

**CENTRAL SIERRA CONNECT
CALIFORNIA EMERGING TECHNOLOGIES FUND
BROADBAND DEMAND SURVEY RESULTS**

**Random Residential Telephone Survey
November 2008- January 2009**



This document summarizes the results from a California Emerging Technology Fund (CETF) sponsored survey that was compiled from Nov 2008-Jan 2009 based on responses from a 5 county Central Sierra community residential random survey. The objective of this summary is to provide results and insight for development of future broadband technology and services.

TABLE OF CONTENTS

TABLE OF CONTENTS	2
ACKNOWLEDGEMENTS	3
EXECUTIVE SUMMARY	4
Results by Question	6
Communication Plan Subscription Rates – Question 1	6
Description of Residential Internet Service Plan – Question 2	6
Broadband adoption issues – Question 3	6
Constraints or Frustrations with Internet Service – Question 4	7
Service Providers – Question 5	7
Hours Spent on Internet – Question 6	8
Dial-Up Applications – Question 7	8
Broadband Applications– Question 8	8
Monthly Rate Plans – Question 9	9
Service Plan Needs – Question 10	9
Willingness to Pay – Question 11	9
Accessibility Challenges – Question 12	10
Need for Assistance – Question 13	10
Demographic Questions	11
Address, Zip Code and County – Question 14	11
Ethnicity – Question 16	11
Education Level – Question 17	11
Household Income Level – Question 18	12
Survey Comments – Open Ended	12
Further Questions and Research	14
Appendix A: Qualitative Survey Responses	15
Appendix B: Methodology	18
Appendix C: List of Questions by Survey Objective	22
Appendix D: Surveyed Population Demographic Charts	23
Appendix E: County “Quick Facts” – US Census Data	26

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EXECUTIVE SUMMARY

The key objective of the survey was to assess the potential demand for broadband in 5 Central Sierra Counties: Alpine, Amador, Calaveras, Mariposa and Tuolumne, using 5 metrics established by CETF: Access + Applications + Affordability + Accessibility + Assistance = Adoption. We also asked for demographic information to help facilitate analysis of the results. A summary of questions and results is included in the appendix.

The survey was completed from November 2008 until January 2009 based on a statistically significant random telephone sample of 396 responses. Survey methodology is detailed in the appendix.

Our key findings:

The top opportunity for broadband adoption in our community is having access to broadband service. The demand is significant and broadband adoption is critical. Over 92% of our survey responders are willing to pay for DSL or enhanced high speed internet, yet almost 40% report that broadband is not available to their household.

In assessing applications we found that up to 75% of responders feel that certain broadband applications are important to their household.

Though it is difficult to assess affordability, a small portion of our community, 6.7%, reported that broadband is too expensive.

For accessibility, we found that up to 6% of our population has challenges that make it difficult to use the internet, though this number includes difficulty with walking or leaving home which could be improved if broadband was to be made available in the household.

In terms of assistance, over 64% reported that they need little or no assistance to access the internet. We conclude that of the factors used to assess broadband adoption, access is the key opportunity and challenge to adoption for our community.

Our qualitative data shows a strong frustration in our community toward the lack of access to broadband. Responders have remarked that our community is much too slow in implementing access to broadband. In addition, responders have noted an inequality in access between neighboring areas within the community. Though some responders were hopeful that this survey would help progress availability, more of the responders simply wanted to know **when broadband would be available** since they were ready to subscribe.

As we move forward in our broadband efforts, the data implies that we will need to be very cognizant of the frustration our community shows regarding lack of access, and focus our communication on realistic plans for improving availability on a timely basis.

Results by Adoption Factors

Access

The survey results show that our community suffers from lack of broadband availability. 40% of our responders report that broadband is not available and qualitative data show that our demand for broadband is critical. Our demand spans income levels and age and is most severe in more rural areas.

Applications

Our results show a high demand for dial-up and broadband applications. Our application assessment is somewhat biased since the majority of responders do not have broadband and may not be familiar with some of the broadband applications. The majority of responders feel that sharing photos or videos is valuable to their household. Online education was the second most prominent valuable application, followed by web-based applications and entertainment. Telemedicine was one of the least valuable applications, reported valuable by only 17.5% of responders.

Affordability

Affordability is difficult for us to assess accurately since there is often not an equal price for comparable service within a given community due to the limited range of type of service (DSL, cable, wireless) available. We asked how much households currently pay for internet per month and the average response was \$11-29. When asked how much the household would be willing to pay, the grand majority of the response was \$20-\$40 per month for high speed. This gap demonstrates a strong demand opportunity for broadband.

Though affordability is an issue of consideration, it is not currently the highest concern in our community since price inequality and lack of access at any price are implied to be higher concerns.

Accessibility

The most significant challenge reported by responders was difficulty with mobility (walking or leaving the home) at 5.8%, followed by difficulty typing at about 4%. Of those with mobility challenges, 30% don't have broadband available at home. Interestingly this group spends significantly more hours on the internet (25-50 hours per week compared to the majority of 1-10). This implies that home broadband could be a positive opportunity for this group. Of those with typing difficulty, about 20% do not have a computer. Those with accessibility challenges show a higher than average need for assistance accessing the internet, but are within the average for willingness to pay for broadband.

Assistance

About 64% of responders do not need assistance accessing the internet and 27% reported sometimes needing assistance. 2.5% reported needing a lot of assistance and the majority of these have accessibility challenges as mentioned above. The majority of those needing assistance are households with persons over 60 years old.

Results by Question

19 key questions were identified for the survey. The survey results are attached in the index. This section will summarize the key takeaways

Communication Plan Subscription Rates – Question 1

Which of the following plans do you subscribe to in your household?

Over 90% of responders have land lines and 70% of the responders have a cell phone calling plan yet only around 60% subscribe to internet plans. Interestingly over 80% subscribe to paid TV (satellite plus cable) which is also higher than internet plans. The penetration of technologies such as VOIP, cell phone data plan and mobile broadband is very low, less than 10% for all of these types of technologies. Plans were not significantly skewed toward income or education levels.

