Benchmark Use Cases

Benchmark: Library Metrics and Trends provides libraries with data visualizations that allow them to compare their inputs and outputs to statistically valid peer groups and nationwide data. Peer comparisons, or benchmarking, can help libraries better understand their performance and can support everyday decision making, such as establishing baselines and identifying opportunities to improve service.

The use cases below represent fictional examples of how public libraries could use Benchmark in practice.

The use cases were developed by Hayley Park and Izak Hosmer-Dillard for their MLIS capstone project, "Data-Driven Decision Making in Libraries" at the University of Washington Information School in spring 2023. As a library worker and researcher, Hayley Park is committed to ensuring equitable access for all people to pursue the knowledge essential to each of our sensemaking journeys. Izak Hosmer-Dillard is dedicated to ensuring that libraries remain inclusive and dynamic spaces in which community members can find lifelong enrichment. Their project won the iSchool's 2023 MLIS Capstone Research Award.

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I. Children's Programming at Stockton Library

Scenario

Stockton Library, a city library on the East Coast serves a community with a population of 150,000-200,000. About 50% of the library's circulation is of children's materials, but when comparing themselves to other cities of similar size, the practitioners discovered that their library has significantly fewer programs for children than their peers, and the programs that they do have are very well attended. They would like to propose an increase in the level of programming for the children to better meet their community's needs.

Librarians in Stockton have wanted to offer more programming for children for a long time. They know from a combination of internal data and first-hand experience how popular their libraries are to the children in their community, and how important it is for those children to have a place to go after school or on weekends where they can learn, have fun, and engage with their community in a safe and welcoming environment.

Narrative

The practitioners wanted to use Benchmark to provide data visualizations that could be used to demonstrate their need for an increase in programming, and to prove how important their libraries are for the children in their community.
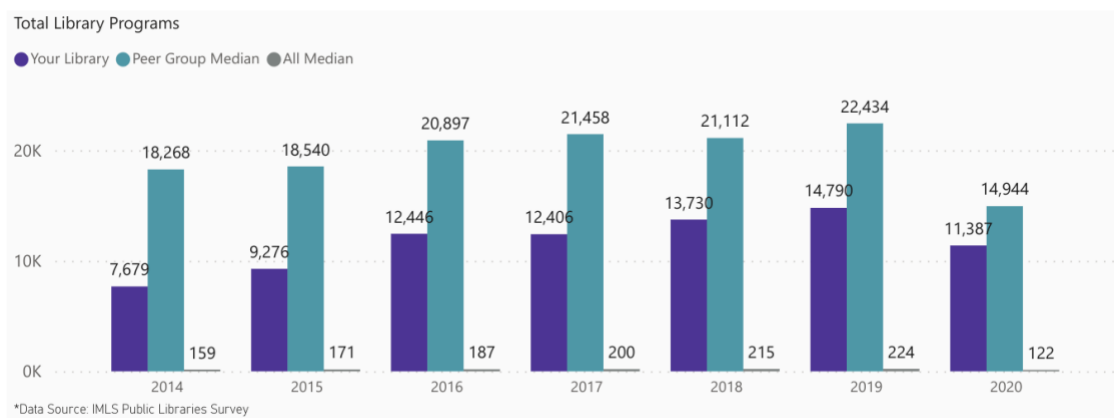

Figure 1.1

Figure 1.1 comes from the Programs and Services tab in the Survey Metrics Dashboard. It reveals part of the disparity between the library programs offered in Stockton and those offered by the libraries in its primary peer group. While this graph clearly demonstrates that the branches in their community offer fewer total programs than their peers, it also shows how the

number of programs offered has gone up in the last five years (prior to COVID). But the practitioners needed more granular data about who is attending these programs to help build their case. Under the same Programs and Services tab, but further down the page, there are graphs which represent just that.

Figure 1.2 depicts the breakdown of program attendees by program type. As the graph clearly shows, nearly three quarters (73%) of the people coming to the library for programs attend children's programs. Comparing that number to that of their peers (21%), and even to all other libraries (63%) makes it clear just how important programs for children are in this library system.
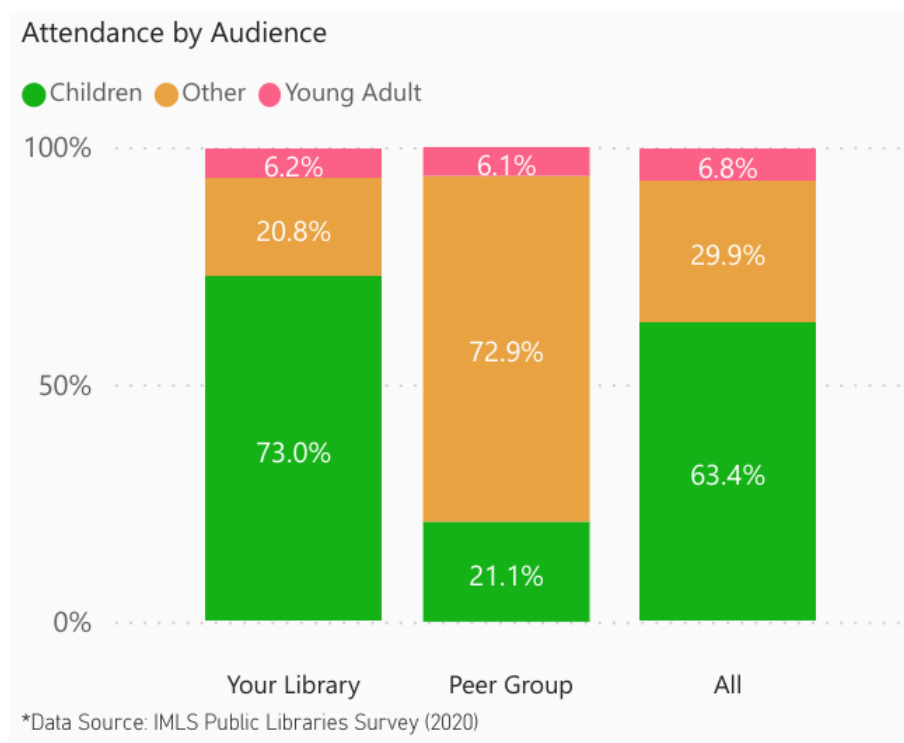

