

CREATING OPPORTUNITY THROUGH CONNECTIVITY:

How Mobile Broadband for Anchor
Institutions Impacts Communities

By:

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and

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Samantha Schartman-Cycyk is an incorporating board member and Research Director of the CYC Institute, a nonprofit devoted to the advocacy of digital equity through research and partnerships with technology advocates in the Northeast Ohio region and beyond. She was also Assistant Director for Connect Your Community 2.0, a collaborative that conducted a 19-million-dollar federal stimulus grant project responsible for connecting over 25,000 residents throughout a 5-state region, a former member of the NTIA BTOP research advisory group, and an independent data scientist, researcher, project manager and consultant with over 10 years of experience in the technology, education and digital inclusion sectors.

She spends most of her time assisting organizations in refining data collection methods and processes, designing research efforts, conducting data analysis, and managing survey efforts. She holds an MA in Cognitive Science from Case Western Reserve University and her research and writing on the topics of digital inclusion, technology use, cognitive science, and linguistics can be found in several peer-reviewed journals as well as publicly shared by organizations and in policy circles.

Katherine Messier

Katherine is the founder and Executive Director of Mobile Beacon, an organization that provides high-speed, low-cost, mobile internet access to the anchors of communities: the nonprofits, schools, libraries, and healthcare organizations that provide vital services to millions of Americans every day. Through this broadband service, organizations have an essential tool to fulfill their missions and maximize their philanthropic impact.

Katherine has spearheaded the development of several national initiatives that address the connectivity needs of community anchor institutions and focus on closing the digital divide. She has grown what started as a small “borrow the internet” pilot program in Providence, RI into a well-established hotspot lending platform supporting over 350 public libraries nationwide. Additionally, Katherine launched the first mobile broadband donation program for nonprofits on TechSoup, which has provided more than 22,000 free 4G devices to 501(c)(3) nonprofits and public libraries to further reduce the cost of connectivity. Most recently, Katherine launched a new national initiative, Bridging the Gap, with nonprofit partner PCs for People, to provide affordable home broadband access and refurbished computers to individuals and families below the 200% poverty level. This program now serves families in all 50 states.

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INTRODUCTION

The nonprofit sector nationally supports and serves millions of people and causes that better our society, the environment, and lives of individuals and families. Community anchor institutions (CAIs), including schools, universities, libraries, museums, healthcare organizations, and other nonprofit organizations, are increasingly recognized for their role as influencers and contributors to a community's prosperity.

Providing high-capacity bandwidth to CAIs enables these organizations to become catalysts for increasing their communities' digital literacy, broadband deployment, and adoption. Given the number of individuals a CAI impacts, one broadband connection has a social, educational, and economic multiplier effect (Internet2, 2016). While it remains a national priority to connect CAIs with wired gigabit connections, mobile broadband also plays an important role in creating connected communities.

Mobile Beacon's service is unique in that it provides \$10/month, mobile, uncapped, and unthrottled service exclusively to CAIs. Affordable, anytime/anywhere connectivity gives these organizations an essential tool to fulfill their missions and maximize their philanthropic impact. Mobile Beacon's clients are not restricted in the amount of data they can use in a given month, nor does their service slow or stop after reaching a certain data allotment. In this way, examining the online behaviors of CAIs using Mobile Beacon's service provides rare insight into the demand for mobile broadband data since they use the data they need – not just what they can afford. We note, however, that overall demand for mobile broadband is expected to grow by 23%, and so the documented data usage in this report should be seen as a benchmark from which these projections should be kept in mind (Cisco, 2016).

This report is organized into four sections.

In **Section I**, we define and report on the broad range of organization types and target audiences served through Mobile Beacon's internet service.

In **Section II**, we look at how different CAIs use Mobile Beacon's service and explore key differences among the largest client categories (schools, libraries, and nonprofits). Specifically, we compare the main motivators to purchase against the main benefits experienced from using the service, define the ways the service is being used for internal and external audiences, and analyze monthly data usage trends by organization type.

In **Section III**, we compare CAIs' experience with previous internet providers against their current service with Mobile Beacon. We investigate the impact of data caps on the quality of internet service and its ability to support existing programs, and what (if any) impact cost-savings had on the organization.

In **Section IV**, we report on customer satisfaction ratings with Mobile Beacon and whether clients have recommended Mobile Beacon's service to others.

RESEARCH METHODOLOGY

For this survey, we drew on a random sample of 2,508 Mobile Beacon's nonprofit clients. 443 responses were collected in November and December of 2016. Follow-up included three callbacks to non-responding numbers unless a hard refusal was given. Designed by the authors, the survey was administered in English (Spanish was available but not needed) using VOIP phone lines in a CATI lab setting. Responses were recorded digitally using a computer-programmed interface. This scientifically-designed survey meets all criteria for statistical significance within less than a $\pm 5\%$ margin for the population and can thus be generalized to represent the entirety of Mobile Beacon's national nonprofit client base.

KEY FINDINGS

- **84%** of respondents rate the importance of having uncapped data as “very important” to “essential” to their existing programs.
- **86%** of respondents whose previous internet service was subject to a data cap needed more data than what they could afford. This resulted in additional unplanned costs from overage charges or diminished service during their service history with previous carriers.
- **42%** of schools say the main benefit of Mobile Beacon's service is to supplement their existing internet connection. Overall, schools use a staggering **373 GB** of data per month.
- **40%** of devices owned by schools are used to provide connectivity to students in the classroom and at home (through hotspot lending programs).
- Public libraries use Mobile Beacon's service to provide connectivity for their communities at the highest rate of all client organization types with **88%** of devices being used for this purpose.
- **86%** of Mobile Beacon library clients offer a hotspot lending program. Half of the remaining plan to start a hotspot lending program soon.
- **67%** of nonprofits use Mobile Beacon's service for mobile purposes (telework, community outreach, travel, offsite meetings/training), while the remaining **33%** rely on this service as their main internet connection, a supplement to an existing connection, or an on-demand backup if their primary internet connection fails.
- **41%** of nonprofits use Mobile Beacon's service to provide internet access to their community. **26%** do this through hotspot lending programs, with another **12%** planning to add such a program soon.
- **69%** of all respondents state unlimited data has allowed them to expand their program services.
- **82%** of all respondents say they have saved money by using Mobile Beacon's internet service.
- The reported annual mid-range cost-savings for all survey respondents is **\$380,100**. Applying this to Mobile Beacon's national client base, the extrapolated mid-range cost-savings is **\$2,662,044** per year.
- **100%** of all respondents say they would recommend Mobile Beacon service to others.

SECTION I: TYPES OF CLIENTS AND AUDIENCES SERVED

Mobile Beacon currently serves CAIs across 49 states. These clients range from small nonprofits to housing authorities to large school districts and library systems.

Analyzing the impact of Mobile Beacon’s service on client organizations is an exercise in understanding relationships: those between Mobile Beacon and its clients, as well as the relationship between Mobile Beacon’s clients and the people they serve. *Figures 1 and 2* below provide a breakdown of the types of organizations and target audiences served.²

The largest category consists of community nonprofits, which we define as those serving all ages and family types within their local community (not a specific demographic). These consist of nonprofits like community housing organizations, YMCAs, first responders/emergency service organizations, and other nonprofits reporting the general public as their target audience.

“Internet access is like having lights on in the room. It’s a requirement to do business as a nonprofit.”

– American Concrete Institute, Farmington Hills, MI

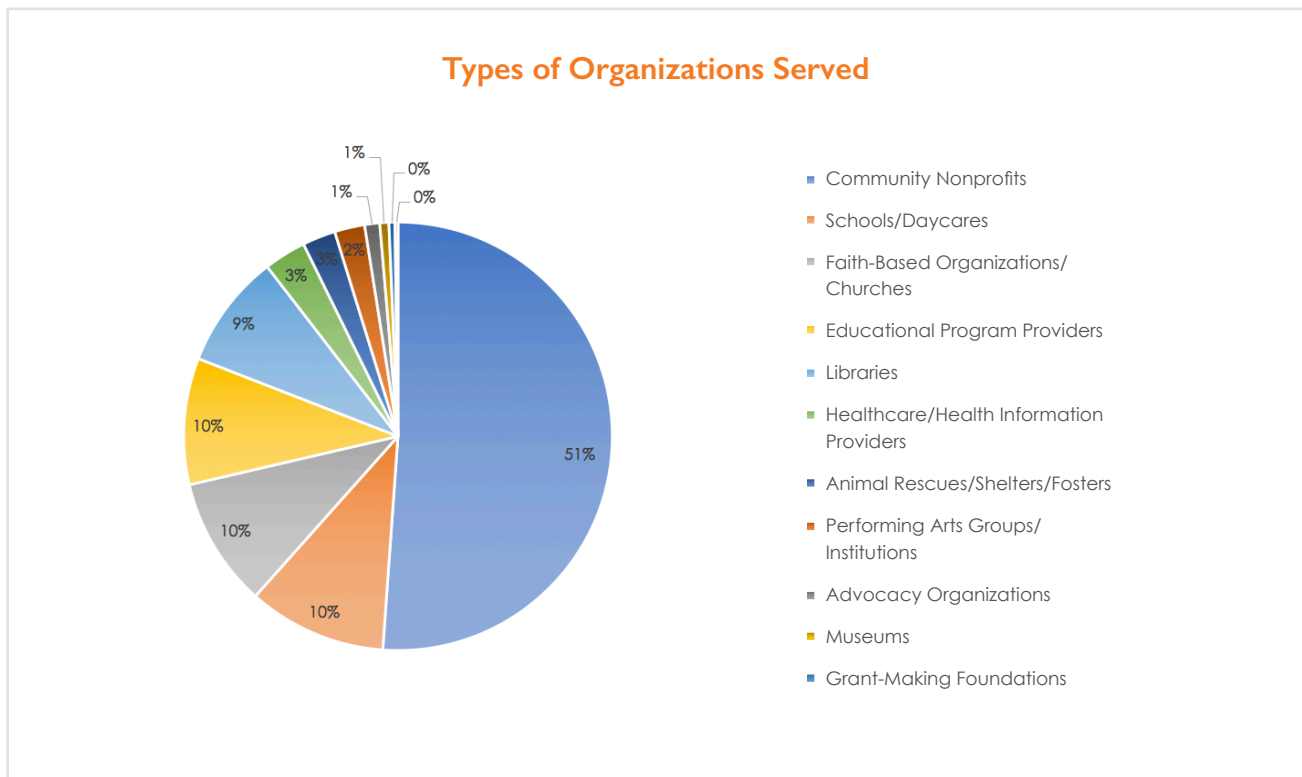


Figure 1

²This data was compared to Mobile Beacon’s client database and found that survey responses closely followed the breakdown of total organization types and audiences served. This demonstrates that the sample is representative of Mobile Beacon’s national client base.

Figure 2 summarizes the distribution of reported audiences served by responding organizations. Respondents could select more than one category, so higher percentages indicate a higher frequency of reporting. Of the largest categories reported, 15% serve the general public and 27% focus specifically on children and students (15% and 12% respectively).

