

## **Attachment A: Customer Follow Up Phone Survey Of Non-Respondents to the Business Case Customer Survey**

### **Purpose:**

1. The UAC expressed concerns about the original survey being skewed due to a “self-selected” population participating in that survey. These concerns arose from:
  - The belief that persons with current Internet connections would more likely to respond to the survey, and by nature they may be different than the typical customer, or
  - The non-respondents, which represent 80% of the population randomly selected to participate, would have decidedly different inclinations than the 20% who actually chose to participate.

Given these concerns, the primary reason for the phone survey was to determine if non-respondents to the first survey had similar opinions to the respondents of the first survey.

2. The secondary objective of the phone survey was to develop a sense of price elasticity for the three services being studied. In addition to determining purchase intent at price parity, a 10% discount in service pricing was tested across all products. Discussions at the UAC implied that at least a 10% discount from the incumbent would be one of the objectives in offering a Palo Alto service. Initial results from the municipal scan indicate an average price discount of 10 to 20 percent in markets that have launched these services, therefore the ability to offer at least a 10% reduction seems reasonable.

### **Background:**

During the business case study, staff contracted with DataCycles to do a market survey of customer:

- Attitudes regarding current services providers,
- Acceptance of Cit of Palo Alto as a provider of services
- Opinion regarding Palo Alto as a potential broadband service provider.

The survey was strictly a market research instrument meant to help project the revenue streams which could be generated by a FTTH project. The survey was not designed to assess political support for FTTH.

The survey instrument was developed by DataCycles in consultation with staff and Uptown to ensure that market data useful to the business case analysis would be collected. Because of the delivery methodology (Internet, email, paper), a very detailed survey could be used. From this a detailed understanding of customer sentiment could be built. In professional fashion, the survey was pre-tested on selected participants before being issued to all participants.

In an effort to gain a representative sampling of Palo Alto residents survey participants were selected at random from all Utilities residential customers, proportionally according to the population by zip code. Each selected participant was sent a postcard informing them that they could participate in the survey by responding over the Internet, by email, or by returning a prepaid return postcard to receive a paper copy of the survey. The paper copy also included a prepaid return envelope. Approximately 140 customers requested paper copies of the survey. Approximately 940 responses were received from all three response methods. This is roughly a 20% respond rate, as compare to the typical response rate for commercial surveys of roughly 4-8 %.

The customer response patterns to the first survey generally show high expectations for each aspect of the services, but only moderate satisfaction with that aspect of the actual product being currently delivered. The difference between expectation and satisfaction is the “gap” which a new provider (City of Palo Alto) can exploit to develop market share. Furthermore, the survey participants generally have a positive view of the City of Palo Alto as a provider of services.

The UAC expressed concern early on about the possibility of “self selected” response. As a consequence the staff senior market analyst performed statistical analysis on the responses by demographic group. His study showed a possible over-representation of those owning their home, and an under-representation of younger age groups. Further study showed that home owners and non-homeowners responded similarly to key questions. This made the over-representation of homeowners mute. Responses across age groups were also similar with the added caveat that the under-represented group (<24 years) is unlikely to have major buying influence.

In addition, DataCycles also surveyed actual users of the Alameda Telecom services, and determined that their current subscriber penetration levels, perceptions and attitudes strongly supported the Palo Alto survey results.

However, the UAC felt that a study of the non-respondents would be prudent to improve their understanding of potential market dynamics and penetrations for the three services studied.

**Non-Respondent Study Methodology:**

By nature, a phone survey is expected to have a higher participation rate because participants are actively keep on the “hook” to complete the survey; whereas with a written survey, we must passively wait and hope that they will complete the exercise. Therefore a phone survey was chosen to increase the response level. In addition, a phone survey could be completed more quickly than another written survey. The actual response level to the phone survey indeed was 93% of the qualified participants contacted.

Since DataCycles had an interest in verifying the first survey, it was necessary for staff to go to an independent new surveyor to avoid possible compromise. Therefore a new

researcher, California Survey Research Services (CSRS) was selected. As was the case in the first survey, CSRS coordinated with Uptown to insure that the survey produced meaningful data.

