

ST. LOUIS CITY/COUNTY
BOARD OF FREEHOLDERS

SUMMARY OF
FISCAL IMPACT ANALYSIS

SEPTEMBER 23, 1988

Price Waterhouse



September 23, 1988

Mr. Wayne L. Millsap
Chairman
St. Louis City/County
Board of Freeholders
121 South Meramec - 10th Floor
Clayton, MO 63105

Dear Mr. Millsap:

ST. LOUIS CITY/COUNTY BOARD OF FREEHOLDERS
SUMMARY OF FISCAL IMPACT ANALYSIS

The enclosed report summarizes the results of the fiscal impact analysis conducted in connection with the local government reorganization plan (the Plan) issued by the St. Louis City/County Board of Freeholders on September 13, 1988. The report presents the project objectives, the methodology employed, and the results of the individual fiscal impact analyses for St. Louis County Government (County Government) and the proposed cities.

The fiscal impact analyses presented in this report were performed based upon certain assumptions and data provided by the St. Louis County Planning Department, the Board of Freeholders, and certain municipalities in St. Louis County. The fiscal impact profiles presented herein do not represent forecasts or projections of future events, but rather illustrations of what County Government and municipal revenue and expenditure levels might have been had the Plan been in effect in 1987. We have not audited these assumptions and data nor have we audited the fiscal impact profiles.

A key element of our approach was the solicitation of County Government and municipal input to validate our understanding of fiscal 1987 operating budgets. A series of review sessions was held with County Government and municipal officials concerning the initial results of the analyses. The views of officials of which we are aware

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results of the analyses. The views of officials of which we are aware that provide additional perspectives regarding the fiscal impact estimates are noted in the respective fiscal impact profiles.

We appreciate this opportunity to provide assistance to the St. Louis City/County Board of Freeholders.

Yours very truly,

Price Waterhouse

ST. LOUIS CITY/COUNTY BOARD OF FREEHOLDERS
SUMMARY OF FISCAL IMPACT ANALYSIS

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I. Project Background

The St. Louis City/County Board of Freeholders (the Board) was established to consider alternatives for reorganizing local government within St. Louis County (the County). In September, 1987, the Board set out to develop a reorganization plan for municipalities that would ensure an adequate revenue base for St. Louis County Government (County Government) and enable the municipalities to provide an adequate level of municipal services.

Prior to its recent adoption of the current 37-City Plan, the Board considered several other reorganization plans, including the following:

- A 21-City "end-state" plan;
- A 36-City "end-state" plan;
- A Metropolitan Boundary Commission plan;
- A 42-City "end-state" plan; and
- A 39-City "end-state" plan.

All of the plans were limited to the reorganization of municipalities and emergency medical service (EMS) and fire protection districts. Excluded were such local jurisdictions as sewerage districts, school districts and other special districts.

The 21-City Plan, as prepared and presented by the St. Louis County Planning Department (the Planning Department) in November, 1987, proposed 21 comparably-sized cities. Analytical data supporting this plan were developed by the Planning Department using methodologies constructed specifically for the 21-City Plan. A structured methodology for estimating the revenues and expenditures of the proposed cities was employed.

The 36-City Plan would have preserved all existing cities of more than 10,000 population. Analytical data supporting this plan were developed jointly by the Board's staff and the Planning Department. A more limited analysis (in comparison to the approach employed for the 21-City Plan) of the relative fiscal impact of the plan on existing municipalities was conducted. For example, some estimating techniques were modified because of time constraints.

The Metropolitan Boundary Commission Plan would have empowered an ad hoc body to revise municipal boundaries in accordance with guidelines approved by voters. A fiscal impact analysis of the Metropolitan Boundary Commission Plan was not conducted.

The 42-City Plan was developed by the Board's staff; it was similar to the 36-City Plan except that it preserved some municipalities with less than 10,000 population. Supporting fiscal data were developed by the Planning Department with some assistance from Price Waterhouse. Essentially, the 42-City Plan relied on the same fiscal methodology as that employed for the 36-City Plan.