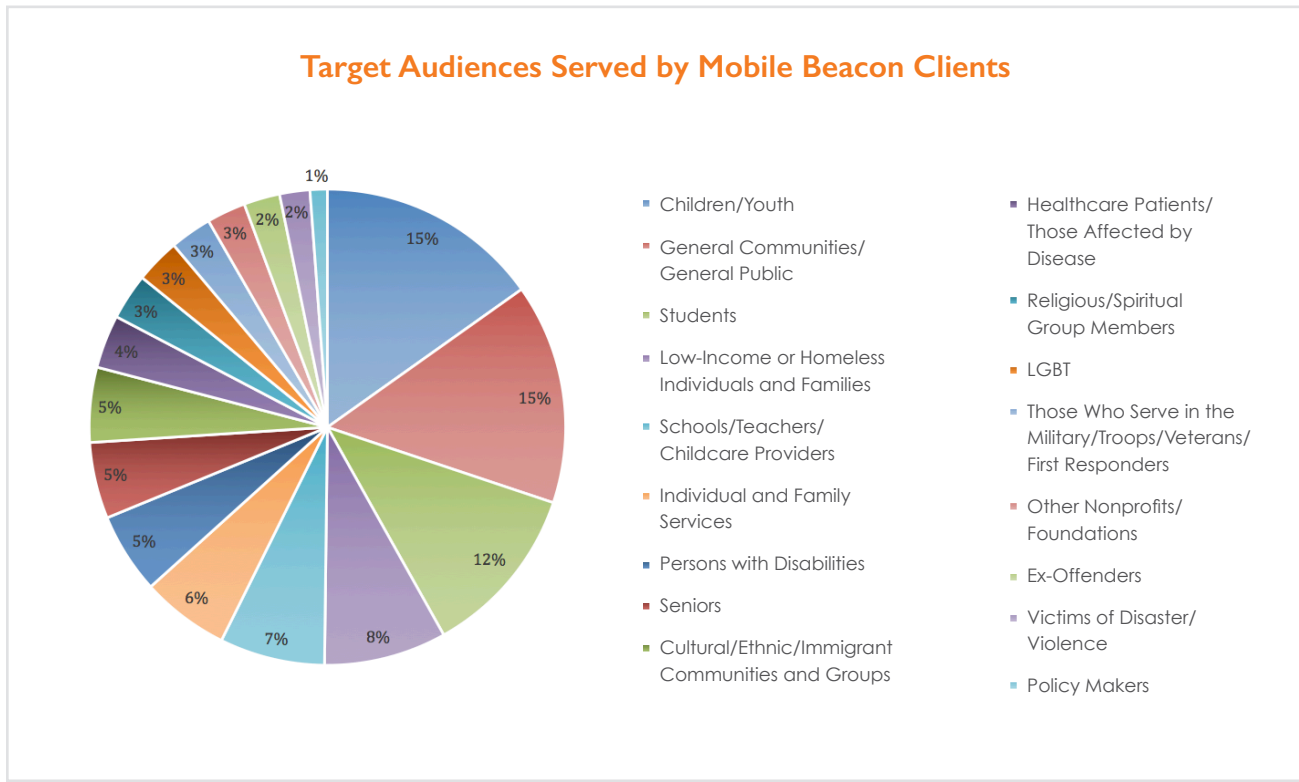


Figure 2

SECTION II: DIFFERENCES IN INTERNET USE BY ORGANIZATION TYPE

Primary Beneficiaries of Mobile Beacon’s Service

Mobile Beacon’s clients use its broadband service in two ways: internal use (connectivity for staff) and external use (connectivity for the nonprofits’ constituent base). As *Figure 3* (below) shows, 86% of all clients report using their service for staff, while 47% use it in support of their community. Those reporting to use Mobile Beacon’s service to serve both internal and external audiences is 34%.

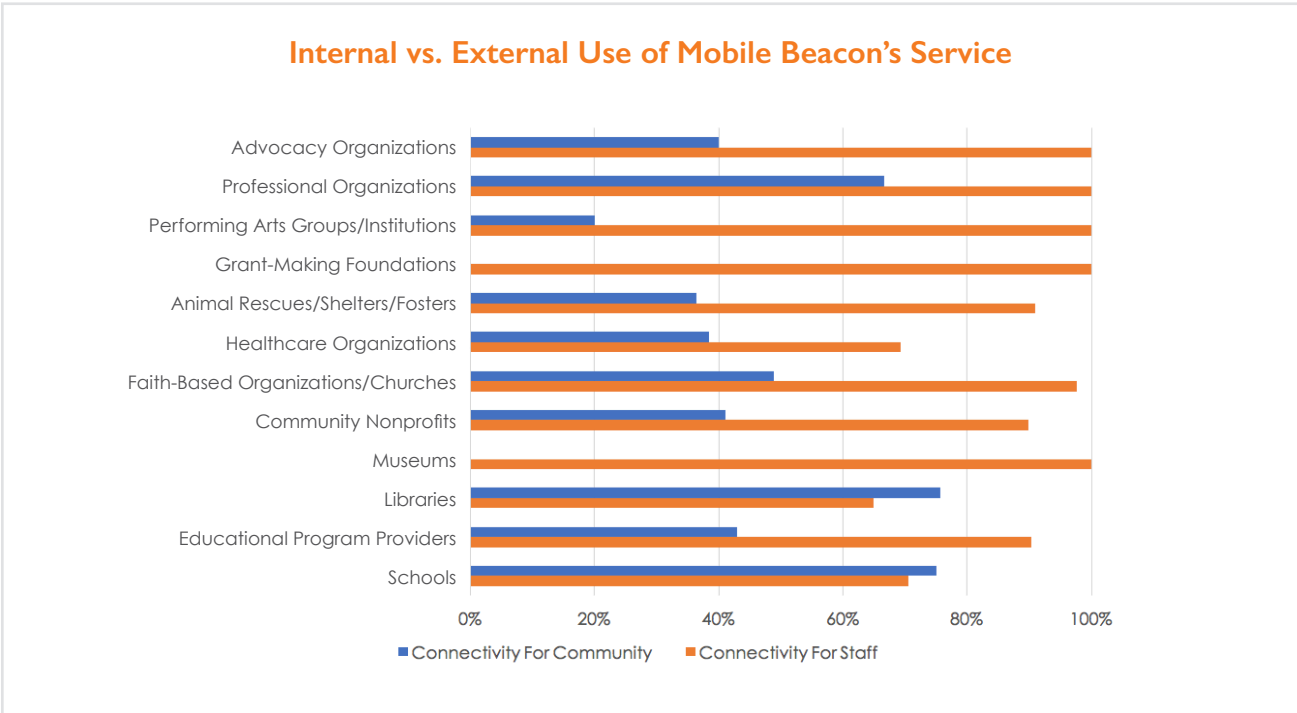


Figure 3

In the following sections, we consider how each of Mobile Beacon’s largest client categories (schools, libraries, and nonprofits) are using its service, how much data is being used for their internal and external purposes, and what value this service delivers for those purposes.

A Closer Look: Schools and Other Educational Program Providers

To understand the value Mobile Beacon’s service provides to schools and other educational program providers, we asked respondents what their main motivation was for purchase. Since expectations can differ from direct experience, we also asked respondents what they see as the main benefit of the service after using it. *Figure 4* compares these responses.

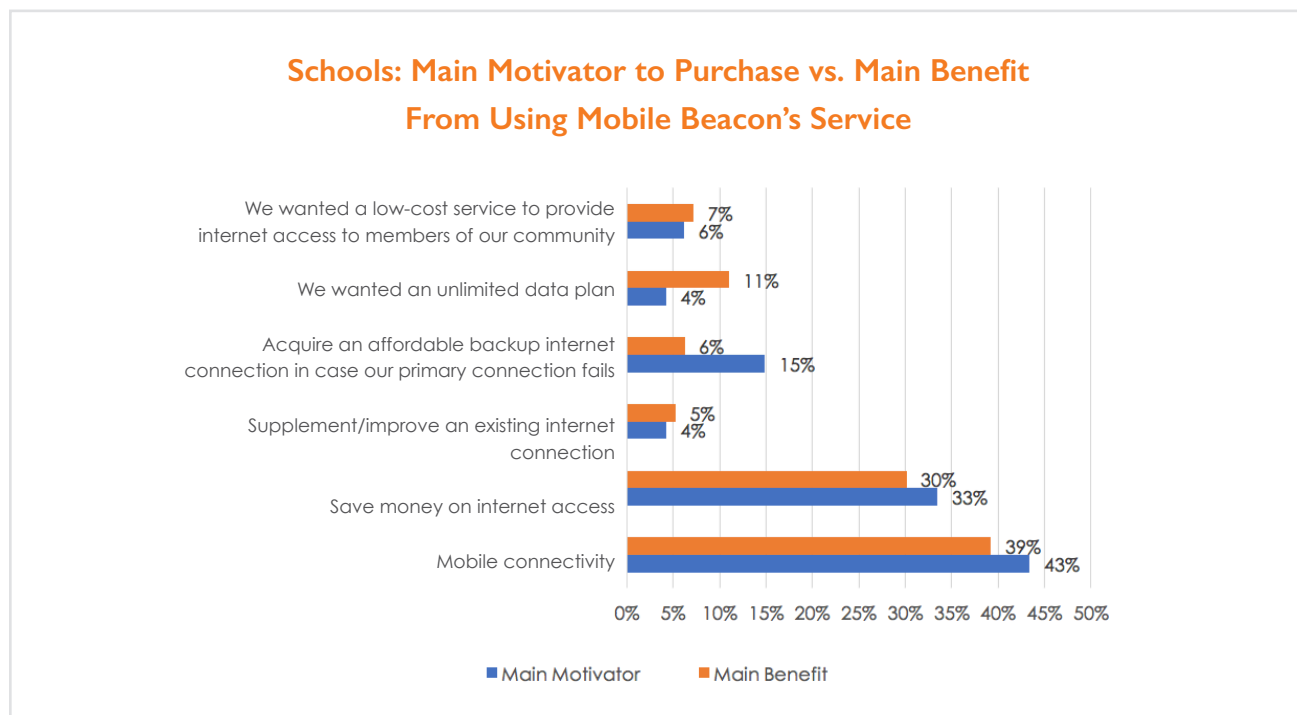


Figure 4

While saving money (28%) and mobility (41%) were the primary factors attracting schools to Mobile Beacon, unlimited data (22%) and the ability to supplement or extend an existing network (42%) became the areas that provided the most value. To understand why these benefits were highly rated, we analyzed overall data usage over a five-month period (Sept. 2016–Jan. 2017). The average monthly data among schools is a staggering 373 GB.

Schools’ need for additional broadband capacity to support learning in the classroom is well-established. The Federal Communication Commission’s 2010 E-rate Program and Broadband Usage Survey found nearly 80% of all survey respondents’ broadband connections did not meet their current needs (Federal Communications Commission Wireline Competition Bureau, 2010). While mobile broadband speeds are far below speeds from fiber or cable connections, the prevalence of schools using Mobile Beacon’s uncapped, mobile broadband service to supplement their existing network speaks to their need for additional capacity.

“It’s extremely valuable. The students are using it to program and learn. When I’m out in different rural districts, I count on Mobile Beacon to get my students online.”

– Science & Engineering Teacher, Friendship High School, Wolfforth, TX

Schools with high-speed cable or fiber connections likely switch over to Mobile Beacon when their primary internet connection temporarily goes down or during peak periods when network speeds may be impaired due to network congestion. Other schools, particularly those in rural areas, do not have high-speed broadband. For example, schools using a T1 line for connectivity (which allows for a maximum speed of 1.5 Mbps) would find Mobile Beacon's service 5-7 times faster (broadband, 2011).³

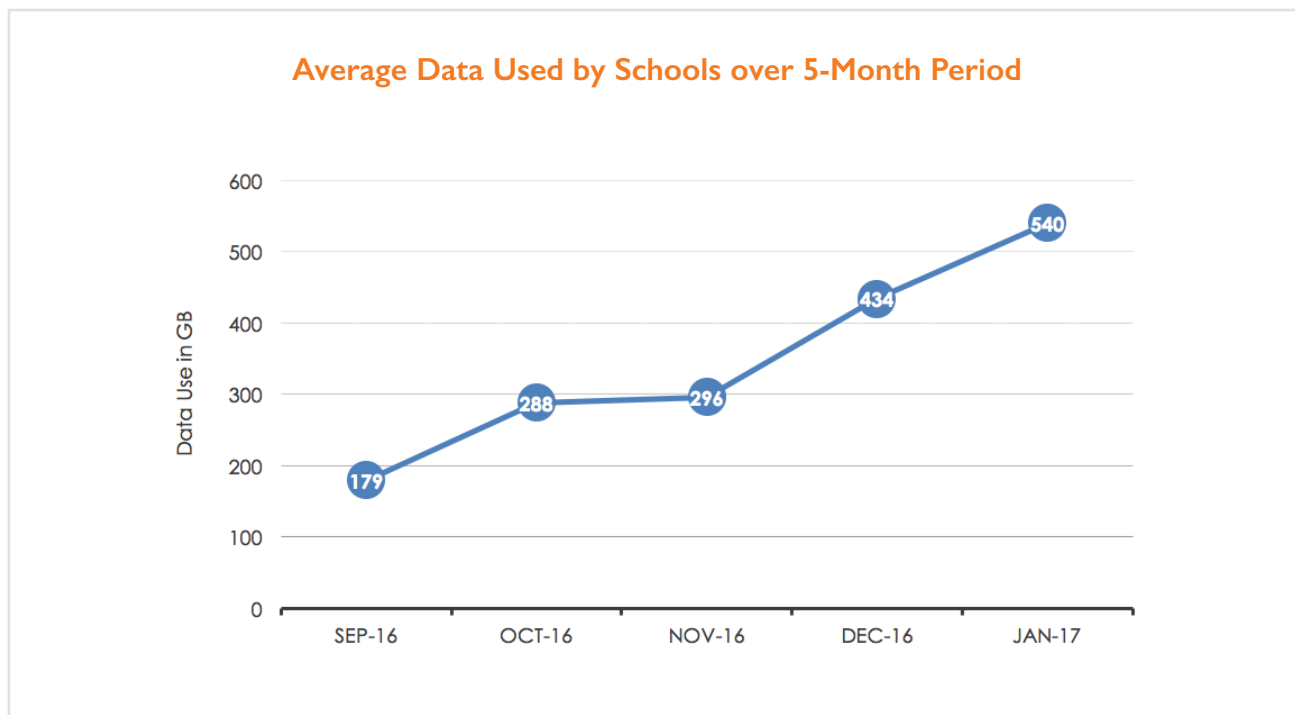


Figure 5

The change in the monthly averages over the sample period (*Figure 5*) shows a strong upwards trend of internet usage. The rising rate of consumption is so strong that it is predictable that within the next year, average school use could double. This effectively outgrows most traditional retail mobile options, which begin throttling their marketed “unlimited” plans far before the current rate of school usage (Moynihan, 2017).⁴

To understand the factors driving this level of demand for data, we asked who uses the service most and when it is used most. *Figures 6* and *7* below show the breakdown of responses.

