

67065-69

G R I

GOVERNMENTAL RESEARCH INSTITUTE

915 OLIVE ST., ROOM 908 • ST. LOUIS, MISSOURI 63101 • (314) 241-3063

BOARD OF TRUSTEES

Richard S. Jones, CHAIRMAN

John Fox, VICE CHAIRMAN

T. Frank James, Jr., VICE CHAIRMAN

Lawrence K. Roos, TREASURER

VICTOR D. BRANNON
Director

CHARLES F. LAMMERS
Assistant Director

April 21, 1980

- Paul B. Akin
- J. A. Baer, II
- G. Duncan Bauman
- Andrew H. Baur
- Andrew N. Baur
- Donald N. Brandin
- Richard P. Conerly
- David M. Culver
- Louis S. Dennig, Jr.
- Clifton W. Gates
- Stanley J. Goodman
- W. L. H. Griffin
- Donald E. Lasater
- Edward E. Lynn
- W. A. McDonnell
- Edwin B. Meissner, Jr.
- David H. Morey
- Frank G. Myers
- Eric P. Newman
- George A. Newton
- D. A. Novatny
- Duane A. Patterson
- W. R. Persons
- Charles M. Ruprecht
- Robert J. Ryan
- Warren McK. Shapleigh
- R. R. Shockley
- James A. Singer
- Tom K. Smith, Jr.
- Edwin J. Spiegel, Jr.
- Donald H. Streett
- John P. Stupp
- Harold E. Thayer
- H. Edwin Trusheim
- Nicholas P. Veeder
- Ben H. Wells
- Merle T. Welshans
- R. C. West
- Ted C. Wetterau
- Raymond H. Wittcoff

Mrs. Christine Lundy
Acquisition Coordinator, NCJRS
Acquisition Report Dept.
Box 6000
Rockville, MD 20850

Dear Mrs. Lundy:

In response to your request of April 17, 1980, we are sending you copies of the five research reports which we prepared to help the local governments in the City of St. Louis and St. Louis County develop a 911 emergency call system. There is no charge for the reports.

You may know that a 911 system became operative in the City of St. Louis and St. Louis County the latter part of February 1980. Several local officials have stated that the many municipal, county, and fire district governments would never have been able to make the system a reality without our assistance.

Sincerely,

Victor D. Brannon

Victor D. Brannon
Director

VDB/sgs

67069

COUNTY-WIDE FINANCING OF THE RECURRING CHARGES
FOR A 911 EMERGENCY CALL SYSTEM IN ST. LOUIS COUNTY
--SOME ALTERNATIVE METHODS--

NCJRS

APR 25 1980

ACQUISITIONS

The Fifth in a Series of Reports
Prepared for

THE ST. LOUIS COUNTY GOVERNMENT
and
THE ST. LOUIS COUNTY MUNICIPAL LEAGUE

GOVERNMENTAL RESEARCH INSTITUTE
915 Olive, Rm. 908
St. Louis, Missouri 63101

March 1979

67069

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	1
Section 1. Advantages, Disadvantages, and Some Solutions to the Problems of County-Wide Financing.....	4
Factors Favoring County-Wide Financing.....	4
Factors Against County-Wide Financing.....	5
Dealing With Some County-Wide Financing Problems.....	7
Section 2. Alternative County-Wide Methods of Financing the Recurring 911 Charges.....	9
From the General Fund Without a Tax Increase.....	9
Advantages of Using General Fund Revenues.....	13
Disadvantages of Using General Fund Revenues.....	14
An Additional Property Tax Levy.....	14
Advantages of a Property Tax.....	16
Disadvantages of a Property Tax.....	16
Federal Revenue Sharing Funds.....	17
Advantages of Using Revenue Sharing Funds.....	20
Disadvantages of Using Revenue Sharing Funds.....	20
A Telephone Service Charge.....	21
The Telephone Service Charge in California.....	22
The Kansas City Proposal.....	25
Telephone Service Charges Required in County and City.....	28
Advantages of A Telephone Service Charge.....	31
Disadvantages of a Telephone Service Charge.....	31
Section 3. Procedures for Determining 911 Charges.....	34
Examples of Rules to be Included in Tariff Proposal.....	34
Likely Rate Elements in Tariff Proposal.....	36
Consideration of the Tariff by the Commission.....	37

TABLES

1. Unappropriated Year-End Balance--General Fund--St. Louis County--1974-1978.....	11
2. Actual Revenues and Expenditures--General Fund--St. Louis County--1974-1978.....	11
3. Projected Yield of Property Tax--St. Louis County--1978-1982.....	15

COUNTY-WIDE FINANCING OF THE RECURRING CHARGES
FOR A 911 EMERGENCY CALL SYSTEM IN ST. LOUIS COUNTY
--SOME ALTERNATIVE METHODS--

Introduction

This report, the fifth in a series of the Governmental Research Institute reports on the 911 Emergency Call System now being developed for the City of St. Louis and St. Louis County, deals with alternative methods of financing the System's recurring charges on a County-wide basis. For purposes of this report, the term "County-wide financing" means payment of the 911 charges by the County Government from any moneys it can obtain and make available for the purpose without requiring payments by other local governments within the County.

Earlier reports in the Institute's 911 series described the features of the St. Louis area 911 System (Report 1); listed the emergency dispatching agencies in St. Louis County, the areas that the agencies serve, and the dispatching services (police, fire, or ambulance) that the agencies provide (Report 2); described the 911 systems in Alameda County (California), Chicago, and Indianapolis, and suggested, on the basis of the experiences of these areas, some steps that St. Louis area officials might take in planning for the advent of 911 in the St. Louis area (Report 3); and presented alternative formulas for distributing the County's share of the recurring 911 charges among the local agencies participating in the 911 System (Report 4). These first four reports were prepared by the Institute in response to resolutions adopted by the St. Louis County Council and the St. Louis County Municipal League.

Following the issuance of the Institute's report presenting alternative formulas for distributing the recurring 911 costs among the County, municipal, and fire district governments in St. Louis County, the Institute was asked by Supervisor Gene McNary and the Executive Committee of the St. Louis County Municipal League to explore County-wide alternatives for paying the on-going,

operational costs of the 911 System. The present report was prepared in response to that request.

In Section 1 of the present report, the major factors in favor of and against County-wide financing are discussed. Solutions are offered to some of the problems which appear to be inherent in County-wide financing.

Four alternative methods for County-wide financing are presented in Section 2: (1) using available revenues from the General Fund without a tax increase, (2) raising the County's property tax levy sufficiently to cover the costs, (3) using Federal revenue sharing money, or (4) levying a telephone service charge. The pertinent advantages and disadvantages are presented for each alternative.

In the case of the telephone service charge, the background and current status of the 911 surcharge in California are discussed. The proposed surcharge bills which have been introduced in the current session of the Missouri General Assembly also are described.

It should also be noted that a combination of two or more of these four methods might be considered for the financing of the 911 System. For example, part of the required 911 money might be obtained from the County General Fund and the remainder from Federal revenue sharing moneys.

Section 3 of the report presents a summary of the procedures that Southwestern Bell Telephone Company will follow in determining the amount of the recurring charges in the first year of 911 operation and in subsequent years. Also summarized are the parts played by the Missouri Public Service Commission in the charge-fixing process, and steps that might be taken by the County Government to verify or question proposed charges.

It should be pointed out that the analysis of the County-wide financing alternatives presented in this report is based on the recurring cost estimate for the 911 System made by Southwestern Bell in September 1977. This estimate

is presently being reviewed. Although it is expected that the recurring charges as filed in the tariff with the Missouri Public Service Commission will be less than initially quoted, the revised charges were not available to the Institute at the time this report was prepared.

