Measuring State Welfare Policy Variations and Change

by

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ABSTRACT

This paper describes a methodology for categorizing state welfare reform policy guidelines into quantitative dimensions to effectively manage the magnitude of data on recipiency rules. Measures developed are used to analyze state-level variations and change on key welfare policy dimensions over the 1996 through 1999 post welfare reform period. Using 1st- and 2nd-order factor analytic techniques, 40 of the 78 unique policy guidelines coded based on text from the Urban Institute’s Welfare Rules Database are reduced to 17 dimensions.
INTRODUCTION

The redesign of U.S. welfare policy in 1996 freed states to create public assistance contexts specific to their own economic environments. States could view the change as an opportunity to aid the poor toward self sufficiency, or as a chance to reduce their own responsibilities in hopes that the poor would just go away – some say, to a state offering better benefits.

Devolution of welfare policy and programs to the states by the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) means welfare benefits can now differ by state on more than dollar amount, creating complex packages of benefits with which states may compete. The federal welfare reform legislation brought variation, for example, in time limits, work requirements, training opportunities, and child care assistance as well as in the size of the welfare check, resulting in greater potential for welfare receipt to appear more or less attractive across localities. Gradual implementation of reforms over time within and across states can add to benefit diversity, but an alternative outcome may be a “race to the bottom” of the welfare generosity barrel, eventually homogenizing the medley as states converge toward a pattern of lower benefits and stricter rules for receiving them.

We contribute to this research and policy debate by providing quantitative evidence on welfare policies across all states and over the 1996-1999 period. The specific objective of this research has been to categorize textual welfare policy guidelines into dimensions and quantified scores across states throughout the post welfare reform implementation period.
This paper develops quantitative measures of the new welfare policies based upon the Urban Institute’s Welfare Rules Database (WRD). The WRD provides a longitudinal textual account of the changes in AFDC/TANF rules in all 50 states and the District of Columbia for each year of 1996-1999. It organizes the detailed and complex textual information on welfare rules across states and times, as well as across different types of assistance units, providing hundreds of data items according to 28 different rule categories. Data in text form are useful for qualitative and case study approaches to understanding welfare reform, but text-form data are difficult to incorporate into a national level study. A quantitative approach calls for both numerical representation of each policy and reduction of the tremendous volume of rules data. We address these objectives from a client-oriented perspective to create a set of indicators useful for comparing all states and for evaluating the consequences of welfare reform for individual and family behavior and outcomes in nationally representative research. We present these data graphically in a cross-state comparative framework to demonstrate the relative stringency of state’s welfare rules and their change in the welfare reform implementation period.

BACKGROUND

The context of this research is the overarching question posed by the title of Schram and Beer's (1999) recent book, "Welfare Reform: A Race to the Bottom?" As they note, the "race to the bottom" metaphor suggests a competition between states to underbid each other on a variety of public policy issues. These include lowering taxes, offering incentives, and simplifying regulations to attract business and industry, while at the same time tightening welfare rules and lowering benefits to reduce welfare rolls.
But what has actually happened to state welfare policy since the welfare reform legislation was passed? Has there been a "race to the bottom" competition among states in welfare rules and benefits? To date the evidence, based largely on state case studies, is mixed. For example, Johnson and Lindaman (1999) report that welfare reform in Kansas has not raced to the bottom as much as it has moved to the middle with a set of incentives and penalties designed to increase movement from welfare to work. On the other hand, Curtis (1999) found that Delaware, already a low-benefit state, became more punitive in an effort to move people off the welfare roles. Furthermore, Nathan and Gais (1999), in a multi-state study of the new welfare legislation implementation, conclude that states are using both diversion programs to discourage applicants to apply for assistance and sanctions to penalize recipients who remain on welfare. But Lurie (1999) finds that declining welfare benefits and restrictive rules were not an inexorable result of state control of welfare: unpredictable and unstable outcomes are apparent across states.

