X | | Cont. |
| 41. Halifax | Halifax | Halifax | X | | | X? | | | | | Va. Tel. |
| 42. Hanover | Hanover | Hanover | X | | | | | | | | Cont. |
| 43. Henrico | Richmond | Richmond | X | X | X | | X | X | X | | C&P |
| 44. Henry | Martinsville | Same | X | X | | X | X | X | X | | Va. Tel. |
| 45. Highland | Monterey | Monterey | X | | | X | | | | | Mutual |
| 46. Isle of Wight | Same | Smithfield | X | X | | X | | X | X | | Cont. |
| 47. James City | Williamsburg | Same | X | X | X | X | X | X | X | | C&P |
| 48. King George | King George | King George | X | | | X | | | | | Cont. |
| 49. King&Queen | Same | Same | X | | | | | | | | Cont. |
| 50. King William | King William | Same | X | | | X | | | | | Cont. |
| 51. Lancaster | Lancaster | Lively | X | | | | | | | | Cont. |
| 52. Lee | Jonesville | Jonesville | X | | | X | | | | | C&P |
| 53. Loudoun | Leesburg | Leesburg | X | X | X | X | X | X | X | | C&P |
| 54. Louisa | Louisa | Louisa | X | | | X | | X | X | | C&P |

| <u>County</u> | County Seat | Exchange | (A) CG | (B) OG | (C) Col. | (D) CHS | (E) <u>Hosp.</u> | (F) Ind. | (G) TC | (H) Other | (I) Tel. Co. |
|--------------------|----------------|---------------------|-----------|-----------|-------------|------------|---------------------|-------------|-----------|--------------|-----------------|
| 55. Lunenburg | Lunenburg | Victoria | X | | | | | | | | Va. Tel. |
| 56. Maidson | Madison | Madison | X | | | X | | X | | | C&P |
| 57. Mathews | Mathews | Mathews | X | | | X | | | X | | ont. |
| 58. Mecklenburg | Boydton | Boydton | X | | | | | | | | Cont. |
| 59. Middlesex | Saluda | Saluda | X | X | X | X | | | | | Cont. |
| 60. Montgomery | Christiansburg | Same | X | X | | | X | X | | | C&P |
| 61. Nelson | Lovingston | Lovingston | X | | | X | | | X | | C&P |
| 62. New Kent | New Kent | Providence Forge | X | | | X | | | | | C&P |
| 63. Northampton | Eastville | Eastville | X | | | | | | | | C&P |
| 64. Northumberland | Heathsville | Same | X | | | X | | | | | Cont. |
| 65. Nottoway | Nottoway | Crewe | X | | | | | X | | | Va. Tel. |
| 66. Orange | Orange | Orange | X | | X | X | | X | X | | C&P |
| 67. Page | Luray | Luray | X | | | X | X | X | X | | Va. Tel. |
| 68. Patrick | Stuart | Stuart | X | | X | X | X | X | X | | Va. Tel. |
| 69. Pittsylvania | Chatham | Chatham | X | X | X | X | X | X | X | | C&P |
| 70. Powhatan | Powhatan | Powhatan | X | | | X | | | X | | C&P |
| 71. Prince Edward | Farmville | Farmville | X | X | X | X | | X | X | | Va. Tel. |
| 72. Prince George | Prince George | Petersburg | X | | | | | | | | C&P |
| 73. Prince William | Manassas | Manassas | X | X | | X | X | X | X | | Cont. |

