

Appendix 1

Justice Expenditure and Employment

Data Survey methodology and definitions of terms

Note: The following information has been excerpted from U.S. Department of Justice, Bureau of Justice Statistics, *Justice Expenditure and Employment Extracts* [Online]; and *Trends in Justice Expenditure and Employment* [Online]. Available: <http://www.ojp.usdoj.gov/bjs/eande.htm>.

Historical overview

The Bureau of Justice Statistics (BJS) began the collection of justice expenditure and employment data with fiscal 1971, using a special sample drawn by the U.S. Census Bureau especially for this purpose. The annual Survey of Criminal Justice Expenditure and Employment (CJEE Survey) provided comparable trend data from 1971 to 1979. That survey was the source of detailed, comprehensive statistics on the justice activities of the Federal, State, and local governments. Each annual survey resulted in a preliminary report or BJS Bulletin, a publication of detailed tabulations of national and State-local estimates, as well as individual government data, a volume displaying trends since 1971, and additional data accessible on magnetic tape.

In 1980, BJS discontinued the CJEE Survey for budgetary reasons following the collection of 1979 data. The cancellation of the CJEE Survey left a gap in national criminal justice statistics, which the CJEE Extracts series is designed to fill, albeit on a limited basis. Instead of presenting data based on a separate survey, the CJEE Extracts contains justice expenditure and employment data from the Census Bureau's annual sample surveys of government finances and public employment.

Those Census Bureau surveys traditionally have provided limited data on the justice sectors of police protection (from 1902) and corrections (from 1954), with slightly more data being collected for State governments and the largest local governments. Beginning with 1982 these surveys began collecting "judicial and legal services" data as a separate category, allowing estimation of total justice expenditure and employment from the Census Bureau surveys, using the criminal justice data

from the Census Bureau's annual government finance and employment surveys.

Special surveys in 1985, 1988, and 1990 collected CJEE Survey data that are comparable to data for 1971 to 1979. The current Extracts methodology produces considerably less detailed information than is available from those special CJEE Surveys. Another significant difference, which is not as noticeable, relates to the comparability of the CJEE Extracts variables to the variables in those CJEE Surveys. In many instances, variables of the same name are not comparable between the two programs. While great care was taken to adjust the source data to maximize comparability with the CJEE Survey data, some differences remain.

In making trend comparisons, users should limit their analysis to one of the two sources: long-term trends for 1971-79, 1985, 1988, and 1990 from the CJEE Survey series; or more recent trends from 1980 using the CJEE Extracts data.

Sample design

The CJEE Extracts data are assembled from data collected through the Census Bureau's annual surveys of government finances and public employment. The samples of local governments for those surveys are drawn from the most recent available Quinquennial Census of Governments. The samples consist of all large local general purpose governments above a certain population threshold (certainty units) plus a sample below the certainty level. The samples also include certain independent school districts and special districts, for which justice data are not collected. For detailed information about the sample for any given year, contact askbjs@ojp.usdoj.gov.

Survey period

The Federal Government expenditure data are for the fiscal year, which ends on September 30 of the year indicated; for example, 2006 data are for the period Oct. 1, 2005 to Sept. 30, 2006.

The State expenditure data presented cover fiscal years ending June 30 for all States except four whose fiscal years ended as follows: New York, March 31; Texas, August 31; and Alabama and Michigan, September 30 of the year indicated. For local governments, the fiscal years reported are those that closed between July 1 and June 30. Most municipalities and counties end their fiscal years on December 31 or June 30. Thus, some local jurisdictions that ended their fiscal year on December 31 are included in the spreadsheets for the following

year. The fiscal years reported for the District of Columbia ended on September 30 of the year indicated.

Some agencies operate on a different fiscal year basis from the parent government. In such instances, figures included are for the agency's fiscal year that ended within the parent government's regular fiscal year.

The employment data are for the month of October for years prior to 1997. Beginning in 1997, employment data are for the month of March.