When the revised figures are available, the Institute's estimates of the property tax rate and telephone service charge needed in St. Louis County to finance the operational costs of the 911 System will need to be adjusted accordingly. The Institute's conclusions with respect to adequacy of the County General Fund and the Fiscal Assistance Trust Fund (revenue sharing fund) as County-wide financing options will also be affected.

Section 1

Advantages, Disadvantages, and Some Solutions
To the Problems of County-Wide Financing

Factors Favoring County-Wide Financing

1. COUNTY-WIDE SERVICES TRADITIONALLY FINANCED ON A COUNTY-WIDE BASIS.

The 911 Call System will be a County-wide service intended to provide easy access to emergency services, regardless of the jurisdiction in which people live, work, shop, and travel. County-wide services are traditionally financed on a County-wide basis.

2. COUNTY-WIDE FINANCING WOULD ENCOURAGE COUNTY-WIDE PARTICIPATION.

Some municipalities or fire districts may not be willing or financially able to bear the added costs of the 911 service. If the recurring costs were distributed according to the formulas discussed in the Institute's fourth report, the costs would range from \$6,368 a year for the Glendale Police Department to \$247,948 a year for the St. Louis County Police Department, with the costs for the other dispatching agencies being within that range, depending on the funding formula used. In addition to the recurring 911 costs, there may be added telephone costs and personnel costs, depending on the circumstances of the local dispatching agency.

Faced with the added costs, some local governments might find it financially difficult to participate, or they might decide that the service would not be worth the cost. However, if citizens of the City of St. Louis and St. Louis County are to enjoy the full benefits of a single telephone number for their emergency calls, it is essential that all police and fire dispatching agencies participate. County-wide financing is probably the best way to encourage County-wide participation.

3. COUNTY-WIDE FINANCING WOULD EQUALIZE TAX BURDEN. If the 911 System's recurring costs were financed on a County-wide basis, the moneys could be

obtained through one or more taxes or a service charge levied uniformly in all parts of the County, or from other moneys which the County Government had available for County-wide services. If the County and each municipality and fire district had to raise the revenues to cover the added 911 costs from the tax sources available to each of these local governments, the tax burden would be different in the various parts of the County, depending on the wealth and tax base of the locality. Without County-wide funding, some County residents might be paying more relative to others for their 911 service.

Factors Against County-Wide Financing

1. MORE DIFFICULT TO HOLD DOWN COSTS. If each participating local government were not directly responsible for paying its share of the recurring costs, financial obligations would tend to play a lesser role in its 911 decisions. A number of examples of this problem might be cited:

a. Without having to pay, there would be less of an incentive for the smaller, less efficient dispatching agencies to combine their dispatching operations with other agencies in order to increase efficiency and effectiveness and to reduce costs. Because the recurring costs will be, in part, related to the number of answering points, the fewer 911 answering points that there will be, the less the total recurring costs will be.

b. A dispatching agency, desiring to provide superior emergency services to the citizens it serves, may want to have more than the recommended complement of 911 answering equipment and services. If the County were paying the recurring charges on behalf of all dispatching agencies without effective restrictions, the residents in areas without embellished 911 systems would be subsidizing the elaborateness of the systems in other areas.

c. Knowing that there were County funds available to cover the recurring charges for the 911 service itself, financially strapped local governments might look to the County to cover some of their costs resulting from 911, such as their added personnel and telephone costs. Thus, the financing of direct 911 charges by a County-wide method might only be the beginning. In addition, there might be requests in the future to have optional features such as Automatic Location Identification (ALI) financed on a County-wide basis. (ALI is a 911 enhancement which makes the address of the caller available to the dispatcher at an answering point.)

2. POSSIBLE LOSS OF LOCAL CONTROL. If the localities are not directly responsible for the operating expenses of the 911 System, the dispatching

agencies could lose some of their control over the design, operation, and maintenance of the system. If County-wide standards accompany County-wide financing, the dispatching agencies serving as answering points might not have the flexibility they otherwise would have if they were paying the recurring charges for their own operation. Some possible areas in which the local agencies might lose their autonomy are: setting maximum levels for equipment and services, choosing to consolidate the police and fire dispatching within a municipality or with other municipalities, and determining call handling and dispatching procedures. While many of these things may be desirable, problems might arise if the County attempted to unilaterally dictate policies through its power of the purse without giving due consideration to the circumstances and needs of the local dispatching agencies.

3. POSSIBLE INEQUITIES. County-wide financing does not recognize the fact that 911 equipment costs, actual usage, and potential usage are not uniform throughout the County. If the recurring costs were borne uniformly by all taxpayers throughout the County, the extent to which a community's taxpayers contributed to County-wide taxes would not necessarily be related to the factors that would be used to determine that community's fair share of the 911 costs. As pointed out in the Institute's fourth report, equipment requirements at the answering points and the degree to which the equipment will be utilized will not be uniform from one agency to another. It was also pointed out that some dispatching agencies will be more efficient because of the volume of calls they will handle relative to the amount of equipment they will need.

A County-wide plan that taxes or charges all residents at the same rate, regardless of where they live, does not take into consideration the differential equipment requirements and efficiencies of dispatching agencies, as well as the differences in the volume of emergency calls placed in different areas--all

factors contributing to the total cost of the 911 System. Through County-wide means of financing, the costs would be averaged out among all of the residents, despite the portion of the total system-wide costs that a locality accounts for.

Dealing With Some County-Wide Financing Problems

1. MONITORING THE COSTS. Perhaps the biggest problem under County-wide financing would be controlling the costs of the system. In this regard, guidelines ought to be drawn prior to the implementation of 911, setting the minimum and maximum allowable levels for 911-related equipment and telephone services. A detailed list of allowable 911 expenses should be drafted, particularly if items other than those specifically included in Bell's 911 package are to be paid for with County-wide revenues. Contingency plans should be made for meeting unexpected expenses and arbitrating new claims.

There are a number of examples of situations that might arise in which some policy decisions would have to be made:

- a. Who should reimburse the phone company for the costs for making the necessary computer file and program changes if dispatching agencies consolidate their operations or if consolidated agencies split up?
- b. If a dispatching agency requests that its extra personnel costs or added telephone costs be reimbursed by the County, will these costs be covered?
- c. Should Automatic Location Identification be an optional feature? Who is going to pay for this enhancement to 911 when it becomes available?

To cover these and other questions that might arise, a users' committee or other policy-making body should be formed, so that standards and guidelines will be in effect prior to the implementation of 911 in February 1980. All interested parties should be represented on this committee, including delegates from the County Government and the participating municipal and fire district governments.*

*For a more detailed discussion of the appropriate functions of a 911 users' committee, see the Institute's report of April 1978, entitled The Emergency 911 Systems of Alameda County, California; Chicago, Illinois; and Indianapolis, Indiana, pp. 19-22.

2. LOCAL CONTROL. The policy-making committee suggested in the preceding paragraph should try to balance the need for a standardized, County-wide system against the desire for local flexibility of operation. The committee would enable the participating governments to play a role in establishing policies that reflect varying needs of the police and fire dispatching agencies.

Section 2

Alternative County-Wide Methods
Of Financing the Recurring 911 Charges

As pointed out above, "County-wide financing methods" refer to an arrangement under which the St. Louis County Government would be responsible for raising the revenue to cover Southwestern Bell's on-going charges for the 911 service. County-wide methods are distinct from the financing arrangement discussed in an earlier Institute report, under which it was assumed that the affected County, municipal, and fire district governments would be responsible for paying for the recurring 911 charges, and possible ways of determining each government's fair share of these operational costs were discussed.

