Measuring Comprehensive Community Initiative Outcomes Using Data Available for Small Areas

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Introduction

Comprehensive community initiatives (CCIs), typically carried out within relatively small, geographically bounded communities, need information about those communities and their residents in order to plan and evaluate their work. Although extensive demographic, economic, and social indicators are available for the nation and other larger geographic units, neighborhood-level information is seldom produced routinely. Furthermore, because CCIs are comprehensive, they need information about a broad range of outcomes, tracked over multiple points in time. For all these reasons, it is desirable that CCIs draw upon existing data sources to derive information about small geographic areas.

Our purpose is to describe the many and varied kinds of data sources that have the potential to produce small area information for CCIs. The focus is on obtaining and using administrative, survey, and census data that are already being collected for other purposes and converting them into information for CCIs. We also address the important cautions and limitations of small area analysis and the application of data collected for other purposes to the measurement of community change. We attempt to cast a wide net by considering many domains that are important to CCIs, including housing, economic development, safety and security, education, service reform, and community building.

Advantages and Disadvantages of Available Data

The advantages of using available data to measure change are several. First, a retrospective baseline can be created because the measures use data that have already been collected. Second, communities can be compared with one another, since many data sources cover the entire city, district, or county within which the CCI target community is located. Third, geographic information system (GIS) technology makes it practical to manipulate data and build up to the desired units of geography through aggregation. Fourth, the data can be subjected not only to traditional time-trend and comparative analyses but also to spatial and ecological analyses.

There are, of course, disadvantages as well. Data collected for purposes other than the particular
evaluation or planning needs of CCIs may only approximate the concepts of interest. Also, because the available data sources vary considerably in their accuracy, care must be taken to adjust for or avoid data elements that are vulnerable to well-known errors. Finally, most available data do not capture the important social processes that go on among community residents and within and between community organizations. These important outcomes of CCIs require special measures and original data collection activities.

Establishing Geographic Boundaries

Although "community," as used in the term "comprehensive community initiative," is a social unit, a CCI must establish clearly demarcated geographic boundaries to acquire and use available data. Geographically bounded communities are often thought of as neighborhoods (Chaskin, 1995). Neighborhood definition is not always an easy task, however, especially when CCI participants disagree about boundaries or when the target area encompasses several neighborhoods.

Researchers have traditionally used census geography for the purpose of data aggregation, with census tracts and block groups serving as proxies for neighborhoods. (A census tract is a geographic area containing between 2,500 and 8,000 residents. A block group is a number of contiguous blocks within a census tract designed to contain about 250-550 housing units. Both designations are established by the U.S. Bureau of the Census.) Research on resident perceptions has shown that residents seldom agree on neighborhood boundaries, but that the average size of their perceived neighborhood is somewhat larger than their block group but smaller than their census tract (Coulton, Korbin, Chan, Su, and Wang, 1997). For convenience and comparability, CCIs often link boundary definitions to census geography, although GIS technology can support resident-defined boundaries as well.

The use of available data sources may present some limitations on geographic definitions. For example, although it is always desirable to obtain data at the smallest geographic unit available, for confidentiality purposes some data sources contain only census codes or administrative districts rather than individual addresses. This can reduce the flexibility of the CCI to set and change boundaries and still make relevant calculations.

If measures built upon available data are to be sensitive indicators of change, it is also important that the geographic boundaries used for data aggregation are commensurate with the real targets of the CCI at a particular point in time. If, for example, the CCI is working on different outcomes or is at different stages in particular sections of the neighborhood, the data should be aggregated so as to capture those differences.

Administrative Data

There is a long tradition of using data collected for administrative purposes to produce social
and economic indicators (Rossi, 1972; Annie E. Casey Foundation, 1997). The emphasis on outcomes and accountability in many social programs has raised additional interest in such information (Schorr, 1994). Most administrative agencies now have computerized record systems, and the advent of GIS technology makes it feasible to calculate indicators for smaller areas from those large data bases.

Numerous sources and types of data from administrative agencies can be used to produce measures useful for CCIs. Most data bases are maintained by local agencies, but a few state and federal data bases can be used for small area measures. Because of the local nature of much of the data, the descriptions in this chapter may not match exactly what is available in a particular locale. Although the list of data sources described here is long, it is not exhaustive. As shown in the table (table 2), the sources are grouped into six categories: housing, economy, safety and security, education, health, social services, and community resources and involvement. These categories reflect the primary uses to which the data have been put, although most sources are applicable in several categories when combined with other information.

