Visualization Tool for Exploring RHNA Methodology Options and Allocation Outcomes

Staff developed the Visualization Tool for Exploring Factor Weighting and Allocation Outcomes to support the Housing Methodology Committee (HMC) as they chose a baseline allocation, explored approaches for distributing units across income categories, prioritized factors, considered weights for each factor, and developed an initial recommendation for a Regional Housing Needs Allocation (RHNA) methodology.

The tool allows users to explore two different approaches the HMC considered for creating a sample RHNA methodology: the "Income Shift" approach and the "Bottom-Up" approach. When the user first opens the RHNA visualization tool, they are brought to a landing page that describes these two approaches. The user can then select from two different versions of the visualization tool, one for the Income Shift approach and one for the Bottom-Up approach. Both versions of the tool have essentially the same features, and the information below can assist the user with either version.

On September 18, 2020, the HMC voted to recommend a RHNA methodology that uses the Bottom-Up income allocation approach, **Future Year 2050 Households** from the Plan Bay Area 2050 Blueprint for the methodology's baseline, and the following factors and weights:

Very Low and Low Units	Moderate and Above Moderate Units
70% Access to High Opportunity Areas 15% Job Proximity – Auto 15% Job Proximity – Transit	40% Access to High Opportunity Areas 60% Job Proximity – Auto

On October 1, 2020, the ABAG Regional Planning Committee voted to recommend this methodology for approval by the Executive Board, and the Board approved its release as the Proposed RHNA Methodology for public comment on October 15, 2020. As required by law, ABAG held a public comment period from October 25 to November 27.

ABAG's Draft RHNA Methodology is similar to the Proposed Methodology with two notable differences. First, it incorporated 2050 Households projections from the Plan Bay Area 2050 Final Blueprint, the San Francisco Bay Area's regional plan slated for adoption later this year. Second, in response to public comments, it integrated the "equity adjustment" that was originally proposed by several HMC members. The Draft RHNA Methodology and Final Blueprint were adopted by the ABAG Executive Board on January 21, 2021, with the Metropolitan Transportation Commission adopting the Final Blueprint on January 27, 2021. Accordingly, the baseline options in this tool based on Plan Bay Area 2050 have been updated with data from the Final Blueprint. For more information about the equity adjustment and the RHNA methodology adopted by the Executive Board, see this document.

Although the HMC has completed its work and ABAG has adopted a Draft RHNA methodology, ABAG-MTC staff is leaving this tool online to help facilitate a better understanding of the RHNA methodology development process. However, the RHNA visualization tool does not include the equity adjustment, and so this tool cannot entirely replicate the methodology adopted by ABAG. Visit the RHNA home page for more information about the next steps in the RHNA process.

Regional Housing Needs Determination
ABAG received its Regional Housing Needs Determination (RHND) from the Department of Housing and Community Development (HCD) in June 2020. When the user opens either version of the tool, the upper right corner of the webpage shows ABAG's RHND for the 2023-2031 RHNA cycle. The RHNA methodology distributes the RHND across ABAG's 109 jurisdictions.

HCD divides a region's RHND across four levels of housing affordability that correspond to different income categories. Ultimately, the RHNA methodology must assign a total number of housing units to each Bay Area jurisdiction and distribute each jurisdiction's allocation among the four affordability levels.

Baseline Allocation
The baseline allocation is used to assign each jurisdiction a share of the RHND as a starting place for the methodology. The factors and weights selected for the RHNA methodology then adjust a jurisdiction's baseline allocation. When the user first opens either the Income Shift or Bottom-Up version of the tool (or refreshes one of these webpages), the map displays the Future Year 2050 Households (Blueprint) baseline allocation by default, which reflects the use of this baseline in the RHNA methodology recommended by the HMC and adopted by the ABAG Executive Broad. The Future Year 2050 Households (Blueprint) baseline uses a jurisdiction's share of Bay Area households in 2050, consistent with the future household distribution in the Plan Bay Area 2050 Final Blueprint.

The user can change the baseline allocation for the RHNA methodology by using the drop-down menu on the right side of the webpage under the heading "Methodology Baseline Options." Using this drop-down menu, the user can select any of the following options:
- A jurisdiction's share of Bay Area households in 2019.
- A jurisdiction's share of Bay Area household growth through 2050, consistent with the growth pattern in the Plan Bay Area 2050 Final Blueprint.
- A jurisdiction's share of Bay Area households in 2050, consistent with the future household distribution in the Plan Bay Area 2050 Final Blueprint.
- A jurisdiction's share of Bay Area jobs in 2017, based upon the most recent Census data.
- A jurisdiction's share of the region's total urbanized land area, using the Census Bureau's definition of urbanized land and excluding lands protected from development under federal or state programs.

