

PUBLIC ASSISTANCE RECORDS:

A SOURCE FOR NEIGHBORHOOD INDICATORS

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Public assistance records are maintained by government agencies that administer cash assistance (i.e., Temporary Assistance for Needy Families), food stamps, and medical assistance. These are programs that meet basic needs of low-income individuals and families. These records can be a useful source of data for neighborhood indicators. This report will focus on the use of public assistance records for calculating neighborhood indicators. Selected indicators will be described in detail along with a discussion of methodological issues and problems in interpretation.

OBTAINING PUBLIC ASSISTANCE RECORDS FOR NEIGHBORHOOD ANALYSIS

State or county agencies that administer human service programs maintain public assistance records. The records are created for the purpose of determining eligibility and for issuing benefits. The benefits are means tested, and persons qualified for the benefits must show that they fall below income or assets thresholds to maintain their eligibility. The records are computerized in all states and are maintained in complex systems that serve many purposes ranging from case management to compliance monitoring. However, for neighborhood indicators work it is necessary to obtain an extract of benefits authorized or paid that contains the residential addresses of the beneficiaries. Since benefits are issued monthly, the beneficiaries and their addresses can change each month. However, neighborhood indicators are typically calculated yearly, necessitating either the selection of one month as representative of the year or the compilation and averaging of twelve months of benefit data.

States or counties generally maintain records for at least three important programs in their systems: cash assistance, which is made up of Temporary Assistance for Needy Families (TANF) and state funds; food stamps, provided through the U.S. Department of Agriculture; and Medicaid, the medical assistance program for the poor. Some states have additional public assistance programs, such as General Assistance (GA), Disability Assistance (DA), or emergency assistance. Records of these benefits may also be part of the system.

The employment status of welfare recipients is of growing interest due to the provisions of welfare reform. Employment information can be obtained from the Unemployment Insurance (UI) records maintained by state agencies that administer employment programs. Employers submit quarterly reports of earnings to the state, and this information can be linked to welfare records using the individuals' social security numbers. In some states, these records have already been linked by the agencies involved.

Public assistance and employment records are confidential and agencies operate under strict federal and state guidelines governing the use of these records. The records may be used for research purposes that have scientific or public policy value, if certain standards for protection are met. Most importantly, only aggregated data may be released and it must not be possible to identify any individual. Furthermore, the data must be secure at all times and individuals processing the data

must operate under strict rules of confidentiality. Typically, if outside agents are processing public assistance records for neighborhood indicators work, they work under contract with and operate as the agents of the government agency, and abide by the same standards as agency personnel.

PROCESSING RECORDS FOR NEIGHBORHOOD INDICATORS

Computerized public assistance records have several portions. An important distinction should be made between the part of the record that pertains to the group that receives the benefits and the part that pertains to the individuals within the group. The family or eligible unit is known as the assistance group or case. A case may include multiple assistance groups in some instances, such as when two sisters who each have their own child live in the same house. The other portion of the record contains information on the individuals who comprise the assistance group and case. A complication in these data is that individuals can change assistance groups or cases and assistance groups or cases can change in their composition over time.

The case record would typically contain the residential address and the benefits authorized each month. The record should also provide some code as to whether the case is open or active in a given month and possibly the authorized benefit amount. The individual record should contain demographic information on each individual, such as birth date, gender, race or ethnicity, educational attainment, citizenship, and other information. Social security numbers may be available for matching with other data sources, such as employment information.

Unemployment Insurance wage records contain the individual's social security number, earnings and weeks worked in the quarter, and information about the employer. Individuals may have more than one employer and, therefore, more than one record. Unlike welfare records, which are monthly, UI records cover a quarter.

Public assistance records for a given month usually can be obtained from the state or county on tape, CD, or other electronic medium for neighborhood indicators work. The records must then be geo-coded so that they can be assigned to neighborhoods. Geo-coding software assigns a geographic designation, such as latitude and longitude, census tract, or census block, to each record. The records can then be aggregated to local neighborhood designations. UI records do not have residential addresses but are linked to the welfare records for the employed individuals in the welfare case. A name and social security number can be used in linking the records from the two data sources.

Neighborhood indicators are usually calculated for neighborhoods within a county or municipality rather than for the whole state. Thus, the first step in geo-coding may be to select only those records with the relevant county or city code. Then, the case's home address is selected for geo-coding. In urban areas, approximately 95 percent of these records should be geo-coded

successfully if the computerized address files used for geo-coding are up-to-date. A few records may have post office boxes or errors that make them impossible to assign geographically. These records should be examined to see whether there are any patterns, such as cases occurring outside the county or in a particular zip code. Records that cannot be geo-coded are assigned to a “missing” geographic designation. While these records are not counted in any neighborhood, they should be added into city or county totals so that these counts can be checked against other published sources.