In February, 1988, Price Waterhouse conducted a review of the methodologies used to develop supporting data for these plans. In its report to the Board on February 1, 1988, "Review of Methodologies for Reorganization Plans", Price Waterhouse suggested areas where approaches could be refined or assumptions defined more clearly, and concluded, "the methodologies, key planning assumptions and data sources used by the St. Louis County Planning Department to produce estimates related to the reorganization plans considered by the Board generally appear reasonable for providing illustrative and comparative data."

Price Waterhouse was then asked by the Board to develop a conceptual model to summarize fiscal data relating to the 42-City Plan and portray the relative fiscal impact of the plan on municipalities and County Government. At the time the Board's work was suspended by the Federal Court, the Board had tentatively approved the 42-City Plan and concluded that an expanded fiscal analysis of the plan would be beneficial.

In May, 1988, Price Waterhouse was requested by the Board to assist in completing the fiscal impact model and reporting the results of the fiscal impact analyses relating to the 42-City Plan. The Board and its staff assumed responsibility for obtaining and summarizing input from the municipalities and developing fire protection district fiscal impact estimates.

The Planning Department developed revenue estimates associated with the 42-City Plan and provided other data employed in the fiscal impact model, including but not necessarily limited to:

- Square mileage;
- Population;
- Dwelling units;
- Crime data;
- Taxable assessed values;
- Earnings tax estimates;
- Sales tax estimates;
- Utility gross receipts tax estimates; and
- Current property tax rates.

In July, 1988, the Board tentatively approved a 39-City Plan. The 39-City Plan was similar to the 42-City Plan except for the consolidation of additional cities and some minor boundary adjustments. Price Waterhouse assisted in preparing preliminary fiscal profiles for the 39-City Plan.

On September 6, 1988, the Board adopted a final reorganization plan including 37 cities. To review the specifics of the 37-City Plan (the Plan), the reader should refer to the document entitled "Plan for Governmental Reorganization in St. Louis and St. Louis County" issued by the Board on September 13, 1988. Broadly, the Plan provides for:

- Incorporation of the County into 37 proposed cities.
- Redelineation of County and municipal services as illustrated in Appendix A (provided by the Board).
- Consolidation of the County's existing fire protection districts and municipal fire departments into four fire protection/EMS districts.
- Rollback of the County property tax (except for funds required for retirement of County Government debt).
- A one-percent earnings tax to be paid by persons residing or employed in the County (excluding persons paying an earnings tax to the City) and businesses operating in the County.
- A partial per capita distribution of sales taxes to the municipalities (i.e., no longer to County Government).
- A nonresidential gross receipts utilities tax to be levied on businesses in the County to partially fund the costs of municipal government.

II. Project Scope and Methodology

The objective of this project was to help the Board assess the fiscal impact of the Plan through an analysis of fiscal year 1987 County and municipal revenue and expenditure data. This was intended to help the Board determine whether the Plan would provide adequate financial resources to support current County and municipal service levels (in some instances, the Board formally prescribed higher than existing service levels for certain less affluent cities).

The scope of this project, as set by the Board, was limited to analyzing the fiscal impact of the Plan on County Government and the proposed municipalities within the County using fiscal year 1987 data. This entailed reviewing County and municipal revenues and expenditures for the fiscal year 1987 and illustrating those revenues and expenditures as if the Plan had been in effect in 1987. The fiscal impact profiles presented herein do not represent forecasts or projections of future events. The fiscal impact of the Plan on the proposed fire protection and emergency medical service districts was not addressed.

At the direction of the Board, municipal expenditures estimates were based on the assumption that basic municipal services, as defined herein, would be maintained (or, in the case of less affluent cities, increased). Further, certain municipal tax revenues were computed so that total municipal revenues would equal or exceed total municipal expenditures. As a result, for each municipal profile, total estimated revenues equal or exceed total estimated expenditures.

In providing this assistance, we performed the following agreed upon procedures:

- Reviewed the earnings tax estimates prepared by the Planning Department and suggested refinements as necessary.
- Obtained County Government budget data, met with a number of County Government officials, and analyzed the potential impact of reorganization (as specified in the Plan) on County Government revenues and expenditures.
- Assisted the Board and its staff in designing an interview guide and a survey to be used in obtaining and summarizing input from current municipalities.
- Obtained municipal financial statements and budgets for fiscal year 1987 for 30 of the largest cities in the County and restated the costs into uniform cost categories.

