The following table and maps are intended to illustrate a few of the hundreds of ways that the CHAS data can be presented. These are not intended to prescribe how the data should be analyzed for the Consolidated Plan or any other purpose. It is our intent that these tables and maps excite the users to explore how the CHAS data can best be used to illustrate the problems or issues for their specific jurisdiction.

The information included in this file does not represent the views or policies of the U.S. Department of Housing and Urban Development or the U.S. Government. If you have questions, please contact Todd Richardson at Todd_M_Richardson@HUD.GOV.
CHAS Tables A3A and A3B allow you to “stack” need without double counting. This is done by prioritizing the housing needs measured in the CHAS. The “highest priority” need is households without complete kitchen and/or plumbing. No matter what other housing needs they might have, they are put into the without kitchen and/or plumbing category. The second priority is households with severe overcrowding (1.51 persons or more per room). This includes all households with this problem except those that are without complete kitchen and/or plumbing (since those households are already counted in the first category). This pattern goes on in the following order: moderate overcrowding, severe cost burden, moderate cost burden, households with no income (cost burden is not calculated for these households), and no problems. This table can be further broken down by income. The table above does this stacking for very low-income households nationwide (including Puerto Rico) and demonstrates graphically that severe cost burden, followed by moderate cost burden is the predominant housing need for very low-income households. One caveat to this table, of course, is that CHAS data do not capture the full extent of substandard housing in the U.S. Local planners should look to other resources for identifying the level of substandard housing in their community.
CHAS Tables A6A and A6B allow users to identify the number of households within very fine cuts of HAMFI. So, for example, if you want to know the number of households less than 60% of HAMFI for purposes of the HOME program, you could use Tables A6A and A6B. The chart above uses the data from Table A6B to show the proportion of renter households nationally by income break with one of four housing problems. Not surprisingly, housing need for renters declines with income.
The most detailed CHAS tables are Tables F5A, F5B, F5C, and F5D. Because they are the most detailed they are also the most difficult to work with. However, taking the time to figure them out is worth it. These tables allow you to cross cut by: four tenure categories - single family renter, multifamily renter, owners without a mortgage, owners with a mortgage; five household types - elderly family, elderly non-family, small family, large family, other households (mostly single adults); four income breaks; and three housing need categories - 1 of 3 housing problems (overcrowded and/or without complete kitchen and/or plumbing), severe cost burden, moderate cost burden. The chart above shows the distribution of very low-income renters nationally on the left by household type and tenure. On the right, we can isolate those with just severe cost burden (paying more than 50% of income for rent).
CHAS Tables A14A and A14B can be used to help identify the number of children potentially at risk of exposure to lead dust. Tables A14A and A14B crosses age of housing with income and presence of children under age 6. Since these data are available at the Census Tract level, planners may find it most useful to map areas with high numbers of older units occupied by poor households with children under age 6. The table above shows nationally the number of households with very low-income children under age 6 by the year their home was built.
CHAS Tables A10A, A10B, A10C allow you to first identify how many units are affordable by income break and then see who is living in those units by income break. The chart above adds the vacancy data on affordable units from Tables A11 and A12 to show the distribution and occupancy of affordable housing nationally.
While the CHAS special tabulation data do not have data on all persons with disabilities, it does have data on persons with mobility and/or self care limitations. Tables A7A, A7B, and A7C are particularly helpful for identifying where those needs are most acute when controlling for age and income. The table below uses national data to illustrate how the data could be used.

**Mobility and/or Self Care Limitations by Age for Households Less than 50% of HAMFI**  
- Tables A7A, A7B, and A7C

<table>
<thead>
<tr>
<th></th>
<th>Age less than 62</th>
<th>Age 62 to 74</th>
<th>Age 75 plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renters</td>
<td>10,948,470</td>
<td>1,538,825</td>
<td>1,790,670</td>
</tr>
<tr>
<td>w/mobility or self care limitations</td>
<td>18.9%</td>
<td>43.3%</td>
<td>51.4%</td>
</tr>
<tr>
<td>Owners with mortgage</td>
<td>3,323,380</td>
<td>742,680</td>
<td>473,063</td>
</tr>
<tr>
<td>w/mobility or self care limitations</td>
<td>23.1%</td>
<td>35.3%</td>
<td>45.7%</td>
</tr>
<tr>
<td>Owners without mortgage</td>
<td>2,027,250</td>
<td>1,742,390</td>
<td>2,408,760</td>
</tr>
<tr>
<td>w/mobility or self care limitations</td>
<td>30.4%</td>
<td>31.5%</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

College towns face a unique challenge as they plan for housing needs due to an often large number of students not living in families who live off-campus. While a large number of those students likely receive financial support from their parents, their response to the Census bureau in 2000 generally does not capture that income. CHAS Table A13 shows that nationally the poverty rate for college students living in off-campus housing in 2000 was 41 percent. The national poverty rate for the rest of the U.S. population was 12 percent. Planners can use CHAS Table A13 to improve their local targeting of resources.

The most powerful use of the CHAS 2000 data locally is the ability to map concentrations of need at the Census Tract level. Very little of the CHAS 1999 data were available at this lower level of geography. The remaining pages show some maps that can be prepared using the shape files downloadable from HUDUSER along with the CHAS data.
This map uses CHAS table F7 and the summary level 080 shape file for the state of Michigan. The data are joined on "sum080".

Concentration of Very Low Income is the Sum of F7c1, F7c2, F7c5, and F7c6 divided by the sum of F7c1 to F7c8.

<table>
<thead>
<tr>
<th>Concentration of VLI Households</th>
<th>michigan tract data.VLICONC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10% vli households</td>
<td>0 to 10% vli households</td>
</tr>
<tr>
<td>11 to 20% vli households</td>
<td>11 to 20% vli households</td>
</tr>
<tr>
<td>21 to 30% vli households</td>
<td>21 to 30% vli households</td>
</tr>
<tr>
<td>31 to 40% vli households</td>
<td>31 to 40% vli households</td>
</tr>
<tr>
<td>41 to 100% vli households</td>
<td>41 to 100% vli households</td>
</tr>
</tbody>
</table>
This map uses CHAS tables A8c and A12 and the summary level 080 shape file for the state of Michigan. The data are joined on "sum080".
Sum of A8cc1 to A8cc6 and A8cc13 to A8cc18 and A12c1 to A12c6.

Rental Units Affordable to Less than 50% of HAMFI
michigan tract data.AFFRENT

- 0
- 1 to 50
- 50 to 100
- 100 to 250
- 250 to 500
- 500 to 1000
- 1000 to 1964
Saginaw, Midland, and Bay City Michigan

Number of Very Low Income Households with Children Under 6 Living in Homes Built Pre-1950

This map uses CHAS tables A14a and A14b and the summary level 080 shape file for the state of Michigan.

The data are joined on "sum080".
Sum of A14ac19, A14ac21,a14bc19, a14bc21.

Very Low Income Households with Children Under Age 6
michigan tract data.VLIKIDP5

- 0
- 1 to 20
- 20 to 50
- 50 to 100
- 100 to 215