| County | County Seat | Exchange | (A) CG | (B) OG | (C) Col. | (D) CHS | (E) <u>Hosp.</u> | (F) Ind. | (G) TC | (H) Other | (I) Tel. Co. |
|------------------|--------------|-------------|-----------|-----------|-------------|------------|---------------------|-------------|-----------|--------------|-----------------|
| 74. Pulaski | Pulaski | Pulaski | X | X | | X | | X | X | | C&P |
| 75. Rappahannock | Washington | Same | X | | | X | | | | | Va. Tel. |
| 76. Richmond | Warsaw | Warsaw | X | | X | X | | X | X | | Cont. |
| 77. Roanoke | <u>Salem</u> | Salem | X | | X | X | | X | X | | C&P |
| 78. Rockbridge | Lexington | Lexington | X | X | X | X | X | | X | | Va. Tel. |
| 79. Rockingham | Harrisonburg | Same | X | X | X | X | X | X | X | | Cont. |
| 80. Russell | Lebanon | Lebanon | X | | | X | | | X | | C&P |
| 81. Scott | Gate City | Gate City | X | X | | X | | | X | | UIM |
| 82. Shenandoah | Woodstock | Woodstock | X | | | X | | X | | | Shentel |
| 83. Smyth | Marion | Marion | X | X | X | X | X | X | X | | UIM |
| 84. Southampton | Courtland | Courtland | X | | | | | X | | | Cont. |
| 85. Spotsylvania | Spotsylvania | Same | X | | | X | | | | | C&P |
| 86. Stafford | Stafford | Stafford | X | | | X | | | | | Cont. |
| 87. Surry | Surry | Surry | X | | | X | | | | | Cont. |
| 88. Sussex | Sussex | Stony Creek | X | | | X | | | | | Cont. |
| 89. Tazewell | Tazewell | Tazewell | X | | | X | | X | X | | Gen. Tel. |
| 90. Warren | Front Royal | Front Royal | X | | X | X | X | X | X | X | Va. Tel. |
| 91. Washington | Abingdon | Abingdon | X | X | X | X | X | X | X | | UIM |
| 92. Westmoreland | Montross | Montross | X | | | X | | | | | Cont. |

| County | County Seat | Exchange | (A) CG | (B) OG | (C) Col. | (D) CHS | (E) <u>Hosp.</u> | (F) Ind. | (G) TC | (H) Other | (I) Tel. Co. |
|-----------|-------------------|------------------------|-----------|-----------|-------------|------------|---------------------|-------------|-----------|--------------|-----------------|
| 93. Wise | Wise | Wise | X | | X | X | X | | | | C&P |
| 94. Wythe | <u>Wytheville</u> | Wytheville | X | | X | X | X | X | X | | UIM |
| 95. York | Yorktown | Peninsula Metropolitan | | | | | | | | | C&P |

Column A - County Government

Column B - Other Government (State and Federal)

Column C - Colleges

Column D - Consolidated High School

Column E - Hospitals

Column F - Major Industries

Column G - Trade Center

Column H - Other

Column I - Telephone Companies Serving

Note: Underlined town has 5,000 or more population - 1970

EXHIBIT 5

COST STUDIES-GUIDELINE ROUTES

Section I - Costs for Exchanges

Section II - Costs for Counties

Section III - Costs for Urban and Special Areas

Exhibit 5

Section I

COST OF EAS BY EXCHANGES - C&P Tel. Co.

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|--------------|--|---------------------|----------------------|---------------------------------------|
| ASHLAND | Beaverdam Gum Tree Hanover Montpelier | \$135,351 | \$- 2,031 | \$- .04 |
| BEDFORD | Big Island Lynchburg Montvale Roanoke | 587,816 | 286,978 | 4.90 |
| BELLE HAVEN | Cape Charles | 100,552 | 41,034 | 1.06 |
| BIG ISLAND | Bedford Lynchburg | 807,467 | 193,163 | 27.42 |
| BLACKSBURG | Newport | 156,489 | 19,631 | .13 |
| BLUEMONT | Leesburg | 22,069 | 8,880 | 1.54 |
| BROKENBURG | Fredericksburg | 91,233 | 27,433 | 5.43 |
| BUCHANAN | Fincastle Roanoke | 218,885 | 87,780 | 5.89 |
| CALVERTON | Manassas | 20,542 | - 13 | 0 |
| CAPE CHARLES | Belle Haven | 121,151 | 50,650 | 2.19 |
| CHARLES CITY | Richmond Varina | 261,289 | 99,515 | 7.81 |
| CHATHAM | Danville | 248,574 | 102,564 | 3.38 |
| CLINCHCO | Clintwood Haysi | 135,563 | 37,540 | 2.57 |
| | Clinchco Haysi | 153,897 | 45,678 | 2.06 |

