



FINAL REPORT

Library Space Needs and Facility Feasibility Study – Blacksburg and Christiansburg Libraries Montgomery County, VA

Prepared for:
Montgomery County, VA

T&L Project No. 13478

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**THOMPSON
& LITTON** EST.
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**ENTEROS
DESIGN**

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I. EXECUTIVE SUMMARY

Thompson & Litton, Inc. (T&L), in Radford, Virginia, in association with Enteros Design, Inc. (Enteros), Petersburg, Virginia, was commissioned by Montgomery County in late July of 2016 to provide a **Library Space Needs and Facility Feasibility Study** (hereinafter referred to as “the Study”) for the Blacksburg and Christiansburg libraries, respectively.

Initial efforts for the Study consisted of a multi-disciplinary team of architects and engineers conducting walkthroughs of both libraries on 22 August 2016 to assess the existing conditions of the grounds and buildings at each respective location.

The first of two (2) sets of meetings to solicit the input of the public on the current and future uses of the two (2) libraries were held at each respective library on the 22nd and the 23rd of August. In addition to the public meetings an on-line survey with 33 questions was developed and advertised for public responses; 394 responses to the survey were received. (Hard copy versions of the survey were also made available at each library.) A meeting was also held with the MFRL Board of Trustees prior to the initial Blacksburg Library public meeting. Meetings to review the scope of the project were also held with the respective Town Managers of Blacksburg and Christiansburg, respectively – Marc Verniel and Steven Biggs. Other officials with Montgomery County were also held to solicit their input on the future of the two (2) libraries.

On the same days as the initial public meetings programming meetings were held with each respective library’s staff to determine each respective library’s space needs projected outward for a 20-year horizon. Based on the initial programming meetings, and with input from the public, a detailed program (listing of square footages by respective functional area) for each respective library was developed, along with a program for a combined (i.e., single) library facility that would essentially replace the two (2) separate libraries.

A second set of public meetings took place on October the 4th and 5th, at which time the results of the on-line survey were reported and additional public input from each community was solicited and received. On those same days follow-up programming meetings were held with each library’s staff to conduct detailed reviews of the programs.

Public input at each library overwhelmingly supported each facility remaining separate and distinct from the other in lieu of a combined library that would serve both communities. The Blacksburg community also expressed a strong desire to keep the facility either where it is currently located or within the downtown Blacksburg footprint. Similarly, the Christiansburg community voiced its desires to keep that library where it is currently located. At all public meetings it was the sentiment of each facility’s patrons that the staff of each respective library was highly regarded, which is a credit to those staff members and the MFRL Regional Library staff.

The program for the Blacksburg Library yielded a need for a facility totaling 29,999 square feet (SF) versus the current facility’s 16,000 SF, while the Christiansburg Library’s program yielded a result of 31,954 SF versus the current 15,100 SF. Those resultant program sizes compare very closely with Virginia communities with similar populations constructed within the last five (5) years. (The Christiansburg Library also houses the administrative offices and support space for the MFRL staff.) A combined library would require 37,615 SF.

The site of the Christiansburg Library would allow for expansion to the programmed area, although parking could be an issue. The Blacksburg Library’s site does not lend itself to



expansion, as the Huckleberry Trail would be disrupted and parking would necessitate a structured parking solution to meet zoning and typical library parking demands, which is costly.

Projected costs for each facility are summarized in the table below.

Facility	Type	Size (SF)	Projected Cost		
			Low	Medium	High
Blacksburg	Renovated	29,999	\$3,599,880	\$5,249,825	\$6,749,775
	New		\$5,249,825	\$8,249,725	\$13,499,550
Christiansburg	Renovated	31,954	\$3,834,480	\$5,591,950	\$7,189,650
Combined Library	New	37,615	\$6,582,625	\$10,334,125	\$16,926,750

II. INTRODUCTION

Thompson & Litton, Inc. (T&L), in association with Enteros Design, Inc. (Enteros), was commissioned by Montgomery County in July of 2016 to provide a **Library Space Needs and Facility Feasibility Study** (hereinafter referred to as “the Study”) for the Blacksburg and Christiansburg libraries. The Blacksburg and Christiansburg libraries are two (2) of the four (4) libraries that comprise the Montgomery-Floyd Regional Library (MFRL) system, the others being the Jesse Peterman Library in Floyd and the Meadowbrook Public Library located in Shawsville.

The purpose of the Study is to assess the Blacksburg and Christiansburg libraries in terms of site, size, aesthetics, functional layout, flexibility, modern look, mechanical health, expansion capability, Americans with Disabilities Act (ADA) compliance, and related criteria for each respective facility’s useful life. A general summary of the scope of the Study is as follows:

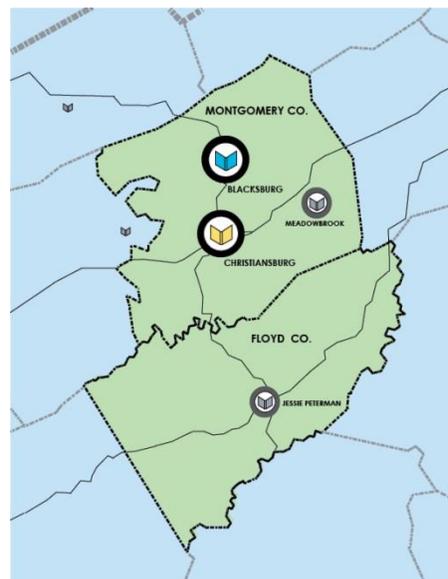


Figure 1. MFRL Library Locations

- Solicit input from each Library’s staff, the MFRL Board of Trustees, Montgomery County’s Board of Supervisors members, the Town Manager for the Town of Blacksburg, the Town Manager for the Town of Christiansburg and select Montgomery County staff regarding the present library buildings versus needed service and space needs.
- Review the MFRL strategic plan, budget, statistics and annual goals and the comprehensive plan of the Town of Blacksburg, Town of Christiansburg and Montgomery County relative to the two libraries.
- Conduct four (4) public meetings – two (2) at the Blacksburg Library and two (2) at the Christiansburg Library. The purpose of these meetings is to obtain opinions and inputs on library space usage and what the users desire from their library facilities.
- Determine the current and future space requirements for each (Blacksburg and Christiansburg) library facility’s major functions and program areas for the next twenty (20) years. Space analysis shall include site, size, structural stability, soundness, aesthetics, electrical and mechanical systems, lighting, compliance with Americans with Disabilities Act (ADA) standards, functional layout, flexibility, and related criteria in terms of each library’s useful life.
- Compare the Blacksburg and Christiansburg libraries to peer libraries in the Commonwealth of Virginia, as well as in surrounding states, and offer a comparison in terms of buildings and services, with Roanoke County being one of the peer library systems to be included in the comparison.



- Prepare and submit a report translating the above Study and inputs into recommendations concerning usage of the current Blacksburg and Christiansburg library facilities, or renovation of those facilities, along with corresponding cost estimates. If new library facilities or additional library facility/facilities are recommended, area location(s) and a space needs document for the facility/facilities, as well as cost estimates, shall be presented. The report is to include an in-depth narrative on data collection, data analysis and data interpretation.

III. BACKGROUND

Montgomery County and Floyd County are located in the southwestern part of the Commonwealth of Virginia in the New River Valley region. The region takes its name from the New River, the nation's oldest river and the world's second oldest river. Both counties are located in the picturesque areas of the Appalachian Plateau and the Blue Ridge Mountains.

Montgomery County is named for Richard Montgomery, an Irish-born American Revolutionary War major general in the Continental Army. The County has a land area of 393 square miles. Topography varies from gently rolling hills to steep mountainous terrain, with elevations varying from about 1,300 to 3,700 feet above sea level (ASL). The majority of the County is at an elevation of approximately 2,000 feet ASL.

Floyd County, situated atop a high plateau of the Blue Ridge Mountains, was created from Montgomery County in 1831 by an act of the Commonwealth of Virginia's General Assembly. The County was named for the Governor of the Commonwealth at that time, John Floyd. Floyd County has a land area of 381 square miles. Similar to Montgomery County in terrain, the average elevation is about 2,300 feet ASL with a high of 3,971 feet ASL (Buffalo Mountain). Due to its location on the Appalachian Plateau no streams flow into Floyd County; the county is drained primarily by the Little River and its tributaries which subsequently flow into New River below the Claytor Lake Dam.

The Town of Christiansburg – the County seat – and the Town of Blacksburg are Montgomery County's primary population centers. Blacksburg is home to the Virginia Polytechnic Institute and State University (Virginia Tech). Founded in 1872 as a land-grant college, Virginia Tech is the largest university in Virginia and one of the country's leading research institutions. The County had a 2015 population of 97,653¹, including Blacksburg (44,215) and Christiansburg (21,943). The population figure for Blacksburg fluctuates with the Virginia Tech student population at different times throughout the academic calendar year.

Montgomery County is governed by an elected seven (7) member Board of Supervisors, with one (1) Supervisor elected from each of seven (7) geographic districts. Terms are for four (4) years; either three (3) or four (4) seats are up for re-election each odd-numbered year. The Board of Supervisors appoints a County Administrator. The County Administrator serves as the County's chief executive officer. The County Administrator appoints all department heads/directors, supervises County staff, implements policies set by the Board of Supervisors or mandated by the Commonwealth of Virginia, and collaborates with other community agencies to provide services to the County's citizens.

The Town of Floyd is the county seat of Floyd County. The town was first called Jacksonville for Andrew Jackson, the seventh President of the United States. Jacksonville was first incorporated in 1858 and then re-incorporated in 1892 to expand the town's boundaries. The town's name was changed from Jacksonville to Floyd via an act of the Commonwealth of Virginia's General Assembly In 1896. The County had a 2015 population of 15,651¹. The Town of Floyd's population at that same time was 439.

Floyd County is governed by an elected five (5) member Board of Supervisors, with one (1) Supervisor elected from each of five (5) geographic districts. Supervisors are elected for four

¹ <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmmk>

(4) year terms on staggered two-year intervals. The County Administrator is appointed by the Board of Supervisors to manage the day-to-day activities of that portion of the County Government under the Board's authority. In addition, the County Administrator serves as the Clerk to the Board of Supervisors.

The Montgomery-Floyd Regional Library (MFRL) organization oversees four (4) libraries within Montgomery County and Floyd County – in Blacksburg, Christiansburg, the Jesse Peterman Library in Floyd and the Meadowbrook Public Library located in Shawsville. The system offers information and reading materials in a variety of formats, including downloadable audio books, electronic format books and streaming of audiobooks, music and movies. Wireless access is available in each library, as well as public computers providing access to the Internet, databases and a selection of office and entertainment software. Public meeting rooms are also available.

The MFRL system is overseen by a nine (9) member Board of Trustees, two (2) of which are appointed by the Floyd County Board of Supervisors and seven (7) of which are appointed by the Montgomery County Board of Supervisors. The MFRL Board appoints an MFRL Director, who is responsible for the day-to-day operations and oversight of the four (4) libraries within the system. The Director appoints a library supervisor for each of the four (4) respective libraries.

The Mission Statement of the MFRL organization is as follows:

To strengthen our community, the Montgomery-Floyd Regional Library provides individuals with access to information, experiences and ideas.

The Core Values for the MFRL organization are as follows:

- *Respect.* Value the individual with equal consideration and courtesy.
- *Accountability.* Deliver on our commitments and responsibilities.
- *Knowledge:* Promote learning, satisfy curiosity and encourage ideas.
- *Diversity.* Provide a variety of viewpoints and free exchange of information.
- *Service:* Maintain a welcoming atmosphere with professional staff and quality standards.
- *Teamwork:* Build partnerships based on trust and collaboration.

