MARKETING & SALES INTEREST GROUPS

2023 Initiatives

ctam

TABLE OF CONTENTS

Summaries by Interest Group

1. **Broadband Positioning Working Group** 5
2. **Mobile Awareness** 8
3. **Competition** 9
4. **Low Income Broadband** 10
5. **Broadband Consumer Labels Working Group** 11
6. **Rural Broadband Working Group** 11

Call Notes and Presentations by Interest Group

1. **Broadband Positioning Working Group** **12**
   - Call Notes: August 23, 2023 12
   - Presentation: *Broadband Positioning Overview* 15
   - Call Notes: September 29, 2023 29
   - Presentation: *Broadband Positioning Proposal* 31
   - Call Notes: October 13, 2023 34
   - Presentation: *Xfinity 10G Brand Story* 36
   - Call Notes: October 27, 2023 36

2. **Mobile Awareness** **38**
   - Call Notes: January 23, 2023 38
   - Presentation: *Mobile Convergence Performance* 42
   - Call Notes: March 20, 2023 50
   - Call Notes: August 21, 2023 53
   - Call Notes: October 2, 2023 55

3. **Competition** **57**
   - Call Notes: June 16, 2023 57
   - Call Notes: August 25, 2023 59
   - Presentation: *New Street Research Autumn for Broadband 1Q23* 62
   - Presentation: *New Street Research Autumn for Broadband 2Q23* 63
   - Call Notes: November 10, 2023 64

4. **Low Income Broadband** **66**
   - Call Notes: June 9, 2023 66
   - Call Notes: July 14, 2023 69
   - Call Notes: August 11, 2023 72
   - Call Notes: September 8, 2023 74
   - Call Notes: October 6, 2023 77
   - Presentation: *ACP Campaign Performance* 80
   - Call Notes: November 3, 2023 82
   - Call Notes: December 1, 2023 86

5. **Broadband Consumer Labels Working Group** **88**
- Call Notes: January 19, 2023 88
- Call Notes: February 2, 2023 91
- *Broadband Label Sample* 93
- Call Notes: March 2, 2023 94
- Call Notes: March 30, 2023 95
- Call Notes: April 13, 2023 96
- Call Notes: May 25, 2023 97
- Call Notes: June 22, 2023 99
- Call Notes: July 20, 2023 100
- Call Notes: August 17, 2023 101
- *Consensus Best Practices for Displaying BB Consumer Labels* 103
- Call Notes: September 14, 2023 104
- Call Notes: October 12, 2023 106
- *Title 47 Telecommunication, FCC, Part 8: Internet Freedom* 108
- Call Notes: November 9, 2023 112

6. **Rural Broadband Working Group** **114**
- Call Notes: January 10, 2023 114
- Presentation: *CTAM IEN Rural BBD Executive Interviews* 116
- Presentation: *HarrisX Rural Broadband TCS Slides* 122
- Presentation: *IEN CTAM Rural Broadband Research Member Report* 134
- Call Notes: June 8, 2023 162
- Presentation: *HarrisX Broadband TCS Slides FINAL deck* 165
- CTAM Rural Broadband Study Executive Summary 182

1

BROADBAND POSITIONING

Objective: Define a framework for messaging and positioning our members' broadband products and depositioning 5G Home Internet

2

MOBILE AWARENESS

Objective: Support awareness-building for our members growing mobile businesses using paid digital media

3

COMPETITION

Objective: Discuss macro trends, industry benchmarks, and the competitive marketplace

4

LOW INCOME BROADBAND

Objective: Discuss best practices in marketing to the low-income broadband segment

5

BROADBAND CONSUMER LABELS

Objective: Provide a forum for members to discuss adopting the new Broadband Consumer Labels requirement across all distribution channels

6

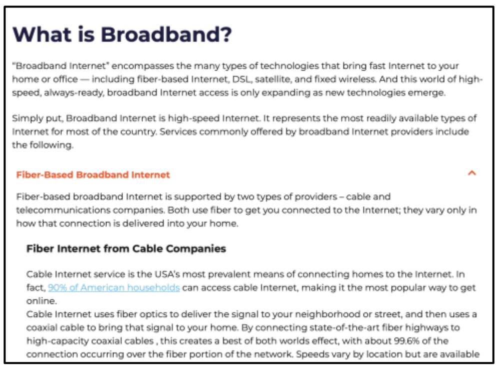
RURAL BROADBAND

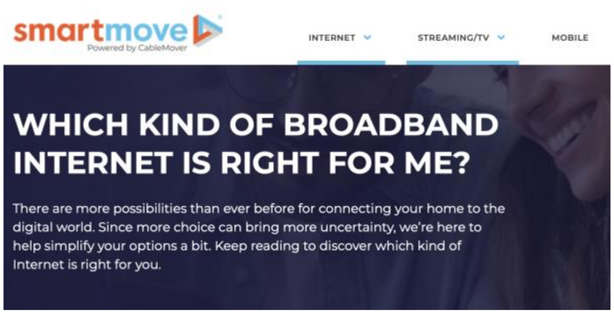
Objective: Help the industry market broadband to the rural segment with research and best practices

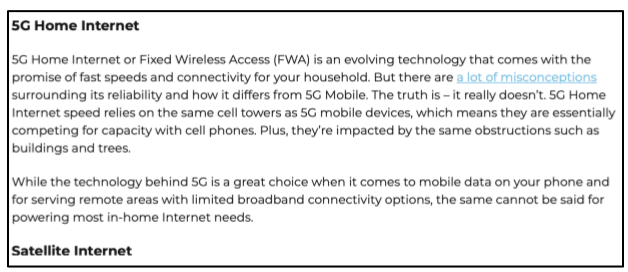
1 **Broadband Positioning**

Earlier in 2023 CTAM pursued three initiatives in support of the industry's broadband positioning efforts:

1. **Broadband Destination Pages**
    - Launched the Broadband destination pages on SmartMove.us with different access points for movers, customers, and consumers searching for information about broadband services: www.smartmove.us/broadband
    - Co-positions Cable Broadband with Fiber (as Fiber-based) and de-positions 5G Home Internet slower services like DSL
    - Includes speed tests and other interactive tools that engage visitors and create lead traffic for members



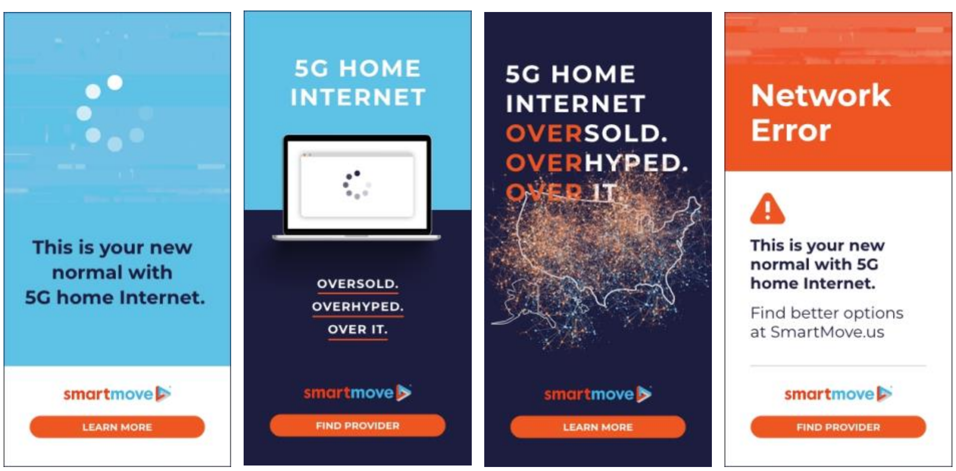




    - Evolved the former factsabout5g.com into a larger review site 5ghomeinternetreviews.com featuring two influencer videos with a collective reach of 9 million followers. Since its launch in June 2023, there have been 62K users to the site, and many more are predicted after launching the de-positioning campaign (see item 2 below)

2. **CTAM 5G Home Internet De-positioning Campaign**
    - During the July Board Meeting we were tasked with preparing a recommendation for how CTAM can go on the offense for the industry vs. 5G Home Internet
    - We developed a media plan, brand new creative, and have launched our initial media efforts

- The approach is to go head-to-head against 5G Home Internet providers by targeting people who have been recently exposed to 5G HI ads/promotions or are actively searching for 5G home internet, intercepting them as they are being influenced in order to deliver hard hitting messaging before they purchase
- This is accomplished through a media mix which does the following:
    - Targets individuals who have searched for 5G Home Internet terms (Paid Search)
    - Retarget individuals who have searched for 5G Home Internet terms, through Google Display Network post search activity (Display)
    - Retarget individuals who have been exposed to competitor 5G Home Internet display ads in the last 14 days, with our own messages through both social channels and programmatic display placements
    - Retarget individuals through YouTube who have been exposed to 5G Home Internet video ads within its ecosystem
- Search Engine Marketing Details:
    - Launched on 8/1 targeting 250+ 5G Home Internet keyword groups
    - As of 9/30, our search ads have been seen more than 250K+ times and have been clicked on 18K times sending visitors to our 5G de-positioning pages 5GHomeInternetReviews and FactsAbout5G
- Display Targeting/Retargeting Details:
    - A series of 4 hard hitting ads were created and launched on 8/7/23 with the programmatic targeting retargeting approaches detailed above
    - Ads are in six size variants to allow for differing media placements with variable CTA buttons dependent on specific media placement and whether the consumer was searching for information around 5G or were actively shopping for 5G
    - As of 9/30, these ads have been shown over 28 Million times and generated 8,465 visits to our 5G de-positioning pages



- YouTube Video Ad Details:
    - Launched on October 9th – six unique 6-second ads will launch simultaneously broadening the reach of our campaign significantly

3. **Unifying Broadband Messaging**
    - CTAM has met with each MSO to determine how each is messaging and branding its broadband product (and in some cases its network)
    - Since the July meeting, the working group has met three times to continue working on ways to define a common framework that stands alone and also functions to support each MSO's individual efforts
    - Some MSOs have embraced 10G while others have embraced Fiber or are saying Fiber powered/rich/plus
    - MSOs are sharing their consumer research and brand strategy work to help the group determine if we can rally around one word or even a set of proof points
    - We are knee-deep in this discussion: can we rally around 10G? Is there another word or statement out there we can define and get behind?
    - We seek your thoughts, input, and guidance here

4. **Collective National 5G Home Internet De-positioning Concept**
    - Comcast has offered to share the creative for their existing 5G Home Internet De-positioning campaign
    - CTAM would act as a clearinghouse and work to clear talent and usage rights with participating MSOs paying on a homes-passed basis to access the customizable versions of the creative
    - New creative could be developed where participating MSOs pay to share in some part of the creative development costs going forward
    - Puts a national push on de-positioning national competitors:
        - More efficient than creating many campaigns
        - Less consumer confusion of the message in shared markets
    - This is a very new idea that came up while speaking with Comcast's Todd Arata – we seek your thoughts and input

<u>2023 Participants</u>

1. Altice – Ben Collier
2. Armstrong – Ken Ashley
3. Cable One – David Ballew
4. Cable One – Karen Cline
5. Charter – Claire Avery
6. Charter – Jennifer Ingram
7. Comcast – Morgan Daloisio
8. Comcast – Todd Arata
9. Cox – Brian Stifel
10. Cox – Rachel Negretti
11. MCTV – Elizabeth Kwolek
12. Mediacom – Alyssa Hurley

2 Mobile Awareness

- CTAM launched an awareness campaign for mobile, targeting movers on paid social, display, YouTube, and ITV/CTV
- The main market component of that campaign concluded in March reaching **8 million consumers** with **29.5 million impressions**
- A Spanish-language version of the campaign ran from April through July, generating over 3 million impressions for that audience
- The group will pivot back to convergence in 2024

2023 Participants

1. Altice – Ben Collier
2. Altice – Loan Tran
3. Armstrong – Peter Grewar
4. Charter - Claire Avery
5. Charter – David Gray
6. Comcast – Morgan Daloisio
7. Cox – Betty Jo Roberts
8. Cox – Catherine Borda de Castro
9. Cox – Caroline Counter
10. Cox – Jodi Muller-Stotser
11. GCI – Stephanie Lovett
12. Mediacom – Dianne Schanne
13. Rogers – Mustafa Zileli

3 Competition

The Competition Working Group meets each quarter after the quarterly earnings calls to discuss competitive and macro trends, exchange best practices around threat detection and measuring flow share, and benchmarking impact of various kinds of competitors (Telcos, 5G Home, regional/local fiber ISPs).

2023 Participants

1. Altice – Andre Martineau
2. Altice – Helene Pandal
3. Altice – Scott Meador
4. Cable One – David Ballew
5. Cable One – Isabelle Jazo
6. Cable One – Mary Savery
7. Charter – David Gray
8. Comcast – Eileen Diskin
9. Comcast – Ginny Too
10. Comcast – John Hewson
11. Comcast – Sarah New
12. Comcast – Stephanie Pearlman
13. Cox - Bruce Berkinshaw
14. Cox – Anthony DeFilippo
15. Cox – Wendy Rosen
16. Mediacom – Dianne Schanne
17. Mediacom – Eric Schoenfeldt

4 Low Income Broadband

The group continues to meet monthly with lively discussions on marketing best practices. The topics addressed have included:

- Media channels (including non-traditional) to reach low-income consumers
- Proactive messaging concepts for the possibility of ACP funding ending
- Message segments (e.g., life stage, lifestyle, mobile substitutors) as well as rural vs. urban low-income customers
- Undocumented persons and the ACP program
- Hispanic/Multicultural segments
- Inbound Sales and Training

In addition, CTAM has been running an ACP search engine marketing campaign for the industry (through 2023).

Through September, the campaign has generated:

- 400,000 impressions
- **20,000** broadband leads
- An impressive Cost per Lead of **$4.97**

The next group meeting is scheduled for November 3rd, where the group will focus on 2024 objectives, specifically on reaching and retaining the income-constrained segment in a post-ACP era.

2023 Participants

1. Altice - Andre Martineau
2. Altice - Ari Schnitzer
3. Altice - Audrey Pinn
4. Altice - Dan Johnson
5. Altice - Greg Clark
6. Altice - Jason Rienth
7. Altice - Karim Madueno
8. Altice - Keith Agabob
9. Armstrong – Andrea Lucas
10. Comcast - David Klein
11. Comcast - Stephanie Pearlman
12. Cox – Ilene Albert
13. Cox – Joel Frost
14. Cox – Francesca Piscopio
15. GCI – Miracle Monares
16. MCTV – Elizabeth Kwolek
17. Mediacom - Alyssa Hurley
18. Mediacom – Chris Lord

5 Broadband Consumer Labels

Created by member request, this group tracks the progress of the upcoming Broadband Consumer Labels requirement. Members exchange best practices on how to approach complying across different sales and marketing channels.

CTAM maintains contact with the NCTA, who has the lead role for the industry on this topic overall.

2023 Participants

1. Altice – Andre Martineau
2. Altice – Bill Heberer
3. Altice – Jacqui Clary
4. Armstrong – Keith Hall
5. Armstrong – Peter Grewar
6. Cable One – David Ballew
7. Cable One – Karen Cline
8. Cable One –Ron Proleika
9. Charter – Joe Carillo
10. Charter – Kathleen Griffin
11. Charter – Naveeta Patoli
12. Comcast – Cameron Hosmer
13. Cox – Cris Webster
14. Cox – Charles Scarborough
15. Cox – Diane Hsu
16. Cox – Leslie Benner
17. MCTV – Chris Thomas
18. MCTV – Katherine Gessner
19. Mediacom – Alyssa Hurley

6 Rural Broadband

The group's work was completed in Q2 2023. The final work product included:

- A quantitative analysis of Rural America, including key market segments to target
- A qualitative study of broadband ISP subject-matter experts (cable as well as fiber) and consumers who live in one of a series of archetypical rural areas across the U.S
- An executive summary of both (included in the written reports section of this book)

2023 Participants

1. Altice – Dan Johnson
2. Altice – Prasanna Thoguluva Santharam
3. Armstrong – Andrea Lucas
4. Armstrong – Peter Grewar
5. Charter – Jen Rocco
6. Charter – Meghan Dering
7. Charter – Zoe Santo
8. Comcast – Adrienne Simpson
9. Comcast – Dana McFarland
10. Comcast – Stephanie Pearlman
11. Cox – Ilene Albert
12. Cox – Joel Frost
13. MCTV – Elizabeth Kwolek
14. Mediacom – Chris Lord

1 **Broadband Positioning**

Call Notes: August 23, 2023
Subject: CTAM Broadband Positioning Working Group Kickoff Call

Welcome/Roll Call

Call Attendees:

Armstrong – Ken Ashley
Cable One – Karen Cline, Dustin Chryst, Jody Ledgerwood, Cynthia Kuntz
Comcast – Todd Arata
Cox – Brian Stifel, Rachel Negretti
Mediacom – Alyssa Hurley
IEN – Anne Cowan
CTAM – Mark Snow, Sloane Stegen, Jes Johnson + Renee Harris

Introduction

The CTAM Broadband Positioning Working Group has been formed for MSOs to work together to develop a collective messaging platform for competitive broadband advertising that unites individual MSO messaging to create a nationally amplified message.

2023 Strategic Overview

Sloane Stegen, Sr. Director, Digital Marketing, CTAM, and Anne Cowan, IEN, presented the attached "Broadband Positioning Working Group Overview" deck.

Highlights of the group's strategic overview include:

North Star (Mission statement): To build trust in our services by guiding consumers to make informed choices, amidst the challenging nuances of today's broadband Internet offerings.

Strategy: To position today's broadband internet service advantages through a unified blend of messages, communicated directly to consumers by CTAM and member companies.

Outcome: Capture an inquisitive audience foster engagement and drive leads.

Key Research Learnings Highlights

I.E. Network (IEN) has completed research in the area of digital intelligence while HarrisX has completed research with the TCS Study, Fiber Perception and 5G Home Internet Studies. Their research decks are attached for review.

Highlights from IEN research include:

- 15% of employees now work from home full-time, while 30% have a hybrid work model.
- Competition has expanded with a variety of internet service options (HFC Broadband, Fiber, Fixed Home 5G and others.
- Economic sensitivities continue to impact consumer choice.
- Streaming customers have or plan to cut an average of three services this year.
- Search terms such as "cost and "affordability: increased in early 2023 conversations by 50%.
- Reliability and speed are critical to consumer satisfaction.

Highlights from HarrisX research include:

- FWA saw a notable decline in customer satisfaction in Q2 2023 – they are vulnerable to defection and win backs.
- Fiber remains the larger long-term threat, though there was slow down in Q2 with the overall share essentially flat and share of new connects ticking down slightly.

Key Executive Interview Learnings Highlights

In early 2023, CTAM interviewed MSO Executive brand delegates to discuss their how they communicate their broadband products and how they position against competitors, the following was noted from those conversations:

- The recurring themes of MSOs responses were **speed, reliability, and value.**
- Each MSO has unique broadband terminology.
- Only a handful of MSOs are "calling out" competitors.

CTAM notes that Shaw, through research, found that consumers were easily influenced by the name "Fibre+" in believing Fiber is better and the "+" meaning "more".

CTAM notes there is an opportunity to present a unified front broadband Internet is future-proof when it comes to home Internet.

<u>Comments/Questions from the group</u>

1. Cox is interested in informing and educating consumers on the strength of their technology and network. Cox is currently working on infographics for consumers to understand 5G, etc. but would like CTAM to assist in creating industry-wide infographics to help educate consumers on broadband.
2. *Has CTAM had conversations with MSOs regarding the use of the term "5G" to talk about Fixed wireless and whether MSOs have any concerns?*
    - CTAM has specifically stated 5G Home Internet as to not disparage 5G as a mobile technology.

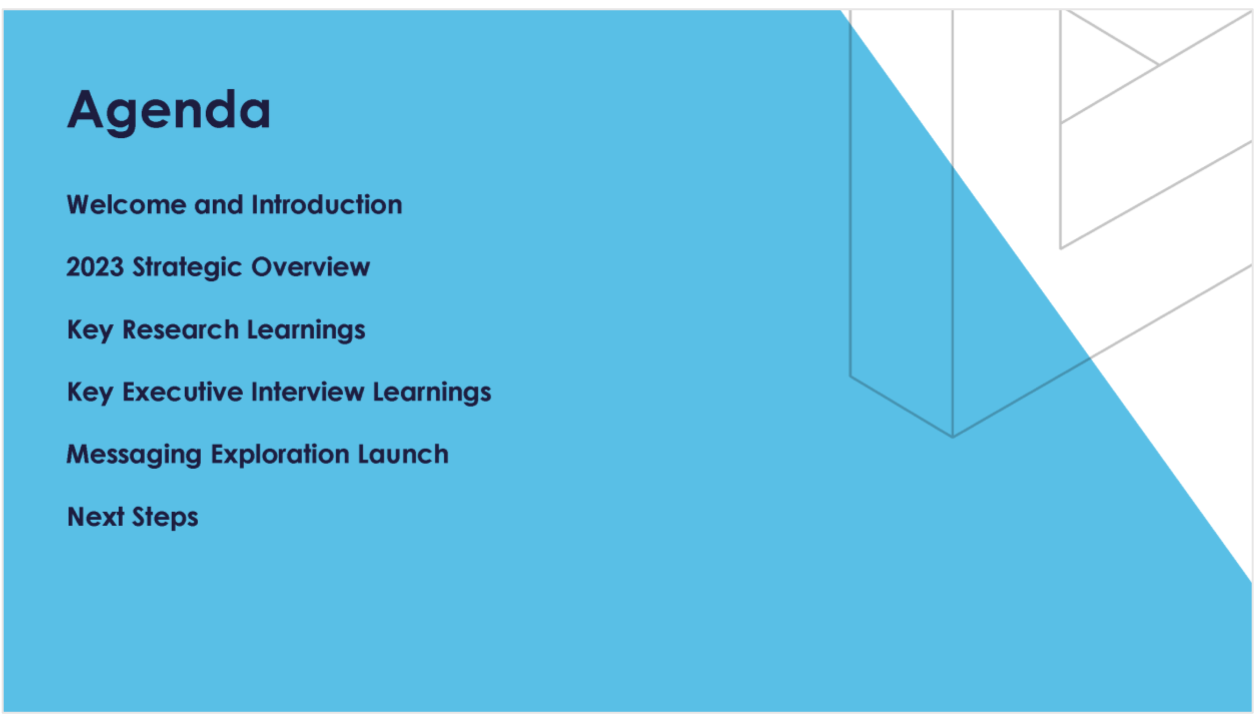
Actions/Next Steps

The following are next steps for the group:

1. Move forward to confirm the brand statement and launch development.
2. Develop key-stone messaging that redounds corporate positioning.
3. Outline a set of potential advertising digital communications and PR approaches and CTAM deliverables.

Call cadence: CTAM will poll the group for bi-weekly calls.

Presentation: *Broadband Positioning Overview (August 2023)*



Strategic Overview

North Star

We will build trust in our services by guiding consumers to make informed choices, amidst the challenging nuances of today's broadband Internet offerings

Strategy

We will position today's broadband Internet service advantages through a unified blend of messages, communicated directly to consumers by CTAM and member companies.

We will promote a digital destination that features factual, engaging, accessible information on Internet reliability, speed and price, along with evolving consumer concerns.

The experience will direct consumers to make informed choices that suit their needs and budgets

Outcome

We will capture an inquisitive audience, foster engagement, and drive leads.

Learnings from Digital Intelligence

I.E. Network 2022-23

15% of employees now work from home full-time, while nearly 30% have adopted a hybrid work model. (Forbes) In any case, this work force requires 24/7, reliable home connectivity.

Competition continues to expand with a variety of Internet service options (HFC Broadband, Fiber, Fixed Home 5G and others).

Economic sensitivities continue to impact consumer choice – although less so in Internet services and more so in content.

Streaming customers have cut, or plan to cut, an average of three services this year.

Terms such as "cost" and "affordability" increased in early 2023 conversations by 50% and 22% respectively – indicating more concern about discretionary spending.

Digital Intelligence (Un)expected Changes

Reliability and speed are critical to consumer satisfaction.

Consumer priorities are changing as lifestyles change – again.

Internet competition is increasing as new technologies grow deeper roots in the marketplace.

Cost concerns continue to impact decision-making, while pricing quietly becomes more ubiquitous.

The streaming content explosion has led to a "paradox of choice," discovery frustration, and added costs.

(Did we say how important reliability and speed are?)

Learnings from Harris X

FWA

Surprisingly, FWA saw a notable decline in Customer Satisfaction in Q2 2023 – they are vulnerable to defection and winbacks. Prior research in 2022 showed FWA had illogical perception advantages on things like speed, latency, and reliability.

FWA still has a price advantage in some cases, there is growing understanding of the service's performance limitations – we can lean into this with our collective and individual de-positioning work

MSOs should consider aggressively targeting FWA customers (particularly Gen Z customers) with converged bundles, as they are <u>most enthusiastic about bundles with home internet and mobile services</u> and are least likely to be satisfied overall and most likely to switch carriers.

Fiber

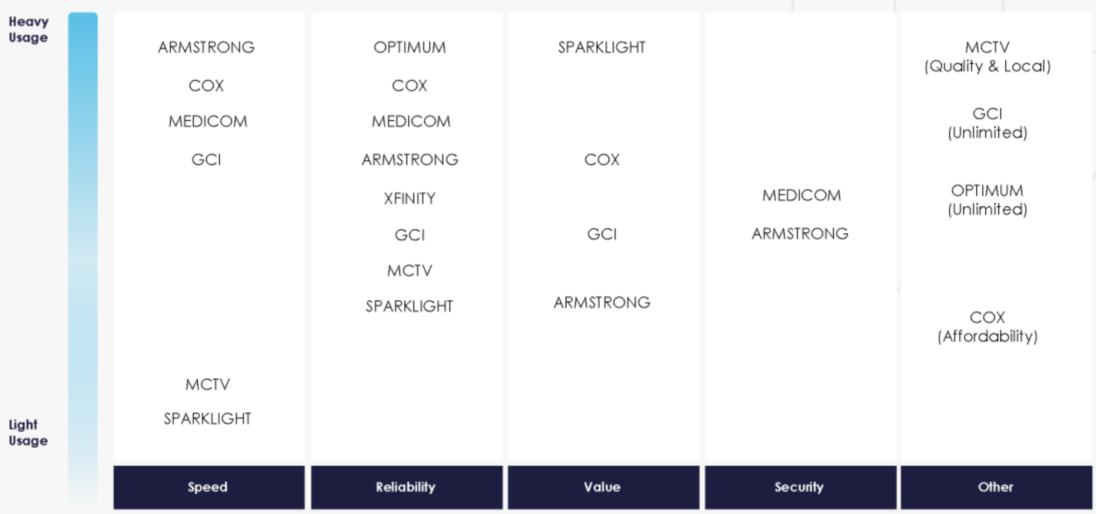
Fiber remains the larger long-term threat, though there was a bit of a slowdown in Q2 with overall share essentially flat and share of new connects ticking down slightly.

Prior research in 2022 comparing Cable Broadband to Fiber showed Fiber led with innovation and speed, and Cable Broadband had advantages with attributes like availability, technology understanding, and installation. Symmetrical speeds and latency did not show a large difference.

Sources: CTAM + Harris X Q2 2023 TCS Study; CTAM + Harris X Cable vs. Fiber Perception Study Q3 2022; CTAM + Harris X Cable vs. 5G Home Internet Study Q4 2022

How do we talk about Broadband?

Recurring Themes



Broadband Focus

Though we all have multiple unique focuses, we all tend to gravitate around RELIABILITY using it in some way to strengthen messaging

Broadband Terms Now

Broadband				
Fiber	Sparklight	optimum.	COX.	
Branded Fiber	GCI	Shaw)	eXcellerate	XTREAM
10G	ARMSTRONG			
Branded 10G		xfinity		XTREAM

Broadband Terms Near Future

Broadband				
Fiber	/Sparklight	optimum.	COX.	
Branded Fiber	GCI	Shaw)	eXcellerate	XTREAM
10G	ARMSTRONG	xfinity	MCTV	
Branded 10G		xfinity		XTREAM

Unique Broadband Phrases

ARMSTRONG	"Unmatched" everything – reliability, speed, coverage, etc.
COX.	Fiber-Powered; Symmetrical Speeds; Multi-Gig or 2 Gig Dimensionalized speed
MCTV	Fiber network is Exellerate; High-speed Internet
GCI	Fiber +; GCI+; Improved WiFi; In-Home Wifi; "*Largest Fiber Network in Alaska*"
XTREAM	Fiber-Rich; "*100% Gigabit Technology with 99.9% Network Reliability*"
optimum.	Optimum or Optimum Fiber Internet; Whole Home Internet; 99.9% Reliability
/Sparklight	Fiber-Rich Network; Worry-Free Internet
Spectrum	Home Connectivity You Can Rely On; The #1 Internet for Gamers
xfinity	Seamless connection; Built for Streaming; Multi-Gig
Shaw)	Fiber network is Fibre+

Shaw // A Short Story

Early Research

Fibre messaging was believable even though consumers did not find it easy to understand

Fibre was perceived faster than all stated speeds: from 150 Mbps to 1G

By testing branding that did not exist, they found how easily consumers can be influenced. I.e. Fibre+ faster than Deep Fibre faster than Fibre

Launched Fibre+, since then brand performance up 4pts, "Faster internet Speed" up 4pts, Brand recall +29pts

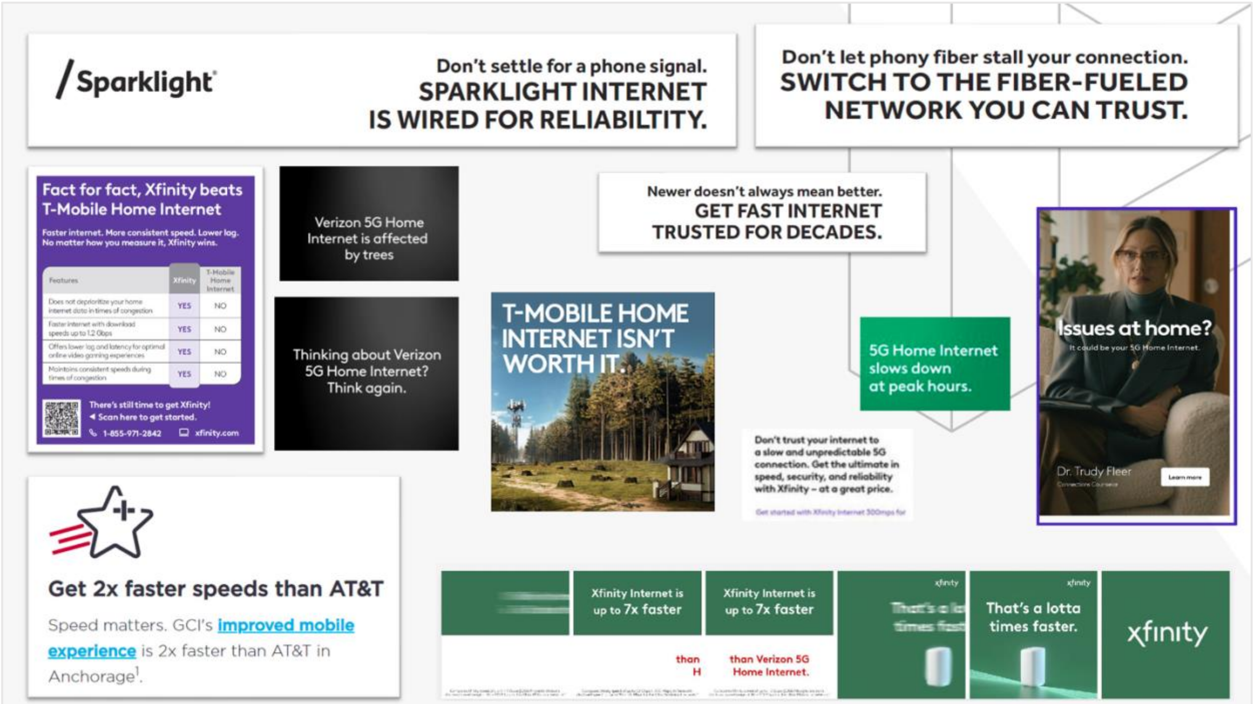
Positioning S.W.O.T.

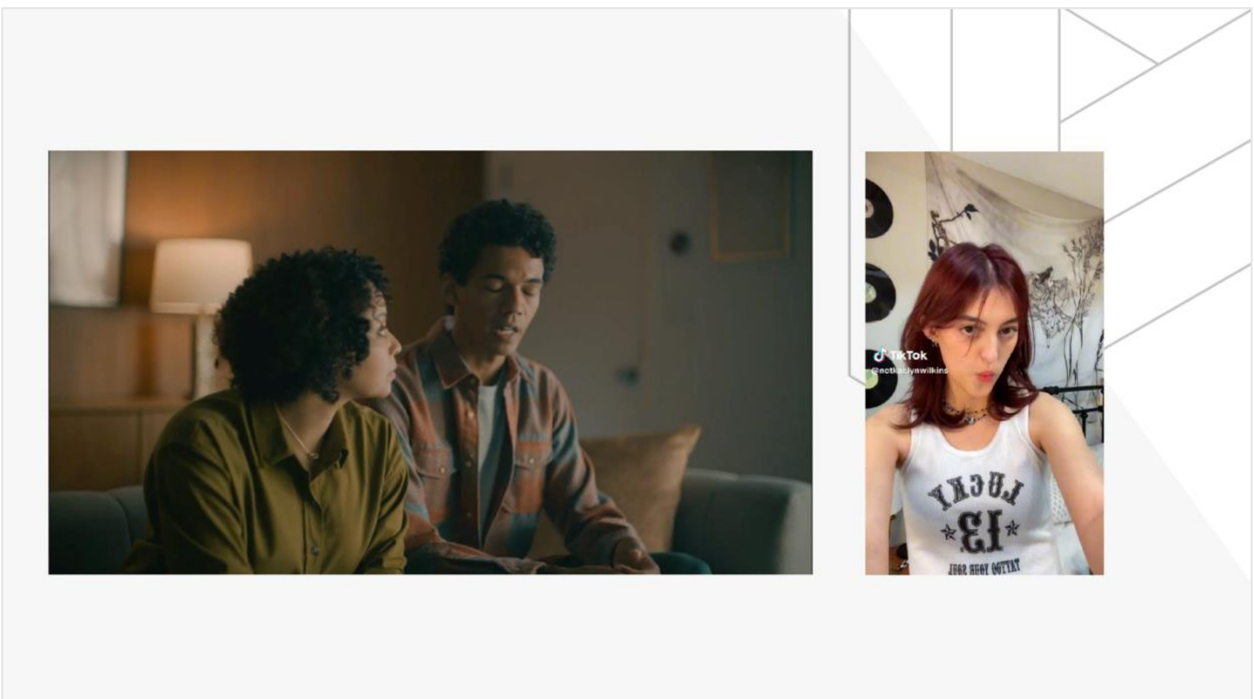
Strength	We all have a near universal use of "reliability" which means we have commonality to build upon.
Weakness	As an industry we are all over the board with how we brand and speak to Broadband Internet, creating confusion as to the connection and speeds it offers.
Opportunity	Present a united front that Broadband Internet is future-proof when it comes to home Internet.
Threat	Leaving an open opportunity for others to claim "The Next Big Tech Advancement" much like Telcos did with 5G.

Broadband & The Competition

Competitive Callouts

	Competitor Call-Out	Website	Ads	Call Center	5G
Sparklight					✓
Xtream					✓
xfinity	✓				✓
cox.					✓
optimum.	✓		✓		✓
Spectrum					
ARMSTRONG					
MCTV					
GCI	✓	✓		✓	


Sparklight
Don't settle for a phone signal.
SPARKLIGHT INTERNET IS WIRED FOR RELIABILTITY.
Don't let phony fiber stall your connection.
SWITCH TO THE FIBER-FUELED NETWORK YOU CAN TRUST.
Fact for fact, Xfinity beats T-Mobile Home Internet
Verizon 5G Home Internet is affected by trees
Thinking about Verizon 5G Home Internet? Think again.
Newer doesn't always mean better.
GET FAST INTERNET TRUSTED FOR DECADES.
T-MOBILE HOME INTERNET ISN'T WORTH IT.
5G Home Internet slows down at peak hours.
Issues at home?
Get 2x faster speeds than AT&T
Speed matters. GCI's improved mobile experience is 2x faster than AT&T in Anchorage[1].
Xfinity Internet is up to 7x faster
Xfinity Internet is up to 7x faster
than Verizon 5G Home Internet.
That's a lotta times faster.
xfinity



The REAL power behind the growth of 5G is that everyone in the space speaks about it in a similar fashion.

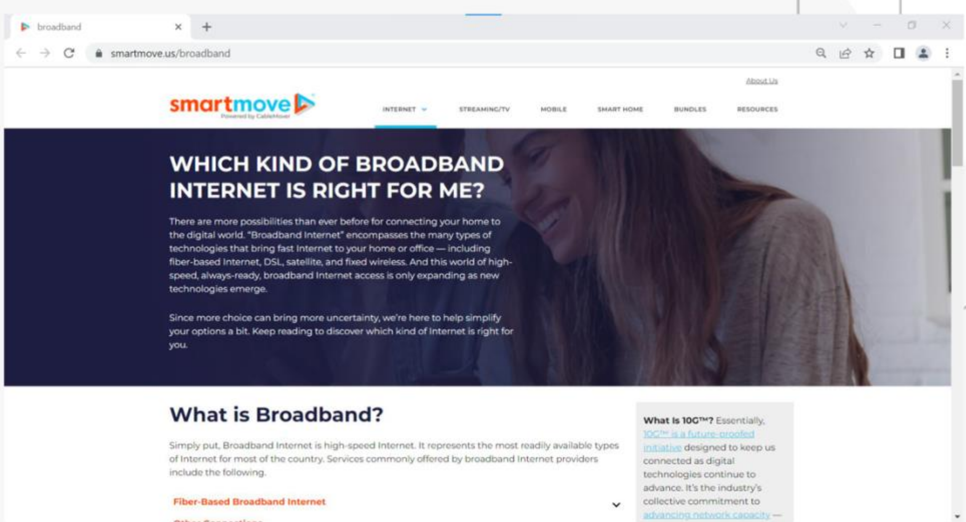
This creates a collective approach in terms of consumer reach nationwide, as well as builds frequency and momentum because consumers are hearing about it constantly from multiple trusted providers.

Our collective voice can be just as powerful when it comes to Broadband/Fiber/10G.

Competitive S.W.O.T.

Strength	We speak factually versus directly engaging the competition.
Weakness	Our voices are not united, and therefore are not as amplified.
Opportunity	Ultimately, we can diffuse the power of 5G, and preemptively get ahead of the narrative on fiber by creating a universal brand that is future-proof.
Threat	Telco Fiber has the spend power, and the story of Fiber to the House, to create a 'new' brand of broadband much like 5G.

CTAM Broadband Webpage



CTAM Website S.W.O.T.

Strength Transparent, clear and factual messaging.

Weakness More educational, rather than spurring enlightenment and inspiration.

Opportunity Double-down on "reliability" messaging, and ultimately become a more united front.

Threat Inactivity – not propelling our technology to the forefront and getting overpowered by Telco and 5G companies.

Every Brand needs a Story…Let's All Tell the Same One

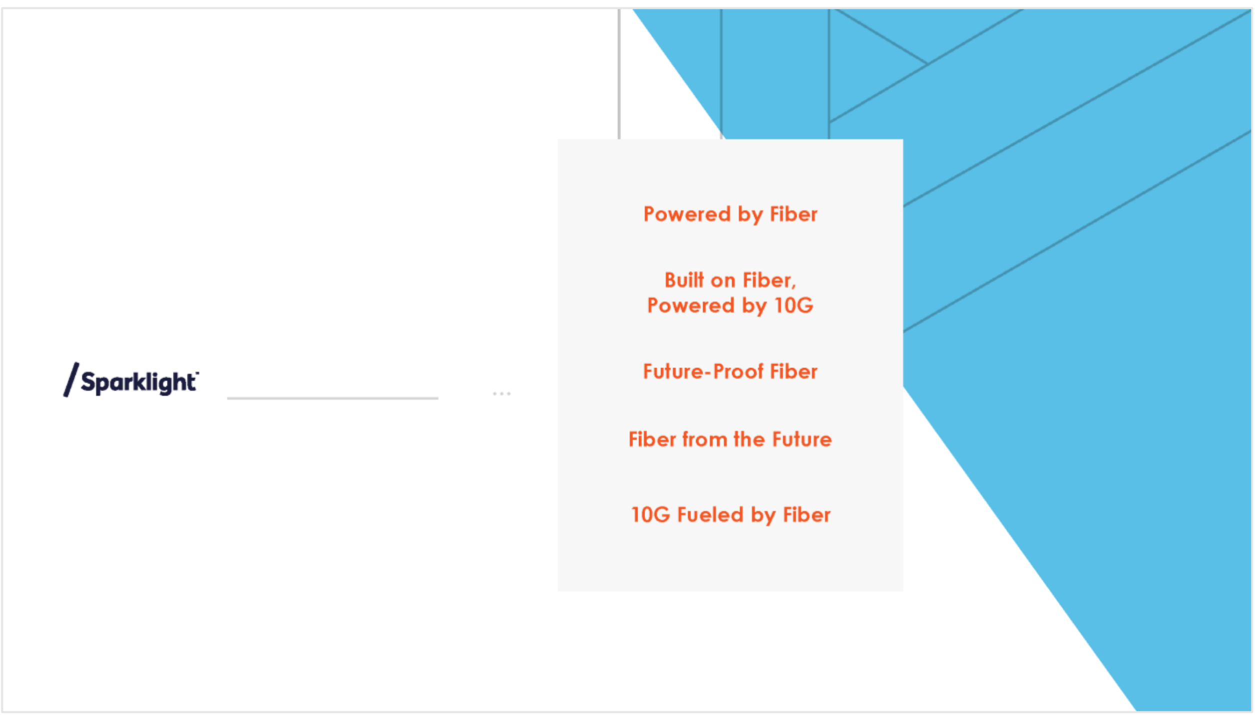
Opportunity

Communicate universally that we are backed by the same future proof tech that brings the ultimate in reliability and speed.

