



## **Best Practices for Allocating and Evaluating RHNA**

A Study Conducted for the  
California Department of Housing and Community Development  
Sacramento, California

By

Annelise Osterberg

Spring 2020

The author conducted this study as part of the program of professional education at the Goldman School of Public Policy, University of California at Berkeley. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author and are not necessarily endorsed by the Goldman School of Public Policy, by the University of California, or by any other agency.

## Table of Contents

Acknowledgements .....	4
Executive Summary .....	5
Introduction .....	10
The RHNA Process .....	11
Existing Research on RHNA .....	14
Qualitative Review Methodology .....	17
Qualitative Findings .....	19
Quantitative Assessment Methodology .....	24
Quantitative Findings .....	26
Recommendations for COGs .....	40
Recommendations for the State .....	45
Conclusion .....	47

## **Acknowledgements**

This paper would not have been possible without the guidance and insight of my client, Megan Kirkeby and Tawny Macedo of the California Department of Housing and Community Development, and the support of my faculty advisor Candace Hester. I would also like to thank my advisor at the Turner Center for Housing Innovation, Ben Metcalf, who helped me hone my analysis and develop relevant and timely policy recommendations. A special thank you to the kind staff of several Councils of Government and housing advocacy organizations who took the time to answer my questions and share their perspective on how California can plan for a greener and more equitable future.

## I. Executive Summary

The Regional Housing Needs Assessment (RHNA) is one of the main tools available to the state for addressing California's state-wide housing crisis. The RHNA process requires that cities and counties plan for the housing needs of all Californians, especially lower-income households. However, RHNA has been criticized for not fairly allocating housing goals among jurisdictions. Indeed, past research shows that lower-income communities are sometimes asked to take on more than their fair share of the regional housing need, while wealthy, white jurisdictions take on less.

In response to this concern, the state passed a number of bills in 2018 reforming the RHNA process. These bills adjust the process the California Department of Housing and Community Development (HCD) uses to estimate regional housing need and change the guidelines for how RHNA is allocated among cities and counties. Further, these laws give HCD new authority to determine whether each regional government's RHNA allocation plan furthers the law's statutory objectives.

To support HCD in this new role, I review the methodologies three regional governments are using to allocate RHNA in the 6<sup>th</sup> cycle, including the allocation plans developed by the Sacramento Area Council of Governments (SACOG), Southern California Association of Governments (SCAG), and San Diego Association of Governments (SANDAG). Through this analysis, I identify best practices that other regional governments can implement moving forward and suggest strategies HCD can use to quantitatively evaluate RHNA allocation plans. My hope is that this will help HCD develop a more nuanced understanding of the extent to which allocation plans further the statutory objectives of RHNA, while also helping the agency develop a more streamlined process for conducting its assessment.

Through my qualitative review of allocation methodologies, I find that some COGs have come up with new strategies for ensuring the process of allocating RHNA is more transparent and data-driven. However, when allocating RHNA among cities and counties, some COGs appear to be putting more emphasis on strategies that promote the state's environmental goals than strategies that promote RHNA's equity objectives. For instance, SANDAG puts more emphasis on building near transit stops than near job centers, even though transit stops are often concentrated in lower-income communities. Further, SACOG and SCAG allocate part of their RHNA based on the land use projections in their Sustainable Communities Strategy, which is primarily designed to help the region meet its greenhouse gas reduction goals. When equity is

taken into account, it is often as a secondary step that only affects what percentage of a jurisdiction's RHNA allocation falls into each of the four income buckets.

Understanding the extent to which a methodology promotes RHNA's statutory objectives requires not only understanding the broad methodological approach employed by a COG, but also an analysis of the plan's actual output. Accordingly, to assess whether the 6<sup>th</sup> cycle allocation methodologies actually promote the five statutory objectives of RHNA, I assess how the size of jurisdictions' RHNA allocations differ relative to key demographic characteristics, including household income, population size, transit and job access, housing costs, and access to resources.

Through this analysis, I find there is variation in the extent to which the three allocation plans further the statutory objectives of RHNA. In an equitable distribution, we would expect to see—at the very least—no pattern of lower-income jurisdictions consistently taking on a larger share of the RHNA allocation relative to their share of the region's population or jobs. Ideally, given that wealthier jurisdictions have historically used exclusionary policies to limit growth within their jurisdictional boundaries, we would see higher-income jurisdictions taking on a larger share of the regional RHNA allocation relative to their share of the region's population and jobs. We would also want to see jurisdictions with a larger number of transit stops and more access to opportunity receiving a larger share of the RHNA allocation relative to their share of the regional population. I find that SACOG's methodology is the only one that consistently does this. Both SANDAG and SCAG's methodologies generally promote both equity and environmental goals, but do not do so consistently.

Overall, this analysis illustrates that there is more that COGs can do to develop allocation methodologies that further RHNA's statutory objectives. While my analysis underscores that there is no one-size-fits-all approach to RHNA allocation that will work for every COG, there are a number of best practices COGs can use to increase the likelihood that their allocation promotes the statutory objectives of RHNA. These include:

- **Considering equity directly when determining how many total RHNA units a jurisdiction will receive.** Using explicit equity-focused factors—such as measures of segregation or opportunity—when determining each jurisdiction's total RHNA allocation can help ensure lower-income and racially segregated areas are not taking on more than their fair share of RHNA, while also funneling more RHNA to higher-income areas with access to key resources that promote economic mobility.
- **Putting more emphasis on strategies that promote both RHNA's equity and environmental goals simultaneously.** Allocating RHNA near existing job centers

promotes both equity and environmental goals because workers are often forced to commute long distances when adequate housing isn't available near jobs. COGs should put more emphasis on factors such as proximity to jobs that can simultaneously promote both the state's equity and environmental goals.

- **Considering a jurisdiction's connection to the regional job market, rather than the number of jobs located within a jurisdiction.** There is existing data that measures how many jobs are within a 30-minute commuting distance by car of census blocks across the state. Using this data to allocate RHNA can ensure that smaller, wealthier jurisdictions that might be located adjacent to a job center, but don't have a large number of jobs within their jurisdictional boundary, are still allocated their fair share of RHNA.
- **Carefully weighing whether basing the RHNA allocation on the land use projections in the SCS is appropriate.** Some SCS land use projections incorporate factors—such as the speed by which jurisdictions approve housing permits and a jurisdiction's current zoned capacity—that arguably should not be considered at any point in the RHNA allocation process based on statutory guidelines. Further, allocating RHNA based on these land use projections can result in an allocation that does not further the statutory objectives of RHNA. In these cases, COGs should not assume they are legally required to allocate RHNA based on the SCS.
- **Using publicly available data from objective, external sources.** Allocating RHNA based on COGs' internal data that incorporates local input raises equity concerns, because it allows small, wealthy jurisdictions that have a significant political incentive to minimize local housing development an opportunity to bias the RHNA allocation. Wherever possible, COGs should use publicly available data from external sources within their RHNA allocation methodology.
- **Develop strategies that allow stakeholders to meaningfully participate in discussions about how to allocate RHNA.** The RHNA process is very complex, but some COGs have developed tools that allow the public to understand more intuitively how different RHNA allocation strategies affect the spatial distribution of RHNA. More COGs should use these tools to ensure that stakeholders can meaningfully weigh in during the RHNA methodology development process.

Further, I also identify a number of strategies the state could pursue to support COGs' efforts to develop more equitable RHNA allocations.

- **First, the state should consider revising the rules around how a region's Sustainable Communities Strategy (SCS) and RHNA interact.** While current law states that RHNA must be "consistent" with the land development pattern in the SCS, SCAG's allocation

demonstrates that this requirement can result in an allocation that does not further the statutory objectives of RHNA. The state should consider requiring that regional governments also take equity factors into account when developing the SCS to ensure that these two processes are fully aligned.

- **The state should consider developing a different version of the TCAC/HCD Opportunity Maps that better reflect the factors COGs consider when allocating RHNA.** Currently, TCAC/HCD Opportunity Maps measure opportunity for rural and non-rural areas separately, which leads to the identification of some rural areas as very high resource (even though they might be considered low resource if compared to non-rural areas). Therefore, using these maps to allocate RHNA can lead to more housing being funneled to rural areas, which hinders the state's efforts to promote infill development. If the state were to develop a different version of the TCAC/HCD Opportunity Maps tailored to the RHNA process, more COGs may consider using this data to allocate RHNA.
- **Lastly, the state should offer more technical assistance to cities and counties during the housing site selection process.** Cities and counties have the ultimate authority to decide whether RHNA is accommodated in a way that promotes infill development and affirmatively furthers fair housing. Accordingly, some COGs have expressed concern that allocating more RHNA to small, high-resource jurisdictions may result in single-family zoning on the outskirts of town. Providing technical assistance to smaller jurisdictions may give COGs more confidence that allocating RHNA to higher-resource areas will also promote the state's greenhouse gas reduction goals.

Ensuring that RHNA is allocated fairly among cities and counties is more important now than ever. The RHNA process offers a tool for measuring statewide progress towards addressing the housing crisis. If RHNA is not allocated fairly among cities and counties, it becomes much harder for the state to assess which jurisdictions are taking adequate steps to promote housing development. Further, recent changes to state law have resulted in much larger estimates of the regional housing need, which means many jurisdictions will need to upzone to accommodate their RHNA. If small, wealthy jurisdictions are allocated their fair share of the regional housing need, many wealthy jurisdictions may need to loosen restrictive zoning requirements that limit housing development and exclude lower-income households. However, if lower-income cities take on a larger share of RHNA, upzoning in these areas could lead to more displacement and gentrification.

Accordingly, state, regional, and local policymakers should take immediate steps to improve the RHNA allocation process. HCD should issue guidance clarifying how COGs can ensure their

allocation plans further all five statutory objectives and what must—at minimum—be achieved within the allocation. HCD should also build an online dashboard that all regions can use to evaluate potential RHNA allocation methodologies moving forward. COGs that have yet to develop draft methodologies—including ABAG—should incorporate the best practices identified through this research in their 6<sup>th</sup> cycle allocation plan. COGs that have already developed 6<sup>th</sup> cycle allocation methodologies should begin making plans for how to fix their methodology for the 7<sup>th</sup> RHNA cycle. Lastly, cities must think about how they can incorporate the principles identified through this research into their Housing Element process to ensure that site selection promotes both RHNA’s equity and environmental objectives. If state, regional, and local policymakers do not take these steps it will significantly impact the state’s ability to address the housing crisis and overcome entrenched patterns of segregation.

## II. Introduction

In 1969, California passed fair share housing legislation that requires cities and counties to plan for the housing needs of all Californians through the Regional Housing Needs Assessment (RHNA) process.<sup>1</sup> As part of RHNA, each city and county in California receives an estimate of future housing need that is divided into four income groups: very-low, low, moderate, and above-moderate.<sup>2</sup> To comply with RHNA, jurisdictions must identify land where new housing can be built and zone it so as to accommodate the projected housing need for each income category.

The RHNA process is one of the main tools available to the state for addressing the state-wide housing crisis. However, it has been widely criticized for (1) not producing housing goals that truly reflect housing need, (2) not fairly allocating housing goals among jurisdictions, and (3) not resulting in the actual permitting of enough units to meet the need, especially among lower-income households. In response to these concerns, the state has passed a number of bills over the last few years reforming the RHNA process, including Senate Bill 828 (Wiener, 2018), Assembly Bill 1771 (Bloom, 2018), and Assembly Bill 686 (Santiago, 2018). Collectively, these bills adjust the processes used to set regional RHNA determinations and to allocate RHNA to cities and counties.

Since the passage of these new bills, the California Department of Housing and Community Development (HCD) now has the authority to adjust regional estimates of housing need to take into account signs of existing need (such as cost burden and overcrowding). This has resulted in significantly higher estimates of housing need for the 6<sup>th</sup> RHNA cycle. These bills also adjust the factors that regional governments must consider when allocating RHNA. First, the bills put an increased emphasis on equity and add a new requirement that allocation plans affirmatively further fair housing. Second, the bills tie RHNA more closely to the state's environmental efforts by requiring that allocation plans promote efficient development patterns that help localities meet greenhouse gas emission reduction targets.<sup>3</sup>

Lastly, these bills give HCD new authority to determine whether each regional government's RHNA allocation plan furthers the law's five statutory objectives. This new oversight authority is critical, given that the allocation process has been criticized for being unfairly implemented in

---

<sup>1</sup> "HCD Regional Housing Needs Allocation and Housing Elements." Accessed March 23, 2020. <https://www.hcd.ca.gov/community-development/housing-element/index.shtml>.