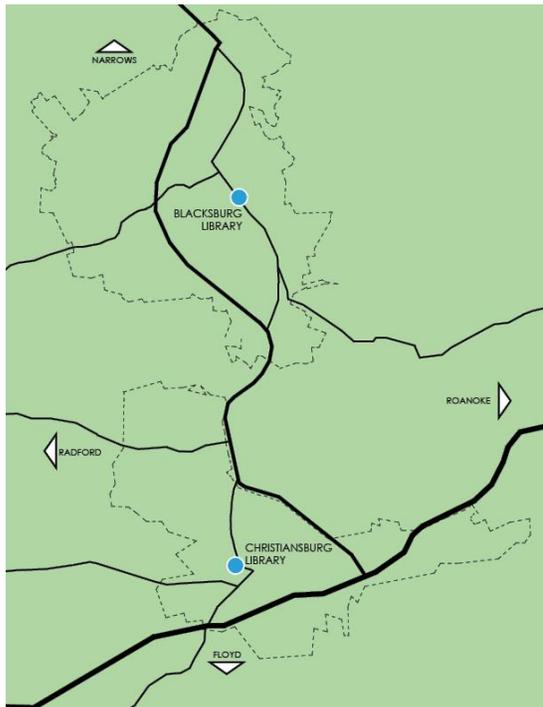


Figure 2. Blacksburg and Christiansburg Library Locations

The Blacksburg Library is bounded by Draper Road on the northeast side, Miller Street on the southeast side, Clay Street on the northwest side and private parking areas to the southwest. A popular regional recreational pathway – the Huckleberry Trail – routes between Miller and Clay Streets and frames the library’s parking area to the southwest of the building. The Trail also divides the land between the library building and a parking lot to the northwest of the building; this lot is shared between library patrons and the Town of Blacksburg’s Police Department, whose administrative building is located on the other side of Clay Street. The library has 14,600 square feet available for public and staff space and a 1,400 square foot mezzanine used for server space and storage. The library moved into its current location in 1988, when it took over a former hardware store. At that time, part of the building was renovated for the library and the rest of the building was utilized for storage space. In 1996, the building was renovated and the library was expanded into the entire building. 21 full-time and part-time staff members are assigned to the Blacksburg Library for a total of 13.4 full-time

equivalents (FTEs).

The Christiansburg Library was built in 1986 at 125 Sheltman Street. The Christiansburg Rescue Squad and the Christiansburg Fire Department constrain the northwest and northeast sides of the library and a small park is located to the east of the library. A hillside frames the southeast side of the library site. The Christiansburg Library contains approximately 15,100 square feet and houses the offices of the MFRL administration. Including regional staff, there are 20 full-time and part-time staff members assigned to the Christiansburg Library for a total of 14.6 FTEs.

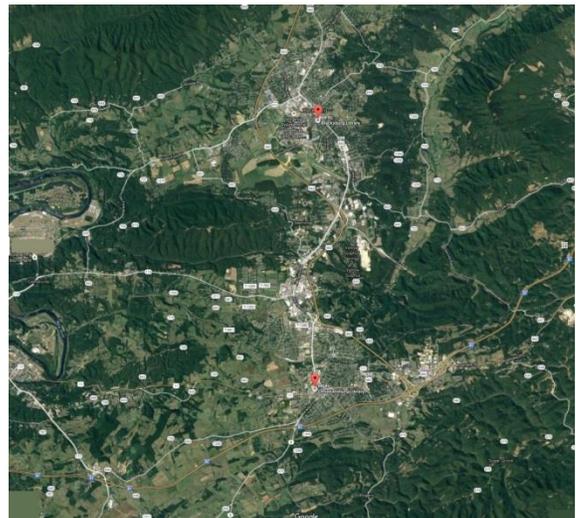


Figure 3. Blacksburg and Christiansburg Library Locations - GoogleEarth™

IV. EXISTING CONDITIONS ASSESSMENT

A multi-disciplinary team of architectural and engineering professionals from Thompson & Litton and Enteros Design visited the Blacksburg Library and Christiansburg Library sites on 22 August 2016. Disciplines represented included architecture (interior and exterior); civil/site engineering; structural engineering; mechanical/HVAC, plumbing and fire protection systems engineering; electrical engineering; data/communications systems engineering; and project management. Tours of the grounds and building at each respective site were led by the respective library supervisors. Items assessed included:



- Site access, parking and vehicular circulation
- Personnel circulation
- Storm drainage
- Landscaping
- Building envelope
- General structural integrity
- ADA compliance
- Building interior spaces
- Heating, ventilating and air conditioning (HVAC) systems and equipment
- Plumbing
- Fire protection
- Electrical power
- Interior lighting
- Exterior Lighting
- Fire alarm system
- Security system
- Information Technology (IT)

The results of the assessment for each respective library are found below.

A. Blacksburg Library

1. Civil/Site

The Blacksburg Library can be accessed from two (2) entrances – one located along Miller Street and the other located along Clay Street. The building is served by two (2) moderately sized parking lots located on the northwest and southwest sides of the building. There are 42 parking spaces in the parking lot to the northwest of the building and 36 parking spaces in the parking lot to the southwest of the building. Also, two (2) staff designated parking spaces are available to the south of the building with an additional four (4) parking spaces available to the east of the building along Draper Road; however, the spaces along Draper Road are only available on a first come, first

served basis. Sidewalks, located all around the building, provide access to the building entrance. Also, the Huckleberry Trail traverses the site to the north of the building.

The following observations were made on the site walkthrough conducted on Monday, 22 August 2016:

- Overall, the site is in fair to good condition
- Storm drains on the site appear to be in relatively good condition
- Sidewalks are in fair condition with minimal cracking
- Curb and gutter systems appear to be in fair condition with minimal cracking
- The pavement in the parking lots is in poor to fair condition
- Vegetative ground cover is in fair to good condition
- Several cleanouts are missing access covers
- ADA parking is sufficient
- Curb stops are in poor condition

Additional Parking

Per the library staff, there are currently not enough parking spaces to accommodate daily traffic. The parking lot to the northwest of the building is shared with the Blacksburg Police Department; therefore, the library only has access to 14 of the 42 spaces in this parking lot. The parking lot to the southwest of the building, although being posted as library parking only, is frequently occupied by area citizens utilizing the Huckleberry Trail. The aforementioned parking issues led to the examination of alternatives to increase the amount of parking spaces. The alternatives are as follows:

1. Construct a parking structure where the existing parking lot to the northwest of the building is located; and,
2. Provide angled parking along Draper Road adjacent to the four (4) parallel parking spaces currently provided.

Per the Town of Blacksburg's zoning ordinances, because the library is in an OTR Zoning District, a minimum of one (1) parking space is required for every 400 gross square feet (GSF) of floor space. At its present size of 16,000 SF, this would equate to a need of 40 spaces, which the current parking provisions meet. The maximum number of parking spaces, per the Town of Blacksburg's zoning ordinances, is 10 percent of the maximum, or 44 spaces. 36 spaces are provided in the upper lot off of Miller Street (of which three(3) reserved for handicapped access) and the lower parking lot has along Washington Street has 42 total spaces, of which fourteen (14) are designated for the use of the library. (The other 28 spaces are utilized by the Blacksburg Police Department, whose primary facility is across the street from the library). Approximately four (4) vehicles can parallel park in front of the building along Draper Road. There are also two (2) parking spaces for library staff on the southern side of the building. In total, 46 parking spaces are available for library staff and patrons, which slightly exceed the maximum allowed per Town of Blacksburg zoning ordinances.

2. Architectural

The Blacksburg Library has 14,600 square feet on the first floor and 1,400 square feet on a mezzanine which is used for storage space, mechanical equipment and server equipment. The library is centrally located adjacent to the downtown business district, on the edge of a residential neighborhood, and within a few blocks of the Virginia Tech campus. The attractive and well maintained facility occupies a prominent site in the heart of Blacksburg; however, the facility lacks the space and essential program areas needed for the public and staff that are found in a modern library. The following conditions assessment addresses the character, function and flow of public and staff areas of the library.

a. Library Site and Exterior Features

Street Presence and Exterior Character

The building is adjacent to the Blacksburg Police Department and the downtown business district. The site is also located adjacent to the Huckleberry Trail, a major walking and biking trail in the area. This trail brings cyclists and pedestrians to the library for library services, but also for access to restrooms and water fountains.

The library site is approximately 1.0 acre, with parking on two (2) sides. The library and parking occupy the majority of the site. Patrons and staff indicate that there is inadequate parking and the lots are frequently full. The site is on a prominent and centrally located site, but there is very limited room for expansion or additional parking.



Landscape and Outdoor Spaces

Landscaping around the library is somewhat minimal, although there are larger trees and shrubs along the roadways and along the Huckleberry Trail. There are no substantial outdoor spaces for reading, programs and events. A covered porch on the parking lot side of the building does provide a space for individuals to congregate and to avoid the weather, but it is not conducive to public use or activities. A small circular section of concrete on the front of the building is too small for group activities, as it lacks seating, and has no landscaping. Future renovation or new construction of the library should consider enhancements to the outdoor spaces and landscaping. The outdoor spaces should accommodate casual reading and relaxation, organized adult and children's programs, and larger events or festivals. The design of these spaces should have complimentary hardscape



and landscape, and they should provide connection to interior program space.

Loading Dock

The building does not have a loading dock or a separate delivery entrance. Deliveries are made through the main parking lot public entrance. A new or renovated library should provide a separate entrance or loading dock for deliveries.

b. Exterior Building Components

Walls and Soffits



The exterior walls are brick veneer masonry construction with EIFS and tile accents. The exterior masonry is in good condition; however, it does need to be cleaned. The exterior soffits around the building appear to be an exterior gypsum panel, and they have significant water damage in several areas as a result of leaking gutters. The gutters and their supports display significant rust and have failed in several locations. The gutters on the building should be replaced as soon as possible. Down spouts

should be replaced at the same time as the gutters. Down spout water is piped below grade at the base of the building. The soil around the base of the down spouts in several locations was wet at the time of the walkthrough and it appeared that standing water may have accumulated in these areas after heavy rains. The down spouts and drain pipes should be checked to make sure they are not clogged and the ground around them should be sloped away from the building to allow for adequate drainage.

Windows and Doors

The exterior windows are aluminum clad wood windows. The windows are in relatively good condition and should last for a number of years. Sealant joints around the perimeter of the windows are cracked and failing in several areas. The windows should be re-caulked in the near future. Small punched windows bring in natural light at an elevated roof level along the spine of the building. These windows appear to be in the same condition as the windows below, although access was not available for close observation. The building has aluminum entrance doors and storefront windows at the main entrances. The doors currently bind and

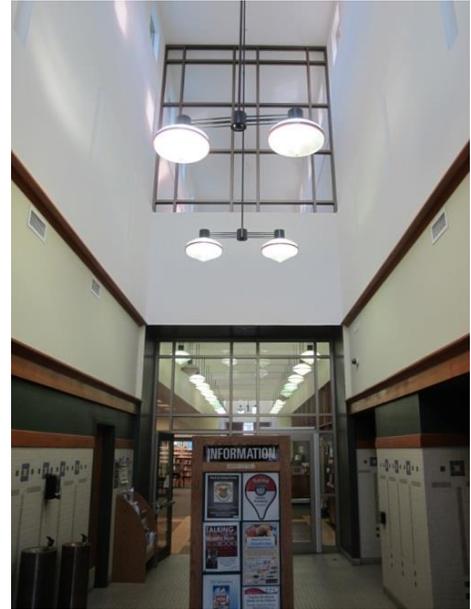




do not close properly. Doors with power assist operators for handicapped accessibility often need to be adjusted to maintain smooth operation. It may be possible to adjust the doors to return them to smooth operation, but replacement of the doors should be part of any proposed renovation. Other exterior doors are hollow metal with hollow metal frames that need to be cleaned and repainted

Roofing

The building has a standing seam metal roof which appears to be original to the 1996 renovation. The roofing appears to be in good condition, but access was not available for closer observation. The roofing should be inspected more closely at the time of the gutters replacement. Inspection should verify that roof leaks are not contributing to the soffit damage mentioned above. During very heavy rains, wind driven rain has caused occasional leaks. These types of leaks are typically associated with improper joints in flashing or failed sealant around windows. The roof should be inspected and repairs to flashing or sealant may be required.



Entry and Access

The primary entrance is from the parking lot in the rear of the building. A front entrance faces Draper Road; however, this entrance is located adjacent to the Children's Area and presents significant safety concerns. The front entrance has been closed and public access is restricted except for emergency egress. The parking lot entrance is adjacent to the handicapped parking area and it has a substantial porch covering for protection from weather.

The entry doors connect into a lobby space which provides access into the library, the meeting room and restrooms. Doors are located between the lobby and the library space such that the meeting room can be used after normal operating hours while the interior library doors are locked. The exterior doors and interior library doors create the effect of a weather vestibule; however, there is no vestibule between the exterior doors and the meeting room doors. A true weather vestibule should be provided as part of any renovation project to improve energy efficiency, comfort and to comply with the energy code.



The lobby area has a high vaulted ceiling with clerestory windows to bring in natural light. The space is inviting and attractive; however, it is relatively narrow and does not provide easy flow and gathering for larger groups entering and exiting the meeting room. Additional space for integrated display of materials would be helpful.

The restrooms are accessed directly off the lobby space. The entry into the restrooms has some visibility from the staff desk, but the interior doors into the lobby do restrict visibility. The position of the desk relative to the entry and restrooms could be improved in a renovation.

c. Interior Public Areas

Open Space and Flow



The interior has an attractive, warm and welcoming appearance, especially in the high vaulted ceiling space where natural light floods in from the clerestory windows. In the areas adjacent to the vaulted ceiling, the ceilings are relatively low and the shelving is high. These areas have a compressed feeling and observation and visibility is limited. The space at the entrance, near the circulation desk and in the main public seating areas is open and allows for easy flow. The open arrival space

near the entrance is understated and does not promote the display of new materials, public information or promotion of library programs and services as affectively as modern libraries should. There is a small coffee counter which consists of a Keurig type coffee maker, but guests must go to the circulation desk to purchase coffee K-cups. A new or renovated library should have a prominent display of new materials, easy access to holds, a retail display environment and often a self-serve/vending café near the entrance to the library.

