

Research Objectives

Phone Survey

1. Determine market share position of incumbent providers.
2. Quantify the percentage of households that are computer users and the percentage that also access the Internet.
3. Quantify the adoption of broadband Internet vs. dial-up access.
4. Quantify the interest and purchase intent for Cable TV, high-speed Internet, and local phone services as stand-alone offerings.
5. Measure the current satisfaction levels among the incumbent providers
 - Overall Satisfaction
 - Customer Service
 - Value
6. Identify the areas of improvement most important to consumers (switching factors).
7. Measure perceived need for greater Internet download capacity.

Conjoint Simulation

1. Determine the purchase intent for a 3-Service bundle (Cable TV, high-speed Internet, and telephone) to quantify the impact of bundling.
2. Develop a predictive model that can determine market share outcomes across a range of values for these variables:
 - Provider
 - Price
 - Services
3. Quantify the impact of offering these services via a new brand (3rd party retailer) versus LAC.

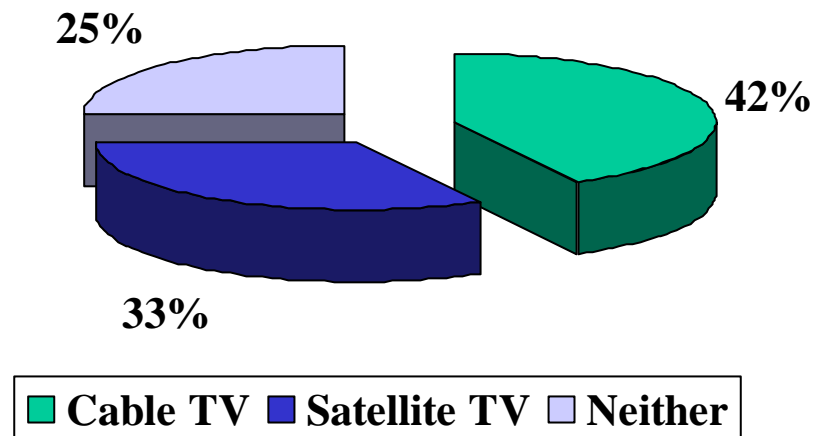
- Discrete Choice Analysis design (Conjoint)
- Conjoint sample size of 350 residential and 50 small business (currently 273 & 23 completes)
- Quantitative phone surveys completed as well (736 residential & 103 business completes)
- Deliverable is a simulation model to predict market penetration given various values for product and market attributes
- Respondents screened to ensure:
 - Decision-maker for telecommunications and entertainment services in the home
 - Respondents with immediate family members employed by any of the following were excluded:
 - » County of Los Alamos
 - » Comcast
 - » Qwest

Video Services Purchasing Behavior

Residential

- A significant number of households do not use pay TV services (25%)
- Comcast has 56% market share of pay TV services
- Market penetration:
 - Cable = 42%
 - Satellite (DBS) = 33%

Question 1: *For TV service, do you have...?*



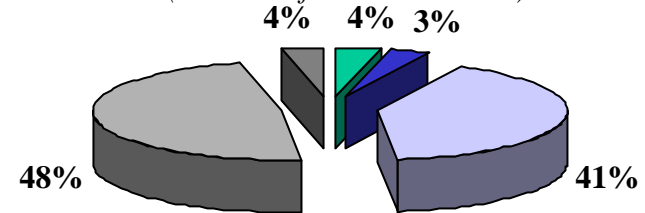
Internet Services Purchasing Behavior

Residential

- 89% of Los Alamos County households use the Internet at home
- Of these, 45% are using broadband Internet today
- DSL has nearly three times the market share of cable modem service

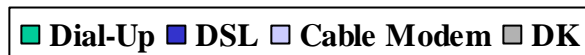
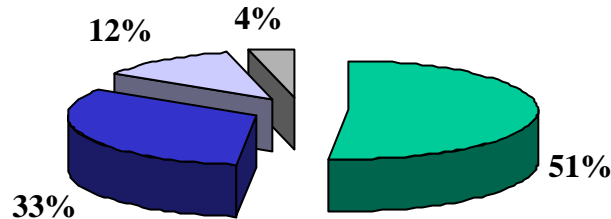
Incidence of Internet Households

(Percent of All Households)

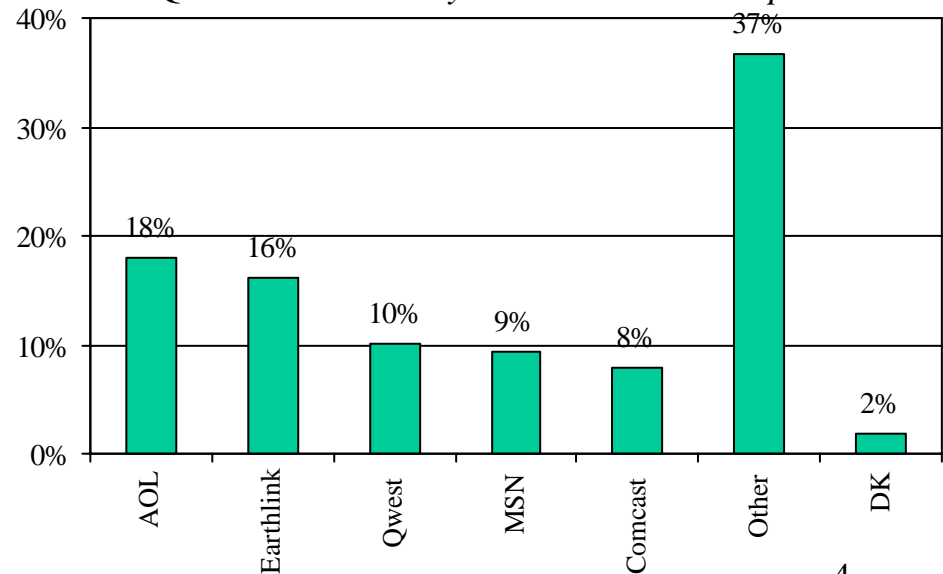


Broadband Internet Market Share

(Percent of Internet Households)



Question 4: Who is your Internet service provider?



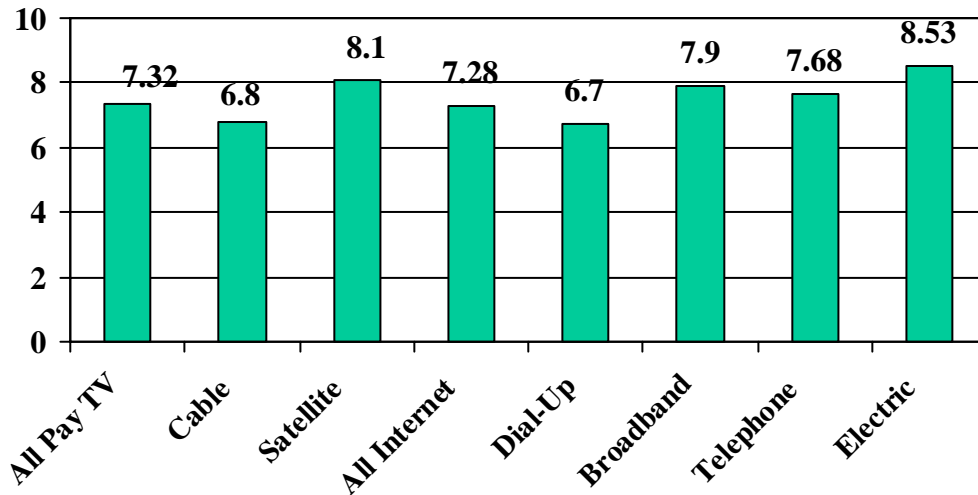
Satisfaction Ratings

Residential

- Electric service scores highest in satisfaction ratings
- Pay TV and Internet and score at similar levels, with telephone slightly higher
- Newer services within the video and Internet sectors score higher, with DBS scoring well above cable TV, and Broadband Internet well above Dial-Up

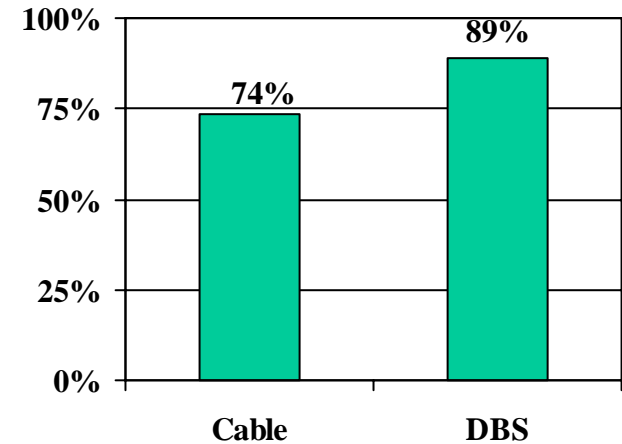
Satisfaction Rating by Service/Service Provider

