AHSC Draft Round 7 Guidelines: Policy Discussion Document

Action:

Members of the public are requested to provide written public comment on the recommendations found in this document by the deadline specified below.

Summary:

The California Strategic Growth Council (SGC), California Department of Housing and Community Development (HCD), and California Air Resources Board (CARB) invite public comment on the Round 6 Affordable Housing and Sustainable Communities Program (AHSC) Guidelines and Greenhouse Gas (GHG) Quantification Methodology, and possible changes to the Round 7 AHSC Guidelines and GHG Quantification Methodology and Tool. Comments will inform the development of the Round 7 FY22-23 Draft AHSC Guidelines and Draft AHSC GHG Quantification Methodology and Tool planned for release in Fall 2022, with Final Guidelines and Notice of Funding Availability (NOFA) released in October 2022.

Deadline:

The AHSC staff is actively working on updates to Round 7 Draft Guidelines, and this document is one step in the process. The team requests written comments on the ideas outlined in this document before **May 31, 2022**. The team will also be soliciting public comments on the Draft (Redline) Guidelines during Summer 2022 and Final Draft Guidelines in October 2022, when additional formal comment processes will take place.

Address for Comments and Questions:

Interested parties may submit comments on the Guidelines and AHSC GHG Quantification Tool via email to the AHSC inbox, **AHSC@sgc.ca.gov**. SGC staff will also be hosting virtual drop-in sessions for stakeholders to have time for direct conversations on any topic of their choice. These dates will be announced through the program’s announcement list. To stay informed on the guideline update process and the AHSC Program overall, please register for the AHSC News & Update Announcement List.

Background:

SGC and agency partners usually update the AHSC Guidelines after each funding round based on stakeholder input. These updates are necessary to adequately adjust the program for current events and new legislation, while encouraging the best practices in sustainable development for applicants. CARB staff periodically reviews the AHSC Quantification Methodology and GHG Quantification Tool to evaluate its effectiveness and update the methodology—to make it more robust, user-friendly, accurate, and appropriate to the projects being quantified. As a key step in updating the Guidelines and GHG
Quantification Methodology for Round 7, AHSC staff (staff from SGC, HCD, and CARB) is seeking public comment on the proposed changes being considered.

Additionally, this document serves as a part of AHSC staff’s response to the Council’s discussion of program priorities from the November 2021 SGC meeting, as well as to the January 2022 request from Council to “evaluate scoring and quantification methodologies to reflect regional differences and report back to the council prior to finalizing methodology for the next round.”

This document is organized in three sections:

- A detailed list of changes being considered for the three AHSC Scoring Elements and Criteria: GHG Reduction Scoring, Quantitative Policy Scoring and Narrative-based Policy Scoring. In some cases, staff describes the intent of a change and seeks input from the public on how to best achieve that intent. This section is designed to follow the content found in the existing AHSC Round 6 Guidelines.
- Appendix A provides a response to how the recommended changes to the AHSC Guidelines and GHG Quantification Tool relate to the 11 policy areas identified in the AHSC Policy Direction Staff Report from the November 2021 SGC Council Meeting. Appendix A references the changes outlined in the detailed list of changes.
- Appendix B includes an analysis of Round 6 awards and the Round 6 quantification methodology. This is in response to the directive from Council at the January 2022 SGC Council Meeting to “evaluate scoring and quantification methodologies to reflect regional differences and report back to the council prior to finalizing methodology for the next round.”

While this document includes many changes, we also recognize that program stability is critical for applicants. These complex projects can take years to come together, and stakeholders have requested consistency in program priorities to help applicants plan and develop the strongest, most transformative projects. To that end, these updates intend to maintain the fundamental components of the program, and it is staff’s hope that these changes will set the AHSC Guidelines on a path for minor, if any, updates in future rounds.

AHSC staff recognizes that the current application process is complex and comprehensive. Four key questions guide our recommendations:

- Is this change required by statute or Council?
- Is this change identified as a priority by stakeholders?
- Will this change improve clarity for applicants and/or reviewers?
- Will this change reduce the complexity of applying, while maintaining the integrity of the program?

Public comment is not limited to the following topics and the public is encouraged to comment on any content in the AHSC Guidelines and supplementary materials. All stakeholder comments on the topics described in this memo will be considered but may not be reflected in the Round 7 AHSC Guidelines.
While future opportunities to provide feedback will continue through a formal 30-day comment period as we release the draft guidelines and 10-day comment period for the final guidelines, early feedback provided in response to this document will allow staff to better consider ways to incorporate public comments.

**Detailed Proposed Changes:**

The following changes are concepts being evaluated by staff to address the issues identified through the public engagement process. Staff is not proposing to implement all of the listed options, and may consider additional ideas beyond those listed in this document. AHSC staff encourage applicants to provide feedback on the following changes discussed below. See Appendix B for an analysis of key GHG related topics and recommendations.

**GHG Reduction Scoring Changes:**

The following changes are structured to match the categories of the Estimated GHG Emission Reductions as part of Section 107(a) on Page 29 of the [AHSC Round 6 Guidelines](#). For reader’s clarity, the authors suggest reviewing that document alongside these changes.

**A. GHG Scoring:**

**A1:** Place less weight on Transit GHG reductions: Within the 30 points for GHG reductions scoring, increase the maximum bin score for the Affordable Housing, Active Transportation and Renewable Energy from 10 to 15, and reduce the bin score for Cost Efficiency of GHG Reductions from 15 to 10. No changes to the maximum bin score for Transit is proposed. Because the Cost Efficiency score is significantly impacted by transit GHG reductions, this change would place less weight on transit related GHG emission reductions. Further analysis is needed to ensure regional balance and align this change with other GHG score changes being considered.

- Transit max score from 5 to 5 (no change).
- Affordable Housing, Active Transportation and Renewable Energy score from 10 to 15.
- Cost efficiency of GHG Reductions score from 15 to 10.

**A2:** Uplift local transit: Have transit projects compete with like projects, based on the average auto trip length they reduce. For example, projects displacing short distance auto trips (<10 miles) would be binned and scored with other short distance auto trip projects. This approach recognizes the importance of transit types that replace short auto trips to improving equitable access and supporting smaller communities. Further analysis is needed to ensure regional balance and align this change with other GHG score changes being considered and further analysis is also needed to best define short and long-distance trips.

**B. Transit GHG Quantification:**

**B1:** Account for local transit conditions: Provide localized factors for trip length and adjustment factors based on National Transit Database metrics in addition to the statewide average default values.
B2: Seek to standardize ridership estimates: Seek to standardize ridership estimates to improve consistency across transit agencies. Standardization may include but is not limited to clarifying the documentation needed to verify ridership projections and whether system-wide ridership increases can be included.

C. Housing GHG Quantification:
C1: Explore alternative methods, data and tools that more inclusively measure Vehicle Miles Traveled (VMT) reductions from job accessibility in all regions instead of using the Central Business Map, which stakeholders find does not accurately capture job accessibility across the state.

C2: Evaluate the latest data available to measure VMT estimates from senior housing and revise the GHG quantification methodology as needed.

C3: Longer term area for study:

C3.a: Baseline VMT: AHSC staff is considering adjusting the quantification methodology for how baseline VMT and project VMT can be refined to better capture the climate benefits of building affordable housing and making transportation improvements in already low VMT areas.

