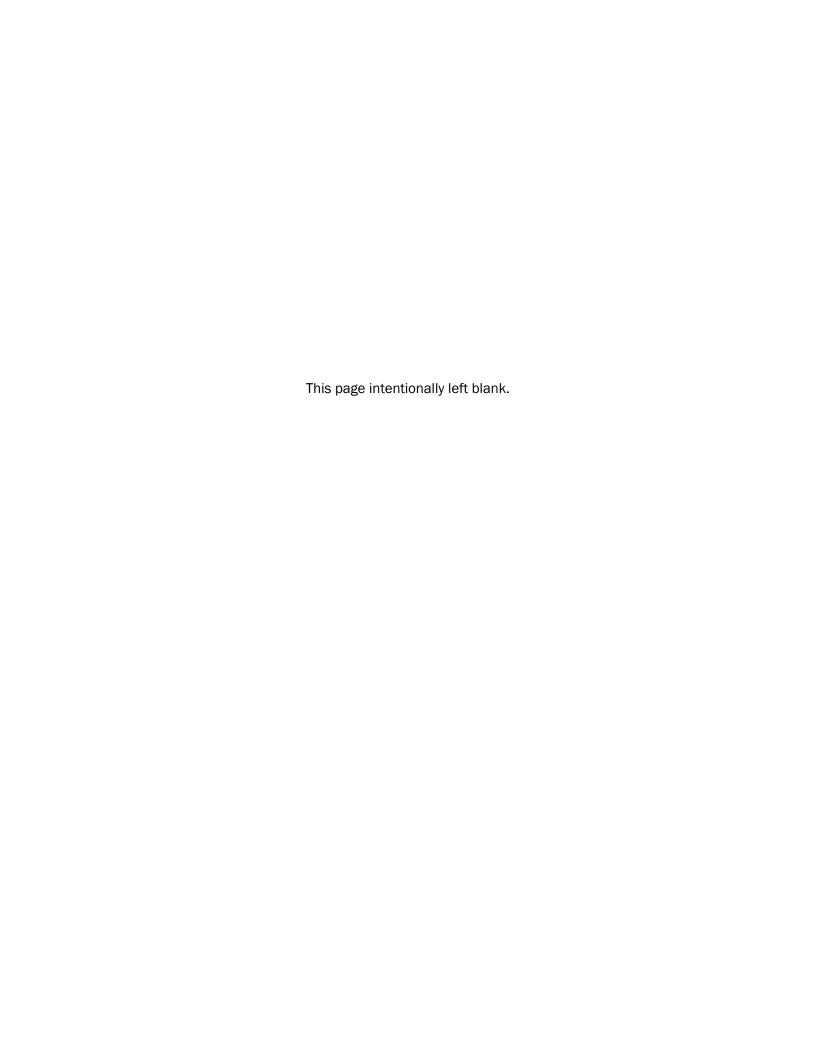# bae urban economics

Eastern Sierra Regional Housing Needs Assessment and Action Plan
Prepared for the Eastern Sierra Collective Action Committee
October 28, 2024

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bae urban economics

October 28, 2024

Shellan Rodriguez, PMP
SMR Development

Via email: shellan@smrdevelopment.com

Dear Shellan Rodriquez:

I am pleased to have the opportunity to submit the attached proposal to prepare the Eastern Sierra Regional Housing Needs Assessment and Action Plan. As a resident of a mountain resort community, I deeply understand and appreciate the multifaceted nature of the issues facing the Eastern Sierra community, and applaud the efforts being undertaken to find a better balance between economic sustainability and quality of life for all residents of the region.

As a real estate economics consulting firm with 35 years of experience specializing in workforce and affordable housing, we believe we are uniquely positioned to complete this work on behalf of the Eastern Sierra Collective Housing Committee (CHC). We have extensive experience conducting related research on affordable and workforce housing issues in peer communities, as well as experience conducting related research within the Eastern Sierra Region. As such, I believe that we are well positioned to ask the right questions and to guide the CHC towards creation of an Action Plan which is right sized and readily implementable.

Per your stated preference in the RFP, we have kept the main proposal to 15 pages. However, we have elected to also provide some supplemental exhibits, to which you may refer at your discretion. These include brief examples of our relevant project experience and references, as well as examples of the survey templates and housing need estimation methods that we propose to use as the basis for completion of this assignment.

If you have any additional questions regarding our qualifications, experience, and/or proposed approach, please do not hesitate to contact me. I am available by phone at (530) 574-9285 or by email at aaronnousaine@bae1.com.

Sincerely,

Aaron Nousaine

Aaron Nousaine, MCRP
Principal, Lake Tahoe Region Office

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TEAM QUALIFICATIONS

BAE is an award-winning, national real estate economics consulting practice. Since 1986, we have completed more than 2,700 engagements for a wide variety of public agencies, non-profits, financial institutions, and real estate investors and developers throughout the nation.

BAE offers a broad range of consulting services related to the nexus of market economics and feasibility and community-based planning. Some of our key practice areas include:

- Workforce and affordable housing needs
- Market and financial feasibility analyses
- Public-private partnership (P3) structuring and negotiation support
- Fiscal impacts and economic benefits analyses
- Public policy analysis and strategy development
- Sustainability and transit-oriented development (TOD)
- Economic development and revitalization
- Public finance and infrastructure funding

BAE's passion for the "triple bottom-line" of sustainable economics, community equity and social justice, and environmental sustainability makes us unique among real estate economists. We believe there are practical solutions to real world issues that can achieve this triple bottom-line, and that consideration of environmental impacts and social benefits, in addition to financial returns, results in the highest quality outcomes and best overall value for our clients. Our company has practiced this same philosophy since our inception with intentional investments in our staff and workplaces to foster creativity, collaboration, innovation, and a commitment to excellence. We foster an environment of "confidence through competence," wherein we empower staff to grow as independent professionals and subject area experts, yet also foster the soft skills necessary to work collaboratively, recognizing each other's strengths. We bring a similar approach to our clients, seeking to augment, enhance, and build on their internal expertise to better achieve their mission(s)

All our work is led by seasoned professionals, who are responsible for project direction and quality control. We have 18 professional staff and three admin staff across five main offices in Davis, Berkeley, and Los Angeles in California, as well as Washington D.C. and New York City, as well as three satellite offices in Truckee, California, Portland, Oregon, and Atlanta, Georgia.

The BAE Difference shows. We have earned more awards for excellence than any other firm in our field, and our clients have retained us repeatedly over our 38-year history. For some examples of our relevant work experience and references, please see Exhibit A.

For more information, please visit our website at www.bae1.com.

Staff Qualifications

Aaron Nousaine, MCRP, Principal

Aaron will function as BAE's Principal-in-Charge and brings almost 20 years of experience in real estate economics, development feasibility, and regional planning. Aaron lives in Truckee, California, and has conducted extensive research into the economics of workforce and affordable housing in tourism-oriented communities. Aaron was lead author of the 2016 *Truckee-North Tahoe Regional Workforce Housing Needs Assessment*, in addition to countless other affordable and workforce housing needs assessments across the country. Aaron also provides project specific development advisory services, such as for the Sugar Pine Village project in South Lake Tahoe on behalf of the State Department of General Services (DGS) Excess Sites Program. Aaron also brings specialized expertise on the impacts of the short-term rental industry on workforce housing, as well as the relationships between housing instability and economic sustainability in destination communities. In addition to his cutting-edge research, Aaron has helped establish innovative programs for scaling workforce housing solutions, including deed restriction purchase programs, among other approaches. Aaron holds an MCRP from UNC Chapel Hill and BA from CSU Monterey Bay.

Matt Fairris, MCP, Vice President

Matt Fairris is Vice President and head of BAE's office in Portland, Oregon. Matt's brings extensive experience assisting BAE with housing market research throughout the West Coast and has extensive expertise in affordable housing finance and development feasibility. Matt is helping to revolutionize affordable housing policy in the greater Portland metro area through refinements to adopted development standards and inclusionary housing policies and is using that expertise to assist other communities throughout the region, most recently including work in Bend, Oregon, and Boise, Idaho. Matt holds an MCP from UC Berkeley and a BS from UC Davis.

Jenna Fairman, Analyst

Jenna is an Analyst in BAE's Sacramento Region office and will provide research support for this assignment. Jenna is currently providing data collection and GIS mapping for the TRPA Restoring Housing Justice project. She also recently supported short-term rental studies in Mariposa County, Mono County, and the Town of Mammoth Lakes, and residential vacancy tax analyses in Nevada County, the Town of Truckee, and the City of South Lake Tahoe. Jenna is an enthusiastic skier and grew up in Bear Valley, California. She holds a BS from UC Davis.

APPROACH AND METHODOLOGY

The following briefly summarizes BAE's proposed scope of work, with optional tasks. We anticipate that this would represent a starting point for discussion. We look forward to working with the Collective Housing Committee (CHC) to tailor the scope of work further, if needed.

Phase I – Regional Housing Needs Assessment + Market Analysis

Per the requested scope of work, Phase I of the project will include collection of background information necessary to inform preparation of the Action Plan under Phase II.

Task 1: Kickoff Meeting and Information Request
BAE staff will attend a virtual kickoff meeting with members of the CHC, including representatives from Inyo and Mono Counties, the Town of Mammoth Lakes, the City of Bishop, the Eastern Sierra Council of Governments (ESCOG), and SMR Development. The purpose of the meeting will be to review the work scope and schedule, discuss project logistics and coordination, plan for the first community workshop, and to provide BAE with any relevant background materials and locally available datasets (e.g., building permit data, planned and proposed project inventory, assessors' parcel data, zoning and land use data, short-term rental permit data and transient occupancy tax receipts, etc.). In addition, the CHC can provide direction on modifications to the Study Region (Inyo County and Mono County) and/or sub-area boundaries (Town of Mammoth Lakes, City of Bishop, and all Census Designated Places), and BAE and the CHC can discuss refinements to the work scope. BAE will also provide the CHC with updated copies of the employer and employee survey tools for review and comment.

