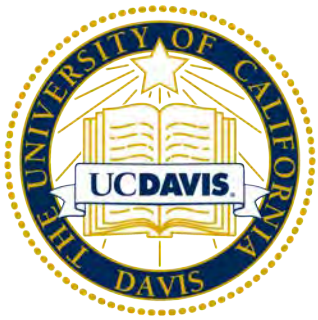

UC Davis Report to the Strategic Growth Council

Evaluation of the Technical Assistance Pilot for the Affordable Housing and Sustainable Communities (AHSC) Grant Program

Prepared by:
Autumn Bernstein, MS candidate
UC Davis Institute for Transportation Studies

Principal Investigator:
Dr. Deb Niemeier, Ph.D
Professor, UC Davis Dept of Civil and Environmental Engineering

July 2017

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Executive Summary

UC Davis was contracted by the Strategic Growth Council (SGC) in the fall of 2016 to assess the effectiveness of a pilot program that was designed to provide technical assistance (TA) for applicants to the Affordable Housing & Sustainable Communities (AHSC) grant program. We were also asked to recommend improvements that would optimize the cost-effectiveness of future technical assistance programs.

The Council's technical assistance (TA) pilot effort provided AHSC applicants from disadvantaged communities with subsidized professional support and analysis to enhance the competitiveness of their applications. The TA pilot was conducted during the second round of the AHSC program (2016-17). Applicants eligible for TA assistance were chosen from round 1 AHSC applicants who had failed to win an award. Each applicant was assigned to work with a designated technical assistance provider.

The SGC awarded $500,000 in contracts to three teams of technical assistance providers to work with sixty-three eligible applicants. The three teams were led respectively by Estolano LeSar Perez Advisors (ELP Advisors); the Southern California Association of Governments (SCAG); and the San Joaquin Council of Governments (SJCOG). All of the teams included subcontractors who specialized in different elements of the application process (e.g., for calculating greenhouse gas changes).

In addition to the technical assistance offered through the SGC, there were a host of other entities, including regional agencies, non-profits and private firms, who also provided technical assistance to AHSC applicants. Some of these providers offered subsidized assistance, while others charged a fee. In this report, we make a distinction between 'Major' TA providers, who provided comprehensive, usually subsidized TA to a large number of applicants, and 'Other Private' TA providers, who provided more focused, fee-for-service assistance to a smaller set of applicants. Table 1 on page 8 summarizes the various TA providers.

As part of this research, UC Davis researchers gathered and analyzed data from SGC TA teams, surveyed AHSC applicants, and interviewed both applicants and TA providers. We also gathered and analyzed data from the other non-SGC supported TA providers to facilitate comparisons between the SGC pilot TA assistance and TA assistance that was available outside the pilot program.

Results

Our findings indicate that 91% (118) of the 129 Round 2 applicants received some form of technical assistance, either through the SGC pilot or another provider. The SGC pilot played a unique and important role by providing assistance to a subset of applicants who were not as readily served by other TA providers. We also found that non-SGC TA providers were more successful in certain circumstances and these successes offer important lessons for SGC and its technical assistance program.

The key findings of our study include:

- Among the 118 Round 2 applicants that received technical assistance, 22% (26) received TA from the SGC TA team, 34% (40) received TA from another Major TA Provider, 10% (12) received TA from two or more Major TA Providers, and 34% (40) received TA from from Other Private Providers.

- Applicants who received comprehensive technical assistance overwhelmingly outcompeted those who did not. The SGC awarded 25 projects in Round 2; all but one received comprehensive technical assistance. Three awards went to projects that received TA from the SGC TA team; 14 awards went to projects that received TA from another Major TA Provider; 7 awards went to applicants who worked with two or more Major TA Providers; 1 award went to an applicant who didn't receive any TA.

- Projects serving disadvantaged communities were less likely to make it to the full application stage without technical assistance.

- The most valued aspect of technical assistance was the quantification of greenhouse gas emissions reductions. Most applicants relied on their TA provider to complete this application requirement. We also note that, even with technical assistance, there were widespread discrepancies and inconsistencies in the GHG quantifications submitted by applicants.

- Comprehensive, subsidized TA was not equally distributed across regions. In two regions (Southern California and Rural California), the majority of AHSC applicants lacked comprehensive technical assistance.
    - In Southern California, SCAG offered subsidized TA to all AHSC applicants, but some applicants either didn't realize this TA was available, or chose to forgo it. 51% (19) of applicants from the SCAG region did not receive comprehensive TA. 14 of these 19 applicants were from outside the City of Los Angeles.
    - In Rural California, there were no Round 2 applicants eligible for the TA pilot, and TransForm was the only Major TA Provider who offered TA to these applicants. 54% (7) of applicants from Rural California did not receive comprehensive TA.

- Imperfect coordination and communication between state agencies and technical assistance providers was a barrier to effective technical assistance.

Recommendations

UC Davis offers the following recommendations to the Strategic Growth Council to maximize the effectiveness of future rounds of technical assistance.

1. Provide targeted and flexible technical assistance to applicants who are most in need

1.1. The Council should continue to target technical assistance to applicants from disadvantaged communities that may not otherwise have access to such benefits.

1.2. The Council should use a flexible approach that allows TA resources to be reallocated to other applicants when an eligible applicant decides not to pursue an application.

2. Update criteria for selecting applicants to receive technical assistance

2.1. The Council should revise its eligibility criteria to ensure that limited TA resources are not being spent on applications that are highly unlikely to win an award.

2.2. Wherever possible, the Council avoid duplication of efforts with other major technical assistance providers.

2.3. The Council should consider designating some of its resources specifically to applicants in Rural California and should work with SCAG to increase awareness of the TA resources available in that region.

3. Improve guidance and oversight for GHG analysis

3.1. The Council and ARB staff should work with TA providers to improve clarity and communication around the GHG reduction methodology.

3.2. The Council and ARB staff should provide additional guidance and oversight regarding the assignment of CAPCOA project setting types.

4. Improve Coordination between State Agencies and TA Providers

4.1. The Council should facilitate an in-person training and orientation for all major TA providers at the beginning of each round of grantmaking.

4.2. The Council should make every effort to increase the amount of time that TA providers have to work with applicants prior to the submission of applications.

4.3. The Council should encourage learning and sharing of best practices among all interested TA providers, not just those who are part of the SGC TA pilot program.

Background

Goals and Scope of this Project

UC Davis was contracted by the Strategic Growth Council to assess the effectiveness of the technical assistance (TA) pilot for the Affordable Housing & Sustainable Communities (AHSC) grant program. The program recently completed its second round of awards (Round 2). In this round, the program received 129 applications and SGC ultimately made 25 awards.