C3.b: Proximity to transit: AHSC staff is considering how to better account for proximity to transit in the VMT reductions calculation. Currently, further study is needed to determine any redundancy of this variable with other variables, including Project Area Type transit proximity requirements.

C3.c: Bedroom count versus dwelling unit count: Explore VMT and trip rates and density calculations from the latest research. The current approach uses data from the Institute of Transportation Engineers’ Trip Generation Manual which is based on research using dwelling unit counts.

D. Add the following quantification elements:
D1: Add shared new mobility to the GHG Quantification Tool using the Clean Mobility Options (CMO) program quantification methodology. Project types include bikeshare, scooter-share, carshare and carpool. This change would expand the list of possible transportation improvements a project can propose.

D2: To further capture the GHG benefits of building design, evaluate the potential to quantify GHG emissions from hot water savings with a focus on the complexity and resources required for applicants to quantify the GHG reductions and other benefits.

E. Technical Fixes:
E1: Clarify that applicants should include documents for module and array type for solar components.

E2: Cap the number of Key Destinations for GHG quantification to 10 per facility and clarify that only the first 7 verified destinations are used for GHG quantification.
**E3:** To increase transparency and clarity on the GHG binning and scoring process, staff is exploring a revision to the binning process, possibly including an approach to score all projects as one cohort. Projects with the highest total scores would then be selected within each Project Area Type. Further analysis is needed to assess impacts to regional balance and align this change with other GHG score changes being considered.

**E4:** Make other technical changes to improve the GHG Quantification Tool usability in format and data.
Quantitative Policy Scoring (QPS) Changes:

The following changes are structured to match the categories of the Quantitative Policy Score as part of Section 107(b) on Page 31 of the AHSC Round 6 Guidelines. For reader’s clarity, the authors suggest reviewing that document alongside these changes.

F. Active Transportation Improvements:

F1: Rename ‘Active Transportation Improvements’ to ‘Active Transportation and Transit Improvements’ to better reflect the reality of eligible items.

F2: Standardize bikeway mileage: To measure the impacts of the program more accurately, staff will clarify that bikeway and walkway measurements are to be quantified as ‘lane miles’ including bi-directional Class 1 and Class 4 bikeways. This will align the QPS data with the GHG Quantification Tool data. This means that a project with 1 block of a bikeway on both sides of the street would count as 2 blocks, while a project with 1 block of a one-way bikeway on only one side of the street would count as 1 block. The minimum distances of bikeways will be doubled: Applicants will be eligible for 2 points for one lane mile or more / 1 point for a half mile or more of context sensitive bikeways.

F3: Class III bikeways as Context Sensitive Bikeways: Given the low cost and low-impact of ‘Sharrow Only’ Class III bikeway designations, and to better align with existing guidelines found in the CARB GHG Quantification Methodology, staff intends to require additional traffic calming features (i.e. traffic circles/roundabouts, diverters, or other significant volume/speed reduction devices) for an applicant to receive points related to length of Context Sensitive Bikeways with a Class III bikeway.

F4: Clarify allowance for enhanced/upgraded bikeways: Projects that upgrade or enhance an existing bikeway from Class 2 to Class 1 or 4; or Class 3 to any physically painted facility will be considered equally as a new facility, so long as it meets the Context Sensitive Bikeway definition.

F5: Documentation of Context Sensitive Bikeways: Create a standard form that allows applicants to easily confirm Annual Average Daily Traffic (AADT), existing Speed Limit, and length for each Context Sensitive Bikeway claimed. This will also allow for a more standardized review process.

F6: Clarify Context Sensitive Bikeway Network Connectivity: Currently, a new Context Sensitive Bikeway is required to connect to any ‘planned’ bikeway, regardless of the jurisdiction’s plan to implement the facility. To increase effectiveness of AHSC investment, applicants will only be eligible for the Bikeway Network Connectivity point if the Context Sensitive Bikeway is directly connecting to an existing facility (Class 1-4) at the time of application.

F7: Redistribute the four (two and two) points for descriptive nature of bicycle and pedestrian facilities: Since a project that includes a Context Sensitive Bikeway or a new pedestrian facility will inherently eliminate/reduce conflict points, barriers and improve sight distance and visibility, these points are redundant and not meaningful. These total four points will remain inside this section.

F8: Modify the ‘Pedestrian link’ point: The lack of clarity in Round 6 led to confusion from many participants in the program. A complete re-think and/or elimination of this point is likely. Staff welcomes
input from stakeholders on how to capture the value of connecting two unlinked pedestrian networks more clearly.

**F9:** Confirming and quantifying pedestrian facilities are compliant with Americans with Disabilities Act (ADA): Staff is exploring ways to have applicants confirm that the 2,000 feet of safe and accessible walkways will be built to meet accessibility standards. Staff welcomes additional feedback on how to confirm this without adding significant complexity to the application and confirmation process.

**F10:** Support Enhancements to Local Bus Service: Projects will be eligible for points (likely 1-4) if the project includes funding for elements that improve existing local bus services for at least 1 lane mile. At least one lane mile must be improved by implementing any (or a multiple) of the following: Bus Only Lane (at least 12 hours a day, 6 days a week - bikes may be allowed); off-board fare collection facilities; at-grade boarding infrastructure; signal prioritization for public transit; or purchases of vehicles to reduce peak hour headways by more than 10 minutes and/or achieve headways of 15 minutes or less. This list of improvements may be further refined as AHSC staff work with Caltrans and other partners, and further stakeholder feedback on this topic is welcomed.

**G. Green Buildings and Renewable Energy:**

**G1:** Clarity on Green Building Standards: Round 6 reviewers had difficulty confirming the level of commitment to achieve Green Building standards for most applicants. Additional confirmation and commitment will be necessary to achieve points, and staff welcomes input on how to make these points more meaningful and actionable.

**G2:** Establish All-Electric Design as Threshold: Redistribute the 7 points for electric design to other portions of Green Buildings and Renewable Energy section, potentially including battery storage, micro-grids, net zero energy, and reductions to embodied carbon in construction materials.

**G3:** All-Electric Buildings: To meet the goals of decarbonization, the AHSC program will no longer fund projects that include natural gas. All projects applying for funding under the AHSC program will be required to be All-Electric with no connections to natural gas infrastructure.

**G4:** Restore points for Zero Net Energy projects: In Round 5, applicants were eligible for 5 points if they could document they achieved energy grid use reductions, measured as total onsite energy consumption, and as verified by a Home Energy Rating System (HERS) rater. In Round 5, projects received 2 points for generating at least one-third of building energy on-site, and an additional 3 points for one hundred percent of energy. Staff is likely to reinstate these points, though the ratio of points may change.

**G5:** Conservation and Land Use: The AHSC team will continue to work with conservation programs, like Sustainable Agricultural Lands Conservation (SALC), and with the Department of Conservation (DOC) team to identify points of intersection to reinforce local planning that results in successful infill development and land conservation.
G6: Encouraging the reduction in embedded energy used for the housing projects: Staff is considering ways to encourage projects to identify ways to reduce energy in building construction including Adaptive Reuse, Mass Timber, module off-site construction, and other sustainable building models. Staff welcomes input on how to make this topic meaningful and accessible to a wide array of projects.