³ A T1 line provides a maximum of 1.5 Mbps download speeds compared to average LTE mobile broadband download speeds of 8-10 Mbps with peak download speeds approaching 50 Mbps.

⁴ In the cited article, the author reports throttling begins at different data usage thresholds depending on the plan. Throttling is found, on some plans, to begin between 500 MB and 22 GB.

Who Uses Mobile Beacon's Service Most in Schools?

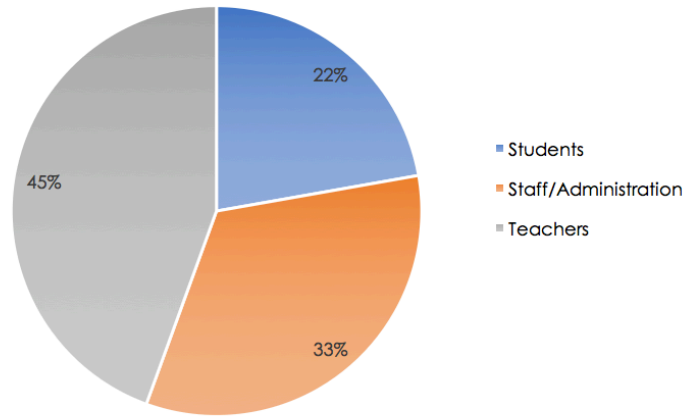


Figure 6

Teachers were most frequently reported as the primary users of Mobile Beacon's service (49%), with students and other staff equally splitting the remaining half. However, when we asked when Mobile Beacon's service is used most (see Figure 7 below), we saw higher reported numbers of direct student benefit. For example, 28% report primarily using the service in the classroom and 13% primarily use it to loan hotspots to students lacking home internet access.

This suggests that while schools often put the responsibility of managing the devices and service in the hands of teachers, they are more frequently deployed in direct service of students. For example, while 72% of those reporting to use Mobile Beacon's service primarily in the classroom said teachers were the principal users, over 55% report connecting between 5 and 10 devices (10 devices is the maximum allowed to connect at once) to the service on average.

When Schools Use Mobile Beacon's Service Most

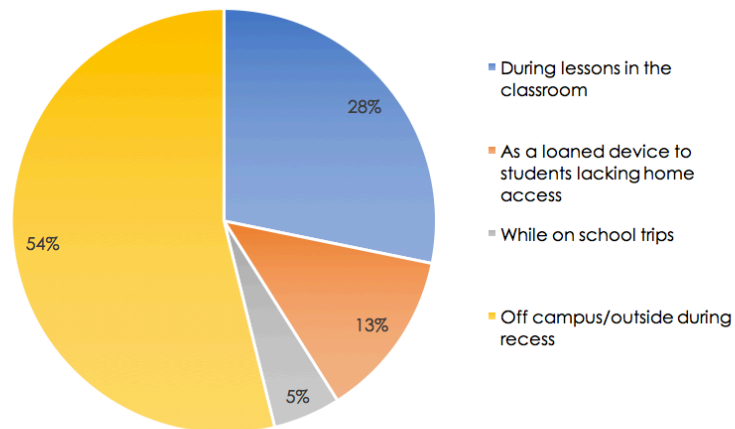


Figure 7

If we use the findings from *Figure 6* and *7* to recalculate and more accurately show who the main beneficiaries of the service are, we see a 25% shift from the “Teacher/Staff” category to the “Student” category.

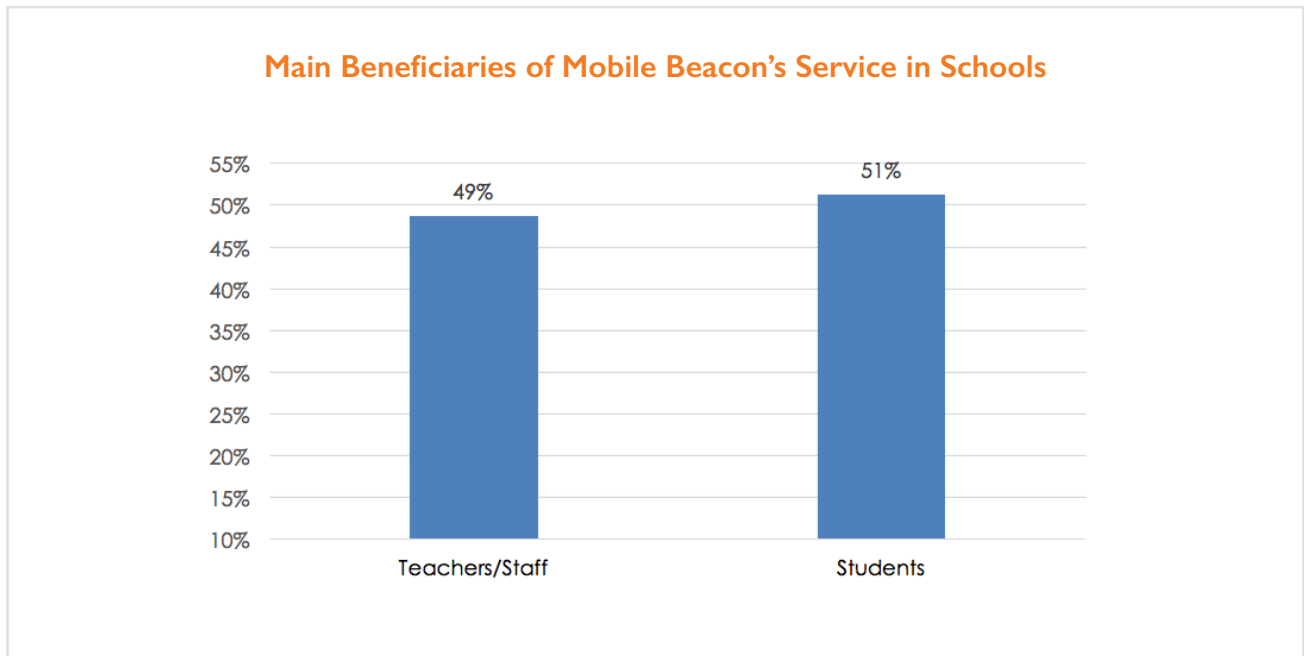


Figure 8

A Closer Look: Libraries

To understand the value libraries find in Mobile Beacon's service, we compared the main motivating factors to purchase against the main benefits experienced after using the service. *Figure 9* below provides the results.

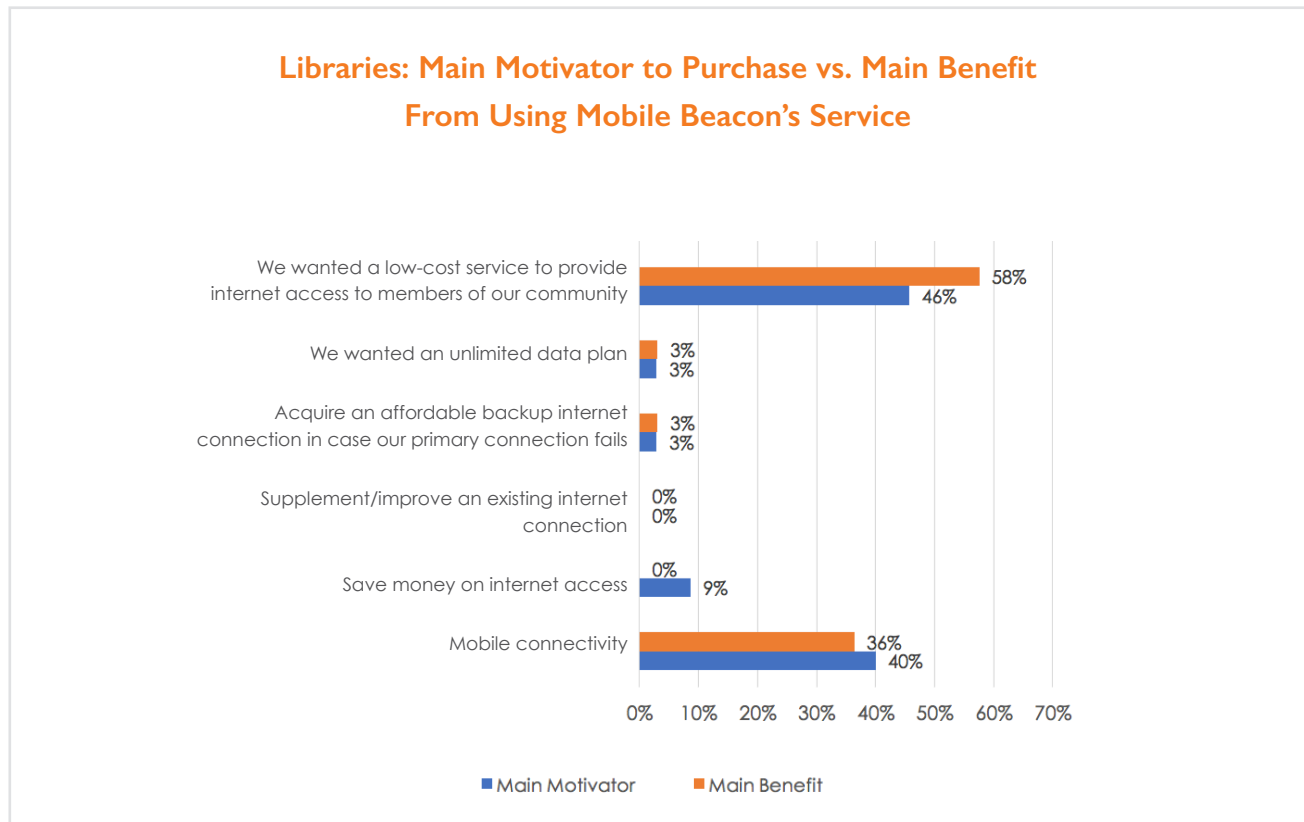


Figure 9

Mobile connectivity and an affordable option to provide internet access to members of a community are dominant factors in both the motivation to purchase and the main benefit perceived after using the service. This is not surprising given that among various types of CAIs, libraries are the clear leaders when it comes to providing broadband access to a community. Nationwide, over 62% of public libraries are the only free source of internet access in their community (Hoffman, 2012). As demand for computers and connectivity continues to exceed what can be provided in their physical space and operating hours, libraries continue to use the internet in a variety of ways to make more resources available outside of their buildings.

“In communities like ours there is a gap in digital literacy. This service benefits those who cannot afford it.”

– Anderson Public Library,
Anderson, IN

The emphasis on libraries using mobile broadband to provide connectivity for the community was further validated when we asked libraries to tell us who uses Mobile Beacon's service most and when the service is used most. *Figures 10 and 11* below provide the breakdown of responses.