Figure 1.2

Unfortunately, when comparing the number of programs offered with those of their peers, the disparity becomes clear. As Figure 1.3 reveals, Stockton offers over 10% fewer programs for children than their peers, and nearly 20% fewer than the national average. The same data show that more than half of their programs are for adults or general audiences (61% Other in Figure 1.3) and these programs that garner less than one quarter of the total program attendance (21% Other in Figure 1.2). The librarians planned to use these numbers to justify considering which programs for adults or general audiences can be replaced with more programs for children.
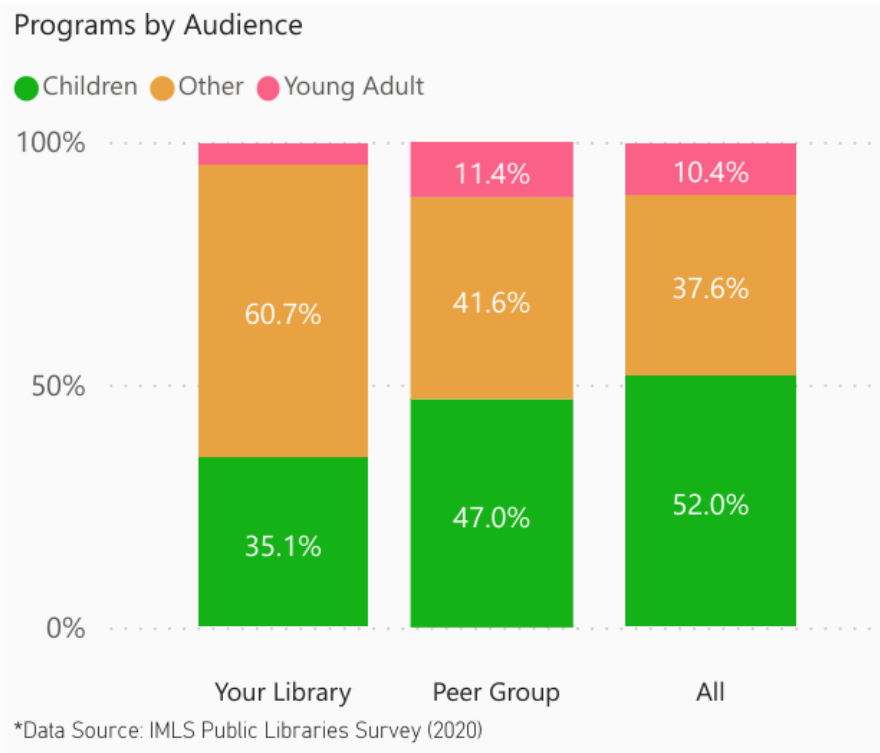
Programs by Audience

● Children ● Other ● Young Adult

*Data Source: IMLS Public Libraries Survey (2020)

Figure 1.3

While these visualizations tell a story of program attendance, the librarians in Stockton wanted to further demonstrate how important their collections are for the children in their community. Under the Collections and Circulation tab of the Survey Metrics Dashboard, one can see how much of the total collection use is children's materials. Figure 1.4 reveals not only that children's materials make up nearly half of the total circulated materials, but that Stockton provides more materials to children than their peers.
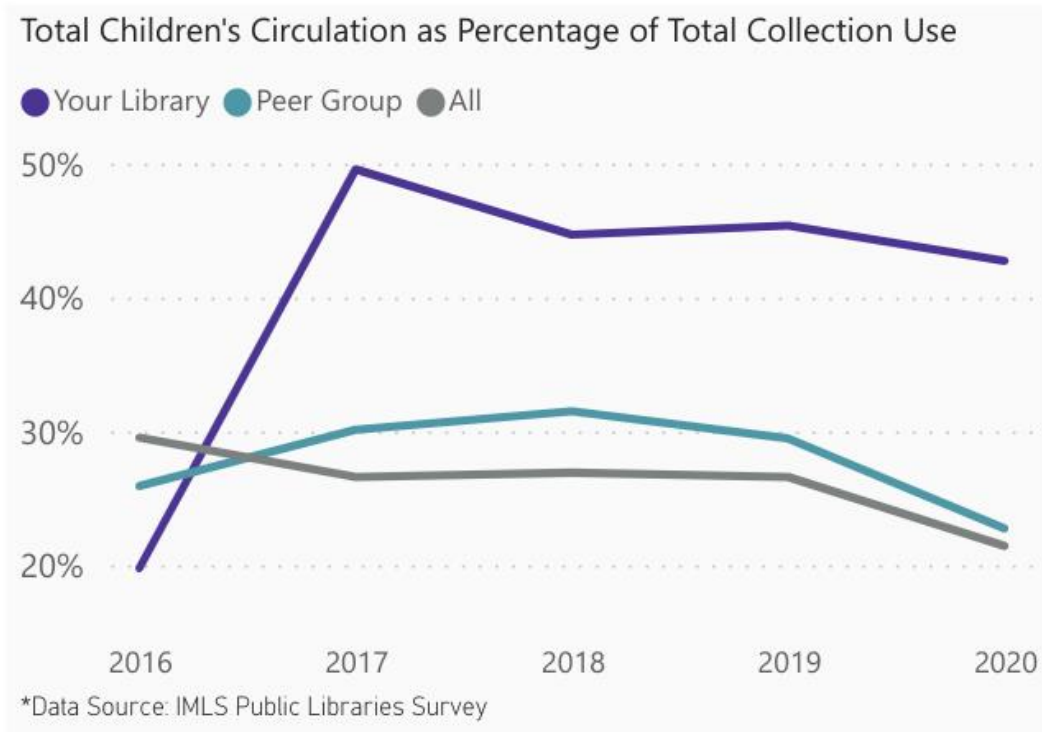
Total Children's Circulation as Percentage of Total Collection Use