<sup>2</sup> CAL. GOV'T CODE § 65584(d)(5)(f).

<sup>3</sup> CAL. GOV'T CODE § 65584.04(d).

the past. However, under the new law, HCD only has 60 days to review an allocation plan and report written findings to the regional government.<sup>4</sup>

To support HCD in this new role, I will review the methodologies three regional governments are using to allocate RHNA during the 6<sup>th</sup> cycle, identify best practices that other regional governments can implement moving forward, and suggest strategies HCD can use to quantitatively evaluate RHNA allocation plans. My hope is that this will help HCD develop a more nuanced understanding of the extent to which allocation plans further the statutory objectives of RHNA, while also helping the agency develop a more streamlined process for conducting its assessment.

### **III. The RHNA Process**

California Housing Element Law, enacted in 1969, is intended to ensure that jurisdictions across the state meet the housing needs of households of all income levels. To comply, cities and counties must develop a Housing Element every five to eight years that is included within their long-term general plan (which lays out the development plan for a jurisdiction). The Housing Element must document a locality's strategy for addressing barriers to housing production and outline a plan for meeting their RHNA allocation.<sup>5</sup>

The RHNA process starts with HCD, which reviews household growth projections developed by the California Department of Finance (DOF) and regional planning bodies, known as Councils of Government (COG). If a COG's household projection is within 1.5% of DOF's estimate, HCD is legally required to use the COG's household growth projection to estimate the region's future housing need.<sup>6</sup> Once HCD determines which household growth projection will be used, the agency adjusts the projection based on indicators that account for existing housing needs, including overcrowding, cost-burden, and vacancy rates. Each COG is also able to supply HCD with additional information on a wide variety of factors, which the agency can use to further adjust the estimate of housing need.

---

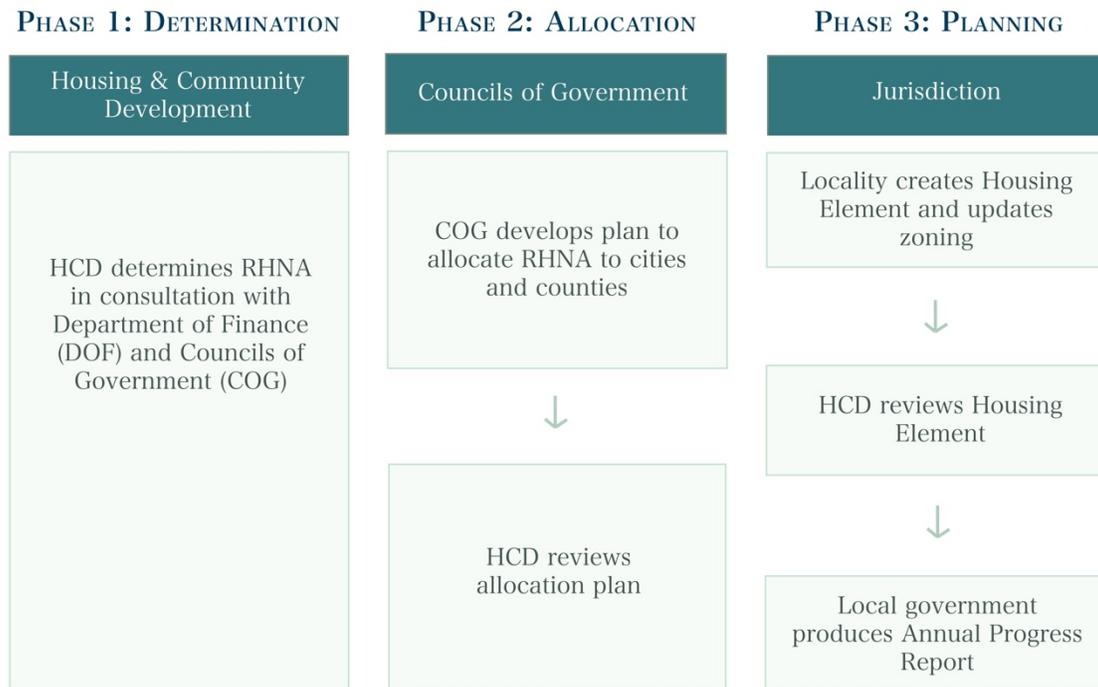
<sup>4</sup> A.B. 1771 (Bloom), 2018 Assemb., Reg. Sess. (Cal. 2018).

<sup>5</sup> Clare, Jeff. "Because Housing Is What: Fundamental. California's RHNA System as a Tool for Equitable Housing Growth." *Ecology Law Quarterly* 46 (2019): 373.

<sup>6</sup> Perry, F. Noel, Colleen Kredell, Marcia E. Perry, and Stephanie Leonard. "Missing the Mark: Examining the Shortcomings of California's Housing Goals." *Next 10*, February 28, 2019.

<https://www.next10.org/publications/housing-goals>.

Figure 1. The RHNA Allocation Process



Each COG must then develop a plan for how it will allocate its RHNA determination by income level among the cities and counties within its jurisdiction. COGs are required by law to develop allocation plans that further five statutory objectives (see Figure 2 for a full list). These objectives are largely focused on promoting the state’s equity goals by encouraging mixed income communities, reducing racial segregation, and promoting a better jobs housing balance. The statutory objectives also promote the state’s environmental goals by requiring that housing allocation plans promote infill development, resource protection, and the reduction of greenhouse gas emissions.<sup>7</sup> In addition to furthering these five statutory objectives, COGs must consider 12 additional factors—including constraints to development and rates of overcrowding, cost burden, and homelessness—although they are not required to develop allocation plans that incorporate these factors.<sup>8</sup>

<sup>7</sup> CAL. GOV’T CODE § 65584(b).

<sup>8</sup> CAL. GOV’T CODE § 65584.04(e).

Figure 2. The Statutory Objectives of RHNA

### STATUTORY OBJECTIVES

1	Increase the housing supply and the mix of housing types, tenure, and affordability in all cities and counties in an equitable manner
2	Promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reduction targets
3	Promote an improved intraregional relationship between jobs and housing, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low-wage workers
4	Allocate a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category
5	Affirmatively further fair housing by taking meaningful actions to overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics

Further, the Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires that housing planning in California be integrated with the transportation planning process. Accordingly, RHNA allocation plans must also be consistent with the development pattern included in the Sustainable Communities Strategy (SCS), which is developed in coordination with the Regional Transportation Plan (RTP).<sup>9</sup> The SCS is a regional strategy for meeting greenhouse gas reduction targets by encouraging efficient development patterns that reduce vehicle miles traveled.<sup>10</sup> However, as pointed out by the Turner Center in *California's SB 375 and the Pursuit of Sustainable and Affordable Development (2008)*, there is no clear legal definition of what it means for a RHNA allocation plan to be consistent with the SCS. Indeed, interviews conducted with state and regional policymakers confirm there is no consensus as to what it means to comply with this requirement.

Once COGs develop a draft RHNA allocation methodology, they must submit their plan to HCD for review. Due to recent changes to state law, COGs are now required to explain in writing how their methodology furthers the five statutory objectives of RHNA, as well as how the 12 additional factors were incorporated into the methodology. HCD is also required to review each allocation

<sup>9</sup> CAL. GOV'T CODE § 65584.04(i).

<sup>10</sup> Mawhorter, Sarah, Amy Martin, and Carol Galante. "California's SB 375 and the Pursuit of Sustainable and Affordable Development." Turner Center, July 2018. <https://turnercenter.berkeley.edu/sb-375>.

plan and make a determination as to whether it furthers RHNA's five statutory objectives. If HCD determines that a methodology is not consistent with RHNA's statutory objectives, the COG can either (1) revise its allocation methodology or (2) adopt the methodology as is along with a resolution supported by substantial evidence detailing why the methodology does promote RHNA's objectives.<sup>11</sup>

Once a jurisdiction receives its RHNA allocation, the locality must develop a Housing Element describing its goals, objectives, and policies relative to future housing growth.<sup>12</sup> The Housing Element allows the jurisdiction to demonstrate its compliance with RHNA, as it must include a housing site inventory listing all the parcels the city has identified as being available for residential housing development. The housing inventory must list each parcel number and document how much of its RHNA and at what income level the parcel can accommodate. If identified housing sites are not currently zoned to accommodate the housing need, jurisdictions must rezone within three years.<sup>13</sup>

#### **IV. Existing Research on RHNA**

While RHNA is an important tool for addressing the housing crisis in California, it has been widely criticized for not yielding sufficient or equitable housing development. Over the last few years, several studies have raised specific concerns with the process that COGs use to allocate RHNA among cities and counties. This research shows that during the three most recent RHNA cycles (3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup>), housing need has not always been distributed fairly based on population size, projected job growth, household income, or race. Specifically, research suggests that RHNA is often weighted towards pro-growth jurisdictions that want new housing and away from wealthy, exclusive jurisdictions that don't. While these studies were all conducted before the most recent changes to state law, their findings provide a benchmark for evaluating how well 6<sup>th</sup> cycle plans have allocated RHNA while also helping us understand what practices and processes can lead to inequitable allocations.

---

<sup>11</sup> CAL. GOV'T CODE § 65584.04(m)(1).

<sup>12</sup> A jurisdiction's Housing Element due date is set at 18 months from the adoption of the RTP. Each COG is supposed to provide jurisdictions with a final RHNA allocation at least one year prior to their Housing Element due date.

<sup>13</sup> Clare, Jeff. "Because Housing Is What: Fundamental. California's RHNA System as a Tool for Equitable Housing Growth." *Ecology Law Quarterly* 46 (2019): 373.

In *Missing the Mark* researchers assessed the allocation of RHNA during the 5<sup>th</sup> cycle and found that COGs across the state had not distributed housing need fairly based on population size.<sup>14</sup> For instance, researchers found that localities that were closest to meeting their RHNA goals had only been assigned .7 housing units per 100 persons on average, while those farthest away from meeting their goals had been assigned 3.0 units per 100 persons. In particular, among the Association of Bay Area Governments (ABAG) counties, Napa and Marin had the lowest allocation as a percentage of their 2017 population—suggesting that smaller and wealthier jurisdictions tended to receive lower RHNA allocations relative to their population size.

Researchers also found that the allocation of units was sometimes misaligned with where job growth was projected to occur. For instance, SCAG’s Regional Transportation Plan (RTP) predicted that Beverly Hills would gain 300 households and 3,400 jobs during the 5<sup>th</sup> RHNA cycle, but the city was only assigned three housing units. On the other hand, some rural jurisdictions in Northern California that had experienced little population growth over previous years were assigned housing goals that required building 3.79 housing units for each new resident. Given that allocating RHNA in areas with a high access to jobs can lead to shorter commutes and therefore lower greenhouse gas emissions, it is particularly concerning that there is such wide variation in the size of allocations relative to projected job growth.

In *Unfair Shares* researchers studied ABAG’s allocation methodology for the 5<sup>th</sup> cycle and found the COG had distributed RHNA unfairly based on race.<sup>15</sup> Researchers determined that jurisdictions with higher percentages of white residents were more likely to have received lower allocations of moderate- and lower-income housing even after adjusting for population size. Researchers also found that the relationship between a jurisdiction’s median income and housing allocation was weak, indicating that differences in RHNA allocations could not be explained away by a city’s income level.

While less research has focused on the Southern California Association of Governments’ (SCAG) past RHNA allocations, Shine Ling’s 2018 master’s thesis suggests that previous RHNA allocations in the Los Angeles region may have been even more inequitable than those in the Bay Area. Ling analyzed SCAG’s RHNA allocations from the last three cycles (covering the period

---

<sup>14</sup> Perry, F. Noel, Colleen Kredell, Marcia E. Perry, and Stephanie Leonard. “Missing the Mark: Examining the Shortcomings of California’s Housing Goals.” *Next 10*, February 28, 2019. <https://www.next10.org/publications/housing-goals>.

<sup>15</sup> Bromfield, Heather, and Eli Moore. “Unfair Shares: Racial Disparities and the Regional Housing Needs Allocation Process in the Bay Area.” *Othring and Belonging Institute*, August 23, 2017. <https://belonging.berkeley.edu/unfairshares>.

from 1998 to 2021), and found high allocations were strongly associated with cities located farther away from downtown Los Angeles, with lower household incomes, more people of color, and high rates of past household growth.<sup>16</sup> Ling notes that, “while these associations may not be surprising, the magnitude of the disparities is truly striking.” For instance, the total allocation for Desert Hot Springs in Riverside County was 150 times larger than that of Manhattan Beach in Los Angeles County on a per capital basis.