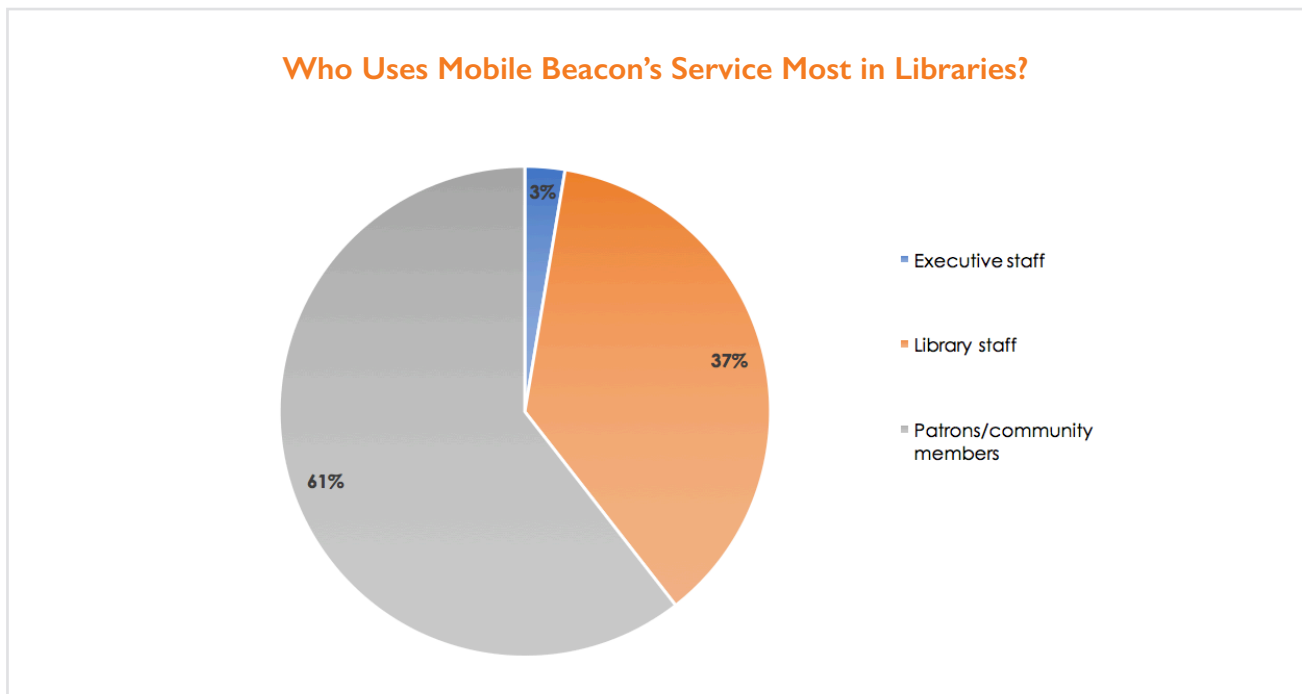


Figure 10

Figure 10 shows 61% of libraries report their patrons are the primary users of Mobile Beacon's service. A little more than a third (37%) said library staff are the primary users.

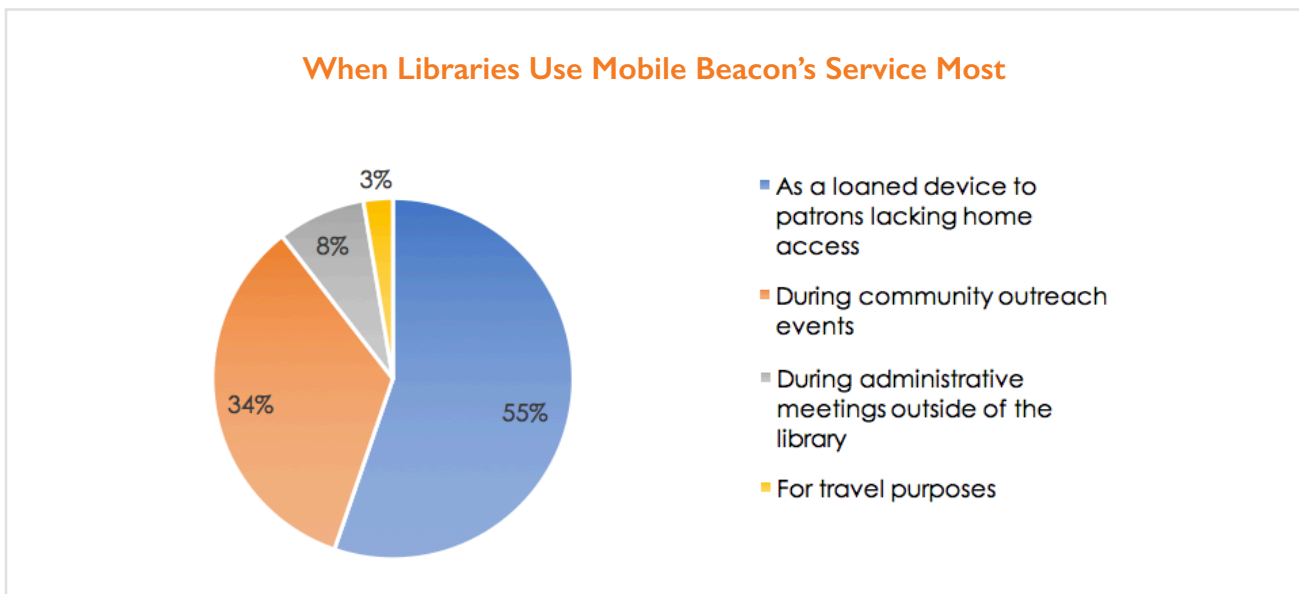


Figure 11

Figure 11 shows the largest percentage of service use (55%) is by library patrons through hotspot lending programs. Hotspot lending programs enable patrons to “borrow the internet” by circulating mobile hotspots with active internet service and the ability to connect up to 10 devices. The prevalence of these programs among Mobile Beacon’s library clients is 86%. Of the libraries not currently offering a hotspot lending program, half report they plan to add one in the next year.

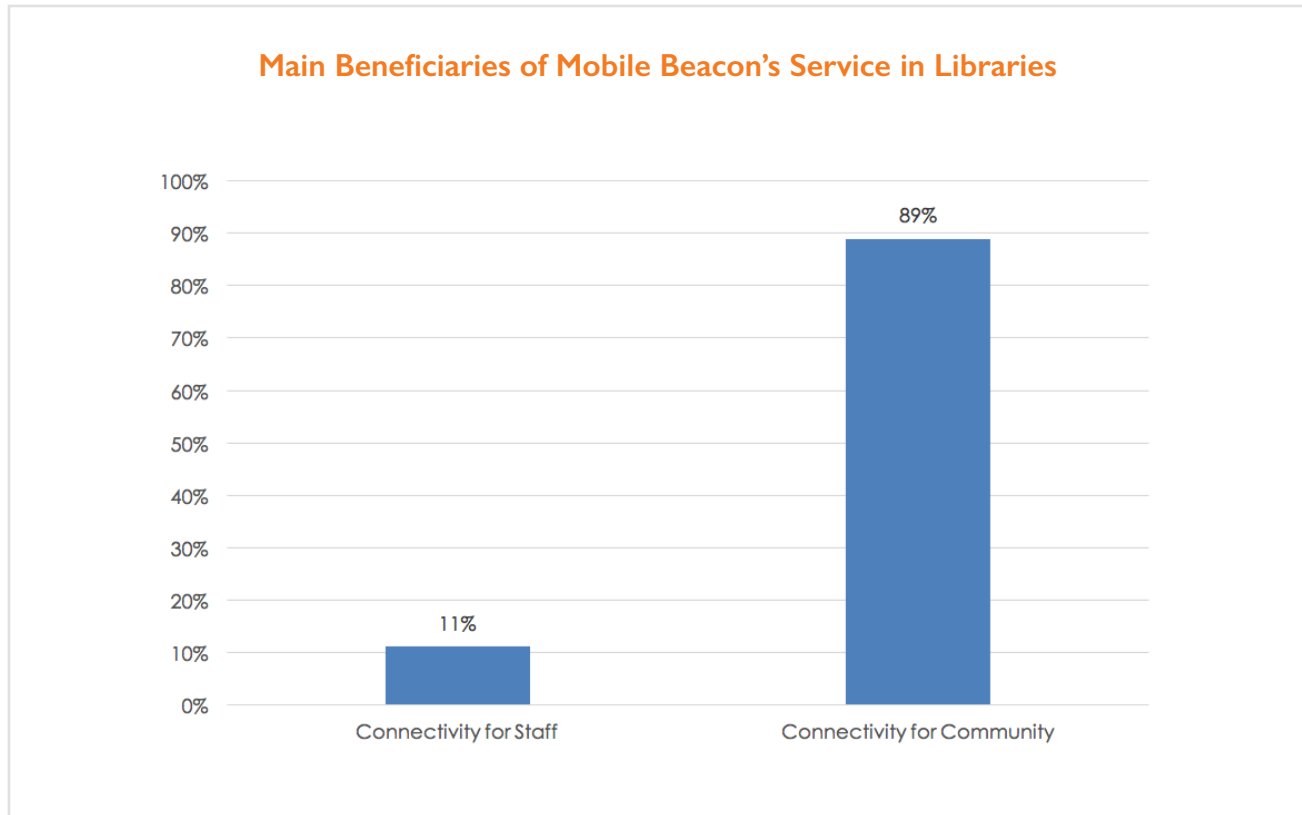


Figure 12

The next highest category of use (34%) is for community outreach and events. If we combine the community outreach and hotspot lending numbers to recalculate the percentage of accounts used to support access for the community, the adjusted findings would largely support connectivity for patron/community use (Figure 12).

“If you’re loaning the device out to patrons, they may not be able to use it if it is capped or limited data. That’s not a concern with Mobile Beacon.”

– Information Technology Manager,
Skokie Public Library, Skokie, IL

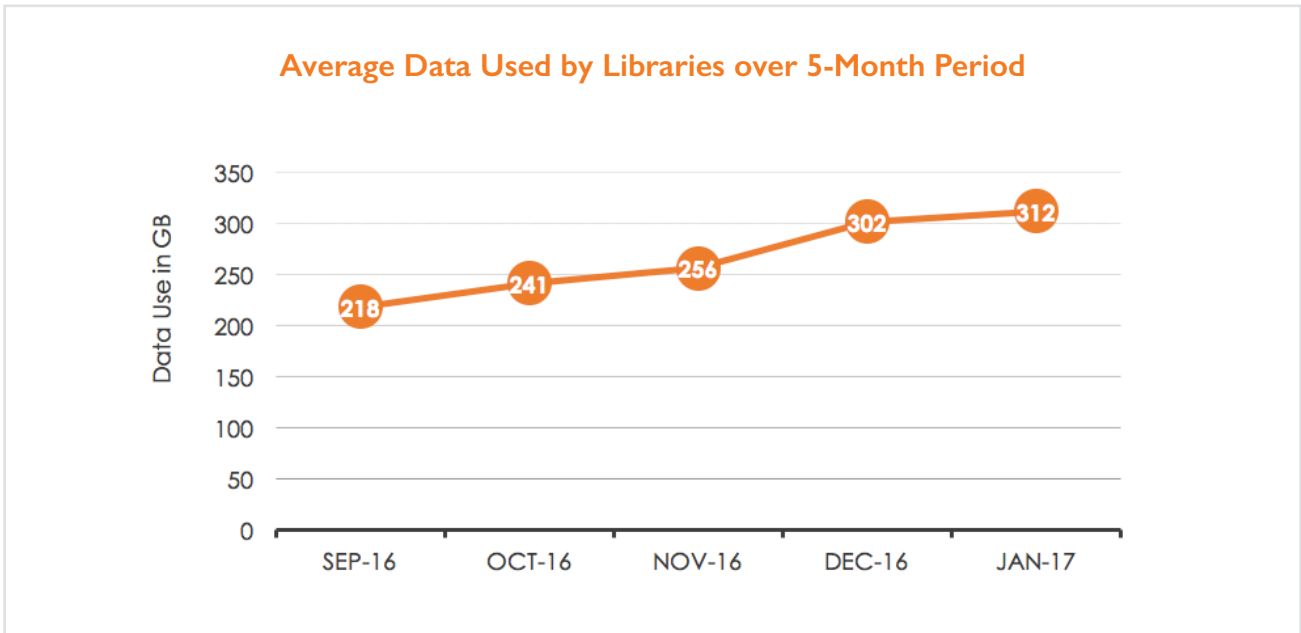


Figure 13

The 5-month average organization wide data use per month is 266 GB. This trends higher than schools overall but is significantly higher than the nonprofit category.

A Closer Look: Nonprofits

The nonprofit category of Mobile Beacon’s client base represents both the largest portion (51%) of overall clients (*Figure 14*) and the most varied in their missions (Schartman-Cyck, 2016). This category consists of organizations that hold a 501(c)-designation from the Internal Revenue Service, including grant-making foundations, community development organizations, humanitarian and relief groups, animal shelters, advocacy groups, environmental organizations and homeless shelters.

It is in this group that we see the breadth of Mobile Beacon’s reach and impact on the range of missions, causes, and services offered across the country. While nonprofits vary widely in size from large anchor institutions with hundreds of employees to organizations with only a few staff members, the average staff size across all responding nonprofit organizations is 43.

To learn more about the how Mobile Beacon’s service is impacting the nonprofit community, we asked respondents what was the main motivating factor for purchase, and, what is the greatest benefit they experienced from using the service.

Figure 14 (below) shows that cost and mobility were the main factors driving enrollment in Mobile Beacon service. Across all categories, the percentage of change from “main motivator” to “main benefit” is less than 4% other than “Acquiring an affordable backup” which reduced in importance by 9% and “Unlimited data” which increased in importance by 7% (the largest increase reported from motivation to benefit across all categories).