● Your Library ● Peer Group ● All

*Data Source: IMLS Public Libraries Survey

Figure 1.4

Age Profile

● Your Library ● Peer Group ● All

| | 8% 6% | 8% 6% | 8% 7% | 7% 7% | 8% 7% | 16% 14% | 13% 13% | 11% 12% | 5% 7% | 5% 6% | 12% 15% |

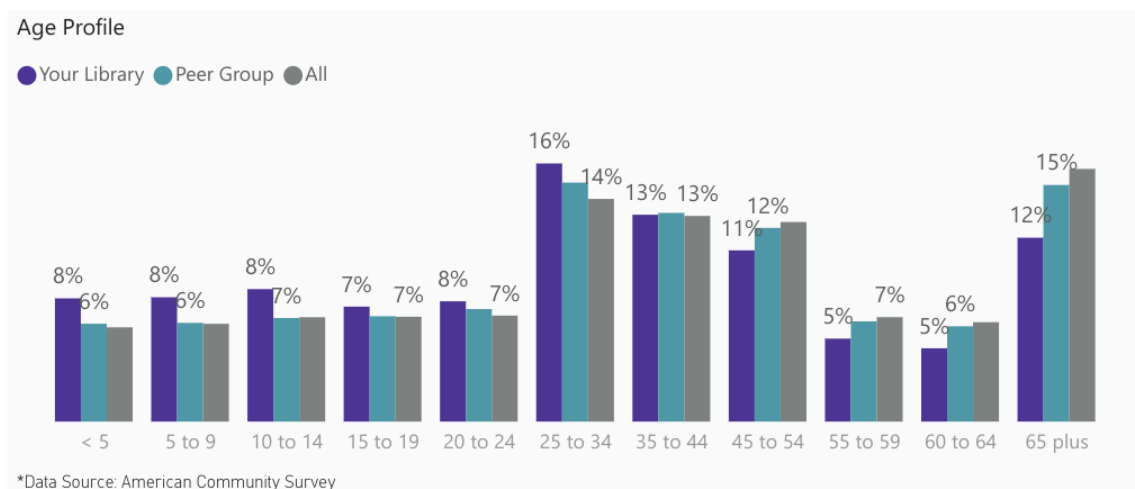*Data Source: American Community Survey

Figure 1.5

Figure 1.5 reveals that Stockton library serves a community with a higher percentage per capita of children under age 15 than their peers and libraries nationwide. Though the librarians at Stockton already knew from experience that they serve a slightly younger community than average, having the information clearly displayed could prove to be crucial.

Conclusion

These visualizations could be used to convince administrators and stakeholders that the number of programs needs to increase. To further support their case, the library could gather evidence about the impact of the children's programs they currently offer, such as by using patron surveys in Project Outcome (projectoutcome.org).

Additionally, these data could encourage a deeper connection between the library and other organizations in the community. Librarians at Stockton could use this information to partner with the local school district to share data about children's literacy, reading trends, and potential gaps in education. Together, the school district and library could implement or strengthen programming in areas such as summer reading and STEM learning. A partnership with the local school district could clearly help children academically, but the data from Benchmark could also inspire partnerships with local nonprofits to promote learning and creativity outside of an instructional setting. Makerspaces, art and music programs, and hiring local performers are all areas in which nonprofits could team up with libraries to engage children with others in their community that inspire creativity and interconnection.

These charts and graphs clearly reveal an imbalance between the number of users attending programs designed for children and the number of programs offered for those users. Yet these data also reveal how vital the libraries in Stockton are to the children in the community. More programming for children could provide a place for them to not only safely learn and have fun, but to flourish.

II. Greenville Facilities Improvements

Scenario

A southwestern suburban library serving a population of around 150,000 has only one single branch and one bookmobile. They would like to pull together data to propose the construction of a second branch, or a major renovation of the current one to include more community/meeting spaces.

Librarians in Greenville have tried multiple times to request funding for the construction of a new branch in their system, but they have been denied at each attempt. The librarians know that most libraries serving similarly sized populations have either an additional branch, or more bookmobiles or other outreach vehicles. The practitioners in Greenville decided to use Benchmark to make comparisons between their library and its peers, and to create data visualizations that could be used to support their claims. They could then use those findings to help build a case to stakeholders that Greenville needs to update and expand its facilities.