It is also important to be aware of the problems of ambiguous information on the public assistance records. Much of the ambiguity occurs because public assistance eligibility can change on almost any day of the month as activity takes place on the case, while a data extract occurs at a specific point in time. For example, a case may show up as open when an extract is made but actually close before the month is up. Therefore, counts made from such time-dependent data may vary according to how and when the data extract is made.

An additional challenge for neighborhood indicators using public assistance data is the fact that the caseload changes monthly. Neighborhood indicators are typically calculated yearly. However, month-to-month changes may also be revealing of trends or needs. Generally, it is advisable that data be processed for all months, although for some indicators only selected months need to be used.

A final issue in processing public assistance data for neighborhood indicators work is the use of linked files. One type of linkage occurs when the monthly extracts are linked to provide longitudinal records for cases or individuals. Longitudinal files are necessary for calculating indicators having to do with the length of public assistance spells, residential relocation, or beneficiaries leaving or entering public assistance programs. Some states and counties may have already created longitudinal files and be able to supply them for analysis. However, since beneficiaries may change addresses, careful consideration needs to be given to the neighborhood location assigned to the individual or case. Options include using the address on a specified date, such as January 1; the address at which the case resided most of the year; or the address at which a key event, such as leaving welfare, occurred. Another type of file linkage occurs when various data sources need to be used to calculate an indicator. The most common example of this is when welfare and employment records need to be linked to calculate employment rates for welfare recipients. If identifiers such as names and social security numbers are erroneous in either file, some cases will not be linked correctly.

SMALL AREA LIMITATIONS

Neighborhoods present some unique problems for the calculation of social and economic indicators because they are much smaller in population than the states or counties, the usual population base for public assistance statistics. Two important issues for neighborhood indicators are the possibility of a breach of confidentiality and the availability of current population counts for small areas.

This problem of small areas can be overcome by either aggregating years or neighborhoods or by avoiding the use of rare events. Three-year averages are often used rather than one-year rates in looking at neighborhood trends. Also, contiguous neighborhoods that are fairly similar may be combined when necessary to stabilize rates. When producing neighborhood indicators, it is also important to avoid dividing the population into categories that might be quite small in some neighborhoods. For example, neighborhoods often have a predominate racial or ethnic group, making indicators calculated for the minority races or ethnic groups in the tract very unreliable. At the extreme, such rates may violate confidentiality of individuals in small racial or ethnic categories and should not be published. Following Census Bureau suppression practices, indicators based on vital records should not be calculated for population groups with fewer than 30 members in the neighborhood to protect confidentiality. Much larger populations are needed to achieve reasonable stability in rates.

Obtaining a valid estimate of the neighborhood population to be used in the denominator of rates may also be a problem for neighborhood indicators. The census provides population counts by age, gender, and race and ethnicity for small geographic areas, but these are made only every ten years. Neighborhood indicators, to be useful, need to be calculated more frequently than the census. The Census Bureau, state demographers, local planning agencies, and commercial vendors issue population estimates between censuses, but the estimates may not be available for small units of geography. The Census Bureau publishes estimates for counties and cities but not smaller geographic areas. Further, population estimates may not be age specific, even though such denominators may be needed for neighborhood indicators based on public assistance records. In general, the validity of population estimates varies inversely with the size of the population to be estimated. Neighborhood population estimates, especially if broken down by age or other demographic characteristics, have a large margin of error. Nevertheless, many neighborhood indicators in non-census years require population estimates for the denominator. Localities have to choose a provider of estimates or an estimation method that is as valid as possible (Heeringa 1982; Smith and Cody 1994). Errors in population counts or estimates can sometimes lead to the situation in which the number of persons receiving food stamps is actually higher than the population estimate, especially in very poor neighborhoods where both the decennial census and inter-censal estimates are notoriously low (Council for Economic Opportunities 1986).

CALCULATING NEIGHBORHOOD INDICATORS FROM PUBLIC ASSISTANCE RECORDS

Public assistance records can be used to calculate indicators that reflect the economic status of neighborhood residents and their access to employment and supports for basic needs. Indicators calculated from public assistance records can also be used to track changes in welfare programs. The indicators selected for discussion in this chapter are summarized in table 1.