The downside of using a phone survey is that it is difficult to ask complex questions or conduct a lengthy interview. As a result, Uptown selected a few key questions from the previous survey and added a few questions to test price elasticity for the three services being studied.

In the first survey it was possible to lead the participant through a cognitive process, which would hopefully increase their understanding of the value provided by their current service. For example, with video the first survey asks 12 questions about TV service. These included the importance to them and their satisfaction with quality, reliability, programming, customer support, and cost. In contrast, the phone survey only asks whether they would switch to Palo Alto service at the current price or at 10% below the current price. Generally the responses to discount pricing are similar to the first survey responses.

Given the brevity of the phone survey, Uptown reworded the response choices to provide a stronger indication of customer intent. The terminology used is consistent with standard practices of consumer research and reflects a five-point Likert Scale. This approach is ideal for measuring purchase intent for product introductions and has been developed and refined within the industry over the last 25 years. The choices presented were changed as follows:

First Survey	Phone Survey
Very Excited (about a PA service)	Definitely Switch (to a PA service)
Very Interested	Probably Switch
Sounds Interesting	Might/Might Not Switch
Only Curious	Probably Not Switch
Not at all Interested	Definitely Not Switch

Along with the change to a standard Likert Scale, Uptown and staff agreed to utilize a standard overstatement adjustment factor to translate the survey responses into appropriate business case inputs. Again, this is a standard practice for quantitative consumer research. The principal behind this adjustment is that consumers consistently overstate their intent to purchase during market research when compared to subsequent, actual purchase behavior. The overstatement factors used were:

Definitely Switch: Multiply response level by 70%

Probably Switch: Multiply response level by 30%

Might/Might not Switch: Multiply response level by 10%

Phone surveys have the additional disadvantage of being expensive. It would be cost prohibitive to attempt to interview the approximately 4000 non-participants, by phone or even by written form. Consequently staff took the strategy of interviewing a random subset of approximately 200 non-participants. If the survey results were statistically consistent among these respondents, then there would be no need to survey further. The Senior Market Analyst believes that the results were statistically significant at a 95% confidence level and that no further surveying is required.

The non-respondent survey is definitely selective by nature, i.e. respondents to the previous survey were disqualified from participating. The selection process was to randomly draw from the previous survey's randomly selected set of potential participants. The first question asked of the new participant was whether they had participated before. If so, they were immediately disqualified, and no further questions asked of them. Sixteen were disqualified in this fashion.

Finally it is arguable that the statistically correct way to view the new survey is to combine the results with the previous survey, in order to form a truly random set (the combining of the subsets of participants and non-participants). However because the second set participants is markedly smaller than the first survey set, the results of the combination would be pulled heavily toward the first survey results. Therefore, in spite of the phone survey being skewed by lack of inclusion of previous survey participants, staff still chose to view it as a stand alone set and to compare it to the first survey. Since the primary concern with the first survey was sampling error, the ability of the second survey to generate similar purchase interest levels is the best way to validate the penetration assumptions used in the business case. That is, the business case penetration numbers are supported by the second survey if the range of response is reasonably close to those of the first. In fact this is the case as described in the following section.

## **Phone Survey Results**

The results of the Phone survey are presented in Attachment 1, "Fiber Optics System-Phone Survey". Key information is organized in tables and graphs over the next several pages.

## Demographic Information

The demographics of the two surveys are similar as shown in the following table. Staff feels no further discussion of the demographics is necessary:

### Zip Code Demographics

Zip Code	First Survey	Phone Survey
94301	34%	29%
94303	32%	31%
94304	7%	8%
94306	27%	30%
Other	Balance	Balance

### Age Group Demographics

Age Group	First Survey	Phone Survey
18-24	1%	1.5%
25-34	8%	9.8%
35-49	35%	29.4%
50-65	32%	29.4%
>65	22%	27.5%
Other	Balance	Balance

### Home Ownership Demographics

	First Survey	Phone Survey
Own Home	83%	75%
Don't Own	17%	25%

## Participant Preference Information

As noted in the methodology, the phone survey was limited in length of time and complexity of questioning. As a result only 10 product questions were asked as follows:

- Three questions related to the satisfaction with the participant's current provider,
- One question asked the participant's opinion regarding City of Palo Alto as an operator of broadband services,
- Three questions asked whether the participant would "**switch**" to city broadband services at current market prices, and
- Three questions asked whether the participant would "**switch**" to city broadband services at a 10% discount from the current market prices.