(Mean Rating on a 1 to 10 Scale)



Satisfaction with Video Service

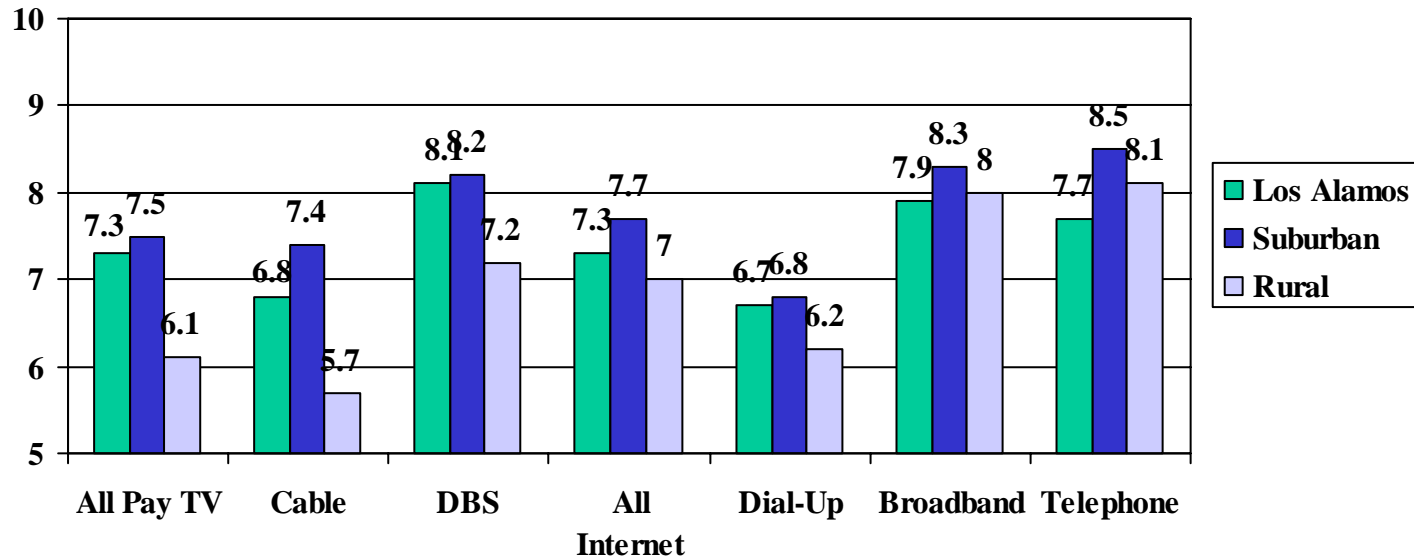
(Percent Rating from '6' to '10')



- Satisfaction levels in Los Alamos County are relatively high compared to other markets studied by Uptown...

Satisfaction Rating by Service/Service Provider

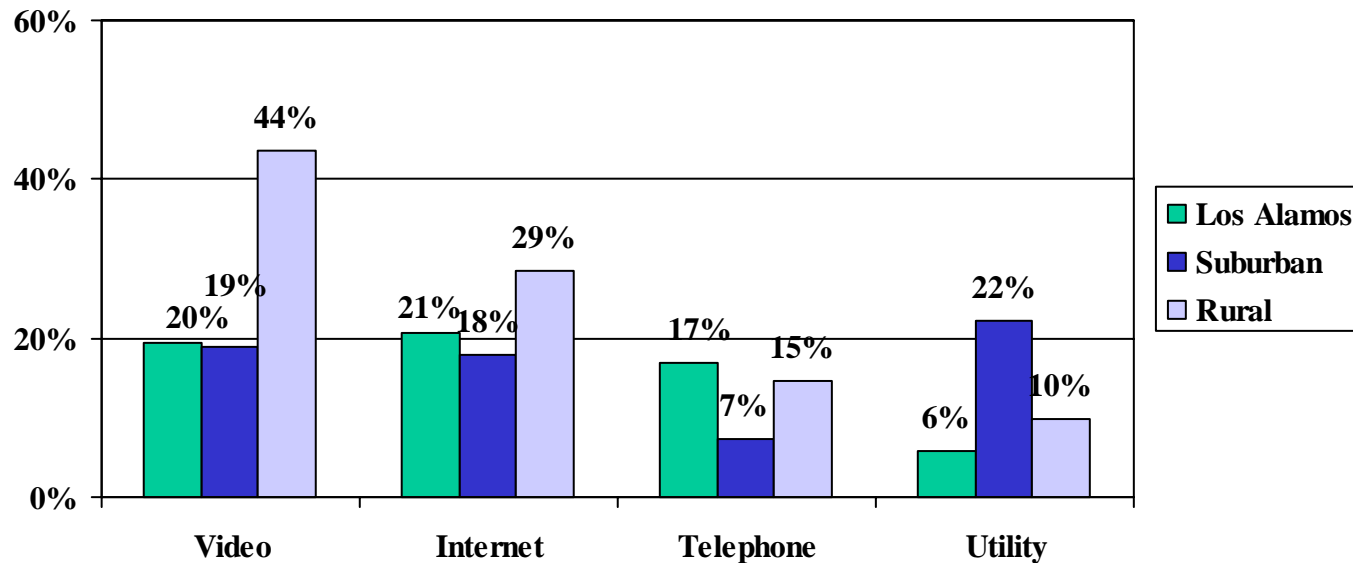
(Mean Rating on a 1 to 10 Scale)



- The incidence of dissatisfied consumers (those who rated their satisfaction from 1 to 5 on a scale up to 10) compares higher for phone and lower for the county utility...

Incidence of Dissatisfied Video/Internet/Phone Users

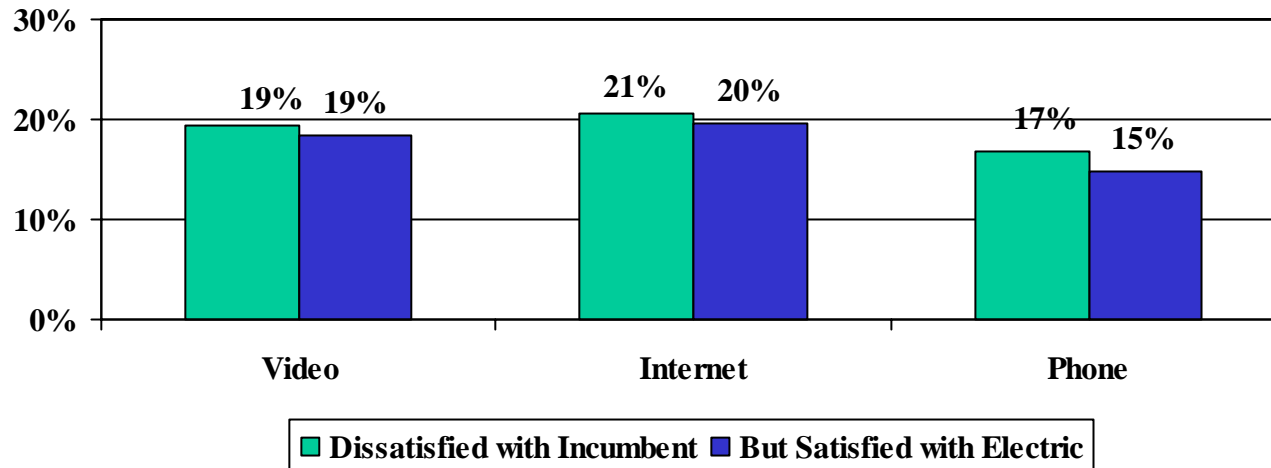
(Percent Rating Incumbent from '1' to '5')



- For video, 107 respondents are dissatisfied with their incumbent. Among these households, 96 are satisfied with their electric service
- For Internet, 141 respondents are dissatisfied with their incumbent. Among these households, 127 are satisfied with their electric service
- For telephone, 124 respondents are dissatisfied with their incumbent. Among these households, 103 are satisfied with their electric service

Incidence of Satisfied Electric Users Among Dissatisfied Video/Internet/Phone Users

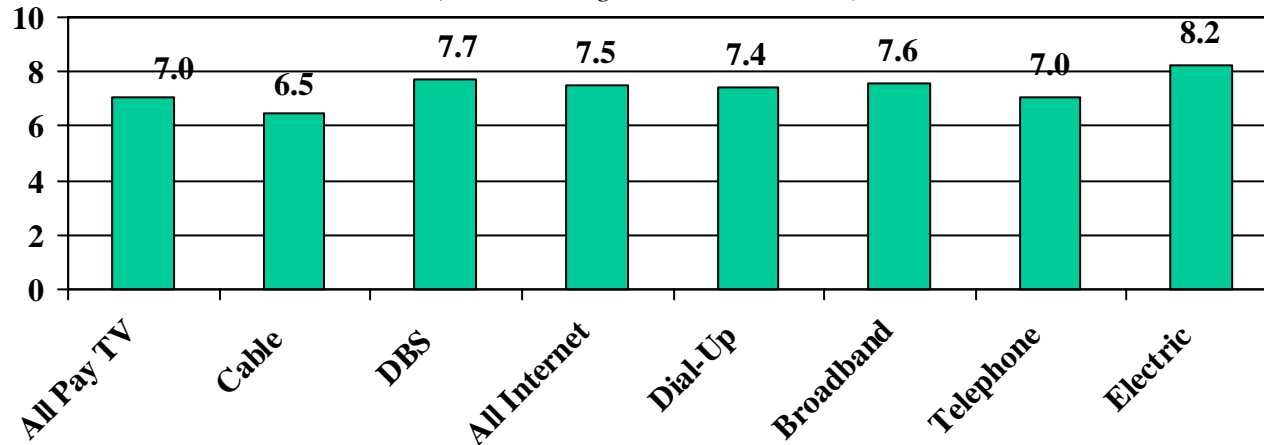
(Percent Who Rated Incumbent from '1' to '5' and Electric from '6' to '10')



- Ratings for customer service performance are lowest for cable TV and dial-up Internet...