From what perspective should welfare policy be categorized and quantified to assess state-level inequalities and changes? There are several alternative possibilities: 1) from the perspective of state policy makers; 2) from the perspective of prior federal guidelines; 3) from the perspective of cost-benefit program analysis. We categorize and quantify welfare policy guidelines on a lenient-to-stringent continuum from the client's perspective. That is, how would a current or prospective welfare client evaluate new state welfare benefits and participant behavior rules from a personal adjustment perspective. For example, welfare reform may influence various survival strategies of poor families, including moving to escape stringent welfare expectations of clients and moving toward a more lenient and welcoming welfare environment. Thus we argue that the client perspective is most appropriate not only to evaluate the "race to the
bottom” question, but also for evaluating the consequences of welfare reform for human behavior.

METHODOLOGY FOR MEASURING WELFARE POLICY VARIATION AND CHANGE

Using the basic categories provided by the Urban Institute’s text-based WRD (Urban Institute, 2000) as a point of departure, we coded 78 salient individual welfare rule items for each state and for the years 1996, 1997, 1998, and 1999. An additional 25 items were excluded because state-to-state variation (see Appendix A). Salient items were coded on a lenient to stringent continuum and then subjected to varimax factor analysis solution to obtain rule dimensions for parsimoniously describing state policies. This process required several steps and relied on both conventional statistical decision criteria and the development of a set of decision rules for dealing with missing information. Our first step was to quantify textual measures provided by the WRD.

Observed Welfare Policy Measures

The Welfare Rules Database, or WRD (Urban Institute, 2000), provides an array of textual indicators documenting state welfare policy annually throughout the United States, beginning with PRWORA’s implementation in 1996, through 1999. These items are organized by the Urban Institute under 28 categories addressing families potentially eligible for benefits (including pregnant women without other children, minor parents, and two-parent families); which people in a family are eligible (e.g., non-citizen family members and family caps); states’ diversion of persons from applying for benefits; the amount of family assets allowable for eligibility; the amount of allowable income and how income is counted in determining eligibility (e.g., earned income disregards and income deeming); the state’s benefit computation technique; child support
requirements in the state; family behavioral requirements (e.g., contracts and agreements, school attendance and health care policies); recipient family work-related requirements (including activities requirements, exemptions, and sanctions); time limits; and states’ strategies regarding recipient transition from welfare to work.

Items within these categories were examined for variation across states and time from 1996 to 1999, and those with sufficient variation for inclusion in statistical analyses were re-coded from a textual format to a numerical one using a lenient-to-stringent continuum. In this coding scheme, the most lenient value is 0, with the highest score representing greatest stringency among states. In some cases, variables are simply coded “yes” or “no,” with the more lenient of these coded 0 and the more stringent coded 1. An example is our indicator for whether or not a pregnant woman without other children is eligible for welfare benefits (PREGELG), where a “yes” response is coded 0 and “no” is coded 1. In some cases, the response is continuous, as for the maximum benefit allowable (MAXBENEF). For some continuous variables, the value is calculated using formulas provided for each state in the WRD. We assume a net income of 0 and a four-member family when these family characteristics are needed for the calculation. In other cases, response categories are ordinal in nature, such as the indicator for who is eligible when a mother is pregnant (PREGWHO). Responses for this measure range from the mother and other family member(s), coded 0, to the mother only, coded 1, or no one, coded 2.

When data were unavailable for an item in the WRD because state policy guidelines do not mention the item, WRD indicates the response to be “N/A.” Those responses were analyzed by three independent coders using other information on the state’s policies available in the WRD to determine whether the data were missing because of leniency on the item in that state, because
welfare reform had not been instituted yet in the state, or because the state continued rules from previous years without change and thus their policy documentation simply did not point out the rule. Based on this information and a straightforward set of decision rules (see Appendix C), codes were assigned to avoid the missing data problem. The research team consulted together to determine the most appropriate response code when inter-coder reliability was low. Thus our missing data imputation was based upon a logical decision rule process and the full range of information available in the WRD. This procedure makes it possible to include data for all states for all years in the principal components analytic stage of the project.