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|----------------|--|------------------|-------------------|---------------------------------|
| CLOVER | Halifax South Boston Turbeville Virgilina Volens | \$ 97,303 | \$ 43,147 | \$ 3.67 |
| COEBURN | Norton Wise | 156,955 | 52,391 | 1.97 |
| CONCORD | Appomattox Rustburg | 87,032 | 14,957 | 1.58 |
| CRAIGSVILLE | Staunton | 161,735 | 57,140 | 5.01 |
| CULPEPER | Orange Remington Washington, Va. | 384,448 | 113,939 | 1.25 |
| CUMBERLAND | Farmville | 100,341 | 13,669 | 1.24 |
| DANVILLE | Chatham | 242,532 | 102,838 | .32 |
| FREDERICKSBURG | Bowling Green Brokenburg King George | 508,496 | 27,355 | .16 |
| GOOCHLAND | Richmond | 253,134 | 103,749 | 7.57 |
| GORDONSVILLE | Charlottesville Louisa | 320,638 | 64,341 | 3.13 |
| GREENWOOD | Charlottesville Crozet Waynesboro | 395,023 | 33,376 | 3.53 |
| HAYSI | Clintwood Clinchco | 88,353 | 26,584 | 2.64 |
| HERNDON | Arcola | 109,781 | 5,607 | .02 |

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|----------------|--|------------------|-------------------|---------------------------------|
| HONAKER | Lebanon | \$ 29,098 | \$ 16,922 | \$.83 |
| LEBANON | Honaker St. Paul | 103,297 | 44,475 | 1.11 |
| LEESBURG | Arcola Bluemont | 76,251 | 9,613 | .15 |
| LOUISA | Gordonsville Palmyra | 83,946 | 7,892 | .40 |
| LYNCHBURG | Altavista Amherst Bedford Big Island Rustburg Sweet Briar | 2,451,575 | 468,284 | .98 |
| MCKENNEY | Petersburg | 138,210 | 52,282 | 5.77 |
| MECHANICSVILLE | Hanover | 39,492 | 2,878 | .03 |
| MONTVALE | Bedford | 16,952 | 9,763 | 1.11 |
| NORFOLK | Suffolk | 1,098,801 | 473,597 | .22 |
| NORTON | Coeburn Pound | 71,245 | 37,427 | 1.11 |
| ONANCOCK | Temperanceville | 95,420 | 38,534 | .88 |
| | Culpeper | 153,351 | 62,546 | 1.53 |
| | Disputanta McKenney Richmond | 1,747,234 | 952,018 | 2.57 |
| | Chuckatuck Crittenden Holland Suffolk Whaleville | 1,319,112 | 499,095 | .86 |

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|------------------|---|------------------|-------------------|---------------------------------|
| POUND | Norton Wise | \$ 139,713 | \$ 52,161 | \$ 3.38 |
| POWHATAN | Richmond | 398,386 | 186,510 | 8.01 |
| PROVIDENCE FORGE | Richmond Sandston | 491,827 | 166,828 | 6.10 |
| REMINGTON | Culpeper | 82,267 | 30,639 | 1.91 |
| RICHMOND | Beaverdam Charles City Goochland Gum Tree Hanover Montpelier Old Church Petersburg Powhatan Providence Forge | 4,464,645 | 1,703,963 | .76 |
| ROANOKE | Bedford Boones Mill Buchanan Fincastle New Castle Rocky Mount Shawsville Stone Mountain | 2,536,356 | 781,484 | .90 |
| ST. PAUL | Lebanon | 88,886 | 36,588 | 1.47 |
| SANDSTON | Providence Forge | 101,876 | 28,544 | .37 |
| SHAWSVILLE | Roanoke | 242,016 | 84,071 | 5.60 |

