

ASSESSMENT OF NEEDS OF GROVELAND, CALIFORNIA RESIDENTS

An Interactive Qualifying Project Report

submitted to the Faculty

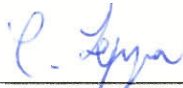
of the

WORCESTER POLYTECHNIC INSTITUTE


in partial fulfillment of the requirements for the

Degree of Bachelor of Science

by



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Date: October 25, 2002

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ACKNOWLEDGEMENTS

We would like to thank the following people who not only contributed immensely to this project, but also to facilitating the stay in Groveland.

Professor Denise W. Nicoletti

Professor John A. Orr

Barbara Broad

Kathy Seaton

Dodie Heiny

Mary Kelly

John and Jane Dees

Cory and Jan Norton

Steve Welch

Keith Zenobia

Peter Barsotti

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ABSTRACT

This project was initiated to research the Groveland, California community and, based on the interests of the community's residents, make recommendations to the Groveland Area Involved Neighbors (GAINs), a local community collaborative, as to where to concentrate their efforts. By conducting focus groups with town officials, resident interviews, a high school survey, and a resident survey, the community's interests were targeted. Now, GAINs will take action based on the conclusions and recommendations from the project.

EXECUTIVE SUMMARY

This project was done to collect the opinions and interests of the residents of the small community of Groveland, California. On the basis of the results from this project, recommendations were made to the local community collaborative, the Groveland Area Involved Neighbors (GAINs), on how to proceed.

Groveland, which is part of Tuolumne County, is located approximately three hours drive from the San Francisco Bay Area, just 26 miles west of the main entrance to Yosemite National Park. Groveland and its nearby communities Big Oak Flat, Moccasin, Buck Meadows, Coulterville and Greeley Hill account for more than 7,000 of Tuolumne County's 53,000 residents. Experiencing two major gold rushes, Groveland is part of California's history. Until the early 1990's the timber industry used to be a major employer within the Groveland area. However, with the protection of the spotted owl, this industry quickly declined. These days, Groveland and its nearby communities mostly depend on tourism and retirees.

Representatives from 38 community, school, and county government groups founded the project's sponsor, GAINs, in July of 2000. Its purpose is to combine efforts toward initiating community planning activities and, eventually, community projects. As a community collaborative, GAINs is eligible for applying for community, state and federal funding for their projects. However, GAINs needs to demonstrate that it acts as a representative of the community, meaning that it pursues the interests of the Groveland area residents. This is the reason why GAINs decided to sponsor an Interactive Qualifying Project targeted at assessing the needs and interests of the Groveland area residents.

The objective of this Interactive Qualifying Project was to understand, analyze, and support the urban development of the Groveland, California community. The major information collection instrument that was used for this purpose was a one-page survey that was distributed to 3,820 households within Groveland and its nearby communities. Furthermore, a separate survey was administered to the students of a local high school, panel discussions were held with different focus groups and interviews were conducted at a local grocery store as well as the main street through the town.

Some of the topics targeted by the two surveys included the redevelopment and renewal of city neighborhoods, the rehabilitation of historic places and buildings, the demographic policies and community facilities as well as community services planning, and land use planning. The surveys also attempted to understand the fundamental needs of the Groveland community, so that it will be possible to address some of the biggest deficits.

One of the goals was to find the methods to achieve the betterment of the community. The Groveland community could actively pursue growth, expansion, renovation, tourism and medical services, for example. To perform these expansions and developments, funding is needed. As a community collaborative, GAINs has the option of applying for federal funding, of which it will most likely take advantage. One of the goals of the two surveys was to see if the application for federal funding is justified and needed, and whether the entire community will benefit from it, providing the funding is received.

The surveys' objective was not to simply back Groveland's funding request, but to justify the needs, in which case the survey results will most likely be used in conjunction with the funding application. Should the funding be received, the results can also be used as a reference and a guideline for future development.

The surveys were developed in conjunction with input received from several Groveland officials. This fact assured that the surveys would assess the needs and interests of the Groveland area residents in a most precise and effective manner. Furthermore, the main survey was distributed on a very large scale giving a very large percentage of the Groveland area residents the opportunity to voice their opinion and possibly influence the future development of the Groveland area.

The student survey was completed by 75 out of 127 students. The results of the student survey suggest the clear-cut need for the creation of new activities and facilities for teenagers within the Groveland area. More than 50% of the student survey respondents report feeling bored on a daily basis, another 19% feel bored more than twice a week. Respondents of the student survey rated Groveland's youth center as poor and the quality and quantity of activities offered for teenagers within the Groveland area as very poor. On the basis of these results, GAINs is recommended to apply for several grants offered by the California Department of Parks and Recreation. One of this department's grant programs, the Murray-Hayden Urban Youth Services Grant Program is specifically designed to address the renovation and new creation of youth centers.

It is recommended that GAINs presents this project report to Tioga High School's board and the school's district superintendent. Tioga High School does not possess a high school gymnasium. The student survey addressed this deficit and the results clearly indicate a very strong interest in the student body for the creation of a high school gymnasium. More than 90% of the student survey respondents showed high or very high interest in a new gymnasium. With the results presented in this project report, the appropriate officials of the Tuolumne County can be strongly encouraged to provide means for the construction of high school gymnasium.

The results of the main survey strongly suggest improving the health care within the Groveland area. Expansion of MediCal and Medicare services ranked of highest interest among the resident survey respondents. More than 69% of the resident survey respondents showed high or very high interest in expanded MediCal and Medicare services. Likewise, fewer than 22% of the respondents rated existing medical services within the Groveland area as good or very good. It is recommended that GAINs presents these remarkable results to Tuolumne County's senator Dick Monteith and to California governor Gray Davis. Furthermore, GAINs can be recommended to explore the California Health Care Foundation for opportunities to provide better medical services within the Groveland area.

Recreational facilities that received high interest among respondents of at least one of the two administered surveys include:

- a theater/movie theater
- a senior center
- a new youth center
- an expanded community hall
- hiking and biking trails
- a workout gym

Furthermore, resident survey results indicate a strong interest among the Groveland area residents in seeing an expanded promotion of Groveland as Gateway to Yosemite as well as summer evening programs.

This report includes an extensive analysis of all survey results as well as specific recommendations to GAINs on how to proceed. With this data, GAINs should be able to successfully conduct town meetings scheduled for September of 2002.

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1 INTRODUCTION

This Interactive Qualifying Project was done to assess the needs and interests of the residents of the Groveland area, California. This assessment was done by the administration of two different surveys, focus group interviews as well as panel discussions. Based on the results of this broad assessment, recommendations were made to Groveland Area Involved Neighbors (GAINs), the local community collaborative and the sponsor of this project.

GAINs was founded in June 2000 by leaders of several community service groups of the Groveland area. The purpose of this organization is to find a consensus for community projects, request funding for such projects on both the state and federal level, and work towards the successful completion of such projects. However, GAINs needs to demonstrate that their goals are in the interest of the Groveland area community. Therefore, GAINs sponsored this Interactive Qualifying Project to determine the level of interest residents of the Groveland area show in different potential community projects.

The project team was invited to Groveland, California, a small town located three hours from the San Francisco Bay Area and just 26 miles west of the main entrance to Yosemite National Park. The team spent two weeks on site in Groveland to research the area and its residents. Before the departure to Groveland, the Groveland community was extensively researched using Internet sites such as the California State webpage and individual Groveland community pages. Personal communication with Barbara Broad, the head of GAINs and contact person for the project team, provided much more detailed information about the Groveland community. Further research was conducted on community collaboratives, surveying techniques, and methods of analysis using several books from the WPI George C. Gordon Library and numerous webpages.

The major scientific tool that was employed to achieve the project's goals was a mailed questionnaire that was distributed to all 3820 households serviced by the Groveland area. Some of the topics targeted by the mailed survey included the redevelopment and renewal of city neighborhoods, the rehabilitation of historic places and buildings, the demographic policies and community facilities planning, and land use planning. The survey also attempted to understand the fundamental needs of the Groveland community, so that it will be possible to address some their biggest deficits. Additionally, a questionnaire was designed for the students of a local high school and focus group interviews were conducted to get the input of residents who were expected to be underrepresented in the largely distributed resident survey.

The project's objective was not to simply back Groveland's funding request, but to examine if the application for funding is justified, in which case the survey results will most likely be used in conjunction with the funding application. Should the funding be received, the results can also be used as a reference and a guideline for future development.

This project found that greatest support among Groveland area residents is for expanded MediCare and MediCal services, a senior center, a theater/movie theater complex, a high school gymnasium, and hiking/biking trail developments. This report includes recommendations to apply for federal and state funding for community projects that meet the strongest support within the Groveland community.

2 BACKGROUND AND LITERATURE REVIEW

2.1 Background on Groveland

Groveland, California is located on Highway 120, just 26 miles north from the entrance to Yosemite National Park, and belongs to Tuolumne County (see Appendix **Error! Reference source not found.**). Savage's Diggings, as it was originally called, gained its name because it was the site where James Savage discovered gold in 1848. Just two years later, in 1850, the town was renamed to Garrotte; "named so for the area's swift and harsh judgment." In the 1870s, after the initial gold rush boom, the town eventually settled and catered to cattle ranches and a small amount of tourists traveling through on their way to Yosemite. In 1875, the town's name was changed yet again, this time to its current name, Groveland.

Soon after, the town experienced a second gold rush with the advent of shaft mines and milling operations. During yet another "rush," Groveland was chosen as the headquarters of the newly approved Hetch Hetchy Water Project to provide water to San Francisco. After World War II, the last boom produced 22 lumber mills, as well as frequent updates to the Hetch Hetchy Water Project. However, this final rush was short-lived: local wells and springs dried up, ending the project. In the mid-1960s, Boise Cascade, a west coast timber company, began development of a new resort, Pine Mountain Lake (PML), with over 4000 residential lots and its own golf course, country club, airport and stables.¹

There is a very low level of industry in Groveland. Timber industry was very big until the early 1990's but declined rapidly after and is of no significance for Groveland today. The timber industry frequently blames environmental protection, especially protection of the Northern Spotted Owl that was put on the list of endangered species in the early 1990's.² These days, the Groveland area lives off of tourism and, to a lesser degree, home construction.³ Nonetheless, both these industries are not in very good shape. In addition, there is some agricultural animal produce but no high-technology industries besides a small networking company.

Groveland's community accounts for more than 7,000 of Tuolumne County's 53,000 residents.⁴ However, there are very few community facilities serving Groveland's residents.⁵ There is one softball field and one obsolete youth center which has two pool tables, a basketball court, computer games, and two ping-pong tables that are in bad condition. There is one elementary school that includes first to eighth grade and which serves about 400 students, and one small high school that is attended by about 125 students. About 60 students attend a high school in Sonora, a neighboring city. Groveland does not have a daycare center. Medical facilities are available but very limited.

¹ Barbara Broad, personal correspondence, May 2002.

² <http://www.sierraclub.org/logging/jobs.asp>, Sierra Club, Protect National Forests, accessed May 6, 2002.

³ Barbara Broad, personal correspondence, May 2002.

⁴ <http://www.thegreatunfenced.com/groveland.htm>, Tuolumne County Visitor's Bureau, accessed May 7, 2002.

⁵ Barbara Broad, personal correspondence, May 2002.

One doctor is available in Groveland for two days per week and, in fact, there are problems getting medical treatment for children under the MediCal program, a welfare program, which is available in Sonora but not in Groveland.⁶

2.2 Background on Community Collaboratives

Community collaboratives are groups of people from a single area who unite to achieve a common goal. This goal is often directed toward the community in which they live and usually is for the betterment of the community. The goals can range from setting up new facilities within the community to decreasing the crime rate or to improving the way of life for the residents of the community. Community collaboratives are mostly made up of volunteers from within the community, as well as politicians and special groups whose job is to run the community from which they were elected.⁷

Community collaboratives can take on many different roles. For instance, they can formulate new policies to meet social, economic, and physical needs of the community, develop land use patterns, housing needs, and plans for new parks and recreational opportunities.

In order for community collaboratives to achieve their goals, they must know what the community wants. Since the collaborative is made up of a select group of residents, other residents in the area must be polled or surveyed to find the general view of the current residents. Using the information found in these surveys, the collaborative can better understand the needs and wants of the community, thereby setting the collaborative's goals.

Stages of collaboration often followed by a community collaborative include: 1.) getting together, 2.) building trust and ownership, 3.) strategic planning, 4.) taking action, and 5.) deepening and broadening the work.⁸ Strategic planning, in which we are taking a part, is the act of defining the collaborative's goals as set by the community's needs.

Examples of such community collaboratives are the Sierra Nevada Alliance, Redwood City 2020 and the East Bay Collaborative. The Sierra Nevada Alliance is made up of many smaller groups of residents and community officials who work to improve their communities. One of these groups, the Pine Grove Civic Improvement Club, is a non-profit group who wants to maintain the history of Pine Grove, California. They also try to improve the way of life for its residents by remodeling and beautifying buildings and the nature surrounding the town. Another such group, the Cherokee Watershed Group, works to improve water quality, flood prevention, and sedimentation associated with mining that occurred in the past. These collaboratives all work together to improve the community, yet all have different goals associated with their specific community.⁹

The Redwood City 2020 collaborative brought a group of over 250 people together to improve the overall conditions in Redwood City, California. Beginning in

⁶ Barbara Broad, personal correspondence, May 2002.

⁷ <http://www.planning.org/careers/field.htm>, American Planning Association, accessed May 6, 2002.

⁸ <http://www.togetherwecan.org/ccwtintro-s.html>, TWC – A National Leadership Development and Capacity Building Initiative to strengthen Children, Youth, Families and the Community, accessed May 6, 2002.

⁹ <http://www.sierranevadaalliance.org>, The Sierra Nevada Alliance, accessed May 6, 2002.

1995, they have been working to improve the public educational system and youth organizations, as well as keeping the city clean and safe. They encourage community residents to become an active part within the community and help develop and define the goals of the collaborative. Furthermore, the collaborative wishes to improve the economy of the city by diversifying the businesses within the area, creating a “vibrant” downtown strip, and encouraging technology firms to root themselves within the city.

Redwood City’s collaborative works together with many different organizations to achieve their goals. These organizations include the Boys and Girls Club of the Peninsula, Canada College, Habitat for Humanity, John Gardener Center for Youth and Their Communities, Kaiser Permanente, Peninsula Conflict Resolution Center, and more. These specialized organizations help the collaborative’s cause greatly. To gather information about the needs of the community, Redwood City 2020 holds monthly forums where the residents have a chance to voice their opinions regarding ways to improve the city. These forums are open to everyone and are often attended by active community members.¹⁰

The East Bay Collaborative has the specific goal of setting up educational opportunities for all students with diverse learning needs. They are currently funding teacher development workshops, raising the awareness of students and staff on the culture of the deaf, preparing workshops for teachers on how to deal with difficult students, and more. Though their specific goal is to improve education within their community, collaboratives often have more general goals geared to the community as a whole.¹¹

2.3 Community Collaborative Grants

There are several different grants available for small communities such as Groveland. The first fund that is available is the California Endowment¹², designed to support community foundations, even those not directly pointed at economic growth. Other funds and grants programs available for economic development include the following: the Rural Economic Development Infrastructure Program (REDIP)¹³, the California Infrastructure and Economic Development Bank (CEIDB), the Rural Economic Development Loan Program, the Rural Business Enterprise Grants, the Rural Economic Development Grant Program and the Community Facilities Loan Program.

The Groveland Community Services District is already using one of the above grants for building new public restroom facilities. Although the previously mentioned economic loans would provide tremendous assistance to the Groveland community, they do require a combined, organized, high-energy effort on the part of local businesses.

To make best use of these grants or loans, the communities should apply for them once a thorough long term plan has been established on how to use and apply the money

¹⁰ <http://www.redwoodcity2020.org>, Redwood City 2020, accessed May 6, 2002.

¹¹ <http://www.planning.org/careers/field.htm>, American Planning Association, accessed May 6, 2002.

¹² Barbara Broad, personal correspondence, May 2002.

¹³ <http://134.186.44.154/business/community/financing.html>, California Technology, Trade and Commerce Agency, accessed May 20, 2002.

in the most effective manner. These grants or loans can then be used to their fullest potential. Such a plan would typically consist of a five, ten or twenty year program.

2.4 Background on GAINs – A Community Collaborative

GAINs (Groveland Area Involved Neighbors) is a non-profit organization whose purpose is to request Federal funding for the Groveland area communities to build their resources. A pamphlet illustrating their goals can be found in Appendix B. This collaborative is interested in building public services (such as an employment exchange, kiosk for visitors) and recreational facilities (such as a community center, senior center, skateboard park, workout gym, miniature golf course, outdoor movie theater, etc.) for Groveland residents and families, especially children. GAINs also want to improve the economy, thereby allowing children to stay past their high school education. This community collaborative pools efforts to provide more effective community service projects. GAINs is made up of citizens who represent Groveland's businesses, education, services, government, and social groups. They seek "civic harmony as well as prosperity." Documents to obtain federal non-profit status were filed in January of 2002.¹⁴

GAINs has established a list of projects that might be implemented to improve the Groveland community. For families, ideas such as a community theater, recreational facilities, farmer's market, and off highway vehicle family recreation area have been proposed. For children, GAINs has proposed ideas such as a preschool building fund, youth center, skateboard park, and miniature golf course. They have also proposed education and employment opportunities such as evening summer programs and an employment exchange. Finally, to attract and keep steady tourism, ideas such as a tourist information center, history of Groveland kiosk in the museum, rest area, and trail development would need to be implemented.¹⁵

2.5 Photographic Survey

In the summer 2000, GAINs initiated a photograph project (see Appendix J). The goal of this project was to identify images that best represent Groveland area and those that do not represent the Groveland area. Furthermore, the project's goal was the identification of Groveland residents' preferred residential, commercial, and public areas, their least favorite commercial areas, as well as, Groveland's most attractive natural features and its unique places. For this purpose, eight different sets of photographs, containing between 16 and 23 pictures, were taken of distinct sites and places in and surrounding Groveland. These photographs showed sites such as "Yosemite Bank," the "Iron Door Saloon," which represents California's oldest drinking establishment, and the PML airport. Other photographs showed natural sites such as the Tuolumne River, Tuolumne Canyon and Cherry Lake. Additional photographs featured events such as the

¹⁴ Barbara Broad, personal correspondence, May 2002.

¹⁵ Barbara Broad, personal correspondence, May 2002.

annual Christmas celebration, Potluck dinner and 49'ers parade. The eight sets of photographs were then shown via display boards to 205 residents of Groveland, each of who selected his or her three favorite photographs of each set.

The survey results showed that Groveland residents' favorite sites are the historical "Iron Door Saloon," the "Yosemite Bank," the PML residential area, and the "Groveland Hotel." Yosemite Park, Wayside Park, the small lake "Rainbow Pool," and the Tuolumne river canyon were selected as Groveland's favorite natural features (see Appendix J). Furthermore, the annual 49er Festival Parade and the annual Christmas celebration were selected as Groveland's favorite events. The sites most disliked by the survey respondents are an undeveloped gas station, which is an ongoing construction site commonly referred to as "The Scar" by Groveland residents, a used car seller carrying the name "Big Oak Auto," and "Ferndale," an area outside Groveland containing two run-down buildings, many broken cars and other junk.

The photography survey does not allow any more detailed conclusions. This is mostly due to two different reasons. First, the photography documentation is strongly biased. Some pictures were taken in bright weather and others in cloudy weather. Also, the quality varies to different degrees from image to image. Thirdly, certain sites appear on photographs in more than one of the eight sections of the photographic survey. These facts prohibit precise conclusions for each one section. Nevertheless, general conclusions about which sites Groveland residents liked and disliked can be drawn.

2.6 Conducting a survey

It is necessary to research designing, conducting, implementing, and analyzing a survey because the survey sent to Groveland's residents must follow the correct procedure. Without following a specific set of guidelines set for a survey such as the one to be conducted, the results found may be invalid and cannot be used for applying for grants in the future.

2.6.1 Introduction to surveying

A survey is a scientific system for information collection. This information can be describing knowledge, opinions, behavior or attitudes.¹⁶ Most scientific surveyors follow a specific procedure when conducting a survey.¹⁷ First, a distinct research objective needs to be set. The question about what information the survey should collect has to be clear. Next, resources available to the surveyor need to be assessed. This is an important part in planning the survey because it limits its extent and might limit the choice of what data collection instrument can be applied. Afterwards, the population the survey is targeted at needs to be identified. This is an extremely important step in conducting a survey when a sample representative of the whole population is to be

¹⁶ Arlene Fink, The Survey Handbook (SAGE Publications, International Educational and Professional Publisher, 1995) 1.

¹⁷ Isadore Newman and Keith McNeil, Conducting Survey Research in the Social Sciences (University Press of America, 1998) preface (x).

drawn. “A good sample should be a miniature version of a population.”¹⁸ Thereafter, pertinent literature should be reviewed to determine the amount of previous work that has been done already.

2.6.2 Data-collection tools

Once the target population has been defined, resources have been assessed, and the pertinent literature has been reviewed, the data collection technique can be determined. There are four different types of data collection techniques: mailed surveys, directly administered surveys, telephone surveys and interview surveys. Each one of these techniques has certain advantages and disadvantages.

The mailed survey is the most common data collection technique applied in today’s world. Its major advantage lies within its capability to reach a huge sample in a short period, which makes the mailed survey much more economical than the three other survey techniques when a large sample is needed.¹⁹ However, there is one major disadvantage to mailed surveys: they have a very low response rate. No general conclusion can be drawn about the value for the actual response rate. The rate differs from population to population and is very much dependent on the percentage of illiterate people, language, the topic and the general level of motivation of the target population.²⁰ These are all variables that differ from population to population and from topic to topic.

In general, one can raise the response rate by premailings, follow-up contacts, or incentives such as raffle prizes.²¹ Nevertheless, response rates will never come close to response rates achieved with telephone surveys or direct interview surveys. Also, the surveyor does not have any control on who answers the survey, which makes it difficult to get a sample representative of the whole target population, and on determining the accuracy of the given responses.²²

Mail questionnaires are self-administered questionnaires meaning that no supervisor is available to answer questions when an individual answers the survey. That is why the questionnaire that is sent out by mail needs to be extremely “user-friendly.” This fact sets special requirements for the characteristics of a mailed survey. The survey’s objective needs to be very clear and “contained,” meaning that it can be sufficiently covered in a short questionnaire.²³ Further, questions should not be concerned with the past or the future of the respondents but mostly with the present. In addition, everyone in the sample has to be able to answer the questions asked; skips and branching should be avoided.²⁴

For a mailed questionnaire, it is important that it require as little work and time as possible. Therefore, questions should be kept short and should have a simple structure. Also, open questions should be avoided because they require more time and effort from

¹⁸ Fink, The Survey Handbook, 27.

¹⁹ Newman, 25.

²⁰ Linda B. Bourque and Eve P. Fielder, How to conduct self-administered and mail surveys (SAGE Publications, International Educational and Professional Publisher, 1995) 14-16.

²¹ Bourque, 15.

²² Newman, 26.

²³ Bourque, 26.

²⁴ Bourque, 27-28.

the respondent than closed questions, which only require the respondent to choose one of the pre-selected answers.²⁵ The questions have to be formulated precisely and answers have to be selected carefully to ensure that every respondent can answer the question. The questions should be put in a logical order progressing from easier questions to more difficult ones. When not all the requirements mentioned here are met, respondents might become easily frustrated, answer questions imprecisely or not respond at all.²⁶

Directly administered surveys are very similar to mail surveys. They have to be self-sufficient, as well, but they do not experience problems with the low response rates experienced by mail surveys. Nevertheless, their administration is most often unfeasible, especially when a larger sample is needed. For directly administered surveys it is necessary to bring respondents together to answer the questions in the presence of supervising personnel. Nonetheless, copies of the survey are distributed to the participants for completion on their own. A situation like this is quite uncommon but can exist in places such as classrooms or workplaces. However, in most cases, sample related problems arise.²⁷

Interview surveys, either face-to-face or by telephone, are quite different from mailed and directly administered surveys. The interviewer plays a much greater role than in self-administered questionnaires. The interviewer can increase the response rate and can clarify immediately any problems that the respondents might have in answering the questions. On the one hand, this is advantageous because there are no problems with low response rates in interview surveys, such as are experienced in mailed surveys. Also, misunderstandings can usually be avoided because the interviewer can provide clarifications to any arising problems respondents might have in answering the questions of the survey. On the other hand, the presence of an interviewer might have a negative influence on the survey conduct. This biasing influence that the interviewer might have on the respondent is called the interviewer effect. Usually, the interviewer effect is felt much less in telephone interviews than in face-to-face interviews where in addition to biased wording and pronunciation of the questions the interviewer's visual cues might manipulate the respondent's answers.²⁸ Another drawback to telephone and face-to-face interview surveys is associated high costs. Costs for personnel and facilities increase rapidly with increasing size of the sample.

2.6.3 Conducting a Discussion Group

Since we will be conducting a discussion group with prominent leaders and business owners on our first day in Groveland, it is important that we run this correctly. Therefore, background research must be done on the topic. Furthermore, short interviews may be conducted throughout the visit to get supplemental information from the townspeople. Though this information will be written about, it will not be analyzed since the survey methods used for selection will not be randomized. For the discussion on our

²⁵ Fink, The Survey Handbook, 15-16.

²⁶ Bourque, 58.

²⁷ Newman, 27.

²⁸ James H. Frey and Sabine Mertens Oishi, How to Conduct Interviews by Telephone and in Person (SAGE Publications, International Educational and Professional Publisher, 1995) 35-36.

first day, there will be four steps we will need to follow: arrangement, preparation, the interview itself, and reconstruction.²⁹

In the arrangement stage, much thought should go into finding the correct people to interview. Picking people of little value or connection to our purpose will not help in preparation of the survey. Therefore, only leaders of the community and those who know the community best will be asked to join the discussion group. These people must then be contacted and informed of our objective and given reasons why we need their help.

It is also important to get all the information and facts before the interview itself; not knowing this information could get us into a lot of trouble during the interview. Therefore, in the preparation stage, we need to do as much research on the subject as possible. Preparing by writing and distributing the questions to be asked, or an agenda of discussion topics ahead of time will be beneficial. This will make the interview run smoothly and efficiently. Three types of questions can be asked, each more difficult to answer than the last. First, there are simple factual questions, asking for times, dates, etc. More difficult is questioning how two pieces of information relate to each other (i.e. How does the scar (see Appendix J for picture) negatively effect the community?). The last type of question searches for the interviewees' opinion on a topic.³⁰ These questions can be asked in a close- or open-ended form. A close-ended form is looking for a short answer, usually yes or no. Open-ended questions force the interviewees to come up with something on their own; this may be more beneficial in some situations. Asking a variety of these questions will get the most out of the interview. It may also be beneficial to make nametags or place holders to easily get to know each other and remember names. Finally, bring a pad of paper for notes or a tape recorder (with the permission of all in attendance) to record the proceedings.³¹

After all the preparations have been made, the interview can be conducted. It is often inappropriate to begin directly with the interview. More appropriately, begin with some casual conversation, get to know each other, and talk a little about what the interview is going to be. Beginning immediately with the interview may put the interviewees in a tense position from the start. Once the discussion has begun, one should follow the agenda precisely, since doing so will keep the interview under control. Quick follow up questions such as "why? when? where?" can provide valuable details that initial questions may not. This information may be very useful later. Off-topic subjects should be kept to a minimum, but such conversations should not end immediately since it can lead to another pertinent topic. However, it is important to keep the time in mind and to not stay on any one topic too long.³² If the discussion does go over the budgeted time, inform the interviewees and make sure they do not mind staying longer. Before closing the interview, summarize the main topics and ask for any more details. Finally, at the end of the discussion, giving out the interviewer's phone number

²⁹ <http://stringers.media.mit.edu/interview.htm>, How to Conduct an Interview, accessed May 13, 2002.

³⁰ <http://www.heritage.nf.ca/confederation/lesson6.html>, Preparing to Conduct an Interview, accessed May 13, 2002.

³¹ <http://saulcarliner.home.att.net/id/interview.htm>, How to Plan and Conduct an Interview, accessed May 13, 2002.

³² <http://stringers.media.mit.edu/interview.htm>, How to Conduct an Interview, accessed May 13, 2002.

will allow the interviewee to contact the interviewer with further details if they become available.³³ These steps will make for an informative, efficient interview.

Once the interview has been conducted, the final step, reconstruction, can be taken. As soon as possible after the interview, one should find a place to review the handwritten notes. Often, notes are incomplete and handwritten notes may be illegible. Therefore, it is important to rewrite notes while the interview is still fresh in one's mind. Underline the important information, adding extra notes to make information easy to find and follow as necessary. Also, adding markings where the questions were asked will help to keep their responses in context.³⁴

2.6.4 Implementation of a Mail Survey

The implementation of a mailed survey is a quite complex procedure and involves sample selection, issues addressing the mailing, follow-up procedures and return processing.³⁵

When the targeted population is too large, surveyors choose to survey a representative sample: a subgroup of the population. Of course, the larger the sample size, the greater the costs for the survey research. For mail surveys, sampling intervals are usually the method of choice for choosing the sample.³⁶ First, a complete list of the targeted population is obtained and a random starting point in the list is chosen. Then, the sample interval is determined. The sample interval determines the size of the sample, meaning that if a sample interval of five is chosen, every fifth individual on the list beginning with the chosen starting point is chosen for the sample. And the sample size will be 1/5 of the total population size.

The quantity and the content of the mailing packets that are sent out to the sample population are mainly determined by the available budget for the survey research and/or the chosen sample size. Each package should contain the questionnaire, a cover letter stating the importance of response and purpose of the study and a return mail envelope, either being postage-paid business mail or just a stamped envelope with an appropriate return address. The larger the sample, the more economical postage-paid business mail is in comparison to stamped envelopes.³⁷

When high response rates are desired, follow-up procedures are often implemented when the budget allows. Follow-up procedures consist of contacting the respondents to remind them to complete the survey.³⁸ This can be done in several different ways. Individuals can be reminded by a postcard, a letter, a phone call or even a complete re-mailing of the questionnaire. All these follow-ups should stress to the respondents the importance of their completion and mailing of the survey. Also, the purpose of the study should be underlined. In some cases, it might be appropriate to include a contact of a survey staff member available for assistance in completing the

³³ <http://saulcarliner.home.att.net/id/interview.htm>, How to Plan and Conduct an Interview, accessed May 13, 2002.

³⁴ <http://stringers.media.mit.edu/interview.htm>, How to Conduct an Interview, accessed May 13, 2002.

³⁵ Bourque, 135.

³⁶ Bourque, 141.

³⁷ Bourque, 168.

³⁸ Bourque, 150.

survey. Follow-ups should be conducted ten days after the initial mailing of the survey and additional follow-ups can be conducted every 10 days thereafter.

2.6.5 Designing a Survey

The method for collecting information on a broad range of subjects is through a survey. The subjects could range from peoples' interests, to needs, health, motivation, and more. As stated in *How to Design Surveys*, well designed surveys have six important features: specific, measurable objectives, sound research design, sound choice of population or sample, reliable and valid instruments, appropriate analysis, and accurate reporting of survey results.³⁹ These steps to creating a valid survey must be followed if accurate results, catered to the population chosen, can be measured and reported.

The first important feature in any survey is a measurable objective. This is the purpose of the survey and the reason why the data need to be collected. Without a measurable objective, the data will not be important, and the survey methods may go askew. Sound survey design is another important aspect. This consists of the environment in which the survey is to be conducted; if it is to be a poll, the survey can be designed to be an interview or written survey, however, if one is conducting an experiment, a more detailed survey design must be sought after. Also included in survey design is the group of people that will be sampled, which is very important when analyzing the results.⁴⁰ When choosing a survey design, there are questions that need to be asked about the objective of the survey. Does the survey want to describe something that is currently known, or predict something that may happen in the future? Is the survey going to be experimental, were multiple groups are surveyed in differing conditions? Who is eligible to take the survey, and to whom will the results apply?⁴¹ These are fundamental questions that must be answered before the survey can be designed.

After the survey is designed, the sample population must be chosen. This can be the whole group of people discussed above, or it can be a subset, often chosen at random and having the same proportions as the full population.⁴² When choosing a subset of the population, the selection must be unbiased, or the data will be skewed.

Next, a sound method of surveying the sample population has to be formulated and distributed. For instance, if the survey is to be conducted orally or written, the questions cannot be stated as to skew the results; they must be unbiased as to not favor any particular answer. If the survey is to be experimental, multiple groups must be chosen, paying special regard to keeping the groups on equal footing: one group should not be more prone to answer any survey more legitimately than the other.⁴³ If the survey is to be mailed, special attention must be given to keeping the sample population proportional to the whole population in all ways regarding the goal of the survey. This

³⁹ Arlene Fink, *How to Design Surveys* (SAGE Publications, International Educational and Professional Publisher, 1995) 1.

⁴⁰ Arlene Fink, *How to Design Surveys*, 2-4.

⁴¹ Arlene Fink, *How to Design Surveys*, 14-20.

⁴² Arlene Fink, *How to Design Surveys*, 17.

⁴³ Arlene Fink, *How to Design Surveys*, 34.

means that the results from the sample population will return the same results as if the whole population were surveyed. Furthermore, the survey must be conducted in a place that does not condone any unfavorable results, which again, will skew the data.

Once the data are collected and the results are tabulated, they can be analyzed. Without this step, the data returned in the survey will be useless; however, analyzing the data incorrectly will produce results that are equally useless. Therefore, it is necessary to have a good understanding of the data that are returned and of the correct procedure for analyzing. The analysis must account for the type of survey given, whether nominal, ordinal, or numerical. The first two types are usually given in bar or pie graph format, the third can be a scatter plot, pie graph, or other type of chart.

Finally, the analyzed results must be reported correctly. With the results provided from the previous step, a report has to be written which correctly states the findings and accurately states the methods used to uncover these findings. Reporting incorrectly invalidates the whole survey, since the report is often the final product. Moreover, since conclusions are drawn from the survey and reported in the final report, this step must be accurate; otherwise incorrect actions may be taken when employing the results found in the survey.⁴⁴

2.6.6 Designing Questions for a Survey

The specific wording of any questionnaire depends on the survey's context. This is defined by the survey's purpose, the people who conduct the survey, how the survey is conducted, the main group of focus, and the characteristics of respondents and their responses. In order for the context of the survey to be verified, a simple procedure must be followed. First, the survey's specific purpose should be identified and verified.⁴⁵ Without a purpose, the survey has no meaning and its results are useless. The wording and syntax of the purpose should then be clarified. This narrows down the scope of the survey to the specific context in which the data will be collected and analyzed. This step is also necessary when common terms, which may be taken to mean different things, are used to define the survey's purpose.

After defining and refining the procedure, the respondents must be characterized. Since the respondents are the ones being asked the questions, the questions have to be tailored to them, not to the surveyors. The questions should be quick to answer, and easy to understand; differing groups of people will find different questions harder to answer than others.⁴⁶ If the respondents cannot answer a posed question, they may begin to answer other questions inaccurately or never return the survey.

Next, the questions should be made standardized, using the same technique for answering most, if not all, of the questions. For example, circling 1-5, representing strongly disagree through strongly agree, is a standard method that simplifies answering the questions.⁴⁷ A nonstandard question, such as a free answer question, can often

⁴⁴ Arlene Fink, How to Design Surveys, 6-13.

⁴⁵ Arlene Fink, How to Ask Questions (SAGE Publications, International Educational and Professional Publisher, 1995) 7.

⁴⁶ Fink, How to Ask Questions, 10.