Task 2: Review Background Materials
BAE will review background materials provided by the CHC regarding affordable and workforce housing needs and policies within the Study Region, including but shall not be limited to:

- 2005 Inyo and Mono County Housing Needs Assessment
- 2017 Mono County Housing Needs Assessment and Resident Survey
- 2017 Mammoth Lakes Housing Needs Assessment and Action Plan
- 2019-2027 Town of Mammoth Lakes Housing Element
- 2019-2027 City of Bishop Housing Element
- 2019-2027 Mono County Housing Element
- 2021-2029 Inyo County Housing Element
- 2022 Downtown Bishop Specific Plan and Mixed-Use Overlay
- 2022 Evaluating Infill Housing Opportunities to Reduce Inyo County per Capita VMT
- 2024 Town of Mammoth Lakes Short-Term Rental Study
- 2024 Mono County Short-Term Rental Housing Study

Task 3: Identify Current Demographic and Economic Trends

Under this task, BAE will collect relevant statistics regarding community demographics, household composition, regional employment and commuting patterns, housing inventory characteristics, and housing market conditions and. BAE will collect statistics from the 2010 and 2020 Decennial Census, as well as the most recent available American Community Survey (ACS), and will consult with members of the CHC (and the ESCOG in particular) regarding known errors and shortcomings associated with these data sets. BAE will also leverage other demographic and economic data source, as needed, including data available from the California Department of Finance (DOF), Department of Transportation (Caltrans), Employment Development Department (EDD), Department of Tax and Fee Administration (CDTFA), the U.S. Postal Service (USPS), and U.S. Bureau of Labor Statistics (BLS), as well as a variety of available private data sources such as CoStar, ListSource, and AirDNA. Data will be collected for the Study Region and subareas. Some selected data may also be collected at the Census Block Group and/or Tract level to facilitate preparation of thematic maps.

The specific variables collected using publicly available data sources will include, but shall not be limited to, total population, age distribution, racial and ethnic distribution, seasonal population changes, number of households, households by income category, household size and type, occupied housing units by tenure (e.g., renter occupied, owner occupied, vacant), households by presence of housing problems,[1] housing units by type (e.g., single-family, multifamily, etc.), employment by industry (both monthly and annual for the two counties and incorporated cities), unemployment and labor force trends, occupational employment characteristics, regional commuting patterns, sales tax and transient occupancy tax trends, housing units by type of vacancy (e.g., functional vs. seasonal, etc.), and housing units by size. As an additional no-cost option, BAE can also supplement information previously collected for Mono County (i.e., add in data for Inyo County) regarding change of address requests submitted to the U.S. Postal Service (USPS) to assess the order of magnitude of in- and out-migration that occurred in recent years and a result of COVID-19 induced regional migration.

Additional data on recent trends in the for-sale and rental housing markets will be collected from private data vendors and various other local sources. For example, BAE will process and review information on residential purchases available through ListSource, a private data vendor, to identify trends in home sales volumes and pricing by subarea and asset class. BAE will also review the available data from CoStar on inventory and pricing trends within the multifamily rental housing market, but will also conduct primary research to identify private rental listings for single-family homes and condominiums that are for rent within the study area. BAE will also interview real estate brokers and property managers to assess trends in the housing market. Data on the tourist accommodations inventory will be collected from the local tourism bureaus (i.e., Visit Mammoth and Visit Bishop), as well as from CoStar for the

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[1] As defined by the U.S. Department of Housing and Urban Development (HUD) and the U.S. Census Bureau.

hotel inventory and from AirDNA for the short-term rental industry. BAE will also request information on recent building permit trends and residential development projects planned for construction in the study area, as well as any non-residential projects that would involve a significant increase in local or regional employment (thereby creating new housing demand).

In addition to collecting the above data on household demographics and housing market trends, BAE will calculate the relative for-sale home prices and rental rates that may be affordable at different income levels, as well as the income that would be necessary to reasonably afford market rate housing within each market segment using industry standard methods and loan underwriting criteria, including the California State income limits.

Task 4: Community Outreach and Stakeholder Surveys
To collect additional information necessary to interpret the quantitative data collected under Task 3, which will also be needed to complete the housing need estimates under Task 5, BAE proposes to complete a series of interviews and to administrate a pair of custom survey tools.

Task 4a: Real Estate Industry Interviews
Under this task, BAE will conduct one-on-one and/or group interviews with up to 20 individuals knowledgeable about local housing market conditions and trends. This will include real estate brokers and property managers, as well as housing advocates, policymakers, and housing program administrators. The interviews may be conducted in-person or virtually (either by phone or web meeting), as dictated by the schedule and budget. BAE will work with the CHC as part of the kickoff meeting to identify potential contacts.

Task 4b: Employer and Employee Surveys
To collect information about the impacts of the workforce housing shortage on job creation, as well as on workforce housing preferences, BAE proposes to administer two concurrent surveys, one aimed at employers and the other at employees. These tools will be based on templates previously used by BAE for similar research (see Exhibits B and C), but will be modified by BAE in consultation with the CHC prior to implementation. The survey tools will be made available online using the SurveyMonkey web survey platform, though hard copy surveys will be available upon request, as well as for use by partner organizations and agencies that would like to assist with survey implementation.

BAE will work with the CHC to compile available business license information and Chamber of Commerce member rolls, including mailing addresses and email addresses for businesses within the Study Region. If needed, BAE can also augment the data provided by the CHC with additional information available through Dun and Bradstreet (D&B), at an additional cost. BAE will then prepare a list of up to 400 businesses to invite to participate in the employer survey. BAE will then prepare customized survey packets for distribution to target employers via email and the USPS. Each information packet will include an introductory letter explaining the purpose of the survey and the uses of its data, including

assurances of anonymity for all survey responses. The letter will give instructions for a business representative to fill out the employer survey and for the business to distribute the employee survey to its workers. The introductory letter will provide web links for the online employer and employee surveys and will also provide web links to download and print hard copy forms for both the employer and employee surveys, along with instructions to mail or email completed surveys to BAE for processing.

In addition to requesting that businesses receiving the survey packets encourage their workers to respond to the employee survey, BAE will also strategize with the CHC to identify methods to publicize the availability of the employee survey through social media channels that would reach local employees independent of their employers. BAE will also work with the CHC to identify the most appropriate timing for administration of the employee survey to optimize the response rates for both year-round and seasonal employees (e.g., avoid the shoulder seasons when some year-round workers leave the area for vacations).

Once the survey period (approximately eight weeks) has lapsed, BAE will download all survey responses from the employer and employee surveys. BAE will also enter the data from any completed hard copy surveys returned to BAE via mail or e-mail. Upon completing survey data entry and cleaning, BAE will analyze the data for use in estimating demand for affordable workforce housing. An important goal of the survey work is to better understand the circumstances of workforce households and their housing needs, by income level.

Task 4c: Community Workshops
BAE will facilitate up to three in-person community workshops during Phase I which will be structured as presentations to members of the CHC, but will also be open to the public and will provide the public with opportunities to observe the process, learn from the information being presented, and provide their own input. The exact number of meetings and their locations will be up to the CHC, the proposed budget assumes the following:

Workshop #1 – Formally convene the CHC, provide a summary of the reasons for undertaking this work, introduce the consultant team, review the proposed process, scope of work, and schedule. Introduce the employer and employee surveys and begin soliciting support. BAE recommends holding this workshop shortly after the kickoff meeting, which can be used to coordinate the first workshop.

Workshop #2 – Present an interim update (with detailed slide deck) to the CHC on the Demographic and Economic Trends analysis and the stakeholder interviews. Announce plans for the employer and employee surveys.

Workshop #3 – Present on key findings (with detailed slide deck) from the community outreach interviews, prior CHC workshops, and the employer and employee surveys. Introduce the Phase II process.

Task 4d: Translation Services
BAE For the purposes of facilitating workshops and other community outreach, BAE will provide Spanish language copies of public facing print and presentation materials, such as the survey tools, invitation letters, and presentation slides.   The CHC will be responsible for coordinating and absorbing the cost of in-person Spanish language translations at each of the community workshops. BAE will provide Spanish language copies of the executive summaries for the Phase I and Phase II reports. A Spanish language copy of the full-text reports may be prepared upon request at additional cost.

Task 4e: Community Town Hall Forums **(Optional)**
As an optional task, BAE staff will be available to participate in up to eight community town hall forums at locations throughout the Study Region. The forums will be structured to summarize the available information on existing unmet housing needs and to solicit input on community housing needs throughout the Study Region. The intent will be to conduct up to four town halls in each county, distributing the meetings in such a way as to achieve the best possible geographic representation of the community. For example, in Mono County, the town halls might be held in the Colville/Walker, Bridgeport, June Lake/Mammoth Lakes, and Benton/Chalfant areas. In Inyo County, the town halls might be distributed across the Bishop, Lone Pine, and Shoshone/Tecopa areas. The exact locations for the town halls would be determined in consultation with the participating jurisdictions who would also be responsible for securing facilities and advertising the meetings to the public. The cost for this task will be determined in conversation with the CHC depending on the ability to consolidated multiple town halls into a small number of staff trips to the Eastern Sierra.