Implications:

- About 40% of responders still do not subscribe to residential internet, which is a major concern for our counties' future
- Based on high rates of cable and satellite TV subscriptions there may be a willingness of responders to allocate budget for internet plans

Opportunities:

- The potential to bundle services with cell phone or TV plans could be an attractive growth opportunity for service providers as only about 10% of the responders currently report having bundled services.
- The potential to expand VOIP, cell phone data plans and mobile broadband is an interesting growth opportunity for service providers

Description of Residential Internet Service Plan – Question 2

Which of the following best describes your internet service plan at home?

Almost half of responders do not have residential broadband and almost 40% report that broadband is not available for their household. 23% are still on dial-up, 15% have satellite internet and over 10% have no internet at home at all. 34% of responders reported to have DSL, 8% have cable modem and almost 6% have wireless broadband.

Implications:

- There is only an 8% gap between those that don't have broadband and those that can't have broadband due to availability. This implies pretty strong potential uptake rates for broadband.

Opportunities:

- **With broadband rates at only about 40% in our communities, residential broadband demand is a significant opportunity.**

Broadband adoption issues – Question 3

DSL and cable TV modem are some examples of high-speed internet service which we refer to as broadband. If you don't subscribe to some type of broadband internet service at home, why not?

About 40% of responders don't subscribe to the internet because they report that broadband is not available for their household. Of these responses, the majority (46.3%) reported to be in the low income category. Alternatively, about 40% do subscribe to broadband and the majority (61.5%) of these responders reported to be in the high income category. About 7% reported that they didn't want or need broadband and only about 6% reported that broadband was too expensive. Of those who reported that broadband is not available for their household, 84 responders would be willing to pay for broadband and 36 responders would be willing to pay for enhanced speed broadband.

Implications:

- Though income level does seem to play in the broadband subscription rates, affordability does not seem to be a highly significant factor.

Opportunities:

- Where broadband is not available there is significant willingness to pay for broadband and enhanced speed broadband services

Constraints or Frustrations with Internet Service – Question 4

Sometimes people report constraints or frustrations with internet service. Please list any of the following that may be experienced by members of your household

The three most prevalent constraints or frustrations reported with internet service are 1) the service is too slow, 2) inconsistent or unreliable service and 3) large files take too long to download. About a third of the responders are limited to how much they can download per day or month.

Implications:

- Many of the concerns or frustrations reported could be solved with migrating to broadband service

Opportunities:

- There are strong opportunities for service providers to address these concerns then communicate the benefits once broadband is available

Service Providers – Question 5

If you have internet, what is the name of the company that provides your internet access

AT&T is the predominant service provider in our communities serving over 30% of the responders. Both Motherlode Internet and Comcast provide service to about 10%, and there is high diversity in service providers for the rest of the responders

Implications:

- Though AT&T is the market leader, there is large diversity in internet service provider in the counties.

Hours Spent on Internet – Question 6

Approximately how many hours does your household spend on the internet each week?

Most households spend 1-10 hours on the internet each week, closely followed by households spending 10-25 hours on the internet.

Implications:

- We did not assess how much time household spend watching TV or other non-internet entertainment nor the growth in time spent on internet over time, but the implication is that people are spending a large portion of their time online.
- Many responders can't access the internet which implies that the time spent per household is biased on the low side. Others report slow internet which implies bias on the high side.

Opportunities:

- There is a strong opportunity to increase the value of the time spent on the internet by increasing the speed and reducing gaps in connection or limits that have been put on data transfer.

Dial-Up Applications – Question 7

Which of these low speed internet applications do you think are valuable to your household?

Almost 97% of responders reported that email was valuable to their household, which is the most ubiquitous response we received in the survey, was a rate even higher than the percentage of responders with a land line phone plan. The grand majority of responders believe that shopping, searching / information services, exchanging products or services and online banking are valuable to their household.

Implications:

- Dial-up applications have a large value and implied adoption already in our community

Broadband Applications– Question 8

Which of these broadband applications do your think are valuable to your household?

The most valuable broadband application reported was sharing photos and videos (76%), followed by online education and web-based applications.

Implications:

- The range and response to the applications implies a solid demand for broadband applications

Opportunities:

- These results indicate an opportunity for training, marketing and motivation for adopting broadband. Opportunities could include examples and best practice sharing for these applications.

Monthly Rate Plans – Question 9

Approximately how much does your household currently pay per month for your internet plan?

Though the majority of responders pay \$11-29 per month there is a huge spread in monthly plans. Some in this category report that they don't have access to broadband and others report that they do. Most of this group reports that their internet is too slow. Surprisingly, even those paying over \$75 per month are also reporting slow internet and gaps in service. Though the majority is paying \$11-29 per month, responders are consistently willing to pay more than this (\$20-\$40) for broadband.

Implications:

- Price paid for internet plans seems to vary widely and act in a way different from traditional supply and demand market factors. Service availability and service type seem to play a strong role in price paid.
- The gap between what is currently paid and what responders are willing to pay can imply a pent-up demand for better and faster service.

Opportunities:

- The gap between what is currently paid and what people are willing to pay is a deviation from normal downward price pressure and is an opportunity for service providers who can provide the service quickly.

Service Plan Needs – Question 10

Which of these service plans most realistically fits the needs of your household?

About 67% of responders feel that broadband fits their need. Surprisingly, 22% feel that dial-up fits their need, yet a good portion of these responders are more willing to pay for broadband.

Implications:

- Since it is counter-intuitive that people would be willing to pay more for something that exceeds their needs, more drill-down on this question could help better understand the core reason for the large percentage of dial-up responses

Willingness to Pay – Question 11

Which of these service plans would you be willing to pay for, assuming the service could eventually be available in your area?

92% of responders are willing to pay \$20-\$40 for broadband. Surprisingly, of those responders who reported to be at the low income level, the majority is willing to pay for broadband or extended broadband.