⁴⁷ Fink, How to Ask Questions, 41.

overwhelm the respondent; making questions standardized cuts down on the time and improves the efficiency of answering the questions.⁴⁸ However, when a standardized procedure is employed, it is important to use a meaningful rating system that can be used throughout. True/false questions may be more meaningful than agree/disagree, just as varying levels of agreement may be unnecessary for the questions posed.⁴⁹ Using a standardized answering procedure requires questions to be worded so as to cater to the degrees of answers, and therefore requires extra consideration.⁵⁰

Finally, it is important to base the questions on the culture in which the questions are to be asked. Different ethnicities, cultures, and religions will take questions differently, and if the results are to be uniform and unbiased toward any particular group, the questions have to be tailored to all groups being surveyed.⁵¹ Therefore, special consideration should be given to test the survey in a small sample from within the population meant for the survey.

In designing a survey, specific consideration needs to be given to the detail in which the questions are written. For example, it is important to use complete sentences, use short questions, state exactly the questions to be answered, and avoid abbreviations, slang, and jargon.⁵² The questionnaire should remain uncluttered and easy to follow. A survey should not jump between questions, and the answers to individual questions should be clearly marked and easily found. There should not be confusion as to which answer goes to which question.⁵³ Following these guidelines will create an easily read, understood, and answered questionnaire that will produce meaningful, unbiased results.

2.6.7 Recording Survey Results

Processing of returns consists of data reduction and simple recording of data from returned mail surveys.⁵⁴ The data are recorded by assigning codes or numbers to all anticipated responses and entering it into a computer using computer programs such as Microsoft Excel®. This process can be facilitated when codes have been assigned to all anticipated responses before the data is collected.⁵⁵ Data reduction mostly consists of prior editing of the returned questionnaires before entering of the data into a computer. This is a necessary step in survey research because some questionnaires might be incomplete; some respondents may have skipped questions or some may have been answered incorrectly. Editing eliminates incorrect responses and provides codes for missing data, and open-ended material.⁵⁶

⁴⁸ Fink, How to Ask Questions, 14.

⁴⁹ Fink, How to Ask Questions, 51.

⁵⁰ Fink, How to Ask Questions, 15-17.

⁵¹ Fink, How to Ask Questions, 18.

⁵² Fink, How to Ask Questions, 24-29.

⁵³ Fink, How to Ask Questions, 54-56.

⁵⁴ Bourque, 163-164.

⁵⁵ Fink, The Survey Handbook, 89-90.

⁵⁶ Bourque, 164.

2.6.8 Analyzing Survey Results

Statistics are important for analyzing survey data since, if used incorrectly, they can alter the way the collected data will be interpreted. Statistics are used to compare, analyze and understand information. The results of a statistical analysis of a survey are descriptions, relationships, comparisons and predictions.

Surveys generally gather three different types of data, which can be measured using different scales: nominal, ordinal or numerical. Nominal scales do not have any numerical value, and the produced data can be fit into various categories, such as gender or birth location. The answer that is selected on the survey is also the name of the category into which the data fit. If there is an order among the various categories, then, an ordinal scale can be used. Ordinal scales are best used in questions that call for quality ratings (good, very good, etc.) or agreements (good, very good, etc.).⁵⁷ Occasionally it might be best to use a numerical scale, it is best used when differences in numbers are needed. When surveying a population and asking for the survey takers' age, an ordinal scale would be optimal.

Survey data are also impacted by the types of variables used: independent and dependant variables. Independent variables are usually used to predict the outcome of the dependant variable in a survey.

When starting to analyze a survey, first the purpose, then the number of dependant or independent variables, and whether they are nominal, ordinal or numerical, must be determined. An analysis method can then be chosen. The survey's objectives must then be compared against the analysis method's assumptions and outcomes.

To analyze a survey, descriptive statistics can be used; they describe the data in terms of measures of central tendency. A measure of dispersion can be established; it represents the range, the standard deviation and the percentiles.

The first important number to be calculated is the mean. The mean is the arithmetic average of observations.⁵⁸ Totaling the observations, scores or responses, and then dividing it by the total number of respondents will calculate the mean. The mean can only be used when the available numbers can be added or when all the characteristics are measured on a numerical scale. The mean is best used when the distribution is approximately symmetric.

The median is also very important to calculate, since it represents the middle observation. It signifies that half of the observations are smaller, and half are larger. The median can be determined by arranging all the observations in either descending or ascending order, and then finding the middle value, or the mean of the two middle values for an even number of observations. The median has some advantages over the mean, since it is not as sensitive to extreme values,⁵⁹ and it is best when the typical score is important, or when the distribution is skewed, or when ordinal data is available.

The mode must also be calculated; the mode of a distribution is the value of the observations that occurs most frequently. Distributions can either be unimodal or bimodal. The mode is most important when there is a distribution with two (bimodal) or

⁵⁷ Arlene Fink, [How to Analyze Survey Data](#) (SAGE Publications, International Educational and Professional Publisher, 1995) 8.

⁵⁸ Arlene Fink, [How to Analyze Survey Data](#), 17.

⁵⁹ Arlene Fink, [How to Analyze Survey Data](#), 19.

more peaks, and also when the prevailing view, characteristics, or the quality are of importance.

The standard deviation is a measure of the spread of data about their mean and an essential part of many statistical tests. Standard deviations are not usually computed by hand. The standard deviation depends on calculating the average distance that the average score is from the mean.⁶⁰ Regardless of the survey, at least 75% of the responses will fall between the mean plus two standard deviations and the mean minus two standard deviations. The variance can also be calculated, it is simply the standard deviation squared.

Other important numbers include the percentile, which indicated the percentage of the distribution that is equal to or lower than that number (the median is the 50th percentile). The percentile is quite useful for ordinal or numerical data. The interquartile range is the difference between the 25th and 75th percentile, it contains the central 50% of the observations.

2.6.9 Survey Reliability and Validity

Every measurement contains a certain error within the information obtained. This fact is true for data-collection tools employed in survey research, as well. In survey research, the error is comprised of random error and of measurement error. Random error results mostly from the applied sampling techniques. Selecting a larger and more representative sample usually minimizes random error. However, the larger the sample gets, the more the survey costs will increase. That is why statistical analysis is often applied to determine the probability that certain results are due to random error.⁶¹ Measurement error results from the data-collection instrument that is used. Surveyors try to minimize the amount of error and evaluate the accuracy of the survey instrument that is employed. Accuracy of a data-collection tool is mostly determined by the survey instrument's reliability and its validity.⁶²

An instrument's reliability is assured if each time the instrument is used the same information is obtained.⁶³ Three different kinds of reliability are often discussed. They are test-retest, alternate-form, and internal consistency reliability.⁶⁴ Test-retest reliability is defined by the relationship of two sets of scores from the same survey instrument done by the same group of respondents at two different points in time. A correlation coefficient can be calculated from the two different sets of scores which indicates the degree to which the two scores are related. The correlation coefficient, also called *r* value, ranges from -1 to +1. A strong relationship is characterized by *r* values close to either -1 or +1. No relationship is characterized by a correlation coefficient equal to zero.⁶⁵ For survey research, *r* values exceeding 0.70 are desired. Measuring test-retest

⁶⁰ Arlene Fink, How to Analyze Survey Data, 23.

⁶¹ Mark S. Litwin, How to measure survey reliability and validity (SAGE Publications, International Educational and Professional Publisher, 1995) 5-6.

⁶² Litwin, 3.

⁶³ Arlene Fink, The Survey Handbook, 41.

⁶⁴ Litwin, 8.

⁶⁵ <http://www.saterfiel.com/reliability.htm>, Saterfiel.com – Personality Assessment and Employee selection, accessed on May 9, 2002.

reliability makes sense only when the variables measured in the survey do not change dramatically between the two points in time in which the data is collected. In addition, another problem to measuring test-retest reliability is the fact that respondents might remember their answers from the first time and just answer the questions the second time from their memory. This effect is called the practice effect and is generally higher for shorter periods of time between the two survey administrations.⁶⁶

Alternate-form reliability is similar to test-retest reliability but it avoids the practice effect. Equivalent surveys are administered to a group of respondents at two different points in time. The practice effect is avoided by rewording the items on the questionnaire or by changing the order. These changes force individuals to read the questions carefully and thereby decreasing the chance that the individual derives the answer from his or her memory. The drawback to alternate-form reliability testing is the difficulty to reword questions without changing their content.⁶⁷

Internal consistency reliability is a method to determine the extent to which all the items on a questionnaire are measuring the same concept.⁶⁸ Nevertheless, different items can address different aspects of that same concept. Cronbach's coefficient alpha can be calculated to give a measure of internal consistency reliability. This statistic is "a reflection of how well the different items complement each other in their measurement of different aspects of the same variable or quality."⁶⁹ The great advantage of internal consistency reliability in comparison to test-retest and alternate-form reliability is that it only requires one survey administration. This fact reduces costs and time needed for conducting the survey.

Survey validity measures the degree of correspondence between a measurement, the conducted survey, and the studied phenomenon, the survey objective. A data-collection tool's validity is determined by how well it actually measures what it means to measure.⁷⁰ There are four different types of validity in survey research; namely, face validity, content validity, criterion validity and construct validity.

Face validity is the most casual measure of validity. It is determined by the judgments of non-experts who simply try to assess whether the survey measures what it sets out to measure.⁷¹

Content validity is very similar to face validity except that in content validity the judgment about the survey's validity is made by experts. The great difference is that experts in the field of survey research are more likely to be aware of nuances in the survey that might be elusive to non-experts.⁷² However, finding the appropriate expert is often an extremely difficult task.

Criterion validity is quite different from face and content validity. This measurement assesses how well a survey measures what it sets out to measure in comparison to the performance of a different survey instrument. Two types of criterion validity exist; namely concurrent validity and predictive validity. For concurrent validity,

⁶⁶ Litwin, 11.

⁶⁷ Litwin, 13-21.

⁶⁸ Litwin, 21.

⁶⁹ Litwin, 24.

⁷⁰ Litwin, 33.

⁷¹ Litwin, 35.

⁷² <http://trochim.human.cornell.edu/tutorial/rymarchk/rymar2.htm>, Validity - By Gretchen K. Rymarchyk, accessed on May 12, 2002

the used survey instrument is judged against another instrument that is generally viewed as a “gold standard” for measuring the variable under study.⁷³ A correlation coefficient can be calculated that determines how well the survey instrument performs comparatively to the “gold standard” method. The reason for not using the “gold standard” method might be that the method is too cumbersome or expensive. Depending on how well the variable that the survey attempts to measure has been studied, it might be more or less difficult to find a “gold standard.” Predictive validity measures how well a survey instrument predicts future events, attitudes, behaviors, or outcomes.⁷⁴ One of the best-known examples is the predictive validity of SAT scores. For assessment of the predictive validity of SAT scores, correlation coefficient between students’ SAT scores and their grade point average at college is calculated. The higher the correlation coefficient is that is calculated the better the predictive validity of SAT scores.⁷⁵

Construct validity theoretically measures how meaningful a survey instrument is.⁷⁶ Of all methods, construct validity is the most difficult one to assess and only possible years after the survey instrument has been in use. For construct validity, no quantifiable statistic is calculated. Instead, it resembles hypothesis testing and “is frequently seen as a gestalt of how well a survey instrument performs in a multitude of settings and populations over a number of years.”⁷⁷

2.6.10 Pilot Testing

Once the final version of the questionnaire has been drafted, the survey is usually first tested on a small sample population.⁷⁸ This testing prior to the actual administration of the survey is called pilot testing and is extensively applied in survey research. Commonly, errors occur in the final version of the questionnaire. Pilot testing exposes these errors and identifies areas of difficulty for respondents. Following, appropriate corrections can be made to eliminate errors and areas of difficulty prior to administering the survey to the target sample population. These errors or areas of difficulty can either be typographical, misarranged response sets, ambiguous instructions, or a confusing layout. Type size and font, which are difficult to read, and difficulties in reading comprehension can also be identified when pilot testing the questionnaire.

For pilot testing, the questionnaire is administered to a small sample population consisting of ten to twenty individuals. The survey results are evaluated and respondents are asked for feedback on the questionnaire. If respondents have difficulties in answering the questionnaire, the survey should be redesigned appropriately and the redesigned survey should be pilot tested another time. Besides identifying difficulties that respondents might have in answering the questionnaire, pilot testing also identifies difficulties the surveyor might face when collecting and evaluating the data.⁷⁹

⁷³ Litwin, 37.

⁷⁴ Litwin, 40.

⁷⁵ Litwin, 41-42.

⁷⁶ Litwin, 43.

⁷⁷ Litwin, 43.

⁷⁸ Litwin, 60.

⁷⁹ Litwin, 60.

2.6.11 Reporting on a Survey

A survey's report consists of a summary, explanations of its findings, methods and significance. The effectiveness of the report largely depends on the clarity of the presentations, i.e. lists, charts and tables.

Lists are most often used to state survey objectives, methods and findings. Lists have multiple advantages, and are very useful in survey reports: they provide lots of clarity to the reader and are easiest to understand. It is also often important to list inclusion and exclusion criteria.

There are multiple ways to create charts; two of which are pie charts and bar and line charts. Pie charts are best for showing data as proportions. To emphasize changes in proportions, two pie charts must be used. Pie charts do present some drawbacks: it is quite easy to create optical illusions by using similar patterns on adjacent slices. One of the most practical ways of creating charts is to create bar and line charts, since most data can be represented on such a chart, nearly all types of data, including names, years, age, can be put on the X-axis. Typically, the X-axis contains data on the independent variable, whereas the Y-axis contains data on the dependent variable. Bar charts can be used for many survey purposes, comparing groups and studying changes over time.⁸⁰ Bar and line charts must still be used with caution, since differences can be made to appear more important than they really are. Differences can be made to look more significant than in reality by changing the values of the Y-axis. It is best to explain differences if they are statistically significant, or if they have practical meaning.

Tables can be used to summarize survey data about the respondents and their responses over time.⁸¹ Tables are best used in written reports, because the readers can spend time with the them, and they are best used when illustrating points with numbers. When reporting on a survey, one must be careful not to be too technical in the report; the expected audience must be taken into account. When talking about or presenting a data analysis, it is often best to use tables, since they allow for the largest amount of information to be presented in a clear and concise manner.

2.7 Copperopolis Survey

The Copperopolis Community designed a survey in 2000 to assist the Copperopolis Community Plan Advisory Committee (CCPAC) in planning their future endeavors. This survey can be found in Appendix C. Their objective is very similar to our objective in that we are looking for what the community wants. Also, the Copperopolis Community is very near Groveland, making the wants and needs of the communities similar. The Copperopolis survey asked questions about community character, economic growth, public facilities and services, recreation, and housing. This section provides our critique of this survey and will show that though the questions asked should provide valuable information, they were not worded in a way that would make the most use of this expensive surveying technique.

⁸⁰ Arlene Fink, How to report on surveys (SAGE Publications, International Educational and Professional Publisher, 1995) 12.

⁸¹ Arlene Fink, How to report on surveys, 22.

To tailor such a survey to GAINs' needs, the questions must be categorized to include ones that ask the residents' opinions on tourism and economic growth within Groveland. Questions rating information, such as favorite/least favorite traits, cannot contain such a long list of options as provided in the Copperopolis Community Survey. Instead of these rating systems, it may be better to list each option individually, and through a standardized rating system, rate each option. Though it would take longer for a reader to fill out this kind of survey, it would obtain more reasonable data that could be analyzed with more accuracy.

The Copperopolis Community Survey also asks how fast the community has grown within the past five years, with the possible answers being "too fast," "too slow," and "about right." Though this question does provide valuable information, its results probably will not help GAINs with their planning. Instead of this question, it may be more valuable to question whether the residents want Groveland to grow or remain the same.

The question about future housing in Copperopolis asks what the residents want to see more of in the future. Again, this does provide useful information, but as GAINs is not in charge of future housing, a question like this should not appear on their survey. An economic growth question, as it appears on the Copperopolis survey will be useful, though medical services should be questioned elsewhere.

The open-ended questions at the end of the survey will provide meaningful information to the surveyors, however this information is not quantitative. In addition, example answers are given, creating bias in these questions. The point of questions like this, especially when tailored toward Groveland, would be to come up with new ideas. However, when examples are given, people often tend to write what they see; the majority of answers will tend toward the examples.

Finally, the Copperopolis Community Survey asks whether the reader considers him/herself a resident of Copperopolis, with the possible answers being "yes," "no," and "don't know." If the respondent answers "no," they are asked where they do consider themselves a resident. This will provide no useful information for the Groveland survey since their survey will only be administered to the Groveland community. Therefore, a question more pertinent will ask in which part of Groveland does the resident live, and where he or she works, if at all. The purpose of these questions is two fold: first, the results can be tallied by area within Groveland, and second, what type of work and income they receive, as well as if their retirement status can be found.

While the Copperopolis Community Survey was important to review before the creation of the Southern Tuolumne County survey, the results and recommendations offered by the producers of the Copperopolis Community Survey were much different than the results expected by GAINs. The Copperopolis recommendations include seven different methods to increase growth of the community by the year 2020. This includes road construction, increased commercial opportunities, movie theater, bowling alley, protecting and preserving wildlife areas, historic districts, and the historical race track, and more. The recommendations, however, do not talk about specific grants in which the community should apply, nor does it talk about a specific plan of action.

After the seven general options are defined, each specific point is mentioned and defined. A general discussion of community gateway monumentation, historic old town Copperopolis, neighborhood clustering, village centers, open space corridors, waterfront

recreation, and circulation are made, with the results from the survey incorporated. However, the recommendations are not based on the feelings of the respondents; most recommendations seem more general and do not seem to reflect the trends shown by the results shown in their Appendix A.

3 PROCEDURE & RESULTS

3.1 Researching Pertinent Information

3.1.1 Researching Surveying Techniques

To assess the needs of the Groveland area residents, the elementary goal of this project, a data-collection instrument needed to be chosen. Different survey techniques were researched and evaluated for their efficacy and their costs involved prior to departure to Groveland, California. This was done by a review of the pertinent literature. Pertinent books were obtained from the WPI, George C. Gordon Library. A list of the books can be found in the Bibliography of this report. Besides different survey techniques, survey design, including the design of survey questions, survey results recording and analysis, as well as, measures of survey reliability and validity, pilot testing and survey reporting were researched. A thoroughly written review of the pertinent literature can also be found in this report (see Background and Literature Review).

3.1.2 Researching Community Collaboratives

Community collaboratives were researched in multiple ways. Information was provided through correspondence with Barbara Broad, indicating other collaboratives, with goals similar to GAINs. Most of these collaboratives have websites on the Internet, through which some information was gained. It was possible to understand how such collaboratives function, and also how they plan to implement their goals of community advancement. Most of these community collaboratives such as the Sierra Nevada Alliance, or Redwood City 2020, have surveyed their respective residents about the interests and needs of the local communities, to better understand how to improve the community. The surveys often targeted similar topics, such as local economics, entertainment, and local services. A copy of the Copperopolis survey report was obtained to further understand what is being done by other community collaboratives.

3.1.3 Researching Available Grants

Initial grant information was originally provided by Barbara Broad, with a list of grants that Groveland would like to apply for but did not know if it can. Such grants included the Main Street Program, which purpose is to revitalize the main streets in smaller towns, such as Groveland, by attempting to spur on the local economy and make the area more attractive; not only for current residents, but also for potential tourists. Before it can be implemented; the program needs all storeowners on the main street to come together; then a request for funding can be completed.

Other grants were also researched using the Internet such as federal and state government webpages. These provide a brief description of all available grants and the criteria for applying to them.

3.1.4 Researching Groveland

In order to research Groveland, much communication was conducted with Barbara Broad, a Groveland resident and GAINs organizer. General information regarding the layout of the communities and the types of residents within each community was received through email correspondence with Ms. Broad. Ms. Broad also provided small pamphlets of information along with history of the town and its current situation. Furthermore, contact information for the town leaders meeting, etc was also transmitted through email correspondence. Also, details of each community, as well as Tuolumne County as a whole, were found online. Demographics such as population and employment were found through various California State Government web sites and through numerous inquiries with town and county officials. The area's history was researched through many online means. A map of Tuolumne County was purchased while on site.

3.2 Requesting Available Funds

Knowing that the IGSD (Interdisciplinary and Global Studies Division) offered funds to project teams doing their IQP or MQP, the project team requested more information regarding these funds. After inquiries with Pamela O'Bryant, a budget and proposal was submitted. Though the initial amount of \$1300.00 was deemed too much to be accepted, \$400.00 was offered. This amount is in excess of almost every other previous IQP done with the IGSD.

3.3 Obtaining Business Reply Permit and Address Line

Initially, the business reply permit was going to be purchased in Groveland, California, where the surveys would return. However, after realizing the cost of such a permit would be \$125.00, it was decided that another method must be found. Talking with the WPI mail office and printer, the project team was referred to Sadie C. Goesch, director of mailing operations. After much interaction with her, the project team was approved to use WPI's business reply permit. Though this required all of the surveys to be mailed directly to WPI's campus, it was a cheaper and more efficient method to collect the results in a timely fashion. The address line "IGSD (Groveland Survey)" was chosen since the IGSD would be funding the return mailings and the project team wanted "Groveland" somewhere within the address to ease the respondents' fears of sending the survey to Massachusetts.

3.4 Procedure for Determining Validity

Tests of the resident and student surveys' reliability were not performed. Time constraints did not allow for the carrying out of either test-retest or alternate form reliability. The time spent on site in Groveland, California, was less than three weeks. Implementation of test-retest reliability would have been useless because of the practice effect that would have been in effect. Since time constraints did not allow for the development of an alternate form of the two administered surveys, alternate form reliability was not performed either. Finally, internal consistency reliability was not performed because only one single concept of the student survey was addressed by more than one question. This concept was concerned with the students' level of satisfaction with leisure recreation opportunities offered within the Groveland area. For all other concepts, space limitations did not allow for more than one question to ask for that concept.

Of the different forms of survey validity, face validity was chosen to determine the resident and the student survey's validity. The limited budget and time constraints did not allow for the implementation of more precise forms of validity measures such as content, criterion or construct validity. Non-experts who tried to make judgments on the face validity of the student and the resident survey were the members of the project team, themselves, as well as, the project's sponsor, Barbara Broad. Both surveys were judged to be a good mean of measure for what they set out to measure.

3.5 Procedure for Creation and Test of Resident Survey

As stated in the Literature Review, to begin writing the survey, the objectives of the survey were first analyzed. For GAINs' survey, the objective was to find out what funds should be applied for based on the community's needs. GAINs had already brainstormed some ideas to improve Groveland, but they were interested in new ideas that the residents feel necessary. These improvements need to get recognition, and the survey designed allowed them to do that. However, when designing it, the simplicity of answering the questions was kept in mind. Since a high return rate was necessary to validate the data collected, the survey could not look intimidating and had to be easy to follow. Natural, normal sized fonts were used, with white space throughout.

A rough outline of the format of the survey was first produced. This took only an hour to complete, and allowed for easy placement of the questions and explanations necessary for the survey to be easy to follow. GAINs' main ideas, such as a tourist information center, skateboard park, etc, were first entered into the outline. They were grouped according to three main sections: "Economic Development," "Community Recreation," and "Community Services." These categories were broad enough to allow many questions, yet descriptive so as to get the respondent interested in the subject before being asked any questions. A brief, yet descriptive comment was put below each heading in order to get the respondent in the correct mind-set. After a little debate, these comments also became short instructions for the reader. Much attention was put on keeping the comments brief since room was valuable on the front of the survey and the

decision was already made that the back of the survey should not be used for anything other than reply information, as shown in Appendix F.

To answer the main questions posed in the body of the survey, a scale was formulated to take into account the opinions of the respondent. This scale was initially made up of five options: two negative (against the proposed question), two positive (for the proposed question), and one neutral. This scale was debated upon, and after input from the town officials and from the information obtained from the usability survey tested at WPI, a new scale was introduced. The final scale was varying degrees of positive responses. This was because no one was greatly opposed to any of the questions posed; therefore more data could be obtained through varying degrees of interest.

To introduce the survey to the readers, a short paragraph, explaining the intent of the survey, reasons for filling it out, and return information, was written to precede the questions. This tells the reader about the organization the survey is supporting, the reasons for filling out the survey, and brief directions for filling out the survey. A line explaining how to return the survey was added again at the bottom of the front page to stress method.

Next, several personal questions were pondered to make the most of the space on the survey without scaring the respondents into not filling out the survey. The questions pondered included the readers' age, home location, work location, and gender. Eventually, after much debate, only the respondents' home location and work status (which includes a general work location) were added. The home location is necessary for statistical purposes; it allowed the results to be analyzed by location, which is valuable data to GAINs. These two questions were simple and took a short amount of time to fill out, yet provided valuable information when analyzing the results.

Finally, two open-ended questions at the end of the survey allowed for further input. The two questions were added at the end of the survey as to make sure the respondents understood the objectives of the survey and had a few examples of types of input before responding to the two more thought-provoking questions. The two questions ask the readers for new ideas not mentioned in the main part of the survey, but which they feel are important for improving Groveland. Though the whole samples' thoughts on these ideas were not analyzed, the answers do provide GAINs with valuable information that they can take in to account when applying for federal funding.

Once Barbara Broad and Professor Nicoletti refined the initial survey, it was tested on a sample population in Worcester. Though the survey results from this test were not important, usability was tested and refined through this process. Each respondent was timed while taking the survey, and was asked a series of questions once the survey was finished. This allowed the final survey's format to be refined as necessary to make it as easy as possible for the respondents to fill it out in a timely fashion. The survey was administered to a selected group of people with no special consideration to randomness or proper sampling techniques. The survey was refined yet again after May 24, when the town officials' opinion was received regarding the survey.

3.6 Panel Discussion with Town Officials

Upon arrival in Groveland, a meeting with town officials, all of whom are local residents, was conducted. The list of people who attended the meeting is as follows:

- Mark Thornton, County Supervisor, District 4
- Marc Fossum, Manager, Yosemite Bank, President, Highway 120 Chamber of Commerce, and member, Groveland Rotary Club
- Jeff Winner, Manager, Groveland Community Services District
- Tony Kash, owner of a local business on Main Street, member of the Chamber of Commerce, member of Kiwanis Club
- Steve Welch, local manager for the rafting company and expert for protecting the natural areas
- Mary Kelly, PML Aviation Association, Pine Cone Performers
- Colleen Carr, County Planning Commission, member of Kiwanis Club
- Kathy Seaton, editor “Yosemite Highway Herald”

At the start of the meetings, all attendees were asked to introduce themselves, their roles in the community, their functions in the ongoing project and survey, and the results they would like to see upon completion of the project. This procedure was in accordance to the agenda, found in Appendix 0. Background information on GAINs was also provided for those not familiar with the organization, as well as background information on the survey project.

A pilot survey tested in Worcester, MA, was used as the basis for a draft of the final version; which was tested by the attendees of the meeting. The goal of testing the draft during the meeting was to assess the survey and determine whether it was applicable to the Groveland inhabitants. Further, it also helped us to determine if the survey was meeting GAINs’, and local town leaders’ expectations.

Once all attendees took the survey, a discussion was introduced to receive feedback; all participants were given the opportunity to voice their opinions and concerns. Many comments and some criticism on the draft were made. The topics of discussion included the system for rating the various proposals, and some of the ideas proposed. Some of the attendants found ideas controversial, especially since they seemed to touch upon issues of previous community discussions.

Nevertheless, some problems also had to be dealt with at the meeting. The final procedure for distributing the survey was discussed and finalized. It was decided where the survey should be distributed and which regions can be considered part of the “Groveland area.” Collection of the surveys was not discussed because the issue had already been resolved.

Finally, the last topic of discussion was the general timeline of the survey project. Because the surveys were sent out within days of the meetings and returned in a short period of time, not exceeding a few weeks, deadlines had to be made for the final draft and returned surveys. It was decided that all surveys were to be returned by June 20, and not earlier as previously discussed, since it might have led to some confusion with a deadline for a local mail-in ballot.

3.7 Feedback from Groveland Residents, Forestry Rangers, and Daren Brown

While creating the survey, it was decided to collect opinions from Groveland residents on the street through personal interviews and from two focus groups whose opinions would not be represented by the resident survey. One focus group consisted of Brenda and Gordon Ehmann, two members of the Stanislaus National Forest – Groveland Ranger District. The other was Daren Brown, a resident. He represented the residents who live in a very sparsely populated part of the southern Tuolumne County, east of Groveland, but who use the services offered within the Groveland area.

Interviews of Groveland residents were conducted at several different locations. Residents were interviewed in front of Ken’s Market, Groveland’s only grocery store, in front of small commerce stores and the Iron Door Saloon, the oldest drinking establishment, which represents Groveland’s major tourist attraction, on Highway 120, and at a large barbeque at a horse stables within PML. Respondents were asked three open-ended questions: 1.) What do you like about living within the Groveland area?, 2.) What do you dislike about living within the Groveland area?, and 3.) If you could change what Groveland has to offer, what would that be? Furthermore, the gender and the approximate age of the respondents were noted down. A blank survey form can be found in Appendix F of the report.

Brenda and Gordon Ehmann, the two forestry rangers, were introduced to the project team at a barbeque at a large horse stables within PML. Their work and the importance of Stanislaus National Forest to the Groveland area were discussed. Furthermore, the resident survey was discussed, including information that pertained to their line of work.

Daren Brown was interviewed at his home east of Groveland. The talk was held in a relaxed atmosphere right next to a small river using rocks for seating. A detailed discussion was held about the advantages and disadvantages of living further away from public amenities and services but in more harmony with nature.

Results

Groveland residents were interviewed in various locations throughout the town of Groveland to attempt to gather additional information about the residents’ views and thoughts about the current situation in the Groveland area. Especially since the resident survey was not complete, the questions asked to the inhabitants were geared towards making sure that no pertinent questions or proposals had been omitted from what would be the final resident survey. Three questions were asked to randomly selected people on the streets; the first question being “What do you like about living within the Groveland area?”, the second “What do you dislike about living within the Groveland area?” and the third “What would you like to change within the Groveland area?”. The questions were not precise for the reason of trying to receive the broadest answers and opinions possible. Thirty-four people were successfully interviewed.

The first location at which people were randomly approached was in front of the local supermarket “Ken’s Market”. The most common answers to the first question, the question pertaining to peoples’ likes of Groveland, were that they liked the remoteness,

the nature, and the calm and peaceful lifestyle, the local community and the stress-less lifestyle.

The major dislikes of the residents, ranged from the grocery store being over-priced and not having sufficient product choices, to the general prices being too high, and to the remoteness. It must here be noticed that many people liked and disliked the remoteness at the same, claiming that it had its advantages and disadvantages. Some of the other complaints were the lack of shopping facilities, and therefore needed to travel to Sonora for such conveniences, the lack of transportation and the lack of entertainment, e.g. theater.

Since the first interviews were conducted in front of Ken's Market, and that numerous people complained about the lack of a proper grocery store or shopping center, it was decided to conduct further interviews downtown on Main St. to determine if the proximity to the supermarket had any influence on the answers. The amount of interviewees complaining about the lack of a larger grocery was proportionally the same, so the proximity to Ken's Market played a very negligible role in the interviewees' opinions.

When answering the third question in the interview, the question pertaining to which changes the inhabitants would like to see in the Groveland area, most interviewed subjects chose to answer with a very similar, if not identical answer to the answer of the question pertaining to their dislikes of the Groveland area.

The discussion with the two forestry rangers of Stanislaus National Forest was highly informative to the project team. The rangers were questioned what they thought about an expanded promotion of Groveland as "Gateway to Yosemite" and expanded tourist attractions within Stanislaus National Forest. They stated that they would not like to see Groveland being promoted as "Gateway to Yosemite" but as "Gateway to Stanislaus." They replied that they would like to see an increasing awareness among the residents of the Groveland area of the recreational opportunities Stanislaus National Forest has to offer. In context with this, they described plans to expand hiking and biking trails as well as off-highway vehicle recreation areas. They hope to see an increased use of Stanislaus National Forest in return by the residents of the Groveland area as well as by more incoming tourists. Following the discussion with the forest rangers, two more items were added to the survey: off-highway vehicle recreation area and hiking/biking trails developments.

Since most of the residents interviewed in front of the market live within the immediate neighborhood and the downtown Groveland area, it was necessary to get information about the people who live outside of the downtown area. Therefore, Daren Brown was interviewed to get the ideas of people who live "up country." The following information was obtained from the interview with Mr. Brown relating to all aspects of his life and the life of people from up country.

First, he was asked what he likes about living within the Groveland area. He answered immediately, stating that he loves the seasons in the area, the solitude of the area, and how he can know everyone (unlike big cities). Furthermore, he likes how everything in the area is stress-free, and hopes to see it stay that way in the future. He was very interested in mountain biking and would like to see more mountain biking trails in the area. He said that this would be a big improvement and many people from the Groveland area, as well as tourists from outside the area, would be interested in trails.

He was then asked what he dislikes about the area and could only reply with the fact that Ken's market is expensive and people who come to visit from cities do not take care of the area. "Eco-problems," as he called them, seemed to trouble him more than anything else in the area. He is against city people coming up into the hills and disrespecting the area then leaving. However, he would not mind if people come to the area to enjoy the forest and understand its beauty as long as they respect the surroundings.

He was then asked what he would like to change within the Groveland area. Though he was interested in a movie theater, he was more interested in rest stops, trash areas, and an increased job market. He was interested in seeing a new campaign to advertise Groveland as a "Gateway to Yosemite" because he feels that Groveland is a town that people drive through without stopping while on their way to Yosemite. However, when asked whether Groveland should organize more activities for youth, he responded that he has no interest in that, and that is not because he does not have any children. He feels that there is plenty to do within the area; people just don't take advantage of it. He feels that the problems discovered here are the same as those in big cities, and therefore cannot be remedied. Besides more activities, he would like to see more medical services. He said that since many residents in the area are elderly, doctors and emergency services are needed. This was a great priority to him.

3.8 Printing and Submitting the Resident Surveys

After much revision, the survey was complete and ready for printing. After researching many printing presses in the Groveland area, Sonora Press was chosen to print 4,000 copies of the survey on 70-pound paper. Since the paper was an insert in a newspaper, thicker paper was chosen so as to be more noticeable in the middle of the newspaper. Negotiating got the price down to a reasonable amount, and the store printer opened especially for this project on Memorial Day, Monday, May 27. This was necessary since the printed copies were due that afternoon. After a few problems at the printer, the printing was perfected, and the 4,000 surveys were completed. Directly from the printer, the surveys were driven to Kathy Seaton and Dodie Heiny of the Yosemite Highway Herald for distribution into that newspaper later that week.

3.9 Administration and Collection of the Resident Survey

The resident surveys were distributed via a local newspaper, the Yosemite Highway Herald. This newspaper is distributed to the Groveland community on a monthly basis and contains articles written by amateur journalists of the Southern Tuolumne County and Northern Mariposa County. The newspaper also reports on community events, community services and other community activities. Each month, 5,200 copies of the Yosemite Highway Herald are distributed to households in Southern Tuolumne County and Northern Mariposa County. The publishers of the newspaper were exceptionally cooperative and agreed to include one copy of the survey per issue of the June edition of the newspaper. It was, furthermore, possible to insert copies of the

survey only into newspapers that were distributed to residents in areas that use the facilities and services offered within the Groveland area, namely to Big Oak Flat, Buck Meadows, Coulterville, Greeley Hill, Moccasin and Groveland (including PML). 3820 copies of the resident survey were distributed this way.

As discussed in the literature review section, the most severe disadvantage of choosing a mail survey over the other data-collection tools is the generally low response rate. To increase the response rate, often follow-up procedures such as letters, post-cards or follow-up phone calls are employed. The purpose of the follow-up letters is to stress the importance of the completion of the survey to the potential respondents, which often increases the response rate notably. In some cases, incentives such as prizes for respondents that complete and send back the survey the fastest might be appropriate to raise the response rate.