**Housing-Related Data Sources**

Many CCIs are interested in improving housing in their communities. Data from a variety of sources can be used to develop indicators of housing stock, conditions, and markets in small areas. Available information covers housing characteristics, condition and quality, construction and demolition, and financing.

**Home Mortgage Disclosure Act (HMDA) Information**

The Home Mortgage Disclosure Act (HMDA), enacted in 1975 and implemented by the Federal Reserve Board, requires covered institutions to compile and disclose data about loan applications they receive and home purchase and home improvement loans they originate or purchase during each calendar year. Institutions required to file HMDA data include commercial banks, savings and loans, credit unions, and mortgage companies that meet specific criteria.

The data are maintained in the institution's Loan Application Register (LAR). Each LAR record contains loan/application information such as type, purpose, amount, and action taken. Each record also contains some applicant and co-applicant characteristics, such as race, gender, and gross annual income. Information about the property location, such as the census tract, county, metropolitan statistical area (MSA), and state is also recorded. In addition, each record includes a few variables about the census tract, such as population, number and percent of minority population, median income, and number of owner-occupied units.

Another record, the Transmittal Sheet (TS), contains information about each financial institution, including name, address, parent company name and address, and tax identification number. The LAR and TS data can be linked by using a respondent identification and agency
These data, available on reel, cartridge, and CD-ROM from the Federal Reserve Bank's Federal Financial Institutions Examination Council (FFIEC), are issued annually, with each year's data released in the fall of the following year. An order form can be downloaded from http://www.ffiec.gov/hmda. Additional information about the data, such as reporting criteria and background information, can also be found on the web site.

Several small area indicators can be developed from the HMDA data. The total numbers of loans applied for, approved, denied, or withdrawn can be determined, along with reasons for denial. The purpose of the loan/application (to purchase, improve, or refinance a home) is available, as is the type (conventional, FHA, VA, or FmHA). Demographic characteristics of loan applicants and co-applicants are also available. From this information, evaluators can compute approval and denial rates for the small area based on race, gender, and income of applicants; approval and denial rates by financial institution; financial institutions' shares of lending in a particular area or to a particular group; and the lending patterns of specific financial institutions.

The data have been used by fair housing groups to examine lending patterns in communities and to test for evidence of discriminatory practices. Public officials have analyzed the performance of financial institutions in meeting the housing credit needs of their communities. The economic stability of a neighborhood can also be assessed by computing trends in commercial lending and conventional mortgage activity.

**Local Property Tax Data**

A wide variety of information about every parcel of property is collected and maintained by the local auditor or assessor office for the purpose of levying taxes. These records contain three types of information: tax billing records, characteristics data, and deed transfer data. The tax billing record includes parcel number, parcel size, owner name and address, land and building assessed values, property class, land use codes, gross taxes, special assessments, and delinquency status. The characteristics data include parcel number, number of rooms, year built, lot size, land use code, and roof type. The deed transfer data includes information about property sales and transfers, names of buyer and seller, address of property, sales amount, date of sale, and deed type. The tax billing and characteristics data are available annually, and the deed transfer data are available monthly. All three types can be linked by parcel number.

Although these are public records, obtaining them in useable formats for analysis can be difficult in some regions. Some local offices provide the data electronically, while others may not have the resources to do so.

Some of the same property information is contained in a commercial software product known as
MetroScan, published for approximately 130 counties nationwide by Transamerica Information Management. Primarily intended for use by realtors, the MetroScan data base includes the census tract and block code for each parcel, as well as some school district information, and gives the user the ability to print county and street maps. The MetroScan data base can be searched by a number of variables, including tract, street, and property type. Although the data can be exported in several formats, the user can export only 5,000 records at a time. Although cumbersome for an area with a large number of properties, this process can be quite convenient for a more modest neighborhood. Information on MetroScan can be obtained at http://www.transamerica.com.

Small area indicators that can be developed from real property data include the market and assessed values of homes, median and average sales prices, volume of property sales and transfers, number of sales by deed type (such as sheriff, trustee, or warranty), and number of tax delinquent properties. All these indicators can be computed by property class (residential, commercial, or industrial), land use (single family, commercial warehouse, manufacturing plant, etc.), and geographic area.