Among the 129 applications, 31 applicants were eligible for, and received technical assistance with their applications as part TA pilot program sponsored by the Strategic Growth Council (SGC). All of the 31 applicants that were eligible for the TA pilot program had to have met two criteria: 1) the applicant had applied unsuccessfully for round 1 AHSC funding, and 2) proposed a project that benefitted disadvantaged communities.

The UC Davis team was charged with assessing the overall effectiveness of the SGC-sponsored TA pilot program. As part of this charge, UC Davis researchers gathered and analyzed data from SGC TA teams, surveyed AHSC applicants, and interviewed both applicants and TA providers. We also gathered and analyzed data from the other non-SGC supported major providers of technical assistance to facilitate comparisons between the SGC pilot TA assistance and TA assistance that was available outside the pilot program. Other TA providers included Metropolitan Planning Organizations (MPOs), non-profit organizations, and private firms. Some of these providers offered free or subsidized assistance, while others were fee-for-service.

AHSC Program Goals and History

The Affordable Housing and Sustainable Communities program provides "grants and affordable housing loans for compact transit-oriented development and related infrastructure and programs that reduce greenhouse gas (GHG) emissions." [1] The program was created by SB 862 (2014) and is funded by California's Greenhouse Gas Reduction Fund (GGRF). The AHSC program is an important aspect of California's comprehensive, cross-sector initiative to reduce greenhouse gas emissions to 80 percent below 1990 levels by the year 2050.

SB 862 gave the SGC, in partnership with its member agencies, the responsibility of developing and administering the AHSC program. SGC staff provide overall administration for the program and the ten-member Council - composed of seven agency secretaries and three public members – is the central authority and provides the overarching governance for the program. In addition, the Department of Housing and Community Development (HCD) and the California Air Resources Board (ARB) each play an important role in AHSC program design and implementation. HCD implements the housing, transportation and infrastructure components of this program. ARB establishes and maintains the methodology for evaluating GHG emissions associated with each proposed project, and conducts an independent review of each applicant's GHG analysis.

[1] http://sgc.ca.gov/Grant-Programs/AHSC-Program.html

The program began in 2014 and the first round of AHSC awards were awarded in the fall of 2015. In both the first and second rounds of grantmaking, the application process consisted of two steps. In the first step, all interested applicants submitted a preliminary or 'concept' application. After initial review, a select number of applicants were invited to submit a more detailed 'full' application. Awardees were selected from among those full applications. The selection criteria and scoring changed significantly between years 1 and 2.

In Round 1, there were 150 applicants, of which 28 won awards. Of the 28 awards given in Round 1, 20 were located in the Bay Area and Southern California, with the majority of those concentrated in coastal, urban communities. The lack of spatial diversity raised concerns that AHSC awards were disproportionately benefitting communities that already enjoy the best transit networks and walkable urban form, which would limit the effectiveness of the ASHC grants as a means of reducing GHGs. Another concern that was raised was that only those areas in which awards were made had sufficient technical capacity to prepare a competitive grant application for a program as complex as AHSC.

In Round 2, there were three eligible project area types:

- **Transit Oriented Development (TOD) Project Area:** Projects in this category demonstrated VMT reductions through connections to high quality transit and residential/mixed-use development, with an emphasis on affordable housing.

- **Integrated Connectivity Project (ICP) Project Area:** Projects in this category demonstrated VMT reductions through mode shift in areas lacking high quality transit.

- **Rural Innovation Project Area (RIPA):** Projects in this category demonstrated VMT reductions through mode shift in rural areas lacking high quality transit.

Launching the TA Pilot

The SGC's technical assistance pilot was created to provide applicants from disadvantaged communities with the support and technical tools necessary to submit competitive applications. At the beginning of Round 2, the SGC awarded $500,000 to three lead teams of technical assistance providers: Estolano LeSar Perez Advisors, the San Joaquin Council of Governments (SJCOG), and the Southern California Association of Governments (SACOG). The applicants who were eligible for this technical assistance were had to meet two criteria: 1) they had submitted an unsuccessful Round 1 proposal, and 2) the proposed project served a disadvantaged community. Sixty-three applicants from Round 1 were eligible to participate in the pilot.

The Larger TA Ecosystem

In addition to the three technical assistance teams chosen for the pilot program, there were a host of other TA providers working with applicants in Round 2. This ecosystem of providers were varied and the ways in applicants accessed technical assistance varied depending on the context. Some providers who were part of the TA pilot also provided technical assistance to

applicants that were not eligible for the pilot, using other sources of funding. Many of the TA providers worked in tandem with one another, and the configurations of these partnerships varied by region. Some offered specific services, while others offered comprehensive support. In short, the ecosystem of TA providers is both complex and multi-faceted.

In this report, we make a distinction between 'Major' non-pilot TA Providers and 'Other Private' TA providers. 'Major' Providers refers to a well-defined set of TA providers who worked with a large number of applicants, and their services were usually comprehensive and subsidized. The Major Providers included MPOs, Enterprise Community Partners and TransForm. In contrast, 'Other Private' Providers refers to TA providers who worked with a smaller number of applicants, and their services were more targeted to specific application components, and they generally charged a fee. Our data on these providers is less complete. Table 1 lists the various known TA providers in each category.

Table 1: Technical Assistance Providers involved in AHSC Round 2

	SGC Pilot TA Teams	'Major' Non-Pilot TA Providers	'Other Private' TA Providers *(partial list)*
Lead TA Providers	Estolano LeSar Perez Advisors San Joaquin Council of Governments Southern California Association of Governments (SCAG)	Enterprise Community Partners Sacramento Area Council of Governments San Joaquin Council of Governments Southern California Association of Governments (SCAG) TransForm	California Housing Partnership Consortium Community Development Resources Group Global Green USA Nelson Nygaard Ramboll Environ Sierra Business Council
Sub-contractors	California Coalition for Rural Housing Climate Resolve Estolano LeSar Perez Advisors Fresno Council of Governments Fresno State Office of Community and Economic Development (OCED) Kern Council of Governments Local Government Commission Merced County Association of Governments San Joaquin Valley Unified Pollution Control District Sigala Inc TransForm Tulare County Association of Governments	Community Development Resources Group Estolano LeSar Perez Advisors Fresno Council of Governments Fresno State Office of Community and Economic Development (OCED) Kern Council of Governments Local Government Commission Merced County Association of Governments San Joaquin Valley Unified Pollution Control District Sigala Inc TransForm Tulare County Association of Governments	

Methods

Data Collection
We combined information collected from the TA providers with data assembled from SGC staff and the FAAST application portal, along with publicly-available data from the US Census and American Community Survey. This information was combined into a database of Round 2 applications that included information on project and neighborhood characteristics, scoring/award status, and information about technical assistance they received. We collected material from the following known technical assistance providers who were willing to share information with us:

- Enterprise Community Partners
- Estolano LeSar Perez Advisors
- Sacramento Area Council of Governments (SACOG)
- San Joaquin Council of Governments (SJCOG)
- Southern California Association of Governments (SCAG)
- TransForm

Online Survey
We also surveyed Round 2 AHSC applicants using an online survey. Three emails were sent from UC Davis to all 129 Round 2 applicants. SGC staff also sent an email to applicants about the survey. A total of 47 applicants responded to the survey, of which 39 completed the entire survey.