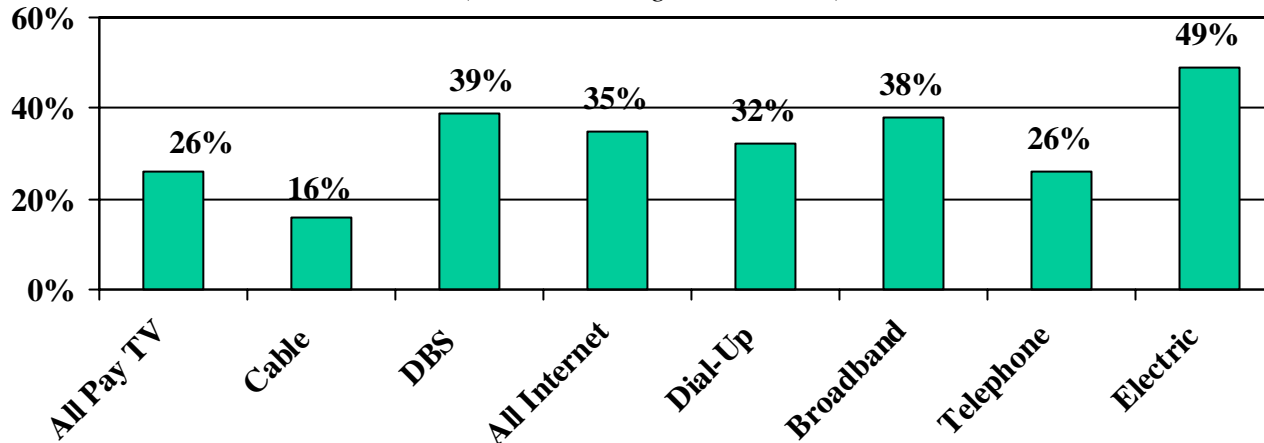
Customer Service Rating by Service/Service Provider

(Mean Rating on a 1 to 10 Scale)



Customer Service Rating by Service/Service Provider

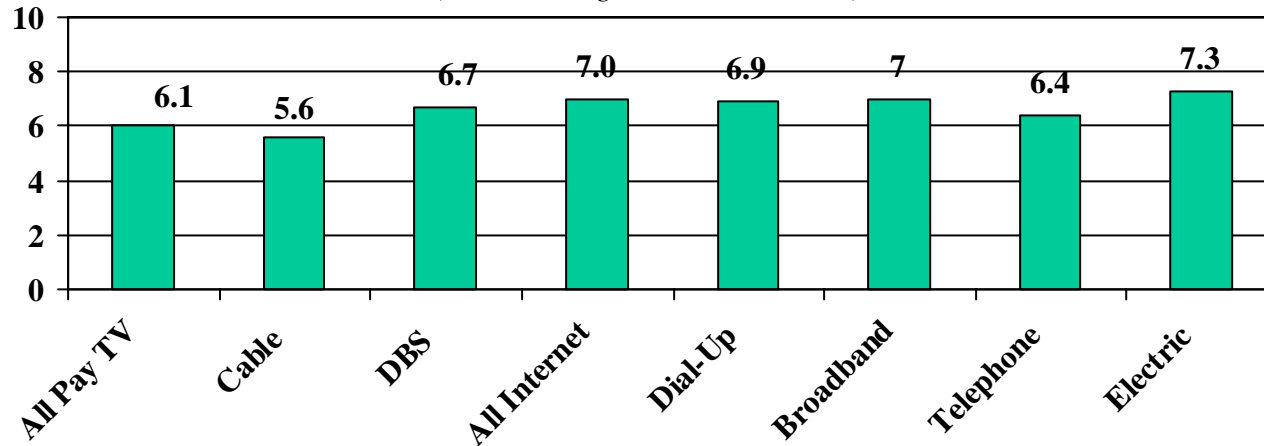
(Percent Rating a '9' or '10')



- Scores for service value represent the best opportunity for improvement in consumer satisfaction...

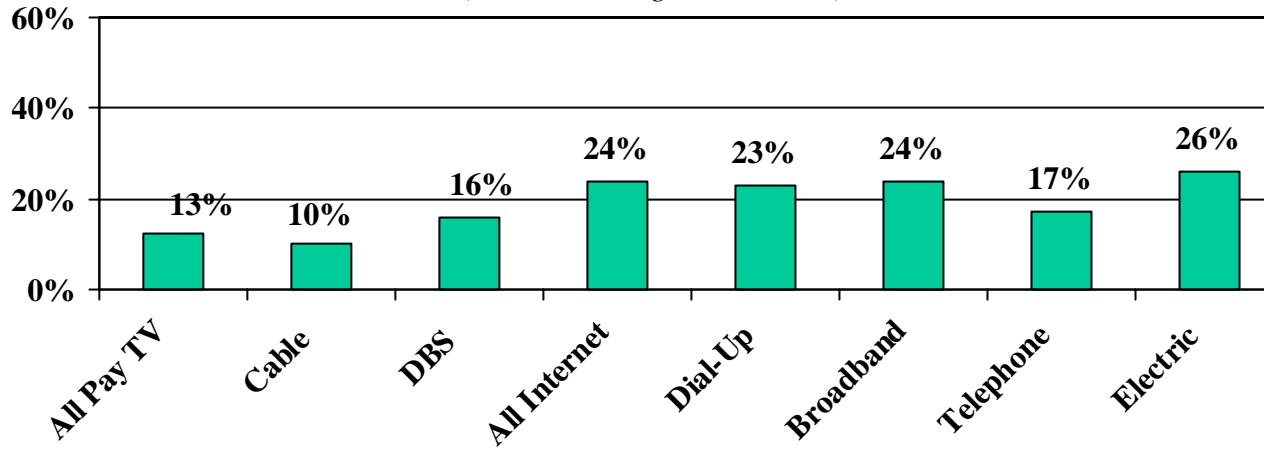
Service Value Rating by Service/Service Provider

(Mean Rating on a 1 to 10 Scale)



Service Value Rating by Service/Service Provider

(Percent Rating a '9' or '10')