G7: Increase resiliency in face of future energy uncertainty: Guidelines will clarify energy storage (batteries) are an eligible cost for applicants.

G8: Quantify Utilities for Projects: Incentivize or require all applicants submit the California Utility Allowance Calculator (CUAC) Submittal Report to provide an accurate estimate of what tenants will pay for energy utilities.

G9: Supporting Adaptive Reuse Projects: The legislature is considering an additional $50 million in funding to incentivize projects that include adaptive reuse. Should these funds be approved, projects will be prioritized if they are eligible to identify that they meet the goals of this funding.

H. Housing and Transportation Collaboration:

H1: Streamline transportation categories: Rework and redefine what items are eligible for Transit Related Amenities (TRA) and revise the language related to TRA funds ‘at a transit station or stop.’

H2: Eliminate the point for ‘Other GGRF funds’: Delete the point projects may be awarded for receiving funding from other Greenhouse Gas Reduction Fund (GGRF) programs.

H3: Supporting Use of Public Lands for Affordable Housing: A project may receive a point for being within an environmentally cleared California High Speed Rail Station Planning Area OR if they are located on a site selected under Executive Order N-06-19 as Excess State Land or Surplus Local Land as identified by a Local Agency as part of the Public Lands for Affordable Housing policy. These conditions would be mutually exclusive.

I. Location Efficiency and Access to Destinations:

I1: Remove points for Walkability: Walkability has been scored using the Walkability Index, which primarily scores locations based on proximity to key destinations. This is similar to the existing Key Destinations in our scoring process, making these points redundant. Additionally, the Index seems to be updated inconsistently and without warning, leading to lack of clarity on scoring. Staff intents to remove points related to the Walkability Index.

I2: Additional clarity on Key Destinations: Specify that the radius for Key Destinations is 0.250 and 0.50 miles from the edge of the Sustainable Transportation Infrastructure (STI) component or project parcel closest to the destination. Applicants may use multiple edges of the parcel but may not exceed 0.50 miles as a radius.

I3: Documentation of Key Destinations: AHSC staff will provide a form for each applicant to complete that includes name, address, and distance from site for each of the Key Destinations, rather than just a map. This will allow clarity on scoring across all projects.
I4: Context Sensitivity to Key Destinations: Staff understands that rural projects are often farther from key destinations. Staff is considering awarding a greater number of points per Key Destination for RIPA projects.

I5: Key Destinations: Key Destination categories will be updated to better capture the types of vital community amenities and resources available to residents of the Affordable Housing Development. Remove “Office Park” and “Place of Worship” as Key Destinations. Combine “Public Schools” and “University or Jr. College” and clarify that only non-profit higher education is acceptable as a Key Destination. Refine definitions for “Grocery Store,” “Medical Center” and “Public Park” for clarity. Potentially add “Publicly-operated Bike Share Station” to the list of Key Destinations. Point value of each Key Destination may change. We also welcome feedback on what additional Key Destinations should be included.

I6: Modify Key Destinations in Guidelines to match GHG Quantification Tool: Staff will align definitions and lists of Key Destinations between QPS and the GHG Quantification Methodology and Tool.

I7: Key Destinations for ‘scattered site’ projects: If an applicant is seeking funding for a ‘scattered site’ they will need to submit one list and map of Key Destinations for each site. After submission, reviewers will average the number of Key Destinations for each site and round downward to the nearest whole number of Key Destinations to calculate the score.

I8: Including spaces for community-serving facilities: A project that includes ground-floor retail that provides a letter of commitment that they will rent out at least 2,500 square feet to a 501(c)3 non-profit, government agency, healthcare provider that accepts Medi-Cal, or a grocery store that includes CalFresh benefits and serves fresh meat produce will be eligible to receive points (possibly 1-3).

J. Funds Leveraged:

J1: Modify Funds Leveraged components related to homeownership projects: Create an alternative measurement under funds leveraged for homeownership projects to reflect the unique nature of funding in these types of projects.

K. Anti-Displacement Strategies:

K1: Prohousing Designation: As required by AB-1029 (Mullin, 2021), the AHSC program will award points (likely 1-2 points) for projects in jurisdictions that have been designated as “Pro-Housing” by the Department of Housing and Community Development at the time of application.

K2: Community-Based Partnerships: Projects with a signed Memorandum of Understanding with a Community Based Organization (CBO) to partner on the Affirmative Marketing Plan will be eligible for points (likely 1-2 points). CBOs include public schools, places of worship, or service/advocacy organizations that can affirm they work with community members in the area around the Affordable Housing Development (AHD). Business Districts and Chambers of Commerce would not be considered CBOs for this purpose.
K3: Reconsider structure of Anti-Displacement Strategies Section: The efficacy of and commitment to Anti-Displacement strategies submitted as part of Round 6 applications were not clear to reviewers. As a result, the ‘Local Policies’ and ‘Business’ anti-displacement strategies will likely be removed and repurposed to other community-serving components of the application.

K4: Strengthen accountability of Anti-Displacement Strategies: Applicants will be required to select strategies from an updated list of voluntary strategies to be funded by the project. The revised list of strategies will aim to fund greater capacity for housing production, preservation, protection, and housing-related activities needed to address gaps in the community. Examples will likely include tenant legal counseling, plans developed through collective impact efforts, defined research, training, and or data collection efforts (based on a partnership), or the hiring of a Community Development Corp./Community Housing Development Organization/Community Land Trust/small local BIPOC-led affordable housing developer in a role that will offer the experience necessary to scale their operations.

L. Local Workforce Development and Hiring Practices:
L1: Consider Changes to Local Workforce Development: Staff will continue to evaluate the Workforce section with an eye towards greater balance of the employment needs of community residents, developer limitations, and labor involvement. Staff will be looking for ways to clarify the existing language, create greater ease in accounting for partnerships and employment pathways, in addition to aligning the section with related programs, CCI reporting and legislative requirements.

M. Housing Affordability:
M1: Reduce scoring allocated to Extremely Low-Income (ELI) unit percentages for rental projects: Given that nearly all applicants achieved 5 points in the current scoring mechanism, staff will reallocate points (likely 2-3 points) from achieving the restriction percentage of ELI units to other affordability categories.

M2: Increase the tiers of Extremely Low-Income unit percentages for rental projects: Increase the tiers of ELI restriction percentage needed to achieve maximum points related to affordability.

M3: Incentivize affordable family style housing: Award points to projects who submit a mix of units that include at least 10% of 3-bedroom or greater units that are income-restricted to Very Low and Extremely Low Incomes (likely 2-3 points).

M4: Modify affordability measurements for homeownership projects: Consider adjustments to the way the program measures affordability (affordability formula tiers and affordability categories) to include the appropriate household income levels to allow homeownership projects to compete more evenly with rental projects.

M5: Aligning with Affirmatively Furthering Fair Housing policies: In line with the concepts of Affirmatively Furthering Fair Housing (AFFH), staff will further explore how to align affordability scoring with High Resource Areas per the TCAC Opportunity Maps.
N. Programs:
N1: Remove Programs Section: Remove this section completely from the Quantitative Policy Scoring and redistribute points to other sections. Currently, most projects submit programs that already receive points in other sections of the application. To encourage the use of this funding as opportunity for applicants to differentiate and invest in their communities, information and documentation related to community-serving programs will be moved to the updated Narrative Scoring section. Funding, commitment letters and MOUs between the project and non-profits will still be required.