Data collection

The CJEE Extracts data are from a special compilation of data and sources available from the Census Bureau's regular surveys of government finances and public employment. The recurrent surveys of government finances and public employment provide data on expenditure and employment, by function of the Federal, State, and local governments (counties, cities, townships, independent school districts, and special districts). The data collection procedures of these surveys for the expenditure and employment data are described below.

Annual Government Finances Survey

Federal Government financial data were obtained from actual data presented in the *Budget of the United States Government* for each fiscal year displayed. The methodology for collecting the Federal financial data was changed in 1998. Previously the Census Bureau performed an extensive compilation of the Federal budget data for the purpose of bringing it in line with Census Bureau definitions. Beginning in 1998, the data were taken directly from the *Budget of the United States Government* using definitions of justice functions contained in the budget. The Census Bureau had included justice expenditures of nonjustice agencies. However, most of this expenditure is coded under other-than-justice functions in the Federal budget.

State finance statistics as well as those for large counties and cities were compiled by Census Bureau representatives from official reports and records, with the advice of State and local officers and employees. The data were compiled from State government audits, budgets, and other financial reports, either in printed or electronic format. The compilation generally involved recasting the State financial records into the classification categories used for reporting by the Census Bureau.

The initial local government data collection phase used two methods to obtain data: mail canvass and central collection from State sources. In about 30 States, all or part of the data for local governments were obtained from cooperative arrangements between the Census Bureau and a State government agency. These usually involved a data collection effort carried out to meet the needs of both agencies--the State agency for purposes of audit, oversight, or information, and the Census Bureau for statistical purposes. Data for the balance of local governments in the annual surveys were obtained via mail questionnaires sent directly to county, municipal, township, special district, and school district governments.

The mail canvass involved the use of detailed Census Bureau schedules with related reporting instructions. Census Bureau examiners reviewed the mail reports and used extensive correspondence to supplement and verify incomplete and questionable information.

As with mail canvass questionnaires, centrally collected financial data sometimes needed supplementation for such items as debt, assets, or particular functional expenditures or revenue items. Census Bureau staff obtained these supplementary data from special tabulations in other State offices, printed reports, secondary sources, or from mail requests directly to the county, municipal, or township governments.

Through these efforts, expenditure information was obtained for the Federal Government, all State governments, and all large county and city governments.

Annual Public Employment Survey

Federal Government civilian employment data were obtained from records maintained by the U.S. Office of Personnel Management. These records did not provide the information necessary to compute Federal full-time equivalent employment.

State government data were collected through a mail survey of all State departments, agencies, and institutions. In approximately half of the States employment data are collected centrally for the State government. In some cases additional mail supplementation is necessary. As with the Finance Survey these States change from year to year. A sample of local governments also was surveyed by mail questionnaire. State agencies and local governments that did not respond by the close of the request period received followup re-

quests. Second request mail consisted of post card reminders. Third request mail was a second mailing of the original request with a survey form. Mail returned to the Census Bureau because of address problems was readdressed and remailed. In addition, large governments that had not responded for several years were contacted by telephone to identify the appropriate office or individual to receive and complete forms.

After extensive nonresponse followup, useable replies were received from more than 70% of the sample canvassed for the 1993 Survey of Public Employment, and similar response levels were achieved in other years.

Data review and adjustments

Once the data are collected, intensive computer editing of the data at various stages of processing minimizes errors that may be introduced during processing in the annual finance and employment survey programs. For the mail portion of the surveys, figures reported by government officials are generally accepted as being substantially correct. In some cases varying interpretations of the instructions or deficiencies in the responding governments' records may make it difficult for officials to render complete and accurate reports for their governments.

These difficulties are handled by: careful definition of terms and detailed instructions in difficult cases; supplemental correspondence and telephone followup to officials; and intense examination of data collected through verification of internal consistency and comparison with previous reports and other sources of data.