Income Shift Approach

Potential Methodology Factors – Total Allocation
A key purpose of the tool is to explore how factors may adjust the baseline allocation. To this end, the tool includes 12 potential factors the HMC considered for the methodology that will determine a jurisdiction's RHNA.

Users can move the sliders to assign a weight to each factor to be included in the methodology. For the Income Shift approach, a factor's weight represents the relative policy importance of that factor in determining a jurisdiction's total unit allocation. Functionally, the weight determines the share of the RHND assigned by a factor. Factor combinations must add up to 100%.

Potential Methodology Factors – Income Shift
The income shift approach produces an allocation that moves jurisdictions' income distributions closer to the regional distribution. In the Income Shift approach version of the tool, users can access the income shift slider by clicking on the "Income" tab below "Potential Methodology Factors." Moving the "income shift" slider adjusts how the RHNA methodology distributes jurisdictions' allocations across the four income categories. A shift of 0% means a jurisdiction's RHNA mirrors the jurisdiction's existing income distribution. A shift of 100% means a jurisdiction's RHNA mirrors the region's existing income distribution. In theory, a higher income shift will close the gap between a jurisdiction's income distribution and the region's distribution more quickly.

Bottom-Up Approach

Potential Methodology Factors – RHNA Income Categories
In contrast to the Income Shift, the Bottom-Up approach does not start with a total allocation assigned with a factor-based methodology. Instead, this approach builds up the total allocation by using factors to determine allocations for the four income categories separately. Each jurisdiction's total unit allocation is calculated by summing the results for the income categories. The Bottom-Up approach uses factors from the same set of 12 factors that can be selected for the total allocation in the Income Shift approach.

In the Bottom-Up version of the tool, the "Very Low-Income" tab is selected first under "Potential Methodology Factors" on the right side of the webpage. The user can adjust the sliders for each factor's weight in the methodology that will determine the allocation of very low-income units. In this context, a factor's weight represents the relative policy importance of that factor in determining a jurisdiction's very low-income unit allocation. Factor combinations must add up to 100%.

Next, the user can click the tabs labelled "Low-Income," "Moderate-Income," and "Above Moderate-Income," which are adjacent to the "Very Low-Income" tab. The user can adjust the sliders for each factor's weight in the methodology that will determine the allocation of the units for these different income categories. Again, factor combinations must add up to 100%.

In the interest of simplicity, staff recommended that the HMC group some income categories together rather than use four separate sets of factors. For example, the methodology could use the same factors to allocate very low-income and low-income units, while a separate set of factors allocates moderate-income and above moderate-income units. This approach to income category grouping is used in the methodology recommended by the HMC and adopted by the ABAG Executive Board.

Seeing Results on the Map
In the Income Shift version of the tool, users can click on the "Update Allocation" and "Update Distribution" buttons to see results for each jurisdiction on the maps after selecting desired factors and weights for a total allocation and an income shift level. In the Bottom-Up version of the tool, users can click the "Update Allocation" button to view results after selecting factors for both affordable housing and market-rate housing.

For both methodology approaches, users can then toggle between five maps: one for the total allocation and one for each of the four income categories. On the total allocation map, jurisdictions with the darkest green will experience the largest <u>household growth rate</u> relative to the baseline allocation (total households in 2019), while jurisdictions shaded darker pink experience a smaller growth rate relative to the baseline allocation. On the income category maps, jurisdictions shaded darker green have a higher <u>share of their allocation</u> in that category, while jurisdictions shaded darker purple have lower shares in that category.

Summaries of Allocation Results
At the bottom of the page, the "Total Housing Allocation by County" section shows the share of the RHND assigned to jurisdictions in a county, and it also displays a comparison to each county's share from the 2015-2023 RHNA.

The "Results Summary" section contains buttons that produce charts and tables showing the income distribution of the allocations received at the county-level and by each jurisdiction. There is also a table and chart that show each jurisdiction's allocation, including the number of units in each income category and the share of units in each income category.

Downloading Results
Users can click on the "Download Data" button to download a spreadsheet with jurisdiction-specific allocations. This spreadsheet also shows how much of each jurisdiction's RHNA comes from each of the methodology factors the user selected.

Additionally, users can click on the "Share" button to download a spreadsheet that records the factors, weights, and income shift level (if applicable) they selected.