“Internet access is the key to everything now. Having affordable access is hugely important, especially for nonprofits. Without Mobile Beacon, we couldn’t shoulder the cost of internet.”

– Academy of Medical & Public Health Services, Brooklyn, NY

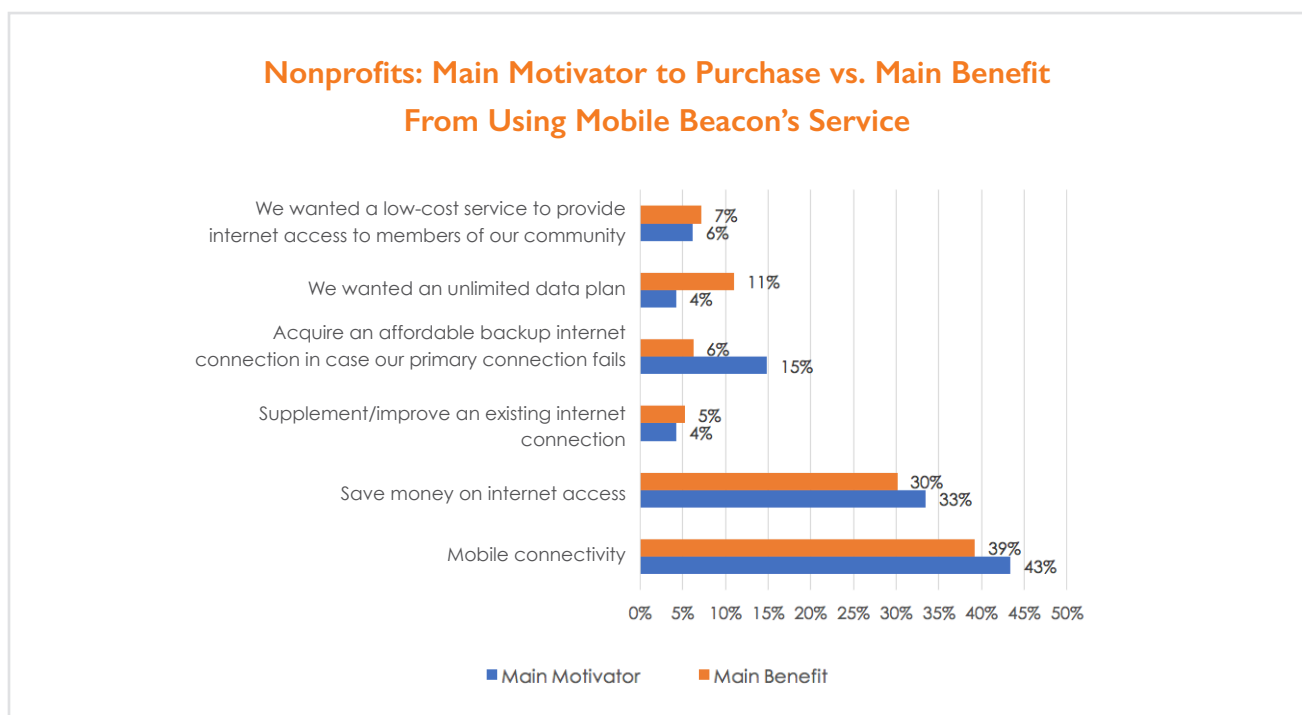


Figure 14

Mobile Beacon’s internet service is unique in that it offers clients truly uncapped and unthrottled data. The amount of data used by organizations is influenced by many factors, including the number of devices an organization has, how often each device is used, and the way the service is being used. For example, a device used as the primary internet source 40 hours a week will likely utilize more data than a device that is used as a backup internet source or exclusively for travel purposes.

Among the various types of nonprofit clients, community nonprofits are the highest data users, with a 5-month average data use per account per device of 87 GB.

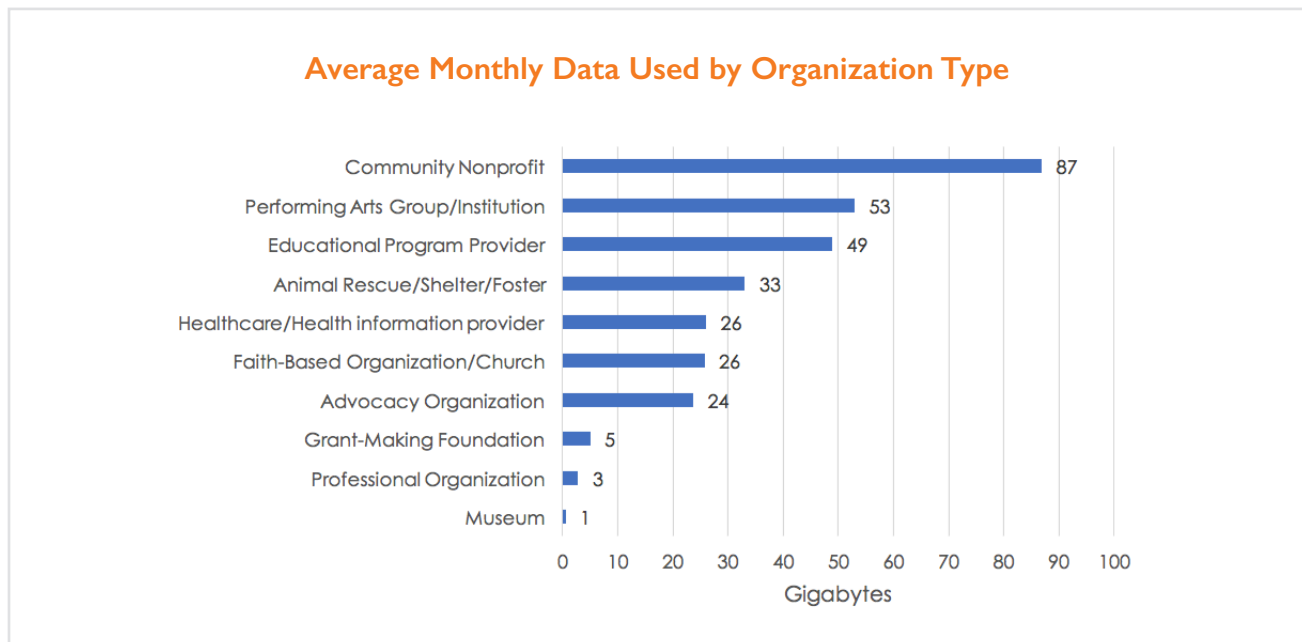


Figure 15

“We’re a free medical clinic running on \$35,000/year. If we had to pay for internet at going rates, it would be a minimum of \$1,500/year or 5% of our budget. Without Mobile Beacon, we would have to cut some medical supplies to get internet.”

– Jefferson Rural Clinic, Jefferson City, TN

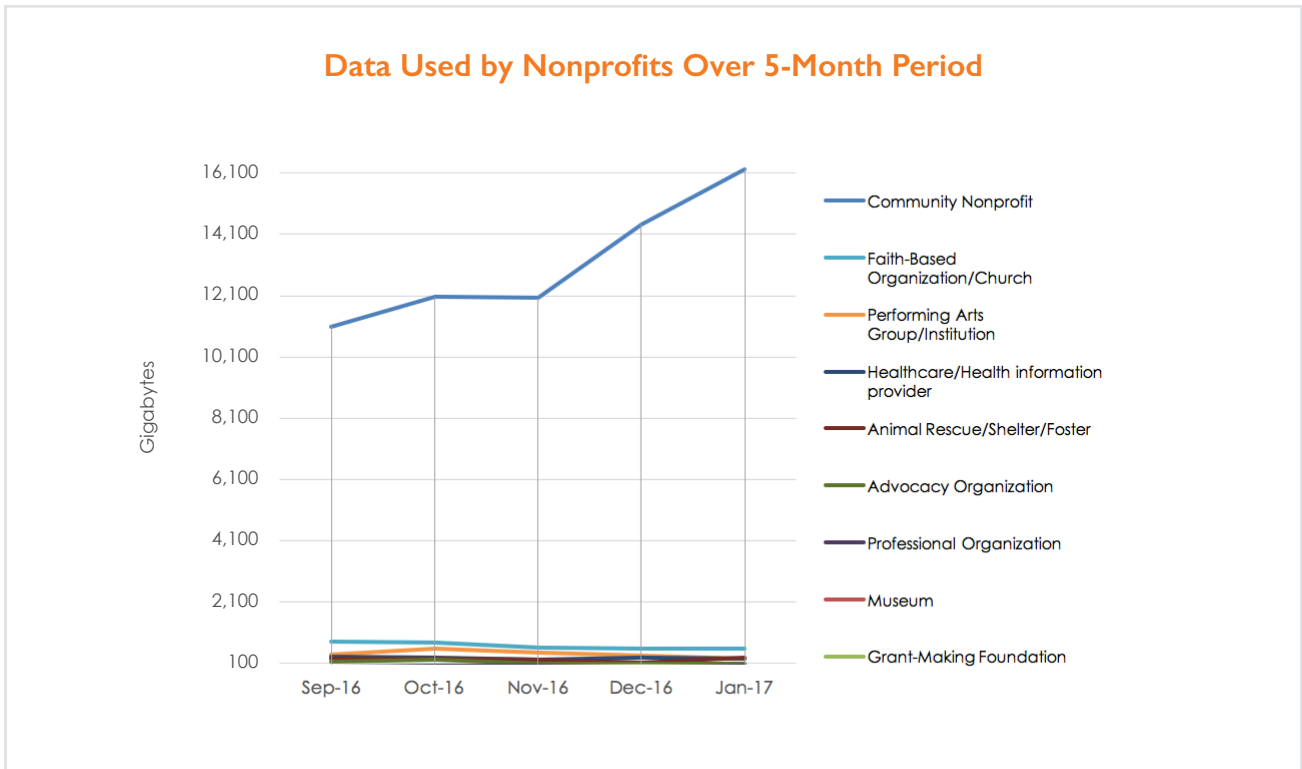


Figure 16

Figure 16 shows data usage by organization type over a 5-month sample. This shows data usage across most nonprofit categories either remained flat or rose significantly, which demonstrates a stable or increasing demand on service.

We next asked nonprofits how often they use Mobile Beacon’s service to provide connectivity for staff versus for their community. Figure 17 below provides the responses.

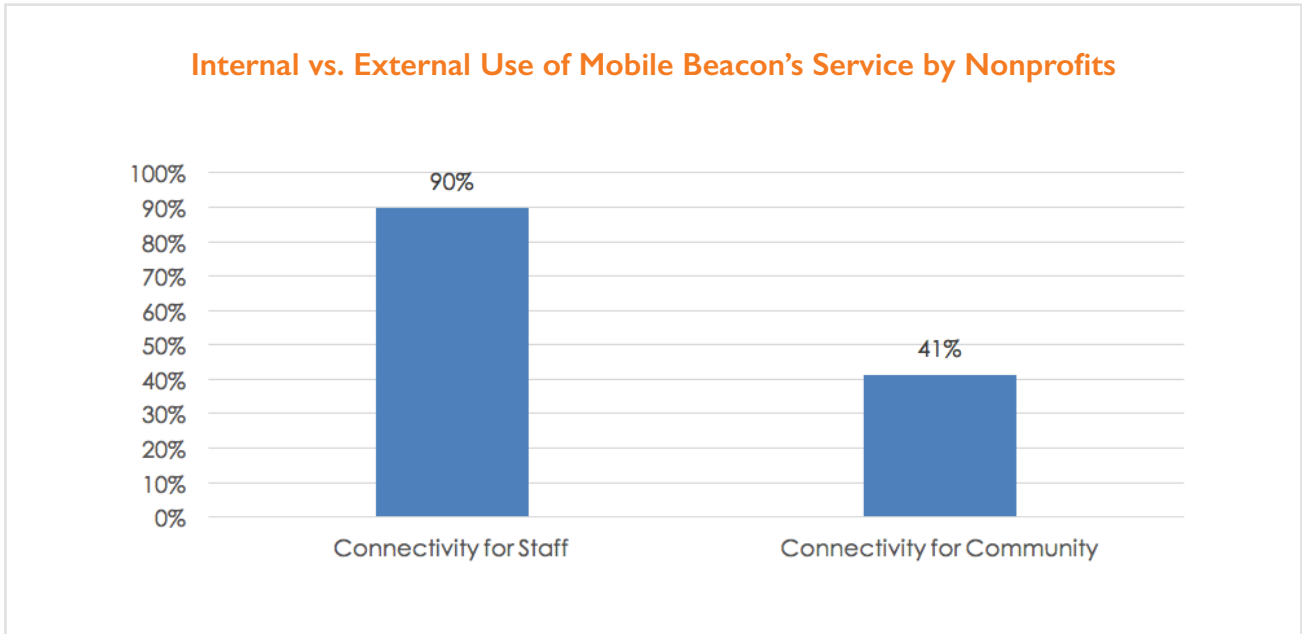


Figure 17

Unlike schools (U S Census Bureau, 2012) and libraries (American Library Association, 2016) that typically receive a level of government funding, most nonprofit organizations are funded mostly through grants and endowments. This difference in their funding structure leads many nonprofits budget conscious when choosing an internet service plan.