N2: Increase Programs Budget: Despite removing the Programs section of the Quantitative Policy Scoring section, staff will retain and expand the maximum spending for Programs, to allow for funding of other important community engagement projects and services, such as internet service. Maximum cap is likely to increase to approximately $700,000.

O. New Components:
O1: Streamline Mapping: Combine the Project Area Map, Transit Service Map, and GHG Transit Map. And require that the map be submitted as a KML/KMZ file. Current mapping requirements, like buffers, may be modified. Mapping guidance for this new process would be released in conjunction with the application.

Narrative-Based Policy Scoring (QPS) Changes:
The following changes are structured to match the categories of the Narrative-Based Policy score as part of Section 107(j) on Page 38 of the AHSC Round 6 Guidelines. For reader’s clarity, the authors suggest reviewing that document alongside these changes.

P. Narrative:
P1: Restructure and revise Narrative Scoring: Staff will create specific prompts to more closely match the narrative rubric and seek short answers (i.e. 200 – 500 words per prompt). The structure of the points by topic may change significantly.

P2: Adding a Transformative Section: Add section on evaluating the Transformative nature of a project. This new section will be worth two points. This is to capture projects that are: going above and beyond in the community engagement process; addressing a long-standing harm in historically marginalized or disinvested communities; piloting new approaches to housing; catalyzing changes in land use in an area; or funding a unique AHSC Program. The Narrative Rubric will be updated to include this section.

P3: Affirmatively Furthering Fair Housing with Community Input and Integration with Housing Element: Add a narrative question asking applicants to describe how their project addresses the needs of the community as identified in the jurisdiction’s Housing Element and additional community engagement efforts.

P4: Refine and Refresh Redundant Content in Narrative: Staff will reduce duplication of content found in the Climate Matrix and Community Engagement Tracker in Narrative prompts. Applicants may still be expected to describe their climate and community commitments in narrative form.
Q. Other Changes to the Program:

Q1: Clarify ICP Project Area Type Definitions: The current definition of ICP Project Areas does not exclude Affordable Housing Developments that are located within one-half mile of from a Transit Station/Stop served by High Quality Transit. Staff intends to modify the definition to affirmatively exclude projects from ICP that are eligible for TOD Project Area Type to better balance the competitiveness of GHG reductions in the ICP Project Area Type.

Q2: Planned High Quality Transit: The current definition of TOD Project Area Type requires that the project site be currently served by High Quality Transit. Staff intends to modify the definition to allow for projects to claim TOD Project Area Type if the proposed transit improvements in the application will modify services to make the Qualifying Transit meet the AHSC definition of High Quality Transit.

Q3: Bus Rapid Transit (BRT) Definition: To create better clarity for applicants, staff will revise and clarify the existing definition of Bus Rapid Transit from listing ‘a combination’ of the five categories to a more clearly defined threshold, such as the Institute for Transportation and Development Policy BRT Scorecard. Additional suggestions on this change are encouraged and AHSC staff will work with CalTrans staff to finalize this definition.

Q4: Allow homeownership projects to access AHD funding: Allow homeownership projects to access AHD eligible costs in the form of a grant.

Q5: Exempt homeownership from Enforceable Funding Commitments (EFCs) requirements: Continue to exempt homeownership projects from EFC threshold requirements for grants.

Q6: Evaluate per-unit subsidies for homeownership projects: Evaluate the appropriate levels of per-unit subsidy levels for homeownership projects to appropriate AMI levels.

Q7: Create an additional measurement of ‘density’ for threshold requirements for homeownership projects that allows for larger units: Currently, the threshold for minimum density for projects is tied to Units per Acre and Floor Area Ratio. To incentivize homeownership projects (which tend to be larger than rental units) and family-style rental units, staff will create an additional measurement that Homeownership applicants can use for minimum density threshold that quantify bedroom units per acre, likely drawing upon the existing language in the Infill Infrastructure Grant Program (IIG). Regardless of threshold choice, GHG Quantification Methods will still be measured using Units Per Acre.

Q8: Increase eligibility pool for Tribal entities: Expand the list of eligible applicants to include California Native American Tribes. A California Native American Tribe is a Native American Tribe that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004 (Pub. Resources Code, § 21073).

Q9: Encouraging Tribal entities to be lead applicant: When considering multiple applications that include Tribal entities to meet the Tribal funding target, the level of Tribal involvement and leadership in a project may be considered for award.
Q10: Modify Urban Uses requirements for Tribal projects: Create an exception to program’s Urban Uses requirement for projects located on Tribal lands.

Q11: Clarify the Net Density definition: Clarify the Net Density definition and allowable deductions to better reflect the unique challenges that Tribal and rural projects face.

Q12: Increase digital access for residents: Recognizing the importance of internet connectivity as a form of access, as many services and amenities can be accessed remotely via the internet, applicants will be required to provide high speed service to each low-income unit for the duration of the grant at no additional fee to tenants. Internet service will be added as eligible expenses under ‘Programs’.

Q13: Encourage Digital Literacy programs: To complement the new requirement of providing internet service to tenants at no additional fee. Digital Literacy Programs will be added as an eligible expense under the ‘Programs’ tab.

Q14: Streamline GHG score reporting: For Initial Score Letters, staff will only communicate verified GHG reductions (MTCO2E) and not conduct a binning process until after all applicant appeals are complete.

Q15: Clarify Project Area Type Targets: Reduce confusion by aligning the language related to Project Area Type Targets to match other requirements by specifying ‘At least [X] percent’ to each of the three Project Area Types, creating a minimum threshold rather than a non-binding target. Retain the limit of percent tied to the NOFA amount, rather than actual program expenditure.

Q16: Clarify remaining funds after Project Area Types: Rename the approximately 20% of funding (that is not dedicated to a specific Project Area Type) to better reflect that the funds are not discretionary, but only available to achieve the goals and targets described in the guidelines. After satisfying all statutory and council-identified requirements and priorities described in the guidelines, the guidelines state that projects with the highest scores should be awarded. Further clarify and reiterate this existing language.

Q17: Clarify that projects cannot be partially funded: Given the interconnected nature of AHSC programs, it is very difficult to partially fund a project, as any unfunded portion of the projects would have a potential change to scoring. Staff intends to explicitly state that unless excess funds from previous rounds are available to fully fund the project, a project that exceeds the maximum available funds would not be funded and remaining funds would be rolled forward into the next AHSC NOFA.

Q18: Establish a process to follow in the event of a tie: The AHSC Guidelines clearly state that only opportunity for true discretionary decision on project awards is when two projects have a tie in scoring. In the unlikely (but possible) case of the remaining funding being insufficient to award multiple projects with an identical score, the project(s) with the total highest GHG reductions will take precedence.