Solution

We take a page from one of the strongest brand building campaigns in advertising history – Intel Inside.

Provoking Our Positioning
Discussion



Sparklight
Powered by Fiber
Built on Fiber,
Powered by 10G
Future-Proof Fiber
Fiber from the Future
10G Fueled by Fiber


THANK YOU


Next Steps.
Move forward to confirm the brand statement and launch development
Develop key-stone messaging that redounds to corporate positioning
Outline a set of potential advertising, digital communications and PR approaches and CTAM deliverables

Call Notes: September 29, 2023
Subject: CTAM Broadband Positioning Working Group Call

Welcome/Roll Call

Call Attendees:

Cable One – Karen Cline, Cynthia Kuntz
Cox – Rachel Negretti
Mediacom – Alyssa Hurley
IEN – Anne Cowan
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Summary of August 23 Kickoff Call

During the August call, CTAM shared collective statements regarding networks and broadband products that were derived from individual meetings with MSOs. There is an overlap in messaging among MSOs with "reliability" as a main positioning keyword with "speed" and "value "coming in second. CTAM shared that it was found that, as an industry, there is a wide range of speaking points about broadband with creates confusion for consumers. An example was shared notating 5G messaging --when voices were united with 5G messaging, it amplified the messaging. So, just as with 5G messaging, CTAM feels that universal communication about MSO products can also be done to change consumer perspective.

Group Discussion:

CTAM posed the following questions the group:

What are your thoughts on what we found?
What are your thoughts on the "thought starter" Broadband Positioning concept?

Mediacom

Mediacom believes all MSOs need to be speaking similar language regarding Broadband. Mediacom notes that regarding 10G, they position it different vs Xfinity. Etc.

Cox

Cox agrees with Mediacom and believes the hardest part will be finding the right shared word to use for messaging. Fiber is no longer impactive so a new word must be found. Cox also notes that consumer friendly messaging needs to be created to assist in marketing the power of the network.

Cable One

Cable One notes they have a mixture of technology they use which presents a challenge as well.

Question from group

1. *For MSOs that have mixed technology markets, legally, how are those markets using messaging?*

Mediacom notes their offers are very market specific. For example, if it's a fiber to the home market, they state "fiber to the home", if it's a 10G platform then they state "10G platform". If HFC, they will state Fiber Rich.

Cox notes their message is "powered by fiber".

CTAM notes that Cable Labs has gone to court in Canada, Spain and Australia testifying that the HFC is 99.6% fiber and have won all three cases thus solidifying the use of the word fiber for cable providers.

Proposal Presented

CTAM presented the attached Proposal to accelerate delivery of Unified Broadband Messaging. Highlights include:

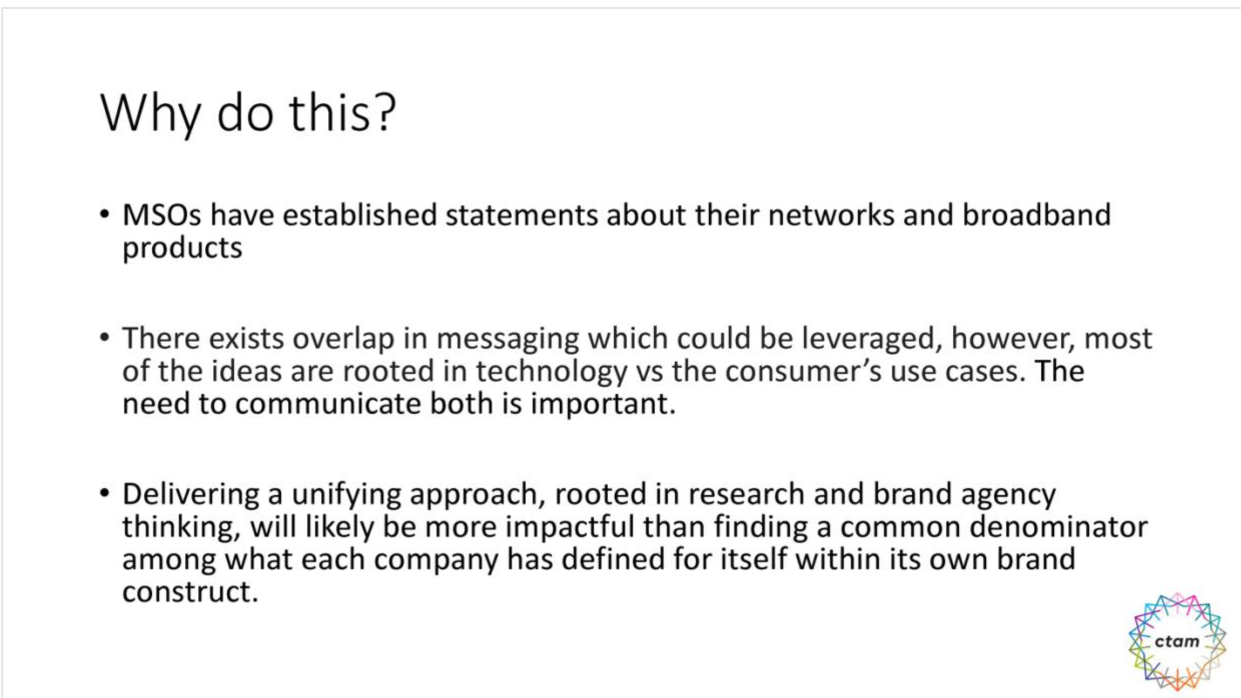
- Delivering a unifying approach, rooted in research and brand agency thinking, will likely be more impactful than finding a common denominator among what each company has defined itself within its own brand.
- CTAM proposes a 4-step approach including:
    - Phase 1: Data Collection (3 weeks) with a cost of $0 - $10,000
    - Phase 2: Ideation (6-10 weeks) with accost of $50,00 - $150,000
    - Phase 3: Testing (4-6 weeks) with a cost of $10,000 - $50,000
    - Phase 4: Campaign development (3 weeks)
- CTAM is funded to complete this work this year using proceeds from LeadShare Corp.
- In summary, the effort will take 16-22 weeks with a cost between $60,000 - $120,000 and can be fully funded by CTAM. CTAM will drive the day-to-day activities with the working group providing guidance as the project proceeds.

Cox notes that they went through a proposal process last year and suggests Lippincott as an agency to work with. Lippincott delivered Cox a compelling concept of using the word "Hybrid" i.e., Hybrid Network to market to consumers. Although Cox did not use the concept, they feel it may be a good fit for the Broadband positioning effort. Cox will speak with their leadership team for approval to share more details.

Actions/Next Steps

The group is in favor of CTAM's proposal. CTAM will contact MSOs not on today's call to obtain their thoughts and will then create a project plan to move forward.

Presentation: *Broadband Positioning Proposal*



Basic Flow of the Steps

Phase 1: Data Collection

- Sentiment Analysis (refreshing the one done in 2022)
- Scan of MSO researchers for sharable studies on broadband, fiber, 10G
- Consolidate existing CTAM perception studies on Broadband vs. Fiber and 5G Home

Phase 2: Ideation

- Engage a brand agency to develop 3-4 test concepts with supporting proof points
- Engage with key Brand and Communications MSO partners as we go

Phase 3: Testing

- Message test the concepts and supporting proof points with consumers and determine those with the greatest promise to persuade, inspire and motivate

Phase 4: Campaign Development

- Develop the winning concept into a campaign that includes both advertising/media components and strategic communications / PR components

	Data Collection	Ideation	Testing	Campaign Development
Duration	**3 weeks**	**6-10 weeks**	**4-6 weeks**	**3 weeks**
Level of Staff Effort	**Medium**	**High**	**Medium**	**High**
Cost Ranges	**$0-10,000? for Sentiment Analysis**	**$50,000-$150,000 for Agency fees**	**$10,000-$50,000 for message testing**	**$0 (excludes actual media spending)**
Risks & Road Blocks	**We don't get anything from the MSO**	**Agency RFP takes longer than expected; work moves slowly; we take too long getting consensus with MSOs**	**Consumers hate all our ideas; consumers love several ideas equally**	**The cost of media to execute the winning idea outside of the scope of CTAM's 2024 IP budget**

Summing it Up

- Effort will take 16 - 22 weeks
  - We can accelerate this to the earlier end of the range

- Cost estimate ranges from $60,000 to $210,000, which CTAM can **fully fund** using proceed from our LeadShare Corp.
  - We need your brains, not your money! ☺

- CTAM can drive the day-to-day with this body guiding us as we go
  - Get as involved as you wish / are able given your schedule
  - Periodic check-ins with the entire group as we go

Call Notes: October 13, 2023
Subject: CTAM Broadband Positioning Working Group Call

Welcome/Roll Call

Call Attendees:

Armstrong – Craig Marzullo
Cable One – Karen Cline
Comcast – James Halsey-Watson, Jamie Thomas
IEN – Anne Cowan
CTAM – Mark Snow, Jes Johnson + Renee Harris

Recap of where we are – group and individual calls

CTAM started this effort by meeting with MSOs one-on-one to get a sense of where companies stood with their own product and network branding efforts. From these calls, CTAM developed a graph showing where various companies stood relative to the others: statements regarding networks and broadband products, proof points, etc. There is some overlap in messaging among MSOs with "reliability" as a main positioning keyword with "speed" and "value "coming in second. CTAM shared that it was found that, as an industry, there is a wide range of speaking points about broadband and not much existing common ground.

CTAM notes three MSOs are all-in with 10G (Comcast, Mediacom and Armstrong). While Cox and others are using Fiber in their network messaging. And some other MSOs are still working through this messaging.

In addition to the branding presentation on this call, Comcast has put CTAM in contact with their research team to get sharable insights around how they arrived at 10G and the 5 supporting pillars (capacity, security, coverage, reliability and streaming) and how consumer perception has evolved since February's launch.

Comcast presentation on their network brand strategy for 10G

James Halsey-Watson, Brand Strategy, Comcast, presented an overview of Comcast's network brand strategy for 10G.

Highlights include:

- The Xfinity 10G Network
  - The purpose: To connect customers more of what they love
  - The Objective: To deliver the world's best connectivity and entertainment experience

- Comcast felt it was important to get ownership and association with the term 10G as it is a term that many consumers do not know now and may confuse with 5G but in the future it will be "table stakes" for connectivity and the Internet
- What is the Xfinity 10G Network?
    - A game changing connection
    - The network built for everything, everywhere
    - A leap forward into tomorrow, so you can be ready
- To Comcast, the Xfinity 10G Network is their total network, not just cables in the ground – it includes Wi-Fi Hotspots, Mobile, etc.
- While Comcast has a lot of fiber in their network, they opted to not go with the "Fiber" network as branding as they wanted to debunk the notation that fiber is better rather than reinforce it
- The Xfinity 10G Network was made for streaming, giving the best quality viewing experience
- Xfinity is undergoing a multi-year network evolution. To signal what they have built and will continue to build, they have rebranded their network to Xfinity 10G Network
- The Xfinity 10G Network was launched in February 2023. Comcast will continue to make entertainment and speed innovations within their network now through 2024
- Xfinity has built a revolutionary new network, designed to transform the way consumers work and play – everywhere they go. Only the Xfinity 10G network provides:
    - Ultra-fast speed
    - Incredible reliability
    - Fastest in & out of home
    - Seamless streaming
- The next generation 10G Network. Only from Xfinity. The future starts now.

<u>Questions from the group</u>

1. *How do you pace your promises about the current and near future innovations versus where the tech actually is in different markets?*
    - Comcast always calls it their Xfinity 10G Network, they do not call it 10 Gigs. While they do provide 10 Gigs it involves a big build-out and is more expensive. They make sure to point out the 10G Network is not just about speed, it's also about reliability, resilience, security, and AI tech forward. With FDX (Full Duplex DOCSIS 4.0), there are a lot of one-to-one communications and plans for localized celebrations as it launches.

2. *Since its launch has Comcast been able to measure change of perception of consumers toward Xfinity and/or what 10G means?*
    - The understanding of 10G and the Xfinity 10G Network has gone up. There were a lot of challenges in social conversations in the beginning, but they have noticed the conversation has changed slightly to the positive as consumers get a better understanding of what it is and that the technology behind it is real. As Comcast stays the course and focuses on their long-term vision, they are confident they will turn around some metrics that were traditionally less strong like trust and value. They want to become a brand people are proud to be associated with.

Next Steps

CTAM will share Comcast and Cox decks on branding and related research once available.

Presentation: *Xfinity 10G Brand Story*

Due to the large file size of this presentation, please contact CTAM to request an electronic copy.

Call Notes: October 27, 2023
Subject: CTAM Broadband Positioning Working Group Call

Welcome/Roll Call

Call Attendees:

Armstrong – Craig Marzullo
Cable One – Dustin Chryst
Cox – Rachel Negretti
Mediacom – Alyssa Hurley
IEN – Anne Cowan
CTAM – Mark Snow, Vicki Lins, Sloane Stegen, Jes Johnson + Renee Harris

Update on Project Status

While there is some common ground amongst MSOs in positioning broadband, CTAM has determined it may not be a single word or common brand to be created which was the original project envisioned for this group. Several MSOs have already invested in a name or brand to position their broadband so it would not be advantageous to have this group override work that has already been done.

CTAM notes that while there may not be a single word or common brand to formulate, there are many layers beneath a brand or tagline where there are commonalities and proof points that CTAM can assist MSOs with coalescing.

CTAM asks MSOs to think about what CTAM can do to help to build a message framework as a path forward.

CTAM also noted that the digital team at CTAM is continuing to drive de-positioning of 5G Home Internet – this campaign is growing and making traction based upon engagement.

Comments from the group

Cox

Cox believes the best approach for CTAM is to help MSOs define the underlying technology and network in a way that it can begin to build equity among consumers. CTAM can brand the technology then MSOs can use that brand to supplement their messaging. Taking DOCSIS for example, CTAM can create another name or such that can be used to describe what MSOs offer.

Mediacom

Mediacom agrees with Cox – that it's about how to speak about the technology in the home – creating a brand or tagline that defines the technology, so it resonates with consumer

CTAM

CTAM notes the question is how to make a brand that doesn't stay grounded in "the wires" but is more about customer experience.

- Cox notes that what is to be branded is network capability – a starting point for what comes next in forward technology. CTAM should "invent" tomorrow and not be invested in what is grounded in today. CTAM should think about what the next generation technology is that MSOs can collectively build equity in. CTAM needs to start a new conversation.

Next Steps + Path Forward

CTAM is conducting consumer research utilizing social listening to better understand current broadband drivers. Insights from this research will be utilized in assisting the creation of a strategic messaging framework. We expect the first round of information to be available early Q1 2024.

Broadband Positioning Group meetings will resume in January 2024. CTAM will poll the group for a call date.

Please contact CTAM with any questions or suggestions.

2 **Mobile Awareness**

Call Notes: January 23, 2023
Subject: CTAM Mobile Awareness Team Call

Welcome/Roll Call

Call Attendees:

Armstrong – Peter Grewar
Charter – David Gray
Comcast – Morgan Daloisio
Cox – Catherine Borda de Castro
GCI – Stephanie Lovett
Mediacom – Alyssa Hurley
Mediacom – Dianne Schanne
Rogers – Mustafa Zileli
CTAM – Mark Snow, Nakesa Kouhestani, Sloane Stegen, Rick Cabigas + Renee Harris

Review Progress of Mobile Awareness Campaign

In 2022, this group was originally formed as the Convergence Working Group which focused on the journey from the bundle to an integrated UX experience – a converged end point. However, the group pivoted to Mobile Awareness in mid-2022. CTAM had completed research which showed that movers were twice as likely as non-movers to switch their mobile service, so the group decided to focus on mobile awareness for the remainder of the year. CTAM created a series of digital display ads and at the end of 2022 CTV was added. Today's presentation will provide an overview of the performance of these campaigns to date.

Nakesa Kouhestani, Digital Media Manager, CTAM, presented the attached "Mobile Convergence Performance" deck.

A link to view the recorded presentation can be found here: CTAM Mobile Awareness Team Kickoff Call-20230123_140212-Meeting Recording.mp4

Highlights include:

- CTAM's task is to aid in awareness building among movers.
- Campaign Phase 1 (Aug 25 – Dec 31) – Targeted consumers who visited the SmartMove site in the past 30 days on Meta with an upper-funnel engagement campaign goal.
- Campaign Phase 2 (November 18 – Present) – Targeted lifestyle audiences across Connected TV (CTV) platforms and YouTube pre-roll.
- To view the CTV/YouTube Spot please click here: https://www.youtube.com/watch?v=JUOBaIB5RxQ
- Results:
    - 12.2M video impressions
    - 7.8M Meta impressions
    - 7.6M unique reached on YouTube & CTV

- 250K unique users on Meta
- **Totals = 20M Impressions and 7.85M uniques reached thus far**

Group Discussion

Can CTAM send the original research noted at the beginning of the call?

- Yes, the relevant pages from the Q3-2021 move research study is attached.

GCI

GCI likes the creative – it's simple and direct and is educating consumers about the combo offer of mobile and broadband.

Comcast

Comcast will share the information provided today with their media lead for their mobile product to get their perspective and determine if it warrants a conversation around their mobile media strategy and where they are showing up vs where CTAM is showing in the digital space to ensure that it is complementary.

Next Steps

CTAM suggests the following next steps:

CTAM notes that as we continue to work on this campaign, CTAM can utilize YouTube to create a digital survey on awareness using a control group.

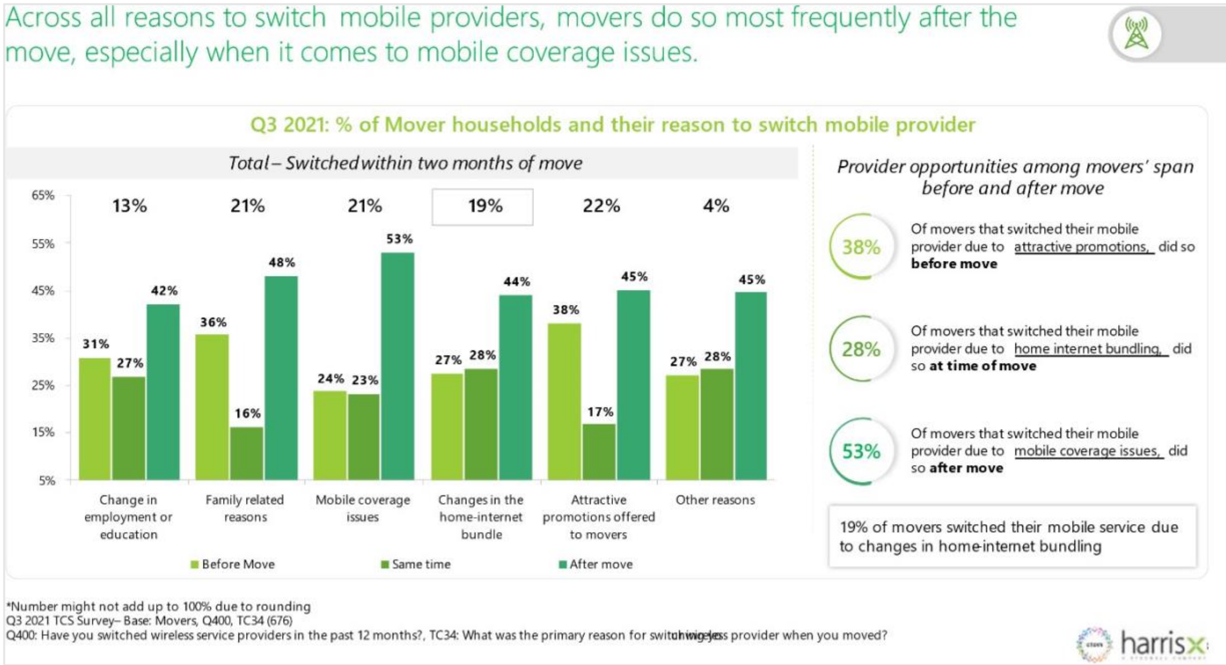
Q1 2023

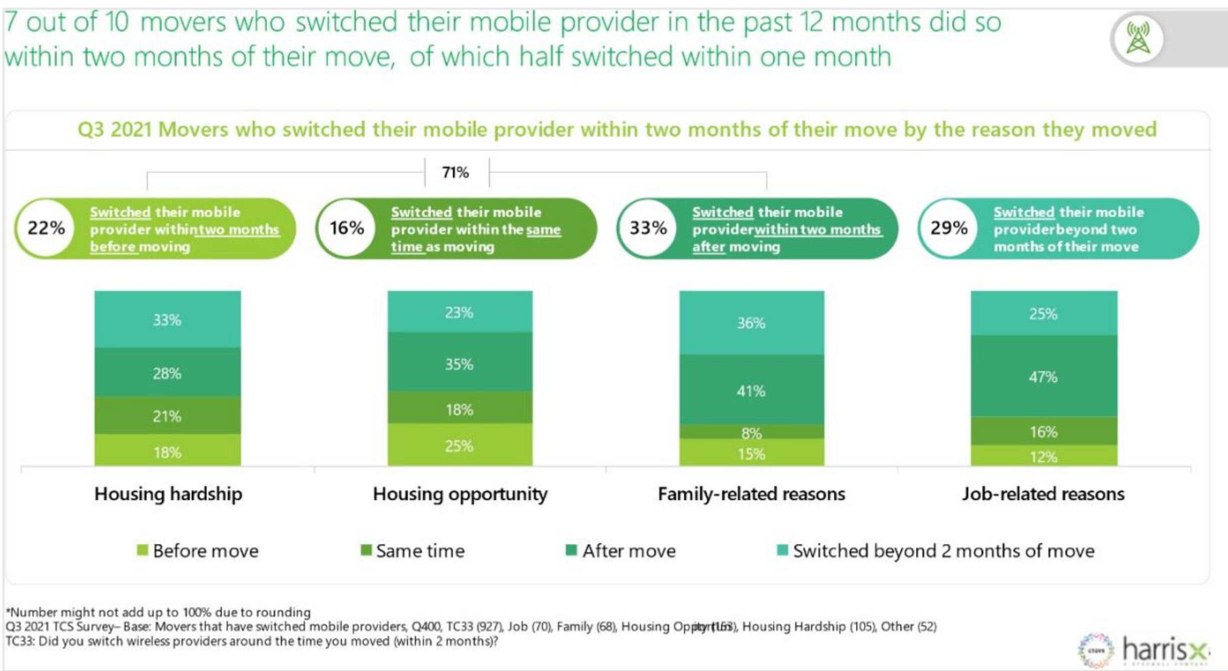
- Continue video campaign through end of Q1 with a focus on lifestyle changes.
- Content specific media buy, as opposed to Programmatic (ex: work directly w Hulu)

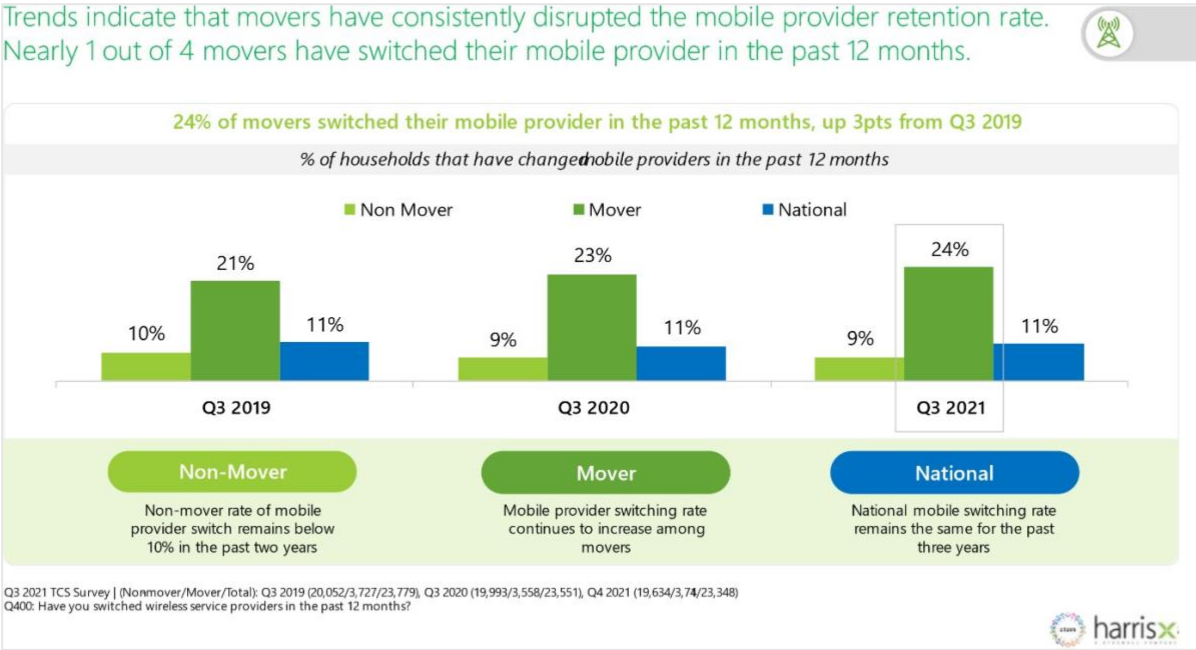
Q2/Q3 2023

- Introduce messaging around convergence?

If MSOs have any thoughts or suggestions, please contact CTAM.


Across all reasons to switch mobile providers, movers do so most frequently after the move, especially when it comes to mobile coverage issues.
Q3 2021: % of Mover households and their reason to switch mobile provider
Total – Switched within two months of move
65%
55%
45%
35%
25%
15%
5%
13%
21%
21%
19%
22%
4%
31%
27%
42%
36%
16%
48%
24%
23%
53%
27%
28%
44%
38%
17%
45%
27%
28%
45%
Change in employment or education
Family related reasons
Mobile coverage issues
Changes in the home-internet bundle
Attractive promotions offered to movers
Other reasons
Before Move
Same time
After move
Provider opportunities among movers' span before and after move
38%
Of movers that switched their mobile provider due to attractive promotions, did so before move
28%
Of movers that switched their mobile provider due to home internet bundling, did so at time of move
53%
Of movers that switched their mobile provider due to mobile coverage issues, did so after move
19% of movers switched their mobile service due to changes in home-internet bundling
*Number might not add up to 100% due to rounding
Q3 2021 TCS Survey– Base: Movers, Q400, TC34 (676)
Q400: Have you switched wireless service providers in the past 12 months?, TC34: What was the primary reason for switching wireless provider when you moved?
harrisx


7 out of 10 movers who switched their mobile provider in the past 12 months did so within two months of their move, of which half switched within one month
Q3 2021 Movers who switched their mobile provider within two months of their move by the reason they moved
71%
22%
Switched their mobile provider within two months before moving
16%
Switched their mobile provider within the same time as moving
33%
Switched their mobile provider within two months after moving
29%
Switched their mobile provider beyond two months of their move
33%
28%
21%
18%
23%
35%
18%
25%
36%
41%
8%
15%
25%
47%
16%
12%
Housing hardship
Housing opportunity
Family-related reasons
Job-related reasons
Before move
Same time
After move
Switched beyond 2 months of move
*Number might not add up to 100% due to rounding
Q3 2021 TCS Survey– Base: Movers that have switched mobile providers, Q400, TC33 (927), Job (70), Family (68), Housing Opportunity (153), Housing Hardship (105), Other (52)
TC33: Did you switch wireless providers around the time you moved (within 2 months)?
harrisx



Trends indicate that movers have consistently disrupted the mobile provider retention rate.
Nearly 1 out of 4 movers have switched their mobile provider in the past 12 months.
24% of movers switched their mobile provider in the past 12 months, up 3pts from Q3 2019
% of households that have changed mobile providers in the past 12 months
Non Mover
Mover
National
10%
21%
11%
Q3 2019
9%
23%
11%
Q3 2020
9%
24%
11%
Q3 2021
Non-Mover
Non-mover rate of mobile provider switch remains below 10% in the past two years
Mover
Mobile provider switching rate continues to increase among movers
National
National mobile switching rate remains the same for the past three years
Q3 2021 TCS Survey | (Nonmover/Mover/Total): Q3 2019 (20,052/3,727/23,779), Q3 2020 (19,993/3,558/23,551), Q4 2021 (19,634/3,74/23,348)
Q400: Have you switched wireless service providers in the past 12 months?
harrisx

Presentation: *Mobile Convergence Performance*

Mobile Awareness Campaign Performance

January 2023

smartmove

Campaign Overview

Background

Several MSOs have or have recently launched mobile services (either as an MVNO or with their own network) to offer a very competitively priced mobile product for consumers. Most require customers also take the broadband product. This is a much better value for consumers than traditional telco mobile and mobile/broadband service bundles, but many consumers are not aware of this offering. The technology aspect can be confusing to consumers and MSOs are somewhat limited in what they can say about the network as an MVNO. CTAM's task is to aid in awareness building among movers, who are twice as likely to be mobile switchers vs. non-movers.

Goals

- Inform the SmartMove mover audience that they can purchase mobile services through their cable provider
- Raise awareness around the mobile + broadband converged bundle and this expanded concept of connectivity

Campaign Overview

Campaign Approach – Phase 1 (Aug 25 – Dec 31)

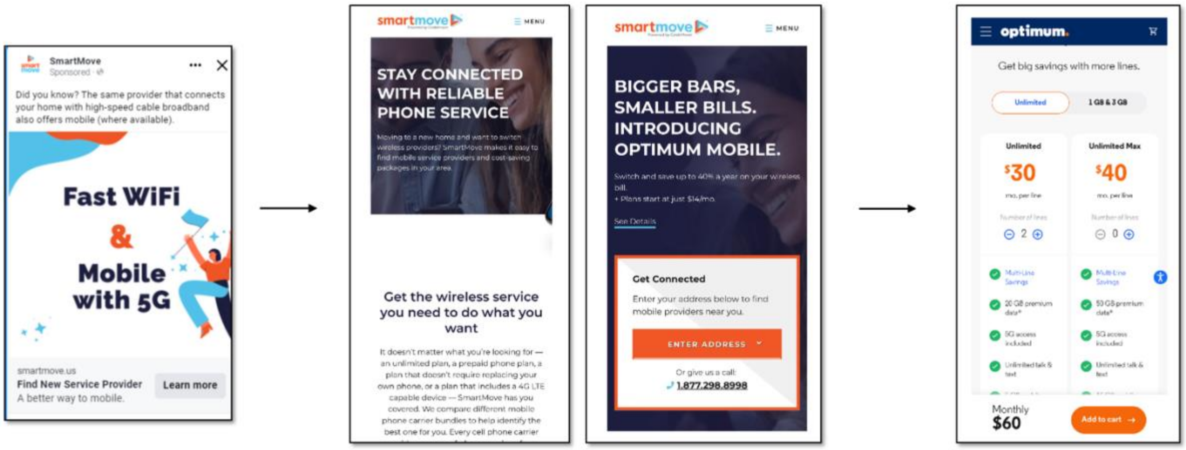
We targeted consumers who visited the SmartMove site in the past 30 days (about 130K) on Meta (FB/Instagram) with an upper-funnel, engagement campaign goal. Unlike our traditional SmartMove campaigns, which optimize toward lead conversions, this campaign optimized on landing page views and video views. Creatively, we used a mix of static and animated placements as we found that a combination of the two sets us up best for performance.

Campaign Approach – Phase 2 (Nov 18 – Present)

During our second phase, we targeted lifestyle audiences across Connected TV (CTV) platforms and YouTube pre-roll. Similar to Phase 1, this campaign was optimized on reach and frequency goals to build awareness. Creatively, we used a 30 and 15-sec video spot across both platforms.

Phase 1

Experience

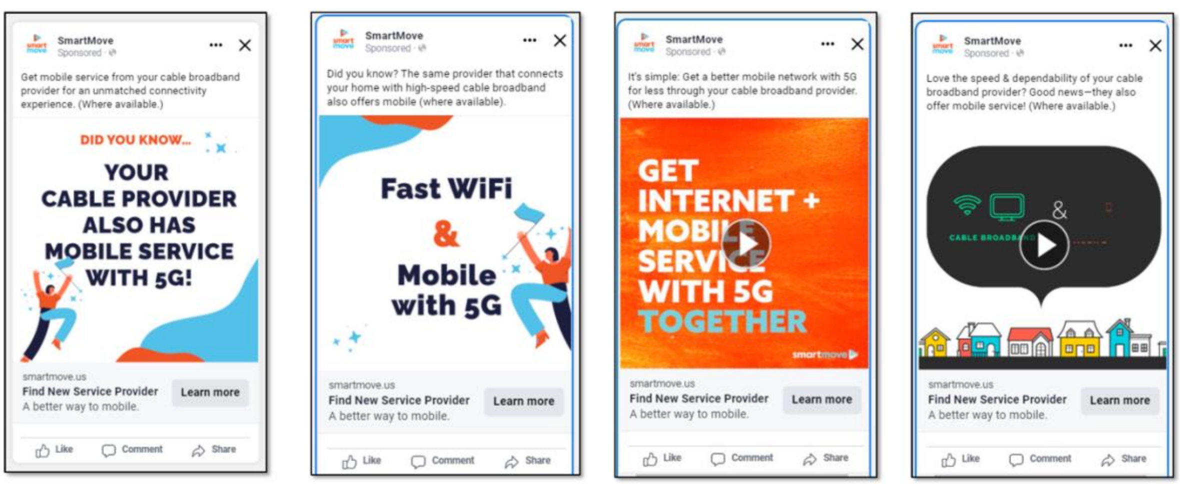


Meta Ad

SmartMove Mobile landing page

MSO Mobile Buyflow

Meta Ad Examples



Meta Performance

This campaign drove 7.8M impressions across 250K users on Meta

Our landing page optimized placements drove 35K landing page views at a $3.16 cost per visit. And, our video optimized placement drove 736K views at a $0.05 cost per view.

Meta audiences skew older, with a majority of users aged 55+

The creative and messaging to the right resonated most with audiences driving the most landing page visits and video views

Static Ad 1 (Landing Page optimized)

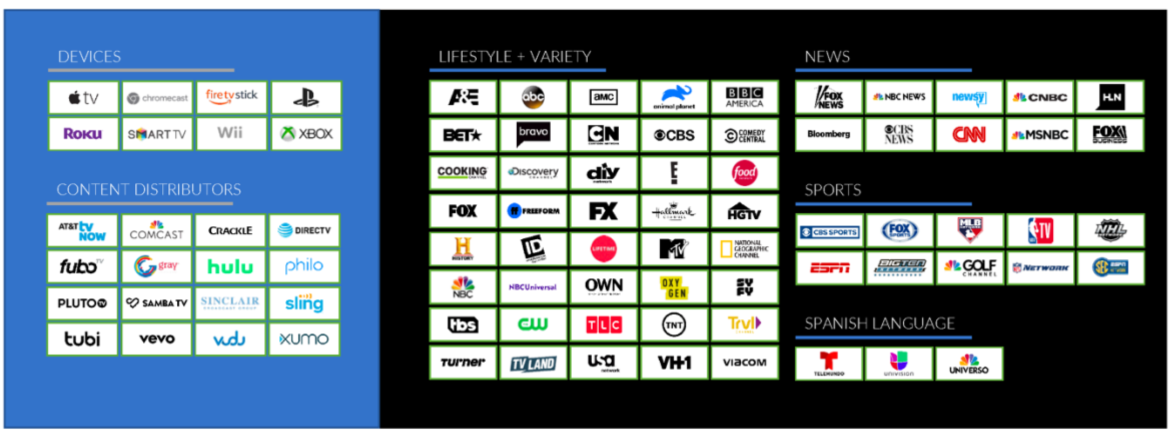
Video Ad 1 (Video View optimized)

Data from Aug 25 – Dec 31

Phase 2

CTV/YouTube Spot

Connected TV – What Is It?



Connected TV (CTV) Performance

So far, this spot has driven 4.3M impressions across 2.4M unique households at a 1.8 frequency per household and a $30.39 CPM

Of the two spots (30-sec and 15-sec), both had strong completion rates of 97.2% and 98.2% respectively

In terms of devices, we saw the most impressions across Samsung (1.5M imp), LG (1.03M imp) and Roku (867K imp) devices

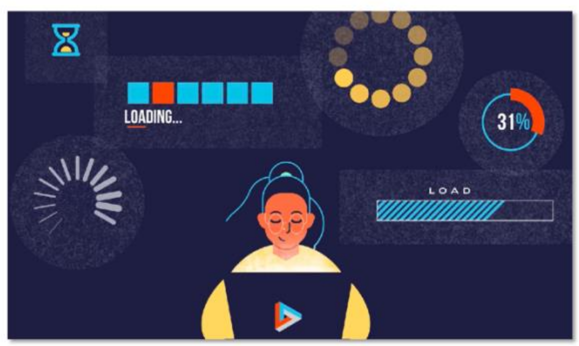
Data from Nov 18 – Jan 16

YouTube (Pre-Roll) Performance

So far, this spot has driven 7.9M impressions across 5.2M unique users at a 1.9 frequency per household.

While only running the 30-sec spot on YouTube, we saw a $0.01 cost-per-view (CPV), below our $0.03 goal.

This audience skewed younger than Meta, with most impressions from users aged 21–49.



Data from Nov 18 – Jan 16

Results

Impressions	12.2M Video Impressions 7.8M Meta Impressions
Reach	7.6M unique reached on YouTube & CTV 250K unique users on Meta
Total	20M impressions 7.85M reached

Questions?

Next Steps

Q1 2023

Continue video campaign through end of Q1

Content specific media buy, as opposed to Programmatic (ex: work directly with Hulu)

Q2/Q3 2023

Introduce messaging around convergence?

15

smartmove

Call Notes: March 20, 2023
Subject: CTAM Mobile Awareness Team Call

Welcome / Roll Call

Call Attendees:

Charter – 203 office number
Comcast – Morgan Daloisio
Mediacom – Dianne Schanne
Rogers – Mustafa Zileli
CTAM – Mark Snow, Sloane Stegen, Rick Cabigas + Renee Harris

Review of Mobile Awareness Campaign to Date

In 2022, this group was originally formed as the Convergence Working Group which focused on the journey from a simple price discount bundle to billing integration to service plus ups to finally an integrated UX experience. Once this landscape was defined at the end of 2021, the group pivoted to Mobile Awareness in 2022. CTAM had completed research which showed that movers were twice as likely as non-movers to switch their mobile service, so the group decided to focus on mobile awareness for the remainder of the year. CTAM created a series of digital display ads with CTV video ads added toward the end of 2022. Today's presentation provides an update on the performance of these campaigns to date.

Sloane Stegen presented the attached Mobile Awareness Campaign results:

Highlights include:

- The original estimate/goal for impressions was 14M, however the campaign delivered 23.6M impressions with:
    - 15.8M video impressions; and
    - 7.M Meta (FB/Insta) impressions
- There has been a reach of 10.4M unique users on YouTube & CTV and 250k unique users on Meta.
- As a reminder, this campaign is funded fully from LeadShare and requires no direct MSO funding.
- CTAM asked the group if they would like to keep the Mobile Awareness campaign going.
    - There was no objection from the group. However, Comcast asked if there were any other existing tactics where this money can be used to drive leads?
        - CTAM will gather options, such as de-positioning 5G Home internet, and share with the group. This action is complete – please see below:

As a response to our discussion around CTAM investigating additional ideas to help enhance lead generation, we took two actions: First we looked at what has been performing well over the last 6 weeks; and second, we looked for areas where we could get traction that we are not currently funding.

Our most consistent, low-cost lead producers are as follows:

- Facebook Mover Terms: $5.08 CPL
- SmartMove Branded SEM: $6.92 CPL (Bing/Yahoo)

We would propose bumping up these high-performing tactics with increases in funding.

For areas with relatively low current advertising investment, we believe that we could gain traction currently by leveraging **the increase in rental activity** which has shown up in data from our own studies as well as those from the broader industry, and news stories.

- Utilize Facebook signaled "SFH Renter" Targeting to complement our current "Mover Targeting"
- Add a new partner: Zumper (Zumper.com) who has a large presence in the SFH renter space, utilizing placements similar to Zillow and Renters but focused against the SFH mover.

Discuss Go to Market Approach for Non-sub + Upgrades

The group had previously expressed an interest in discussing go to market approaches for non-subs and upgrades. CTAM asked if any MSOs on the call have any approaches to share.

Comcast

Comcast has spent last three years creating various converged propositions and have found success in two ways:

1. In thinking of the formula for driving prospect demands in general, Comcast has been in market positioning a broadband price inclusive of the converged discount a – during sale windows they may attached additional offers such as a VISA gift card.
2. Then in looking at what has been successful in driving mobile attached on a new broadband customer, some of their XM offers are successful so what works at driving XM to their base generally works with new customers as well. BYOP offers as well as free phone offers have worked well. In addition, Comcast is now on one common platform for sales – so customers can now go through their buy flow to purchase Internet and Mobile together in the same purchase. They have seen an uptick in new customer attach due to this change. Comcast also has their converged discount available to customers for the first 90 days. Which gives the customer time to decide as well as allowing Comcast to continue to market.

Rogers

Apart from mass campaigns which eventually drive traffic or conversion or both – Rogers does a lot of targeted campaigns to smaller audiences using A/B testing to see what works. Two approaches are:

- Being very proactive and leverage proactive channels; and
- Offering an added bonus for customers who already want to upgrade their device.

Mobile Convergence Research

CTAM asked the group if anyone has done any mobile convergence research and noted that, if not, CTAM's vendor, HarrisX, could possibly complete research in this area.

- In thinking about Fiber competitive customer and what convergence means to them, Comcast asked what is the ability to recruit certain populations?
    - CTAM can oversample for segments. CTAM will share ideas of what can be done in the coming days.
- Comcast also asked if CTAM can share all research with the Co-op Board.
    - Yes, CTAM is working on creating an Executive version of the research findings as well as the original research report to share with board members.

Next Steps/Cadence

CTAM asked the group their preference for regularly scheduled calls or ad hoc calls as needed.

- The group agreed to calls scheduled as needed with specific topics or perhaps just quarterly calls if no specific topics are slated. The group agreed to have a call in June 2023 prior to the July 11 Co-op Board meeting.