Previous Research has identified specific elements of the RHNA allocation process COGs use that appear to contribute to inequitable allocations. For instance, some researchers argue that COGs put too much weight on environmental priorities when developing allocation methodologies.<sup>17</sup> Past allocations have often prioritized pushing growth into dense urban areas so as to promote transit-oriented development. However, these areas also have higher levels of concentrated poverty and segregated living patterns. Other researchers have noted that when COGs measure access to jobs, they often calculate the number of jobs within a city’s jurisdictional boundaries, without considering the distribution of the regional job shed. This can benefit small, wealthy localities that border jobs centers but do not necessarily have many jobs located within their jurisdictional boundaries.<sup>18</sup>

Research also suggests that part of the reason RHNA has been unfairly allocated is because anti-growth jurisdictions have used both official and unofficial channels to influence the RHNA allocation methodologies.<sup>19,20</sup> The Board of Directors for most COGs is almost entirely comprised of local elected officials who have the authority to approve the final RHNA allocation plan. Many officials from small, wealthy jurisdictions face strong opposition from constituents to new housing, and thus have a strong incentive to advocate for methodologies that result in a smaller allocation. Further, many COGs use a voting process that gives every city an equal vote, which allows smaller, wealthier communities a louder voice relative to their population size.<sup>21</sup>

---

<sup>16</sup> Ling, Shine. “How Fair Is Fair Share? A Longitudinal Assessment of California’s Housing Element Law.” University of California, Los Angeles, 2018.

<sup>17</sup> Drane, Michael. “Increasing the Equitable Distribution of Affordable Housing in California.” University of California, Berkeley, 2017.

<sup>18</sup> Clare, Jeff. “Because Housing Is What: Fundamental. California’s RHNA System as a Tool for Equitable Housing Growth.” *Ecology Law Quarterly* 46 (2019): 373.

<sup>19</sup> Bromfield, Heather, and Eli Moore. “Unfair Shares: Racial Disparities and the Regional Housing Needs Allocation Process in the Bay Area.” *Othoring and Belonging Institute*, August 23, 2017. <https://belonging.berkeley.edu/unfairshares>.

<sup>20</sup> Drane, Michael. “Increasing the Equitable Distribution of Affordable Housing in California.” University of California, Berkeley, 2017.

<sup>21</sup> Clare, Jeff. “Because Housing Is What: Fundamental. California’s RHNA System as a Tool for Equitable Housing Growth.” *Ecology Law Quarterly* 46 (2019): 373.

Overall, this research suggests that past RHNA allocation methodologies have tended to funnel housing into lower-income jurisdictions while whiter, wealthier districts—which may have more access to jobs and opportunity—have been asked to take on less. This suggests there is much COGs can do to improve the RHNA allocation process in order to promote a more equitable RHNA distribution. The next section will review allocation methodologies used by COGs during the 6<sup>th</sup> cycle of RHNA and assess the extent to which the issues identified in the most recent RHNA cycles are still present, given recent changes to the state’s Housing Element Law.

## V. Qualitative Review Methodology

To better understand the methods COGs are using to allocate RHNA, I conducted an in-depth review of the three most recent allocation plans produced during the 6<sup>th</sup> RHNA cycle. These plans were developed by the following regional governments: Sacramento Area Council of Governments (SACOG), Southern California Association of Governments (SCAG), and San Diego Association of Governments (SANDAG)<sup>22</sup>. Given that the Association of Bay Area Governments (ABAG) has formed a Housing Methodology Committee (HMC) that is currently weighing different options for its 6<sup>th</sup> cycle allocation plan, I also reviewed meeting minutes and other materials published by the HMC.

Additionally, I conducted interviews with COG staff and housing advocates who have been involved in the methodology development process. I would like to thank these individuals for taking time to share their expertise with me: Seth Litchney at SANDAG, Dov Kadin at SACOG, Dr. Kevin Kane at SCAG, Gillian Adams at ABAG, Rodney Nickens, Jr. at Non-Profit Housing Association of Northern California, Leonora Camner at Abundant Housing LA, Paavo Monkkonen at the UCLA Luskin School of Public Affairs, Anya Lawler at Public Interest Advocates, Brian Augusta at Housing Advocates, Eli Moore at the Othering & Belonging Institute, Heather Bromfield at Strategic Economics, Shajuti Hossain at Public Advocates, and Justine Marcus at Enterprise Community Partners.

Before reviewing the results of my analysis, it is helpful to have a general understanding of how RHNA allocation methodologies are structured. Each RHNA allocation methodology has two

---

<sup>22</sup> It should be noted that SANDAG was the first COG required to create a RHNA allocation methodology for the 6<sup>th</sup> cycle. SANDAG first received its regional RHNA determination from HCD in July 2018 and began developing its allocation plan shortly after. The three state bills that reformed Housing Element Law were not signed into law until September 2018. However, the bills were in effect by the time SANDAG submitted its RHNA allocation methodology to HCD for review.

main components: (1) a determination of each jurisdiction’s total RHNA allocation, and (2) a distribution of the total RHNA allocation into four different income categories based on equity considerations (often called the “equity adjustment”).

Figure 3 provides a simplified overview of each COG’s total RHNA allocation methodology. As can be seen, there is wide variation in the complexity of the methodologies used—while SACOG allocates its RHNA based solely on the population growth projections from its Sustainable Communities Strategy (SCS), SCAG goes through a multi-step process to allocate total RHNA units based on a variety of factors.

Figure 3. Total RHNA Allocation Process

SANDAG	SACOG	SCAG	
<div style="text-align: center;">  <p>Allocates 65% of RHNA based on jurisdiction’s share of the existing transit network</p> </div> <div style="text-align: center;">  <p>Allocates 35% of RHNA based on jurisdiction’s share of regional jobs</p> </div>	<div style="text-align: center;">  <p>Allocates 100% of RHNA based on jurisdiction’s share of the projected regional growth in the SCS</p> </div>	<div style="text-align: center;">  <p>Allocates 38% of RHNA based on a jurisdiction’s share of the projected regional growth in the SCS</p> </div> <div style="text-align: center;">  <p>Allocates 31% of RHNA based on a jurisdiction’s share of regional population within planned High Quality Transit Areas</p> </div>	<div style="text-align: center;">  <p>Allocates 31% of RHNA based on a jurisdiction’s share of region’s projected jobs within a 30-minute driving commute</p> </div> <div style="text-align: center;">  <p>“Disadvantaged” communities’ RHNA capped and redistributed</p> </div>

Figure 4 provides an overview of the factors COGs consider when determining how many very-low-, low-, moderate-, and above-moderate-income units to allocate to each jurisdiction. All three regional governments take into consideration a jurisdiction’s current share of the region’s low-income households. SACOG and SCAG also take into consideration the number of high resource areas in a jurisdiction, which refers to areas that research indicates support educational attainment, higher employment earnings, and economic mobility, among other outcomes. SACOG is the only jurisdiction that takes into consideration jobs housing fit.

Figure 4. Income Level Allocation Process

SANDAG	SACOG	SCAG
Allocates more low-income units to jurisdictions with:	Allocates more low-income units to jurisdictions with:	Allocates more low-income units to jurisdictions with:
 a lower than average percentage of low-income households	 a lower than average percentage of low-income households	 a lower than average percentage of low-income households
	 higher proportion of existing units in high resource areas	 more high resource areas
	 higher than average ratio of low-wage workers to affordable units	

## VI. Qualitative Findings

Through my review of the three allocation methodologies developed since the most recent changes to state law, I find that some COGs have come up with new strategies for ensuring the process of allocating RHNA is more transparent and data-driven. However, when allocating RHNA among cities and counties, some COGs still appear to be putting more emphasis on strategies that promote the state’s environmental goals rather than strategies that promote RHNA’s equity objectives. For instance, SANDAG puts more emphasis on building near transit stops than near job centers, even though transit stops are often concentrated in lower-income communities. Further, SACOG and SCAG allocate part of their RHNA based on the land use projections in their Sustainable Communities Strategy (SCS), which are designed to help the region meet its greenhouse gas reduction goals. When equity is taken into account, it is often as a secondary step that only affects what percentage of a jurisdiction’s RHNA allocation falls into each of the four income buckets.

**The allocation plans developed during the 6th cycle RHNA are all driven by objective, consistent methodologies; however, some are more transparent than others.**

All three of the 6<sup>th</sup> cycle methodologies use a consistent, data-driven formula to allocate RHNA among member jurisdictions. The methodologies each rely on a consistent formula to allocate RHNA and in no cases make individual adjustments to a specific jurisdiction’s allocation. Further, while there have been concerns in past cycles that local elected officials have negotiated behind

closed doors to allocate RHNA, the 6<sup>th</sup> cycle process has been more transparent, with many COGs working hard to engage stakeholders and the public in the allocation process. For instance, ABAG has formed a 38-member Housing Methodology Committee (HMC) to develop its plan that includes 16 regional stakeholders representing the interests of housing, social equity, transportation, and labor groups, among others.

However, while COGs have generally brought more stakeholders to the table to discuss RHNA allocation, not all COGs have made it possible for stakeholders to meaningfully participate in the process. For instance, SCAG approved a methodology that is significantly more complex than that developed by SACOG and SANDAG. The methodology involves a multi-step process that incorporates at least seven different data sources. While the methodology is summarized in a 32-page document, descriptions of the key assumptions and calculations that underpin the methodology are buried in a 237-page Data Appendix. The methodology is so complex that six months after its Board approval, HCD is still receiving complaints from SCAG jurisdictions that do not understand how it works. If local jurisdictions can't understand the existing methodology, it's unlikely that localities, stakeholders, or the public could have meaningfully participated in discussions when the methodology was debated by the RHNA Subcommittee.

On the other hand, other COGs have developed a number of strategies that help to ensure stakeholders and the public can participate in a robust discussion about how to best allocate RHNA. For instance, ABAG developed an online visualization tool that allows users to understand how assigning different weights to ten allocation factors impacts the geographic distribution of RHNA.<sup>23</sup> This allows those who may not have the technical expertise to understand exactly how the methodology works to see visually how the weighting of different allocation factors affects the spatial distribution of RHNA. Further, SACOG includes tables in its published allocation plan that illustrate exactly what calculations were used to allocate the RHNA and how each calculation changes the distribution of RHNA among jurisdictions. Finally, one of SANDAG's main priorities when developing its allocation plan was to create a methodology that was, "transparent and not overly complicated so that it could be easily understood by the public."<sup>24</sup> This focus resulted in a straightforward methodology that allocated total RHNA units based on only two factors: jobs and transportation.

---

<sup>23</sup> "Visualization Tool for Exploring Factor Weighting and Allocation Outcomes." Metropolitan Transportation Committee (MTC), 2020. <https://rhna-factors.mtcanalytics.org/>.

<sup>24</sup> "SANDAG Board of Directors Agenda." SANDAG, July 26, 2019. [https://www.sandag.org/uploads/meetingid/meetingid\\_5149\\_26226.pdf](https://www.sandag.org/uploads/meetingid/meetingid_5149_26226.pdf).

**The 6th cycle allocation plans appear to put more emphasis on factors that promote the state’s environmental goals rather than equity goals when allocating total RHNA units.**

When determining each jurisdiction’s total RHNA allocation, all three methodologies appear to give more weight to factors that promote the state’s environmental goals than those that promote equity goals. For example, SACOG and SCAG allocate a significant portion of their RHNA based on the land use projections in their SCS, which is primarily focused on achieving reductions in greenhouse gas emissions. Further, SANDAG allocated 65% of units based on the location of the region’s existing transit system, but only 35% based on the regional distribution of jobs. Allocating housing near transit furthers the state’s environmental goals, as it can reduce vehicle miles traveled and greenhouse gas emissions. However, given that smaller, wealthier jurisdictions often don’t have robust transit systems, allocating housing near transit doesn’t necessarily promote RHNA’s equity objectives.<sup>25</sup> Indeed, some lower-income jurisdictions in the SANDAG region expressed concern that they were allocated more than their fair share of RHNA because they had more transit stops than higher-income jurisdictions.<sup>26</sup> Given that four out of the five statutory goals of RHNA are equity focused, it is concerning that equity-focused factors are given so little weight during the total RHNA allocation process.