Task 5: Estimate and Forecast Housing Needs by Type
Under this task, BAE will prepare estimates of the order of magnitude of housing demand originating from existing resident, non-resident, and seasonal worker households. These estimates will illustrate the relative magnitude of the mismatch between the available housing stock within the region and the types of housing units that may best suit the needs of the region's workforce. As a result, the estimates should not be interpreted strictly as the number of new units that need to be built, but as the number of units that need to be "made available" to meet the needs of the workforce. For example, a portion of the estimated unmet demand comes from households that live in housing units with inadequate kitchen and plumbing facilities, which are overcrowded, or in households that are significantly overpaying for housing. Therefore, a portion of the estimated unmet demand may be satisfied through programs aimed at residential rehabilitation and towards improving affordability within the existing rental and for-sale housing stock. Nonetheless, a portion of the identified unmet demand, notably the demand from non-resident in-commuter workforce households and households associated with new employment growth, must be satisfied through the provision of new units (e.g., either new construction or conversion of existing second homes).

Task 5a: Estimate Number of Resident Workforce Households
The first step in the process of estimating unmet workforce housing needs is to identify the number of existing resident workforce households. To do this, BAE uses the robust demographic data available through the U.S. Census Bureau Public Use Microdata Sample (PUMS). The PUMS data provide a sample of individual responses to the American Community Survey (ACS) for defined areas of 100,000 or more persons (Public Use Microdata Areas, or PUMAs), which allow the creation of cross-tabulations of data not otherwise available in the published ACS data tables. BAE will use the SPSS statistical software package to generate frequency counts of resident workers by occupation, household size, and combined household income. The data is then adjusted to account for the number of workers in the Study Region compared to the PUMA analysis area. BAE will then use data from the Quarterly Census of Employment and Wages (QCEW) and the Census Bureau's Non-Employer Statistics to reweight the distribution to align with the occupational employment distribution observed within the Study Region specifically. BAE will then use the PUMS data to convert from resident workers to worker households by income level.

Task 5b: Estimate Number of Seasonal and In-Commuter Workforce Households
The next step is to estimate the number of seasonal workforce households living in the Study Region. This ss done based on the total number of resident workers identified based on the PUMS analysis, which represents an annual average. BAE then adjusts the total number of year-round resident workers downward, proportionate to the seasonal fluctuations in employment, to estimate the number of off-season resident workforce households, and upwards to estimate the number of peak season resident workforce households, based on QCEW and Census Non-Employer Statistics. The difference between these estimates equals the total number of seasonal workers that live in the Study Region. To estimate the number of households associated with the in-commuter workforce, BAE will apply the region's gross in-commuter rate, based on data from ESCOG and/or the U.S. Census Bureau, to the average annual resident workforce estimates. To convert from workers to workforce households, BAE will apply worker per household, total household size, and household income estimates derived based on the employee survey response data.

Task 5c: Estimate Unmet Workforce Housing Demand by Type
To estimate the anticipated housing demand generated by workforce households of all types, BAE makes the simplifying assumption that each household would occupy the smallest available unit, while simultaneously avoiding overcrowding (i.e., no more than two persons per bedroom, or more than one person per room). While many households prefer housing that is larger than the minimum necessary to avoid overcrowding, to the extent that housing affordability correlates with housing type and size, workforce households that are struggling to locate and secure housing often need to occupy smaller units than they might prefer. The unmet resident workforce housing demand estimates are subsequently based on estimates of total workforce housing demand from year-round resident worker households, multiplied by the proportion of households within each income category that

experienced one of the four HUD defined housing problems, as reported in the HUD Comprehensive Housing Affordability Strategy (CHAS) dataset. Unmet seasonal and non-resident workforce housing demand estimates are based the proportion of seasonal and in-commuter survey respondents who indicated their preferred housing type and who would relocate to the Study Area if adequate housing options were made available.

Task 5d: Forecast Future Housing Needs by Type, Size, and Affordability Level
BAE will forecast anticipated future housing needs over the next five to ten years by housing type, household size, and affordability level. To do this, BAE will evaluate jobs by industry forecasts available from the EDD and Caltrans and will convert forecasted workers to forecasted workforce housing demand based on the distribution of workforce households by type (i.e., resident, seasonal, and in-commuter), household size, and income level, based on the distributions matrices compiled in Tasks 5a-d above.

Task 5e: Estimate/Forecast Housing Needs by Race/Ethnicity (OPTIONAL)
As an optional task, BAE can also calculate the distribution of unmet housing needs for each worker household category by worker race and ethnicity. The calculations are based on the distribution of workers by race and ethnicity, as reported in the PUMS, as well as by seasonal workers and in-commuters as part of the employee survey. Additional cross tabulations not otherwise specified here may also be possible at an additional cost.

Task 5f: Prepare Housing Need Estimation and Forecasting workbook
As a final subtask under Task 5, BAE will prepare a Microsoft Excel workbook similar to the attached example (see Exhibit D), that will allow the CHC to replicate the methods used for this study for future updates. The workbook will identify where the CHC should enter newly updated data and will identify the appropriate data sources and formats to be used.

Task 6: Housing Funding/Financing Gap Analysis
Under this task, BAE will prepare a set of tables that compare consumer spending power for housing at different income levels with the cost associated with providing housing. BAE will prepare a table illustrating the maximum rent that can be considered affordable at each income level, assuming 30 percent of income goes to housing with allowances made for utilities. BAE will then calculate the amount of permanent debt that could be supported based on the rent that is affordable at each income level. BAE will also calculate the maximum for-sale home purchase prices that could be considered affordable at each income level based on prevailing mortgage lending terms and will compare. BAE will then compare the debt that would be supportable by rental income and the for-sale purchases prices at each income level to the cost of providing different types of housing (e.g., single-family homes, ADUs, apartments, condominiums, etc.). The difference between what the consumer can afford to support and the cost of providing housing is known as the financing gap, which would need to be closed through some form of subsidy or cost reduction to make development financially feasible. The funding/financing gap estimates and the housing need estimates, when combined, can

provide perspective on the order of magnitude cost that would need to be closed in order to provide housing sufficient to meet the estimated existing and forecasted need.

Task 7: Regional Housing Sites Inventory **(Optional)**
As an optional task, BAE will prepare an inventory of residentially zoned land throughout Inyo and Mono Counties, as well as the incorporated Town of Mammoth Lakes and City of Bishop. To do this, BAE will collect the current assessor's parcel database in ArcGIS geodatabase format, along with files associated with General Plan Land Use and Zoning designations. The participating jurisdictions will provide guidance regarding the land use and zoning districts that allow different types of housing, and will also need to provide BAE with other data sets necessary to evaluate the project readiness of different potential housing opportunity sites. These additional data sets will be dependent on what is available from the jurisdictions, but may include roadways; water, sewer, and electrical infrastructure; public land ownership; flood zone overlays; etc. BAE will use assessed value data and indicators within the assessors' parcel database related to the presence of built structures to identify vacant and underutilized parcels. BAE will coordinate with staff from each jurisdiction to identify additional government owned property that may represent potential housing opportunity sites. BAE will then work with staff from each jurisdiction to calculate an assumed buildout density and site efficiency factor for each applicable zoning district that may be reasonably achievable, and will use these factors to estimate the residential buildout potential of the existing sites inventory. Upon completion of this work, BAE will provide the CHC with an electronic database containing the collected information regarding the regional housing sites inventory. In lieu of completing this work as part of this initial needs assessment effort, this task may also be included as part of the Action Plan for completion during a future implementation phase.

Task 8: Housing Development Feasibility Analysis **(Optional)**
In addition to preparing the housing funding/feasibility gap analysis under Task 6, BAE staff will be available to prepare detailed pro-forma financial feasibility models for desired housing types in order to better assess barriers to development feasibility. This would include interviews with local developers to identify detailed construction costs, including land acquisition costs, site preparation costs, hard and soft construction costs, and financing terms. BAE would then work with each jurisdiction to estimate governmental fees. BAE would leverage work completed under Task 3 to estimate market rate and affordable housing costs. BAE would then calculate the relative feasibility of new construction and conduct sensitivity analysis to identify potential ways of improving the financial feasibility of new development, including potential updates to the development code, as well as innovative financing tools. In lieu of completing this work as part of this initial needs assessment effort, this task may also be included as part of the Action Plan for completion during a future implementation phase.

Task 9: Prepare Draft and Final Regional Housing Needs Assessment Report
Concurrent with completion of Tasks 1-8, BAE will prepare a report that summarizes the data collected and identifies key findings and conclusions. BAE will provide an *Administrative Draft*

report to SMR Development for review. Upon receipt of comments, BAE will prepare a *Review Draft* report for circulation to the CHC. Upon receipt of one consolidated set of comments, prepared by SMR Development, BAE Will revised the Public Review Draft report and prepare a *Final* report for public distribution and presentation at a community workshop.

Phase II – Eastern Sierra Regional Housing Action Planning Process

Per the requested scope of work, Phase II of this project will include preparation of a Regional Housing Action Plan. The following is a rough summary of BAE's proposed approach.

Task 10: Facilitate a Regional Housing Action Planning Process

Upon completion of the Phase I research, BAE will facilitate up to three workshops with the CHC to review key findings from the Phase I research and discuss potential policy and program options for both local and regional implementation over a five-year Action Plan timeframe:

Workshop #4 – Discuss the spectrum of potential policy and program solutions that would meet the needs identified through the Phase I research. Receive guidance regarding which approaches may warrant consideration. Gain an understanding of what additional information the CHC members may need in order to build consensus around solutions.