Q19: Streamline Sustainable Community Strategy (SCS) compliance by providing template to be filled by applicant and reviewed and signed by regional government.
Q20: Seek to align AHSC Guidelines with the Multifamily Finance Super Notice of Funding Availability ("Super NOFA") where possible to maintain consistency across funding sources. AHSC staff will focus especially on topics such as emerging/community-based developers, Tribal entities, high resources areas, and submission/record-keeping requirements.
Appendix A: Proposed Changes to Address Key Policy Areas

The Policy Discussion Document details nearly 100 changes to the AHSC Round 7 Guidelines as identified by AHSC staff (which includes the Core AHSC Team made up of staff from SGC, HCD, and CARB). Staff considered public stakeholder feedback, and was guided in large part by Council priorities identified during November 2021 SGC meeting, stakeholder feedback during our TA-led Listening Sessions and small group discussions with staff across state agencies. The Policy Discussion Document is one step in the process of developing Round 7 Guidelines, and we continue to welcome feedback from voices across the state to improve the AHSC program. This Appendix serves as a summary of how the changes detailed above address the 11 policy areas discussed by the Council previously. This summary is not an exhaustive list of all the changes found in the main document, but a summary of some of the most significant changes.

1. **Geographic Distribution:** Stakeholders continue to raise questions about whether regions are equally able to compete for funding. The Council-adopted a Geographic Target of one project per each of the eight regions, if competitive applications are submitted, has already created some checks and balances in the system. All regions received an award in the most recent round. Further analysis on this issue (Appendix B) shows that there is no uniform challenge across regions. For example, one region with lower scores is having challenges across all scoring categories, while another region’s challenges are focused on proposing transit improvements that result in competitive GHG emission reductions. Though there is no uniform challenge across regions, staff is considering the following changes to recognize the differences of varying geographic contexts, within and across regions: C1, C3, F4, F10, G5, H3, I4, Q11

   There was significant discussion during the January 2022 SGC Council meeting about the possible impact of different transit types to GHG score and regional application success. The analysis in Appendix B shows there is no regional bias related to different transit types in the quantification methodology. The analysis also shows that short-distance transit trips typically result in less GHG emission reductions and therefore score in the lowest GHG bin. To uplift local transit to level the competitiveness with long-distance transit and to ensure that all transit types are funded, staff is considering the transit related changes outlined below in the ‘Other’ category.

2. **Climate Energy Nexus:** AHSC continues to explore ways to support the state’s decarbonization goals. In Round 6, the AHSC guidelines introduced up to seven points to incentivize building electrification, and nearly all projects achieved this goal, signaling this technology is feasible across the state. Staff is considering mandating all-electric projects and reinstating points related to Net Zero projects. The following changes support this policy area: D2, G2, G3, G4, G6, G8, G9.

3. **Fair Housing:** The AHSC Program funds thousands of affordable housing units across the state, and enacting statutes call for more than half of project funds to be spent in Disadvantaged Communities (DACs). AHSC staff continues to work to balance this requirement with the recent shifts in policy related to Affirmatively Furthering Fair Housing and Prohousing legislation. The
team intends to revise housing affordability points to encourage more family-style units and incentivize construction of affordable housing in higher resource areas. The following changes support this policy area: M1, M2, M3, M5, P3.

4. **Homeownership:** In addition to legislation encouraging more access to homeownership projects in AHSC, the Round 6 application review process resulted in the identification of significant challenges to funding structures related to affordable homeownership projects. AHSC staff continues to work to better refine definitions of affordability, funds leveraged, and other measurements to allow homeownership projects to not only access the program, but to compete on more equal footing. The following changes support this policy area: J1, M4, Q4, Q5, Q6, Q7.

5. **SGC Racial Equity Plan:** Across all Strategic Growth Council programs, staff is working to identify and remove barriers for diverse applicants and improve equity for disadvantaged communities, low-income communities, Tribal communities, and communities of color. AHSC staff have worked to increase community partnerships and are actively reconsidering anti-displacement strategies to keep communities safe and thriving. The following changes support this policy area: K2, K3, K4, P2, Q12, Q13, along with many more.

6. **Workforce and Labor Requirements:** Staff will continue to evaluate the Workforce section with an eye towards greater balance of the employment needs of community residents, developer limitations and labor involvement. Staff will be looking for ways to clarify the existing language, create greater ease in accounting for partnerships and employment pathways, in addition to aligning the section with related programs, California Climate Investments (CCI) reporting and legislative requirements. The following changes support this policy area: L1.

7. **Conservation and Affordable Housing Nexus:** AHSC and SALC staff continue to meet to identify ways to bring the goals of the two programs into alignment. While both projects work to reinforce local planning that results in successful infill development and land conservation, the two programs work on different scales that are hard to measure or incentivize at the AHSC-project level. There are not any current changes recommended to the guidelines to address this topic. The following changes support this policy area: G5.

8. **Tribal Access:** AHSC staff continue to meet with stakeholders and Tribal representatives on how to improve access and increase competitiveness of projects that benefit and involve Tribal entities. The complex nature of land ownership, land use policies, Tribal sovereignty, and experienced developers require flexibility from State agencies to welcome participation from Tribal entities. The following changes support this policy area: Q8, Q9, Q10, Q11.

9. **Master Plan for Aging:** In 2021, the State of California published a Master Plan for Aging calling for the production and preservation of affordable housing for senior populations. SGC continues to pursue ways to support this priority. Stakeholders have expressed concern that the GHG emission reductions from senior housing projects make these applications uncompetitive in the program. The following changes support this policy area: C2.

10. **Joint Liability:** AHSC staff continue to meet with stakeholders concerned about joint liability. However, staff believes that the integrated nature of the AHSC program requires commitments from all parties to achieve the goals described in applications and weakening this requirement
would reduce the efficacy of the AHSC program funded projects. There are not any current changes recommended to the guidelines to address this topic.

11. **Prohousing Requirements:** As required by AB-1029 (Mullin), the AHSC program will award points for projects in jurisdictions that have been designated as “Pro-Housing” by the Department of Housing and Community Development at the time of application. These points will replace some of the “Local Policies” portions of the Anti-Displacement scoring area. The following changes support this policy area: K1.

12. **Other Topics:** Beyond the 11 topics described in the November 2021 Policy Discussion paper, there was significant discussion during the January 2022 SGC Council meeting about the possible impact of different transit types to GHG score and regional application success. The analysis in Appendix B shows that short-distance transit trips typically result in less GHG reductions and therefore score in the lowest GHG bin. To uplift local transit to level the competitiveness with long-distance transit and to ensure that all transit types are funded, staff is considering the following changes support this policy area: A1, A2, B1, B2, D1, F10, Q1, Q2, Q3.
Appendix B: Round 6 Score and Quantification Analysis

Background

The Affordable Housing and Sustainable Communities (AHSC) program of the Strategic Growth Council (SGC) is a highly competitive grant program. In Round 6, 37 out of 53 applications were recommended for funding. Stakeholders have raised questions about whether every region can equally compete, and whether different transit types receive funding less often. In response, at the January 26, 2022, meeting, SGC councilmembers directed AHSC staff to “evaluate scoring and quantification methodologies to reflect regional differences and report back to the council prior to finalizing methodology for the next round.”

In response to those questions, this analysis examines key issues including regional distribution of awards and transit type. Although this analysis considers all award rounds on some topics, we generally focus on the most recent round of awards as it is the most informative for considering what additional work is needed for future rounds.