- Performed a regression analysis on these cost categories using demographic and other statistical data supplied by the Planning Department and municipalities.
- Designed and programmed a fiscal impact model, including regression formulae, and reviewed it with the members and staff of the Board and Planning Department.
- Received demographic and other statistical data for the proposed cities, developed fiscal impact profiles for the proposed cities, and reviewed the profiles with the Board, Planning Department, and interested municipal officials.

The variances among existing municipalities in service levels, tax capacity, financial condition and financial reporting practices are significant. In order to develop a uniform approach for analyzing the cities, certain assumptions were employed. Major assumptions used in the municipal analysis included the following:

- Municipal revenue and expense patterns occurring in fiscal years ending in 1987 were assumed to be representative of each city's financial position and operating requirements. Comments by municipal officials concerning this assumption are noted in the respective profiles.
- The municipal model was designed to maintain current levels of service in all communities. At the direction of the Board, service levels were increased in those municipalities where the Board determined that current service levels were inadequate.
- At the direction of the Board, non-recurring expenditures, capital expenditures and operating surpluses were excluded from each city's financial profile.
- The property tax rate stated in each profile is intended to encompass the city's general operating levy, plus any levies dedicated for basic operating expenditures as defined later in this report. All other special purpose levies, such as bonded indebtedness and municipal library districts, were assumed to remain in effect pending review by the St. Louis County Municipal Transition Commission. It was our understanding, per our discussions with the Board, that most of these special levies would be rolled back by the Transition Commission and cities.

The fiscal impact analyses presented herein were performed based upon certain assumptions and data provided by the Planning Department, the Board and certain municipalities in the County. We have not audited these assumptions and data nor have we audited the fiscal impact profiles.

A key element of our approach was the solicitation of County and municipal input to validate our understanding of the fiscal year 1987 operating budgets. A series of review sessions was held with County and municipal officials concerning the initial results of the analyses. The views of officials of which we are aware that provide additional perspectives regarding the fiscal impact estimates are noted in the respective profiles.

The summaries of fiscal impact analyses and specific provisions of the Plan presented herein are based upon our understanding of the Plan. Since the final Plan was not issued until September 13, 1988, and we were not directed by the Board to review the Plan, we did not review the Plan in detail. Consequently, our understanding of the Plan is based on our discussions with the Board and its staff.

The Plan specifies that, if it is approved by the voters of the City and County on June 20, 1989, its provisions shall take effect on January 1, 1992. Since the fiscal impact analyses were based on fiscal year 1987 data, additional analyses will be required before the effective date of the Plan. It was our understanding that the respective situations of County Government and the proposed cities would be reviewed as the effective date approaches to ensure that the tax rates set forth in the Plan provide adequate resources without the accumulation of unnecessary reserves.

This project did not address issues such as the timing of revenue collections, subsequent events that may necessitate tax rate changes, municipal start-up costs and employee benefit plan changes. Nor was the project intended to address any potential efficiencies that may be achievable as a result of the Plan's implementation. These issues should be addressed if the Plan is approved, as part of the transition process outlined in the Plan. A thorough financial analysis of each proposed city should be conducted at that time.

III. Revenue Impact

A. Overview

The Plan contemplates certain changes to the current distribution of County Government and municipal tax revenues. The revenue proposals specified in the Plan include three basic elements as follows:

- A one percent (1%) earnings tax to partially fund County Government, fire protection/EMS operations and municipal development projects;
- A rollback of the County property tax, (except that required for the retirement of debt); and
- A partial per capita distribution of the municipal sales tax.

The Plan specifies that the municipal sales tax would be distributed in two ways. Twenty-five percent of the sales tax would be distributed to cities on a point-of-sale basis (i.e., each city would retain 25 percent of the sales taxes collected within its boundaries). The remaining 75 percent of the sales taxes would be "pooled" and distributed on a per capita basis.