Workshop #5 – Report back on the additional information that was requested by the CHC and receive additional guidance regarding which approaches may warrant inclusion in the draft Action Plan. Identify which solutions can be implemented right away, versus those that require additional research and preparation prior to implementation. Begin to assign roles and responsibilities and to discuss potential funding sources.

Workshop #6 – Present the Review Draft Regional Housing Action Plan to the CHC and receive comments on the draft. Confirm that consensus of members. Receive public commitments to pursue near-term implementation.

Task 11: Prepare the Eastern Sierra Housing Action Plan

In preparation for the fourth CHC community workshop, BAE will prepare a slide deck summarizing the array of potential policy and program options that may warrant inclusion in the Regional Housing Action Plan. Upon receipt of comments from the CHC, BAE will conduct additional research and will refine the list of potential policy options. Upon completion of the fifth CHC community workshop, BAE will begin preparation of an *Administrative Draft Regional Housing Action Plan* for review by SMR Development. Upon receipt of comments from SMR Development, BAE will prepare a Review Draft Regional Housing Action Plan for review by the CHC and for presentation at a sixth community workshop. Upon receipt of one consolidated set of comments from the CHC, prepared by SMR Development, BAE will prepare a Final Regional Housing Action Plan document for public distribution and implementation by the CHC.

PROPOSED PROJECT TIMELINE

BAE proposes to complete the above scope of work over a work period of approximately 36 weeks (around nine months). For details, please refer to **Table 1** on the following page.

We anticipate that the initial demographic and economic trends analysis will take roughly six to eight weeks to complete, which would position the project team to report on the research conducted to date at the first of the CHC workshops. At that time the consultant team and the CHC would announce the launch of the employer and employee survey effort, which will include approximately two weeks of prep time along with six to eight weeks for survey administration. The housing needs estimation and forecasting effort would start concurrently with the background demographic and economic research, but will not be completed until after the survey results are tabulated. From the time that BAE initiates the background materials review and demographic/economic research, we will also be preparing draft report materials, such that we can provide the initial Administrative Draft of the Phase I report for review SMR Development shortly after completing the survey tabulation and the third CHC community workshop.

The timeline for the Phase II action planning process is intentionally short at approximately 16 weeks (around four months). This will help ensure that the project team and the CHC are able to maintain the level of engagement needed for a successful process. The proposed timeline assumes that the first action planning workshop would be held roughly 4-5 weeks following delivery of the final Phase I report. BAE is committed to maintaining an ongoing inventory of potential policy and program options from the start of the project, which will facilitate this quick turnaround. BAE then proposes to hold CHC action planning workshops every 4-5 weeks thereafter until the consultant team has received input sufficient to prepare the Administrative Draft Eastern Sierra Housing Action Plan for review by SMR Development.

Table 1: Proposed Project Timeline

Task	Proposed Project Schedule (Weeks) — shaded cells (░ = Progress, ▓ = Deliverable)
Phase I - Regional Housing Needs Assessment + Market Analysis	
Task 1: Kickoff Meeting and Information Request	▓1 ▓2
Task 2: Review Background Materials	▓1 ▓2
Task 3: Identify Current Demographic and Economic Trends	░1 ░2 ░3 ░4 ░5 ░6 ▓7
Task 4: Community Outreach and Stakeholder Surveys	
Task 4a: Real Estate Industry Interviews	░3 ░4 ░5 ░6 ▓7
Task 4b: Employer and Employee Surveys	░5 ░6 ░7 ░8 ░9 ░10 ░11 ▓12 ▓13
Task 4c: Community Workshops	░2 ▓3 ░7 ▓8 ░18 ░19 ▓20
Task 4d: Translation Services	Ongoing
Task 4e: Community Town Hall Forums (Optional)	TBD
Task 5: Estimate and Forecast Housing Needs by Type	
Task 5a: Estimate Number of Resident Workforce households	░3 ░4 ░5 ▓6
Task 5b: Estimate Number of Seasonal and In-Commuter Households	░3 ░4 ░5 ▓6
Task 5c: Estimate Unmet Workforce Housing Demand by Type	░14 ░15 ░16 ▓17
Task 5d: Forecast Future Housing Needs by Type	░14 ░15 ░16 ▓17
Task 5e: Estimate/Forecast Housing Needs by Race/Ethnicity (Optional)	░14 ░15 ░16 ▓17
Task 5f: Prepare Housing Need Estimation and Forecasting Workbook	░18 ░19 ▓20
Task 6: Housing Funding/Financing Gap Analysis	░4 ░5 ░6 ▓7
Task 7: Regional Housing Sites Inventory (Optional)	░2 ░3 ░4 ░5 ░6 ░7 ▓8
Task 8: Housing Development Feasibility Analysis (Optional)	░4 ░5 ░6 ░7 ░8 ▓9
Task 9: Prepare Draft and Final Regional Housing Needs Assessment Report	░1–░18 ▓19
Phase II - Eastern Sierra Regional Housing Action Planning Process	
Task 10: Facilitate a Regional Housing Action Planning Process	░22 ░23 ░24 ░25 ▓26 ░28 ░29 ░30 ░31 ▓32 ░33 ░34 ░35 ▓36
Task 11: Prepare the Eastern Sierra Housing Action Plan	░1–░31 ▓32 ▓33 ░34 ▓35 ▓36

Legend:
▓ Deliverable
░ Progress

13

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PROPOSED BUDGET

BAE proposes to complete the above scope of work on a percent complete basis for a fixed fee of $193,305, excluding optional tasks, as shown in Table 2 below. BAE looks forward to working with SMR Development and the CHC to further refine the scope of work and budget, including identifying costs for Optional Tasks 4e and 8. BAE proposes to complete Optional Task 7 for a fixed fee amount of $18,560. Reported hourly rates include personnel and overhead costs, and are subject to revision on or after January 1, 2025. Travel costs and other expenses, such as data purchases, are passed through to the client with no markup.

Table 2: Proposed Project Budget

Task	BAE Urban Economics				
	Principal	Director	Sr. Assoc.	Analyst	
hourly rates	*$310*	*$285*	*$220*	*$120*	(a)
Task 1: Kickoff Meeting and Information Request	2				**$620**
Task 2: Review Background Materials	16				**$4,960**
Task 3: Identify Current Demographic and Economic Trends	32	6	60	80	**$34,430**
Task 4: Community Outreach and Stakeholder Surveys	122		64	28	**$55,260**
Task 4a: Real Estate Industry Interviews	*30*				*$9,300*
Task 4b: Employer and Employee Surveys	*40*		*40*	*16*	*$23,120*
Task 4c: Community Workshops	*48*			*12*	*$16,320*
Task 4d: Translation Services	*4*		*24*		*$6,520*
Task 4e: Community Town Hall Forums **(Optional)**			*TBD*		
Task 5: Estimate and Forecast Housing Needs by Type	48	42	0	20	**$29,250**
Task 5a: Estimate Number of Resident Workforce households	*4*	*16*		*4*	*$6,280*
Task 5b: Estimate Number of Seasonal and In-Commuter Households	*8*	*8*		*2*	*$5,000*
Task 5c: Estimate Unmet Workforce Housing Demand by Type	*8*	*8*		*4*	*$5,240*
Task 5d: Forecast Future Housing Needs by Type	*8*	*2*			*$3,050*
Task 5e: Estimate/Forecast Housing Needs by Race/Ethnicity **(Optional)**	*4*	*4*		*2*	*$2,620*
Task 5f: Prepare Housing Need Estimation and Forecasting Workbook	*16*	*4*		*8*	*$7,060*
Task 6: Housing Funding/Financing Gap Analysis	2		8		**$2,380**
Task 7: Regional Housing Sites Inventory **(Optional)**	16		40	40	**$18,560**
Task 8: Housing Development Feasibility Analysis **(Optional)**		*TBD - $7,500 per prototype*			
Task 9: Prepare Draft and Final Regional Housing Needs Assessment Report	40	4	16	16	**$18,980**
Task 10: Facilitate a Regional Housing Action Planning Process	88			16	**$29,200**
Task 11: Prepare the Eastern Sierra Housing Action Plan	40			16	**$14,320**
Reimbursable Expenses					**$3,905**
Data Purchase and Subscriptions					*$2,000*
Travel (e.g., mileage, accommodations, etc.)(b)					*$1,905*
Totals, Excluding Optional Tasks	**$120,900**	**$14,820**	**$32,560**	**$21,120**	**$193,305**
Including Optional Tasks		*TBD*			

Note:
(a) Hourly rates are subject to revision on or after January 1, 2025.
(b) Assumes 250 miles round trip mileage at $0.67 per mile, and one $150 per night hotel stay, per workshop.

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EXHIBIT A: SELECT PROJECT EXAMPLES

Image Credit: Tahoe Prosperity Center.

Restoring Housing Justice in a Tourist Destination: Integrating Housing, Equity, and Conservation | *Tahoe Regional Planning Agency | 2024*

The Tahoe Regional Planning Agency (TRPA) 2020 to identify and prioritize specific, quantifiable local and regional actions that leverage environmental redevelopment and water quality improvements to achieve the housing goals of the region, as specified in the Housing Program update prepared in 2014 by BAE.