For the Southern Tuolumne County Survey, the study's limited budget did not allow for any costly follow-up procedures. Nonetheless, discussions were held about including initiatives such as a raffle with cash prizes in the survey. The hopes were to increase the response rate, as well as, to make the survey more representative of the target population since it was expected that especially younger people's reluctance to answer the survey would be lowered. The general opinion was that senior citizens would be the most motivated group to answer the survey. However, it was finally concluded that the budget did not provide sufficient funds for attractive prizes and the seriousness of the survey might have been questioned by some if an initiative such as a raffle had been included in the survey. Therefore, an initiative of any kind was not part of the survey.

Attention to the survey was drawn by several newspaper articles. As mentioned in the literature review section, the Yosemite Highway Herald is a local newspaper that is distributed on a monthly basis. In the May edition of the newspaper, the project's sponsor, Barbara Broad, had published an article about the project team and GAINs, raising the awareness of the Groveland area residents of the upcoming survey. The survey was included in the June edition as an insert. The newspaper's June edition had an article about GAINs, the project team and the survey centered on the title page containing a request to the reader to fill out the inserted survey and mail it back to the project team (see Appendix K). In about the same period of time, articles about the survey and the project team were published in the Pine Mountain Lake News and The Union Democrat. The Pine Mountain Lake News is published on a monthly basis and distributed to each household within PML. The Union Democrat is the region's largest daily newspaper having 11,600 subscribers.

Collection of the surveys was done via the prior obtained business reply permit. Respondents were asked to fold the survey into thirds making sure that the Business Reply box faces outward and to seal it shut. Furthermore, respondents were asked to mail the survey no later than June 20, 2002. Completed resident surveys were mailed to the IGSD. The staff at the IGSD was very cooperative and set received surveys for the project team aside for pick-up. Completed surveys that were received after June 26, 2002 were not accepted.

Of the 3820 Southern Tuolumne County Surveys that were distributed as an insert in the June edition of the Yosemite Highway Herald, 552 surveys were mailed back to the IQP team. This corresponds to a return rate of 14.5%. Of the 552 returned surveys, five were not filled out at all and 126 were incomplete. Most of the incomplete surveys lacked only the answer to one, two or three questions. On average, each question was answered by about 514 respondents, the minimum number of responses being 499 and the maximum number being 525 answers. The results are discussed by section on the Southern Tuolumne County Survey starting with “Economic Development,” continuing with “Community Recreation” and “Community Services,” and ending with “Current Situations.”

Under “Economic Development,” residents of the Southern Tuolumne County were asked to state their interest in the following four ideas to promote economic growth in the Groveland area: tourist information center, rest area development, expanded promotion of Groveland as “gateway to Yosemite”, and local review of new business buildings and renovations. Figure 1 depicts the average responses for these four items.

As can be seen in Figure 1, residents of the Groveland area showed highest interest in an expanded promotion of Groveland as “Gateway to Yosemite.” The average response was 3.43 with a standard deviation of 1.45. As can be seen in Figure 2, 290 residents, or 56.2%, showed very high interest (5.0) or high interest (4.0) in an expanded promotion. Residents of Coulterville and Mocassin showed less interest in an expanded promotion with an average response of 2.25 and 2.30, respectively, compared to residents of all other locations with average responses ranging from 3.41 for Groveland residents to 3.60 for Greeley Hill residents (see Figure 3). There was no significant difference in rating between residents with different employment status (see Figure 4). Nonetheless, it is noteworthy that respondents who work outside Tuolumne County showed least interest in an expanded promotion of Groveland as “Gateway to Yosemite” with an average response of 3.00, whereas unemployed respondents showed highest interest with an average response of 3.60.

Respondents showed next highest interest in a local review of new business buildings and renovations. The average response for this item was 3.31 with a standard deviation of 1.42 (see Figure 1). In general, 47.6% of the respondents showed high (4.0) or very high interest (5.0) in a local review of business buildings whereas only 28.7% showed only little (2.0) or no interest (1.0, see Figure 2). Residents of Buck Meadows and Mocassin showed less interest in an expanded promotion with an average response of 2.75 and 2.38, respectively, compared to residents of all other locations with average responses ranging from 3.26 for PML residents to 3.54 for Greeley Hill residents (see Figure 3). Differences in rating based on employment status are extremely small and therefore, negligible (see Figure 4).

A rest area development was of third highest interest to respondents of the Southern Tuolumne Survey. Interest in a rest area development represented by an average response of 3.09 (1.45, standard deviation) is remarkably lower than the interests in an expanded promotion of Groveland as “Gateway to Yosemite” or in a local review of new business buildings and renovations. Furthermore, 217 respondents, or 42.6%,

showed high (4.0) or very high (5.0) interest in a rest area development. In comparison, 177 respondents, or 34.7%, showed only little (2.0) or no interest (1.0, see Figure 2). Residents from Coulterville showed on average the highest interest in a rest area development (4.0, average response) and Mocassin residents showed the least interest (1.75, average response) whereas the average responses for residents of all other locations is close to 3.00 (see Figure 3). There was no significant difference in rating between residents with different employment status (see Figure 4).

Residents of the Groveland area showed least interest in a tourist information center. These data are represented by a low average response of 2.91 with a standard deviation of 1.37 (see Figure 1). Overall, 177 respondents, or 34.8%, showed high (4.0) or very high (5.0) interest in a development of a tourist information center. On the contrary, 196 respondents, or 38.5%, showed only little (2.0) or no interest (1.0, see Figure 2). As for the rest area development, residents from Coulterville showed the highest interest in a tourist information center, which is represented by an average response of 4.18. Again, the least interest was shown by Mocassin residents represented by an average response of 2.13. The average responses for residents of all other locations were close to 3.00 (see Figure 3). Differences in average responses by employment status are insignificant (see Figure 4).

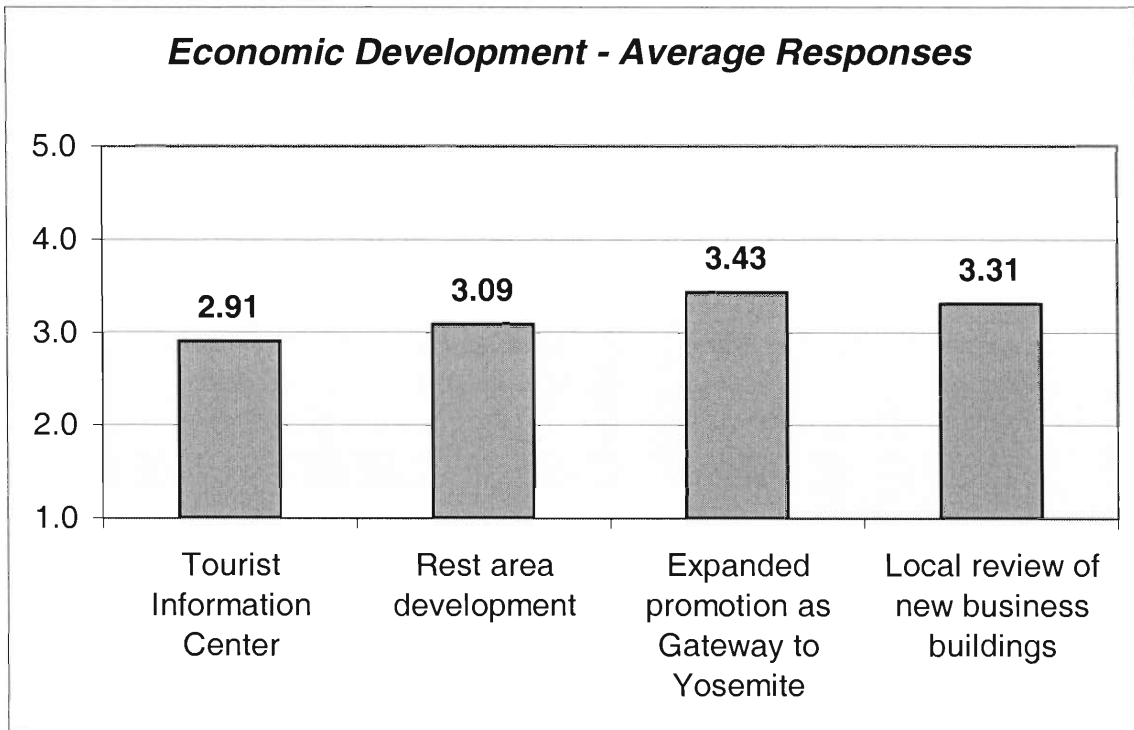


Figure 1. Economic Development section's averages for all respondents.

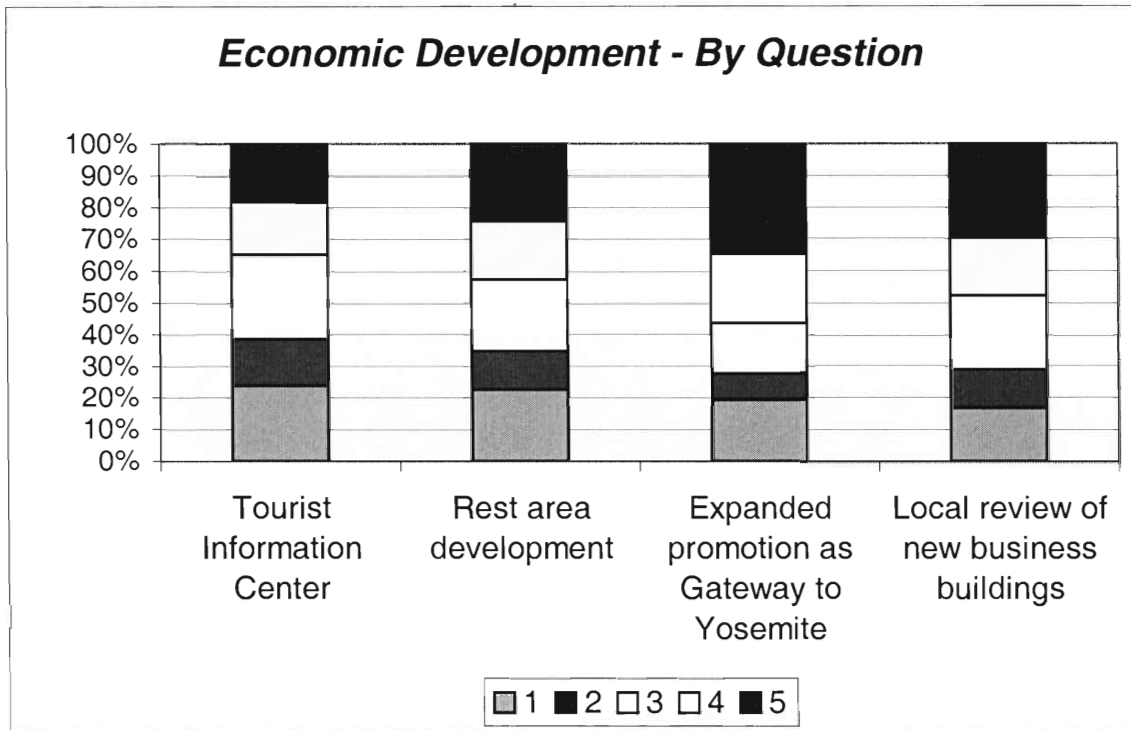


Figure 2. Economic Development section breakdown of responses

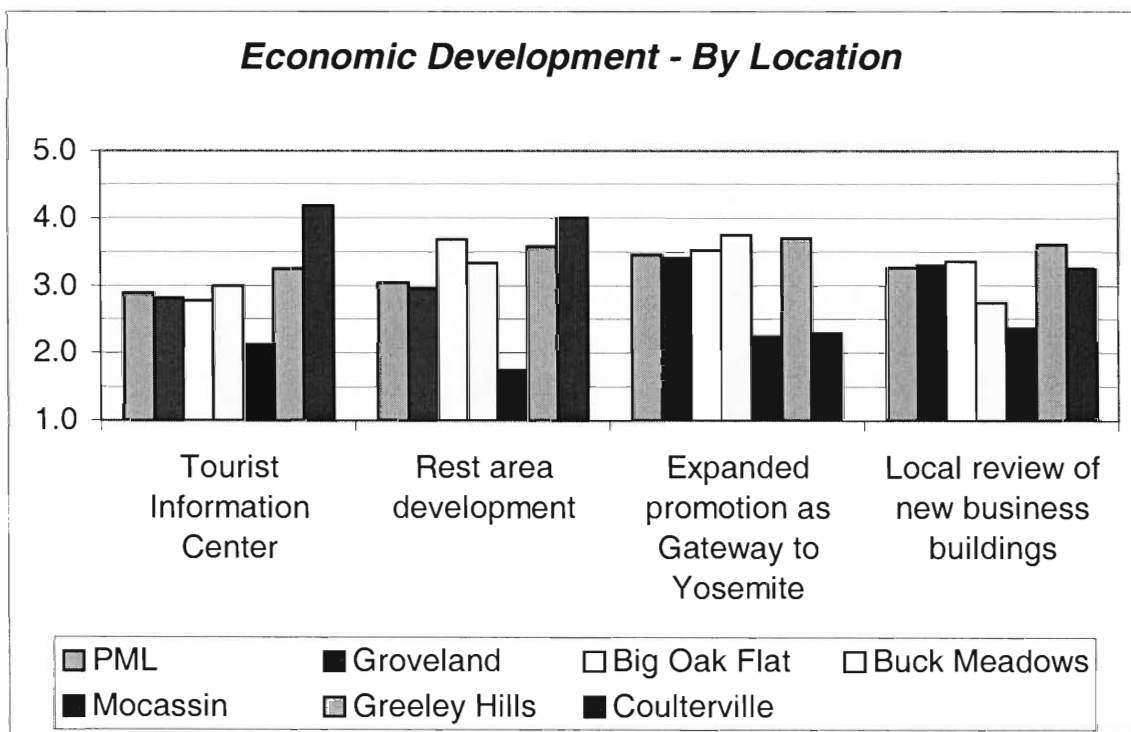


Figure 3. Economic Development breakdown of averages by location

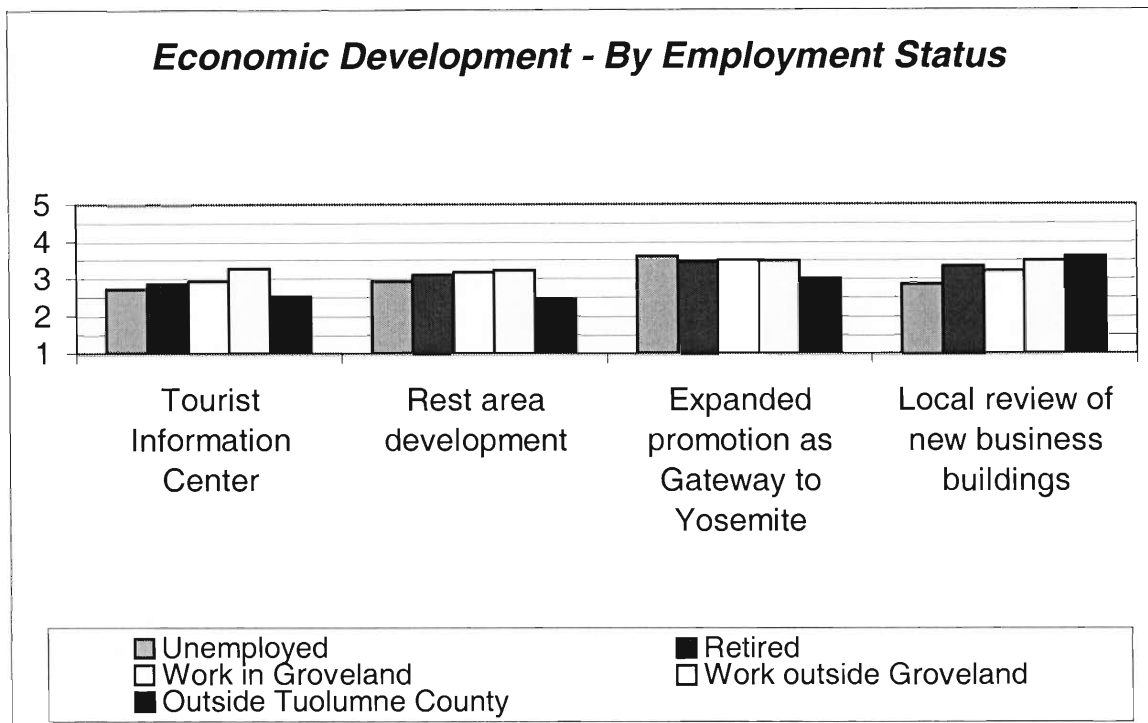


Figure 4. Economic Development breakdown by employment status

Community recreation, the largest section of the resident survey, provides examples of possible expansions to the community. The items suggested, in order of highest average interest amongst all respondents, are: 1.) senior center, 2.) theater/movie theater, 3.) hiking/biking trail development, 4.) expanded community hall, 5.) new youth center, 6.) workout gym, 7.) skateboard park, 8.) mini golf course, 9.) bowling alley, 10.) off highway vehicle recreation area. The average values of each of these ideas are 3.39, 3.34, 3.33, 3.31, 3.13, 3.03, 2.79, 2.40, 2.32, 1.90, respectively (see Figure 5).

The highest six averages stand out above the others as having most interest from the respondents. A senior center, averaging the highest among respondents, gains most of its interest from respondents in PML, Groveland, Greeley Hills and Coulterville. Lower interest comes from the community of Mocassin, where its average interest is 2.22 out of 5.0. All other breakdowns by location show an average interest of 3.0 or higher (see Figure 7). As expected, the retired respondents have greatest interest in a senior center, averaging 3.54, while all other employment breakdowns are between 3.00 and 3.20 out of 5.0 (see Figure 8).

The second most positive responses came for a theater/movie theater, averaging 3.34 out of 5.0 amongst all respondents (see Figure 5). Big Oak Flat and Coulterville each had the largest interest in a theater/movie theater, each averaging 4.0 out of 5.0. Least interest again came from Mocassin, averaging 2.89 (see Figure 7). The respondents working outside the Groveland area and unemployed averaged the highest two values when splitting the data by employment status, averaging 4.13 and 3.79, respectively. Statistically, retired respondents averaged the lowest interest in a theater/movie theater with a 3.09 of 5.0 (see Figure 8).

Of next highest interest is that of creating hiking and biking trails. Of all the respondents, the average interest was 3.33 out of 5.0, statistically equivalent to that of a theater/movie theater (see Figure 5). However, the demographics of such hiking and biking trails is much different. Mocassin, Coulterville, and Big Oak Flats' residents are most interested in creating hiking and biking trails, with averages of 4.22, 4.18, and 3.63, respectively (see Figure 7). Retired respondents stand out as having least interest in hiking and biking trail development, with an average response of only 3.03 out of 5.0 (see Figure 8).

An expanded community hall holds the fourth-highest response average of 3.31, again, statistically similar to those of a theater/movie theater and creation of hiking and biking trails (see Figure 5). However, Mocassin, along with Greeley Hills, shows the least interest in expanding the community hall (see Figure 7). Breaking down the results by employment status shows that unemployed are less interested in expanding the community hall, however, all other breakdowns are statistically similar to each other (see Figure 8).

Interest in each of a new youth center, workout gym, skateboard park, mini golf course and bowling alley are either statistically similar or of less interest to the general Groveland area population. Therefore, less consideration was given to these responses. Though the results for these suggestions are important, nothing more than what can be interpreted from the figures can be taken from the data.

Of least interest, however, is that of an off highway vehicle recreation area. Receiving the lowest average of only 1.90 out of 5.0 for the whole sample surveyed, it scored well below the next lowest average in the whole survey (see Figure 5). Breaking the results by location, PML and Mocassin show least interest, averaging 1.71 and 1.89, respectively (see Figure 7). Further breaking down the results by employment status, it is shown that retired respondents are least interested in an off highway vehicle recreation area, averaging 1.74 (see Figure 8). Finally, breaking the data down by response, it is shown that 315 respondents voted 1.0, the lowest possible interest, on this question (see Figure 6).

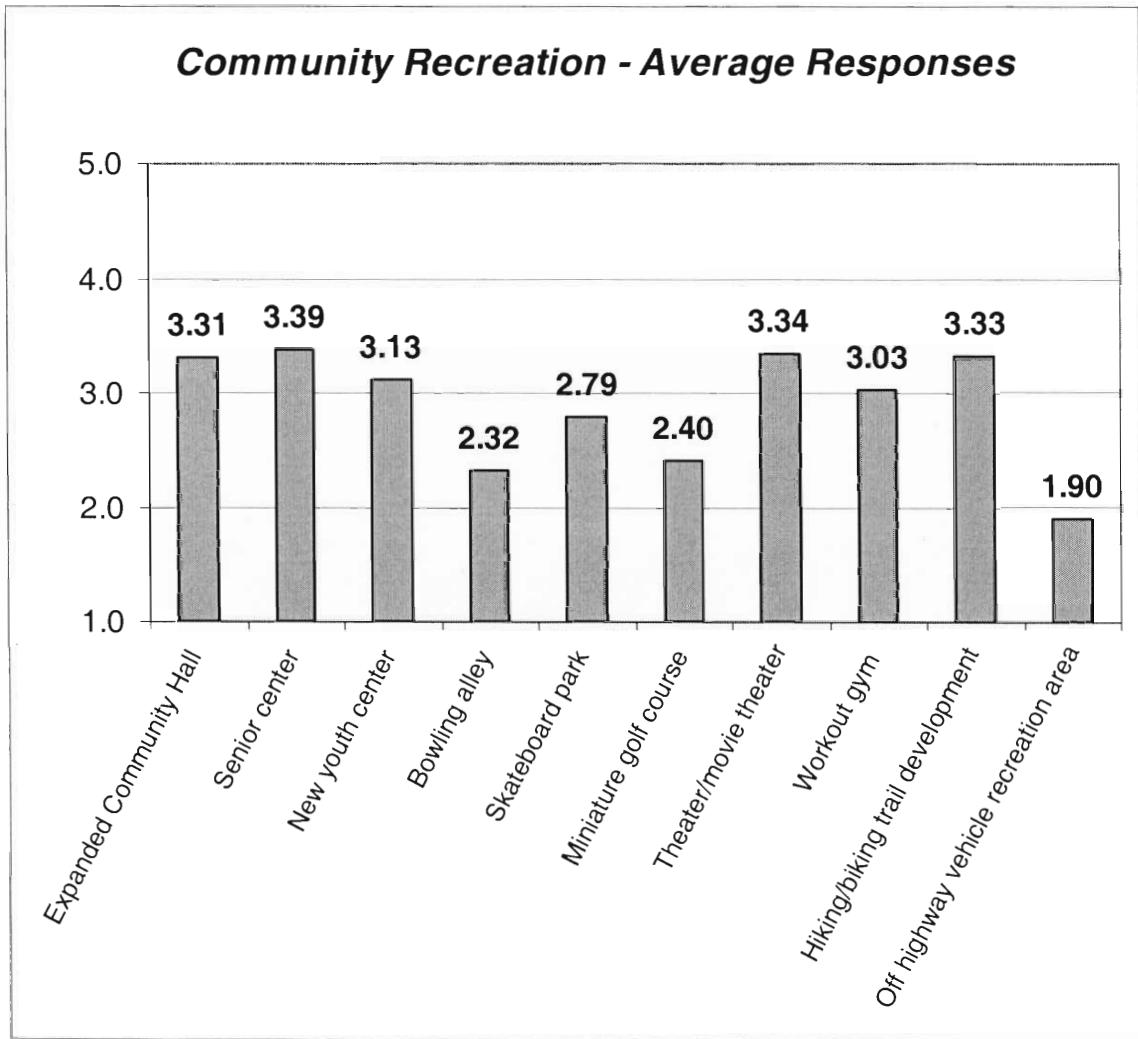


Figure 5. Community Recreation section's average responses for all respondents

Community Recreation - By Question

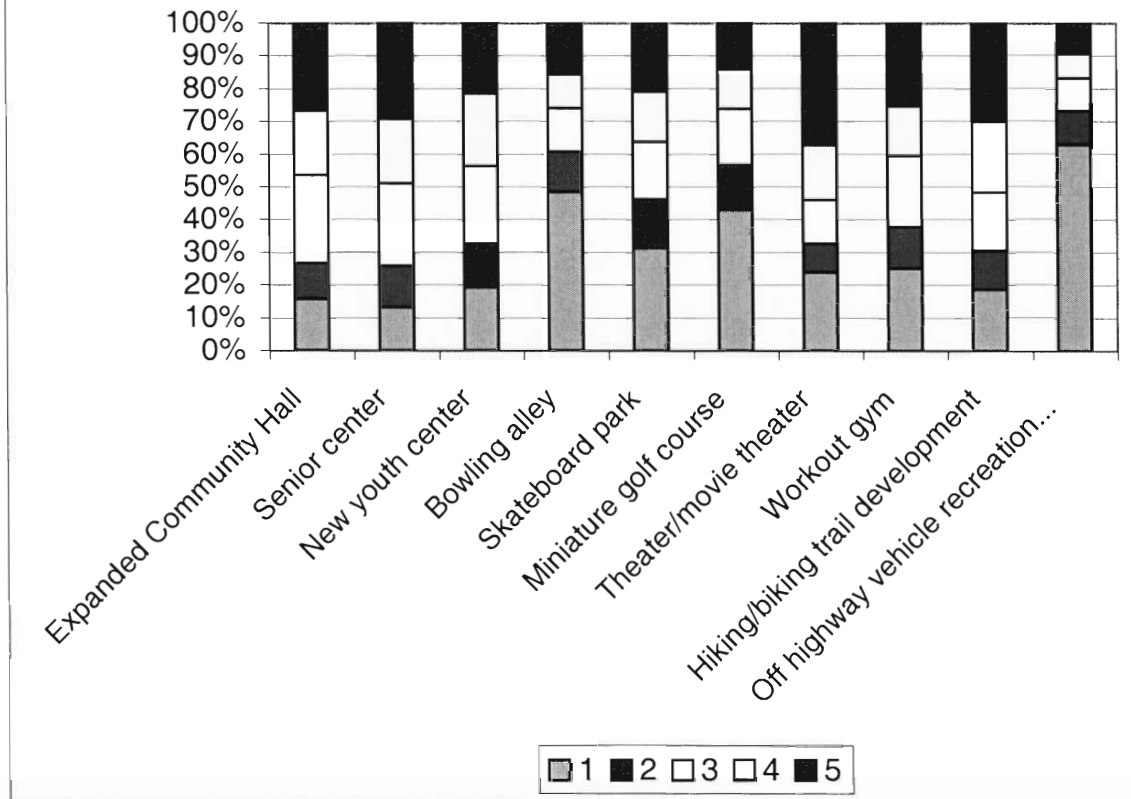


Figure 6. Community Recreation breakdown by responses

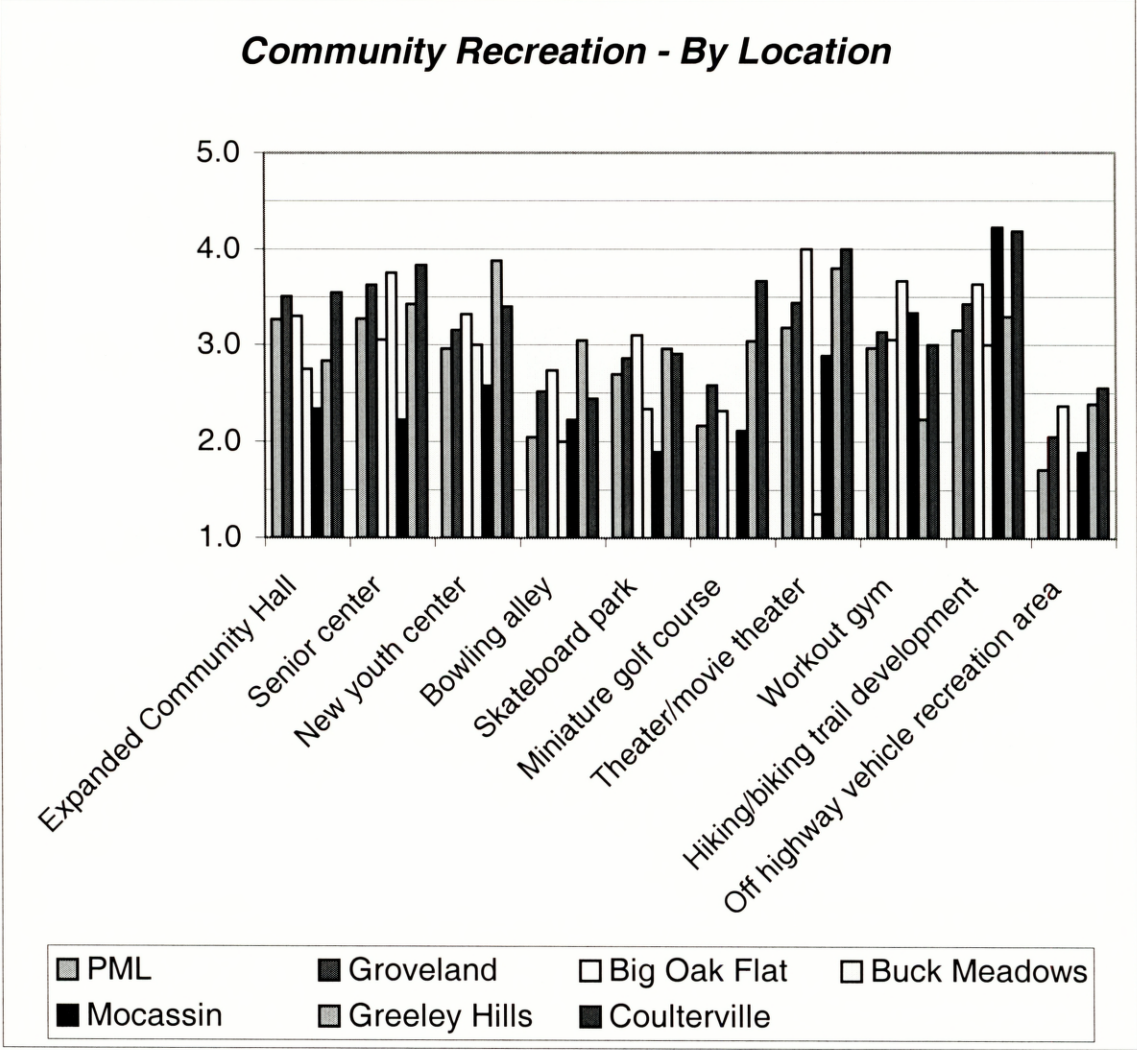


Figure 7. Community Recreation breakdown by location

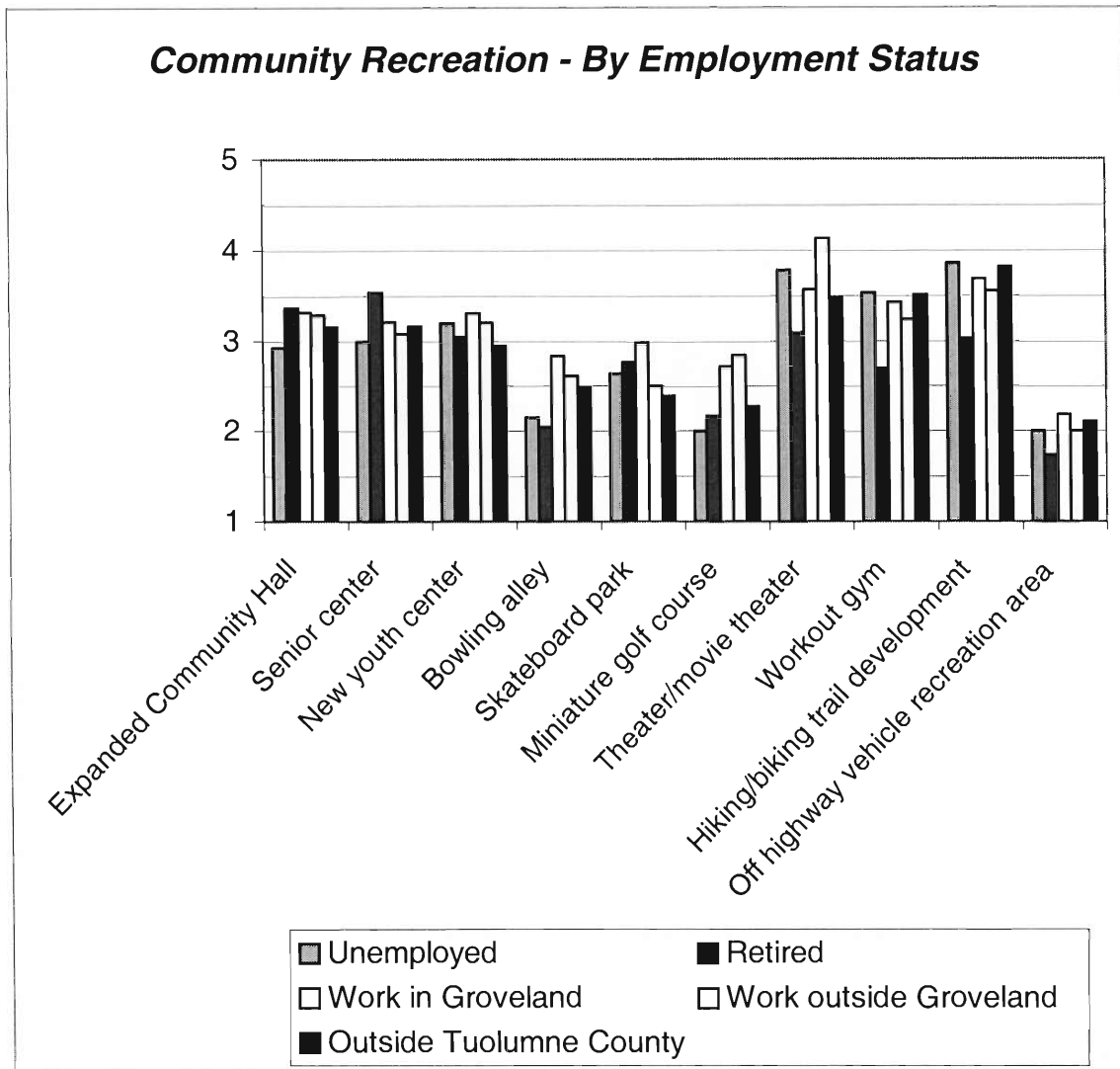


Figure 8. Community Recreation breakdown by employment status

Of all questions, the question with the highest average response is the one pertaining to “Expanded MediCare and MediCal Services”, with an average response of 3.92. The standard deviation for the question is 1.3 (see Figure 9). It is notice that almost 70% of the respondents answered either a 4.0 or a 5.0 (see Figure 10). Most areas in the Groveland area have average responses around 4.0, with the exception of Mocassin with a low average response of 2.4, for a total of eight respondents from the area (see Figure 11). When investigating into the responses of this question based on employment status, most responses are in the range of 3.8 to 4.0, with the exception of the response from people working outside of the Groveland area, which is 3.4 (see Figure 12).

The next question in “Community Services” was also the second highest rated in the entire survey by average response, the question asked about “Summer/Evening Programs.” The average response was 3.43, with a standard deviation of 1.3 (see Figure 9). It is also noticed that over 50% of the respondents answered either 5.0 or 4.0 (see Figure 10). When studying this question by location of residence, three distinct groups

emerge: the first encompasses the answers of people from PML, Groveland and Big Oak Flat, whose answers range from 3.30 to 3.55. The second group consists of only Mocassin with an average response of 3.10. The third group consists of Greeley Hills and Coulterville, which have higher average responses, ranging from 3.80 to 4.00 (see Figure 11). When observing by employment status, there is a spread of answers from 3.30 to 3.80, with people working outside of Groveland being the highest and retired people having the lowest average response (see Figure 12).