The data extracted from the regular Census Bureau programs for the CJEE Extracts received additional examination. After compilation for the general finance survey a special reviewer examined in detail the expenditure data for State governments and large local governments, and investigated special data compilation problems in order to adjust the data as needed. The local government expenditure and employment estimates were reviewed, potential problems investigated, and data were revised, where necessary. Data for each of the States and large counties and cities displayed individually in the CJEE Extracts tables and spreadsheets were scrutinized and compared to prior years' data. A separate computer edit was then performed. Where possible, both expenditure and employment data were adjusted to correct errors, reclassify activities, and narrow differences with the CJEE Surveys. Specific procedures included referring to alternate sources of data, estimating miss-

ing data, and refining data through proration (for example, sheriff offices, where some employees perform police functions, others perform judicial functions (bailiffs), and others perform corrections (jail) functions).

Data limitations

The survey sample for the local government CJEE Extracts justice expenditure and employment estimates was not designed specifically to produce data on these activities. Thus, the sampling variability, or "standard error," for the justice sectors may be larger than for the major categories in the Census Bureau's regular surveys and for the same functions in the CJEE Survey series. The "standard error" is a measurement of variation among the estimates from all possible samples, of which this is one, having the same size and selected using the same sampling design. Estimates derived from the different samples would vary from each other (and also from a complete census using the same data collection procedures). The standard error, therefore, measures the precision with which an estimate from one of these samples approximates the average result of all the possible samples.

Interval estimates with a prescribed confidence level can be calculated for each statistic by using the sample estimate and the standard error as estimated from the sample. For example, a 90% confidence interval can be constructed by adding 1.6 times the estimated standard error to the estimate and subtracting 1.6 times the estimated standard error from the estimate. If intervals were constructed in such a manner for all possible samples of the same design and size, about 90% of them would include the complete enumeration statistic.

In reviewing the sample-based estimates, bear in mind that, because State government figures are not subject to sampling variation, the State-local aggregates shown for individual States are more reliable (on a relative standard error basis) than the local government estimates they include. Conversely, the sampling variability for smaller components, such as type of local government detail, is likely to be greater than that for the State and local total estimates. Because the national estimates of local government expenditure and employment are based on summations of individual State data, they are more reliable than the State-area data.

The data also are subject to possible inaccuracies in classification, response, and processing. Every effort was made to keep such errors to a minimum through care in examining, editing, and tabulating the data submitted by government officials. Followup proce-

dures were used extensively to clarify inadequate and inconsistent survey returns.

Readers should be generally cautious in comparing governments because differences among States and local governments in functional responsibilities, governmental structure, degree of urbanization, and population density can affect the comparability of expenditure and employment data. For example, some State governments directly administer certain activities that elsewhere are undertaken by local governments, with or without fiscal aid, and the same variation in the division of responsibilities exists for counties and cities.

Data differing from other publications

The CJEE Extracts data differ in some cases from the Census Bureau's annual finance and employment survey data because of the more extensive review procedures used for this special compilation, the refinements of the data involved, and certain definitional differences. The CJEE Extracts trend data for 1985, 1988, and 1990 also differ from those published by BJS in its CJEE Survey series. Those CJEE Survey data should be used in trend analyses with other CJEE Survey data for 1971-79. The 1985, 1988, and 1990 CJEE Extracts data should be used in trend analyses only with other CJEE Extracts data.

Definitions of terms and concepts

Following is a glossary of terms and concepts used in the CJEE Extracts program and comments regarding their limitations. These definitions are based largely on those used in the Census Bureau's governmental finances and employment statistics program.

Federal Government--the term Federal encompasses all activities of the United States Government other than employment of the Armed Forces. District of Columbia data are excluded from this category and included with data for municipalities.

State governments--this category refers to the governments of the 50 States that constitute the United States.

Local governments--the Census Bureau classifies local governments by five major types: county, municipality, township, independent school district, and special district.

Population--the "resident population" data used are for July 1 of each year from the U.S. Census Bureau, Current Population Reports. They are consistent with the 1980 and 1990 decennial enumerations and they do not include adjustments for

census coverage errors. They are the most current estimates available when the tables were assembled. The data in the trend tables may differ from population data used in single year tables earlier in this series and in other sources that used estimates available at the time they were prepared.

