
2016 TRANSIT DEVELOPMENT PLAN for the LASSEN COUNTY TRANSPORTATION COMMISSION



A Proposal Prepared for the
Lassen County Transportation Commission

Prepared by



LSC Transportation Consultants, Inc.

LSC TRANSPORTATION CONSULTANTS, INC.



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April 13, 2016

Mr. Kelly Mumper, Transportation Planner
Lassen County Public Works Division of Transportation
707 Nevada Street Suite 4
Susanville, CA 95482

RE: Proposal for the Lassen County Transit Development Plan

Dear Mr. Mumper:

With this letter and attached proposal, LSC Transportation Consultants, Inc. of Tahoe City, California is proud to present our qualifications to conduct a Transit Development Plan and Marketing Plan for the Lassen County Transportation Commission (LCTC). For this work, LSC Transportation Consultants, Inc., with experience and expertise in all areas of rural and small city transit planning and operations, has put together a highly-qualified Study Team that can conduct the study efficiently, on time, and with careful consideration of local requirements.


LSC Transportation Consultants, Inc. is an established California- and Colorado-based transportation planning firm that has been assisting transit programs for 40 years. Our firm has extensive experience in transit and transportation planning in rural settings and medium-sized cities throughout the western and midwestern United States, including work conducted for Lassen County. Within the past ten years, we have completed FTA-sponsored transit planning studies in more than 30 cities and 40 rural areas.

Our proposed Work Scope closely follows that outlined in the Lassen County Transportation Department's Request for Proposals. Our study approach features a close working relationship with local staff and decision-makers, a "hands-on" approach to conducting the work effort, a thorough data collection and analysis effort regarding demographics and existing services, a careful review of a wide range of service and capital alternatives, and attention to the vital considerations of financial strategies. Our public outreach efforts will ensure we address issues that are of concern to the community in addition to our technical understanding of the transit system.

We are eager to begin work on this important study and look forward to your response to this proposal and would happy to provide additional information or to make a formal presentation to your selection committee, at your discretion. Thank you for the opportunity to present our proposal.

Respectfully Submitted,

LSC Transportation Consultants, Inc.

By 
Gordon Shaw, Principal

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2016 TRANSIT DEVELOPMENT PLAN
FOR THE
LASSEN COUNTY TRANSPORTATION COMMISSION**

A Proposal Prepared for the

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LSC Transportation Consultants, Inc. (LSC) of Tahoe City, California is proud to present our proposal for consultant services to the Lassen County Transportation Commission to prepare a Transit Development Plan and Marketing Plan for Lassen County. We believe that, through our knowledge and experience with successful transit planning for similar transit agencies, as well as previous experience working with Lassen Rural Bus, we can identify creative and cost-effective solutions to improve the region's transit program.

LSC was originally formed in 1975 to provide consulting services in all phases of transportation planning and traffic engineering. The company's formation was in response to a perceived need for these services to be provided from a locally owned base in the American West, by competent and experienced engineers and planners, and at a reasonable cost to clients. From an initial office in Denver, Colorado, the firm has expanded to include offices in Tahoe City, California and Colorado Springs, Colorado.

LSC offers a number of advantages with regard to the Lassen County transit planning effort:

- ♦ The senior-level staff of LSC is experienced in transit planning, which includes extensive experience in rural and mid-sized urban areas. Key personnel experience ranges from very small, demand-response systems such as those found in many rural areas and small towns, to larger fixed-route systems.
- ♦ LSC is also highly familiar with the transportation and transit issues in other portions of Northern California. In particular, our team has completed numerous transit and transportation studies in the area, including studies in Lassen County, Plumas County, and Modoc County, as well as Del Norte County, Oroville, Mendocino County, Placer County, Yuba / Sutter Counties (Yuba Sutter Transit), Amador County and Nevada County.
- ♦ Further, LSC has completed several transit planning studies in Lassen County, including the *Transit Development Plan* in 1997 and 2006, the *Lassen Rural Bus Facility Expansion Plan* (2011), and the *Regional Transportation Plan* (2012).
- ♦ With many California triennial performance audit studies and transit planning studies under our belt, we have a strong understanding of the Transportation Development Act and how transit needs are specifically defined in this key state law.
- ♦ The local nature of our firm is also advantageous, as we can easily attend all public outreach efforts and public hearings, as well as provide "on-call" type of service to the Lassen Rural Bus and Lassen County Transportation Department staff without the costs and scheduling restrictions of air travel. Staff travel time and costs associated with the vital public input process will be minimal.

The Lassen County Transportation Department's Request for Proposal (RFP) outlines a general work program for the Transit Development Plan. This proposal, by LSC Transportation Consultants, Inc., is presented in response to the RFP and has been developed to provide, along with the specific requirements outlined in the RFP, the following:

- ♦ A specific study approach designed to best attain the goals for public transportation services in the study area.

- ♦ Resumes, references, and descriptions of previous LSC projects that indicate the firm's extensive experience in pertinent transit issues and marketing efforts, as well as our commitment to the client.

In sum, we believe that this proposal will clearly show the uniquely strong qualifications of the Study Team to conduct the Transit Development Plan for Lassen County.

PROJECT UNDERSTANDING AND TECHNICAL APPROACH

The Request for Proposal (RFP) from the Lassen County Transportation Department outlines a work program to prepare a 5-year transit development plan, as well as an associated marketing plan. This proposal by LSC Transportation Consultants, Inc. (LSC) is presented in response to the RFP.

Upcoming Project

The Lassen Rural Bus (LRB) system began service 35 years ago with two wheelchair-accessible vehicles operating the City Route and the South County Commuter Route. The LRB system has since grown to include the West County Route, the East County Route, a seasonal Eagle Lake Route, as well as Dial-A-Ride service for the elderly and disabled and a taxi voucher program. The service strives to meet the mobility needs of residents in the County, and especially those whom are transit dependent. This can be challenging in such a rural area, which has a population of just 22,439 in 4,729 square miles of land. Nonetheless, the transit system has performed well in terms of its farebox return rate and fairly steady ridership.

As is the case with any transit system, it is appropriate to review transit performance, passenger needs, and potential improvements in detail to plan for the upcoming years of service. The Transit Development Plan would accomplish this through a carefully planned work program. The political framework and financial scenario under which transit services operate create new challenges as well as new opportunities. To address these challenges and ensure the transit program best fits the comprehensive needs of Lassen County's character and region, a TDP study is to be conducted. Particular issues to be addressed in this transit study include the following:

- ♦ What areas of Lassen County truly warrant transit service, and what type of service is warranted? What are the area's unmet transit needs, and are these needs reasonable to meet? How will the needs for transit service change over the coming five years?
- ♦ Does the current Susanville Route structure optimize the use of resources and deliver passengers to their destinations in the most efficient and effective way? Can performance be improved through route or schedule changes?
- ♦ Are the service frequency, span of service, and route structure on other existing services appropriate, or are modifications to service levels, periods, and areas warranted? What are the various cost and ridership impacts of different options?
- ♦ Is it appropriate to have varying performance standards based on population and terrain? For instance, should local routes perform at the same level as out-of-county routes? What are the appropriate standards for each type of service?
- ♦ What are the specific needs of Lassen County residents to access larger communities and urban centers, such as Redding and Reno? Is regional service to these locations adequately serving the population's need?
- ♦ What is the cost-effectiveness of the existing fixed-route and demand-response services? Are there redundancies in services?

- ♦ What sources of revenue – public and private – can be utilized to ensure the continuing improvement in transit services? How will new transportation legislation likely affect funding sources?
- ♦ What is the appropriate vehicle replacement plan for Lassen Rural Bus? With Proposition 1B funding timing out, how will LRB sustain a reliable vehicle fleet?
- ♦ What other capital facilities and staff (if any) will be required to provide the transit services called for in the study documents?
- ♦ What is the best management organizational structure for Lassen Rural Bus in the future? What organizational strategies and options can be employed while making best use of available funding? What is the best institutional strategy for oversight of the transit program?
- ♦ What marketing program can best promote transit service among both potential riders and the general public, while making effective use of a limited marketing budget? How should the capabilities of social media and new technologies be used in the marketing strategy?
- ♦ What is the long-term financial future of transit services? What are the best financial strategies to ensure the long-term success of the program? How can Lassen County ensure it takes advantage of financial opportunities as new funding programs arise?

These issues should be considered as part of a comprehensive look at the role of transit in Lassen County and the service plan that best serves this role. This study will afford the leadership of the area an opportunity to take a mid-range look at the transit services, and identify the optimal manner in which transit can meet both the present and the future needs of the area.

Project Approach

The LSC Transportation Consultants, Inc. Team will approach this study from an objective and realistic viewpoint, for it is our intention that only the most useful study product be developed. The LSC Consulting Team will be available on an “on-call” basis throughout the project, and will work from our Tahoe City office directly with the Lassen County Transportation Commission staff and Lassen Rural Bus staff to ensure that all work tasks are completely addressed.