The data have been used to study small area trends in housing values and the market for real estate. Other studies have examined the pattern of population movement by linking deed transfers for sale and purchase, thus tracking where individuals are buying and selling property. These and other indicators have been used together to assess neighborhood stability and condition.

**Building and Demolition Permits**

Building and demolition permits-intended to ensure that zoning requirements, fire and structural standards, and other building standards are met-are collected and maintained within a municipality's building or housing department. Each permit includes the name of the owner, address of the property, parcel number, written description of work to be done, codes identifying work to be done, permit use class (such as commercial or residential), estimated cost of work to be done, and permit issue and expiration dates. In addition, the permit shows the name and registration number of the contractor performing the work, inspection date, building inspector, and permit fees. The permit information is public record and can be obtained in the appropriate city department, although its availability in electronic format varies by city.

Small area indicators that can be developed from this data include the number of permits by type (such as new construction or external rehabilitation) and by use class (such as commercial or residential). By calculating values associated with building permits by type and geographic area, it is possible to determine, for example, the level of investment being made in residential rehabilitation or new housing construction. Neighborhood groups have used the information to track housing demolition and, in conjunction with other housing indicators, to assess neighborhood stability and condition.
Housing Code Enforcement Reports

Housing code enforcement information is available from a city's building inspection or housing division. The housing code attempts to ensure the health and safety of the occupants of a building by setting rules for basic maintenance and upkeep. Reports of housing code violations typically include the address and owner of the property with the violation, parcel number, code being violated, inspector name, date the violation was cited, time period to comply, compliance date, and whether or not legal action was taken. In addition to code violations, the records show complaints of nuisances or problems that make a neighborhood unattractive or unsafe. The information is available to the public from the appropriate city department, although not every city can supply it in electronic format. The data are frequently updated.

Indicators that can be developed from these data include number and rate of properties with violations, violations by type (for example, faulty wiring or paint needed) and severity, and number and rate of nuisances (abandoned buildings and cars, garbage improperly stored, etc.) by geographic area. Compliance rates and violations that result in legal action can also be calculated. The data have been used, in conjunction with other housing indicators, to assess the stability and condition of neighborhoods and to document success in enforcing compliance with code violations.

HUD Information on Public and Subsidized Housing

The U.S. Department of Housing and Urban Development (HUD) collects and maintains a variety of information about public and subsidized housing units, most of it gathered at the local level and reported to HUD. These data are available for census tracts and individual housing projects.

The HUD information includes the name and address of the housing project, total number of subsidized housing units by type (such as public housing or Section 8), percent of units occupied, average rent, percent of tenants who moved during the last year, average stay in unit, average number of months on waiting list, average number of persons per unit, average income, percent of persons in different income categories, where the majority of tenants' income comes from (such as welfare or wages), percent with assets over $5,000, average age of head of household, percent with disability, racial breakdown, average bedroom size, percent of residents by family type, percent overhoused (more bedrooms than people), and percent with utility allowance. Geographic information includes the zip code, latitude and longitude, census tract, and county. Additional tract-level information includes percent poor, percent minority, and percent households that are owner-occupied. This information is available through HUD's HUDUSER data base by project site or census tract. The data can be downloaded for inclusion in data bases, spreadsheets, and statistical packages. More information is available at http://www.huduser.org/data.html.
Each local housing authority collects and maintains its own records regarding tenants and management of units. The locally maintained data bases may be more complete than information supplied to HUD and may provide more detail and flexibility than the national data set, which offers only aggregate information. The ease with which the information can be obtained may vary by housing authority.

Public housing data can be used to determine the economic status and mobility of public housing residents within the neighborhood. Combined with a total housing unit count from the census, it can be used to calculate the percentage of housing in the neighborhood that is publicly operated. The data have been used by a variety of researchers, evaluators, and housing administrators to profile the public and subsidized housing population and develop programs to assist tenants in moving from subsidized housing to home ownership.

**Economic-Related Data Sources**

Many administrative data sources contain information about the economic and job activity in an area, which can be useful in supporting CCI work toward economic development and related issues.

**Employment Data Bases**

Although departments of employment services are the primary sources of employment information in states, these agencies do not usually publish information for small areas. Nevertheless, several of their data bases may be useful to CCIs in measuring aspects of employment within neighborhoods.