Due to these budget constraints and uncertainty around future funding, it is not surprising that we see higher percentages of respondents in the nonprofit category reporting to use their Mobile Beacon service for staff (90%) than we did in the school and library categories.

To further investigate the ways Mobile Beacon’s service is used by nonprofits, we asked how their staff uses the service. In *Figure 18* (below) respondents could select more than one category so the percentages shown are not based on unique values.

“Mobile Beacon allows us to give more accurate service to our participants. Now we can process information on-the-spot with them.”

– Able Works, Palo Alto, CA

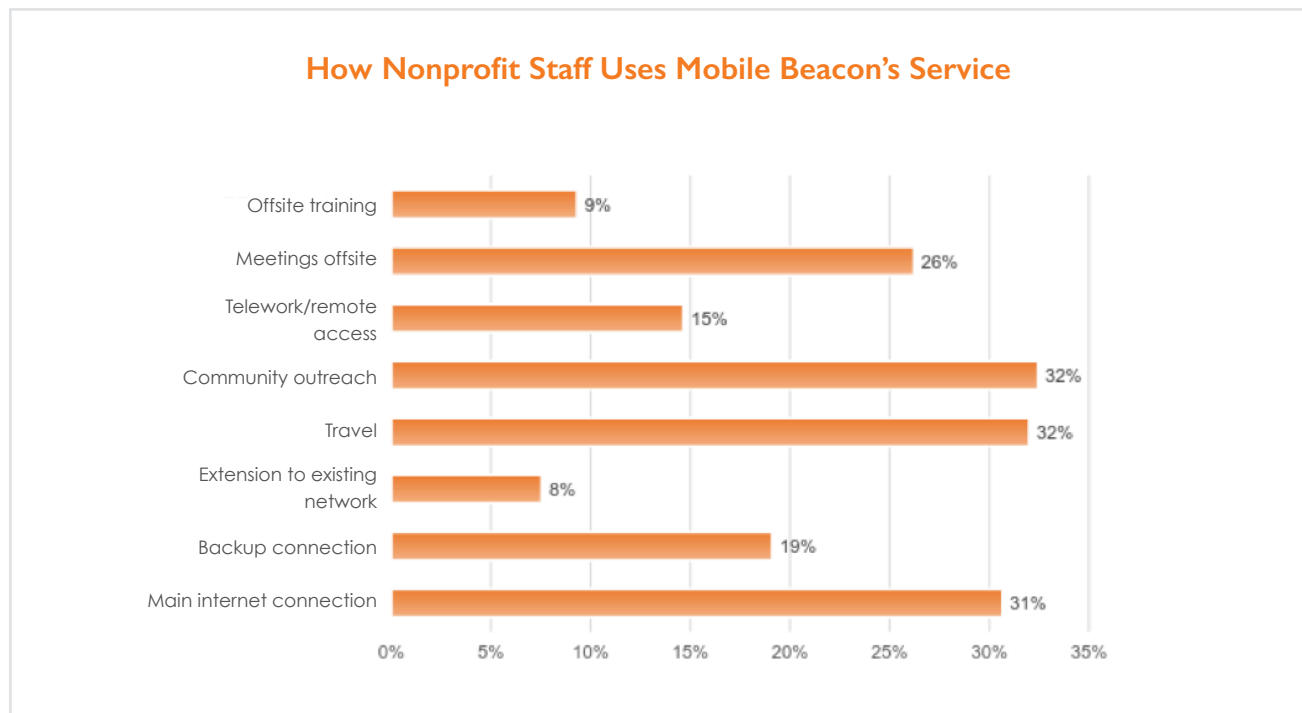


Figure 18

A closer look at the responses from *Figure 18* reveals two overarching themes: mobility and infrastructure. If we combine travel, community outreach, telework, offsite meetings, and offsite training then divide by the number of overall category selections, the overall portion of nonprofit use dependent on mobility would be 67%, leaving 33% representing nonprofits relying on their service as a main connection, an extension to an existing connection, or an on-demand backup connection.

With 41% of nonprofits using their Mobile Beacon service to provide connectivity to their constituents, we found a significant number (26%) currently offering hotspot lending programs with another 12% reporting to have plans to add such a program soon. We also asked how their constituents are use the internet. In *Figure 19*, we see a wide array of online activities with the greatest percentages of use in general research (44%), email communication (36%), and educational activities (58% combined).

From this we find that information gathering and knowledge increasing activities (research, training, education) are the highest drivers of internet use among nonprofit constituents. These constituents (51%) also report to use the service daily.

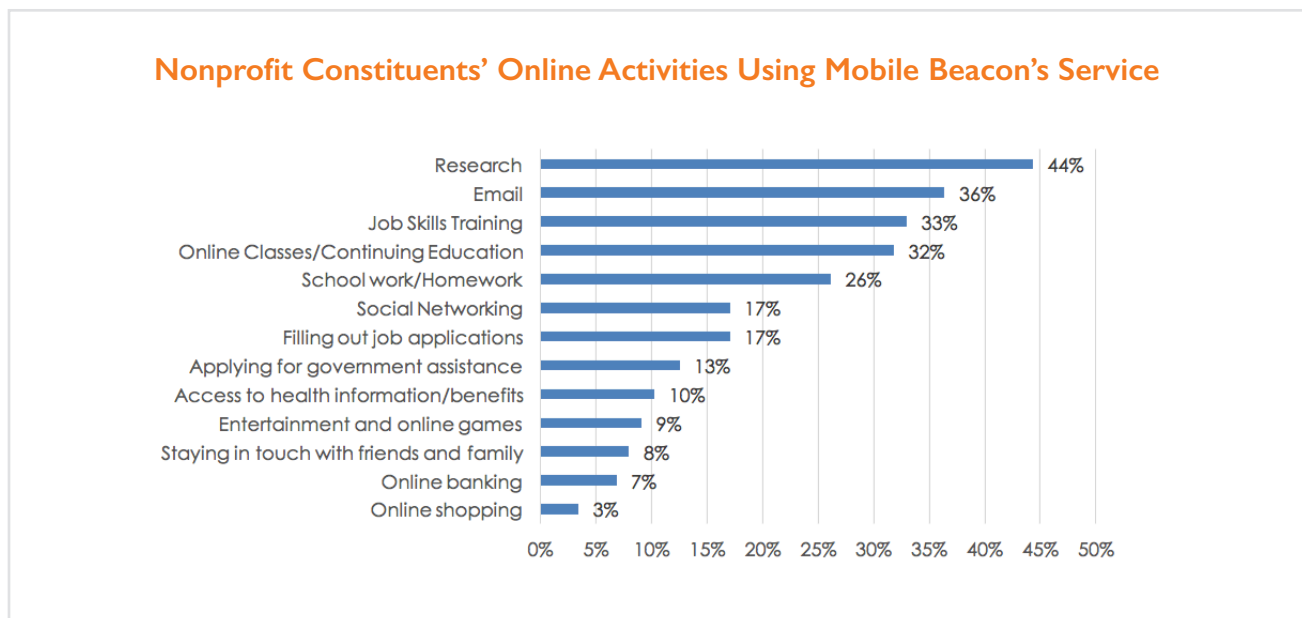


Figure 19

SECTION III: MOBILE BEACON: COST SAVINGS AND VALUE EXPANSION

Mobile Beacon offers \$10/month, high-speed, mobile internet that supports up to 10 devices at one time. This internet service also comes without data caps and is not throttled (a tactic used by telecoms to intentionally slow internet speeds based on how much data is used or for what it is used for – streaming video for example). This unlimited service, offered exclusively to the nonprofit sector, brings with it significant cost savings as well as program and service expansion opportunities to clients.

Data Consumption Trends With Mobile Beacon’s Internet Service

We asked survey respondents how important having unlimited internet access is to their current programs. As shown in *Figure 20* below, 84% rated it either “very important” or “vital.”

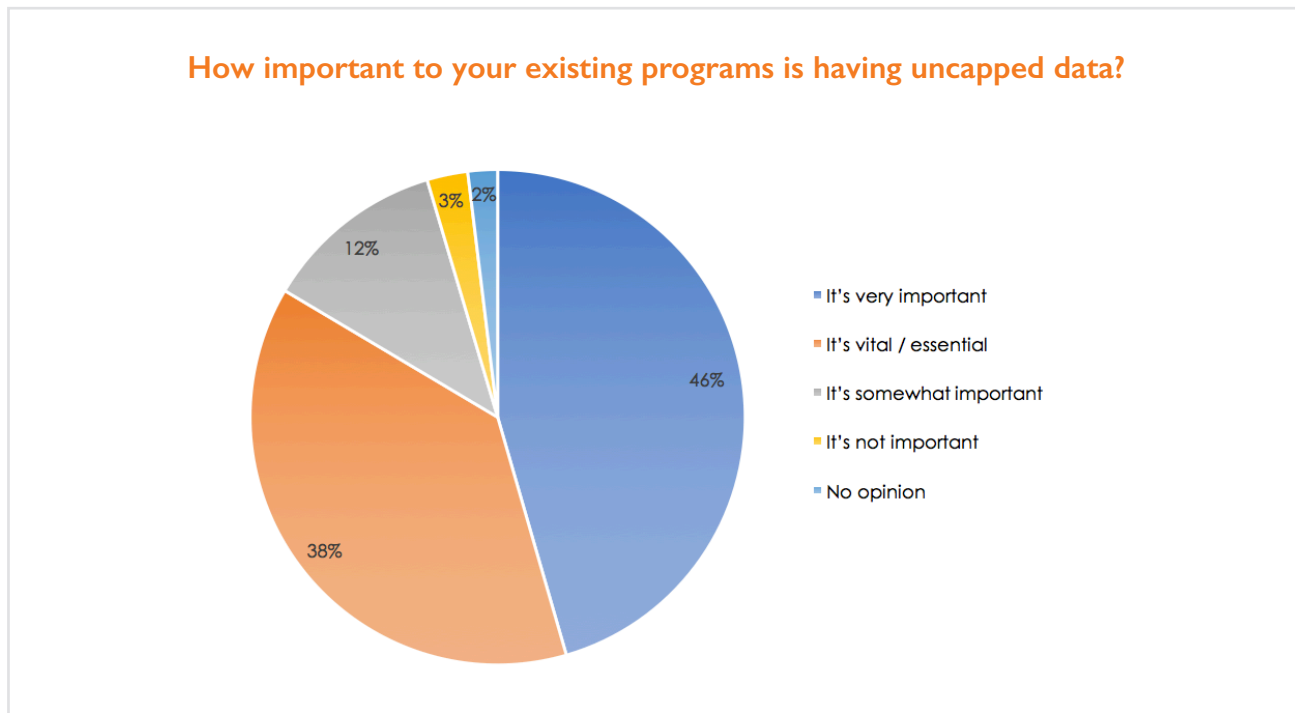


Figure 20

For those who previously had internet through another provider, we asked respondents how much data was included with their former internet plan. As we see in *Figure 21*, the largest groups reported they had an unlimited plan (typically a carrier’s most expensive offering and therefore represents a significant investment for nonprofits) or they were unaware. If we remove those who did not know how much data they had, the adjusted percentage would show 59%⁵ had an unlimited plan. Insofar as financial investment indicates perceived value, this high percentage demonstrates the recognition by CAIs that having unrestricted data is highly important.

⁵ After removing the “unknown” group and recalculating percentages, 59% is the percentage of the remaining respondent pool. This reduced sample size is still statistically significant within a 7% margin of error (which is smaller than most survey research that operates within a 10% margin).