On examining the results of the phone survey, staff was disappointed to find that 42% of the participants had responded NOT APPLICABLE when questioned about TV service, and 37% had responded NOT APPLICABLE when questioned about Internet service. Staff believed that the phrasing "would you switch" had caused those who did not currently subscribe to a service to respond "Not Applicable". This resulted in no information about potential subscription rates of current non-subscribers. Believing that the subscription rate for current non-subscribers is important, staff had the "not applicable" respondents resurveyed but given the question "would you subscribe" (rather than "would you switch") in order to elicit a yes or no response. At the same time, staff took the opportunity to add two questions to the resurvey group:

- One question, introduced by the UAC at the April meeting, was the impact of changing email address had on the customer's choice of Internet provider. Staff felt this may be an important issue to "dial up" customers who might tend to be less Internet savvy than high-speed subscribers.
- The business case is based on the three well-established services, and shows moderate economic feasibility. Staff believes that over time other services will be available over the FTTH and will add revenue streams to improve the economics of the system. Most of these other services do not have well defined economics. However, security monitoring, is already well established. Staff wished to get a preliminary indication of the economics of a security monitoring service, so a question was added, "would you subscribe to security monitoring."

The business case penetrations were determined from the first survey by establishing a penetration level for each survey sub group, and then aggregating all sub groups to get the final penetration from that service. For example, video sub groups could be basic, advanced, or non subscribers to cable/satellite service. The average penetration would be the weighted average of these groups. Where possible in the following presentation, we include charts for each subgroup studied and an aggregate chart representing the citywide penetration projections for that service.

The graphs for each of the studied groups and subgroups are presented on the next several pages. Please refer to Graph 1 while reviewing the following explanation.

In the title block it states the survey subgroup which is represented by the graph. Graph 1 is for “All” survey participants and describes their “Willingness the Subscribe to a Palo Alto Offered TV Service.” Each horizontal bar on the right represents the range for which we are 95% confidence that this subgroup will subscribe to a Palo Alto offered service. For example:

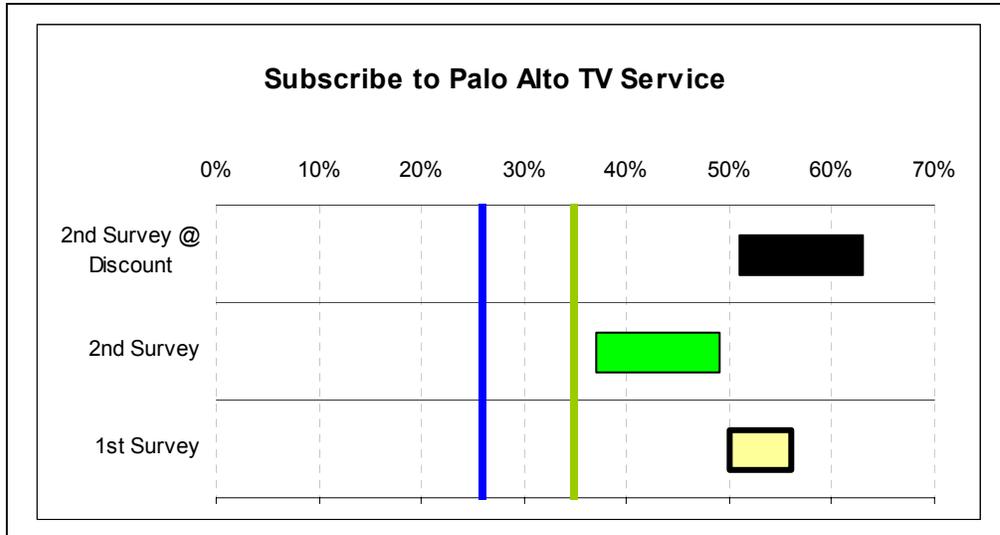
- a) The top (dark) horizontal bar shows we are 95% sure that between 51 to 63% of all Palo Altans will subscribe to a Palo Alto service, if a 10% discount from the incumbent price is offered. This projection is from the definitely and probably subscribe responses to the 2<sup>nd</sup> survey.
- b) The middle, lighter bar shows we are 95% sure that between 37 to 49 percent of all Palo Altans will subscribe if no discount from the incumbent is offered. This projection is also based on the second survey results.
- c) The lowest, outlined bar shows we are 95% sure that between 50 to 56 percent of all Palo Altans will subscribe to a Palo Alto service based on the extensive questioning levied at them in the first survey. The confidence range here is narrower because more people were surveyed in the first survey than in the second survey.

