SACOG Board of Directors

February 14, 2013

Consultant Selection for Economic Research in Older Suburbs

Issue: Consultant assistance is needed to develop economic factors for community success in older suburban communities.

Recommendation: That the Board of Directors select the Metropolitan Research Center of the University of Utah proposal and authorize the Chief Executive Officer to finalize negotiations and sign a contract in the amount of $100,000. The statements of qualifications were not available for the Government Relations & Public Affairs Committee to review.

Committee Action/Discussion: For this Request for Qualifications we received six inquiries of interest and ultimately received two statements of qualifications. We received inquiries, but no statement of qualifications (SOQ) from: 1) the Center for Strategic Economic Research and a local consultant; 2) a local university professor; 3) a Bay Area consultant; and 4) a Boston, MA based consultant. SOQs were received from: 1) the Metropolitan Research Center (MRC) at the University of Utah; and 2) a team led by Jack Faucett Associates (JFA).

Both SOQs included qualified professional staff capable of the level of economic and strategic analysis we require and were within the stated budget of $100,000. The SOQs were reviewed by Gordon Garry, Director of Research & Analysis; Joe Concannon, Data Services Manager; and Greg Chew, Senior Planner. Action on this item is requested to allow two grant funded projects to remain on schedule.

The MRC SOQ, however, was clearly a better approach from a number of factors that include both data sources and methodologies. The MRC approach includes data from Census (housing, employment, payroll, local government revenue), private firms (Zillow, REIS), and their own proprietary nationwide, multi-year, parcel-level databases of businesses. The JFA SOQ includes data from Census (employment) and focuses mostly on the Sacramento area with a sample of other regions including Portland, OR and Dallas, TX (based on prior work). The breadth and depth of the MRC data is clearly more robust and will allow for better analysis.

The MRC analysis for Task 1 (successful suburban communities) will be based on a broader mix of factors (employment, housing real estate, government revenues, and urban form) than the JFA analysis which will be based on only employment data and appears to focus on light rail station areas rather than the entire suburban community area. For Task 2 (employment near light rail station areas) the MRC methodology has more depth due to the use of nationwide data of employment and the building costs and occupancy rates. One of the value-added components of the MRC approach is the data review and cleaning that this team has already completed which improves the analysis because there is less chance of data errors leading to false conclusions. The JFA approach uses only Sacramento data to be compared to two other regions for comparison purposes. A review of national data sources was a central element of our request for qualifications.

Lastly the MRC SOQ has a four month schedule, and the JFA SOQ has a six month schedule. The staff recommendation is unanimous for the MRC SOQ. The scope of work from this SOQ is attached.

Approved by:

Mike McKeever
Chief Executive Officer

MM:GG:ef
Key Staff: Gordon Garry, Director of Research & Analysis, (916) 340-6230
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THE
UNIVERSITY
OF UTAH

February 19, 2013

Mr. Joe Concannon
Data Services Manager
1415 L Street, Suite 300
Sacramento, CA 95814
(916) 321-9000
jconcannon@sacog.org

re: Research Related to Economic Development in Suburban Settings

Dear Mr. Concannon:

This is to confirm that the following person has authority to negotiate on behalf of and to contractually bind the University of Utah and who may be contacted during the period of statements of qualifications evaluation.

Name: Shauna Peterson
Title: Research Related to Economic Development in Suburban Settings
Address: 1471 Federal Way
         Salt Lake City, Utah, 84102
Phone number: 801-585-0062
         shauna.peterson@osp.utah.edu

Sincerely,

Brent Brown
Director,
Office of Sponsored Projects
University of Utah

Contents

Introduction

SACOG, with its vital role in regional land use, transportation, and air quality planning, serves a region with remarkable needs and opportunities in these areas. Located as it is at a major crossroads of interstate highways, railroads, and an ocean-going port, transportation and mobility are important parts of Greater Sacramento's story. As a booming metropolitan area with a growing regional population, land use and development issues ranging from affordable housing, urban sprawl, and community economic vitality are urgent matters for many of SACOG's local governments. And in an era of growing resolution to act on the threat of global climate change, the roughly two-million residents of SACOG's six county and 22 municipal member communities face significant challenges as they seek to coordinate planning and development activities to reduce greenhouse gas emissions and become a sustainable society. On each of these fronts, SACOG works with Federal and State government divisions while coordinating county and municipal government needs and actions and reaching out to the individuals who desire and deserve a voice in determining the shape and behavior of Greater Sacramento going forward.