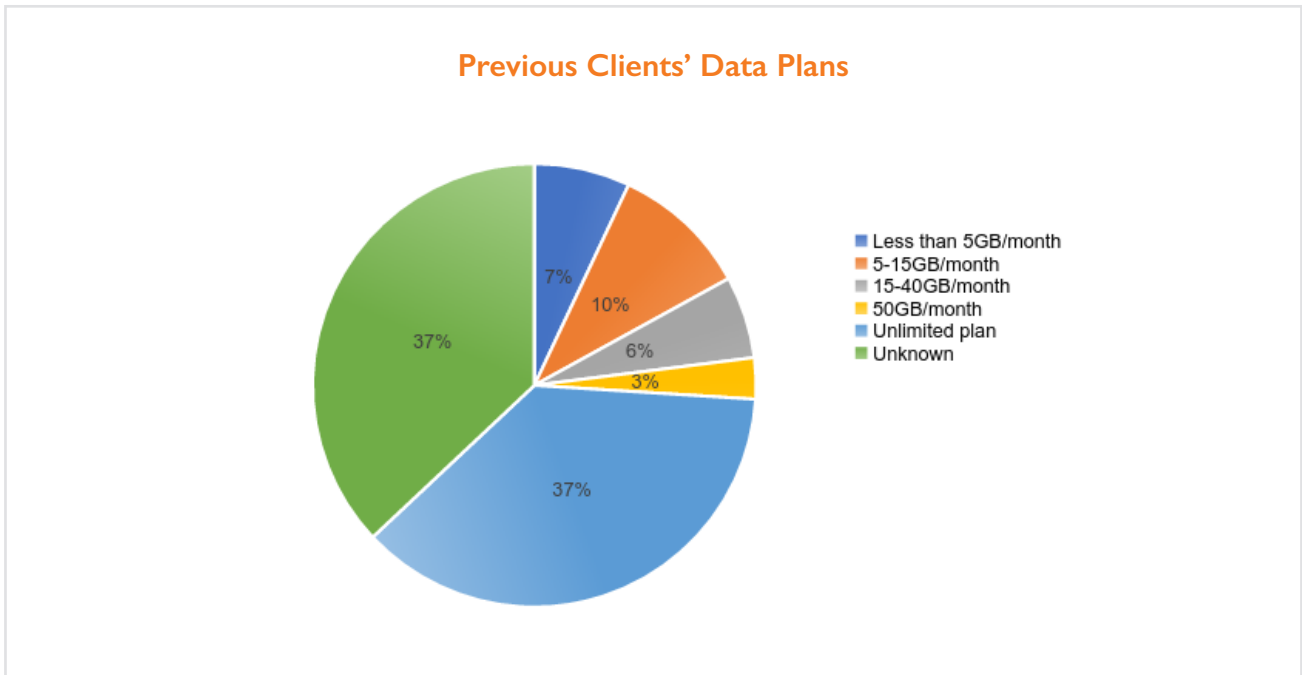


Figure 21

For those who reported previously having a data cap, we asked how often they reached it. *Figure 22* below shows the breakdown. From this, we see that 47% reported reaching their data caps “very frequently” or “always” while another 31% reported reaching their allotments “occasionally.” Only 10% report to have never reached their data cap.

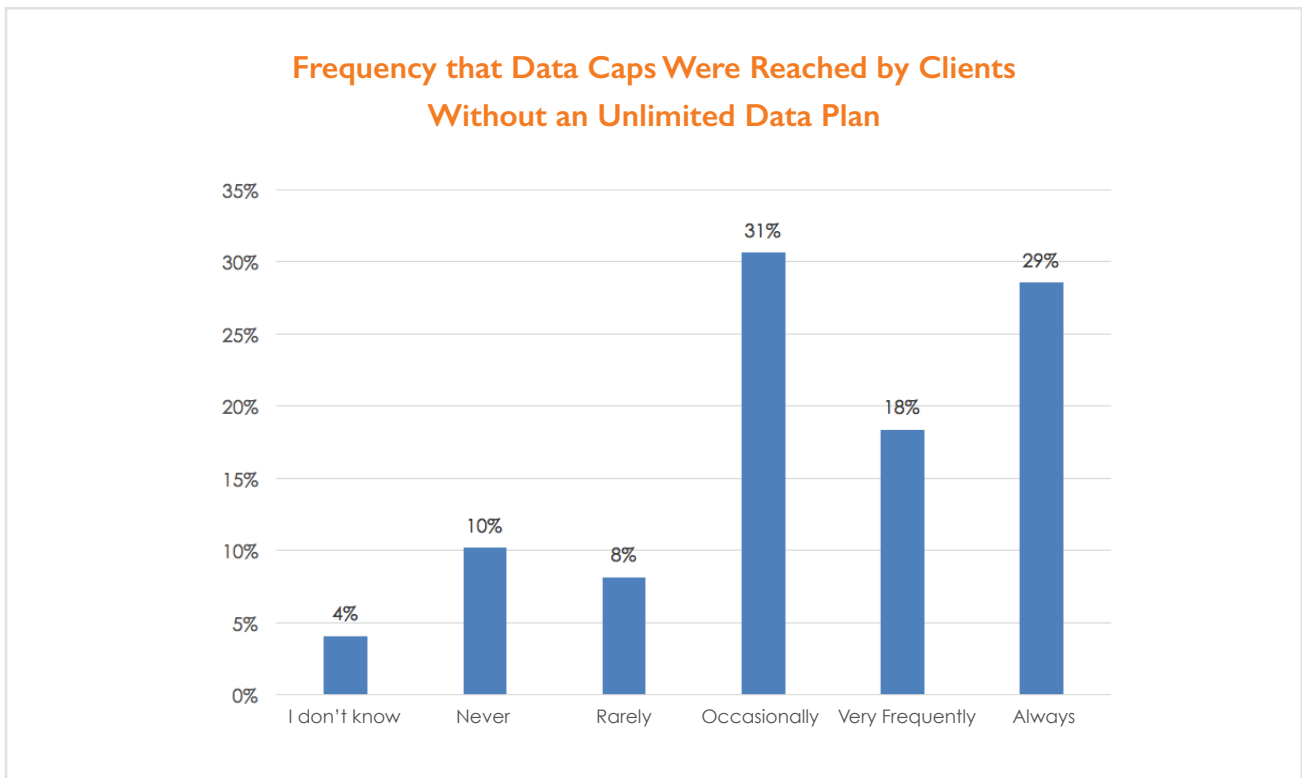


Figure 22

This shows 86% of all nonprofits need more data than they had planned for or could afford. It also means that in all these cases, nonprofits experienced overage charges or impaired service at points in their service history. This issue threatens the effectiveness and ability of nonprofits to carry on their mission-driven work if they are not able to bear the additional charges for their growing use of data.

“It’s important not to have [data] restrictions. If there is a limitation, everything stops when you hit it.”

– Verified Voting, Carlsbad, CA

The rising cost of data is a growing concern for nonprofits and businesses of all types. Although internet connectivity is as important to the operation of a business as any other utility, the fee structures that are common in the telecommunications industry are difficult to plan for and often fraught with hidden fees and fine-print terms that compromise the dependability of service.

Published rates for broadband connectivity across the country support the assumption that a switch to Mobile Beacon from a traditional carrier would result in cost savings. 82% report to have saved money by switching to Mobile Beacon. To learn more about their cost savings, we asked respondents to quantify those savings. *Figure 23* shows how much money respondents saved.

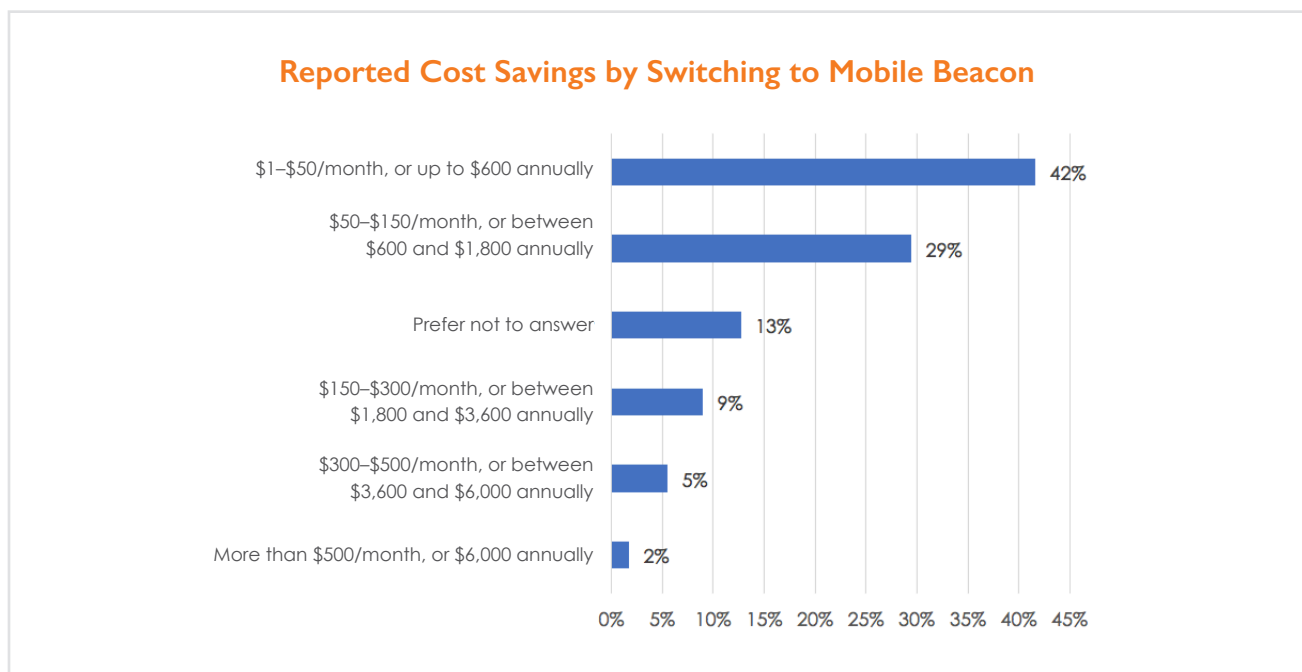


Figure 23

As can be seen in chart above, 71% of respondents save between \$1 and \$150 each month (or up to \$1,800 annually). Using mid-range values for each savings category to estimate the overall cost-savings of the sample, we estimate a total combined annual savings of \$380,100 by question respondents.

“The expense can be astronomical for broadband. Without Mobile Beacon, we would not be able to provide the services we do today.”

– 2gether Wii Can! Inc, Kissimmee, FL

“Having experienced services like AT&T, there’s a great unknown as to how much it will cost month-to-month. We were shocked when our bill went from \$150 to \$350 suddenly because they were trying to get us to switch over to U-Verse. I would call Mobile Beacon an excellent resource and lifeline for nonprofits.”

– Executive Director, Nicos Chinese Health Coalition, San Francisco, CA

To estimate the cost savings over the whole of Mobile Beacon’s client base, we would take 82% of the total client account number (those reporting to have saved money) and then use the percentages of each savings category shown in *Figure 23* to estimate the number of accounts we would assume to have experienced similar savings. Then, taking a midpoint savings of each represented category, we could extrapolate the overall cost-savings of all Mobile Beacon clients, which comes out to \$2,662,044 each year.

This significant cost-savings experienced by Mobile Beacon clients provides opportunities to nonprofits with tight budgets or expansion aspirations. To find out how these reported cost-savings impacted client organizations, we asked respondents to describe how these savings were reallocated.

“Having access through Mobile Beacon helps reduce administrative costs and allows us to put more resources toward service delivery.”