Call Notes: August 21, 2023
Subject: CTAM Mobile Awareness Team Call

Welcome/Roll Call

Call Attendees:

Altice – Loan Tran
Altice – Nicole Averill
Cox – Caroline Counter
GCI – Stephanie Lovett
Mediacom – Dianne Schanne
CTAM – Mark Snow + Renee Harris

Non-Sub vs Upgrade Approach

Following up from the last call in March 2023, the group discussed the non-sub vs upgrade approach.

GCI

GCI Plus was launched a year and half ago. Up until Q4 2022 GCI was still seeing high Internet growth but in 2023, they have seen a 15-20% decline in connects. Some of this decline has been due to their competitor, a Telco offering legacy DSL but now upgrading neighborhoods to fiber; and to Starlink, who has been acquiring many rural customers. GCI has been leveraging their Internet subscribers to grow their Mobile base. This year Mobile has increased, and Internet has slowed down (a reverse from a year ago and now in sync with what lower 48 MSOs are seeing). 10% of their subs are on Mobile only. So, now GCI is working to upgrade their Mobile only into broadband. For non-customers, GCI has just kicked off an aggressive Internet only marketing tactic. They have seen a lot of success in selling both BB and Mobile together. They have changed their plans to make them more enticing – so now it's not just top plans that get all the benefits, their plus plan is the second level up from the entry plan. GCI notes that price sensitively is very high right now.

GCI notes that in some areas where their footprint is not there yet but know likely will be in the future, they are offering their top Mobile plan with a MiFi device in hopes to secure those consumers as Internet customers in the future by being "first in home".

Mediacom

Mediacom has no plans to follow their fixed wireless footprint with Fiber. They use Fixed Wireless to extend their current footprint, especially in rural areas. Mediacom discovered the configuration of farms is often not conducive to fixed wireless due to folks placing large tress around houses for privacy and shade.

Altice

Altice has not aggressively marketed to their prospects but are looking into that now. Their strategy thus far has been to market to their base and hoping to convert them. They have not seen the success they had hoped for as they are seeing a slower adoption rate from their existing base.

Their Mobile service is Optimum Mobile, but their umbrella is the Optimum brand. Altice has combined their service and launched Optimum Complete in May which provides their customers a deep discount when signing up for Mobile and Internet at the same time – this has proven successful for new customers.

Cox

Cox's strategy has been to penetrate the base and just recently has launched a converged offering to focus on acquisition. They have seen good connect activity over the last couple weeks and are hopeful in the coming weeks to see more positive results. In September, Cox will launch Family Plans and hope this will change performance as they will be able to compete with a multi-line discounts from the Telcos.

Questions from group for Cox:

1. *Does Cox also have a discount on the Internet portion of their service?*

   Customer is given discounts on Internet if they take Internet and Mobile but Mobile pricing is static.

2. *Regarding equipment, did Cox first launch with customers bringing their own devices or have they always offered devices for sale or Bring Your Own Device (BYOD)?*

   Cox started with customers having to buy their device to join Cox Mobile as Cox did not have the backend functionality at that time to connect customer owned devices. They also offered Samsung devices. BYOD was launched in April 2023 and has seen a step change in performance with BYOD. With the BYOD device launch, they now have partnered with Apple so have more device options for customers.

Next Steps

- CTAM will contact the Co-op Co-chairs to check the prioritization of Mobile Awareness, Broadband Positioning and 5G Home Internet de-positioning.
- The group agreed to schedule a 45 min call in October 2023.

Call Notes: October 2, 2023
Subject: CTAM Mobile Awareness Team Call

Welcome/Roll Call

Call Attendees:

Charter – David Gray
Mediacom – Dianne Schanne
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Review of completed English and Spanish Language Mobile Awareness campaign

CTAM completed a small-scale test from April 1 – July 31 of an English and Spanish Mobile awareness campaign on Meta which targeted Hispanic audiences in Denver and Fresno areas. These areas were chosen because they have similar Hispanic family dynamics in terms of children and households. Response rates were 2:1 in consumers who visited the site based on ads in Denver vs Fresno which points to a possible unforeseen product mismatch. Even so, the campaign delivered a good number of impressions and visits to the Smartmove.us website.

Overall Impressions:

- 6.8 million video impressions and 11 million Meta impressions
- In terms of reach, 7.2 million unique trough YouTube and CTV and 800,000 in Meta
- Total: 27.8 million impressions and 8M consumers reached.

CTAM notes the funds that were used for Mobile Awareness are now being used for 5G depositioning.

Return to Convergence

CTAM notes that the original purpose of this working group, which was formed in 2021, was to discuss Convergence. CTAM shared the attached foundational thinking of the group which is as follows in regards to Convergence:

Convergence is defined as a semi-aspirational concept that has three discrete stages:

- Financial – the price/value notion associated with traditional "1.0" bundling.

- Managerial – combining things like broadband, home automation, mobile, etc., can be made easier working with one provider.

- Experiential – the most powerful: a UX where the boundaries between traditional products blurs or vanishes in terms of features, common navigation/UX; done well and the notion of removing one part seems counterintuitive –it's a BRAND X experience, not a product A + product B experience.

Convergence has connectivity at the Center:

- Connectivity includes broadband, in-home Wi-Fi, IoT control tools, out-of-home Wi-Fi hotspots, as well as Mobile (broadband and voice)

- Things like TV and local phone and home security, etc., are all extensions and made possible/better by this core of connectivity.

- From the customer perspective, the aspirational endgame creates a contiguous UX experience such that the lines between products blurs or even disappears.

Questions as we go forward:

1. Is it time to return to this more strategic discussion?

2. What role does TV 2.0 plan in Convergence?

Group Discussion

Mediacom

Mediacom believes it is time to return to Convergence and notes that adding value for consumers is making packages how customers have always wanted – purchasing the packages they want rather than the 400 channels that are offered.

CTAM

CTAM notes that CTAM is currently evaluating RFPs for research which will ask customers what they want in a TV 2.0 world. The CTAM MSO Research Working Group is involved in reviewing proposals and this research will begin this year and will help drive the conversation of what consumers want. The research will most likely be fielded in the end of October/November.
CTAM suggest this group return to Convergence and include Internet, Mobile and Video as focal points.

Charter

Charter also agrees the group should return to a focus on Convergence and welcomes a discussion to include "TV 2.0" as part of a new triple play.

Next Steps/Actions

- CTAM will discuss with the Co-op Board combining the following CTAM working groups: Convergence, Broadband Positioning and Competition due to the overlapping purposes of these groups.
- The group agreed to schedule a 30 min call in early/mid-November 2023. Renee Harris will send a poll for this call.

3 **Competition**

Call Notes: June 16, 2023
Subject: CTAM Competition Working Group Kickoff Call

Welcome/Roll Call

Call Attendees:

Cable One – David Ballew, Sr. Director of Competition (within Marketing)
Comcast – Sarah New, Leads Competitive Insights & Strategies
Cox – Anthony DeFilippo, Sr. Director, Competitive Strategy
Cox – Wendy Rosen, AVP, Consumer Insights (all primary research)
Mediacom – Eric Schoenfeldt, Director of Competitive Intelligence and Strategy
CTAM – Mark Snow, Janine Lee + Renee Harris

General Discussion "Go 'Round" Session - who is doing what tracking and measuring competition: tools, level of granularity, fiber vs. FWA, etc.

CTAM asked the group to provide a brief overview of their current competitive focus.

Cox

From a Competitive Insights perspective, Cox has tracking studies to keep a pulse on competitive customer perceptions and has done deep dives with competitive fiber customers –keeping focus on consumer understanding, perceptions, etc. Cox views their disconnects to understand why the customer has switched. Cox has also done positioning work, is fully into their Fiber product, and is following customers after this deployment to provide messaging insights to assist communications teams in providing effective messaging. They are continuing to evolve their own value proposition to stay competitive.

From a Competitive Strategy lens, one of the biggest challenges Cox is tackling is getting up to date, real- time information on where competitive Fiber is available and when Fiber is coming to areas. On the activated side of Fiber, they are investigating "big data" type solutions to increase intel in this area.

For the Fixed wireless side, Cox does not focus as heavily on this as there is a fundamental difference between FWA and Cable Broadband/Fiber.

Mediacom

Mediacom is working on understanding who is the competitor and is using FCC fabric data to do so – they have started tracking customers during the disconnect by asking where they are going, in addition to why they are leaving. Mediacom has done a lot of competitive pricing analysis. Mediacom's team has also done similar research like Cox noted above but primarily trying to understand why customers are choosing Fiber. Mediacom is also using 811 utility locates to identify potential new fiber build-outs as well as create competitive maps. They have also been involved in state grants to determine where folks are building.

Comcast

Comcast is using Open Signal to help them understand FWA availability and wins/losses in the broadband space. John Hewson's team has been working on an impact model leveraging publicly stated data.

Comcast is also trying to understand the Fiber builds and it has been their foremost focus. They have been digging find construction maps in city meeting minutes to understand Fiber deployments to inform strategy and execution to protect their base in those areas.

Outside of Fiber, for FWA, they are working to understand the customers who are leaving Comcast and why they are leaving as well as determining win-back window opportunities. They are also focused on mobile and looking at the win/loss composition with the converged offering front and center. In addition, they also have a heavy focus on their MDUs to better understand how to compete and how to combat aggressive offers given to property owners from the competition.

Cable One

Cable One's focus is also similar to the other MSOs. The timing of the competitive threat is important. Cable One partners with Open Signal as well and it has been a valuable resource for them.

Fixed Wireless Broadband, to some extent, is having more impact in traditionally low competition markets – again the important aspect is the timing of the competitive response especially when it comes to pricing and protecting revenue.

CTAM

CTAM shared the following sites CTAM created to help de-position 5G Home Internet:

- 5ghomeinternetreviews.com
- factsabout5g.com

What one or two things could we do together to make things better for you?

Comcast notes that a quarterly check-in, after earnings results, would be good for the group vs choosing a topic to set focus.

Brief update on Industry (Broadband) Positioning

CTAM has met with each MSO Co-op Board member, as well as key people at each company (often a brand, marcom, product strategist, and/or insights person) to discuss their approach to positioning broadband whether and how they are positioning their networks and how they talk about the broadband product itself (pillars, proof-points, claims). From those conversations, CTAM is working to synthesize this into a "common ground landscape" to determine our common themes and how CTAM can help align our voices and come directly over the top with support messaging.

Next Steps/Call Cadence

The group agreed to quarterly calls after MSO earnings calls. Renee Harris will schedule the calls.

Call Notes: August 25, 2023
Subject: CTAM Competition Working Group Call

Welcome/Roll Call

Call Attendees:

Charter – David Gray
Cox – Anthony DeFilippo
Mediacom – Dianne Schanne
CTAM – Mark Snow, Janine Lee + Renee Harris

Review New Street Research Reports

Please find the attached reports – they contain interesting takes on share and where things may be heading.

- New Street Research | Autumn for Broadband Q1 2023
- New Street Research | Autumn for Broadband Q2 2023

Update on Broadband Positioning

CTAM has formed a Broadband Positioning Working Group for MSOs to work together to develop a collective messaging platform for competitive broadband advertising that unites individual MSO messaging to create a nationally amplified message. The group had their kickoff call on August 23 and from that meeting the group declared there is an opportunity to present a unified front that broadband Internet is future-proof when it comes to home Internet. This effort will be member led with CTAM facilitation.

In the coming weeks, the group will work to confirm a brand statement and develop messaging that redounds corporate positioning.

Update on CTAM's 5G De-positioning Campaign

CTAM is actively engaged in depositing 5G Home Internet in the digital media space through paid search, display and other programmatic digital television. Please see below creative samples:


Network Error
This is your new normal with 5G home Internet.
Find better options at SmartMove.us
smartmove
FIND PROVIDER


5G HOME INTERNET
OVERSOLD. OVERHYPED. OVER IT.
smartmove
FIND PROVIDER


5G INTERNET
OVERSOLD.
OVERHYPED.
OVER IT.
smartmove
LEARN MORE

Comment from the group

Charter would like to see research on Verizon and any other research on T-Mobile Fixed Home Internet that could be helpful to MSOs.

- CTAM will contact HarrisX to confirm if a cut of the 2023 TCS Research Study can be made specific to Verizon.

MSO Discussion on Latest Trends

Mediacom

Mediacom notes that competitors are "calling out" Cable more specifically and are equating Cable with DSL. In their research, they have seen that consumers have an elevated opinion on 5G but they are starting to see mixed reviews on 5G in neighborhood blogs and Nextdoor sites.

CTAM notes CTAM has paid engagements with two social media influencers who chronicle their saga with trying T-Mobile 5G Home Internet. The two influencers' videos are shown here as well as their respective TikTok and YouTube pages: https://www.5ghomeinternetreviews.com/5ghomeinternet#reviews

Charter

Charter is involved in NAD (National Adverting Division) matters with several smaller fiber ISPs re: their advertising claims. They are monitoring competitors closely and have gotten more aggressive with NAD.

Next Steps

Our next call will be scheduled in November 2023.

Presentation: *New Street Research Autumn for Broadband 1Q23*

NewStreet Research

Research Events Coverage Team Contact

RESEARCH

Autumn for Broadband 1Q23

By Jonathan Chaplin

May 15, 2023

In the eighth installment of our Autumn for Broadband series, we review what happened in the three-way fight between Cable, fiber, and fixed wireless broadband in 1Q23, based on the results of nine of the largest broadband companies.

The punchline: broadband industry adds were below last year and pre-pandemic levels. Among the market participants, FWB net adds have accelerated significantly from pre-pandemic levels and from a year ago (though they have slowed over the last couple of quarters from a peak in 3Q22). Cable adds are down sharply from pre-pandemic levels and from a year ago, and telco adds are flat, with accelerating growth in fiber offsetting accelerating declines in DSL.

FWB adds may have peaked in 3Q22. If they haven't peaked already, they likely will within the next 3-4 quarters. As FWB adds plateau and then decline, Cable adds should stabilize and then recover. As cable adds recover, there should be a revaluation of the sector.

Residential broadband market growth was weak in 1Q

Based on the nine[i] companies we track that make up roughly 85% of the market[ii], the broadband market added roughly 700k subscribers in 1Q23. That is lower than the ~830k reported in the years preceding the pandemic (we ignore 2020 and 2021 given unusual pandemic impacts). Adds are also below 1Q22.

Figure 1: Broadband industry net adds – 1Q19 to 1Q23

Source: NSR; Company data

Figure 2: TTM broadband industry net adds

Source: NSR; Company data

The ILECs are slightly worse. Cable is a whole lot worse

The ILECs have gone from adding ~30k residential subs in 1Q19 to losing ~20k in 1Q23. Cable residential broadband adds were barely positive with only ~55k adds. This compares to adding ~800k in 1Q23, a decline of ~745k.

Figure 3: ILECs broadband net adds – 1Q19 to 1Q23

Source: NSR; Company data

Related Research

August 15, 2023
VZ follow up: further thoughts on accelerating C-Band deployment
By Jonathan Chaplin

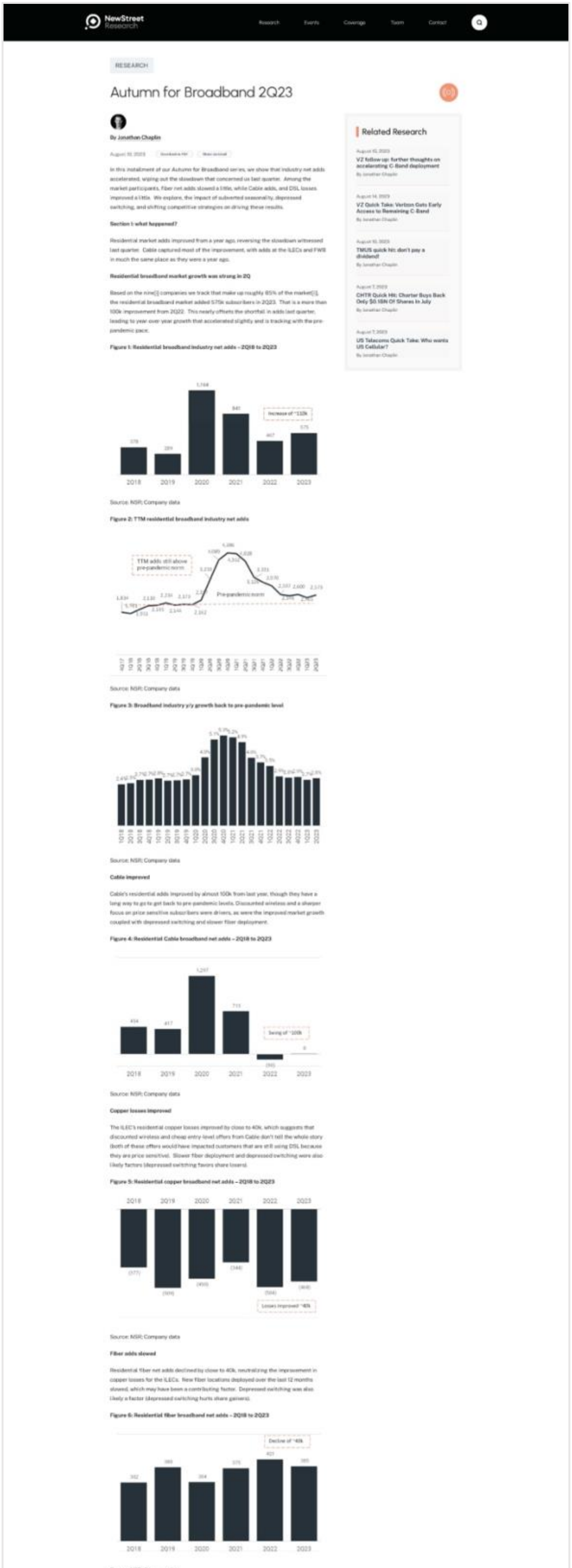
August 14, 2023
VZ Quick Take: Verizon Gets Early Access to Remaining C-Band
By Jonathan Chaplin

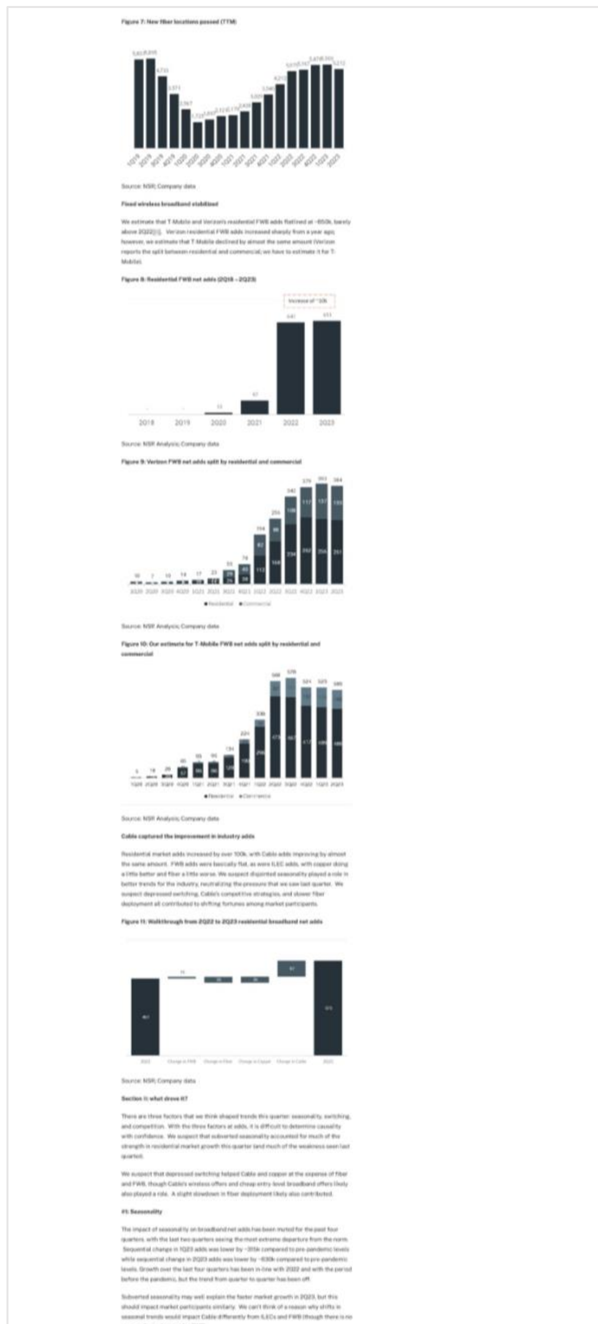
August 10, 2023
TMUS quick hit: don't pay a dividend!
By Jonathan Chaplin

August 10, 2023
Autumn for Broadband 2Q23
By Jonathan Chaplin

August 7, 2023
CHTR Quick Hit: Charter Buys Back Only $0.1BN Of Shares In July
By Jonathan Chaplin

Presentation: *New Street Research Autumn for Broadband 2Q23*





Call Notes: November 10, 2023
Subject: CTAM Competition Working Group Call

Welcome/Roll Call

Call Attendees:

Charter – David Gray
Mediacom – Eric Schoenfeldt
CTAM – Mark Snow, Janine Lee + Renee Harris

Discuss Telco and Cable Q3 earnings reports plus NSR's Q3 Broadband Close Up and Autumn for Broadband reports

Please click the link below to download the following NSR reports:

- New Street Research | Autumn for Broadband Q3 2023 reports and Quick Takes (9 files in total)

Please note, link expires on November 27: https://we.tl/t-1bjDHc4vjd

State of Competition Round Robin

CTAM question to the group: *Has there been anything new or different from competitors in the fiber space?*

Charter

Charter has seen fiber spreading in concentrated areas. Wide Open West (WOW) is building a lot fiber in specific markets in Florida and also in Charter's south region. There is chatter in the system about larger providers like Frontier and others who are dialing down their fiber expansion and are focusing on aerial plant which will easier and cheaper for them to complete, thus suspending expansion in certain areas. They also have been keeping a close eye on any signs of private equity funded builders.

Mediacom

Mediacom is continuing to see the same handful of competitors such as MetroNet and Google Fiber finishing up their construction and are not seeing a lot of new entries to the space. In their coastal region-
- Georgia, Alabama footprint—they are seeing an increase in fiber from AT&T and C Spire is finishing up construction they have had planned from Mississippi through lower Alabama. They are seeing some fiber overbuilding from Frontier and Brightspeed, but it is just business as usual.

CTAM

CTAM has been discussing that if cable companies only offer Internet, then there is not much difference from other competitors. But with Mobile and some type of entertainment offering, MSOs get the ability to bundle. Sparklight just announced that they are turning off TV all together while T-Mobile is going to offer YouTube live TV as an option for consumers.

CTAM also notes that CTAM Broadband Consumer Labels group has requested CTAM to find or build a service that collects all Consumer Broadband labels from all competitors across the country. CTAM will keep this group posted with status on this project.

Question from Group

1. Mediacom wonders if there is a way for CTAM to help monitor state grants for who has won what and where? Mediacom has been working with their local GR/PR teams to see if they can start monitoring and mapping but would like to know if this is something CTAM can assist with. For example, they had a competitor win funding surrounding their Valdosta system and found out that the competitor will not only take the surrounding area of Valdosta but plan on using their own funding to build through Valdosta.

- Charter notes they were asked to map out who won what and one of the things they looked for was instances of where it would be logical for competitors to build transit through their existing footprint and there would be nothing to prevent overbuilding through that transit if they chose to. They generally have visibility on areas they didn't win, and they track areas they didn't win for those, They have a cross functional team that analyzes why they didn't win those areas.

- CTAM can research if there is a service or analyst that offers a collection of state grant data.

Next Steps

For 2024, CTAM will be combining Competition and Retention groups in an effort to consolidate topics and have fewer calls for members. However, this group will have one last call in mid-February to review Q4 earnings.

4 **Low Income Broadband**

Call Notes: June 9, 2023
Subject: CTAM Low Income BB Working Group Kickoff Call

Welcome/Introductions

Call Attendees:

- Altice – **Audrey Pinn**
    - Audrey Works on Product Management and focusing on Low-income offering (Optimum Advantage Internet) + ACP.
- Altice – **Jason Rienth**
    - Director of Growth Initiatives and is working heavily on ACP strategy.
- Altice – **Dan Johnson**
    - Director, Segment Marketing
- Comcast – **David Klein**
    - Director of Prospect Activation within the Growth Strategy team focused exclusively on low-income segments.
- Cox – **Joel Frost**
    - Consumer Insights Director – leads internet mobile & convergence work streams and overs low-income broadband.
- Cox – **Brea Wagner**
    - Brea works on Internet and affordability initiatives.
- GCI – **Miracle Monares**
    - Strategist
- MCTV – **Elizabeth Kwolek**
    - Sales & Marketing Director – oversees business Sales team, security sales and the marketing team.
- MCTV – **Kristen White**
    - Marketing Manager
- Mediacom – **Alyssa Hurley**
    - Sr. Brand Director
- Sparklight – **Varn Chavez**
    - Product & Digital Strategy
- CTAM – Mark Snow, Deepa Venkataraman, Sloane Stegen + Renee Harris

2023 Objectives (group discussion)

CTAM would like to ensure this group focuses on the needs of MSOs and asked the group:

1. What needs to be accomplished? & 2. What are priorities for MSOs?

Group Discussion

Mediacom

Mediacom notes their biggest concern is the end of ACP funding and what does the transition looks like when/if ACP ends. They have a lot of low-income customers, as well as rural markets, and they know low prices win. Because of that they know lots of consumers are going to competitors such as T-Mobile for affordability reasons.

Regarding segmentation, Mediacom notes that the lifestyle stage should also be considered for low income – age, renters, homeowners, etc.

Sparklight

Sparklight agrees price wins but also notes that a large portion of their ACP customers are on half Gig or higher and are not on the lowest plan available. However, Sparklight also notes for customers who are on the lower plans, it will be a challenge to find the right plan for them if ACP ends.

Cox

Cox is continuing to work to identify folks eligible for ACP and they are looking at profiling ACP adaptors – those who are using and those who are not. They also have research into barriers of adoption and are completing profiling work on those customers.

Altice

Altice has done high level work on messaging segment but would like to drill down further.

Altice would be interested in messaging around urban vs rural segmentation and how to interact with those customers.

Comcast

Comcast notes they think a lot about how to position broadband relevance particularly in the context of mobile substitutes --- how do we talk about the importance of in-home broadband and how do we find those people. For people who are truly unconnected, just speaking to them about affordability does not sway them – they need to understand why it would enhance their life. So, it comes down to how to find these customers and how to message them – events in communities, participating in on profits and other nontraditional marketing tactics.

MCTV

MCTV would also look into nontraditional ways of marketing. MCTV has pulled back on direct mail marketing in their micropolitan and rural areas but realized it is now more impactful, so they are questioning what nontraditional marketing they should be doing as people who are not connected are not viewing digital ads.

CTAM

CTAM notes that HarrisX has completed research on Rural Segments (25k Households) for the CTAM Rural Broadband Working Group and HarrisX could use the percentage of households that are eligible for ACP in the study to look at differences in lifestyle.

Questions from Group

Regarding the hesitance to apply for the ACP program, with ACP being available to undocumented immigrants, has this come up as a potential thought?

- Good question, it can be something the group discusses in a future call.

Based on the group's discussion, below please find Topics for Focus this year:

- **Media channels (including non-traditional) to reach low-income customers.**
- **Proactive messaging for the possibility of ACP ending.**
- **Message segments (e.g., lifestage, lifestyle, mobile substitutors) as well as Rural vs. urban low-income customers.**
- **Undocumented immigrants and the ACP program.**
- **Hispanic/Multicultural segments.**

CTAM will suggest a prioritization to concentrate on for the remainder of 2023. CTAM will explore current research with Harris X for additional relevant findings to be shared. The CTAM 5G review website will also be shared with the group for the next call.

If there are any topics you would like to add, please contact CTAM.

Determine Call Cadence and Next Steps

The group agreed to monthly calls on Fridays at 10:00 ET with the next call being Fri, July 14 to accommodate the July 4 Holiday week. Renee Harris will send a call invite through year end.

Call Notes: July 14, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

Call Attendees:

Altice – Audrey Pinn
Altice – Jason Rienth
Armstrong – Andrea Lucas
GCI – Miracle Monares
Mediacom – Alyssa Hurley
Sparklight – Varn Chavez
CTAM –Deepa Venkataraman + Renee Harris

Initial Topics of Focus

As discussed during our kickoff call, the following topics will be focused on for our initial discussion today:

- Media channels (including non-traditional) to reach low-income customers
- Proactive messaging for the possibility of ACP ending.
- Segmentation Strategy/Messaging (e.g., lifestage, lifestyle, mobile substitutors) as well as Rural vs. urban low-income customers

Media channels (including non-traditional) to reach low-income customers

Mediacom

Mediacom does not do anything specifically different for low income. They send direct mail to non-subs and the offer can vary, and they also target mass media – digital, TV, radio, etc. They have recently been reaching out to all subs via email with an ACP offer and it has been their best performing email. Mediacom uses email for all existing subs and sends 10-20 emails per month.

Mediacom also sends out amnesty emails to customers who have not paid their bill which offers them either 100% or 50% payoff along with their lowest priced Internet offering.

Questions

- For amnesty emails, if they have backpay for video, is the entire balance cleared or just internet?
    - It depends on how much they own and what they qualify for, but Mediacom confirm details of the amnesty and share with the group soon.

Armstrong

Armstrong rarely uses email for non-subs due to the challenge of not being able to validate email addresses. Email is mostly used for current subs. Armstrong's ACP messaging is only through direct mail currently, but they have an ACP section on their website. Armstrong tends to advertise their lowest level internet while including the ACP program on that message.

Sparklight

Sparklight reaches out to all their non-subs homes passed and promotes that all their plans are eligible for ACP. They have not reached out to their existing base regarding ACP and are curious if any MSOs have used ACP as a deterrent for non pays.

Questions

- Are any MSOs engaging in grassroot tactics?
  - With wireless being a key offering and Alaska being a tribal land, GCI had the opportunity to target a segment of Lifeline customers and promote internet through ACP. Contact was initiated by text, email and letters and the messaging focused on maximizing the value of lifeline for ACP. They also have an organization within their company that focuses on volunteer opportunities that support various nonprofit groups that serve low- income individuals which allows them to distribute flyers on ACP as well as have live chats about the program.
- Are any MSOs doing door to door marketing for low income?
  - Armstrong uses door to door but not for low income, it is for new builds.
  - Altice only uses door to door for existing BAU plans and if they happen to come upon a customer who may qualify for ACP then they provide information on the program to the customer.
- Do MSOs have any low-income/ACP marketing materials at POS retail locations?
  - Mediacom includes low-income marketing across all mediums – stores, payment locations, TV, etc.
  - Armstrong includes a QR code in their welcome packet.

Proactive messaging for the possibility of the end of ACP

Altice

Altice has not changed their messaging but in the fine print they include a notation that the program could end but they are not messaging about the program ending.

Questions

- Has anyone heard of the timing for ACP to end?
  - Sparklight notes they have heard that the program probably will remain funded and may be in place through 2024 to get through the election year but they are not sure.

  - Altice has heard there may be changes to the eligibility requirements – making requirements stricter. For example, all NYC students receive free lunch so receiving free lunch made families eligible for ACP – which in essence could allow a higher income family to receive the benefit.
- Is there still a struggle with getting all eligible customers to take advantage of ACP?
  - Altice is still actively pursuing consumers eligible for ACP. Altice also believes there is an overall awareness problem with ACP.
  - Armstrong notes they believe the older population is the challenge as many are eligible but struggle to use technology to sign up.

Segmentation Strategy/Messaging (e.g., lifestage, lifestyle, mobile substitutors) as well as Rural vs. urban low-income customers

Armstrong

Armstrong has a mix of rural and urban messaging for non-subs. For low-income segmentations, they remove any messaging for higher-cost packages, but they do not exclude lower income products from higher-income segments.

Questions

- For non-sub mobile substitutors, is there a specific effort for messaging or is it part of non-sub acquisition?
  - GCI has not noticed much of a movement in mobile substitutors, messaging is more so part of acquisition.

Next Steps

For the next call, there will be a check-in on low-income tactics and discussion on the following other topics of focus:
- Hispanic/multicultural segments
- Undocumented consumers who may be eligible for ACP Please reach out to CTAM with any questions.

Please reach out to CTAM with any questions.

Call Notes: August 11, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

Call Attendees:

Altice – Dan Johnson
Altice – Karim Madueno
Altice – Jason Rienth
Comcast – Stephanie Pearlman
Cox – Ilene Albert
Cox – Joel Frost
MCTV – Elizabeth Kwolek
Mediacom – Alyssa Hurley
CTAM –Deepa Venkataraman, Sloane Stegen + Renee Harris

Updates on any new ACP marketing activity/learnings

Altice

Altice has noted they have been doing a good job of marketing ACP but now the effort is getting consumers to accept it, especially undocumented consumers.

MCTV

MCTV has taken the "status quo" approach on ACP and are not putting more effort in marketing it as they are concerned when the funding will run out. MCTV also notes they have noticed many customers "gaming" the system and not paying their bills; these customers may know they will not be cut off with the program and are taking the highest tiers as long as they can, until they are downgraded for nonpayment.

Cox

Cox is still leaning heavily on ACP marketing. Their churn rate was lower than expected during last year's re-qualification. Cox sees it as a benefit that customers are choosing a higher tier with ACP especially on the retention side. They have had to downgrade customers, but it has not been a concerning amount.

Question from group

1. *How are MSOs educating and upscaling Home Internet with new ACP customers, especially those with limited digital literacy/experience?*

Altice does not have an ACP-specific initiative, but they have a digital literacy initiative with community partners such as libraries. They do not have the resources to create an entire digital literacy library.

Altice does have a welcome email for new customers that includes information on how the Internet can assist customers, etc. Additionally, Altice notes that perhaps sponsored billboards from all MSOs regarding ACP could be placed in high visibility areas to increase awareness.

- Comcast notes this was done in LA and can share a case study on it.

CTAM notes that the Mover ACP digital SEM campaign has been reactivated as of last week so there should be mover leads coming to MSOs from this effort.

2. *Has there been discussion of when ACP funding will cease? What are MSOs hearing about ACP being refunded? What are MSOs doing for retention of customers if/when ACP ends?*
    - Mediacom believes April will be the end but think the program may be extended. The majority of their ACP subscribers have 1 GIG.
    - MCTV does not think the ACP program will be extended based on the information they are reviewing.
    - Altice thinks the program will be extended because 2024 is an election year.

3. *Are there any best practices on how MSOs are supporting inbound front-line agents with ACP?*
    - Mediacom has a specific queue for ACP. The agents who take ACP calls are specifically trained on the program.

Marketing to Multicultural/Hispanic audience

<u>Comcast</u>

Comcast notes it's very important that when marketing to multicultural consumers, it's important to bring a native speaker to connect with the consumer.

<u>Altice</u>

Altice targets Hispanic and income constrained audiences via digital and offline tactics using transcreation and wonder what other MSOs are doing to target.

<u>CTAM</u>

CTAM markets the SmartMove nationally digitally using bi-lingual messaging and has been ensuring site transcreation is up to date and expanded.

Next Steps

For the next call, the following topics will be discussed:

- Inbound sales and training
- Marketing to Multicultural/Hispanic audience
- ACP-eligible undocumented consumers: identifying and marketing Please reach out to CTAM with any questions.

Please reach out to CTAM with any questions.

Call Notes: September 8, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

<u>Call Attendees:</u>

Altice – Audrey Pinn
Altice – Dan Johnson
Altice – Karim Madueno
Cox – Ilene Albert
Cox – Brea Wagner
MCTV – Elizabeth Kwolek
Sparklight – Varn Chavez
CTAM –Deepa Venkataraman + Renee Harris

ACP Training/Approach for Inbound Sales Teams

<u>Altice</u>

Altice has heard the ACP will not be eliminated because it is an election year, but the eligibility will change.

For ACP, Altice does not do sign ups by phone, customers must use their digital application. In order to complete the application, the customer needs a national verifier number as well as an Altice account number. The customer is not considered a customer until after they are installed.

Altice reps and customer care are trained to handle ACP calls. They also have trained ACP retention reps. Altice recently launched a "wizard tool" which gives their reps the right dialogue to have with customers in various situations such as denials, etc.

Altice does not have ACP sign ups in retail stores as the store does not have RAD ID approved reps.

Altice notes that ACP credit is not always reflected on the first bill, and this has caused confusion for customers. Altice also notes they have heard that Verizon is giving ACP credits to customers in advance to avoid this.

<u>Cox</u>

Cox has been told by their regulatory team that the ACP program can run out as early as March, however, there is bi-partisan support but there is doubt as to where the funding will come from. Cox is 100% all in for the ACP program and has not swayed marketing efforts even with the possibility of the program ending.

As far as training for ACP call queues, Cox has done refreshers for the program training and call listening to ensure compliance. Within Cox's IVR system there is an option for customers to select ACP as an option, and they are directed to the ACP queue; but they note that many ACP calls go to other queues.

Sparklight

Sparklight agrees that because of the election year, the ACP program will be refunded – at least temporarily.

Most of Sparklight ACP customers go online for application completion and then come back with their ACP approval code for implementation.

Once an ACP customer is approved in Sparklight's system, the order is pending (with discounts already enabled) until the customer activates the service.

Sparklight notes that for a few customers who cannot figure out how to complete their ACP applications online, they are taking the customers word and are giving them the discount in order to keep the sale. They will remind the customer that they must finish their application, If they do not finish the application, Sparklight removes the discount. Essentially, Sparklight is taking a hit on $30-$75 for the first couple billing cycles by giving the customer the credit.

For non-pay customers, (i.e., "soft disconnects"), Sparklight is testing ACP messaging to see if it impacts the reconnect rate.

Sparklight notes they recently sent a generic newsletter about ACP and received 900 signups in 5 days far outpacing their usual activity.

Question from group

1. *What activities is Cox planning if ACP goes away?*

    Cox is scenario planning now. There will be an impact on revenue and customers if ACP goes away. They are working with their acquisition and retention teams to create different options for customers who lose subsidies.

Eligible undocumented consumers – identifying them and raising awareness of ACP program

Sparklight

For customers who do not have internet access, Sparklight directs them to go to their local library for access. For customers who do not speak English, Sparklight has found that those customers are able to find an English-speaking family/friend in the household to assist.

Altice

Altice would like to know what is the approach to undocumented customers – what is the response to set those customers as ease that they would not be reported for being undocumented in order to get them to sign up for ACP?

> CTAM notes it would probably be best approaching undocumented consumers in person perhaps at community events.

Marketing to Multicultural/Hispanic audience

Altice

Altice is in market bilingually in most markets and are driving traffic to their Spanish landing pages. Altice notes that ACP marketing mass emails do well.

Actions/Next Steps

The group is interested in a collective effort to market for ACP. CTAM will follow up with Comcast for their results of their collective ACP billboard that was placed in Los Angeles. CTAM will also see what industry lobbying efforts (i.e., NCTA) are active to support continuation of ACP.

For the next call, the following topics will be discussed:

- ACP Continuation Discussion (MSOs can invite their Government Affairs specialist to join the call)
- Collective ACP Marketing Effort

Please reach out to CTAM with any questions.

Call Notes: October 6, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

Call Attendees:

Altice – Audrey Pinn
Altice – Dan Johnson
Cox – Ilene Albert
Mediacom – Alyssa Hurley
Sparklight – Varn Chavez
CTAM –Deepa Venkataraman + Renee Harris

ACP Collective Effort Update

CTAM has spoken to Comcast, and it was confirmed that Comcast did not participate in the ACP collective effort in LA County, CA but simply noticed the initiative. The campaign was initiated by the California Emerging Technology Fund last year when the program was named EBB – a link to the ad can be found here: https://urlisolation.com/browser?clickId=88F22DC7-C893-48EC-AD69-C7E4832F8C8C&traceToken=1697755691%3Bcomcast_hosted2%3Bhttps%3A%2Fwww.cetfund.org%2Fhow-los-a&url=https%3A%2F%2Fwww.cetfund.org%2Fhow-los-angeles-county-is-boosting-broadband-subsidy-enrollment%2F

CTAM notes they have heard the ACP program may end next year or at least have qualifications adjustments made; discussion was had around what the MSOs know:

- Sparklight has heard the funding for ACP will run out but most likely will run out during an election year, and they will tighten requirements for the program.
- Mediacom has not heard anything firm about the program ending and is continuing to market the program heavily.
- CTAM notes it may be unlikely the funding ends during an election year but nevertheless the group should begin discussing how to retain income-constrained customers should ACP end.

Question from group

1. *Did anyone see a jump in ACP activity in September?*
    - Sparklight saw a 3x jump in ACP sign-ups in September.
    - Altice saw a small increase.
    - Mediacom notes that whenever they send ACP emails out there is always an increase in sign-ups.

2. *Altice's sales department would like Altice to give ACP customers 2 months of credit before ACP approval due to installation fees, etc. Has any other MSO heard similar request from their sales departments?*
    - Sparklight has not had this issue. Sparklight requires customers to sign up online and as soon as they are approved, they are immediately given the discount at POS.
    - Mediacom also ensures customers are qualified before they are signed up for the ACP program and then are given the credit on their first bill. Customers do not sign up for ACP before they are qualified. Mediacom has APIs set up internally for the ACP program.

3. *If ACP income qualification was reduced from the current 200% to 135%, how many of ACP customer base will be no longer be qualified?*
    - Altice has not done the calculation but as far as the CEP provision that enabled anyone sending their children to NYC to get ACP, would affect their base greatly. Altice also notes that 90 days should be given to MSOs if there are changes to the program and the 90 days should include full requirements.
    - Sparklight has not started looking at these details yet.

Summary of CTAM ACP Initiatives

CTAM's ACP awareness digital initiative started in 2022, paused in early 2023 and was reactivated in August 2023. A summary of the program is attached for review.

Successful low-income segment messages outside of ACP

<u>Altice</u>

At this time, Altice is focused less upon the marketing and are more concerned they do not have the right business practices to attract and retain low-income customers; so it is more of a product issue than a marketing issue. Altice does not currently offer a prepaid product. For instance, their $100 installation fee may be too high for low-income segments or for segments on fixed incomes; how can they ensure price increases do not affect those customers. Altice would like to hear what other MSOs are doing from a business and product standpoint to secure and retain income-constrained customers.