Since its inception in 2020, the Tahoe Living Working group has worked with various consultant teams to evaluate housing costs throughout the Lake Tahoe Basin and to prepare and adopt updates to the Regional Plan to facilitate construction of housing affordable to workforce households. The third phase of the Tahoe Living Working Group effort is now underway and is focused on updates to the transfer of development rights (TDR) program which limits the total amount of development allowed within the basin and directs the allocation of new development over time and my community subarea. At the request of TRPA leadership, BAE was added to the winning consultant team due to our unrivaled expertise regarding affordable and workforce housing needs in the region, as well as the unique economics associated with the development of housing in mountain resort communities, particularly within the context of the TRPA transfer of development rights (TDR) program.

BAE's scope of work for the project includes preparation of an update affordable and workforce housing needs and equity analysis. This includes a detailed evaluation of the available data from the U.S. Census Bureau, among other sources, which can often be unreliable given the community's rural character and seasonal tourist economy. As part of this work, BAE will also prepare updated and consolidated regional workforce housing needs estimates, including evaluation of in-commuter housing need, substandard housing conditions, prevalence of homelessness and underhoused seasonal workforce needs, as well as analysis of workforce housing needs by income level and race/ethnicity by subarea.

Web Link: https://www.trpa.gov/housing/tahoe-living-working-group/
https://www.tahoeliving.org/

Reference: Karen Fink, Housing and Community Revitalization Program Manager
Tahoe Regional Planning Agency
(775) 589-5258
kfink@trpa.org

Image Credit: YHLA Architects

Truckee North Tahoe Regional Workforce Housing Needs Assessment | *North Lake Tahoe* | *2016*
A public/private consortium of regional stakeholders selected BAE to prepare this landmark study of housing needs within the Truckee-North Lake Tahoe Region. The 2016 Need Assessment has functioned as a key tool for developing consensus regarding affordable and workforce housing issues in the region and is now being updated by the client group on a two-year cycle, which is made possible due to BAE's commitment to methodological transparency.

Although the community was not yet ready to prepare a formal action plan at the time due to a lack of initial consensus regarding scope and organizational responsibility, the 2016 Needs Assessment did include a variety of recommendations for near-term actions to help improve the availability and affordability of housing. More specifically, BAE recommended that the community consider taking a multi-faceted approach that included creation of an organization that could take ownership over the consensus-building process (i.e., the Mountain Housing Council); consideration of a variety of policy options and regulatory changes that recognize the geographic scope and organizational capacities of partner jurisdictions, organizations, and partners; establishment and coordination of incentives; inventorying of public resources and land that could be leveraged for workforce housing; and the establishment of supplemental funding mechanisms that spread the fiscal burden more broadly throughout the community.

In addition to quantitative and qualitative data analysis, BAE's scope included extensive interaction with a technical advisory group that included public and private stakeholder representatives from throughout the region, support for a comprehensive public outreach with multiple community-based workshops, and a cutting-edge employee and employer survey effort that reached over 1,600 workforce members and 300 businesses.

Web Link: http://www.ttcf.net/wp-content/uploads/2016/01/NorthTahoe-Truckee-Housing-Study-Final-Presentation-Bookmarked.pdf

Reference: Stacey Caldwell, CEO
Tahoe Truckee Community Foundation
(530) 587-1776
stacy@ttcf.net

Image Credit: AirBnB.com

Mammoth Lakes and Mono County Short-Term Rental Impacts Analyses | Town of Mammoth Lakes and Mono County, CA | 2023-2024

BAE was retained by the Town of Mammoth Lakes and Mono County to conduct analysis regarding the state of the short-term rental (STR) market and to assess the relationships between STR activity and conditions in the local housing market. This research built upon methods developed by BAE in other peer markets, including eastern Placer County, Mariposa County the Town of Truckee, and City of Goleta.

The foundation for BAE's approach to this topic is an extensive and ongoing inventory of contemporary academic and professional literature on the impact of STRs on the availability and pricing of housing for local workforce households. While much of the available literature focuses on large international destinations, like Seattle, San Francisco, New York, Madrid, and London, a significant effort was made to identify studies that reflect non-urban environments, including professional literature pertaining to the impacts of STRs on communities throughout the Mountain West. The key findings from the literature review were then used to facilitate interpretation of quantitative and qualitative market data for the Town of Mammoth Lakes and unincorporated Mono County, including a variety of small Census Designated Places ranging from larger communities like Bridgeport and June Lake to small unincorporated hamlets like Topaz, Walker/Coleville, Benton, and Chalfant, among others. The analysis then looked at policy approaches in other mountain communities across the Mountain West.

Key findings included a determination that the concentration of STRs in the Town of Mammoth Lakes likely contributes to acute second home demand in that market, whereas the relatively small numbers of STRs in unincorporated Mono County are unlikely to be sufficient to drive the market, with some exceptions. Recognizing these dynamics, BAE offered recommendations for improving the existing regulatory framework and administration within each jurisdiction, including creation of a new *Certified Properties* requirement in the Town of Mammoth Lakes.

Web Link: https://monocounty.ca.gov/sites/default/files/fileattachments/planning_division/page/5732/mono_county_short_term_rental_study_final2.pdf

Reference: Nolan Bobroff
Community and Economic
Development Director
Town of Mammoth Lakes
(760) 965-3631
nbobroff@townofmammothlakes.ca.gov

Wendy Sugimura
Community Development
Director
Mono County
(760) 924-1814
wsugimura@mono.ca.gov

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EXHIBIT B: EMPLOYER SURVEY TEMPLATE

Workforce Housing Needs Study - Employer Survey

[Client Group Name] is studying the housing needs of the regional workforce. This survey will help these agencies and organizations to better understand what kind of housing the workforce needs, where the housing is needed, and how much the workforce can afford to pay for housing. The agencies and organizations will use this information to serve workforce housing needs in the future. Please fill out the survey to the best of your knowledge. If you would prefer, you can send an email to [TBD] to receive a printable copy of the survey along with instructions on how to complete the form and return it by mail. If you would prefer to complete the survey online, please visit [TBD].

[Define study area and/or applicable region]

THIS HOUSING SURVEY IS ANONYMOUS. Your answers will only be presented in the study report in aggregate with other survey responses and none of your answers will be personally identifiable.

1) Where is your business located? (Fill in the ZIP Code for your business location)
Your business address ZIP Code: _____

2) What is your business type? (Check the best answer, or fill in "Other")

Agriculture or Forestry
Natural Resources, Mining, Construction
Manufacturing
Transportation or Utilities
Wholesale Trade
Consumer Retail or Service
Restaurant
Hospitality and Entertainment
Recreation
Warehouse/Distribution
Business or Professional Services
Finance, Insurance, Real Estate
Healthcare/Medical
Education
Government
Other:_____

3) What months do you consider <u>off-season</u> in terms of the number of workers you employ.
(Check all that apply)

January	February	March	April	May	June
July	August	September	October	November	December

4) <u>During your off-season,</u> how many full-time employees and part-time employees do you have?
Full-Time Employees: _____   Part-Time Employees: _____

5) What months do you consider <u>peak season</u> in terms of the number of workers you employ?
(Check all that apply)

January	February	March	April	May	June
July	August	September	October	November	December

6) <u>During your peak season,</u> how many full-time employees and part-time employees do you have?
Full-Time Employees: _____   Part-Time Employees: _____

7) In the next five years, how do you expect your business's peak season workforce needs to change? (Check one)
Peak number of employees will <u>stay about the same</u>
Peak number of employees will <u>grow</u> less than 10% from current levels
Peak number of employees will <u>grow</u> between 11% and 25% from current levels
Peak number of employees will <u>grow</u> more than 25%
Peak number of employees will <u>decline</u>, but by less than 10%
Peak number of employees will <u>decline</u> between 11% and 25%
Peak number of employees will <u>decline</u> by more than 25%

8) As a rough percentage of total employment during peak season, who makes up your workforce? (Enter percentages to the best of your knowledge below)
Year-round Tahoe/Truckee/Reno area residents   %
College-aged U.S. workers: %
Workers from outside U.S.:   %
Semi-retired workers: %
Farmworkers during their off-season: %
Other: %
Please describe those in the Other category:
_____

9) What, if any, types of housing assistance do you provide to your workforce?
(Check all that apply and/or fill in the blank)
None
Assist in locating roommates
Provide listings of available rental units
Provide housing stipend   If yes, how much per month? Stipend: $ _____
Provide employee housing on or off-site
Other (Please describe) _____

10) If you provide employee housing, please provide details below. (Check all that apply):
Dormitory Beds   How many? ____   Rent $ _____ per month
Apartment Units   How many? ____   Rent $_____per month
Single-family homes   How many?____   Rent $_____per month
Other (Please describe) _____ How many? _____ Rent: $_____ per month

11) How does the availability of suitable housing for workers in the Tahoe/Truckee area impact your workforce recruitment and retention? (Check one)
Not at all   Very little   Moderately   Somewhat   Significantly

12) How does the availability of suitable housing for workers in the Tahoe/Truckee area impact the success of your business? (Check one)
Not at all
Current housing conditions contribute to the success of my business
Current housing conditions detract from the success of my business
I am not sure how housing conditions affect my business success

13) Please indicate whether you agree with the following statement
(1=completely disagree, 5=completely agree)

There are no significant workforce housing issues in the [Name] region.
   1   2   3   4   5

14) In your opinion, how severely do the following issues impact the [Name] region?
(1=not a problem at all, 5=very high severity)

Insufficient availability of housing
0   1   2   3   4   5
Lack of affordable housing
0   1   2   3   4   5
Shortage of housing for year round residents
0   1   2   3   4   5
Lack of rental housing
0   1   2   3   4   5
Lack of housing for-sale
0   1   2   3   4   5
Insufficient housing in areas that are accessible to jobs
0   1   2   3   4   5
Transportation options to get workers from available housing to work locations
0   1   2   3   4   5
Poor quality of the available housing stock
0   1   2   3   4   5
Other (Please specify):_____
0   1   2   3   4   5

15) To help the sponsoring agencies and organizations understand housing affordability for employees, please provide the job title, the number of employees in that category <u>during your business's peak season,</u> and their average weekly wage. If you prefer, you can provide this information on a separate sheet.
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____
Job Title:_____   Number: ___ Weekly Wage: $_____

Thank you for completing our survey. If you have any questions regarding this survey, please call [TBD] at [TBD].