Phone Interviews
We conducted phone interviews with nine Round 2 applicants and eight TA providers, as well as two state agency staff who were involved in the AHSC application process. In the case of providers who were part of the SGC TA Pilot, we interviewed at least one lead provider and at least one secondary provider. Interviews lasted between 30 minutes and one hour. One applicant responded to questions via email rather than in an interview format.

The nine AHSC applicants interviewed for this project were selected to represent a diverse cross-section of the applicant pool. Among the nine interviewed, the following characteristics were present:

- Five applicants were part of the TA pilot, and four received TA outside of the pilot;
- There was at least one applicant from every major region, including rural California;
- There were three ICP projects, three TOD projects, and three RIPA projects;
- Two were awarded grants, and seven made it to the concept application stage;
- Five were from disadvantaged communities, and three were from non-disadvantaged communities;

- There was at least one applicant from every project setting type, including projects that used TAC methods only.

All TA Providers were asked an identical set of questions, and all Round 2 applicants were asked an identical set of questions. Detailed notes were taken during each interview. After all surveys were completed, we reviewed the notes from each interview and summarized the key points. These key points were then compiled to compare and identify common and frequently-occurring themes.

Results

Technical Assistance among AHSC Applicants

A total of 129 applicants participated in the second round of AHSC grantmaking. Seventy-four (74) of those submitted a full application, and twenty-five (25) were ultimately awarded an AHSC grant. Some of these applicants were eligible for subsidized or free technical assistance from the SGC pilot program or other entities, while many more were not.

We found that 78 AHSC applicants (60%) received comprehensive technical assistance from either the SGC TA team or another Major TA provider. These numbers come directly from data provided to us by SGC and the Major TA providers.

We estimate that an additional 34% (40) of applicants received TA from Other Private[2] providers. As explained below, this is an estimate because we have incomplete data about Other Private Providers.

In total, we estimate that 91% (118) of Round 2 applicants received some form of technical assistance. Table 2 details the number of applicants who received TA from each category of TA provider.

Table 2: AHSC Round 2 applicants who used at least one form of technical assistance

Major Technical Assistance Providers[3]	**No. of Applicants**
SGC Pilot	26
Enterprise Community Partners	19
Other Major TA	21
Two or More Major Providers	12
Total	**78**
Smaller, Private TA Providers[4]	
Estimate based on survey results	40
Total Applicants who used TA	**118**
Total Number of Round 2 Applicants	**129**

[2] See Table 1 for definitions of Major TA Providers and Other Private TA providers.
[3] See Table 1 for definitions of Major TA Providers and Other Private TA providers.
[4] See Table 1 for definitions of Major TA Providers and Other Private TA providers.

Estimating the Use of Other Private Providers

In our survey of 37 AHSC applicants, we found that 15 applicants reported hiring one of Other Private Providers to assist with some component of the application. We also found that not all applicants used private TA equally. Among those who did not receive TA from a Major TA Provider (31%), approximately 55% of those hired a private firm to assist with their application. Among those who did get help from a Major TA Provider (69%), the rate was approximately 25%. If we assume that all applicants followed this same pattern, then we estimate that approximately forty (72*0.55 = 40) applicants (%) likely used an Other Private TA provider as their sole source of technical assistance.

Combining these applicants with those who received Major TA, we derive our estimate that 118 of the 129 applicants – or 91% - of the total applicants in Round 2 used some form of technical assistance (Table 1).

Except where otherwise noted, the remainder of this report focuses exclusively on the Major TA providers, including those within and without the SGC pilot, because data for the smaller providers is sparse. Nonetheless, we believe it is significant that over 90% of applicants in Round 2 likely sought some form of technical assistance for their application. Among those who did not receive free or subsidized assistance, the majority were willing to pay out of pocket. This finding speaks to both the competitiveness of the AHSC grant program and the perceived difficulty and complexity of the application itself.

Most Valued Aspects of Technical Assistance

We solicited feedback from both AHSC applicants and TA providers on those aspects of technical assistance that they found most valuable. Respondents reported that GHG quantification was, by far, the most valued aspect of TA, due to its specialized nature and the lack of familiarity with methods (Table 2). A plurality of applicants also valued many other aspects of the assistance they received, notably transportation capital project development and geographic information system (GIS) services.

We asked each applicant to rate the value of various elements of TA on a scale from 1 (“not at all valuable” to 5 (“essential”). These results are reported in Table 3 as weighted values. The weighting was accomplished by assigned a multiplier to each point on the scale. A score of 5 (“essential”) was assigned a weight of 4, while a score of 1 (“not at all valuable”) was assigned a weight of 0. We then tallied the number of responses for each point on the scale, multiplied them by the weight, and found the sum. We used a similar approach to ask applicants about the difficulty of various aspects of the application process, where 1 = “not at all difficult” and 5 = “extremely difficult”).

Table 3: Most valued aspects of technical assistance, as reported by applicants (N=39)

Overall Value of Technical Assistance	**Percentage of applicants who agree**
My TA provider "met or exceeded" my expectations	72
I would not have been able to complete my application without TA	50
I am extremely likely or likely to solicit technical assistance for future AHSC applications	83
Top Reasons for Utilizing TA	**Percentage of applicants who agree**
The application process involved unfamiliar or challenging analytical methods	70
I believed TA would make my application more competitive	70
Most Valuable Elements of TA	**Weighted Value**
GHG quantification	98
GIS services	74
Transportation Capital Project Development	66
FAAST	58
Transit Operations Capital Project Development	56
Affordable Housing Finance	52
Partnership Development	44
Affordable Housing Development	38
Knowledge of Local Entitlement Process	28
Most Difficult Aspects of Application Process	**Weighted Score**
GHG quantification	100
Understanding application guidelines and requirements	89
Gathering all the needed components for application	88
Budget and enforceable funding commitments	61
Demonstration of project readiness	43
Classifying project as TOD, ICP, or RIPA	36

While most of the major technical assistance was free or subsidized, there were some applicants who paid out-of-pocket for assistance. Among the 39 applicants who took our survey, 27 paid for some form of assistance (12 hired TransForm, 15 hired Other Private Providers).