Implications:

- The demand for broadband is critical and the willingness to pay for it at \$20-\$40 is real

Opportunities:

- This implies a strong demand in our region and opportunity for those who can provide the infrastructure at the \$20-\$40 price range.

Accessibility Challenges – Question 12

Please indicate if any of these challenges make it difficult for you to use the internet

The most significant challenge reported by responders was difficulty with mobility (walking or leaving the home) at 5.8%, followed by difficulty typing at about 4%. Of those with mobility challenges, 30% don't have broadband available at home and most are over 45 years old. Interestingly this group spends significantly more hours on the internet (25-50 hours per week compared to the majority of 1-10 hours per week).

Implications:

- This implies that if home broadband were available, those with mobility or other physical impairments could have adoption rates equal or better than average

Opportunities:

- For those with physical challenges, broadband is a potential lifestyle opportunity or even necessity.

Need for Assistance – Question 13

Which of the following describes your need for assistance or support using the internet?

About 64% of responders do not need assistance accessing the internet and 27% reported sometimes needing assistance. 2.5% reported needing a lot of assistance and the majority of these have accessibility challenges as mentioned above. The majority of those needing assistance are households with persons over 60 years old. Though about 6% of responders reporting wanted some kind of training or support, less than 1% was willing to pay for it.

Implications:

- In addition to an availability gap, our community may have a generational gap impacting need for assistance.

Opportunities:

- Opportunities for assistance could potentially be provided by peer groups, mentors or younger generations

Demographic Questions

Our key demographic needs included street address zip code and county, number and age in household, race, education and income.

Address, Zip Code and County – Question 14

What is the address (street address/apt, ZIP code) of the location(s) where you receive phone or internet service

As shown below, the distribution of survey results was aligned to the population values for each of the counties.

NOTE: In the future we could provide a map of the responses by zip code.

Description of Residential Internet Service Plan – Question 15

How many people in your household are in the following age ranges?

The population of our community is older than the average for California, consistent with our retirement community culture.

Implications:

- Challenges of aging populations may need to be considered for education and support

Ethnicity – Question 16

Which of these groups would you say best represents your race or ethnicity for your household?

91% of our responders are white, consistent with the overall demographics of our counties. 3.2% of our responders are Hispanic / Latino.

Implications:

- The race / ethnicity of our survey results are not significantly diverse enough for further drill-down analyses.

Opportunities:

- Multi-language internet sites could be a future opportunity for our community.

Education Level – Question 17

What is your highest level of education?

The majority of our responders have had some college, consistent with our overall demographics.

Implications:

- Education levels did not seem to be a significant factor in access, need for assistance or willingness to pay for internet.

Household Income Level – Question 18

Which of the following categories best describes your annual household income from all sources?

About 66% of the responders reported to be middle income, with 26% at low income, about 8% at high income and the rest not responding to the question. As mentioned earlier, surprisingly, income did not have as significant a factor in willingness to pay or broadband availability as would be expected.

Implications:

- Though we could imply that population density is a more important factor than income level for broadband availability, we would need to assess the income levels of micro-geographies to confirm or deny this implication.

Opportunities:

- Providing equal broadband access to all income levels could help close the overall digital divide in our community and as compared to more connected outside communities.

Survey Comments – Open Ended

Additional Comments – Question 19

Please provide additional comments you feel will help implement broadband internet in our community?

A list of open ended responses is detailed in the appendix. The most significant comment was a request to **GET BROADBAND NOW**. Some responders wanted to help us out, many encouraged us. A rare few strongly disagreed with bringing broadband to our communities.

The following tag cloud represents the focus of the open ended feedback:

Implications:

- The demand for broadband is real and critical for our community

Opportunities:

- On the positive side, there is a strong opportunity to have good adoption levels once broadband is finally available.
- On the negative side, the community has such a strong interest that any promises or plans that aren't met could bring dissatisfaction and potential disruption

Further Questions and Research

The survey results may raise the following questions or ideas for further research:

- The key follow-up question to this survey analysis is “when will broadband be available”? In the future, the conversation with potential responders may need to have a good answer to this question.
- This survey was limited to random residential phone numbers, biasing the survey toward those who have phone accessibility. A self-select survey may remove the bias of phone subscribers.
- The survey was biased to those who already were familiar with the dial-up and broadband applications. Further self-select surveying could also be highly valuable to improve the reach, education and outreach to our communities for application adoption.
- The survey brought out positive and negative emotions related to broadband availability. Some responders were encouraged by the survey and wanted to help through time or donations which could be further leveraged for developing grassroots support for the project, others were reminded of lasting frustrations and are becoming less confident of getting results from engagement with the project. Future research could assess levels of support or confidence.

Appendix A: Qualitative Survey Responses

The following are responses to the open-ended question:

Airways should be available to everyone and anyone
area is so poorly served in tuolumne
At&t services are frustrating would like a more reliable service
AT&T services are frustrating. Would like a more reliable service
Atcaa needs to get off their bottoms
availability slow ,many frustrations in area 'something needs to change
Be nice to all have Broadband access
Be nice to have a dependable service at a reasonable price
Be nice to have a reliable source, At this time my computer is too slow.
be nice to see a better internet plan available soon
Better Access
Better reception.
Better service broadband.
Bring It On!
Bring price down
bring price down
broadband user since 1996 thrilled with the availability
Broadband would be great.
bush stated internet would available to all and it did not happen
Cheaper and easier
Cheaper than Comcast would be nice
cheaper than comcast would be nice
Competition is good
competition is good
competition is good it should bring down the prices
county's are behind he times
current prices are ridiculous, get the fiber optic lines get them in the ground, and get it over with.
Dial up is really bad - consistent universal availability is really needed in this area.
Did not want to take complete survey, only talk and express his disgust with anyone and anything related to the internet. Anyone who brings internet into a community should be prosecuted.
difficult to get broadband in the hills would like to see it more available to everyone.
distance seems to be a problem from one house to another
Does not feel there will ever be quality broadband in this area. Wish you luck.
Expand internet service in Tuolumne County.
faster and cheaper/ please do not solicite
faster is better
faster service better prices because their is a demand now, not tomorrow.
Get Broadband up here soon.
get it here as fast as they can
GET ON THE BALL!
get the competition going
gold rush blocked over and over at&t is non compasionate to the individuals needs sometimes it takes her three hours to get her web page..she is tired of it
Gold Rush blocked over and over AT&T. Is non compassionate to needs. Sometimes it takes three hours or more to get to web page. Tired of it.....
Good luck getting this in the area.
government stated that all should have access to internet particularly in shopping areas
Happy something's getting done.
happy with service
Has a pole on property that would be able to be used as a transponder to his area and his neighbors.