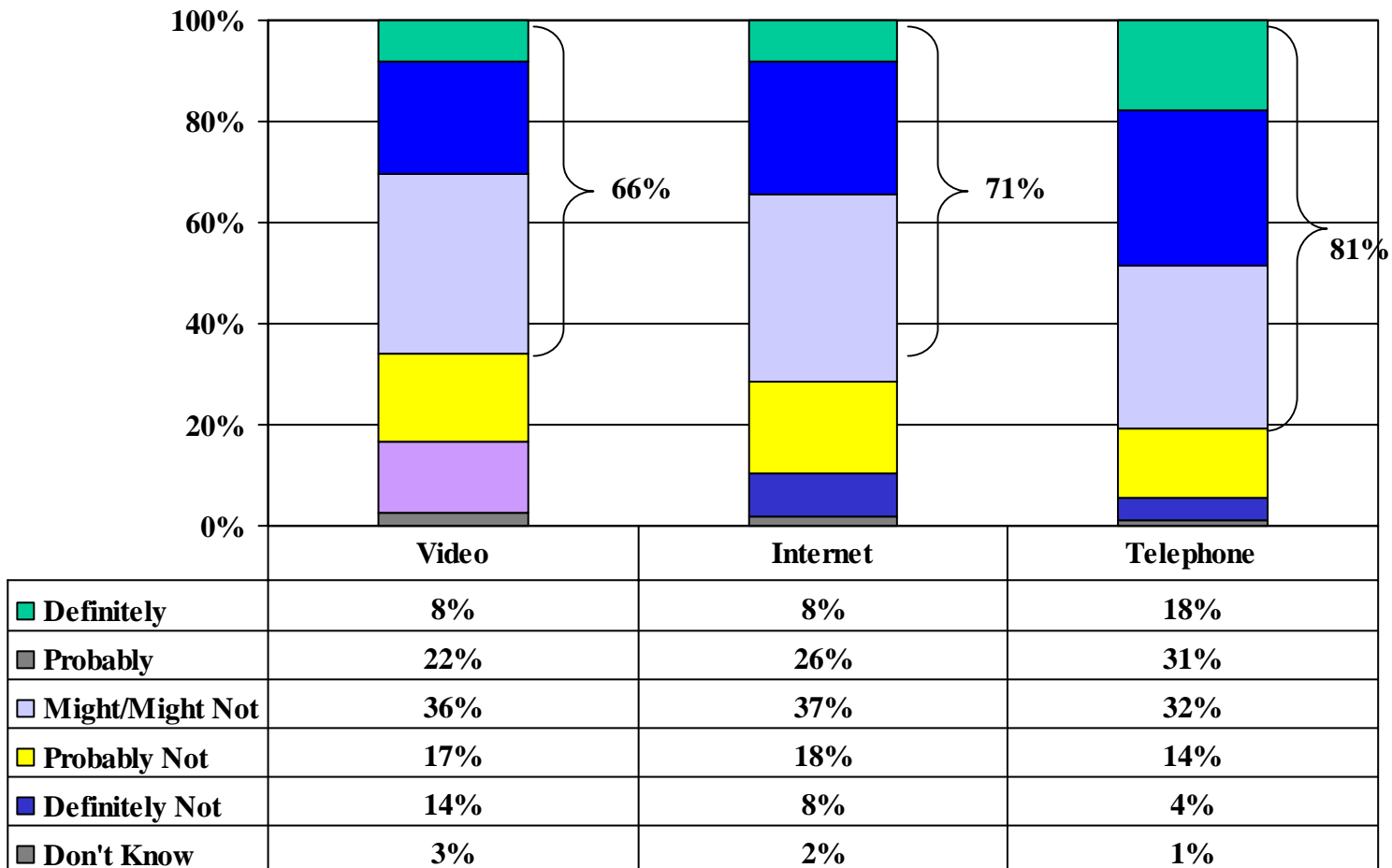


Purchase Intent – All Services

Residential

- Purchase intent is strongest for telephone service, but demand exists for an alternative provider for Internet and video service as well. This has a positive impact on the demand for a 3-product bundle...

Questions 18, 19, & 20: *If a new provider were to offer television/Internet/Local Phone service for 10% less than the current price, how likely would you be to subscribe?*



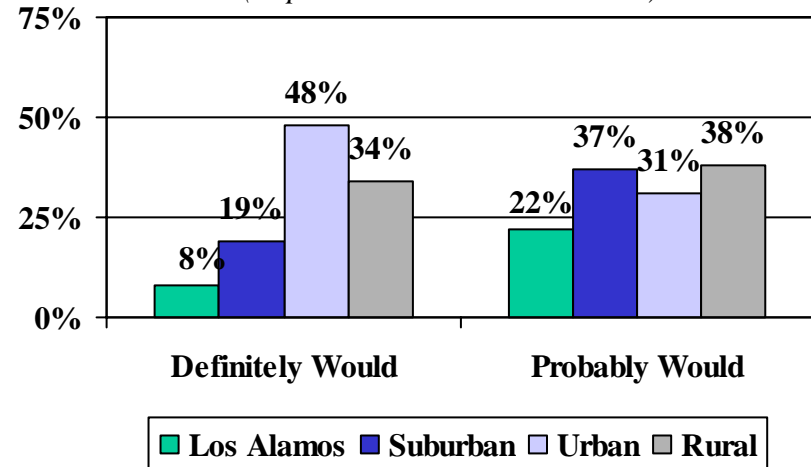
Purchase Intent Benchmarking

Residential

- Demand for an alternative broadband communications provider is lower in Los Alamos compared to other markets Uptown has studied.

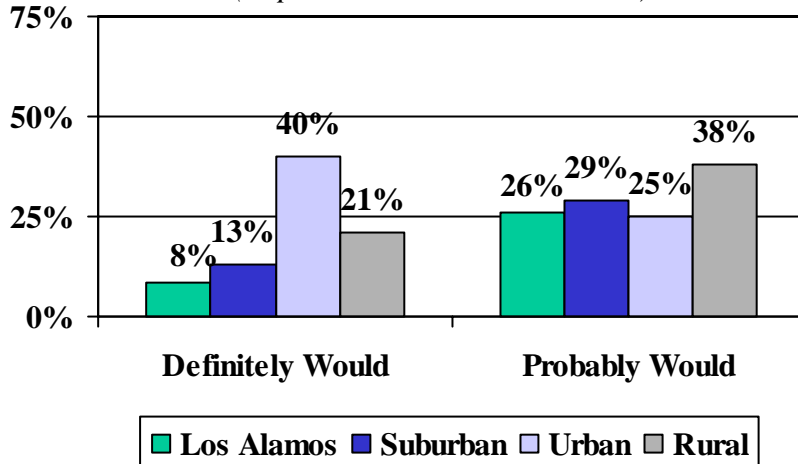
Purchase Intent:Video

(Top Two Box at 10% Discount)



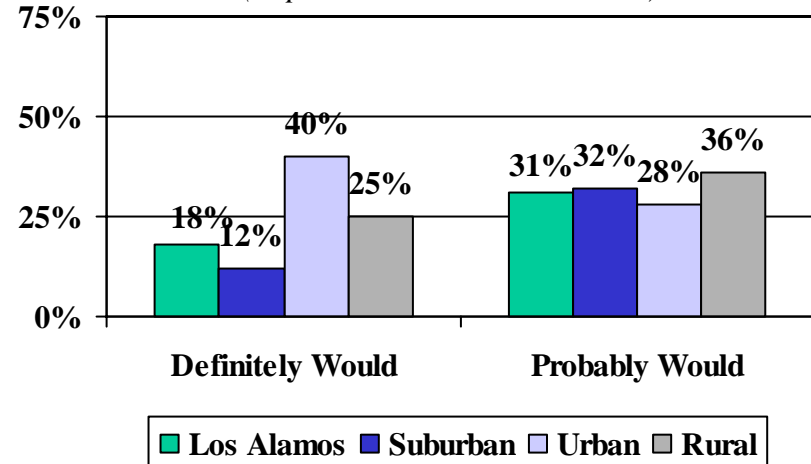
Purchase Intent:Internet

(Top Two Box at 10% Discount)



Purchase Intent:Local Phone

(Top Two Box at 10% Discount)



- **Recommend ‘Likert Scale’ with Overstatement Adjustment**
 - Conservative research techniques from the Packaged Goods sector
 - Clearly specify purchase intent vs. “interest” and removes “overstatement” bias
- **How likely would you be to subscribe to local telephone?**

• Definitely Would	17.8%	x 70% = 12.5%
• Probably Would	30.8%	x 30% = 9.2%
• Might/Might Not	32.1%	x 10% = <u>3.2%</u>
• Probably Would Not	13.9%	24.9% = Penetration Estimate
• Definitely Would Not	4.2%	
• Don't Know	1.2%	

Overstatement Adjusted Penetration Levels

(At a 10% Discount to Incumbent)

Service	Terminal Penetration (Year 5)
Video	15.9%
Internet	17.3%
Local Phone	24.9%

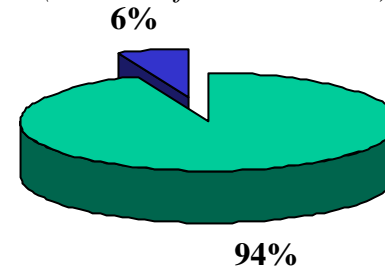
Internet Services Purchasing Behavior

- Almost all (94%) of Los Alamos businesses have Internet access
- The majority of these businesses (56%) use broadband Internet already today
- Qwest is the dominant service provider, likely due to its DSL product

Small Business

Incidence of Internet Businesses

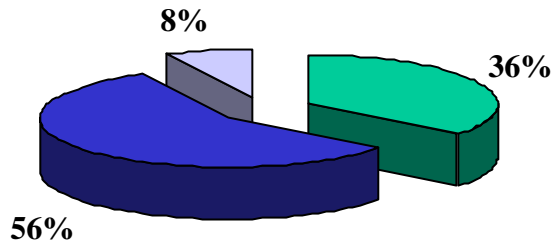
(Percent of All Businesses)



■ Have Internet Access ■ Do Not Have Internet Access

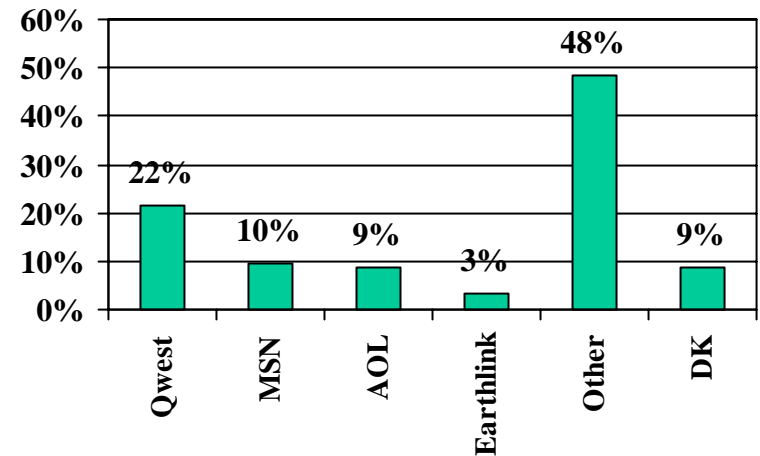
Broadband Internet Market Share

(Percent of Internet Businesses)



■ Dial-Up ■ DSL/Cable Modem ■ DK

Question 3: Who is your Internet service provider?