**In 6th cycle allocation plans, equity factors are often only considered as a secondary step, which can mute their impact.**

All three methodologies include an equity adjustment that determines what percentage of the jurisdiction’s RHNA allocation falls within each of the four income categories. For instance, SACOG uses an equity adjustment that takes into consideration economic segregation, the jobs-housing fit, and access to opportunity. Some COG staff argue that only taking equity into account during this point in the RHNA allocation process is sufficient, given that what really matters is

---

<sup>25</sup> It should be acknowledged that building housing – including affordable housing – near transit can promote equitable outcomes. For one, lower-income households are more likely to be transit dependent and may rely on transit services to access jobs and other key resources that promote economic mobility. Further, because lower-income communities are often disproportionately impacted by climate-related disasters, taking meaningful action to reduce greenhouse gas emissions also has profound long-term equity implications. This paper is not aimed at disputing this fact. Rather, I seek to highlight that transit is but one of many resources that benefit lower-income households, and because transit services are so unevenly distributed across metro areas, giving the existing transit system too much weight when allocating RHNA can result in white, wealthy enclaves receiving less than their fair share of RHNA.

<sup>26</sup> Hernandez, David. “National City, Imperial Beach Object to Proposed Housing Quotas.” San Diego Union-Tribune, August 28, 2019. <https://www.sandiegouniontribune.com/communities/south-county/story/2019-08-27/national-city-imperial-beach>.

how much lower-income RHNA wealthier jurisdictions receive, not their total RHNA allocation. This is due to the fact that lower-income RHNA must be accommodated with a higher zoned density (generally 30 units per acre).<sup>27</sup> Therefore, if suburban or rural jurisdictions receive a large allocation of lower-income units, they will likely accommodate the RHNA with parcels located near the urban core (given that they won't want high density buildings located on the outskirts of town). On the other hand, if these jurisdictions receive a large allocation of higher-income units, they may find that the easiest way to accommodate their RHNA is to zone for single-family housing on undeveloped land – which could lead to sprawl. Consequently, some COGs argue that ensuring non-urban jurisdictions receive a high percentage of lower-income units and a relatively small total RHNA allocation is the best strategy for promoting both RHNA's equity and environmental objectives.

However, if a small, wealthy jurisdiction receives a RHNA allocation that is small enough, the equity adjustment may not have an impact, even if they receive a relatively high percentage of lower-income units. Del Mar's (San Diego County) RHNA allocation highlights why this could be a concern. Del Mar is a relatively wealthy city that is marked as a "highest resource" area by the TCAC/HCD Opportunity Maps and is within driving distance of several job centers. The city was given a total RHNA allocation of 163 but was identified as a city whose percentage of very low-income units would be adjusted upwards. The COG first applied an equity adjustment that would have resulted in an allocation of 52 very low-income units, and then applied a control so that Del Mar's adjusted allocation for each income category did not exceed the city's total allocation. Ultimately, the city was assigned a very low-income RHNA of 37, which is less than what it would have received if no equity adjustment were applied. This suggests that equity adjustments applied to jurisdictions with small overall RHNA allocations may have little – if any – impact on the distribution of lower-income RHNA.

**Several methodologies use population growth projections in the region's Sustainable Communities Strategy (SCS) to allocate RHNA, which raises equity concerns.**

Both SCAG and SACOG allocate a portion of their RHNA based on the land use projections in their SCS. These land use projections estimate where in the region growth will occur over a 20 year timeline, including the "general location of different types of land uses, residential densities, and employment intensities."<sup>28</sup> The land use projections are highly complex and based on a wide variety of factors, including the existing capacity in adopted local government plans, community

---

<sup>27</sup> A.B. 2348 (Mullin), 2004 Assemb., Reg. Sess. (Cal. 2004).

<sup>28</sup> "2020 Metropolitan Transportation Plan/Sustainable Communities Strategy." SACOG, November 18, 2019. [https://www.sacog.org/sites/main/files/file-attachments/2020\\_mtp-scs.pdf?1580330993](https://www.sacog.org/sites/main/files/file-attachments/2020_mtp-scs.pdf?1580330993).

plans, and specific plans, natural resource and floodplain issues, existing infrastructure, and the feasibility and timing of securing permits and approvals.<sup>29</sup> At its core, the SCS represents a population growth pattern that is (1) likely to occur given local policies, land use regulations, and market conditions and (2) will also allow the region to achieve its greenhouse gas reduction goals. Allocating RHNA based on the SCS land use projections can further the state’s environmental goals by aligning housing and transportation planning; however, depending on how the SCS land use projections are developed, this may not further the state’s equity goals.

The process of developing an SCS involves extensive public involvement and incorporates local input about where growth should go. For instance, SCS plans are often grounded in jurisdictions’ local land use plans and may consider factors such as past housing permit activity and the feasibility of receiving development approvals when projecting where future growth will occur. In fact, SCAG’s SCS capped jurisdictions’ growth based on the available capacity within each locality’s general or specific plan.<sup>30</sup> Consequently, SCAG’s SCS gives jurisdictions that believe they are already “built out” a lower proportion of the projected population growth, even if they also have high access to jobs and other key resources. Indeed, Paavo Monkkonen, an Associate Professor of Urban Planning and Public Policy at the UCLA Luskin School of Public Affairs, found that an earlier version of SCAG’s methodology that allocated a higher proportion of the region’s RHNA based on the SCS pushed “housing growth to cities farthest from job opportunities” because the “cities closest to abundant job opportunities were mostly ‘built out’ under existing zoning.”<sup>31</sup>

Consequently, COGs that use the SCS to allocate RHNA may consider factors in the RHNA allocation methodology that promote an inequitable distribution of housing need. It is understandable why COGs use the SCS to allocate growth—it represents the most nuanced population growth projection a COG has access to and includes some factors that state law suggests should be considered during the RHNA allocation, such as policies that preserve open space and natural resources. Further, state law does require that the RHNA allocation is

---

<sup>29</sup> “Appendix D: 2020 MTP/SCS Land Use Forecast Documentation.” SACOG, November 18, 2019. [https://www.sacog.org/sites/main/files/file-attachments/appendix\\_d\\_-\\_land\\_use\\_documentation\\_0.pdf?1573685694](https://www.sacog.org/sites/main/files/file-attachments/appendix_d_-_land_use_documentation_0.pdf?1573685694)

<sup>30</sup> “Sustainable Communities Strategy: Technical Report.” SCAG, November 2019. [https://www.connectsocial.org/Documents/Proposed/pfConnectSoCal\\_Sustainable-Communities-Strategy.pdf](https://www.connectsocial.org/Documents/Proposed/pfConnectSoCal_Sustainable-Communities-Strategy.pdf)

<sup>31</sup> Monkkonen, Paavo, Michael Lens, Michael Manville, Brian D. Taylor, Evelyn Blumenberg, Stephanie Pincetl, Lisa Schweitzer, et al. “Regional Housing Needs Assessment (RHNA) Methodology,” August 31, 2019.

“consistent with the development pattern” in the SCS, although there is no clear legal definition of what this means.<sup>32</sup> However, it is also arguable the SCS incorporates factors—such as the speed by which jurisdictions approve housing permits and a jurisdiction’s current zoned capacity—that should not be considered at any point in the RHNA allocation process given statutory guidelines.<sup>33</sup> Further, depending on how the SCS incorporates existing zoned capacity into its growth projections, predominately using the SCS to allocate RHNA could result in a distribution that does not further any of the five statutory objectives.

## VII. Quantitative Assessment Methodology

Understanding the extent to which a methodology promotes the RHNA’s objectives requires not only understanding the broad methodological approach employed by a COG, but an analysis of the plan’s actual output. Accordingly, to assess whether the 6<sup>th</sup> cycle allocation methodologies actually promote the five statutory objectives of RHNA, I assess how the size of RHNA allocations among member jurisdictions differ relative to key demographic characteristics. To conduct this analysis, I first collected data from a variety of sources, including:

- Comprehensive Housing Affordability Strategy (CHAS) data;
- California Department of Finance (DOF) population estimates;
- University of Minnesota Center for Transportation Studies data;
- Center for Neighborhood Technology H+T index data;
- Zillow Rent Index data; and
- TCAC/HCD Opportunity Maps.

I then used this data to assess how each locality’s RHNA allocation compared to its share of the regional population, share of households with incomes below 80% of Area Median Income (AMI), typical market rent, mix of housing types, development pattern, and access to jobs, transit, and

---

<sup>32</sup> CAL. GOV’T CODE § 65584.04(m)(1).

<sup>33</sup> According to California Government Code, COGs can consider “opportunities and constraints to development of additional housing” when developing allocation methodologies, including “the availability of land suitable for urban development, the availability of underutilized land, and opportunities for infill development” but COGs “may not limit consideration of suitable housing sites or land suitable for urban development to existing zoning ordinances and land use restrictions of a locality.” Given that SCS land use projections are grounded in existing land use plans, using the SCS to allocate RHNA could be considered in violation of this requirement. On the other hand, some policymakers argue that it is not realistic for the SCS and RHNA process to not consider current zoned capacity. Because 6<sup>th</sup> cycle RHNA allocations are so much larger than those from previous cycles, many localities will need to upzone to accommodate their RHNA allocations. If significant upzoning takes more than the eight-year RHNA cycle to complete, allocating RHNA without regard to current zoned capacity could result in many localities being declared out of compliance with Housing Element Law.

other resources. The table below lists some of the questions I explored when assessing whether each methodology furthered RHNA’s statutory objectives. (For a more detailed look at the methodology I used to assess 6<sup>th</sup> cycle allocation plans and my recommendations for how HCD should approach its assessment process in the future see the appendices.)

Table 1. Key Questions Explored During Quantitative Assessment

Statutory Objective	Question
(1) Increase housing supply equitably	<ul style="list-style-type: none"> <li>• Is a jurisdiction’s share of the RHNA allocation proportional to its share of the regional population?</li> <li>• Do jurisdictions with a higher percentage of owners receive a higher proportion of lower-income RHNA units?</li> <li>• Do jurisdictions with higher rents receive a larger share of the regional RHNA allocation relative to their share of the regional population?</li> <li>• Do jurisdictions with higher rents receive a larger proportion of lower-income RHNA units?</li> </ul>
(2) Greenhouse gas reduction	<ul style="list-style-type: none"> <li>• Is a jurisdiction’s share of the RHNA allocation proportional to its share of the region’s jobs accessible by transit?</li> <li>• Is a jurisdiction’s share of the RHNA allocation proportional to its share of the region’s jobs accessible by car?</li> <li>• Do jurisdictions with more compact development patterns receive larger RHNA allocations?</li> </ul>
(3) Jobs/housing fit	<ul style="list-style-type: none"> <li>• Is a jurisdiction’s share of the RHNA allocation proportional to its share of the region’s jobs accessible by car?</li> <li>• Is a jurisdiction’s share of the lower-income RHNA allocation proportional to its share of the region’s low-wage jobs accessible by car?</li> </ul>
(4) Household income distribution	<ul style="list-style-type: none"> <li>• Do jurisdictions with a higher percentage of households with incomes below 80% AMI receive a lower proportion of lower-income RHNA units?</li> </ul>
(5) Affirmatively further fair housing	<ul style="list-style-type: none"> <li>• Do jurisdictions with more access to resources receive a larger share of the regional RHNA allocation relative to their share of the regional population?</li> <li>• Do jurisdictions with higher levels of poverty and segregation receive a lower proportion of lower-income RHNA units relative to their share of the regional population?</li> </ul>

### VIII. Quantitative Findings

Through my quantitative analysis of RHNA output, I find there is variation in the extent to which the three allocation plans further the statutory objectives of RHNA. In an equitable distribution, we would expect to see—at the very least—no pattern of lower-income jurisdictions consistently taking on a larger share of the RHNA allocation relative to their share of the region’s population or jobs. Ideally, given that wealthier jurisdictions have historically used exclusionary policies to limit growth within their jurisdictional boundaries, we would see higher-income jurisdictions taking on a higher share of the regional RHNA allocation relative to each of these factors. We would also expect to see that jurisdictions with a larger number of transit stops and more access to opportunity receive a larger share of the RHNA allocation relative to their share of the regional population. I find that SACOG’s methodology is the only one that consistently promotes RHNA’s objectives. Both SANDAG and SCAG’s methodologies generally promote both equity and environmental goals, but do not do so consistently. (See Table 2 for an overview of my assessment of each allocation plan.) In the following sections, I will describe in more detail the methodology I use to assess each allocation plan relative to RHNA’s five statutory objectives.