SACOG has responded to California's SB 375 mandate to integrate transportation, land use, and air quality planning and has completed its Sustainable Communities Strategy. In its multivalent role as COG, MPO, and RTPA, SACOG is now turning to the vital work of actualizing the potential sustainability benefits envisioned in the SCS by assisting its member communities as they implement the Strategy on the ground. By steering future business development to locations that accord with the SCS, SACOG can help revitalize struggling inner-ring suburbs while facilitating increased transit mode share for mobility, reducing traffic congestion, and decreasing.

Against this backdrop, the Metropolitan Research Center brings to bear recognized expertise in the interrelationships between real estate, urban form, and mobility behaviors and outcomes, We have deep combined experience in asking meaningful questions of large national data sets and, using statistical and geospatial analysis techniques and our recognized disciplinary expertise (our key staff have literally "written the book" on the responses of real estate economics and mobility behaviors to transit) will enable us to produce clear, actionable, and most importantly, fruitful understanding and recommendations as an outcome of this research project.

Technical Approach

Our basic approach to Task 1 will be to develop a multi-dimensional index of community economic health and then, using data either reported at, or queried and aggregated via GIS to, the community level, investigate the relationships between this index and employment dynamics, while also examining a range of other variables understood to also influence economic activity and vigor at local levels. With the results of this national descriptive analysis in hand, we will consider the specific case of three SACOG-area communities, selected in consultation with SACOG, and develop phasing strategies for increasing the mix of indicated employment types.

For Task 2, we will use GIS tools and national datasets to develop by-year, by-distance-to-transit employment profiles of neighborhoods near rail transit stations. By analyzing the differential responses of business sectors to the availability of transit, we'll be able to identify which business types are attracted to and flourish near transit, helping SACOG to target this kind of business activity in their economic development work.

Task 1: Economically Successful Suburban Communities

Part A: National Descriptive Analysis: Employment/business activity creating sustained economic health in suburban communities

The overall objective of this project is to relate community economic health with urban composition and business activity at the community scale, thereby allowing planners to target planning actions that could be expected to protect or stimulate community economic health.

Quantitative research supporting the project's objectives at the national scale will require a definition of "community", as well as "inner-ring suburb". We will follow recent work of Hanlon (2010)[1], and define a community as a census place, whether an incorporated place, a consolidated city, or an unincorporated Census-designated-place (CDP). Using a definition of community that follows place boundaries has the virtue of allowing for the capture of policy influences on employment and real estate dynamics. We will define inner-ring suburbs as communities that a) are not central cities, b) have a majority of housing stock built prior to 1969, and c) are part of a contiguous block of communities that meet the first two criteria and are contiguous to a central city. We will define a central city as the largest city (by population) in a metropolitan or micropolitan area.

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[1] Hanlon, B., 2010, "Once the American Dream: Inner-Ring Suburbs of the Metropolitan United States", Temple University Press, Philadelphia.

Subtask 1A.1: Kickoff call. Our team will hold a kickoff teleconference with SACOG representatives within a week of receiving notice to proceed, to clarify and discuss project objectives and arrange for transfer of an inventory of available SACOG data holdings that may be useful in the Task 1 and Task 2 analyses.

Subtask 1A.2: Develop Community Economic Health Index. We will develop an objective "Community Economic Health Index" (CEHI) that tracks economic health in suburban communities and can be operationalized in the Sacramento region. We will define CEHI as the ability of a community to retain or grow per-capita or per-household wealth over time in real terms (i.e. inflation-adjusted). Because both income and expenses vary widely across the country, the CEHI will measure wealth-producing factors (income, real estate values) relative to wealth-consuming factors; this will allow for comparisons between, for instance, high-income but economically stressed communities in large metro areas and low-cost, healthy communities in smaller metros. We will analyze CEHI on the basis of performance over time. CEHI scores that increase over time and display fewer swings will be indicative of economically stable and healthy communities. This subtask will start with a review of literature to identify measurable characteristics of economically healthy communities. We anticipate that the index will include the following:

- Household income, from MRC's proprietary database of household characteristics (modified from InfoGroup). CEHI would be directly proportionate with household income.
- Home value, from 2011 5-year ACS, tract-level self-reported home value estimates, aggregated to the community level. CEHI would be directly proportionate with home value.
- Combined household housing and transportation costs ("H+T"); from a proprietary database of 20~ peer metros, by block group. 2000, 2009 purchased from CNT. CEHI would be inversely proportionate with this.
- Unemployment rate, from BLS data. CEHI would be inversely proportionate with unemployment rate.