Opportunities for Further Participation

If you are interested in participating further in this study of regional workforce housing needs, including notifications of upcoming public meetings, having your employees fill out an employee survey, or potentially participating in a community workshop session, please provide your contact information to [TBD].

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EXHIBIT C: EMPLOYEE SURVEY TEMPLATE

Regional Workforce Housing Needs Study - Employee Survey

[Client Group Name] is studying the housing needs of the regional workforce. This survey will help these agencies and organizations to better understand what kind of housing the workforce needs, where the housing is needed, and how much the workforce can afford to pay for housing. The agencies and organizations will use this information to serve workforce housing needs in the future. Please fill out the survey to the best of your knowledge. If you would prefer, you can send an email to [TBD] *to receive a printable copy of the survey along with instructions on how to complete the form and return it by mail. If you would prefer to complete the survey online, please visit* [TBD].

[Define study area and/or applicable region]

THIS HOUSING SURVEY IS ANONYMOUS. Your answers will only be presented in the study report in aggregate with other survey responses and none of your answers will be personally identifiable.

1) What is your primary <u>work</u> location? (Fill in the ZIP Code for your work place, or name of the city or community if you don't know the ZIP Code)
Your work address ZIP Code: _____ or city/community name: _____

2) Please check all the months that you typically work in the [Name] area.

Year-round   January   February   March   April   May   June

July   August   September   October   November   December

3) If you work in the [Name] region, but live elsewhere, would you be interested in moving to the [Name] region if adequate housing was available in your price range?
Yes   No   I live in the [Name] region

4) Where is your current <u>residence</u>? (Fill in your home address ZIP Code, or name of the city or community if you don't know the ZIP Code)
Your home address ZIP Code: _____ or city/community name: _____

5) Do you own or rent this residence? (Check one)
Own   Rent

6) What type of home is this? (Check one)

Apartment   Dormitory   Duplex   Condo   Mobile Home   Single-Family Home   RV
Other

7) How many bedrooms does this home have? (Check one)

Studio   1   2   3   4   5   6   Other: _____

8) Please check all the months that you live in this home.

Year-round   January   February   March   April   May   June
July   August   September   October   November   December

9) Do you consider your current home to be your permanent place of residence? (Check one)

Yes   No

10) If your current home is not your permanent place of residence, where is your permanent residence?

Your permanent ZIP Code: _____ or city/community name:
_____

11) Please rate how satisfied you are with your current housing situation. (Check one)

Unsatisfied   Somewhat Satisfied   Satisfied   Very Satisfied

12) If you are less than satisfied with your current housing situation, what would be your ideal housing situation? (Check all that apply)

I would like a larger home for me and my immediate family

I would like a larger home for me to share with housemates

I would like a home in a location closer to my work

I would like a home in a location closer to my spouse's work

I would like a home that is in better condition or has better features to suit my needs

I need housing that is more affordable

I am currently renting and I would like to purchase a home

I currently own a home and I would like to rent instead

My home is temporary or short-term and I need permanent housing

Other: _____

13) Including yourself, how many people live in this home? (Check one)

1   2   3   4   5   6   7   8 Other:_____

14) What is the total monthly rent or mortgage payment for this housing unit? (Give total paid by all people living in the unit, if you share the housing expenses with others.)

Rent or Mortgage Payment (excluding utilities, insurance, etc.): $_____ per month

15) On average, what is your weekly pay (before taxes) when working in the [Name] region?
(Check one)

under $250 a week	$600 to $799 a week	
$250 to $399 a week	$800 to $999 a week	
$400 to $599 a week	$1,000 or more a week	Choose not to disclose

16) As a percentage of your monthly income (before taxes), roughly how much do you spend on housing.(ONLY IF YOU ARE A RENTER, include any water, sewer, electrical, and natural gas utility bills that you pay in addition to your rent)? (Check one)

Less than 30%   30% or more but less than 50%   50% or more

17) Did you experience any problems when searching for and securing a place to live while you work in the [Name] region? (Check all that apply and/or fill in your own answer)

<u>If you rent your home</u>:
The security deposit was more than I can afford
The rent was not affordable
Landlords didn't want to rent to seasonal workers
Landlords required a long-term lease
I could not find housing that was offered for year-round occupancy
Landlords limited the number of persons that could live in the unit
I had trouble finding roommates
Suitable housing was too far from work
Other: _____

<u>If you own your home</u>:
Home purchase prices were not affordable
I lacked a sufficient down payment and/or funds for closing costs
Could not secure a mortgage loan on reasonable terms
I could not find a suitable home to purchase
Suitable housing was too far from work
Other: _____

18) How did you locate your current housing? (Check all that apply)

Newspaper classified ads

Craigslist

Social media posting

Other Internet-based housing listings

Found out about available housing from a friend or family member

Found out about available housing from employer

Saw a for-rent or for-sale sign posted on the home

Obtained listing of available housing from Realtor or property management company

Other: _____

19) Are you currently on any waiting lists for the following types of housing or housing programs?

(Check all that apply)

Wait list for market rate rental housing

Wait list for below market rate (i.e., affordable) rental housing or a rental housing assistance program

Wait list for below market rate (i.e., affordable) for-sale housing

Wait list for a home ownership assistance program (e.g., down payment assistance, etc.)

20) On average, how long is your commute to work? (Check one)

Less than 10 minutes   30 to 39 minutes

10 to 19 minutes   40 to 49 minutes

20 to 29 minutes   More than 50 minutes

21) What is your occupation in your current job (Check the answer that best fits your occupation, or fill in the space for "Other")

Retail/Service Worker (staff in a store, resort, personal or business services company)

Professional (e.g., accountant, attorney, health care professional, other types of skilled office workers, etc.)

Tradesperson (e.g., carpenter, electrician, mechanic, equipment operator, etc.)

Business Manager, Executive, or Owner

Other: _____

22) If your current job is seasonal, please tell us about any other work that you do during the rest of the year (Check all that apply)

I do not have another job

I have one or more other jobs in the [Name] region

I have one or more other jobs outside of the [Name] region

I am a student and I live <u>outside</u> of the region when not working in the [Name] region

I am a student and I live <u>inside</u> the region when not working in the [Name] region

23) What is your age? (Check one)

under 18   31 to 40
18 to 23   41 to 50
24 to 30   51 and over

24) What is your marital status? (Check one)

Single   Married   Separated   Divorced   Widowed

25) How many children under the age of 18 live with you? (Check one)

0   1   2   3   4   5   6   Other:

26) To the best of your knowledge, check the <u>annual</u> income category that best describes your household's total combined income in 2015. (This includes you, your spouse, and any other people with whom you share household expenses.)

Choose not to disclose $45,000 to $59,999
under $15,000 $60,000 to $74,999
$15,000 to $24,999 $75,000 to $99,000
$25,000 to $34,999 $100,000 to $124,999
$35,000 to $44,999 $125,000 and above

Thank you for completing our survey. If you have any questions regarding this survey, please call [TBD].

Opportunities for Further Participation

If you are interested in further participating in this study of regional workforce housing needs, including notifications of upcoming public meetings or potentially participating in a community workshop, please provide your contact information to [TBD].

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EXHIBIT D: Example Housing Need Estimation Workbook

Truckee North Tahoe Workforce Housing Study: Workforce Housing Demand Estimate Workbook

INTRODUCTION

This workbook is intended to provide a high-level overview of the method used to develop the workforce housing demand estimates reported as part of the Truckee North, Tahoe Regional Workforce Housing Needs Assessment. Due to the methods and data sources used, the workforce housing demand estimates do not lend themselves to easy replication. However, the steps outlined here should provide a reasonable framework through which a subject matter expert may develop alternative and/or updated figures.

Note that while the workforce housing demand estimates presented here were derived based on the best information currently available, they represent only a reasonable estimation of the existing unmet workforce housing demand within the region and should be interpreted with caution. The estimates reflect demand originating from existing resident, non-resident, and seasonal worker households and, as such, illustrate the magnitude of the mismatch between the available housing stock within the region and the types of housing units that may best suit the needs of the workforce. As a result, the estimates should not be interpreted strictly as the number of new units that need to be built, but as the number of units that need to be "made available" in order to meet the needs of the workforce.

For an additional qualitative description of the method used to generate the workforce housing demand estimates, please refer to the appropriate section of the 2016 Truckee North Tahoe Regional Workforce Housing Needs Assessment.

ORGANIZATION

This workbook provides a step-by-step outline of the methods used to generate the workforce housing demand estimates. It also provides a full list of data sources used to generate the estimates. The process is broken down into a number of stages, each of which is summarized on a seperate worksheet. Each stage is then broken down into a series of component steps. Each step includes a brief description of each operation. Example data are used, where appriopriate, for illustrative purposes.

List of Data Sources

Below is a brief listing of the data sources used to generate the workforce housing demand estimates. Note that the sources listed below represent the core pieces of data necessary to generate the estimates. In some cases, additional data may be needed.