The LSC Team will prepare all interim study chapters, which will be compiled to comprise a Draft Report, and later, a detailed Final Report for use by the Lassen County Transportation Commission and Lassen Rural Bus staff, and other public and private partners in future planning. The operations / service program will outline potential service schedules and routes, passenger fares, and impacts to ridership and costs.

As part of our proposed approach, the Lassen County Transportation Commission and Lassen Transit Services Agency staff will be responsible for the following elements:

- ♦ Provision of readily-available data to the Consultant Team and direction with regard to sources of data not readily available
- ♦ Cooperation in conducting onboard passenger surveys and assistance with self-help onboard passenger surveys on select routes and dial-a-ride

- ♦ Timely review of interim and final study documents
- ♦ Participation in public meetings and workshops

Responsibility for all original data collection, analysis, and report preparation tasks, however, will rest fully with the Consultant Team.

Proposed Work Plan

LSC Transportation Consultants, Inc. propose the following specific Work Plan for the Transit Development Plan, based on our interpretation of the Lassen County Transportation Department's RFP and successful experience in similar study areas. The Team will work closely with local staff to complete all of the work elements called for in the RFP. We have found through experience in previous transit and transportation planning studies that this manner of approaching the proposed Work Plan provides for a cost-effective use of resources, as well as allowing the client staff to keep well apprised of our progress. The following pages present a detailed outline of our proposed Work Plan.

TASK 1.0: Meetings, Coordination, and Information Review

The first task will be to establish the communication links and information processes that are necessary to the success of the study. The Consultant will develop and provide a list of desired data items. The Contract between the Consultant and the Lassen County Transportation Commission will be finalized and executed. An initial "kick-off" meeting will be held between the Consultant, staff from the Lassen County Transportation Commission and Lassen County Transit Agency, and others at the staff's discretion. This meeting will have a number of goals, including the following:

- ♦ Review of the data list to identify any missing items and to decide a course of action to collect or develop additional data.
- ♦ Provide the Study Team with an opportunity to identify and evaluate issues for further analysis in the study, as well as to identify the position of local interest groups and stakeholders.
- ♦ Finalize the Work Program to best address the issues identified, and to best address the additional data needs.
- ♦ Finalize the public input and participation process.

This task will provide the Study Team with a clear understanding of the goals of the study, the data available, and the steps needed to develop a useful final study product.

DOCUMENTATION / DELIVERABLE:

The Study Team will provide the Lassen County Transportation Commission staff with a finalized project timeline and detailed deliverable information.

TASK 2.0: Overview of Existing Data and Policies

In developing an appropriate transit plan, it is essential to gain an understanding of conditions under which transit services are provided. To this end, we propose the following tasks.

Task 2.1: Review of Existing Plans and Studies

The regulatory and institutional context of the study will be reviewed and documented. The particular relevance to the current transit plan will be highlighted from a review of the following documents:

- ♦ Previous transit planning documents for the area, including the 2012 TDP, Bus Facility Expansion Plan, Coordinated Plan, and triennial performance audits
- ♦ Lassen County's current marketing plan (see Task 2.3 for details)
- ♦ Lassen County's Regional Transportation Plan and Transportation Improvement Program
- ♦ Findings and Hearing Minutes documenting the Unmet Transit Needs process over the previous three years
- ♦ Available documentation of transit needs, such as survey data
- ♦ General plans for the City of Susanville and for Lassen County
- ♦ Contracts and organizational structure

Task 2.2: Demographic Overview

We propose to conduct a demographic analysis of the study area from the perspective of transit factors. The data supplied by the U.S. Census, social service agencies, and state agencies will be used to obtain existing and projected information about the general population and potential transit-dependent populations, including elderly, disabled, low income and youth groups. The Consultant will update information identifying major activity centers and trip generators such as hospitals, clinics, senior centers, shopping centers, recreation areas, employment centers, education centers, and other major transit generators in Lassen County.

Additionally, the analysis will provide details regarding the economic climate of the study area, as well as housing trends. Information will be extracted from the Department of Finance regarding employment trends and employer data. Land use patterns, such as the location of multifamily housing areas and larger planned developments, will be considered. Long-range planning efforts, such as the General Plan process, will also be evaluated to understand broader planning policies related to transportation in the County. The most recent available Census data, local planning offices, social service agencies, and state agencies will be used to obtain the existing and projected information about these population groups.

Task 2.3: Review of Marketing Materials

Existing marketing materials used by Lassen Rural Bus, including rider guides, advertising strategies, signage, and website content, will be cataloged and analyzed for effectiveness. We will look at the current use of social media and technology (Facebook, ETA SPOT) and evaluate the effectiveness of these tools in reaching current and future riders. The onboard surveys conducted for Task 3.2 will also be used to evaluate customer satisfaction and successful marketing strategies.

**DOCUMENTATION /
DELIVERABLE:**

The results of this task will be presented as part of the first interim working document, Technical Memorandum One, which will include all documentation completed in Tasks 2.0 through 4.0.

TASK 3.0: Conduct Quantitative and Qualitative Research

It is important for the local communities and all citizens of Lassen County to have ample opportunity to participate in the planning process of this Transit Development Plan, including both those that do and do not use transit services currently. Initial input from the public and decision-makers will be important to ensure that the Study Team understands the transportation issues that are important to the public as well as public perception of the effectiveness of current service. To this end, LSC proposes the following outreach efforts under Tasks 3.1 through 3.5.

In order to promote the public participation activities and provide information on the project's progress, we will utilize multiple forms of advertisement. This would include using social media, such as Facebook, to provide updates to project progress, as well as to post interim working documents and post information regarding community poster sessions and surveys. Further, working documents will be posted as appropriate on the Lassen County Transportation Commission, Lassen Rural Bus and the Consultant's websites (as determined at the kick-off meeting). We also propose to advertise the project in local newspapers, as well as through flyers on transit vehicles and at key locations, such as senior centers, social service agencies, and educational campuses. Lastly, public hearings for the presentation of the Draft Report will provide another forum for public outreach, where their input can be considered by the decision-making bodies.

Task 3.1: Conduct Passenger Survey

In order to analyze travel patterns of current riders, assess customer satisfaction, and obtain a demographic profile of current riders, the Consultant Team will conduct on-board surveys. This information will be integral to the development of service alternatives.

LSC will develop a draft survey instrument and present this instrument for review at the initial kick-off meeting. The survey form will be in English on one side and Spanish on the reverse side. Any necessary comments will be incorporated to develop the final survey form. We will work with local Lassen Rural Bus transit staff to ensure that the days chosen for surveying are representative of typical conditions.

Ridership on Lassen Rural Bus routes would be evaluated to determine the optimal strategy for conducting surveys. We would propose to place a trained contract surveyor on routes with the highest ridership. For routes that serve lower passenger loads, it would be more cost effective and still manageable for the driver to administer the survey. Each surveyor will be responsible for distributing and collecting the survey forms and pencils, assisting passengers with the form as needed, keeping the vehicle free of discarded forms and pencils, and conducting a boarding/alighting count by stop. This process has been used by LSC to conduct similar surveys for a number of transit providers, including the Citifare system in Reno, Nevada, Yuba-Sutter Transit in Marysville, California, Lake Transit in Lake County, California and ROTA bus in Riverside/Oakdale, California, as well as previously in Lassen County.

Surveys will be conducted on a Tuesday, Wednesday, or Thursday to avoid any irregularities associated with the beginning or end of the work week. In addition, we will work with LRB staff to ensure that the days chosen are representative of the average.

The collected data will be entered by LSC staff into Excel spreadsheets for analysis. The data will be evaluated to yield summaries regarding the following:

- ♦ Travel mode to and from the bus
- ♦ Trip origin and destination (place name or street intersection)
- ♦ Ridership frequency
- ♦ Trip purpose
- ♦ Reason for using the bus, and auto availability
- ♦ Opinion regarding transit service characteristics
- ♦ Age
- ♦ Disability
- ♦ Household income
- ♦ Desired service improvements

Onboard surveys would be conducted by drivers of the on-demand services. LSC will provide the Dial-A-Ride drivers with survey forms, instructions, and other materials needed to provide passengers with the opportunity to complete survey forms over the same week that fixed route service is surveyed. The collected data will be entered by LSC staff into a spreadsheet and evaluated to yield summaries regarding the following:

- ♦ Passenger characteristics
- ♦ Perception of existing services
- ♦ Trip origin/destination

Questions about desired service improvements will include, at a minimum:

- ♦ More frequent service
- ♦ Weekend service
- ♦ Evening service

In addition to straight tabulations, we will conduct cross-tabulations between passenger characteristics and other survey responses. This data will be presented in tables, charts, and text format.

Task 3.2: Conduct Qualitative Interviews / Focus Groups

The second part of LSC's approach to public outreach is to conduct focus groups with various target markets in the community. These focus groups will be identified at the kick-off meeting, but could include senior citizens, Lassen College students, social service providers and/or clients, members of the Susanville Indian Rancheria, and members of the Chamber of Commerce or business community.