Public Assistance Participation Rates

Public assistance participation rates are of interest to neighborhood groups for gauging the economic status of neighborhood residents and monitoring the availability of public services to support basic needs. *Public assistance participation rates* for cash assistance, Food Stamps, and Medicaid are simply the number of individuals who receive benefits from each program divided by the total population in that neighborhood. The participation rate can be calculated for a particular month such as January or July of the year using a count of individuals on active or open cases in that month. Alternatively, the counts in the neighborhood for all twelve months of the year can be averaged to obtain the yearly figure. These indicators are easy to calculate because they use total population in the denominator rather than a specific population at risk. They can be misleading, though, because neighborhoods differ in their age and gender distributions, factors that affect public assistance participation.

Age-specific participation rates are preferable measures if the neighborhood is large enough to allow such population disaggregation. The age groupings chosen should differ for the several types of public assistance. For example, cash assistance programs may require finer age groupings for children, whereas medical assistance participation could be calculated for specific ranges of older adults as well.

Public assistance can be a proxy for the poverty status of the population because eligibility depends on having various, specified levels of low income. A rise or fall in public assistance cases can be a sign that a neighborhood has changed economically. However, changes in public policy, such as welfare reform, can result in falling public assistance participation rates without a commensurate decrease in poverty. Many of those families who leave welfare for work still have relatively low household incomes. Thus, the interpretation of public assistance participation rates in neighborhoods must be accompanied by an understanding of local welfare programs and policy. Indeed, participation rates may prove more useful as an indicator of access to services or as a sign that particular neighborhoods are underserved by Food Stamp and Medicaid programs since eligibility for these programs has remained unchanged or expanded.

Case Demographics

Determining the proportion of cases with varying household compositions may be indicative of some service needs. In particular, cash assistance cases without an adult member suggest situations of kinship care or some type of disability in the family. An indicator of these situations is the *percent child-only cases*. This is calculated by counting the number of cash assistance groups that are made up of children alone divided by the total number of cash assistance groups in the neighborhood. This indicator must be interpreted cautiously during the implementation of welfare reform since child-only cases are being treated differently than adult-headed cases with respect to time limits and work requirements. Their exemption for time limits may prove to be an incentive to change the constellation of cases in some places. Similarly, case demographics may change in other ways that are of interest to neighborhoods. Other case or individual demographics can be calculated similarly to the child-only case indicators, as a percent of the total cases or recipients with a particular characteristic.

Persistence of Poverty

Most participants in public assistance programs use benefits for a relatively short period of time. Families who receive public assistance for a prolonged period may represent a group at particularly high risk. This risk can be determined for neighborhoods by calculating the *percent long-term recipients* for any of the public assistance programs. These calculations depend upon the creation of longitudinal files or a data element in the monthly files that specifies the number of months out of a specified time period (usually five years) that the individual has received assistance. Long term is typically defined as receiving benefits for 36 out of the preceding 60 months but other definitions can be used. The numerator of this indicator is the number of individuals in the neighborhood at a point in time that meet the definition of long term, divided by the total number of public assistance participants in the neighborhood. This indicator might also be calculated for specific age groups and should be interpreted in conjunction with the overall participation rate. The neighborhoods with greatest need might be those with both high participation rates and a high percentage of persistent poverty.

Welfare to Work

Declining welfare caseloads in many neighborhoods raise questions about whether lost welfare benefits are being replaced by earnings in the community. A relevant neighborhood indicator is the *ratio of earnings to benefits lost* among residents leaving TANF. This can be calculated for all adults who have left TANF for at least one quarter in a given year. The indicator is calculated as the total earnings in the quarter following exit divided by the total benefits that were paid to these individuals in the quarter prior to exit.

The interpretation of this indicator rests on the assumption that the benefits issued in the quarter after exit would have been the same amount as those issued in the quarter before exit. This assumption will be valid in most cases although it would not apply to cases in which family composition changed or in which the individual moved out of state. A ratio of one on this indicator suggests that earnings of neighborhood residents who left welfare are equal to welfare dollars lost; a ratio of two means that earnings are twice the dollar value of benefits, and so forth. Users of the indicator may want to take into account costs of living and costs of going to work to determine what ratio is desirable.

Residential Churning

New welfare regulations may affect neighborhood stability if welfare recipients change their residences more or less frequently than they did in prior years. *Residential turnover rate* is a potential indicator of this phenomenon. This indicator represents the dynamics of welfare recipients' movement in a period of one year. For each neighborhood, the number of recipients who moved in from other neighborhoods and/or moved out to other neighborhoods is counted for the year. Because the analysis unit is neighborhood, recipients who have multiple in or out migrations in the year are counted each time they move. The denominator is the "unduplicated" count of all recipients in each neighborhood during the year.