Series or Table Name	Dataset Name	Published By	Available at:
Public Use Micro Data Sample (PUMS)	2010-2015 American Community Survey (ACS)	U.S. Census Bureau	http://www.census.gov/programs-surveys/acs/data/pums.html
Employment Status for the Population 16 Years and Over (B23025)	2010-2015 American Community Survey (ACS)	U.S. Census Bureau	http://factfinder.census.gov/
n.a.	Quarterly Census of Employment and Wages (QCEW)	Bureau of Labor Statistics	Special tabulation from the California Employment Development Department
n.a.	Census Nonemployer Statistics	U.S. Census Bureau	http://www.census.gov/econ/nonemployer/
OnTheMap Tooll	LEHD Origin-Destination Employment Statistics (LODES)	U.S. Census Bureau	http://lehd.ces.census.gov/
Seasonal worker survey response extraction	Truckee North Tahoe Workforce Housing Employee Survey	BAE Urban Econoimcs	Available upon request.
In-commuter survey response extraction	Truckee North Tahoe Workforce Housing Employee Survey	BAE Urban Econoimcs	Available upon request.
n.a.	Comprehensive Housing Affordability Strategy (CHAS)	U.S. Department of Housing and Urban Development	https://www.huduser.gov/portal/datasets/cp/CHAS/bg_chas.html

First Stage: Public Use Microdata Sample (PUMS) Extraction and Conversion

NOTES:

The steps identified below are intended primarily for informational purposes. Due to the complexity of the Public Use Microdata Sample (PUMS) dataset, the operations described should be undertaken by persons familiar with the strengths and limitations of the PUMS data.

STEP 1: Identify Appropriate Public Use Microdata Areas (PUMAS)

Use the U.S. Census Bureau's TIGER/Line Shapefiles to identify the Public Use Microdata Areas (PUMAS) that most closely approximate your study area. Note that due to minimum population requirements, the PUMAS will likely extend beyond the desired study area.

STEP 2: Download the Public Use Microdata Sample (PUMS) Data

Download the raw PUMS data from the U.S. Census Bureau website for the most appropriate time period.

STEP 3: Extract data from the Public Use Microdata Sample (PUMS)

Use the PUMS data to identify the number of employed residents, by household size and income level, who are employed within each major industry sector.

STEP 4: Adjust the data to account for the number of employed residents and the industry mix within the Study Area

If the PUMAS used for this analysis extend beyond the desired study area, use data from the Quarterly Census of Employment and Wages (QCEW) and the Census Non-Employer Statistics to control for the total number of employed residents and the mix of industries present within the study area. While the QCEW reports jobs, not employed residents, it provides a useful perspective regarding the mix of employment opportunities available within the Study Area.

STEP 5: Convert from employed residents to households

Use the average number of workers per household, as reported in the 2010-2014 American Community Survey (ACS), to convert from employed residents to workforce households.

Step 6: Convert from income level to income category.

Use the annual Income Limits published by the California Department of Housing and Community Development (HCD) to convert from Census income level (e.g., $25,000 to $50,0000 per year) to correspond with the income categories defined by the U.S. Department of Housing and Urban Development (HUD). For an example, refer to the Placer County income limits provided below.

Median Family Income: $76,100

Income Level	One	Two	Three	Four	Five
Extremely Low-Income (30% MFI)	$16,000	$18,300	$20,600	$24,300	$28,440
Very Low-Income (50% MFI)	$26,650	$30,450	$34,250	$38,050	$41,100
Low-Income (80% MFI)	$42,650	$48,750	$54,850	$60,900	$65,800
Median Income (100% HAMFI)	$53,250	$60,900	$68,500	$76,100	$82,200
Moderate Income (120% MFI)	$63,900	$73,050	$82,150	$91,300	$98,600

Number of People Per Household

Step 7: Summarize the number of worker households by size and income category.

Create a table, similar to that provided below, that summarizes the number of workforce households by household size and income category. This will form the basis for the following stages of the demand estimation process.

Resident Workforce Households (Average Annual)

Income Category	1-Person	2-Person	3-Person	4-Person	5+ Person	Total, All Households	Total, Workers
Extremely Low Income (≤ 30% of AMI)	200	183	132	116	87	718	1,166
Very Low Income (> 30% ≤ 50% of AMI)	211	357	146	203	125	1,042	1,692
Low Income (> 50% ≤ 80% of AMI)	222	636	365	218	221	1,662	2,699
Moderate (> 80% ≤ 120% of AMI)	183	701	407	356	334	1,981	3,217
Above Moderate (>120% AMI)	297	1,880	1,146	1,064	667	5,054	8,209
Total, All Income Categories	**1,113**	**3,757**	**2,196**	**1,957**	**1,434**	**10,457**	**16,984**

Second Stage: Adjusting for Seasonal Resident Employment

NOTES:
The prior stage generated estimates of the annual average employed residents and households. The purpose of the second stage is to account for seasonal fluctuations in the number of employed persons who live in he Truckee North Tahoe Study Area.

STEP 8: Purchase monthly employment data for the Study Area

In the absence of comprehensive data on seasonal fluctuations in the number of employed residents within the Study Area, this research utilized industry employment data (i.e., jobs not employed residents) to estimate the rough magnitude of seasonal fluctuations in regional employment. This assumes that seasonal fluctuations in the number of employed resident households will roughly correspond with seasonal changes in the number of employment opportunities.

In order to identify seasonal changes in industry employment, BAE collected data from the Quarterly Census of Employment and Wages (QCEW) for a set of ZIP Codes that roughly correspond to the Truckee North Tahoe Study Area. The data included monthly estimates of number of jobs, by major industry sector during 2014, the most recent year for which data were available.

STEP 9: Adjust to account for nonemployer based jobs

The number of jobs, as reported in the QCEW, was then proportionately adjusted to account for nonemployer based jobs (e.g., self-employed persons) based on the proportion of nonemployer based jobs in Placer and Nevada Counties in 2014, as reported in the U.S. Census Bureau's Nonemployer Statistics. Note that all nonemployer based jobs are assumed to be filled by permanent year-round residents.

STEP 10: Calculate seasonal fluctuations in the number of employment opportunities available in the region

Based on the combined (i.e., employer and nonemployer based) employment profile within the Study Area, BAE calculated the percent change in employment between the year-round average and both the seasonal high and the seasonal low. This was expressed as a percent change from the annual average. For an example, refer to the figures provided below.

	Jan	Feb	March	April	May	Annual Average
Employmernt (thousands)	17.0	16.6	16.4	15.6	14.0	15.8
% of annual average	*7.4%*	*4.7%*	*3.2%*	*-1.8%*	*-11.5%*	

STEP 11: Estimate the number of permanent year-round resident workers

In order to estimate the number of permanent year-round workers that live within the Study Area, BAE took the employed resident totals developed in the first stage and adjusted the numbers downward based on the proportionate difference between the average annual employment total and the seasonal low-point.

STEP 12: Estimate the number of seasonal resident workers

In order to estimate the number of seasonal workers that live within the Study Area, BAE took the employed resident totals developed in the first stage and adjusted the numbers upward based on the proportionate difference between the average annual employment total and the seasonal high-point. BAE then subtracted out the permanent year-round resident workers identified in Step 4 to generate an estimate of the total seasonal resident workforce.

Step 13: Convert to Households and Identify characteristics for Year-Round and Seasonal Households

Based on the total number of seasonal and year-round workers identified in Steps 4 and 5 above, BAE then converted to households based on the average number of workers per household. Household characteristics for permanent year-round workforce households were identified based on the PUMS data. Household characteristics for seasonal workforce households were identified based on an analysis of results of the Truckee North Tahoe Workforce Housing Employee Survey. To do this, BAE identified those survey respondents who lived in the Study Area only during periods of peak employment and developed a profile of survey respondents by household size and income category. For an examples of the resulting estimates, refer to the figures provided below.

Resident Workforce Households (Year-Round)

Income Category	Household Size					Total, All Households	Total, Workers
	1-Person	2-Person	3-Person	4-Person	5+ Person		
Extremely Low Income (≤ 30% of AMI)	137	151	69	37	24	417	684
Very Low Income (> 30% ≤ 50% of AMI)	132	309	35	171	0	648	1,058
Low Income (> 50% ≤ 80% of AMI)	206	525	238	123	158	1,250	2,040
Moderate (> 80% ≤ 120% of AMI)	151	590	296	340	318	1,696	2,761
Above Moderate (>120% AMI)	186	1,626	1,051	953	619	4,436	7,219
Total, All Income Categories	**812**	**3,202**	**1,690**	**1,624**	**1,119**	**8,447**	**15,024**

Resident Workforce Households (Seasonal)

Income Category	Household Size					Total, All Households	Total, Workers
	1-Person	2-Person	3-Person	4-Person	5+ Person		
Extremely Low Income (≤ 30% of AMI)	63	32	63	79	63	301	482
Very Low Income (> 30% ≤ 50% of AMI)	79	48	111	32	127	396	634
Low Income (> 50% ≤ 80% of AMI)	16	111	127	95	63	412	660
Moderate (> 80% ≤ 120% of AMI)	32	111	111	16	16	285	457
Above Moderate (>120% AMI)	111	254	95	111	48	618	989
Total, All Income Categories	**301**	**555**	**506**	**333**	**317**	**2,012**	**3,222**

Third Stage: Adjusting for the Regional Commute Flow

NOTES:

The purpose of the third stage is to account for the regional flow of workers into the Study Area, recognizing that many of these workers may prefer to live within the Study Area, but live elsewhere due to excessive housing costs and poor housing availability within the Study Area. Note that while the regional commute-shed involves workers commuting both into and out of the Study Area, the demand estimates account only for those workers who commute into the Study Area and does not subtract those who commute out of the Study Area, since it was not possible, based on the available data, to identify which household contain only out-commuters and those which contain out-commuters, as well as workers who are employed within the Study Area.