On the left of the graph are two narrow vertical bars. The darker bar represents the penetration level projected by Uptown in the business case. As described earlier, this penetration level is derived from the overstatement-adjusted responses from the second survey. This vertical bar represents the percent of the total population expected to subscribe to a Palo Alto service (not the subgroup of current subscribers only).

The lighter vertical bar represents the average penetration actually achieved by municipal broadband services studied in the municipal scan. The phone service graph does not have a muni bar because there is insufficient data to support a meaningful number.

Below each graph is the data set for the graph, providing the numeric information represented on the graph.

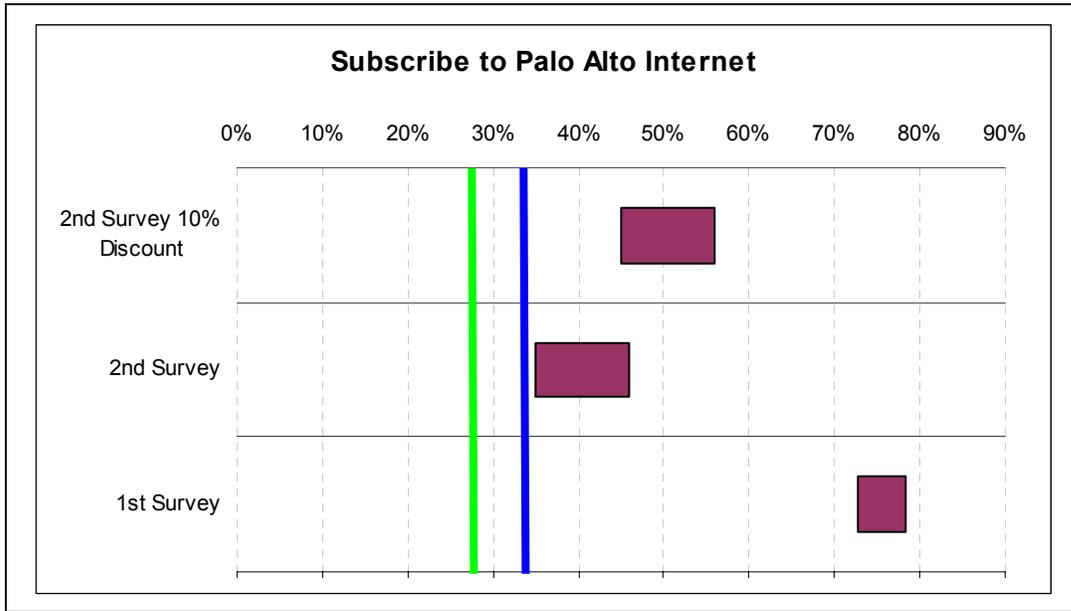
**Graph 1: Willingness to Subscribe to a Palo Alto Offered TV Service (All)**



**Graph 1 Data Set**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> w/10% Discount	51-63	57
2 <sup>nd</sup> w/Price Parity	37-49	43
1 <sup>st</sup> Survey	50-56	53
Muni Average		34
Business Case Projection		27