The average amount paid for private assistance was $8,272. The minimum was $2,500 and the maximum was $20,000. We found that applicants who paid less for private TA were more likely to have received free or subsidized TA from one of the major providers. As might be expected, those who didn't have subsidized assistance were more likely to pay more for private TA.

Among those who paid for assistance (N=27), what did they find most valuable? These applicants also overwhelmingly reported that GHG quantification was the most valuable TA assistance provided (Table 4). Aside from this, however, their responses differed from the larger pool of applicants. After GHG quantification, the two most popular services were: 1) suggesting strategies to make application more competitive; and 2) writing or editing the narrative.

Table 4: Most valuable aspects of TA among those who paid for it (N=27)

Most valuable aspects of TA	Number of Responses
GHG Quantification	11
Suggesting strategies to make application more competitive	4
Writing/editing narrative	4
Supporting partnership development with municipalities and transportation agencies	2
Acting as intermediary with SGC	2
Having a dedicated/informed/responsive team member	2
Clarifying application requirements	1
Proforma and budget assistance	1

Did TA make applications more competitive?

Applicants who used TA were much more likely to win awards (Table 5). In fact, our analysis shows that 24 of the 25 AHSC award winners in Round 2 received assistance from one or more of the major TA providers. These findings were consistent across the three application categories (TOD, ICP and RIPA) as well as for disadvantaged communities and non-disadvantaged communities.

Table 5: AHSC award status for projects that did or did not receive technical assistance

Project characteristics		Received TA		No TA		Total
		Award	No Award	Award	No Award	
AHSC Project Type	TOD	9	16	0	12	37
	ICP	11	29	1	26	67
	RIPA	4	11	0	10	25
	Total	**24**	**56**	**1**	**48**	**129**
Disadvantaged Community Status	DAC	20	40	1	30	91
	Non-DAC	4	16	0	18	38
	Total	**24**	**56**	**1**	**48**	**129**

There were significant disparities in competitiveness among applicants who worked with different TA providers (Table 6). Applicants working with two or more major TA providers had the highest rate of success (58% of applicants awarded), followed by those working with Enterprise Community Partners (47% of applicants awarded). Applicants who worked with the SGC pilot and other major providers had more modest rates of success (13% and 23% of applicants awarded, respectively), and those who didn't work with any major TA provider were at a severe disadvantage (2% of applicants awarded) with respect to competitiveness.

Table 6: Success rate of applicants among different TA Providers

Number of Applicants	TA Provider					Total
	SGC Pilot	Enterprise	Other Major TA	Two or More	No TA	
Total number of applicants	26	19	21	12	51	129
Applicants that submitted full applications	14	16	17	11	16	74
Applicants that were awarded grants	3	9	5	7	1	25
% of Total Applicants Awarded	**13%**	**47%**	**23%**	**58%**	**2%**	**19%**

We find a variety of different factors contributed to these differences in outcomes.

1) **Different TA providers supported different types of applicants (Table 7).** A larger proportion of TOD applicants worked with Enterprise, or with two or more providers (one of which was Enterprise). In contrast, the SGC pilot supported more ICP and RIPA applicants and -- because the pilot only supported projects aimed at disadvantaged communities -- there were a much higher proportion of disadvantaged community projects supported by SGC than by any other TA provider. The category 'Other major TA providers' also worked with a large number of ICP and RIPA projects, but the majority of those applications were not benefitting disadvantaged communities.

Table 7: TA Providers worked with different types of applicants

Application Type	Technical Assistance Provider					Total
	SGC Pilot	Enterprise	Other Major TA	Two or More	No TA	
TOD	5	8	3	8	13	37
ICP	15	10	10	4	28	67
RIPA	6	1	8	0	10	25
Total	**26**	**19**	**21**	**12**	**51**	**129**
DAC	24	13	10	11	33	91
Non-DAC	2	6	11	1	18	38
Total	**26**	**19**	**21**	**12**	**51**	**129**

2) **SGC pilot applicant pool was less competitive by design.** The SGC-sponsored TA pilot was only available to applicants who applied, and lost, in Round 1. Thus, it is reasonable to assume that this pool of applicants might have been less competitive than the larger applicant pool.

3) **The Enterprise model had some distinct advantages.** Enterprise Community Partners, as a private entity, operated outside the constraints of the public agency model in several important ways. They focused on specific cities rather than entire regions and they began working with prospective applicants well before the RFP was released. In contrast, applicants and TA providers affiliated with the SGC pilot reported that there was insufficient time for them to work together on improving concept applications. In addition, the Enterprise model emphasized partnership development between housing developers and local agencies (especially transportation agencies), a process which is time-consuming but important. Applicants and TA providers alike observed that partnership development was something Enterprise did especially well, and it resulted in more competitive applications.

Findings for Disadvantaged Communities

Applications for projects in disadvantaged communities experienced large benefits from technical assistance. Of the 25 AHSC awards in Round 2, 21 went to projects benefitting disadvantaged communities (Table 8). Among disadvantaged community applicants, very few made it to the full application stage without technical assistance. Only six applicants out of 33 (18%) submitted a full application. In contrast, among non-disadvantaged community applications, 10 out of 18 applicants (55%) made it to the full application stage without technical assistance. This result indicates that applications in disadvantaged communities especially benefit from technical assistance in the early stages of the application process.

In the Southern California region, 54% (19) of disadvantaged community applications didn't receive TA, despite the existence of the pilot fact that the Southern California Association of Governments (SCAG) was offering subsidized assistance to applicants who were not eligible for the SGC TA pilot. In contrast, 26% (6) of disadvantage community applications in the Bay Area did not receive TA, 18% (4) of applicants in the San Joaquin Valley, and 0% in the Sacramento region. We also found that ICP projects in disadvantaged communities were somewhat less likely to receive TA than either TOD or RIPA projects. 43% (20) of ICPs did not receive TA, compared to 29% (9) of TODs and 30% of RIPAs (4). Many of these ICP applications were located in the SCAG region.