1: Geographic Distribution

a. Score Overview and Geographic Analysis of Round 6 Awards

Several stakeholders raised questions about the extent to which different regions can successfully compete for funds in the AHSC program and the factors that affect their competitiveness. In Round 6, the Guidelines authorized the use of discretionary funds to award at least one project in each of eight specified geographic areas. It was necessary to use discretionary funds to meet this goal for two of the eight regions: San Diego Area and Inland Southern California (Inland SoCal).

Table 1 shows the regional application and award rates in Round 6, compared to the share of population in each region. Regions applied at different rates with some regions submitting fewer applications than others. The regions that applied less often received fewer awards. While the AHSC program does not seek to divide funds by population, and program staff does not believe that raw population is the best measurement for determining an equitable distribution of resources, creating an alternative measurement of need across regions is outside the scope of this analysis. With that caveat, Table 1 shows that some regions are applying at a lower rate and getting awarded at a lower rate when compared to their population share.
Table 1. Success Rate by Regions for Rounds 1-6

<table>
<thead>
<tr>
<th>Region</th>
<th>Projects Submitted</th>
<th>Share of Submitted Projects (%)</th>
<th>Projects Awarded</th>
<th>Share of Projects Awarded (%)</th>
<th>Share of Funds Awarded (%)</th>
<th>Share of Statewide Population (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Coast</td>
<td>16</td>
<td>4.9%</td>
<td>4</td>
<td>25%</td>
<td>3.7%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Coastal Southern California</td>
<td>81</td>
<td>24.7%</td>
<td>50</td>
<td>62%</td>
<td>29%</td>
<td>33.2%</td>
</tr>
<tr>
<td>Inland Southern California</td>
<td>22</td>
<td>6.7%</td>
<td>8</td>
<td>36%</td>
<td>5%</td>
<td>12.4%</td>
</tr>
<tr>
<td>North State &amp; Sierras</td>
<td>18</td>
<td>5.5%</td>
<td>7</td>
<td>39%</td>
<td>3.7%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td>21</td>
<td>6.4%</td>
<td>8</td>
<td>38%</td>
<td>5.9%</td>
<td>6.5%</td>
</tr>
<tr>
<td>San Diego Area</td>
<td>21</td>
<td>6.4%</td>
<td>7</td>
<td>33%</td>
<td>3.8%</td>
<td>8.4%</td>
</tr>
<tr>
<td>San Francisco Bay Area</td>
<td>99</td>
<td>30.2%</td>
<td>53</td>
<td>54%</td>
<td>35.1%</td>
<td>19.5%</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>50</td>
<td>15.2%</td>
<td>27</td>
<td>54%</td>
<td>13.8%</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

To understand whether certain scoring categories disproportionately challenged one or more regions, AHSC staff reviewed the regional score averages for each scoring category. Focusing in on the regions that required awards through discretionary funds in Round 6, Inland Southern California had lower scores than other regions across a variety of scoring categories, while the San Diego Area received lower scores primarily in the GHG category (Table 2).
Table 2. Round 6 Average score by region, separated into scoring category (QPS, narrative, and GHG)

<table>
<thead>
<tr>
<th>Regions (number of applications)</th>
<th>Total Points: 100 possible</th>
<th>Quantitative Policy Points: 55 possible</th>
<th>Narrative Policy Points: 15 possible</th>
<th>GHG Points: 30 possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento Area (4)</td>
<td>84</td>
<td>50</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>San Joaquin Valley (5)</td>
<td>83</td>
<td>49</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Coastal Southern California (28)</td>
<td>83</td>
<td>50</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>San Francisco Bay Area (16)</td>
<td>82</td>
<td>51</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>North State and Sierras (2)</td>
<td>82</td>
<td>48</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Central Coast (4)</td>
<td>77</td>
<td>49</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>San Diego Area (3)</td>
<td>76</td>
<td>50</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Inland Southern California (4)</td>
<td>53</td>
<td>36</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

Staff also compared regional score averages of the three GHG sub-categories Table 3 shows the average GHG sub-categories scores by region for Round 6 applications. The data shows that the regions that received the lowest average GHG points scored low in several sub-categories. The Inland Southern California Region scored lowest on all three sub-categories. Of the four applications from the Inland Southern California Region, two did not include a transit component and also received the lowest possible score [1]. Scores for Inland Southern California applications were lower than average in the housing and cost-efficiency sub-categories as well. The San Diego Area received low scores in the transit and cost-efficiency categories. Of the three applications from this region, one did not have a transit component and received the lowest possible score.
Table 3: Round 6 Average GHG Score by region, separated into sub-scores (housing, transit, and cost-efficiency)

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total GHG Points: 30 possible</th>
<th>Housing GHG Points: 10 possible</th>
<th>Transit GHG Points: 5 possible</th>
<th>Cost-efficiency GHG Points: 15 possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin Valley (5)</td>
<td>24</td>
<td>7</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Sacramento Area (4)</td>
<td>22</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Coastal Southern California (28)</td>
<td>21</td>
<td>8</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>North State and Sierras (2)</td>
<td>20</td>
<td>8</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>San Francisco Bay Area (16)</td>
<td>19</td>
<td>5</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Central Coast (4)</td>
<td>16</td>
<td>7</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>San Diego Area (3)</td>
<td>14</td>
<td>7</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Inland Southern California (4)</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

b. AHSC Quantification Methodology Analysis

Staff reviewed the Round 6 AHSC methodology for calculating VMT and GHG reductions for both housing and transit elements to identify any geography-based factors and the impacts that they could have on different regions. The points below summarize geography-based factors in the CARB AHSC Methodology and Quantification Tool.

- Average home-based trip lengths vary by county or multi-county region, with different values for urban and rural areas within each county or region. This is used to calculate Vehicle Miles Travelled (VMT) reductions of housing projects. **Source:** From MPOs or the California Statewide Travel Demand Model
- Emission factors for passenger autos vary by county. This variable is used to calculate GHG emission reductions of housing and transit projects. **Source:** From EMFAC2017

There are two quantification factors that are directly impacted by geography: the average home-based trip lengths and the emission factors for passenger autos. The underlying data for these two factors are...
research-based and reflect CARB staff’s assessment of the most appropriate source of data at the time the AHSC GHG Quantification Tool was developed.

Our analysis shows that neither of these factors appears to be strongly impacting regions, including the two regions that under-performed in Round 6. As Table 4 shows, the average trip lengths of the San Diego Region’s urban areas, and Inland Southern California’s urban areas, are higher than the average for all regions. The average for Inland Southern California’s rural areas is below the average for all regions, but only one of the three applications in Inland Southern California was in a rural area.