The question “Transportation to Sonora and Columbia College” ranked third in its category. The average response was 3.05 with a standard deviation of 1.5 (see Figure 9). When comparing the answers based on residence location, three distinct groups are also noticed; the first group (PML) seems less interested by the idea, with an average response of 2.75. The most interested area is instead Big Oak Flat with an average response of 3.9. The rest of the areas all have average responses in between 3.25 and 3.70 (see Figure 11). When comparing by employment status, the results are fairly even, with responses from 2.9 to 3.35 (see Figure 12).

The next question is “Transportation to outside of Tuolumne County,” with an average response of 2.69, and a standard deviation of 1.5 (see Figure 9). Almost 50% of the respondents answered this question with a 1.0 or a 2.0 (see Figure 10). When analyzing this question based on the location of residents, two areas answered distinctly lower than the others: PML and Groveland, which also do constitute the majority of the responses. Those two areas responded with average responses of 2.40 and 2.80, while the other areas all answered in between 3.30 and 3.50, respectively (see Figure 11). When looking at the average responses by employment, the retired group stands out: their average response was 3.55, while all other groups’ responses were in between 2.60 and 3.00 (see Figure 12).

The final question of the section “Preschool and daycare services” received an average response of 2.68, with a standard deviation of 1.4 (see Figure 9). Again, over 45% of the respondents responded with either 1.0 or 2.0 (see Figure 10). There is no large difference in the response based on the residence location. Respondents from PML and Groveland responded on average in between 2.4 and 2.7. Respondents from Big Oak Flat, Mocassin and Greeley Hills rated the suggestions on average from 3.2 to 3.6. Coulterville instead, on average responded with high responses ranging around 4.3 (see Figure 11). When observing the responses based on employment status, retired people responded lower with responses on average of 2.45, whereas all other people responded with responses an average ranging from 2.8 to 3.1 (see Figure 12).

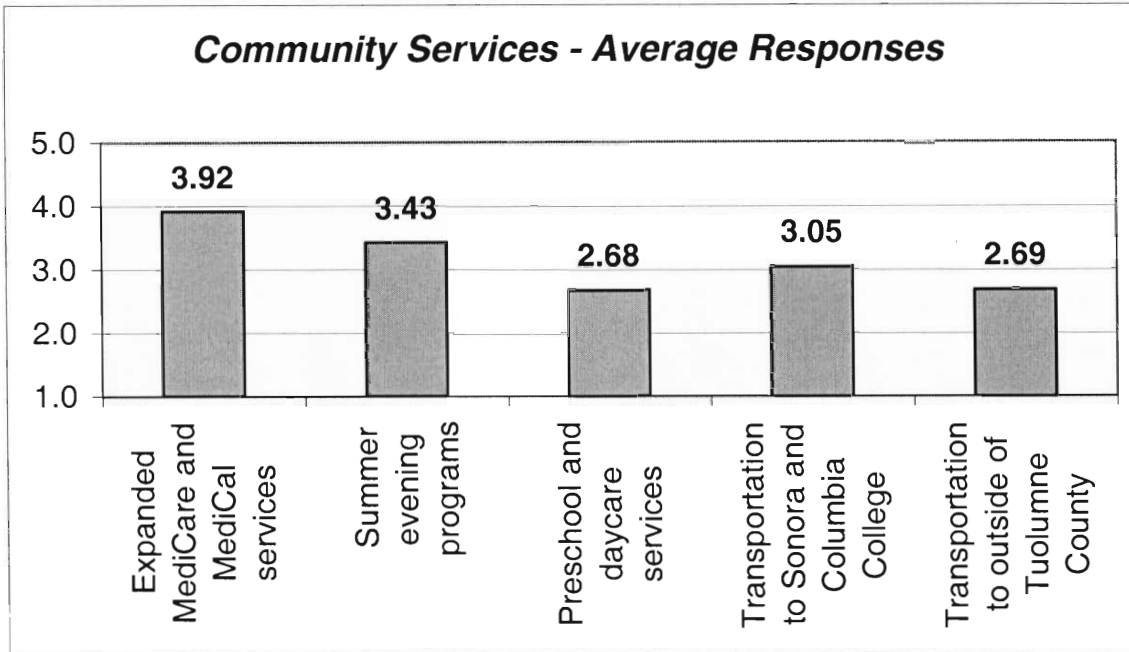


Figure 9. Community Services section's average responses for all respondents

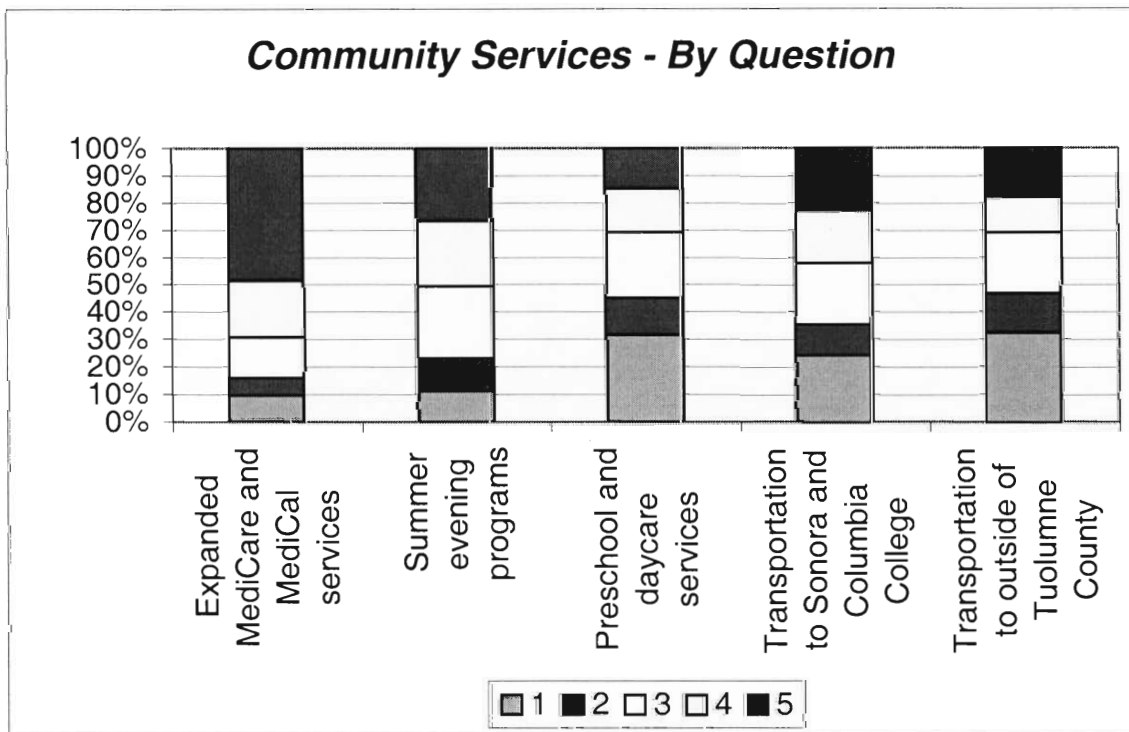


Figure 10. Community Services breakdown by responses

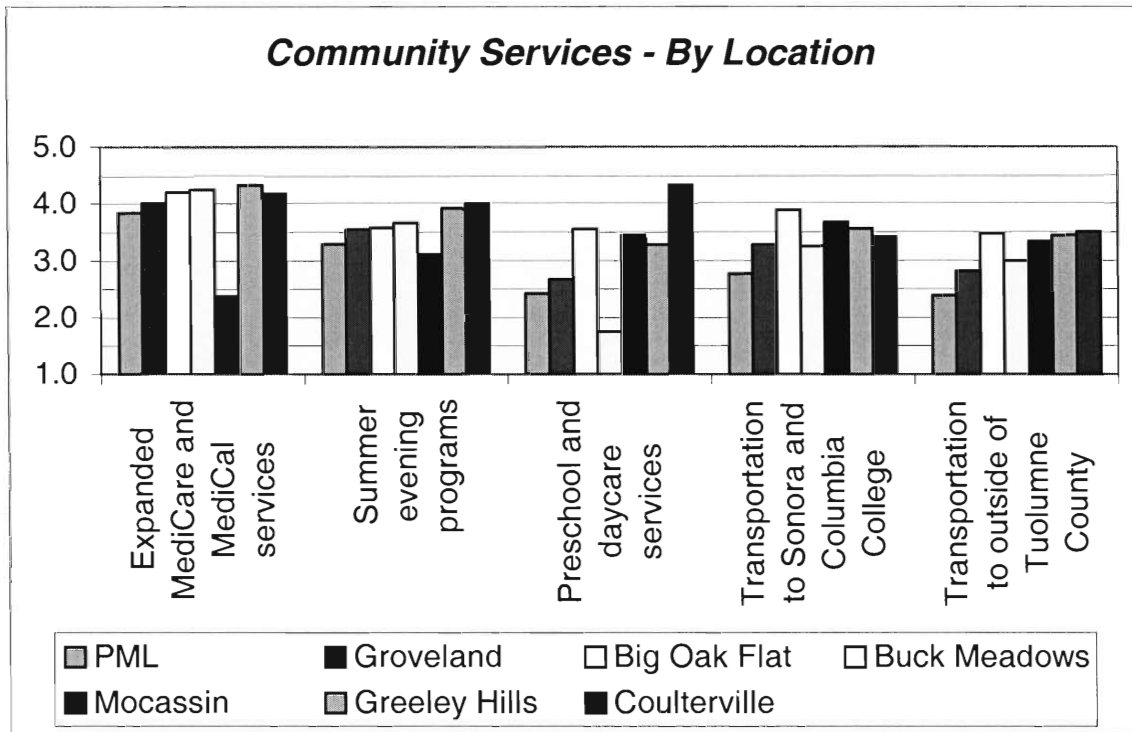


Figure 11. Community Services breakdown by location

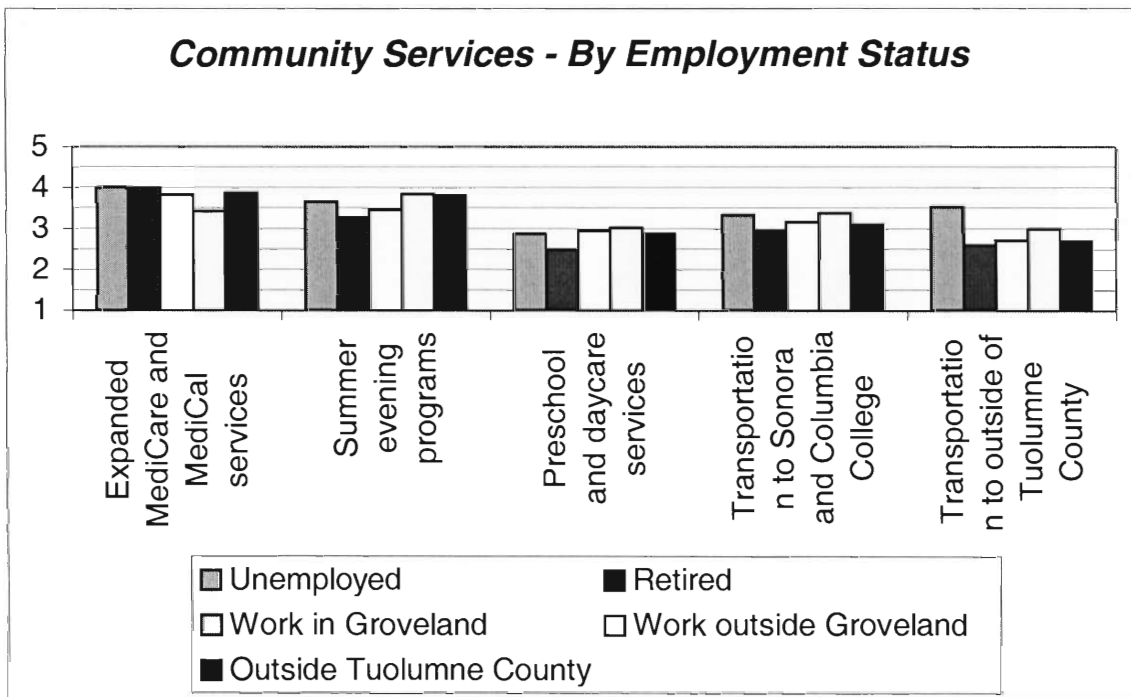


Figure 12. Community Services breakdown by employment status

The current situations results appear in a very strict order as follows, starting with the most positive response averages: 1.) law enforcement, 2.) overall economy, 3.) medical services, 4.) recreational facilities. The average values spanning over the whole response group are 2.91, 2.81, 2.70, and 2.66, respectively. The standard deviations for the four questions are 1.20, 0.93, 1.08, and 1.15, respectively (see Figure 13).

Law enforcement, the highest scoring of all of the current situations received an average value of 2.91 out of 5.0 (see Figure 13). When comparing responses by location, Big Oak Flat and Greeley Hill respond with the most positive averages of 3.50 and 3.63, respectively. The lower values are relatively steady around 2.90 out of 5.0. However, four respondents from Buck Meadows averaged 1.25 out of 5.0, the lowest values of the responses (see Figure 15). Further comparing by employment status, retired respondents stand out with the most negative responses, averaging 2.80 while all other respondents averaged around 3.10 to 3.20 (see Figure 16).

The second most positive averaging current situation is overall economy, averaging 2.81 out of 5.0 (see Figure 13). Though only 18.9% of the respondents responded either a 4.0 or 5.0, the average was higher than the last two questions (see Figure 14). Respondents from Big Oak Flat averaged the highest with 3.05, while Buck Meadow's four respondents again averaged the lowest with 1.67. All other areas averaged between 2.30 to 2.80 (see Figure 15). Workers outside Groveland gave overall economy the highest average at 3.00 out of 5.0. No other employment status breakdown proved to stand out as the lowest average. The other employment status breakdowns averaged from 2.70 to 2.90 (see Figure 16).

Third out of the four current situations listed is that of medical services, which averaged 2.70 out of 5.0 among all respondents (see Figure 13). No single community rated medical services statistically higher or lower than the average, therefore none stand out as feeling the medical services are any better or worse than any others (see Figure 15). However, when breaking down the results by employment status, retired respondents find the medical services to be the best, averaging 2.81 out of 5.0. All other breakdowns feel the medical services are around the average value of 2.60 to 2.70 (see Figure 16).

The worst averaging current situation is recreational facilities, receiving 2.66 out of 5.0 (see Figure 13). Breaking down the results by location of respondents, no community seems to statistically have higher or lower values than any other, however, breaking down the results by employment status, respondents that work in the Groveland area find recreational facilities to be the lowest, with an average response rate of 2.46 out of 5.0. All other breakdowns average around 2.60 to 2.70 (see Figure 16).

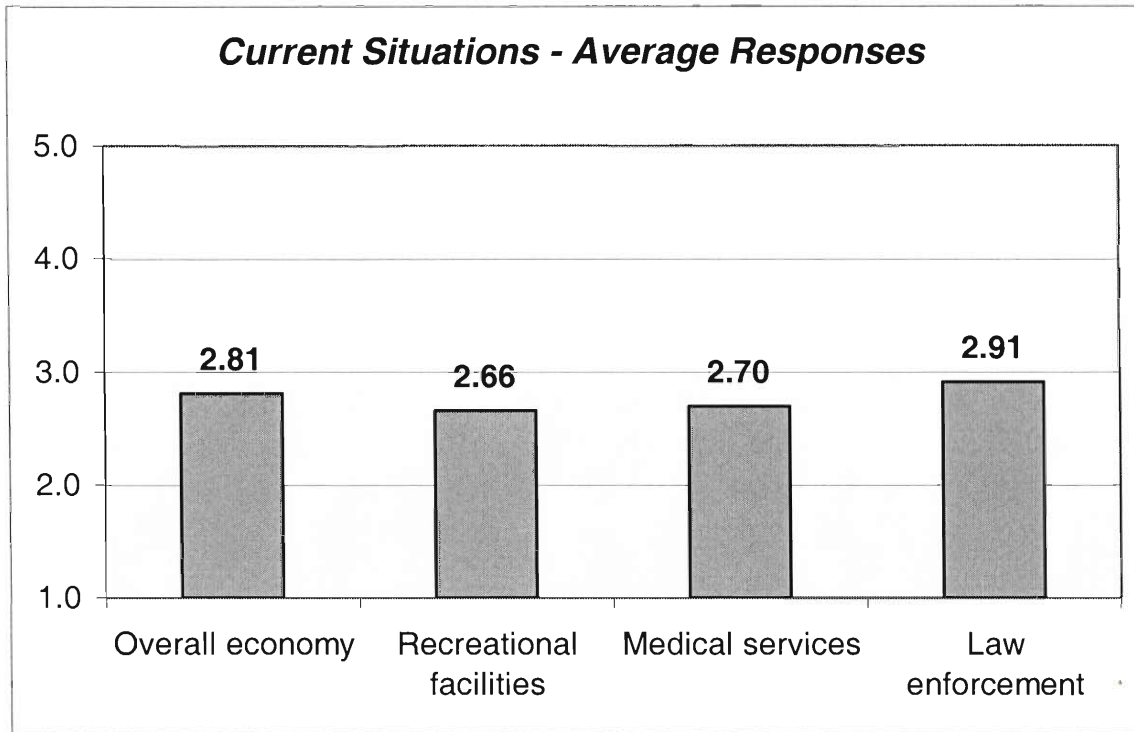


Figure 13. Current Situations section's average responses for all respondents

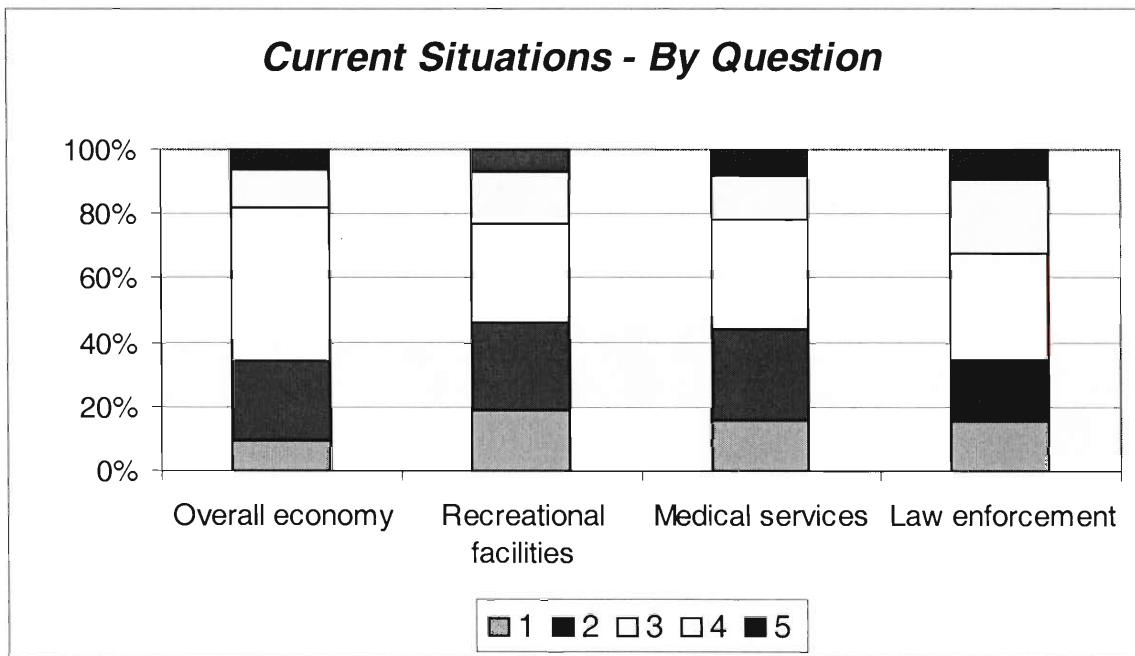


Figure 14. Current Situations breakdown by responses

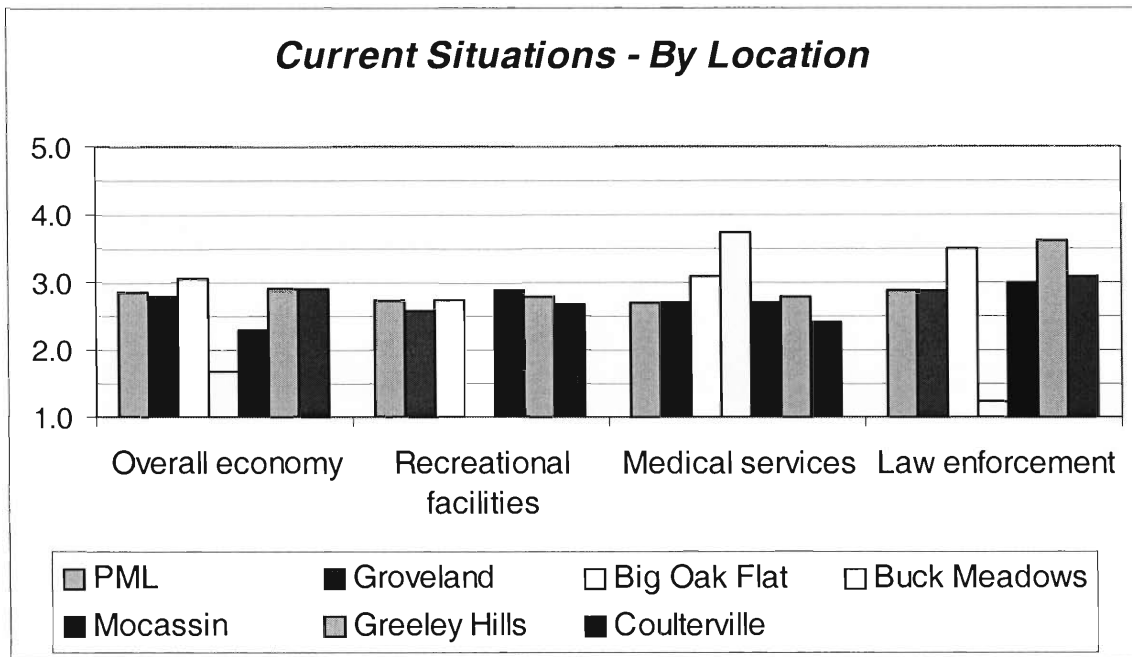


Figure 15. Current Situations breakdown by location

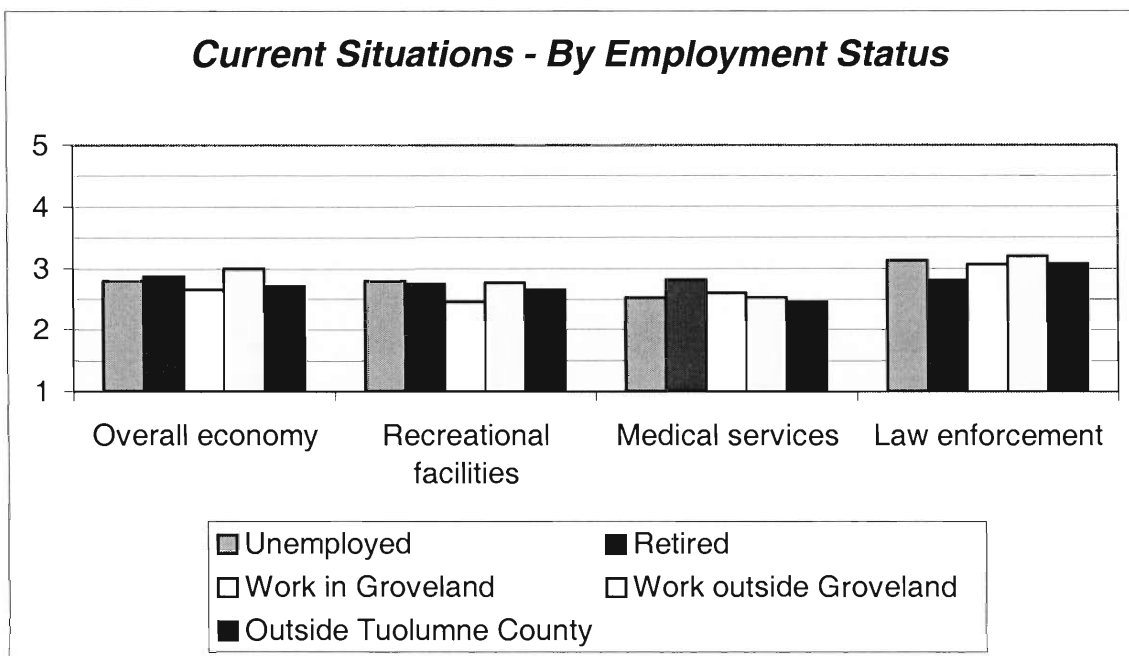


Figure 16. Current Situations breakdown by employment status

As seen in Figure 17, over 50% of the survey responses originated within PML, followed by 35% originating from Groveland. These two areas represent the large majority of the responses, since the rest of the responses are dwarfed by these two areas. The other responses originated from Greeley Hill (6%), Big Oak Flat (4%), Mocassin

(2%), Coulterville (2%) and Buck Meadows (1%). The two areas of Groveland and PML represent 85% of the responses. PML is in Groveland, but is separated from the city of Groveland, since there are large differences in the living standards in between the two areas, and they can therefore be considered as two separate communities.

Fifty-seven percent of the people who responded are retired, followed by 24% of the respondents working in Groveland (as shown in Figure 18). These two categories alone represent 81% of the respondents. Eight percent of the respondents work within the general Groveland area, and 8% work outside of Tuolumne County. There are only 3% of the respondents who are currently unemployed, and there was only one respondent claiming to be a student, representing less than 1%.

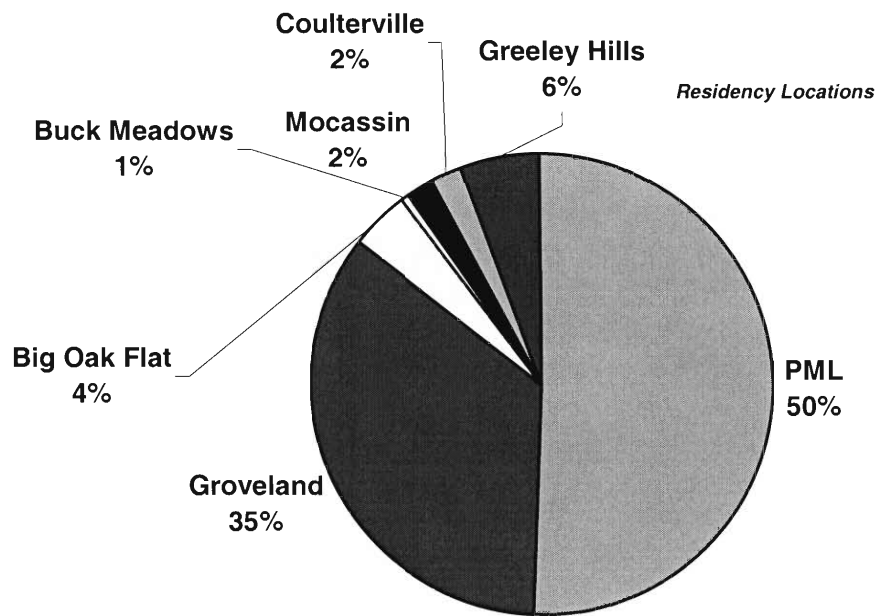


Figure 17. Respondents by Residency Location

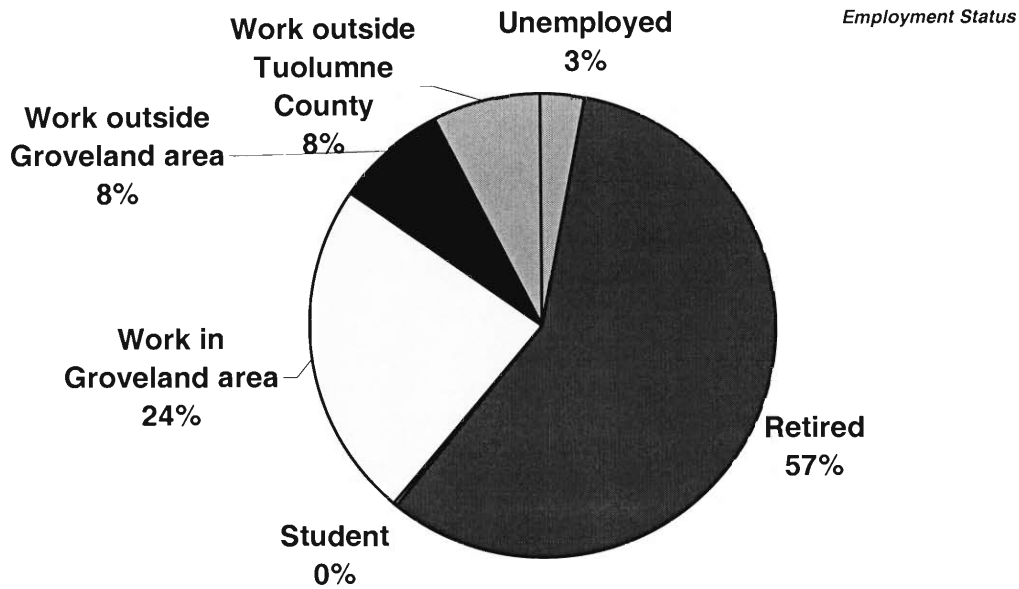


Figure 18. Respondents by Employment Status

3.10 Creation and Administration of Student Survey

While in residence in Groveland, California, a separate survey was created and administered to the students of the Tioga High School, the high school servicing the Groveland area. This separate survey was administered to collect the opinions of the students of the Groveland area. The project team was of the opinion that students and teenagers were very likely to be underrepresented in the Southern Tuolumne County Survey because motivation to complete the survey was expected to be greater among adults.

The current enrollment at Tioga high school was 127 students – 27 seniors, 30 juniors, 33 sophomores, and 37 freshmen. The high school survey was called “Tioga Survey” and was derived from the resident survey. It consisted of four sections. Under “Current Situation,” students were asked to rate law enforcement, high school education, the youth center, and activities offered in the Groveland area on a scale from poor (1) to good (5). Under “Recreational Facilities & Services,” students were asked to rate if they would like to see the following in the future based on their interest from no interest (1) to strong interest (5): expanded community hall, new youth center, high school gymnasium, public swimming pool, bowling alley, skateboard park, miniature golf course, theater/movie theater, workout gym, hiking/biking trail development, off highway vehicle recreation area, transportation to Sonora, and transportation outside of Tuolumne County. Under “General Information,” students were asked to mark down their school year, their gender, where they live, and how often they found themselves bored ranging from never to every day. Furthermore, they were asked to write down their hobbies and interests and whether they were planning on staying within the Groveland area after completing high school. Students who answered that they did not plan on staying were asked to write

down where they were planning on moving. Finally, as on the resident survey, students were asked to answer two open-ended questions: 1.) What two things do you feel are most needed in the Groveland area?, and 2.) What new facilities and/or services would you like to see in the future? For a copy of the administered student survey, see Appendix H.

The student survey was first pilot tested on six students attending a computer class taught at Tioga High School by Barbara Broad. The project team did not make any changes to the survey after the pilot test. One day later, the permission to administer the “Tioga Survey” to the students was obtained from the Tioga High School Principal. Copies of the survey were passed to Tioga High School’s teachers before the beginning of the first class. The teachers were very cooperative, administered the survey to their students at the beginning of class, and read instructions out loud to the students. Completed surveys were then collected by the teachers and returned to the project team.

Results

Seventy-five students completed the student survey, which corresponds to approximately 70% of the entire Tioga High School student body. The 75 students split up into 24 freshmen, 21 sophomores, 21 juniors, and 9 seniors. Seniors are underrepresented in this survey because it was administered at the end of the school year during senior week, and many seniors were absent from school. Of all respondents, 32 were female and 43 were male, corresponding to 43% and 57%, respectively. Two students were from Greeley Hill, two from Coulterville, one from Buck Meadows, five from Big Oak Flat, 29 from Groveland, and 32 from PML.

Grade Levels

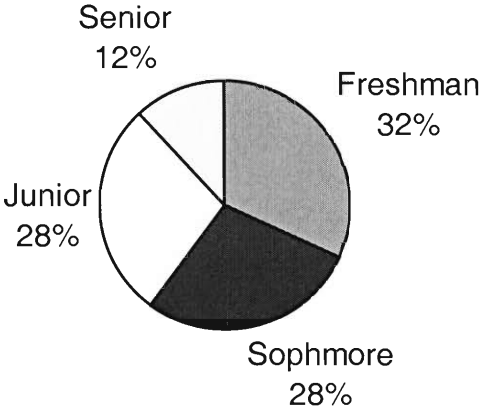


Figure 19. Grade levels of student respondents

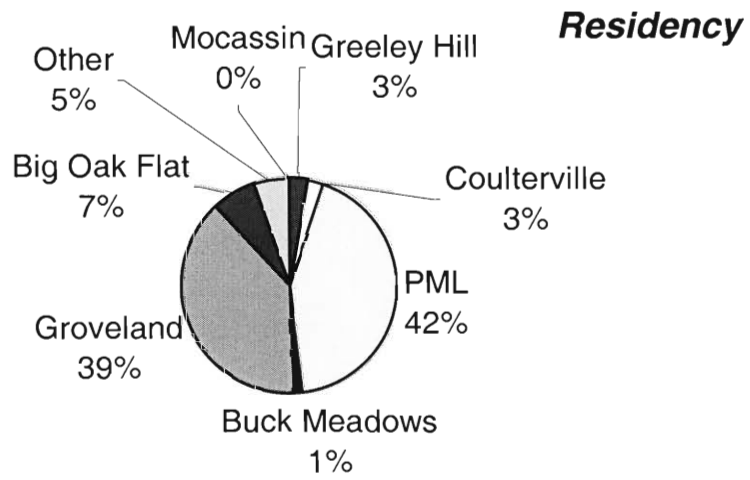


Figure 20. Residency breakdown of student respondents

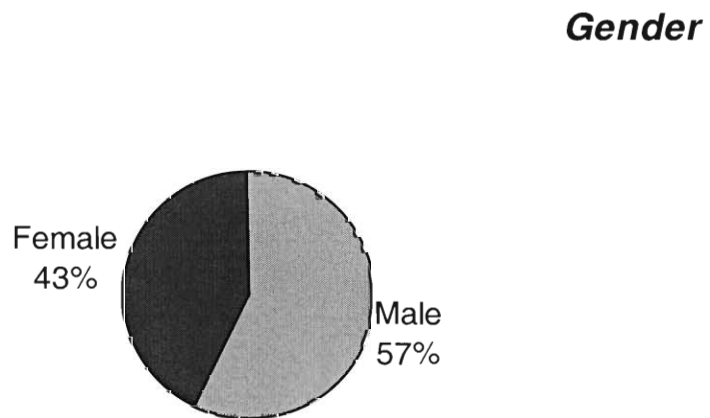


Figure 21. Gender breakdown of student respondents

Amount Bored

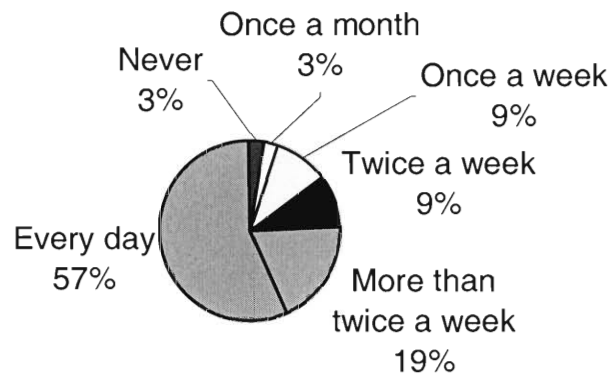


Figure 22. Percentage of student respondents bored

Percent Staying in Groveland Area

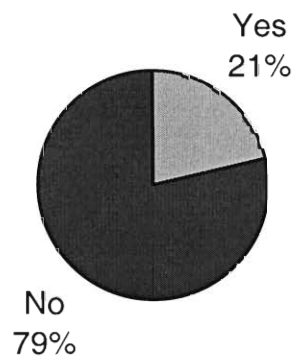


Figure 23. Percentage of student respondents staying in Groveland after graduation

Overall, the average responses were a lot higher for the student survey than for the Groveland Area Resident Survey. This is partly due to the substitution of some questions that seemed to be irrelevant to students of the Groveland area (such as summer evening programs), with questions of higher relevance to the students such as the construction of a High School Gymnasium. Furthermore, it was to be expected that younger people would show higher interest in the expansion of recreational facilities and services.