Table 8: Results for Disadvantaged Community applicants at each stage of application process

	DAC Applications with TA			DAC Applications with No TA		
	Concept	Full App	Award	Concept	Full App	Award
By Project Type						
TOD	22	16	9	9	0	0
ICP	27	19	8	20	5	1
RIPA	9	6	3	4	1	0
Total	**58**	**41**	**20**	**33**	**6**	**1**
By Region						
Bay Area	17	13	6	6	1	0
Southern CA	16	12	6	19	3	1
San Joaquin Valley	18	12	7	4	1	0
Sacramento	4	2	0	0	0	0
San Diego	2	2	1	1	0	0
All Other Areas	0	0	0	3	1	0
Total	**58**	**41**	**20**	**33**	**6**	**1**
By Project Setting						
Urban	20	17	10	9	0	0
Urban Center	18	11	5	10	1	0
Suburban Center	7	4	2	5	1	1

Low-Density Surburban	10	6	3	6	2	0
N/A	3	3	0	3	2	0
Total	**58**	**41**	**20**	**33**	**6**	**1**
By TA Provider						
SGC pilot	24	13	3	--	--	--
Enterprise	13	10	6	--	--	--
Other TA	10	8	5	--	--	--
Two or More	11	10	6	--	--	--
Total	**58**	**41**	**20**			

Greenhouse Gas Analysis Challenges

The quantification of greenhouse gas (GHG) reductions is a critical component of the AHSC application process. Applicants who were selected to submit full applications in Round 2 were required to estimate the GHG reductions associated with their project, which were a key factor in the scoring criteria. Applicants and TA providers alike reported that this aspect of the application was the most challenging of the process; it was also the step in which technical assistance was most highly valued. Many applicants expressed frustration and confusion about the GHG calculation process. As part of our analysis, we conducted a 'post-mortem' of the GHG analysis failures in Round 2 and found that a variety of factors contributed to applicant frustration and the errors in calculations which were identified. .

Who did the GHG Analyses?

The methodology for quantifying GHG reductions was created by ARB and made publicly available. Very few AHSC applicants elected to complete the GHG analysis themselves; most chose to work with a TA provider to complete the analysis (Table 9).

TransForm completed the majority (51 %) of the applicant GHG calculations. TransForm was part of the SGC TA team in every region of the state except the San Joaquin Valley. Additionally, TransForm was a subconsultant to many of the other Major TA providers, and they also worked independently with some applicants, particularly in Rural California. The next largest providers of GHG quantification were the San Joaquin Valley Unified Air District and Community Development Resources Group.

Table 9: TA Providers who performed GHG analysis for Round 2 full applications

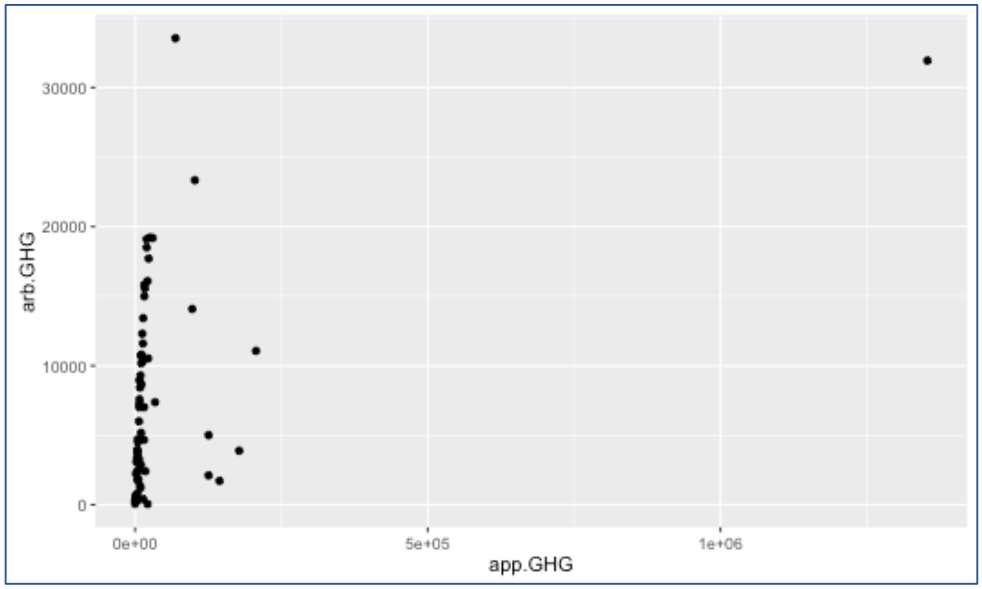
GHG Analysis Provider	Number of Applications
TransForm	38
Community Development Resources Group	9
San Joaquin Valley Unified Air District	9
SACOG	4
Ramboll Environ	4
Sierra Business Council	2
Nelson-Nygaard	1
Wtrans	1
San Francisco County Transportation Authority	1
Self/none reported	5
Total	**74**

GHG Discrepancies

The California Air Resources Board (ARB) reviewed and independently verified the results of the GHG analyses provided by the applicants. This independent review was important because it

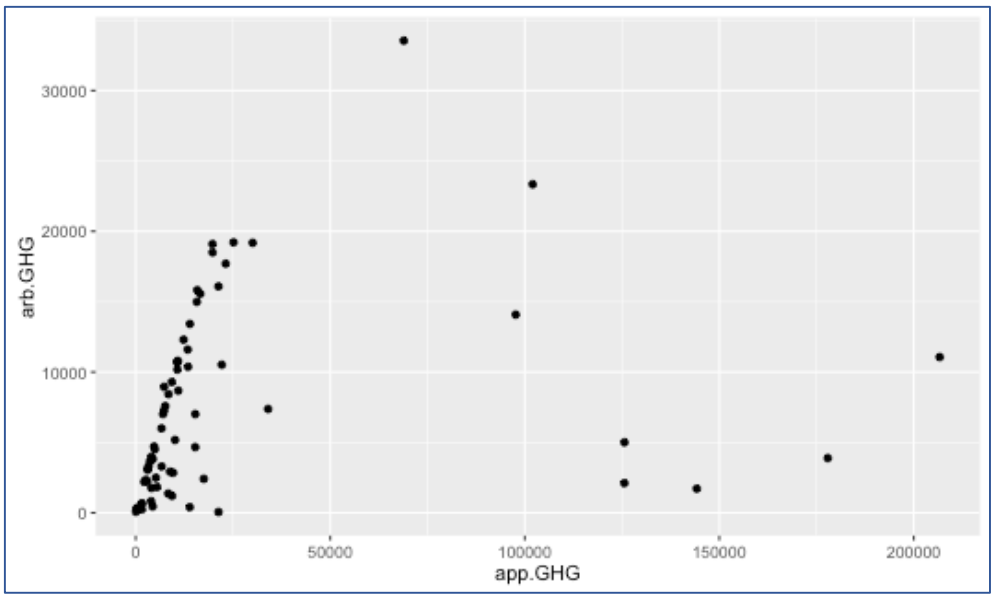
was ARB's estimate of GHGs – not the applicant's – that was ultimately used for scoring applications. When comparing the ARB estimates to those submitted with the applications, ARB found modest differences in the GHG estimates for the majority applicants (x %), and very large differences for a handful of outliers (x %). Plotting the applicant GHG values against ARB GHG values, we initially found one very large outlier whose GHG discrepancy was orders of magnitude larger than the rest (Figure 1).