Work on this subtask will begin immediately following the project kickoff call.

Subtask 1A.3: Analyze factors contributing to community economic health. Next, we will analyze the national inner-ring suburb data set using multiple linear regression to quantify the relationship between CEHI and predictive factors reflecting the economic composition of the community. We will examine factors reflecting community economic activity and composition, as well as factors reflecting community urban form, which our research has increasingly indicated has indirect causal impacts on economic activity and outcomes. SACOG is understandably interested in findings that can be translated into actions that will in turn yield intended results. Our regression analysis will examine correlations between predictor (e.g. business activity and response (e.g. CEHI) variables. While correlation cannot conclusively demonstrate causation, by analyzing factors other than sectoral employment and business activity, we can control for the impacts of these other variables which theory and previous research indicate also influence community economic health.

Where employment or wages are considered, we will use LED data to analyze and report at the 2-digit NAICS sector level, except for the following 2-digit NAICS sectors: 44-45 (retail trade), 48-49 (transportation and warehousing), and 72 (accommodation and food services). We will break these sectors down further to the 3-digit NAICS sector using MRC's unique and proprietary geocoded national business database (adapted from Infogroup).

Predictor variables analyzed will include the following:

- Total payroll, from County Business Pattern data.
- Wage-housing balance, from earlier MRC research using LED data.
- Sectoral diversity of employment base, using LED data.
- Total employment, using LED data.
- Employment by 2- or 3-digit NAICS sector, using LED data in combination with our modified Infogroup database.
- Employment wages by NAICS sector, using LED data
- Real estate market changes, from Zillow, REIS
- Sales tax and other local government revenue, from the Census of Local Government Finance
- Urban sprawl metric, from previous MRC research.
- Compactness score, from previous MRC research.
- Composition of housing stock by age, from Census data.

Planners and policy makers in the SACOG area can change some of these predictors of community health more easily than others. Sectoral business and employment mix can be influenced using the levers of economic development, and so we will use the results of the data analysis to identify the identity and mixture of business sectors that are most closely associated with community economic health. We will interpret these findings as targets for by-sector employment and/or mixtures of sectors.

During the course of work on this subtask, we will hold a one-day informal workshop at SACOG offices with key SACOG staff, and attended by two key MRC project members, date to be arranged. The purpose of this workshop will be to discuss preliminary findings, discuss potential further data needs, and "ground truth" analytic results in the Sacramento region.

Work on this subtask will begin immediately following the project kickoff call, and will proceed concurrently with that of Subtask 1A.2.

Subtask 1A.4: Document Findings. We will prepare a technical report that documents our research methods and findings, with an emphasis on interpreting the results of our statistical analysis in easy-to-understand conclusions with direct bearing on planning and policy decisions. We will give special emphasis to findings of relationships between CEHI and the performance of particular business sectors, given SACOG's interest in leveraging this research to strengthen economic development efforts.

The final deliverable for this subtask will be delivered to SACOG by 15 May 2013.

Part B: SACOG Regional Prescriptive Analysis: Strategies for phased realization of sustained economic health in SACOG suburban communities

A nation-wide quantitative analysis of inner-ring suburb economic health can be of direct use to SACOG in its specific local planning for struggling suburban communities. Task 1 Part B will apply the findings of the primary research conducted in the previous task, and apply them to the needs of communities for which SACOG share planning responsibility. Work on this task will begin following delivery of the Task 1A report.

Subtask 1B.1: Community Selection Workshop. We will hold a one-day informal workshop at SACOG offices with key SACOG staff, and attended by two key MRC project members. The purpose of this workshop will be to select three communities in the region, discuss their economic and development circumstances, conduct site visits, and review existing and forecasted employment mixture data provided by SACOG. The workshop will be held on a date agreed upon by MRC and SACOG project teams, but no later than 01 June 2013.

Subtask 1B.2: Develop phasing strategies for the SACOG communities. Following the subtask 1B.1 workshop, we will produce detailed, specific assessments of these three communities, using the databases (i.e. CEHI, its constituent variables, and predictive economic variables) and analyses produced for Task 1A. We will use these data to produce specific phasing strategies, referring to the by-sector target metrics developed in Task 1A.

Subtask 1B.3: Document findings. We will produce a technical memo reporting the findings of our data analysis for the three SACOG communities, setting them in the context of the national findings from Task 1A, and laying out the phasing strategies developed in Subtask 1B.2.