STEP 14: Identify the rate of in-commuting and calculate the number of in-commuters

For the purposes of this research, the rate of in-commuting was calculated based on the ratio of in-commuters to employed Study Area residents. This is because the workforce household estimates described in prior stages are based on the number of employed residents, not jobs or employment opportunities. Note that this differs from the commute-rate typically cited, which calculates the percent of persons employed in an area who commute in from outside the area. Data on the regional commute shed were collected from the 2013 Longitudinal Employer-Household Dynamics (LEHD) OnTheMap Tool, which are published by the U.S. Census Bureau.

	Study Area Workers
Work In Region/Live Outside Region (In-Commuters)	9,271
Live Within the Region (Employed Residents)	12,277
Ratio of In-Commuters to Employed Residents	*75.5%*

STEP 15: Calculate the number of in-commuters and identify household characteristics

Once identified, the in-commuter rate was then applied to the annual average number of employed residents within the Study Area, as identified in the first stage. Household characteristics for in-commuter households, including household size, were identified based on an analysis of results of the Truckee North Tahoe Workforce Housing Employee Survey. To do this, BAE identified those survey respondents who commute into the Study Area on an ongoing basis and developed a profile of survey respondents by household size and income category. For an examples of the resulting estimates, refer to the figures provided below.

Non-Resident (In-Commuter) Workforce Households

Income Category	Household Size					Total, All Households	Total, Workers
	1-Person	2-Person	3-Person	4-Person	5+ Person		
Extremely Low Income (≤ 30% of AMI)	50	0	151	0	100	301	481
Very Low Income (> 30% ≤ 50% of AMI)	150	200	301	250	250	1,152	1,844
Low Income (> 50% ≤ 80% of AMI)	250	501	351	351	150	1,603	2,565
Moderate (> 80% ≤ 120% of AMI)	351	351	451	150	250	1,553	2,485
Above Moderate (>120% AMI)	301	1,453	651	551	451	3,407	5,451
Total, All Income Categories	**1,102**	**2,505**	**1,905**	**1,302**	**1,202**	**8,016**	**12,826**

Fourth Stage: Translating Households to Housing Demand

NOTES:

The purpose of the fourth stage was to translate the workforce household estimates generated in prior stages into estimates of housing demand. This was done in two distinct steps, described in greater detail below.

STEP 16: Translate household totals into gross housing demand estimates

Under this stage, BAE converted the workforce household estimates derived in prior stages into gross housing demand estimates. To simplify the calculation, in the absence of better information regarding housing preferences, this analysis assumed that households would occupy the smallest available units, while simultaneously avoiding overcrowding (defined as having more than two people per bedroom). Studio units are assumed to be occupied by one-person households only. These were determined to be reasonable assumptions, since both housing affordability and wide-spread overcrowding are known issues within the Truckee North Tahoe area. Therefore, by estimating demand based on the smallest suitable unit, this analysis focuses on estimating the number of units by size that would be sufficient/adequate to meet the needs of the region's workforce households. Below is a simple matrix that outlines the way in which the household estimates were allocated based on household size.

Household Size	Unit Size
1-Person	Studio
2-Person	1-Bedroom
3-person	2-Bedroom
4-Person	2-Bedroom
5+ Person	3+ Bedroom

Based on these simplifying assumptions, BAE estimates gross housing demand generated by local workforce households as follows:

Year-Round Resident Workforce Housing Demand

Income Category	Unit Size				Total,
	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	137	151	106	24	417
Very Low Income (> 30% ≤ 50% of AMI)	132	309	206	0	648
Low Income (> 50% ≤ 80% of AMI)	206	525	361	158	1,250
Moderate (> 80% ≤ 120% of AMI)	151	590	636	318	1,696
Above Moderate (>120% AMI)	186	1,626	2,004	619	4,436
Total, All Income Categories	**812**	**3,202**	**3,314**	**1,119**	**8,447**

Seasonal Resident Workforce Housing Demand

Income Category	Unit Size				Total,
	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	63	32	142	63	301
Very Low Income (> 30% ≤ 50% of AMI)	79	48	143	127	396
Low Income (> 50% ≤ 80% of AMI)	16	111	222	63	412
Moderate (> 80% ≤ 120% of AMI)	32	111	127	16	285
Above Moderate (>120% AMI)	111	254	206	48	618
Total, All Income Categories	**301**	**555**	**839**	**317**	**2,012**

Non-Resident (In-Commuter) Workforce Housing Demand

Income Category	Unit Size				Total,
	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	50	0	151	100	301
Very Low Income (> 30% ≤ 50% of AMI)	150	200	551	250	1,152
Low Income (> 50% ≤ 80% of AMI)	250	501	702	150	1,603
Moderate (> 80% ≤ 120% of AMI)	351	351	601	250	1,553
Above Moderate (>120% AMI)	301	1,453	1,202	451	3,407
Total, All Income Categories (b)	**1,102**	**2,505**	**3,207**	**1,202**	**8,016**

Workforce Housing Demand, All Worker Types

Income Category	Unit Size				Total,
	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	250	183	399	187	1,019
Very Low Income (> 30% ≤ 50% of AMI)	361	557	900	377	2,196
Low Income (> 50% ≤ 80% of AMI)	472	1,137	1,285	371	3,265
Moderate (> 80% ≤ 120% of AMI)	534	1,052	1,364	584	3,534
Above Moderate (>120% AMI)	598	3,333	3,412	1,118	8,461
Total, All Income Categories	**2,215**	**6,262**	**7,360**	**2,638**	**18,475**

Fifth Stage: Estimating the Unmet Demand for Workforce Housing

NOTES:

In the fifth and final stage BAE utilized the available data to estimate the existing unmet workforce housing demand. This was calculated somewhat differently for in-commuter households, compared to year-round and seasonal resident households. This was done in two distinct steps, described in greater detail below.

STEP 16: Estimate the existing unmet workforce housing need for year-round and seasonal workforce households

To convert the gross workforce housing demand estimates into estimates of unmet demand, BAE calculated the proportion of resident households within each income category that experienced any one of the four housing problems defined the U.S. Department of Housing and Urban Development (HUD). These include 1) overpaying for housing (i.e., paying more than 30 percent of income to housing costs), 2) living in overcrowded conditions (i.e., more than one person per room), 3) living with inadequate sanitary facilities, and/or 4) living with inadequate kitchen facilities. This data was obtained as part of the Comprehensive Housing Affordability Strategy (CHAS) dataset, which is generated based on a special tabulation of the American Community Survey (ACS).

STEP 17: Estimate the existing unmet workforce housing demand for non-resident in-commuter workforce households

To convert the gross workforce housing demand estimates into estimates of unmet need for non-resident in-commuter workforce households, BAE analyzed the results of the Truckee North Tahoe Workforce Housing Employee Survey to identify the proportion of in-commuters who indicated that they would be interested in moving into the Truckee North Tahoe area (85.6 percent), if affordable and adequate housing were made available.

Step 18: Summarize the Unmet Workforce Housing Demand Estimates

As a final step, BAE compiled the resulting estimates of existing unmet workforce housing demand estimates into the following table.

Unmet Year-Round Resident Workforce Housing Demand

	Unit Size				Total,
Income Category	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	124	137	96	22	379
Very Low Income (> 30% ≤ 50% of AMI)	90	210	140	0	440
Low Income (> 50% ≤ 80% of AMI)	146	371	255	112	884
Moderate (> 80% ≤ 120% of AMI)	89	349	376	188	1,001
Above Moderate (>120% AMI)	59	512	631	195	1,396
Total, All Income Categories	**508**	**1,579**	**1,498**	**516**	**4,100**

Unmet Seasonal Resident Workforce Housing Demand

	Unit Size				Total,
Income Category	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	57	29	130	57	274
Very Low Income (> 30% ≤ 50% of AMI)	53	32	97	86	269
Low Income (> 50% ≤ 80% of AMI)	11	79	157	45	291
Moderate (> 80% ≤ 120% of AMI)	19	65	75	9	168
Above Moderate (>120% AMI)	35	80	65	15	194
Total, All Income Categories	**176**	**285**	**523**	**212**	**1,196**

Unmet Non-Resident Workforce Housing Demand

	Unit Size				Total,
Income Category	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	43	0	129	86	258
Very Low Income (> 30% ≤ 50% of AMI)	129	171	472	214	986
Low Income (> 50% ≤ 80% of AMI)	214	429	601	128	1,373
Moderate (> 80% ≤ 120% of AMI)	301	301	515	214	1,330
Above Moderate (>120% AMI)	258	1,244	1,029	386	2,917
Total, All Income Categories (b)	**944**	**2,145**	**2,746**	**1,029**	**6,864**

Worker Housing Demand, All Types

	Unit Size				Total,
Income Category	Studio	1-Bedroom	2-Bedrooms	3+ Bedrooms	All Units
Extremely Low Income (≤ 30% of AMI)	225	166	354	165	911
Very Low Income (> 30% ≤ 50% of AMI)	272	414	709	300	1,695
Low Income (> 50% ≤ 80% of AMI)	371	879	1,014	285	2,548
Moderate (> 80% ≤ 120% of AMI)	409	714	965	411	2,499
Above Moderate (>120% AMI)	351	1,836	1,724	596	4,507
Total, All Income Categories	**1,627**	**4,009**	**4,766**	**1,757**	**12,160**