Figure 1: Applicant-reported GHGs compared to ARB-verified GHGs (no outliers removed)



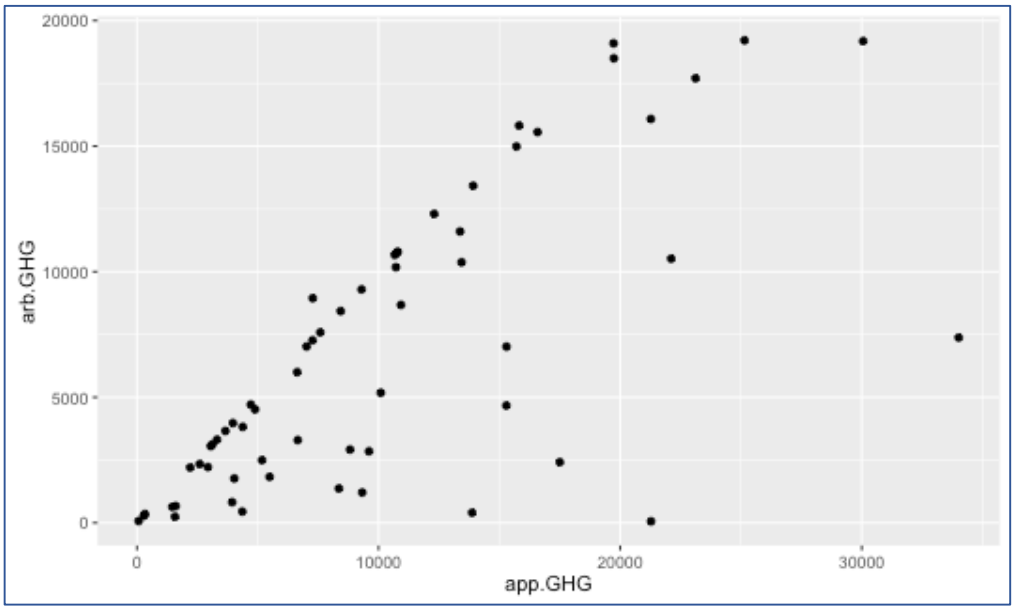
Removing the largest outlier and replotting values reveals 8 additional outliers (Figure 2).

Figure 2: Applicant-reported GHGs compared to ARB-verified GHGs (1 largest outlier removed)



Removing these additional eight outliers yields a plot where the relationship between ARB and applicant GHG values becomes clearer (Figure 3). In most cases, applicants over-estimated their GHG emissions reductions by a small amount, although as the plot shows, there were a handful of under-estimates. The median GHG difference was 774.

Figure 3: Applicant-reported GHGs compared to ARB-verified GHGs (9 largest outliers removed)



Examining the outliers more closely shows that all nine outliers were located in the central Bay Area, in either "urban" or "urban center" project settings (Table 10). Six are ICP projects and three are TOD. TransForm conducted the GHG analysis for seven of the nine applications. Among these nine outliers, complete project information was readily available for the four applications who won AHSC awards: Coliseum Connections, Grayson Street Apartments, Lakehouse Connections, and Empyrean & Harrison Hotel Housing). Among those four projects, all four proposed to give free bus passes to residents.

The project with the most extreme difference between ARB and applicant-calculated GHGs, by far, was Coliseum Connections. This project proposed 110 housing units, half of which were affordable units, the other half were market rate units. The other three projects for which data were available (Grayson Street Apartments, Lakehouse Connections, and Empyrean & Harrison Hotel Housing) proposed only affordable units.

Additional GHG calculation information from both ARB and the applicants would need to be provided for us to ascertain why exactly the large differences occurred.

Table 10: Characteristics of Nine GHG Outlier Projects

ID	Project Name	GHG Estimate applicant	GHG Estimate ARB	GHG difference	GHG TA Provider	City	CAPCOA Project Setting	Project Type
	Mean of non-outlier projects	**10,120**	**6,754**	**3,361**				
35538	Coliseum Connections	1,353,700	31,940	1,321,760	TransForm	Oakland	Urban Center	TOD
35458	Public Market	206,653	11,067	195,586	TransForm	San Francisco	Urban	ICP
35253	Creekview Terrace	177,885	3889	173,996	TransForm	San Pablo	Urban Center	ICP
35554	Treasure Island Intermodal Transit Hub	144,204	1717	142,487	SF County Transpo Authority	San Francisco	Urban Center	ICP
35299	Alameda Site A Family Apartments	125,614	5006	120,608	TransForm	Alameda	Urban	ICP
34760	Alameda Site A Senior Apartments	125,589	2113	123,476	TransForm	Alameda	Urban	ICP
34786	Grayson Street Apartments	97,667	14,081	83,586	Self/ unknown	Berkeley	Urban Center	ICP
35347	Empyrean & Harrison Hotel	102,028	23,339	78,689	TransForm	Oakland	Urban	TOD
35213	Lakehouse Connections	68,905	33,545	35,360	TransForm	Oakland	Urban	TOD

The differences in GHG calculation results were not limited to these outliers. Indeed, the majority of applicants had some amount of difference between their calculation and ARB's calculation. The reasons include a combination of calculation error, faulty assumptions, and miscommunication between ARB and TA providers.

It is also important to recognize the tool used to perform these calculations, the California Emissions Estimator Model, or CalEEMod, has inherent limitations and has been subject to limited validation. A recent UC Davis analysis by Amy Lee and Susan Handy compares CalEEMod alongside other VMT quantification tools and finds that VMT and GHG estimates vary widely by tool. [5]

[5] Lee, Amy E., Kevin Fang, and Susan L. Handy. *Sketch-Level Methods for Quantifying Vehicle Miles Traveled*. No. 17-06879. 2017.

APA

Inconsistent use of Project Setting Types

One clear problematic aspect of the GHG quantification methodology is defining the project setting types. Every applicant was asked to classify their project's surrounding neighborhood according to one of four categories, known as project setting types, which range from *urban* (highest density) to *low density suburban* (lowest density). These classifications are adapted from a typology created by the California Air Pollution Control Officers Association (CAPCOA), and are a required input for the CalEEMod tool, which is used in the GHG quantification methodology. Each Project Setting Type has a different cap on VMT reductions (Table 11). This is based on the assumption that projects located in denser, more urban contexts will be able to achieve greater VMT reductions than projects in more suburban and rural contexts.