The final deliverable for this subtask will be delivered to SACOG by 30 June 2013.

Task 2: Employment near Transit Rail Stations in Suburban Settings

The overall objective of this project is to determine the types of employment investments that will most likely succeed because of the unique asset of being close to rail transit. Identifying industries that have flocked to transit station locales will help planners identify economic development strategies that are more likely to be successful in drawing new firms and jobs to areas under consideration.

Recent research conducted for CTOD by Strategic Economics clarifies the important role of employment destinations in the ridership and success of transit systems. The MRC has a proprietary database of businesses coded by industry sector, whose NAICS codings are at finer sectoral resolution than is reported in publically available databases such as the Census LED database. *Our ownership of and analytic experience in working with these data will enable SACOG to get a finer-grained, more nuanced and revealing picture of the relationship between transit accessibility and industry-specific employment dynamics.* Analysis for this task will use the definitions for and list of suburban communities developed for Task 1. We will include both inner- and outer-ring suburbs for this analysis. The work will take the following form.

Subtask 2.1: Literature Review. Our first step will be to conduct a literature review to identify existing research findings on the kinds of firms attracted to, and perhaps repelled from,

light rail transit stations. We will also review present knowledge of differences in station usage as a function of the size and makeup of the employment base in station neighborhoods. We will take the findings of this literature review into account as we finalize a selection of station types to be the categorical framework for the rest of this research task. Findings of the literature will be summarized in a brief memo, and will be considered in our interpretation of the subsequent data analysis.

Work on this subtask will begin immediately following the project kickoff conference call, and will proceed concurrently with work on Task 1A. The final draft of the memo deliverable for this subtask will be delivered to SACOG by 15 March 2013.

Subtask 2.2: Characterization of major employment centers. Previous empirical work bears out the theoretical expectation that different kinds of employment would differ in their attraction to rail transit. Prior to analyzing employment dynamics over time, we will characterize each station on the basis of the predominant employment sector within a 1.5 mile radius of the station in the later of either 2002 or the first year the station entered service. We will classify stations as "office", "government", "retail" and "institutional" (health care and education) based on the plurality of reclassified 2-digit NAICS employment count. We will classify stations within 0.5 mi of sports venues as "sports", and classify as "Not major employment" stations whose total employment count within the 1.5 mile radius is below the 50th percentile of the distribution for the MSA the station falls in.

Work on this subtask will begin following the project kickoff meeting, and will run concurrent with task 1A and subtask 2.1.

Subtask 2.3: Employment and land use data analysis. Next, we will analyze the employment dynamics for all areas within one-and-a-half miles (at one-eighth mile increments) of light rail stations ("station-areas") in the national database of suburban communities developed for Task 1. Unless noted otherwise below, our analysis will be annual from 2002 through 2011, which are economically meaningful end points: 2002 represents the first recovery year after the 2001 recession, and 2011 (the last year for which data are available) is in the recovery phase from the Great Recession of 2008. Results will be aggregated by

Raw data used for this analysis will be:
- Employment counts by 2-digit NAICS sector, reported at the Census block level (from the Census Local Employment Dynamics (LED) database) for 2002-2011[2].
- Employment counts by 3-digit NAICS sector for the following 2-digit NAICS sectors: 44-45 (retail trade), 48-49 (transportation and warehousing), and 72 (accommodation and food services) reported at the Census block level from MRC's unique and proprietary geocoded business database (adapted from Infogroup) for 2002-2011
- Sale price, rental rates, and vacancy rates by principal use (retail, office, institutional, etc.) for 2012 from our proprietary geocoded database from CoStar.
- Stadium locations from worldstadiums.com.

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[2] The LED database does not include data for MA; consequently, metropolitan areas from this state will not be included in the nation-wide analysis.

Using GIS tools, we will select all census blocks whose centroids intersect in one-eighth mile buffers from transit stations; we will aggregate these data to the station-area level. We will then examine the change in absolute (counts), relative (percentage) numbers of jobs, change in regional share, and shift in regional share, each by 2- or 3-digit NAICS sector as explained above. Using the MRC's proprietary nationwide database of businesses will allow us to examine the entry and exit dynamics of firms by NAICS from station areas at a finer grain than prior research. Our analysis will also assess the market responsiveness to station location by type of station with respect to land use including sales values, rental rates, and vacancy rates for the most recent year for which those data are available.

Work on this task will run from project kickoff through May 2013.