<u>Sparklight</u>

Sparklight is currently looking at prepaid products to assist in the low-income product offerings. They are also looking at "bring your own modem" products or refurbished modems – they are looking at all ways to reduce prices for this segment of customers.

Cox

Cox is also having discussions on how to keep the low-income segment of customers if ACP ends. Cox currently has a few products for income-constrained customers: Connect to Compete which is a $10 offer targeted at families with school aged children, $30 offer which is for customers who match the same qualifications as ACP, and they also have a prepaid Internet product partnered with Boost Mobile called “StraightUp Internet”.

Actions/Next Steps

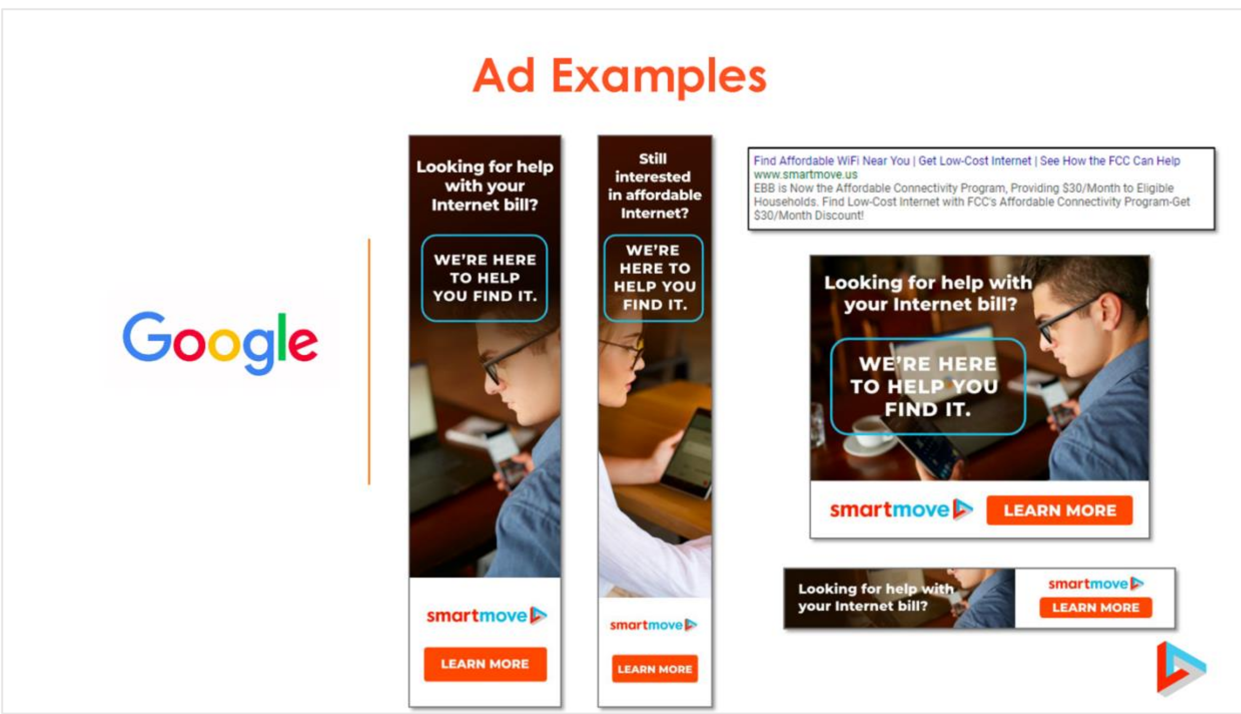
The group agreed to continue monthly calls. CTAM suggests MSOs invite their colleagues from their product and/or government affairs teams to join our next call as they may have information to share regarding low-income segments.

For the next call, the following topics will be discussed:

- Possible Cox Presentation on their Low-Income Efforts
- 2024 Focus

Please reach out to CTAM with any questions.

Presentation: *ACP Campaign Performance*



Campaign Performance

Google

At the conclusion of this campaign, we saw an average CTR of 4.79% and an average impression share of 10.95% across search and 10.76% across display.

This campaign drove 70K leads a $5.02 CPL and 703 sales across the MSOs at a 1% sales close rate.

Month	Impressions	Clicks	CTR	Leads	Sales	Spend
Jan-22	2,915	235	8.06%	73	0	$ 505.00
Feb-22	322,597	11,958	3.71%	3,763	4	$ 17,668.13
Mar-22	357,746	11,966	3.34%	3,944	4	$ 18,537.02
Apr-22	291,445	11,776	4.04%	4,008	6	$ 17,413.17
May-22	471,753	21,053	4.46%	6,888	15	$ 33,584.49
Jun-22	301,476	19,190	6.37%	6,759	61	$ 31,646.72
Jul-22	510,811	20,831	4.08%	7,351	136	$ 31,634.01
Aug-22	455,005	20,483	4.50%	7,082	136	$ 31,652.30
Sep-22	148,425	6,747	4.55%	1,988	28	$ 12,060.53
Oct-22	335,068	17,667	5.27%	5,424	74	$ 31,008.40
Nov-22	250,286	17,583	7.03%	5,662	72	$ 31,632.47
Dec-22	289,121	17,057	5.90%	5,197	46	$ 31,533.48
Jan-23	628,265	20,039	3.19%	5,189	56	$ 30,678.53
Feb-23	147,236	13,840	9.40%	3,992	40	$ 20,061.58
Mar-23	103,988	10,709	10.30%	3,292	25	$ 15,064.39
Total	**4,616,137**	**221,134**	**4.79%**	**70,612**	**703**	$ 354,680.22

THANK YOU

smartmove

Call Notes: November 3, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

Call Attendees:

Altice – Audrey Pinn
Altice – Dan Johnson
Altice – Kristen Thurber
Armstrong – Andrea Lucas
Cox – Ilene Albert
GCI – Miracle Monares
Mediacom – Alyssa Hurley
Mediacom – Dianne Schanne
Mediacom – Chris Lord
CTAM –Deepa Venkataraman, Sloane Stegen + Renee Harris

Low-income Customers: Acquisition and Retention Strategies

Ilene Albert, AVP, Digital Equity, Cox, provided an overview of Cox's low-income customer acquisition and retention strategies.

Highlights Include:

- Cox Digital Equity Programs include:
  - Cox Affordability Tiers
    - Before ACP, Cox had the following programs:
      - **Connect2Compete program** – this program focused on households with children in K-12 and ,135% poverty level and priced at $9.95 per month
      - **Connect Assist** – this program matches with ACP qualifications and prices at $30 per month
      - **StraightUp Internet** – this program is for credit challenged and low ability to pay households – priced at $50 per month
  - Cox's Connect2Compete program has been available for over 10 years and during that time Cox has learned a lot about low-income households. Previously Cox had requirements such as existing customers were ineligible for the program without first turning off existing services for 90 days before applying for the program. They also had late fees on the program. However, they have since removed the ineligibility requirements for existing customers and late fees as well. Cox has learned that if a customer is in need, then they must remove barriers that prevent them from getting or keeping service. So, for these programs there are no install fees, upfront costs, no data usage or late fees. While there was fear of seeing negative business impact from taking these strides to help customers, Cox has seen the reverse – they have not seen current customer down tiering and have found that in doing right by customers has been right for the business.

- Cox also offers low-cost computer and education programs
    - With ACP, computers can be purchased for as low as $25
    - Cox's Digital Academy offers online learning tools and digital literacy
  - Cox partnerships are critical to their success with low-income households
    - Previous to COVID, the majority of their connects were driven by their local teams.
    - Cox completed research and found that for customers within ACP and their Cox low income assist programs that:
      - 50% have home internet for the first time
      - 70% found a job or a better job because of having internet with Cox
      - 37% are a first-generation college graduate as a result
      - 49% received a promotion or increase in pay
- Cox has been focusing on local activation where they focus on the following:
  - Pursuing digital navigator partnerships – these are partners who can help customers sign up for the programs
  - Evolving "other" partnerships – these are awareness partners such as schools and foodbanks who will deliver program flyers, etc.
  - Attracting older adults – these consumers do not have children in the home so marketing materials that are geared towards families with children do not reach them
  - Providing personalized support – in the low income segment some customers need more support with technology so Cox has committed to ensuring help is available for these customers
  - Local Activation Reference Guide – this guide was created for Cox's local teams to assist them with knowing how to be effective when working with partners. Cox has found that working with partners who have the same vested interest in helping low-income families has been key to their success
- Cox has launched the following Awareness tools to assist in their
  - Influencer brochure – this brochure explains to nonprofits and government officials all that Cox is offering with their programs
  - Collateral – Cox has many types of collateral that can be customized based on the partner they are working with
  - ACP Palm cards
  - Sizzle Reels
  - Spot lighting older adults – Cox will be doing additional research to understand the needs and barriers of this segment of customers

Cox believes MSOs can do a lot to assist low-income customers with or with ACP and encourages all to continue to pursue efforts to help this segment.

Questions from the group

1. *How long did it take Cox to set up this program? How did Cox go about finding partners to work with this program?*
    - For Connect2Compete, Cox teams have been working on the program for 10 years. However, the local activation strategy was just developed this year and is just kicking off the digital navigator portion, so they are just in the beginning stages. Most of their focus has been on awareness Cox notes that creating digital tools for the digital navigators is important and they have just launched a support line for local partners. They are getting a lot of calls but just having that support available has been quite a differentiator.
    - As far as partners, they have a couple of private insurance companies that focus on Medicaid patients where those companies want Medicaid patients to have access to the Internet for tele-visits and in home monitoring.

2. *Who brings the partners to the table and owns the relationships – community affairs, government affairs, etc.?*
    - It is their local public affairs (PA) and government affairs (GA) teams, but their market leaders have a vested interest as well. Cox has provided goals to all of their market leaders as well have their public and government affairs teams. So, it depends -- if it is a typical non-profit association, it could be the PA or GA team but many times they see the market leader sitting on boards and can provide a broader, holistic view. But once the partner is onboard, the PA or GA team will own it – it is all under the umbrella of digital equity.

3. *How is your PA team working with the partner?*
    - Cox realized all their markets were handling partners in their own way, but Cox has now committed to creating all the tools and a common strategy for their teams to be more effective and efficient. Because this is still new, some PA teams are still engaging the marketing leaders are Cox corporate to assist in training, etc. but eventually Cox will be training their local teams to handle partner engagements on their own.

4. *How successful is the program – were they able to grow subs?*
    - Because Cox was doing Connect2Compete, they were able to see that using their local teams, they were able to get consumers connected. Their whole philosophy is getting consumers connected who traditional marketing is not able to reach. Churn is significantly lower on these programs than those who are not. Removing late fees reduced churn and nonpays.

5. *Where is your senior leadership pointing their attention – towards retention or gross adds?*
    - It's been about both – they are seeing that this segment is performing better than the rest of their other segments – so they have seen a significant impact on both retention and gross ads.

ACP News and Weather

No one on the call had any new information regarding ACP extension.

Question from the group

1. *How are MSOs feeling about the White House $6M ask for ACP from Congress?*
    - Mediacom is continuing to promote ACP and thinks the government will come up with some type of continuation at some level with possible eligibility changes or criteria updates, but they are working toward a transition plan for customers should ACP end.

2. *If criteria changes do MSOs think the government would make MSOs de-enroll customers who qualified based on the they are changing or would they let them be grandfathered in?*
    - One participant notes that if the customer is grandfathered in, they are not sure the government would want to pay for it
    - Another participant thinks they will make AVP people reapply and anyone who doesn't make the criteria reapply.

Next Seps

For the next call, the following topic will be discussed:

- 2024 Focus

Please reach out to CTAM with any questions.

Call Notes: December 1, 2023
Subject: CTAM Low Income BB Working Group Call

Welcome/Introductions

Call Attendees:

Altice – Audrey Pinn
Altice – Dan Johnson
Cox – Brea Wagner
MCTV – Kristen White
MCTV – Elizabeth Kwolek
Mediacom – Alyssa Hurley
Mediacom – Dianne Schanne
Mediacom – Chris Lord
CTAM –Deepa Venkataraman + Renee Harris

2024 Focus

For 2024, CTAM will pivot to working groups that produce playbooks/case studies versus only group discussions. Therefore, CTAM would like to focus on 2-3 topics to dive deep into for 2024.

CTAM asked the group what 2 or 3 topics they would be interested in addressing for the low-income broadband segment. CTAM notes that some MSOs have stated that they do not have a dedicated product or offering for the low-income segment so addressing this concern could be a potential topic.

Group Discussion

Altice

Altice believes it is not about the product but how they are doing business with the customer. Altice would like to learn more about how MSOs are doing business with low-income customers. For example, Comcast and Cox prepaid products such as Boost Mobile are sold in gas stations, convenient stores, etc. not in typical MSO storefronts. Altice would like to hear more about what is working for doing business with low-income customers. Possible areas for discussion could include non-pay policies and whether credit checks are required for certain groups, etc.

Altice does not want to rule out ACP discussions for 2024 as the program will either be refunded, or it ends and MSOs will be looking for ways to retain the customers.

Altice would also be interested in discussing multicultural low-income broadband in 2024.

Mediacom

Mediacom would like to understand how they can better identify consumers who would qualify and need low-income broadband – how do MSOs engage with this segment. Currently, Mediacom uses government qualifications for the low-income segment, but they would like a more refined process for identification.

Mediacom has not focused on multicultural marketing as there has not been a need for their footprint.

2024 Proposed Topics

Based on the group discussion the following topics are proposed for 2024:

1. Identifying qualified low-income consumer segments
2. How to best engage with the low-income segment (e.g. products such as prepaid, channels such as third-party retail, grassroots channels, policies around credit checks and non-pay)
3. Multicultural marketing to the low-income segment.

*CTAM will continue to have an ACP News and Weather segment on calls in 2024

ACP News and Weather

Mediacom

Regarding ACP, Mediacom shared that Charter has started sending customers notices that ACP may be ending in early 2024 and are requesting customers to take action via an included form to reach out to their local representatives to express their need for the program.

CTAM

CTAM will reach out to Charter's Government Affairs department to see if any more information can be shared regarding their notice to customers regarding ACP.

CTAM also reminded the group that MSO government affairs departments should engage with NCTA groups to keep track of the latest developments with ACP policies. CTAM is happy to connect MSOs with NCTA should they not have contacts.

Next Steps/Call Cadence

CTAM will circle back to the group to confirm a call a cadence for 2024 and determine if Friday's at 10:00 ET is still a good time slot for calls.

Please reach out to CTAM with any questions.

5 **Broadband Consumer Labels Working Group**

Call Notes: January 19, 2023
Subject: CTAM Broadband Consumer Label Team 2023 Kickoff Call

Welcome/Roll Call

Call Attendees:

- Altice – Bill Heberer, SVP, Legal
- Altice – Jacqui Clary, Senior Counsel
- Breezeline – Adrianna Michalska, Associate Counsel
- Cable One – David Ballew, Sr. Director,
- Cable One – Karen Cline, Marketing Director
- Charter – Kathleen Griffin, VP, Marketing Communications
- Comcast – Cameron Hosmer, Executive Director Pricing & Promotions
- Cox – Cris Webster, Product Marketing
- MCTV – Katherine Gessner, President
- NCTA – Steven Morris, VP & Deputy Counsel
- CTAM – Mark Snow, Sloane Stegen + Renee Harris

What do we know?

Steven Morris, Vice President & Deputy Counsel, NCTA, provided an overview of the Consumer Label FCC requirements. Link to full document here: https://docs.fcc.gov/public/attachments/FCC-22-86A1.pdf

Highlights include:

- The new Consumer Label requirements are a result of the 2021 Infrastructure Act and is mandatory for all broadband providers.
- The timing for when the law goes live is not certain. There is an approval process that needs to occur with the Office of Management and Process and that can take a few months.
  - There are deadlines for providers who want to participate in the process, but timing is uncertain.
  - While timing for implementation is uncertain NCTA believes Q4 is a good estimate, but MSOs should consult with their regulatory department for specific dates.
- There are a couple large issues:

- How and where to display on website and how to do that in a way that complies with the FCC requirement. The label should be in close proximity of the marketing description of the plan, but it can come after the customer has input their address. MSOs will have to determine regional plans and then work through how to incorporate.
- NCTA notes that Alternative channels such as retail locations will be different for each MSO and that 3rd party retailers will be complicated.
- As far as customers on the phone, there may be a need to read the label to customers who do not have access to view the label online.
- NCTA notes that in the paragraph regarding alternative channels, there was a notation that providers must document every time the label is given to a customer, however, NCTA and other providers association filed a petition yesterday with the FCC to clarify the section and noted in the petition that it is not possible to document every customer interaction.

- NCTA pointed out that we do not know how consumers are going to react to the labels.

Discussion + Questions from Group

Regarding alternative sales channels, is retail considered just physical retail or does it include online retailers?

- NCTA believes it is referring to physical retail locations but however the customer is shopping they need to see the label, so the onus is on the MSO to ensure they are in compliance and ensure their 3rd party retailers have the correct labels. NCTA urges MSOs to be sure to start thinking about this with regards to their 3rd party vendors.
- CTAM notes there are 3rd party providers that could close sales and may have to show the labels.

Does the label apply to Direct Mail?

- No, Direct mail is considered mass mail, so it is not included.

Does the label have to be included with bundles?

- No. The requirement applies to broadband only -- for each tier of service a label will be required but will not be required for bundles. For bundles, MSOs may want to put a link to the Label for the broadband portion. It will be more complicated for companies doing Mobile where there is always voice component – in the petition sent to the FCC yesterday this issue was also added as a request for clarification.

Next Steps + Call Cadence

The group agreed to bi-weekly calls on Thursdays at 3:00 ET starting February 2 and then pivot to monthly calls starting in May through November. Renee Harris will send call invites.

Items to possibly discuss on a future call:

- CTAM to possibly assist with creating best practices to create low friction by creating a strawman buy flow.
- Usability testing with consumers

Call Notes: February 2, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Bill Heberer
Altice – Jacqui Clary
Breezeline – Adrianna Michalska
Cable One – David Ballew
Cable One – Karen Cline
Cable One – Ron Proleika
Comcast – Cameron Hosmer
Cox – Diane Law-Hsu
Cox – Leslie Benner
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- To recap from our last call, February 16 is the deadline to respond to the comments for the proposed rulemaking of the Consumer Broadband Label.
- Are there any updates MSOs have to share? Is anyone working on design?
    - No new updates – it's still early for MSOs
- Regarding how much friction the label requirements will put on MSO buy flows, have any MSOs started thinking about if labels will be a static image, a separate page or will there be a machine-readable image?
    - Cable One notes the label doesn't have to live on the MSO website or product page but it's in the cart – but could it be managed like disclaimers are where there's a link.
    - CTAM wonders if a pop up some sort would fulfill the requirement.
    - Cox is still in the early stages but one question they have is, knowing that they can't have a link, what if the image of the label is small but expands when a consumer hovers over it.
    - Comcast wonders if a thumbnail would be considered machine readable.
- CTAM asked the MSOs if CTAM could create a mock label on a website for MSOs to review as a start for usability, etc. CTAM will work to have a mock label created for review in the coming weeks.
- Cable One – What could the potential call component requirement end up being?
    - Per Steve Morris at NCTA, once a consumer chooses the Internet service they want, MSOs would have to read the label to the consumer, document it and retain that documentation for 2 years unless there is a way via SMS or email to have the consumer acknowledge the label but NCTA is still seeking clarity on this issue.
    - CTAM ponders if emailing or an SMS to the customer while on the call would satisfy the requirement even if the customer does not see it live while on a call with a rep. CTAM will contact NCTA about this.
- Cox question – If an MSO offers a 30-day money guarantee, is there an opportunity to send the nutrition label post sale in a confirmation email and hence therein complies with the label requirement?
    - CTAM will inquire about this with NCTA

    - Altice notes they also send an order confirmation email before the install and wonders as well if the label could be sent at that time to satisfy the requirement.
- Please contact CTAM if there are any specific items you would like addressed with NCTA.

Actions:

- CTAM to follow up with NCTA if the label requirement for call center sales could be given via email or SMS and/or if the requirement could be satisfied by sending the label within an email order confirmation.

Our next call is scheduled for Thurs, February 16 at 3:00 ET.

Broadband Label Sample

Broadband Facts

Provider Name

Service Plan Name and/or Speed Tier

Fixed or Mobile Broadband Consumer Disclosure

Monthly Price	**[$]**

This Monthly Price [is/is not] an introductory rate. [if introductory rate is applicable, identify length of introductory period and the rate that will apply after introductory period concludes]

This Monthly Price [does not] require[s] a [x year/x month] contract. [only required if applicable; if so, provide link to terms of contract]

Additional Charges & Terms

Provider Monthly Fees	
[Itemize each fee]	**[$]**
One-time Fees at the Time of Purchase	
[Itemize each fee]	**[$]**
Early Termination Fee	**[$]**
Government Taxes	Varies by Location

Discounts & Bundles

Click Here for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. [Any links to such discounts and pricing options on the provider's website must be provided in this section.]

Affordable Connectivity Program (ACP)

The ACP is a government program to help lower the monthly cost of internet service. To learn more about the ACP, including to find out whether you qualify, visit affordableconnectivity.gov.

Participates in the ACP	**[Yes/No]**

Speeds Provided with Plan

Typical Download Speed	**[] Mbps**
Typical Upload Speed	**[] Mbps**
Typical Latency	**[] Ms**

Data Included with Monthly Price	**[] GB**
Charges for Additional Data Usage	**[$/GB]**

Network Management	**Read our Policy**
Privacy	**Read our Policy**

Customer Support

Contact Us: example.com/support / (555) 555-5555

Learn more about the terms used on this label by visiting the Federal Communications Commission's Consumer Resource Center.

fcc.gov/consumer

[Unique Plan Identifier Ex. F0005937974123ABC456EMC789]

Call Notes: March 2, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Jacqui Clary
Altice – Bill Heberer
Altice – Andre Martineau
Armstrong – Peter Grewar
Charter – Naveeta Patoli
Comcast – Cameron Hosmer
Cox – Charles Scarborough
Cox – Cris Webster
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- CTAM shared a mockup of the consumer labels – all examples are machine readable and can be viewed using the links below:
  https://stage.smartmove.us/mobile/consumer-label
  https://stage.smartmove.us/mobile/consumer-label-v2
  https://stage.smartmove.us/mobile/consumer-label-v3
  - Please free feel to share any feedback you may have on these mockups with CTAM.
  - *As a reminder, these renderings are not vetted by counsel - this is just a free space for us to try things out from a UX and design perspective.*
  - Question – Can an "i" (information) box be used that includes the label? A one click away? When a customer chooses a specific plan.
    - Group members do not believe that is allowed – they believe the FCC states the POS starts when the consumer inputs their address. The language of the order states "Providers must display the actual label not simply an icon or link to the label in close proximity to the associated plan advertisement". It further states in section 14 "In addition to label content, we adopt requirements for the labels format and display location to ensure consumers can make side by side comparisons".
- The group discussed Speed Test regulatory requirements. Highlights of the discussion are as follows:
  - Has anyone started thinking about how they will document speeds?
    - "Typical" speeds must be defined
    - FCC had guidance on speed requirements in the order although not very clear, but points to the Measuring Broadband report but also states that providers can measure on their own.
    - At what level in the label do typical speeds need to be reported? And what's the cadence of when the speed data needs to be reported?
    - Ookla data cannot be used because a device needs to be used for Ookla. Must be from the router directly. For one MSO, a care rep or field tech and now customers, through an app, can initiate a speed test.
    - What would count as a valid test?
    - CTAM suggests that perhaps CableLabs could assist with defining specs? CTAM will reach out to CableLabs to see if they can join our next call.
    - Perhaps methodology from Measuring Broadband America can be used to assist in determining typical speeds.

Our next call is scheduled for Thurs, March 16 at 3:00 ET.

Call Notes: March 30, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Ankita Agarwal
Altice – Andre Martineau
Comcast – Cameron Hosmer
Cox – Charles Scarborough
CTAM – Mark Snow + Renee Harris

Call Summary

- Steve Morris, NCTA was unable to join today's call but hopes to join a future call to discuss speed tests.
- CTAM reached out to Cable Labs about possibly joining a future call to discuss their ideas regarding a speed test spec.
- A member is curious if you have two different DOCSIS networks – one goes to a max of 500 Mbps and the other to 1 Gig – but since both have a 500 Mbps speed, would they be considered different or the same? The group generally felt that they would be different enough to warrant being considered two different tests.
- From last call, a topic the group was interested in discussing was "Updates on communication methods requirements for sales over the phone". At this time, CTAM does not have any additional information.
    - CTAM will reach out to NCTA to see if they have any information on when the FCC might provide guidance.
- Question from group – regarding the label UPI, the 15-digit plan identifier, have MSOs thought through how they will create this identifier and operationally, and which teams within their company will "own" this?
    - One member has thought about breaking the 15 characters into pieces including fields for the year, upload, download speeds but making the last character of the ID a version number or alphanumeric character so they could change the price of that speed combination several times in a year.
    - How much data needs to be carried in the identifier?
        - The label itself has all the data so the identifier just needs to uniquely identify the particular label.

Actions:

- CTAM to follow up with NCTA regarding communication requirements for sales over the phone and an updated timeline for answers to the questions submitted to the FCC.
- CTAM will invite CableLabs to the next call to discuss speed testing.

Our next call is scheduled for Thurs, April 13 at 3:00 ET.

Call Notes: April 13, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Andre Martineau
Altice – Ankita Agarwal
Altice – Jacqui Clary
Armstrong – Peter Grewar
Breezeline – Adrianna Maciejewska
Cable One – David Ballew
Comcast – Cameron Hosmer
Cox – Charles Scarborough
Cox – Cris Webster
Cox – Leslie Benner
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- Following up from our last call, CTAM asked NCTA about clarity on the communications requirements (disclosure of the label content) for sales calls into the call centers. Please see the reply below from Steve Morris, NCTA:

  > *"The obligation in the rules in Appendix A is to "display" the label and paragraph 95 talks about making it "available" to consumers, "orally providing" it over the phone, and in footnote 214, "reading the entire label." What's not clear, and what companies should be thinking about, is whether, and how, to give consumers the ability to bypass or ignore the label in that context, just as they can when it is displayed on a website or posted in a store. My sense is that there should be a way to do that and still be in compliance, but it's for the companies to make those decisions."*

- Question from group - Has anyone solved for how to document what is being retained for two years?
  - No one on the call has any solutions yet.
- CTAM has reached out to Chris Lammers at CableLabs to discuss speed testing – asking the question if there is a possibly of grouping like markets by architecture and tier. Chris will first meet CTAM and NCTA then will join our group call, hopefully in the next two weeks, to bring clarity to the speed test discussion.
- Question from group - What is the correlation between the label and the speed test?
  - The FCC rules state that the label must note the Speeds provided by the plan which include "typical" download, upload and latency speeds but in the rules, it's very vague what "typical" speeds mean so the group wants to discuss developing a common framework.
  - Every UPI that corresponds to a broadband label must have a typical upstream, downstream and latency speed.
- A member notes, the UPI requirement that is required for each label and is used for the ACP reporting is due in October. There are 15 digits in the UPI that can be used to create a unique code, but it seems not many MSOs have defined how they will create the UPI yet. Perhaps MSOs could collaborate on a future group call to assist in discussing how to create the UPI.
  - CTAM suggests an upcoming call be focused on this topic – possibly our next call, pending the confirmed date of when CableLabs can join the call to discuss speed tests.
- A member notes a struggle they are working on is figuring out where in the buy flow should the label displayed.

Topic for TBD future call: UPI Discussion.
Our next call is scheduled for Thurs, April 27 at 3:00 ET.

Call Notes: May 25, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

<u>Call Attendees</u>
Altice – Jacqui Clary
Armstrong – Peter Grewar
Breezeline – Adrianna Maciejewska
Cox – Diane Law-Hsu
Cox – Charles Scarborough
Cox – Leslie Benner
CTAM – Mark Snow, Sloane Stegen + Renee Harris

<u>Call Summary</u>

- CTAM question – With the labels being machine readable, once they're active on MSO websites, do MSOs believe there will be an influx of comparison sites/lead aggregators and have they discussed what impact that may have on marketing efforts and organic traffic?
    - The group on the call did not have any information to share but Cox can ask their digital teams about this.
- Group question – There is a debate about whether the rack rate is presented on the label or a discount rate? They wonder if a discount rate did get to an aggregator, what would be the effect?
- Are there any new topics around marketing of the labels?
    - Cox notes a couple items:
        - As mentioned earlier, the question of should the rack rate or market rate discount presented on the label– the answer could vary by channel.
        - Cox also notes they are also having conversations around when to display that label when in the call center, they note, it's pretty clear on the web when/where to display the label but it's not quite as clear for call centers so Cox is working to figure out a solution- they know it will be after serviceability but discussing when would be best time to send the label electronically. They are considering including the label within their "insta quote" which is sent to consumers once they have discussed service and price the customer is interested in but is not a commitment for the customer.
- A group member notes there are a lot of concerns about "breakage" in that the prices on the labels may not be the ultimate price the customer gets which could create turmoil. Digital teams are concerned about this.
    - A participant notes the FCC did give the option to rely on a non-promotional rate but as mentioned there is tension between offering a simpler approach, being the rack rate, on the label and customer experience confusion which would prompt to desire to display a promotional rate which, in turn, makes creating labels more complicated.
- Regarding requirements for UPIs, CTAM has not found any hardline guidelines around if lower- and upper-case letters are allowed within the UPI.
    - Cox notes they are investigating using upper and lower case in the UPI with their accessibility teams but think it may be not be accessible for screen reader technology to read, so Cox has built their UPI to not need upper and lower case.
- Question - Are there any font requirements for the labels?

    - Currently there are no requirements for font but the FCC did seek comment on this but as of today, there are no specific requirements.
- Question - Retail SMB would include labels but enterprise, private circuit, education and industrial would not require labels – has anyone on the call heard anything different?
    - The group agreed mass market B2B will require the labels.
- A group member notes that MSOs should think through how they will get the data for typical speeds – upstream, downstream and latency, particularly if their business services and residentials services have different speeds.
    - CTAM notes that CableLabs shared a suggestion of a company by the name of, SamKnows, that could help MSOs test speeds.
        - An attendee notes that both Ookla and SamKnows would not be the best for business service speeds.
    - CTAM also notes that NCTA recommends MSOs develop speed tests based on the MBA testing methodology used for the open internet disclosures may be sufficient. The group discussed how there may be a disconnect in the level of effort to create test speeds using the MBA method given it's LOE and the number of tiers that would need to be tested.
    - Cox notes that it would be very helpful to have an industry spec for how to handle speeds and also wonders if all ISPs came up with parameters around speed testing, would that be better than what the FCC would decide.

Our next call is scheduled for Thurs, June 22 at 3:00 ET.

Call Notes: June 22, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Jacqui Clary
Altice – Andre Martineau
Cable One – David Ballew
Charter – Kathleen Griffin
Cox – Charles Scarborough
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- CTAM notes there is no new news on the Consumer Labels per the Federal Register.
- CTAM also notes that Comcast has filed a petition with the FCC about the labels being an undue burden on MSOs as well as consumers. Link to article: https://www.fcc.gov/ecfs/document/10608230225212/1
- Altice question – What are MSOs thinking on timing of Labels and ACP data collection? Per their internal research, they are thinking Labels will go in effect around February 2024.
  - Cox notes they believe October to be the time deadline for ACP and January 17 for Broadband Labels but they believe the Labels will be delayed due to lack of movement on this within the FCC.
- The data collections for ACP consists of all the information that would be included in Broadband labels as well as any plan that any ACP customer is on.
- CTAM shared the attached link to a response to request for ACP disbursement data from Sens. Cruz and Thun. Link: https://www.fcc.gov/sites/default/files/doc-393007a2.pdf This document includes every providers' receivables for the reimbursement of ACP so gives a sense of relative scale of subs by ISP.
- Altice question – Other than the issues all MSOs are waiting for guidance from the FCC on, are there any other stumbling blocks MSOs are facing regarding label implementation? They have been talking about the exhaust issue on the 15 characters for the unique identifier.
  - The group did discuss the UPI 15 characters. One MSO did not feel the need to use upper and lower case and chose to use all caps as there should be more than enough variations. They also noted it avoids any possible issues with accessibility (parsing upper case I from lower case L, etc.)
- Altice question – Regarding the ACP data collections, are MSOs arranging a new process for it logistically?
  - Cox notes that for ACP data collection, the process is ad hoc as it is only required once a year but they will be building a data model process for labels.
- Charter question – Is there a benefit to aligning on how labels look visually?
  - CTAM provided a digital mock-up label for MSOs to view and there have been discussions on generally agreed approaches in an ad hoc way.
  - CTAM will compile a running list of the collective proposed best practice approaches by channel and share that with each set of call materials going forward.

Our next call is scheduled for Thurs, July 20 at 3:00 ET.

Call Notes: July 20, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Jacqui Clary
Cable One – David Ballew
Cable One – Karen Cline
Comcast – Cameron Hosmer
Cox – Diane Hsu-Law
Cox – Charles Scarborough
Cox – Leslie Benner
MCTV – Chris Thomas
CTAM – Sloane Stegen + Renee Harris

Call Summary

- CTAM shared the attached CTAM Broadband Consumer Label Best Practices – this document encumbers the best practices this group has discussed thus far regarding the BB Consumer Label requirements. Please review and let us know if there are any additions or questions you may have. We will continue to update the best practices with new information as it becomes available and, in the coming days, will provide a link to house this living document for ease of access.
- There has been no new news from the FCC regarding Broadband labels as of today nor has there been any new petition filings.

Our next call is scheduled for Thurs, August 17 at 3:00 ET.

Call Notes: August 17, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Jacqui Clary
Cable One – David Ballew
Cable One – Karen Cline
Cox – Charles Scarborough
Cox – Leslie Benner
Mediacom – Alyssa Hurley
MCTV – Chris Thomas
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- CTAM notes a joint filing was submitted by NCTA to the FCC on August 11 which can be viewed here: [081123 22-2 NCTA Industry Coalition Ex Parte on Labels.pdf (fcc.gov)]
- CTAM asked if MSOs have any updates to share regarding building the BBLs in a test environment, etc.?
    - No one on the call had any updates to share.
- Question – Is there a need to communicate and educate consumers on the Broadband Labels?
    - No MSO on the call had yet started any work in this area.
    - CTAM notes there could be an opportunity to educate consumers on the label while highlighting the positives of their broadband services vs. others (5G Home in particular) when the time is right.
- Question – Is March 25, 2024 still the date for label implementation?
    - One member noted they also believe end of March 2024 will be the date.
- Member notes there still not has been resolution to the question of document retention in alternate channels, they are hoping guidance will be given before March but do not have any insights on this. The order states that MSOs must document each instance of a label being presented in an alternate format.
    - Another member said they do not plan to document every single label but will document what labels were shown to consumers.
- CTAM notes the MSOs should feel free to send any specific questions on the BBL program and CTAM will facilitate getting the questions answered by NCTA, CableLabs, etc.
- Question from group – What do MSOs think is "typical" performance speed as to be notated on the label? One member notes "SamKnows" is no longer an approved partner with the FCC.
    - CTAM notes in previous conversations this year about "typical speeds", Steve Morris of NCTA stated that the testing methodology of Measuring Broadband America (MBA) used for the open internet disclosures may be sufficient. However, CTAM will ask NCTA if there is any new information available on this now that SamKnows is going away.
    - One member was on the call when the FCC announced they would no longer partner with SamKnows and, as they understand, the FCC has about half of years' data and will partner with a new company to complete the remaining data.
    - An MSO on the call would like to have a call to candidly discuss what other MSOs will do regarding determining "typical" speeds and displaying price point.

- Members would like to review draft labels CTAM presented earlier this year.
- Attached please find the CTAM Broadband Consumer Label Best Practices – this document encumbers the best practices this group has discussed thus far regarding the BB Consumer Label requirements which was reviewed during our last call.

Actions

1. CTAM to contact NCTA to confirm if there is any new information on defining "typical" speeds.
2. CTAM to reach out to MSO CMOs to obtain approval for MSOs to discuss candid thoughts on the labels specifically how they will define typical speeds and how to display price points. CTAM will seek to have anti-trust counsel on the call.

Our next call is scheduled for Thurs, September 14 at 3:00 ET.

Consensus Best Practices for Displaying BB Consumer Labels

(Each MSO should make its own determinations – this is group discussion only)

Call Center

- Offer SMS or E-mailed version of label(s)
- Opt Out verbally (captured in call recording and also documented some other way?)
- Default: need to read the label to customers who do not have access to view the label online or on a phone or unwilling to opt-out.

Web

- The label should be in close proximity of the marketing description of the plan, but it can come after the customer has input their address.
- Each plan will need a label.
- Bundles are excluded; however some will elect to include. (expanded notes below)

Retail/Point of Sale

- Have labels printed on cards or other digital or physical media for customers to see when selecting tiers.

3rd Party Retail / E-Tail

- Must follow same guidelines as 1st party retail and web.

Overall / Other

- NCTA notes that in the paragraph regarding alternative channels, there was a notation that providers must document every time the label is given to a customer.
- Direct Mail is considered "mass mail" and may not need labels.
- Bundles are excluded, so technically only stand-alone presentments of broadband need labels but many MSOs will include them even when bundling TV, Mobile, etc.
    - The requirement technically applies to broadband only -- for each tier of service a label will be required but will not be required for bundles.
    - For bundles, MSOs may want to put a link to the Label for the broadband portion.
    - It will be more complicated for companies doing Mobile where there is always voice component – is that a bundle and if so does that exempt the label requirement for broadband when part of a mobile offering?
- UPI Code (15 digits) – generally MSOs are leaning toward all caps alpha and numbers to avoid issues with lower case L and capital I, etc. There are enough combinations with 36 possible values for each of the 15 positions.
- Mass market plans to SMB seem to be included in the requirement for labels.
- While there are no specific fonts described for the labels, most agree the accessibility guidelines for online content would apply.

Latest on Timing

- Feb 2024 for 1MM+ ISPs and July 2024 for <1MM ISPs
- Data collection for ACP in October 2023 is related to BBCLs for some MSOs

Call Notes: September 14, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Andre Martineau
Cox – Leslie Benner
MCTV – Chris Thomas
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- Question from group – What is the latest update on how long to retain proof that the label was shown to customers?
  - Per NCTA's note to CTAM that was distributed to the group, the rules have been amended by request of the ISPs that interactions over the phone and at retail can be documented by documenting the business process used to display the labels to consumers. Rules for online, etc. remain as is. Please see the revised rules in the Order on Reconsideration document from the FCC site here: https://docs.fcc.gov/public/attachments/FCC-23-68A1.pdf
    - Refer to Section D (paragraphs 27-29:

      P27: In response to the ACA Connects Joint Petition, we reconsider the requirement that a provider must document each instance when it directs a consumer to a label at an alternative sales channel (e.g., retail stores, kiosks, and over the phone) and retain such documentation for two years. [47]In doing so, we grant ACA Connects' request and clarify in accordance with such request that the requirement will be deemed satisfied if: 1) the provider establishes the business practices and processes it will follow in distributing the label through alternative sales channels; 2) retains training materials and related business practice documentation for two years; and 3) provides such information to the Commission upon request, within 30 days. [48]No commenter opposed Petitioners' request.

      P28: We agree with petitioners that this clarification will avoid unnecessary burdens and costs on providers that may risk diverting resources to otherwise assist consumers with making broadband purchases at alternative sales channels. [49]We share their concerns that creating an additional system by which customer-facing employees are required to record the details of when and how they share the label in every customer interaction may impose significant costs on providers. We are persuaded by petitioners that providers deal with millions of customers and prospective customers by phone, in retail locations, and at "pop-up" sales outlets such as fairs or exhibitions, and that it may be challenging for providers to capture and retain such documentation when consumers are provided with access to the labels at each and every point of sale.

      P29: We believe that permitting providers to alternatively establish business practices and training materials to ensure labels are distributed consistently and accurately in retail stores and other sales channels will sufficiently protect consumers.[51]It is also consistent with our online point-of-sale requirements, whereby providers need not document each time a consumer views a label on their websites; they must instead archive all labels after they are removed from their websites and maintain such archive for at least two years after the service plan is no longer offered to new customers. As with archived labels, which must be provided to the Commission, upon request, within 30 days, we also find that, should the Commission request a provider's training materials and business practice documentation for alternate sales channels, ISPs must provide such information within 30 days. As a result, we amend section 8.1(a)(2) of the Commission's rules to clarify that the requirement to document interactions with consumers at alternate sales channels will be deemed satisfied if, instead, the provider: 1) establishes the business practices and processes it will follow in distributing the label through alternative sales channels; 2) retains training materials and related business practice documentation for two years; and 3) provides such information to the Commission upon request, within 30 days.

- The request to trim down the taxes and fees disclosure requirements was denied. See Section A of the Order on Reconsideration.
- Following up from an action from our last call, CTAM spoke with anti-trust counsel regarding CTAM holding a meeting for MSOs to discuss standardizing measuring typical speeds as required by the proposed rules. Counsel advised that NCTA would be the appropriate place for members to facilitate such as discussion as that body is spearheading the interaction between members and the FCC. CTAM recommends marketers in the group work with their government affairs teams to inquire about such an effort with the NCTA.
- CTAM asked the group if they want to continue monthly calls through November or pause until the final order comes out. The group agreed to keep the October + November calls.

Please note, our next call is scheduled for Thurs, October 12 at 3:00 ET.