**ES202 information.** According to federal mandate, states must collect reports related to unemployment insurance from every establishment that employs more than one worker. The ES202 data base, generated from these reports, therefore covers nearly all paid employees, although self-employed individuals, such as doctors, and family businesses with no paid employees are largely unrepresented. This is the only government data base that provides company-level information along with geographic location.

The data contained in the ES202 file includes establishment name, legal name, address, city, zip code, state, county code, standard industrial classification (SIC) code, ownership code (indicating public or private ownership), number of employees, and total quarterly wages. Total monthly employment is provided for each establishment. Two variables, the unemployment insurance (UI) number and the reporting unit number (RUN), uniquely identify a company. A date indicates when the UI number was established, and successor and predecessor UI numbers may enable the user to link companies that have changed ownership over time. (These variables are not required and therefore may not be reported.) Another variable indicates whether the company is a multi-unit employer (such as a bank with multiple branches) or a single-unit
The data are available quarterly from the state's bureau of employment services, with each quarter's data available in the same quarter of the following year. The information is available electronically, but the format may vary by state.

Although they provide unique establishment-level information, the ES202 data pose some well-known problems (White, Zipp, and McMahon, 1990; Leete and Bania, 1995; Waits, Rex, and Melnick, 1997). First, address information may not be accurate, since some firms mistakenly report all employment at the address of a headquarters or of an accountant who completes the report rather than the address of the actual employment location. There are additional problems if the user wants to look at establishments over time. Each establishment has unique UI and RUN numbers to link quarter by quarter, yet these numbers change if an establishment changes ownership. If the predecessor or successor UI number is not reported, there may be some difficulty linking establishments.

The advantage of the ES202 data is the accuracy of the total employment reported by each firm. The federal mandate carries with it a tax liability that encourages accurate reporting of employment. In addition, the ES202 employment numbers at the county level have been found to mirror other official government measures of employment closely.

Federal and state rules restrict who may obtain these data and how they may be used, and some confidentiality rules apply. For example, if there are only two employers in a geographic area with a particular SIC code, or if one establishment accounts for more than 80 percent of the employment in a particular SIC code, the data must be suppressed.

The ES202 data can be used to calculate several small area indicators on employment. Employment, wages, and number of establishments can be calculated by SIC code and geographic area. Average payroll per employee by industry and geographic area can also be calculated. If data are analyzed over time, the number of business openings, closings, and relocations and associated employment and wages can be determined. Employment gains and losses by geographic area and SIC code can also be computed. The ES202 employment data have been used to measure employment change by SIC in small areas, develop estimates of employment in various geographic areas, determine location of specific types of employment, and estimate locations of expected job openings.

**UI wage record.** The unemployment insurance (UI) wage record is also available from each state's bureau of employment services and collected under the same federal mandate as ES202. In addition to information about the employer, the wage record file contains specific information about the employee, including name, social security number, quarterly wages paid, and weeks worked. Employer information includes name, address, city, zip code, state, SIC code, and UI number. Like the ES202 data, UI wage records are available quarterly and are subject to some
restrictions on obtaining and using the files.

The UI wage records cannot be used alone to develop small area indicators because they do not contain individual wage earners' home addresses. Even so, some researchers have linked address-coded public assistance records to UI records to determine the employment experiences of welfare recipients within a geographic area. Links could be made to other agency records as well.

**UI claimant file.** The UI claimant file, collected under the same federal mandate as ES202 data and the UI wage record, contains specific information about individuals who have filed for unemployment compensation. The data include the claimant's social security number, address, birth date, sex, and race. Additional information includes weekly benefit amount, average weekly wage, number of qualifying weeks, date of claim, date of separation from job, pay rate, and employer UI account number. These data are confidential, and state and federal regulations restrict who may obtain them and how they may be used. The file is available quarterly from the state's bureau of employment services.

Small area indicators that can be developed from these data include percent of persons receiving benefits, average length of time on unemployment, and percent who have exhausted benefits. Demographic characteristics of unemployment compensation recipients can be also computed. The data have been used, in conjunction with other data sources, to target recipients who have exhausted benefits and provide access to job training programs.

**Business Directories**

Business directories can be helpful sources of employment information. Only a few directories are listed here, but most libraries maintain a catalogue of the directories available and the types of information provided by each. On their own, the directories may not be a complete source of employment information, but they can enhance the accuracy of addresses and establishments in a geographic area when used in conjunction with ES202 data (Carlson, 1995).