The Planning Department developed revenue estimates for the Plan for the fiscal year 1987. As noted in our previous report dated February 1, 1988, the methodologies, assumptions and data sources employed in developing these estimates were reviewed by Price Waterhouse and determined to be reasonable, given the available data. The Planning Department's estimates were reviewed and, as necessary, refinements were suggested to ensure their internal consistency with the Planning Department's assumptions.

B. Earnings Tax

It was estimated that had the earnings tax specified in the Plan been in effect in fiscal year 1987, it would have generated approximately \$127.7 million in revenues. The Plan specifies that earnings tax revenues would be used to partially fund County Government and fire protection/EMS operations. Earnings tax revenues would also fully fund the municipal development fund set forth in the Plan.

Estimated Earnings Tax
Fiscal Year 1987

<u>Item</u>	<u>Amount</u> <u>(\$Millions)</u>
Earnings Tax for Individuals:	
Individuals Employed in County	\$120.5
City Residents Employed in County	(8.1)
County Residents Employed in Other Counties	<u>5.7</u>
	\$118.1
Net Business Profits Tax	<u>17.7</u>
Total Earnings Tax Collectible	\$135.8
Earnings Taxes Not Collected	<u>(8.1)</u>
 Earnings Taxes Collected	 <u><u>\$127.7</u></u>

The Planning Department made several assumptions in estimating the earnings tax base. First, it assumed that the base would only include the wages of County residents who do not work in the City and nonCity residents who work in the County. (City residents and County residents who work in the City were excluded to preserve the City's current tax base.) Second, it assumed that the base would include the net profits of corporations, proprietors, and partnerships.

The methodology employed by the Planning Department in estimating the earnings tax entailed the following steps:

- Estimate the wages of all persons employed in the County;
- Estimate and deduct the wages of City residents employed in the County;
- Estimate and add the wages of County residents employed in other counties in the St. Louis Standard Metropolitan Statistical Area;
- Calculate the earnings tax for individuals using a one percent rate;
- Estimate and add the business net profits tax; and
- Estimate and deduct uncollected revenues.

The most critical assumption regarding wage estimates was that the Missouri Division of Employment Services (MDES) ES-202 data represents a valid proxy for County payroll data. A related assumption pertained to employee commutation patterns. The distribution of the County workforce – County residents (70.6%), City residents (8.7%) and other SMSA residents (20.7%) – was based on the 1980 Bureau of Census commutation patterns.

Data from the 1986 Bureau of Labor Statistics (BLS) Household Survey and MDES ES202 were then used to update the census data. The 1980 Census Bureau data indicated that 9.3 percent of those employed in the County were City residents. The Planning Department adjusted this ratio downward to 8.7 percent given the trends evidenced by the 1986 BLS and MDES data.

The Planning Department made another series of key assumptions concerning wages. Average wages for City residents employed in the County were assumed to be 80 percent of average County wages. The product of the average wage and number of City residents was then deducted from the base tax.

A similar approach was used to estimate the earnings of County residents employed outside the County and City. In this case, however, the average wage was assumed to be 120 percent of the average County wage. Again, this assumption was based on the Planning Department's professional judgment.

The business net profits tax is levied on sole proprietors, partnerships and corporations. With the earnings tax for individuals, the Planning Department was able to identify a proxy for estimating the tax base. In contrast, for the business net profits tax, the Planning Department found no readily available proxy on which to support their estimate. Consequently, it decided to base this estimate on the City's experience.

In 1987, the City's business net profits tax was 15.9 percent of total individual earnings tax receipts. In 1986, it was 14.4 percent. The Planning Department assumed that the County's ratio of business net profits tax receipts to individual earnings tax receipts would be no less than the City's ratio. For the purposes of this analysis, the assumption was established at 15 percent. The Planning Department also assumed that the County's collection yield would parallel the City's (about 94% of collectible taxes).

C. Property Tax Rollbacks

The Plan specifies that the County property tax would be rolled back and that the lost revenue would be replaced by the earnings tax. Only that portion of the property tax applied to debt service would be retained by the County under the Plan. It also is our understanding that the merchants and manufacturers tax, excluding the business surtax, would be rolled back pursuant to the Plan.