**Development of Summary Measures Using Principal Component Analysis**

Variables were first standardized so that a uniform metric was established among items. Sets of variables expected to represent a single underlying construct were determined using a preliminary exploration of the pattern of inter-correlations. These sets were then analyzed using principal component analysis, a data reduction procedure quite similar to factor analysis in practice but differing in the assumption regarding causality, to arrive at a factor score for the underlying construct. As described by Hatcher (1994), a principal component is a variable created by the appropriately weighted variables that are observed. With principal components analysis, items found to factor according to a single construct contribute in a linear fashion to the calculation of that construct’s value. With factor analysis, when items are found to factor according to a single construct, their covariation is assumed to result from that construct. In this case, the underlying construct is a latent variable that contributes, in a linear combination of latent constructs, to the value of the observed variable.

Principal component analysis is conducted as a series of steps leading to the construction
of the factor score summary measure. The first step is to extract the components to determine the number of components accounting for large portions of the variance among the variable set. Following the Kaiser criterion (Kaiser 1960), only components with an eigenvalue greater than 1 were retained for interpretation. In most cases, only one component was retained for our sets of variables. When more than one component was indicated, the rotated solution was sought, using a varimax rotation procedure, which provides an orthogonal rotation. This procedure maximizes the variance in the factor matrix column, resulting in uncorrelated factors. Factors were interpreted according to the shared meaning among variables loading on the factor; that is, when variables load together on a factor, the meaning of the component is interpreted as the construct the variables all seemed to measure. Items with loadings of at least .40 were considered to contribute acceptably to the component; items with lower loadings were dropped from the set of variables used to create the factor-based construct score. Reliability for the summary scales was calculated as the Cronbach coefficient alpha. While most items’ Cronbach alpha scores fall above the generally used threshold criterion of .70, we accept lower scores when our constructs are created by very small sets of variables. For constructs meeting our criteria, factor scores were calculated by multiplying each item by its optimal regression weight and summing the products to obtain each state’s score on the construct. The results from this analytical process, which produced 15 1st-order constructs, are presented in Tables 1 and 2. Factor scores were calculated for each state in each year of 1996-1999. Mean scores for 1999 are presented in Table 3. Because these constructs are created with standardized items, factor scores range from negative (the lowest indicating greatest leniency) to positive (the highest indicating greatest stringency) values.
These 1st-order factor scores were then subjected to a second round of principal component analysis to determine whether further data reduction would result in fewer, more general constructs. Patterns of correlation in the set of 1st-order scores were examined to determine groups of variables which might together serve as indicators of a single construct. These groups were analyzed using principal components analysis and a varimax rotation. Based upon the same threshold criteria as for 1st-order constructs, variables found to contribute significantly to the variance among the set were retained in the construction of 2nd-order factor scores and Cronbach alpha reliability coefficients were calculated for each. Two 2nd-order constructs were found (see tables 1 and 2) – one representing state’s rules regarding eligibility, and the other representing rules regarding the expected behaviors of recipients. Factor scores for these two constructs were then calculated for each state in each year. First-order scores contributing to the 2nd-order eligibility item include rules for two-parent families and immigrants; rules regarding allowable income and assets; and basic eligibility requirements. The 2nd-order behavior-related rules item comprises expected client behaviors; penalties for noncompliance; and special exemptions from rules. Four of the 1st-order constructs did not load with these 2nd-order items and were retained as separate items. These are rules regarding welfare eligibility of pregnant women, activities requirements, financial responsibilities for the recipient and the availability of transitional benefits. The pattern of relationships among the 1st- and 2nd-order constructs is shown graphically in Figure 1. These data – Welfare Dimensions Summary Scores (WDSS) – are available through the Data Archive of the Population Research Institute (PRI) at the Pennsylvania State University. (See Appendix B for the list of summary variables and WRD variables on which they are based.)
Measuring Change in State Policies over Time

To compare state welfare policies during the reform period requires understanding of the shifts in those policies as well as their degrees of stringency in rules and requirements at any point in time. We calculate a simple change score for this purpose. This score represents the absolute difference between levels of stringency in 1996 and 1999 multiplied by -1 when the score for 1999 is lower than that for 1996. Thus a positive change score indicates a shift toward greater stringency, while a negative change score shows a shift toward more leniency. Mean change scores for each factor score measure are included in Table 3. Each of these measures, available as part of the WDSS dataset, contributes to our understanding of the welfare policy environment from the perspective of clients.