**Cole's Business Directories.** A directory is published for each state by American Directory Publishing Company in Omaha, Nebraska, and distributed by Cole Publications. Directories are available in print and electronic (CD-ROM) formats. The data base has several drawbacks. Unlike ES202 files, it contains employment ranges only, not actual employment levels, and firms are under no legal requirement to be listed. In addition, the directory is updated continuously, making it difficult to establish a list of firms for a single point in time. The listing is based on telephone directories, and so firms not listed in the telephone book are unlikely to be included.

Various versions are sold as electronic "national yellow page" listings for businesses, primarily intended for other businesses marketing products to firms in particular industrial classes. Other
electronic business directories include ProPhone Business Listing, PhoneDisc PowerFinder, and Select Phone Business Listings, each with similar shortcomings.

**Dun and Bradstreet Indicators.** Based on Dun and Bradstreet credit rating data, the Dun Market Indicators (DMI) file is limited to firms that actively seek out a credit rating record with Dun and Bradstreet. Smaller firms and those without a credit history are unlikely to be included. DMI is also likely to contain outdated data, since firms that close or move have no incentive to update their records. Additionally, firms may understate or overstate employment levels in an effort to improve credit ratings. DMI does not attempt to track employment for every establishment location, therefore employment counts may represent county or area totals for a given firm.

**Harris Directory.** The Harris Directory is published annually by Harris Publishing Company of Twinsburg, Ohio, and is available for selected Midwestern and Southern states. Most of the firms listed are manufacturing companies. Like DMI, the Harris Directory does not necessarily report employment by establishment location, therefore the employment count may represent a firm total. It may also contain some of the same problems as the other business directories listed.

**Community Development Block Grant Information**

The Community Development Block Grant (CDBG) program is funded by the Department of Housing and Urban Development and administered by communities that are receiving funding. This entitlement program provides annual grants to central cities of metropolitan statistical areas, other cities with populations of at least 50,000, and qualified urban counties with populations of at least 200,000. The purpose of the grants is to assist communities in carrying out a wide range of community development activities directed toward neighborhood revitalization, economic development, and the provision of improved community facilities and services. Specifically targeted are areas with high concentrations of low- and moderate-income residents. Each city allocates funding to projects it deems appropriate and consistent with HUD regulations and submits to HUD an annual report of funded activities. Activities include housing rehabilitation and new construction and improvements to or construction of public facilities, such as neighborhood centers, parks, streets, and health facilities.

The data are prepared and maintained by each community receiving the funding, usually by a local department of community development or planning. The data available from CDBG include name and address of the funding recipient, census tract and political boundary, description of the activity funded, activity codes, amount of funding, month and year of the activity, amount expended in a given period, geographic area served by the activity (census tract, political boundary, or city as a whole), and number of residents or households served. The racial and income characteristics of residents or households served by particular activities are also available. National objective codes indicate whether the area being served is considered low/moderate income, slum/blighted, or in urgent need of assistance.
Although the information is public record, the ease of obtaining and using it varies by community, as does its availability in electronic format. The data contain some ambiguities, particularly when the user is focusing on neighborhood analysis. For example, it is difficult to assign the financial benefit of some projects to a particular neighborhood, since activities may target multiple neighborhoods or a project based in one neighborhood may operate citywide. Such expenditures must either be apportioned across many neighborhoods or left out of neighborhood-level analyses.

Small area indicators that can be developed from these data include estimated CDBG funding by geographic area, estimated per capita funding by geographic area, types of activities being funded, and racial and income profiles of populations being assisted. The data have been used to study the impact of CDBG funding on residential rehabilitation and other community development activities in specific communities and to determine the investment being made in various CDBG activities.

**Municipal Income Tax Records**

Many states allow municipalities or counties to collect taxes on income earned by their residents and by nonresidents who work within their boundaries. These taxes are withheld by the employer and collected by the jurisdiction imposing the tax or by a central collection agency on its behalf. The information collected by the jurisdiction or collection agency includes the employer name and address, total amount of local taxes withheld from employees, taxes paid based on net profit of business, and federal identification number. Generally, the taxes are paid on a monthly or quarterly basis, although this varies by state. Confidentiality rules may make this information difficult to obtain in some localities. Typically, the tax collection agency produces aggregate data for selected neighborhoods in response to a special request.