Table 4. Average Home-based Trip Lengths

<table>
<thead>
<tr>
<th>Region</th>
<th>Average Trip Length (miles) Rural Counties</th>
<th>Average Trip Length (miles) Urban Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Regions</td>
<td>13.8</td>
<td>6.7</td>
</tr>
<tr>
<td>San Diego Area</td>
<td>20.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td>17.5</td>
<td>8.8</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>15.7</td>
<td>6.7</td>
</tr>
<tr>
<td>North State and Sierras</td>
<td>14.4</td>
<td>5.1</td>
</tr>
<tr>
<td>Central Coast</td>
<td>13.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Coastal Southern California</td>
<td>11.2</td>
<td>8.9</td>
</tr>
<tr>
<td>Inland Southern California</td>
<td>10.1</td>
<td>8.1</td>
</tr>
<tr>
<td>San Francisco Bay Area</td>
<td>8.7</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Table 5 shows that auto emission factors for the two lowest scoring regions are close to the average for all regions. They are higher than the emission factors of other regions that had higher success rates, indicating this factor is not likely to be impacting the success rate of these two regions.
Table 5: Average Auto Emission Factors by County

<table>
<thead>
<tr>
<th>County</th>
<th>Auto Emission Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Counties</td>
<td>346.1</td>
</tr>
<tr>
<td>North State and Sierras</td>
<td>354.8</td>
</tr>
<tr>
<td>Coast SoCal</td>
<td>347.6</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>344.7</td>
</tr>
<tr>
<td>Central Coast</td>
<td>340.5</td>
</tr>
<tr>
<td>Inland Southern California</td>
<td>340.2</td>
</tr>
<tr>
<td>San Diego Area</td>
<td>339.6</td>
</tr>
<tr>
<td>San Francisco Bay Area</td>
<td>336.1</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td><strong>335.7</strong></td>
</tr>
</tbody>
</table>

Many other variables in the GHG Quantification Tool may be indirectly impacted by project location. For example, the type of transit improvement that can be built depends upon both the current transit network and the arrangement of homes and destinations. More discussion of these factors occurs in later sections of this document.

c. Discussion and Recommendation

Although staff was required to use discretionary funds to achieve geographic balance in Round 6, our analysis has not found geography-based variables introducing inherent regional bias in the AHSC GHG Quantification Methodology and Tool. The equations and underlying data used to calculate VMT and GHG reductions are research-based, as explained in the Quantification Methodology.

This scoring analysis shows that some regions have the greatest challenges in the transit scoring criteria. Section 2 below analyzes this in greater detail and provides further recommendations. While the housing methodology seems to have less impact on regional success, our analysis and recommendations for possible longer-term changes to the housing calculations follow in Section 3.

2: Transit Scoring and GHG Quantification

To better understand the relative success of different transit types, staff analyzed transit scores by transit project type. Staff also reviewed how key factors, such as ridership and trip length, contributed to transit scores.

a. Round 6 Transit Score Overview and Analysis
The GHG Quantification Tool allows applicants to select from one or more of twelve different transit types. In Round 6, only six transit types were selected across all applications. Table 6 summarizes the application award rate of different transit types. The award rates outlined in Table 6 result from the full combined score. This analysis only includes applications with either one transit type or no transit. For clarity, we excluded five applications with multiple transit types (i.e. local bus and heavy rail).

Vanpools, heavy rail, and long-distance commuter bus projects had the highest funding rate in Round 6. Some stakeholders have expressed concerns that rail is more likely to be funded than bus projects. However, in Round 6 a similar number of rail projects (including heavy and light rail) and bus projects (including short distance and long-distance buses) were funded, with a total of 12 rail projects and 11 bus projects in the final awards.

### Table 6. Transit Type Funding Rate by Region

<table>
<thead>
<tr>
<th>Transit Type</th>
<th>Applied</th>
<th>Funded</th>
<th>Project Award Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanpool</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Heavy Rail</td>
<td>14</td>
<td>12</td>
<td>86%</td>
</tr>
<tr>
<td>Long-distance Commuter Bus</td>
<td>7</td>
<td>6</td>
<td>85%</td>
</tr>
<tr>
<td>No Transit</td>
<td>5</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>Capital Improvement</td>
<td>7</td>
<td>4</td>
<td>57%</td>
</tr>
<tr>
<td>Local Bus</td>
<td>9</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>Light Rail</td>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>48</strong></td>
<td><strong>41</strong></td>
<td><strong>85%</strong></td>
</tr>
</tbody>
</table>

*NOTE: 5 projects with multiple Transit Types were excluded for accuracy*

To identify how the GHG Quantification Tool contributed to these results, Table 7 shows the average combined transit and cost-efficiency score for each transit type. This table combines two of the three components of the GHG score: the transit score, which result solely from the transit-related GHG emission reductions, and the cost-efficiency score, which compares GHG emission reductions from all components to the project’s total funding request and can be significantly affected by a variety of factors including transit-related GHG emission reductions. On average, heavy rail projects do not score highest on these two factors. This suggests that the high success rate for heavy rail projects seen in Table 6 above is not being driven by the transit project’s GHG emission reductions.

However, the local bus project type did receive lower combined transit and cost-efficiency scores when compared to all other transit types in Round 6. Table 6 shows that more than half of local bus projects were funded, suggesting that there may already be some checks and balances in the scoring system. Table 7 reveals that the somewhat lower success rate for local bus projects may be partially due to lower GHG and cost-efficiency scores.
**Table 7. Combined point total for transit and cost-efficiency by transit type**

<table>
<thead>
<tr>
<th>Transit Type</th>
<th>Average Transit and Cost-Efficiency Score: 20 pts possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanpool</td>
<td>16.4</td>
</tr>
<tr>
<td>Long-distance Commuter Bus</td>
<td>16.1</td>
</tr>
<tr>
<td>Capital Improvement</td>
<td>15.6</td>
</tr>
<tr>
<td>Heavy Rail</td>
<td>13.5</td>
</tr>
<tr>
<td>Light Rail</td>
<td>8.0</td>
</tr>
<tr>
<td>Local Bus</td>
<td>7.6</td>
</tr>
<tr>
<td>No Transit</td>
<td>6.0</td>
</tr>
</tbody>
</table>

b. Transit Quantification Variable Analysis

To better understand the impact of each quantification variable on the success of different transit types, staff analyzed the range of variables in the VMT and GHG equations. The equations for calculating GHG emissions reductions are found in the GHG Quantification Tool. In short, GHG emission reductions are calculated by multiplying the average VMT that a project will replace by the GHG emission factor for private vehicles and subtracting the emissions from the transit vehicle. The VMT that a project will displace is estimated by multiplying three factors: the average ridership increase for the first and last year of the project’s useful life, a transit dependency adjustment factor representing how likely that trip is to happen by transit, and the length of the average vehicle trip that is displaced. Staff looked at these three factors, which were identified as primary concerns for stakeholders.

**Ridership increase.** A key variable is the average annual increase in ridership, calculated by averaging the increase in the first and last year of service, multiplied by the number of years the project will be in service. The focus is on the increase in ridership, meaning that a project with low or no ridership now could potentially score well. This equation does not differentiate between new service and service expansions and can be used for any project that increases ridership.