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|-----------------------|--|------------------|-------------------|---------------------------------|
| STAUNTON | Craigsville Deerfield Mount Solon Raphine Waynesboro | \$1,162,211 | \$204,155 | \$ 1.01 |
| STEPHENS CITY | Front Royal | 149,879 | -13,957 | -.36 |
| STONE MOUNTAIN | Roanoke | 345,798 | 104,089 | 4.66 |
| SUFFOLK | Crittenden Norfolk Portsmouth | 1,326,631 | 591,106 | 4.82 |
| TEMPERANCEVILLE | Onancock | 80,754 | 41,734 | 1.46 |
| VARINA | Charles City | 52,189 | 14,959 | .83 |
| WARRENTON | Haymarket | 61,898 | -89,347 | -1.43 |
| WHALEYVILLE | Chuckatuck Crittenden Portsmouth | 155,923 | 42,387 | 4.82 |
| WHITE SULPHUR SPRINGS | Covington | 94,083 | 26,089 | 10.17 |
| WINCHESTER | Gore Strasburg | 271,254 | 39,159 | .22 |
| WISE | Coeburn Pound | 161,759 | 48,962 | 1.63 |

| EXCHANGE | EAS TO | TOTAL INVESTMENT | ADDED ANNUAL COST | COST PER MAIN STATION PER MONTH |
|---|--|------------------|-------------------|---------------------------------|
| BRADDOCK ENGLESIDE HERNDON WASH. MET. AREA ZONES OF - ALEXANDRIA DALEVIEW ELMWOOD FAIRFAX FALLS CHURCH OXFORD VIENNA | PRINCE WILLIAM COUNTY EXCHANGES Dale City Haymarket Independent Hill Lorton Manassas Nokesville Occoquan Triangle | \$8,850,754 | \$1,439,771 | \$.35 |
| SAME AS ABOVE | Arcola Dulles | 331,469 | 47,581 | .01 |
| | Total | \$34,982,207 | \$9,900,690 | |

Exhibit 5

SECTION I

COST OF EAS BY EXCHANGES - INDEPENDENT COMPANIES

| <u>Exchange</u> | EAS To | Total Investment | Added Annual Cost | Cost Per Main Station Per Month |
|------------------------------|-----------------------------------|-------------------|-------------------|---------------------------------|
| Abingdon (4) | Bristol | 663,865 | 462,441 | |
| Allwood (2) | Amherst | 40,094 | 16,141 | 4.75 |
| Altavista (1) | Lynchburg | 135,430 | 128,369 | 3.45 |
| Amherst (2) | Allwood Gladstone Lynchburg | 719,287 | 257,036 | 12.39 |
| Appomattox (2) | Concord Gladstone | 193,024 | 51,995 | 1.97 |
| Arcola (2) | Herndon | 205,074 | 67,359 | 7.09 |
| Beaverdam (5) | Ashland Hanover Richmond | 128,005 | 66,461 | 12.53 |
| Bland (4) Boones Mill (1) | Wytheville Roanoke | 123,121 37,738 | 60,648 25,819 | 1.91 |
| Boydton (2) | Clarksville South Hill | 158,507 | 41,839 | 6.27 |
| Bowling Green (1) | Fredericksburg | 619,628 | 163,323 | 6.70 |
| Bristol (4) | Abingdon | (See #1 Abingdon) | | |
| Burkes Garden (5) | Tazewell | 21,513 | 5,469 | 18.00 |
| Brodnax (1) | Lawrenceville | 35,489 | 14,434 | 3.05 |