Early in the study, these groups would be contacted, and several focus sessions of 7 to 15 people scheduled. At the first series of focus sessions, the Consultant would explain the purpose and process of a TDP, present the Technical Memorandum One findings, and seek input on what the community (represented by the focus groups) sees as transit issues that need to be addressed. The format would include an informal presentation by the Consultant, followed by a question and answer session. The results of the sessions would be included in the qualitative discussion of transit demand (Task 4.3), and would inform the choices of service alternatives to evaluate in later tasks.

The second series of focus sessions, with the same groups, would be held after service alternatives have been developed and evaluated. The results of the alternatives analysis would be presented to the focus group, and a guided discussion would lead to selection of the best alternatives for development in the Draft Transit Development Plan.

One final component of the focus session is that group members would be asked to encourage and possibly facilitate participation in the online surveys developed for Task 3.4. For example, flyers for the

online surveys could be distributed by focus group members, or links to the surveys emailed to social service departments, college students, et cetera.

Task 3.3: Conduct Stakeholder Interviews

The Consultant will conduct interviews with various stakeholders in the area to further gain insight on known public transit needs and perception of the current transit system. Stakeholders might include department heads in social service agencies, City and County government employers, the school district, Lassen College administration, and hospital administrators. The Consultant Team will work with Lassen County Transportation Commission staff during Task 1.0 to better refine the list of potential stakeholders to contact. Stakeholder interviews will be conducted during the development of *Technical Memorandum One*, and will be conducted in person, by phone, or by email, depending on stakeholders' availability.

Task 3.4: Conduct Community Survey

Next, the Consultant will design and administer a web-based community survey (via SurveyMonkey.com) designed to reach non-transit-users. The content of the survey would include 10 to 15 questions to determine the public's desire to use transit for work, social and recreational purposes, time and location of desired service, and personal limitations that might discourage transit usage. Questions would be designed to gather information on the following:

- ◆ Awareness level of non-riders about LRB service
- ◆ Reasons that non-riders are not using LRB services
- ◆ Suggested improvement for LRB in order to encourage non-riders to use LRB
- ◆ Demographics on non-riders
- ◆ Travel preferences of non-riders
- ◆ Type of media non-riders use to obtain information

The availability of the survey would be announced on the Lassen County Department of Transportation home page, as well as at the senior center, Lassen College, Social Service and non-profit offices, and at grocery stores and Walmart, if permitted. In addition, we propose to place panel ads in the local newspaper(s) advertising the availability of the online survey, as well as any social media outlets and email blasts currently used by members of the focus groups in Task 3.3. Since the internet may not be available to all potential participants, we also propose to have hard copies of the surveys available that can be distributed through local organizations, such as those noted above.

Task 3.5: Conduct LCTC Staff Workshop

The last component of the public outreach efforts is to conduct a workshop for Lassen County Transportation Commission staff. At this workshop, we will present findings from outreach tasks 3.1 to 4.2, and work with the LCTC staff to develop a list of service alternatives for evaluation. The alternatives will be developed in response to public input, community and transit review, and LCTC staff input. In addition to service alternatives, the Consultants will work with LCTC staff on marketing strategies and potential marketing tools for the Marketing Plan. We propose that this be held in the middle of Task 4.0, specifically after Task 4.3 when the first study document has been completed.

DOCUMENTATION / DELIVERABLE:

This Task will result in vital information necessary to the completion of the first interim working document, as well as future work products. At the end of this Task 4.3, Technical Memorandum One will be submitted and presented to LCTC staff for review, and revised as necessary based upon comments received.

TASK 4.0: Conduct Transit Policy and Service Analysis and Develop Alternatives

The intent of this task is to perform a thorough analysis of Lassen County's transit services to determine the extent to which the goals and objectives for transit service in the region are being met and whether the transit services are provided effectively and efficiently, and to review in detail the operations and financial effectiveness of the current transit services.

Under this task, LSC will produce two interim working documents. The first, *Technical Memorandum One*, will be presented after the review of existing transit operations and transit demand, and will also include results from Tasks 2 through 3. The second document, *Technical Memorandum Two*, will be presented once the alternatives have been developed and evaluated after Task 4.3.

Task 4.1: Review System Operations and Performance

We propose to provide a detailed inventory of the current Lassen Rural Bus (LRB) transit services and operational structure. Specifically, the analysis will review:

- ♦ Type of operation (fixed-route, demand responsive, etc.)
- ♦ Service area and clients served
- ♦ Hours of operation and level of service
- ♦ Routes and schedules
- ♦ Number of passengers and passenger-trips served, by route, time of day, and by market segment
- ♦ Existing fare structure and transfer agreements
- ♦ Operating budget, funding sources, and financial program
- ♦ Existing funding agreements
- ♦ Operator's equipment and facilities, including existing fleet
- ♦ Maintenance arrangements
- ♦ Existing fleet replacement and bus stop improvement plans

LSC will collect and review annual, quarterly or monthly operations reports for the previous three years. A cost allocation model will be developed for Lassen Rural Bus. This model will assign all existing operating costs to the appropriate service variable, and will be very useful in the plan development in estimating the costs of potential service options. The Study Team will also review existing policies, procedures, and performance standards currently in place for all LRB transit services.

The next step in this task will be to collect the necessary data regarding current staffing contracts for management and operations positions. In particular, LSC will review the following:

- ♦ Existing administrative details regarding staff, including titles, hours worked and responsibilities
- ♦ Existing per-hour costs for contract administration, including current overhead ("A-87") charges.
- ♦ Existing service contract documentation
- ♦ Existing personnel policies, including labor agreements and benefit levels

Prior to reviewing organizational alternatives, LSC will prepare a summary of existing transit institutional/management structure for the Lassen County Transit Agency, along with funding responsibilities. This will include the following:

- ♦ An organization chart depicting roles and responsibilities within the current structure

- ♦ A review of the various functions that go into management of a transit service (contract administration, grants, board attendance, etc.)
- ♦ A summary of existing administrative costs

The Study Team will then provide an overview of various policy and alternative management options for the Transit Manager and other operations positions.

Task 4.2: Analyze Individual Route Performance

The Study Team will conduct a performance evaluation of the LRB transit system. The service **efficiency** analysis will consider the organization's ability to put service on the street in a cost-effective manner. Performance measures that will be evaluated as part of this process include cost per revenue-mile and cost per revenue-hour for each route and service. Additionally, using information obtained from LTSA staff regarding demand response service, service efficiency for paratransit will also be evaluated.

The service **effectiveness** evaluation will measure the service's ability to generate ridership and farebox income, and will include a review of such measures as passenger-trips per vehicle-mile, passenger-trips per vehicle-hour, farebox return ratio, cost per passenger-trip, and net operating subsidy per passenger-trip. These evaluations will be conducted for each route and service. Demand response service effectiveness will also be reviewed, based on data provided by the LTSA.

Task 4.3: Conduct Transit Demand Analysis

Estimates of existing transit demand by market segment will be identified, using accepted transit demand estimation methodologies. To identify all facets of demand, it will be necessary to employ a range of techniques:

- ♦ Commuter demand will be evaluated based on mode split factors, as well as a review of the U.S. Census Longitudinal Employment Household Data.
- ♦ Senior/disabled demand will be estimated based on methodologies developed specifically for these passenger types. ADA versus non-ADA demand will be assessed.
- ♦ Student and youth demand will be estimated based on an analysis of information on the location of the youth population, existing trip-making, and current school and college attendance patterns.
- ♦ General public demand will be evaluated based on established methods that consider transit trip-making rates for zero-vehicle and one-vehicle households.
- ♦ Finally, connectivity to regional transit services (both existing and planned) will be evaluated.

A comparison will then be made of the existing supply of transit service with the identified demand and needs. This comparison will identify potential underserved market segments (by area and by type of passenger) that can be addressed through service improvements. Also, as part of this task, the Consultant Team will consider the results of Unmet Needs Hearings for the last three years, and any other pertinent documents. These documents should prove valuable both as data sources and to gain an understanding of the goals and considerations that went into original development of the existing transit services, and transit issues that have emerged over the last few years.

Next, transit demand forecasts will be made for the five-year TDP update analysis period. Forecasts in employment and population available from the state, Lassen County, and Susanville planning departments will be reviewed to prepare an estimate of future growth in demand.

At a more specific level, data will be collected and reviewed regarding future changes in specific transit generators, including the following:

- ♦ Residential developments
- ♦ Retail developments
- ♦ Lassen College
- ♦ Office/employment development
- ♦ Senior communities

As needed to form the basis for transit demand estimates associated with future development, the Consultant Team will review existing transit ridership generated by similar existing development areas. Together, these specific development forecasts will be used to identify future transit demand, by area and ridership type. These estimates will be developed on a census tract level to assist in the identification of specific areas that warrant changes in transit service levels.