Narrative

Figure 2.1 comes from the Facilities tab in the Survey Metrics Dashboard. In this tab, it is easy to see and compare the total square footage of Greenwood's library system, the number of library buildings, as well as the number of bookmobiles.
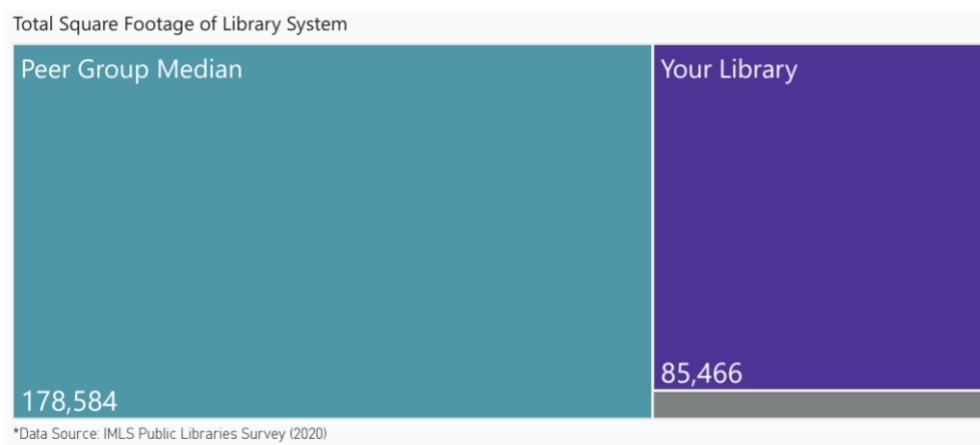

Figure 2.1

The visualization in Figure 2.1 can serve as an effective reference for library practitioners to show to their stakeholders, as it reveals a stark contrast between the total square footage of Greenville's library, and that of other suburban southwestern libraries with similar populations (their peer group).

In the same Facilities tab, the Library Buildings chart shows a comparison between the total number of library buildings in this library's own system to those of its peers. In Figure 2.2, it is clear that Greenville library has fewer library buildings (branches) than both the national average and their peers.
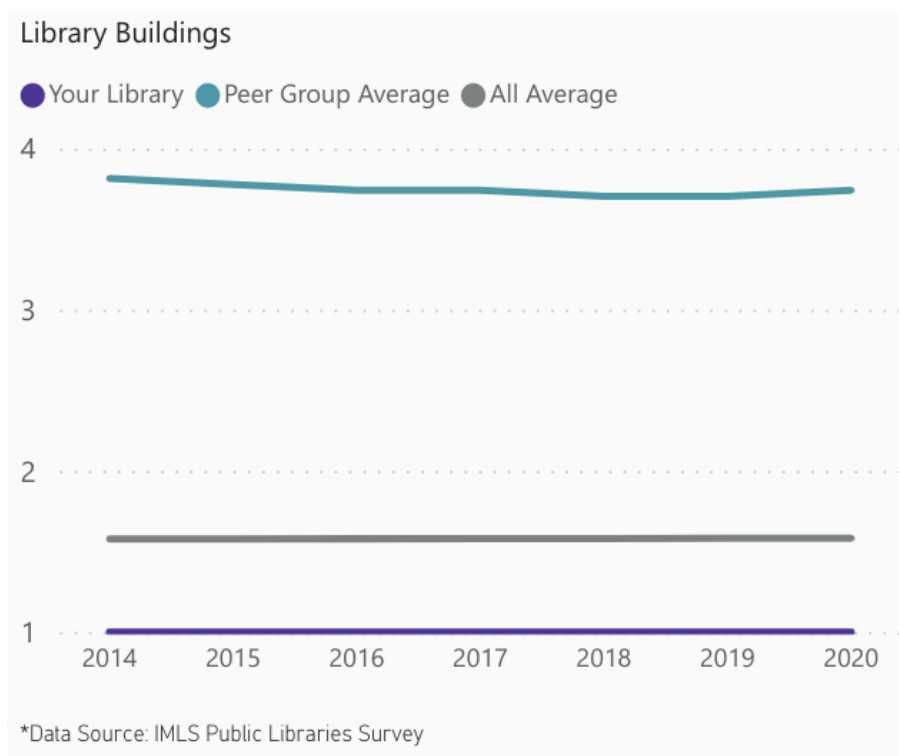

Figure 2.2

Though these disparities could be convincing enough for some decisions to be made around Greenville's facilities, employing more visualizations and data from the diverse set that Benchmark offers could be even more convincing to stakeholders.

Through both observation and communication with other systems in the area, the librarians at Greenville know that their physical circulation numbers are generally higher than those of their peers. They also know that if there are more physical items being circulated in their system than that of their peers, but fewer branches or bookmobiles from which those items can be accessed by their users, there is an imbalance. Benchmark can provide data visualizations to clarify this imbalance to potential donors and stakeholders.