Lighting

Natural light is brought into the interior through large windows around the perimeter and high clerestory windows that extend down the central spine of the building. The tall shelving in front of the windows blocks natural light. Artificial light is achieved through the use of fluorescent pendant lights and 2-foot by 4-foot fluorescent fixtures. The artificial lighting should be changed to modern energy efficient LED fixtures as part of any renovation. The use of more suspended direct/indirect lighting which bounces light off the ceiling would improve lighting conditions.



Finishes and Materials

The interior finishes are functional, relatively well maintained and present a cohesive design aesthetic on the interior. Some wear and stains were noted on painted walls and ceiling tiles. Updated and modern finishes should be part of any renovation and new construction.

Furniture

The seating and furniture overall in the library appears to be relatively new and is in good condition. The furniture compliments the interior of the building and creates comfortable reading areas. Study tables are provided in public areas; however, they are all four-person tables rather than a mix with two-person tables. The larger study tables are often only occupied by one person. The addition of two-person tables may offer the flexibility needed to accommodate more patrons. Study tables are currently located on major paths of circulation, and traffic may be distracting during focused activities. Locating tables away from the main circulation path, in a quiet reading room or alcove, would create more appealing focused work areas.



Shelving in the adult collection is typically 90 inches tall. The top shelf of this shelving is not used because it is too tall for easy or reasonable access. Lower shelving at 66-inch or 72-inch maximum height would improve visibility, open space and improve lighting quality in the library. The non-fiction shelving the children's collection is also high and it is out of scale with the age group served. Picture book shelving in the children's area is appropriately sized; however, more display shelving of flip bins would encourage browsing.



Although most of the shelving meets the required ADA clearance, it was observed that several aisles that are less than 36 inches clear. In a few cases the end panels intrude on the clearance and in others books are extending into the clearance. Renovations should reposition shelving to maintain the required clearances.

Study Rooms

The Blacksburg Library has two (2) small study rooms. The study rooms are only suitable for two (2) people in a tutoring arrangement. Study rooms and small meetings support activities of tutoring, group study, collaboration among project teams and provide much needed meeting space for small committees and community groups.

Modern libraries of similar size in comparable communities would have multiple group study rooms of varying sizes. Group study rooms should be incorporated into any proposed renovation or new construction.

Adult Spaces

Adult spaces in the library are comfortable and have adequate space and flow. Improvements listed above and other improvements include reduced shelving height, relocation and better display of the new books materials, introduction of a quiet reading room and better distribution of reading tables. The periodicals collection should be relocated for better visibility and display adjacent to the adult reading area.



Children's Area



The Children's Area is currently bisected by the main circulation spine of the building. The former front entrance doors, although no longer used, are still major features within the children's area and give the impression of a main circulation corridor. The Children's Area seems divided and in some aspects appears to merge with the adult and teen collections. The adult periodicals

collection should be relocated to an area further away from the children's collections.

The Children's Area lacks some of the character-defining features commonly found in a modern library. The atmosphere and design features could be enhanced to include elements such as a uniquely designed story time and activity space within the Children's Area, specialty seating or window seats and more significant interactive furniture. These features would give the area a more defined character with which children could identify.



A small program room is located adjacent to the Children's Area. This program room is used for small story time activities; however, the room lacks technology, storage space and a sink that would be commonly found in a children's program room. A room adjacent to the children's program room is currently used for storage and passport

photos. The wall between the program room and this storage room could be removed to create a larger activity room. The windows in the storage room would also bring natural light into the program room.

The Children's Area is open and in close proximity to adult areas. Acoustic separation between the areas may be a problem during children's activities.

Computers in the Children's Area are limited to two (2) AWE computers. More dedicated public computers are needed in the Children's Area on furniture that is sized appropriately for the age of the users.

Teens Area

The Teens Area is very limited in size and is tucked into a corner of the library. A small section of bar height counter with four (4) stools and two (2) other gaming chairs comprise the extent of seating for teens. The Teens Area lacks sufficient seating, activity spaces or a general atmosphere to meet the needs of teens. In a new or renovated library, a designated teen area should be provided using materials, finishes and furnishings that are appropriate to teens. This space should include appropriate teen seating, specialty seating such as booths or window seats, dedicated computers, a gaming and activity area, good observation and acoustic separation.

Technology

Technology in the library is very limited. There are 18 adult computers, two (2) OPAC computers, two (2) children's AWE computers and a self-check computer. Six (6) adult computer stations are currently vacant. Technology in a modern library should include separate adult, teen and children's computers, more self-check computers, digital displays, smart boards and other multi-media technology.



Meeting and Program Space

There is one (1) main meeting room in addition to the small children's program room in the library, which is used for all adult, children and community activities. The meeting room has a capacity of approximately 187 individuals. The space can be subdivided into two (2) smaller rooms. A variety of meeting room sizes would allow for more flexibility in programs. A more direct connection to the library would allow for flexible use of the meeting room for reading space, a computer lab or similar activities when it is not used for other programs. Expanded technology in the meeting room, including sound and video integration, would bring the meeting room up to modern standards. The meeting room has a large connected storage room for tables and chairs, but it is



also used for maintenance supplies. A kitchenette counter with upper and lower cabinets is installed along the side wall of the meeting room. A separate small kitchen would allow for more flexibility and use of the kitchen space for activities, events or catered functions.

d. Staff Areas

Branch Library

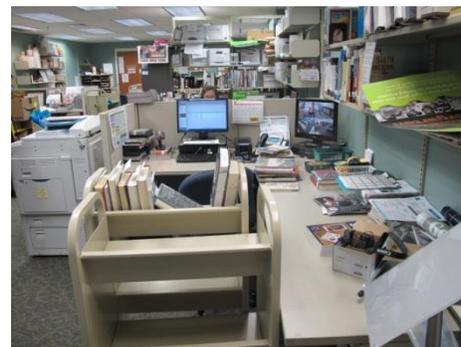
Circulation Desk

The circulation desk is located along the main circulation path in line with the main entrance and directly in front of the circulation work room. It is centrally located with reasonable observation of the library spaces. Three (3) staff check-out stations are provided on the desk. There is no lower handicapped accessible level at the desk. The desk appears to have adequate storage for staff materials below the desk; however, there is inadequate storage and organization of materials along the back wall behind the desk. A large laser printer is squeezed into a corner of the desk. The connection to the circulation work room provides efficient access for staff, but greater visibility from the staff work room may be desirable. The design of a future circulation desk should provide adequate shelving and work areas that accommodate integrated printers, office equipment, book carts and storage needs. Additional self-check stations would improve efficiency for staff and patrons and would perhaps result in less space needed for the circulation desk. The self-check area should be reconfigured in a renovation and expansion so that it is on a more direct route to the library entry/exit, and more counter space should be provided for convenience in handling materials.



Circulation Work Room

The circulation work room currently has three (3) staff workstations; two (2) appear to be mainly processing stations. A fourth workstation is used as a work area, storage space and mail distribution area. The Branch Manager's office is located remotely from the workroom down a hallway with access to the staff restrooms, lockers and rear entrance. The remote location limits interaction between the circulation staff



and the manager and prevents view of the public areas from the manager's office. A storage room is located adjacent to the workroom but it was full at the time of the walkthrough. Reorganization of the storage room may allow for storage items to be relocated from the workroom. The workroom is very crowded as a result of storage materials, book carts for book sale items and lack of a separate shipping and receiving area. Improvements in the organization of the circulation workroom could be made by having a separate shipping and receiving area, more space in a separate room for the Friends of the Library and reorganization and relocation of storage items.

Branch Managers Office

The Branch Manager's office is approximately 10' x 13', and is not accessible or visible from the circulation work room. The remote location, and lack of visibility to the circulation work room and public areas, may create inefficiencies in staff flow. The office size is consistent with typical libraries of this size; however, the lack of a separate staff conference room means that the manager has meetings in her office. Space is limited within the office for normal office functions and meeting space. Additional shelving or a separate storage closet would be helpful to the Branch Manager.



Storage

The library has a small storage room adjacent to the circulation work room and a large storage room on the mezzanine level. The mezzanine level storage room is not very convenient for materials used on a regular basis. A separate children's storage room should be provided adjacent to the children's space or program room. General office supply storage could be accommodated in upper and lower cabinets in a common copy/print work room.



Friends of the Library

The Friends of the Library area currently occupies a small room adjacent to the circulation workroom. Their materials overflow into the circulation workroom and congestion, noise and interruptions interfere with the operations of both areas. A larger dedicated work room and storage space should be provided for the Friends of the Library. The required size for this work room is often never adequate because the users of these spaces will usually fill all space



that is available to them. The room is normally large enough to accommodate a 4-6 person work table in the center, shelving on the perimeter walls and a small computer processing station and work counter. In larger libraries with a significant used book retail presence, the work room and dedicated storage area could be significantly larger. The display of the book sale materials should be further developed in the public areas to follow more of a retail model to promote the sale and turnover of these materials.

Regional Library

Offices

Although the Regional Library is located in the Christiansburg Branch, the IT staff is located in the Blacksburg Library. Four (4) relatively large cubicles are located in a separate staff area adjacent to the Branch Manager's office. Three (3) of these workstations are occupied by IT staff and the fourth is occupied by a Children's Coordinator. The IT Department also occupies space on the mezzanine level in the existing server room. If major renovations or new construction occurs at either branch it may be more efficient for staff operations to locate the IT staff in the main Regional Library with the other Regional staff.

Workroom

The Blacksburg Library does not have a separate staff copy/workroom. All of these functions currently occur in the circulation workroom. A separate staff workroom, or a defined space, for the copy/print/production area would clear up space and congestion in the circulation workroom. The copy/print workroom would typically have a work table in the center, counter space along the perimeter and upper and lower cabinets for storage.

Breakroom

The breakroom is located in a far corner of the building. The room is large enough for a small round table which can only accommodate approximately three (3) staff at one time. Standard breakroom equipment includes a refrigerator, a microwave, a two compartment sink and upper and lower kitchen cabinets. A larger breakroom that could accommodate more staff would be appropriate to a library of this size.



Shipping and Receiving

The Blacksburg Library does not have a shipping and receiving entrance or work area. Shelving and supplies for this function create congestion and clutter in the circulation workroom. The inter-library tote bins are also stacked in the middle of the workspace. These items could be held on shelves in a Shipping and Receiving area until they are picked up by the courier. A separate Shipping and Receiving room should be located adjacent to a separate delivery entrance, and the room should be sized to accommodate the typical volume of boxes and materials associated with a delivery. A

wind curtain mechanical device should be located above the delivery entrance to minimize air infiltration when the doors are opened.

ADA Compliance

Several deficiencies with ADA compliance in the building were observed during the walkthrough, as noted below:

- Aisles between library shelving are less than 36 inches clear in several areas
- Bathroom sinks are not ADA compliant, and pipe drains are not wrapped
- Signage is not ADA compliant
- The circulation desk does not have a lower transaction surface
- Non-compliant staff bathrooms and family bathrooms
- Inaccessible staff entrance

3. Structural

The facility is a steel framed single-story building with a mezzanine that supports the mechanical and electrical rooms. The structural roof consists of cold-formed steel trusses and cold-formed steel rafters overbuilt on the existing open-web steel joist. The roofing is an architectural standing seam metal roof attached to a trapezoidal structural steel deck. The exterior walls are brick veneer with cold-formed steel stud backup or concrete masonry unit (CMU) block backup. The load-bearing walls and steel columns are supported on shallow foundations.

Most of the structural system could not be inspected since it is covered by interior finishes. Some of the existing framing is visible above and below the mezzanine. The structural framing visible appears to be in good condition with no apparent remediation required.

The exterior stairway from the sidewalk adjacent to Miller Street has guardrail posts that are bent and one post is rusted through.

Some of the standing seam metal roofing along Miller Street near the employee entrance has visible rust. The roof gutter along Miller Street is rusted through and leaking. Most of the roof gutter support straps are rusted. The roof gutter is damaged above the cooling tower adjacent to the employee entrance. These deficiencies could lead to water infiltration into the building in the short term.