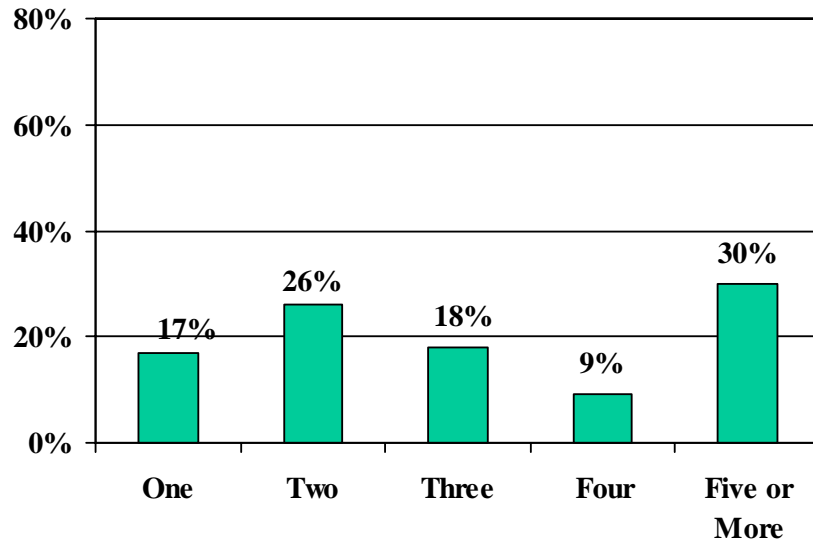


Phone Services Purchasing Behavior

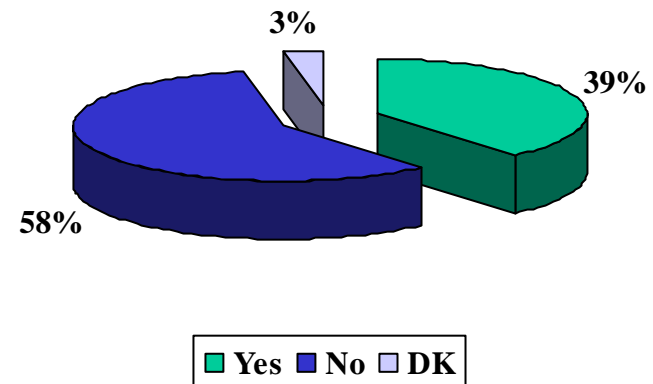
Small Business

- Only 17% of businesses surveyed had one line
- 39% used one of their additional lines for Internet access
- Nearly 37% of businesses would be able to save the cost of an additional line by switching to broadband for their Internet access service

Question 5: *How many phone lines do you have at your business location?*



Question 6: *Is one of these phone lines dedicated to Internet access?*



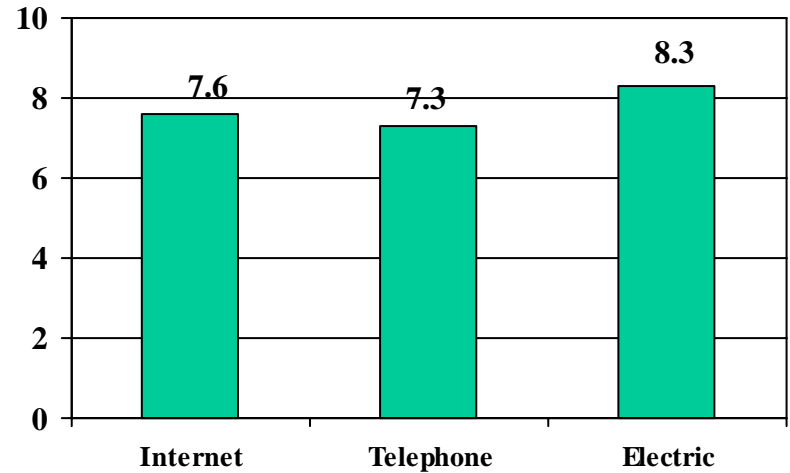
Satisfaction Ratings

- Los Alamos businesses are less satisfied with their Internet and telephone services compared to electric

Small Business

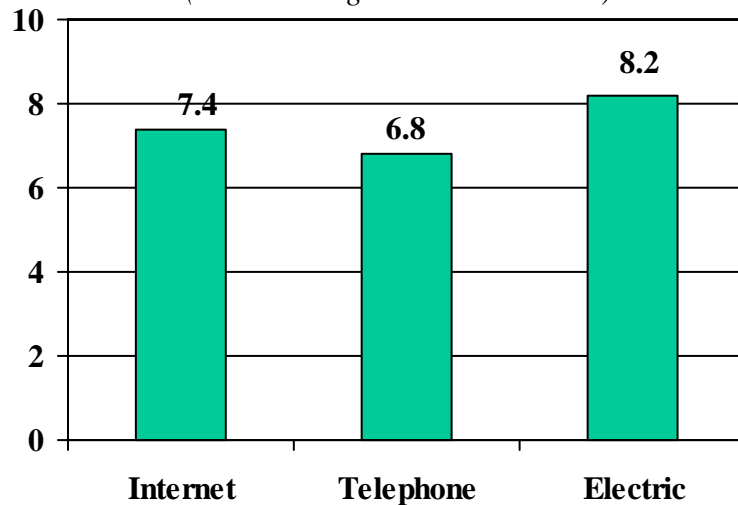
Satisfaction Rating by Service

(Mean Rating on a 1 to 10 Scale)



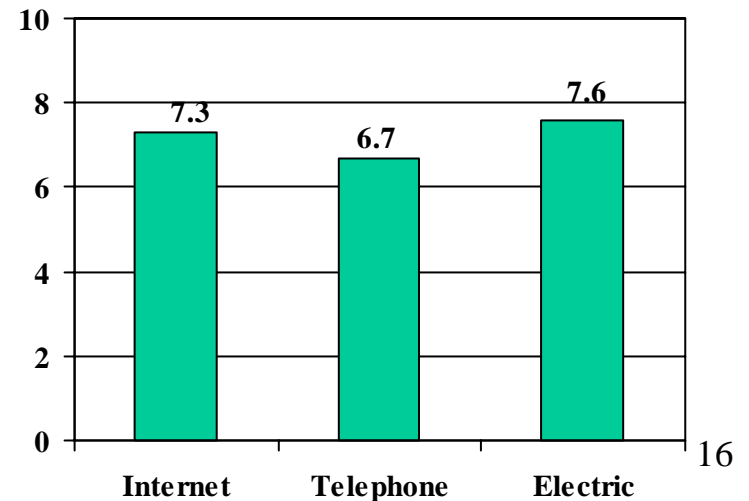
Customer Service Rating by Service

(Mean Rating on a 1 to 10 Scale)



Service Value Rating by Service

(Mean Rating on a 1 to 10 Scale)