There are a number of revenue sources which the County Government might utilize to finance the recurring charges for the 911 System. The major alternative sources are: (1) any General Fund revenues that can be made available for 911 without a tax increase, (2) an additional property tax levy specifically for 911, (3) Federal revenue sharing money, or (4) a telephone service charge. When evaluating each alternative, the advantages and disadvantages given for each alternative should be considered, along with the general merits and problems of County-wide financing discussed in the previous section of this report.

From the General Fund Without a Tax Increase

The feasibility of financing the recurring 911 charges from the County's General Fund without any increase in taxes depends upon: (1) whether there are year-to-year surpluses in this fund, and (2) the extent to which 911 is given priority over the many other requests made each year for General Fund moneys. For purposes of this report, these questions apply to the County's

1980 budget and subsequent budgets, because the monthly recurring charges for 911 will not begin until the system is put into operation in February 1980. Therefore, the discussion of the availability of sufficient surpluses to cover the recurring charges is concerned with the 10 months between March and December in 1980 and subsequent calendar years.*

It was not feasible for the Institute to undertake a detailed, time-consuming study that would project General Fund revenues from tax sources such as the general property tax, the County-wide sales tax, and merchants and manufacturers licenses, and would estimate expenditures for seventeen divisions and offices. Therefore, the history of the General Fund during the last five years is used as an indication of the availability of funds.

Any cash balance in the General Fund at the end of each fiscal year is available for appropriation for the next fiscal year. Between 1974 and 1978, the portion of the General Fund year-end balance not appropriated to cover budgeted expenditures for the new fiscal year ranged from \$512,938 to \$3,386,473. (See Table 1.)

In one sense, these unappropriated balances might be considered to be an indication of surplus in the General Fund. It should be noted, however, that these balances are drawn upon during each budget year to finance supplementary appropriations made after the adoption of the budget for the year. For example, supplementary appropriations may be required during the current budget year to finance the 2.5% salary increase authorized for County employees after the beginning of the year, an additional 2.5% salary increase proposed for next July, and some Public Works Department budget items. Such supplementary appropriations would reduce substantially the unappropriated balance of \$3,386,473 for December 31, 1978, as shown in Table 1, and would also reduce the prospective cash balance available at the end of the 1979 budget year to help balance the budget for 1980.

*The County's fiscal year is concurrent with the calendar year.

Table 1

UNAPPROPRIATED YEAR-END BALANCE
GENERAL FUND
ST. LOUIS COUNTY
1974 - 1978

<u>Fiscal Year</u> <u>Ending December 31</u>	<u>Unappropriated</u> <u>Balance*</u>
1974.....	\$ 512,983
1975.....	2,966,048
1976.....	3,378,089
1977.....	897,387
1978.....	3,386,473**

*The unappropriated balance represents the portion of the General Fund balance at the end of one fiscal year which had not been appropriated to cover the budgeted expenditures for the next fiscal year.

**The 2½% salary increase for County employees authorized for January 1979 and the proposed 2½% increase for July 1979 have not been funded. There was a \$600,000 under-funding of the Public Works Department after adjustments were made in the 1979 budget. If and when these items are funded, the unappropriated surplus for 1978 will be reduced.

Table 2

ACTUAL REVENUES AND EXPENDITURES
GENERAL FUND
ST. LOUIS COUNTY
1974 - 1978

<u>Fiscal</u> <u>Year</u>	<u>Revenues</u>	<u>Expenditures</u>	<u>Excess</u> <u>(Deficit)</u>
1974.....	\$26,929,880	\$29,458,981	\$(2,529,101)
1975.....	31,141,455	28,874,578	2,266,877
1976.....	34,574,410	32,249,848	2,324,562
1977.....	37,740,307	36,896,794	843,513
1978.....	43,345,344	43,033,673	311,671

Prepared by: Governmental Research Institute, 915 Olive Street, Room 908,
St. Louis, Missouri 63101. Phone: 241-3063. March 1979.

On the other hand, it should be noted that the amount of cash balance available at the end of the budget year to help balance the budget for the next year is influenced not only by the supplementary appropriations made during the budget year, but also by any excess in receipts over expenditures during the budget year. For example, between 1974 and 1978, revenues have exceeded expenditures every year except in 1974, when there was a \$2.5 million deficit. (See Table 2.) For 1975 and 1976, the year-end surplus each year was about \$2.3 million; in 1977, revenues exceeded expenditures by \$800,000; and in 1978, there was a \$300,000 excess.

If all of the funds needed to cover the recurring charges were to come from the General Fund, there is the likelihood that the County's spending priorities would have to be altered somewhat. Assuming that the County pays two-thirds and the City pays one-third of the monthly recurring charges, and assuming that the first monthly bill in 1980 is due in March, the County's share of the recurring charges for fiscal 1980 would be \$681,513. The 1979 budget can be used for illustrative purposes in order to put this into perspective. The ten-month cost of \$681,513 would be 1.5% of the total estimated revenue for the General Fund in 1979. For a 12-month period, the total cost would be \$809,639, which is 1.8% of the estimated General Fund revenues for 1979. From another perspective, the County's share of the ten-month operating costs in 1980 would be equivalent to the amount of expenditures proposed for the Magistrate Courts in the 1979 budget. For an entire year, the recurring costs of \$809,639 would amount to more than the \$749,000 budget proposed in 1979 for the Department of Planning.

While the amount of revenue needed for the operating costs of 911 seems small, relative to the amount of revenue raised for the General Fund, its magnitude as a single item seems much greater. Rearranging spending priorities to allow for the recurring 911 costs would be an important policy decision, in

as much as these costs would be greater than the budgets of seven of the seventeen divisions and offices listed in the Supervisor's proposed General Fund Budget for 1979.

On the basis of the Institute's analysis, there appears to be no assurance that the recurring costs of 911 could be financed each year from surplus funds in the General Fund. Surplus funds might be available some years because of unexpected increases in revenues. In other years, a rearranging of priorities would be required to make the funds available without a tax increase. This means that 911 would have to compete with the many other requests for General Fund financing.

Advantages of Using General Fund Revenues. There are two factors favoring using the County's General Fund revenues to finance the recurring 911 charges:

1. NO NEW TAXES. If sufficient funds are available in the General Fund, using moneys from the General Fund would mean that no tax increase or new tax would be required to finance the recurring charges for 911 in St. Louis County.

2. DIVERSIFIED. One tax, with any inequalities and inherent problems it may have, would not be the sole source of money for the operating costs of the 911 System. Although the largest portion of General Fund revenues come from general property taxes (41%), sales taxes, merchants and manufacturers licenses, utility gross receipts taxes, and cigarette taxes also are sources of revenues.

Because of the diversity of General Fund tax sources, more of the beneficiaries and potential beneficiaries of the 911 System would share in the payment of its costs. For example, people from outside St. Louis County, who come to shop in the unincorporated areas of the County and who might use the 911 Emergency Call System while in the County, would in some measure be helping to pay for the system through their sales and cigarette tax payments, which go into the General Fund.

Disadvantages of Using General Fund Revenues. There are two factors against using revenues from the County's General Fund to finance 911 recurring costs:

1. UNCERTAINTY OF FUNDS. There is no guarantee that sufficient surplus funds will be available in the General Fund to finance the 911 recurring expenses from year to year.