**DOCUMENTATION /
DELIVERABLE:**

The results of tasks 2.0 to 4.4 will be presented as part of the first interim working document, Technical Memorandum One. This document will include all work completed in Tasks 2.0 through 4.0, and will be presented to Lake APC and LTA staff for review and comment.

Task 4.4: Identify and Analyze Service Alternatives

The Consultant Team will work with the local staff to decide alternatives that should be evaluated, as discussed in Task 3.5. The alternatives will be formulated based on public/stakeholder input, the unmet needs and transit demands identified in Task 4. The following information will be provided for each alternative:

- ♦ Type of service to be offered.
- ♦ Operating characteristics, including service areas, routes and schedules, hours of operation, vehicle mileage, ridership, etc.
- ♦ Ridership impacts, disaggregated by type of rider. In particular, LSC will compare the potential for additional new riders versus the impact of any service modifications on existing ridership.
- ♦ Financial characteristics including operating, capital and administrative costs as well as fares, charter, advertising, tax, and other revenues. Cost and revenue figures will be projected for each of the five years.
- ♦ Provisions for meeting elderly and disabled needs in general and the requirements of the ADA in particular.
- ♦ Institutional options, such as joint service with other jurisdictions, or public/private partnerships.

Each of these components will be incorporated into a cost-effectiveness analysis for the alternatives. The alternatives will also be evaluated based on the goals and objectives for transit service in the study area. At a minimum, the following alternatives will be assessed:

- ♦ Expansion in service area
- ♦ Route modifications to provide enhanced service in existing areas
- ♦ Eliminating or restructuring of service to areas with poor performance
- ♦ Changes in the hours of service
- ♦ Out of the area non-emergency medical service
- ♦ Senior focused transit services
- ♦ Review opportunities for increased coordination with regional transit providers and human service agencies
- ♦ In addition, a “status quo” alternative will be projected over the five-year study horizon to identify the impacts associated with maintaining current operations.

The alternatives will be developed after close consultation and coordination with LCTC staff. Alternatives will be refined from the conceptual level to better define operational systems in terms of their feasibility, level of service, rolling stock requirements, maintenance facilities, etcetera. Based upon the configuration and service quality of the alternative systems, forecasts of ridership will be prepared.

During this task, the Study Team will conduct the second round of focus group events, as outlined in Task 3.2.

Task 4.5: Inventory of Bus Stop Amenities and Prioritize Bus Stop Improvements

In a deviation from Task 4.5 in the RFP which asks the Consultant to “Validate and inventory all bus stop locations, including GPS coordinates and improvement needs”, LSC proposes instead to inventory the existing bus stop amenities and their condition, and to develop a prioritized list needed improvements. (Bus stop locations and coordinates have already been inventoried for the ETA STOP application used by LRB.) Specifically, LSC will complete the following for the inventory and recommendations:

- ♦ Identify stops with shelters, benches, and signs and note their condition
- ♦ Identify stops with the highest activity (in terms of daily boardings and alightings), and recommend appropriate amenities for those stops
- ♦ Identify stops with issues, including poor site distance, poor wheelchair access, poor visibility of signage, et cetera, and determine if cost-effective improvements can be implemented
- ♦ Create a list of the top 20 recommended bus stop improvements, including potential costs and potential funding sources. The information will be included as part of the five-year Capital Plan (Task 4.7).

Task 4.6: Develop a Five-Year Operating Plan

The results of Tasks 4.4 and 4.5 will be used to prepare a detailed five-year Operating Plan. This plan will identify which preferred service alternatives are recommended, as identified through the focus group input and meetings with LCTC and LRB staff. As needed, specific operating schedules will be developed, and service quantities (both in-service and deadhead) defined. Impacts on fleet size, driver scheduling and administrative/dispatch staffing will be identified.

Task 4.7: Analyze Capital Alternatives and Develop Five-Year Capital Plan

Based on the service alternatives evaluated in Task 4.4 and the recommendations for bus stop improvements in Task 4.5, the Consultant will outline a transit capital program for selected alternatives.

Specific elements of the capital recommendations will include:

- ♦ Fleet plan (for both replacement and expansion vehicles)
- ♦ Maintenance facility requirements
- ♦ Safety and Security elements
- ♦ Other capital elements (such as transit equipment, software upgrades, communications equipment, and office facilities)
- ♦ A prioritized list of bus stop improvements (from Task 4.6)

The resulting capital requirements will be projected over a five-year span, with the exception of the fleet replacement plan which will be for a ten-year horizon. Costs and appropriate funding sources will also be identified.

Task 4.8: Analyze Financial Alternatives and Develop Cost Projections

Both the operating and capital recommendations will be used to forecast future financial requirements. These requirements will then be used to make final recommendations regarding financial strategies. The forecast changes in operating costs, future capital requirements, and changes in financial resources will all be input into a spreadsheet-based, year-by-year financial forecast for the system. Through an iterative process, differing capital and service improvement plans can be evaluated to ensure that an adequate funding balance is maintained through the life of the plan. This task will result in a financial plan that includes analyses of revenue and expenditures for the plan period.

To effectively develop a reliable Financial Plan, it is necessary to identify future funding sources for the planned operating and capital alternatives developed in Task 4.5 through 4.7. The consultant will develop five-year cash flow projections to match the recommended service alternatives and their capital elements.

In coordination with the LCTC staff, the consultant will prepare a list of funding source assumptions for the following:

- ♦ Passenger Fares
- ♦ Local and state revenues
- ♦ Federal and state transit grants
- ♦ Operating Cost projections from Task 4.5 and 4.6

- ♦ Capital Cost projections from Task 4.7

**DOCUMENTATION /
DELIVERABLE:**

Tasks 4.4 to 4.8 will result in the preparation of the second working document Technical Memorandum Two. This document will be submitted and presented to LCTC staff for comment and review, and will be revised as necessary based on feedback.

TASK 5.0: Marketing Analysis and Strategies

Marketing is critical to changing the way people travel. Route and schedule changes, introduction of new services and other changes must be communicated to bring about awareness and ridership. In Lassen County, where transit attracts commuters, recreationists, seniors, students and those dependent on transit, the branding and marketing of alternative transportation services allows residents and visitors more travel options. Effective transit marketing elevates the public's perception of the transit system, thereby making transit a more attractive travel mode and maximizing ridership.

Task 5.1: Identify Target Markets and Develop Marketing Objectives and Policies

The first step is to identify the target markets in the Lassen Rural Bus service area. Activities under this subtask will go hand in hand with the public outreach efforts (Task 3.0). The information gleaned from the surveys and focus groups play a key role in the understanding of who is (and isn't) using public transit and why, and what the needs and desires are of various population groups. These "target markets" include types of passenger, trip purpose, and origin/destination, and are determined by reviewing a wide variety of information / data, including:

- ♦ General population and employment data, including projections
- ♦ Demographic data, such as transit dependent populations
- ♦ Locations of key activity centers in the Study Area
- ♦ Travel patterns and traffic model data
- ♦ Visitor use

The identified target markets will drive the development of tailored marketing objectives for each rider group as well as policies for Lassen Rural Bus. The first step will be to identify an overall goal for the system marketing, as well as customized goals and outputs for the targeted audiences. This provides the Study Team with a clear purpose and focus in working with LRB and LCTC staff to develop a set of objectives and policies aimed at improving service, bringing awareness to the system, increasing / expanding ridership, and improving the customer experience. In other words, it strives to get people out of their cars and onto transit.

Task 5.2: Conduct Market Analysis

The market analysis will shed light on what markets are and are not being served with the current transit program. The results from the transit demand analysis (Task 4.3) are an important component of the market analysis to fully understand what markets have the greatest needs and how they can be addressed.

During this task, the Study Team will expand on the transit demand analysis and analyze the transit propensity of certain target markets (or populations). A transit needs index will be developed, which takes into consideration various demographic and socioeconomic attributes and assigns a weighted figure. This

information will be cross referenced with the Census Tract data and mapped to help located where the populations with a higher propensity to use transit are located. From there, we can determine if they are being served currently, or if there is the potential for service and how best to craft the marketing message for each group.

Task 5.3: Develop Marketing Strategies

The Study Team will review current marketing efforts and make recommendations for future marketing, particularly as it relates to any new or changed services. These strategies will build upon the goals and objectives outlined in Task 5.2, and will be used to address the target markets identified earlier. The effectiveness of existing marketing strategies will be reviewed with staff and compared against industry standards. Potentially new marketing programs and social media strategies will be evaluated in light of local community characteristics. The recommendations will include prioritization, so that the most cost-effective marketing efforts can be implemented first.

The marketing strategies will focus on three key concepts:

1. The level of advertising and customer service employed by LRB.
2. The branding of LRB and the information it provides to passengers, including LRB logos on materials and buses, bus stop signage, agency website content and transit technologies (i.e. ETA SPOT and Google Transit), and other materials such as rider guides.
3. The public outreach efforts of LRB to engage the community in transit development activities.