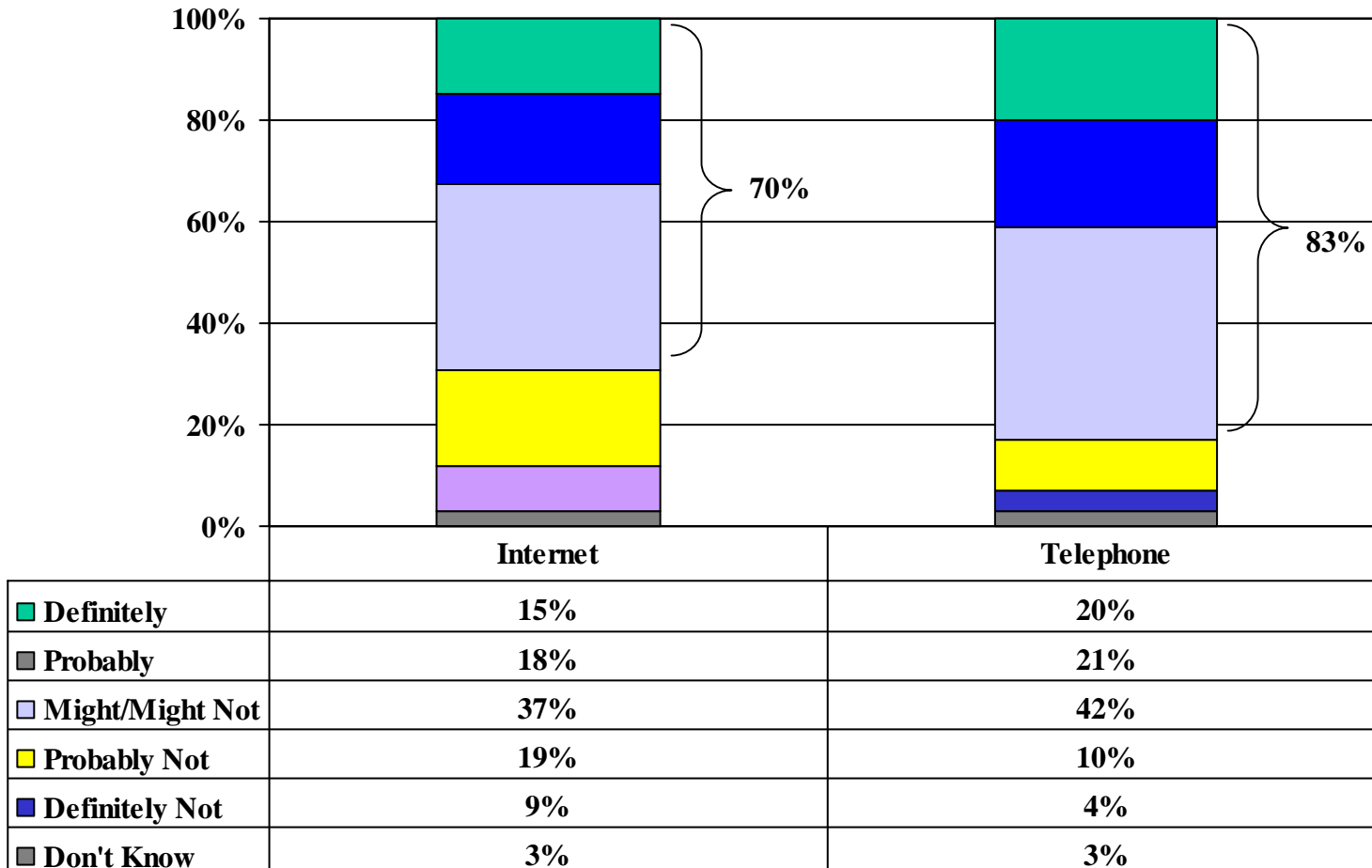


Purchase Intent

Small Business

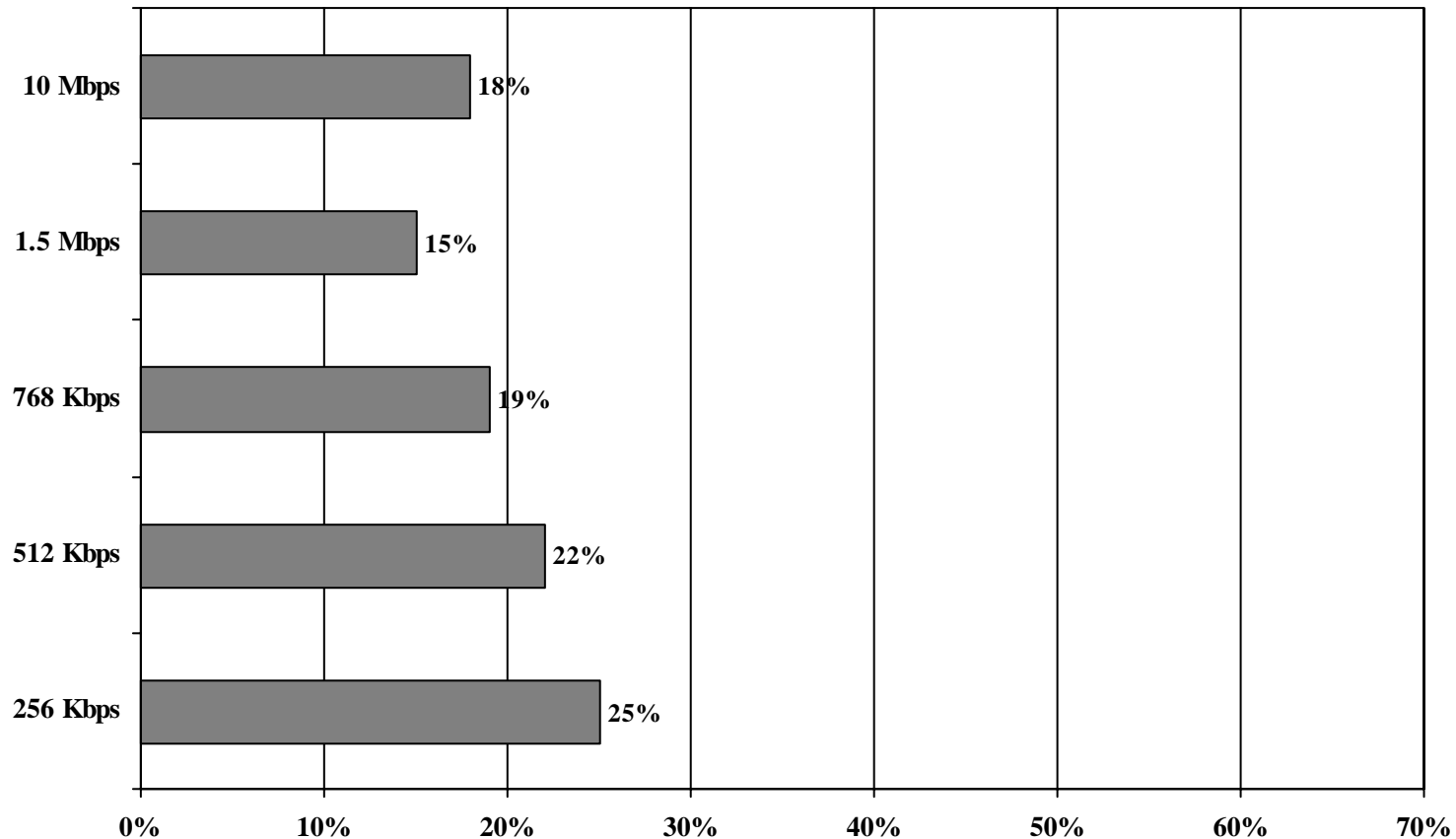
- Overstatement adjusted terminal penetration estimates within the small business market are:
 - Internet = 19.2%
 - Local Telephone = 24.9%

Questions 16 & 18: *If a new provider were to offer Internet/Local Phone service for 10% less than the current price, how likely would you be to subscribe?*



- Most businesses are not sure of what data transfer speed they need, but 20% of businesses indicate a need for cable modem level speeds and higher

Question 17: *What level of download speed would your business require?*



- Participants are presented with about 15 different scenarios for which telecommunications services they most prefer to receive, from which provider, and at what price. The scenarios represent bundle possibilities.
- Each scenario is equivalent to asking the respondents which combination they like best of the two to five combinations presented. The option to keep what you currently have is always available.
- The five price levels tested have been transformed in the model to a continuous array ranging from \$30 to \$150. This allows us to simulate any price level within the range.
- The results are used to build a simulation model. This enables the client to examine alternative market scenarios:
 - Sensitivity analysis
 - Update price and service values to changing market conditions

Attributes Tested

Conjoint Analysis

- As an output of the conjoint research design, any combination of the following variables can be examined as a market share outcome in a simulation model...

Services & Service Bundles

1. Local phone only
2. Local phone and high-speed Internet
3. Local phone and Dial-up Internet
4. Local phone and cable TV
5. Local phone and Satellite TV
6. Cable TV and high-speed Internet
7. Cable TV and dial-up Internet
8. Satellite TV and high-speed Internet
9. Satellite TV and dial-up Internet
10. Local phone, high-speed Internet, and cable TV
11. Local phone, dial-up Internet, and cable TV
12. Local phone, high-speed Internet, and satellite TV
13. Local phone, dial-up Internet, and satellite TV

Providers (“Brands”)

1. Los Alamos Utilities
2. Comcast Cable TV
3. Satellite TV
4. Qwest
5. A new provider in Los Alamos

Price

1. \$30
2. \$60
3. \$90
4. \$120
5. \$150

Utility Scores

Conjoint Analysis

- The utility scores give an indication of the relative value and preference (utility) of each service attribute...