2. UNINCORPORATED AREA TAXES BEING USED FOR A COUNTY-WIDE SERVICE. Some of the major tax revenues that go into the General Fund are based only on the unincorporated areas of St. Louis County. The utilities gross receipts taxes that go into the General Fund are collected in the unincorporated areas of the County, and the cigarette taxes and retail sales taxes collected by the State are distributed to the County for its General Fund on the basis of the population of the unincorporated areas. State law requires that receipts from the utilities gross receipts tax and the cigarette tax be used for police and law enforcement purposes in the unincorporated areas, but receipts from the sales tax are not specifically earmarked. As a consequence, using revenues from the General Fund to finance 911 throughout the County might mean that, to some degree, taxes collected in the unincorporated areas would be used to support a County-wide service. The Institute has not made the in-depth analysis which would be required to determine whether the 911 recurring costs could be financed fully from the County-wide taxes that go into the County General Fund, without drawing upon the taxes based only on the unincorporated areas of the County.

An Additional Property Tax Levy

A second financing option is raising the County's property tax levy by a sufficient amount to cover the County's share of the 911 recurring costs. Since the statutory limit on the property tax levy in St. Louis County for County purposes is 35¢ per \$100 assessed valuation and the rate presently is at 25¢, the property tax could be increased without an election to get voter approval.

The present property tax rate is lower than in previous years. In 1977, the General Fund levy was at its legal maximum of 35¢. The total tax rate also is down from its 1977 level of \$1.38, to 96¢ in 1979, a 42¢ reduction. This 96¢ rate includes the 25¢ levy for the General Fund as well as a 23¢ levy for the Special Road and Bridge Fund, a 26¢ tax for the Community Health and Medical Care Fund, a 2¢ levy for the Park Maintenance Fund, and a 20¢ rate for Debt Service.

Important to the consideration of the property tax as a revenue source is the tax rate needed to raise sufficient revenues to cover the 911 charges in 1980 and beyond. On the basis of the trend for the past ten years, the Institute projects a 5.5% annual growth in the County's total assessed valuation. A one-cent tax per each \$100 of assessed valuation would yield about \$459,000 in 1980. (See Table 3.) Consequently, a two-cent property tax would be more than sufficient to finance the 911 recurring charges, estimated to be \$809,639 annually.

TABLE 3

PROJECTED YIELD OF PROPERTY TAX
ST. LOUIS COUNTY
1978 - 1982

<u>Year</u>	<u>Yield from Each 1¢ of Tax*</u>
1978.....	\$413,000
1979.....	435,000
1980.....	459,000
1981.....	485,000
1982.....	511,000

*The County's assessed valuation is assumed to grow 5.5% each year.

Advantages of a Property Tax. As with any of the financing options discussed in this report, each option has advantages and disadvantages. Some of the factors in favor of the property tax are:

1. **PROPERTY-RELATED SERVICE.** 911 is a property-related service, as well as a people-related service. The assessed valuation represents the value of the residential and commercial property that could benefit from this emergency call service. The property tax has traditionally been used as a source of revenue to support property-related services.

2. **BROAD-BASED TAX.** The property tax is a broad-based source of revenue. It is assessed against all taxable property in the County. It is paid directly by individuals and businesses owning such property, while renters pay varying portions of the tax indirectly through their rents. Thus, there would be a fairly universal application of the tax to both the beneficiaries and the potential beneficiaries of the 911 Emergency Call System.

3. **STABLE TAX SOURCE.** The property tax is a relatively stable source of revenue, in that it does not vary greatly with the ups and downs of the economy. The assessed valuation in the County has experienced a small increase each year for the past 10 years.

Disadvantages of a Property Tax. There are four important disadvantages to the property tax as an alternative financing method:

1. **NOT INDICATIVE OF ABILITY TO PAY.** Property values, actual or assessed, do not always indicate the relative ability of individual property owners to pay taxes. This is especially true of property owners with relatively low incomes, regardless of whether their incomes remain fixed or increase during a period of inflation. However, this situation has been alleviated to some extent by the tax rebates which the State of Missouri now makes available to low income individuals, both those who own their homes and those who rent them.

2. UNEVEN ASSESSMENTS. The property tax, which is computed for each piece of property by applying a tax rate against the assessed value of the property, does not provide a uniformly equitable basis for taxation. This inequity arises from the fact that assessed valuations are not presently at a uniform percentage of current market value throughout the County. In some areas of the County, for example, homes built in recent years are taxed on the basis of assessed valuations which reflect the inflationary increases which have taken place in property values, but many older homes are taxed on the basis of assessed valuations which reflect property values of the late 1950's and the early 1960's. As a result, owners of newer homes pay a disproportionate share of the property taxes levied in the County. This situation would change if there were a reassessment.

3. TAXPAYER RESISTANCE. The property tax has been the subject of widespread criticism and taxpayer resistance, not only in St. Louis County, but in other areas throughout the United States. This has been evidenced by the increasing difficulty experienced by local governments in their efforts to obtain voter approval for proposals for increases in property tax rates. A number of nationwide polls have indicated a preference for nonproperty taxes, such as the retail sales tax.

4. MAY NOT KEEP PACE WITH RISING COSTS. While the property tax has been a relatively stable tax source, its rate of growth may not be enough to keep pace with rising 911 operational costs, should they increase at a rate greater than the average annual 5.5% growth of property assessments. As a result, a property tax rate adequate for 911's first-year costs might have to be increased in order to raise sufficient revenues in subsequent years.

Federal Revenue Sharing Funds

A third option that may be available to the County, as a means of financing the recurring 911 costs, is the use of Federal revenue sharing money. In the

past, County programs concerned with police protection, public works, human resources, health care, and recreation have been funded from this source. In fact, the County's \$1,260,000 share of the nonrecurring costs for the 911 System are being paid for with revenue sharing money. Through an ordinance enacted November 1977, one-half of the \$1,260,000 total, or \$630,000, was appropriated from the Fiscal Assistance Trust Fund in 1977 and one-half was appropriated in 1978.

Whether revenue sharing money will be a possible source of financing for the County's share of the 911 recurring costs depends on the availability of revenue sharing funds in 1980 and subsequent years. Two major factors make it difficult to predict the volume of Federal money that the County will be receiving.

First, the fiscal assistance act passed by Congress in October 1976 provides for the program's continuation only through September 1980. At that time, Congress could discontinue the program, increase or reduce its funding, or change the distribution and allocation criteria for the money. Thus, the amount of money the County will receive, if any, is in doubt for the last quarter of 1980 and beyond.

Second, if the program is continued at the same level of funding, using the same allocation criteria (population, tax effort, and average weighted income), the County's share of the shared moneys could fluctuate due to the nature of the allocation process. The money appropriated each year by the Federal government is divided among the states and local governments within each state according to each government's "score" on the allocation factors relative to other governments at the same level. As a consequence, a change in one factor, such as tax effort, for one government could affect the other governments. In the past, these fluctuations have been slight, according to the Accounting Officer of St. Louis County.

In addition to the question of the amount of revenue sharing money the County will be receiving from the Federal government, there is the question of the latitude the County will have in the allocation of this money for new programs, given the programs that it is committed to funding. There are projects which have been funded from this source on a continuing basis for at least four years. These include: the police department's flight operations program, retirement program, and recruit training program; drug abuse programs; and the County code enforcement and inspections program. The Supervisor's recommended appropriation for these continuing programs amounts to 40% of the total Federal revenue sharing budget of \$9,361,095 for 1979.