The Collections & Circulation tab of the Survey Metrics Dashboard has other visualizations that could be useful for librarians at Greenville. Figures 2.3 and 2.4 prove what the librarians already knew but show it in easily understandable visualizations. Figure 2.3 shows that Greenville's patrons use their resources at higher rates than their peers, while Figure 2.4 clarifies that

physical circulation make up a greater proportion of the total collection use compared to their peers. Clearly, these data demonstrate that Greenville's users value the materials the library provides, particularly the physical items in the collection.
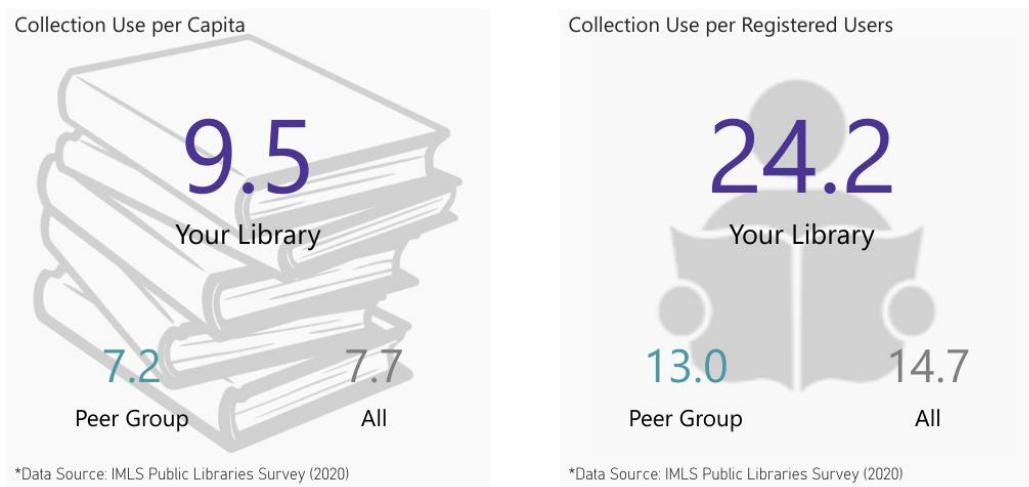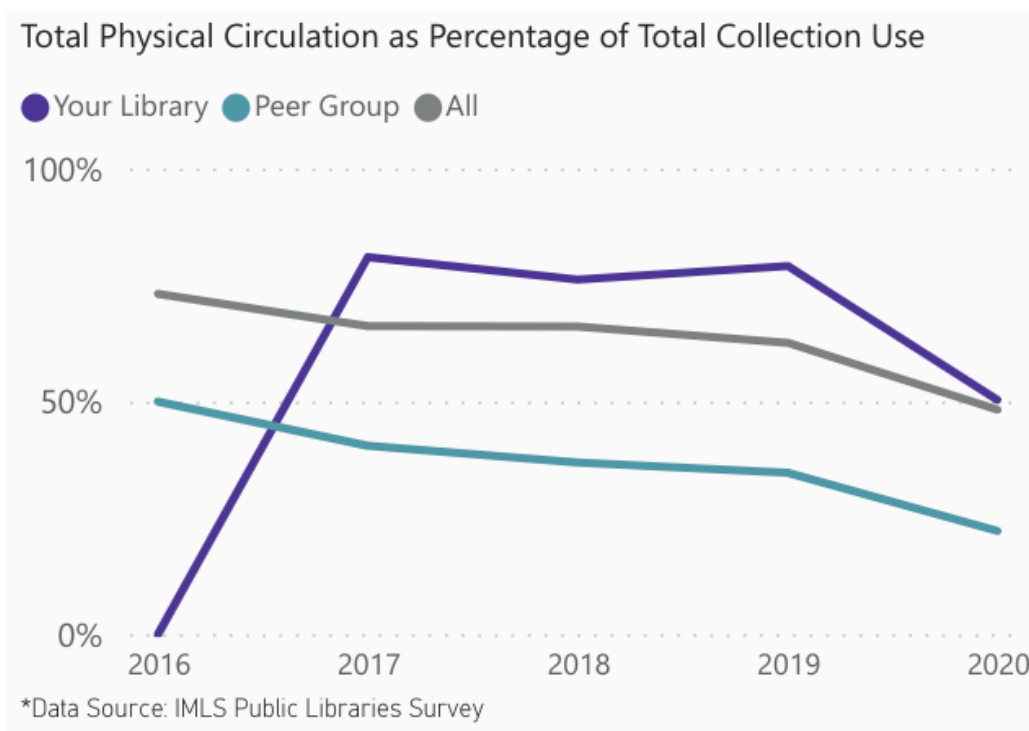

Figure 2.3

Figure 2.4

Using the data from PLA's 2022 Services for Strong Communities Survey could also help indicate where Greenville is in need of improvements. Particularly, the survey shows that 80.9%

of suburban libraries nationwide have a large meeting space or auditorium (for more than 25 people). Additionally, the survey shows that 25% of suburban library branches were built or underwent major renovations between 2001 and 2010, and 31.7% of them did so between 2011 and 2020. As Greenville does not have a large meeting space and has not built a new branch or received major renovations in the past 20 years, these data represent an unwelcome distinction for their branch.

Conclusion

These data highlight the imbalance between Greenville library patrons' usage of materials and the number of access points from which the patrons can access those materials. The charts and graphs also reveal that Greenville Public Library serves a community that appreciates and makes good use of the library's resources. Practitioners at Greenville could use the information provided by these data visualizations along with their own internal data regarding visits in meetings with stakeholders and other decision-makers. These data describe a community that is particularly engaged with the materials that Greenville Library provides, and it suggests that the construction of a new branch, or an expansion of the current central branch, would only increase that community engagement.

III. Mountainview Library and E-book Readers

Scenario

Jamie Lee is an Accessibility Coordinator at Mountainview Library in the Midwest. It is a suburban library with 30 branches, serving a population of 750,000. Jamie recently received a voice message from Mr. Gaines, a senior patron of the library, who identified himself to be visually impaired. In the voice message, Mr. Gaines expressed his frustration at the lack of new titles in Large Print format and assistive technology for people with varying degrees of visual impairment. Mr. Gaines stated that his needs as a library user are not met by the library system. Jamie took this concern seriously and created a task force to investigate ways to make the library more welcoming and accessible for all community members, including those who might share the same needs as Mr. Gaines to present a proposal at a library board meeting.