The Plan specifies that all County property tax rates, except the levy for the retirement of bonded indebtedness, would be rolled back to zero by September 1, 1993. Before September 1, 1992, County property tax rates would be reduced in accordance with a formula involving the excess of estimated earnings tax revenues over the sum of 1991 sales tax and County Aid Road Trust Fund receipts. This analysis was based on the full property tax rollback which would be in effect by September 1, 1993.

D. Sales Tax Distribution

The third element of the revenue proposal of the Plan is a revision of the municipal sales tax distribution formula. The Plan provides that 25 percent of sales tax revenues would be distributed on a point-of-sale basis. The remaining 75 percent of municipal sales taxes would be distributed on a per capita basis to the reorganized municipalities. The only exception is the sales tax generated in the remaining unincorporated area (i.e., St. Louis Lambert International Airport) which would be distributed to the Economic Development District.

IV. County Fiscal Impact

A. Overview

The Plan would result in a rollback of the property tax used to support the operations of County Government. The proposed one percent earnings tax is intended to replace this revenue source. The Plan's redelineation of county and municipal services (a summary of the redelineation of services provided by the Board is presented in Appendix A) would result in the shifting of many County Government revenues and expenditures now required for unincorporated areas to the proposed cities.

County Government's 1987 revenues and expenditures were reviewed to identify the potential fiscal impact of the Plan on County Government. In Appendix B, the results of this review are summarized. The County fiscal profile is intended to illustrate the potential fiscal impact of the Plan on County Government using fiscal year 1987 data. The profile does not represent a forecast or projection of future events, but rather an illustration of what County Government revenues and expenditures in fiscal year 1987 might have been had the Plan been in effect at that time.

B. County Government Revenue

Implementation of the Plan would result in a reduction of County Government revenues from existing revenue sources. County Government base 1987 revenues were \$153.9 million. It was estimated that, had the Plan been in effect in 1987, the County would have experienced a \$109.2 million (or 71 percent) revenue reduction due to reorganization.

As noted earlier, it was estimated that had the earnings tax specified in the Plan been in effect in fiscal year 1987, it would have generated approximately \$127.7 million in revenues. The Plan specifies that a portion of earnings tax revenues would be provided to County Government to replace annual revenues lost due to reorganization.

The following table presents revenue reduction estimates, based on data for fiscal 1987, by revenue source.

Estimated County Revenue Reductions By Source
Fiscal Year 1987

<u>Source</u>	<u>Fiscal Impact</u> <u>(\$ Millions)</u>	<u>Percent Change</u>
Property Tax	(43.1)	(100)%
Merchants and Manufacturing Tax	(1.9)	(27)
Sales Tax	(27.2)	(100)
Utility Gross Receipts Tax	(21.4)	(100)
Intergovernmental	(6.8)	(64)
Cigarette Tax	(2.0)	(100)
Other Revenues	<u>(6.8)</u>	<u>(16)</u>
 Total County Revenue Reduction Estimate	 <u>\$(109.2)</u>	 <u>(71) %</u>

The Plan specifies that the property tax for general operating purposes would be eliminated. It also is our understanding that the merchants and manufacturers tax would be rolled back except for the business surtax. In estimating the reductions in County Government's sales, utility gross receipts, intergovernmental and state cigarette taxes (see table above), it was assumed that they would be shifted to the proposed municipalities. Further, it was assumed that a portion of other revenues would be shifted from the County to the proposed municipalities since these revenues relate to municipal services currently provided by County Government.

C. County Government Expenditures

Implementation of the Plan would also result in a reduction of County Government expenditures. County Government's 1987 base expenditures were \$153.8 million. It was estimated that, had the Plan been in effect in 1987, the County would have experienced a \$43.2 million (or 28 percent) expenditure reduction due to reorganization.

The following table presents expenditure reduction estimates, based on data for fiscal year 1987, by department.

Estimated County Expenditure Reductions By Department
Fiscal Year 1987

<u>Department</u>	<u>Fiscal Impact</u> <u>(\$ Millions)</u>	<u>Percent Change</u>
Police	\$(21.9)	(70)%
Highways and Traffic	(15.1)	(59)
Revenue	2.0	62
Public Works	(3.2)	(29)
DOCHMC	(1.5)	(6)
Administration	(1.6)	(22)
Parks and Recreation	(0.9)	(7)
Planning	(0.6)	(50)
Other Departments*	<u>(0.4)</u>	<u>(1)</u>
Total County Expenditure Reduction Estimate	<u>\$(43.2)</u>	<u>(28)%</u>

*Net reductions and additions for other departments.