CONCLUSIONS

The objective of this paper was to describe a methodology for categorizing 78 state welfare reform policy guidelines and, using principal component analysis, to identify 15 1st-order and two 2nd-order policy dimensions. Based on conventional scale construction criteria (i.e., adherence to conventional rules for threshold values of the eigenvalues, Cronbach coefficient alpha scores, and factor loadings), the resulting dimensions provide meaningful operational measures of the variation across states and changes over time in welfare policy guidelines for the 1996-1999 welfare reform implementation period.
REFERENCES


APPENDIX A. RULES EXCLUDED DUE TO INADEQUATE VARIABILITY

Are two-parent, non-disabled units eligible? (98% YES)

Are child only units living with ineligible parents eligible? (100% YES)

Are child-only units living with ineligible non-parent relatives eligible? (100% YES)

Are child-only units living with non-relative caregivers eligible? (91.7% YES)

Whether mandatory or optional to include natural/adoptive parents living in the household as members of the unit (100% MANDATORY)

Whether it is mandatory or optional to include all dependent children living in the household as members of the unit (93.9% MANDATORY)

The age under which an individual is considered a child with no restrictions (96.9% 18)

The age under which an individual is considered a child with restrictions (e.g., must be a full-time student) (94.1% AGE 19)

Whether SSI recipients are eligible (100 % NO)

Whether cooperation with child support enforcement is required in the state (100% YES)

Whether illegal immigrants, or undocumented aliens who are remaining in the U.S. without INS permission are eligible for benefits. (100% NO)

Whether nonimmigrants, or aliens who have been admitted for a temporary stay in the U.S. in order to fulfill a specific purpose (i.e., tourists, students, business visitors), are eligible for benefits. (99.35% NO)

Whether the non-exempt group of “regular immigrants” who enter the U.S. with a green card or are permitted permanent residence under the Immigration Reform and Control Act (IRCA) or Special Agricultural Worker provisions of the IRCA are eligible for benefits. (98% ALL ELIGIBLE)

Whether the non-exempt immigrant group with humanitarian status based on conditions abroad (i.e., may face persecution in their homeland) is eligible for benefits. Refugee status permits non-citizens to enter from abroad, and asylee status permits non-citizens in the U.S. to remain. (95% ALL ELIGIBLE)

Whether non-exempt non-citizens granted a stay of deportation or who have had their deportation withheld are eligible for benefits. (90% All ELIGIBLE)
Whether non-exempt persons or immigrant groups that are permitted entry into the U.S. in cases of emergency or because of an overriding public interest are eligible for benefits. These entrants are granted temporary residence and are not likely to become residents. (94% ALL ELIGIBLE)

Whether a state counts some portion of Food Stamps as unearned income in determining eligibility and benefits. (99.35% NO)

Whether or not the income of grandparents outside the household is deemed. (99% NO)

Range of dollar values to which Earnings Disregard #1 applies. (99% ALL)

Whether parents are required to be involved in their children’s education in any way other than encouraging school attendance. (94% NO)

Whether students are required to achieve at least minimum school standards. (99% NO)

Whether any school bonuses are offered for compliance with school requirements. (97.4% NO)

Whether a state provides Transitional Child Care to some or all former program participants. (90%+ YES)

Whether state provides Transitional Medicaid coverage to some or all former program participants. (90%+ YES)

Whether state has any test that compares net earnings (earned income with disregards) to an income threshold (100% NO)
APPENDIX B. CODE BOOK
WELFARE DIMENSIONS SUMMARY SCORES (WDSS)

Variables are presented here by the WDSS item to which they contribute. All WDSS items are first- or second-order factor scores. Urban Institute designations for individual items are given in parentheses.