Governmental expenditure

Expenditure--all amounts of money paid out (net of recoveries and any correcting transactions) other than for retirement of debt (including interest), investment in securities, extensions of loans, or agency transactions. It includes only external cash payments and excludes any intragovernmental transfers and noncash transactions, such as the provision of meals or housing of employees. It also includes any payments financed from borrowing, fund balances, intergovernmental revenue, and other current revenue. In several instances, two or more governments share the expense of maintaining a court or a justice agency. In these cases, the allowable direct expenditure amount is reported for each government in the appropriate category.

When a government pays pensions directly to retired employees from appropriated funds, such payments are included as expenditure of the government concerned. However, State and local government contributions to retirement systems they operate are not included in expenditure data because many governments make lump-sum contributions to plans covering all government employees and cannot report separately for justice employees. Neither in governments' basic accounting records (from which criminal justice expenditure figures are drawn) nor in the records of their general-coverage employee benefit systems is there usually any breakdown of amounts contributed in terms of the various agencies or functions involved. Nor has an adequate procedure for calculating the proportion of such contributions allocable to justice employees been developed because of the wide variation in the coverage of various plans, employee status requirements, benefit rates, and so forth. Expenditure is divided into major categories by character and object as follows:

Direct expenditure--is all expenditure except that classified as intergovernmental and is further divided into two categories:

Direct current--includes salaries, wages, fees, commissions, and the purchase of supplies, materials, and contractual services.

Capital outlay--includes expenditure for the three object categories of construction, equipment, and purchase of land and existing structures.

Data are presented separately in the CJEE Extracts program for State construction of correctional institutions; the "other" category in those tables includes equipment and the purchase of land and existing structures.

Construction--production of fixed works and structures as well as additions, replacements, and major alterations thereto undertaken either on a contract basis by private contractors or through force account construction by the employees of the government. Included are the planning and designing of specific projects; grading, landscaping, and other site improvement; and providing equipment and facilities that are integral parts of the structure.

Expenditure for interest on general debt, assistance and subsidies, and insurance benefits are not applied to specific functions because they are not ordinarily available on a functional basis from government financial reports. In instances where bonded or mortgaged general indebtedness is identified for specific purposes, the interest payments are aggregated with other interest expenditures, which makes reliable and consistent breakouts of such data over a long period of time impossible.

Intergovernmental expenditure--comprises payments from one government to another, including grants-in-aid, shared revenues, fiscal assistance, and amounts for services performed by one government for another on a reimbursable or cost-sharing basis (for example, payments by one government to another for boarding prisoners). It excludes amounts paid to other governments for purchase of commodities, property, or utility services; any tax imposed and paid as such; and employer contributions for social insurance (for example, contributions to the Federal Government for old-age, survivors', disability, and health insurance and local government payments to State-operated retirement systems on behalf of their employees).

Total expenditure--is direct and intergovernmental expenditure of a government or type of government. In the expenditure tables, certain totals have been adjusted to exclude duplicative intergovernmental expenditure amounts. For example, money paid by a State government to a county government within that State is reported by the State government as an intergovernmental expenditure and by the county government as a direct expenditure when the money is spent (for salaries, wages, equipment, and so forth). Therefore, to arrive at a combined State-local government total that does not duplicate these transactions, intergovernmental expenditure amounts are deducted from the State-local total because those

amounts also are reflected in the direct expenditure of the recipient government. The same treatment is used for intergovernmental payments between counties and municipalities within the same State when computing local totals. Totals reported for "all governments" also are adjusted to exclude duplicative intergovernmental expenditure involving the Federal Government.

Governmental employment

Employment and employees refer to all persons gainfully employed by and performing services for a government. Employees include all persons paid for personal services performed, including persons paid from federally funded programs, paid elected officials, persons in a paid-leave status, and persons paid on a "per meeting," annual, semiannual, or quarterly basis. Unpaid officials, pensioners, persons whose work is performed on a fee basis, and contractors and their employees are excluded from the count of employees.