The 1987 base expenditure estimates were developed using the County's 1988 Budget Plan and 1987 Comprehensive Annual Financial Report (CAFR). Budget amounts for 1986, 1987 and 1988 were reviewed to determine the need for any adjustments to the 1987 base expenditure estimates. The 1987 budget amounts were then compared to 1987 actual expenditures to identify any major budget variances; the 1987 base expenditure estimates were adjusted accordingly.

The estimated expenditure reductions were primarily based on assumed staffing reductions, with the largest reductions estimated for the Police, Highways and Traffic, and Public Works departments. It was assumed that many responsibilities (e.g., patrol, County road maintenance and code enforcement) would be shifted to the proposed municipalities. The only major expenditure increase was estimated for the Revenue Department which would be responsible for collecting the earnings tax.

These expenditure reduction assumptions were formulated in conjunction with the County Budget Office as well as the affected departments. Surveys were sent to those departments expected to experience the most substantial expenditure impacts. Follow-up interviews were conducted with several departments. Finally, the results of the analysis were reviewed with the County Executive.

V. Municipal Fiscal Impact

A. Overview

As noted in earlier pages, the principal outputs of the municipal fiscal impact analyses are municipal profiles illustrating the potential impact of the Plan on each proposed city's revenues and expenditures had the Plan been in effect for fiscal year 1987. As was stated with respect to the County impact profile, the municipal profiles do not represent forecasts or projections of future events. The profiles for the 37 municipalities proposed in the Plan are presented in Appendix C.

B. Basic Operating Revenues

Basic operating revenues were defined to include all funding sources required to fund basic operating expenditures. Those revenues include the following sources:

- Property Tax;
- Residential Utility Tax;
- Nonresidential Utility Tax;
- Sales Tax;
- Intergovernmental Tax;
- Other Revenue; and
- Business Surtax.

The methodologies employed for estimating these revenues are summarized below.

1. Property Tax

The property tax is levied against real property, personal property and state and local assessed railroads and utilities. Countywide taxable assessed values for real property were reallocated by the Planning Department to the proposed cities by using the County's computerized parcel file and recompiling school district subcode assessed valuation estimates by parcel.

School subcodes were used by the Planning Department to support the development of estimates for personal property, railroad realty and utility realty. As with the development of population estimates, the recompilation of assessed valuation by school subcode for each proposed city was dependent upon "redigitizing" proposed municipal boundaries in relation to these subcodes.

A range of \$0.00 to \$0.93 per \$100 of assessed value was used for municipal property operating levy rates. The rate for each city was based on the incremental revenues needed to fund estimated operating expenditures. The property tax estimates exclude existing cities' mandated debt rates, some special levies for nonbasic operations as defined herein and some capital improvement expenditures as noted on each profile.

2. Utility Gross Receipts Tax

The utilities tax was estimated by the Planning Department using two bases -- the residential base and nonresidential base. Actual consumption data for 1987 was used to estimate each base through a step-down approach. Actual tax payment data were obtained from the four largest utilities serving the County: Union Electric, Laclede Gas, St. Louis County Water Company and Southwestern Bell.

Union Electric and St. Louis County Water Company also provided actual consumption figures (distributed by residential and nonresidential usage) for all municipalities, including those that do not levy utility gross receipts taxes. Laclede Gas Company provided revenues subject to the sales tax on nonresidential utility consumption for those municipalities which do levy utility gross receipts taxes. Southwestern Bell Telephone Company was unable to distinguish residential and nonresidential consumption, and the telephone tax payment data covered only those cities which levy utility gross receipts taxes.

For Laclede Gas, actual tax payment data were then converted to consumption estimates (expressed in dollars) based on current tax rates. Gas and telephone consumption estimates were computed for remaining cities (e.g., those for which complete data were unavailable) using the following ratios: electric (54.9%), gas (24.8%), telephone (15.4%) and water (4.9%).