Table 11: CAPCOA project setting types used in AHSC application process

Project Setting Type	Location Description Summary	Cap on %VMT Reduction
Urban	• Typical building heights: six stories or (much) higher • Typical street pattern: grid • Parking supply: constrained on and off street • Examples: San Francisco, Downtown Oakland	75%
Urban Center	• Typical building heights: two to four stories • Typical street pattern: grid • Parking supply: constrained • Examples: Fairfax (LA), Albany	40%
Suburban Center	• Typical building heights in stories: two stories • Typical street pattern: grid • Parking supply: somewhat constrained on street; ample off-street • Examples: Downtown San Rafael, San Mateo	20%
Low Density Suburban	• Typical building heights in stories: one to two stories • Typical street pattern: curvilinear (cul-de-sac based) • Parking supply: ample, largely surface lot-based • Examples: none given.	15%

The effect of the project setting types on GHG calculations are potentially large and have not been well validated. In practice, the different caps on VMT reduction create an incentive for applicants to "upzone" their project to a more urban project setting, in order to maximize potential VMT reductions. This creates a situation where project setting types could potentially be applied inconsistently.

We heard this claim made anecdotally from several TA providers and applicants. To determine if there was evidence to support it, we used the Walk Score variable as a proxy for project setting type (Table 12). Walk Score measures the walkability of a parcel, and is based on metrics including population density, block length, intersection density and the variety of amenities (such as grocery stores, restaurants and retail) located within walking distance. While

Walk Score is not an exact match for project setting type, it is reasonably comparable and its accuracy has been validated by numerous academic studies.

Table 12: Walk Score categories
(Taken from walkscore.com/methodology.shtml)

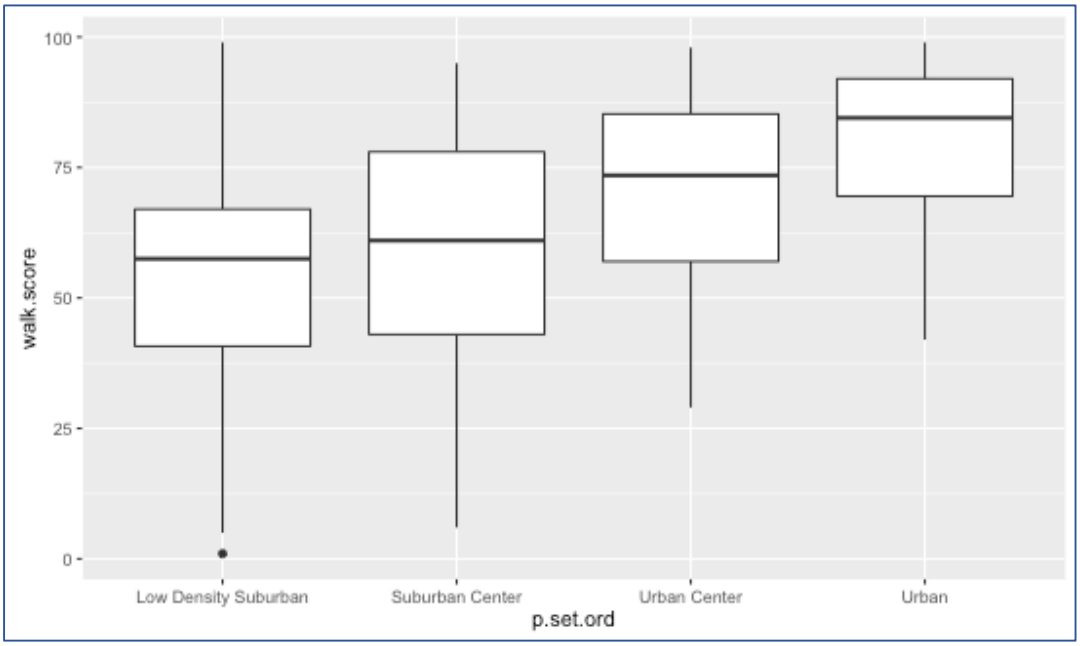
Walk Score	Description
90-100	Walkers Paradise *Daily errands do not require a car*
70-89	Very Walkable *Most errands can be accomplished on foot*
50-69	Somewhat Walkable *Some errands can be accomplished on foot*
25-49	Car-Dependent *Most errands require a car*
0-24	Car-Dependent *Almost all errands require a car*

We compared the applicant's project setting type to the walk score. We did this comparison in two ways: we calculated the average (mean) walk score and other summary statistics for all applications in each project setting type; and we plotted the walk score against the project setting type for each individual project. The means are presented in Table 13, and the plot is shown in Figure 4.

Table 13: Mean walk score and other summary statistics for each project setting type

Project Setting	Walk Score for Round 2 Applicants in Each Project Setting				
	Lowest Score	First Quartile	Mean	Third Quartile	Max Score
Urban	42	70	**81**	92	99
Urban Center	29	57	**71**	85	98
Suburban Center	6	43	**59**	78	95
Low-Density Surburban	1	38	**56**	66	99

Figure 4: Comparing Project Setting and Walk Score for All Round 2 Applicants



We found that the average walk score for several project settings to be different that would be expected. In particular, the average walk score for the Urban type was lower than expected (81) and the average walk score for the Low Density Suburban type (56) was higher than expected. Within each project setting type, the range of walk scores varied widely, and there was obviously significant overlap across setting types. For example, each project setting type had at least one project that scored in the high 90s ("Walkers Paradise") and one project that scored less than 50 ("Car-Dependent"). The mean scores for Suburban Center and Low-Density Suburban were only 3 points apart, suggesting there is little discernable difference between applicants in these two categories.

Regional Disparities in Distribution of Technical Assistance

Comprehensive, subsidized technical assistance was not equally distributed across all regions. In two regions, Southern California and Rural California, the majority of applicants did not receive technical assistance, although for different reasons.

Many applicants who were eligible for free assistance from the SGC TA pilot decided not to apply this year. This was especially true in Southern California, where 79% of applicants eligible for the SGC TA pilot did not apply (Table 14). Unfortunately, because of the way applicants were selected for eligibility, those TA resources were not transferred to other potential applicants.