This definition includes two classes:

Full-time employees--include those persons whose hours of work represent full-time employment in their employer government during the pay period including October 12 for 1980-95. Generally, it includes full-time temporary or seasonal workers employed during that pay period. Beginning in 1997, the reference month changed from October to March.

Part-time employees--are those persons who work less than the standard number of hours for full-time work in their employer government and persons paid by more than one government.

Full-time equivalent employment--is a statistical measure that estimates the total workforce accounting for the less than full-time employment of part-time employees. Prior to 1986, the formula for computing full-time equivalent (FTE) employment was payroll-based; specifically, it was calculated by dividing the total payroll amount (full-time plus part-time) by the full-time payroll amount and multiplying the resulting quotient by the number of full-time employees. Beginning in 1986, it is computed by dividing the part-time hours paid by the standard number of hours for full-time employees in the particular government and then adding the resulting quotient to the number of full-time employees. In both formulae, the calculation is performed separately at the individual function type for each respondent government. Consequently, summaries by State, type of gov-

ernment, and function are aggregates of individual calculations.

The formula was changed because the previously used payroll-based formula necessarily assumed that there is little or no difference between average wage rates for full-time and part-time workers--however, this is seldom the case. Part-time pay scales are generally below those for full-time workers, thus resulting in an understatement of full-time equivalent employment. The understatement was estimated at between 2.8% and 3.8% at the national level. The previously used payroll-based methodology may also produce a "trend bias" if the rate of change in part-time employment is different from that in full-time employment. Users should keep in mind the expected understatement of FTE in years prior to 1986 when making trend comparisons.

October/March payrolls--represent gross payrolls for the 1-month period of October or March and comprise the gross payroll before deductions. It includes all salaries, wages, fees, or commissions paid to employees during the pay period including October 12 for 1980-95. Beginning in 1997, the reference month changed from October to March. Payroll amounts reported for a period other than 1 month were converted to represent 1-month amounts.

Governmental functions

General government functions include all activities other than those classed as public utilities (water supply, electric power, gas supply, and transit systems), liquor stores (dispensaries operated by 17 State governments and by local governments of 6 States, as of 1992), and insurance trust systems (no employment data are associated with insurance trusts). All government functions include the latter.

Justice--is the combined functions of police protection, judicial and legal services, and corrections as defined below. As noted below, it consistently includes civil justice functions as well as criminal justice functions where criminal functions cannot be segregated in available source documents.

Police protection--is the function of enforcing the law, preserving order and traffic safety, and apprehending those who violate the law, whether these activities are performed by a police department, a sheriffs' department, or a special police force maintained by an agency whose primary responsibility is outside the justice system but that has a police force to perform these activities in its specialized area (geographic or functional). This category includes: regular police

services; police patrols and communications; crime prevention activities; temporary lockups and "holding tanks"; traffic safety and engineering (but not highway planning and engineering); vehicular inspection and licensing; buildings used exclusively for police purposes; the maintenance of buildings used for police purposes; medical examiners and coroners; law enforcement activities of sheriffs' offices; and unsworn school crossing guards, parking meter readers, and animal wardens, if employed by a police agency.

Private security police are outside the scope of the survey.

The special police forces included in the data are only those that are part of a general purpose government. Special police forces that are part of independent school districts or special districts are not included in the data because these districts are not general purpose governments.

Police protection employment data are further divided between sworn employees, which represent persons with the power of arrest, and nonsworn employees, which are all others.

In most States, sheriffs' departments are multifunctional agencies providing police protection, judicial, and/or correctional services. In order to allocate expenditure and employment data to the proper activity, the data for sheriffs' departments are prorated, resulting in differences from other police reporting programs such as BJS's Law Enforcement Management and Administrative Statistics program and the FBI's Uniform Crime Reporting program, which report the numbers of employees in law enforcement agencies regardless of functions performed.

Short-term custody and detention are considered part of the police protection function. Data for lockups or "tanks" holding prisoners less than 48 hours are included in the police protection category. Data for institutions with authority to hold prisoners 48 hours or more are included in the corrections category.