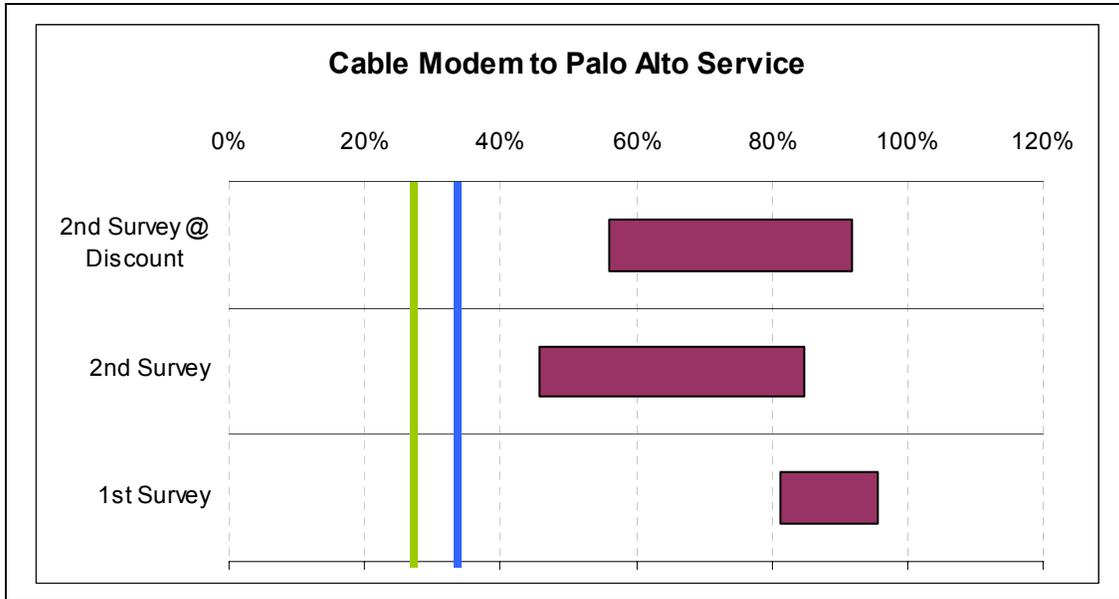
**Graph 2: Subscribe to Palo Alto Offered Internet Service (All)**



**Data for Graph 2:**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> w/10% Discount	45-56	50.5
2 <sup>nd</sup> w/Price Parity	35-46	40.5
1 <sup>st</sup> Survey	73-78	75.5
Muni Average		28
Business Case Projection		34

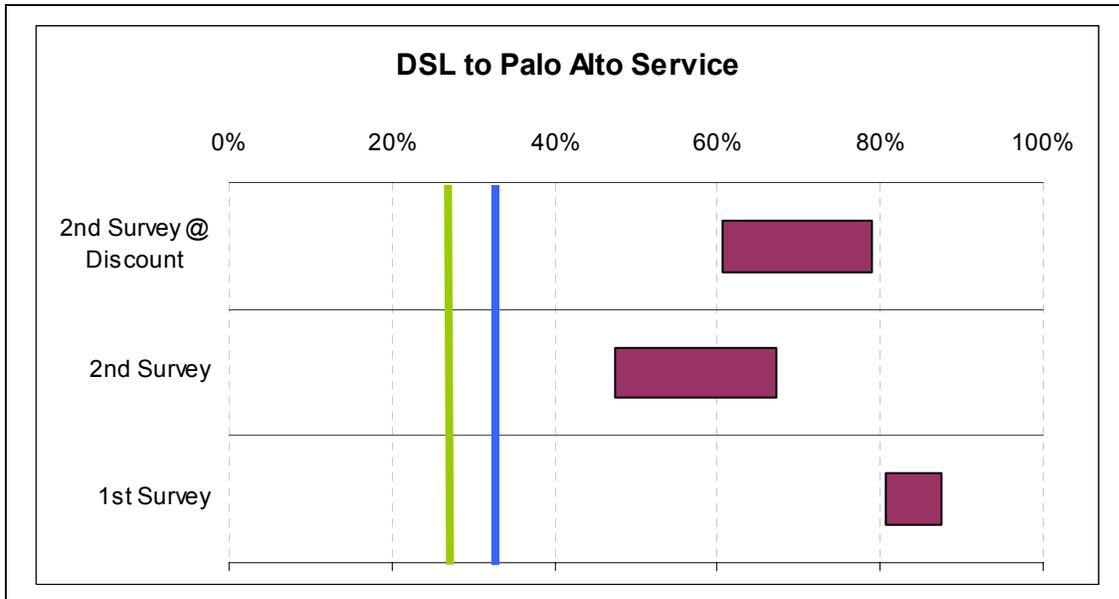
**Graph 3: Current Cable Modem Subscribers Willingness to Switch to a Palo Alto Offered Service**