Small area indicators that can be developed from these data include income tax generated by businesses in a geographic area. If appropriate confidentiality agreements can be crafted, it might be possible to link these data with other data sources, such as ES202 files, using federal identification numbers. This would allow additional indicators to be developed, such as income tax generated by particular industries (using SIC codes) and total wages and number of employees by geographic area and industry.

**Training Program Records**

Federally funded training programs generate data that can be used to determine levels of participation in these activities in local communities. Although the programs may undergo significant changes in the next few years as a result of block grants and welfare reform, their data bases are likely to continue to record the same basic information.

**Job Opportunities and Basic Skills program information.** From 1988 to 1997, Job
Opportunities and Basic Skills (JOBS) was the federally mandated program aimed at helping families make the transition from welfare to self-support through job search, work experience, education, training, and other services. (It has since been superseded by the Temporary Assistance to Needy Families program.) JOBS was governed by federal and state regulations, and its data systems were operated primarily by state departments responsible for public assistance administration. Under welfare reform, states and local welfare-to-work initiatives are likely to maintain similar, perhaps improved, data bases.

The JOBS information is located in two files, one containing demographic information about public assistance recipients obtaining JOBS services and the other containing information about recipients' activity histories in the JOBS program. The demographic information includes social security number, address (street, city, zip code, and county), race, sex, date of birth, educational level or school enrollment status, marital status, cash benefit from Aid to Families with Dependent Children, and length of time on assistance. Program information, updated monthly, includes a chronological history of an individual's participation status, including eligibility, job assessment, job assignment, attendance record, exemptions (for long-term illness, very young children, etc.), failure to participate, sanctions, and employment history. The two files can be linked by social security number. Obtaining data may depend on the purpose for which it is sought, since the files contain confidential information about each JOBS participant.

Small area indicators that can be developed from the JOBS data include the average time between a job assessment and assignment to an activity, the participation rate among recipients, participation rates by JOBS activity, sanction rates, and employment rates of participants. Data from the JOBS program have been used to determine participation rates in welfare-to-work programs and, in conjunction with public assistance records, participation by long-term recipients in JOBS activities (Coulton, Verma, and Guo, 1996).

**Job Training Partnership Act records.** The Job Training Partnership Act of 1982 (JTPA) established the nation's largest employment and training program for disadvantaged adults and youths facing serious barriers to employment. The goals of the program are to increase employment and earnings and reduce welfare dependence. Program participation is voluntary, but candidates must meet certain criteria to receive JTPA services. The program provides classroom vocational training, on-the-job training, job search assistance, and other related training services. It is administered by the states, with service delivery provided locally.

JTPA program data include participant information, such as social security number, birth date, sex, race, address, eligibility status, employment history and status, educational status, and participation in public assistance programs. Application date, termination date, and services provided are also recorded, as is information regarding the aptitude, ability, and skill level of each participant. Employment and public assistance status are recorded approximately three months after termination from the program. The data are collected and maintained by the state's bureau of employment services and are available quarterly. Like the other employment related data files, restrictions apply regarding who may obtain these data and how they may be used.
Several small area indicators can be developed from JTPA data, including participation rates overall and by race and sex, percent of participants on welfare, and education and skills levels of participants. The data have been used to document participant demographics and outcomes, such as drop-out rates, employment rates, average wage when employed, and decreased reliance on welfare.

**Data Sources Related to Community Safety and Security**

Neighborhood safety and security is a major concern of almost all CCIs. Information regarding these issues can be found in several sources.

**Municipal Police Records**

Each police department maintains a record of each incident of crime reported in its jurisdiction. These records contain a significant amount of information about the crime, the victim, and, when available, the suspect or arrestee. The crime reports contain specific information, such as crime location, type of crime, time, date, weather conditions, and information about the arresting officer, including name and badge number. Types of crime include homicide, rape, aggravated assault, robbery, burglary, arson, auto theft, domestic violence, simple assault, menacing, and drug-related violations such as trafficking or possession. Some crime reports also contain a file of information about the victim, including race, sex, address, age, and date of birth.

Police departments also maintain an arrest data base. Included in each arrest report are address, race, sex, age, and date of birth of the arrestee. Information is also available about suspects, including geographic and demographic information and physical characteristics according to witness or victim descriptions. Information is also available regarding weapons used during incidents of crime. Crime reports can be linked to victim, arrest, and suspect reports using a report number.