The retaining wall at the stairway to the Mechanical Room along Miller Street has moss growing on the wall and has visible effervescence from the mortar joints. There is no sealant in the joint between the slab-on-grade and the retaining and exterior building walls. The local grade above the retaining wall has settled or eroded away and is sloped toward the top of the wall. This reverse slope is shedding rainwater toward the wall. This drainage issue could lead to a build-up of hydrostatic pressure behind the retaining wall which, in turn, could cause a failure in the wall. In the long term, rainwater could infiltrate the slab joints and cause the subgrade beneath the slab or wall foundations to weaken and fail.

At the canopy above the main entrance, the exterior insulation façade system (EIFS) has been damaged. The roof gutter on the north side of the main entrance has been damaged. These deficiencies could lead to water infiltration into the building in the short term.

Near the fire control panel there is staining of the wall indicating that water is overflowing the roof gutter and running down the wall. The sealant in the joint between the slab-on-grade and the exterior walls and column surrounds, in addition to the expansion joints in the slab-on-grade, are deteriorated. The roof gutter deficiency could lead to water infiltration into the building in the short term. In the long term, rain water could infiltrate the slab joints and cause the subgrade beneath the slab or wall foundations to weaken and fail.

The roof soffit of the clearstory has a hard surface without any vents of control joints and there are visible signs of moisture damage, as well as cracks in the soffit. These deficiencies could lead to mold growth inside the soffits of the building clearstory in the short term.

At the Draper Road exit, the roof downspouts and roof gutter support brackets have visible rust. The joints in the slab-on-grade and between the slab and exterior walls are deteriorated. The roof gutter and downspout deficiencies could lead to water infiltration into the building in the short term. In the long term, rain water could infiltrate the slab joints and cause the subgrade beneath the slab or wall foundations to weaken and fail.

4. Mechanical

HVAC

The building is conditioned by fifteen (15) water source heat pumps. The entire system was installed in 1995 during the building's renovation. The majority of the water source heat pumps are original to 1995 but several have been replaced in recent years. All water source heat pumps are horizontal ceiling-hung units. Twelve (12) units are installed above the ceiling of the main floor; three (3) units are installed in the upper floor / mezzanine space. The sprinkler riser room is heated with an electric unit heater.

The condenser water loop for the water source heat pumps is served by a 64-ton cooling tower manufactured by Evapco on the south exterior of the building. The cooling tower is a closed circuit type with a packaged spray pump and basin heater. The condenser water loop is heated by a 900 MBH gas-fired boiler manufactured by Bryan in the mezzanine mechanical room. The condenser water loop is circulated by two (2) in-line pumps in parallel in the mechanical room. The boiler, pumps and cooling tower were installed in 1995. The mechanical room also includes make-up water for the condenser water loop, an air separator, expansion tank and water treatment system.

The HVAC systems are controlled by a central Trane Energy Management System (EMS).

Plumbing

The plumbing system was installed during the building's renovation in 1995. Urinals and water closets are commercial, flush valve style with manual controls. Restroom lavatories also have manual controls. The facility also includes stainless steel kitchen sinks in the community room and break room and a mop sink in the janitor's closet. All plumbing fixtures were in generally good condition. Building personnel expressed interest in upgrading the fixtures to automatic sensor controls for restroom plumbing fixtures.

The building is served by a 2-1/2" domestic cold water service with a backflow preventer in the sprinkler riser room. Waste leaves the building through a 4-inch main on the east corner.

Hot water for restroom sinks, the community room sink and the mop sink is provided by electric instantaneous water heaters. These water heaters were installed in 1995 and are in poor condition. Domestic hot water for the break room is served by a 40-gallon electric water heater that was recently installed.

On the north side of the building, there is a condensate line from a mechanical unit penetrating the brick façade at a roof downspout. The water from the condensate line should be draining into the downspout boot but is instead running back along the pipe, which terminates abruptly after penetrating the exterior wall, and onto the brick façade. This deficiency could lead to water infiltration into the building in the short term if not corrected.



Fire Protection

The building includes a wet-pipe sprinkler system. The sprinkler riser, alarm bell and fire department connection are on the west corner of the building. All sprinkler piping and equipment appears to be in good condition.

Mechanical Observations

Items observed during the walkthrough are as noted below:

- The cooling tower, boiler and circulation pumps are nearing the end of their useful life with replacement likely necessary within the next five (5) years.
- Most of the water-source heat pumps are nearing the end of their useful life.
- The second floor server room was described as getting very hot during summer months.
- The central circulation desk area has airflow distribution issues. Sidewall supply grilles are located above lighting and structures that obstruct airflow. This area was also noted to



have comfort issues.

- The condensate draining from above-ceiling heat pumps HP-7 and HP-8 is routed outside and spilling to grade instead of tying in to the remaining condensate piping.
- Exhaust fan EF-2, which serves the restroom near the Children's section, is in very poor condition and needs to be replaced within the next couple years.
- Maintenance access for many of the water-source heat pumps is difficult because they are located above very high ceilings (10 feet and higher) in the main library space.
- The wall next to the mop sink has water damage.



5. Electrical

Electrical Service/System Description

The electrical system in the Blacksburg Library is fed from Virginia Tech Electric Service (VTES) with a 150 KVA pad-mounted transformer to an 800 Amp main distribution panel with distribution to (6) 225 Amp sub distribution panels at 120/208 Volts three-phase. The electrical distribution equipment was a Square-D Schneider Electric, I-Line series main panel, manufactured by Square D/Schneider Electric with Model No. NQOD distribution panels. The electrical equipment, including panelboards and over-current devices, appeared to be in good operating condition and are still serviceable. The equipment is vintage 1995; with an estimated 40-year useful life this equipment is roughly halfway through its useful life. Panelboards and circuits appeared to be well marked to identify present use and equipment connected to the system. Electrical disconnects located outside of the building that serve mechanical equipment appeared in good operating condition. A surge suppression device was observed on the main service, as manufactured by Advanced Protection Technology. The device was powered and appeared operational.

Lighting

2-foot by 4-foot recessed, deep cell parabolic light fixtures are used in the library book stacks and reading room areas and were in good operating condition. These fixtures generally have a two (2) lamp configuration and the egress lighting fixtures use on-board self-contained emergency batteries with test switches in the luminaires. Pendant fixtures are used in the clearstory or monitor area using Holophane prismatic glass refractors to assist vertical illumination and provide uplight to accent the structure and higher ceiling areas. The narrowness of the monitor does not provide efficient area for direct sunlight and daylight harvesting methods of lighting control. The pendant fixtures have remote ballasts with metal halide sources and are generally in good operating condition except for a couple of fixtures whose lamps require replacement. Restroom and corridor light fixtures were in good operating condition. It was observed during the walkthrough that one (1) emergency lighting fixture in the staff work room was not



working. Fluorescent strips for the storage and mezzanine level use T-8 lamps and were operational.

Lighting control is via contactor control separated for designated lighting zones. It was observed that the two (2) time clocks were disconnected and replaced with switch controls for manual control for the lighting system. Library staff uses the contactors to flash the lights prior to closing the library as a management signal to patrons of the library that the facility is about to close for the day.

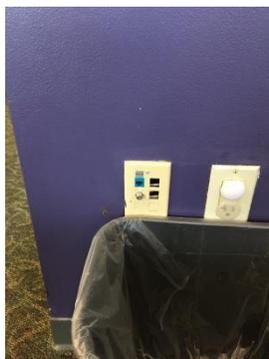
Illumination levels were observed as 50-60 FC levels in the reading room areas and book stacks, which is above the 30 FC recommended in the current Illuminating Engineering Society of North America (IESNA) requirements. Illumination appeared to be in good in the stacks, with good visibility on the lower book stack shelves.

The Community Room used two-lamp dimmable fluorescent fixtures and incandescent down lights with fluorescent ballast (manufactured by Lutron) and controls. This system was operational and sectioned to allow independent control of each room. The illumination levels observed for this space was 40 FC which appeared to be in line with recommended levels for the room's purposes.

The Electric water heater did not have a local disconnect as required for the NEC 422.31.

Receptacles

Receptacles and wiring devices showed rather high usage. Some devices have yellowed from age and data ports were missing RJ-45 data jacks in some locations. Estimated life on wiring devices light switches and receptacles is 30 years; thus, the devices should be replaced within the next seven (7) years for continued use of the branch circuits. A loose receptacle mounting bracket was observed and it should be repaired or replaced in the floor box near the children's area.



Safety receptacles were also installed in the Children's Area and these devices appeared with yellowed surfaces and discolored wall plates. Receptacles were spot checked and found to be properly grounded.

Fire Alarm System

The fire alarm system was an addressable Pyrotronics MxlQ system using addressable manual pull stations, HVAC duct detectors and supervision of the sprinkler system with water flow switches and valve tamper switches. Horns and strobes were used as notification alarm devices. The fire alarm system appeared to be in good condition and serviceable.

Security System

The security system, manufactured by Honeywell, is a perimeter zone type system with two keypad control for operation and reset. The reader did not observe the book security system during the walkthrough. The security system was served by a plug-in transformer in a receptacle. The library has a camera system composed of four (4) Internet protocol (IP) type color cameras with Twinax coaxial cable and Bayonet Neill-Concelman (BNC) power connection to operate the AC powered cameras. The system was operational.

Exterior Lighting

Exterior lighting poles finishes are starting to deteriorate. The fixtures appeared to be operational and functional

Information Technology (IT)

The IT system in the Blacksburg Library serves as the central server for the four (4) branch regional libraries. Interconnection is through fiber-optic cable (FOC) provided by Citizens. The system provides internet service, inventory locators service (ILS) and communications via voice-over-Internet protocol (VOIP) telephone service. The system has a managed switch, fiber patch panel, router, two (2) blade servers and a managed switch, to serve both fixed hard-wired data ports, and three (3) wireless access points to provide wireless services in the building.

B. Christiansburg Library

1. Civil/Site

The Christiansburg Library is located at 125 Sheltman Street. It is bounded by facilities housing the Christiansburg Rescue Squad and Fire Department, respectively, on the northwest and north sides; by Sheltman Street on the west and southwest sides, by a park

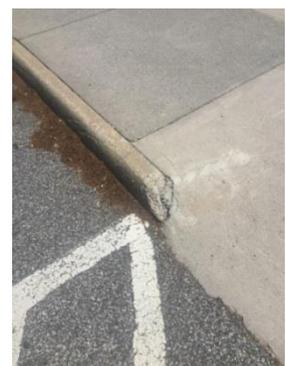


on the northeast side; by nearby structures on the east side; and by a hillside on the southeast and south sides. The library can be accessed from only one (1) entrance located along Sheltman Street; this limits the flow of trucks and larger vehicles into and out of the site and forces joint use of the entrance by trucks and personal occupancy vehicles of library patrons. The building is served by one (1) large parking lot located to the northwest, north and northeast of the building. There are 74 total parking spaces, including three (3) ADA and six (6) staff designated parking spaces. Sidewalks, located along the parking lot on the northern side of the building, provide access to the building entrance. A courtyard area is located on the south side of the building.

Per the library staff, the existing parking lot provides sufficient parking for most events. However, on occasion, there is a shortage of parking spaces.

The following observations were made on the site walkthrough conducted on Monday, 22 August 2016:

- Overall, the site is in fair condition
- Only one (1) storm drain was able to be located on the site; no outlet was located.
- Sidewalks are in fair to poor condition.
- Curbs between the parking lot and the sidewalk are in poor condition;
- The pavement in the parking lot is in fair condition;
- The dumpster pad is in fair condition.
- Drain at back door entrance. No outlet was located.
- Water enters building at the back door entrance during significant storm events.
- The southeast corner of the building has been washed out due to a roof drain issue. It appears that no foundation is present.
- Vegetative ground cover is in generally good condition.
- Patio area has not been maintained;
- Parking curbs are in generally good condition.
- Parking spaces / ramps are not ADA compliant.



Per the library staff, the existing parking lot provides sufficient parking for most events. However, on occasion, there is a shortage of parking spaces.

Use of the loading dock by large trucks is problematic, as maneuverability in the vicinity of the loading dock is constrained. Large trucks often have to back up the entire distance from the entrance off of Sheltman Street to the dock.

Landscaping is nicely arranged near the main entrance, providing good visual relief at the main entrance.

2. Architectural

The existing Christiansburg Library facility was built in 1986 and consists of 15,100 gross square feet (GSF) on one (1) level. The facility is attractive, well maintained and continues to provide vital services to the community; however, the facility lacks the space and essential program areas needed for the public and staff in a modern library. The following conditions assessment addresses the character, function and flow of public and staff areas of the library.

a. Library Site and Exterior Features

Street Presence and Exterior Character

The site is a few blocks from the downtown historic business district and the government center. The adjacent middle school was relocated, and the existing school building has limited use.

The library is built on a sloping site and it is surrounded by beautiful landscaping. Its proximity to the downtown park enhances the natural beauty and provides an attractive amenity in the walking trail and green space. The site has limited visibility from Sheltman Street and it has no visibility from the major public access road along Depot Street. Adequate directional signage guides visitors from the major roadway to the library site.