As illustrated in Figure 24, by average response, respondents of the high school survey showed highest interest in seeing the following six facilities in the future within the Groveland area: 1.) high school gymnasium, 2.) theater/movie theater, 3.) bowling alley, 4.) public swimming pool, 5.) workout gym, and 6.) skateboard park.

The question that received the highest interest from the students was that of a high school gymnasium. The average response to this question was 4.6 out of 5.0, with a standard deviation of 0.895, the lowest of all of the standard deviations (see Figure 24). Out of the 75 students surveyed, 61 of them (81.3%) responded with the highest rating of 5.0. A further 7 of them (9.33%) responded with the second highest rating of 4.0. Three, two and two other students responded with ratings of 3.0, 2.0, and 1.0 respectively (see Figure 25). Out of the students that voted the lowest three ratings, three are from PML, two are from Groveland, and one is from Big Oak Flat. Splitting the responses by gender, it was shown that males responded at an average of 4.49 out of 5.0 and females responded at an average of 4.84 out of 5.0, making the average response 7.34% higher for females (see Figure 26). While six males voted the lowest three ratings, only one female did the same. Further dividing the data, most of the low interest responses came from third year students (4 out of 7 responses). However, all seven low interest responses are overshadowed by the overwhelming positive response shown for a high school gymnasium.

The second most popular question amongst the students was for a theater/movie theater. This question got an average response of 4.39 out of 5.0, with the second smallest standard deviation of all the questions: 1.00 (see Figure 24). Out of all of the students who responded, 48 of the 75 answered they have strong interest in a theater/movie theater, 14 rated a theater/movie theater second highest, at 4.0, and 7 students rated this question at 3.0. The final five students rated a theater/movie theater at 2.0 or below (see Figure 25). The five lowest responses were all from Groveland; four of the 3.0 ratings were from PML; and all other locations rated this question as 4.0 or above. Furthermore, all of the lowest five responses were from male students, bringing the average male response to 4.16 while the lowest female response was 4.71 (see Figure 26). Though the lowest responses are evenly distributed amongst freshman, sophomores and juniors, seniors have no low responses. This means that the majority of low interest responses came from male Groveland residents.

Students of Tioga High School showed their third highest interest in seeing a bowling alley within the Groveland area. The average response for a bowling alley was 3.85 with a standard deviation of 1.4 (see Figure 24). This question was answered by 73 of the 75 respondents; 35 students rated a bowling alley of highest interest, 12 students each rated this item 4.0 or 3.0, 8 students rated this question at 2.0, and 6 students showed no interest in seeing a bowling alley constructed (see Figure 25). Interestingly, the

interest is higher for females (4.27, average response) than for males (3.56, average response rate) and corresponds to a difference of 16.6% (see Figure 26). Furthermore, it is striking that students residing in PML showed more interest (4.06, average response) than students living in Groveland (3.68, average response). The lowest interest in seeing a bowling alley is shown by students from Big Oak Flat averaging 2.75 out of 5.0. More than 64% of the students showed high (4) to very high (5) interest in the opening of a bowling alley.

The question concerning the development of a public swimming pool found the fourth highest interest by the respondents, with an average response of 3.84 and a standard deviation of 1.36 (see Figure 24). Of the 75 students who answered this question, 35 students, or 46.7 %, showed very high interest, 14 students, or 18.7%, rated this item at 4.0, 12 students, or 16%, at 3.0, and 7 students each, or 9.33% each, rated this question 2.0 or 1.0 (see Figure 25). There is no difference in response from different locations. However, female students showed higher interest (4.28, average response) than male students (3.51, average response), resulting in a percentage difference in average response of 18% (see Figure 26). In general, it can be concluded that 49 students, or 65.1%, showed high interest (5.0 or 4.0) in seeing the development of a public swimming pool.

The questions pertaining to the development of a workout gym and the construction of a skateboard park are by average response, respectively ranked fifth and sixth highest overall, with respective average responses of 3.80 and 3.72, with standard deviations of 1.4 and 1.5 points each (see Figure 24).

For a workout gym, there are a total of 75 responses, with 33 people answering 5.0, 16 people answering 4.0, 12 people answering 3.0, 6 people answering 2.0 and 8 people answering 1.0 (see Figure 25). The most noticeable element of a workout gym question is the average difference in between the male and female responses, which is higher than that of any other question. On average, female responses were 19.6% higher than male responses, which can almost be translated into an entire point difference with average responses being 4.28 versus 3.44 (see Figure 26). It can be concluded that out of 75 respondents, 49/75 respondents (answers 4.0 and 5.0) or 65.3%, support the development of a workout gym, whereas, 14/75 (answers 1.0 and 2.0) or 18.7% oppose the idea (see Figure 25).

For a skateboard park, there are also a total of 75 responses, with 38 people answering 5.0, 8 people answering 4.0, 11 people answering 3.0, 6 people answering 2.0 and 12 people answering 1.0 (see Figure 25). By comparing answers in between males and females we notice female responses where one average 1.54% lower than the male responses, with average responses of 3.69 versus 3.74 (see Figure 26). It is quite noticeable, when comparing the responses by location, that the students living in PML, are by percentage, the ones most supportive of the construction of a skateboard park, with 21 people answering 5.0 versus a total of 11 for all other answers, or a total of 24 people answering either 4.0 or 5.0, versus 8 people answering either 3.0, 2.0 or 1.0. All other locations tend to represent the general opinion observed by looking at the total and average results. It can also be concluded that 46/75 respondents (answers 4.0 and 5.0) or 61.3%, support the construction of a skateboard park, whereas 18/75 respondents (answers 1.0 and 2.0) or 24.0%, oppose the idea.

Of the last seven questions, the highest was an off-highway vehicle recreation area with an average response of 3.57 and a standard deviation of 1.38 (see Figure 24). Noticeable was that the average male response was 6.9% higher than the average female response. Also quite striking were the average responses by grade level: the average freshman response was 3.25, sophomore 3.76, junior 3.81 and senior 3.44.

The average response the miniature golf question was 3.33, with a standard deviation of 1.57, which is quite significant (see Figure 24). The difference in between the female and male responses is quite negligible, with only 2% difference. The spread of the answers across the different grade levels is as follows: freshman – 3.17, sophomore – 3.71, junior – 2.95 and senior – 3.78. We notice an almost full point difference in between the average junior and senior response.

The question “Transportation to Sonora” received an average response of 3.31 with a standard deviation of 1.58 (see Figure 24). There exists a 5% difference in between the average female and male responses with the males favoring the idea more. The average responses across the freshman, sophomore and junior classes ranged from 3.04 to 3.33, whereas the average senior response was 4.11.

The “Transportation outside of Tuolumne County” received average responses, with an average response of 3.01 and a standard deviation of 1.56 (see Figure 24). The difference by gender is also very negligible with 2.62% difference. Again, we notice that the average responses of the classes from freshman throughout junior year ranged from 2.86 to 2.90, whereas the average senior response was 4.00.

The “Hiking / Biking Trail Development” question received an average response of 2.97 with a standard deviation of 1.33 (see Figure 24). The difference in between the male and female responses is that female respondents on average answered 6.97% higher. When observing the average answers by class year, we observe the same phenomenon as previously with the freshman, sophomore and junior classes answering on average in between 2.50 and 3.14, whereas the senior class on average answered 3.89.

The proposal for a new youth center received an average response of 2.70, with a standard deviation of 1.44 (see Figure 24). There is virtually no difference in between the male and female responses, and when observing by grade level, we notice the same phenomenon as previously: the classes from freshman throughout junior year, on average answered from 2.19 to 2.90, whereas the senior class on average answered 3.56.

The proposal for an expanded community hall was the question that received the lowest answers out of all others, with an average response of 2.00 and a standard deviation of 1.15 (see Figure 24). Nonetheless, there is a 15% difference in between male and female responses with males on average answering 1.86, while the females on average answered 2.19. When observing by grade level, there are no trends that particularly stand out, the average responses range from 1.67 to 2.43.

Under “Current Situation,” students of the Tioga High School were asked to rate law enforcement, high school education, the youth center, and activities for teenagers offered in the Groveland area on a scale from poor (1) to good (5).

As can be seen in Figure 24, Groveland’s High School education received the highest rating with an average response of 3.53 and a standard deviation of 1.15. Sixteen students gave the highest rating of 5.0, 26 students rated High School Education at 4.0, 17 students at 3.0, 11 students at 2.0 and four students chose the lowest rating of 1.0. This data is shown in Figure 27. In general, 56.7% of the students found the quality of

education they receive at Tioga High School good (4.0) or very good (5.0) whereas only 20.5% found the quality of their high school education poor (2.0) or very poor (1.0). Differences in rating based on gender, location, and grade level are extremely small and therefore negligible.

The students' opinions on the quality of law enforcement within the Groveland area were also at the higher end of the scale with an average response of 3.34 and a standard deviation of 1.19 (see Figure 24). Sixteen students found the quality of law enforcement to be very good (5.0), another 16 students to be good (4.0), 23 students to be average (3.0), 15 students to be poor (2.0) and four students to be very poor (1.0, see Figure 27). Thus, the general opinion of the quality of law enforcement within the Groveland area was found to be high and only 25.1% of the respondents rated law enforcement as poor (4.0) or very poor (5.0). There were only minor differences in rating based on gender and location. However, a striking difference appeared in ratings by different grade levels. The average response given by the freshmen class was found to be much lower compared to the average responses given by the other three grade levels. The average response for the freshmen class was 2.87 compared to 3.33, 3.52 and 4.11 for the sophomore, junior and senior classes, respectively.

The students' opinions on the quality of Groveland's youth center were much lower compared to their opinions on High school education and law enforcement. The average response for "Youth Center" was 2.66 with a standard deviation of 1.27 (see Figure 24). As can be seen in Figure 25, only 17 students, or 24.3%, rated their youth center as very good (5.0) or good (4.0), seven students and ten students, respectively. In contrast to that, 31 students, or 44.3%, rated Groveland's youth center facility as poor (2.0) or very poor (1.0), 14 students and 17 students, respectively (see Figure 27). There were only small differences in rating based on gender or location or. However, seniors tended to have a lower opinion on the youth center (1.89, average response) than the other grade levels. The average response for juniors was 2.9, for sophomores 3.0 and for freshmen 2.45.

Tioga High School students showed their lowest opinion on the quality and quantity of activities for teenagers offered within the Groveland area. As can be seen in Figure 24, the average response for activities for teenagers was 1.81 with a standard deviation of 1.04. Overall, 59 students, or 79.7% of the respondents, rated the quality and quantity of activities for teenagers as poor (2.0) or very poor (1.0), 22 students and 37 students, respectively (see Figure 27). On the contrary, only five students, or 6.75%, rated this item as good (4.0) or very good (5.0), two students and three students, respectively. Differences in rating based on gender, location and grade level are extremely small and therefore negligible.

Average Responses

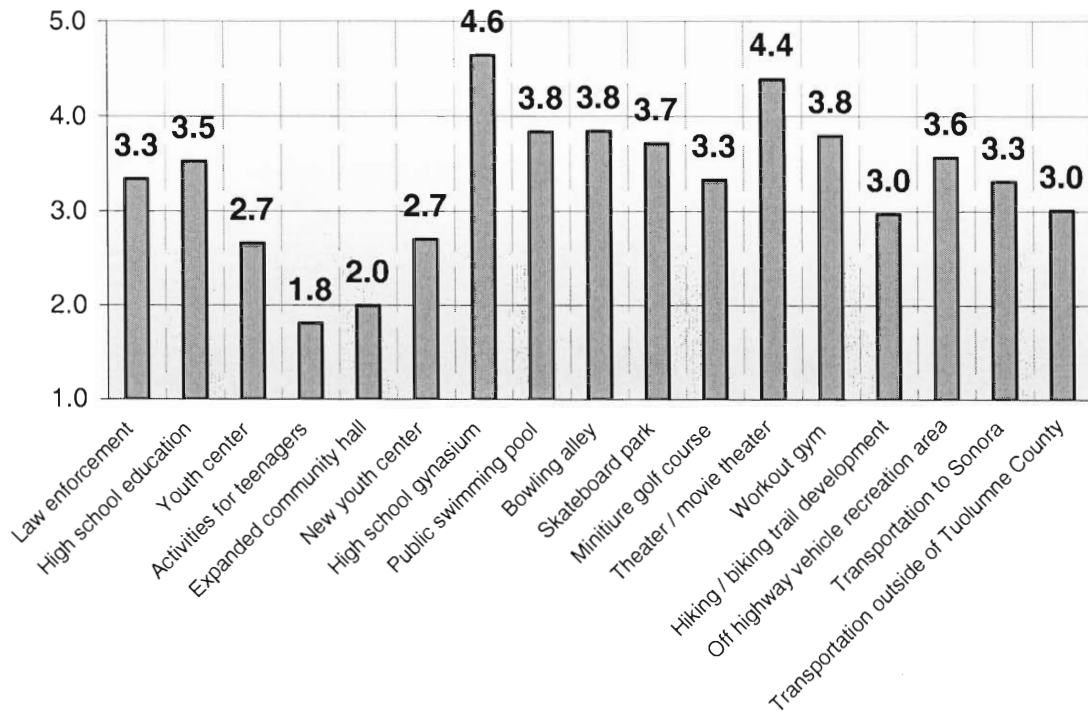


Figure 24. Average responses of all student respondents to Tioga High School Survey

Recreational Facilities/Services

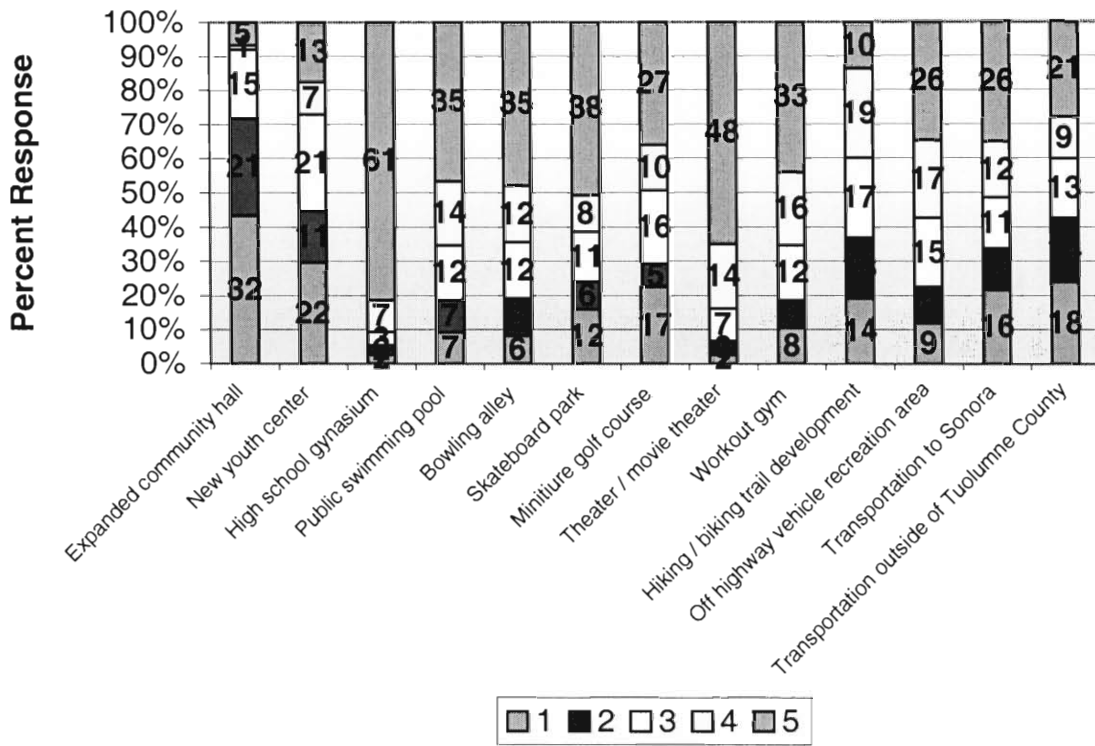


Figure 25. Response breakdown for all student respondents. Bold numbers indicate actual responses

Percent Difference Between Female and Male Responses

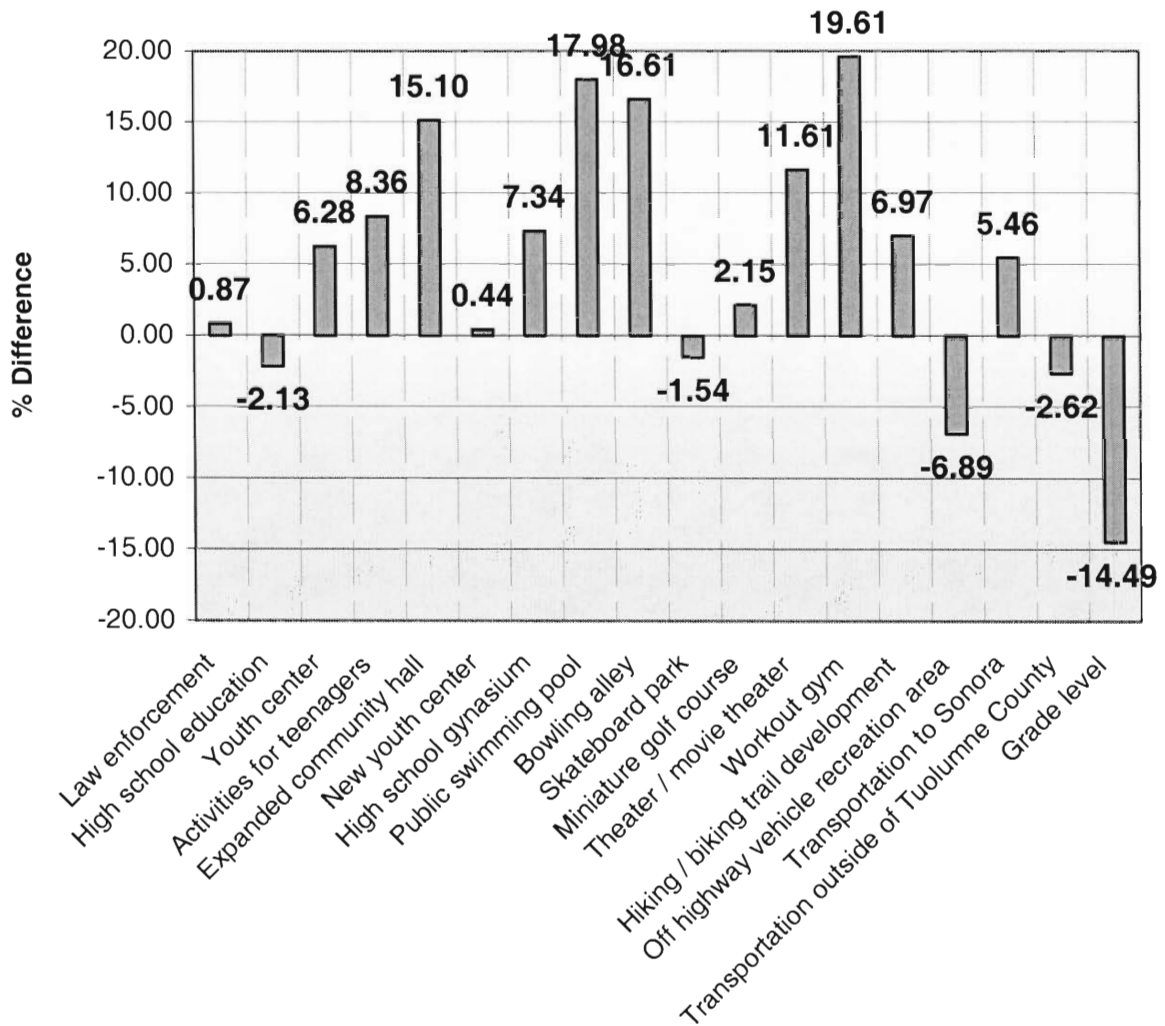


Figure 26. Comparison of male and female responses. Positive values refer to a higher female average response

Current Situations

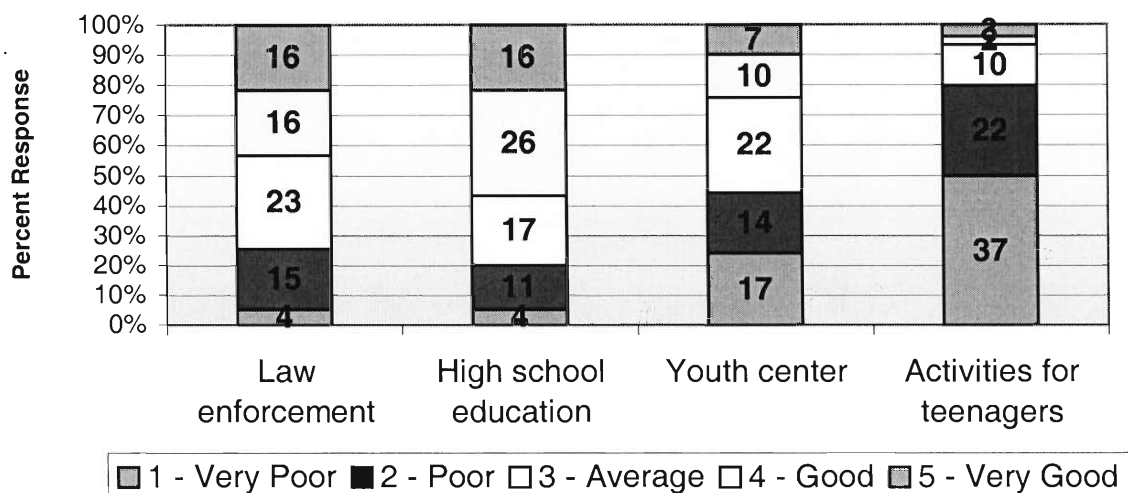


Figure 27. Response breakdown for all student respondents to Current Situations section.

3.11 Panel Discussion with GAINs Members

The meeting with GAINs officials, originally scheduled to happen shortly after arrival in Groveland, had to be pushed off multiple times due to the inability of a large number of members to attend the meeting. A meeting date was finally set on June 3. The list of people attending was as follows:

- Barbara Broad, founder and leader of GAINs
- John Triolo, School Superintendent, Big Oak Flat/Groveland Unified School District
- Mary Kelly, PML Aviation Association, Pine Cone Performers
- Colleen Carr, County Planning Commission, member of Kiwanis Club
- Jan Norton, local grant writer
- Shirley, Board of Realtors

Originally, the meeting was supposed to cover similar topics to the meeting with local town officials; since the surveys had already been distributed, and a local high school survey completed, and initially analyzed, it was found more appropriate to discuss the initial results, and the outcome of the two surveys.

The initial results, combined with the attendees' opinions, led to a discussion and agreement as to why the Groveland area needs to promote economic growth, why a theater is needed, and why a high school gym would help high school enrollment. The current high school is lacking a gym, which hurts the enrollment because students can choose to attend other high schools that have gyms. There are other problems pertaining

to teenagers, which were discussed, such as the lack of available entertainment and activities, and what can be done to alleviate this. Ideas such as the development of a combined theater and movie theater were discussed. Other ideas, such as reading clubs, and other interest groups were also discussed. Some of the local chapters of national organizations, such as Kiwanis Club and the Lions Club, already help sponsor local children in need of help; they provide assistance through scholarships, free doctor's visits, clothes purchases, etc., and these organizations would be willing to assist the children with needs even more, to try not only to help high school enrollment, but also to provide these children with opportunities.

Other topics of discussion included the need for Groveland to apply for grants, but Groveland is not classified as a needy area, therefore a successful application will be tougher, and in need of originality. There are other concerns as well, such as the current lack of health insurance availability and retreat of the major health insurance companies from the Groveland area, which makes people move out of the area, especially the elderly people who are most in need of health insurance, and proximate health services.

3.12 Noticeable Aspects of the Groveland Community

The Groveland community provided for some quite noticeable acts or events, which were quite surprising, but nonetheless remarkable. Quite noticeable was the fact that various people from the community volunteered to bring food for the entire IQP team on a daily basis, to show some support, and also be able to help. Also quite noticeable was the free entertainment, ranging from a weekend rafting in the Tuolumne River, to the free airplane tour above Yosemite.

The inhabitants of Groveland were for the most part quite friendly and open, and very approachable, a certain amount of the residents also seemed genuinely interested in seeing their community better and improved, and seemed willing to contribute to this effort, which is not very common for all communities. Some noticeable results of this community effort, is the construction of the combined library and museum in Groveland. The entire project cost over \$300,000 and most of the money was raised over multiple years within the Groveland community.

Another noticeable aspect was the current state of Groveland, the town in some parts was quite attractive, but in other parts seemed quite run-down. For example, there exists a certain site, commonly referred to as "The Scar" (see Appendix J) by the Groveland residents, which consists of an old and run down gas station, which has evidently been out of business for numerous years. Something else to consider was the state of the current youth center, which also seemed run down, and in bad shape.

There also seems to be a split, which exists within Groveland, in between the residents of Groveland, and the residents of PML, which is part of Groveland. PML is a gated community, with it's own sports facilities, airport and lake. This separation seems to create a divide in between the inhabitants of PML and the rest of Groveland, not only socially, but there also seems to be an economic divide. PML seems to be a retirement community, as the resident survey has shown, although some PML residents will not agree with the idea.

Additionally, three newspaper articles were written about the project, including one in which we were interviewed for. Those newspapers were: “The Yosemite Highway Herald,” the “Daily Union Democrat,” and “Pine Mountain Lake News.” The interview was conducted for the Daily Union Democrat. A talk was also held at Tioga High School, on the benefits of pursuing a college education.

3.13 Recommendations

Using all the results obtained from the resident survey, student survey, resident interviews, and focus groups, recommendations could be made as to which steps GAINs should take in the future. With the top results calculated, the project members researched possible grants to fulfill the needs of the community via the Internet and other contact sources. The grants that were seen as possible candidates for the Groveland area were further researched and reported. Contact information for such grants was also reported, thereby allowing GAINs to pursue the grants. Besides grants, senators and governors were also researched, and their contact information was provided. Finally, agencies which were thought to be able to help reach GAINs goals were researched and contact information, along with a brief description of their purpose, was also provided.

4 RECOMMENDATIONS

After tallying and analyzing the results submitted by the two surveys, along with the data collected on the streets of Groveland, meetings, and interviews, conclusions about the wants and needs of the community can be drawn. Differing views are noticed when analyzing different sampling groups, however, strong trends do stand out amongst the population. Recommendations as to the path GAINs should follow can be made according to these trends.

The respondents of the Groveland area ranked their number one highest interest as expanded MediCare and MediCal services. This response is, in a large amount, due to the large portion of retired respondents to the survey. Judging from the resident interviews conducted on the streets of Groveland, people in the area are having more and more difficulty getting adequate health care, especially since the better doctors can only be found in Sonora, one hour drive away. Many residents do not want to make this commute, but must in order to get the health care they need. Residents of Mocassin averaged much lower than any other community on this question, mainly because they do not have to make such a strenuous commute to reach Sonora. One resident questioned explained that driving down and up Old Priest Grade every time she needed to visit a doctor was too inconvenient to do it regularly. Furthermore, HMOs in the area have been providing less and less services to the Groveland area, making it even more difficult to find adequate health care. Since this issue is of great importance to the well-being of the community, steps should be made immediately to remedy the problem. Contacting the local senator, Senator Dick Monteith of Tuolumne County, is the first step that should be taken. It is important to mention how few doctors are in the area and how many people have difficulty getting to the doctors. It is also important to mention that expanded MediCal and MediCare services ranked of highest interested amongst 552 respondents in the resident survey. The Senator can be contacted via any of the below addresses or phone numbers:

Capitol Office:
State Capitol Room 4090
Sacramento, CA 95814
(916) 445-1392

Merced Office:
777 W. 22nd St., Ste. B
Merced, CA 95340
(209) 722-4988

Modesto Office:
1620 N. Carpenter Rd., Ste A-4
Modesto, CA 95351
(209) 577-6592

Madera Office:
1901 Howard Rd., Ste. B
Madera, CA 93637
(559) 674-2898

Governor Gray Davis, the California governor, should also be contacted with the same information. He can be reached at:

Fresno Office:
2550 Mariposa Mall #3013
Fresno, CA 93721
(559) 445-5295

Riverside Office:
3737 Main Street #201
Riverside, CA 92101
(909) 680-6860

Los Angeles Office:
300 South Spring Street
Suite 16701
Los Angeles, CA 90013
(213) 897-0322

San Diego Office:
1350 Front Street
Suit 6054
San Diego, CA 92101
(619) 525-4640

The California HealthCare Foundation is another good contact to help improve the health care issues in the Groveland area. The foundation provides funding to organizations that will have a positive impact on access, costs, and quality of health care for consumers. The foundation, however, “does not generally support direct clinical care, ongoing general operating expenses, capital campaigns, annual appeals or the other fundraising events, construction, purchase or renovation of facilities, or purchase of equipment.” They can be contacted at:

California HealthCare Foundation
476 Ninth Street
Oakland, CA 94607
(510) 238-1040
grants@chcf.org

Policy issues relating to MediCal can be resolved too, through contact with MediCal’s Policy Institute. Relaying the problems in the area to this institute could resolve some of the conflicts. The county’s Policy Institute can be contacted at:

Human Services Agency
20075 Cedar Road North
Sonora, CA 95370
(209) 533-5711

Ranking second as of most interest to the Groveland resident survey respondents is summer/evening programs. The question was left broad to cover a wide range of possible topics since listing specific individual programs would not be beneficial to the whole of the Groveland area. Realizing that there are few activities for youth and adults, a broad mix of summer/evening programs would be beneficial to the community for a variety of reasons. Talking with residents on the streets, as well as various comments received through the two open-ended questions asked on the resident survey proved that extra programs besides those currently offered are needed. Furthermore, from the student survey, most high school students find themselves to be bored more than two days a week. Evening activities will improve the quality of life for more than just the adults who decide to take advantage of them.

A few possible methods to obtain summer/evening programs would be through finding teachers for various classes/activities who would work for a minor fee. High school teachers looking for extra money, or residents of the community who know about the subject could teach academics, dance, theater, martial arts, photography, mechanics or art. A local flyer sent out to the community could ask for people willing to teach any of these classes. Further instructors could be found at neighboring Sonora, where

instructors could come up once or twice a week to teach a small class in the Groveland community.

It will also be beneficial to contact Columbia College⁸² to find instructors for various other classes. Especially in the summer, instructors will be willing to make the commute to Groveland for few extra benefits.

To make the coordination process easier, it is suggested that one person be designated the manager to coordinate the programs and advertise the classes. Once enough interest is found for any particular class, teachers can be contacted, and a meeting place and time can be chosen. Since the community is small, it may be that only one or two classes can be conducted at a time, space permitting. However, with the interest shown by the resident survey, it is believed that enough interest will be found to successfully conduct summer/evening classes.

A senior center, obtaining fourth interest overall on the resident survey, with an average of 3.39 out of 5.0, is an important goal for GAINs to reach. Judging by the overwhelmingly large response of retired residents, 57% of respondents, as well as the fact that over 25% of the respondents voted the highest possible interest in a senior center, this service is quite important to the Groveland community. These data, along with the data collected while interviewing residents on the street, show that there are not adequate activities for seniors and there is no common place for seniors to meet. Obtaining funds to build a center of this type can be easy since many foundations and government committees are centered around helping seniors. For instance, in Ohio, funding totaling \$741,500 just became available to build, renovate, and repair 26 senior centers. This funding was offered through Ohio's Department of Aging to facilities that provide seniors with social and recreational activities. California's counterpart, the California Department of Aging, has a separate Senior Housing Information and Support Center (SHISC). They can be contacted at shisc@aging.ca.gov, and will provide much information about grants and funding available to California communities looking for improving the way of life for seniors. Tuolumne County also has an Agency on Aging, which can be contacted at (209) 532-6272. They, too, will provide valuable information regarding the next step toward the creation of a senior center.

The California Wellness Foundation also provides grants to organizations that improve the quality of life among older Californians. In addition, they provide separate funding to "help California communities deal effectively with the health impact of the shift of federal responsibilities for health and human services to state and local levels." To begin the application procedure, GAINs should first write a one- to two-page letter of interest that describes the organization's mission and activities, the region and population(s) served, how the funds will be used, and the total funds requested. If requesting project funding, include project goals, leadership and duration. These letters of interest can be mailed to:

The California Wellness Foundation
6320 Canoga Avenue, Suite 1700
Woodland Hills, CA 91367

⁸² Columbia College, <http://columbia.yosemite.cc.ca.us/>, accessed July 14, 2002

Another effective method of obtaining funds for a new senior center is through fundraising within the community. This has worked quite successfully to bring about the creation of the museum and library building, and could be just as effective, if not more effective for the creation of a senior center. Since such a large portion of the community is interested in a new senior center, support through fundraisers will be done with great enthusiasm.

A senior center in such a small community does not have to be a stand-alone project, but instead it can be coupled with other projects such as a new Community Hall. Combining a senior center with a Community Hall provides many benefits, including making the new building accessible to people of all ages, not just limiting the activities to seniors. Creating a multipurpose building such as this will also be seen as a more reasonable endeavor for the community since much of its population would not benefit from the building of just a senior center.

As suggested by the results from the two administered surveys, the development of a theater/movie theater complex was the most popular recreational facility on both the resident and the student survey. With an average response of 4.39, it received the second highest average response overall on the student survey and with an average response of 3.34, the second highest average response of the "Community Recreation" section on the resident survey. These results suggest an immensely strong interest in seeing a new theater/movie theater facility that is broadly distributed among the residents of the Groveland area. This fact can be explained by the general lack of entertainment facilities in the Groveland area but also by the existence of a larger group of senior citizens showing a high interest in the performing arts. Discussions with GAINs members and members of the Kiwanis Club Groveland suggested that a relatively large percentage of the Groveland area residents is actively involved in the performing arts. A local theater group builds on great success. Their performances draw many spectators to Groveland's community hall. However, as we were told by Mary Kelly, an active GAINs member and member of Groveland's theater group, the performances suffer from poor accommodation due to the small size and the poor lighting of Groveland's community hall.

Conclusions drawn from the two surveys and discussions held with individual Groveland area residents suggest the strong need for a multipurpose complex accommodating the performing arts, as well as, a movie theater. GAINs can be recommended to contact the California Arts Council (CAC) to request funding for such a new facility. The CAC's "Organizational Support Program (OSP)" might be very suitable for the purpose of the construction of a new theater building.⁸³ This program is designed to support arts groups in all artistic disciplines. Furthermore, AMC theaters should be contacted and the opening of a movie theater within the Groveland area should be requested.⁸⁴ The following mailing address should be used for this purpose:

AMC Theatres
P.O. Box 725489
Atlanta, GA 31139-9923

⁸³ California Arts Council, <http://www.cac.ca.gov/programs/description/osp.cfm>, accessed July 20, 2002

⁸⁴ AMC Theaters, <http://www.amctheatres.com>, accessed July 20, 2002

Possibly, a co-operation between AMC Theaters and the California Arts Council can be worked out.