Eligibility Rules (2\textsuperscript{nd}-order Factor Score)

\textit{Eligibility of Two-Parent Families (1\textsuperscript{st}-order Factor Score)}

\textbf{HUNDRED (tp\_maxap)}
Indicates the maximum number of hours a principal earner in a two-parent, non-disabled applicant unit can work and still be eligible for benefits. (The 100 hour rule for applicants).

- 0 = No Limit
- 1 = 100 hours
- 2 = N/A

\textbf{WKHIS (tp\_wkhis)}
Captures the required proof of labor force attachment for the principal earner in a two-parent, non-disabled applicant unit in order to be eligible for benefits (The work history rule).

- 0 = N/A and No
- 1 = If a work history, id required

\textbf{UNEMWAIT (tp\_bwait)}
Length of time the principal earner of a two-parent, non-disabled family must be unemployed in order to receive benefits. (The 30 day waiting period rule).

- 0 = N/A
- 1 = no wait
- 2 = 30 day wait (4 weeks)

\textit{Immigrant Needs-based Eligibility (1\textsuperscript{st}-order Factor Score)}

\textbf{VYRNEWIM (nc\_5ste$)}
Captures whether the state chooses to fund any groups of non-exempt qualified, new immigrants during their first five years in the country.

- 0 = Yes
- 1 = No

\textbf{BATIMPOS (nc\_nbatt)}
Captures whether battered immigrants are eligible for benefits.

- 0 = Some or eligible
- 1 = Not applicable or not eligible
**BATIMPRE (nc_obatt)**
Captures whether battered immigrants are eligible for benefits.
0= Yes
1= No

**Immigrant Eligibility in the Public Interest (1st-order Factor Score)**
**PERMIMM (nc_nperm)**
Captures whether the non-exempt group of new immigrants who enter the U.S. with a green card or are permitted permanent residence under the Immigration Reform and Control Act (IRCA) or Special Agricultural Worker provisions of the IRCA are eligible for benefits after their first five years in the country.
0= Some or eligible
1= Not applicable or not eligible

**NODEPORT (nc_ndprt)**
Captures whether non-exempt non-citizens granted a stay of deportation or who have had their deportation withheld are eligible for benefits.
0= Some or eligible
1= Not applicable or not eligible

**Basic Eligibility Rules (1st-order Factor Score)**
**INCTEST (Combined Income Eligibility Tests Variables)**
Value of income eligibility test value, computed to be comparable to gross income test value (earned and unearned income) and reverse coded so that high values indicate most stringent income test values and lowest values indicate highest allowable incomes.
Range= 99 - 4444

**DRUGFEL (ei_drgfl)**
Indicates whether persons convicted of a drug felony are eligible.
0= Yes
1= No and Not eligible

**CA_JSREQ (ca_jsreq)**
Indicates whether or not job search is required as a condition of eligibility in the state. Details on this policy are captured in the corresponding notes variable.
0= No
1= Yes

**Assets/Income (1st-order Factor Score)**
**UNRESASS (at_unres)**
Indicates the allowable value of assets that can be held for a particular use, often referred to as IDAs (Individual Development Accounts).
1= 3000 and up
2= 2000-2500
3= 1000-1500
D_CNSTNT (ed_#1use, ed_#1tme, ed_#2use, ed_#2tme, ed_#3use, ed_#3tme)
Indicates whether income disregards remain constant over time or decrease with increasing time on welfare.
0= Yes, remain constant
1= No, decrease over time

Behavior-related Rules (2nd-order Factor Score)

Family Responsibilities (1st-order Factor Score)
CA_IMREQ (ca_imreq)
Indicates whether or not immunizations and/or health screenings are required in the state. Details regarding immunization and health screening policies are found in the Immunization and Health Screening Requirements category.
0= No
1= Yes

CA_SAREQ (ca_sareq)
Indicates whether or not school attendance and parental involvement are required in the state. Details regarding school requirements for parents and children are found in the School Policies for Dependent Children and Minor Parents Activities Requirements and Bonuses categories.
0= No
1= Yes