The components of each marketing strategy will be developed to engage people and communities in understanding transit as a travel resource.

Task 5.4: Conduct Workshop with LCTC Staff

Branding and marketing transit is rooted in respect and collaboration. The key component in creating a successful marketing campaign is working with the people who know a place best. The act of public engagement is the first step in building excitement about a region's resources and destinations. As discussed under Task 3.5, the Study Team will facilitate a workshop session with LCTC staff focusing on marketing strategies (Task 5.3) and the potential marketing tools to implement the Marketing Plan. Using the workshop for both marketing and service alternative options allows us to make more efficient use of time and resources, and to work on multiple tasks concurrently.

Task 5.5: Develop Marketing Tool Kit

LSC will identify specific marketing pieces and strategies that are warranted based upon the results of the surveys, public input and workshop. From this, a marketing budget and implementation plan will be identified. Not that, as LSC is not a graphics firm, specific new graphic images or logos are not included in our proposed scope.

DOCUMENTATION / DELIVERABLE:

This task will result in the preparation of the third interim working document, Technical Memorandum Three, which will focus on the Marketing Strategies for LRB. This document will be submitted to the LCTC staff for review and comment.

TASK 6.0: Draft and Final TDP Plan and Marketing Plan

Task 6.1: Develop the Draft and Final Transit Development Plan

After the completion of Task 4.0, the first two technical memoranda (revised to incorporate any comments throughout the process) will be combined to prepare an administrative *Draft Transit Development Plan*. This document will include the five-year plans for the operations, financial and capital alternative components, as well as a policy section discussing management / institutional options for Lassen Rural Bus. The *Draft* document will be submitted electronically to the LCTC staff. After internal review, comments received during this process will be made and incorporated into a public *Draft Transit Development Plan*, which will be distributed to the LCTC and the public for review. The LCTC will receive either electronic or hard copies, at their preference. For public review, the report will be posted on the LCTC and/or LSC website, with a hard copy available in the Public Library or other venue.

Once the *Draft Transit Development Plan* has been reviewed by the LCTC, LCTC staff and the public, comments will be addressed and the document will be revised as necessary. This will become the *Final Transit Development Plan*.

Task 6.2: Develop the Draft and Final Marketing Plan

In conjunction with the *Draft Transit Development Plan*, the Study Team will prepare a *Draft Marketing Plan* for review. This document will incorporate comments received from staff after review of *Technical Memorandum Three* (Task 5.0). Once the *Draft* document has been reviewed by LCTC staff, any further revisions will be made and included as part of the *Final Marketing Plan*.

Task 6.3: Present the Draft and Final TDP and Marketing Plan

The Draft TDP and Draft Marketing Plan will be presented to the LCTC Board for discussion and comments. After a review period, the comments will be addressed and incorporated into the Final TDP and Marketing Plan, as appropriate. The Final TDP and Marketing Plan will then be presented to the LCTC Board for adoption.

DOCUMENTATION / DELIVERABLE:

The results of this task will include the Draft and Final versions of both the TDP and the Marketing Plan. The Draft and Final reports will be presented to the LCTC Board.

Project Management

The LSC Team will approach this study from an objective and realistic viewpoint, for it is our intention that only the most useful transit plan be developed. The LSC Team will be available on an “on-call” basis throughout the project and will work from our Tahoe City office directly with the LCTC staff to ensure that all work tasks are completely addressed.

The LSC Team will make use of all the latest available planning, land use, and socioeconomic information, including data from the U.S. Census (including the Longitudinal Employer-Household Dynamics database) and the California Department of Finance Demographics Unit, among others. The LSC Team will ensure that each task in the work program is accomplished through the practical and systematic evaluation of existing conditions, identification of realistic service alternatives, and development of sound programs for future transit improvements. Throughout the project, the LSC Team will utilize all available sources and references in order to consider the state-of-the-art in transit service innovations and the latest policy developments, including Federal Transit Administration (FTA) policies and regulations.

LSC will prepare a detailed study for use by Lassen Rural Bus and LCTC staff for planning of transit services in Lassen County. The study efforts will be carefully coordinated by the LSC Team to ensure that realistic and useful products are provided to residents of the area. Technical memoranda detailing various portions of the study will be submitted to LCTC staff in order to allow continual review of study progress, while the draft and final plans will be presented to the LCTC Board.

Consultant Team

LSC will bring to the TDP a Study Team consisting of experienced transit and transportation planners. LSC’s Team will function in a complementary manner with local staff to accomplish the transportation study in a timely manner, responsive to locally formulated goals and objectives. Key team members will not be removed or reassigned without the prior approval of the LCTC staff. Proposed members of the Consultant Team are introduced below.

LSC TRANSPORTATION CONSULTANTS, INC.

Principal-In-Charge – Gordon R. Shaw, P.E., AICP, a Principal of LSC, will serve as the Principal-In-Charge for the Transit Development Plan and Marketing Plan for the Lassen County Transportation Commission. He will be responsible for schedule and budget control, providing oversight in all aspects of the project, and contributing his expertise in development of the alternatives and review of all study products. Mr. Shaw has nearly 30 years of transportation engineering and planning experience throughout the West. He holds a B.S. degree in Civil Engineering from Purdue University, as well as M.S. and Engineer degrees from Stanford University, is a registered Professional Engineer in Utah, California, Nevada, and Colorado, and is also a member of the American Institute of Certified Planners. He has conducted over 100 transit studies throughout the American West, including studies for over a dozen rural counties in California.

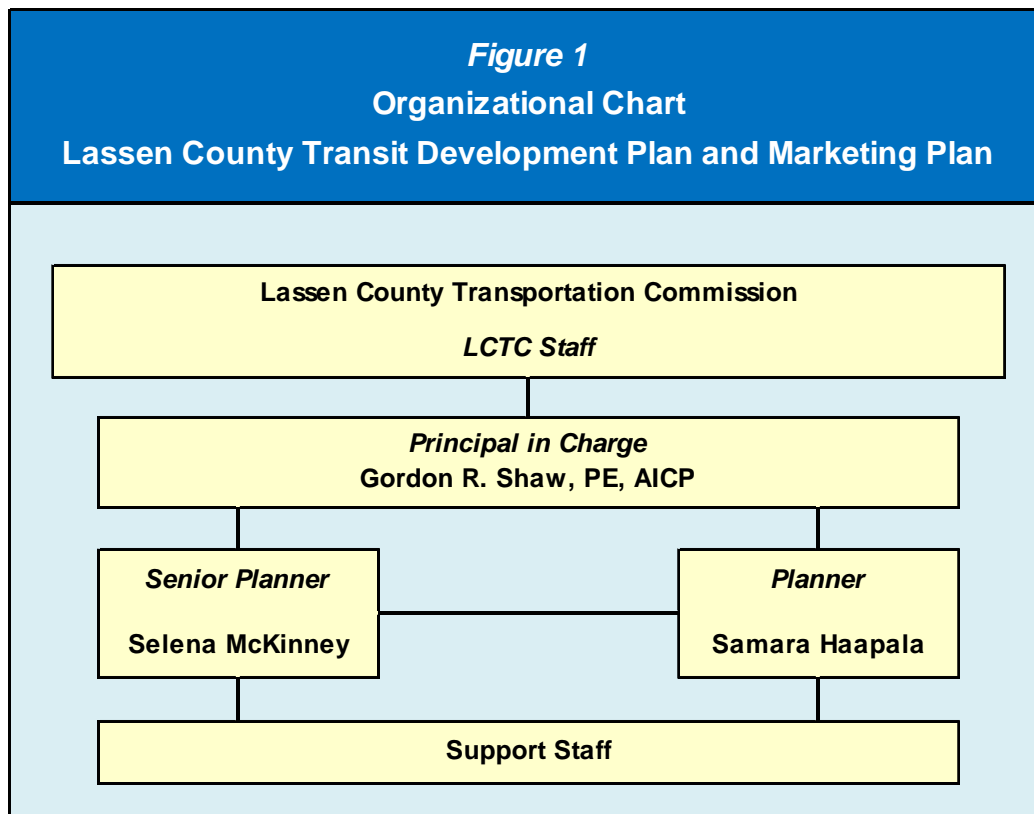
Project Planner – Selena McKinney, Transportation Planner with LSC since 1991, will serve as the Project Planner for the study. She will be responsible for substantial portions of the Work Program,

including report preparation and public participation efforts, as well as serve as the liaison with local staff. Ms. McKinney has developed various short- and long-range transit plans for Lassen County, Lake County, Del Norte County, El Dorado County, Kings County, and Western Nevada County, California, among many others, as well as for clients in Utah and Colorado. She is currently completing a survey study in the City of Lompoc to identify target markets for improving transit ridership, as well as a TDP for Western Nevada County. She holds a Bachelor of Science in Natural Resource Planning from Humboldt State University. Ms. McKinney works from her home office in Fair Oaks, California. With family in Susanville, she is very familiar with the area.