There currently is only one general grocery store in Groveland. Although not a question on the survey, the idea of a second grocery store or an improved grocery store has come up often. During the street interviews of Groveland inhabitants, many people mentioned the idea of a new grocery store, and also mentioned their dissatisfaction with the current grocery store's services. Although there was considerable interest for either an improved grocery store or the development of a new supermarket, it is questionable whether a town the size of Groveland can support a full sized supermarket. It may therefore be in the town's best interest to either pursue the construction of another grocery store, or to attempt to negotiate an agreement with the owner of the current grocery store Ken's Market, to improve his store, demonstrating that an improved store, with a wider variety of products, may benefit everybody. The grocery could earn higher profits, and in turn it would have a larger base of satisfied customers.

Either for the development of a new grocery store, or for the improvement of Ken's Market, it would be best to seek funding through the Main Street Program⁸⁵, a national grant that seeks to revitalize the main streets of small communities. The purpose of this program is to help develop the main streets of small communities, often in distress, with the hope of creating a local economy and new jobs, and ultimately making the local towns a nicer place. The acceptance into the program is not easy, since it requires various committees responsible for the organization, promotion, design and economic restructuring. This program requires that all shop and store owners consent to participate in the program for a successful completion and revitalization of the local town, but the benefits are large, and it would be best to seek improving Ken's Market through this program.

There are other possibilities with this program. Groveland is very close to Yosemite, which has only four highways that lead to the national park. Of these four highways, Highway 120 runs through the middle of Groveland, and is also geographically the easiest to access and for travel to Yosemite from the highly populated San Francisco Bay Area. It would therefore only seem natural to promote Groveland as a "Gateway to Yosemite." From the resident survey, there does seem to be some support for the promotion of Groveland as such a gateway. This would naturally entail more tourists traveling through the town, but it would also bring the benefit of increased business opportunities for local businesses, such as stores and hotels. The Main Street Program seems to be a natural fit, as it could easily be combined with the promotion of Groveland as a gateway to Yosemite, since the local businesses would be improved; this would make the entire town more interesting to tourists passing through. It is also recommended that the local hotels become part of the "California Hotel & Lodging Association"⁸⁶, which is an organization whose goal is to promote hotels that are part of its network on a local, state and national level to tourists and appropriate tourist agencies. This organization also offers money-saving opportunities for members, on such items such as furniture, marketing and various costs.

⁸⁵ <http://134.186.44.154/business/community/mainstreet/index.html>

Contact information: <http://134.186.44.154/business/community/mainstreet/email.html>

⁸⁶ P.O. Box 160405-414-29th Street, Sacramento, CA 95816
(916) 444-5780 - (916) 444-5848 - service@chma.com

Transportation outside of the Groveland area was a large issue in the meetings held with both the town officials and GAINs. Both say that it is important for there to be public transportation to Sonora and Columbia College, as well as outside Tuolumne County. However, both the resident survey and the student survey found this to be untrue. Transportation outside Tuolumne County and Transportation to Sonora and Columbia College had averages resulting fifth and seventh lowest, respectively. The student survey provides the same result, with averages of 3.01 and 3.31, respectively. Both surveys find the interest in Transportation to Sonora and Columbia College higher than that of Transportation outside Tuolumne County. Though the results are low for these two items, it does not mean that some progress cannot be made. Transportation to Sonora would increase the medical services available to the area, the top issue of interest from the resident survey. Therefore, steps should be taken to provide (at least limited) transportation to Sonora.

Skateboard park was the sixth lowest scoring issue on the resident survey. Though this idea has been of huge debate in the area for a long time now, with fundraisers going on weekly to help in the construction of this park, the overall interest is not there. The idea to build a skateboard park arose from the many students getting in to trouble skateboarding in parking lots and on the streets, upsetting many of the store owners in the area; this shows in the results: people that work in the Groveland area want the skateboard park the most. However, the majority of the residents in the Groveland area do not feel that this is necessary. They may not know of the problems occurring in town, and therefore it does not affect them. Therefore, it may be of interest to GAINs to reevaluate the funding of the skateboard park, and possibly look for alternative projects to fund with the money already raised for the park.

Preschool and daycare services also scored low on the list of items at fourth lowest. Though there was much interest during the meetings with town officials, the results from the resident survey proved otherwise. Furthermore, there was no mention of these services in any resident interview. Therefore, it is unnecessary to take huge steps to create a preschool or daycare services. However, if one or two residents from the community could be found that would be willing to devote their time and home to taking children in during the day, small steps could be made toward helping out the few parents who need these services.

A miniature golf course was yet another item that was of controversy in the community. Both the town officials and GAINs suggested many times that the Scar (shown in Appendix J) be turned into a miniature golf course, however, both the resident survey and the student survey proved that it should not. In the resident survey, a miniature golf course received the third lowest interest, and sixth lowest interest in the student survey. The resident interviews showed even more, with many residents saying that they do not want the Scar changed, stating they like the way things are. Therefore, no steps should be made toward a miniature golf course.

The second to last item of least interest was that of a bowling alley. This item was a suggestion from the students during student interviews, and was added because it was felt that there were little activities for teenagers in the area. Judging from the student survey, this proved to be correct. And though the students rated this item as the third highest overall in the student survey, it is a project that would require too much time and money to further. Also, no grants could be found to help in the construction of a project

such as this. Therefore, it is advised that no steps should be taken to create a bowling alley. However, if a new youth center or community center is built, a decision could be made as to whether or not adding a few bowling lanes would be worth the extra cost.

Two items on the Southern Tuolumne County Survey and on the Tioga Survey were of special interest to the two forestry rangers of Stanislaus National Forest, Brenda and Gordon Ehmann. They were “Hiking/Biking trail development” and “Off highway vehicle recreation area.” Currently, new hiking and biking trail developments, as well as, new off highway vehicle recreation areas are being discussed by the members of the Stanislaus National Forest – Groveland Ranger District. The purpose of such new developments would be to attract more tourists but also residents of the Groveland area to sites within the Stanislaus National Forest.

The resident survey results for “Hiking/Biking trail development” suggest that there is a lot of interest within the Groveland area community in seeing new trail developments. The average response was 3.33 and ratings are very consistent for residents of different employment status suggesting that interest in new trails is very broadly seeded. Less than 20%, 94 out of 507 respondents, showed no interest in seeing new hiking and biking trail developments. Students of Tioga High School showed almost as much interest in new trail developments as suggested by the results from the Tioga Survey. The average response for “Hiking/Biking trail development” was 2.97, a bit lower than the average response for this item on the resident survey.

The results from the resident survey suggest that there is only little support for the development of new off highway vehicle (OHV) recreation area within Stanislaus National Forest. In fact, this item received the lowest average response on the whole questionnaire. More than 60% of the respondents showed no interest at all in seeing OHV recreation areas. On the contrary, Tioga High School students showed a lot more interest in this item. The average response on the student survey was 3.57 and almost 1.6 points higher than the average response on the resident survey. Nonetheless, with 552 respondents for the resident survey compared to 75 respondents for the student survey, there is no evident broad interest within the Groveland area in seeing OHV recreation areas.

On the basis of the results from the resident and the student survey, the Stanislaus National Forest – Groveland Ranger District can be recommended to proceed with extensive planning with regard to developments of new hiking and biking trails. The California Department of Parks and Recreation administers the “Recreational Trails Program” at the state level.⁸⁷ This program is specifically designed to provide funds for the development of recreational trails. Application forms can be obtained either online or by mail from the following contact:

California State Parks
Office of Grants and Local Services
PO Box 942896
Sacramento, California 94296-0001

Concerning the development of off highway vehicle recreation, the Groveland Ranger District can be recommended to doing further research on existing or non-existing

⁸⁷ Department of Parks and Recreation, <http://www.parks.ca.gov/default.asp>, accessed July 14, 2002

support within the Groveland area. The resident survey results indicate that there is only little interest in such recreational areas. However, the student survey results suggest that there is a lot of interest in OHV recreation areas among the younger residents of the Groveland area. If the Stanislaus National Forest – Groveland Ranger District decides on teenagers of the Groveland area being the target group for OHV recreation areas, the members of the district can be recommended to proceed with planning for these recreational areas, as well. To obtain information on potential federal and state funds for the development of OHV recreation areas, the following should be contacted:

California State Parks
Off-Highway Motor Vehicle Recreation
Division, PO Box 942896
Sacramento, California 94296-0001

Finally, it has to be mentioned that the recommendations made above are solely based on the resident and the student survey results. Respondents of both surveys were all residents of the Groveland area. Developments of hiking and biking trails, as well as, off highway vehicle recreation areas would also find interest among tourists traveling the Groveland area. Therefore, the demand for new hiking and biking trails and OHV recreation areas might be higher than is indicated by the survey results.

The creation and administration of the student survey, which was done on site in Groveland, California, proved to be an immensely valuable undertaking. The initial expectation that senior citizens would be over-represented and teenagers, especially, would be underrepresented in the Southern Tuolumne Survey was met. The fact that the resident survey was completed by only one student and by 305 retirees, which corresponds to less than 1% and 57% respectively, proves this assumption to be correct. Therefore, it is important to regard the results from the student survey not just as supplementary to the resident survey but equally as important as the results from the resident survey.

The results from the student survey suggest the definitive need for the creation of new programs and facilities targeted at the youths of the Groveland area. Four items on the student survey were targeted at assessing how the students feel about leisure time activities offered in Groveland. Students were asked how often they feel bored each week and whether they were planning on staying or moving out of the Groveland area. Furthermore, they were asked to rate Groveland's youth center and the quality and quantity of activities offered for teenagers within the Groveland area. The results for these four items are well linked to each other and suggest that Groveland's youths seem to be ignored by the officials.

The fact that 57% of the student survey respondents stated that they feel bored every day and another 19% feel bored more than twice a week is striking and alarming. Accordingly, it is not surprising that 59 students, more than 79% of the total respondents rated the quality and quantity of activities for teenagers offered within the Groveland area as very poor or poor. The poor ratings for Groveland's youth center are therefore, not out of the blue and are in accordance with the other results. Furthermore, these results might explain to some extent why only 16 out of 75 students are planning on staying within the Groveland area after graduation from Tioga High School. The rest of the students, more

than 79%, are planning on moving out of the Groveland area. However, this fact is heavily influenced by the low job prospects graduates have within Southern Tuolumne County as shown in the Southern Tuolumne County Survey. Nonetheless, lack of recreational facilities, services and few activities offered for teenagers contribute to the fact that many young people want to move away from the Groveland area.

There is a definite need for a renovation of the old youth center or possibly the construction of a completely new youth center. GAINs can be recommended to apply for the Murray-Hayden Urban Youth Services Grant Program. This program is offered by the California Department of Parks and Recreation.⁸⁸ This program is mainly designed at providing funds for parks and park facilities. However, it also provides funds for the renovation or new creation of youth centers. As a non-profit organization, GAINs would be an eligible applicant. One requirement GAINs would need to consider before applying is the fact that GAINs would need to provide 3/7 of the total grants from non-state funds.

The Department of Parks and Recreation offers a variety of other grant programs that are targeted at park and recreation projects. These grants might be a valuable source for projects targeted at creating more activities, services and facilities within Wayside Park (shown in Appendix J) that would provide recreational opportunities for teenagers of the Groveland area. The results of the student survey suggest that it is essential for the Groveland area community to create more activities and facilities for the teenagers. Failure to create new activities and facilities might result in the Groveland area community becoming a pure retirement community.

The most outstanding result of the student survey is the overwhelming interest in the creation of a gymnasium for Tioga High School. More than 90% of the respondents showed high or very high interest in seeing the construction of a high school gymnasium. School sports have a high status at Tioga High School. Though there are few students, the school participates in many different sport competitions, which is possible because many students participate in more than just one sport. The school and its students present themselves as highly competitive, in academics as well as in sports competitions. Therefore, it seems ironic that Tioga High School does not own a gymnasium and, at present, students need to be bused to a gymnasium at a different school. It is recommended that GAINs present the student survey results to the Tioga High School's board and to the school's district superintendent encouraging them to initiate the construction of a Tioga High School gymnasium.

With an average response of 3.53, respondents of the student survey showed to be quite content with the education they receive at Tioga High School. The fact that students of all grade levels seem to be satisfied with the quality of Tioga High School's education suggests that quality seems to be maintained throughout most classes. Considering the small size of Tioga High School, this fact is exceptionally outstanding. The fact that Tioga High School students generally perform very well on state contests supports the view that this high school provides high quality education. There are no indications that would recommend a change in the academic curriculum.

⁸⁸ Department of Parks and Recreation, <http://www.parks.ca.gov/default.asp>, accessed July 14, 2002

5 CONCLUSIONS AND FUTURE DIRECTIONS

The objective of this project was to understand, analyze, and support the urban development of the Groveland, California community. Though the initial plan to achieve this goal was through only one resident survey, it was greatly surpassed by using various surveying techniques, including multiple focus groups with town leaders, resident interviews, a student survey, and a resident survey. Based on the results from the analyzed data, recommendations such as which grants to apply and officials to contact were made, thereby further surpassing the initial project goals. Furthermore, the project positively advertised Worcester Polytechnic Institute in the area through three published news articles about the project and the WPI Plan, and a presentation of the institute to local high school students.

With the project's conclusions in hand, GAINs has set up multiple Town Meetings to discuss how the recommendations made and what projects to initiate. Because of the results spawning from this project, the community's needs and interests were positively identified, thereby reassuring GAINs that their future decisions will be correct. Furthermore, with the recommendations made from the project, GAINs can immediately plan and initiate redevelopment and revitalization of the community.

The project's results and recommendations will facilitate much more work that needs to be done in the Groveland community. GAINs will use the outcome of this project to decide on future projects within the Groveland area. Such projects will require extensive and thorough planning possibly involving WPI students.

Through advertising the WPI Plan, Mark Thornton, the County Supervisor, suggested multiple ideas for future projects. The town Library and Museum, as well as the local Forestry Service, also expressed a large interest in the project system.

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APPENDICES

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A. Locations of Groveland, Copperopolis and Redwood City

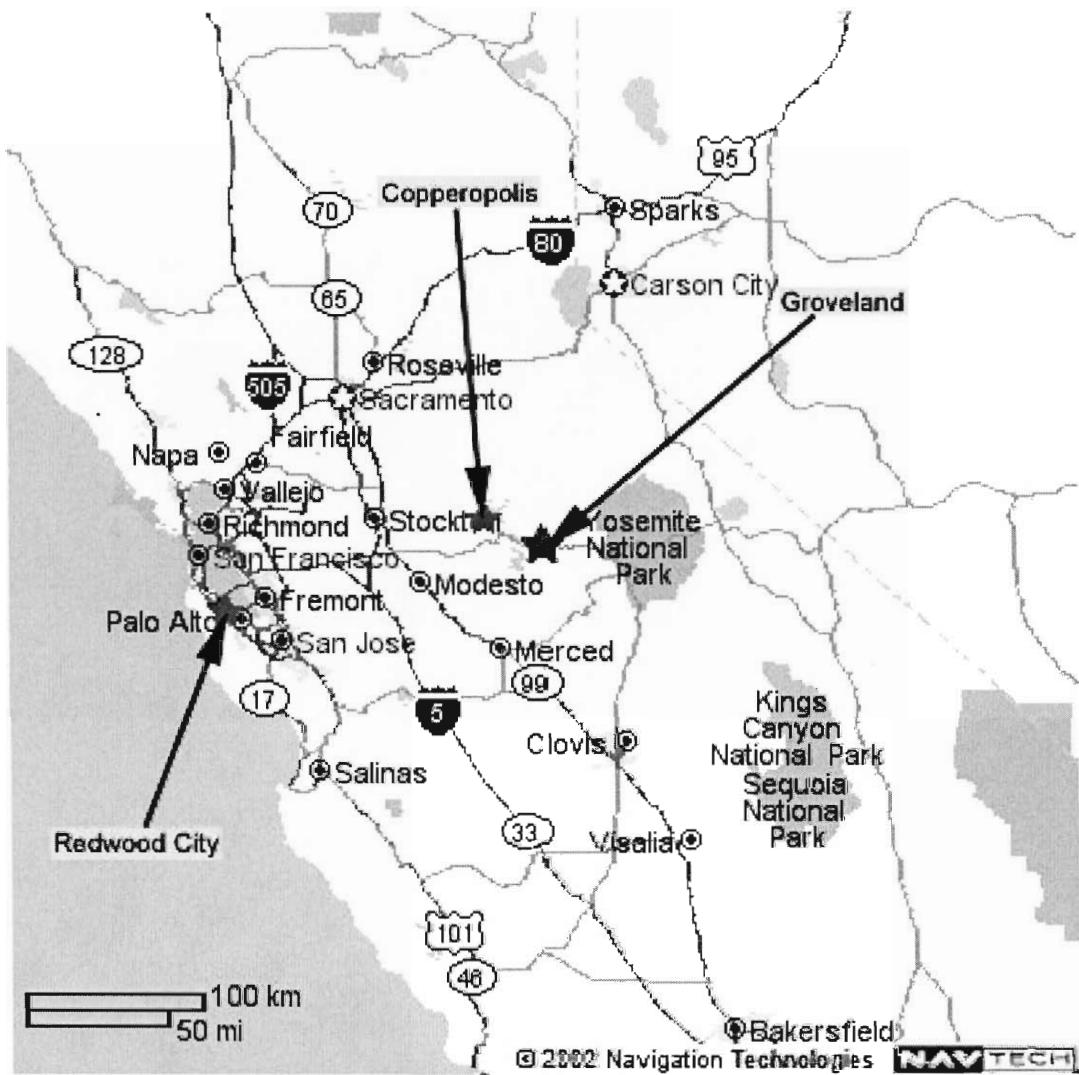


Figure 28. Locations of Groveland, Copperopolis and Redwood City in California (black arrows)

B. Groveland Area Involved Neighbors Pamphlet

Figure 29. GAINs information pamphlet, front

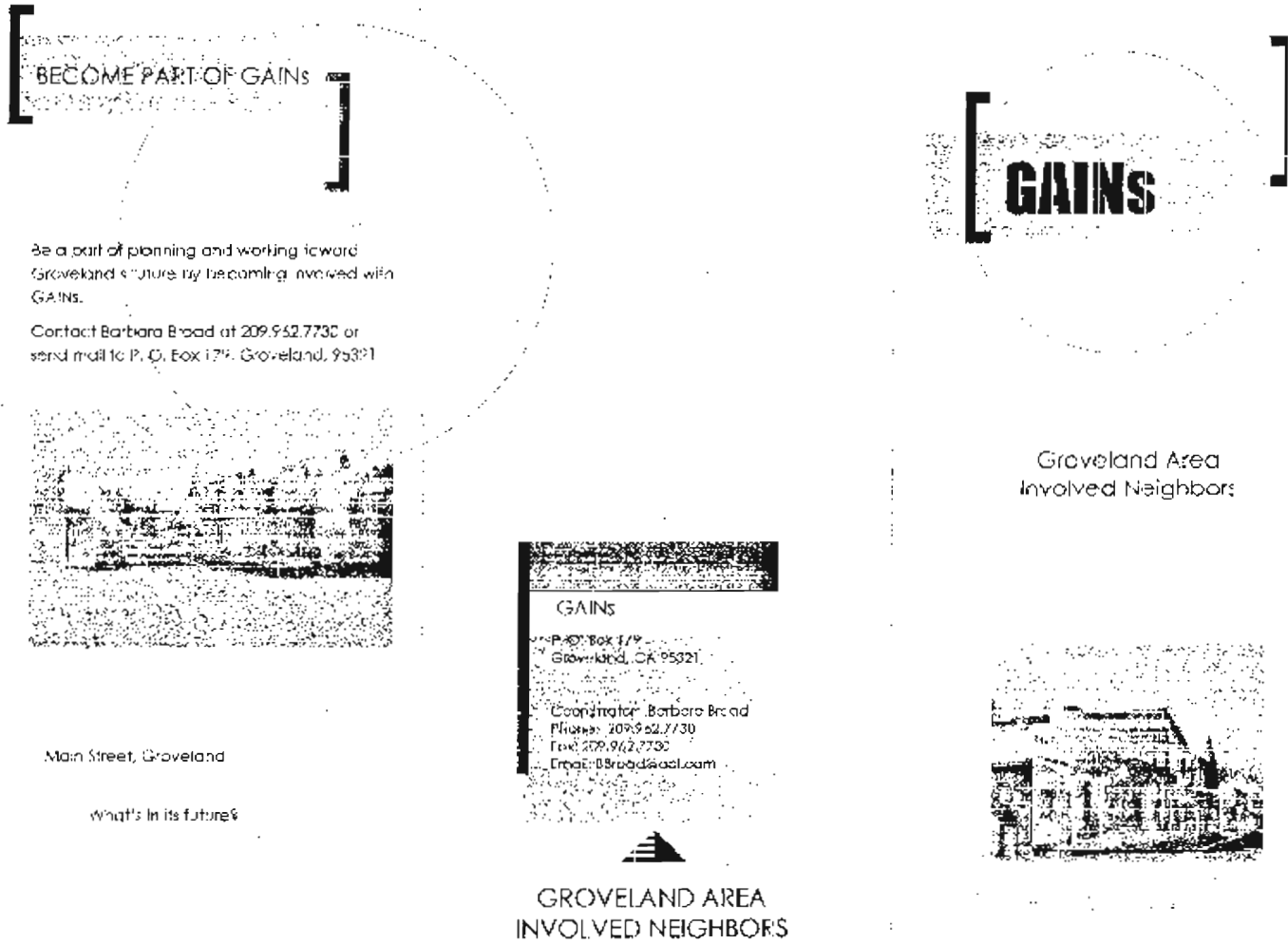


Figure 30. GAINs information pamphlet, back

A COMMUNITY COLLABORATIVE

History:

In June 2000, leaders of several Groveland community service groups met to discuss a plan to develop a community collaborative to pool efforts and provide more effective community service projects.

In July 2000 representatives from 35 community, school, and county government groups met to discuss collaborative projects and formed Groveland Area Involved Neighbors.

In August 2000 Sonora Area Foundation awarded GAINs \$1000 to develop the collaborative organization.



GAINs Purpose:

We are citizens of the Groveland area and representatives of service, business, educational, government and social groups in Southern Tuolumne County. Conscious of the strength to be found in unity, we have joined together that our community may be enriched by an organization able to utilize our various skills in common causes.

Our organization will discuss goals, ideas, and information from our community, evaluate and form a consensus for projects, then work toward successful achievement of our goals. In addition, we will be supportive of other community organizations whose projects fulfill the goals stated herein.

We recognize and will provide for the differing needs of youth and age. We are committed to work in concert to assure a community that is at once respectful of those who have built before, responsive to growth and protective of the unique qualities of small town living and the environment that we cherish. We seek civic harmony as well as prosperity.

Funding

As a community collaborative GAINs will be eligible for foundation and government grants to cover the expenses of community planning activities and, eventually, community projects. In addition, GAINs will support grant proposals of individual community organizations when their projects fit into GAINs purpose and goals.

The only financial support expected to be asked of Groveland citizens and groups is annual sponsoring memberships to cover administrative costs. To be a true collaborative, GAINs must demonstrate support from Groveland citizens and groups.

We need your support of our goals and your sponsoring membership to help reach those goals. Individual and group memberships are \$5 per month, or \$60 annually.

Supporting Memberships

Name _____
 Address _____

 Phone: _____ Email: _____

Membership Amount
 \$50 Annually \$6 Monthly

Method of Payment
 Check Bill Me

Signature _____

GROVELAND AREA INVOLVED NEIGHBORS

P. O. Box 179
 Groveland, CA 95321

Coordinator: Barbara Broad
 Phone: 209.962.7750
 Fax: 209.962.7730
 Email: BBroad@aol.com

C. Copperopolis Survey

2000 Survey
RAM

COPPEROPOLIS Community Vision 2020

Community Survey – Your Input Counts!

Under a grant from the Great Valley Center, the Calaveras County Lake Tulloch Conservancy (CCLTC) and Copperopolis Community Center are sponsoring a visioning process to assist the Copperopolis Community Plan Advisory Committee (CCPAC) in the preparation of a Community Plan for Copperopolis. As a resident or business within the Copperopolis area, your input is valuable to the vision process and is greatly appreciated. Please take the time to share your thoughts with us by completing the following questionnaire. All information will remain anonymous.

Community Character

1. What three (3) things do you like most about living in the Copperopolis area? (Please check only three)

- | | | |
|--|---|--|
| <input type="checkbox"/> Small town atmosphere | <input type="checkbox"/> Recreational opportunities | <input type="checkbox"/> Proximity to Sierras |
| <input type="checkbox"/> Open Space | <input type="checkbox"/> Shopping opportunities | <input type="checkbox"/> Agricultural setting |
| <input type="checkbox"/> Area History | <input type="checkbox"/> Safe Community | <input type="checkbox"/> Rural Character/Lifestyle |
| <input type="checkbox"/> Community events | <input type="checkbox"/> The Copperopolis Area | <input type="checkbox"/> Other _____ |

2. What three (3) things do you dislike most about the Copperopolis area? (Please check only three)

- | | | |
|--|---|---|
| <input type="checkbox"/> Small town atmosphere | <input type="checkbox"/> Recreational opportunities | <input type="checkbox"/> Proximity to Sierras |
| <input type="checkbox"/> Schools | <input type="checkbox"/> Shopping opportunities | <input type="checkbox"/> Agricultural setting |
| <input type="checkbox"/> Housing availability | <input type="checkbox"/> Rural Character/Lifestyle | <input type="checkbox"/> Distance from Services |
| <input type="checkbox"/> Community events | <input type="checkbox"/> Open Space | <input type="checkbox"/> Other _____ |

Development

3. In the past five years, the Copperopolis area has grown (check one):

- Too fast Too slow About right

4. What three (3) items should be given the highest priority in the Copperopolis area? (Please check only three)

- | | |
|--|--|
| <input type="checkbox"/> Impacts on agricultural lands | <input type="checkbox"/> Variety of housing styles and opportunities |
| <input type="checkbox"/> Public safety | <input type="checkbox"/> Adequate public services (fire, police, etc.) |
| <input type="checkbox"/> Open space/recreation | <input type="checkbox"/> Community appearance |
| <input type="checkbox"/> School crowding | <input type="checkbox"/> Don't know/no opinion |
| | <input type="checkbox"/> Other _____ |

Housing

5. What three (3) types of housing would you like to see most in the Copperopolis area? (Please check only three)

- | | |
|---|--|
| <input type="checkbox"/> Large lot residential (> 10,000 square feet) | <input type="checkbox"/> Small lot residential (> 5,000 square feet) |
| <input type="checkbox"/> Medium lot residential (5,000 – 10,000 s.f.) | <input type="checkbox"/> Apartments (5 units or more) |
| <input type="checkbox"/> Duplexes/Triplexes/Fourplexes | <input type="checkbox"/> Condominiums |
| <input type="checkbox"/> Rural Estate (3 acres and up) | <input type="checkbox"/> Mobile/manufactured homes |
| <input type="checkbox"/> No more housing needed | <input type="checkbox"/> Don't know/no opinion |
| | <input type="checkbox"/> Other _____ |

Economic Growth

6. What three (3) types of non-residential development would you like to most in Copperopolis? (Please check only three)

- | | |
|--|---|
| <input type="checkbox"/> Professional and business offices | <input type="checkbox"/> Neighborhood retail/shopping centers |
| <input type="checkbox"/> Light manufacturing | <input type="checkbox"/> Historic Preservation |
| <input type="checkbox"/> Agricultural processing | <input type="checkbox"/> Medical facilities |
| <input type="checkbox"/> Restaurants/Fast food | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Nothing new needed | |

Public Facilities and Services

7. What three (3) types of public facilities/services should be given the highest priority? (Please check only three)

- | | | |
|--|---|--|
| <input type="checkbox"/> Schools | <input type="checkbox"/> Water/sewage treatment | <input type="checkbox"/> Water supply |
| <input type="checkbox"/> Road improvements | <input type="checkbox"/> Police services | <input type="checkbox"/> Fire services |
| <input type="checkbox"/> Public transit | <input type="checkbox"/> Parks | <input type="checkbox"/> Don't know/no opinion |
| <input type="checkbox"/> Senior/Youth Facilities | <input type="checkbox"/> Library | <input type="checkbox"/> Other _____ |

Leisure/Recreation

8. List at least three (3) leisure/recreational activities/facilities you would like to see added or expanded in the Copperopolis area (e.g., arts/cultural events, bicycle/pedestrian paths, youth and adult sports, farmer's market, lake or stream water oriented recreation, etc.).

General

What features have you seen in other communities that you would like to see in the Copperopolis area?

Do you consider yourself a resident of Copperopolis?

Yes

No

Don't know

If no, where?

Please list other items of concern to you in the Copperopolis area:

Thank you for taking the time to complete this questionnaire. Please drop it in one of the boxes provided at the Calaveras Excavation Company, McCarty's, Copperopolis Post Office, Sierra Trading Post (STP) or outside Servidio's or fold, affix postage, and mail to the address below no later than October 5, 2000. Questions regarding the Vision Process and/or this questionnaire should be addressed to Mr. Russ Thomas, Chairman of the Copperopolis Community Plan Advisory Committee, 185-2070.

fold line



Mr. Russ Thomas, Chairman
Copperopolis Community Plan Advisory Committee
c/o Calaveras County Lake Tulloch Conservancy
P.O. Box 481
Copperopolis, CA 95228

fold line

COPPEROPOLIS
Community
Vision 2020

D. Agenda of Panel Discussions

AGENDA

Town Leaders Meeting

organized by

Adam Siegel Julian Serafini Christoph Lepper

May 24, 2002

- I. Introductions**
- II. Information on GAINs (Broad)**
- III. Background on Survey Project (students)**
- IV. Discuss Preliminary Survey (students)**
- V. Discuss Distribution and Collection of Survey (Broad and students)**
- VI. Discussion of student's project general timeline (students) and then the GAINs timeline (Broad)**

E. Preliminary Southern Tuolumne County Survey

GROVELAND AREA SURVEY

The Groveland Area Involved Neighbors (GAINs) is conducting a survey to understand the needs and interests of people who live in the Groveland area. With your help, new facilities will be planned and new services will be offered to increase the quality of life within the South County. Your answers will be kept anonymous. **Please see the reverse side for postage-paid return instructions. Mail by June 15, 2002.**

Please circle the number next to the suggestion that best represents your opinion: Strongly Against to Strongly Support.

Economic Development	Strongly Against	Against	No Opinion	Support	Strongly Support
What is your opinion on the following ideas to promote economic growth in the Groveland area?					
Attract new businesses	1	2	3	4	5
A tourist information center	1	2	3	4	5
Rest area development	1	2	3	4	5
Local review of new buildings and renovations along Highway 120 in Big Oak Flat and Groveland	1	2	3	4	5
Community Recreation	Strongly Against	Against	No Opinion	Support	Strongly Support
What is your opinion on the following recreational facilities?					
Multipurpose center for meetings, theater, workout gym	1	2	3	4	5
Senior center	1	2	3	4	5
Off highway vehicle recreation area	1	2	3	4	5
Expanded youth center	1	2	3	4	5
Skateboard park	1	2	3	4	5
Hiking trails development	1	2	3	4	5
Miniature golf course	1	2	3	4	5
Family recreation center	1	2	3	4	5
Public Services	Strongly Against	Against	No Opinion	Support	Strongly Support
What is your opinion on the following community services?					
Expanded medical services	1	2	3	4	5
Summer evening programs	1	2	3	4	5
Preschool and daycare center	1	2	3	4	5
Transportation to Sonora and Columbia College	1	2	3	4	5
Current Situations	Very Poor	Poor	No Opinion	Good	Very Good
Rate the present situations within the Groveland area according to the scale on the right.					
Economic situation	1	2	3	4	5
Recreational facilities	1	2	3	4	5
Medical services	1	2	3	4	5
General Information					
Please check all the boxes that apply to you.					
Where do you live?	<input type="checkbox"/> Groveland <input type="checkbox"/> Big Oak Flat <input type="checkbox"/> PML		What is your employment status?		
	<input type="checkbox"/> Buck Meadows <input type="checkbox"/> Greeley Hill		<input type="checkbox"/> Unemployed <input type="checkbox"/> Work in Groveland		
	<input type="checkbox"/> Other (Please specify): _____		<input type="checkbox"/> Retired <input type="checkbox"/> Student <input type="checkbox"/> Work outside Groveland		

Further Ideas

To get your full opinion, please fill out the following questions. Feel free to add any comments you may have.
 What two things do you feel are most needed in the Groveland area?

What new facilities would you like to see in the future? (i.e. after-school programs for children)

Please see reverse side for return instructions

F. Final Southern Tuolumne County Survey

SOUTHERN TUOLUMNE COUNTY SURVEY

The Groveland Area Involved Neighbors (GAINs), your local community collaborative, is conducting a survey to understand the needs and interests of people who live in the Groveland area. With your help, new facilities can be planned and new services offered to increase the quality of life within southern Tuolumne County. Your answers will be kept anonymous. **Please see the reverse side for prepaid return instructions. Mail by June 20, 2002.**

Please circle the number on the scale that best represents your interest, from “No Interest” (1) to “Strong Interest” (5).

Economic Development

What is your interest in the following ideas to promote economic growth in the Groveland area?

	No Interest	—————▶				Strong Interest
A tourist information center	1	2	3	4	5	
Rest area development	1	2	3	4	5	
Expanded promotion of Groveland as “Gateway to Yosemite”	1	2	3	4	5	
Local review of new business buildings and renovations	1	2	3	4	5	

Community Recreation

What is your interest in the following facilities?

	No Interest	—————▶				Strong Interest
Expanded Community Hall	1	2	3	4	5	
Senior center	1	2	3	4	5	
New youth center	1	2	3	4	5	
Bowling alley	1	2	3	4	5	
Skateboard park	1	2	3	4	5	
Miniature golf course	1	2	3	4	5	
Theater / movie theater	1	2	3	4	5	
Workout gym	1	2	3	4	5	
Hiking / biking trail development	1	2	3	4	5	
Off highway vehicle recreation area	1	2	3	4	5	

Community Services

What is your interest in the following community services?

	No Interest	—————▶				Strong Interest
Expanded MediCare and MediCal services	1	2	3	4	5	
Summer evening programs	1	2	3	4	5	
Preschool and daycare services	1	2	3	4	5	
Transportation to Sonora and Columbia College	1	2	3	4	5	
Transportation to outside of Tuolumne County	1	2	3	4	5	

Current Situations

Rate the present situations within the Groveland area according to the scale on the right.

	Poor	—————▶				Good
Overall economy	1	2	3	4	5	
Recreational facilities	1	2	3	4	5	
Medical services	1	2	3	4	5	
Law enforcement	1	2	3	4	5	

General Information

Please check all the boxes that apply to you.

<p>Where do you live?</p> <p><input type="checkbox"/> Groveland <input type="checkbox"/> Greeley Hill <input type="checkbox"/> Coulterville <input type="checkbox"/> PML</p> <p><input type="checkbox"/> Buck Meadows <input type="checkbox"/> Moccasin <input type="checkbox"/> Big Oak Flat</p> <p><input type="checkbox"/> Other (Please specify): _____</p>	<p>What is your employment status?</p> <p><input type="checkbox"/> Unemployed <input type="checkbox"/> Work in Groveland area</p> <p><input type="checkbox"/> Retired <input type="checkbox"/> Work outside Groveland area</p> <p><input type="checkbox"/> Student <input type="checkbox"/> Work outside Tuolumne County</p>
--	---

Further Ideas

Please fill out the following questions. Add **any** comments you may have. Use back if necessary.