– Healthcare nonprofit, GA

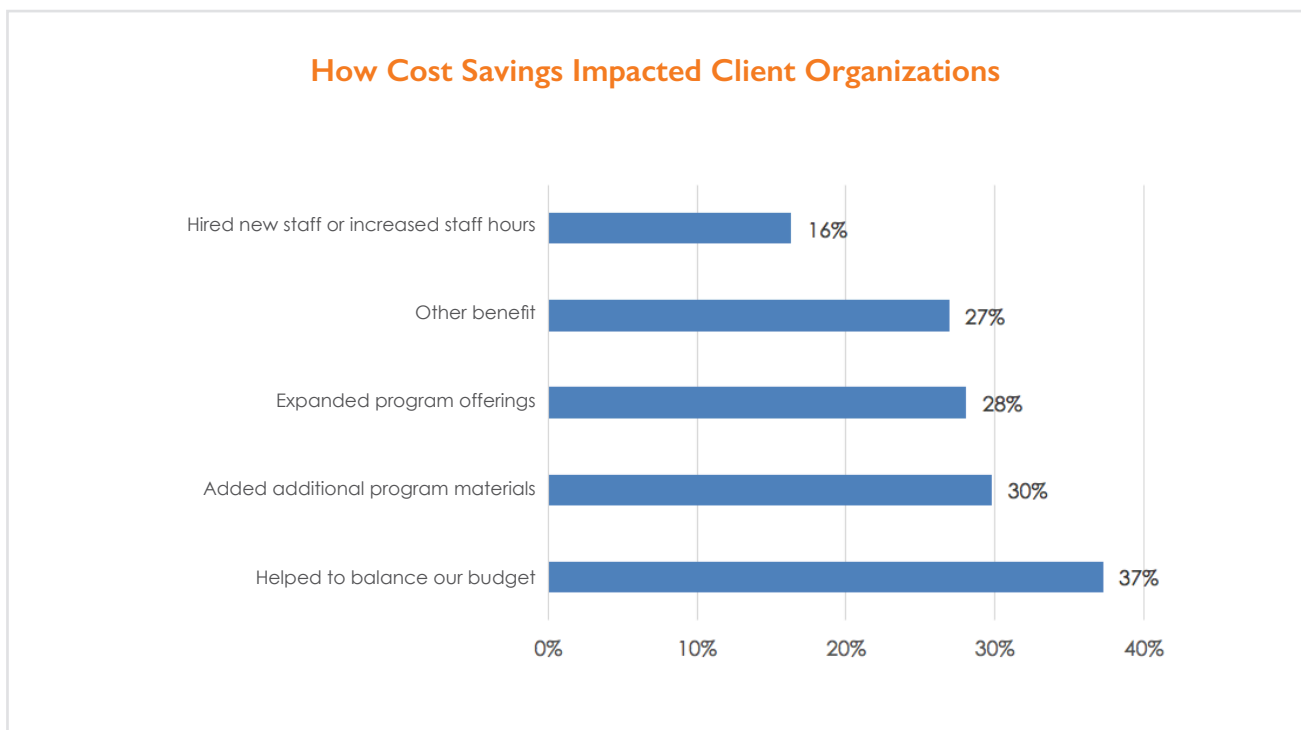


Figure 24

Figure 24 (above) shows how respondents have reallocated the funds they saved by switching to Mobile Beacon from a traditional telecommunications carrier. Respondents could select more than one category so percentages shown are the percent of all client organizations responding.

“Without Mobile Beacon, internet costs would run us several hundred dollars a year. We’re a small program so having that few hundred dollars results in us being able to feed more kids.”

– Executive Director, River Valley Food 4 Kids, Russellville, AR

SECTION IV: SATISFACTION

As we have seen in the previous sections, Mobile Beacon reaches a diverse range of organizations across the country and has a positive impact on their clients. It could be said that the greatest test of overall client satisfaction is how readily clients will recommend a product or service, so, we asked respondents if they had recommended Mobile Beacon to anyone. *Figure 25* illustrates that 71% of all clients have recommended Mobile Beacon to others.

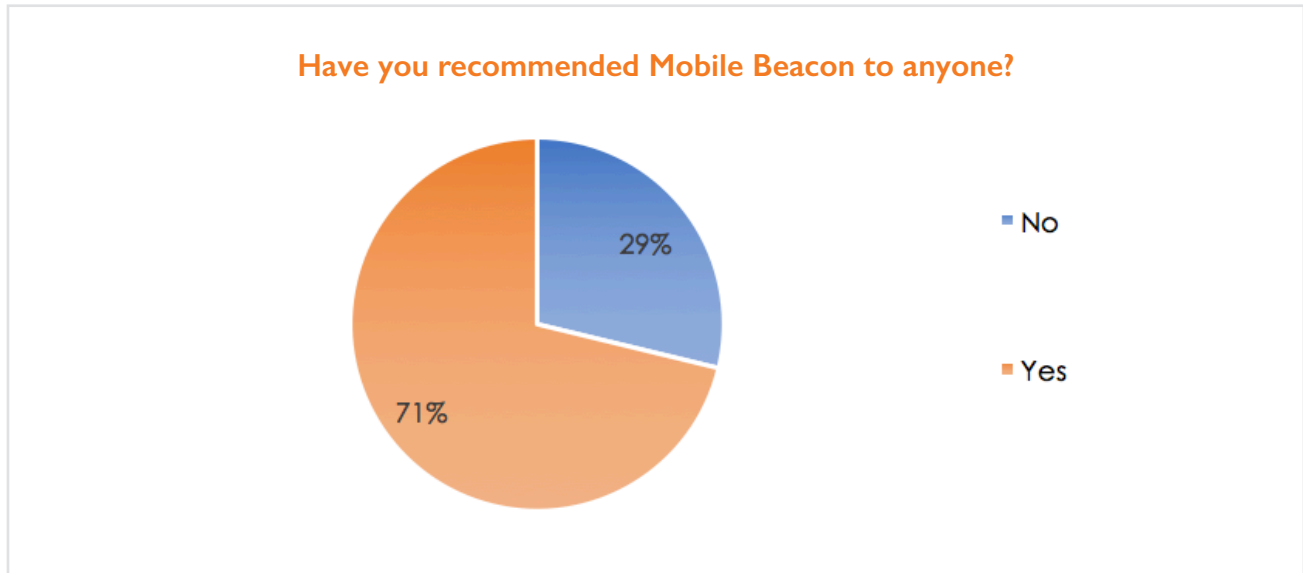


Figure 25

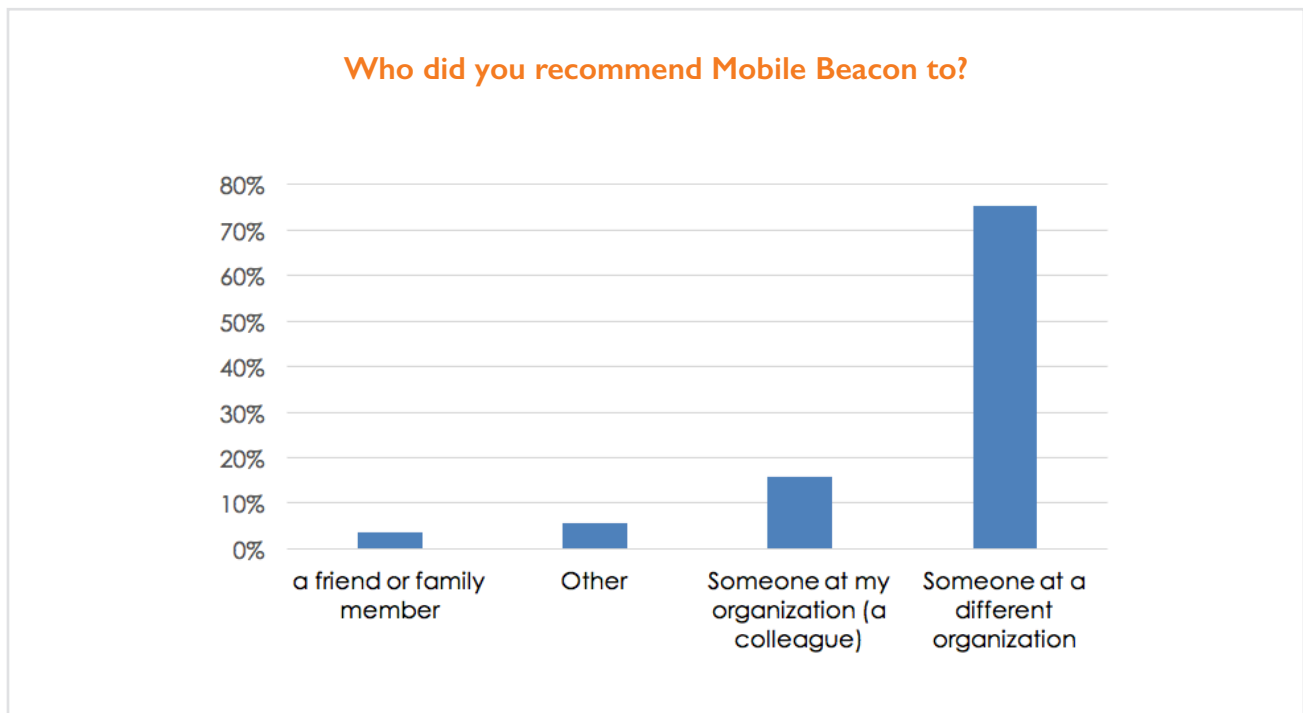


Figure 26

To learn more, we then asked respondents to whom they provided recommended the service. *Figure 26* shows that by far, clients are sharing their experience within their local nonprofit communities. This finding underscores the value of word of mouth marketing and highlights the potential for Mobile Beacon account growth to snowball over time as more accounts are added through various channels.

Last, and perhaps most impressive are the unanimous responses to the question “why not” asked of those who reported to have not recommended Mobile Beacon.

When asked why respondents haven’t recommended Mobile Beacon, 100% of all respondents said “they would, but haven’t yet!” This finding shows that 100% of Mobile Beacon’s clients would endorse or recommend its service.

“I don’t know of any organization that does what Mobile Beacon does. There’s no comparison to it. Mobile Beacon is the only one we use for any kind of internet access.”

– IT Director, Christian Care Communities, Louisville, KY

CONCLUSION

The collective social impact contributed by community anchor institutions across the country is a powerful force in our society. Collectively they help those in need, feed our hungry, heal our sick, educate future generations, and give hope to millions. These organizations carry the weight of our country's needs; yet, they often operate within narrow margins of existence and struggle with a shortage of resources and funding to carry on their important work.

People's access to technology has become a vital part of every mission to fight hunger, poverty, inequality, and countless other social causes. As the internet plays an increasingly dominant role in the way we receive information and communicate with one another, it is equally important that CAIs have adequate broadband to deliver their programs and services to their communities as it is for the people they serve to have connectivity to fully access those resources.

As this report shows, having affordable, mobile, and uncapped internet service increases the potential of these organizations to reach and serve their audiences. Internal use of Mobile Beacon's service has enabled staff to increase productivity through telework, manage constituents' data in real-time in the field, reduce down-time when a primary internet connection fails or is slow, and reallocate cost-savings received from switching to Mobile Beacon to expand program services.

Additionally, all client types are using Mobile Beacon's service to provide broadband connectivity to those in their community. For example, public libraries loan out Mobile Beacon's 4G mobile hotspots so patrons without internet access at home can "borrow the internet" the same way they can borrow a book. Similarly, schools have an affordable means outside of E-rate to provide internet access to students who previously struggled to complete homework assignments due to a lack of home connectivity. Thousands of other nonprofits providing resources and services to help people in their communities become self-sufficient and are connecting more families to the internet by using Mobile Beacon's service at community events and through hotspot lending programs.

As advocates for affordable broadband for community anchor institutions continue to explore ways of supporting this important sector, it is imperative to acknowledge that CAIs' need for high-speed, high-capacity broadband is both fixed and mobile. These organizations have tremendous reach into our communities, impacting the lives of many individuals and families with a single broadband connection.

WORKS CITED

- Alvarez, L. (2015, January 21). To bridge the digital divide we need a division of labor. Retrieved February 10, 2017, from CNBC: <http://www.cnn.com/2015/01/20/how-the-division-of-labor-could-bridge-the-digital-divide.html>
- American Library Association. (2016, July 12). 2017 Appropriations Fact Sheet. Retrieved January 23, 2017, from <http://www.ala.org/advocacy/advleg/federallegislation/libraryfunding>
- Broadband.com. (2011, May 31). Home / Blog / T1 vs DSL: What is the difference? T1 vs DSL: What is the difference? Retrieved May 30, 2017, from broadband: <http://broadband.com/product-comparison/t1-v-dsl-what-is-the-difference/>
- Cisco. (2016, June 2). The Zettabyte Era — Trends and Analysis. Retrieved December 14, 2016, from Cisco: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html>
- Federal Communications Commission Wireline Competition Bureau. (2010). 2010 E-Rate Program and Broadband Usage Report. FCC, Wireline Competition Bureau. Washington: Federal Communications Commission. Retrieved from https://transition.fcc.gov/010511_Eratereport.pdf
- Hoffman, J. J. (2012, June 1). Libraries Connect Communities: Public Library Funding & Technology Access Study 2011-2012. Digital supplement of American Libraries magazine. Retrieved from <http://viewer.zmags.com/publication/4673a369>
- Internet2. (2016). The Impact of Anchor Institutions on a Community's Broadband Connections. Internet2. Internet2.
- Moynihan, T. (2017, February 13). Verizon's Unlimited Data Plan Is Back. Here's How It Compares to Other Carriers. Retrieved May 24, 2017, from Wired: <https://www.wired.com/2017/02/verizons-unlimited-data-plan-back-heres-compares-carriers/>
- Schartman-Cyck, S. (2016). Mobile Beacon Client Data Analysis Whitepaper. Mobile Beacon. Mobile Beacon.
- U S Census Bureau. (2012, June 21). Education Funding: Where do Schools Get Their Money? How do They Spend it? Retrieved January 23, 2016, from <http://blogs.census.gov/2012/06/21/education-funding-where-do-schools-get-their-money-how-do-they-spend-it/>