While some of the programs have been funded on a long-term basis, other programs have been funded on a short-term basis. For example, about one-third of the appropriations for programs included in the 1978 revenue sharing budget were not included in the Supervisor's recommendations for 1979. There is a possibility, according to the Accounting Director, that programs accounting for 20% of the \$9.4 million in recommended appropriations for 1979 will not be continued into 1980. In other words, from year to year, some of the programs which are funded change. This means that funding 911 could be considered in place of discontinued programs.

Assuming that the County's level of revenue sharing receipts will remain the same in 1980 as in 1979, the entitlement funds received in 1980 will be \$8.4 million. This amount, added to about \$300,000 in interest, will bring the County's total receipts for the Fiscal Assistance Trust Fund to \$8.7 million. The recommended revenue sharing appropriations in the 1979 budget for programs that probably will be continued in 1980 amount to approximately \$7.5 million. On the basis of these figures, it appears that there should be about \$1.2 million of Federal revenue sharing money available in 1980 for other programs-- more than enough to cover the annual 911 recurring charges of \$809,639.

It is to be expected that other worthy projects will be competing for any available revenue sharing money. It is also possible that the costs of important, on-going programs financed from this source will escalate. The analysis indicates, however, that Federal revenue sharing money can be considered as a possible source of financing the 911 recurring costs on a County-wide basis.

Advantages of Using Revenue Sharing Funds. The points in favor of using Federal revenue sharing money to finance the 911 operational costs are:

1. NO TAX INCREASE. If Federal revenue sharing money is used to finance the recurring costs of 911, the County Government will not need to increase its property tax or levy a telephone service charge. There will also be no need to modify General Fund spending practices.

2. SIMILAR PROJECTS HAVE BEEN FUNDED. There is ample precedent for funding programs involving County and municipal governments from the Fiscal Assistance Trust Fund (Federal revenue sharing fund). An example of this is the financing of the Regional Justice Information System (REJIS), a central data processing center serving criminal justice agencies in the metropolitan area. The County Government's share and the municipalities' share of the costs of operating REJIS have been paid from the revenue sharing fund. Furthermore, all of the County's share of the nonrecurring charges for the 911 Emergency Call System have been funded from this same source.

Disadvantages of Using Revenue Sharing Funds. Some of the disadvantages of using revenue sharing money are:

1. UNCERTAIN FUTURE OF PROGRAM. Congress will be deciding the future of the revenue sharing program in 1980. The program could be discontinued; the authorization for it could be increased or decreased; and the factors used to determine each government's share of the money could be changed. Some concerns have already been expressed that the level of funding might be cut in an attempt to balance the Federal budget and reduce inflationary, Federal spending.

2. FLUCTUATION OF RECEIPTS. Revenue sharing moneys are distributed to state and local governments according to allocation formulas. Whenever one of the factors in these formulas changes for one of the governments, the other governments' shares of the funds are affected, because of the relative nature of the allocation process. For example, assuming that tax effort continues to be a distribution criterion, a reduction by the State of Missouri in its state taxes could affect St. Louis County's revenue sharing receipts. St. Louis County would receive less money because Missouri, relative to other states, would decline in its tax effort (assuming that the other states do not make similar changes). Also, there will be a new census in 1980 which may have a bearing on the factors used in the allocation formulas. Should the County's population be significantly different from the figure now used, its share of revenue sharing money might be changed.

Although there have been no significant fluctuations in the County's revenue sharing receipts in the past resulting from the factors used in the allocation formulas, the possibility of these changes does exist. Since the 911 call service will be a continuing program, it is important that a stable source of revenue be available to cover the on-going costs. Significant fluctuations in the availability of revenue sharing funds would, therefore, be disadvantageous.

A Telephone Service Charge

The fourth financing option is a telephone service charge. Under this method, a charge would be added to the bills of phone customers, and the revenues from this charge would be collected by the phone company and turned over to the government imposing the charge. Enabling legislation would be needed from the State Legislature in order to authorize the imposition of such a charge.

A service charge could take one of two forms. It could be a fixed charge per phone customer or phone line, or it could be a percentage rate applied to

the telephone company's charges for telephone service. The latter kind of service charge is in effect in California, where it is called a "surcharge." Both forms have been considered in the Kansas City area, where the percentage type is currently being favored.

In this section, the status of the telephone service charge in California and Kansas City is discussed, and the charges required in St. Louis County to finance the recurring costs are estimated. In addition, the advantages and disadvantages of a telephone service charge are presented.

The Telephone Service Charge in California. California, one of three states with mandated State-wide 911 service, has had a telephone service charge or "surcharge" of one-half of one percent on the charges for certain classes of intrastate telephone communications services since August 1, 1977. Its purpose is to finance both one-time and on-going costs of the mandated 911 systems throughout the State. However, the future of the surcharge is uncertain, because of problems in defining the 911 costs that should be reimbursed, questions about accumulating the receipts from the surcharge, and costs that have increased more rapidly than expected. The surcharge is currently under study by the State Legislative Analyst, who will report his findings and recommendations in April 1979.

The Emergency Telephone Users Surcharge Law, adopted in 1976,* authorizes a surcharge of up to three-fourths of one percent on the monthly service flat-rate charges for usage, message unit charges, and the charges for toll calls placed within the State of California. Exempt from the surcharge are charges for service and equipment that can be purchased competitively from an outside vendor, installation or connection charges, one-time service charges, directory advertising charges, and certain other intrastate services.

*Part 20 of the California Revenue and Taxation Code.

The California surcharge is collected by the phone companies, turned over to the State, placed in the State Emergency Telephone Number Account, and used to reimburse certain nonrecurring and recurring costs incurred by the local public safety agencies throughout the State. The items whose costs are reimbursed include: the 911 trunk lines; terminating equipment that is needed for the 911 service; the answering and transfer devices used to receive 911 calls; transfer arrangements to secondary answering points, such as fire departments, ambulance services, and civil defense agencies; the seven-digit phone numbers at the public service answering points that serve as backup emergency access numbers; selective routing; and any allowed incremental costs that have been recommended by the Advisory Committee on the State Emergency Telephone Number and concurred in by the State Communications Division. (Incremental costs are defined as the costs not specifically identified in the Bill, which are unique and necessary to the planning and implementation of 911 systems.)

The reimbursement policy for some incremental costs has not been completely established. Among the items of uncertain funding status are: Automatic Number Identification (ANI), a feature that displays the 911 caller's phone number to the answering personnel on a specially-designed console; Automatic Location Identification (ALI), a feature displaying the address of the caller to the dispatcher; and the extra personnel costs that have arisen because of the added call volume associated with 911. A final determination about the reimbursement policy for these items, as well as further definition of the phrase "incremental costs," will come with the completion of the Legislative Analyst's report on 911 in April 1979.

Concern that there might not be sufficient funds in the Emergency Telephone Number Account in the future to meet all reimbursement requests led to the introduction in 1977 of Senate Bill 1030, which was not adopted. This bill would have increased the surcharge levy from the present one-half of one percent

to three-fourths of one percent, the maximum rate authorized by the basic 911 legislation, and would have allowed the accumulation of surcharge receipts from year to year. In the basic legislation, the State Board of Equalization was authorized to establish the surcharge rate for the upcoming year, depending on the anticipated expenses for that year. Hence, the rate was established for only one year, based on the expenses of that year. However, it was known that many systems would begin operation in the early 1980's. In order that sufficient funds would be available to meet the expected surge in reimbursable expenses, it was proposed in SB 1030, that the surcharge rate be increased and the receipts be accumulated.