Table 14: Many applicants who were eligible for the TA Pilot didn't submit applications

Region	Round 2 Applicants Eligible for SGC-sponsored TA Pilot			
	Eligible for TA	Submitted Concept App	Did Not Submit	Did Not Submit (%)
Bay Area	13	9	4	**30 %**
Southern CA	29	6	23	**79 %**
San Joaquin Valley	12	12	0	**0 %**
Sacramento	5	2	3	**60 %**
San Diego	4	2	2	**50 %**
Rural California	0	0	0	--
Total	**63**	**31**	**32**	**51%**

Conversely, there were a large number of applicants who were not eligible for the SGC's pilot TA program and applied for a grant anyway (Table 15). In Southern California, 51% (19) of applicants did not receive comprehensive TA. Among those 19 applicants, 74% (14) were from jurisdictions other than the City of Los Angeles. SCAG offered subsidized TA to all AHSC applicants (including those who were not eligible for the SGC TA pilot) but these 19 applicants may not have realized that subsidized TA was available.

Table 15: Actual distribution of TA in Round 2

By Region	Applicants who received TA	Applicants with No TA
Bay Area	25	15
Southern CA	18	19
San Joaquin Valley	19	4
Sacramento	7	1
San Diego	3	3
Rural California	6	7

There were similar, but less pronounced, patterns in the Bay Area, Sacramento and San Diego. It might have been preferable to allow TA providers to transfer TA resources to these applicants, once it became clear that the original applicants were not going to apply.

Applicants in Rural California (including the Central Coast, Eastern and Northern Sierra, Northern Sacramento Valley and North Coast) faced particular hurdles to receiving technical assistance. Many rural communities are not part of an MPO – or their MPO is small and doesn't have the resources to provide subsidized assistance. Furthermore, no applicants from rural California were eligible for the SGC-sponsored pilot.

Yet, there were 13 applicants from Rural California in Round 2. Among these applicants, 54% (7) did not receive TA from a Major Provider – and they had to pay for it. TransForm was the only Major TA Provider who actively supported applicants in Rural California. Unlike in other regions, where TransForm's work was often subsidized by the SGC TA Pilot or other Major TA providers, TransForm was not subsidized to work in rural California. Therefore, all of the applicants who worked with TransForm in Rural California paid out of pocket for their assistance.

This is especially unfortunate because small, rural communities are less likely to have discretionary income to spend on applications like AHSC. Going forward, it will be important to ensure applicants in rural communities have equitable access to technical assistance.

Coordination Between State Agencies and TA Providers

Nearly every TA provider we interviewed noted there were significant challenges in coordinating with the state agencies overseeing the application process: the Strategic Growth Council, California Air Resources Board, and Department of Housing and Community Development.

Many AHSC applicants also expressed frustration at the inability to get questions answered in a timely fashion. Some expressed skepticism about whether their TA providers were knowledgeable about the application process. Indeed, many of the TA providers themselves observed that they were unprepared and unable to answer questions, particularly during the rush period to submit concept applications.

TA Providers that were not part of the TA pilot felt especially out of the loop, and they believed they had even less access to state agency staff to discuss concerns and get questions answered.

Several specific issues were raised repeatedly in our conversations:

1. **Timing of TA contracts:** For TA providers who were part of the SGC pilot, most felt there was insufficient time between when contracts were signed and concept applications were due. This made it difficult to execute major, substantive changes to applications that might have improved their competitiveness.

2. **Knowledge transfer, communication and problem solving among SGC, state agencies and TA providers:** TA providers observed that there was little opportunity for them to receive training or transfer knowledge from state agencies before they began working with clients. This was due, in part, to the short timeframe noted above. Additionally, TA providers stated that there was no formal opportunity for TA providers to sit down with state agencies and clarify the guidelines at the outset of the process. Several TA providers suggested that such an opportunity should be provided for future rounds of TA.

Recommendations

1. Provide targeted and flexible technical assistance to applicants most in need

1.1. AHSC applicants who receive comprehensive technical assistance enjoy a strong competitive advantage over those who do not receive assistance. Projects benefitting disadvantaged communities appear to receive an even greater benefit from technical assistance than other projects. Therefore, the SGC should continue to target technical assistance to applicants from disadvantaged communities that may not otherwise have access to such benefits.

1.2. A large number of applicants eligible for the SGC TA pilot did not ultimately apply for an AHSC grant in the Round 2. Going forward, the SGC should use a flexible approach that allows TA resources to be reallocated to different applicants when an applicant decides not to pursue an application.

2. Update criteria for selecting applicants to receive technical assistance

2.1. The criteria used to select applicants for the SGC TA pilot may have unintentionally encouraged applicants to pursue projects that were fundamentally uncompetitive for AHSC. Going forward, the SGC should revise its eligibility criteria to ensure that limited TA resources are not being spent on applications that are unlikely to win an award.

2.2. Wherever possible, the SGC TA program should avoid duplication of efforts with other major technical assistance providers. The SGC could potentially exclude from its TA program any applicant that is already working with another Major TA provider. Alternatively, the SGC could target a greater share of TA resources to applicants that are less statistically likely to have access to other TA because of geography, project type, or disadvantaged community status.

2.3. Given the geographic disparities in availability of comprehensive technical assistance, the SGC should consider shifting some of its resources to applicants in Rural California. Additionally, the SGC should work with SCAG to ensure all applicants in Southern California region – especially those outside the City of Los Angeles – are aware that subsidized TA is available to them, either through SCAG or the SGC.

3. Improve guidance and oversight for GHG analysis

3.1. The SGC and ARB staff should work with TA providers to improve clarity and communication around the GHG reduction methodology. Specifically, the SGC and ARB should identify the most common errors and causes of confusion in Round 2, clarify the

correct methods and approaches, and provide additional guidance on the more subjective aspects of the methodology. In addition, the SGC and ARB should identify strategies to improve ongoing communication between TA providers and agency staff throughout the application process.

3.2. The SGC and ARB staff should provide additional guidance and oversight regarding the assignment of CAPCOA project setting types. We found evidence that project setting types were not assigned consistently, which may have given certain projects an unfair advantage over others.

4. Improve Coordination between State Agencies and TA Providers

4.1. The SGC should facilitate an in-person training and orientation for all major TA providers at the beginning of each round of grantmaking. Staff from ARB, HCD and other relevant state agencies should participate and be available to answer questions during and after the orientation.

4.2. The SGC should make every effort to increase the amount of time that TA providers have to work with applicants prior to the submission of applications. TA providers can play a crucial role in some of the most important aspects of the application – such as building partnerships between affordable housing developers, transportation agencies, and community organizations – but only if there is ample time to do so.

4.3. The SGC should encourage learning and sharing of best practices among all interested TA providers, not just those who are part of the SGC TA program. The SGC cannot provide TA to all AHSC applicants, therefore it is in everyone's best interest to ensure that the other TA providers are providing high-quality support and analysis to applicants.