Services & Service Bundles

1. Local phone, high-speed Internet, and satellite TV (+58)
2. Local phone, high-speed Internet, and cable TV (+49)
3. Local phone and high-speed Internet (+28)
4. Satellite TV and high-speed Internet (+22)
5. Cable TV and high-speed Internet (+17)
6. Local phone and Satellite TV (-3)
7. Local phone, dial-up Internet, and cable TV (-8)
8. Local phone, dial-up Internet, and satellite TV (-10)
9. Local phone and cable TV (-10)
10. Satellite TV and dial-up Internet (-29)
11. Local phone and Dial-up Internet (-35)
12. Local phone only (-37)
13. Cable TV and dial-up Internet (-44)

Providers (“Brands”)

1. Los Alamos Utilities (+9)
2. A new provider in Los Alamos (+3)
3. Qwest (-1)
4. Satellite TV (-3)
5. Comcast (-8)

Price

1. \$30 (+62)
2. \$60 (+38)
3. \$90 (0)
4. \$120 (-28)
5. \$150 (-72)

None (Stay with what I have)

1. (+72)

- A scenario that matches status quo conditions was run through the simulation model to confirm validity...

Brand	Services	Price
Qwest	2 = Local phone and high-speed Internet	\$66
Comcast	6 = Cable TV and high-speed Internet	\$87
Satellite	8 = Satellite TV and high-speed Internet	\$90
Mixed	All other combinations	Not Applicable

- Error values are within the same range as those for the quantitative phone survey...

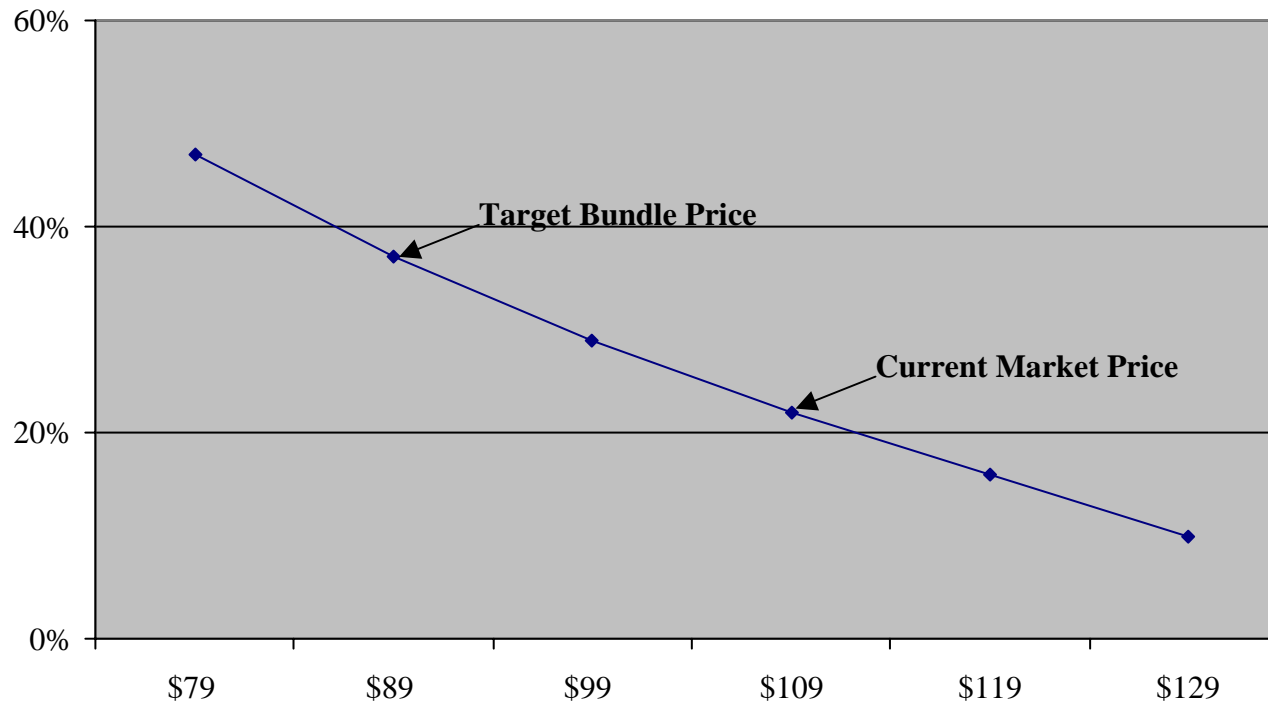
		Qwest	Comcast	Satellite	Multiple Providers
Residential Penetration (Phone Survey)	Video	-	42%	33%	NA
	Broadband Internet	33%	12%	11%	
	Telephone	100%	-	-	
Percent in 2-Product Bundle	Phone Survey	33%	12%	11%	44%
	Conjoint Model	29%	10%	15%	46%
Error		- 4%	- 2%	+ 4%	+ 2%

Telephone penetration was not measured by the survey but is estimated at 100%. Satellite Internet penetration of 11% represents 33% DSL penetration of their 33% video penetration to normalize for reselling DSL.

- The current price for all three services in Los Alamos is \$105 from multiple providers, so the Los Alamos three-product bundle achieves 22% penetration with no discount. Driven by two factors:
 - Brand Preference: Depending on service, 15% to 20% of households are dissatisfied with their current provider and are satisfied with their electric service.
 - Single-Provider Preference: The benefit of dealing with a single provider.

Expected Market Share of Los Alamos Bundle

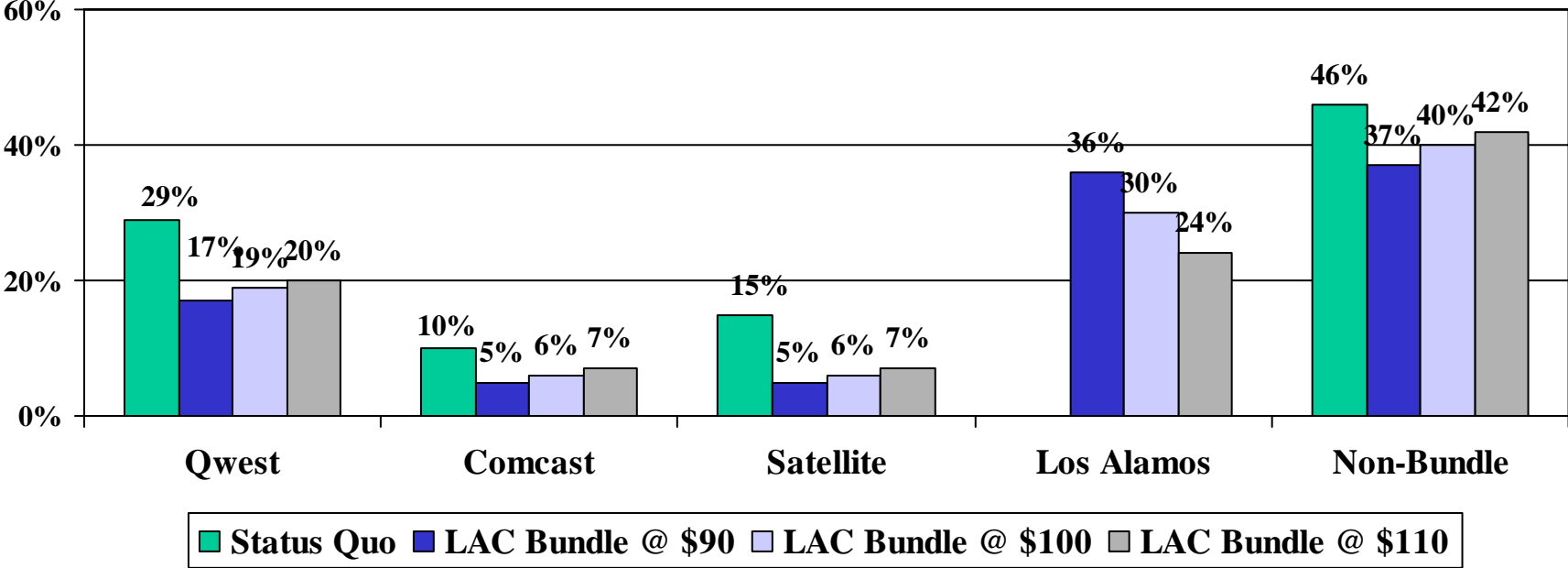
(From \$79 to \$129 Monthly)



- Market share results if Los Alamos County offers a 3-Product bundle...