has dish net work,but it works real slow
Has Dish Network but it works real slow
Has high speed service but would like service to be faster
has high speed service, but would like for it to be faster
He would really appreciate service in this area and all of the out lying areas of Tuolumne County!
Hope Broadband comes available soon. Tired of having slow internet service.
Hopes survey helps
huge need for broadband upgrade
hurry!!!
I am very interested in Quality Broadband High Speed internet at what ever price it takes!
I beleive that a quality affordable broadband internet access is really needed in this area!
I feel the availability of Broadband in the community would be an asset.
I have tried foe several years to get quality internet services in my area to no avail - good luck with your endeavors.
I hope high speed internet becomes available to everyone in this area.
I hope we get it in this area
I look forward to getting quality internet service in this area - I feel it is important.
I Really need this technology in my home - I am handicapped and if I am on the net and have an emergency I have to turn off the computer to be able to use my emergency contact equipment!
I would buy as soon as it would become available.
I would like service as soon as possible, tired of living in the stone age.
if broadband ran solely as one everyone would have what they need
If it were affordable, would definitely get broadband.
Improve Internet
in favor of having better access to change
internet is commercially needed for most forms civic interaction the arts & unemployment:
Internet is commercially needed for most forms civic interaction. The art & unemployment:
Internet service @ the time was slow, looking for better quality
Isp need to work with the telephone companies or Cable companies
it is ridiculous that we can not get the same service just ten miles apart
it should be a right everyone should have access to good quality internet
it should be available to everyone who is inclined
it should be more available and cost effective to those in need
it would be great if broadband could be available in the area.
it would be great to have it where I live, I really need a reliable service.
it would be nice if everyone could have access that all deserve bring on the competition, but get it going
it would be nice to have a more affordable service and reliable.
it would be nice to have a reliable service provided
it would be nice to have a reliable source, at this time my computer is to slow
it would be nice to have better choices.
it would help the unemployment
Keep reasonable price
know a lot of people that need services a.s.a.p
Like to see more option online
like to see more options
local companies are missing out , if they can not provide our needs give it to someone who will.
looking to get high speed internet.
love to have some competition
Love to see competition
Lower the price
make it affordable..
make it available and he will buy
Make it available and we will buy
make services more available and I will do what it takes to belong
many have heard that broadband is coming into the area but there is so little info on the plan as to when.
may be changing cable services soon

Micro Wave service is great for very rural.
more choices would be nice
Need Broadband
Need Broadband. DSL service is spotty.
need lower cost, more options.
need to get more service available to the different locations.
need to make services for all.
People Farther up in the hill need a better source
people farther up the hill need a better source
please bring high speed internet to us
Please provide high speed internet to Lake Camanche residents. Nothing is available and it is frustrating.
recognize there is a problem with lack of services that are provided to these areas with more technology
there would be more jobs available
service is slow and frustrating.
Spent 7 years on dialup with much dis-satisfaction and would support any Broadband efforts utilized.
Sure would like to see broadband up here.
technology needs to get with the times.
these internet companies need to get with the times
They have been talking for years about high speed internet??? I hope this helps get it going.
They run a school from thier home and several people are on the net each day
Values ATCAA services.
very interested in change
Very interested in change.
waiting over a year and no results, with internet requested.
we live thirty five miles from sonora it is ridiculous that we can not get the service we would like to have.
we need better access
we would be supportive to the community reason why many of our friends are without proper service
wish it was affordable to all
wish services were faster in our community.
wish they would make it available out in the boonies soon
wish they would make it available for distibution of free computers or laptops as so they do in foreign countries.
worried about loss of tv service would like it if, some type of service was avaiiable
WOULD LIKE MORE INFORMATION ON WHAT ATCAA IS PLANING FOR BROADBAND
would like to continue with computer services but has not met any server to meet her needs.
would like to have high speed available
Would like to have reliable cell phone service since he can not use his cell phone at home.
would like to see broadband services available for everyone soon
Would Like to see it available in area
Would love to see some broadband.
Would use it a lot if it were high speed

Appendix B: Survey Methodology

The main deliverables for the survey portion of the project were survey design, development of a project database, data input, data analysis and reporting.

SURVEY METHODOLOGY

Process Steps:

- 1) Determine overall draft types of questions and analysis needed
- 2) Review and sign-off questions with key stakeholders
- 3) Determine random versus self-select, sample size and population
- 4) Procure telephone numbers for phone surveying
- 5) Determine survey format (electronic versus written)
- 6) Select and procure online survey tool
- 7) Create survey form
- 8) Input test survey questions
- 9) Send out test survey to colleagues for beta testing and feedback
- 10) Test analysis of survey results
- 11) Test download of survey results to project database
- 12) Create scripts for telephone surveyors
- 13) Create final survey in written and electronic forms
- 14) Train Surveyors
- 15) Collect random phone surveys
- 16) Audit survey collection
- 17) Input data into electronic tool
- 18) Cleanse data
- 19) Monitor and analyze results
- 20) Download final results to project database
- 21) Close survey

Survey Sampling

- Based on discussion with CETF and UC Davis (Jim Fletcher) and Carolyn Ward, the recommendation was to sample about 500 people in our 5-county region.
- We purchased about 3400 random phone numbers from SSI, corresponding to population statistics for our county as it was recommended that with that number we would reach our approximate sample number

Electronic Survey Process

- The electronic survey format we used was based on a 3rd party tool called "Survey Monkey" to collect, analyze and download information
- All of the phone surveys were manually into the online survey tool.