Narrative

The main feature Jamie and her team used for the assessment was the Community tab of the Survey Metrics Dashboard in Benchmark, which gives an overview of the community composition based on the latest American Community Survey data.

| Summary | Programs & Services | Collections & Circulation | Technology | Staff | Facilities | Funding | Community |

Figure 3.1

Figure 3.2 (below) clearly shows that the Mountainview Library serves a considerably higher percentage of the older population compared to the other age groups in the library service area and to the other institutions in the primary peer group and nationwide.
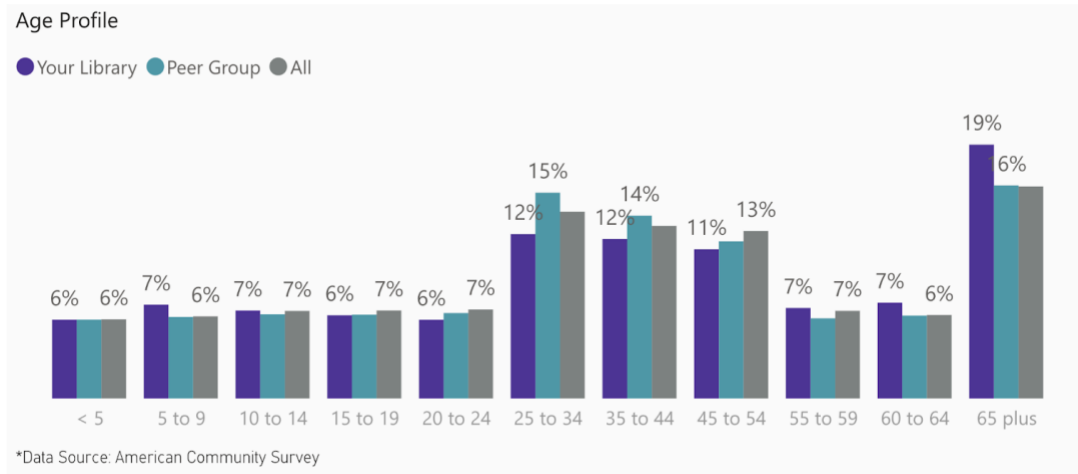
Age Profile

*Data Source: American Community Survey

Figure 3.2

In reviewing the data, one thing that stood out to Jamie about the Community summary was the fact that the majority of the community members in the Mountainview Library's service area have access to broadband and computing devices.
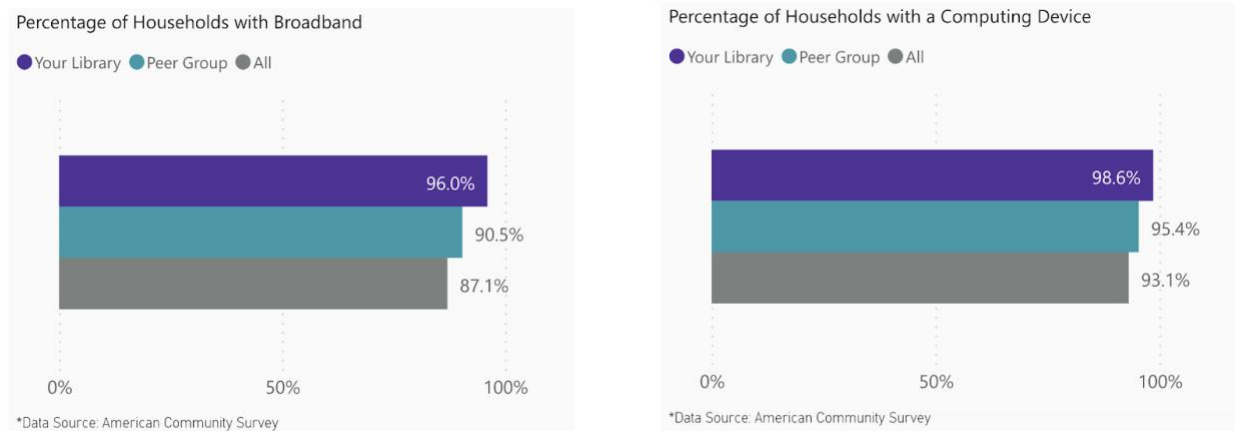

