The *Making Room* Household Model™

**What is *Making Room***?

*Making Room* is a new approach to housing policy which seeks to match the design of a city’s housing stock with the needs of its households.

The *Making Room* approach, developed and coined by housing research and education group CHPC, comprises three key areas of scrutiny:

1) How the population is grouping itself into households;
2) Best Practices regarding options for different housing typologies that can support new household arrangements and lifestyles;
3) The revision of possible zoning, planning, subsidy, and building code controls so that the development of new housing models is allowed and encouraged.

**Why do we need a new model for finding out how the population is grouping itself into households?**

The simple answer is that the way that housing data is processed does not help us understand household configurations in a way that is informative about how people are living and what the housing need is.

Housing data analysis relies on the U.S. Census, the American Community Survey (ACS), and other local surveys, that offer detailed information about housing units across the country and the people who live there. However, when the data is processed, households are categorized into *family* and *non-family* groupings.
For example, these are the current household categories for the American Community Survey:

<table>
<thead>
<tr>
<th>American Community Survey Household/family type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Married couple household</td>
</tr>
<tr>
<td>2. Other family household : Male householder, no wife present</td>
</tr>
<tr>
<td>3. Other family household : Female householder, no husband present</td>
</tr>
<tr>
<td>4. Nonfamily household : Male householder : Living alone</td>
</tr>
<tr>
<td>5. Nonfamily household : Male householder : Not living alone</td>
</tr>
<tr>
<td>6. Nonfamily household : Female householder : Living alone</td>
</tr>
<tr>
<td>7. Nonfamily household : Female householder : Not living alone</td>
</tr>
</tbody>
</table>

These categories tell us nothing about the size of the household or how the housing unit is being consumed. They are outdated in terms of not including unmarried or same sex partners as family members. And they do not highlight which housing units are being shared by multiple adults – a crucial piece of knowledge for understanding housing need.

**The Making Room Household Model**

CHPC developed a data model for re-configuring annual American Community Survey (ACS) population and housing unit data to establish clearer, more straightforward categories of households. The model categorizes households into the following six types:

**Simple**

1) Single person living alone
2) Couple living with no children
3) Couple living with children that are all under 25
4) Single person living with children that are all under 25

**Shared**

5) Unrelated adults sharing housing (the head of household and/or their partner plus at least one additional unrelated adult such as a roommate or lodger)
6) Adult relatives sharing housing (the head of household and/or their partner plus at least one additional related adult over 25)

A second-tier model can offer more scrutiny of the household categories 5 & 6. We can delve further into these “sharing households” and determine different sub-categories ie households sharing with adult children, households sharing with elderly relatives, room-mate households etc.
**Latest National Results**

For American Community Survey data from 2014, the U.S. falls into the following Making Room Household Categories:

- **28%** Single person living alone
- **24%** Couple living with no children
- **22%** Couple living with all children under 25
- **8%** Single person living with children all under 25
- **5%** Unrelated adults sharing housing
- **12%** Adult relatives sharing housing

Using 2014 American Community Survey data and applying the Making Room Household Analysis Model, our model can run the breakdown of these household categories for any Public Use Micro Data Area (PUMA) in the country. A PUMA is a statistical geographic area defined for disseminating results of the American Community Survey and built on census tracts and counties.
Methodological Details

This methodology utilizes the ‘relationship’ variable in the ACS which categorizes people within a household by their relationship to the head of household. It also uses the egen function in STATA to tag certain characteristics of people to the whole household.

The basic rules we use to categorize the Making Room household types are as follows:

- Households are tagged as type 1 if there is only 1 person living in the household.

- If only two people live in a household and the household includes a married or unmarried partner, it is a type 2 household.

- If a household includes a couple and child(ren) under 25 and no other adults then it is a type 3 household.

- If only a single person and his/her child(ren) all under 25 live in a household, it is a type 4 household.

- If a household shows the presence of a non-family member – roommate, boarder or lodger, it is a type 5 household.

- If an adult relative – including mother, father, brother, sister, other relative - is identified in a household, it is classified as a type 6 household.

Because people live complicated and diverse lives, many housing arrangements do not fit neatly into the six categories. Therefore, our methodology gives special consideration for the following examples of household compositions:

- If a household is composed of a single adult living with an eight year old child, we would classify this as a type 4 household. It does not matter whether it is a grandmother raising her grandchild or a single mother raising her child from a housing consumption perspective.

- If a couple or a single parent lives with a child under 25, but the child is either married or has his/her own children, then we re-classify this child as an adult and such a household is a type 6 instead of a type 4 household.
One especially problematic feature of the ACS sample is the definition of ‘head of household’. The survey requires an individual in the household to fill in the form, and describe his/her relationship with the other members of the household. Sometimes this means that the survey is answered by a child in the household. We assume this may be if the child (under 25) has stronger English skills than the parents. Following our standard classification process, these families would be categorized as type 6 because they would declare that they live with their parents. In reality, many of these households should be type 3 or 4 - they are under 25 and living with a parent or both parents. Our model addresses this issue by singling out the households with a young householder. Then we use the following rule to re-categorize this group of households.

1. If a young ‘household head’ lives with two parents and no other adult relatives or nonrelatives in the household, then it is re-categorized as a type 3 household.
2. If a young ‘household head’ lives with one parent and that parent has a spouse present in the household and no other adult relatives or nonrelatives in the household, then it is a type 3 household.  
3. If the parent of the young ‘household head’ does not have a spouse present and no other household members then it is re-categorized as a type 4 household.

There are also some households of related household members where all of the residents are younger than 25 ie sisters and brothers or other relatives all under 25. If this is the case, the model identifies these households and re-categorizes them as a type 6 shared unit if they are all over 21. If a household member is under 21 then we consider this as a ‘child’ of the head of household and re-categorize accordingly.

For more information on this model, please contact Sarah Watson, Deputy Director, at swatson@chpcny.org or (212) 286-9211 ext. 116.

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1 This rule has a small flaw. If a young ‘head of household’ lives with one parent and the parent has a partner but they are not married, the model would classify this household as a type 5 or 6 – because the additional adult would be classified as something like ‘other relative’ or maybe ‘unrelated adult’. We are currently unable to run an accurate rule that would remedy this issue. However, the number of households for this is very small.

2 This rule would re-categorize a 23 year old and 19 year old brother and sister living together as a Type 4: single person living with child(ren) all under 25. This is not perfect but from a housing consumption perspective we believe this is the closest match.