Some of the problems with California's State-wide financing law were brought out during the hearings on SB 1030. An important problem was the severe underestimation of the total one-time and on-going costs for the 911 systems. According to one senator, a cost projection, prepared about one year after the initial surcharge bill was passed, showed that the original projection underestimated the costs by \$20 million.

Another problem discussed in the hearings concerned the difficulties of controlling the costs for 911. Since the layout of a 911 system and many telephone features of the system are optional, one senator asked whether, knowing that their costs would be reimbursed by the State, the local agencies would not be inclined to go "first class" in designing their systems, thereby pushing up the total State-wide 911 bill. It was pointed out that local governments have a "blank check," because all surcharge receipts are put into one fund and returned to the localities to cover approved 911 costs, without regard to the tax contribution coming from each locality.

As a result of the concerns expressed in the hearings about the funding arrangements for 911, Senate Bill 1457 was adopted in 1978. It postponed the mandated order and implementation deadlines for 911 systems in California in

order to give the State Legislative Analyst time to study the 911 funding situation. The Bill requires the Legislative Analyst to make a full cost-benefit evaluation of the 911 program and report to the Legislature during April 1979. His report will include: an analysis of the cost of the final 911 plans submitted by all of the localities for approval and reimbursement; a recommendation on disputes between local agencies and the State concerning State reimbursement of incremental costs; an evaluation and recommendation of alternative, equitable, and workable methods for distributing State tax revenues to fully reimburse local agencies; and a comparison of the benefits of 911 in relation to its effectiveness and costs.

This legislation provides a one-year moratorium to review the 911 funding situation. The information contained in the Legislative Analyst's report will enable the Legislature to decide in 1979 or 1980 whether to continue the 911 system as planned, or to repeal the program and its mandates. In the meantime, the one-half percent surcharge continues to be collected.

The Kansas City Proposal. Planning efforts are under way in the Kansas City area for a 911 Emergency Call System. At the request of political leaders in the area, the Mid-American Regional Council (MARC) has become involved in this planning. The proposed system will serve both the Missouri and Kansas portions of the metropolitan area, and will include service areas of three telephone companies: Southwestern Bell, United, and Continental.

Although Kansas City area officials have not yet entered into a contract with Southwestern Bell, they have been exploring financing alternatives in anticipation of making a commitment to install a 911 system. The financing method currently being favored is a telephone service charge that would be used to pay both the nonrecurring and recurring costs of the system. To facilitate this objective, enabling legislation has been introduced in the 80th General Assembly of Missouri, in the form of House Bill 197 and Senate Bill 64.

The bills would authorize the governing bodies of Cass, Clay, Jackson, Platte, Ray, and St. Louis Counties, and the City of St. Louis to levy a service charge on charges for selected telephone communications services, for the purpose of providing for the installation and/or operation of a 911 emergency telephone service. The service charge, levied at a rate not to exceed two percent, would be applied to local telephone service and would include the monthly service flat-rate charges for usage. The charge would not be applied to:

1. Federal and local taxes
2. Calls placed from coin-operated phones
3. Charges for installation, service connection, and directory advertising
4. Charges for equipment and service that can be purchased competitively from a supplier other than the phone company supplying the 911 service
5. Service provided for customers who are exempt from the Federal communications services tax (Federal, state, and local government offices, common carriers, telephone companies)
6. Charges for toll telephone service and toll-free service (WATS)
7. Two-party measured service (party line telephone service in which a maximum number of calls is permitted each month for the basic charge)

For any one telephone customer, the service charge would be assessed on no more than 100 exchange access arrangements (phone lines and facilities allowing access to the telephone exchange office).

The service charge required to be collected by the phone company would be added to and stated separately in its normal billing of customers. The service charge receipts would be turned over by the phone company to the governing body on a quarterly basis. The governing body would be permitted to carry balances forward from year to year. Annually, the governing body would have to establish a charge rate, not to exceed the two percent authorized by law, that, together with any surplus revenues carried forward, would produce sufficient revenues to fund the necessary expenditures for the 911 system.

The receipts from the collection of the service charge could be used for the following purposes: (1) to pay for the central administration of the

emergency telephone service, exclusive of the costs associated with the operation of the primary and secondary answering points; (2) to pay the phone company for the installation and operation of either a basic 911 system, which may have additional special features provided by the phone company, or a selective routing 911 system; and (3) to pay for approved incremental costs incurred by the phone company in installing and operating a 911 system.

HB 197 and SB 64 differ from legislation introduced during the second session of the 79th General Assembly. First, the earlier bills would have authorized a monthly fixed service charge for each exchange access arrangement. The Mid-American Regional Council changed the focus of its current legislative proposal because of the opposition expressed to a fixed-amount service charge by Kansas City citizens groups representing the elderly and poor. These groups felt that the fixed charge would be particularly burdensome to those on fixed incomes and those with low incomes. Recognizing this situation, the current bills put the charge on a percentage basis and exempt two-party measured service, which is the lowest cost residential phone service available in exchanges where this service is offered.

Second, the present enabling legislation differs from earlier bills in that the definition of governing bodies authorized to levy the tax has been broadened to include St. Louis County and the City of St. Louis. In fact, the present legislation has a number of cosponsors from the St. Louis area.

Since the Kansas City 911 System will be a bi-state system, legislation similar to Missouri HB 197 and SB 64 has been introduced in the Kansas Legislature. The future of 911 in the Kansas City area will depend upon the successful passage of enabling legislation in Missouri and Kansas.

The decision of the Mid-American Regional Council to support a telephone service charge as the means to finance a 911 system for the Kansas City area was made after considering such alternatives as the establishment of a special

district with authority to levy a property tax, and having each local government contribute its share from any funds available for the purpose.

Telephone Service Charges Required in County and City. With the aid of data supplied by Southwestern Bell Telephone, the Institute has estimated the telephone service charges needed in St. Louis County and the City of St. Louis to finance the recurring charges for the 911 System. The Institute's estimates are for both a fixed-amount service charge and, as an alternative, a percentage rate service charge.

There are a number of ways in which a fixed-amount service charge could be levied. A charge could be made for each customer, for each phone (station), or for each exchange access arrangement (phone line and facility allowing access to the telephone exchange office).

For the purpose of estimating the fixed-amount service charges required to finance the recurring 911 costs, the Institute has assumed that a fixed-amount service charge would be applied to each exchange access arrangement, which would have been the basis for fixed-amount service charges under bills introduced in the last session of the General Assembly. According to Southwestern Bell, in November 1978, there were 386,904 trunks providing exchange access in St. Louis County, and 229,395 trunks in the City of St. Louis--a total of 616,299 exchange access arrangements.

Under an informal agreement between the Mayor and the Supervisor, the County's share of the \$102,227 monthly recurring charge for the 911 System will be \$68,152, and the City's share will be \$34,075. Given these revenue requirements, a telephone service charge of 18¢ per access arrangement in the County, and 15¢ per arrangement in the City would be needed. For an entire year, the service charge per access arrangement would be \$2.16 in the County and \$1.80 in the City.

A number of qualifications apply to these estimates for fixed-amount service charges:

1. Service charges applied at the estimated rates would raise just enough revenue to pay the recurring costs. The estimates for the City and County do not allow for an extra margin of revenues to cover unexpected contingencies.

2. The figures on the number of trunks used for exchange access in the City and County are estimates rather than actual counts. The actual division of these lines may be somewhat different. Because many of the telephone exchanges cross the City-County border, it was necessary to estimate the proportion of the business and residential phone lines in these exchanges falling into the City and into the County. In preparing its estimates, Southwestern Bell used the number of households as reported in the 1970 census. The business and residential telephone trunks for the telephone exchanges that cross the City-County line were assumed to be divided between the City and County in proportion to the division of households between the City and County in the 1970 census. If the actual division is significantly different, the amount of the service charge required in each jurisdiction will be changed.