Surveying by Telephone

- Volunteers and in-kind resources helped call the candidates using scripts and answering on paper input forms
- Alternatively, the workgroups and listening sessions were used to get qualitative input.

Survey response rate

- We contacted approximately 3400 candidates by phone, based on a statistical sampling provides by Survey Sampling International (SSI).
- Many of the candidates did not answer the phone or choose to complete the survey so our final sample size was 396, about 11% completion rate.

Survey Analysis

- All surveys were eventually input into the online tool for consolidation and analysis.
- The survey tool allowed continuous monitoring of responses and results. The tool also allowed the full project team to enter into the survey for analysis, though the project team did not widely use this option.
- The survey also allowed us to provide results online for public access. Only the consolidated results were visible, demographics and comments were not visible.
- Survey results were downloaded into the database discussed in the next section

Templates and Examples

- An example of the survey is attached in the appendix
- The results analysis is currently visible on our website:
http://centralsierraconnect.org/index.php?option=com_content&view=article&id=85&Itemid=72

Process Wins, Loses, and Learnings

- We were able to get good engagement from the community during the survey process. Some responders asked if they could help out or continue to get further information.
- The phone surveyors were perceived positively since they were part of the community, but were not professionally trained surveyors.
- The data cleansing was quite a tedious process, particularly for the data input and cleaning of the open-ended questions
- The survey was biased toward those who had telephones which may have missed some of the more rural community members who are a critical part of this surveying

Methodology Recommendations

- The online survey tool is an excellent choice for this type of survey, analysis and reporting
- I would highly recommend creating analysis and report samples before finalizing the survey.

DATABASE METHODOLOGY

Process Steps:

- 1) Determine data elements needed

- 2) Select database software
- 3) Design database tables, queries, reports
- 4) Test populate database
- 5) Input survey data using import tools
- 6) Import files and attachments
- 7) Cleanse and quality control data
- 8) Develop database queries
- 9) Report results – preliminary, intermediary, final
- 10) Backup and save database
- 11) Deliver database to project owners for future use

Data Elements

- We determined that in addition to the surveyed information via the survey tools mentioned above, we would want to attach profile and surveys from our participant population
- We decided that the database needed to be relational for more advanced queries and analyses

Database Software Selection

- As a team we decided to align on open source tools and between Robert Santorelli and Erin Mutch, a structure was developed. The survey data from this phase of data collection was stored in Excel and CSV file types.

Data cleansing and quality control

- Due to the nature of our survey, much cleansing and control was needed on the data elements. For example address information needed to be cleansed and corrected.
- Some surveys were mistakenly input twice so we de-duped and corrected the errors.

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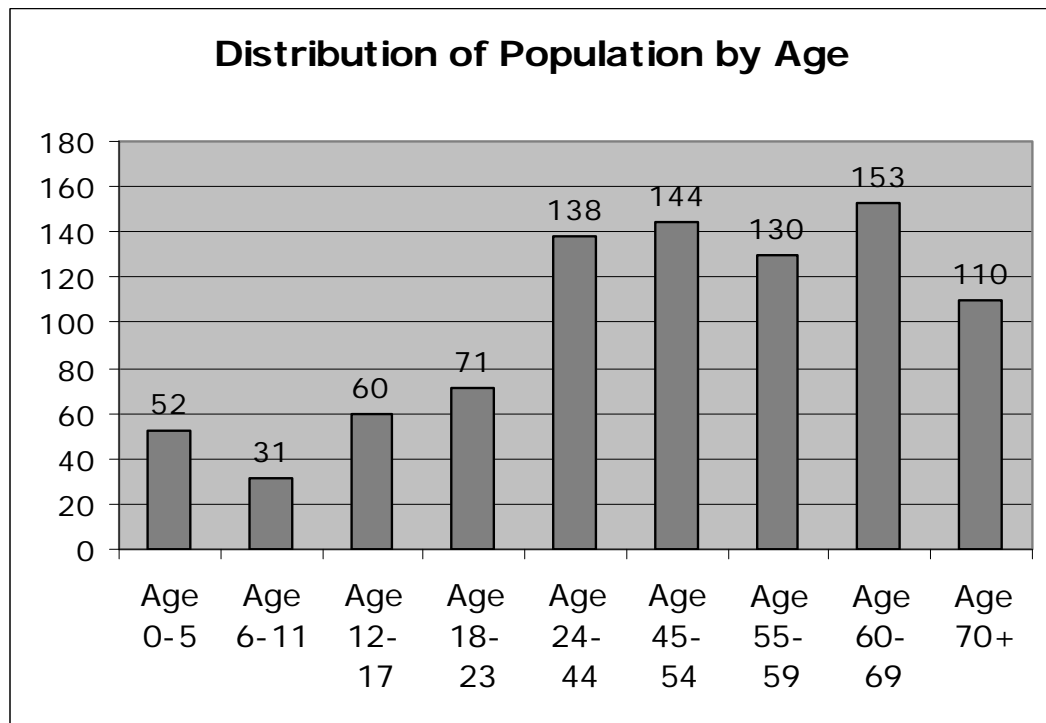
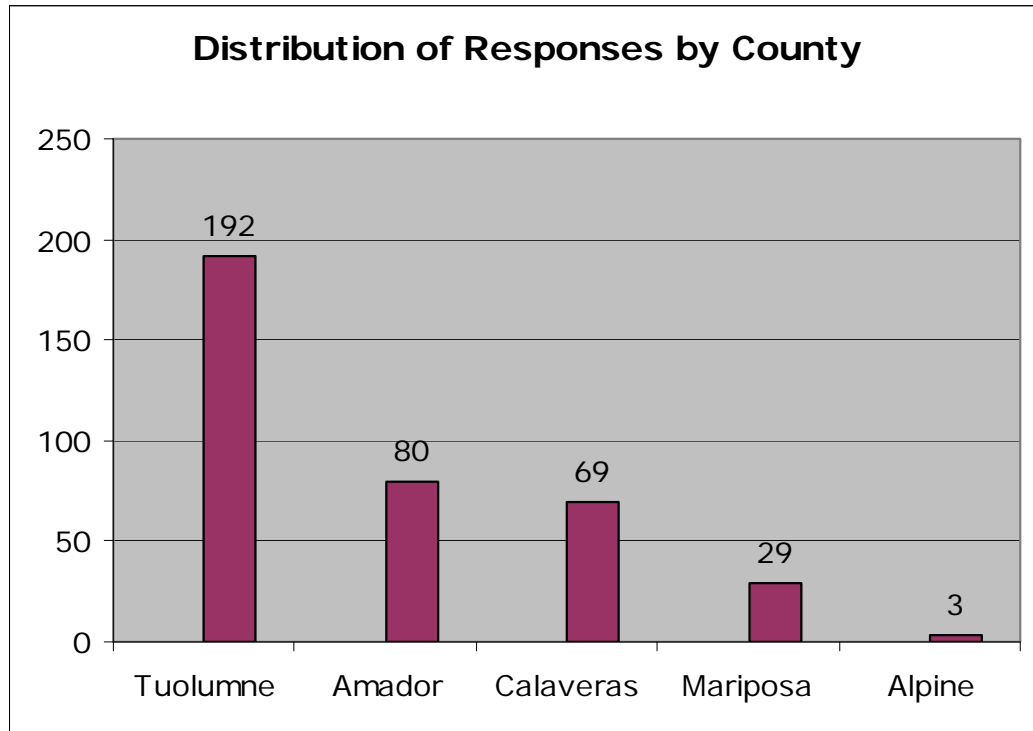
Appendix C: Survey Questions and Summarized Results