**Graph 3 Data Set**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> w/10% Discount	56-92	74
2 <sup>nd</sup> w/Price Parity	46-85	65.5
1 <sup>st</sup> Survey	81-96	89
Muni Average		28
Business Case Projection		34

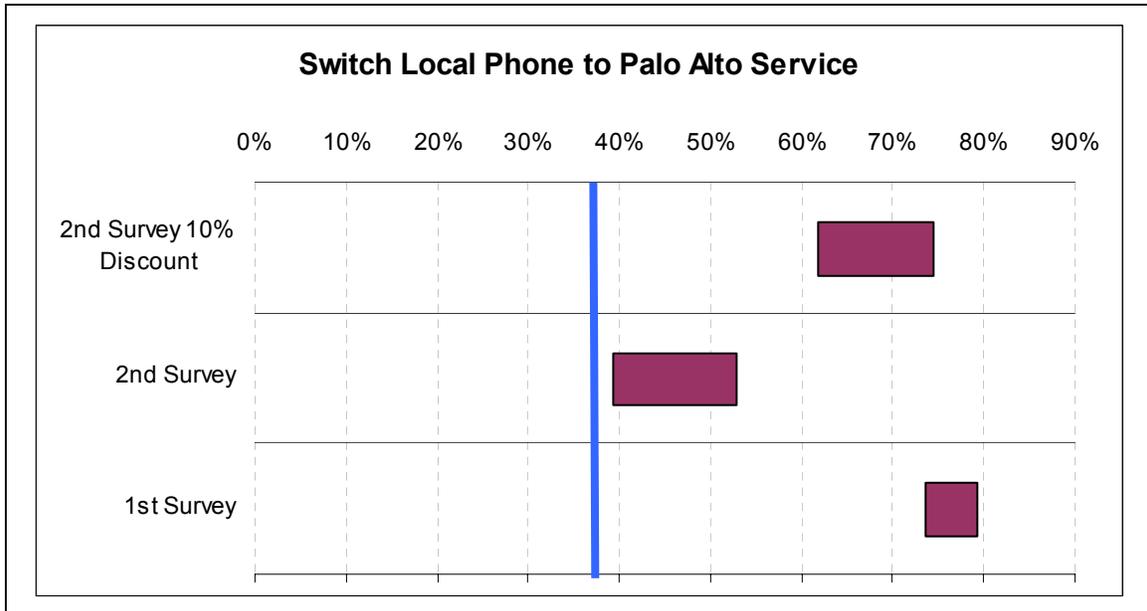
**Graph 4: Current DSL Subscribers Willingness to Switch to a Palo Alto Offered Service**



**Graph 4 Data Set**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> w/10% Discount	61-79	70
2 <sup>nd</sup> w/Price Parity	47-67	57
1 <sup>st</sup> Survey	81-88	85
Muni Average		28
Business Case Projection		34