Table 2. Results of Quantitative Assessment

	<b>SACOG</b>	<b>SANDAG</b>	<b>SCAG</b>
<b>OBJECTIVE 1</b>			
POPULATION SIZE	Promotes	Somewhat promotes	Somewhat promotes
TENURE	Promotes	Promotes	Promotes
AFFORDABILITY	Somewhat promotes	Somewhat promotes	Somewhat promotes
<b>OBJECTIVE 2</b>			
TRANSIT STOPS	Promotes	Promotes	Promotes
JOB ACCESS	Promotes	Promotes	Promotes
COMPACT DEVELOPMENT	Somewhat promotes	Promotes	Promotes
<b>OBJECTIVE 3</b>			
JOB ACCESS	Promotes	Does not promote	Does not promote
<b>OBJECTIVE 4</b>			
HOUSEHOLD INCOME	Promotes	Promotes	Promotes
<b>OBJECTIVE 5</b>			
OPPORTUNITY ACCESS	Promotes	Somewhat promotes	Somewhat Promotes
SEGREGATION	Somewhat promotes	Promotes	Promotes

## Objective One: Equitably Increasing the Mix of Housing Types, Tenure, and Affordability

The first objective of RHNA is to “increase the housing supply and mix of housing types, tenure, and affordability in all cities and counties in an equitable manner.”<sup>34</sup> To assess how well each allocation plan promotes this objective, I compare the allocation of RHNA in SANDAG, SCAG, and SACOG to the spatial distribution of the region’s population and variations in ownership rates and market rents.

**Increasing Housing Supply Equitably:** To analyze whether an allocation methodology increases housing supply in an equitable manner, I use population estimates to determine whether each jurisdiction’s share of the RHNA allocation is proportional to their share of the regional population. I then group the jurisdictions based on household income and determine whether – on average – higher-income jurisdictions are taking on a larger share of the RHNA allocation relative to their share of the regional population.

The following tables show the results of this analysis for the three regional governments. In SACOG, higher-income jurisdictions are on average taking 1.3 times as much RHNA than are lower-income jurisdictions, indicating the distribution is equitable. On the other hand, in both SANDAG and SCAG lower-income jurisdictions are taking on more RHNA than higher-income jurisdictions.

*Table 3. SACOG: Objective 1 – Total RHNA vs. Population Size*

	Average Share of RHNA / Share of Population
Lower income jurisdictions	0.86
Higher income jurisdictions	1.12

*Table 4. SANDAG: Objective 1 – Total RHNA vs. Population Size*

	Average Share of RHNA / Share of Population
Lower income jurisdictions	0.92
Higher income jurisdictions	0.74

*Table 5. SCAG: Objective 1 – Total RHNA vs. Population Size*

	Average Share of RHNA / Share of Population
Lower income jurisdictions	0.79
Higher income jurisdictions	0.71

<sup>34</sup> CAL. GOV'T CODE § 65584.04(i).

Given that a jurisdiction’s lower-income RHNA allocation theoretically does the most to further RHNA’s goals of promoting mixed-income communities, I also assess whether higher-income jurisdictions are taking on a larger share of the lower-income RHNA allocation relative to their population size. The following tables show that across all three regions this is indeed the case. This suggests that the equity adjustments used by SANDAG and SCAG ensure lower-income RHNA units are distributed across the region equitably – even if total RHNA units are not.

Table 6. SACOG: Objective 1 – Lower-income RHNA vs. Population Size

	Average Share of Lower-income RHNA / Share of Population
Lower income jurisdictions	0.75
Higher income jurisdictions	1.25

Table 7. SANDAG: Objective 1 – Lower-income RHNA vs. Population Size

	Average Share of Lower-income RHNA / Share of Population
Lower income jurisdictions	0.72
Higher income jurisdictions	0.94

Table 8. SCAG: Objective 1 – Lower-income RHNA vs. Population Size

	Average Share of Lower-income RHNA / Share of Population
Lower income jurisdictions	0.80
Higher income jurisdictions	0.91

**Increasing Housing Types and Tenure:** To assess whether allocation methodologies increase the mix of housing types and tenure, I assess whether communities with high levels of ownership receive a RHNA allocation made up of a larger percentage of lower-income RHNA units. Given that lower-income RHNA units must be accommodated with a higher zoned density, allocating more lower-income units to a locality will likely promote more multi-family construction. The following tables show that, on average, jurisdictions with higher levels of ownership are receiving a larger percentage of lower-income RHNA units relative to their total RHNA allocation – indicating that all three allocation methodologies do promote this aspect of objective one.

Table 9. SACOG: Objective 1 – Percentage of Lower-income RHNA vs. Ownership

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with less ownership	36%
Jurisdictions with more ownership	43%

Table 10. SANDAG: Objective 1 – Percentage of Lower-income RHNA vs. Ownership

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with less ownership	40%
Jurisdictions with more ownership	43%

Table 11. SCAG: Objective 1 – Percentage of Lower-income RHNA vs. Ownership

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with less ownership	39%
Jurisdictions with more ownership	48%

**Increasing Affordability:** The first statutory objective of RHNA is also aimed at encouraging the affordability of housing. To assess whether the three allocation plans promote this goal, I first determine whether localities with higher rents receive a larger proportion of lower-income RHNA units. The following tables show that that this is the case in all three regions. For instance, in SANDAG, 48% of the RHNA units assigned to jurisdictions with higher rents are lower-income, whereas only 34% of the RHNA units assigned to jurisdictions with lower rents are lower-income.

Table 12. SACOG: Objective 1 – Percentage of Lower-income RHNA vs. Market Rent

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with lower rents	36%
Jurisdictions with higher rents	43%

Table 13. SANDAG: Objective 1 – Percentage of Lower-income RHNA vs. Market Rent

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with lower rents	34%
Jurisdictions with higher rents	48%

Table 14. SCAG: Objective 1 – Percentage of Lower-income RHNA vs. Market Rent

	Average Percentage of RHNA units that are Lower-income
Jurisdictions with lower rents	39%
Jurisdictions with higher rents	46%

I also assess whether jurisdictions with higher rents are allocated larger total RHNA allocations. Given that the affordability crisis in California is partly a result of a lack of housing supply, an important strategy for promoting increased affordability is allocating more housing to jurisdictions with high rents (which are an indicator of pent up demand). Indeed, research by Paavo Monkkonen et. al. has shown that upzoning in high-price locations results in more housing-

production than in lower-price locations.<sup>35</sup> However my analysis reveals that, across all three regions, jurisdictions with higher rents do not consistently receive a larger share of the regional RHNA allocation relative to their share of the population.

Table 15. SACOG: Objective 1 – Total RHNA vs. Market Rent

	Average Share of RHNA / Share of Population
Jurisdictions with lower rents	0.89
Jurisdictions with higher rents	0.78

Table 16. SANDAG: Objective 1 – Total RHNA vs. Market Rent

	Average Share of RHNA / Share of Population
Jurisdictions with lower rents	1.01
Jurisdictions with higher rents	0.93

Table 17. SCAG: Objective 1 – Total RHNA vs. Market Rent

	Average Share of RHNA / Share of Population
Jurisdictions with lower rents	0.78
Jurisdictions with higher rents	0.72

**Objective Two: Promoting Infill Development and a Reduction in GHG emissions**

The second objective of RHNA is to “promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, the encouragement of efficient development patterns, and the achievement of the region’s greenhouse gas reduction targets.”<sup>36</sup> To assess how well each allocation plan promotes this objective, I compare the allocation of RHNA to the distribution of transit services, access to jobs, and compact development patterns.

Transit services: To assess whether jurisdictions with more transit service are allocated a larger share of the regional RHNA, I use data from the University of Minnesota’s Access Across America study. This data uses the U.S. Census Bureau’s Longitudinal Employer-Household Origin-Destination Employment Statistics (LODES) data to estimate the number of jobs accessible within

<sup>35</sup> Monkkonen, Paavo, Christopher Elmendorf, Moira O’Neill, and Eric Biber. “A New Approach to the Housing Element Update.” UCLA Lewis Center for Regional Policy Studies, January 2020.

<sup>36</sup> CAL. GOV’T CODE § 65584.04(i).

a 45-minute transit commute of each census block in California.<sup>37</sup> Accordingly, this data reflects both the level of transit service in any particular locality as well as job density. The following tables show that, across all three regions, jurisdictions with more transit service consistently receive a larger share of the regional RHNA allocation relative to their share of the population.

Table 18. SACOG: Objective 2 – Total RHNA vs. Transit Access

	Average Share of RHNA / Share of Population
Jurisdictions with less transit	0.84
Jurisdictions with more transit	1.10

Table 19. SANDAG: Objective 2 – Total RHNA vs. Transit Access

	Average Share of RHNA / Share of Population
Jurisdictions with less transit	0.92
Jurisdictions with more transit	0.74

Table 20. SCAG: Objective 2 – Total RHNA vs. Transit Access

	Average Share of RHNA / Share of Population
Jurisdictions with less transit	0.68
Jurisdictions with more transit	0.81

**Job access:** Housing Element Law acknowledges that “insufficient housing in job centers hinders the state’s environmental quality” and forces Californians “to drive longer distances to work” and emit increased greenhouse gasses.<sup>38</sup> Accordingly, to assess the extent to which allocation methodologies promote objective two, I also assess whether jurisdictions with greater access to jobs receive a larger share of RHNA. I conduct this analysis based on another dataset from the University of Minnesota’s Access Across America study, which uses LODES data to estimate the number of jobs that are accessible within a 30-minute auto commute of each census block in California. The following tables show that, across all three regions, jurisdictions with more job access consistently receive a larger share of the regional RHNA allocation relative to their share of the population.

Table 21. SACOG: Objective 2 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Population
Jurisdictions with less job access	0.88
Jurisdictions with more job access	1.07

<sup>37</sup> Murphy, Brendan and Andrew Owen. “Access Across America: Auto 2018 Data.” 2020. Retrieved from the Data Repository for the University of Minnesota, <https://doi.org/10.13020/qyh7-qy92>.

<sup>38</sup> CAL. GOV’T CODE § 65584(a)(3).

Table 22. SANDAG: Objective 2 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Population
Jurisdictions with less job access	0.75
Jurisdictions with more job access	0.88

Table 23. SCAG: Objective 2 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Population
Jurisdictions with less job access	0.69
Jurisdictions with more job access	0.79

**Compact Development Patterns:** To assess whether areas with more efficient development patterns are allocated a larger share of the regional RHNA, I use data from the Center for Neighborhood Technology measuring the compactness of development.<sup>39</sup> This data set assigns each city in California a “compact development” score that takes into account gross household density, regional household intensity, fraction of single family detached and rental housing, and block density. For my analysis, I determine whether jurisdictions with more compact development patterns are assigned more RHNA on average relative to population size.<sup>40</sup> The following tables show that jurisdictions with more compact development do generally receive a larger share of the regional RHNA allocation relative to their share of the population – although in SACOG jurisdictions with less compact and more compact development receive exactly the same share of RHNA on average.

Table 24. SACOG: Objective 2 – Total RHNA vs. Compact Development Patterns

	Average Share of RHNA / Share of Population
Jurisdictions with less compact development	0.97
Jurisdictions with more compact development	0.97

Table 25. SANDAG: Objective 2 – Total RHNA vs. Compact Development Patterns

	Average Share of RHNA / Share of Population
Jurisdictions with less compact development	0.62
Jurisdictions with more compact development	1.03

<sup>39</sup> Center for Neighborhood Technology. “H+T Affordability Index.” 2020. Retrieved from <https://htaindex.cnt.org/map/>.

<sup>40</sup> “H+T Index Methods.” Center for Neighborhood Technology. August 2017. [https://htaindex.cnt.org/about/HTMethods\\_2016.pdf](https://htaindex.cnt.org/about/HTMethods_2016.pdf)

Table 26. SCAG: Objective 2 – Total RHNA vs. Compact Development Patterns

	Average Share of RHNA / Share of Population
Jurisdictions with less compact development	0.73
Jurisdictions with more compact development	0.79

**Objective Three: Promoting an Improved Jobs Housing Balance**

The third objective of RHNA is to “promote an improved intraregional relationship between jobs and housing, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low-wage workers.”<sup>41</sup> To assess whether jurisdictions with more jobs receive larger RHNA allocations, I again use data from University of Minnesota’s Access Across America study measuring the number of jobs accessible within a 30-minute auto commute of each census block in California. It is important to note that this data measures the number of jobs accessible to each census block – regardless of whether those jobs are actually located within a city’s jurisdictional boundaries. This allows the data to more accurately capture the shape of the commuter sheds that surround job centers.