Most police department data are available electronically and are released annually. Since this information is confidential and sensitive, the willingness of police departments to release these data may vary by jurisdiction.

Among the small area indicators that can be developed with these data are numbers and rates of crime by geographic area. Many researchers consider only serious crimes, called Part I crimes under the terminology of the Uniform Crime Report (UCR). Crimes can also be disaggregated by the race, sex, and gender of victims and assailants or by the victim-assailant relationship. For example, the reports can be used to identify crimes in which the victim and offender live in the same area or are of the same race. Weapon use by crime type can also be calculated. Crime data have been used to document crime levels in communities, to determine the need for violence prevention or community policing programs, and to understand possible causes and effects of
crime.

Most police departments have adopted the UCR codes for crime reporting and standardization of offense definitions, which allow crime statistics to be compared across police jurisdictions. The UCR program compiles and maintains nationwide crime statistics, using data provided through the voluntary participation of local and state law enforcement agencies. The Federal Bureau of Investigation administers the program. Each year, the FBI releases a report entitled Crime in the United States, which contains data collected through the UCR program. The report provides data by state, county, and municipality (for cities and towns with 10,000 or more in population), including crime rates, number of crimes by type, and number of arrests by sex, race, and age. Crime in the United States can be found in libraries or purchased from the U.S. Government Printing Office. More information is available at [http://www.fbi.gov](http://www.fbi.gov).

### 911 System Data

Most 911 emergency systems are operated by county agencies, with 911 calls for emergency service processed by the appropriate police, fire, or emergency medical service department. Data available from 911 calls include the name, address, and phone number of the caller, although this information is not always complete because some callers are reluctant to identify themselves. Information about the emergency includes the exact location, date, and time of call, description of the emergency, whether an ambulance is required, and a priority and alarm level based on type of emergency. The time a call is received by the police, time of arrival at the scene, whether a contact is made, and a description of the result of the call are also available.

The data are organized by priority level, with 1 being the most serious and 4 being the least. The calls are also categorized according to whether the call indicates a crime against a person, an accident (involving, for example, hazardous waste), a danger to public safety (such as a bomb threat), a property crime, or general assistance (such as transporting a prisoner or assisting with a traffic stop). The data are available annually and may vary in format by jurisdiction.

Small area indicators that can be developed from these data include police response times and number of 911 calls by priority level. In addition, the calls can be categorized according to the description of the emergency. For example, the number of 911 calls indicating violent crime (such as homicide, robbery, or domestic violence), property crimes, or public safety issues can be calculated. Data about 911 calls can supplement other crime-related information. For example, some 911 calls are precipitated by incidents-such as altercations within households or minor disturbances—that do not result in crime reports. Data regarding response times can be useful to police departments and communities as a whole, since slow response times may indicate a need for more staffing during particular periods or in certain geographic areas.

**Juvenile Court Records**
The juvenile court handles cases of delinquency, unruliness, and dependency for all individuals under the age of eighteen. A record is maintained for each juvenile who enters the court system, including age, sex, race, date of birth, and census tract.

Offenses that come before the juvenile court include violent crimes, such as homicide and robbery; property crimes; drug violations; and less serious offenses, such as disorderly conduct, curfew violations, and truancy. Information collected by the court includes the location, date, and type of each offense, case number and type, source of the complaint (parent, school, etc.), judge, and disposition and disposition date. In addition, the records contain information regarding probation, such as probation officer, days on probation, and, where applicable, detention home location and release date.

The court maintains records of the addresses of offenders, victims, and offense locations, but researchers' ability to obtain those data varies by court system. Access to demographic characteristics of victims also varies. Detailed information about individual victims and offenders, such as address, race, sex, and age, is confidential. The court may release an annual report aggregating data to the municipality or county level, but neighborhood indicators are seldom published.

Small area indicators that can be developed include delinquency rates, number and type of crimes committed by juveniles, and race, sex, and age of offenders. If victim information is obtained, the victim-offender relationship by sex, race, age, and geography can also be determined at an aggregate level. The data have been used to determine the level of juvenile crime and develop strategies and programs to reduce it. The federal Office of Juvenile Justice Prevention provides information at http://www.ncjrs.org/ojjdp/html/pubs.html.