Landscaping and Outdoor Spaces

Future renovation or expansion of the library should consider enhancements to the outdoor spaces and landscaping. There is an attractive circular garden area in front of the library with a bench for seating. The space compliments the library entry and landscaping, but is not large



enough to accommodate any significant event or activity. Additional outdoor space should be developed for events, outdoor story time, other library programs, and casual reading.



A semi-circular paved area exists at the end of the library in an area of the site that is surrounded by a raised hill. This outdoor space creates a natural amphitheater environment, but the space could be enhanced with additional pavement and sidewalks for access, terrace surfaces or built-in benches along the hillside for more comfortable seating, and partial covering or landscaping for shade. The space has electrical power, but additional capabilities for sound systems and lighting could improve function of the space. The downtown park adjacent to the library offers another potential outdoor space for activities and events. Access

to the park, or a separate enclosed outdoor garden space adjacent to the children's area, could improve the program opportunities for the children's space.

Loading Dock



The building has a covered delivery entrance in the rear of the building. The entrance has the appearance of a loading dock; however, site constraints prevent trucks from backing up, or maneuvering directly to, the loading dock service for easy unloading from the rear of the truck. The floor of the dock is raised approximately 2-3 feet above the adjacent grade, but it is only accessible by steps. Construction of a sloped ramp from grade up to the floor level would make deliveries by dolly easier. Renovations or new construction should consider options for

improved maneuverability to the loading dock.

b. Exterior Building Components

Walls and Soffits



The exterior walls are brick veneer masonry construction. The exterior masonry is in good condition; however, it does need to be cleaned. In a few areas, rainwater from the down spouts and gutters is eroding the soil at the base of the walls. In one area, the soil is completely eroded below the brick veneer, and it appears that the brick was not constructed with direct bearing on the foundation. This condition could result in

inadequate support for the brick, and the condition should be investigated and corrected immediately.

The soffit and fascia between the masonry walls and roof are constructed of stained plywood. The stained plywood is in relatively good condition, but this type of construction material will require frequent maintenance.



Windows and Doors

The exterior windows are aluminum clad wood windows. The exterior aluminum cladding on the windows has been re-painted in the past, and the paint is beginning to fade and fail. The wood finish on the interior is not in good condition, and the seals on the insulated glass are beginning to allow moisture between the panes. Sealant joints around the perimeter of the windows are cracked and failing. The windows will need to be replaced in the next few years. Clerestory windows extend the length of the building at the peak of the sloped roof. These windows appear to be in the same condition as the windows below, and it is believed that they will need to be replaced along with the other exterior windows.

The aluminum entrance doors and storefront appear to be original to the building. They currently bind and do not close properly. Doors with power assist operators for handicapped accessibility often need to be adjusted to maintain smooth operation. It may be possible to adjust the doors to return them to smooth operation, but replacement of the doors should be part of any proposed renovation. Other exterior doors are hollow metal with hollow metal frames, and they need to be cleaned and repainted.



Roofing

Asphalt shingles were installed within the past few years. The shingles appear to be in good condition and the County's facilities maintenance staff believes they are performing well and are still under warranty. During very heavy rains, wind driven rain has caused occasional leaks. These types of leaks are typically associated with improper joints in flashing or failed sealant around windows. The shingles are a slate gray color; matching them in a new building addition may be possible but an exact match may be difficult.

Entry and Access

The building's entrance is connected to the parking lot by a sidewalk leading to the handicapped parking. Patrons have expressed concern that the entrance is too far from the handicapped parking spaces. The entrance is not directly adjacent to the parking

lot, but it is not further than many other similar sized libraries. The library's book return is located within a deep recessed outdoor space adjacent to the entrance. This deep and large recess creates a safety concern. Library staff has, from time to time, found homeless individuals sleeping in the area in the morning when they come to work. This area should be re-purposed as part of any library renovation or expansion. The space could be claimed as interior library space relatively easily.

The entry doors connect into a lobby space which provides access into the library, the meeting room, and restrooms. Doors are located between the lobby and the library space so that the meeting room can be used after normal operating hours while the interior library doors are locked. The exterior doors and interior library doors create the effect of a weather vestibule; however, there is no vestibule between the exterior doors and the meeting room doors. A true weather vestibule should be provided as part of any renovation project to improve energy efficiency, comfort, and to comply with the energy code.



The restrooms are accessed off the lobby through a relatively narrow corridor. The entry into the restrooms is not visible from the staff desk. This condition represents a potential safety and security concern.

c. Interior Public Areas

Open Space and Flow

The interior has an attractive, warm and welcoming appearance. The tall vaulted ceiling with exposed wood beams and clerestory windows improves the open and airy feel of the interior. The observation and visibility from the staff areas are good; however, the tall shelving limits views into the more remote areas. The interior of the library is well organized with open space and flow; however, there is some congestion around the circulation desk, media collection, computers, adult seating, and the genealogy collection. A renovated and expanded or new library with more space would allow for better zoning of active and quiet areas.



Lighting

Natural light is brought into the interior through large grouped windows in the Children's area and the Adult Reading area. The high clerestory window helps contribute to the interior light in the space. The tall stacks in the adult collection area block natural light and the space lacks exterior windows. Artificial light is achieved through the use of fluorescent strip lights and 2-foot by 4-foot fluorescent light fixtures. The artificial lighting should be changed to modern energy efficient LED fixtures as part of any

renovation. The use of more suspended direct/indirect lighting which bounces light off the ceiling would improve lighting conditions.

Finishes and Materials

Interior finishes are functional and relatively well maintained, but they are somewhat dated and give the library an older appearance. The natural wood finish of the vaulted ceiling space gives a warm and natural feeling. Updated interior finishes for carpet, paint and tile would give the library a more modern appearance.

Furniture

The library has a variety of furniture of different vintages. The collection of furniture is serviceable and provides the basic functions needed, but it also has a dated appearance and does not contribute to a cohesive, modern, and attractive interior design.

Shelving in the adult collection is typically 90 inches tall. The top shelf of this shelving is not used because it is too tall for easy or reasonable access. Lower shelving at 66 inches or 72 inches maximum would improve visibility, the sense of open space and lighting quality in the library.



The height and layout of shelving in the children's area seems to be well organized and appropriate in size and use. Additional seating and tables in the children's area would be beneficial.

The library area overall needs additional reading tables, collaborative work areas, and study tables. There are currently three (3) four-person tables in the adult area and one (1) two-person genealogy table. Staff and public comments have suggested that additional table space is needed, especially for the genealogy collection.

Study Rooms

The Christiansburg Library does not have any group study rooms. Study rooms and small meetings support activities of tutoring, group study, collaboration among project teams and provide much need meeting space for small committees and community groups. Modern libraries of similar size in comparable communities typically have multiple group study rooms of varying sizes. Group study rooms should be incorporated into any proposed renovation or new construction.

Adult Spaces

Adult areas in the library are somewhat crowded and spaces with varying functions are congested. Seating, reading areas, computers areas, media collections, the circulation desk and entry overlap one another and the spaces and functions create distractions.



More room and defined zones would create opportunities for more active or focused activities. A separate quiet reading room would allow patrons who prefer silence to read or study in a quiet environment. In an apparent effort to secure the media collection, the DVD cases have been roped off and placed in a compressed area adjacent to the circulation desk. This arrangement creates a somewhat awkward and uninviting appearance to the patron. A more inviting layout and display of this material should be considered in a new design,

and security device options should be evaluated if theft is an issue.

Children's Area

The Children's Area appears to have adequate space for the collections and functions currently served by the library; however, the children's area lacks some of the character defining features commonly found in a modern library. The atmosphere and design features could be enhanced to include elements such as a uniquely designed story time and activity space within the children's area, specialty seating or window seats and more significant, interactive furniture. These features would give the area a more defined character with which children could identify. The main community meeting room is adjacent to the children's area and is accessible through a side door into the meeting room. Competing activities in the meeting room may interfere with scheduling adult and children's activities. A small separate program room would allow for greater flexibility in the use of these spaces.



The Children's Area is open and in close proximity to adult areas. Acoustic separation between the areas may be a problem during children's activities. Computers in the children's area are limited to two (2) AWE computers. More dedicated public computers are needed in the Children's Area on furniture that is sized appropriately for the age of the users.

Teens Area

The Teens Area is very limited in size and essentially consists of the space between two (2) book stacks. The Teen Area lacks sufficient seating, activity spaces or atmosphere to meet the needs of teens. In a new or renovated library, a designated teen area should be provided using materials, finishes and furnishings that are appropriate to teens. This space should include appropriate teen seating, specialty seating such as a booth or window seat, dedicated computers, gaming and activity area, good observation and acoustic separation.

Technology

Technology in the library is very limited. There are 14 adult computers, two (2) OPAC computers, two (2) children's AWE computers, a microfilm reader, a self-check computer and one (1) express computer. Technology in a modern library should include separate adult, teen and children's computers, more self-check computers, digital displays, smart boards and other multi-media technology.

Meeting and Program Space

There is one (1) main meeting/program room in the library. It is used for all adult, children and community activities. Conflicts occur in scheduling activities for these various groups. More than one (1) meeting/program of varying sizes would provide more flexibility in accommodating program activities. A more direct connection to the library would allow for flexible use of the meeting room for reading space, a computer lab or similar activities when it is not used for other programs. Expanded technology in the meeting room, including sound and video integration, would bring the meeting room up to modern standards.

d. Staff Areas

Branch Library

Circulation Desk

The circulation desk is located in line with the main entrance and directly in front of the circulation work room. It is centrally located with reasonable observation of the library spaces. Three (3) staff check-out stations are provided on the desk, with one (1) of them at a lower handicapped accessible level. A rolling display shelving unit has been used to extend the length of the circulation desk to provide more space for the lower check-out station. The desk appears to have adequate storage for staff materials below the desk; however, there is inadequate storage and organization of materials along the back wall behind the desk. A large laser printer has been placed on a rolling printing AV equipment cart. Folding patio chairs are stored in bags along the back wall. A variety of book carts, shelving units, display monitor and a small marker board accommodate functions established by the staff over a period of time, but they do not contribute to the organized and integrated design appearance that should be expected in a planned library renovation or expansion. The connection to the circulation work room provides efficient access for staff, but greater visibility from the staff work room may be desirable. The design of a future circulation desk should provide adequate shelving and work areas that accommodate and integrate printers, office equipment, book carts and storage needs. Additional self-check stations would improve efficiency for staff and patrons, and perhaps would result in less space needed for the circulation desk. The self-check area should be reconfigured in a renovation and expansion so that it is on a more direct route to the library entry/exit, and more counter space should be provided for convenience in handling materials.

The public copy area is located adjacent to the children's area and the space allocated for that function appears to be inadequate. A work counter adjacent to the copier would

make it more convenient for patrons to assemble materials. Recycling containers should be placed near the copier to reduce trash waste produced by the library. Copier function should be separated from the children's area, perhaps in a new business center area.

Circulation Wookroom



The circulation workroom currently has two (2) staff workstations and a processing station. A small enclosed Branch Manager's office is adjacent to the workroom. Adjacent to the workroom is a copy and print area which is shared with the Regional Library staff. The workroom is very crowded as a result of limited space and freestanding shelving for storage extending into the space. The arrangement of the storage shelving, a supervisor's cubicle and a round work table leaves little spaces for book carts and processing operations. Additional storage space, staff work stations and processing space is needed for the work room.

Branch Manager's Office

The Branch Manager's office is accessible and visibility from the circulation work room. The office size is consistent with typical libraries of this size; however, the lack of a separate staff conference room means that the manager has to conduct meetings in her office. Space is limited within the office for normal office functions and meeting space. Additional shelving or a separate storage closet would be helpful to the Branch Manager.



Storage

Overall, the library lacks sufficient storage space in all areas. The staff has used all available storage space and they have incorporated additional storage shelving within the work areas. Dedicated storage space should be provided for the circulation work room, general bulk storage, the children's librarian, the Regional Library and the Friends of the Library. General office supply storage could be accommodated in upper and lower cabinets in a common copy/print work room.

Friends of the Library

The Friends of the Library area currently occupies an overflowing cubicle in the Regional Library space. The Friends of the Library function typically more closely relates to the branch library operations. A dedicated work room and storage space should be provided for the Friends of the Library. The required size for this work room is often never adequate because the users of these spaces will usually fill all space that is available to them. The room is normally large enough to accommodate a 4-6 person work table in the center, shelving on the perimeter walls and a small computer

processing station and work counter. In larger libraries with a significant used book retail presence, the work room and dedicated storage area could be significantly larger. The display of the book sale materials should be further developed in the public areas to follow more of a retail model to promote the sale and turnover of these materials.