| Exchange | <u>EAS To</u> | Total Investment | Added Annual Cost | Cost Per Main Station Per Month |
|---------------------|--|------------------|-------------------|---------------------------------|
| Capron (2) | Courtland | 61,714 | 18,068 | 2.88 |
| Charlottesville (1) | Gordonsville Greenwood Palmyra Schuyler Standardsville | 435,603 | 386,760 | .81 |
| Chuckatuck | Holland Portsmouth Whaleyville | 241,937 | 60,148 | 7.71 |
| Covington (5) | White Sulphur Springs, | | | |
| Clarkesville (2) | Boydton | 110,496 | 28,583 | 1.22 |
| Courtland (2) | Capron | 146,061 | 37,068 | 3.36 |
| Covington (5) | White Sulphur Springs, Virginia | 98,648 | 32,105 | .45 |
| Crittenden (2) | Holland Portsmouth Suffolk Whaleyville | 528,769 | 137,760 | 14.16 |
| Crozet (1) | Greenwood | 45,526 | 59,342 | 2.39 |
| Deerfield (5) | Staunton | 22,000 | 20,200 | 8.13 |
| Dendron | Smithfield | 45,426 | 12,127 | 3.65 |
| Disputanta (5) | Petersburg | 20,500 | 27,100 | 11.89 |
| Emporia | Jarratt | 913,387 | 216,645 | 3.98 |
| Farmville (1) | Cumberland | 199,603 | 98,821 | 1.68 |
| Fincastle (5) | Buchanan | 75,200 | 31,241 | 3.29 |

| <u>Exchange</u> | | Investment | Annual Cost | Cost Per Main Station Per Month |
|------------------|---|-------------|-------------|---------------------------------------|
| Front Royal | Stephens City Washington | 81,173 | 99,455 | .97 |
| Galax | Hillsville Independence | 745,547 | 383,618 | |
| Gate City (4) | Kingsport | 931,937 | 311,830 | |
| Gladstone (2) | Amherst Appomattox | 110,894 | 35,310 | 7.37 |
| Gore (4) | Winchester | 136,548 | 40,295 | 17.40 |
| Gum Tree (5) | Ashland Hanover Richmond | 183,590 | 71,696 | 23.90 |
| Hanover (2) | Ashland Beaverdam Gum Tree Mechanicsville Montpelier Old Church Richmond Rockville | 373,643 | 97,229 | 46.04 |
| Harrisonburg (2) | New Market | 78,399 | 24,192 | .17 |
| Hillsville (4) | Galax | (See Galax) | | |
| Holland (2) | Chuckatuck Crittenden Portsmouth | 108,196 | 25,368 | 3.54 |
| Independence (4) | Galax | (See Galax) | | |

| <u>Exchange</u> | <u>EAS To</u> | <u>Investment</u> | <u>Annual Cost</u> | <u>Cost Per Main Station Per Month</u> |
|-------------------|---|-------------------|--------------------|--|
| Jarratt (2) | Emporia | 81,859 | 34,791 | 4.82 |
| King George (2) | Fredericksburg | 849,311 | 232,751 | 11.11 |
| Lawrenceville (2) | Broadnax | 56,772 | 17,317 | .78 |
| Manassas (2) | Calverton | 140,298 | 49,899 | .30 |
| Montpelier (5) | Ashland Hanover Richmond | 256,535 | 143,140 | 13.49 |
| Mount Solon (5) | Staunton | 79,446 | 27,900 | 3.55 |
| New Castle (2) | Roanoke | 300,406 | 80,822 | 7.73 |
| New Market (5) | Harrisonburg | 87,821 | 35,369 | 2.38 |
| Newport (2) | Blacksburg | 172,431 | 38,454 | 9.00 |
| Old Church (2) | Hanover Providence Forge Richmond | 99,463 | 49,192 | 5.81 |
| Palmyra (1) | Charlottesville Louisa | 158,387 | 93,754 | 4.85 |
| Raphinee(2) | Staunton | 342,438 | 94,898 | 8.04 |
| Richlands (4) | Tazewell | 420,626 | 221,412 | 4.85 |
| Rocky Mount | Roanoke | 502,205 | 243,182 | 2.99 |
| Rustburg (1) | Concord Lynchburg | 258,749 | 127,865 | 9.36 |
| Smithfield (2) | Dendron Windsor | 648,461 | 155,536 | 3.92 |
| Strasburg (5) | Winchester | 145,203 | 52,024 | 2.11 |