Expected Market Share of Bundle Subscribers at \$90, \$100, and \$110

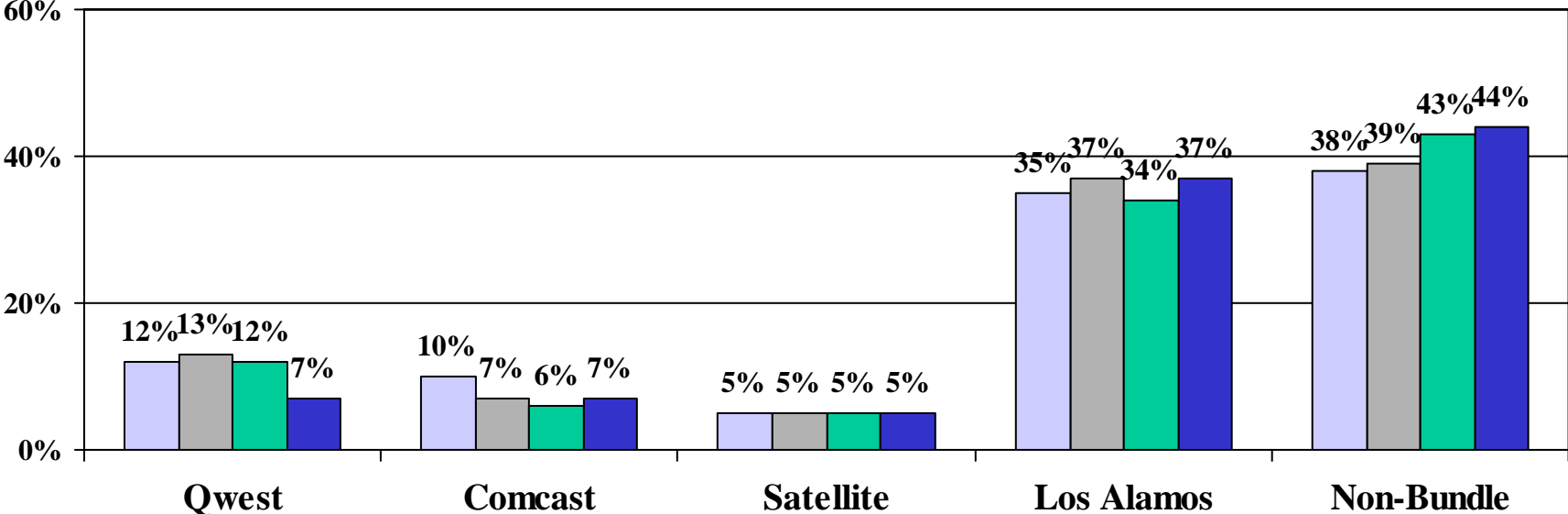
(With Current Incumbent Services and Prices)



- Market share results if Comcast or Qwest also offer 3-Product bundles...

Expected Market Share if Comcast or Qwest Offer Bundles at \$100 or \$120

(With Los Alamos Bundle at \$90)

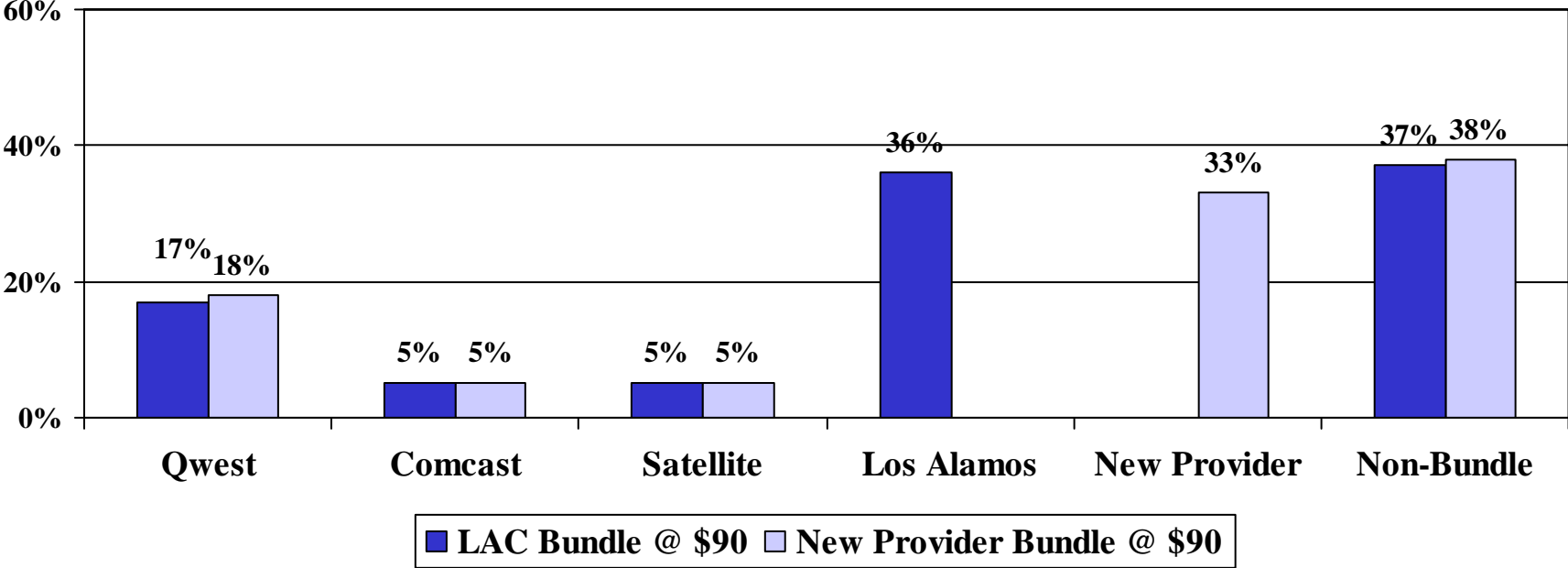


■ Comcast Bundle @ \$100 ■ Comcast Bundle @ \$120 ■ Qwest Bundle @ \$100 ■ Qwest Bundle @ \$120

- Comparison of retail versus wholesale market share results...

Expected Market Share of Bundle Subscribers – Retail versus Wholesale Model

(With Current Incumbent Services and Prices)



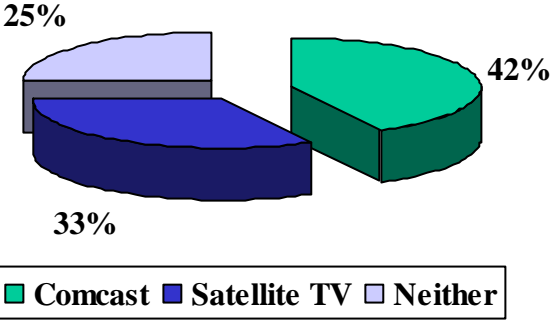
Penetration Analysis

Forecasted Video Penetration

- Uptown expects that bundling and a price decrease to expand the percentage of video households from 75% to 85%...

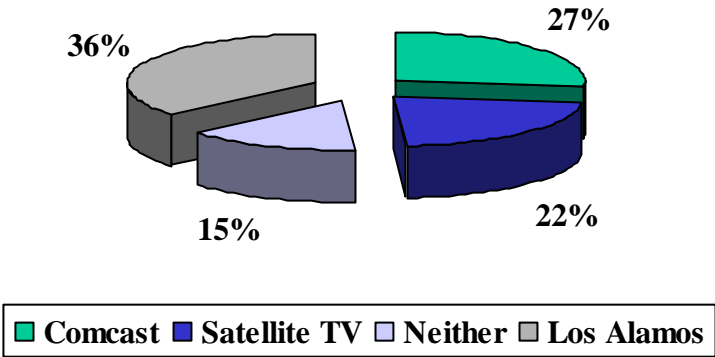
Current Market Share (Video)

(Percent of All Households)



Forecasted Market Share – LAC \$90 Bundle (Video)

(Percent of All Households)



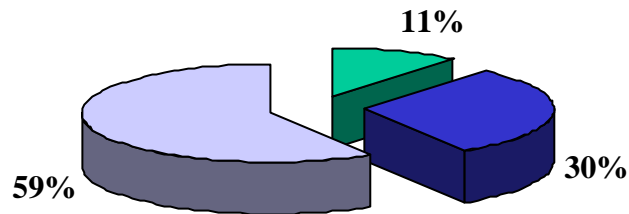
Penetration Analysis

Forecasted Internet Penetration

- The introduction of an alternative broadband Internet provider offering bundled services increases broadband market share from 41% to 58% versus dial-up...

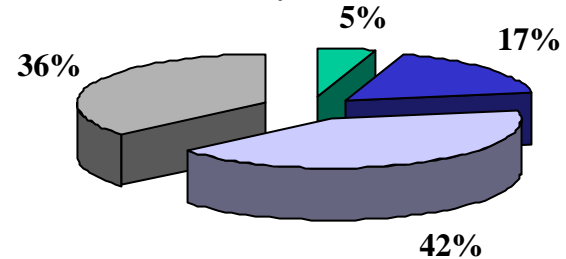
Current Market Share (Internet)

(Percent of All Households)



Forecasted Market Share – LAC \$90 Bundle (Internet)

(Percent of All Households)



**Forecasted Market Share – LAC \$90 Bundle
(Telephone)**
(Percent of All Households)