Regional Library

Offices

The Regional Library Director has a separate office off of a separate administrative and reception area. The office is large enough for a desk area, storage shelving and a small meeting table. Adjacent to the office is a small reception space with an open cubicle for an administrative assistant. The reception area has limited waiting space and the entry into the space is less welcoming than similar new library administrative offices. A more inviting entrance would be more welcoming to Board members, Foundation supporters and potential donors. Administrative offices should have access to a separate staff conference room/board room, a slightly larger reception space and storage.



Workroom

An open copy/print workroom is shared with the branch library staff adjacent to the circulation work room. The workroom is in a relatively large open floor space, but the center of the space is unused. A separate copy/print workroom for the regional library staff should accommodate typical office equipment including a large copier, scanner, fax machine and postage machine, as well as a large work table in the center with upper and lower cabinets around the perimeter for storage and additional work surfaces.



Breakroom

The breakroom is also shared with the branch library staff. The room is large enough for a small round table which can only accommodate approximately three (3) staff members at one time. Standard breakroom equipment includes a refrigerator, a microwave on the counter, a two-compartment sink and upper and lower





kitchen cabinets. A larger breakroom that could accommodate more staff would be appropriate to a regional library of this size.

IT Offices

The IT staff for the Regional Library System is currently located in the Blacksburg Library. Consolidation of the Regional Library staff may be more efficient and should be considered in any renovation of new construction concepts.

Staff Work Areas

The remaining Regional Library staff includes Technical Services, Youth Services, Public Relations and Outreach and the Business Manager. The Technical Services Manager is in a separate office adjacent to open cubicles for the Technical Services staff. The open floor space in front of the cubicles is normally filled with book carts holding books under processing into the system. The Technical Services area lacks the normal shelving, work counters and space for book carts typically associated with these departments. A separate Technical Services workroom would help to avoid these activities from overlapping and interfering with other work spaces.



The Youth Services Manager is located in a cubicle adjacent to the technical services area, and also occupies another cubicle for storage and assembly purposes. The remote location away from the Children's Collections Area and the Program Room does not promote efficient service to the Children's Area. The amount of space allocated to the Youth Services Department does not appear to be adequate. A dedicated storage room, office area and work room is recommended for Youth Services, and it should be located as close to the Children's Area and Program Room as possible.



The Public Relations/Outreach function and the Business Manager are in open cubicles adjacent to Technical Services. The space allocated to these staff areas appears to be adequate; however, there are acoustic concerns between these types of function. The Public Relations/Outreach Manager and business manager would benefit from private offices to avoid noise distractions from adjacent work areas and to keep confidential conversations private.



As mentioned previously, the Friends of the

Library space is located in the Regional Library open work area. This location creates significant noise issues when volunteers are working together in the Friends area. The Friends of the Library should be relocated to a separate work space.

The Shipping and Receiving area is also located within the open staff work area. Shelving and supplies for this function create congestion and clutter along the main circulation path. The inter-library tote bins are also stacked in this area for pickup by the courier. When major deliveries occur boxes and materials from shipments interfere with activities and circulation through the space. Although two (2) doors are provided creating a small vestibule between the exterior and the interior at the delivery entrance, the vestibule is too small for unpacking of materials. When the delivery entrance is used, opening of the doors impacts the heating and cooling of the space. A separate Shipping and Receiving Room should be located adjacent to the delivery entrance and the room should be sized to accommodate the typical volume of boxes and materials associated with a delivery. A wind curtain mechanical device should be located above the delivery entrance to minimize air infiltration when the doors are opened.

3. Structural

The facility is a masonry-framed single-story building. The structural roof primarily consists of wood trusses supported on load-bearing concrete masonry unit (CMU) block walls, except in the main front area where the roof is 3-inch by 6-inch tongue-and-groove deck boards supported by glue-laminated timber beams and girders bearing on steel tube columns. The roofing consists of shingles attached to deck boards and what is believed to be plywood sheathing over the wood trusses; however, the plywood sheathing is not visible. The exterior walls are brick veneer with CMU back-up. The load-bearing walls and steel columns are supported on shallow concrete foundations.

Most of the structural system could not be inspected since it is covered by interior finishes with the exception of the wood deck boards and glue-laminated beams and girders. There is a small opening in the mechanical room where part of a wood roof truss is visible. What little of the wood roof truss that was visible appears to be in good condition; however, for the most part none of the roof truss framing was visible.

The roof was re-shingled approximately two to three years ago; however, library staff indicated that the roof was still leaking at several locations. Water is most likely penetrating the joints in the flashing at the walls between the high and low roofs. Water is penetrating the joints in the flashing between the low roof and the wall of the clearstory. The water is running between the deck boards and down the glue-laminated timber girder. Varnish wood framing has deteriorated at the water infiltration and there appears to be visual evidence of mold growth. The wood deck board fasteners may be deteriorating and, if so, the wood framing will eventually deteriorate. The extent of deterioration of the wood framing could not be determined as there was no vertical access to the roof framing available at the time of the walkthrough.

At the main entrance, there is water staining on the wall at a joint in the wall cap flashing. This deficiency could lead to water infiltration into the building and mold growth in the short term.

There is spalling of the exterior concrete slabs-on-grade at the front entrance and at the rear loading dock stairs and truck ramp. This deficiency should be corrected in the long term as it will continue to worsen and may lead to tripping hazards.

The roof gutter downspouts drain to splash blocks or have been connected to corrugated plastic pipe. The splash blocks and pipes are too short and one pipe is curved upward toward the sky. Rain water has eroded the soil adjacent to the building which is directing water back toward the building walls. At one location, water has undercut the soil beneath a building wing wall. This deficiency should be corrected in the near term as it will continue to worsen and will cause the subgrade at the foundations to weaken and eventually fail and will continue to undercut the wing wall foundation, causing the wing wall to crack or fail.

At the rear recessed stairway and door entrance, a roof downspout discharges onto the recessed slab-on-grade and flows to an area drain. During heavy rain storms, water backs up and infiltrates the building at the door threshold. This deficiency should be corrected in the near term as it is leading to water infiltration and possibly causing mold growth in the building.

There is no sealant at the joints between the loading dock slab-on-grade and the exterior building walls. The edge protection angle of the loading dock is rusted. There are cracks in the loading dock stairs and landing. In the long term, rain water could infiltrate the joints and slab cracks and may cause the subgrade beneath the slab or wall foundations to weaken and fail. The rust from the edge angle should be removed and the angle cleaned and coated with a cold galvanizing in the long term as it will continue to rust and will eventually spall the concrete at the loading dock.

On the north side of the building, the roof gutter is damaged causing rainwater to overflow and erode the soil at the wall below. There are other spots along the north wall where the soil has been eroded and rainwater is being directed back toward the building. These deficiencies should be corrected in the short term as it will continue to become worse and may cause the subgrade at the foundations to weaken and eventually fail.

4. Mechanical

HVAC

The building is conditioned by four (4) split-system heat pumps, as follows:

Equipment Name	Capacity (tons)	Area Served
AHU-1/HP-1	7.5	Community Room
AHU-2/HP-2	15	Adult Reading Library space
AHU-3/HP-3	15	Juvenile Reading and General Circulation
AHU-4/HP-4	7.5	Administrative Area

Table 1. Christiansburg Library HVAC Units

The indoor air handling units are original construction from 1985 and are in poor condition. HP-1, HP-2 and HP-3 were replaced in 2001 and HP-4 was replaced in 2008. AHU-2 and AHU-3 are located in a mechanical room in the Administrative Area. AHU-1 is located in a closet at the front main entry. AHU-4 is located above the ceiling of a storage room in the Admin area. Each of the four air handlers are difficult to access for maintenance. AHU-3 includes a duct-mounted steam humidifier located above the ceiling Library Branch Head Office.

The building also includes perimeter baseboard heaters along exterior wall of the Library, Community Room and offices.

Each air handler is controlled by a wall-mounted thermostat. The building doesn't include an Energy Management System for HVAC.

Plumbing

The piping for the plumbing system was installed during original construction in 1985. However, all fixtures appear to have been upgraded since that time. Urinals and water closets are commercial, flush valve style with manual controls. Restroom lavatories also have manual controls. All plumbing fixtures were in good condition.

The building is served by a 2-inch domestic cold water service with a backflow preventer above the ceiling in the closet of the Community Room. The incoming service and backflow preventer are very difficult to access for maintenance and inspection. Waste leaves the building through a 4-inch main on the Northeast corner.

Domestic hot water is served by two electric water heaters: a 50-gallon, 4.5-KW (WH-1) in the Mechanical Room and a 12-gallon, 1.5-KW (WH-2) in the Community Room closet. Both water heaters were installed recently.

Fire Protection

The building does not include a sprinkler system.

Mechanical Observations

Items observed during the walkthrough are as noted below:

- AHU-1, -2, -3 and -4 are nearing the end of their useful lives with replacement likely to become necessary within the next 2-3 years. New air handlers would require the replacement of the heat pumps and refrigerant piping as well conversion to R-410A refrigerant systems, which do not result in ozone depletion. The existing heat pumps use R-22 refrigerant which will be phased out of production by the United States' Environmental Protection Agency (EPA) by 2020.
- Maintenance access for AHU-1 is quite difficult. The existing location yields very limited access to the coil, filter, and fan.
- Filters for AHU-2 must be changed from outside the mechanical room through an added door.
- Maintenance and inspection access for the backflow preventer for the domestic water service and WH-2 is very difficult.
- Ceiling tiles have water damage near WH-2 hot water piping.
- Ceiling tiles below the drain pan of AHU-4 have water damage.



5. Electrical

Electrical Service/System Description

The electrical system in the Christiansburg Library is fed from American Electric Power (AEP), with a pole-mounted transformer bank to an 800 Amp main distribution panel with distribution to sub distribution panels at 120/208 Volts three-phase – two (2) at 225 Amps, one (1) at 400 Amps and one (1) at 100 Amps. The electrical distribution equipment is manufactured by General Electric (GE), CCB series main panel, with GE distribution panels. The electrical equipment, including panelboards and over-current devices, appear to be in good operating condition and are still serviceable. The equipment is vintage 1985 with 31 years of service on an estimated useful life of 40 years, or 9 remaining years in the projected life cycle. Panelboards and circuits appeared to be labeled to identify present use and equipment connected to the system. Electrical disconnects located outside serving mechanical equipment appear to be in good operating condition. A surge suppression device was not observed on the main service.

Lighting

2-foot by 4-foot recessed, acrylic prismatic lensed light fixtures are used in the library book stacks. These fixtures have older T-12 Lamps and non-energy efficient ballasts. Pendant tubular shape suspended fixtures are manufactured by Peerless with T-8 lamps in the reading areas and are in good operating condition. These fixtures generally have a two-lamp configuration. Pendant fixtures are used in the clearstory area using Peerless fixtures with louvered down light components and upright reflectors to assist with vertical illumination and to provide upright to accent the structure and higher ceiling areas. Restroom, office, work room and corridor light fixtures are in good operating condition but have the older T-12 lamps and acrylic lenses. It was noticed

that one emergency and exit lighting fixture in the Community Room space. Fluorescent strips were used for the storage spaces and were operational.

Lighting control is via switched breakers to control designated lighting circuits. Contactors to switch interior areas or to switch illumination levels of lamps (for dual illumination levels with two-lamp arrangements) are suitable for the large stack areas. Occupancy or vacancy sensors could be applied for offices and small areas to meet current energy codes.

Illumination levels were observed as 40-45 FC levels in the reading room areas and 23-27 FC in the book stacks, which is near the 30 FC recommended in current IESNA requirements. Illumination appeared suitable in the stacks, with good visibility on the lower book stack shelves.

The Community Room uses two-lamp fluorescent fixtures. Incandescent down lights are used above the circulation desk; this can be a good application for LED light sources. The Community Room would also be a good application for retrofitting with LED fixtures and new preset dimmable controls. The illumination level observed for this space was 40-50 FC which is in line with recommended levels for the meeting room tasks/usage.

Receptacles

Receptacles and wiring devices were mostly located in systems furniture for the work spaces. Estimated life on wiring devices light switches and receptacles is 30 years. Accordingly, the permanent building devices should be replaced within the next two (2) years for continued use of the branch circuits. It was observed that the outdoor receptacle on the rear patio was damaged and the cover of the enclosure was broken.

Fire Alarm System

The fire alarm system was an older Ademco Honeywell Fire Control System Inc. 8 zone, main panel with, ADA horns and strobes, manual pull stations and HVAC duct detectors. The fire alarm system was in trouble condition at the time of the walkthrough.

Security System

The security system, manufactured by Litton, is a perimeter zone-type system with keypad control. A book security system was observed during the walkthrough. The system is presumed to be operational. A new six- (6) camera system, manufactured by Viligon, with mini dome IP cameras was recently installed with software and monitor and was operational and in good condition.