Call Notes: October 12, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Andre Martineau
Altice – Bill Heberer
Charter – Nyota Ferguson
Comcast – Cameron Hosmer
Cox – Charles Scarborough
MCTV – Chris Thomas
Mediacom – Alyssa Hurley
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- As the groups is aware, the FCC finally published the final order in the Federal Register: https://docs.fcc.gov/public/attachments/DA-23-943A1.pdf
- Key Dates are as follows:
  - For MSOs >100,000 subs, the go-live date is April 10, 2024
  - For MSOs <100,000 subs, the go-live date is October 10, 2024
  - The exception to this is the web portal – everyone has until October 10, 2024 to implement.
- CTAM points out two requirements in the order that state the following:
  - Labels must be made available in every language used in MSO marketing
  - Labels must be summarized in a downloadable spreadsheet (This is not a day 1 requirement but do by October 10, 2024)
- CTAM further notes the following highlights from the order:
  - Point-of-sale includes the website and alternative channels including retail, 3rd party retail, by phone (a)(2)
  - Point-of-sale begins when the consumer begins investigating and comparing service offerings [I read this as not behind the click-to-buy button or order confirmation pages] (a)(2)
  - Providers can use documentation of process vs. recording each occurrence of label display for alternative distribution channels (a)(2)
  - Online labels must be machine-readable (a)(3)
  - All labels must be summarized in a spreadsheet comparing all the labels and make that available on the website for download and viewing (a)(3)
  - Labels must be in English and any other language the provider markets service (a)(4)
  - Retired labels (retired service plans) must be preserved for two years (a)(5)
  - Services covered under the order include mass-market retail wired and wireless internet service, excluding dial-up (b)
  - Section (a)(1) of Appendix A states: Any person providing broadband internet access service shall create and display an accurate broadband consumer label for each standalone broadband internet access service it currently offers for purchase. (See attached)
- An MSO on the call notes the following concern:

    - For Mobile providers, for pass through government fees, they are jurisdictional based so the sheer quantity of labels will be high if each label must display an exact pass-through fee amount and is curious if other MSOs have determined how many labels they will have
        - Another MSO on the call has the same concern and have discussed this internally with their Mobile team. The FCC order clearly states that MSOs cannot include such wording as "fee varies by location" so they are possibly considering providing a range for jurisdictional fees provided that there is not a large range between fees so for example $.04 - $.10 and NOT $.05 - $10 so keeping the range in cents and not dollars.
        - Another MSO notes they use ranges already in their video advertising, they show local broadcast station surcharge and regional sports surcharges separate and shows a range for example of $20-$32. This is shown prominently when they advertise price.
- Question from group – How many labels do MSOs think they'll have?
    - MSOs on the call did not have any guesses
- Question from group – Regarding the date required for when a label needs to be provided in machine readable format, is there any thought about compiling the data that will be publicly available across all providers so including AT&T, T-Mobile, etc.?
    - The group thought there could be a CTAM-led effort to curate all the labels and spreadsheets from all the ISPs across the wireline and wireless space for MSOs' collective access and use. CTAM will put thought into how to make this happen and circle back to the group.

Please note, our next, and last, call for the year is scheduled for Thurs, November 9 at 3:00 ET.

Title 47 —Telecommunication
Chapter I —Federal Communications Commission
Subchapter A —General
Part 8 —Internet Freedom

Authority: 47 U.S.C. 154, 201(b), 257, 303(r), and 1753.
Source: 76 FR 59232, Sept. 23, 2011, unless otherwise noted.

§ 8.1 Transparency.

(a) Any person providing broadband internet access service shall publicly disclose accurate information regarding the network management practices, performance characteristics, and commercial terms of its broadband internet access services sufficient to enable consumers to make informed choices regarding the purchase and use of such services and entrepreneurs and other small businesses to develop, market, and maintain internet offerings. Such disclosure shall be made via a publicly available, easily accessible website or through transmittal to the Commission.

(1) Any person providing broadband internet access service shall create and display an accurate broadband consumer label for each stand-alone broadband internet access service it currently offers for purchase. The label must be prominently displayed, publicly available, and easily accessible to consumers, including consumers with disabilities, at the point of sale with the content and in the format prescribed by the Commission in "[Fixed or Mobile] Broadband Consumer Disclosure," in figure 1 to this paragraph (a)(1).

Figure 1 to Paragraph (a)(1)—[Fixed or Mobile] Broadband Consumer Disclosure Label

Broadband Facts

Provider Name

Service Plan Name and/or Speed Tier

Fixed or Mobile Broadband Consumer Disclosure

Monthly Price [$]

This Monthly Price [is/is not] an introductory rate. [if introductory rate is applicable, identify length of introductory period and the rate that will apply after introductory period concludes]

This Monthly Price [does not] require[s] a [x year/x month] contract. [only required if applicable; if so, provide link to terms of contract]

Additional Charges & Terms

Provider Monthly Fees [Itemize each fee or enter "None."]	**[$]**
One-time Fees at the Time of Purchase [Itemize each fee or enter "None."]	**[$]**
Early Termination Fee	**[$]**
Government Taxes	**[Varies by Location/Taxes Included]**

Discounts & Bundles

Click Here for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. [Any links to such discounts and pricing options on the provider's website must be provided in this section.]

Affordable Connectivity Program (ACP)

The ACP is a government program to help lower the monthly cost of internet service. To learn more about the ACP, including to find out whether you qualify, visit GetInternet.gov.

Participates in the ACP **[Yes/No]**

(2) Broadband internet access service providers shall display the label required under paragraph (a)(1) of this section at each point of sale. *Point of sale* is defined to mean a provider's website and any alternate sales channels through which the provider's broadband internet access service is sold, including a provider-owned retail location, third-party retail location, and over the phone. For labels displayed on provider websites, the label must be displayed in close proximity to the associated advertised service plan. *Point of sale* also means the time a consumer begins investigating and comparing broadband service offerings available to them at their location. For alternate sales channels, providers must document each instance when it directs a consumer to a label and retain such documentation for two years. This requirement will be deemed satisfied if, instead, the provider: establishes the business practices and processes it will follow in distributing the label through alternative sales channels; retains training materials and related business practice documentation for two years; and provides such information to the Commission upon request, within thirty days. *Point of sale* for purposes of the E-Rate and Rural Health Care programs is defined as the time a service provider submits its bid to a program participant. Providers participating in the E-Rate and Rural Health Care programs must provide their labels to program participants when they submit their bids to participants. Broadband internet access service providers that offer online account portals to their customers shall also make each customer's label easily accessible to the customer in such portals.

(3) The content of the label required under paragraph (a)(1) of this section must be displayed on the broadband internet access service provider's website in a machine-readable format. Broadband internet access service providers must provide the information in any label separately in a spreadsheet file format on their websites via a dedicated uniform resource locator (URL) that contains all of their labels. Providers must publicize the URL with the label data in the transparency disclosures required under this paragraph (a).

(4) The label required under paragraph (a)(1) of this section must be provided in English and in any other languages in which the broadband internet access service provider markets its services in the United States.

(5) Broadband internet access service providers shall maintain an archive of all labels required under paragraph (a)(1) of this section for a period of no less than two years from the time the service plan reflected in the label is no longer available for purchase by a new subscriber and the provider has removed the label from its website or alternate sales channels. Providers must provide any archived label to the Commission, upon request, within thirty days. Providers must provide an archived label, upon request and within thirty days, to an existing customer whose service plan is associated with the particular label. A provider is not required to display a label once the associated service plan is no longer offered to new subscribers.

(6) Broadband consumer label requirements and the transparency rule in paragraph (a) of this section are subject to enforcement using the same processes and procedures. The label required under paragraph (a)(1) of this section is not a safe harbor from the transparency rule or any other requirements established by the Commission.

(7) Paragraphs (a)(1) through (6) of this section may contain an information-collection and/or recordkeeping requirement. Compliance with paragraphs (a)(1) through (6) of this section will not be required until this paragraph (a)(7) is removed or contains a compliance date, which will not occur until after the Office of Management and Budget completes review of such requirements pursuant to the Paperwork Reduction Act or until after the Consumer and Governmental Affairs Bureau determines that such review is not required. The compliance date will be one year after the removal

or amendment of this paragraph (a)(7) for providers with 100,000 or fewer subscriber lines and six months after the removal or amendment of this paragraph (a)(7) for all other providers, except that the compliance date for paragraph (a)(3) of this section will be one year after the removal or amendment of this paragraph (a)(7) for all providers. The compliance date for the requirement in paragraph (a)(2) of this section to make labels accessible in online account portals will be one year after the removal or amendment of this paragraph (a)(7) for all providers. The Commission directs the Consumer and Governmental Affairs Bureau to announce compliance dates for paragraphs (a)(1) through (6) of this section by subsequent Public Notice and notification in the FEDERAL REGISTER and to cause this section to be revised accordingly.

(b) Broadband internet access service is a mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence or that is used to evade the protections set forth in this part. For purposes of paragraphs (a)(1) through (6) of this section, "mass-market" services exclude service offerings customized for the customer through individually negotiated agreements even when the services are supported by federal universal service support.

(c) A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband internet access service.

[83 FR 7922, Feb. 22, 2018, as amended at 87 FR 76978, Dec. 16, 2022; 88 FR 52043, Aug. 7, 2023; 88 FR 63859, Sept. 18, 2023]

Call Notes: November 9, 2023
Subject: CTAM Broadband Consumer Label Working Group Call

Call Attendees

Altice – Jacqui Clary
Comcast – Cameron Hosmer
Cox – Charles Scarborough
Mediacom – Alyssa Hurley
CTAM – Mark Snow, Sloane Stegen + Renee Harris

Call Summary

- Question: With respect to fees, does anyone have additional thoughts on how the industry is planning to incorporate the recurring monthly fees requirements into the labels for wireless?
  - One member has determined they must do it at the level where the fees are required – so by minimum by state but likely by market. They have been guided that they have a distinct label for each unique circumstance for government fees.
- Question: How many labels are MSOs thinking they will have to do for fixed and wireless?
  - One member has two wireless plans so for that would not be that much because there are only two plans. For the wireline side, their business services sides has more than 1000 plans, on the residential side, the biggest struggle is on the performance metrics because if the performance metrics can vary by market, so there has to be a label for each. They are working through at what level should the performance metrics be – national, by state or by market. They have seen speed tiers, upstream and downstream, are consistent so a national number could work but latency is distanced based and that creates a problem of not having a common latency metric nationwide – they are discussing this with their regulatory team. If they do not have to go national than it would be much less than 1000 labels.
  - It was noted that Google has published a label which can be viewed here: https://fiber.google.com/blog/2023/10/is-your-internet-high-fibernutrition.html
    - One member notes that Google shows a latency number of 13ms – which looks like they are measuring latency in some sort of national average way [editorial note: or this is a spec label and there will be more variations when they actually publish them]
    - It was also noted the ingredients summary that shows at the bottom of the label is in "marketing pitch" speak and may not be permitted.
    - Also, on the speeds provided by plan, it's listed as 1 gig but they are over provisioning the service in the real world.
- Question: Is there a process for pre-submission of the label?
  - There doesn't appear to be a formal submission and approval process, just compliance [and enforcement?]
- CTAM notes that the service to have access to all labels in one place for members to view for competitive intelligence is still being worked on but the vendor who will produce this work has been tied up on other CTAM work. CTAM will engage with them in Dec to obtain an SOW / estimate.
- Question: Did MSOs get their ACP reports filed?

    - Yes, MSOs on the call did.
- A member is working on a draft label now. One concept being considered is a set of tiles where the usual messaging is on one side and you can then click to “flip” the tile over to see the label Question: Does anyone on the call have any thoughts on why this would or would not work?
    - Response from Group
        - If this option passes with their regulatory team it should be good – it just can’t be a link
        - It could be an issue if the labels are not able to be seen side by side (more than one flipped to the label side)
        - The label on the page itself must be machine readable — it would be the unformatted version of the page that needs to be readable
- This call was last in the series for 2023, calls will resume in January – a new invite series has been sent.

Our next call is scheduled for Thurs, January 11 at 3:00 ET.

6 **Rural Broadband Working Group**

Call Notes: January 10, 2023
Subject: CTAM Rural + Low Income Broadband Working Group Call

Welcome/Roll Call

Call Attendees:

Altice – Prasanna Thoguluva Santharam
Altice – Dan Johnson
Armstrong – Peter Grewar
Charter – Zoe Santo
Charter – Jennifer Rocco
Charter – Meghan Dering
Comcast – Adrienne Simpson
Cox – Ilene Albert
Cox – Joel Frost
MCTV – Elizabeth Kwolek
Sparklight – Varn Chavez
CTAM – Mark Snow, Renee Harris, Sloane Stegen + Nakesa Kouhestani
IEN – Anne Cowan + Tim Sherno

Progress readout and initial findings from I.E.N. (industry interviews, consumer interviews)

Tim Sherno and Anne Cowan, IEN, presented the attached "CTAM IEN Rural BB Exec Interviews" deck.

Highlights include:

- IEN interviewed industry insider executives to determine rural "themes" and they reviewed smaller markets with a hands-on, feet on the ground approach.
- Common themes that emerged as a result of the analysis include:
  - **Presence** – awareness and trust are key.
  - **Handshake Marketing** – impersonal marketing is useful as a reminder AFTER you've met.
  - **Consumer Education** – Price and performance mean less when they're not understood.
  - **Competition –** Expect competition – it's best to be first but don't expect to be first.
  - **Skepticism –** Broadband still scares people, and these consumers may worry about government intrusion. Be ready to address concerns but know when to let go.
  - **Pricing –** Simplicity rules. Explain speed and bandwidth first and translate

technology into benefits then talk pricing. Narrow options offered as fancy pricing does not fit with entry level awareness.

- Who is already doing well in these markets?
    - Companies with high positive regional awareness
- What's next?
    - IEN will talk directly to consumers to test the above common themes.

<u>Questions from the group</u>

1. *Is there any way to regionalize differences between rural consumers?*

   IEN is planning to be mindful of regional differences when conducting consumer interviews. As far as current data, IEN can provide some imaging but not a tight focus.

2. *Is there any perspective that can be given on the Hispanic, African American or Asian western market?*

   Yes, this information will come out in the quantitative HarrisX data. In addition, the rural data may be able to show these perspectives as well.

3. *Have there been conversations about "stickiness" – determining whether rural customers are actually using internet service once they get it?*

   IEN feels answers to this question will come after consumer interviews. CTAM can look at how new users intend to use the service to address this question.

Laying out the final project deliverables and delivery date / project wrap-up

The final deliverable will a) be a messaging framework for marketing to identified rural market segments; and b) a best practices playbook for engaging the local government and community when entering a new rural market.

Actions/Next Steps

- CTAM to look into adding rural questions to the Q1 2023 Mover study.
- CTAM will schedule a call do to the read-out of the final deliverable in early April.

Presentation: *CTAM IEN Rural BBD Executive Interviews*

Set Up

Companies expected to enter predictable market environment.
*Apply previously successful formulas.
*Achieve previous results.

Urban and suburban environments fit patterns.
*More exposed to marketing messaging.
*More willing to ingest marketing messaging.
*Closer to fast paced life/lifestyle evolution.

Rural environments are less exposed.
*The ‘Mayberry Effect’
*Education.
*Independent thinking.

WHO we talked to and WHY we talked to them.

Executive interviews.

We assembled a puzzle from different pieces of success.

Looked at smaller markets with a hands-on, ears-to-the-ground and feet-on-the-street approach.

Listened for challenges *and* for solutions.

YES - THEMES EMERGED

Common Themes.

Presence
Handshake Marketing
Consumer Education
Competition
Skepticism
Pricing

Presence

Awareness and trust are key.

In rural communities, marketing chatter is at a low volume.
* Low volume = more quiet.
* Low volume = less frequent.

Excuse me, but WHO are you?

Handshake Marketing

Impersonal marketing is useful as a REMINDER AFTER YOU'VE MET.

Until then you're a LOGO and a PROMISE and a PRICE-TAG

Consumer Education

Price and performance mean less when they're not understood.

Explain everything.

Tie tech to value; learning, work-from-home, gaming, entertainment, medical care.

Competition

Expect it.

It's best to be first.

Seizing pent-up demand happens fast.

Don't expect to be first.

If you're second but your competition isn't connecting - connect quickly!

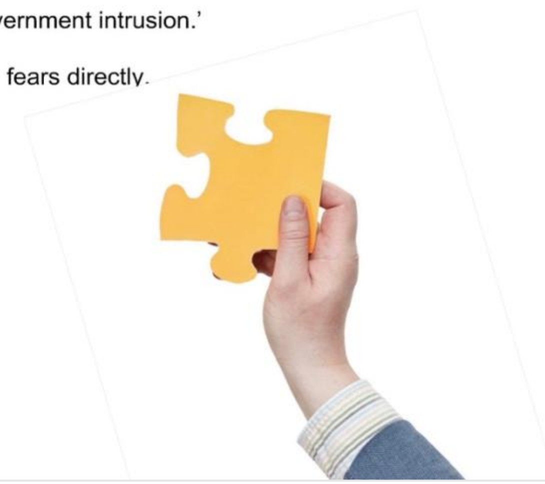
Skepticism

Broadband still scares people - don't understand, hesitant to consider.

'Who sent you?' 'Do you listen-in on me?' 'Government intrusion.'

Need to be ready to address the concerns and fears directly.

And know when to let go.



Pricing

Simplicity rules.

Explain speed and bandwidth first.

Translate technology into benefits.

Then talk pricing.

Fancy pricing isn't a fit with entry level awareness:
*Limit tiers - no more than 3
*Narrow the options for them

Who is already doing well? And what does that tell us.

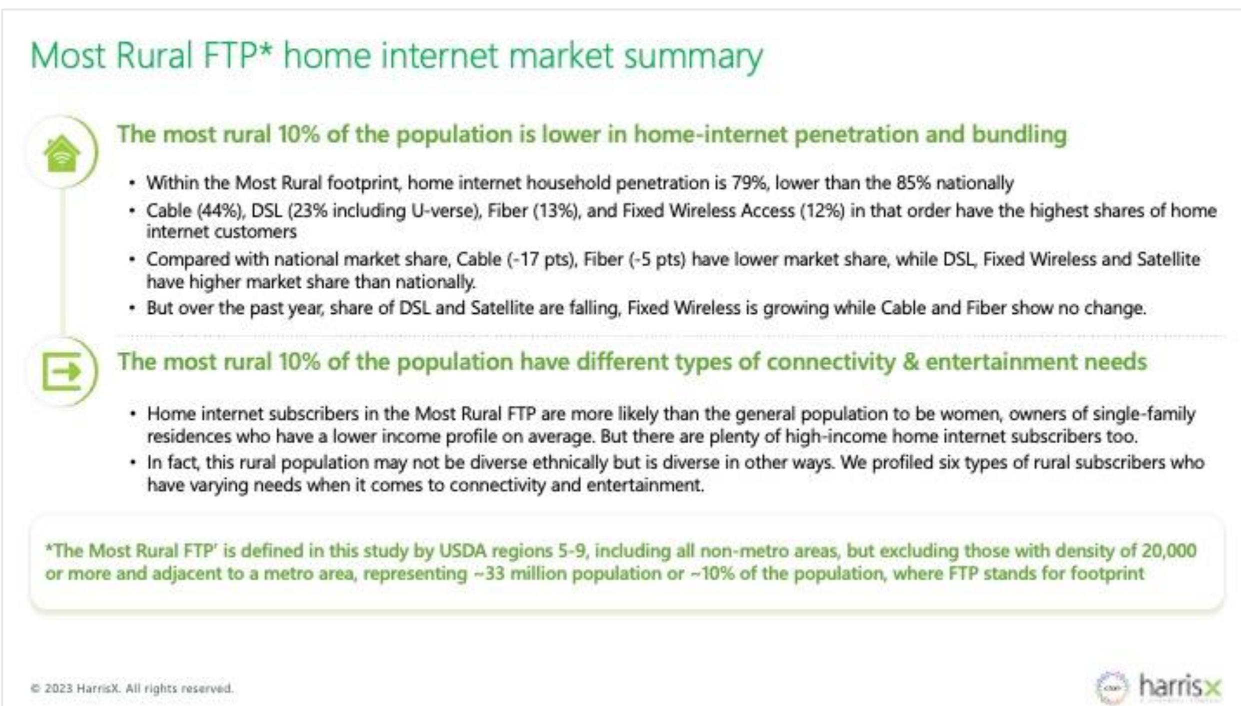
Companies with high, positive regional awareness start on 2nd base. 'I know who they are.'

Anyone with an existing GROUND GAME already knows the market and can TALK UP new offers.

What's next?

We're gonna go talk to consumers and hear it directly from them.

Presentation: *HarrisX Rural Broadband TCS Slides*



Most Rural Footprint Summary

Proposed Segments/ profiles

- Mobile Reliant Singles (24%) – Possible target for converged bundles. Highest mobile only reliance for internet access (20%) compared to other groups.
- Millennial Moms (27%) – Possible target for bundles with streaming add on promotions – they spend time streaming tv content, have a higher internet spend, & higher rates of taking the TV/Internet bundle
- Low Choice Homeowners (30%) – Possible target for bundles with Pay TV. They have the highest share of watching Live TV and like to indulge in social networking
- Retired Grandmas (13%) – Target with lower priced internet plans. They spend the least on home internet, do not stream or social network as much as other groups.
- Wealthy Employed Bundler Dads (6%) – Best target for converged bundles (45% have one already). They have higher incomes, are likely to be gamers, and app users who spend more on home internet.

*Converged bundles refer to bundles with at least home internet and a mobile plan

harrisx

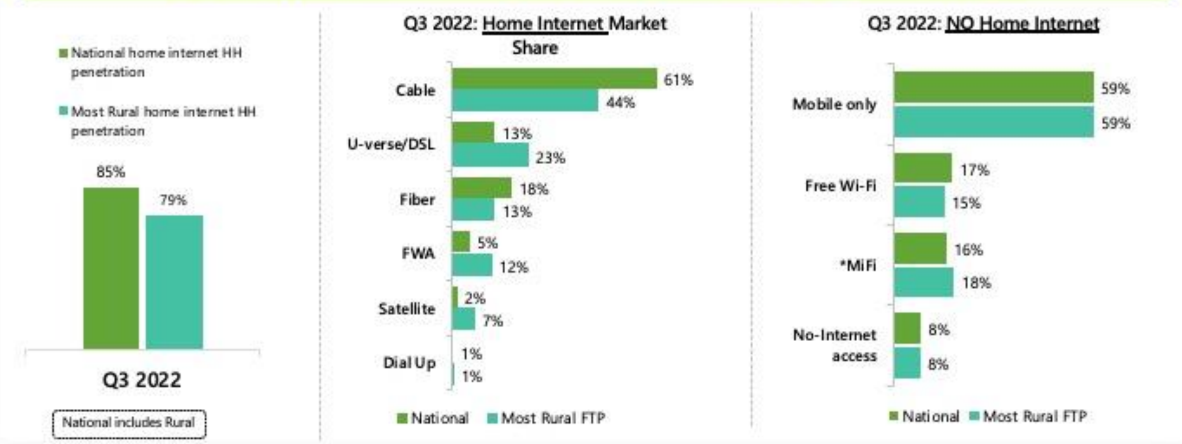
harrisx

Most Rural Home Internet Subscriber

Most Rural FTP

Compared with National, HH penetration is lower in the Most Rural FTP, MSO market share is also lower (61% v 44%); FWA share of households is higher by 7 pts, and Satellite by 5 pts

Household Penetration of Home Internet and Tech market share, National v Rural



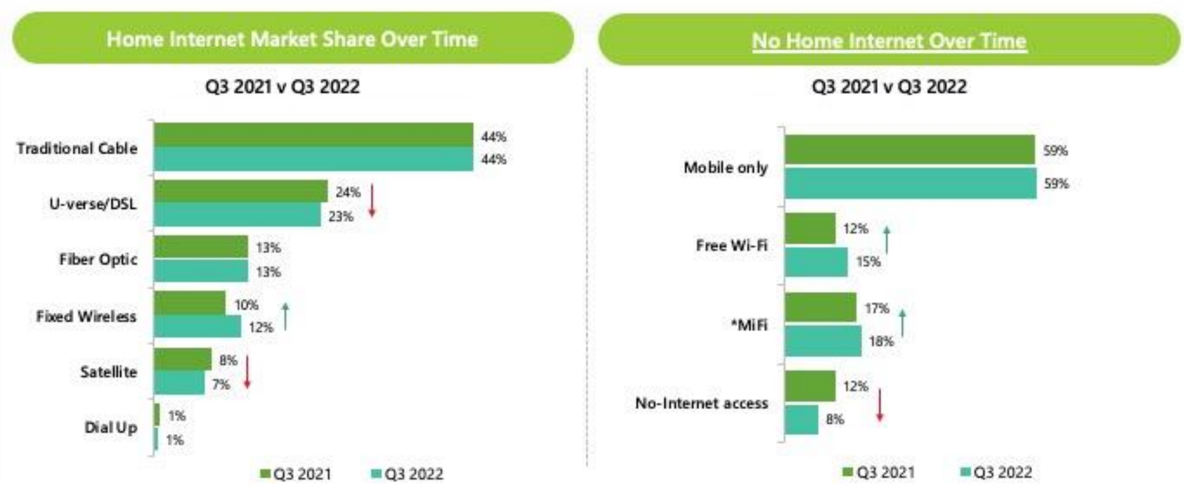
Base: Q3 2022 Most Rural Footprint | National/Most Rural (N): (23,713/1,876)
TCS Survey | T1003

*MiFi includes wireless routers that act as mobile WiFi hotspots

harrisx

Most Rural FTP

U-verse/DSL and Satellite shares are falling YoY while FWA gains; Reliance on Free Wi-Fi and MiFi for home internet is increasing YoY



Base: Q3 2022 Most Rural Footprint (1,876)
Q3 2022 TCS Survey | T830,T828

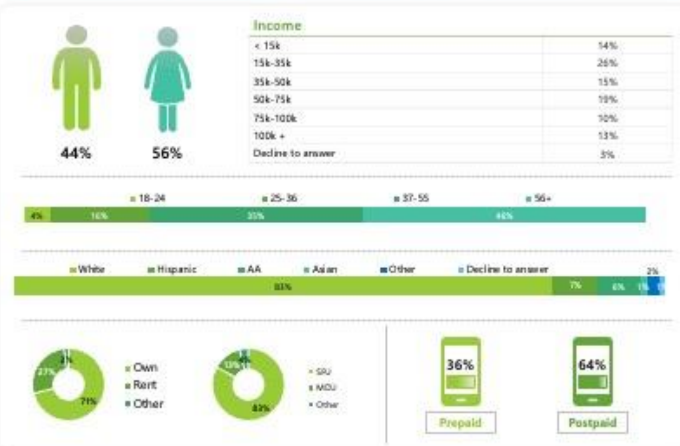
*MiFi includes wireless routers that act as mobile WiFi hotspots

harrisx

Most Rural FTP

Rural Home Internet Subscribers are more likely to be lower income, single family home-owners than the national population

Q3 2022 Home Internet Subscribers: Most Rural Footprint



GENDER

Women: +5 pts

Rural home internet customers are skewed towards more women than national home internet subscribers

INCOME

< $50K: +18 pts

Lower income profile than national home internet subscribers

AGE

- **37-55: +6 pts**

More middle aged than national but not by much

RACE/ETHNICITY

Caucasian: + 3 pts

Less racial and ethnic diversity than national

HOME

+15 pts SFUs

+ 5 pts homeowners

Many more owning homes and living in SFUs

PREPAID

+ 2 pts

A little more likely to be on Prepaid plans overall, but some segments have > 50% on Prepaid plans

Base: Q3 2022 Home Internet Subscribers | National/Most Rural Footprint (20,660/1,523)
Q3 2022 TCS Survey | T101, agebuckets, RaceEthn, T1025A, Family, H15

harrisx

Consumer Groups

		Mobile Reliant Singles	Millennial Moms	Low Choice Homeowners	Retired Grandmas	Wealthy Employed Bundler Dads	National (Q3 2022)
		24%	27%	30%	13%	6%	
Internet Activities	Activities	Social Networking (71%), Streaming TV/Movies (67%), Online Gaming (43%)	Social Networking (74%), Streaming TV/Movies (73%), Online Gaming (54%)	Watching Live/ Recorded Traditional TV (67%), Social Networking (65%), Streaming TV/ Movies (55%)	Watching Live/ Recorded Traditional TV (61%), Social Networking (61%), Streaming TV/ Movies (46%)	Social Networking (72%), Streaming TV/Movies (68%), Online Gaming (52%)	Social networking (61%), Using Apps (60%), Streaming Music (49%)
	Customer Needs	Appreciate price, good network quality and do not want to disrupt service, but at risk of leaving if preferred provider offers service	Appreciate good network quality, but at risk of leaving if preferred provider offers service	Appreciate price, good network quality, but at much greater risk of leaving if preferred provider offers service	Appreciate good network quality and price/promotion, but at risk of leaving if preferred provider offers service	Appreciate good network quality and price/promotion, but at risk of leaving if preferred provider offers service	Appreciate good network quality & Price/Promotion
	No choice in choosing provider	32%	35%	43%	37%	34%	26%
Internet Technology	Internet Technology Types	Cable: 33%, U-Verse/DSL: (13%), FWA: 8%, Mobile Only: 20%	Cable: 34%, U-Verse/DSL: 17%, FWA: 11%, Mobile Only: 14%	Cable: 37%, U-Verse/DSL 21%, Fiber: 12%, Mobile Only: 8%	Cable: 36%, U-Verse/DSL 20%, Fiber: 9%, Mobile Only: 12%	Cable: 28%, Fiber 19%,U-Verse/DSL: 18%, FWA: 13%, Mobile Only: 9%	Cable: 52%, Fiber: 15%, FWA: 5%, U-Verse/DSL: 11% Mobile Only: 9%
Internet Penetration	Paid Internet Penetration	68%	77%	86%	80%	84%	84%
Demographics	Gender & Age	Female (57%), Average Age: 41	Female (66%), Average Age: 39	Mixed Male/Female, Average Age: 62	Female (67%), Average Age: 66	Male (67%), Average Age: 40	Mixed Male/Female, Average Age: 51
	Ethnicity	More Diverse: Hispanic (11%), AA(15%)	More Diverse: Hispanic (18%), AA(9%)	White Dominant (84%)	White Dominant (92%)	White Dominant (98%)	White (69%)
	Home Ownership	Skew towards SFU Owner/Renter Mix	Skew towards SFU Owners	SFU Owners	Skew towards SFU Owners	SFU Owners	Skew towards SFU Owners
	Family	Single/Divorced without Kids	Skewed Married With Kids	Married without Kids	Widowed/Divorced without Kids	Married with Kids	Skew towards Married with no Kids
	Income	<$50k(81%)	Skewed less <$50k(57%)	>$75k (39%)	<$50k (80%)	$100k+ (55%)	$100k+ (25%)
	Education	Less than college (81%)	Less than college (77%)	College Graduate/Graduate Degree (37%)	Some College/High School (56%)	College Graduate/Graduate Degree (67%)	College Graduate (23%)
	Employment	Not Employed (40%)	Homemaker (22%) & Employed (42%)	Semi Retired	Retired (86%)	Full Time Employed (100%)	Employed (56%)

*Mobile Only = only use mobile phone for internet

*Factors considered when clustering: Demographics, Prepaid/Postpaid

*Without kids refers to no kids at home

harrisx

Consumer Groups

		Mobile Reliant Singles	Millennial Moms	Low Choice Homeowners	Retired Grandmas	Wealthy Employed Bundler Dads	National (Q3 2022)
		24%	27%	30%	13%	6%	
Prepaid v Postpaid	Postpaid	Prepaid: 51%	Postpaid: 53%	Postpaid: 78%	Postpaid: 58%	Postpaid: 100%	Postpaid: 71%
Internet Satisfaction & Spend	Price Satisfaction (T3B%)	50%	56%	42%	49%	57%	50%
	Network Quality Satisfaction (T3B%)	64%	66%	64%	68%	69%	71%
	Monthly Spend (Mean $)	$63.36	$68.94	$63.66	$58.65	$71.84	$64.44
Internet Technology	Internet Technology Types	Cable: 33%, U-Verse/DSL: (13%), FWA: 8%, Mobile Only: 20%	Cable: 34%, U-Verse/DSL: 17%, FWA: 11%, Mobile Only: 14%	Cable: 37%, U-Verse/DSL: 21%, Fiber: 12%, Mobile Only: 8%	Cable: 36%, U-Verse/DSL 20%, Fiber: 9%, Mobile Only: 12%	Cable: 28%, Fiber 19%,U-Verse/DSL: 18%, FWA: 13%, Mobile Only: 9%	Cable: 52%, Fiber: 15%, FWA: 5%, U-Verse/DSL: 11% Mobile Only: 9%
Switching Behavior	Likelihood to Switch (T2B%)	Likely (6%)	Likely (8%)	Likely (5%)	Likely (4%)	Likely (8%)	Likely (6%)
	Likely to Cancel (T2B%)	Likely (7%)	Likely (11%)	Likely (4%)	Likely (4%)	Likely (23%)	Likely (9%)
	NPS Category	Promoter – 42% Detractors – 25%	Promoter – 47% Detractors – 23%	Promoter – 39% Detractors – 31%	Promoter – 42% Detractors – 29%	Promoter – 53% Detractors – 20%	Promoter – 44% Detractors – 24%
Bundling Behavior	Bundlers	18%	20%	29%	26%	32%	39%
	Converged Bundlers	11%	22%	5%	3%	45%	12%
	Bundle Type	TV/Internet (43%)	TV/Internet (38%)	TV/Internet (33%)	TV/Internet (31%)	TV/Internet/Phone (20%)	TV/Internet (36%)

*Mobile Only = only use mobile phone for internet

harrisx

Most Rural FTP

Overall, activities are in line with gen pop, with internet browsing, streaming and social networking being the top ranked activities, with differences among segments

Activities in past month	Q3 2022					
	Mobile Reliant Singles	Millennial Moms	Low Choice Homeowners	Retired Grandmas	Wealthy Employed Bundler Dads	National (Q3 2022)
Internet searching/ browsing	78%	76%	85%	82%	77%	78%
Social networking	71%	74%	65%	61%	72%	61%
Streaming TV shows, movies, videos, sports or events	67%	73%	55%	46%	68%	64%
Using apps	67%	69%	55%	44%	62%	60%
Watching live or recorded TV (via cable/satellite/antenna/DVR)	45%	45%	67%	62%	51%	56%
Streaming music or radio	60%	64%	39%	27%	60%	49%
Downloading apps, games, or Other content	53%	62%	29%	24%	54%	41%
Online gaming	42%	53%	19%	19%	52%	33%
Downloading or playing downloaded music	38%	45%	22%	15%	42%	30%
Video chatting/conferencing	34%	45%	25%	17%	46%	33%
Downloading or playing downloaded TV shows, movies, videos	31%	37%	22%	15%	36%	27%
Playing videos/movies from discs (DVD/Blu-ray, etc)	29%	38%	19%	14%	42%	23%
Base	*2,754*	*3,425*	*4,321*	*1,706*	*866*	*20,548*

Base: Q3 2022 Most Rural Footprint | Q3 2022 TCS Survey | T1008

harrisx

Most Rural FTP

Online gaming, Downloading apps/games, and Streaming TV/Movies and other content have seen increases in activity amongst FWA and Overall home internet subscribers

Activities using internet in past month	Q3 2021				Q3 2022			
	Cable	Fiber	FWA	Overall	Cable	Fiber	FWA	Overall
Internet searching/browsing	80%	81%	**73%**	79%	82%	80%	**80%**	79%
Social networking	66%	69%	**68%**	66%	72%	68%	**70%**	69%
Streaming TV shows, movies, videos, sports or events	64%	59%	**60%**	58%	68%	60%	**70%**	63%
Using apps	59%	59%	**59%**	57%	65%	69%	**69%**	62%
Streaming music or radio	49%	53%	**45%**	45%	52%	47%	**59%**	49%
Downloading apps, games, or Other content	42%	39%	**46%**	40%	44%	42%	**53%**	42%
Online gaming	34%	35%	**38%**	34%	34%	31%	**48%**	34%
Downloading or playing downloaded music	30%	30%	**38%**	30%	30%	35%	**34%**	30%
Video Chatting/Conferencing	31%	28%	**36%**	29%	30%	28%	**38%**	28%
Downloading or playing downloaded TV shows, movies, videos	26%	26%	**28%**	25%	28%	25%	**29%**	26%

Base: Q3 2021 – Q3 2022 Most Rural Footprint | Cable (612/645), Fiber (181/184), FWA (153/179), Overall (1484/1521)
Q3 2022 TCS Survey | T1008

harrisx

Most Rural FTP

Cable and Fixed Wireless Home Internet Subscribers are more likely to Rent and reside in multiple dwelling units than other Home Internet Types

Residence Status

	Q3 2021						Q3 2022					
	Cable	Fiber	FWA	U-verse/DSL	Dial Up	Satellite	Cable	Fiber	FWA	U-verse/DSL	Dial Up	Satellite
SFU	78%	93%	82%	86%	77%	94%	81%	90%	76%	87%	98%	88%
MDU	19%	6%	13%	9%	5%	3%	17%	7%	17%	10%	2%	4%
Own	66%	84%	68%	81%	72%	81%	66%	80%	58%	79%	89%	84%
Rent	32%	15%	30%	16%	28%	15%	31%	19%	38%	20%	11%	14%

Base: Home Internet Subscribers Most Rural Footprint | Q3 2021/Q3 2022 (1,403/1,434)
Q3 2022 TCS Survey | T1025A

harrisx

Most Rural FTP

18–24-year-olds are increasingly subscribing to home internet in Q3 2022, a 7pt increase YoY; However, still more likely not to have home internet

	Q3 2021					Q3 2022				
	18-24	25-36	37-55	56+	Overall	18-24	25-36	37-55	56+	Overall
No Home Internet	*40%*	*24%*	*22%*	*16%*	*21%*	*33%*	*28%*	*23%*	*16%*	*21%*
Internet Cord Cutters	70%	83%	80%	80%	80%	79%	81%	83%	91%	85%
Internet Cord Nevers	30%	17%	20%	20%	20%	21%	19%	17%	9%	15%
Base (Those with no home internet currently):	*41*	*88*	*139*	*113*	*381*	*50*	*110*	*166*	*116*	*442*
Likely to Sign Up Again	26%	27%	31%	17%	25%	30%	33%	26%	17%	25%
Base (Those with no home internet currently):	*41*	*88*	*139*	*113*	*381*	*50*	*110*	*166*	*116*	*442*

Base: Q3 2021 – Q3 2022 Rural Footprint
Q3 2022 TCS Survey | T282, T285A, T286

harrisx

Most Rural FTP

Cord-cutters are more likely to cite the price being too expensive as the primary reason why their household is unlikely to sign up again for Internet

	18-24	25-36	37-55	56+	Overall	18-24	25-36	37-55	56+	Overall
It's too expensive	64%	40%	43%	48%	46%	45%	46%	45%	50%	47%
I have unlimited data on my mobile device	12%	29%	15%	21%	20%	29%	28%	24%	17%	22%
There are no reliable internet service providers in my area	14%	15%	17%	26%	20%	40%	22%	21%	20%	22%
I can access the internet for free	15%	29%	20%	20%	21%	9%	14%	14%	15%	14%
I do not use the internet enough to make it worth it	11%	24%	13%	8%	13%	7%	5%	7%	8%	7%
Other	2%	3%	6%	4%	4%	3%	5%	4%	9%	6%
Base (Those who do not have home internet & unlikely to sign up again):	*32**	*66*	*98*	*93*	*289*	*34**	*73*	*125*	*96*	*328*

Base: Q3 2021 – Q 2022
Q3 2022 TCS Survey | T282, T285A, T286

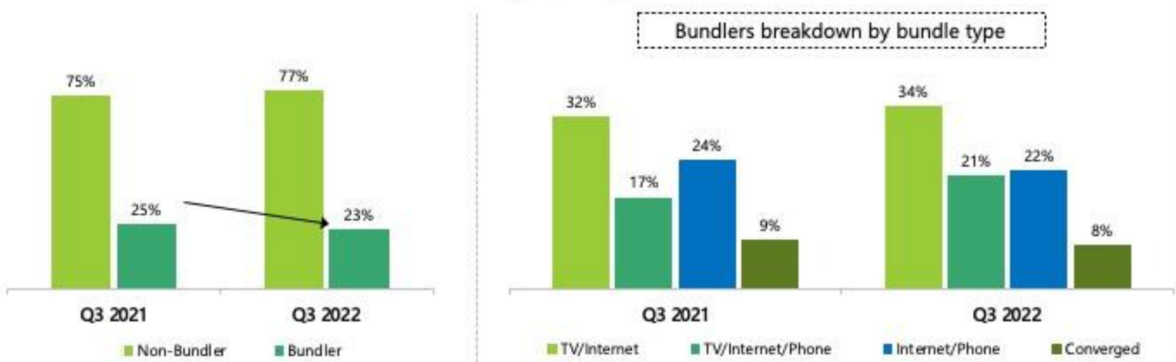
harrisx

Home internet & Bundling

At least 23% of rural households still bundle, though that is lower than the national rate of bundling; bundling is declining

Bundling Penetration and Types of Bundles – All HH with at least one communication service

Q3 2021 – Q3 2022



**Note: Converged bundles refer to any bundle with internet and mobile included*

Bundles not included in this analysis include home security, phone and mobile, and other types of bundles

Base: Q3 2021 – Q3 2022 Most Rural Footprint | Bundlers (n): (412/359)
Q3 2022 TCS Survey | T401

Most Rural FTP

While older Home Internet Subscribers continue to Bundle, bundling penetration declined 20 points amongst 18-36 year olds

Bundling Penetration and Types of Bundles – All HH with at least one communication service

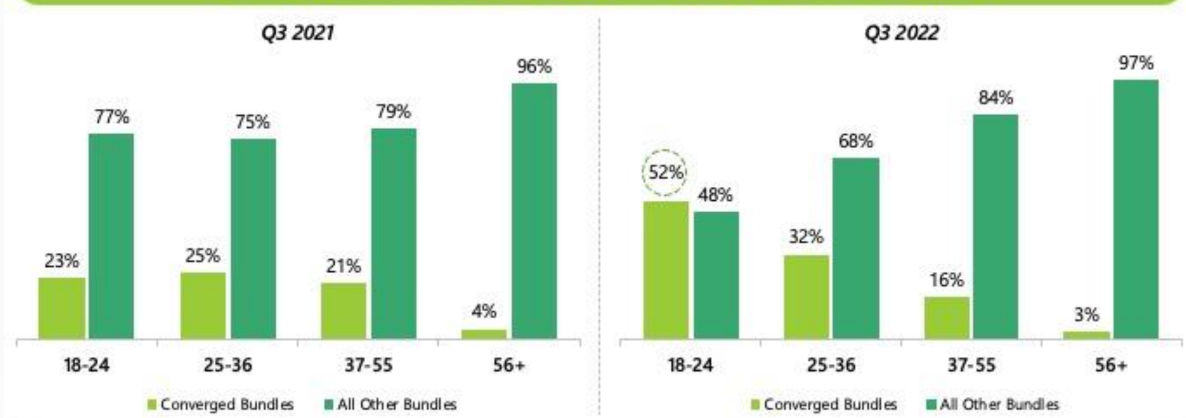
Base: Q3 2022 Most Rural Footprint | 18-24/25-36/37-55/56+ (n): (99/303/586/651)
Q3 2022 TCS Survey | T401

harrisx

Most Rural FTP

Converged Bundles amongst 18-24 year olds have increased 29 points between Q3 2021 and Q3 2022