IMMUMREQ (im_imreq)
Captures whether the state has an immunization requirement.
0= No
1= Yes

SCHLREQ (sp_screq)
Captures whether the state has any school requirements.
0= No
1= Yes

Personal Responsibilities (1st-order Factor Score)
CA-DGREQ (ca_dgreq)
Indicates whether or not drug and alcohol screening and/or treatment is required in the state. Details on this policy are captured in the corresponding notes variable.
0= No
1= Yes
CA_PTREQ (ca_ptreq)
Indicates whether or not parenting classes and/or family skills training sessions are required in the state. Details on this policy are captured in the corresponding notes variable.
0= No
1= Yes

Illness Exemption (1st-order Factor Score)
ILLEXEM (ae_illps)
Indicates whether or not an ill or incapacitated person is exempt from Activities Requirements.
0= Yes
1= No

CARILLEX (ae_illct)
Indicates whether or not a unit member caring for another ill or incapacitated unit member is exempt from Activities Requirements.
0= Yes
1= No

Work Exemption (1st-order Factor Score)
WKHRS (ae_wkhrs)
Indicates the number of hours per week a unit member must work in an unsubsidized job in order to be considered exempt from Activities Requirements.
Range = 0 – 40 (Actual Values)

NOPROGEX (ae_nopgm)
Indicates whether or not a state exempts a person from activities requirements if they are living in an area where the program is not available.
0= Yes
1= No

VISTAEX (ae_vista)
Indicates whether or not full-time VISTA volunteers are exempt from Activities Requirements.
0= Yes
1= No

Penalties for Noncompliance (1st-order Factor Score)
ACTSANCT (as_worst)
Describes severity of sanctions for noncompliance with an activities requirement.
1= Most lenient sanctions
2= Moderately lenient sanctions
3= Moderately harsh sanctions
4= Harsh sanctions
5= Hardest sanctions – unit becomes ineligible for a period/permanently.
CHSSANCT (ss_worst)
Describes severity of sanctions imposed for failure to meet child support cooperation requirements.
1= Fixed-rate financial penalty
2= Calculated penalty
3= Needs of parent and child in question are dropped from benefit calculation.
4= Unit loses eligibility.

Time Limits (1st-order Factor Score)
TIMELMT (tl_types)
Describes the combination of time limits the state employs.
0= No limit
1= Lifetime limit, Individual determination, or both
2= Benefit reduction period
3= Periodic Limits
4= Lifetime and Periodic Limits
5= Benefit waiting period
6= Lifetime limit and benefit waiting period

TMLMTEXT
Captures how the extension policy is implemented in the state. Basically, this variable describes if the state has a set policy on granting extensions or if each case is evaluated on its own personal merits.
0= Not applicable
1= Case by case
2= Specific rules
3= No extension

1st-order Factor Score Items Not Included in 2nd-order Factor Scores

Activities Requirements (1st-order Factor Score)
ACTREQ1 (ar_#1dsc)
Describes what is required for Activities Requirement #1.
0= Wide range of activities, including community service and child care
1= More possibilities than only work or only school related activities
2= Only work or only school activities

ACTREQ2 (ar_#2dsc)
Describes what is required for Activities Requirement #2.
0= Wide range of activities, including community service and child care
1= More possibilities than only work or only school related activities
2= Only work or only school activities
ACTREQ3 (ar_#3dsc)
Describes what is required for Activities Requirement #3.
0= Wide range of activities, including community service and child care
1= More possibilities than only work or only school related activities
2= Only work or only school activities

ACTREQ4 (ar_#4dsc)
Describes what is required for Activities Requirement #4.
0= Wide range of activities, including community service and child care
1= More possibilities than only work or only school related activities
2= Only work or only school activities

ACTREQ5 (ar_#5dsc)
Describes what is required for Activities Requirement #5.
0= Wide range of activities, including community service and child care
1= More possibilities than only work or only school related activities
2= Only work or only school activities