Exterior Lighting

Exterior lighting poles finishes did not show signs of deterioration.



Information Technology (IT)

The information technology system at the Blacksburg Library serves as the central server for the four (4) branch regional libraries. The interconnection is thru fiber-optic cable provided by Citizens. The Christiansburg local system provides internet service, ILS services and communications of VOIP telephone service. The system has a managed switch, fiber patch panel, router, two (2) blade servers and a UPS to serve the fixed hard-wired data ports.

V. ESTABLISHING NEEDS

A. Mission

The Montgomery-Floyd Regional Library system strives to provide library services that allow “One Stop – Unlimited Possibilities”. The administration and staff of the library system continue to improve resources for the community and they endeavor to fulfill their mission statement:

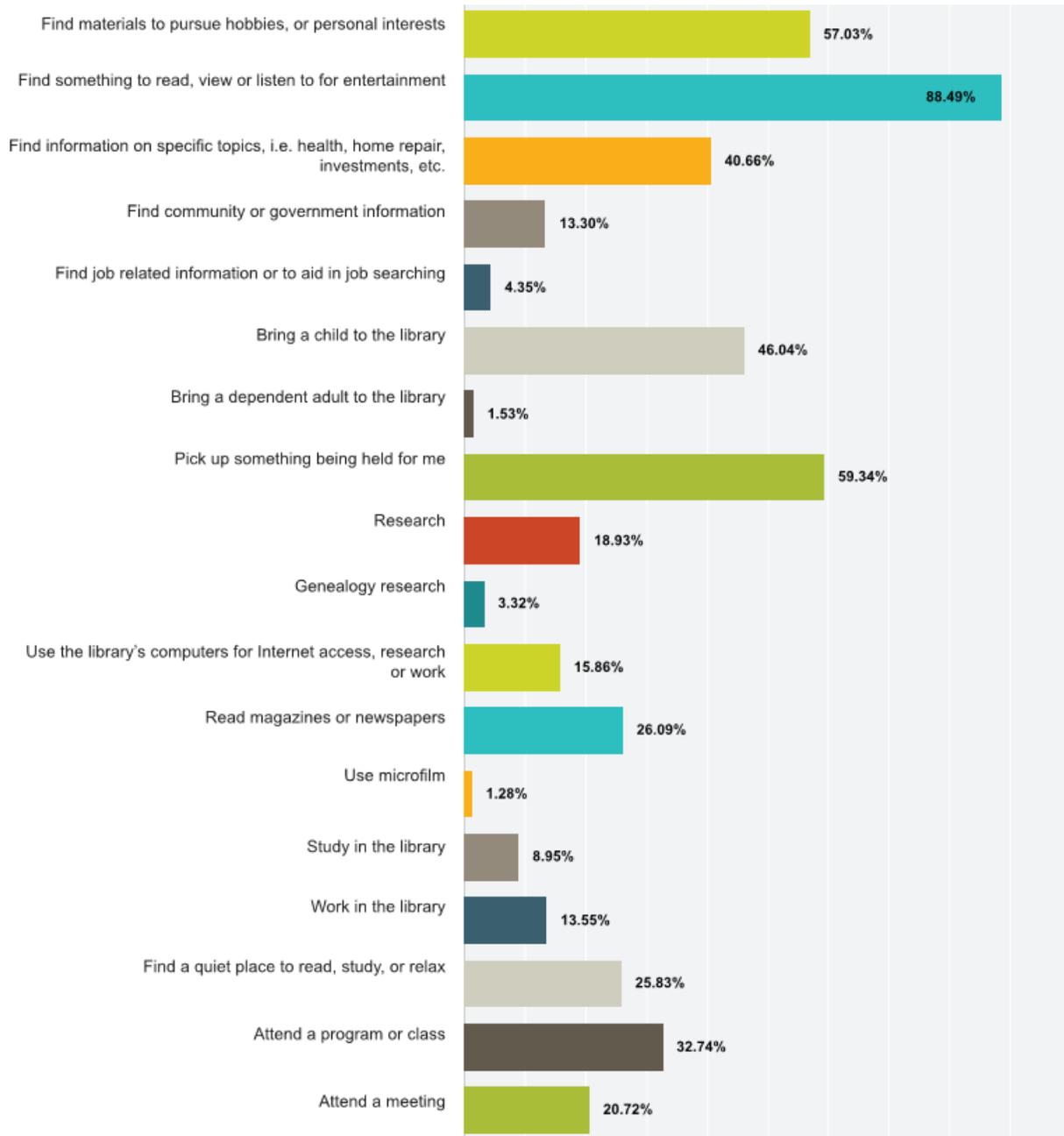
“To strengthen our community, the Montgomery-Floyd Regional Library provides individuals with access to information, experiences, and ideas.”

In order to achieve this mission and maintain the relevance of library services in the Christiansburg and Blacksburg libraries, the facilities, space allocation, collections, programs, and services need to be re-evaluated and updated. The libraries will need to evolve to meet the current needs of the respective communities as well as the evolving needs of our society in the 21st century. Libraries are in an exponential state of change and need to be designed for flexibility and adaptability. The Blacksburg and Christiansburg communities have strongly stated their demand for physical copies of literature; however, this demand may change in future years. Although the future need for extensive physical copies of collections is unknown, the need for space to share culture, literature, education, entertainment and social interaction is certain. People will continue to be curious, strive to learn, desire to enjoy culture and entertainment and crave social interaction with people of common interests. The library will be a key place to satisfy these needs of the communities.

B. Community Input

One of the main goals of a public library is to provide access to information, entertainment, literature, culture and programs that are relevant to a community. In order to understand and define the library services that are relevant to the Blacksburg and Christiansburg communities, two (2) public input meetings were held in each library and a questionnaire was administered on-line. The public input meetings received enthusiastic results from local residents and avid library users; however, attendance was limited and responses may not represent a full cross section of the two respective communities. The on-line questionnaire received 394 responses which provide good insight into the needs of the respective communities. The questionnaire was also available in hard copy form in each library, but few written responses were received and the responses may not reflect the needs of those in the two communities without access to computers.

One of the key questions on the survey asked, “*For what purpose(s) do you use the library? (Choose all that apply.)*” The answers to that question are in the graphs below.



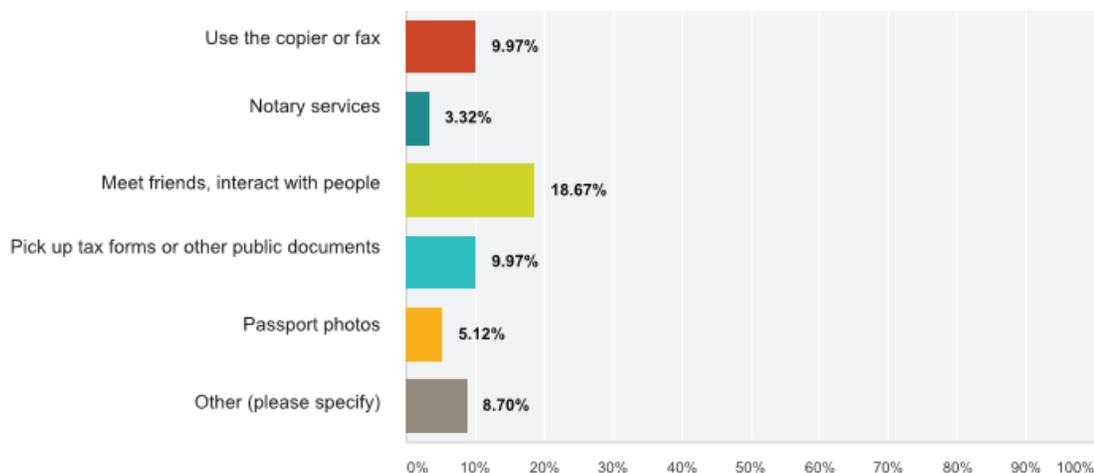


Figure 4. Responses to Question 13 of Public Survey

A complete set of survey questions and answers can be found in the Appendix.

C. Comparison to Design Standards and Similar Facilities

In order to further define and verify the anticipated program needs, the requirements were compared to library design standards and similar recently completed library projects. This comparison helped to inform decisions for the seating numbers, meeting space requirements, and size and types of program spaces. The following tables summarize the standards used in the comparisons.

Library of Virginia – Planning for Library Excellence: Standards for Virginia Public Libraries						
Service Population	29,629			38,384		
Branch	Christiansburg			Blacksburg		
Category	A	AA	AAA	A	AA	AAA
Collections	59,258	103,702	133,331	76,768	134,344	172,728
Gross Square Feet	17,777	23,703	29,629	23,030	30,707	38,384
Computers	10	15	30	13	19	38
Hours	40	68	76	40	68	76
Library Card Holders	7,407	11,852	17,777	9,596	15,354	23,030

Table 2. Library of Virginia Planning Standards – Separate Blacksburg and Christiansburg Libraries

Illinois Public Library Association – Seating Calculations					
Library (population)	Baseline		per 1000		Total Seats
Christiansburg (25,000 to 49,999)	105	+	2.5	for every 1,000 over 25,000	117
Blacksburg (25,000 to 49,999)	105	+	2.5	for every 1,000 over 25,000	138

Wisconsin Department of Public Instruction – Public Library Space Needs: A Planning Outline – Seating Calculations					
Library	Population		per 1000		Total Seats
Christiansburg	29,629		4.5		133
Blacksburg	38,384		4.5		173

Table 3. Nationally Recognized Library Seating Standards – Separate Blacksburg and Christiansburg Libraries

For the possibility of a combined, single Montgomery County Library the following tables would be relevant:

Library of Virginia – Planning for Library Excellence: Standards for Virginia Public Libraries			
Service Population	68,013		
Branch	Combined		
Category	A	AA	AAA
Collections	136,026	238,046	306,059
Gross Square Feet	40,808	54,410	68,013
Computers	23	34	68
Hours	40	68	76
Library Card Holders	17,003	27,205	40,808

Table 4. Library of Virginia Planning Standards – Combined Blacksburg and Christiansburg Library

Illinois Public Library Association					
	Baseline		per 1000		Total Seats
Combined Library (50,000 to 74,999)	167	+	1.5	for every 1,000 over 50,000	194

Wisconsin Department of Public Instruction - Public Library Space Needs: A Planning Outline					
	Population		per 1000		Total Seats
Combined Library	68,013		2.5	171	171

Table 5. Nationally Recognized Seating Standards – Combined Blacksburg and Christiansburg Library

Category	MFRL System	Christiansburg Existing	Christiansburg Proposed	Blacksburg Existing	Blacksburg Proposed	South County Roanoke County Library System	England Run Central Rappahannock Library System	Northside Branch Jefferson-Madison Library System
Location	Montgomery County	Christiansburg	Christiansburg	Blacksburg	Blacksburg	Roanoke County	Stafford Cnty. Fredericksburg	Albemarle Cnty. Charlottesville
County Population	95,352	NA	NA	NA	NA	92,353	134,251	102,116
Town Population	NA	21,805	NA	43,985	NA	NA	24,286	44,349
County Median Income	\$43,478	NA	NA	NA	NA	\$59,446	\$93,065	\$64,847
Town Median Income	NA	\$50,498	NA	\$31,075	NA	NA	\$43,558	\$47,218
Total System Revenue	\$2,579,504	NA	NA	NA	NA	\$4,054,508	\$13,689,768	\$6,770,188
Year Built	varies	1986	NA	1988/1996	NA	2011	2010	2015
Hours	varies	3,168	?	3,168	?	3,380	3,614	2,652
Visits	413,595	117,095	TBD	175,837	TBD	342,568	228,474	230,448
Users	50,521	13,733	TBD	17,791	TBD		19,238	27,500
Total Circulation	721,682	193,743		280,900		662,219	627,196	468,431
MLIS Librarian Staff	NA	1	?	2	?	10	6	5
Other Staff	NA	10	?	16	?	33	39	14
Library Size - GSF	NA	15,100	31,954	16,000	30,000	53,892	30,000	30,000
Items in Collections	NA	67,591	71,596	75,955	79,232	137,287	77,728	92,014
SF Adult	NA	5,002	8,289	6,394	7,930	15,043	9,608	8,050

Services								
SF Youth Services	NA	1,996	3,700	2,406	4,578	4,220	5,164	3,100
SF YA Services	NA	400	1,203	514	1,111	1,431	1,450	1,442
SF Community room	NA	968	1,400	1,564	1,750	1,813	2,158	1,566
SF Children's Program	NA	NA	750	220	750	567	NA	658
Other Program Spaces	NA	NA	600	NA	750	3,929	270	1,100
SF Quiet Reading Room	NA	NA	400	NA	600	419	NA	766
4- to 6-person Study Rooms	NA	NA	3	NA	3	0	6	3
2-person Study Rooms	NA	NA	2	2	2	2	NA	3
Adult Computers	NA	14	16	17	18	62	34	28
YA Computers	NA	0	6	0	6	9	7	6
Children's Computers	NA	2	9	2	9	12	13	6
Adult Seating	NA	43	72	47	86	95	82	71
YA Seating	NA	7	17	12	21	21	27	34
Children's Seating	NA	12	34	20	38	52	37	37
SF Café	NA	NA	500	NA	600	1,704	652	1,528
SF Staff Areas	NA	1,710	3,553	2,302	3,840	8,110	5,168	5,196
SF Regional Staff Areas	NA	2,118	3,480	566	0	5,339	NA	NA
Separate Loading Dock	NA	Yes	Yes	No	Yes	Yes	No	YES

Table 6. Comparison to Recently Constructed Virginia Libraries of Similar Size

VI. SATISFYING NEEDS

The projected space needs for the Christiansburg and Blacksburg libraries were established through analysis of community input, staff interviews, collections, demographics, analysis of existing conditions and a review of modern library design standards. The analysis focuses on providing the space required to accommodate current space requirements and projected growth for collections, program space, seating areas and staff space. The design of any future facility should be flexible and adaptable to accommodate changes in library services and functions as time passes. The following tables summarize the space needs for collections, seating, and overall space requirements. The full detailed program spread sheets are provided in the appendix to this document.