Bundling Penetration and Types of Bundles – HHs with bundled services



*Note: Converged bundles refer to any bundle with internet and mobile included

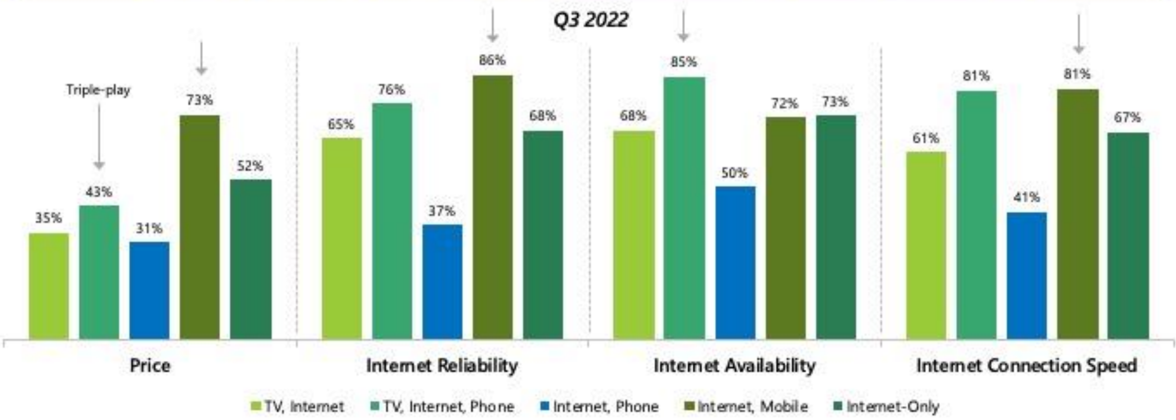
Base: Q3 2022 Most Rural Footprint | Bundlers | 18-24/25-36/37-55/56+ (n): (13*/43/121/182)
Q3 2022 TCS Survey | T401

harrisx

Most Rural FTP

Those with internet and mobile bundles are particularly satisfied with the price they paid when compared with those who have other types of bundles

Bundle and Internet Satisfaction Metrics for those Bundling Internet v Internet-Only



Base: Q3 2022 Most Rural Footprint | (TV, Internet/TV,Internet,Phone/Internet,Phone/Internet,Wireless/Internet Only) (n): (120/75/76/15*/1,047)
Q1 2022 TCS Survey | T401

harrisx

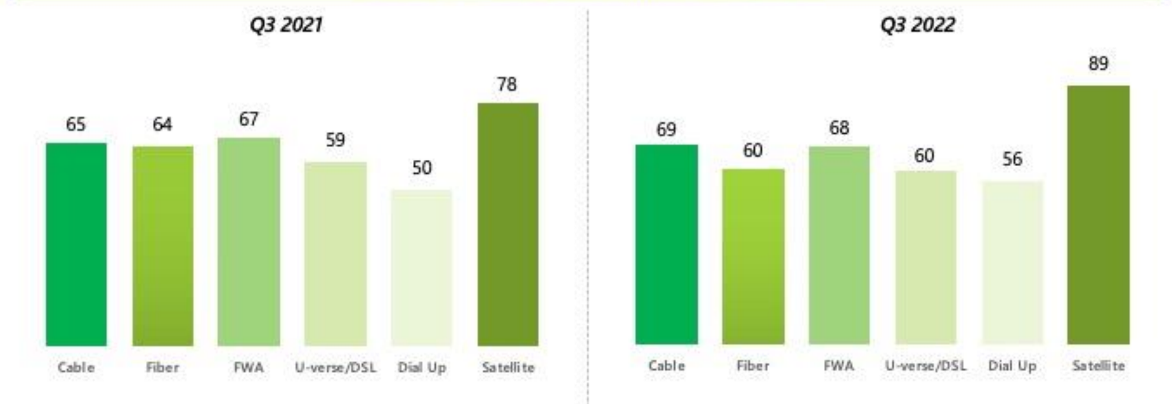
harrisx

Home Internet spend and Sat by tech

Most Rural FTP

Satellite subscribers continue to have the highest average monthly spending over other Home Internet types

Monthly Spend on Home Internet in $ – L1Y



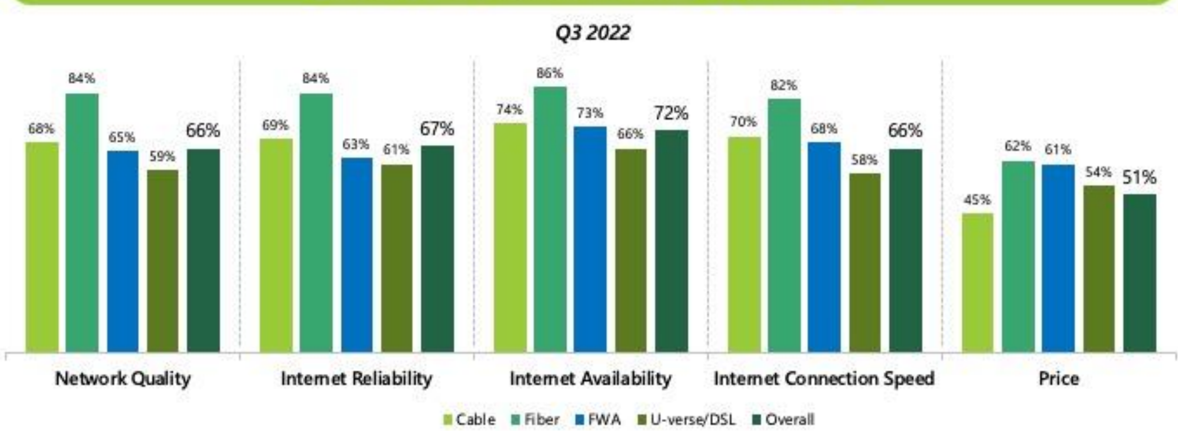
Base: Most Rural Footprint | Q3 2021/Q3 2022 (N): Cable (416/443), Fiber (159/164), FWA (119/153), U-verse/DSL (226/233), Dial Up (14/18), Satellite (89/86)
Q3 2022 TCS Survey | T1023

harrisx

Most Rural FTP

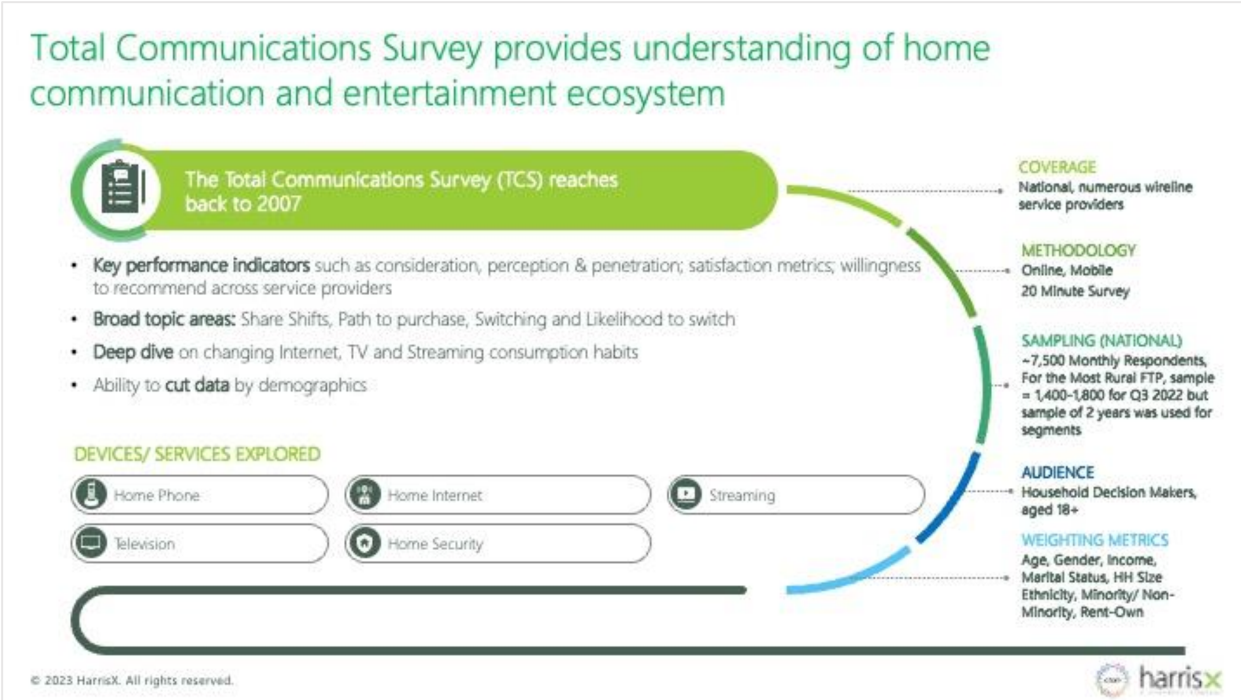
Rural Fiber Home Internet Households have the highest satisfaction ratings for all five internet and price related metrics

Internet & Price Satisfaction Metrics By Technologies

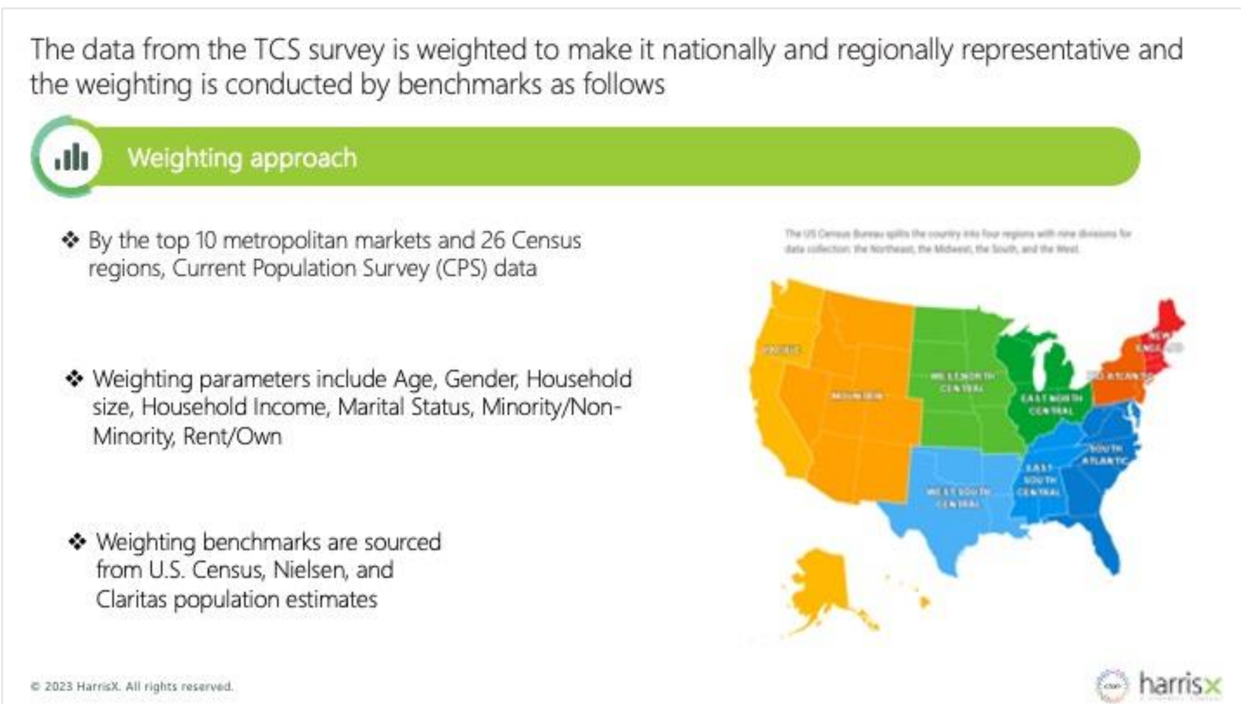


Base: Q3 2022 Most Rural Footprint | Cable/Fiber/Fixed/U-verse/DSL/Overall) (n): (427/152/121/313/1,461)
Q3 2022 TCS Survey | T803,T804,T805,T806,T850

harrisx

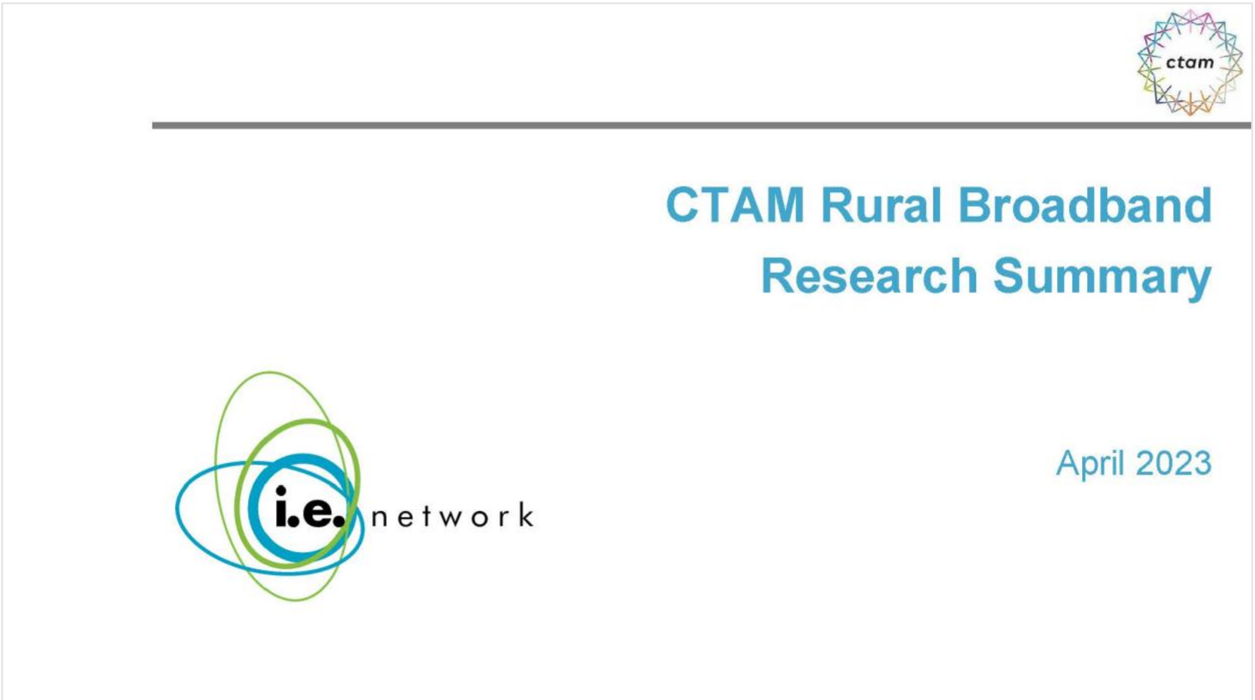


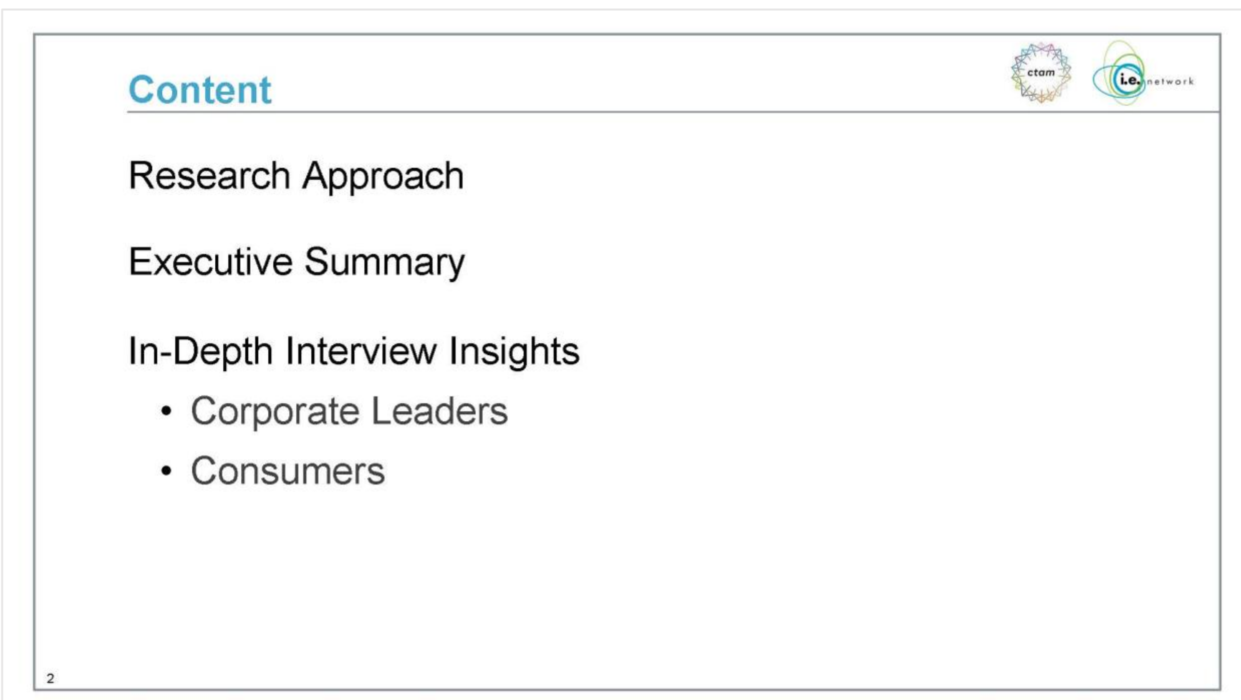
Total Communications Survey provides understanding of home communication and entertainment ecosystem
The Total Communications Survey (TCS) reaches back to 2007
• Key performance indicators such as consideration, perception & penetration; satisfaction metrics; willingness to recommend across service providers
• Broad topic areas: Share Shifts, Path to purchase, Switching and Likelihood to switch
• Deep dive on changing Internet, TV and Streaming consumption habits
• Ability to cut data by demographics
DEVICES/ SERVICES EXPLORED
Home Phone
Home Internet
Streaming
Television
Home Security
COVERAGE
National, numerous wireline service providers
METHODOLOGY
Online, Mobile
20 Minute Survey
SAMPLING (NATIONAL)
~7,500 Monthly Respondents, For the Most Rural FTP, sample = 1,400-1,800 for Q3 2022 but sample of 2 years was used for segments
AUDIENCE
Household Decision Makers, aged 18+
WEIGHTING METRICS
Age, Gender, Income, Marital Status, HH Size Ethnicity, Minority/ Non-Minority, Rent-Own
© 2023 HarrisX. All rights reserved.
harrisx



The data from the TCS survey is weighted to make it nationally and regionally representative and the weighting is conducted by benchmarks as follows
Weighting approach
❖ By the top 10 metropolitan markets and 26 Census regions, Current Population Survey (CPS) data
❖ Weighting parameters include Age, Gender, Household size, Household Income, Marital Status, Minority/Non-Minority, Rent/Own
❖ Weighting benchmarks are sourced from U.S. Census, Nielsen, and Claritas population estimates
© 2023 HarrisX. All rights reserved.
harrisx

Presentation: *IEN CTAM Rural Broadband Research Member Report*





Research Approach

Digital/Social Conversations

Corporate SME Interviews

Consumer Interviews

Digital Social Conversation Mining

Reviewed nearly 29,000 U.S. based digital conversations, including social media posts, shared articles, local news, and forum entries.

Topics searched:

- Need for fast internet access
- Complaints about current Internet access
- Stories about broadband expansion
- Internet providers launching service

Listening revealed few relevant discussions among consumers – but rather among national policy makers, state legislators, and local municipality leaders *(see Appendix for details).*

We agreed to pause this research until we see growth in conversations among rural customers in target locations.

4

In-depth Corporate Leader Interviews

Conducted interviews with a cross-section of six executives, representative of large, mid-size and small companies.

Each had launched or planned to launch service in rural or edge markets.

All were engaged in broadband marketing + communications across a variety of small U.S. communities.

Some faced significant challenges at the onset and experienced unexpected competition. Others gained early ground and are meeting adoption expectations.

IEN divided insights from conversations into common themes that you'll see throughout the report.

Note: *We agreed to keep identities and comments anonymous, so they would speak and share insights freely.*

5

In-depth Consumer Interviews

Interviewed six people living in a cross-section of select communities. These consumers are learning about or experiencing new high-speed Internet services and making choices that fit their needs.

Some of the interviewees:

- Had a low level of trust in provider companies
- Expected local customer care and support
- Struggled with broadband pricing and affordability.

Note: *We agreed to keep identities and comments anonymous, so they would speak and share insights freely.*

6

Executive Summary

Objectives/Methodology

Key Learnings

Conclusions

Indicated Actions

Understanding the Rural Opportunity

Grounded ourselves in the rural broadband *status quo* to better understand:

1. The needs and desires of rural and edge-market consumers
2. Ways to communicate and market successfully to same consumers.

Research December 2022 – March 2023	CONVERSATION MINING	EXECUTIVE SME INTERVIEWS	CONSUMER IN-DEPTH INTERVIEWS
Conclusions March 2023	MEET EXPECTATIONS	CLARIFY OFFERINGS	EARN TRUST
Indicated Actions April 2023	BUILD A PRESENCE	FINE-TUNE TARGETED MESSAGING	EDUCATE

8

Key Learnings and Conclusions

1. **Many communities have no local corporate presence. Customers are annoyed that the nearest offices are miles away or non-existent.** Storefronts closed during COVID and community engagement vanished. "The only place I see their name is on my bill."

2. **Personal relationships can be a successful approach to helping consumers understand the new broadband services.**
Interact with customers where they gather – in supermarkets and in coffee shops. Company reps agreed they need to be active participants in the broadband conversation and provide answers face-to-face.

3. **These consumers need to know how faster Internet will meet their needs and improve their lives.**
Address connectivity benefits first (family, education, healthcare), then speed and price.

4. **Consumer resistance to adoption of broadband is driven by:**
   - Complex set of offerings that are hard to understand
   - Perceived lack of local presence and engagement
   - Concern that high-speed Internet will be not be affordable
   - General lack of trust in cable companies.

9

Marketing Topline Conclusions

1. **Establish a strong relationship with leaders in rural communities.**
This is proven to re-enforces your commitment to providing support and service.

2. **"Handshake,"personalized, conversational marketing is proving to be successful.**
It helps your prospects believe in you, your employees and the level of customer care.

3. **Simplifying the number of options, particularly speed and associated pricing.**
This makes decision-making easier for customers – and reduces concerns of being "misled" by too many tiers and hidden costs.

4. **Explain the lifestyle benefits of the technology.**
This translates capabilities into personal, relatable experiences – and an emotional purchase.

10

Indicated Actions

1. **Establish a "store front" presence, so consumers are confident that their problems will be solved quickly.**
   They provide critical services, while the lack of them makes doing business less convenient. Hire employees that are community-based or nearby. Embrace an old-school ground game of making connections. Consumers want to do business with people, not machines.

2. **Become a force in the community.**
   Lean in on sponsorships, parades, free Internet skills training, Chamber of Commerce memberships, local sports, tutor, host a gaming group. Limit ads and mass media. Invest in local loyalty.

3. **Emphasize how broadband improves the quality of lives.**
   Segment audiences based on their needs and the level of importance placed on child education, medical care, business support, entertainment, family connections.

4. **De-mystify speed, bundling and price.**
   Explain the benefits linked to speed and WiFi services. Educate how to choose the level of service that best suits their current situation and needs.

11

In-Depth Interviews

Corporate SMEs

Consumers

What We Learned from *Corporate Leaders*

Themes Uncovered

- Presence
- Handshake Marketing
- Education
- Competition
- Resistance
- Simple Pricing

14

Presence

- Transform relationship from “company” to “community member”.
- Ground game is critical.
- Engagement vs. Selling.

Corporate Leaders’ Quotes

“Local is all about engagement.”

“We establish a presence in a community if we’re new to a town.”

“It’s like the old days of marketing cable -from door hangers to one-on-one conversations and community events.”

“Sponsor what’s important in a community.”

“We sponsor 80 annual community events.”

15

Handshake Marketing

Get close to your customer to know them.

Small market sales happen one at a time.

One size doesn’t fit all. Listening is selling.

Traditional marketing is useful as a reminder AFTER you have *met*.

Until you’ve made a connection, you’re just a LOGO, a PROMISE, a PRICE TAG.

Corporate Leaders’ Quotes

“We conduct research to better understand the rural personas and their propensity to buy. In addition, census data gives us clarity on income levels, the number of children in the household in a particular neighborhood.”

“If there are school-aged children or empty nesters in the home, we target the marketing differently.”

This is one person at a time.

Listen first, then explain what the service will mean to them in their own words.

“Our objective is to create leads in each neighborhood. My best sales conversations happen in the dog parks. I carry cookies -ask for the owner’s email address. Or we talk to people in coffee-shops, at school board meetings, book clubs and homeowner associations meetings. Even church picnics.”

When people get an email or a door hanger from us, they remember us as people -not a company.”

16

Education

Teach before selling.

Don't embarrass people who don't know - explain.

Find out what they need, sell only what they need … they may want more later.

Pricing structures and performance mean less when they're not understood. Explain everything.

Talk value: connection, family, learning, gaming, entertainment, medical care.

Corporate Leaders' Quotes

"We did not expect to have to sell broadband."

"We focus on value first. Our service will improve their lives."

"Don't try to sell them a service they're not even sure they want."

"We'll offer fun, free, introductory sessions in our stores before they sign up for service. No one needs to be embarrassed."

17

Expect Competition

Don't *expect* to be first.

Be first and if not, move fast.

Seizing pent-up demand happens fast.

If second and competition isn't connecting, connect quickly!

Have a ground game.

Be flexible.

Corporate Leaders' Quotes

"We did a lot of advance work to understand current and potential competitors in certain areas. But to our complete surprise, another company beat us to market by two months. The impact was significant. There was pent-up demand in that community, so being first was critical and we paid a price to catch-up."

"Competition comes in many flavors. You want to be first-to-market. There are neighborhoods that will throw open their doors to get connected. But many less educated consumers are afraid of what they don't know, and low-income families want broadband for their kids but won't know how they'll pay for it. Those are types of competition too. And no size fits all."

"Sometimes we're our own enemy. Whether you have competition or not, rural broadband adoption demands consumer research and one-on-one personalized marketing."

18

Resistance

Price is an issue for many.

Broadband may not be a priority.

Switching can be a huge hassle.

Broadband still worries people who don't understand and are hesitant to consider.

"They're not won-over easily. Unless the price is low, they're generally not interested."

"These folks aren't paying attention all the time."

"It's not a money issue, it's just an inconvenience for some."

"We help low-income customers as much as possible. For example, advertising the ACP program. We also help families whose children are on free or reduced lunch in school districts that will help. We connect the house with enough internet for them to do their homework and the school district will pay $10, $15 dollars a subscriber."

Corporate Leaders' Quotes

19

Simple Pricing

Sell benefits first - they're more easily understood.

The lowest price and product is the starting point.

Keep numbers simple - avoid a la carte menu pricing.

Be ready to help low-income families.

Talk about value first. Then talk pricing.

Complex pricing doesn't fit with entry level awareness.

- Limit tiers
- Narrow options

"We focus on value first. Our service will improve their lives."

"We provide two options. Number one: the lowest priced service that will serve their needs. Number two: a higher priced option that includes the 'wish list.' People will shut down with more options."

"Reduce the number of packages."

Corporate Leaders' Quotes

20

What We Learned from *Consumers*

Immokalee, Florida

INCOME
Household: $43,873
Individual: $22,897

MEDIAN HOME VALUE
$156,100

HOME
Own: 35%
Rent: 64%

SOURCE: U.S. CENSUS / WORLD POPULATION REVIEW

Las Vegas, New Mexico

INCOME
Household: $30,877
Individual: $17,657

MEDIAN HOME VALUE
$123,300

HOME
Own: 56%
Rent: 43%

SOURCE: U.S. CENSUS / WORLD POPULATION REVIEW

Gentry, Arkansas

INCOME
Household: $70,036
Individual: $33,203

MEDIAN HOME VALUE
$227,856

HOME
Own: NA
Rent: NA





SOURCE: U.S. CENSUS / WORLD POPULATION REVIEW

Hailey, Idaho

INCOME
Household: $63,377
Individual: $31,509

MEDIAN HOME VALUE
$419,800

HOME
Own: 65%
Rent: 34%





SOURCE: U.S. CENSUS / WORLD POPULATION REVIEW

Front Royal, Virginia

INCOME
Household: $54,731
Individual: $27,034

MEDIAN HOME VALUE
$237,800

HOME

Own:	58%
Rent:	42%

SOURCE: U.S. CENSUS / WORLD POPULATION REVIEW

The Consumer Profiles

Lifetime Local:	Female. 50s. Married. Mother of grown children. Works in county govt.
Savvy Businessman:	Male. 60s. Transplant from nearby small town. Owns/operates motel.
Jaded Working Student:	Male. 30s. Active and busy. Juggles full-time work and school.
Community Librarian:	Female. 60s. Second career. Dedicated to community. Tech savvy.
Hometown Skeptic:	Male. 40s. Set-in-his-ways resident and business owner.
School IT Manager:	Male. 40s. Responsible for technical connectivity.

28

Are You "One of Us"?

IEN found consumer expectations are formed by their other local experiences. What they get from local services they expect from ALL services.

IEN was told by some that broadband is considered a utility, a must-have. Even so, it was VERY clear that budgets are tight, so consumers need an affordable price, but they also expect value and service. Do what you say. Always.

Consumers notice when a company is local — and it matters to them for very practical reasons like better service and convenience.

IEN heard consumers don't like mass marketing. They prefer personal attention.

29

Personal Connections Are Important

IEN was told only a few of the broadband providers currently have staffed storefronts in the communities, but they used to — and people liked that.

Consumers told us few of the broadband providers make noticeable efforts to appear in or participate in the communities where they offer service. It's noticed.

Consumers with whom we spoke may endure phone-tree service calls, but they prefer personal service.

30

Presence

IEN heard presence is important, but we heard more about that simple idea.

Presence was important for a few reasons: community connection but also convenience and practicality which are linked to service.

These additional themes explain why presence has value: It's not just a box to be checked. There are logical, supported reasons for the value of presence.

31

Presence: Connection

The people we spoke with live in smaller towns and expressed a sense of dedication to their community and commented on "reinvestment."

Lifetime Local:
[Providers with a presence] "…show they are invested here. That they care about the people."

In contrast, lack of presence seem to generate cynicism.

Jaded Working Student:
"The only time I see their name is on my bill. We're a small town and there are expectations that come with where we are. That said, I'm younger and I'm used to it." ('It' = Modern, big-business, impersonal treatment.)

Community Librarian:
"In small towns, people who live here will go to the LOCAL hardware store, the LOCAL pizza shop. There is no feeling of loyalty to COX."

Hometown Skeptic:
"With some services, such as WiFi, it's not important to me for a local brick and mortar. The reality is, I'm not going to visit there that often."

32

Presence: Connection

Savvy Businessman:
"They don't do a lot of advertising. It's a lot of word of mouth. They were in a couple of parades. They had a float. And you see their name around town. They do participate in some of our events in town -high school billboards, college team, like that. They used to have a store front, but they moved it and it was closed during COVID."

Lifetime Local:
"We do have events, but I haven't seen them participate. They used to in the past, when they had an office here. So, probably since COVID I haven't seen somebody. Probably 3 years now. Nobody has an actual office here."

"Comcast was pretty much the only one left in this area that had an actual site, and after COVID they closed their doors. Comcast does not. CENTURYLINK doesn't either. The only utility companies* that have an actual office here is the water and light company."

Groups broadband with utilities. So does ***Jaded Working Student:*** "I don't think very highly of any of them, but they're like utilities. You have to have it."

"They were coming to chamber breakfast and some community meetings, but it's been a while since I've seen anybody come."

Community Librarian:
"Two of the companies are members of the chamber, you don't see them, neither ever show up at city council meetings."

School IT Manager:
"Around here, usually if someone comes to your house, you know them. Or you know their mom or their cousin. Or you just know them, or you've seen them around."

33

Presence: Convenience

IEN was told convenience is about making business easy for consumers.
Plus, it's another thread of personal connection.

Lifetime Local:
"My phone breaks, my husband is old school. He wants to go to the building. Phone breaks, he goes to the building. He wants to pay his bill, he forgot it's due today? He's going to the building. They have a presence."

Hometown Skeptic:
"We pay the monthly bills. We have to mail them now -previously they were two blocks from my office. I just accepted it was a business decision (for them) and it's an inconvenience now (for me.)"

34

Presence: Practicality

Consumers see a connection between local presence and the practical impact it has on service. If a business is miles away, service takes longer. Small town businesses and residents perceive a lower level of service from companies not present and they don't like it.

Savvy Businessman:
"None of the big ones have a storefront. They send someone from Santa Fe or Albuquerque, and you have to wait. Plateau has people here in town. I saw two trucks at the restaurant this morning. If I need something done, they don't have to drive from Clovis. They're here. With the other guys, response for getting service is slow. If you call, it's a work order. If there's someone in town, ok. Otherwise, it's next day or later."

Jaded Working Student:
"Here, you run into people. There's accountability. That's how business gets done here -with people. People that may also do business with you.
That's what it comes back to."

Community Librarian:
"Their nearest office is 25 miles away. 25 miles!"

35

Price

Price alone is very important, but price isn't just a factor at the moment of purchase. We heard price is tied to quality, service and accessibility. They continued to be judged after a purchase.

Jaded Working Student:
"For me it's about cost. All these companies require contracts, or they bundle stuff, and the price gets to be too high. It was 80 for high-speed internet, but there were all these other bundles or whatever, 10 bucks for this, 20 bucks for that. If you want to add on features, they cost less, but only after you pay the big price first."

"$80 is too much. Why is it too much? We're at work most of the day. We're not home using it. You only use it at night for streaming or homework or whatever. And if it's not high speed it feels super slow so… you have to pay. You have no choice. It's a pretty good chunk of everyone's money every month."

Lifetime Local:
"It can get complicated because they start adding $5 for this box, or $5 more for this. There are still people in our community who can't afford it."

Community Librarian:
"People only have so much to go so far. People are looking, this is how much I have coming in, this is how much I have going out."

36

Price

School IT Manager:

"For maybe 10% of kids, it's just poverty."

"What happens when a student can't afford service is a teacher or the principal sends them to us. They walk into our office and say, 'We don't have internet.' We'll give them a hotspot tell them to take it home and try it and if it doesn't work, to come back and we'll swap for another. We have three different providers they can try."

"We give don't connect them with subsidies. Not internally through us. There are programs the State has and we refer them. We give them information from flyers. We don't have a follow up to see if they complete it or not."

37

Price: Quality

Savvy Businessman:
"I don't have any glitches or lag at all. I see the little wheel turn, it's on? Ok, cool."

Community Librarian:
"Part of the problem is smaller companies may try, but they can't provide the speed. It affects how people see the service. They're getting less than other people are getting, it's 2nd class service."

School IT Manager:
"It's getting better, leaps and bounds since COVID. The State and Federal Government put a lot of money into improving infrastructure. I'm not saying it's great -it's still like a 55, or a D-minus."

38

Price: Service

Savvy Businessman:
(IF EVERYONE IN TOWN COULD GET *PLATEAU* WOULD THEY?) "In my opinion? Yes. Oh yes." (WHY?) "Because they treat you better. People don't like a runaround. One time I spoke with 9 people. You never get Sally Sue the next time you call. That is not customer service. I had trouble with an outside router, and they fixed it right away."

Jaded Working Student:
"You put in a call… you don't know when you'll get help. Maybe they'll be out today, but it can be days. I've heard a lot of people call to get service hooked up and it's gonna be two weeks!"

Hometown Skeptic:
"Winchester, about 30 miles from us, is our closest provider of COMCAST equipment. Picking up equipment takes me, driving, about 30 minutes" [each way.]

39

Price: Accessibility

Savvy Businessman:
(TECHNICAL INFORMATION) "Some of it goes over my head, but I do ask questions. They're not there to impress me or confuse me. They wanted to make sure I was happy. It's all I could ask for."

Jaded Working Student:
"There's nobody around that actually cares. You're talking to someone in another state."

(PREVIOUS SMALLER PROVIDER) "Makes me wish smaller companies could do better and compete. I'd see the owner around. He might run to the house to fix something. He was that guy I could call to get stuff fixed, vs COX, you get on a help line and talk to 10 people."

"It's was like 'Ok, I'll be out there today' vs a matter of days."

40

Need/Demand

Community Librarian:
"Not a day goes by that we don't have cars parked outside our library. 25 feet from the library. Cars come every day. They park outside to use it. Our schools provide Chromebooks and hot spots."

"I know people who live just outside of town, they drive in to do their email. And we have people who come in to do their business. This is practically their office."

Jaded Working Student:
(PREVIOUS SMALLER PROVIDER) "Makes me wish smaller companies could do better and compete. I'd see the owner around. He might run to the house to fix something. He was that guy I could call to get stuff fixed, vs COX, you get on a help line and talk to 10 people."

41

Messaging/Marketing

Lifetime Local:
(SCHOOL PROVIDED INFORMATION) "In the flyer they said if you don't have internet this is who you contact. Had a link where to go for free. If you're on free or reduced lunch, then you quality for this service."

"What was the buy-in? Because it was free, or very minimal cost -$10. So that was the buy in for a lot of families. I'm going to tell you, the schools did it. It wasn't so much the internet company."

Savvy Businessman:
"It's a big business mentality. They rely on ads. Why not just treat customers right? They'll stay with you."

(*PLATEAU*) "They're my company, the company I use. I'm glad they're here."

(IF YOU WERE APPROACHED, WOULD YOU CHANGE?) "Why would I change? I wouldn't. They charge a fair price and they're the fastest in the area. Price and speed. Every time I've spoken with them, it's very simple. I think that's fair."

Jaded Working Student:
"I get email. It's basically spam. Usually, you know if they're trying to sell you something it's not a good deal. You're getting the same email as 1,000,000 other people."

(PREFERS) "Organic sales. Here's my issue, you know, and it's -- 'I'd do this, I'd try this."

42

Word of Mouth

Lifetime Local:
"I have cricket. That's from word of mouth."

(DO PEOPLE TALK? WORD OF MOUTH?) "Yeah, they do. They do, but they don't have many options."

Savvy Businessman:
"I started to check around and heard nothing but negative stuff about everyone else."

43

Cricket

Because we were listening for insight on successful marketing, we took notice when one of the consumers we spoke with championed a company doing business in town -Cricket.

Lifetime Local had a lot to say about CRICKET and the company's community marketing.

"My family now has CRICKET. I will not switch to VERIZON, to anybody."

"All my family's phones are now CRICKET."

"They have 3 sites in Immokalee. They have 3 sites in Immokalee! In little bitty Immokalee!"

"They had a grand opening. They painted their building the color of their brand and they said, 'We're here and we're going to offer service'."

"They hired local. Customer service is great. They do participate in our events and have promotions all the time."

44

Cricket (continued)

Lifetime Local:

"They participate in our parades. We have two parades a year and they participate."

"Because they show that they are invested here. That they care about the people, if they're coming out to tell them, 'Oh, this is what we offer, these other things.' We get generic text messages from them. That doesn't do it for me. They'll send you generic text messages. 'This is our promotion,' or, 'This is what we have. And now we have spam block and now we have this.' So we get generic text messages. That doesn't do it for me. It's the presence of the person in the building, that they have a site."

45

And again…

Key Learnings

Conclusions

Indicated Actions

Key Learnings and Conclusions

1. **Many communities have no local corporate presence. Customers are annoyed that the nearest offices are miles away or non-existent.** Storefronts closed during COVID and community engagement vanished. "The only place I see their name is on my bill."

2. **Personal relationships can be a successful approach to helping consumers understand the new broadband services.**
Interact with customers where they gather – in supermarkets and in coffee shops. Company reps agreed they need to be active participants in the broadband conversation and provide answers face-to-face.

3. **These consumers need to know how faster Internet will meet their needs and improve their lives.**
Address connectivity benefits first (family, education, healthcare), then speed and price.

4. **Consumer resistance to adoption of broadband is driven by:**
   - Complex set of offerings that are hard to understand
   - Perceived lack of local presence and engagement
   - Concern that high-speed Internet will be not be affordable
   - General lack of trust in cable companies.

47

Marketing Topline Conclusions

1. **Establish a strong relationship with leaders in rural communities.**
This is proven to re-enforces your commitment to providing support and service.

2. **"Handshake,"personalized, conversational marketing is proving to be successful.**
It helps your prospects believe in you, your employees and the level of customer care.

3. **Simplifying the number of options, particularly speed and associated pricing.**
This makes decision-making easier for customers – and reduces concerns of being "misled" by too many tiers and hidden costs.

4. **Explain the life-style benefits of the technology.**
This translates capabilities into personal, relatable experiences – and an emotional purchase.

48

Indicated Actions

1. **Establish a "store front" presence, so consumers are confident that their problems will be solved quickly.**
They provide critical services, while the lack of them makes doing business less convenient. Hire employees that are community-based or nearby. Embrace an old-school ground game of making connections. Consumers want to do business with people, not machines.

2. **Become a force in the community.**
Lean in on sponsorships, parades, free Internet skills training, Chamber of Commerce memberships, local sports, tutor, host a gaming group. Limit ads and mass media. Invest in local loyalty.