3. A number of phone lines included in Southwestern Bell's count could be exempted from the service charge by the enabling legislation. For example, the phone lines used by government offices were included in estimates of exchange access arrangements. Also, a limit could be placed on the number of trunks per customer that would be subject to the service charge. Because of the inability of Bell to easily identify the number of trunks for large business customers and governmental agencies as separate items in its records, all trunks were included in its November 1978 estimate. If the trunk lines of certain customers were exempted in the legislation authorizing a service charge, the fixed-amount service charge for the City and County will need to be adjusted upwards to compensate for the exclusions.

4. Southwestern Bell's November 1978 estimate for St. Louis County includes the trunk lines of some telephone exchanges that are only partially in the County. Because the non-County users of these exchanges will not have the 911 service and will not be subject to the service charge, the number of exchange access arrangements on which the service charge could be imposed in St. Louis County will be less and the per trunk service charge will have to be increased accordingly.

In order to estimate the percentage rate service charge for St. Louis City and County, the Institute obtained estimates from Southwestern Bell of its monthly revenues in the City and County from the classes of telephone service that would be subject to a service charge under HB 197 and SB 64. Information received by the Institute shows that, in November 1978, revenues from the applicable business and residential phone services were \$2,469,745 in the City and \$4,612,060 in the County--a total of \$7,081,805. On the basis of these revenue figures, a service charge of 1.5% would be needed to finance the County's \$68,152 share of the monthly recurring charges, and a 1.4% rate would be required in the City to finance its monthly share of \$34,075. It should be noted that these estimates are subject to the same qualifications as the estimates for the fixed-amount service charges.

Caution should be exercised in trying to assess the impact of a percentage rate service charge on a customer's bill. To determine the service charge that a telephone customer would pay each month, it is not possible to simply multiply the service charge rate by his total bill. This cannot be done because many items on a bill would be exempt from the service charge under the proposed legislation. Tolls for long distance calls, charges for extension phones and optional phone services, and taxes would be exempt from this service charge. Only the basic local service portion of a telephone bill would be subject to the service charge.

Advantages of a Telephone Service Charge. Some of the advantages of a telephone service charge are:

1. A TELEPHONE-RELATED SERVICE. A 911 Emergency Call System is a telephone service which gives citizens easier access to their emergency agencies. Since the purpose of a service charge is to assess those who benefit from the service, telephone customers logically would be subject to the surcharge, because they are the ones who potentially will benefit from the convenience of the 911 Call System.

2. REVENUES SHOULD KEEP PACE WITH RISING COSTS. Revenues from a fixed-amount service charge would grow with the increase in the number of telephone customers, while revenues from a percentage rate service charge would grow with the increase in the number of telephone customers and also increases in telephone rates. If a percentage rate service charge were imposed, it is probable that the growth in revenues would keep pace with increases in 911 operating costs caused by inflation. For either form of the service charge, new businesses and residences and those with expanded telephone services would be subject to the charges as soon as the phone service was connected.

3. A BROAD-BASED SOURCE OF REVENUE. Like the property tax, a telephone service charge would provide a broad-based source of revenue to finance the 911 recurring costs on a County-wide basis. Today, most homes and businesses have at least one line, so a telephone service charge would be paid by most County residents and by most business firms which maintain an office in the County.

Disadvantages of a Telephone Service Charge. Some of the disadvantages of a telephone service charge are:

1. NOT TRADITIONAL WAY OF FINANCING EMERGENCY SERVICES. The telephone costs of emergency agencies are presently funded through general tax sources, as are the other costs of providing emergency services such as personnel,

vehicle, and fuel expenses. If tradition were followed, the cost of the 911 System would be financed from general tax sources, rather than by a special "tax" or charge for service.

2. UNEQUAL INCIDENCE OF THE SERVICE CHARGE. Businesses that are phone intensive would have to pay a disproportionate share of the recurring costs for the 911 System. A million dollar factory employing 100 people may have only two trunk lines coming into its administrative offices, while a storefront real estate office with eight agents may have four trunk lines running into its office. More people and higher valued property would be served by the 911 System at the factory than at the real estate office, but the real estate office would pay more for its potential usage of the system than the factory. In other words, the level of phone services that one has is not necessarily related to the potential benefit that could be derived from the 911 System in terms of either the value of property protected or the number of people served.

Furthermore, a number of large businesses will benefit from exemptions to the service charge, while small businesses and residential customers generally will not enjoy exemptions. Because a maximum of 100 exchange access arrangements would be subject to the service charge under the proposed legislation, businesses having large Centrex telephone systems with more than 100 exchange access trunks would enjoy an exemption from the telephone service charge on the trunks in excess of the maximum. In contrast, residential and small business customers generally would be subject to the service charge on the entire amount of their telephone services. In addition, many large users of telephone services would be exempt from the telephone service charge under the provision of the proposed legislation that exempts those not subject to the Federal communications service tax. However, all of these exempted telephone users would enjoy the same benefits as would users subject to the service charge.

3. MORE BURDENSOME ON LOW INCOME GROUPS. A fixed-charge service charge would be relatively more burdensome on individuals with fixed incomes and low

incomes, since the less affluent would be paying for their 911 service at the same rate as the more affluent. A percentage rate service charge would be more related to the ability to pay, assuming that an individual's economic situation and his level of phone services are related.

The bills introduced in the 80th General Assembly of Missouri give some recognition to the special situation of the low income groups. Measured two-party service, the service intended for those who can afford only low cost phone service, would be exempted from the service charge.

4. SERVICE CHARGE POSSIBLY SUBJECT TO SALES TAX. The telephone service charge added each month to customers' phone bills might be subject to State and local sales taxes. If this were the case, an additional \$37,455 would be collected from phone customers in St. Louis County each year because of the sales taxes imposed on the \$809,639 of service charges needed to cover the County's share of the recurring costs.

5. COUNTERS EFFORTS TO REDUCE UTILITY BILLS. A number of St. Louis area municipalities have recently reduced or eliminated their gross receipts taxes on utilities. Currently, there are legislative proposals before the Missouri General Assembly to remove the state sales tax on utility services. The imposition of a special service charge on selected telephone services would run counter to the steps that have recently been taken to reduce the size of utility bills by eliminating taxes on utility services.

Section 3

Procedures for Determining 911 Charges

Southwestern Bell's charges for the 911 service and the conditions under which this service will be provided will be determined by the Missouri Public Service Commission, because the Universal Emergency Number Service (911) will be "tariffed." According to Southwestern Bell, the company intends to file its tariff proposal for 911 with the Public Service Commission sometime before the end of September 1979. This tariff will be filed as part of the General Exchange Tariff, and will include appropriate rules and regulations that will apply to the 911 service, in addition to the rates for the service.

The company is currently reviewing its September 1977 quotation of the nonrecurring and recurring charges for the St. Louis area 911 System. Although the re-evaluation of these charges has not been completed, it is anticipated that the final nonrecurring and recurring charges will be less than initially estimated in September 1977. In addition, there has not been a final determination as to which rules and regulations will be included in the tariff proposal and the wording of the rules.

Once the tariff for the Universal Emergency Number Service is in effect, Southwestern Bell plans to apply for a rate change for 911 only when an across-the-board rate change is requested from the Public Service Commission. Hence, if there is a change in 911 rates, it will occur at the same time as adjustments for other phone services are made. Southwestern Bell applies for a general rate change when it determines that its rate of return for all telephone services taken together has dropped below what is considered to be an acceptable level.