What two things do you feel are most needed in the Groveland area?

What new facilities and/or services would you like to see in the future?

HOW TO RETURN YOUR SURVEY

On behalf of GAINs (Groveland Area Involved Neighbors) and volunteer students from Massachusetts who are preparing and analyzing this survey, thank you.

If you have any questions or would like more information about GAINs, please contact:

Groveland Area Involved Neighbors P.O. Box 179 Groveland, CA 95321 or phone members at
962-7067 962-6312 962-7730

Mailing instructions: Fold into thirds by folding top then bottom along fold lines. Make sure the Business Reply box faces outward. Proceed to seal shut. No postage necessary.

Please mail no later than June 20, 2002.

FOLD

FOLD



NO POSTAGE
NECESSARY IF
MAILED IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 162 WORCESTER, MA

POSTAGE WILL BE PAID BY ADDRESSEE

WPI
IGSD (GROVELAND SURVEY)
100 INSTITUTE ROAD
WORCESTER MA 01609-9967



FOLD

Please fold where indicated so that the Business Reply box above faces out.
Seal with a piece of tape and mail – no postage necessary.
Thank you.

FOLD

G. Resident Questionnaire

GROVELAND AREA RESIDENT INTERVIEWS

GAINs (Groveland Area Involved Neighbors) will be conducting a survey to assess the needs and ideas of the residents of the Groveland area. The survey will be distributed with the June edition of the Yosemite Highway Herald. The survey's goals are to identify the needs and interests of the Groveland area residents. Presently, GAINs is designing this survey. We would like to hear your ideas, which will influence the kind of questions asked on the survey. Please take the time to answer the following questions.

GENERAL INFORMATION

Please check boxes next to the answer that applies to you.

What is your gender?

Male Female

What is your age?

8-14 15-21 22-40 41-64 65?

What do you like about living within the Groveland area?

What do you dislike about living within the Groveland area?

If you could change what Groveland has to offer, what would that be?

H. High School Student Survey

TIOGA SURVEY

The Groveland Area Involved Neighbors (GAINs), your local community collaborative, is conducting a survey to understand what the students in the Groveland area want. By understanding your interests, new activities can be planned and better facilities can be created. With your help, *fun can happen!!* Your answers will be kept anonymous.

Please circle the number on the scale that best represents your opinion on the following.

CURRENT SITUATION

Rate the following services and facilities available to you in the Groveland area.

	Poor	—————→			Good
Law enforcement	1	2	3	4	5
High school education	1	2	3	4	5
Youth center	1	2	3	4	5
Activities offered in the Groveland area	1	2	3	4	5

RECREATIONAL FACILITIES & SERVICES

What is your interest in seeing the following in the future?

	No Interest	—————→			Strong Interest
Expanded Community Hall	1	2	3	4	5
New youth center	1	2	3	4	5
High school gymnasium	1	2	3	4	5
Public swimming pool	1	2	3	4	5
Bowling alley	1	2	3	4	5
Skateboard park	1	2	3	4	5
Miniature golf course	1	2	3	4	5
Theater / movie theater	1	2	3	4	5
Workout gym	1	2	3	4	5
Hiking / biking trail development	1	2	3	4	5
Off highway vehicle recreation area	1	2	3	4	5
Transportation to Sonora	1	2	3	4	5
Transportation outside of Tuolumne County	1	2	3	4	5

GENERAL INFORMATION

Please check all the boxes that apply to you.

What year are you? <input type="checkbox"/> Freshman <input type="checkbox"/> Junior <input type="checkbox"/> Sophomore <input type="checkbox"/> Senior	Where do you live? <input type="checkbox"/> Moccasin <input type="checkbox"/> Greeley Hill <input type="checkbox"/> Coulterville <input type="checkbox"/> PML <input type="checkbox"/> Buck Meadows <input type="checkbox"/> Groveland <input type="checkbox"/> Big Oak Flat <input type="checkbox"/> Other (Please specify): _____
What is your gender? <input type="checkbox"/> Male <input type="checkbox"/> Female	How often do you find yourself bored? <input type="checkbox"/> More than twice a week <input type="checkbox"/> Twice a week <input type="checkbox"/> Once a week <input type="checkbox"/> Once a month <input type="checkbox"/> Never

What are your hobbies and interests?

Do you plan on staying within the Groveland area after high school? Yes No

If no, where are you planning on going?

FURTHER IDEAS

Please fill out the following questions. Add **any** comments you may have. Use back if necessary.

What two things do you feel are most needed in the Groveland area?

What new facilities and/or services would you like to see in the future?

I. WPI Student Test Survey

WPI COMMUNITY SURVEY

The WPI Area Involved Neighbors (WAINs) is conducting a survey to understand the needs of the community. With your help, new facilities will be planned and new services will be offered, with the hopes of increasing the quality of life within our community. Your answers will be kept anonymous. **Please see reverse side for return instructions. Mail by June 15, 2002.**

Please circle the number corresponding to the suggestion, ranging from Strongly Against to Strongly Support, that best represents your opinion.

Admissions

Ideas such as the following have been proposed to promote WPI nationally.

	Strongly Against	Against	No Opinion	Support	Strongly Support
Developing admission information centers nationally	1	2	3	4	5
Rest area development	1	2	3	4	5
Developing informational packets	1	2	3	4	5
TV commercial ad campaign	1	2	3	4	5

Recreation Facilities

The following facilities and services have been proposed for members of the community to take part.

	Strongly Against	Against	No Opinion	Support	Strongly Support
Community building for theater and conferences	1	2	3	4	5
Go-kart park off Salisbury Road	1	2	3	4	5
Youth center, including skateboard park	1	2	3	4	5
Miniature golf course	1	2	3	4	5
Workout gym	1	2	3	4	5

Public Services

Services available to all WPI students have been proposed to improve the community.

	Strongly Against	Against	No Opinion	Support	Strongly Support
Expand health services	1	2	3	4	5
Establish committee to promote growth	1	2	3	4	5
Employment exchange with engineering firms	1	2	3	4	5
Evening summer education program	1	2	3	4	5
Grocery market on campus	1	2	3	4	5

General Information

Your school location of residency	<input type="checkbox"/> On Campus <input type="checkbox"/> Fraternity <input type="checkbox"/> Sorority <input type="checkbox"/> Salisbury Estates <input type="checkbox"/> Other: _____				
Your summer employment status	<input type="checkbox"/> Unemployed <input type="checkbox"/> Student <input type="checkbox"/> Work at WPI <input type="checkbox"/> Work Outside WPI				

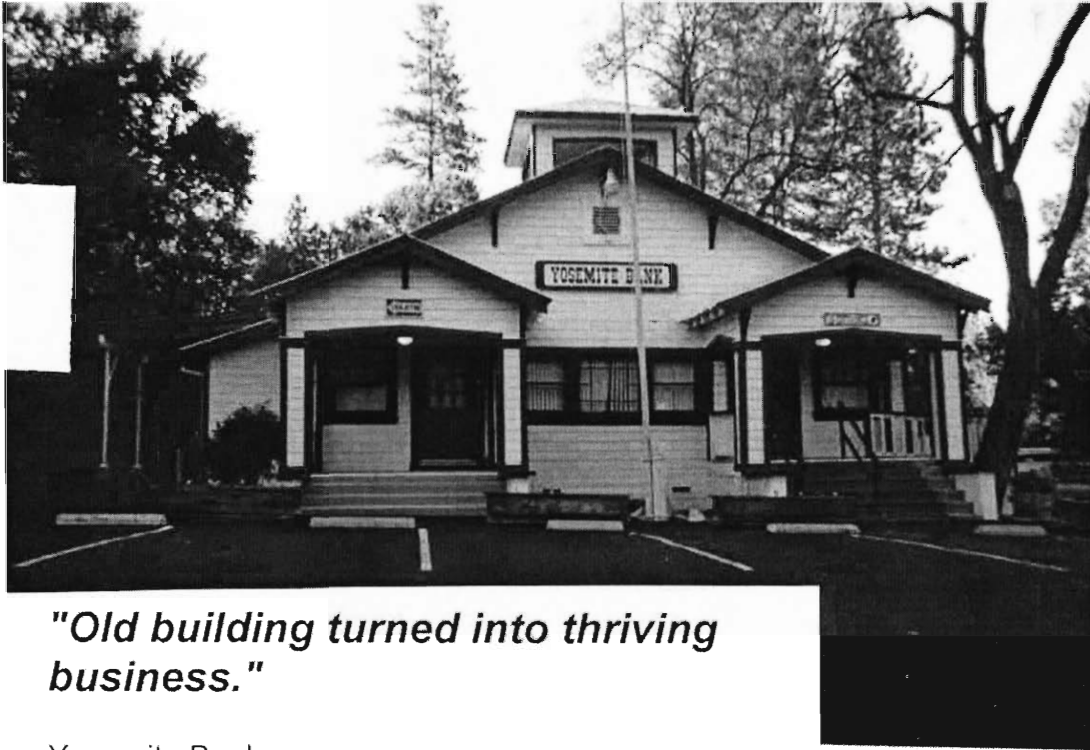
Further Ideas

To get your full opinion, please fill out the following questions. Feel free to add **any** comments you may have.

What do you feel is most needed at WPI?

What would you like to see in the future at WPI?

J. Photographic Survey Results



"Old building turned into thriving business."

Yosemite Bank

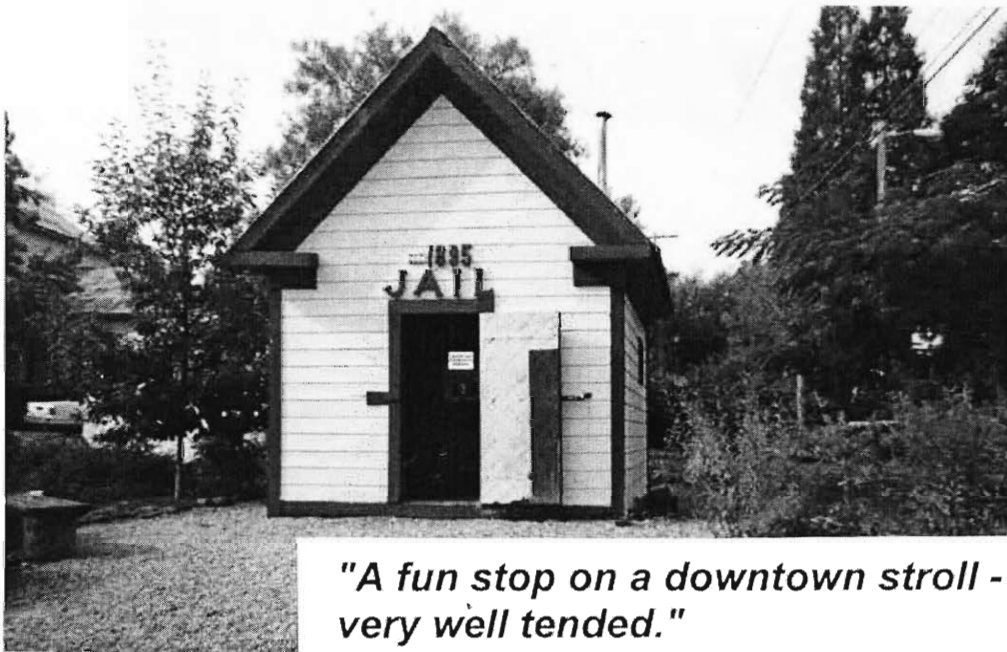
Figure 31. Yosemite Bank



Figure 32. Iron Door Saloon (oldest drinking establishment in CA)

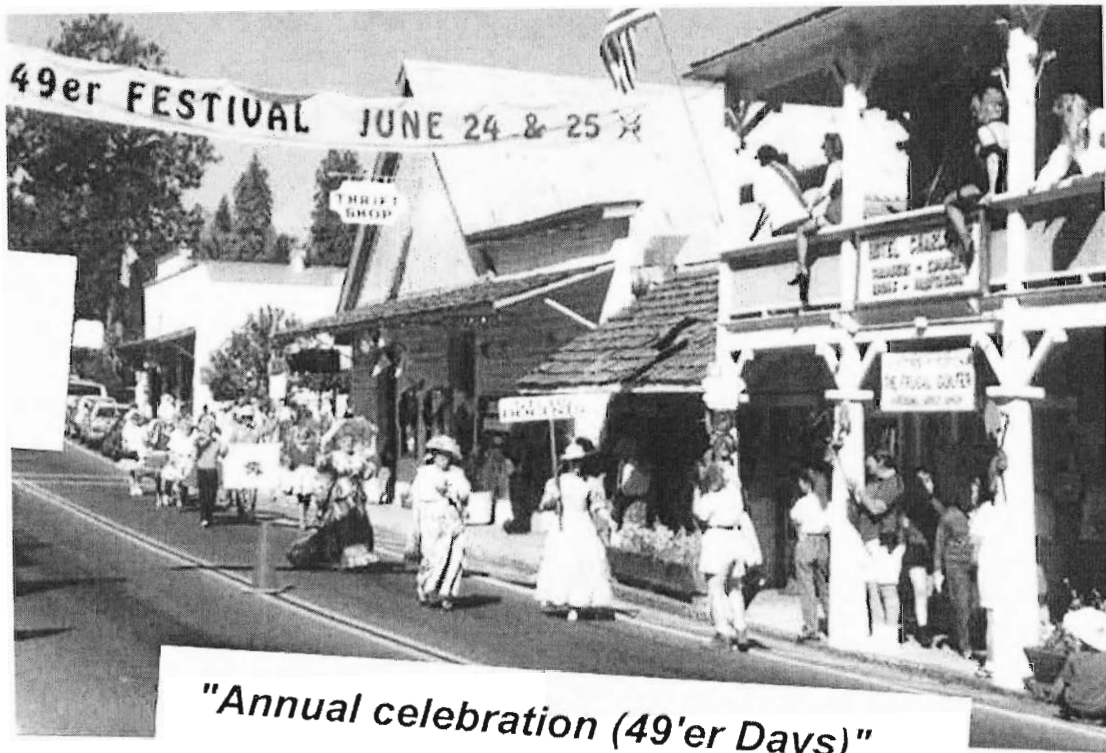


Figure 33. Groveland Hotel



*"A fun stop on a downtown stroll -
very well tended."*

Figure 34. Groveland's Old Jail



"Annual celebration (49'er Days)"

Figure 35. Annual 49'er Parade

"Annual celebration (Christmas)"

16



Figure 36. Christmas Celebration

Canyon Portal looking up Tuol. River

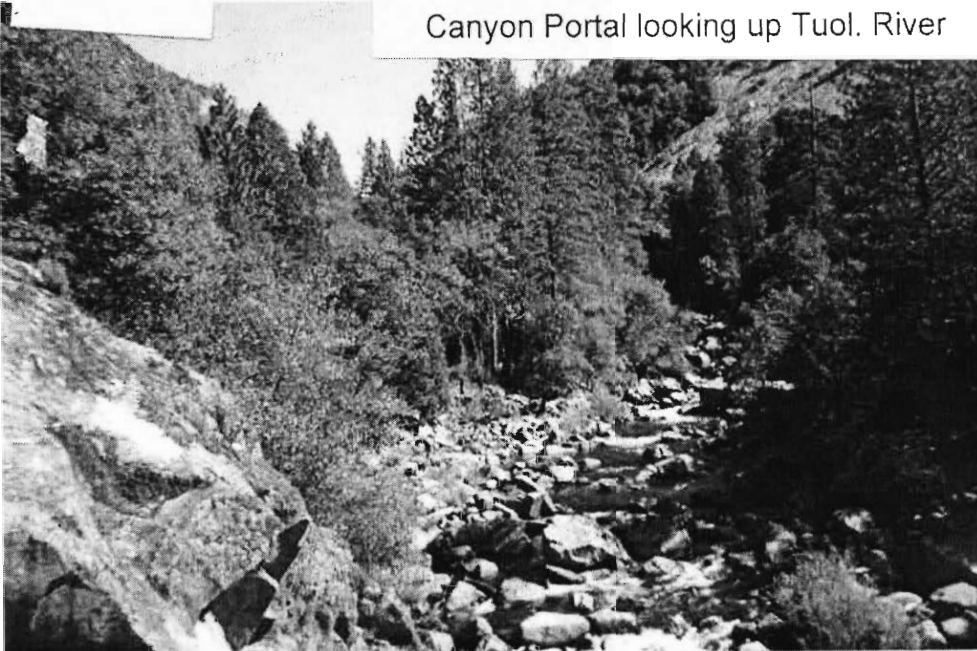


Figure 37. Natural Attraction - Canyon Portal

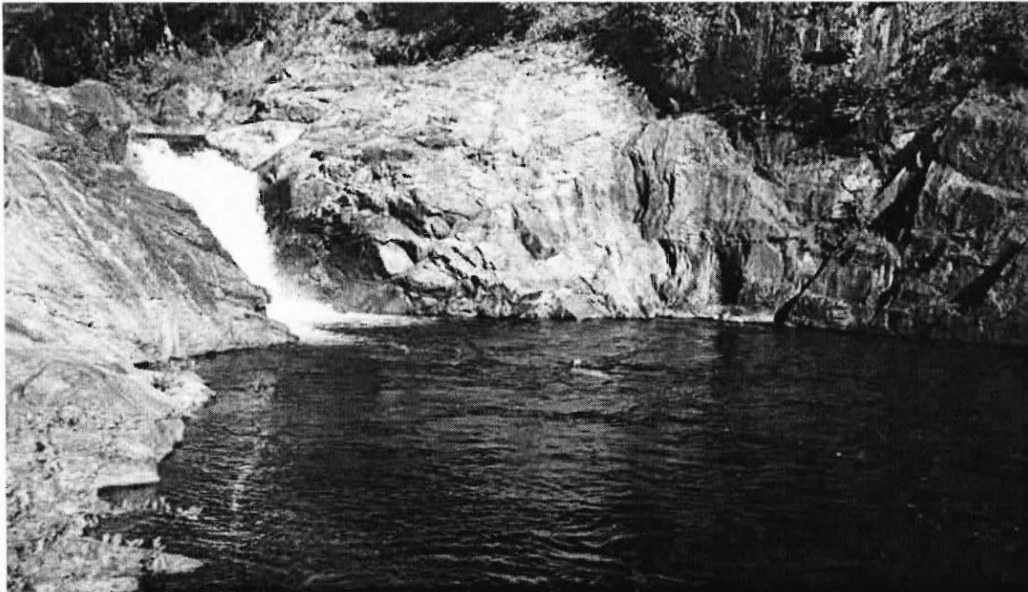


Figure 38. Natural Attraction - Rainbow Pools



Figure 39. Pine Mountain Lake (PML)



Figure 40. Wayside Park

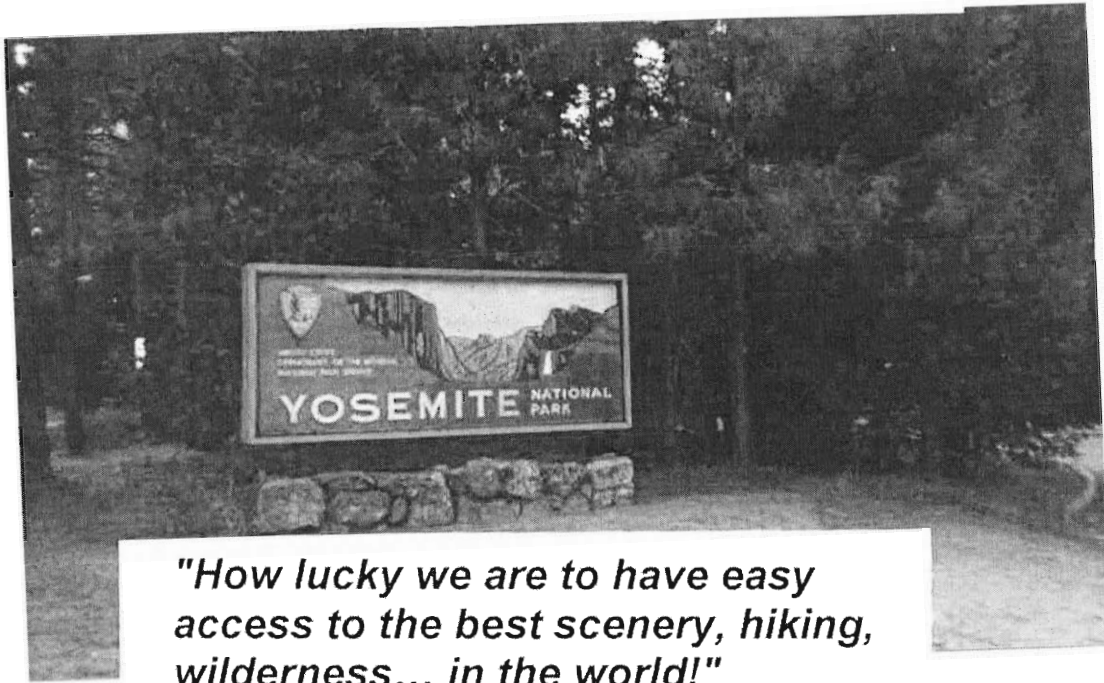


Figure 41. Yosemite Park

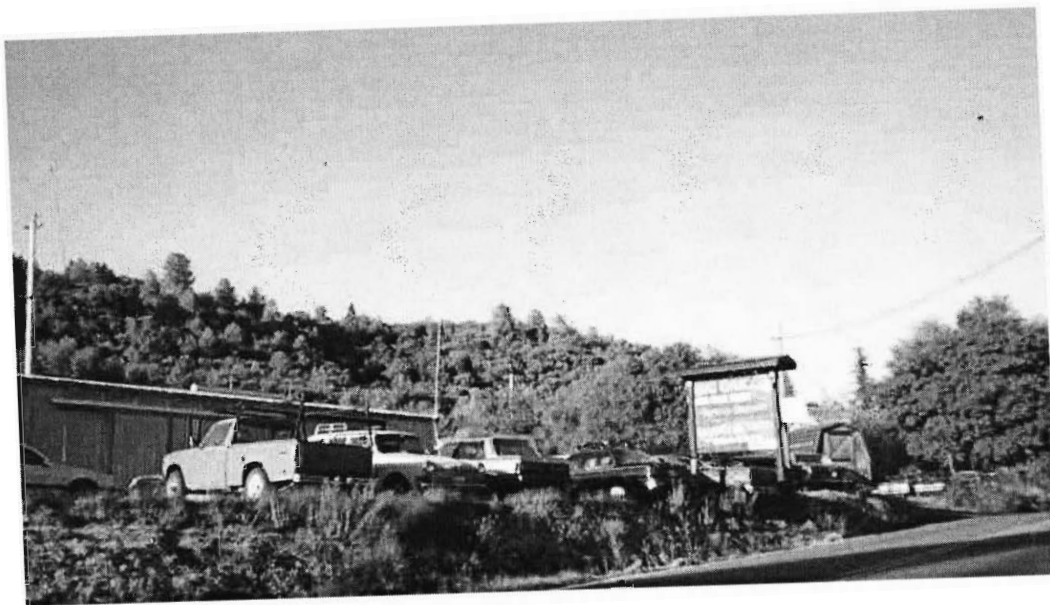
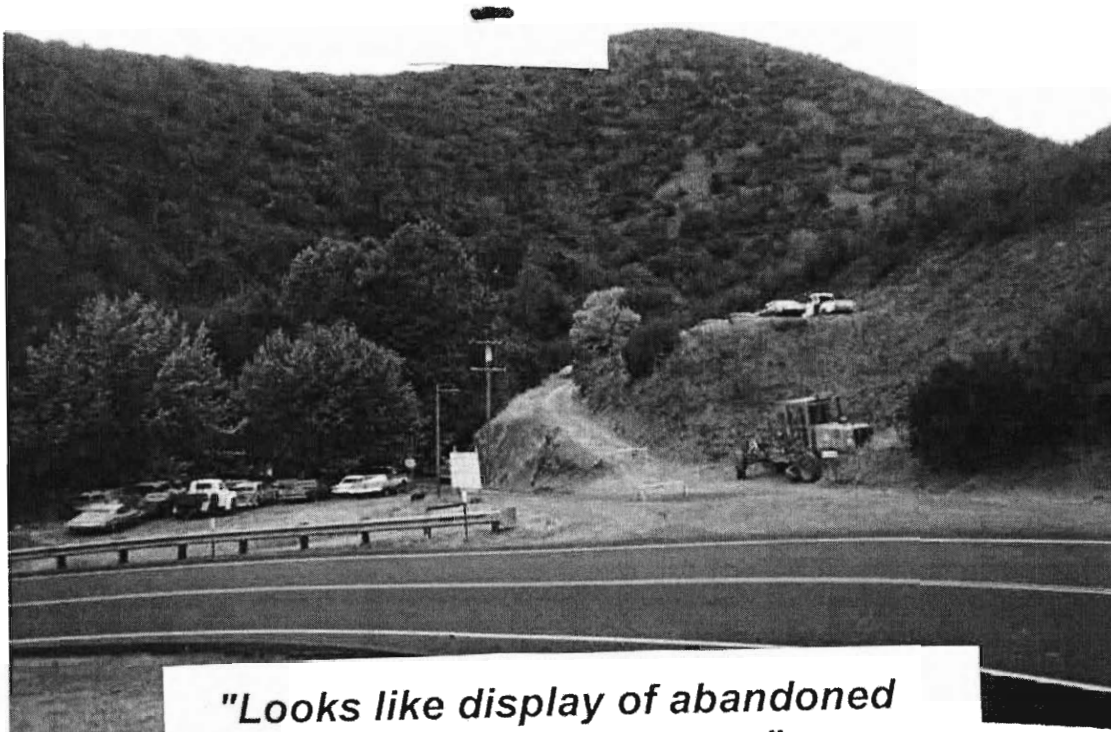


Figure 42. Big Oak Auto (Used Car Seller)



"Looks like display of abandoned autos waiting to rust away."

Figure 43. Ferndale (2 run-down buildings and many broken cars)



Figure 44. "The Scar" (Undeveloped Gas Station, Ongoing Construction)

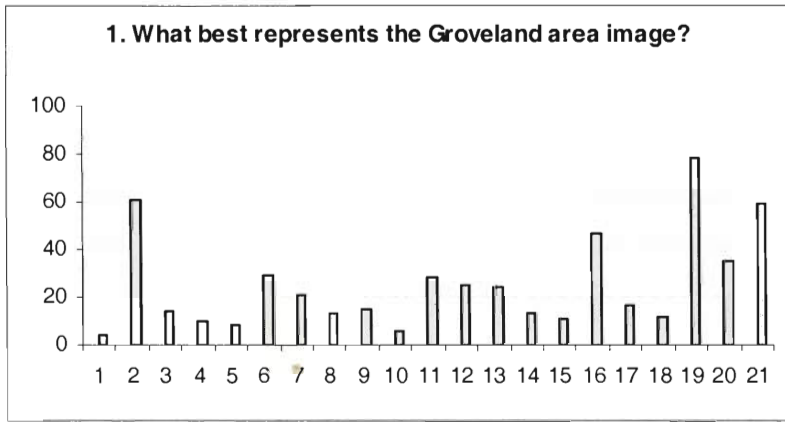


Figure 45. Photographs Set 1: 2) Yosemite Bank, 16) Christmas Celebration, 19) Iron Door Saloon, 21) 49'er Parade

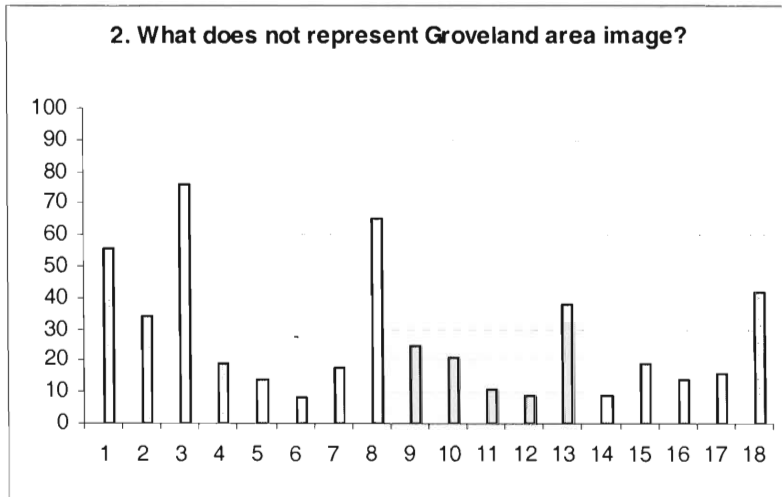


Figure 46. Photographs Set 2: 1) Ferndale, 3) "The Scar", 8) Big Oak Auto

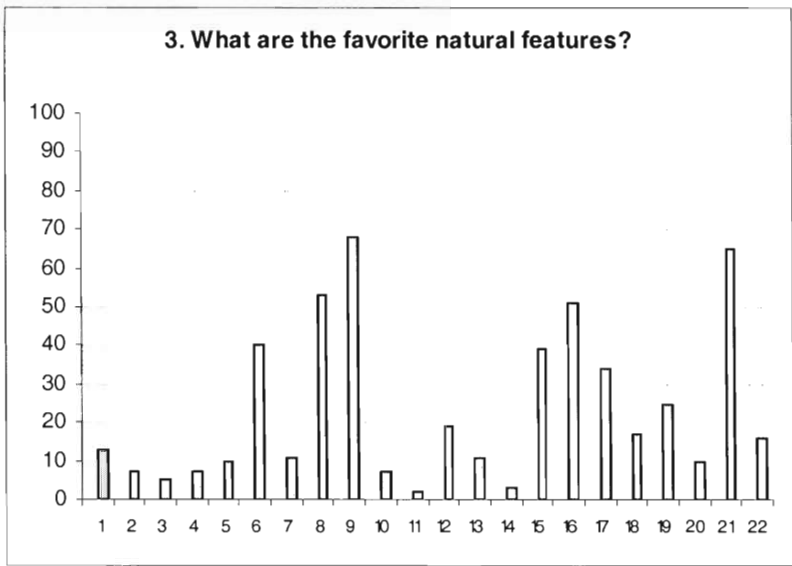


Figure 47. Photographs Set 3: 8) Canyon Portal, 9) Pine Mountain Lake (PML), 21) Rainbow Pool

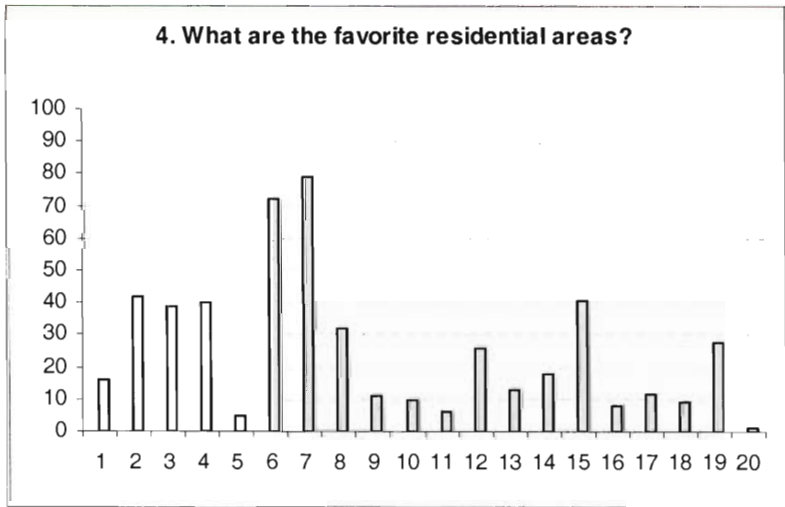


Figure 48. Photographs Set 4: 6, 7) PML

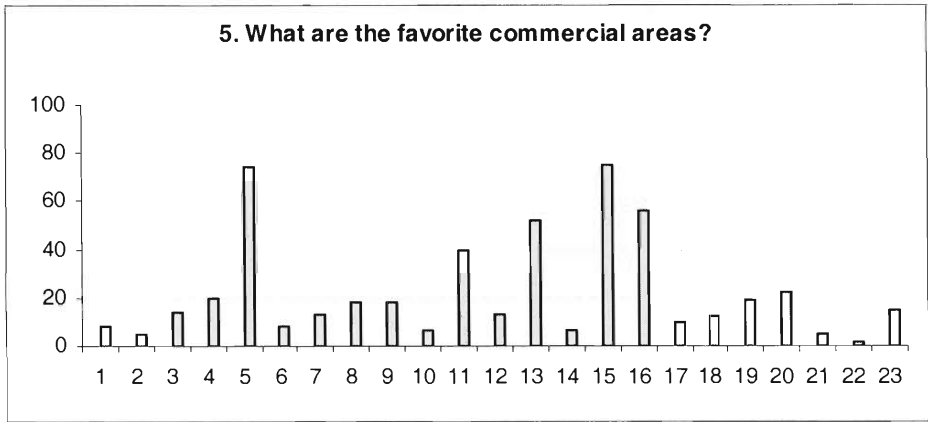


Figure 49. Photographs Set 5: 5) Yosemite Bank, 15) Iron Door Saloon, 16) Groveland Hotel

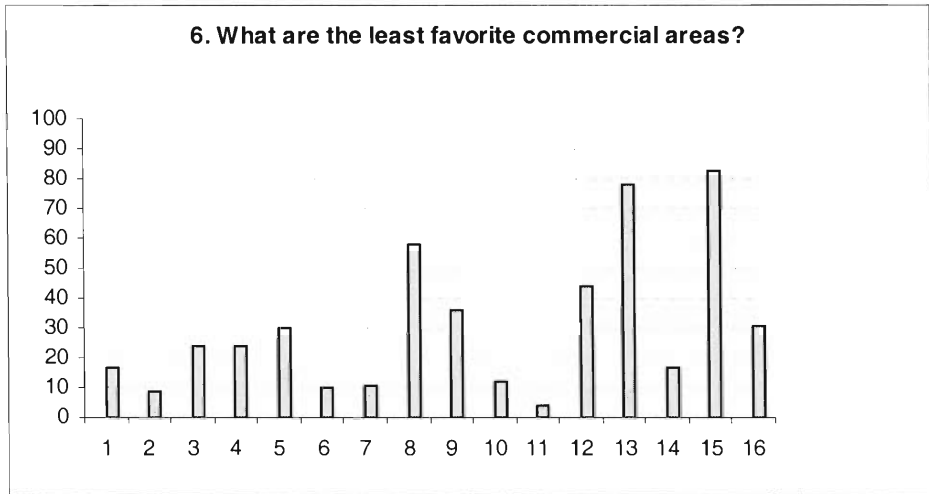


Figure 50. Photographs Set 6: 13) Big Oak Auto, 15) "The Scar"

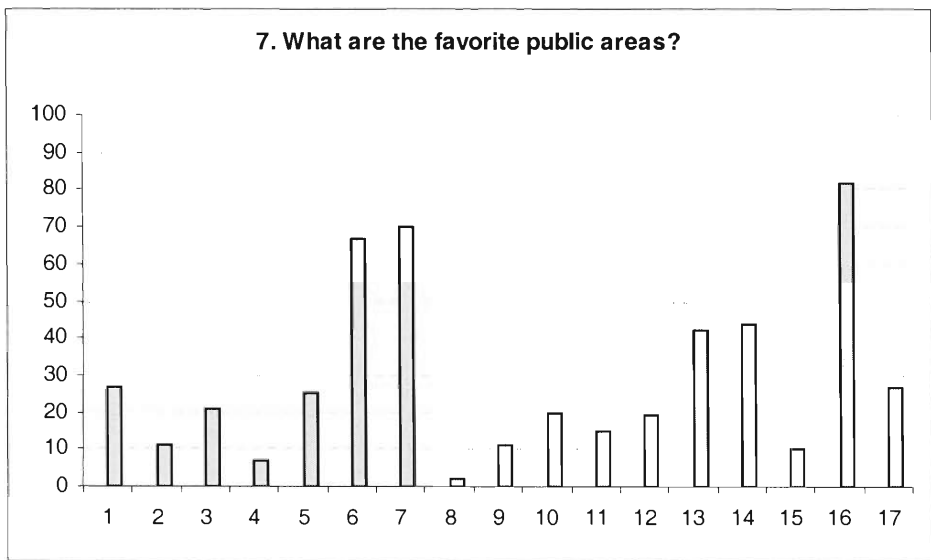


Figure 51. Photographs Set 7: 6) Groveland Wayside Park, 7) Yosemite Park, 16) PML

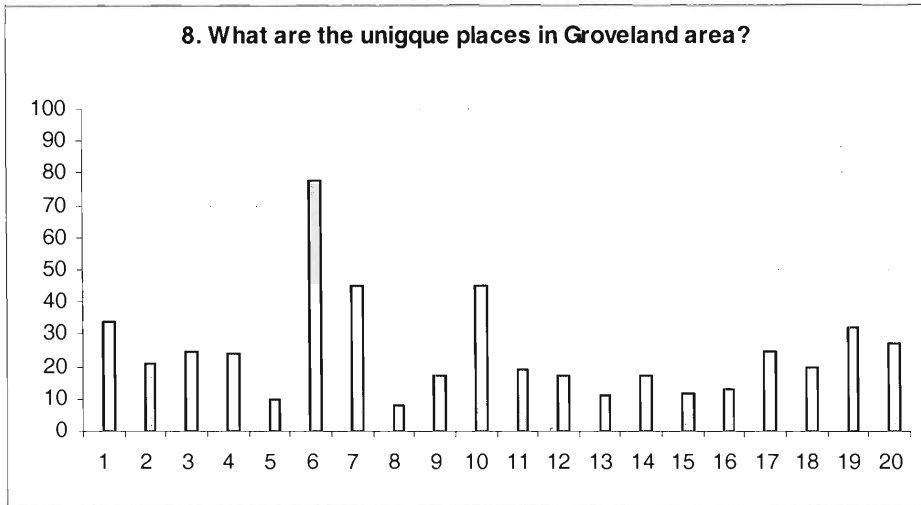


Figure 52. Photographs Set 8: 6) Iron Door Saloon, 7) Old Jail, 10) Groveland Hotel

K. Newspaper Articles

YOSEMITE HIGHWAY HERALD

Vol. 16, No. 6

JUNE 2002

Serving Southern Tuolumne County and Northern Mariposa County Since 1987

Groveland Rotary

Wine and Food Festival

Don't miss the second annual Groveland Rotary Wine and Food Festival **Saturday, June 8** from 4 p.m. to 9 p.m. This year's event will feature Chico Vega's original Drifters and the Fabulous Coasters.