Planner – Samara Haapala, Transportation Planner with LSC since 2015, will serve as a Planner for the study. She will collect, compile, and analyze demographic data and assist in the analyses of existing conditions. While with LSC, Ms. Haapala has worked on transit plans for Inyo/Mono Counties, San Luis Obispo, the San Luis Obispo Regional Transit Authority, the Tahoe Region, and for the rural portions of Placer County, as well as for design of a transit center in Lake County, California. She holds a B.S. in Environmental Science and Political Science from Santa Clara University.

Other Project Staff – In addition to the key study personnel identified above, LSC will provide the clerical staff and graphics needed to conduct the study from our Tahoe City office. If study schedule requirements indicate a need for additional professional personnel, LSC will draw (at no additional cost to the client) on staff members in our Colorado Springs office.

An organizational chart is displayed below and full resumes of the LSC Transportation Consultants Study Team are presented in the Appendix.



Project Schedule

LSC is prepared to begin this study immediately upon approval and the signing of a contract. As presented in Table 1, LSC proposes a schedule that calls for an intensive data-gathering effort in the first six weeks of the study, maximizing the time available for system evaluation in the latter stages of the effort. Our ability to assign several staff members to this project will allow several tasks to take place concurrently. The schedule would provide for completion of the study within a fast-paced 6-month time frame, with final products delivered no later than December 31, 2016.

The schedule proposed in Table 1 is based on completion of all tasks identified in the table and timely reviews by LCTC staff. If, for any reason, local requirements dictate a different schedule for completion, we would be pleased to discuss these needs and make the necessary adjustments to our schedule.

Project Cost

Labor requirements and detailed cost estimates have been developed for the study Work Plan. We have estimated the cost of the original scope of work for the Feasibility Study at \$62,930, as shown in Table 2. Of this total, \$60,230 is needed for professional fees, while the remaining \$2,700 is necessary to cover travel, copying, delivery, translation services and phone charges. We believe this level of funding is realistic based upon the scope of services and the level of effort called for in the Work Plan and due to the need for on-site public outreach efforts. Our understanding of transit and transportation issues in the study area will allow us to focus study resources on the pertinent public input, alternatives analyses and plan preparation tasks. This proposal is a firm offer for 90 days subsequent to the deadline for submission.

TABLE 1: Proposed Schedule

Transit Development Plan and Marketing Plan for Lassen County

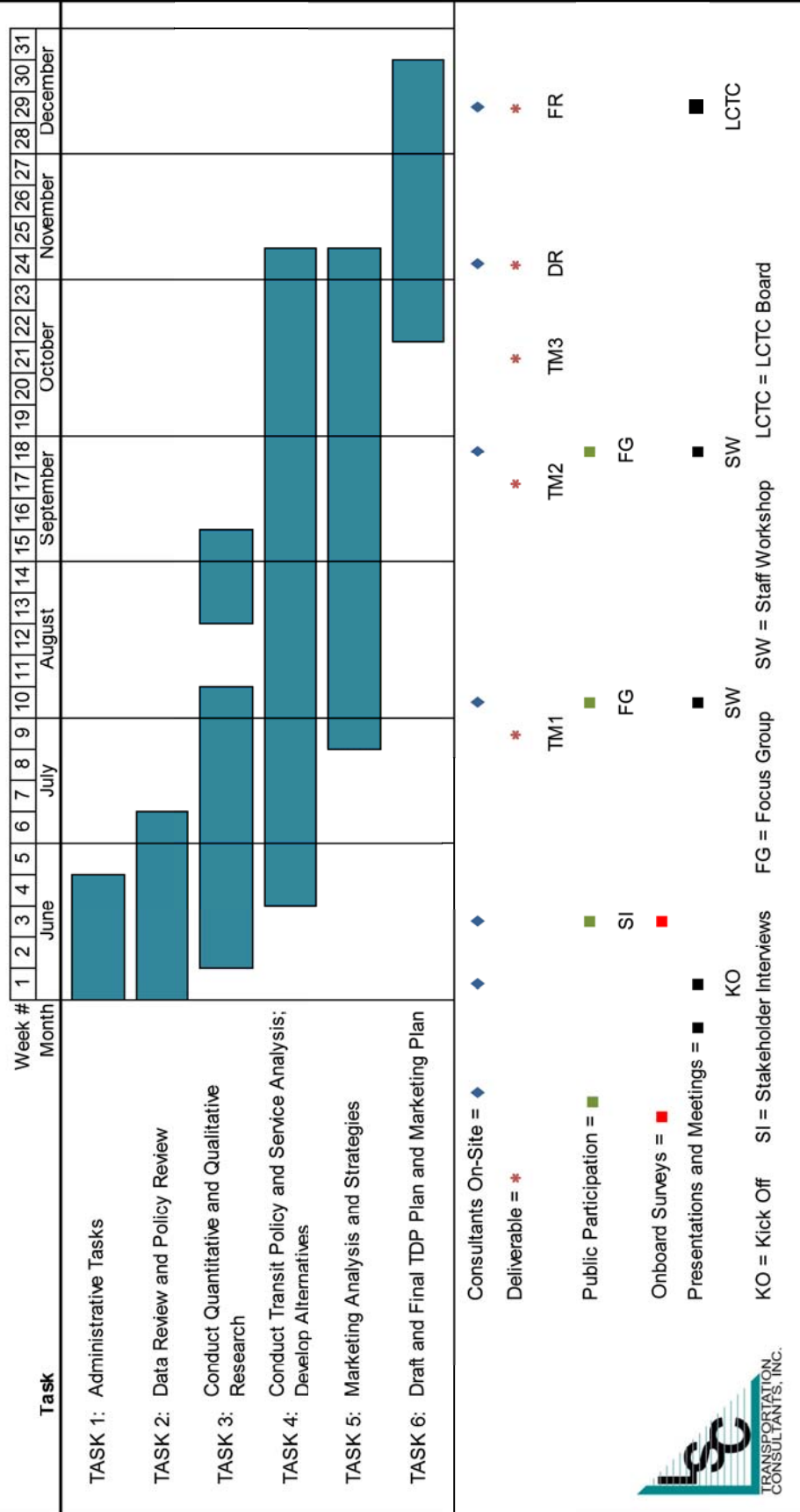



TABLE 2: Fee Schedule**Transit Development Plan and Marketing Plan for Lassen County**

Task	Personnel and Hourly Rates							Total Hours	Total Cost
	Principal-In Charge Shaw	Senior Planner McKinney		Planner Haapala	Graphics Support	Clerical Support			
		\$190	\$110				\$95		
	Total Cost Per Hour								
TASK 1: Administrative Tasks	8	8	0	0	4	20	\$2,640		
TASK 2: Data Review and Policy Review	4	16	20	0	8	48	\$4,900		
TASK 3: Conduct Quantitative and Qualitative Research	8	60	24	16	28	136	\$13,120		
TASK 4: Conduct Transit Policy and Service Analysis; Develop Alternatives	40	80	24	20	16	180	\$20,940		
TASK 5: Marketing Analysis and Strategies	16	36	8	4	8	72	\$8,500		
TASK 6: Draft and Final TDP Plan and Marketing Plan	20	36	8	10	16	90	\$10,130		
Total Hours	96	236	84	50	80	546			
Total Personnel Cost	\$18,240	\$25,960	\$7,980	\$3,250	\$4,800		\$60,230		
LSC Additional Expenses									
Travel (Mileage)							\$2,000		
Printing/Copying							\$300		
Advertising							\$200		
Phone/Postage/Delivery							\$200		
Subtotal: Other Expenses							\$2,700		
Total Study Costs							\$62,930		



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CONSULTANTS, INC.



Related Experience and References

LSC has developed extensive experience in the field of public transit planning, focusing on the development of short-range transit plans and transit development plans for rural and small urban areas.

Our work preparing plans for similar transit services has provided us with a very good understanding of how to accurately forecast potential ridership, how to develop effective and efficient service plans, and how to define effective capital and financial strategies. In particular, the Study Team's transit planning experience in Lassen County will be instrumental in preparing a comprehensive, thorough and realistic plan for Lassen Rural Bus.

LSC has extensive experience preparing transit studies nationwide and throughout California, as can be seen in Figures 2 and 3.



YUBA-SUTTER TRANSIT AUTHORITY SHORT RANGE TRANSIT PLAN UPDATE

PROJECT/LOCATION

Yuba and Sutter Counties, California

CLIENT

Yuba Sutter Transit Authority
2100 B Street
Marysville, CA 95901

PROJECT MANAGER

Gordon Shaw

CONTRACT AMOUNT

\$95,350

DATE

2014-current

REFERENCES

Keith Martin, Executive Director
Yuba Sutter Transit Authority
keith@yubasuttertransit.com
530-634-6880



Public transportation in Yuba and Sutter County is currently provided by the Yuba-Sutter Transit Authority (Yuba-Sutter Transit), a joint powers agency comprised of the Yuba and Sutter Counties and the cities of Marysville, Yuba City, Live Oak and Wheatland. Yuba-Sutter Transit provides local fixed route, dial-a-ride and commuter service. The transit program has grown from 96,400 passenger trips in 1979 to 1,279,600 in 2013. While this ridership growth has resulted in increased service efficiency, the system is not without growing pains. The transit program serves a high number of students, low-income individuals, program-based trips, and senior citizens. The demand for dial-a-ride continues to increase, and on-time performance is poor on all local routes. Furthermore, funding for the transit program comes from multiple jurisdictions involving complicated allocations, and the capital needs of this 51-bus system are substantial.