Subtask 2.4: Produce target firm allocations. The analysis from Subtask 2.3 will reveal which sectors are attracted to station areas by narrow distance bands from stations. Insights can lead to refined planning that is responsive to firms based on their location propensity with respect to station distance and type. Using SACOG employment projections, we will assist staff to generate a refined allocation of target firms by station type and distance for each 2-/3-digit NAICS sector evaluated.

As part of this task, we will hold a one-day informal workshop at SACOG offices with key SACOG staff, and attended by two key MRC project members. The purpose of this workshop will be to review SACOG employment figures, discuss regional perceptions and prospects by business sector, conduct site visits, and discuss preliminary allocation results. The workshop will be held on a date agreed upon by MRC and SACOG project teams, but no later than 20 June 2013.

Subtask 2.5: Document Findings. We will deliver a report detailing the findings of our literature review, data analysis, and target firm allocations. The final draft of this report will be delivered to SACOG on 30 June 2013.

Project Management

The prime investigator, senior technical lead, and executive manager on the project will be Dr. Chris Nelson. Martin Buchert will function as the project manager. Martin will report weekly via email to Dr. Nelson on the status of work. Progress on the contract work will be also be reported monthly in a progress summary to the SACOG project manager. In addition to participating in generating pertinent sections of deliverables Dr. Nelson will provide internal review of draft deliverables prior to delivery of final versions. Draft versions of all reports and other deliverables will be submitted to SACOG no later than 10 days prior to the applicable deliverable deadline for review and comments.

Consultant and Subcontractor Staff

Arthur C. "Chris" Nelson, Ph.D., FAICP, Presidential Professor of City and Metropolitan Planning, Metropolitan Research Center Director, Adjunct Professor of Finance, School of Business, University of Utah. Chris has more than 20 years of experience in economic and demographic analysis of urban systems. Sponsors of this work have included Economic Development Administration, HUD, APA, and ULI. Chris's research has been published in books by the APA, ULI, Ashgate and Island Press, and in such journals as the Journal of the

American Planning Association, Economic Development Quarterly, and Journal of Planning Literature. **Chris will serve as the technical director for this project, providing overall direction and guidance. He will also serve as the senior technical lead.**

Especially relevant recent publications by Arthur C. Nelson:

- The New California Dream: How Demographic and Economic Trends May Shape the Housing Market - A Land Use Scenario for 2020 and 2035 (2011). Urban Land Institute. http://la.uli.org/uli-in-action/housing/the-new-california-dream-new-report/
- A Home for Everyone: San Joaquin Valley Housing Preferences and Opportunities to 2050 (2013). Council of Infill Builders. http://www.councilofinfillbuilders.org/resources/valley-housing.html
- Reshaping Metropolitan America: Development Trends and Opportunities to 2030 (2013). Island Press. See exhaustive database online at www.reshapemetroamerica.org/

Reid Ewing, Ph.D., Professor of City and Metropolitan Planning at the University of Utah, associate editor of the Journal of the American Planning Association, columnist for Planning magazine, and Fellow of the Urban Land Institute. Earlier in his career, he was director of the Voorhees Transportation Center at Rutgers University and research professor at the National Center for Smart Growth. He served two terms in the Arizona legislature, and worked on urban policy issues at the Congressional Budget Office. He holds masters degrees in Engineering and City Planning from Harvard University, and a Ph.D. in Urban Planning and Transportation Systems from the Massachusetts Institute of Technology. Dr. Ewing is a pioneer in the field of metricizing urban form and the built environment, and his research program has involved work with MPO's across the country. He has worked extensively with spatial and aspatial data from Census, MPO, and a wide variety of other sources. **Reid will serve as senior technical resource for statistical and data analysis.**

Martin Buchert, Senior Research Analyst, Metropolitan Research Center, Adjunct Assistant Professor, Dept. of City and Metropolitan Planning, University of Utah. Martin's educational background is in conservation planning and land-use analysis using geospatial technologies. His experience includes 5 years as a researcher in modeling and analysis of land-use/land-cover change, where his work involved advanced spatial models, multiple criteria decision making tools, and the use of machine learning algorithms such as Classification and Regression Trees for data analysis. Martin also has 4 years of experience in planning analysis and NEPA projects, working as the GIS Specialist for a mid-sized national transportation planning firm where he consulted on regional planning projects for State DOT's in Utah and Idaho as well as MPO's along Utah's Wasatch Front. Since joining the MRC, Martin has managed collection, management, and spatial analysis of our extensive data holdings. **Martin will serve as the project manager for this project, and as a technical expert for the GIS and data analysis.**