| <u>Exchange</u> | EAS TO | Investment | Annual Cost | Cost Per Main Station Per Month |
|---------------------|---------------------------|-------------------|--------------|---------------------------------------|
| Sweet Briar (2) | Lynchburg | 177,659 | 51,245 | 19.50 |
| Schuyler (1) | Charlottesville | 37,990 | 20,129 | 4.81 |
| South Boston (1) | Clover | 198,129 | 104,920 | .71 |
| South Hill (1) | Boydton | 142,882 | 60,973 | 1.54 |
| Standardsville (1) | Charlottesville | 120,648 | 80,102 | 3.05 |
| Tappahannock (2) | Warsaw | 508,516 | 129,892 | 4.23 |
| Tazewell (3) | Burkes Garden Richland | 427,888 | 306,720 | 6.90 |
| Warsaw (2) | Tappahannock | 96,643 | 37,478 | 2.37 |
| Washington, Va. (1) | Culpeper Front Royal | 161,347 | 86,529 | 11.63 |
| Waynesboro (5) | Greenwood Staunton | 529,022 | 543,353 | 3.89 |
| Windsor (2) | Smithfield | 61,030 | 21,737 | 1.88 |
| Wytheville (4) | Bland | (See Bland No. 8) | | |
| Note: | | | | |
| | (1) Central Tel. Co. | | | |
| | (2) Continental Tel. Co. | | | |
| | (3) General Tel. Co. | | | |
| | (4) United Tel. Co. | | | |
| | (5) Other Independents | | | |
| | Total Independents | \$38,439,599 | \$13,011,190 | |
| | Total C&P Tel. | 34,982,207 | 9,900,690 | |
| | Total State | 73,421,806 | 22,911,880 | |

Exhibit 5

Section II

COST OF EAS BY COUNTIES

| <u>Area</u> | <u>Exchanges</u> | Total Investment | Added Annual Cost |
|-------------|---|---------------------|----------------------|
| Accomac | Onancock Temperanceville | \$176,174 | \$80,268 |
| Albemarle | Charlottesville Gordonsville Greenwood Palmyra Schuyler Standardsville | 1,396,869 | 636,023 |
| Alleghany | Covington White Sulphur Springs | 192,731 | 58,194 |
| Amherst | Allwood Amherst Gladstone Lynchburg | 3,321,850 | 776,771 |
| Appomattox | Appomattox Concord Gladstone | 390,950 | 102,262 |
| Augusta | Craigsville Deerfield Mount Solon Raphine Staunton Waynesboro | 2,296,852 | 947,646 |
| Bedford | Bedford Big Island Lynchburg Montvale Roanoke | 6,400,166 | 1,739,672 |
| Brunswick | Broadnax Lawrenceville | 92,261 | 29,341 |

COST OF EAS BY COUNTIES

| <u>Area</u> | <u>Exchanges</u> | Total Investment | Added Annual Cost |
|--------------|--------------------------------------|---------------------|----------------------|
| Campbell | Rustburg Lynchburg Concord | 2,797,356 | 611,106 |
| Caroline | Bowling Green Fredericksburg | 1,128,124 | 190,678 |
| Carroll | Hillsville Galax | 535,702 | 292,759 |
| Charles City | Charles City Varina | 313,478 | 114,474 |
| Culpeper | Culpeper | 699,146 | 263,014 |
| Cumberland | Orange Cumberland Farmville | 299,944 | 112,490 |
| Dickenson | Clincho Clintwood Haysi | 377,813 | 109,802 |
| Fluvanna | Palmyra Charlottesville Louisa | 375,090 | 171,691 |
| Franklin | Rocky Mount Roanoke | 3,038,561 | 1,024,666 |
| Frederick | Gore Strasburg Winchester | 553,005 | 131,478 |
| Goochland | Goochland Richmond | 4,717,779 | 1,807,712 |
| Grayson | Independence Galax | 209,845 | 90,859 |