For cities that do not levy a utility gross receipts tax, the proportion of gas consumption attributable to nonresidential consumers was derived from cities with proportions of nonresidential electrical use similar to that of the city in question. The nonresidential telephone use for each city was then assumed to be the same as the proportion of nonresidential use for the other three utilities.

Residential consumption estimates for the existing cities were then used to estimate residential consumption for the proposed cities. Household consumption rates were based on household data derived from the population estimates discussed earlier.

Adjustment factors were then developed for each proposed city (i.e., the ratio of the average household consumption of the existing cities within the proposed city to the average countywide consumption per household).

The unincorporated average was used for proposed cities where information was not available. Residential consumption for each proposed city was then calculated as a product of housing units and adjusted consumption per household. Existing residential utility tax rates were used to estimate revenues for existing cities, except where a higher rate was required to balance a deficit.

Nonresidential consumption was calculated for the proposed cities based on ratios developed from data on existing cities; the ratios reflected a relationship between nonresidential improvement assessed value and nonresidential consumption. Ratios for existing cities within each proposed city were applied to the commercial improvement assessed value of those cities.

3. Sales Tax

To estimate municipal sales tax revenues, the Planning Department used a sales tax base of \$93.5 million, the actual 1987 countywide one percent sales tax receipts for St. Louis County, less an estimated \$0.8 million generated at St. Louis Lambert International Airport. It further assumed a point-of-sale distribution of 25 percent and per capita distribution of 75 percent of the sales tax revenues.

The estimated 1987 population for the County was 999,700. After the proposed municipal boundaries were "redigitized" in relation to census tract, block and parcel components, the number of dwelling units within each census tract and block for each proposed city were determined by the Planning Department from countywide real estate records.

The Planning Department then used average household size assumptions to develop population estimates by census tracts for each of the proposed cities. These population estimates were then added and compared against the total population estimate. Whenever proposed City boundaries varied from census tract boundaries, a share of census tract population assigned to each new city was based on the proportion of single-family and multi-family dwelling units within each city. The reliability of the fiscal impact estimates for the individual cities depend in large measure on the reliability of the population estimates.

4. Intergovernmental Revenue

State intergovernmental revenue was defined to comprise two sources, the cigarette tax and motor vehicle fuel tax. These taxes are distributed to municipalities (as well as the County for unincorporated areas) on a per capita basis. The Planning Department employed the same methodology in allocating these revenues to the proposed cities. Intergovernmental revenue was calculated by multiplying County per capita fuel and cigarette tax rates (\$17.16 and \$5.99, respectively) by city population.

5. Other Revenue

Other municipal revenue (e.g., licenses, permits and miscellaneous revenues) was calculated as 18.25 percent of total calculated basic expenditures (i.e., general, police, public works, and parks). This rate was based on current relationships between actual other municipal revenue and total basic expenditures for core cities. Actual revenues were used for some cities to reflect current fee structures.

6. Business Surtax

Business surtax revenue reflects the existing business surtax revenue received by certain cities. The business surtax was established in 1985 to replace the merchants and manufacturers tax on inventories. It was established only for those entities who levied a merchants and manufacturers tax on inventories at that time.

C. Basic Operating Expenditures

Price Waterhouse developed a fiscal impact model to analyze 1987 basic operating expenditures for 30 existing cities and provide a basis for estimating such expenditures for proposed cities under the Plan. Basic operating expenditures were defined to include general government, police, public works, parks and recreation and debt service for existing capital projects. Excluded from these expenditures were costs associated with municipal fire departments, enterprise or "quasi-enterprise" activities, planned capital projects and extraordinary, nonrecurring events.

In analyzing the statistical relationships between existing municipal expenditures in the County and a variety of independent variables, assessed value was determined to be an important predictor of municipal expenditures. The Board established a policy to increase the expenditures (and thereby the service levels) of the less affluent cities.

At the direction of the Board, this was achieved through the fiscal impact model by increasing the assessed values of the less affluent cities to the average assessed value for all proposed cities in the County. (Note that this was done only for the purpose of estimating expenditures, not revenues.)