Questions and results are attached in PDF format

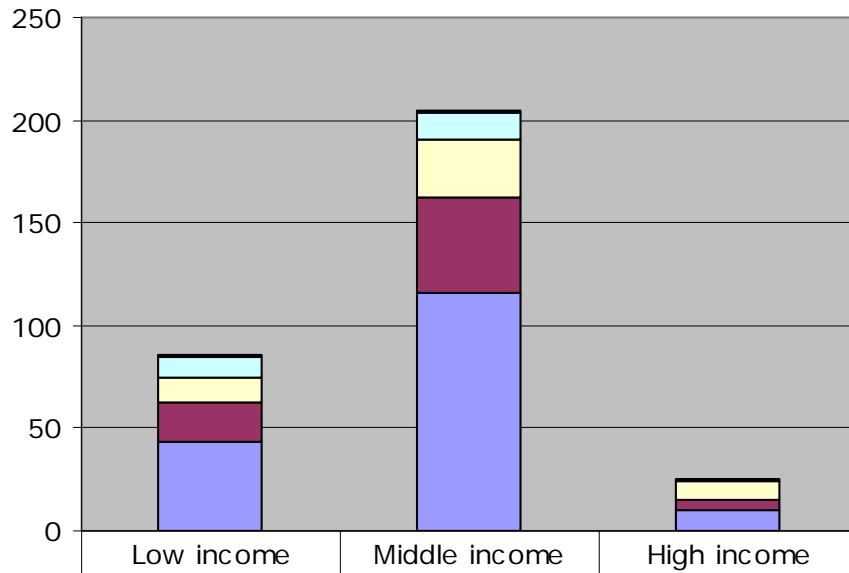
Appendix D: List of Questions by Survey Objective

#	Question (abbreviated)	Access	Access-ability	Afford-ability	Appli-cations	Assist-ance	Demo-graphics
1	Which of the following plans do you subscribe to in your household?	1					
2	Which of the following best describes your internet service plan at home?	1					
3	If you don't subscribe to some type of broadband internet service at home, why not?		1				
4	Please list any of the following constraints that may be experienced by members of your household		1				
5	If you have internet, what is the name of the company that provides your internet access?	1					
6	Approximately how many hours does your household spend on the internet each week?				1		
7	Which of these low speed internet applications do you think are valuable to your household?				1		
8	Which of these broadband applications do you think are valuable to your household?				1		
9	Approximately how much does your household currently pay per month for your internet plan?			1			
10	Which of these service plans most realistically fits the needs of your household?			1			
11	Which of these service plans would you be willing to pay for, assuming the service could eventually be available in your area?			1			
12	Please indicate if any of these challenges make it difficult for you to use the internet?		1				
13	Which of the following describe your need for assistance or support using the internet?					1	
14	What is the address (street address/apt, ZIP code) of the location(s) where you receive phone or internet service?						1
15	How many people in your household are in the following age ranges?						1
16	Which of these groups would you say best represents your race or ethnicity for your household?						1
17	What is your highest level of education?						1
18	Which of the following categories best describes your annual household income from all sources?						1
19	Additional comments open ended						