To conduct this analysis, I determine whether each jurisdiction’s share of the RHNA allocation is proportional to their share of the region’s accessible jobs. I then group the jurisdictions based on household income and determine whether – on average – higher-income jurisdictions are taking on a larger share of the RHNA allocation relative to their share of jobs. Table 27 shows that SACOG is the only region in which this is the case. In SACOG, higher-income jurisdictions are on average taking on almost twice as many RHNA units as lower-income jurisdictions, relative to their share of the region’s accessible jobs. However, in both SCAG and SANDAG, lower-income jurisdictions take on more than two times as many RHNA units as higher-income jurisdictions relative to job access – indicating their allocations do not promote objective three.

Table 27. SACOG: Objective 3 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Jobs
Lower income jurisdictions	1.43
Higher income jurisdictions	2.72

Table 28. SANDAG: Objective 3 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Jobs
Lower income jurisdictions	1.39
Higher income jurisdictions	0.60

<sup>41</sup> CAL. GOV’T CODE § 65584.04(i).

Table 29. SCAG: Objective 3 – Total RHNA vs. Job Access

	Average Share of RHNA / Share of Jobs
Lower income jurisdictions	3.33
Higher income jurisdictions	1.36

The third objective of RHNA is also focused on improving the balance of the number of low-wage jobs and the number of affordable units within jurisdictions. Accordingly, I also look at whether each jurisdiction’s share of the lower-income RHNA allocation is proportional to their share of the region’s low-wage jobs. The following tables show that higher-income jurisdictions in SACOG are taking more than two times as much lower-income RHNA as lower-income jurisdictions relative to low-wage job access; however, in SANDAG and SCAG lower-income jurisdictions are still taking on more lower-income RHNA than higher-income jurisdictions.

Table 30. SACOG: Objective 3 – Lower-Income RHNA vs. Low-wage Job Access

	Average Share of Lower-income RHNA / Share of Low-wage Jobs
Lower income jurisdictions	1.11
Higher income jurisdictions	2.52

Table 31. SANDAG: Objective 3 – Lower-Income RHNA vs. Low-wage Job Access

	Average Share of Lower-income RHNA / Share of Low-wage Jobs
Lower income jurisdictions	1.12
Higher income jurisdictions	0.79

Table 32. SCAG: Objective 3 – Lower-Income RHNA vs. Low-wage Job Access

	Average Share of Lower-income RHNA / Share of Low-wage Jobs
Lower income jurisdictions	3.18
Higher income jurisdictions	1.71

#### Objective Four: Promoting Mixed Income Communities

The fourth objective of RHNA is to “allocate a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category.”<sup>42</sup> To assess how well each allocation plan promotes this objective, I assess whether higher-income jurisdictions are on average taking on a larger percentage of lower-income RHNA units compared to lower-income jurisdictions.

<sup>42</sup> CAL. GOV’T CODE § 65584.04(i).

The following tables show that higher-income jurisdictions are receiving larger lower-income RHNA allocations in all regions. For instance, in SANDAG higher-income jurisdictions on average receive a RHNA allocation of which 52% are lower-income units, compared to 33% for lower-income jurisdictions. This finding is not surprising, given that all three regions applied an equity adjustment aimed at funneling more lower-income RHNA units to higher-income jurisdictions.

*Table 33. SACOG: Objective 4 – Lower-Income RHNA vs. Low-wage Job Access*

	Average Percentage of RHNA units that are Lower-income
Lower income jurisdictions	35%
Higher income jurisdictions	45%

*Table 34. SANDAG: Objective 4 – Lower-Income RHNA vs. Low-wage Job Access*

	Average Percentage of RHNA units that are Lower-income
Lower income jurisdictions	33%
Higher income jurisdictions	52%

*Table 35. SCAG: Objective 4 – Lower-Income RHNA vs. Low-wage Job Access*

	Average Percentage of RHNA units that are Lower-income
Lower income jurisdictions	37%
Higher income jurisdictions	49%

**Objective Five: Promoting Racial Integration and Access to Opportunity**

The fifth objective of RHNA is to “affirmatively further fair housing” by “taking meaningful actions to overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics.”<sup>43</sup> To assess how well each allocation plan promotes this objective, I use TCAC/HCD Opportunity Maps to assess whether more RHNA is allocated to areas with access to key resources that promote economic mobility. I also assess whether RHNA is funneled away from areas of concentrated poverty and segregation.

**Access to resources:** The following tables show that jurisdictions with more access to resources do not consistently receive a larger share of the regional RHNA allocation relative to their share of the population. For instance, in SCAG, jurisdictions with less access to resources receive larger RHNA allocations relative to population size. In SANDAG, jurisdictions with fewer resources take

<sup>43</sup> CAL. GOV'T CODE § 65584.04(i).

on a share of the RHNA allocation that is almost equal to that allocated to jurisdictions with more resources. SACOG is the only region where more RHNA is allocated to jurisdictions with more access to key resources that promote economic mobility.

Table 36. SACOG: Objective 5 – Total RHNA vs. Access to Resources

	Average Share of RHNA / Share of Population
Jurisdictions with less resources	0.79
Jurisdictions with more resources	1.18

Table 37. SANDAG: Objective 5 – Total RHNA vs. Access to Resources

	Average Share of RHNA / Share of Population
Jurisdictions with less resources	0.84
Jurisdictions with more resources	0.82

Table 38. SCAG: Objective 5 – Total RHNA vs. Access to Resources

	Average Share of RHNA / Share of Population
Jurisdictions with less resources	0.80
Jurisdictions with more resources	0.68

I also assess whether jurisdictions with more access to resources are taking on a larger share of the lower-income RHNA allocation relative to their population size. The following tables show that across all three regions this is generally the case. This suggests that the equity adjustments used by SANDAG and SCAG ensure lower-income RHNA units are distributed across the region equitably relative to resource access – even if total RHNA units are not. Further, this analysis indicates that SACOG’s methodology by far does the most to allocate both total and lower-income RHNA to jurisdictions with more resources; after SACOG’s equity adjustment is applied, jurisdictions with more resources receive almost twice as many lower-income RHNA units relative to population size.

Table 39. SACOG: Objective 5 – Lower-Income RHNA vs. Access to Resources

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with less resources	0.69
Jurisdictions with more resources	1.28

Table 40. SANDAG: Objective 5 – Lower-Income RHNA vs. Access to Resources

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with less resources	0.67
Jurisdictions with more resources	1.04

Table 41. SCAG: Objective 5 – Lower-Income RHNA vs. Access to Resources

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with less resources	0.82
Jurisdictions with more resources	0.89

**Segregation:** To determine how well regions promote objective five, I also assess whether jurisdictions with high levels of segregation and poverty receive smaller lower-income RHNA allocations. For this analysis, I identify jurisdictions that include census tracts identified as being “High Segregation and Poverty Areas” according to the TCAC/HCD Opportunity Maps (which are defined as areas where 30% of the population falls below the federal poverty line and people of color are overrepresented). I then determine whether these jurisdictions receive smaller lower-income RHNA allocations relative to population size on average. The following tables show that jurisdictions with segregated areas of poverty do generally receive a smaller share of the lower-income RHNA allocation relative to their share of the population.

Table 42. SACOG: Objective 5 – Lower-Income RHNA vs. Areas of Segregated Poverty

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with high segregation + poverty*	1.00
Jurisdictions without high segregation + poverty	0.96

Table 43. SANDAG: Objective 5 – Lower-Income RHNA vs. Areas of Segregated Poverty

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with high segregation + poverty*	0.71
Jurisdictions without high segregation + poverty	1.18

Table 44. SCAG: Objective 5 – Lower-Income RHNA vs. Areas of Segregated Poverty

	Average Share of Lower-income RHNA / Share of Population
Jurisdictions with high segregation + poverty*	0.83
Jurisdictions without high segregation + poverty	0.89

\*Jurisdictions where over 65% of land area is designated as high resource or highest resource were excluded from this category.

Overall, this analysis suggests that, despite recent efforts to reform the RHNA allocation process, there is still room for improvement. While SACOG’s methodology consistently promotes all of RHNA’s objectives, SANDAG and SCAG’s allocations at times require lower-income jurisdictions to take on more than their fair share of RHNA. Further, these allocation plans do not consistently

allocate more RHNA to areas with high access to jobs and other key resources that promote socioeconomic equity. Based on this quantitative analysis, I identify a few key takeaways that can inform future efforts to develop more equitable RHNA allocation methodologies.

**COGs should put more emphasis on addressing the jobs housing imbalance when allocating RHNA.**

My analysis reveals that neither SCAG nor SANDAG allocate RHNA equitably relative to the spatial distribution of jobs. On average, lower-income jurisdictions in both regions take on a larger share of the RHNA allocation relative to their share of the region's jobs. Jurisdictional-level analyses reveal even more striking disparities. For example, in SANDAG, Del Mar – which has the highest percentage of households above 80% AMI – receives a share of the lower-income RHNA allocation that is only 21% of its share of accessible low-wage jobs. On the other hand, Escondido receives a lower-income RHNA allocation that is 226% of its share of the region's low-wage jobs. In SCAG, Laguna Beach (Orange County) receives a share of the lower-income RHNA that is only 12% of its share of the region's low-wage jobs, while Calexico (Imperial County) receives a share of the lower-income RHNA that is 2366% of its share of the region's low-wage jobs. Given the important role that addressing the jobs housing imbalance plays in both promoting RHNA's equity and environmental goals, COGs should put more emphasis on allocating housing to higher-income jurisdictions that are within commuting distance of job centers.

**COGs should put more emphasis on factors that affirmatively further fair housing goals.**

My analysis reveals that 6<sup>th</sup> cycle allocation methodologies do not consistently allocate RHNA in a way that affirmatively furthers fair housing. For instance, while SACOG's methodology does allocate more RHNA to jurisdictions with more access to resources, it does not consistently allocate less RHNA to jurisdictions with high levels segregated poverty. Conversely, SANDAG's methodology does allocate less RHNA to jurisdictions with higher levels of segregation and poverty, but does not allocate more RHNA to jurisdictions with more resources. Given that the state legislature only added the fifth objective of RHNA in 2018, it is not surprising that COGs have experienced some challenges developing a methodology that promotes this objective. Accordingly, COGs should put more emphasis on developing RHNA allocation methodologies that adequately promote fair housing goals in the future.

**COGs should put more emphasis on assigning larger RHNA allocations to areas with high rents.**

My analysis reveals that none of the three 6<sup>th</sup> cycle RHNA allocation methodologies consistently allocate more RHNA to localities with higher rents. This is concerning, given that the RHNA process has consistently been criticized for not resulting in sufficient housing construction, and research indicates that upzoning in high-price locations is more likely to result in more housing production than in lower-price locations.<sup>44</sup> To increase the likelihood that the RHNA process actually results in adequate housing construction – including more affordable housing construction – COGs should put more emphasis on allocating RHNA to high-price locations.

**Allocating RHNA based on the land use projections in the SCS can hinder efforts to promote RHNA’s five statutory objectives.**

Overall, SCAG’s allocation illustrates why it can be problematic to allocate RHNA based on the land use projections in the SCS. Analysis by Paavo Monkkonen shows that SCAG’s SCS “pushes housing to parts of the region with fewer jobs” including cities in Imperial, San Bernardino, and Riverside Counties and unincorporated areas of the region, which adds “to regional congestion, increasing emissions and damaging air quality.”<sup>45</sup> Even though SCAG’s RHNA allocation is only partially based on the SCS land use projections, we see the same patterns emerging in its RHNA output, with Orange County taking on less RHNA and Imperial County taking on more relative to their share of the region’s jobs and population.