To address these issues, LSC Transportation Consultants has been retained by Yuba-Sutter Transit to conduct the 2015 Short Range Transit Plan. LSC has collected extensive data on the community and has evaluated the performance of the transit program. The study includes extensive outreach efforts as well, through onboard surveys, online surveys and stakeholder interviews, as well as several community meetings. LSC is evaluating the need for transit service within the area, and will develop service strategies to improve overall efficiency, and better serve the community. A focus of this work will be expansion of services to a newly opened Yuba College campus, including development of a funding mechanism, as well as establishing guidelines for dial-a-ride services to ensure the service is provided to those who most need it. This Short Range Transit Plan is slated for completion in March, 2015.



GLENN TRANSIT SERVICES SHORT RANGE TRANSIT PLAN

PROJECT/LOCATION

Glenn County, California

CLIENT

Glenn County Planning &
Public Works Agency
P.O Box 1070
Willows, CA 95988



PROJECT MANAGER

Selena McKinney

DATE

2013-14

REFERENCE

Mardy Thomas
Glenn County Planning & Public Works Agency
530 • 934-6540
mthomas@countyofglenn.net

Glenn Transit Services operates Glenn Ride intercity service, local Dial-a-Ride service and a volunteer medical transportation program, serving rural Glenn County as well as providing commuter service to Chico. LSC Transportation Consultants, Inc. developed a Short Range Transit Plan for Glenn Transit. The scope of work included analysis of existing services, public input workshops, onboard passenger surveys, financial analysis, and the development of detailed service, capital, management, and financial plans.

Our approach was to thoroughly evaluate existing transportation services to determine the strengths and opportunities for the transit system, while also determining weaknesses so that they may be addressed. We prepared detailed service, capital, and financial plans to ensure that the transit program is carefully tailored to the needs of Glenn County residents and is financially feasible. The plan included revisions to commuter service to reduce travel times, enhance service in Chico, and add additional runs. Additionally, the plan increases dial-a-ride. Another element of the SRTP was a capital improvement program, including a new bus facility, retirement of an outdated fleet, and replacement of appropriately sized vehicles. The financial plan, which included existing sources of revenue plus a small fare increase, will result in a strong capital reserve fund.



SAN LUIS OBISPO JOINT SHORT RANGE TRANSIT PLANS

PROJECT/LOCATION

San Luis Obispo, California

CLIENT

San Luis Obispo Regional Transit Authority

PROJECT MANAGER

Gordon Shaw

CONTRACT AMOUNT

\$163,012.00

DATE

Feb 2015 - Current

REFERENCE

Geoff Straw, Executive Director
805-781-4465
gstrow@slorta.org



Using funds provided through the San Luis Obispo Council of Governments, LSC was selected (with AECOM as a subcontractor) to conduct joint Short Range Transit Plans for the San Luis Obispo Regional Transit Authority as well as the City of San Luis Obispo's SLO Transit system. Together, these two systems serve over 1.8 million passenger boardings per year, including ridership generated by the California Polytechnic University. Our work included the following:

- Onboard surveys of all routes and services, including passenger perception surveys and transfer surveys.
- Performance review of all services
- Cost and ridership analysis of a wide range of service alternatives, capital alternatives, and management alternatives.
- Detailed evaluation of the regional Runabout paratransit program, and management strategies to control operating costs.
- Specific evaluation of means to better coordinate the two transit services, including schedule revisions, route revisions, shared goals/objectives/standards and fare alignment.

The resulting plans include an expansion of Express Service on the RTA system, and a wholesale route realignment of the SLO Transit program to focus services on high-demand areas. The two plans are currently scheduled for final adoption in May 2015.



KINGS COUNTY TRANSIT DEVELOPMENT PLAN

PROJECT/LOCATION

Kings County, California

CLIENT

Kings County Association of Governments
339 West D Street, Suite B
Lemoore, CA 93245

PROJECT MANAGER

Selena McKinney

DATE

2014-15

REFERENCES

Angie Dow, Executive Director
Kings Area Rural Transit
629 Davis Street, Hanford, CA
559-852-2692
angie.dow@co.kings.ca.us

Teresa Nickell, Regional Planner
Kings County Association of Governments
339 W. D Street, Suite B
Lemoore, CA 93245
559.852.2657
Teresa.Nickell@co.kings.ca.us



Kings County Area Public Agency (KCAPTA) is a Joint Powers Authority (JPA) formed between Kings County and the Cities of Hanford, Lemoore, and Avenal. KCAPTA oversees the operations of the Kings Area Rural Transit (KART) system and allocates funding to KART and the Corcoran Area Transit (CAT) operating out of Corcoran). KCAPTA retained LSC to conduct a Transit Development Plan focusing on both public transit operators. The plan included an overview of community conditions, in-depth analyses of the existing services (including onboard surveys), service recommendations for both transit programs, and detailed capital and financial plans.

KART operates local fixed-route services in the cities of Hanford and Lemoore, and County routes from Hanford to Avenal, Corcoran, Fresno, Laton, Lemoore Naval Station, Fresno and Visalia, as well as ADA Dial-a-Ride service in Hanford and Lemoore. One of the focuses of the plan was to identify more efficient routing to address on-time performance issues and to maximize ridership.

Corcoran Area Transit (CAT) is a general public curb-to-curb Dial-a-Ride service in Corcoran. The ridership is primarily senior citizens and grade-school to high school students. The plan evaluated and recommended implementing fixed-route service to better serve the community.

Figure 2
LSC National Transit Studies
1992-2015

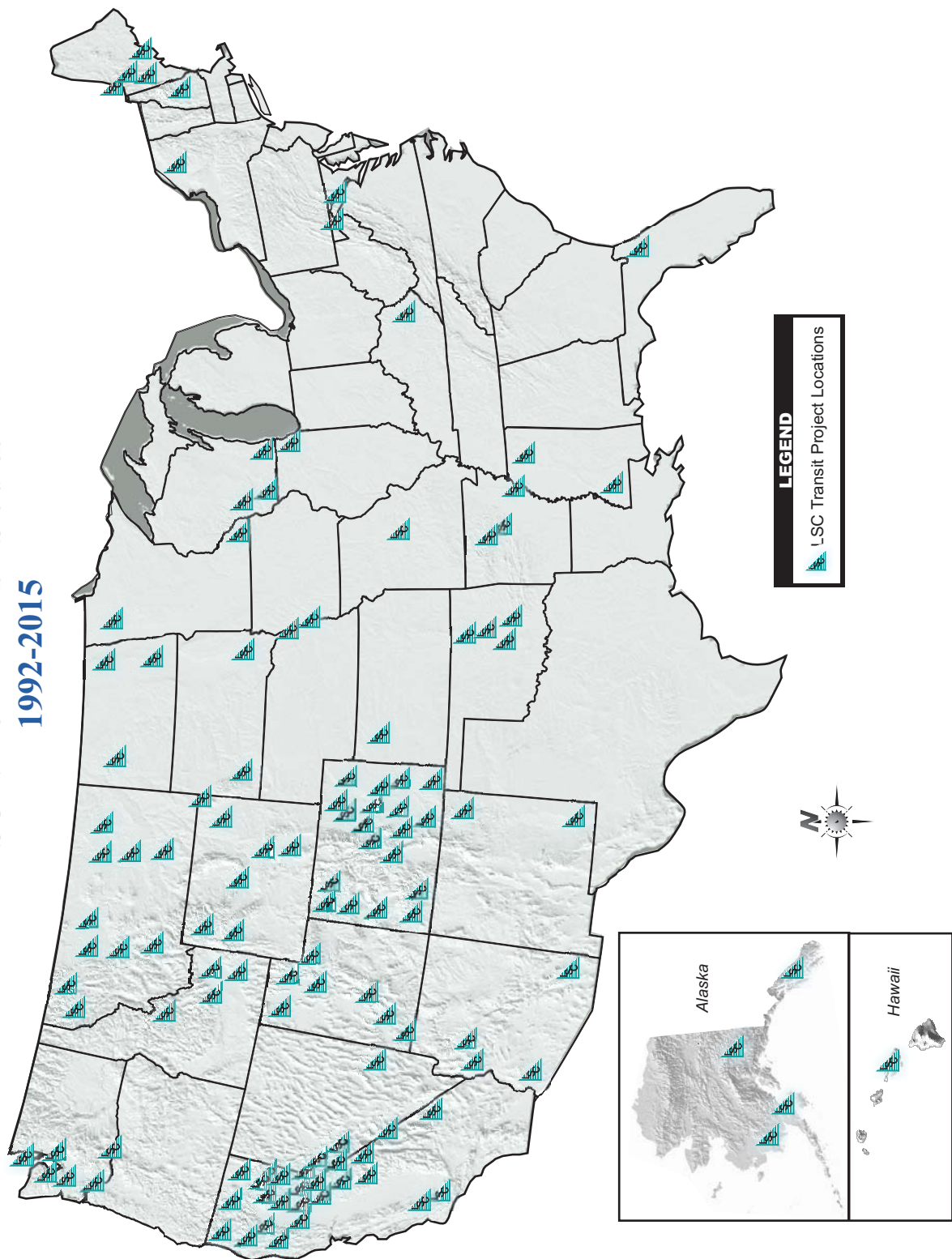


Figure 3
**LSC California Transit Studies
 1992-2015**



Gordon Shaw, PE, AICP

Principal



EDUCATION

Engineer's Degree in Civil Engineering – Stanford University
Master of Science in Infrastructure Planning – Stanford University
Bachelor of Science in Civil Engineering – Purdue University