Percentage of Households with Broadband

96.0%
90.5%
87.1%

*Data Source: American Community Survey

Percentage of Households with a Computing Device

98.6%
95.4%
93.1%

*Data Source: American Community Survey

Figure 3.3

Identifying the access to broadband and computers, technology in general, as a potential area of opportunity, Jamie delved into the peer data on the Technology tab. To her surprise, she found that the institutions in the pre-assigned peer groups have been providing a number of offsite technology services. The Mountainview Library currently does not offer devices for checkout and use offsite except for Hotspots (Figure 3.4).
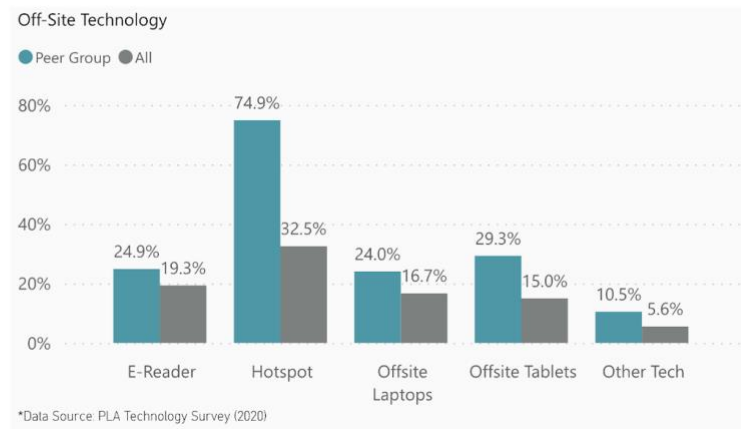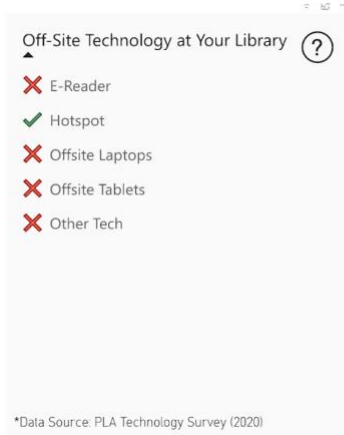
*Data Source: PLA Technology Survey (2020)

*Data Source: PLA Technology Survey (2020)

Figure 3.4

Figure 3.5 shows that the Mountainview Library offers Assistive Technology to patrons, though less than half of its peer libraries do. However, on-site technology apparently did not meet Mr. Gaines's needs for assistive technology for reading in an accessible format comparable to a Large Print book, which offers high readability and can be enjoyed in the comfort of one's own home.
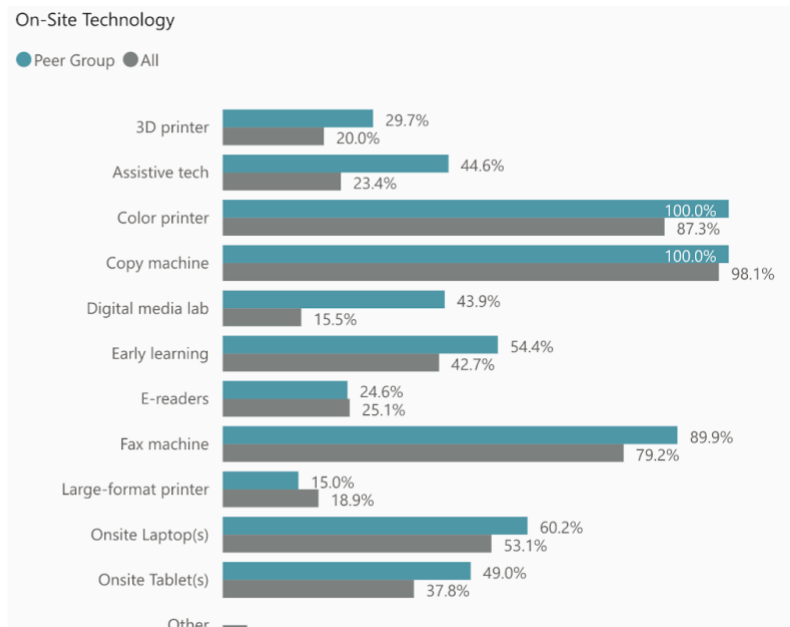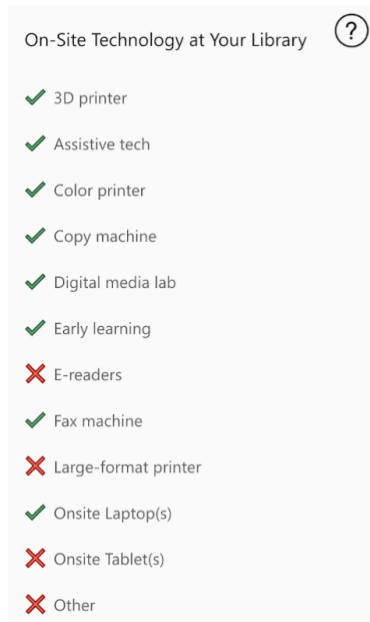

Figure 3.5

Discussion

Mr. Gaines's feedback highlighted the shortcomings of the current annual accessibility audit at the Mountainview Library, which had not raised these concerns. Also, given that the library has been financially and operationally impacted by COVID, the library board has been cautious about implementing new services without concrete arguments. The combination of patron feedback and the data provided in the Benchmark visualizations, which presents a condition in which the library could leverage existing community access to broadband, Jamie and her team could present a proposal to add e-book devices to the existing technology services. This improvement is not just to keep up with the peer library services but most importantly to respond to patron needs in a way that expands access to resources for the larger community. Given the benefits of various accessibility features embedded in e-book devices, especially tablets, as well as high utility for various purposes – including educational, medical, and vocational – for all ages, adding e-books devices to the library resources collection could be a well-justified technology improvement at Mountainview Library.

IV. Plain County Public Library and Language Specialist

Scenario

Diana Garcia Rodriguez has been the Director of Public Services at Plain County Public Library, a six-branch library that serves a predominantly rural population of 445,000 residents, for the last four years. During her time, she noticed that there had been a shift in the community demographics. The latest U.S. Census Data listed that Plain County has been a new migration hub for Spanish-speaking populations because of its employment opportunities, affordable housing, and inclusive community culture. Despite the data and the general observation in the larger community, Diana noticed the absence of Spanish-speaking patrons inside library buildings. To make a case for the importance of creating more inclusive services for Spanish-speaking patrons, Diana used Benchmark to better understand how her peer libraries are doing in similar efforts.