Exhibit 5
Section II

-3-

COST OF EAS BY COUNTIES

| <u>Area</u> | <u>Exchanges</u> | Total Investment | Added Annual Cost |
|---------------|---|---------------------|----------------------|
| Greene | Standardsville Charlottesville | 279,903 | 178,598 |
| Greensville | Emporia Jarratt | 995,246 | 251,436 |
| Halifax | Halifax South Boston Tuberville Virgilina Volens Clorer | 295,432 | 148,067 |
| Hanover | Ashland Beaver Dam Gum Tree Hanover Old Church Mechanicsville Montpelier Richmond Rockville | 5,680,730 | 2,132,568 |
| Isle of Wight | Dendron Smithfield Windsor | 754,917 | 189,400 |
| Loudoun | Arcola Bluemont Leesburg | 303,394 | 85,852 |
| Louisa | Gordonsville Louisa Palmyra | 562,971 | 165,987 |
| Mecklenburg | Boydton Clarksville South Hill | 411,885 | 121,399 |

Exhibit 5
Section II

- 4 -

COST OF EAS BY COUNTIES

| <u>Area</u> | <u>Exchanges</u> | Total Investment | Added Annual Cost |
|---------------|---|---------------------|----------------------|
| Orange | Culpeper Orange | 537,799 | 176,485 |
| Pittsylvania | Chatham Danville | 491,106 | 205,402 |
| Prince George | Disputanta Petersburg | 1,767,734 | 979,118 |
| Rappahannock | Washington Culpeper Front Royal | 615,272 | 227,840 |
| Russell | Hoanker Lebanon St. Paul | 221,281 | 97,985 |
| Scott | Gate City Kingsport | 931,937 | 465,860 |
| Southampton | Capron Courtland | 207,775 | 55,136 |
| Tazewell | Tazewell Richlands Burkes Garden | 870,026 | 533,604 |
| Washington | Abingdon Bristol | 663,865 | 462,441 |
| Warren | Front Royal Stephens City Washington, Va. | 355,650 | 133,601 |
| Wise | Coeburn Pound Wise | <u>458,427</u> | <u>153,514</u> |
| | Total | \$45,719,046 | \$16,055,199 |

Exhibit 5

Section III

COST OF EAS BY URBAN & SPECIAL AREAS

| <u>Area</u> | <u>Exchanges</u> | Total Investment | Added Annual Cost |
|----------------|--|---------------------|----------------------|
| Richmond | Ashland Beaverdam Charles City Goochland Gum Tree Hanover Mechanicsville Montpelier Old Church Petersburg Powhatan Providence Forge Richmond Sandston Varina | \$8,986,659 | 3,684,651 |
| Roanoke | Bedford Boones Mill Buchanan Fincastle New Castle Roanoke Rocky Mount Shawsville Stone Mountain | \$4,846,423 | 1,725,466 |
| Lynchburg | Altavista Amherst Bedford Big Island Lynchburg Rustburg Sweet Briar | \$5,137,983 | 1,512,940 |
| Fredericksburg | Bowling Green Brokenburg Fredericksburg King George | \$2,068,668 | 450,862 |

| <u>COST OF EAS BY URBAN & SPECIAL AREAS</u> | | | | |
|---|--|--|--------------|-----------|
| | <u>Total</u> | <u>Added</u> | | |
| <u>Exchanges</u> | <u>Investment</u> | <u>Annual Cost</u> | | |
| Suffolk | Chuckatuck Crittenden Holland Norfolk Portsmouth Suffolk Whaleyville | \$4,779,369 | 1,829,461 | |
| Eastern Shore | Belle Haven Cape Charles Onancock Temperanceville | 397,877 | 171,952 | |
| Northern Virginia Prince William County | Alexandria Braddock Daleview Elmwood Engleside Fairfax Falls Church Herndon Oxford Vienna | Dale City Haymarket Independent Hill Manassas Nokesville Occoquan Quantico Triangle Arcola Dulles | \$31,791,348 | 8,228,093 |
| Calverton-Manassas | Calverton Manassas | 160,840 | 49,738 | |
| Tappahannock-Warsaw | Tappahannock Warsaw | 605,159 | 167,370 | |
| Newport-Blacksburg | Newport Blacksburg | 328,920 | 58,085 | |
| Newmarket -Harrisonburg | Newmarket Harrisonburg | 166,220 | 59,561 | |
| Galax | Hillsville Independence Galax | 745,547 | 383,618 | |
| | Total | \$60,015,013 | 18,321,797 | |