PROFESSIONAL REGISTRATIONS

Registered Professional Engineer in California, Colorado,
Nevada, and Utah

PROFESSIONAL MEMBERSHIPS

American Institute of Certified Planners (AICP)
Institute of Transportation Engineers (ITE)
American Planning Association (APA)

PROJECT EXPERIENCE

Transportation Planning Studies

- Long-range transportation plan for Park City, Utah
- Comprehensive transportation planning study of the Lake Tahoe Basin
- Transportation alternatives and environmental assessment for Yosemite National Park
- Assessments of need and location for potential freeway improvements in the Denver area
- Traffic/transit/pedestrian study for the City of Aspen and Pitkin County, Colorado
- Traffic calming study for Park City, Utah
- Community-wide transportation study for Murphys, California
- Circulation study for Weaverville, California

Transit Planning Studies

- Aspen, Colorado
- Carson City, Nevada
- Durango, Colorado
- El Dorado County, California
- Folsom, California
- Grand Forks, North Dakota
- Grand Junction, Colorado
- Great Falls, Montana
- Greeley, Colorado
- Inyo County, California
- Jackson, Wyoming
- Kodiak, Alaska
- Lake Havasu/Bullhead City, Arizona
- Lassen County, California
- Leadville, Colorado
- Lexington, Kentucky

Gordon Shaw is a Principal of LSC Transportation Consultants, Inc. and generally serves as the Project Manager for studies conducted out of the Tahoe City, California office. Mr. Shaw has over 30 years of experience conducting traffic and transportation studies throughout the western United States. He has conducted over 300 transportation studies for both public and private clients, including traffic engineering studies, traffic model and simulation analyses, transit planning studies, parking analyses, transit facility designs, and bicycle/pedestrian studies.

Mr. Shaw holds an Engineer's Degree in Civil Engineering from Stanford University, a M.S. in Infrastructure Planning from Stanford University, and a B.S. in Civil Engineering from Purdue University.

**TRANSPORTATION
PLANNING AND
TRAFFIC
ENGINEERING
CONSULTANTS**

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Tahoe City, CA 96145
530 • 583-4053



**TRANSPORTATION
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Transit Planning Studies

- Mammoth Lakes, California
- Nevada County, California
- Pitkin/Garfield Counties, Colorado
- Placer County, California
- Pocatello, Idaho
- Pueblo, Colorado
- Rapid City, South Dakota
- Redding, California
- Roseville, California
- Sierra Vista, Arizona
- Sioux Falls, South Dakota
- Siskiyou County, California
- Sitka, Alaska
- Snowmass Village, Colorado
- South Lake Tahoe, California
- Steamboat Springs, Colorado
- Summit County, Colorado
- Tahoe Basin, California/Nevada
- Vacaville, California
- Yuba/Sutter Counties, California
- Yuma, Arizona

Other Transit Planning Activities

- Plans for specialized transit systems providing service to the elderly and disabled of Weld County, El Paso, and Pueblo Counties in Colorado
- Statewide, specialized transit needs assessment for the Arkansas Governor's Office
- Conducted transit training workshops for conferences
- Part of the team that conducted the Transit Cooperative Research Project B-3 for the Transportation Research Board, developing an improved methodology for determining the demand for public transit systems in rural areas

Environmental Impact Statements/Environmental Impact Reports

- Logan, Utah
- Park City, Utah
- Placer County, California
- South Lake Tahoe, California
- Tahoe City, California
- Truckee, California
- Washoe County, Nevada
- Yosemite National Park, California

Preliminary Engineering Studies

- Bikeway design, Greeley, Colorado and Tahoe City, California
- Busway design, Aspen, Colorado
- Interchange design, Arapahoe County, Colorado and Truckee, California
- Park-and-Ride lot design, Pitkin and Eagle Counties, Colorado
- Roundabout design, Park City, Utah and Truckee, California



Selena McKinney



Selena McKinney is currently a Senior Planner with LSC. She originally joined LSC as a transit planner between 1990 until 1993, and rejoined the firm in 2005 after working on a contract basis in the interim. The focus of her work has been in conducting transit plans for fixed route transit systems in rural and small urban areas. Over the past decade, she has been Project Manager for Short Range Transit Plans and Transit Development Plans for more than a dozen cities and counties, primarily in California, but also in Nevada, Utah and Colorado. Ms. McKinney has extensive experience in all aspects of developing a transit plan, from needs assessment, transit system analysis, operations analysis, operations planning, capital planning, and financial analysis.

EDUCATION

Bachelor of Science in Natural Resource Planning –
Humboldt State University

PROJECT EXPERIENCE

Ms. McKinney has conducted a number of survey projects using onboard surveying, online surveying, and community outreach and telephone surveys. The survey studies have been conducted in conjunction with Short Range Transit Plans/Transit Development Plans, or as stand-alone studies. Stand-alone survey projects were conducted for North San Luis Obispo County and El Dorado County in California, and winter and summer surveys for Park City Transit in Utah. Ms. McKinney has developed numerous survey instruments designed to meet the clients' needs, which include tools for collecting data on passenger demographics, travel patterns, customer satisfaction, transit dependency, and desired improvements. The survey results have been used to design service improvements, address customer service concerns, adjust fare structures, and strengthen marketing. Survey efforts have included development of the original survey instrument, scheduling the surveys, hiring temporary survey staff, training surveyors, overseeing survey efforts, setting up and supervising data entry, and generating comprehensive reports of the methodology and results.

Ms. McKinney also has experience in assessing passenger facility needs. After assisting in passenger facilities development plans for Lake County and El Dorado County, Ms. McKinney was Project Manager for a Passenger Facilities Development Plan for Del Norte County. This project included an on-site analysis of bus stop amenities for Redwood Coast Transit, and developed a list of recommended improvements which prioritized safety and accessibility.

Previous to her employment with LSC, Ms. McKinney prepared an environmental impact statement for a fire-recovery project as a U.S. Forest Service employee in 1989. From 1985 to 1987 she served as an Assistant Planner in the long range planning division of the Tahoe Regional Planning Agency, where she maintained a computerized parcel-by parcel database, provided support for planning documents and project review, and helped to develop regulations for transfer of development rights.

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Samara Haapala



EDUCATION

Bachelor of Science in
Environmental Science and Political Science
Minor in Biology
Santa Clara University, Santa Clara, CA

PROJECT EXPERIENCE

Key projects that Ms. Haapala has focused on include the Eastern Sierra Short Range Transit Plan, the Placer County Rural Transit Study, and the joint San Luis Obispo City/County Transit Study.

Samara Haapala joined LSC Transportation Consultants, Inc. in 2015 as a Transportation Planner in the Tahoe City, California office. With LSC, she has assisted in data collection and analysis for transit services in San Luis Obispo, Inyo County, Mono County, and Placer County.

In addition to her coursework at Santa Clara University, Ms. Haapala held an internship position for a technology supply company in Santa Clara. Her training included the comprehension of numerous scientific meters and methods in order to conduct radiation, chemical sampling, noise, and air quality surveys; and, to synthesize the data into conclusive scientific reports. She was responsible for updating the corporate Environmental Health and Safety database and ensuring government standards were maintained through tracking and correspondence with state and federal agencies.

Prior to joining LSC, Ms. Haapala served as a Case Clerk for a law firm in the San Francisco Bay Area. Her previous work included analysis of financial documents and medical records to draft litigation claims that were submitted to Settlement administrators for review. Ms. Haapala maintained team organization through tracking deadlines, ordering client records, and managing Excel spreadsheets and Access databases.

Ms. Haapala has strong research and technical writing skills and is experienced in performing with Microsoft Excel, Access, ArcGIS, and SPSS software.

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