3. **Emphasize how broadband improves the quality of lives.**
Segment audiences based on their needs and the level of importance placed on child education, medical care, business support, entertainment, family connections.

4. **De-mystify speed, bundling and price.**
Explain the benefits linked to speed and WiFi services. Educate how to choose the level of service that best suits their current situation and needs.

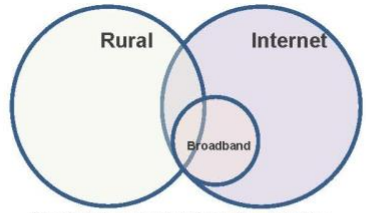
49

Appendix

Digital Conversation Mining Highlights
IEN Research Approach Overview

Digital Mining - What We Found

- Most conversations pertained to Internet access.
- Rural connectivity (mainly political/national talking points debated in both the U.S. congress and state government) had second-most conversations.
- However, *Rural* + *Broadband* conversation has small volume.



Size of circle represents volume of conversations.

- Most relevant conversations are local in small-town newspapers, local forums, and Facebook groups.
- The primary discussion among those looking for access is deciding between StarLink, Satellite, or some of the 5G offerings.
- Many municipalities have internal debates over private broadband and whether they want to use public funding for expansion with larger broadband providers.

51

Tools Used for Digital Mining

Brandwatch

BuzzSumo

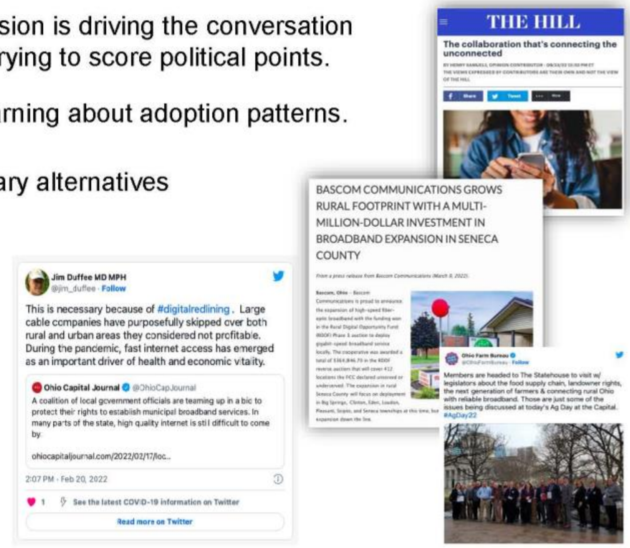
publications

Google

52

Themes Uncovered

- Political discussion about rural expansion is driving the conversation but is often high-level policy makers trying to score political points.
- Very little conversation relevant to learning about adoption patterns.
- Starlink and 5G are seen as the primary alternatives in the local conversations.
- Top needs are Speed, Connectivity and Reliability.



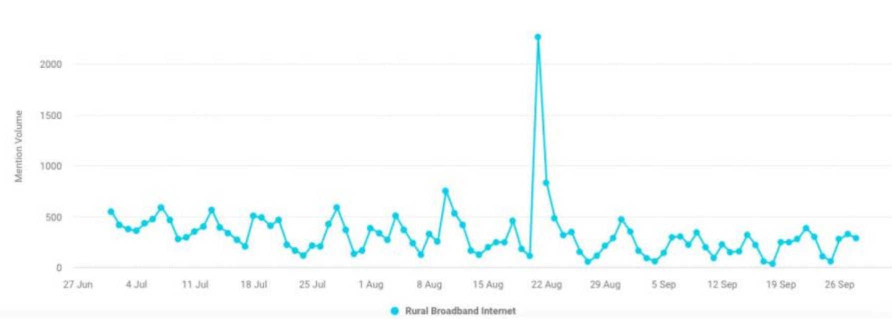
53

Rural Conversations

Total Mentions	Unique Authors	Trending Topics	Top News Stories
28.76K ▲18.7K% Previous Period: 153	7893 ▲60.62K% Previous Period: 13	1. broadband support 2. rural areas 3. underserved areas	1. The collaboration that's connecting the... 2. Big telecom's relentless lobbying is pu... 3. Republican says FCC SpaceX decisio...

Mentions Over Time by Day | Rural Broadband Internet | Jul 01, 2022 - Sep 28, 2022

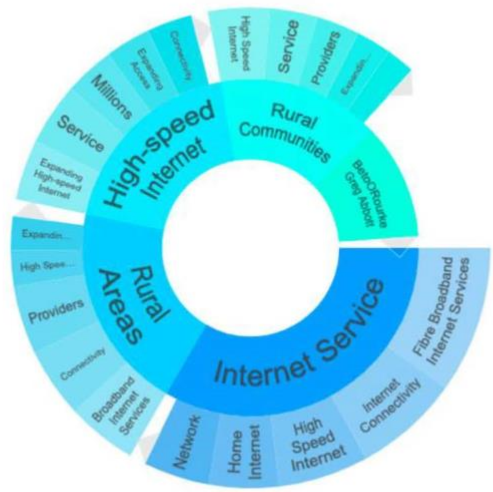
Mention Volume for Days broken down by Queries



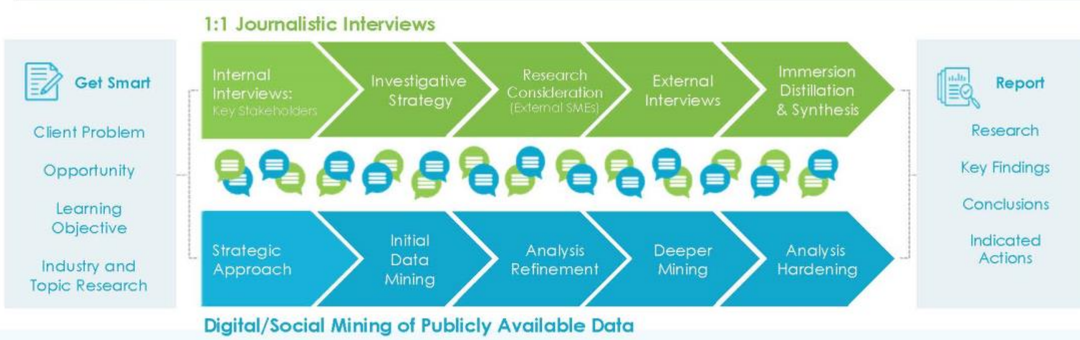
Rural Broadband Conversation

Initial review of rural internet conversation identified clusters of conversations related to:

- Broadband Access
- Speed Concerns
- Community Expansion (private ISP funding debate)



IEN Approach to Market Research



"Headline News"

Real Time Client Feedback

Real time learning, feedback, and ideation

- Cautionary: Rabbit hole
- New lines of inquiry
- Potential expansion of interviews
- Immediate action

56

Call Notes: June 8, 2023
Subject: CTAM Rural Broadband Working Group Call

Welcome/Roll Call

<u>Call Attendees:</u>

Altice – Dan Johnson
Armstrong – Andrea Lucas
Charter – Meghan Dering
Charter – Jennifer Rocco
Charter – Zoe Santo
Comcast – Adrienne
Simpson Cox – Joel Frost
Sparklight – Varn Chavez
CTAM – Mark Snow, Sloane Stegen + Renee Harris
HarrisX – Kamalini Ganguly, Zahi Fawaz

Review of IEN Quantitative Findings

Mark Snow provided a recap of the attached IEN's qualitative findings about rural markets:

- Many communities have no local corporate presence from their ISP. Customers are annoyed that the nearest offices are miles away or non-existent. IEN suggests MSOs should establish a "store front" presence so consumers are confident that their problems will be solved quickly.
- Personal relationships can be a successful approach to helping consumers understand the new broadband services. MSOs should become a force in the community – leaning in on sponsorships, parades, Chamber of Commerce memberships, etc.
- Rural consumers need to know how faster Internet will meet their needs and improve their lives. MSOs should emphasize how broadband improves the quality of life for the rural consumer.
- Consumer resistance to adoption of broadband is driven by:
    - Complex set of offerings that are hard to understand.
    - Perceived lack of local presence and engagement.
    - Concern that high-speed internet will not be affordable.
    - General lack of trust in cable companies.
        - MSOs should de-mystify speed, bundling and price – explain the benefits linked to speed and Wi-Fi services and educate rural consumers on how to choose the level of service that best suits their situation and needs.

HarrisX Presentation of Quantitative Rural Research

Kamalini Ganguly and Zahi Fawaz, HarrisX, presented the attached "CTAM Most Rural Footprint Broadband Report" deck.

Highlights include:

- The Most Rural Footprint is defined in this study by density of < 20,000 population in non-metro and rural areas, representing ~33M population or ~10% of the population. Source classification is USDA and source data is the HarrisX TCS Survey.
- The most rural 10% of the population is lower in home-internet penetration and bundling.
- The most rural 10% of the population have different types of connectivity and entertainment needs.
- Compared with National averages, HH penetration is lower in the Most Rural Footprint, MSO market share is also lower (61% v 44%); Fixed Wireless Access (FWA) share of households is higher by 7 pts and satellite by 5 pts.
- Rural Home Internet subscribers are more likely to be lower income and single family homeowners than the national population.
- Segments defined as follows:
    - Mobile Reliant Singles N= 3,879 – 24% of sample | Possible target for mobile first converged bundles. Highest mobile only reliance for home internet compared to other groups.
    - Millennial Moms N= 4,274 – 27% of sample | Possible target for bundles with streaming
    - Low Choice Homeowners N= 4,846 – 30% of sample
    - Retired Grandmas N=2,053 – 13% of sample
    - Wealthy Employed, Bundler Dads N= 1,000 – 6% of sample
- Online gaming, downloading apps/games and streaming TV/movies and other content have seen increases in activity over time.
- Online gaming, downloading apps/games and streaming TV/movies and other content have seen increases in activity amongst FWA home internet subscribers.
- At least 23% of rural households still bundle, though that is lower than the national rate of bundling; bundling is declining.
- Satellite subscribers continue to have the highest average monthly spending over other Home Internet types.
- Those with internet and mobile bundles are particularly satisfied with the price they paid when compared with those who have other types of bundles.
- Cable and Fixed Wireless Home Internet Subscribers are more likely to Rent and reside in multiple dwelling units than other Home Internet types.
- 18–24-year-olds are increasingly subscribing to home internet in Q3 2022, a 7pt increase YoY; However, still more likely not to have home internet
- Cord-cutters are more likely to cite the price being too expensive as the primary reason why their household is unlikely to sign up again for Internet.

Questions from the group

1. *What is the definition of "no choice"?*

   43% of the sample said they had no choice when choosing their provider. HarrisX asked "why did the customer sign up" and one of the options they had to choose from was "they had no choice" so that is where the 43% comes from. CTAM notes this could mean either there truly is only one ISP or there's a single Fiber or Cable provider *and* a DSL provider but the respondent does not consider the DSL provider a choice.

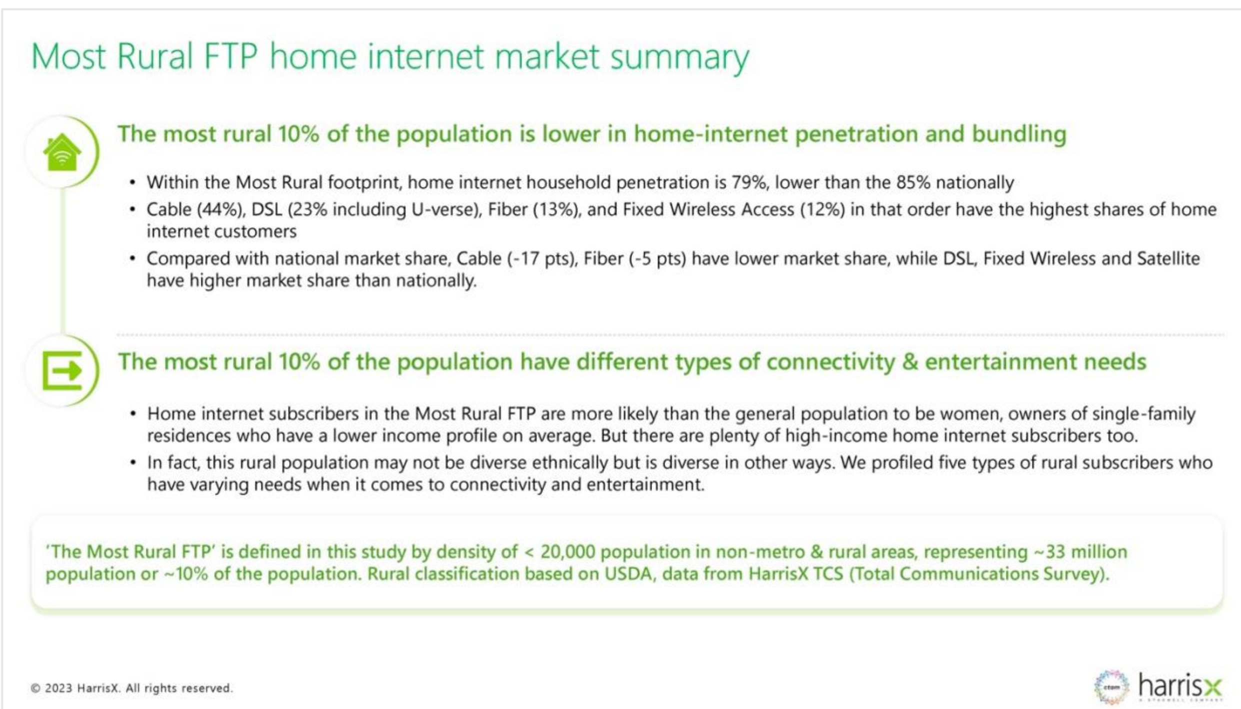
2. *Do you think the Internet and phone bundle is higher in the rural markets due to poor reception?*

   CTAM believes we can assume this to be the case. HarrisX can look at satisfaction rates compared to national rates and share that information.

Actions/Next Steps

The CTAM Rural Broadband Working Group is complete. CTAM will work to create a final deliverable for the group which combines both the IEN and HarrisX research summaries.

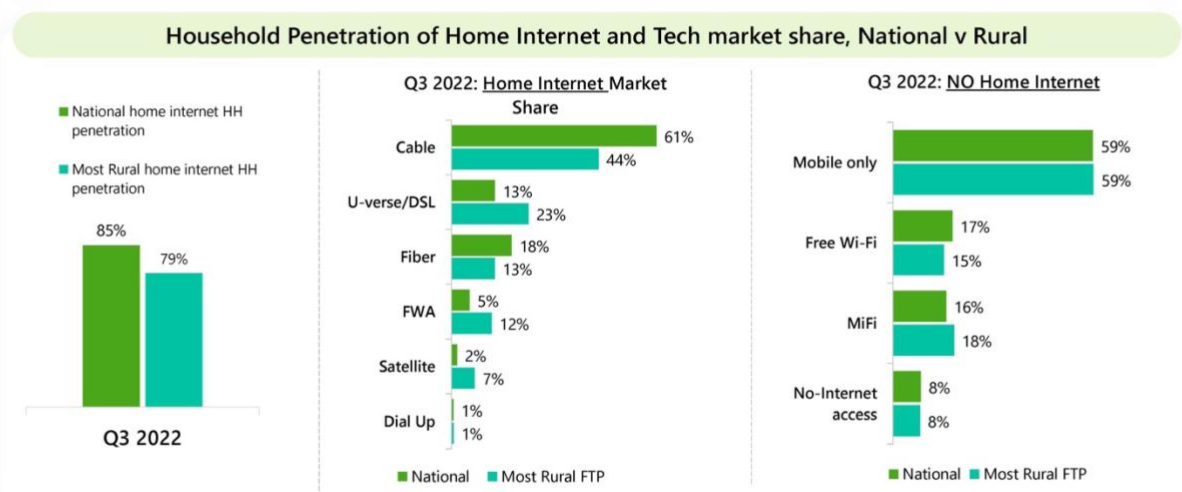
Presentation: *HarrisX Broadband TCS Slides FINAL deck*



Most Rural Home Internet Market

Most Rural FTP

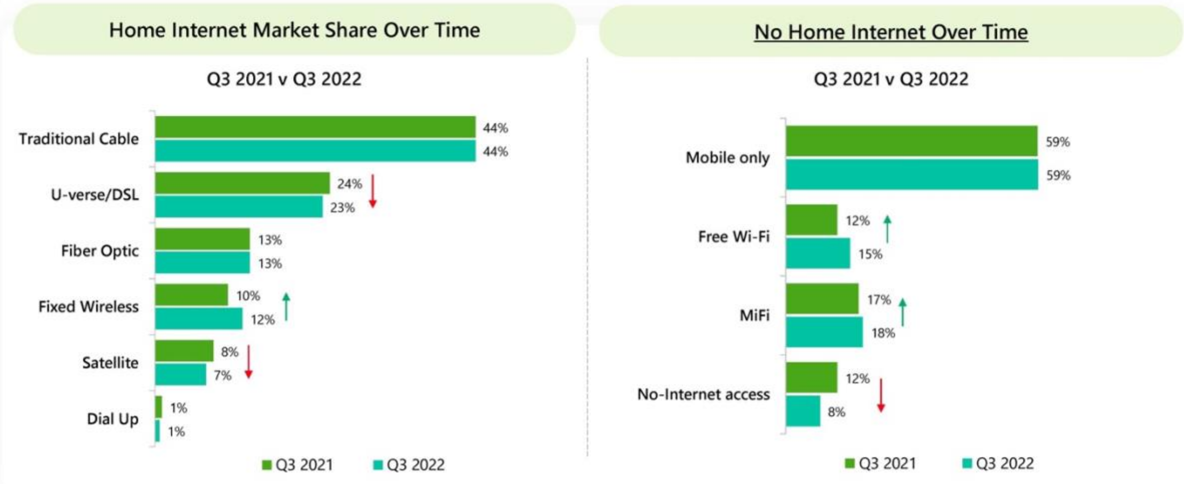
Compared with National, HH penetration is lower in the Most Rural FTP, MSO market share is also lower (61% v 44%); FWA share of households is higher by 7 pts, and Satellite by 5 pts



Base: Q3 2022 Most Rural Footprint | National/Most Rural (N): (23,713/1,876)
TCS Survey | T1003

Most Rural FTP

U-verse/DSL and Satellite shares are falling YoY while FWA gains; Reliance on Free Wi-Fi and MiFi for home internet is increasing YoY

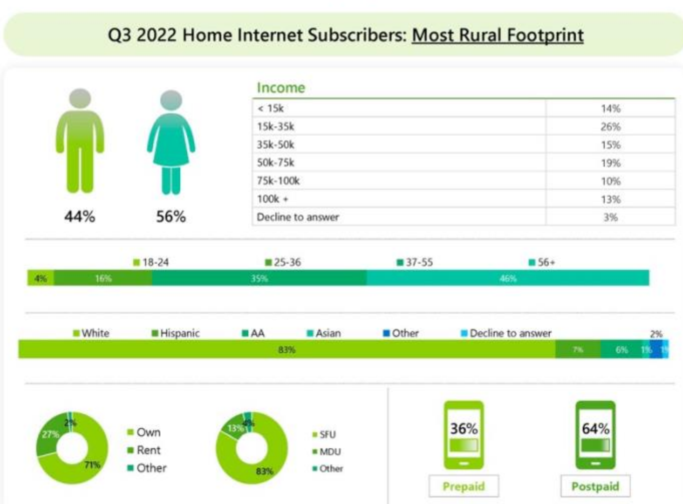


Base: Q3 2022 Most Rural Footprint (1,876)
Q3 2022 TCS Survey | T830,T828

harrisx

Most Rural FTP

Rural Home Internet Subscribers are more likely to be lower income, single family home-owners than the national population



GENDER

Women: +5 pts

Rural home internet customers are skewed towards more women than national home internet subscribers

INCOME

< $50K: +18 pts

Lower income profile than national home internet subscribers

AGE

➢ 37-55: +6 pts

More middle aged than national but not by much

RACE/ETHNICITY

Caucasian: + 3 pts

Less racial and ethnic diversity than national

HOME

+15 pts SFUs

+ 5 pts homeowners

Many more owning homes and living in SFUs

PREPAID

+ 2 pts

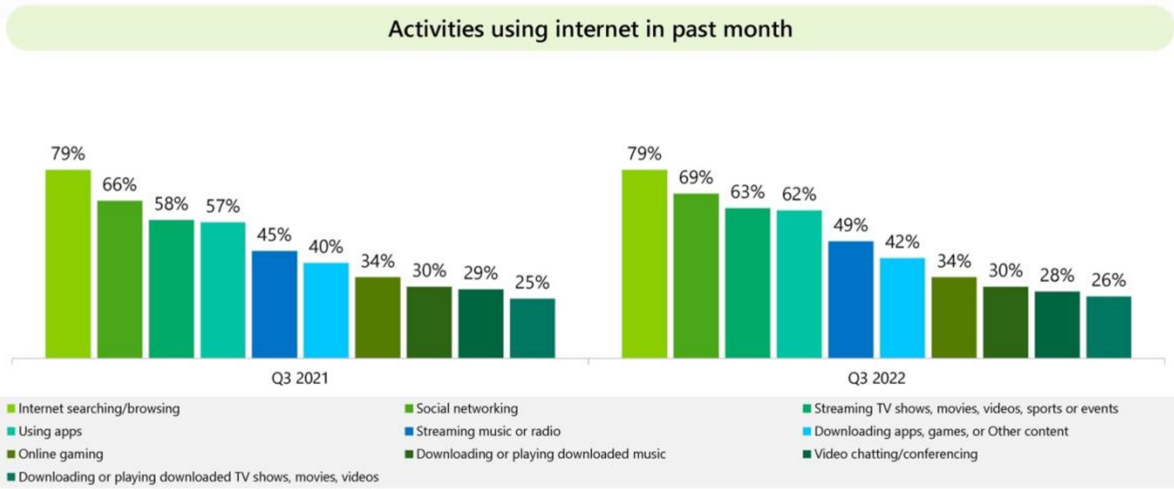
A little more likely to be on Prepaid plans overall, but some segments have > 50% on Prepaid plans

Base: Q3 2022 Home Internet Subscribers | National/Most Rural Footprint (20,660/1,523)
Q3 2022 TCS Survey | T101, agebuckets, RaceEthn, T1025A, Family, H15

harrisx

Most Rural FTP

For this rural cohort, Online gaming, Downloading apps/games, and Streaming TV/Movies and other content have seen increases in activity over time

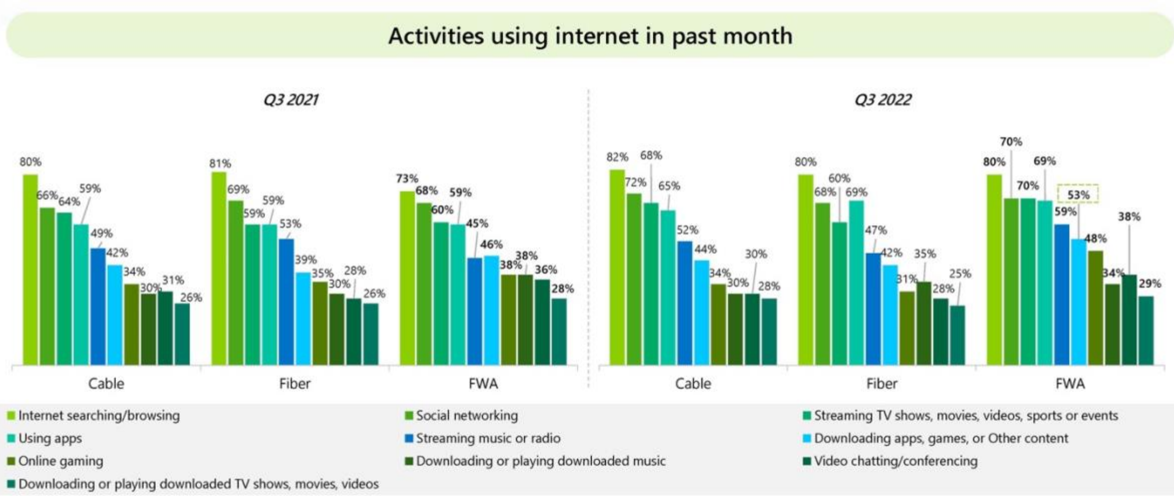


Base: Q3 2021 – Q3 2022 Most Rural Footprint | Cable (612/645), Fiber (181/184), FWA (153/179), Overall (1484/1521)
Q3 2022 TCS Survey | T1008

harrisx

Most Rural FTP

This increase in activity is particularly true amongst FWA home internet subscribers



Base: Q3 2021 – Q3 2022 Most Rural Footprint | Cable (612/645), Fiber (181/184), FWA (153/179), Overall (1484/1521)
Q3 2022 TCS Survey | T1008

harrisx

Rural Consumer Profiles and comparison with National averages

Segment/customer profile introductions

Mobile Reliant Singles N=3,879

More diverse demographic mix. Their high reliance on mobile to access the internet might lead them to cancel home internet even though they already have the lowest internet penetration compared to other segments. They are in the lower income bracket and mostly without a college degree and in fact, more unemployed. They skew towards prepaid plans and have the lowest bundling rate

24% Size of segment

Millennial Moms N=4,274

Youngest segment, women with the highest Hispanic proportion, employed and married with kids. Their high engagement in internet activity (probably their children too) make them the most likely to switch providers searching for better quality and speed. They are fans of the converged bundle. About 25% of them are reaching the end of their contract, and could be good acquisition targets

27%

Low Choice Homeowners N=4,846

Older couples with a high income, SFU owners and married without kids. Having the highest internet penetration rate with the highest cable share, they present the highest risk of switching providers if their preferred provider services their area. They are the least satisfied group with lowest NPS among segments - they are value sensitive.

30%

Retired Grandmas N=2,053

Predominately older women, likely to be divorced without kids and in the lower income bracket. Not a lot of internet activity exerted compared to other segments and have the lowest converged bundle rate. This is the most price sensitive segment and they pay the least for home internet. Interestingly, less than 10% think they can access the internet for free, much lower than other segments

13%

Wealthy Employed, Bundler Dads N=1,000

Male heads of households with high income and higher education. Married with kids and are all employed. The segment has the highest satisfaction in price and network quality, and the highest NPS score among segments. Bundling is popular for them, especially converged bundles. They also are the most likely to switch provider as 23% said their preferred provider is coming to town, or to cancel home internet possibly because 57% of them believe they can access the internet for free.

6%

Based upon 1/10th population

Consumer Groups

		Mobile Reliant Singles N=3879	Millennial Moms N=4274	Low Choice Homeowners N=4846	Retired Grandmas N=2053	Wealthy Employed Bundler Dads N=1000	National (Q3 2022)
		24%	27%	30%	13%	6%	
Internet Activities	Activities	Social Networking (71%), **Streaming TV/Movies (67%),** Online Gaming (43%)	**Social Networking (74%)**, Streaming TV/Movies (73%), Online **Gaming (54%)**	**Watching Live/ Recorded Traditional TV (67%),** Social Networking (65%), Streaming TV/ Movies (55%)	Watching Live/ Recorded Traditional TV (61%), Social Networking (61%), Streaming TV/ Movies (46%)	Social Networking (72%), Streaming TV/Movies (68%), Online Gaming (52%)	Social networking (61%), Using Apps (60%), Streaming Music (49%)
	Customer Needs	Appreciate price, good network quality and do not want to disrupt service, but at risk of leaving if preferred provider offers service	Appreciate good network quality, but at risk of leaving if preferred provider offers service	Appreciate price, good network quality, **but at much greater risk of leaving if preferred provider offers service**	Appreciate good network quality and price/promotion, but at risk of leaving if preferred provider offers service	Appreciate good network quality and price/promotion, but at risk of leaving if preferred provider offers service	Appreciate good network quality & Price/Promotion
	No choice in choosing provider	32%	35%	**43%**	37%	34%	26%
Internet Technology	Internet Technology Types	Cable: 33%, U-Verse/DSL: (13%), FWA: 8%, **Mobile Only: 20%**	Cable: 34%, U-Verse/DSL: 17%, FWA: 11%, Mobile Only: 14%	**Cable: 37%,** U-Verse/DSL 21%, Fiber: 12%, Mobile Only: 8%	Cable: 36%, U-Verse/DSL 20%, Fiber: 9%, Mobile Only: 12%	**Cable: 28%,** Fiber 19%,U-Verse/DSL: 18%, **FWA: 13%,** Mobile Only: 9%	Cable: 52%, Fiber: 15%, FWA: 5%, U-Verse/DSL: 11% Mobile Only: 9%
Internet Penetration	Paid Internet Penetration	**68%**	77%	**86%**	80%	84%	84%
Demographics	Gender & Age	Female (57%), Average Age: 41	**Female (66%), Average Age: 39**	**Mixed Male/Female, Average Age: 62**	**Female (67%), Average Age: 66**	**Male (67%)**, Average Age: 40	Mixed Male/Female, Average Age: 51
	Ethnicity	More Diverse: Hispanic (11%), AA(15%)	**More Diverse: Hispanic (18%), AA(9%)**	White Dominant (94%)	White Dominant (92%)	White Dominant (98%)	White (69%)
	Home Ownership	Skew towards SFU Owner/Renter Mix	Skew towards SFU Owners	SFU Owners	Skew towards SFU Owners	**SFU Owners**	Skew towards SFU Owners
	Family	**Single/Divorced without Kids**	**Skewed Married With Kids**	Married without Kids	**Widowed/Divorced without Kids**	**Married with Kids**	Skew towards Married with no Kids
	Income	<$50k(81%)	Skewed less <$50k(57%)	>$75k (39%)	<$50k (80%)	**$100k+ (55%)**	$100k+ (25%)
	Education	Less than college (81%)	Less than college (77%)	College Graduate/Graduate Degree (37%)	Some College/High School (56%)	**College Graduate/Graduate Degree (67%)**	College Graduate (23%)
	Employment	Not Employed (40%)	**Homemaker (22%) & Employed (42%)**	Semi Retired	**Retired (86%)**	**Full Time Employed (100%)**	Employed (56%)

*Mobile Only = only use mobile phone for internet

*Factors considered when clustering: Demographics, Prepaid/Postpaid

*Without kids refers to no kids at home

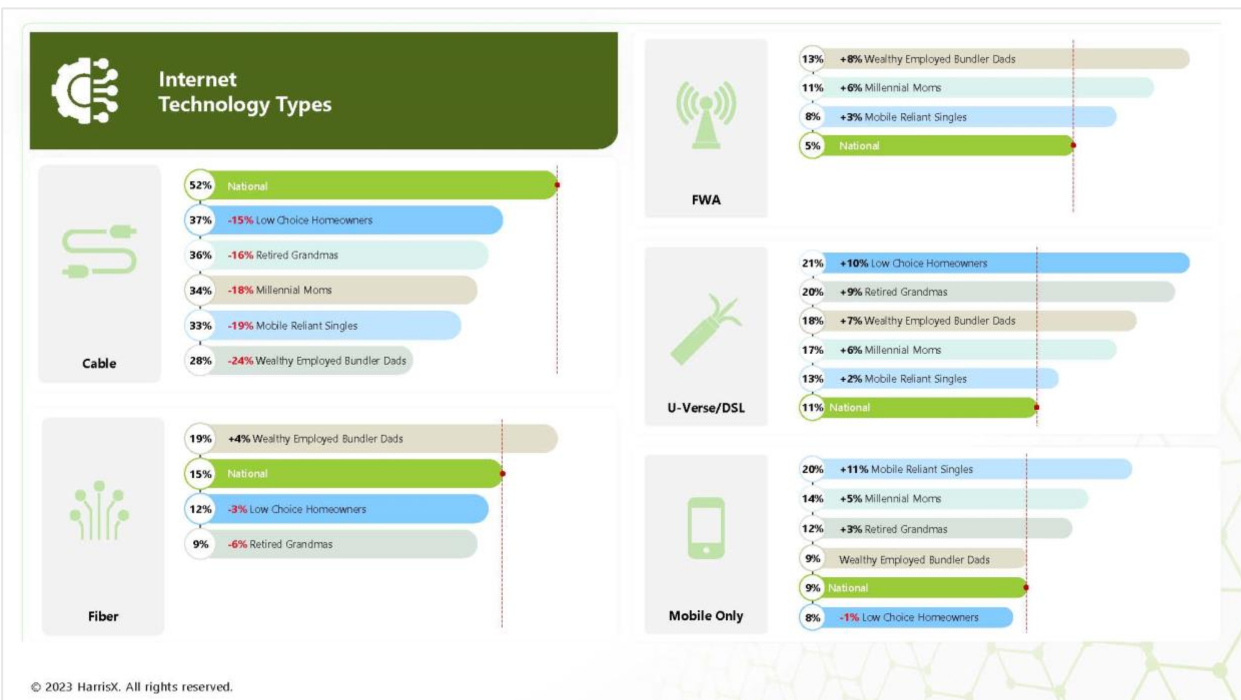
Based upon 1/10th population

Consumer Groups

		Mobile Reliant Singles	Millennial Moms	Low Choice Homeowners	Retired Grandmas	Wealthy Employed Bundler Dads	National
		24%	27%	30%	13%	6%	
Prepaid v Postpaid	Postpaid	Prepaid: 51%	Postpaid: 53%	Postpaid: 78%	Postpaid: 58%	Postpaid: 100%	Postpaid: 71%
Internet Satisfaction & Spend	Price Satisfaction (T3B%)	50%	**56%**	**42%**	49%	**57%**	50%
	Network Quality Satisfaction (T3B%)	**64%**	66%	64%	68%	69%	71%
	Monthly Spend (Mean $)	$63.36	**$68.94**	$63.66	$58.65	**$71.84**	$64.44
Internet Technology	Internet Technology Types	Cable: 33%, U-Verse/DSL: (13%), FWA: 8%, Mobile Only: 20%	Cable: 34%, U-Verse/DSL: 17%, FWA: 11%, Mobile Only: 14%	Cable: 37%, U-Verse/DSL 21%, Fiber: 12%, Mobile Only: 8%	Cable: 36%, U-Verse/DSL 20%, Fiber: 9%, Mobile Only: 12%	**Cable: 28%,** Fiber 19%,U-Verse/DSL: 18%, **FWA: 13%,** Mobile Only: 9%	Cable: 52%, Fiber: 15%, FWA: 5%, U-Verse/DSL: 11% Mobile Only: 9%
Switching Behavior	Likelihood to Switch (T2B%)	Likely (6%)	Likely (8%)	**Likely (5%)**	**Likely (4%)**	**Likely (8%)**	Likely (6%)
	Likely to Cancel (T2B%)	Likely (7%)	Likely (11%)	**Likely (4%)**	**Likely (4%)**	**Likely (23%)**	Likely (9%)
	NPS Category	Promoter – 42% Detractors – 25%	**Promoter – 47%** Detractors – 23%	**Promoter – 39% Detractors – 31%**	Promoter – 42% Detractors – 29%	**Promoter – 53%** Detractors – 20%	Promoter – 44% Detractors – 24%
Bundling Behavior	Bundlers	**18%**	20%	**29%**	26%	**32%**	39%
	Converged Bundlers	11%	**22%**	**5%**	**3%**	**45%**	12%
	Bundle Type	**TV/Internet (43%)**	TV/Internet (38%)	TV/Internet (33%)	TV/Internet (31%)	**TV/Internet/Phone (20%)**	TV/Internet (36%)

*Mobile Only = only use mobile phone for internet


No choice in choosing provider
43% +17% Low Choice Homeowners
37% +11% Retired Grandmas
35% +9% Millennial Moms
34% +8% Wealthy Employed Bundler Dads
32% +6% Mobile Reliant Singles
26% National Average
Paid Internet Penetration
86% +2% Low Choice Homeowners
84% Wealthy Employed Bundler Dads
84% National Average
80% -4% Retired Grandmas
77% -7% Millennial Moms
68% -16% Mobile Reliant Singles
Price Satisfaction (T3B%)
57% +7% Wealthy Employed Bundler Dads
56% +6% Millennial Moms
50% Mobile Reliant Singles
50% National Average
49% -1% Retired Grandmas
42% -8% Low Choice Homeowners
Network Quality Satisfaction (T3B%)
71% National Average
69% -2% Wealthy Employed Bundler Dads
68% -3% Retired Grandmas
66% -5% Millennial Moms
64% -7% Low Choice Homeowners
64% -7% Mobile Reliant Singles
Monthly Spend (Mean $)
$71.8 + $7.4 Wealthy Employed Bundler Dads
$68.9 +$4.5 Millennial Moms
$64.4 National Average
$63.6 -$0.78 Low Choice Homeowners
$63.4 -$1.04 Mobile Reliant Singles
$58.6 -$5.79 Retired Grandmas
Likelihood to Switch (T2B%)
8% +2% Wealthy Employed Bundler Dads
8% +2% Millennial Moms
6% Mobile Reliant Singles
6% National Average
5% -1% Low Choice Homeowners
4% -2% Retired Grandmas
Likely to Cancel (T2B%)
23% +14% Wealthy Employed Bundler Dads
11% +2% Millennial Moms
9% National Average
7% -2% Mobile Reliant Singles
4% -5% Low Choice Homeowners
4% -5% Retired Grandmas
Bundlers
39% National Average
32% -7% Wealthy Employed Bundler Dads
29% -10% Low Choice Homeowners
26% -13% Retired Grandmas
20% -19% Millennial Moms
18% -21% Mobile Reliant Singles
Converged Bundlers
33% +21% Wealthy Employed Bundler Dads
22% +10% Millennial Moms
12% National Average
11% -1% Mobile Reliant Singles
5% -7% Low Choice Homeowners
3% -9% Retired Grandmas
© 2023 HarrisX. All rights reserved.


Internet Technology Types
Cable
52% National
37% -15% Low Choice Homeowners
36% -16% Retired Grandmas
34% -18% Millennial Moms
33% -19% Mobile Reliant Singles
28% -24% Wealthy Employed Bundler Dads
Fiber
19% +4% Wealthy Employed Bundler Dads
15% National
12% -3% Low Choice Homeowners
9% -6% Retired Grandmas
FWA
13% +8% Wealthy Employed Bundler Dads
11% +6% Millennial Moms
8% +3% Mobile Reliant Singles
5% National
U-Verse/DSL
21% +10% Low Choice Homeowners
20% +9% Retired Grandmas
18% +7% Wealthy Employed Bundler Dads
17% +6% Millennial Moms
13% +2% Mobile Reliant Singles
11% National
Mobile Only
20% +11% Mobile Reliant Singles
14% +5% Millennial Moms
12% +3% Retired Grandmas
9% Wealthy Employed Bundler Dads
9% National
8% -1% Low Choice Homeowners
© 2023 HarrisX. All rights reserved.

Recommendations

Rural Customer Profiles

- Mobile Reliant Singles (24%) – Target with mobile-first converged bundles and ACP. Highest mobile-only reliance for access to internet compared to other groups.
- Millennial Moms (27%) – Target with bundles inclusive of streaming add on promotions, since they spend time streaming, have a higher internet spend, & higher rates of bundling TV/Internet
- Low Choice Homeowners (30%) – Target with bundles inclusive of Pay TV. Highest share of watching Live TV and like to indulge in social networking
- Retired Grandmas (13%) – Target with lower priced internet plans. Spend the least on home internet, do not stream or social network as much as other groups.
- Wealthy Employed Bundler Dads (6%) – Target with converged bundles. They enjoy higher incomes, are gamers, and app users who spend more on home internet.