For instance, Table x compares SCAG’s allocation of lower-income RHNA units to each jurisdiction’s share of the region’s low-wage jobs. In Table x, higher-income jurisdictions (those with a higher percentage of households with incomes above 80% AMI) are shaded in yellow, and lower-income jurisdictions are shaded in pink. The last column shows whether each jurisdiction’s share of the total RHNA allocation is proportional to its share of the region’s jobs (if the allocation was exactly proportional this value would be 1.0). In an equitable distribution, we would expect to see the lower-income jurisdictions (shaded in pink) clumped near the top (with a value in Column E below 1.0) and the higher-income jurisdictions (shaded in yellow) clumped near the bottom (with a value in Column E above 1.0). Concerningly, Orange County which has the second highest share of the region’s low wage jobs, receives a share of RHNA that is only 58% of its share of the region’s low wage jobs. On the other hand, Imperial County, which has the lowest share of the region’s low-wage jobs, receives a share of the lower-income RHNA allocation that is 597% its share of the region’s low-wage jobs. This analysis suggests that using the SCS to

---

<sup>44</sup> Monkkonen, Paavo, Christopher Elmendorf, Moira O’Neill, and Eric Biber. “A New Approach to the Housing Element Update.” UCLA Lewis Center for Regional Policy Studies, January 2020.

<sup>45</sup> Monkkonen, Paavo, Michael Lens, Michael Manville, Brian D. Taylor, Evelyn Blumenberg, Stephanie Pincetl, Lisa Schweitzer, et al. “Regional Housing Needs Assessment (RHNA) Methodology,” August 31, 2019.

allocate RHNA can lead to an allocation that does little to promote both RHNA’s equity and environmental goals.

Table x. SCAG: Lower-Income RHNA Share Compared to Low Wage Job Share

County	A. Accessible Low-wage Jobs*	B. Share of Low-wage Jobs	C. Assigned Lower-Income RHNA	D. Share of Regional Lower-Income RHNA	E. Lower-Income RHNA Share / Low-wage Job Share**
Orange	10,603,562,581	23.5%	75430	13.5%	0.58
Ventura	851,563,539	1.9%	9550	1.7%	0.91
Los Angeles	28,960,661,646	64.1%	340633	61.0%	0.95
San Bernardino	2,696,614,354	6.0%	57405	10.3%	1.72
Riverside	1,994,321,058	4.4%	68365	12.2%	2.77
Imperial	94,906,626	0.2%	7001	1.3%	5.97
Regional Total	45,201,629,804		558,384		

Data: University of Minnesota Center for Transportation Studies, Accessibility Observatory, Access Across America: Auto 2018 Data

\*Total jobs with wages below \$1,250 within a 30-minute driving commute of each jurisdiction.

\*\*Column E is calculated by dividing Column D by Column B.

Overall, my analysis highlights the importance of reviewing the actual output of allocation methodologies in order to determine the extent to which they further the statutory objectives of RHNA. As is highlighted above, SCAG’s allocation is partially based on its SCS and does the least to promote RHNA’s objectives, while SACOG’s allocation is based entirely on the SCS and does the most to promote RHNA’s objectives. Further, SANDAG developed a simple methodology based on only a few factors that still resulted in a relatively equitable allocation, while SCAG developed a complex methodology that explicitly addressed each statutory objective, but on a whole did the least to promote RHNA’s objectives. To truly understand the extent to which an allocation plan furthers the statutory objectives of RHNA – especially within the context of each region, it is necessary to analyze the actual output of the methodology.

**IX. Recommendations for COGs**

Based on my analysis of 6<sup>th</sup> cycle allocation methodologies, as well as conversations with COG staff and housing advocates, I identify a number of best practices that COGs can use to increase the likelihood that their allocation plans promote the statutory objectives of RHNA.

**Address economic inequity and racial segregation directly when determining each jurisdiction’s total RHNA allocation, rather than considering these factors as a secondary step.**

Incorporating measures of economic inequity and racial segregation into the total RHNA allocation can help ensure wealthy, high-resource jurisdictions receive an adequately sized RHNA allocation. Currently, most COGs only incorporate equity factors during the equity adjustment. However, this strategy can limit a region’s ability to funnel more housing into the communities where it is needed most, such as those with high access to resources that promote economic mobility or those with high housing costs that signal pent up demand. Accordingly, COGs should consider incorporating additional equity focused factors into the total RHNA allocation process. ABAG’s Housing Methodology Committee (HMC) has discussed several potential strategies. For instance, the HMC has considered using a divergence index or White isolation index to directly measure racial segregation. ABAG has also discussed allocating total RHNA based on TCAC/HCD Opportunity Maps, which measure “place-based characteristics linked to critical life outcomes, such as educational attainment, earnings from employment, and economic mobility.”<sup>46</sup> The maps also identify “High Segregation and Poverty Areas” where 30% of the population falls below the federal poverty line and people of color are overrepresented. Using these maps can help ensure lower-income and racially segregated areas are not taking on more than their fair share of RHNA, while also funneling more RHNA to higher-income areas with access to key resources that promote economic mobility.

**Put more emphasis on strategies that promote both RHNA’s equity and environmental goals simultaneously.**

Another strategy for ensuring allocation methodologies further both RHNA’s equity and environmental objectives is to put more emphasis on allocating RHNA near existing job centers rather than transit stops. As mentioned previously, while allocating housing near transit is important, much of the existing transit system is located in higher-density and lower-income areas. Therefore, if this factor is given too much weight, smaller, wealthier communities that don’t have transit systems won’t receive their fair share of RHNA. On the other hand, allocating RHNA near existing job centers promotes both equity and environmental goals because workers are often forced to commute long distances when adequate housing isn’t available near jobs.

---

<sup>46</sup> “California Housing Task Force: Draft Methodology for the 2020 TCAC/HCD Opportunity Map,” April 2020. <https://www.treasurer.ca.gov/ctcac/opportunity/draft-2020-tcac-hcd-methodology-december.pdf>.

Indeed, research has shown that an improved jobs housing balance leads to reduced Vehicle Miles Traveled (VMT) and greenhouse gas emissions.<sup>47</sup>

SACOG's allocation methodology provides one example of how the location of job centers can be factored into RHNA allocation methodologies. As part of its equity adjustment, SACOG gathered data on the number of low-wage jobs and the number of affordable units located within each jurisdiction. SACOG then calculated which jurisdictions had the largest imbalance between existing low-wage jobs and affordable units and assigned more lower-income RHNA to these localities. Therefore, SACOG did not only funnel more housing to jobs centers, but specifically targeted areas where the existing jobs housing imbalance was the largest. While SACOG used this data only during the equity adjustment, this factor could easily be applied by other COGs during either the total RHNA allocation or the equity adjustment.

Some COGs have expressed concern that putting too much emphasis on the jobs housing imbalance could undermine the region's ability to meet its greenhouse gas reduction goals because some jobs are located in rural and unincorporated areas. COGs have expressed concerns that larger total RHNA allocations in these communities could lead to increased greenfield development, given that the easiest way for low-resource jurisdictions to meet their RHNA targets will be through the zoning of undeveloped areas for single-family residences. While this concern is valid, it is important to remember that COGs have no authority to require or prohibit growth of any kind.<sup>48</sup> Therefore, even if projected growth is not allocated to a rural community through RHNA, there is no guarantee that growth will not occur. Indeed, given the barriers to infill development, much greenfield development inconsistent with COGs' land use projections still occurs regularly.<sup>49</sup> Consequently, it doesn't make sense to undermine RHNA's ability to promote equitable development simply because the COG can't control where that growth happens within jurisdictions.

To better balance the equity and environmental objectives of RHNA, COGs could consider treating unincorporated and incorporated areas differently during the allocation process. Given the size and amount of undeveloped land in unincorporated counties, it is reasonable that COGs may not want to allocate more RHNA to these areas even if they do contain job centers. However,

---

<sup>47</sup> Benner, Chris, and Alex Karner. "Low-Wage Jobs-Housing Fit: Identifying Locations of Affordable Housing Shortages." *Urban Geography* 37, no. 6 (August 17, 2016): 883–903. <https://doi.org/10.1080/02723638.2015.1112565>.

<sup>48</sup> "2020 Metropolitan Transportation Plan/Sustainable Communities Strategy." SACOG, November 18, 2019. [https://www.sacog.org/sites/main/files/file-attachments/2020\\_mtp-scs.pdf?1580330993](https://www.sacog.org/sites/main/files/file-attachments/2020_mtp-scs.pdf?1580330993).

<sup>49</sup> Mawhorter, Sarah, Amy Martin, and Carol Galante. "California's SB 375 and the Pursuit of Sustainable and Affordable Development." *Turner Center*, July 2018. <https://turnercenter.berkeley.edu/sb-375>.

while allocating more RHNA to small, rural areas may not result in high-density development and increased transit use, it likely will still reduce the length of commutes for workers, and therefore can further both the environmental and equity objectives of RHNA.

**Consider jurisdictions' connection to regional job markets, rather than the number of jobs located within a jurisdiction.**

Another strategy for creating a more equitable RHNA allocation is to consider what areas are connected to the regional job market, rather than simply considering the number of jobs located within jurisdictional boundaries. For instance, my analysis of 6<sup>th</sup> cycle allocation plans relies on data from the University of Minnesota's Access Across America study, which measures how many jobs can be accessed by residents of each jurisdiction within a 30-minute car commute. Using this data can help ensure that smaller, wealthier jurisdictions that might be located adjacent to a job center, but don't actually have a large number of jobs within its jurisdictional boundaries, are still allocated their fair share of the regional RHNA.

**Consider carefully whether basing the RHNA allocation on land use projections in the SCS is appropriate.**

Moving forward, COGs should consider carefully whether it is appropriate to use the land use projections in the SCS to allocate RHNA. COGs have wide latitude to decide exactly what variables are taken into account in the SCS and how much weight they are given. If a region's SCS caps growth based on a jurisdiction's existing zoned capacity, using the SCS to allocate RHNA raises significant equity concerns. Further, there are a variety of strategies COGs can include in the SCS to meet greenhouse gas reduction goals, including the promotion of efficient land use patterns and the more widespread use of low-emission technologies such as bike sharing and teleworking. If a region's SCS relies more on technology strategies than land use strategies to meet its greenhouse reduction goals, allocating RHNA based on the SCS land use projections likely won't promote either the state's equity or environmental goals. Therefore, as long as a region can still meet its greenhouse gas reduction targets under the proposed RHNA allocation, COGs should not feel compelled to use the SCS land use projections to distribute RHNA.

There may still be cases where using the SCS to allocate RHNA is appropriate. However, in these situations, COGs should include a much more robust discussion in the RHNA narrative of what assumptions are built into the SCS land use projections. During the 6<sup>th</sup> cycle of RHNA, COGs provided very limited information within the RHNA allocation plan itself on how the SCS was developed. This made it exceedingly difficult for policymakers, stakeholders, and the public to

understand how using the SCS would impact the distribution of RHNA. Moving forward, COGs should provide more information about the SCS in the RHNA narrative, including the extent to which the land use projections are based on current zoned capacity, a jurisdiction's permitting history, the location of job centers, or the distribution of opportunity.

**Use publicly available data from objective, external sources whenever possible.**

Moving forward, COGs should try to use publicly available data from objective, external sources as much as possible within the allocation methodology. Collecting local input is an important part of the RHNA allocation process. Local officials have a more detailed understanding of the unique characteristics of their jurisdiction and can help COG staff better understand how different methodologies will play out at the local level. However, allocating RHNA based on local input raises equity concerns, because it allows small, wealthy jurisdictions that have a significant political incentive to minimize local housing development, an opportunity to bias the RHNA allocation. Further, there are many situations where COGs may be able to identify data from external sources – such as the U.S. Census – that measures the same variables included in its internal databases. For instance, SANDAG used LODS data from the U.S. Census Bureau to estimate the distribution of jobs within the region rather than internal projected job growth data. Therefore, where possible, using publicly available data from external sources would help promote confidence in the integrity of a COG's RHNA allocation methodology.

**Be as transparent as possible about how the decisions COGs make about which factors to include and how much they are weighted affect the spatial distribution of RHNA.**

COGs should work to be as transparent as possible about how proposed allocation methodologies affect the spatial distribution of RHNA. This can help ensure that policymakers, stakeholders, and the public can actually participate in discussions about how to best to allocate RHNA. This could include developing an executive summary that clearly describes the major elements of the allocation methodology or publishing tables within the narrative that show exactly what calculations are used and how each calculation changes the distribution of RHNA. Further, to encourage a higher level of transparency, HCD should require that all COGs use an online interactive dashboard that allows users to see visually how incorporating different factors into the methodology changes the distributions of RHNA. HCD should develop a standardized version of this dashboard so that low-resource regions can easily implement this recommendation.

## X. Recommendations for the State

In addition to the best practices outlined in the previous section, this section also identifies strategies the State should pursue in order to improve the RHNA allocation process.