Eligibility of Pregnant Women (1st-order Factor Score)
PREGELG (ep_asteg)
Indicates whether pregnant women are ever eligible in the state and whether only the mother is
eligible or whether the mother and her unborn child are eligible.
2= Yes (mother and father, mother and spouse if he lives with, mother and unborn child)
1= No

PREGMO (ep_month)
For states that provide assistance to pregnant women, indicates the month or pregnancy during
which eligibility begins for a pregnant woman with no other children.
0= 6 months and under
1= 7 months and up
2= N/A

Transitional Benefits Available (1st-order Factor Score)
CHCARDUR (tb_tcdur)
Describes the duration of prior assistance receipt required for a unit to be eligible for Transitional
Child Care.
1= 1 of last 6 months
2= 3 of last 6 months
3= 1 of last 3 months
4= Not applicable – no child care provided
MEDICDUR (tb_tmdur)
Describes the duration of prior assistance receipt required for a unit to be eligible for Transitional Medicaid.
0= No duration requirement
1= 3 of last 6 months
2= Not applicable

Financial Responsibilities of Extended Kin (1st-order Factor Score)

STEPRNT (ei_stprt)
Indicates whether inclusion of stepparent in the unit is mandatory, optional or prohibited.
0= Mandatory
1= Optional
2= Prohibited

ESSENPER (ei_esper)
Indicates whether inclusion of "essential persons" (persons other that parents, non-parent caretakers) in the unit is allowed.
0= Yes and Allowed
1= No and Not allowed

GRNDDEEM (di_ghmd)
Captures whether or not the income of grandparents in the household is deemed.
0= No
1= Yes

STEPDEEM (di_spwho)
Describes to whom a step-parent's income is deemed, if at all.
0= Not applicable or not deemed to unit
1= Deemed to spouse and children
APPENDIX C. DECISION RULES FOR MISSING DATA IMPUTATION

Welfare Dimensions Summary Scores (WDSS)
Imputation for Missing Data
Decision Rules

(Examples use 0/1 indicators, where “1” is more stringent and shaded cells where values are imputed.)

Single Variables

When a single variable is missing and the text provides no information indicating a change from the previous year, the value from the previous year is used:

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>state</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

When the value for 1996 is missing and 1997 is not missing and indicates the initiation of a rule to specify the appropriate rule for all to follow, it is assumed that this new rule indicates an increase in stringency compared with the previous year and the 1996 value is coded to be less stringent:

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>state</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

When the value for 1996 is missing and 1997 and 1998 are not missing and 1998 indicates the initiation of a rule to specify the appropriate rule for all to follow, it is assumed that the 1996 value is comparable to the 1997 value:

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>state</td>
<td>1</td>
<td>← 1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

If all years are missing, assign less stringent value to each based upon the assumption that the lack of a rule implies flexibility in how the issue is handled from one welfare office to another.
Series Variables

If the value is missing for a variable in a series of variables (e.g., activities requirement #1 through activities requirement #5) and values exist for variables earlier in the series, and the text has no indication of a reasonable difference, assign the value from the earlier variable in the series from the same year because when this situation occurs, it usually indicates that the earlier requirement covers the period that the missing variable would have covered if a change in requirement had occurred:

<table>
<thead>
<tr>
<th>CASE</th>
<th>AR#1</th>
<th>AR#2</th>
<th>AR#3</th>
<th>AR#4</th>
<th>AR#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>state-97</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

If all in the series are missing for a year, and the text provides no information indicating a change from the previous year, assign values from the previous year:

<table>
<thead>
<tr>
<th>CASE</th>
<th>AR#1</th>
<th>AR#2</th>
<th>AR#3</th>
<th>AR#4</th>
<th>AR#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>state-98</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>state-97</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
</tbody>
</table>

If all in the series are missing for 1996, and the text indicates the first institution of rules on the issue occurs in the following year, assume that 1996 was a less stringent period:

<table>
<thead>
<tr>
<th>CASE</th>
<th>AR#1</th>
<th>AR#2</th>
<th>AR#3</th>
<th>AR#4</th>
<th>AR#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>state-97</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>state-96</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>