At the Board's direction, estimated costs for general government, police, public works and parks and recreation were not allowed to vary from existing costs more than a predetermined percent on a per capita basis for cities with a per capita assessed value greater than \$9,000 (approximately the County average in 1987). For cities with a per capita assessed value below \$9,000, cost estimates were calculated using a per capita assessed value of \$9,000. Current per capita costs were not used as parameters to limit expenditure estimates for these cities.

1. General Government

General government activities were identified as legislation, administration, finance, boards and commissions, personnel, purchasing, legal, municipal court, insurance, and other miscellaneous activities.

A formula was derived using multiple regression analysis, with density and total assessed value emerging as the most important factors. For proposed cities that would be significantly reorganized, general government costs were calculated using the formula. Actual 1987 costs were used for the cities that would basically be unchanged by the Plan. For the other cities, the greater of the calculated or 1987 actual cost was used.

2. Police

This function includes police and dispatch expenditures. For proposed cities that would be significantly reorganized, the regression formula was used, with population, total assessed value and calls for police service emerging as the most significant indicators. The actual 1987 costs were used for the cities that would be unchanged. The greater of the calculated or 1987 actual police expenditure was used for the other cities.

3. Public Works

This function includes routine street maintenance and repair, snow and ice removal, engineering, building inspection, code enforcement, planning and zoning, street lighting, municipal building maintenance, vehicle maintenance and central garage

operations. Many data which could have proven useful in estimating public works costs were not readily available (e.g., the age and current condition of streets, lane miles, and average per capita planning and zoning costs).

For proposed cities that would be significantly reorganized, the regression formula was used, with total assessed value and number of dwelling units emerging as the most significant indicators. The actual 1987 costs were used for the cities that would be unchanged. The greater of the calculated or 1987 actual public works expenditures was used for the other cities.

4. Parks and Recreation

Expenditure requirements for parks and recreation can be difficult to measure; they may vary widely by city depending on a variety of factors. Many potential indicators of such expenditure needs were not readily available for this project.

The regression formula used single family dwelling units and sales tax revenue as the most significant indicators. Actual 1987 costs were used for the cities that would be unchanged. The greater of the calculated or 1987 actual parks and recreation expenditures was used for the other cities.

Some cities with extensive parks and recreation programs funded by user fees were provided an additional allocation for parks and recreation services to accommodate the extension of such services to the unincorporated areas added to their cities. At the direction of the Board, parks and recreation expenditures for certain new or significantly reorganized cities which do not currently offer parks and recreation programs were calculated at \$50,000 per 10,000 population.

5. Capital Projects Debt Service

This represents existing, annualized debt service for the existing cities and smaller municipalities as indicated by the municipal financial statements or municipal surveys. This number was reduced, based on municipal input, for debt which would expire or potentially expire before the Plan takes effect.

Several cities in the County fund capital projects from operating surpluses rather than through the issuance of debt. Alternative methods for estimating operating surpluses (e.g., using ten percent

of basic operating expenditures) were presented to the Board. At the direction of the Board, operating surpluses for capital projects were eliminated from the fiscal profiles.

D. Other Surpluses/(Deficits)

These expenditures include municipal expenditures other than basic operating expenditures. These expenditures are shown net of any revenues which are associated with the expenditures (e.g., municipal golf course fees).

1. Enterprise Funds

This item includes the total enterprise fund net income for all enterprise funds in the existing city. It was assumed that new cities and existing cities which do not have enterprise funds would not have enterprise funds as a result of the Plan.

2. Trash/Sanitation Services

This item includes net revenues and expenses for trash collection. Generally, for proposed cities which would include existing cities, trash service was extended to the unincorporated areas at the existing cities' subsidy levels (where trash service in the existing city is currently provided). For proposed cities which would not include existing cities, residents were assumed to primarily use private trash collection services; therefore, it was assumed that trash collection revenues and expenses for these new cities would be zero.

3. Auxiliary Services

This item includes revenues and expenses related to such programs as municipal swimming pools and community centers. Existing data were used for existing cities. It was assumed that new cities would not have auxiliary services as a result of the Plan.

4. Auxiliary Capital Projects Debt Service

Auxiliary capital projects debt service includes any annualized debt service expenditures or debt related to auxiliary services.