### **Consider revising the rules around how a region’s Sustainable Communities Strategy (SCS) and RHNA allocation interact.**

Some COGs interpret the legal requirement that RHNA be “consistent” with the land development pattern in the SCS as meaning the RHNA allocation must be identical to the land use projections developed through the SCS process. However, SCAG’s allocation output highlights why this can be problematic, given that using the land use projections can result in an allocation that does not further the statutory objectives of RHNA. Given that there is value in aligning the state’s transportation and planning processes, the state should consider revising the rules around how the SCS land use projections are developed. This could include requiring that regions consider access to jobs and opportunity when projecting where future growth will occur or prohibiting regions from capping growth based on a jurisdiction’s current zoned capacity. The state should also clarify in Housing Element Law that COGs can choose not to use the SCS land use projections if doing so will result in an allocation that does not promote RHNA’s statutory objectives. Fundamentally, the goal of SB 375 and the SCS is to plan for a development pattern that will reduce VMTs and greenhouse gas emissions.<sup>50</sup> If COGs allocate RHNA in a way that deviates from the land use pattern in the SCS, but still allows the region to meet its greenhouse gas reduction goals, then the allocation plan should be viewed as being consistent with the state’s legal requirements.

As written, state law encourages COGs to think of the state’s environmental and equity goals as being in opposition. However, this is largely not the case. For instance, Public Advocates developed an “Equity, Environment and Jobs Scenario” for ABAG’s SCS that focused on creating more housing near jobs centers, expanding transit service, and increasing affordable housing. While the scenario had a strong equity focus, it was also found to be “the environmentally superior alternative” to the five scenarios developed by ABAG.<sup>51</sup> This reiterates

---

<sup>50</sup> Mawhorter, Sarah, Amy Martin, and Carol Galante. “California’s SB 375 and the Pursuit of Sustainable and Affordable Development.” Terner Center, July 2018. <https://ternercenter.berkeley.edu/sb-375>.

<sup>51</sup> Public Advocates. “Equity, Environment and Jobs Scenario Leads the Plan Bay Area Pack,” April 8, 2013. <https://www.publicadvocates.org/resources/news/equity-environment-jobs-scenario-leads-plan-bay-area-pack/>.

that it is possible to develop an SCS and RHNA allocation that does more to promote both the state's equity and environmental goals.

**Consider developing a different version of the TCAC/HCD Opportunity Maps that better reflects the factors COGs must consider when allocating RHNA.**

Some COGs expressed interest in using the TCAC/HCD Opportunity Maps to allocate RHNA but were concerned that the methodology used to measure opportunity in rural areas was at odds with RHNA's focus on promoting infill development. TCAC/HCD Opportunity Maps are designed to allocate LIHTC funding to affordable housing developers. Through the LIHTC program, rural applicants compete for a separate pool of funding from non-rural applications. Accordingly, the TCAC/HCD opportunity maps calculate a separate opportunity index for rural block groups than they do for urban census tracts. The maps may identify a rural area as being "highest resource" relative to other rural areas; however, if that area was compared to an urban census tract it likely would not be identified as higher resource. Therefore, in order to encourage more COGs to use TCAC/HCD opportunity maps to allocate RHNA, the state should consider developing a different version of the maps that better reflect that factors COGs must consider when allocating RHNA.

**Consider creating more opportunities for localities to receive technical assistance during the housing site selection process.**

Some COGs express concern that allocating more housing to job centers or high opportunity areas—which may be located in smaller or rural jurisdictions—could lead to more sprawl. COG staff argue that these jurisdictions are sometimes low-resourced and may find it easiest to accommodate RHNA by zoning for more single-family housing on the outskirts of town. In order to encourage more COGs to allocate RHNA to high-opportunity areas, the State should consider creating more opportunities for localities to receive technical assistance during the housing site selection process with the budget funds allocated in 2020. This can help ensure that equitable regional allocations also result in a more equitable and sustainable local distribution of housing. Cities and counties have the ultimate authority to decide whether they will accommodate RHNA in a way that promotes infill development or affirmatively furthers fair housing. Therefore, while allocating RHNA fairly among cities and counties is important, the decisions that localities make about where to accommodate RHNA within their jurisdictional boundaries are even more critical. The state should consider offering technical assistance from the budget funds allocated in 2020 so that COG staff feel more confident that allocating RHNA to smaller jurisdictions will still allow the region to meet its greenhouse gas reduction goals.

## **XI. Conclusion**

Ensuring that RHNA is allocated fairly among cities and counties is more important now than ever. The RHNA process offers a tool for measuring statewide progress towards addressing the housing crisis. If RHNA is not allocated fairly among cities and counties, it becomes much harder for the state to assess which jurisdictions are taking adequate steps to promote housing development. Further, recent changes to state law have resulted in much larger estimates of the regional housing need, which means many jurisdictions will need to upzone to accommodate their RHNA. If small, wealthy jurisdictions are allocated their fair share of the regional housing need, many wealthy jurisdictions may need to loosen restrictive zoning requirements that limit housing development and exclude lower-income households. However, if lower-income cities take on a larger share of RHNA, upzoning in these areas could lead to more displacement and gentrification.

Accordingly, state, regional, and local policymakers should take immediate steps to improve the RHNA allocation process. HCD should issue guidance clarifying how COGs can ensure their allocation plans further all five statutory objectives and what must—at minimum—be achieved within the allocation. HCD should also build an online dashboard that all regions can use to evaluate potential RHNA allocation methodologies moving forward. COGs that have yet to develop draft methodologies—including ABAG—should incorporate the best practices identified through this research in their 6<sup>th</sup> cycle allocation plan. COGs that have already developed 6<sup>th</sup> cycle allocation methodologies should begin making plans for how to fix their methodology for the 7<sup>th</sup> RHNA cycle. Lastly, cities must think about how they can incorporate the principles identified through this research into their Housing Element process to ensure that site selection promotes both RHNA's equity and environmental objectives. If state, regional, and local policymakers do not take these steps it will significantly impact the state's ability to address the housing crisis and overcome entrenched patterns of segregation.

# APPENDIX A. Strategies for Evaluating RHNA Output

This section describes the strategies I recommend HCD use to evaluate future RHNA allocation methodologies. As is mentioned above, the best way to assess the extent to which a methodology furthers the objectives of RHNA is to review its actual output. Because there is no one-size-fits-all approach to RHNA allocation, HCD will not be able to determine whether a methodology furthers the statutory goals of RHNA simply by reviewing the broad methodological approach used by the COG. Instead, HCD will need to use a consistent set of quantitative tools to evaluate each methodology.

What data source HCD uses to assess each allocation plan will have a significant impact on the results of its analysis. For instance, using data on job location will lead to different conclusions than if job access were measured. Therefore, it is important that HCD think carefully about what data sources are used.

- HCD should ensure that it uses the same set of data sources to evaluate each regional allocation. This will ensure that HCD is comparing apples to apples, and not holding one COG to a higher standard than another.
- HCD should gather data from objective, external sources. While reviewing SACOG, SCAG, and SANDAG’s allocations, HCD sometimes relied on data shared by the COG. To ensure that the data used to evaluate each methodology is consistent across COGs and also not influenced by local input, HCD should rely on external data to conduct its assessment.
- HCD should gather data sources that correspond to each of the five statutory objectives. Table 1 lists the data sources I used to assess whether the allocation plans promoted each statutory objective of RHNA. In addition to these sources, HCD may want to consider other metrics that could allow for even more precise assessments, such as measures of segregation (e.g. a divergence index), jobs-housing fit (by comparing job access to the existing supply of below market rate housing), or other measures of location efficiency.<sup>52</sup>

**Table 1. Data Sources Used to Evaluate 6<sup>th</sup> Cycle Plans**

Statutory Objective	Characteristic	Data Source
1	Population	Department of Finance Population Estimates

<sup>52</sup> Newmark, Gregory L., and Peter M. Haas. "Income, Location Efficiency, and VMT: Affordable Housing as a Climate Strategy." California Housing Partnership, December 16, 2015. <https://chpc.net/wp-content/uploads/2016/05/CNT-Working-Paper-revised-2015-12-18.pdf>.

1, 4	Household income	Comprehensive Housing Affordability Strategy (CHAS)
1	Tenure	Comprehensive Housing Affordability Strategy (CHAS)
1	Housing Costs	Zillow Rent Index
2	Job access via transit	University of Minnesota Center for Transportation Studies, Accessibility Observatory, Access Across America: Transit Data
2	Compact development patterns	Center for Neighborhood Technology H+T index data
2, 3	Job access via car	University of Minnesota Center for Transportation Studies, Accessibility Observatory, Access Across America: Auto Data
5	Access to resources	TCAC/HCD Opportunity Maps

**HCD should, at minimum, ensure that lower-income jurisdictions are – on average – not taking on a larger share of the regional RHNA allocation relative to key demographic characteristics.**

Ideally, given that wealthier jurisdictions have historically used exclusionary policies to limit growth within their jurisdictional boundaries, we would want to see higher-income jurisdictions taking on a higher share of the regional RHNA allocation relative to their share of the region’s population and jobs. However – at minimum – HCD should require that all regions produce a RHNA allocation plan that does not on average give lower-income jurisdictions a larger share of the regional RHNA allocation relative to population, jobs, and other key demographic factors.

For example, when comparing the allocation of RHNA to the distribution of the regional population, this would require that HCD:

- A. Calculate what share of the regional population is located within each jurisdiction;
- B. Calculate what share of the regional RHNA allocation is distributed to each jurisdiction;
- C. Divide each jurisdiction’s share of the RHNA allocation (step B) by its share of the regional population (step A).
- D. Sort the jurisdictions into two groups: (1) jurisdictions with a lower than average percentage of households with incomes at or below 80% AMI and (2) jurisdictions with a higher than average percentage of households with incomes at or below 80% AMI.
- E. Calculate the average value from step C for both lower- and higher-income jurisdictions.

If lower-income jurisdictions have a value from step E that is higher than the value calculated for higher-income jurisdictions, then HCD should conclude that the allocation methodology is inequitable.

A similar analysis could be done to assess whether the allocation promotes an efficient development pattern. For instance, HCD would need to:

- A. Calculate what share of the regional transit network is located within each jurisdiction;
- B. Calculate what share of the regional population is located within each jurisdiction;
- C. Calculate what share of the regional RHNA allocation is distributed to each jurisdiction;
- D. Divide each jurisdiction's share of the RHNA allocation (step C) by its share of the regional population (step B).
- E. Sort the jurisdictions into two groups: (1) jurisdictions with more than the median share of the regional transit network and (2) jurisdictions with a less than the median share of the regional transit network.
- F. Calculate the average value from step D for both groups.

If jurisdictions with more transit access are, on average, receiving a smaller share of the regional RHNA allocation relative to their share of the population, then HCD should conclude that the allocation methodology does not support objective two.

**Assess how proportional each allocation is to key demographic characteristics to evaluate the extent to which each methodology furthers the statutory objectives of RHNA.**

In addition to ensuring that each methodology meets the minimum criteria described in the previous section, HCD should also assess the extent to which each methodology furthers RHNA's equity and environmental objectives. This can be measured more precisely by looking at how proportional a jurisdiction's allocation is relative to key demographic characteristics. To do this, HCD would need to first calculate the ratio of a jurisdiction's RHNA share to its population or job share, and then ask questions such as:

- Are higher-income jurisdictions, on average, receiving a larger share of the regional RHNA allocation relative to, for instance, their share of the population?
  - How much larger is the average ratio of RHNA share to population share for higher-income jurisdictions? Is it 1.5 times the ratio for lower-income jurisdictions? Is it 2 times the ratio for lower-income jurisdictions?
- Are all higher-income jurisdictions receiving a share of RHNA that is larger than their share of the population (a ratio above 1.0)?
- Are all lower-income jurisdictions receiving a share of RHNA that is smaller than their share of the population (a ratio below 1.0)?
- Does the jurisdiction with the lowest percentage of lower-income households also receive the highest ratio of RHNA to population size? Does the jurisdiction with the second lowest

percentage of lower-income households receive the second highest ratio of RHNA to population size, etc.?

By asking these questions, HCD can get a better sense of the extent to which an allocation plan furthers the equity and environmental objectives of RHNA. HCD's expectations about what it means to "further" RHNA's statutory objectives might change over time, but these assessment tools can help the agency to conduct more a precise and consistent assessment. (To see a complete list of the quantitative assessment tools that were used in my analysis and my interpretation of the results see Appendix C and D.)