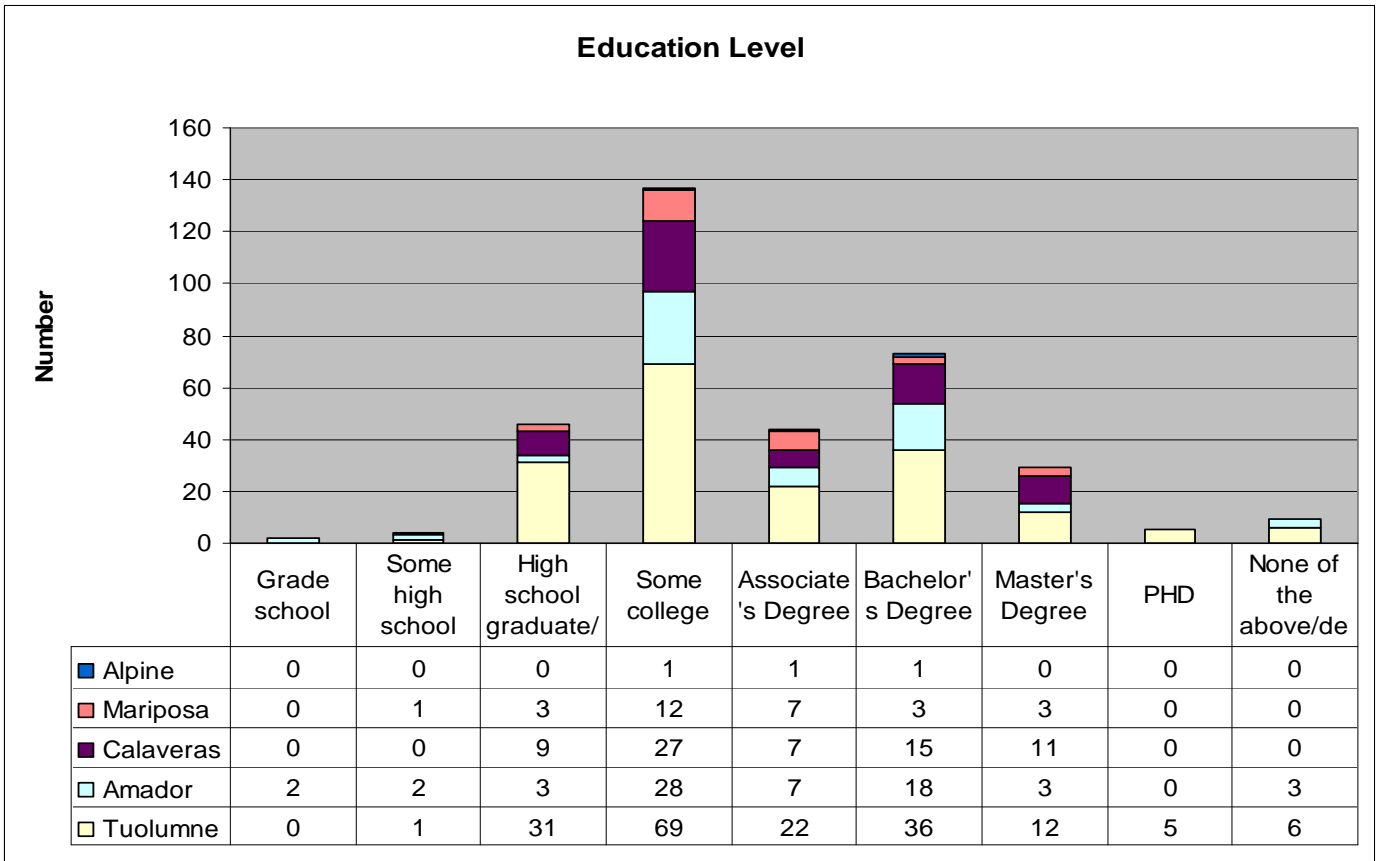
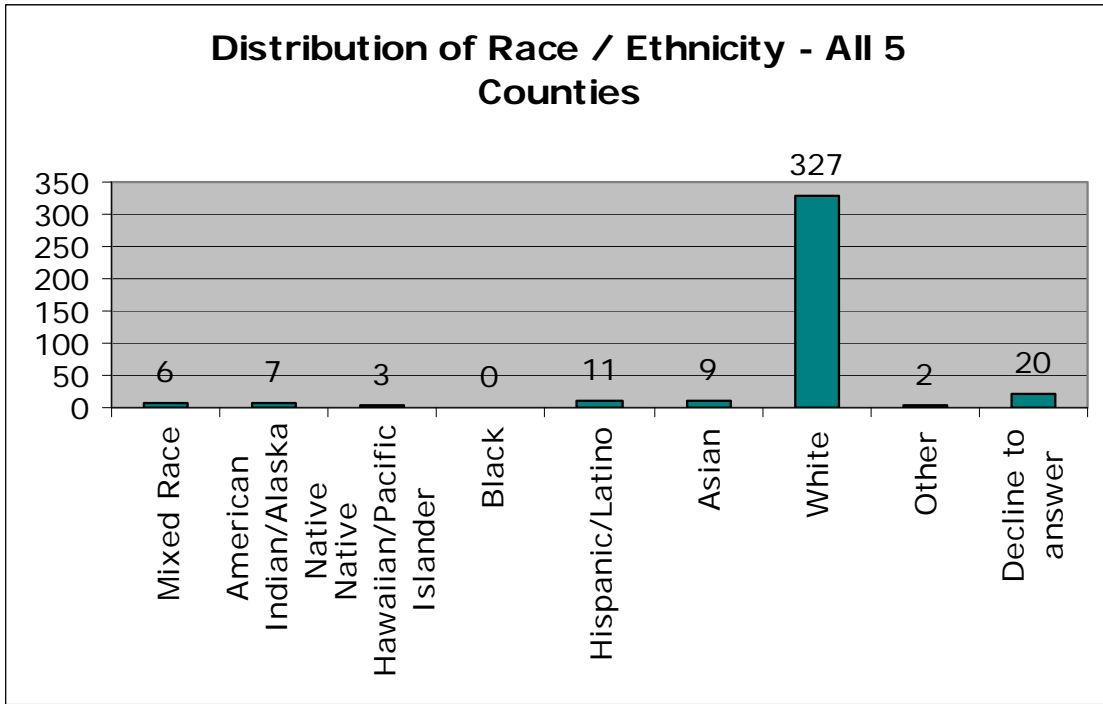
Appendix E: Surveyed Population Demographic Charts



Income Distribution - All 5 Counties



	Low income	Middle income	High income
■ Alpine	1	1	1
■ Mariposa	10	13	0
■ Calaveras	13	29	9
■ Amador	19	46	5
■ Tuolumne	43	116	10



Appendix F: County "Quick Facts" – US Census Data

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report. Last Revised: Friday, 25-Jul-2008 15:41:17 <http://quickfacts.census.gov/qfd/states/06000.html>