In addition to the world class entertainment there will be gold country wineries, gourmet food booths, full bar, complimentary etched wine glasses, raffle prizes, custom designed program with autograph page, and a choice of filet mignon or grilled salmon served with starch, salad, and dessert.

Last year's event was such a tremendous success we are looking forward to dancing to the sweet sounds of the '50s and '60s. Each group had several number one hits on the top forty. The Coasters struck it rich with such hits as "Yakety Yak," "Charlie Brown," "Poison Ivy," and "Along Came Jones." The Drifters hits include: "There Goes my Baby," "Dance With Me," "Up On The Roof," "Under The Boardwalk," and "On Broadway." **This is your chance to bring back the glory days with Chico Vegas Original Drifters and the Fabulous Coasters June 8 from 4 p.m. to 9 p.m.**

Tickets are on sale for \$50.00 per person. Please contact the following Rotarians for tickets: John Brunk (962-6276), Betty Fries (962-7156), Robert Hatmaker (962-6318), Jack Jenkins (962-0232), Richard Rosenbaum (962-0420), Red Rossio (962-4830), Larry SantaMaria (962-7904); Don

See WINE AND FOOD, Page 28

Another spaghetti feed

By Kristina Zanker

The La Grange Improvement Association is hosting a Spaghetti Dinner/Fundraiser on **Friday, June 7** at the IOOF Hall in downtown La Grange from 4:30-8:00 p.m.

The meal includes spaghetti, garlic bread, salad, drinks, and dessert. You can purchase your tickets ahead of time (contact Evelyn McCoy 853-2430) for \$6.50 adult/ \$3.50 child (6 and under) or at the door. We will be offering take-out as well.

In addition we will be raffling off a \$2.50 gold coin. Tickets can be purchased in advance or at the door for \$1.00. Contact Betty Varain 853-9011 for more info.

All proceeds go toward the Historic La Grange Water Defense Fund.

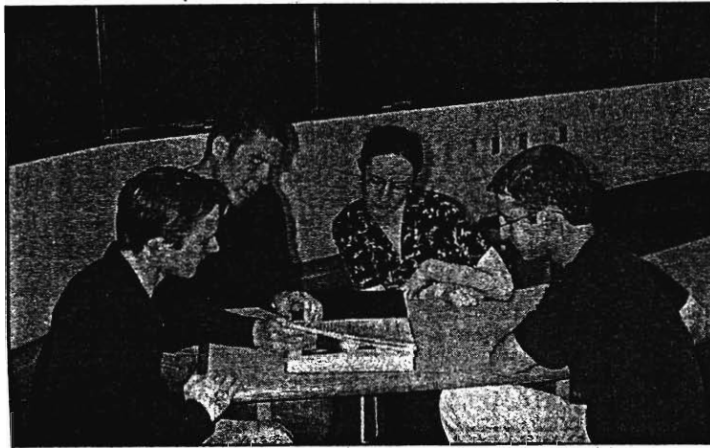


Photo provided by Barbara Broad

From left, students on the WPI survey team, Julian Serafini, Christoph Lepper, and Adam Siegel, study Groveland materials and pictures with their faculty advisor, Professor Denise Nicoletti.

GAINs Survey

By Barbara Broad

Who should decide what the future "on the hill" should look like? Groveland Area Involved Neighbors (GAINs) thinks it should be the people who live "on the hill."

GAINs wants everyone to have a say and is preparing a comprehensive community survey, funded by a grant from the Sonora Area Foundation. The purpose is to get ideas from as many people who live and visit here as possible. What would you like to see in the South County's future?

Three engineering students from Worcester Polytechnic Institute (WPI) in Massachusetts are developing the survey as their senior project. They are studying South County information now and preparing some ideas for the survey. The team members are Julian Serafini, who grew up in California, Belgium, and Germany, Christoph Lepper, a German foreign student, and Adam Siegel, from Bethesda, Maryland, with their project advisor, Professor Denise Nicoletti, Computer and Electrical Engineering Department.

The students and Prof. Nicoletti arrived May 24 to be here twelve days. They met immediately with several community leaders and more meetings are scheduled. Look for the students in and out of town interviewing people and getting acquainted with life "on the hill." For some variety, the PML Aviation Association will provide aerial tours of the South County. ARTA will take them rafting, the Iron Door Saloon will host them for dinner, there will be a Western barbecue at the Dees' home on Gibson Ranch, and they look forward to at least a

glimpse of Yosemite. Local organizations are bringing in dinners, and the team will be living and working at Barbara Broad's house.

Look for them in and out of town and be ready with your ideas. Then please participate by returning the survey which is inserted into this issue. If your organization would like the team to come to a meeting, contact Barbara Broad at 962-7730 or bbroad@aol.com.

Soroptimist International of Groveland

Community blood drive

Please join the Soroptimist International of Groveland and Delta Blood Bank in a community blood drive on **Saturday, June 1** from 9:30 a.m. to 1:30 p.m. at the Groveland Fire Department at 18930 Hwy 120, and help the community by donating blood.

During this blood drive, each individual that registers to donate will receive a free Delta Blood Bank t-shirt.

Everyone in the community is encouraged to donate. Please support the community of Groveland on June 1, from 9:30 am - 1:30 pm at the Groveland Fire Department at 18930 Hwy 120. For more information please contact Jeanie Brunk at 962-6276.

Family Wellness Faire

Soroptimist International of Groveland is proud to present our second annual Family Wellness Faire on **Saturday, June 1** at Wayside Park, Groveland, from 9 a.m. to 1 p.m.

There will be over 40 booths with important health, safety, and wellness information including cholesterol testing, PSA testing, blood pressure checks, and Delta Blood Bank accepting blood donations. Great food and reasonable prices will also be available.

Take the kids to meet McGruff, the crime dog, and Dave the stilt man of Groveland. And sign up to win an autographed hockey puck from our own playoff contenders—The San Jose Sharks.

So get your friends and family down to the Family Wellness Faire and fun, food, and free stuff!

For more information contact Roberta at 962-4134, or Kristin at 962-4830.

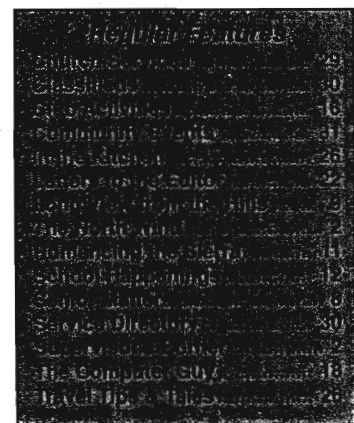
STCHS Presents:

Billee Hoornbeek Archaeologist Extraordinaire

By Marjorie Ward

Most of us who live between the Tuolumne and Merced Rivers are aware of our local cemeteries; Oak Grove, Mt. Carmel Catholic Cemetery, and the old Chinese Camp cemetery, but Billee Hoornbeek, who moved here with her husband Frank

See ARCHAEOLOGIST, Page 28



Copyrighted materials removed from scanned project

Original may be viewed at Gordon Library

IQP/MQP SCANNING PROJECT



L. Survey Data

Resident Survey Data

Survey #	Tourist Information Center	Rest area development	Expanded promotion as Gateway to Yosemite	Local review of new business buildings	Expanded Community Hall	Senior center	New youth center	Bowling alley	Skateboard park	Miniature golf course	Theater/movie theater	Workout gym	Hiking/biking trail development	Off highway vehicle recreation area	Expanded MediCare and Medical services	Summer evening programs	Preschool and daycare services	Transportation to Sonora and Columbia College	Transportation to outside of Tuolumne County	Overall economy	Recreational facilities	Medical services	Law enforcement	Residency	Employment status	Mark
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82		4				4																		g	2
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139																										
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p 4
g 2
p 3

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347	1	3	4	5	3	5	5	1	5	1	5	5	1	3	5	5	3	1	1	4	5	5	5	p	2	
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349		5	5	3	4	4	5	2	5	2	3	2	4	3	5	3	3	3	3	4	3	2	2	p	2 *	
350	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	3	1	1	1	p	2	
351	3	4	4	2	2	2	3	3	3	4	4	4	4	3	3	4	4	3	3	3	2	2	3	g	5	
352	3	3	1	5	3	3	5	1	5	1	4	5	5	1	5	3	1	1	1	1	2	3	3	p	2	
353	3	1	1	2	1	2	3	3	4	1	5	2	1	4	3	4	3	2	2	3	3	4	4	f	1	
354					5	5								5				5			2	3	2	2	p	2
355	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	5	5	3	3	3	1	g	2 *
356	3	3	4	4	3	3	3	1	4	4	1	1	1	1	4	4	4	4	2	3	3	2	2	p	2	
357	3	4	4	3	3	2	2	1	2	1	4	2	3	1	4	3	1	3	3	2	3	3	1	p	5	
358								3	3	3	3														h	6
359	2	2	1	1	3	1	1	1	1	1	1	2	1	1	1	1	3	1	1	5	4	4	3	p	2	
360	3	5	3	5	5	2	2	2	4	2	5	1	1	1	5	2	2	3	3	4	4	3	4	p	2	
361	3	2	4	3	5	4	3	1	3	1	1	1	4	4	4	1	1	1	1	2	3	2	2	o	4	
362	1	2	3	3	4	5	3	2	5	1	1	2	1	1	4	3	3	2	2	1	1	2	3	g	2	
363	2	5	2	2	5	3	2	3	3	2	5	3	4	5	3	5	3	5	5	3	2	2	3	f	5	
364	4	2	4	4	3	3	2	3	2	3	4	4	5	2	4	2	2	3	3	2	2	3	3	g	6	
365	3	1	5	3	1	1	3	1	1	1	1	1	1	1	5	3	1	4	4	3	4	3	5	p	2	
366	2	1	4	3	2	3	3	3	2	5	3	3	4	5	4	4	3	4	5	4	3	3	4	g	4	
367	5	5	5	5	5	3	4	2	2	2	2	2	4	1	1	3	1	3	3	2	2	2	3	g	4	
368	2	3	4	5	3	3	1	4	4	4	5	3	3	1	5	4	3	4	3	3	2	3	2	p	2	
369	1	1	1	5	1	3	4	1	5	1	1	1	1	1	5	1	5	5	1	1	1	1	5	h	2	
370	1	2	1	1	5	1	5	2	1	1	1	1	1	1	1	3	2	1	1	2	1	3	1	p	2 *	
371	4	3	2	3	4	3	3	1	3	2	2	3	4	1	3	4	4	4	3	2	4	2	5	p	5	
372	3	3	3	5	3	5	2	3	1	4	5	2	5	3	5	5	3	5	5	3	3	3	3	g	6 *	
373	5	4	2	3	4	3	2		1				5		5	2	4	3	2	1	3	1	2	c	6	
374	1	2	2	1	2	2	2	1	1	1	3	2	2	1	5	1	1	2	2					g	1	
375	1	3	3	4	3	2	4	1	3	1	1	1	3	3	2	2	1	2	2					g	2 *	
376				4		5									5									h	2	
377	2	2	2	1	2	3	3	1	2	1	1	1	2	3	1	2	2	2	2	2	2	3	3	g	6	
378	1	1	1	1	3	5	3	1	1	1	1	1	1	1	5	4	1	4	4	5	5	4	4	p	2	
379	4	3	3	2	3	5	3	1	1	1	2	2	1	1	5	3	2	2	2	3	4	4	3	g	2	
380	3	1	5	5	3	3	1	1	1	3	5	3	5	4	4	4	1	1	5	3	1	5	1	g	2	
381	3	3	3	4	5	3	4	2	4	2	4	3	4	1	4	5	3	2	2	2	3	3	4	p	2	
382	5	3	5	5	3	5	5	5	4	5	5	5	5	3	3	4	4	5	3	3	2	2	2	o	4	
383	3	4	2	3	2	2	4	1	4	1	1	3	3	1	4	2	2	4	4	3	2	3	2	o	4 *	
384	3	3	3	3	4	3	4	1	1	1	1	5	5	1	4	4	4	5	3	1	1	2	2	g	4	
385	4	3	4	5	4	5	5	5	5	5	5	5	5	5	5	5	4	4	4	3	2	3	3	g	2	
386	5		5	5					3						5		5	5		2		2	1	g	2	
387	2	3	1	3	1	1	1	1	1	1	3	3	2	1	4	5	5	3	1	3	3	2	4	p	6 *	
388	4	5	3	5	1	1	5	5	5	3	5	1	5	3	1	2	1	1	1	4	1	5	5	h	2	
389	5	5	4	2	4	3	3	4	2	1	4	2	3	4	5	5	5	5	5	3	3	1	1	h	1 *	
390	5	5	5	2	3	1	2	2	4	1	2	3	3	1	4	3	5	5	3	2	2	2	1	g	6	
391	1	1	1	1	1	2	1	2	3	1	1	3	1	1	2	2	1	2	3			3	1	b	2 *	
392	4	4	3	3	4	2	2	1	2	1	3	3	3	3	4	3	3	4	4	2	2	3	3	p	2	
393	3	3	3	3	4	5	3	1	3	4	4	3	2	1	4	4	3	5	5	3	3	5	3	h	2	

394	4	5	5	4	5	3	5	3	4	4	5	3	3	4	4	4	4	3	3	3	3	4	4	o	2
395	5	5	5	3	1	3	3	1	3	1	1	5	5	1	5	5	2	5	1	3	1	2	2	b	4 *
396	3	3	5	5	5	5	5	3	4	1	5	5	5	1	5	5	4	4	3	2	3	2	3	p	4
397			5		5	5	5				5	5			5	5	5	5		3	1	2	4	g	4
398	2	2	5	5	3	3	2	4	2	3	5	4	3	2	5	5	1	5	5	1	1	2	3	g	4
399	5	3	5	2																		1		p	4
400	3	3	3	3	3	2	2	1	1	2	2	2	2	5	3	3	3	3	3	3	3	3	3	p	4
401	1	1	1	5	1	1	4	1	5	1	5	5	5	1	5	5	1	4	5		4	1	2	p	2
402	3	3	3	3	3	4	4	5	5	2	5	4	2	1	5	4	2	2	2	4	4	5	4	p	2
403	2	2	1	4	3	3	3	1	2	2	2	4	4	1	4	4	4	3	3	4	4	3	4	m	5
404	3	3	3	3	3	3	3	5	1	3	5	1	2	1	3	3	3	2	2	3	1	3	3	p	2
405	1	1	1	1	1		3	1	4	1	3	3	2	1	4	3	1	3	1	3	1	1	1	g	2
406	1	1	1	4	1	1	4	5	5	5	5	3	5	1	1	3	3	1	1	1	1	3	4	g	4
407	5	5	5		4	2	2	1	4	2	5	2	5	1	2	3	5			2	1	3	1	g	2 *
408	3	3	3	3	3	3		1	1	1	1	1	3	1	5	3	5	3	3	3	3	5	5	p	2
409	1	1	4	4	2	3	2	1	1	4	4	5		2	1	4	1	3	1	3	2	2	4	g	5
410	1	1	1	1	3	3	2	1	2	1	1	3	2	1	5	3	2	1	1	5	5	5	5	g	2
411			3		5	3	3	1	1	1	1	1	1	1	4					3	3	3	1	p	2
412	1	1	4	2	3	2	1	4	5	5	5	3	5	2	1	4	1	4	5	1	1	1	3	g	1
413	5	5	5	5	5	5	5	4	3	5	5	5	5	4	5	5	3	2	3	3	4	2	4	p	6
414	2	3	1	1	4	5	4	5	4	1	3	5	4	1	5	4	4	3	3	3	3	3	3	f	2
415	3	5	5	3	5	5	5	5	5	5	5	5	1	5	5	5	2	5	3	3	5	2	5	f	2
416	4	4	3	3	5	4	4		3		5	4	3	2	5	4	4	4	4	3	2	3	1	p	2
417	1	1	1	1	3		5	4	5	5	2	5	1	1	4	1	1	1	1	2	2	2	4	p	2
418	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4		2	2	2	3	3	3	3	h	2
419	5	5	5	5	5	5	3	1	1	1	1	3	5	1	1	1	1	1	1	4	3	4	3	g	2
420	1	4	1	5	5	3	1	1	5	1	3	5	5	1	5	5	3	1	1	3	3	2	4	p	4
421	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	4	1	1	1	4	1	2	2	p	2
422				4		5	4					5				5	5	5			2	1	1	p	2
423	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	2	1	2	2	3	3	3	3	h	2
424				5		5					5		5		5	5	5	5	5	1	1	1	1	c	5 *
425	1	3	1	4	4	4	5	1	5	3	5	3	1	1	5	3	1	5	5	2	1	4	2	p	2
426	1	1	1	1	5	5	3	1	1	1	3	1	4	1	3	3	1	3	3	3	2	3	3	g	2
427	1	1	4	5	3	4	1	1	1	1	3		5	1	5	5	1	3	1	3	5	2	2	p	6
428	3	3	3	3	5	5	5	5	3	5	5	1	5	1	5	3	5	5	5	1	2	1	3	g	2
429		5	5						5										5		5			g	2
430	3	3	5	4	4	3	4	1	4	1	4	4	4	1	4	2	4	4	2	3	2	1	2	p	2
431	5	5	5	5	5	4	5	5	5	3	5	5	5	3	5	5	4	5	3	3	2	3	3	p	4
432	3	3	3	5	4	5	3	5	1	3	3	3	5	1	5	5	2	5	5	1	1	1	3	o	4
433	3	1	4	3	3	3	4	1	5	1	3	3	3	1	5	5	2	4	1	2	1	2	3	g	2
434	4	5	5	4	3	4	4	1	2			3	5	1	4	4	2	1	1	3	2	1	3	o	
435	3	3	2	3	4	4	4		2	2	4	3	5	1	5	4	5	5	5	3	2	3	3	p	2 *
436	2	2	1	2	1	2	2	1		1	2	3	3	1	2	3	3	4	2	2	2	2	3	p	4 *
437	5	4	5	5	3	4	4	1	2	1	5	1	5	5	5	5	1	1	3	3	3	1	3	g	2
438	3	4	4	5	4	5	5	1	1	1	1	3		1	5	4	1	1	5	1	1	5	1	b	2
439	2	2	2	4	4	4	4	4	4	4	4		2	2	5	4	4	5	5	3	3	2	2	g	4 *
440	1	2	1	4	3	3	4	1	1	1	2	1	1	1	3	3	3	3	3	1	2	4	2	g	2
441	1	1	1	1	3	3	2	1	3	2	1	1	1	1	3	2	1	1	1	3	3	3	4	g	2
442	1	2	1	5	2	3	4	1	2	1	1	1	1	1	3	2	3	3	5	1	3	3	2	g	2
443	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5	5	2	1	3	1	p	2
444	3	4	3	4	5	3	3	1	3	1	5	3	3	1	3	3	1	2	2	3	4	4	3	p	2

445		5				5	5					5			5			5			3	1	3	3	g	1
446	1	3	2	3	2	2	4	4	4	4	5	3	5	1	4	4	5	4	4	3	3	2	4	h	4 *	
447	5	4	5	4	5	5	4	4	4	1	5	4	4	2	5	5	5	3	4	3	2	2	2	p	5	
448	3	5	5	1	5	5	5	5	5	2	4	1	5	1	5	5	1	3	3	2	1	2	2	p	4	
449	2	2	2	5	3	5	5	1	4	3	3	1	1	1	5	2	3	2	2	4	3	4	5	g	2 *	
450	3	4	5	5	5	5	2	1	4	1	1	1	4	1	5	5	5	4	4	3	3	2	1	p	2	
451	3	3	5	3	4	3	1	1	1	1	5	1	1	1	5	1	1	1	1	1	3	2	4	p	2	
452	1	1	2	5	2	4	5	1	1	1	5	5	5	5	5	5	2	4	4	3	3	2	2	g	5	
453	1	5	5	5	5	5	5		1	4	4		1	1	5	5	4	1	1	1	1	1	1	h	4	
454	1	5	2	1	1	3	1	4	1	1	2	1	4	1	5	5	4	5	5	3	1	2	1	g		
455	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	2	1	p	5
456	1			4	1	4									5	5	5	5	1	3	3	3	3	p	2	
457	5	4	5	3	4	4	3	1	2	3	4	1	3	1	5	4	3	3	3	1	1	1	2	p	2	
458						5	5								5		5	5		1				h	2 *	
459						5	5		5	4	1	1	4	1	3	5	1	3	1	2	2	2	2	p	2	
460	4	5	5	5	4	4	4	4	3	3	3	3	3	1	4	3	3	3	4	2	3	2	2	o		
461								5		5					5					3	5	1	2	g	2	
462	1	1	1	1	3	3	3	1	5	3	1	4	1	5	3	3	3	5	4	3	3	3	3	g	5	
463	4	5	2	3	3	3	5	1	3	5	5	5		4	3	4	3	3	3	3	3	3	2	c	5	
464	4		5			5												5	5	5		5	5	g	2	
465	3	5	3	5	5	3	4	1	3	1	1	1	3	1	3	3	3	3	1	2	4	3	3	g	2	
466	3	5	4	1	3	3	5	4	4	4	2	5	5	1	4	5	3	4	2	1	1	1	1	g	4	
467	5	4	5	4	3	5	5	5	5	5	5	3	3	5	5	5	3	5	5	5	5	5	5	g	4	
468	2	3	2	2	1	2	3	5	3	4	2	4	4	5	2	4	4	3	4	4	4	3	3	p	2	
469	3	5	4	2	3	4	4	4	4	2	5	1	3	1	4	4	4	3	3		2	4	4	p	2	
470	3	3	5	4	5	5	2	1	2	1	4	4	3	1	5	5	2	4	1	3	3	1	2	p	2	
471	3	4	4	4	3	4	2	3	4	3	5	3	4	1	4	4	3	4	3	2	2	2	2	f	4 *	
472	4	4	4	3	1	1	1	2	2	2	2	2	2	2	5	2	2	2	2	2	3	3	3	4	p	4
473				2							2				4			5	3	3	3	1	3	p	2	
474	3	4	5	5	5	5	5	5	5	5	5	1	1	1	5	5	5	5	5	4	4	2	4	g	2	
475	4	3	4	4	3	4	4	2	2	2	2	3	3	2	4	4	3	3	2	4	2	3	2	g	4	
476	1	1	1	5	5	3	1	1	1	1	1	1	3	1	3	3	1	3	1	1	2	2	2	g	2	
477	5	5	5	5	2	5	5	5	1	5	5	1	1	1	5	5	5	5	5	5	5	5	5	h	5	
478	3	5	5	4	5	5	5	5	5	3	5		3	4	5	5	4	4	5	4	4	4	3	h	2	
479	5	4	5	5	3	3	2	3	2	4	4	5	4	4	5	5	5	5	5	4	3	4	4	g	5	
480	5	5	4	3	3	5	3	3	3	3	3	3	3	3	4	4	5	3	3	3	3	3	3	p	4	
481	5	5	5		5	3	3	1	3	1	1	3	1	3	5	1	5	5	5	3	2	2	2	p	2	
482	4	5	5	4	5	5	4	1	3	3	3	4	3	1	5	4	4	3	3	4	4	5	4	p	2	
483	4	4	4	4	4	5	4	5	4	3	5	3	3	1	5	5	4	4	4	3	4	4	2	p	2 *	
484	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	5	2	2	2	4	4	4	4	g	4	
485	5	5	5	5	5	2	2	1	2	3	1	1	5	1	1	1	1	1	1	2	2	2	5	p	4	
486	2	2	2	1	5	3	2	2	2	2	3	2	4	1	3	3	1	1	1	2	1	1	1	p	4	
487																										
488	5	5	5	5	3	2	4	4	5	2	5	5	4	4	5	5	1	1	1	1	2	3		h	4	
489	5	5	5	4	3	3	3	2	2	2	2	3	3	2	4	4	4	3	2	3	3	3	4	g	4	
490	5	5	5	5	5	3	5	3	4	3	5	3	4	1	5	5	5	3	4	2	2	2	4	h	5	
491	1	4	2	1											5	2	1	1	5	5	5	5	5	g	1	
492	3	4	5	5	3	2	3	2	4	1	4	4	4	1	2	4	4	4	4	2	2	2	3	f	1	
493	4	4	4	3	3	3	3	1	3	1	4	4	3	1	3	3	3	3	3	2	1		5	p	4	
494	2	2	4	4	4	2	2	1	2	1	1	1	1	1	3	1	2	1	4	4	4	4	4	p	2	
495		3	4	5		5					5	5	5	1		5	5	5	5		4	5	1	g	4	

496	1	1	1	1	3	3	5	5	5	5	5	3	5	5	4	5	4	1	1	3	2	2	3	
497	3	3	4	3	2	2	3	3	4	4	5	4	5	5	4	5	4	4	4	3	3	3	4	
498	3	2	5	2	4	4	5	1	5	2	1	5	4	1	5	4	3	5	4	1	1	2	1	
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500	4	4	5	3	3	2	4	4	3	1	5	4	3	3	5	3	3	5	4	3	2	2	3	
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503	4	4	5	3	5	4	3	4	4	3	4	2	2	1	5	4	2	3	1	2	2	4	2	
504	5	4	5	5	3	5	5	5	5	2	1	1	4	1	4	4	5	4	1	3	1	3	4	
505	5	5	5	5	5	5	5	1	5	1	1	5	5	5	5	5	2	5	5	5	5	5	5	
506	2	2	1	1	3	3	3	3	3	3	3	3	4	5	2	2	2	4	3	1	2	2	3	4
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g 6
f 1
p 1
p 4
f 2
p 2
f 2
g 2
p 4
p 2
m 4
p 2
p 2
h 4
p 6
g 4
h 1
p 2
p 2
p 2
g 6
p 2
p 6
g 5
c *
2
p 2
g 2
p 6
p 2
h 2
g 5
p 6 *
o 6
p 4
p 4
p 4
p 2
f 4
g 2
p 6
p 2
p 2
c 2 *
p 4
o 2
p 2
o 2
g 5

547	4	3	4	2	3	5	3	1	3	5	1	1	4	5	5	1	3	5	5	3	4	3	3	h	2
548	4	3	4	2	2	4	5	1	3	1	4	4	5	2	5	5	4	4	3	3	3	1	4	g	6
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551	3	1	5	4	1	2	3	1	4	1	3	2	3	1	4	2	2	1	2	2	2	1	2	o	4
552	1	1	1	5	5	3	1	1	1	1	1	1	3	1	3	3	1	3	1	1	2	1	2	g	2

Student Survey Data

Survey #	Law enforcement	High school education	Youth center	Activities for teenagers	Expanded community hall	New youth center	High school gynosium	Public swimming pool	Bowling alley	Skateboard park	Miniture golf course	Theater / movie theater	Workout gym	Hiking / biking trail development	Off highway vehicle recreation area	Transportation to Sonora	Transportation outside of Tuolumne Coui	Grade level	Residency	Gender	Bored
1	1	4	2	1	2	2	5	4	1	1	1	4	5	3	2	5	5	4	g	m	6
2	5	1	1	1	1	1	2	1	3	1	1	5	1	1	5	5	5	3	g	m	6
3	2	4	2	1	3	5	5	5	1	1	2	5	5	2	3	5	4	3	g	m	6
4	4	4	4	2	3	3	5	3	3	4	3	4	4	3	4	3	3	3	g	m	5
5	3	2	2	1	2	4	5	5	5	4	4	5	4	4	4	4	4	4	g	m	6
6	4	5	3	1	3	3	5	4	4	4	3	5	5	4	4	3	3	4	p	f	5
7	2	4	3	2	1	2	5	3	5	5	3	5	5	4	3	4	4	1	p	f	4
8	3	4	5	1	1	1	5	3	5	5	5	5	5	1	2	5	3	2	g	m	6
9	2	3	2	4	2	2	5	3	2	5	2	5	3	2	2	2	2	1	p	m	3
10	4	3	3	2	1	1	4	2	2	5	1	3	1	2	4	5	4	1	p	m	6
11	5	5	5	1	1	1	4	4		5	1	5	5	1	3	5	5	2	g	f	6
12	3	4	3	2	1	3	5	2	4	1	1	5	5	1	1	1	1	1	g	f	4
13	4	3		1	2	4	5	4	4	5	5	5	1	5	4	5	5	2	c	m	6
14	2	3	3	3	2	3	5	5	3	3	3	3	4	4	3	5	3	1	g	f	6
15	3	1	3	1	1	1	5	1	5	3	3	4	3	1	1	4	2	1	h	f	6
16					5	5	5	4	4	5	4	5	4	3	3	3	3	1	c	f	6
17	2	2	1	4	5	5	5	2	3	1	4	5	5	4	3	4	2	1	o	f	5
18	5	5	5	1	2	3	3	2	3	5	1	1	1	1	5	5	5	3	g	m	6
19	3	3	2	1	1	3	5	5	5	5	4	4	3	3	4	5	5	2	g	f	4
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21	4	4	3	2	1	1	5	4	5	2	5	5	2	1	1	1	1	3	p	f	5
22	4	2	3	1	2	2	5	5	5	5	3	3	5	3	5	4	1	3	p	f	3
23	4	5	3	2	3	4	5	5	4	2	3	5	5	5	4	3	2	3	p	m	6
24	4	5	2	5	3	2	5	4	4	5	4	4	5	4	4	3	4	3	p	m	6
25	2	2	4	1	1	2	5	4	3	3	1	5	3	4	5	5	5	3	g	f	6
26	4	4	3	1	1	1	5	4	3	1	1	4	5	1	5	5	2	3	o	m	6
27	3	3	2	2	1	1	1	1	2	3	2	5	2	2	4	2	2	3	p	m	6
28	4	3	3	2	1	1	2	2	2	2	3	3	3	1	2	2	2	3	f	m	6
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33	3	5	1	5	5		3	5	5	5	5	5	5	3	5		3	1	p	f	4
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35	4	5	2	5	3	2	4	4	2	4	3	5	4	3	3	3	1	4	g	f	4
36	5	2	1	1	1	5	5	5	5	5	5	5	3	2	1	3	4	4	g	m	2

	Hobbies Staying?	Where going?
fighting, church	n	Los Angeles
computer games	n	College
music, sports	n	Sonora
anything to keep me busy	y	Bigger city
video games	y	
	n	CSU Stanislaus in Turlocks
Shopping, Drama, Band	n	
	n	
Football and basketball	n	
Skateboarding	n	
Swimming	y	College
Singing, dance, theater, community service	n	San Diego
Hunting, fighting	n	Live in Ceres
Volleyball, golf, sewing	y	
	n	Modesto
Poetry, movies	n	Santa Cruz
	y	
Hockey, motorcycles	y	
	n	Ocean
	n	
	n	Sonora or Modesto
BMX, equestrian	n	San Luis Obispo
BMX	n	Santa Rosa
Sports, church	n	Santa Cruz or Monterey
Motorcycles	y	
Football	y	
BMX, cars	n	Manteca
Weightlifting, mechanic	n	Different state
Skateboard, snowboard	n	
Sports, music	n	Modesto
	n	
Hockey, basketball, wieght lifting	n	
Skateboarding, horseback riding, swimmin	n	Santa Cruz
Water sports	n	Alaska
Guitar, sports	n	Military
Dirt bikes, hiking, fishing, boating	y	

Most needed

New facilities/services

Fast food	Internet, computer game room
Transportation, teen activities	Fast food, school gym
Teen activities, shopping, employment	High school gym
Employment, better school	Permanent High School
High school gym	
High school gym, shopping center	Shopping center, high school gym, police
High school gym, football team, skateboard park	
High school gym	Hospital
Skateboard park	Skateboard park
High school gym, Transportation around, shopping	Transportation, movie theater, clothes shopping center
High school gym, shopping center	Movie theater
Miniature golf, movie theater	
Mall, grocery	Hospital
Teen activities, youth center	Hospital
High school gym, movie theater	movie theater, skatepark, bowling alley
Youth center	
Teen activities	
Teen activities	
Teen activities	
Movie theater, shops, high school gym, lockers	Movie theater, grocery, lockers, gym
Vehicle rec area, high school gym	grocery, pool hall
Workout gym, bowling alley	High school gym, minigolf, movie theater
High school gym, skateboard park	Gym, bowling alley
Teenage activities	High school gym, fast food
High school football team	Teenage activities
Movie theater, workout gym	Fast food
Skateboard park, High school gym	Skateboard park, bike track
High school gym, teen activities	High school gym
Teen activities	
Music/CD store	Workout gym, Music/CD store
Mall, ice skating, movie theater, large stores	
Park	
Better high school, better teen opportunities	Hockey ring, laser tag, mall, fast food
Skateboard park	