**Coroner's Reports**

The coroner determines the circumstances, manner, and cause of each violent, sudden, unusual, or unattended death and prepares a detailed report outlining the findings. Coroner's reports contain confidential information about the victim and, when applicable, the assailant. Information about the victim includes age, sex, race, and address, along with any findings regarding drugs or alcohol in the victim's system at the time of death. Information about the death includes place, date, time, day of the week, type of death (homicide, suicide, etc.), and mode of death (firearm, stabbing, etc.), and, where applicable, caliber of weapon. Information about the assailant includes sex, race, age, address, and previous offenses. The data are available from the local coroner's office annually, but the format and rules for access may vary by jurisdiction. In some localities, for example, much of the report is not computerized.

Small area indicators that can be developed from these data include suicide and homicide rates, places of death, times and days when deaths occur, and how deaths occur. Information about victims and assailants, such as race and sex, and about victim-assailant relationships by age,
race, sex, and geography can also be determined. Coroner's reports are more detailed than police department crime reports and can be used in conjunction with those reports to enhance information regarding homicides and suicides.

**Child Maltreatment Reports**

Incidents of child abuse and/or neglect are reported to local child protection agencies, which investigate claims and determine whether abuse or neglect has occurred or is occurring. A record is maintained for each reported incident of abuse and/or neglect. The data available from reported cases of child abuse include location of alleged abuse and/or neglect, person making the report (teacher, doctor, victim, etc.), type of alleged abuse and/or neglect (sexual, physical, or emotional), and whether the allegation was substantiated, indicated, or unsubstantiated. Information about the victim is also available, including address, age, gender, and victim's relationship to the perpetrator. Perpetrator information includes age and gender. The confidentiality and sensitivity of this information is an important issue, particularly at the address level. Obtaining these data depends on the purpose for which they are sought. Generally, the data are available annually and electronically.

Indicators that can be developed from these data include child abuse rates, types of abuse and/or neglect being reported, and numbers of substantiated and unsubstantiated incidents. The age and gender of victims can be determined, as can victims' relationships with perpetrators of abuse and those reporting abuse. The data have been used to document child maltreatment and determine factors that may contribute to it.

The National Center on Child Abuse and Neglect, part of the U.S. Department of Health and Human Services, collects and maintains national and state-level information on abused and neglected children through its National Child Abuse and Neglect Data System (NCANDS), available at [http://www.caliber3.calib.com/nccanch](http://www.caliber3.calib.com/nccanch). The system does not release information regarding small areas. Participation by states is voluntary, but most states provide data to the system. The NCANDS annual report includes information regarding reporters of maltreatment; number of reports substantiated, indicated, and unsubstantiated; types of maltreatment; and perpetrator and victim characteristics, such as age, race, and gender.

**Liquor License Records**

In each state, the Department of Liquor Control is responsible for issuing permits to manufacture, sell, and distribute alcoholic beverages. Records of those permits are public information and include the name of the permit holder, address of permit location (street, city, zip code, county, and taxing district), and permit class (carryout beer only, wine only, etc.). The address of the outlet as listed on the permit is inaccurate in some cases, but the name of the permit holder may provide some clue to its true location.
A few small area indicators can be developed from these data, including the number of alcohol outlets in a geographic area, the number per capita, and the types of outlets, such as carryout stores or bars. Investigators can also determine the type of alcohol sold (beer, wine, hard liquor, or all three) and how late alcohol can be sold. Researchers have used these data to examine and document the relationship between the density of alcohol outlets and the level of violent crime in an area.

**Education-Related Data Sources**

Educational outcomes are important indicators of the well-being of a community and the functioning of its systems. CCIs often focus on children and young people since education is a fundamental component of development (Thornton, Love, and Meckstroth, 1994). Public school systems typically generate reports for the state or the community as a whole, but seldom produce data for small areas. Only limited data are available for private and parochial schools, which maintain separate and unique record systems.

**Public School Records**

Most public school districts maintain computerized files of individual student records. These records are confidential but, with proper protection agreements, can be used to develop measures for small areas. The files include each student's address, school attended, school transfers or leavings, scores on standardized achievement and proficiency tests, attendance and disciplinary records, free lunch eligibility, and family status.

The data can be used to calculate attendance rates and average achievement for students by school or by neighborhood. School and residential mobility can be calculated by matching students' records across years to determine movement. By matching records for a cohort of students-usually from the 8th grade onward-to determine those who graduate, school completion can be calculated. School entry records have also been used to document immunization status and school readiness. The nature of these records varies considerably across districts.

*continued to pt 2*