A limitation of this indicator is that addresses will not be known for recipients who leave all welfare programs during the year. It only captures movement of people while they are on cash assistance, food stamps, or Medicaid. However, since many welfare cases that leave cash have family members that continue participation in another program, it may be possible to get an indication of residential churning, even for families that move from welfare to work.

INTERPRETING AND APPLYING INDICATORS

Indicators calculated from public assistance records, like most neighborhood indicators, do not speak for themselves. They are simply counts and proportions that are believed to be signs of something that is valued: economic status, access to services, and family stability. The relationship between the indicator and the value is usually indirect and often unspecified. Thus, there is legitimate debate about which indicators to examine and how important they are. Further, most indicators have multiple determinants that are not completely understood. Thus, there are also many reasonable pathways toward changing or maintaining the outcome or condition that the indicator reflects. Finally, indicators are proxies for valued outcomes or conditions rather than direct measures. Thus, thoughtful observers will disagree about what they mean and how high or low they should be.

The rapid pace of welfare reform poses special challenges for the interpretation of welfare indicators. Some will want to use them to draw conclusions about whether welfare reform is successful or failing. However, because many other factors such as the overall economy affect

welfare participation and employment levels, there are fallacies in such interpretation. Nevertheless, it is important to have a measure of the status of individuals who have been on welfare in order to plan community services and programs to meet their changing needs during this period of major policy change.

Calculating neighborhood indicators, albeit a significant effort, is only the beginning step toward understanding neighborhood conditions because of these limitations and ambiguities. Indicators cannot be interpreted in a vacuum, but only within a local context, and the use of them requires community involvement. But the community is not monolithic, and various stakeholders will bring their own perspectives to interpretation. Community activists may use an indicator to galvanize public opinion or to increase civic involvement. Citizen councils may use them to hold local institutions accountable for their performance. Governments may use them to plan programs and evaluate their own performance. Neighborhood residents may use them to promote mutual help and volunteer action. Investors may use them to suggest community viability. The same number at the same time and place may be interpreted differently for any of these uses.

The variation among community perspectives might seem to preclude the possibility of having any systematic ways of interpreting neighborhood indicators. However, several approaches are commonly used and have had some degree of success. First, there is the tradition of establishing goals and comparing indicators with those goals. The goal becomes the target value on the indicator toward which communities can work. A second approach to interpreting indicators is known as benchmarking, which involves comparing a community's achievement on indicators with other communities, often ones that are thought to be in its peer group or at the level to which the community would like to aspire. This approach requires having identical or comparable indicators for similar points in time for relevant comparison communities. Benchmarking has been used by citizen councils to compare their cities with others and to promote public opinion and citizen education for change.

A third approach involves spatial and trend analysis. Although there may not be consensus about the target for an indicator, there is typically agreement about the direction of change that is desirable. Frequently, it is also agreed that the benefits of improvement should be spread fairly evenly, not concentrated in particular areas. Examining trends over time between and among neighborhoods can present evidence that is useful for determining whether outcomes are moving in the desired direction. Such analyses can also drive the allocation of resources toward selected indicators or neighborhoods in greatest need. United Ways and planning councils have effectively used indicators in this way.

Finally, indicators may play a role in more complex analyses directed toward problem solving or knowledge development. Using indicators in this way requires a conceptualization of how neighborhood outcomes and conditions are related to one another. Such conceptualizations can be used to chart a pathway of change that pushes not just on one indicator but also on indicators of the preconditions that are necessary for effective change. Comprehensive community initiatives are beginning to use indicators from many data sources in this way to create a theory of change for their neighborhoods and to assess their progress along the way.

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Table 1: Selected neighborhood indicators from public assistance records

Indicator	Numerator	Denominator
Participation		
Public assistance participation rates	Number of individuals active on program (i.e., Food Stamps, Medicaid, cash aid) in the month	Total population in the neighborhood
Age-specific participation rates	Number of individuals in age range that are active on program (i.e., Food Stamps, Medicaid, cash aid) in the month	Total population in the age range
Case demographics		
Percent child-only cases	Number of assistance groups that are made up of children only	Total number of assistance groups
Persistence		
Percent long-term recipients	Number of recipients active for at least 36 out of 60 months	Total number of recipients
Welfare to work		
Ratio of earnings to benefits lost	Total quarterly earnings of residents who left cash assistance in quarter	Total amount of cash benefits received by residents in quarter prior to exit
Residential churning		
Residential turnover rate	Number of recipients that moved in or out in the year	Unduplicated count of recipients during the year