Supporting the importance of language and community knowledge integral to the success of community outreach and programming, Diana conceived of the idea of creating a language-specific position. She learned about similar precedents and successes from her professional network, but creating a non-traditional position would require the library board's approval. This is where Benchmark can play a significant role.

Narrative

In order to make a case for highlighting the relevance of creating a language-specific position, Diana used the Community Demographics chart to present the percentage of the population that is of Hispanic origin and who will most likely have a high familiarity with Spanish. The bar graph shows that in Plain County, people of Hispanic origin make up almost 50% of the population.
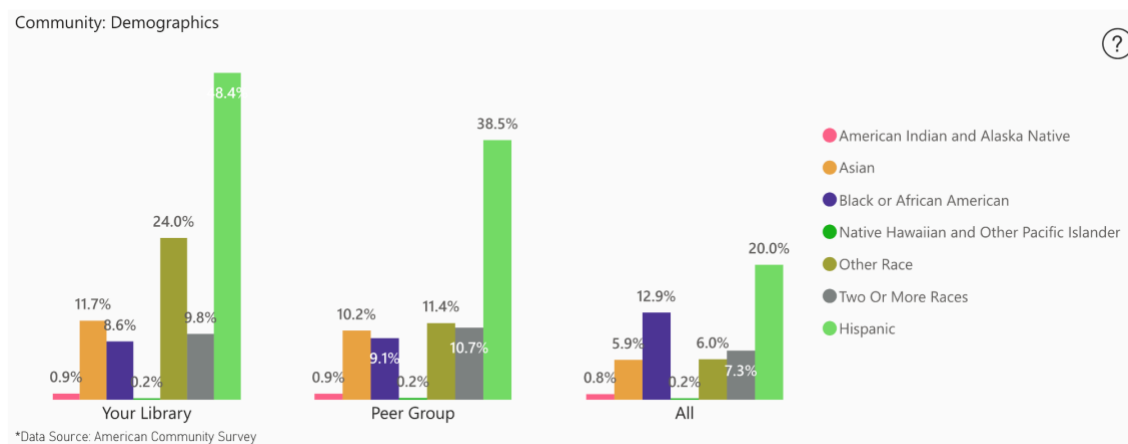

Figure 4.1

The additional data on language (Figure 4.2) also shows that about 58% of the community members speak a language other than English at home. For more detail about the languages spoken in the community, the library could look at additional data on data.census.gov or the Census Bureau's narrative profile for the county. With the demographic and language information, it can be argued that the library will benefit from having a Spanish-speaking specialist for outreach services. In addition to this, the library's internal collection data shows that the Spanish collection has a high circulation number per item, which means that the collection is highly used and could benefit from expansion.
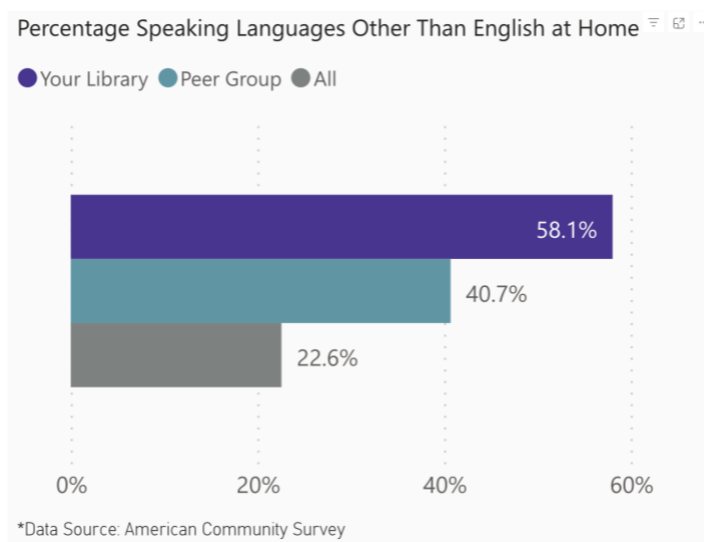

Figure 4.2

Given the fact that there has been an outreach effort in another language at Plain County in the past, Diana used the Custom Report feature to seek out custom data related to outreach. The custom selection of data from PLA's Staff and Diversity Survey in Figure 4.3 shows that 95% of the Plain County Library System's Primary Peers have a staff member for whom community engagement and outreach is part of their job title or description, and 71.4% provide programming in a language other than English.

Figure 4.3

In addition, Diana created a custom aspirational peer group using the Manage Peer Groups feature to see how they are doing in multilingual outreach in relation to the national average. The result showed that all of the selected aspirational peers are engaged in multilingual outreach efforts.

Figure 4.4

Discussion

Based on observations in the community, feedback from staff, and the community demographics data provided by American Community Survey visualized by Benchmark show that Plain County is becoming more diverse than it had been in the past. The language data further suggests that aligned with the demographic changes, there is a significant change in the

linguistic landscape of the community. Linguistic diversity is key to providing an equitable distribution of access to information and resources. Engaging in additional research on the impact of language barriers, Diana and her team found that having multilingual services is key to achieving language justice that allows community members to speak and engage in meaningful activities in their preferred language. In order to create a successful program, it is advisable to hire an expert in the language and subject matter. Also, given that the custom peer comparison data showing that the Primary Peer Group, as well as the Aspirational Peers, are engaged in multilingual outreach programming clearly demonstrates the need for the Plain County Library System to join the multilingual outreach efforts, Diana can use this evidence to advocate for the creation of a Spanish-speaking Specialist position to oversee the collection development, community-centric programming, and community outreach.