Examples of Rules to be Included in Tariff Proposal. Although Southwestern Bell's tariff proposal has not been finalized, it is possible to present some examples of the rules and regulations that are being considered for the governance

of the Universal Emergency Number Service. As with most tariffed telephone services, a general definition of the customer will be given. Under the planned definition, the 911 customers in the St. Louis area will be the St. Louis City Government and the St. Louis County Government. It will further be stipulated that the Expanded 911 service will be provided only in those areas where existing phone facilities and operating conditions permit. The three digits, 9-1-1, will be designated and reserved as the only numbers to be used for this emergency call service, and two emergency call systems serving the same geographic area will be prohibited.

Other points being considered by Southwestern Bell for inclusion in the tariff are:

1. All local police, fire, and medical agencies must agree to participate in the service.

2. Each customer (the City and County) must make arrangements to handle the 911 calls from the entire area served by a telephone central office which is equipped with 911 capacity, even if boundaries of the telephone office and political subdivision boundaries do not coincide. (This obligation would extend to those central offices that are only partially within the customer's jurisdiction.)

3. Temporary suspension of the 911 service at the request of the customer will not be permitted.

4. The 911 call service is intended for reporting emergencies and is to be used for emergency purposes only.

5. The Data Management System developed for selective routing will be maintained on the premises of the phone company, and will be under its control in order to insure the privacy of phone customers' records.

6. The customer will be required to discover and report any defects and malfunctions in the 911 equipment. In the event of an interruption of 911 service, the phone company's only liability will be to repair the equipment and adjust the monthly recurring bill to reflect the time that service was out of order after the problem had been reported.

7. If a customer desires to provide his own terminal equipment, he may do so, subject to generally-accepted conditions for connecting non-Bell equipment to a Bell network. (See "Connection With Equipment or Facilities Provided by Customers" in the General Exchange Tariff.)

The customers will be asked to agree to a number of terms and conditions.

The customers probably will be asked to agree to:

1. Staff at least one answering point (PSAP) 24 hours a day.
2. Accept the responsibility to act upon the emergency calls that are received.
3. Have sufficient equipment and subscribe to enough 911 trunk lines to adequately handle the 911 emergency calls received. (The decision as to what is adequate will be made by Southwestern Bell, based upon call studies it periodically makes.)
4. Have additional local exchange phones to be used for administrative purposes and to receive emergency calls placed by telephone company operators and people wishing to use the agency's seven-digit number.

The points of agreement above are between Southwestern Bell and its two customers, the City and the County. Signed agreements between the company and the individual answering points (PSAPs) may not be required by the tariff. Therefore, two rules considered earlier for inclusion in the tariff, and presented in the Institute's first report under the heading "Responsibilities of E-911 Participants," may not be directly covered in the tariff proposal. One is: "All parties will be required to sign an agreement to forward the emergency calls that they receive which are for other jurisdictions." The other is: "Every dispatching agency will be asked to sign an indemnity agreement."

To assist it in fulfilling its obligations under the Universal Emergency Number Tariff, the County may want to require that each individual answering point (PSAP) agree to forward misrouted calls and report system malfunctions.

Likely Rate Elements in Tariff Proposal. The items that will be subject to nonrecurring and recurring charges are those included in Southwestern Bell's proposal of September 1977. These items are repeated from the Institute's first 911 report:

1. ESS START-UP--the software package that gives the main electronic switcher the ability to handle 911 calls.
2. SELECTIVE ROUTING AND SELECTIVE TRANSFER--the ability to route a 911 call to the appropriate primary answering point and then automatically reroute the call to a secondary answering point.

3. GEOGRAPHIC FILE OF EMERGENCY AGENCY JURISDICTIONS--the jurisdictional file which will contain the emergency police, fire, and ambulance agencies responsible for every street segment in St. Louis City and County.
4. DATA MANAGEMENT SYSTEM DEVELOPMENT--the system which will create a data file for the auxiliary computer by retrieving the phone number of customers in St. Louis City and County and associating with it the proper emergency agencies based upon the installation address of the phone.
5. E-911 TRUNKS AND ASSOCIATED FACILITIES FROM THE END OFFICES TO THE ESS--the dedicated trunk lines from the wire centers to the main electronic switcher.
6. E-911 TRUNKS AND FACILITIES FROM THE ESS TO THE END OFFICES SERVING THE PSAPs--the dedicated trunks running from the main switcher to the wire centers where the answering points are located.
7. LOCAL CHANNELS FROM THE END OFFICES TO THE PSAPs--the dedicated trunk lines from the local wire centers to the answering points themselves.
8. PRIMARY PSAP START-UP--the line control units at primary answering points that facilitate the routing of 911 calls.
9. SECONDARY PSAP START-UP--the line control units at secondary answering points that facilitate the reception of 911 calls.
10. ATTENDANT CIRCUITS--the phone lines that run from the line control units to the answering attendants' positions.
11. STAND ALONE DISPLAY AND TRANSFER UNITS--the special consoles which display the caller's phone number and have buttons for transferring 911 calls.

Although these items might be listed differently in the tariff when it is filed with the Public Service Commission, the same services and equipment will be covered in the tariff that is actually filed. It should be noted that, while Speed Calling will be among the 911 features, it will not be specifically rated in the 911 tariff because it is already included in another section of the General Exchange Tariff.

Consideration of the Tariff by the Commission. Although public utilities are not required to file a tariff with the Missouri Public Service Commission more than 30 days prior to the intended effective date of a rate change or service implementation, Southwestern Bell is planning to file its Universal Emergency Number Tariff by the end of September 1979. When it files with the Commission, it is also obligated to file a copy of the proposal with the Missouri State Public Council, who, in addition to the Commission staff, represents the

general public during hearings before the Commission. A copy of the tariff proposal must also be available for public inspection during regular business hours at the phone company's public business office in each exchange affected by the proposed service or change in service. The filing is also listed in the Tariff Docket, a weekly publication of the Commission which itemizes the proposals received by the Commission during the preceding week and is circulated to those on a subscription list.

Using documentation provided by the phone company in support of its tariff filing, the staff of the Commission considers the tariff proposal. They review the rules and regulations governing the service as well as the rates for the service. The rate schedule is scrutinized to see if the charges are sufficient to be compensatory to the phone company. A request to implement a new telephone service is considered in light of its effect on existing phone customers and existing phone services. During the course of the Commission's consideration of the proposal, it may ask the phone company to provide additional information in support of its case.

If the Commission and its staff are satisfied with the proposed tariff, it will become effective as filed on the requested effective date (probably February 1980). However, if the Commission's questions about the tariff proposal have not been satisfactorily resolved by the requested effective date, the Commission has two alternatives. One is to allow the 911 service to go into effect on a temporary basis under the tariff as filed. The second is to suspend the implementation of the tariff. If the tariff is suspended, the Commission makes a public announcement to this effect. The suspension is for 120 days from the requested effective date of the tariff. Should the rate case not be settled during this 120-day period, the tariff can be suspended for an additional six months.

At any point after a tariff has been filed with the Commission, interested parties may file a complaint with the Commission pertaining to the tariff. It

is, of course, necessary for those wishing to question a tariff to learn that it has been filed. They may depend upon the phone company and the news media to publicize the filing. However, the surest way for County, municipal, and fire district officials to make sure that they know promptly when a 911 tariff has been filed is to subscribe to the Tariff Docket, which is published weekly by the Missouri Public Service Commission.

END