*Converged bundles refer to bundles with at least home internet and a mobile plan

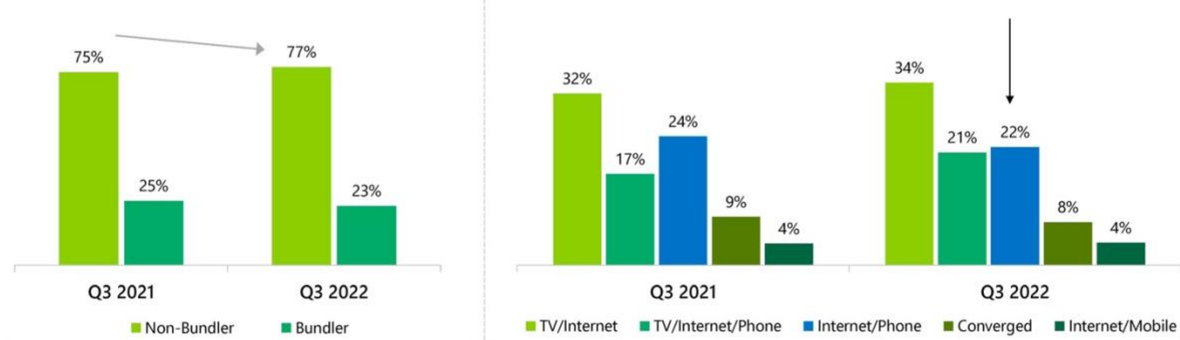
Home Internet & Bundling for Rural FTP

Most Rural FTP

At least 23% of rural households still bundle, though that is lower than the national rate of bundling; bundling is declining; landline bundles are strong

Bundling Penetration and Types of Bundles – All HH with at least one communication service

Q3 2021 – Q3 2022



**Note: Converged bundles refer to any bundle with internet and mobile included*

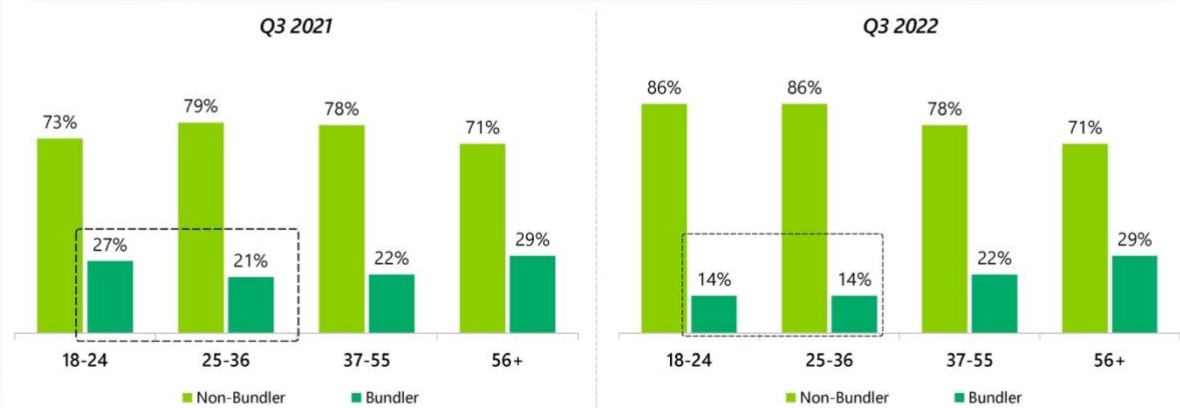
Home Internet Subscribers who are bundlers:
Q3 2021: 27%
Q3 2022: 25%

Base: Q3 2021 – Q3 2022 Most Rural Footprint | Bundlers (n): (412/359)
Q3 2022 TCS Survey | T401

Most Rural FTP

While older Home Internet Subscribers continue to Bundle, bundling penetration declined 20 points amongst 18-36 year old rural households

Bundling Penetration and Types of Bundles – All HH with at least one communication service

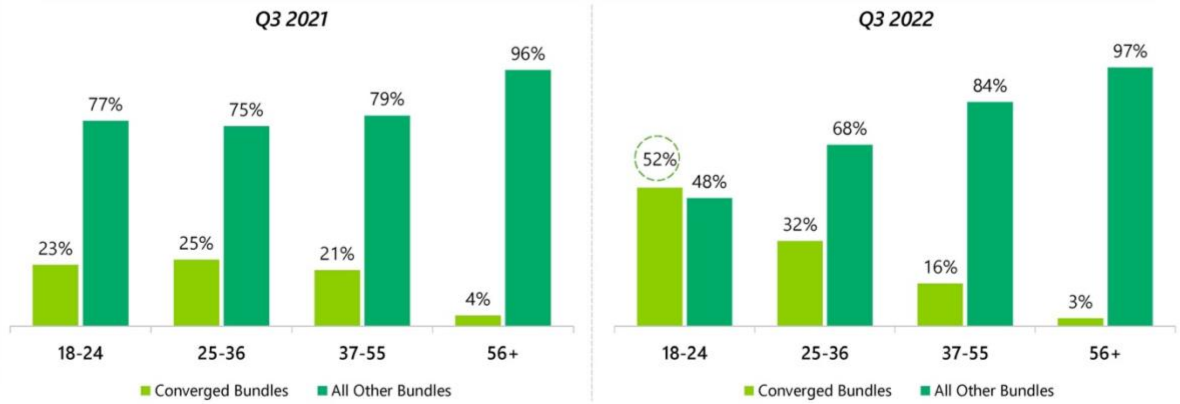


Base: Q3 2022 Most Rural Footprint | 18-24/25-36/37-55/56+ (n): (99/303/586/651)
Q3 2022 TCS Survey | T401

Most Rural FTP

Converged Bundles amongst 18-24 year olds have increased 29 points between Q3 2021 and Q3 2022

Bundling Penetration and Types of Bundles – HHs with bundled services



*Note: Converged bundles refer to any bundle with internet and mobile included

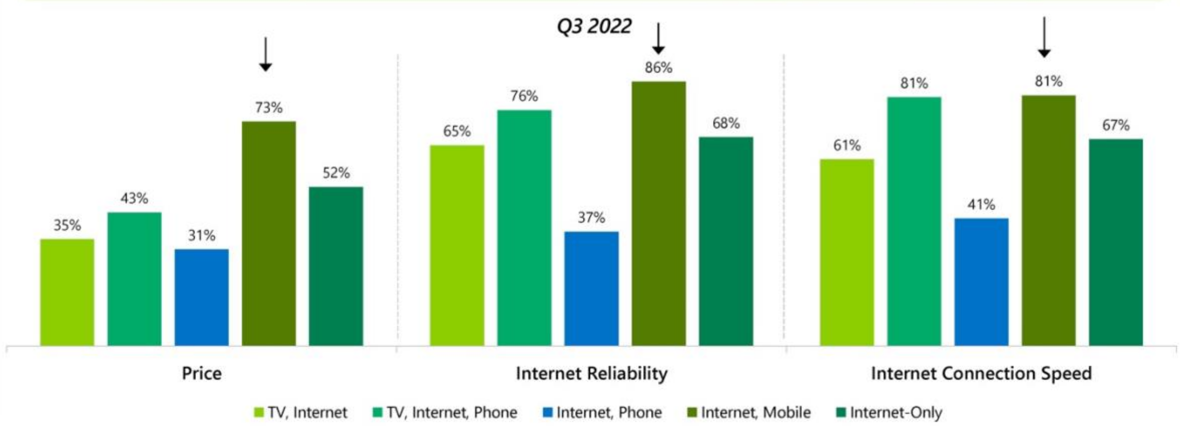
Base: Q3 2022 Most Rural Footprint | Bundlers | 18-24/25-36/37-55/56+ (n): (13*/43/121/182)
Q3 2022 TCS Survey | T401

harrisx

Most Rural FTP

Those with internet and mobile bundles are particularly satisfied with the price they paid when compared with those who have other types of bundles

Bundle and Internet Satisfaction Metrics for those Bundling Internet v Internet-Only



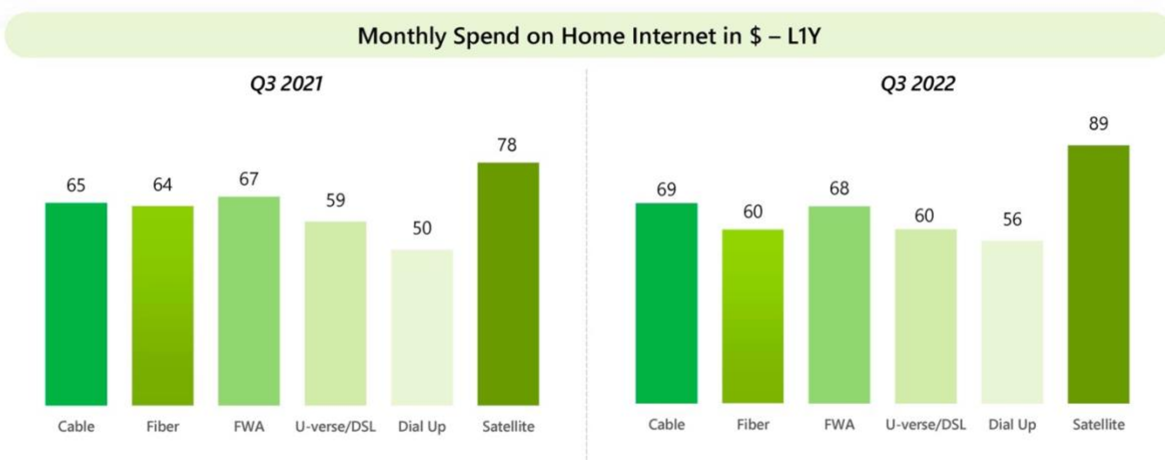
Base: Q3 2022 Most Rural Footprint | (TV, Internet/TV,Internet,Phone/Internet,Phone/Internet,Wireless/Internet Only) (n): (120/75/76/15*/1,047)
Q1 2022 TCS Survey | T401

harrisx

Rural FTP spend, satisfaction, living situation by internet technology

Most Rural FTP

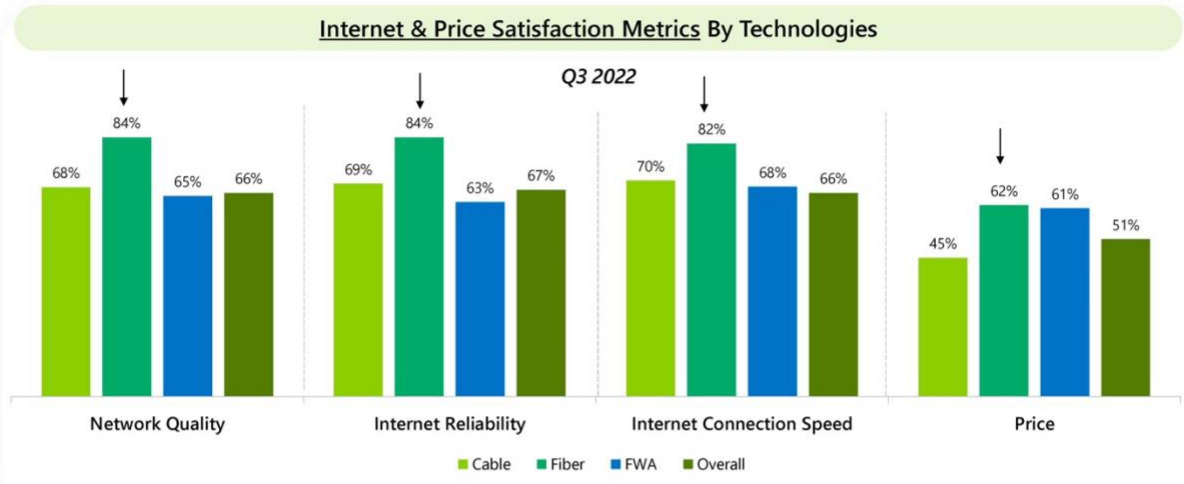
Satellite subscribers continue to have the highest average monthly spending over other Home Internet types



Base: Most Rural Footprint | Q3 2021/Q3 2022 (N): Cable (416/443), Fiber (159/164), FWA (119/153), U-verse/DSL (226/233), Dial Up (14/18), Satellite (89/86)
Q3 2022 TCS Survey | T1023

Most Rural FTP

Fiber Home Internet Households have the highest satisfaction ratings for all internet and price related metrics

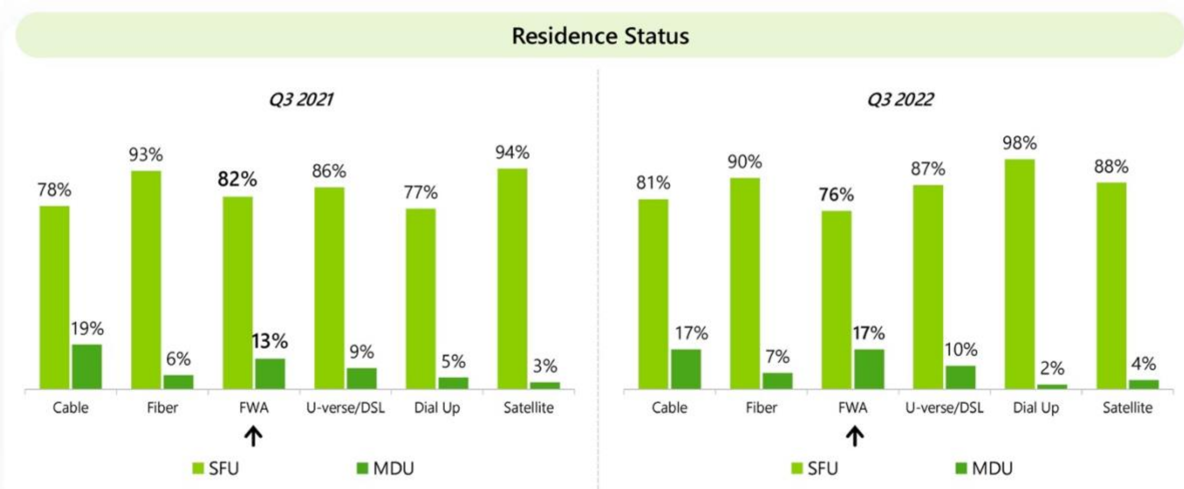


Base: Q3 2022 Most Rural Footprint | Cable/Fiber/Fixed/Overall) (n): (427/152/121/1,461)
Q3 2022 TCS Survey | T803,T804,T805,T806,T850

harrisx

Most Rural FTP

Cable and Fixed Wireless Home Internet Subscribers are more likely reside in multiple dwelling units than other Home Internet Types

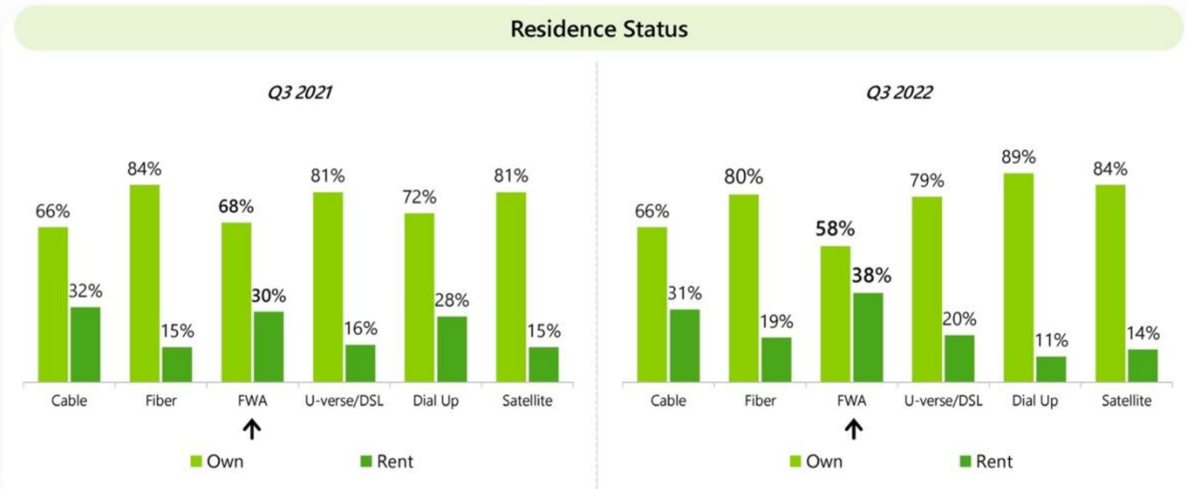


Base: Home Internet Subscribers Most Rural Footprint | Q3 2021/Q3 2022 (1,403/1,434)
Q3 2022 TCS Survey | T1025A

harrisx

Most Rural FTP

Cable and Fixed Wireless Home Internet Subscribers are more likely to Rent than other Home Internet Types

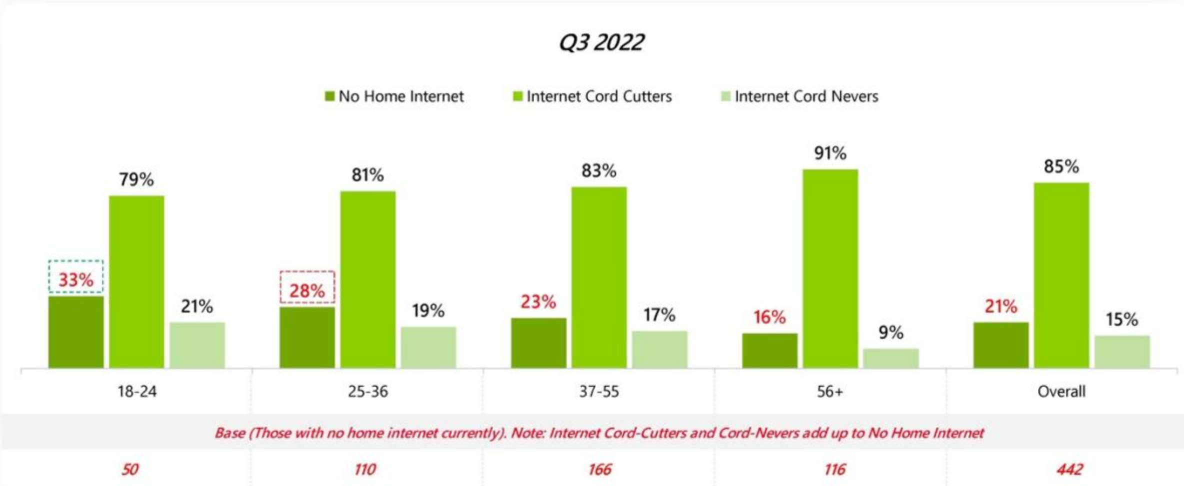


Base: Home Internet Subscribers Most Rural Footprint | Q3 2021/Q3 2022 (1,403/1,434)
Q3 2022 TCS Survey | T1025A

Rural FTP internet/ cord-cutters by age

Most Rural FTP

18–24-year-olds are increasingly subscribing to home internet in Q3 2022, a 7pt increase YoY; However, still more likely not to have home internet

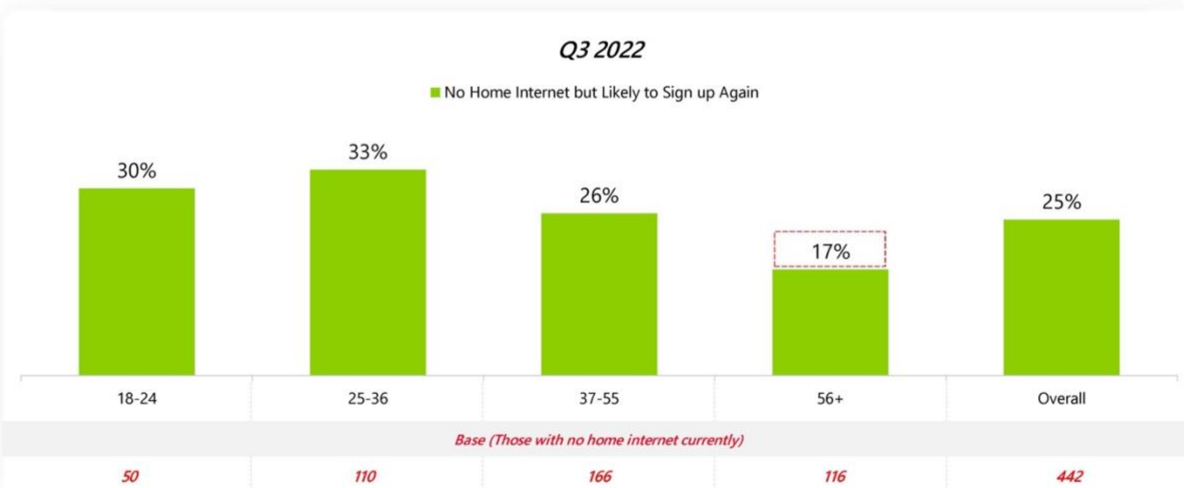


Base: Q3 2021 – Q3 2022 Rural Footprint
Q3 2022 TCS Survey | T282, T285A, T286

harrisX

Most Rural FTP

Of those without home internet, one-third of 18–36-year-olds are likely to sign up again, more so than the older age groups

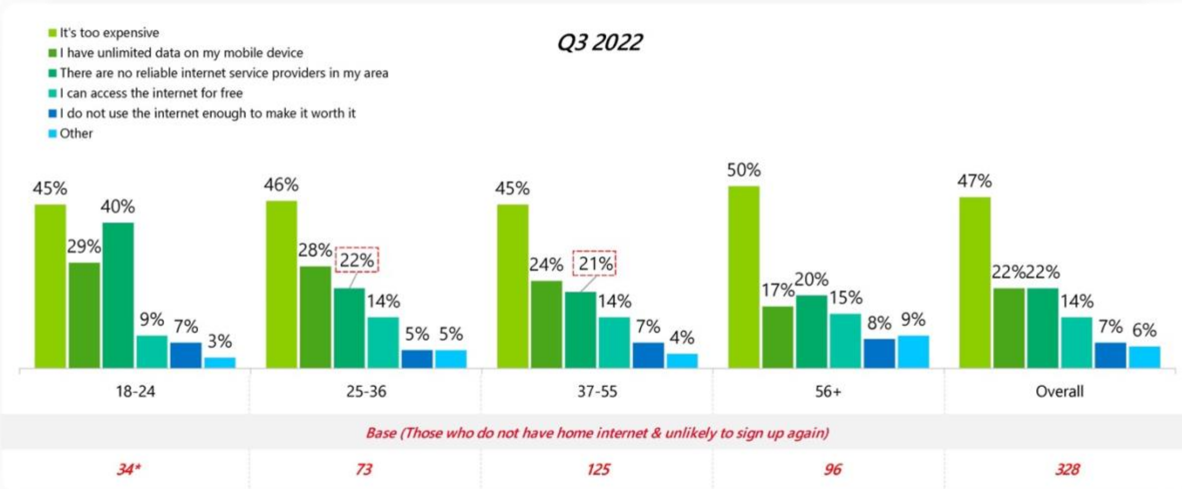


Base: Q3 2021 – Q3 2022 Rural Footprint
Q3 2022 TCS Survey | T282, T285A, T286
© 2023 HarrisX. All rights reserved.

harrisX

Most Rural FTP

Cord-cutters are more likely to cite the price being too expensive as the primary reason why their household is unlikely to sign up again for Internet



Base: Q3 2021 – Q 2022
Q3 2022 TCS Survey | T282, T285A, T286

harrisx

HarrisX delivers connected data intelligence – day in and day out

We have a cross-disciplinary skillset and extensive experience at the intersection of market research, data analytics, polling, and consulting services.

EXPERIENCED BRAND, TMT INDUSTRIES AND TECHNOLOGY EXPERTS UNDER ONE ROOF

RELIABLE INTERCONNECTED TRACKING PLATFORMS THAT CAPTURE CONVERGENCE

360 VIEW – CONSUMER ATTITUDES + BEHAVIOR

A LEADING HOLDING GROUP OF AGENCIES

As **part of Stagwell**, we are both entrepreneurial and backed by global scale, experienced leadership, and sophisticated investors

AMONG THE TOP 10 INTEGRATED COMMUNICATIONS GROUPS IN THE WORLD

We incorporate actual behavioral/performance data to drive decision making

- **Telelphia.io (Passive Metering Application)**
- **Billing Snapshots (Automated Bill Scraping)**

PREDICTIVE MODELING WHICH RELATES ATTITUDES TO PERFORMANCE (NOT JUST PROXIES)

The largest and longest running continuous trackers dedicated to capturing digital attitudes and behavior

Largest TMT & Digital Behavior Trackers

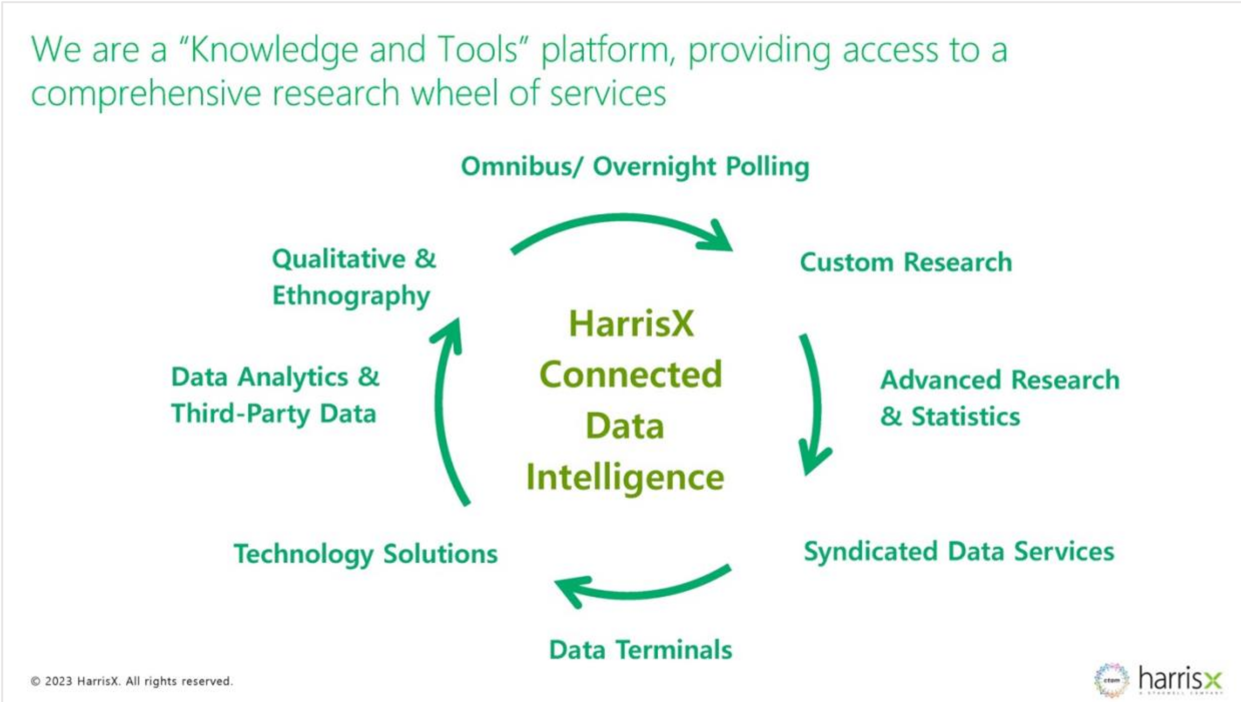
- Mobile Insights Survey
- Total Communications Survey
- Connected Life/ Connected Devices
- BDM/5G platform
- Retail customer service

TOP BRANDS RELY ON HARRISX FOR TRENDING/INSIGHTS WHICH DRIVE BUSINESS DECISIONS

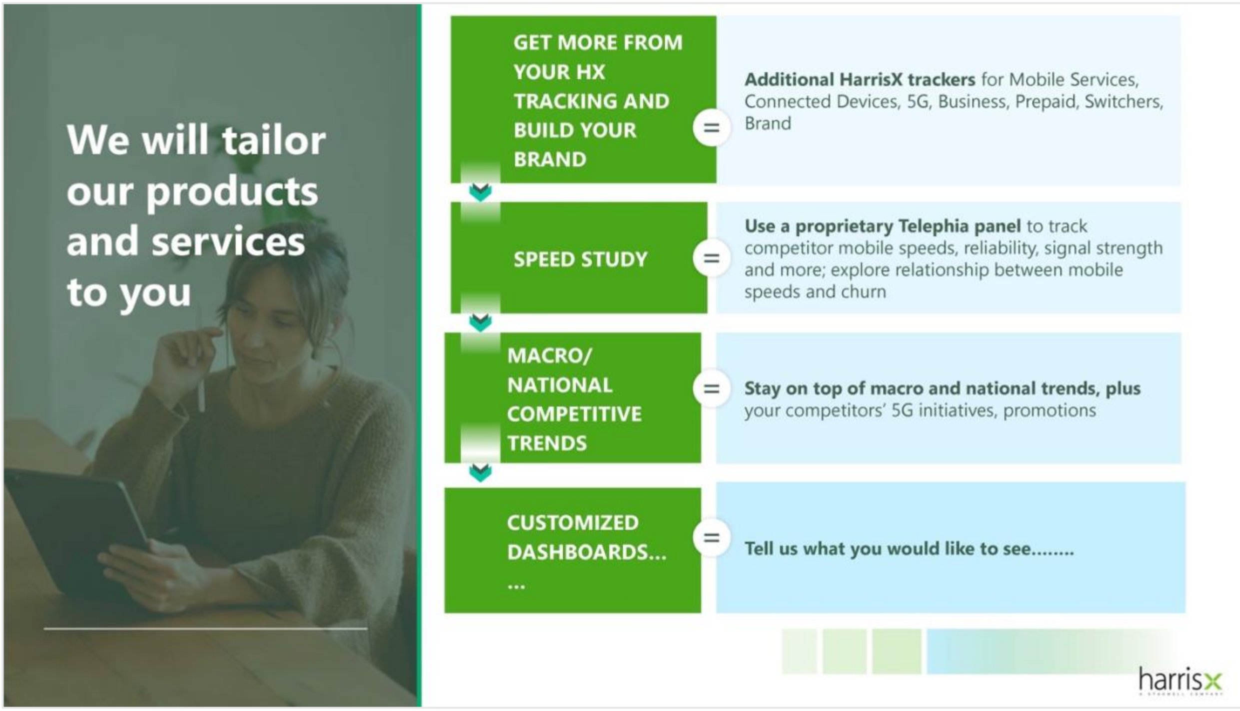
We have experience with qualitative and quantitative research into, services, technology, and brands and work with most major mobile carriers and OEMs, many internet / TV providers and government agencies.

20+ YEARS TELECOM/TECH

harrisx


We are a "Knowledge and Tools" platform, providing access to a comprehensive research wheel of services
Omnibus/ Overnight Polling
Custom Research
Advanced Research & Statistics
Syndicated Data Services
Data Terminals
Technology Solutions
Data Analytics & Third-Party Data
Qualitative & Ethnography
HarrisX Connected Data Intelligence
© 2023 HarrisX. All rights reserved.
harrisx


Our research and operations allow for Speed, Scale, Sophistication all at once, removing the trade-off usually inherent between the three
Custom Research
Research solutions born in a Presidential election and a toolkit of best-in-class custom and advanced solutions.
We offer the only true overnight poll.
We work in 40+ countries.
Our Scale
2M+ surveys across all states, the top 50 MSAs and top 50 DMAs for in depth understanding of consumer behavior and perceptions.
We reach 92% of all US counties each year.
Technology Solutions
Telephia tracks the behavior of Smartphone owners and offers an always on panel.
Billing Snapshots reads consumer bills and purchasing patterns at scale.
Best in class terminals bring it all together.
Reputation & Growth
We work as a multi-disciplinary SWAT team of data scientists and analysts, product developers, and consultants.
Employing evidence-based strategies to develop working solutions.
Our Results
Our findings have affected corporate strategies reaching upwards of 750 million users.
And we were determined the most accurate pollster in the 2020 President Election.
© 2023 HarrisX. All rights reserved.
harrisx


We will tailor our products and services to you
GET MORE FROM YOUR HX TRACKING AND BUILD YOUR BRAND
Additional HarrisX trackers for Mobile Services, Connected Devices, 5G, Business, Prepaid, Switchers, Brand
SPEED STUDY
Use a proprietary Telephia panel to track competitor mobile speeds, reliability, signal strength and more; explore relationship between mobile speeds and churn
MACRO/ NATIONAL COMPETITIVE TRENDS
Stay on top of macro and national trends, plus your competitors' 5G initiatives, promotions
CUSTOMIZED DASHBOARDS... ...
Tell us what you would like to see........
harrisx


hx
THANK YOU
1808 I St. NW Suite 500
Washington, DC 20006
dritan@harrisx.com
kam.ganguly@harrisx.com
zahi.fawaz@harrisx.com
www.harrisx.com

Executive Summary
CTAM Rural Broadband Study

Background

The CTAM Co-op Board asked staff to develop an analysis of Rural America and the opportunities and challenges facing MSOs entering new areas. CTAM engaged two reliable vendor partners to accomplish this.

We divided the study into two phases 1) a quantitative analysis of Rural America, and 2) a qualitative study of Rural Broadband with interviews with consumers and members of the industry who are experts in building into new rural markets.

Our goal was to better understand Rural America, what consumers in these diverse areas want, and what best practices we could document to help member MSOs achieve the best outcomes possible.

What follows is a summary of each phase and a set of recommendations. The full detail of each study is attached in the two PDFs:

- HarrisX Rural Broadband TCS Slides (Quantitative)
- IEN Rural Broadband Research (Qualitative)

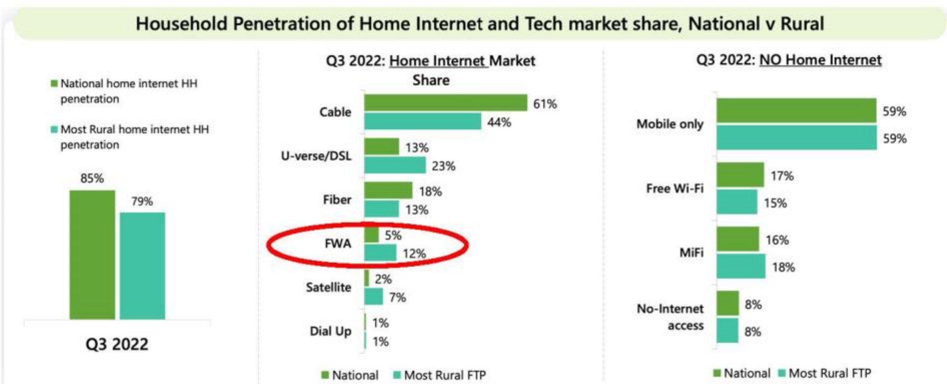
| INSIGHTS

Summary of Quantitative Analysis of Rural America

CTAM Insights and HarrisX took data from the existing Total Communications Survey (TCS) and applied the USDA definitions for rural to compare these areas to the greater U.S. market. This was done to better understand differences in competitive market dynamics, income, and internet adoption rates across various groups.

Key findings include:

- Cable share of broadband households is 17 points lower (44% vs. 61%) in rural areas.
    - Overall broadband penetration is 6 points lower in rural areas.
    - Satellite, FWB, and DSL have higher penetration rates in rural areas.



Base: Q3 2022 Most Rural Footprint | National/Most Rural (N): (23,713/1,876)
TCS Survey | T1003

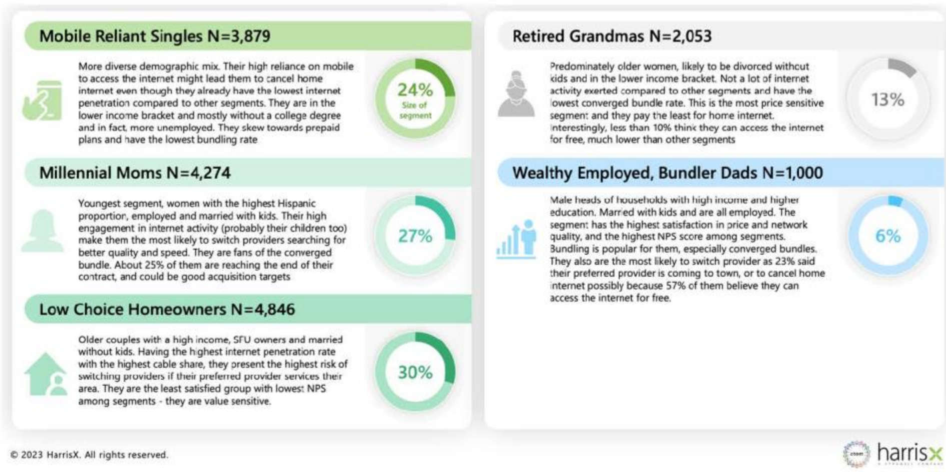
harrisx

This is not surprising given the footprints as they existed pre-RDOF/BEAD, but the success of FWA in these areas is notable given the head start this gives new entrants T-Mobile and Verizon in areas that have heretofore had only slower services like DSL and satellite internet (and sometimes mobile broadband) available. This may blunt the first-in advantage of a wired broadband provider in a rural market. There is also evidence that FWA is taking share from satellite and DSL in rural markets among existing internet-connected households.

Demographically, rural Americans tend to be a bit lower income but more likely to own their home, particularly single-family homes (vs. condos and townhomes). They are also slightly less diverse than the national average (-3 points). That said, there is an incredibly diverse assortment of rural areas. Some are affluent satellite towns within commuter reach of major metropolitan areas while others are what the USDA calls "far and away" rural areas many miles from a major city or town. Some had economies focused on agriculture while others centered around mining or manufacturing.

Broadband Use Cases: there is a healthy and growing appetite for streaming, downloading games/apps and music. This is particularly true among FWA subscribers as a subset of rural broadband.

Taking all this into account, we created five rural market segments:

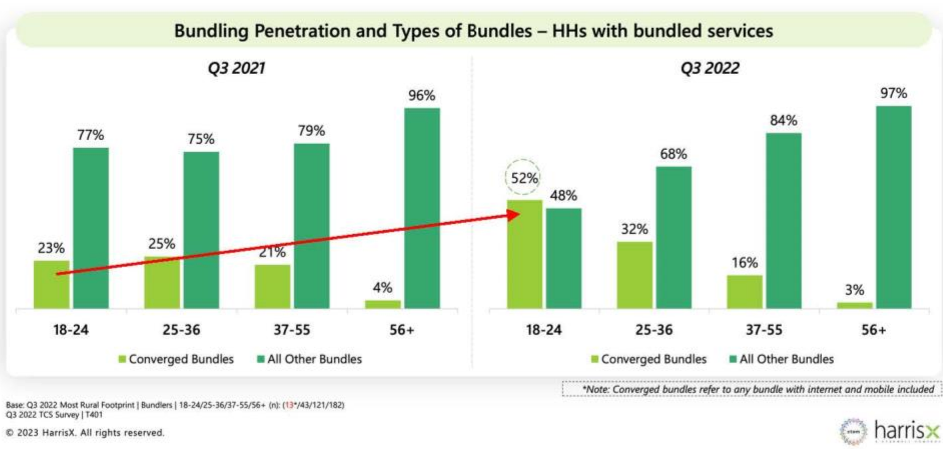


Details of these segments appear on slides 11-15 in the HarrisX deck. Highlights include:

- **Mobile Reliant Singles (24%)**
  - Traits: Are least likely to take home internet and more likely to drop it for financial reasons.
  - Recommendation: Target with mobile-first converged bundles and ACP. Highest mobile-only reliance for access to internet compared to other groups
- **Millennial Moms** (27%)
  - Traits: Are more diverse than average and over-index on social media use and gaming.
  - Recommendation: Target with bundles inclusive of streaming add-on promotions, since they spend time streaming, have a higher internet spend, & higher rates of bundling TV/Internet
- **Low-Choice Homeowners** (30%)
  - Traits: Are older, more affluent homeowners and while they take home internet at a high rate are also “brittle” and at great risk to defect when an alternative appears. Over-index for live TV.
  - Recommendation: Target with bundles inclusive of Pay TV. Highest share of watching Live TV and like to indulge in social networking. For MSOs with large rural exposure, protecting this base of subscribers may take targeted preemptive action ahead of an overbuild.

- **Retired Grandmas** (13%)
  - Traits: Are older and more likely to be divorced. Very price sensitive, but surprisingly less likely to know about subsidized programs like ACP.
  - Recommendation: Target with lower priced internet plans and ACP messaging. They spend the least on home internet and are less likely to stream or use social networking as other groups.
- **Wealthy Employed Bundler Dads** (6%)
  - Traits: Are high-income heads of household who are currently employed full-time. Highest satisfaction for price and product among all groups and have the highest take rate for converged bundles (Internet+Mobile). But they are also more likely to switch providers or cancel.
  - Recommendation: Target with converged bundles. For existing subscribers in this segment, getting ahead of a new entrant to the market will be important as this group may seek what's new or "cutting edge".

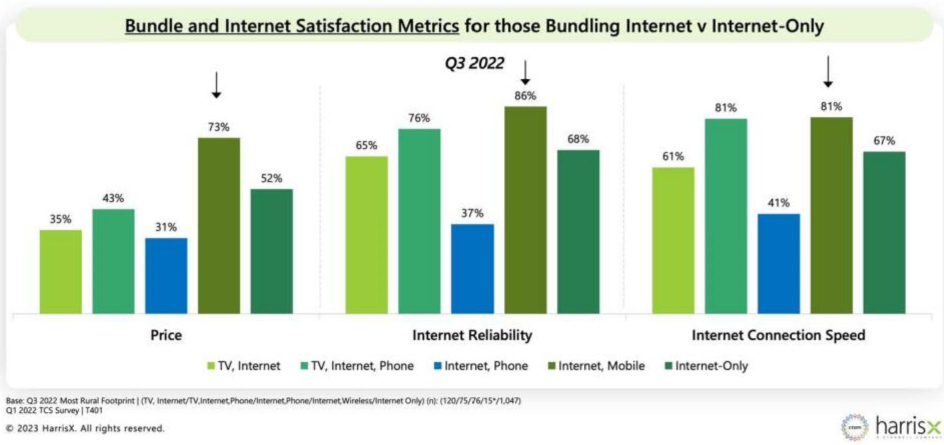
Shifting to Bundling, rural consumers lag the national average with only 23% bundling services with a single provider. And bundling overall is in decline (mostly due to the decline in pay tv and landline) with younger consumers unbundling over time faster than older consumers. That said, young, rural consumers are adding *converged* bundles at quite a clip – more than *doubling* as a share of all bundles from Q3-2021 to Q3-2022.



And those rural consumers who have converged bundles have higher price satisfaction than other kinds of bundles.

4

ctam | INSIGHTS



The remainder of the report drills into satisfaction across internet connection types (Cable, Fiber, FWA, Uverse/DSL, Dial-up, and Satellite) as well as slicing rural cord cutters and nevers by age. CTAM encourages you to share the full decks with staff and to dive in.

This is a living document – we will be updating it with Q3-2023 data when it becomes available.

| INSIGHTS

Summary of Qualitative Research Study of Rural Broadband

For the qualitative phase, CTAM Insights and Informed Engaged Network (IEN) collaborated on a series of in-depth interviews with consumers and industry experts to define a deeper sense of both consumer needs/wants/preferences as well as go-to-market best practices.

The study began with a series of conversations with MSO and other ISP industry experts who were either specifically leading rural market selection and/or builds, or who operate legacy rural markets. The distilled take-away from these industry interviews was: be first if at all possible and if you are second, you need to have your A Game in terms of local engagement, door knocking, etc. Order of entry was a large factor for success.

The consumer interviews revealed a general distrust of outsider companies, especially those who were not going to establish a local presence (where the closest office was miles away in the bigger town down the road), and like the quantitative study indicated, price sensitivity and affordability matter even more in Rural America than the overall U.S. market.

Key Learnings from the Consumer Interviews:

1. Many communities have no local corporate ISP presence. Customers are annoyed that the nearest offices are miles away or non-existent: "The only place I see their name is on my bill."
2. Personal relationships can be a successful approach to helping consumers understand the new broadband services.
3. These consumers need to know how faster Internet will meet their needs and improve their lives.
4. Consumer **resistance** to adoption of broadband is driven by:
    a. Complex set of offerings that are hard to understand.
    b. Perceived lack of local presence and engagement.
    c. Concern that high-speed Internet will not be affordable.
    d. General lack of trust in cable companies.

Overall Community and Marketing Recommendations:

- Establish a strong relationship with leaders in rural communities.
- Become a force in the overall community – parades, skill training events, etc.
- Establish a "store front" presence, so consumers are confident that their problems will be solved quickly.
- Personalized, conversational marketing is proving to be successful.
- Simplifying the number of service options.
- Explain the lifestyle benefits of the technology - translating capabilities into personal, relatable experiences.

| INSIGHTS

We encourage you to flip the entire CTAM + IEN deck – there is much more there including verbatims from both sets of interviews and a deep stare into several archetypical rural towns across the nation.

If you have any questions about this summary or the two accompanying study decks, please reach out to Mark Snow at mark@ctam.com. He and the Insights Team will be happy to help.