Judicial and legal services--covers all civil and criminal activities associated with courts, including prosecution and public defense.

The "judicial and legal services" category in the CJEE Extracts series includes the following court functions covered as a separate category in the periodic CJEE Survey: civil and criminal functions of courts at all levels of legal jurisdiction-- appellate (last resort and intermediate), general jurisdiction, and limited jurisdiction; activities associated with courts, such as law libraries, grand juries,

petit juries, and medical and social service activities (except probation, which is classified as corrections where separately identifiable); court reporters, judicial councils, bailiffs, "register of wills," and similar probate functions; and court ("civil") activities of sheriffs' offices in some jurisdictions.

Also included in the "judicial and legal" category are all civil and criminal justice activities of prosecution and legal service agencies. It includes the following prosecution and legal service activities covered as a separate category in the periodic CJEE Survey: attorneys general, district attorneys, State's attorneys, and their variously named equivalents; corporation counsels, solicitors, and legal departments with various names including those providing legal advice to the chief executives and subordinate departmental officers, representation of the government in law suits, and the prosecution of accused violators of criminal law; and various investigative agencies having full arrest powers and attached to offices of attorneys general, district attorneys, or their variously named equivalents.

These activities are included whether performed by one office or several because in some jurisdictions a single office provides all legal services, whereas in others a prosecutor's office handles only criminal matters and a separate attorney's office performs all civil legal services.

Also included in the "judicial and legal" category are the civil and criminal justice activities of public defenders, other agencies that provide legal counsel and representation in either criminal or civil proceedings, and other government programs that pay the fees of court-appointed counsel. It includes the following public defense activities covered as a separate category in the periodic CJEE Survey: court-paid fees to individually retained counsel; fees paid by the court to court-appointed counsel; government contributions to private legal aid societies and bar association-sponsored programs; and activities of an established public defender office or program.

This category excludes monetary judgments and claims or other payments of a government as a defendant in judicial or administrative proceedings, and legal units of noncriminal justice agencies, whose functions may be performed by a legal service department in other jurisdictions (such as a county counsel).

Corrections--is that function of government involving the confinement and

rehabilitation of adults and juveniles convicted of offenses against the law and the confinement of persons suspected of a crime and awaiting adjudication.

Corrections direct expenditure for State governments is further divided into two subcategories: correctional institutions and other corrections. Correctional institutions are any facilities for the confinement and correction of convicted adults or juveniles adjudicated delinquent or in need of supervision and for the detention of those adults and juveniles accused of a crime and awaiting trial or hearing. (Data for lockups or "tanks" holding prisoners less than 48 hours are included in the police protection category.)

Correctional institutions include: prisons and penitentiaries; reformatories; jails; houses of correction; other variously named correctional institutions, such as correctional farms, workhouses, industrial schools, and training schools; institutions and facilities exclusively for the confinement of the criminally insane; institutions and facilities for the examination, evaluation, classification, and assignment of inmates; and facilities for the confinement, treatment, and rehabilitation of drug addicts and alcoholics, if the institution is administered by a correctional agency.

When an institution maintains a prison industry or agricultural program, data on the cost of production or the value of prison labor used by agencies of the same government, if identifiable, are excluded (and classified as expenditure for the function using the product or services). Expenditure for the manufacture, production, sale, and distribution of goods produced for sale or use outside the government is included under this heading. It excludes the costs of maintaining prisoners in institutions of other governments, which are classified as an intergovernmental expenditure for which the "institutions" vs. "other corrections" distinctions are not applied.

Other corrections consists of all noninstitutional correctional activities including: parole boards and programs; pardon boards; non-residential resettlement or halfway houses for those not in need of institutionalization; probation activities and programs, even if administered by a court; correctional administration not directly connected to institutions; and miscellaneous items that cannot be directly related to institutional care. Payments to another government for boarding prisoners are classified as "intergovernmental expenditure" for which the "institutions" and "other corrections" distinctions discussed above are not applied. In practice, intergovernmental payments of this type are difficult

to detect for insignificant amounts between local governments.