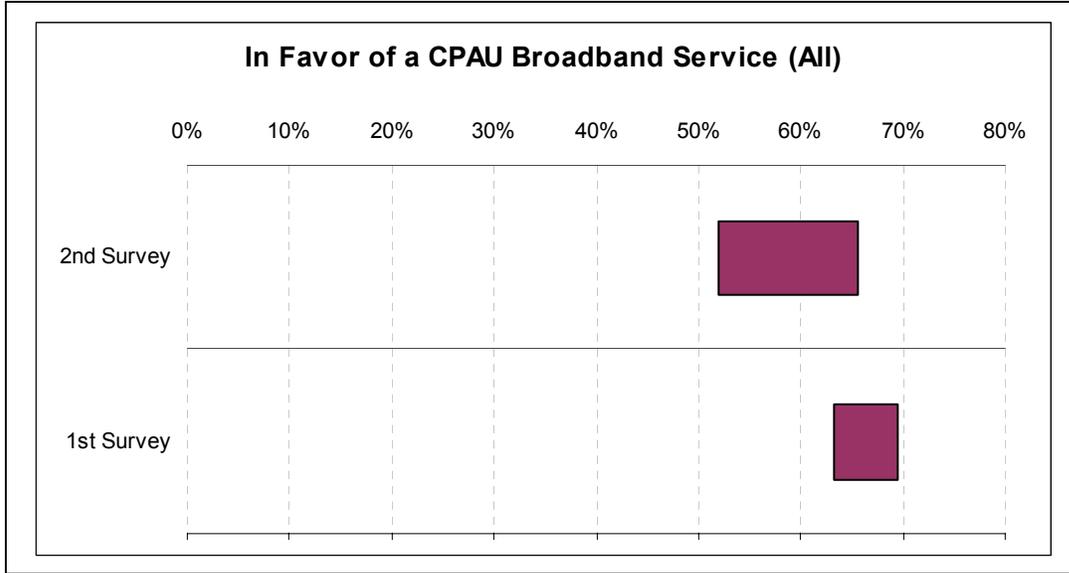
**Graph 5: Current Phone Service Users Willingness to Switch to a Palo Alto Offered Service**



**Graph 5 Data Set**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> w/10% Discount	62-75	68.5
2 <sup>nd</sup> w/Price Parity	39-53	46
1 <sup>st</sup> Survey	74-79	76.5
Muni Average		N/a
Business Case Projection		38

**Graph 6: General Population Supporting Palo Alto Owning and Operating a Broadband System**



**Graph 6 Data Set**

	<i>Range</i>	<i>Mid-Point</i>
2 <sup>nd</sup> Survey	52-66	58
1 <sup>st</sup> Survey	63-70	66.5

Without running statistical tests we can see that, except for video service, the second survey penetration projections are systemically lower than the first survey projections. However when the 10% discount is offered the results become more comparable. The differences could be attributed to one or more of the following reasons:

- The second survey purposely de-selected participants to the previous survey. This would have slightly lowered the response levels.
- There may have truly been self selection in the first survey results
- The rewording of the second survey (which asks “would you subscribe”) may have incited a more conservative response
- The extensive questioning of the first survey may have incited a more cognitive appraisal of the situation and a more thoughtful response

- Random statistical differences. This is not likely because the second survey results are systemically lower.
- Other factors unidentified

Probably the most important outcome of the second survey is that the results, while lower than the first survey, are still sufficiently high to support a viable business case. Uptown will explain the relevant adjustments in their portion of the report.

#### **Email address conversion issues:**

As part of the resurvey effort staff and Uptown took the opportunity to present the “change of email address issue”. Only 32 responses were received to the question:

“If you switch to Palo Alto’s Internet service, your Internet provided email address would need to change. To what extent is this a concern?”

Of the respondents, only 12.5% would be “very concerned”. This is a very small portion of the potential subscriber base, however it is probably large enough group to warrant a targeted marketing campaign in the implementation phase of the project, if the project should progress to that point.

#### **Customer interest in security system monitoring service:**

Since we were involved in a resurvey effort, staff and Uptown wished to get a preliminary indication of the viability of a security service. In the resurvey effort we were able to get 60 responses to the question:

“If Palo Alto offered a home security monitoring service priced at \$25 per month would you consider subscribing to the security monitoring service, whether or not you have this service today?”

17% responded that they “definitely” or “probably” would subscribe to such a service. Another 23% ‘Might/ might not’ subscribe. The limited number of respondents and selectiveness of the group limits the usefulness of the results in making subscription projections. However, the level of interest expressed does indicate that statistically valid market research on this service would be a worthwhile effort in the future.