Table 8 shows that capital improvements and long-distance commuter buses had the highest average ridership increase, followed by light rail. While capital improvements and vanpools both scored relatively high on transit (Table 7), light rail scored far worse, illustrating the importance of every variable in the equation. In Round 6 and earlier, this input was provided by the applicant. Within each transit type, there was a range of values provided, suggesting that transit providers may be using a diversity of approaches to estimating this value.
Table 8. Average Ridership Increase by Transit Type

<table>
<thead>
<tr>
<th>Transit Type</th>
<th>Average Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvement</td>
<td>648,896</td>
</tr>
<tr>
<td>Long-distance Commuter Bus</td>
<td>421,312</td>
</tr>
<tr>
<td>Light Rail</td>
<td>346,561</td>
</tr>
<tr>
<td>Local Bus</td>
<td>316,968</td>
</tr>
<tr>
<td>Heavy Rail</td>
<td>238,556</td>
</tr>
<tr>
<td>Vanpool</td>
<td>105,756</td>
</tr>
</tbody>
</table>

Adjustment Factor and Trip Length. The two other key variables in the VMT reduction equation are the length of the auto trip the project displaces and the likelihood that a rider will take the trip by transit every time, known as the “adjustment factor.” The GHG Quantification Tool includes default values based on state averages from the National Transit Database. This research does show a difference between adjustment factors and trip lengths of different transit types. For instance, the average local bus trip in California is shorter than the average heavy rail trip in California, and the GHG Quantification Tool reflects this difference.

Importantly, the variables in the equations – these research-based averages – can be modified in the GHG Quantification Tool to account for local circumstances. Fifty-four percent of applications modified one or more of these variables in Round 6. The GHG Quantification Tool provides defaults for applicants’ convenience, but those can easily be changed. While the average local bus trip in the state may be fairly short, the trip length on a specific bus route may well be longer. If a transit agency has that information, they can use it in the GHG Quantification Tool.

Table 9 compares the adjustment factor and trips length inputs in Round 6 applications to state averages. Heavy rail, long-distance commuter bus and vanpool projects had the highest adjustment factors and trip length inputs. It’s likely these factors had the most impact on the success rate of transit types in Round 6. For example, while vanpools tend to have low ridership, they have a high adjustment factor and trip length leading to high auto VMT reductions and relatedly, GHG emission reductions.

Table 9. Adjustment Factors and Trip Lengths by Transit Type

<table>
<thead>
<tr>
<th>Transit Type</th>
<th>Rd. 6 Average Adjustment Factor</th>
<th>Adjustment Factor State Average</th>
<th>Rd. 6 Average Length of Auto Trip Reduced (miles)</th>
<th>Trip Length State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Improvement</td>
<td>0.62</td>
<td>--</td>
<td>11.52</td>
<td>--</td>
</tr>
<tr>
<td>Heavy Rail</td>
<td>0.83</td>
<td>0.79</td>
<td>25.41</td>
<td>11.48</td>
</tr>
<tr>
<td>Light Rail</td>
<td>0.69</td>
<td>0.68</td>
<td>6.10</td>
<td>5.44</td>
</tr>
<tr>
<td>Local Bus</td>
<td>0.56</td>
<td>0.56</td>
<td>5.22</td>
<td>3.77</td>
</tr>
<tr>
<td>Long-distance Commuter Bus</td>
<td>0.71</td>
<td>0.7</td>
<td>30.63</td>
<td>25.62</td>
</tr>
<tr>
<td>Vanpool</td>
<td>0.88</td>
<td>0.88</td>
<td>39.77</td>
<td>42.28</td>
</tr>
</tbody>
</table>
c. Discussion and Recommendation

Staff analyzed how the quantification methodology treated different transportation types and found that differences in treatment between types were well-founded in research. The equation inputs do differ between transit types to reflect statewide data, but applicants can modify these factors to reflect local conditions. Additionally, because the equations simply multiply these inputs, without giving more weight to any one factor, a change in any of these factors would cause the same rate of change in any transit type. For example, while a local bus project may have a low auto-trip displacement factor, it can compete well if its ridership increase is significant. Stakeholders have also expressed concerns that the lack of standardized ridership models used by transit agencies is resulting in a wide range of ridership estimates for each transit type, causing an unfair comparison of ridership increase. Based on this analysis and concern from stakeholders that transit continues to have an outsized impact on outcomes, staff recommends that the program:

a) Award quantitative points for local-serving bus projects, including to certain improvements to existing local bus service, like improving headways, implementing Bus Only Lanes, or implementing Signal Prioritization. (F10)

b) Host a working group to standardize and improve ridership calculation parity between transit agencies. (B2)
   a. Identify an approach to standardize ridership projections across transit agencies and/or provide additional guidance and best practices on how ridership can be projected. Clarify and standardize the level of detail needed in ridership projection documentation from transit agencies.
   b. Explore additional factors that would inform changes to GHG emission reduction estimates.
   c. Clarify whether system-wide ridership increases can be included, after considering whether this advantages some transit systems that are better able to calculate system-wide impact.

c) Modify the awards process to allow transit projects to compete only against similar transit types by assigning certain scores within two subgroups based on average auto trip length reduced. (A2)

d) Within the 30 points for GHG reductions scoring, increase the maximum bin score for the Affordable Housing, Active Transportation and Renewable Energy from 10 to 15, and reduce the bin score for Cost Efficiency of GHG Reductions from 15 to 10. (A1)

e) Provide localized factors for trip length and adjustment factors based on National Transit Database metrics in addition to the statewide average default values to better reflect local conditions. (B1)
3: Housing Score and GHG quantification

a. Housing Quantification Variable Analysis

Stakeholder feedback from listening sessions identified several questions about how the housing related GHG emission reductions are calculated. Currently, avoided VMTs are calculated based on home-based trip lengths by county. These are multiplied by elasticity factors related to specific interventions. This means that counties with longer average trips are estimated to have more VMT and GHG reduction potential, which means a higher potential scores in the GHG Reduction Scoring.[2]

While this is an objective way to calculate total VMT and GHG from auto displacement, and county-based data was determined to be the most accurate/appropriate, it may not fully capture the VMT reduction potential of building housing in areas with lower VMTs in counties with high trip lengths. Developing a method to address this will take further research.

In addition, analysis as part of the effort to promote homeownership identified the larger average number of bedrooms in homeownership projects as a consideration. This analysis was unable to consider this in depth because only one homeownership project submitted documentation allowing its GHG emission reductions to be calculated in Round 6, but further study on the issue of bedroom count may be appropriate. However, because the GHG Quantification Tool relies upon the Institute of Transportation Engineers’ Trip Generation Manual, which is unit-based and not bedroom-based, additional study would be necessary to address this issue and validate the data to ensure accuracy (e.g., not introduce double-counting of reductions).

b. Discussion and Recommendation

Based upon the considerations above, staff recommends that the program:

1. Explore alternative methods, data and tools that more inclusively measure Vehicle Miles Traveled (VMT) reductions from job accessibility in all regions instead of using the Central Business Map, which stakeholders find does not accurately capture job accessibility across the state. (C1)
2. Evaluate the latest data available to measure VMT estimates from senior housing and revise the GHG quantification methodology as needed. (C2)
3. Undertake a long-term effort to evaluate alternative methods of quantifying housing-related reductions that could incorporate the benefits of locating housing in a community with lower Vehicle Miles Traveled, address proximity to transit in other ways, and potentially calculate density in ways that incorporate bedroom count. (C3)

[1] All GHG components of the two Inland SoCal applications were nullified since the submitted documentation did not validate key variables required for verification.

[2] This is somewhat mitigated by the project area type, since counties with higher trip lengths tend to compete in the RIP-A category which has lower caps for VMT reductions.