People QuickFacts	Alpine County	Amador County	Calaveras County	Mariposa County	Tuolumne County	California
Population, 2006 estimate	1,180	38,941	47,722	18,401	56,855	36,457,549
Population, percent change, April 1, 2000 to July 1, 2006	-2.3%	10.9%	17.7%	7.4%	4.3%	7.6%
Population, 2000	1,208	35,100	40,554	17,130	54,501	33,871,648
Persons under 5 years old, percent, 2006	4.4%	3.6%	3.7%	4.1%	4.2%	7.3%
Persons under 18 years old, percent, 2006	18.9%	16.9%	18.4%	18.1%	17.6%	26.1%
Persons 65 years old and over, percent, 2006	11.4%	18.1%	17.1%	17.4%	18.6%	10.8%
Female persons, percent, 2006	48.9%	45.5%	50.5%	49.1%	47.3%	50.0%
White persons, percent, 2006 (a)	73.4%	90.6%	93.2%	90.9%	91.8%	76.9%
Black persons, percent, 2006 (a)	0.7%	3.9%	0.9%	1.1%	2.3%	6.7%
American Indian and Alaska Native persons, percent, 2006 (a)	20.8%	1.8%	1.7%	3.6%	2.0%	1.2%
Asian persons, percent, 2006 (a)	0.3%	1.4%	1.2%	1.0%	1.1%	12.4%
Native Hawaiian and Other Pacific Islander, percent, 2006 (a)	0.2%	0.1%	0.1%	0.3%	0.2%	0.4%
Persons reporting two or more races, percent, 2006	4.7%	2.2%	2.8%	3.1%	2.7%	2.4%
Persons of Hispanic or Latino origin, percent, 2006 (b)	8.4%	9.7%	9.3%	10.0%	9.3%	35.9%
White persons not Hispanic, percent, 2006	70.5%	81.5%	84.5%	81.9%	83.3%	43.1%
Living in same house in 1995 and 2000, pct 5 yrs old & over	57.9%	53.4%	55.0%	53.0%	49.4%	50.2%
Foreign born persons, percent, 2000	3.2%	3.4%	3.0%	2.8%	3.2%	26.2%
Language other than English spoken at home, pct age 5+, 2000	8.2%	7.6%	6.2%	5.2%	5.8%	39.5%
High school graduates, percent of persons age 25+, 2000	88.3%	84.0%	85.7%	85.1%	84.3%	76.8%
Bachelor's degree or higher, pct of persons age 25+, 2000	28.2%	16.6%	17.1%	20.2%	16.1%	26.6%
Persons with a disability, age 5+, 2000	182	6,591	8,199	3,516	10,392	5,923,361
Mean travel time to work (minutes), workers age 16+, 2000	17.3	29.1	34.5	32.1	26.8	27.7
Housing units, 2006	1,708	17,116	26,684	9,684	30,197	13,174,378
Homeownership rate, 2000	68.3%	75.5%	78.7%	69.8%	71.3%	56.9%
Housing units in multi-unit structures, percent, 2000	37.3%	6.4%	3.7%	6.8%	7.9%	31.4%
Median value of owner-occupied housing units, 2000	\$184,200	\$153,600	\$156,900	\$141,900	\$149,800	\$211,500
Households, 2000	483	12,759	16,469	6,613	21,004	11,502,870
Persons per household, 2000	2.5	2.39	2.44	2.37	2.36	2.87
Median household income, 2004	\$42,827	\$47,459	\$46,052	\$37,355	\$41,067	\$49,894

Per capita money income, 1999	\$24,431	\$22,412	\$21,420	\$18,190	\$21,015	\$22,711
Persons below poverty, percent, 2004	13.2%	8.8%	9.3%	11.0%	11.6%	13.2%
Business QuickFacts	Alpine County	Amador County	Calaveras County	Mariposa County	Tuolumne County	California
Private nonfarm establishments, 2005	61	909	1,080	366	1,592	860,866
Private nonfarm employment, 2005	1,237	9,283	6,908	3,475	13,813	13,382,470
Private nonfarm employment, percent change 2000-2005	18.0%	25.8%	20.0%	10.4%	11.2%	3.9%
Nonemployer establishments, 2005	147	2,925	3,700	1,335	4,301	2,609,258
Total number of firms, 2002	200	3,396	4,067	1,446	5,260	2,908,758
Black-owned firms, percent, 2002	F	F	F	F	F	3.9%
American Indian and Alaska Native owned firms, percent, 2002	F	F	F	F	S	1.3%
Asian-owned firms, percent, 2002	F	F	S	F	F	12.8%
Native Hawaiian and Other Pacific Islander owned firms, percent, 2002	F	F	F	F	F	0.2%
Hispanic-owned firms, percent, 2002	F	F	F	F	S	14.7%
Women-owned firms, percent, 2002	F	S	S	S	26.2%	29.9%
Manufacturers shipments, 2002 (\$1000)	NA	90,089	NA	NA	210,631	378,661,414
Wholesale trade sales, 2002 (\$1000)	NA	D	17,347	D	D	655,954,708
Retail sales, 2002 (\$1000)	1,621	1,641,687	208,310	70,920	482,649	359,120,365
Retail sales per capita, 2002	\$1,333	\$44,592	\$4,828	\$4,095	\$8,612	\$10,264
Accommodation and foodservices sales, 2002 (\$1000)	24,482	42,480	28,203	114,093	69,773	55,559,669
Building permits, 2006	31	235	497	139	222	160,502
Federal spending, 2004 (\$1000)	9,275	208,393	244,957	125,219	332,316	232,387,168
Geography QuickFacts	Alpine County	Amador County	Calaveras County	Mariposa County	Tuolumne County	California
Land area, 2000 (square miles)	738.62	592.97	1,020.04	1,451.12	2,235.41	155,959.34
Persons per square mile, 2000	1.6	59.2	39.8	11.8	24.4	217.2
FIPS Code	3	5	9	43	109	6
Metropolitan or Micropolitan Statistical Area	None	None	None	None	Phoenix Lake-Cedar Ridge, CA Micro Area	