A. Collections Analysis

The existing collections of each respective branch were analyzed and reviewed with each library's staff. The analysis and staff input determined which collections were growing or reducing in response to demand from the community and evolving trends in physical and digital circulation. The following tables provide a summary of the existing and proposed collections in each area; they indicate the anticipated percentage of materials out in circulation. The percentage circulation rates are based on historical data from the branches and the projected rates provided by staff for the new branches. If the opening day collections are developed to respond to the communities demand, the circulation rates for each branch should increase substantially.

Blacksburg Library Collections Summary						
Item	Current Collection Items	Percent Growth/Reduction	Proposed New Collection	Typical Percentage Out In Circulation	Volume per Foot on Shelf	Percentage of Total Collection
Adult Print						
AS-Fiction	15,523	0%	15,523	10%	8	
AS-NF & Bio	17,515	0%	17,515	10%	10	
AS-Large Type	1,453	15%	1,670	15%	10	
AS-GN	234	0%	234	10%	15	
AS-New	1,215	15%	1,397	45%	8	
Reference	316	0%	316	0%	8	
Totals	36,256		36,655			46.26%
Young Adult						
YA-Fiction	809	15%	930	15%	11	
YA-Graphic Novels	468	10%	515	15%	17	
YA NF & Bio	353	10%	388	0%	10	
Totals	1,630		1,833			2.31%
Youth Print						
J-Board Books (Shelves)	550	15%	632	55%	24	
J-Easy (Shelves)	7,881	15%	9,063	25%	25	

J-I Can Read (Shelves)	944	30%	1,227	50%	19	
J-Fiction	6,157	0%	6,157	15%	16	
JNF & Bio	9,509	0%	9,509	10%	20	
J-Graphic Novel	241	10%	265	10%	25	
Totals	25,282		26,853			33.89%
Adult Media						
AS-Audio Books	2,414	10%	2,655	25%	8	
AS-DVD	4,354	10%	4,789	25%	14	
AS-Music CDs	1,068	0%	1,068	10%	26	
Totals	7,836		8,512			10.74%
Young Adult Media						
YA-Audio Books-CDs	190	10%	209	10%	9	
YA-Video Games	181	15%	208	15%	26	
Totals	371		417			0.53%
Youth Media						
J-Audio Books-CDs	431	15%	495	30%	11	
J-Music CDs	261	0%	261	5%	26	
J-DVDs	1,736	10%	1,909	20%	19	
Totals	2,428		2,665			3.36%
Serials						
Back Periodicals	1,550	-15%	1,318	20%	12	
AS -Current Periodicals	117	-15%	99	0%	12	
YA-Current Periodicals	6	-15%	5	0%	12	
J-Periodicals	14	-20%	11	5%	12	
Back Newspapers	98	0%	98	0%	14	
Current Newspapers	7	0%	7	0%	7	
Totals	1,792		1,538			1.94%
New Materials						
New Books-Face Out	48	10%	53	45%	2	
New Books-Spine Out	672	5%	706	45%	8	
Totals	720		759			0.96%
TOTAL COLLECTION	76,315		79,232			100.0%

Table 7. Blacksburg Library Collections Summary

Christiansburg Library Collections Summary						
Item	Current Collection Items	Percent Growth/Reduction	Proposed New Collection	Typical Percentage Out In Circulation	Volume per Foot on Shelf	Percentage of Total Collection
Adult Print						
AS-Fiction	17,658	0%	17,658	5%	8	
AS-NF & Bio	16,543	0%	16,543	5%	10	
AS-Large Type	3,561	15%	4,100	15%	10	
AS-GN	171	5%	180	10%	15	
AS-New	765	10%	842	50%	8	
Reference/Genealogy	963	4%	1,000	0%	8	
Totals	39,661		40,323			56.32%
Young Adult						
YA-Fiction	1,989	5%	2,090	11%	11	
YA-Graphic Novels	372	10%	400	10%	17	
YA-New	20	25%	25	25%	4	
Totals	2,381		2,515			3.51%
Youth Print						
J-Board Books (Shelves)	501	0%	501	45%	20	
J-Easy (Shelves)	5,082	15%	5,845	20%	25	
J-I Can Read (Shelves)	896	10%	986	30%	29	
J-Fiction	4,136	5%	4,342	15%	16	
JNF & Bio	5,910	0%	5,910	10%	20	
J-Graphic Novel	286	10%	315	10%	25	
J-Paperback/series	381	10%	420	10%	25	
Totals	17,192		18,319			25.59%
Adult Media						
AS-Audio Books	1,399	3%	1,441	25%	12	
AS-DVD	3,607	0%	3,607	52%	14	
AS-Music CDs	819	0%	819	5%	26	
Totals	5,825		5,867			8.19%
Young Adult Media						
YA-Audio Books-CDs	68	5%	72	10%	8	
YA-Video Games	126	10%	137	25%	19	
Totals	194		209			0.29%
Youth Media						
J-Audio Books-CDs	314	5%	330	20%	11	
J-Music CDs	233	0%	233	10%	26	
J-DVDs	1,317	5%	1,383	20%	19	
Totals	1,864		1,946			2.72%

Serials						
Back Periodicals	0			%	0	
AS-Current Periodicals	1,241	0%	1,241	10%	3	
YA-Current Periodicals	17	0%	17	0%	3	
J-Periodicals	51	0%	51	5%	3	
Back Newspapers	234	0%	234	0%	10	
Totals	1,543		1,543			
New Materials						
New Books-Face Out	10	120%	12	50%	2	
New Books-Spine Out	765	10%	842	50%	8	
New Books-Tables	20	0%	20	50%	10	
Totals	795		874			1.22%
TOTAL COLLECTION	71,319		71,596			100.0%

Table 8. Christiansburg Library Collections Summary

Combined Library Collections Summary						
Item	Current Collection Items	Percent Growth/Reduction	Proposed New Collection	Typical Percentage Out In Circulation	Volume per Foot on Shelf	Percentage of Total Collection
Adult Print						
AS-Fiction	33,181	110%	36,500	25%	15	
AS-NF & Bio	34,000	110%	37,400	25%	15	
AS-Large Type	5,000	115%	5,750	30%	10	
AS-Paperbacks	0	0%	0	0%	0	
AS-GN	400	105%	420	10%	15	
AS-New	2,000	110%	2,200	40%	15	
Intern'l Lang.	0	0%	0	0%	0	
Reference/Genealogy	1,250	0%	1,250	0%	10	
Totals	75,831		83,520			57.65%
Young Adult						
YA-Paperbacks	0	0%	0	0%	0	
YA-Fiction	2,800	105%	2,940	25%	15	
YA-Graphic Novels	840	110%	924	25%	25	
YA NF & Bio	500	0%	500	10%	15	
YA-New	20	200%	60	0%	4	
Totals	4,160		4,424			3.05%
Youth Print						
J-Board Books (Shelves)	1,051	140%	1,500	40%	20	
J-Easy (Shelves)	12,963	120%	1,472	30%	35	

J-I Can Read (Shelves)	1,840	120%	2,208	30%	30	
J-Fiction	10,293	105%	10,808	30%	25	
JNF & Bio	15,419	105%	16,189	15%	30	
J-Graphic Novel	527	110%	580	10%	25	
J-Paperback/series	381	110%	420	10%	25	
J-New	0	100%	50	10%	5	
Totals	42,474		33,227			
Adult Media						
AS-Audio Books	3,813	110%	4,195	30%	12	
AS-DVD	7,961	110%	8,758	30%	25	
AS-BluRay	0	0%	0	0%	0	
Hotflicks	0	0%	0	0%	0	
AS-Music CDs	1,887	0%	1,887	10%	30	
Totals	13,661		14,840			
Young Adult Media						
YA-Audio Books-CDs	258	105%	275	10%	12	
YA-DVDs	0	0%	0	0%	0	
YA-BluRay	0	0%	0	0%	0	
YA-Video Games	307	110%	340	25%	25	
Totals	565		615			0.42%
Youth Media						
J-Audio Books-CDs	734	115%	845	20%	12	
J-Music CDs	494	105%	520	7%	30	
J-DVDs	3,053	115%	3,511	20%	0	
J-BluRay	0	0%	0	0%	0	
Totals	4,281		4,876			3.37%
Serials						
Back Periodicals	2,500	0%	0	10%	2	
AS -Current Periodicals	231	0%	1,241	0%	3	
YA-Current Periodicals	12	0%	12	0%	3	
J-Periodicals	28	0%	28	5%	3	
Back Newspapers	200	0%	200	0%	2	
Current Newspapers	14	0%	0	0%	2	
Totals	2,985		1,481			1.02%
New Materials						
New Books-Face Out	58	125%	75	50%	10	
New Books-Spine Out	1,437	125%	1,800	50%	22	
New Books-Tables	20	0%	20	50%	10	
Totals	1,515		1,895			1.31%
TOTAL COLLECTION	145,472		144,878			100%

Table 9. Combined Library Collections Summary

B. Seating and Computer Needs

The number of seats and computers needed for each respective branch was determined by reviewing national and state standards recommended for the service area population. These numbers are indicated in the tables listed in the **Establishing Needs** section. The total number of seats was reviewed with the staff of each respective branch, and the following seating program distributed the required numbers throughout the various library departments.

Blacksburg Library Seating Program					
Qty.	Description	No. / Unit	Total	SF / Unit	Total SF
Children					
2	4-Person Table – Low	4	8	50	100
2	4-Person Table – Standard	4	8	50	100
6	Pod/Child Seat	1	6	16	96
2	Parent and Child Seat	2	4	40	80
6	Lounge Seat	1	6	25	150
3	Window Seat	2	6	40	120
Totals			38		646
Young Adult					
1	Couch Seat	3	3	40	40
4	Lounge Seats	1	4	25	100
1	4-Person Table	4	4	50	50
2	2-Person Table	2	4	25	50
2	Gaming Chair	1	2	25	50
2	Window Seat	2	4	40	80
Totals			21		370
Adult					
Periodicals					
8	Lounge Seating	1	8	25	200
2	4-Person Table	4	8	50	100
3	2-Person Table	2	6	25	75
Sub-total Periodicals			22		375
Adult Fiction					
2	4-Person Table	4	8	50	100
4	2-Person Table	2	8	25	100
8	Lounge Seating	1	8	25	200
Sub-total Adult Fiction			24		400
Adult Non-Fiction					
2	4-Person Table	4	8	50	100
3	2-Person Table	2	6	25	75
8	Lounge Seating	1	8	25	200
Sub-total Adult Non-Fiction			22		375
Café					



3	2-Person Table	2	6	25	75
2	Booth	4	8	50	100
4	Lounge Seating	1	4	25	100
Sub-total Café			18		275
TOTAL SEATS			145		2,441

Table 10. Blacksburg Library Seating Summary

Christiansburg Library Seating Program					
Qty.	Description	No. / Unit	Total	SF / Unit	Total SF
Children					
2	4-Person Table – Low	4	8	50	100
2	4-Person Table – Standard	4	8	50	100
6	Pod/Child Seat	1	6	16	96
6	Lounge Seat	1	6	25	150
3	Window Seat	2	6	40	120
Totals			34		566
Young Adult					
1	Couch Seat	3	3	40	40
2	Lounge Seats	1	2	25	50
1	4-Person Table	4	4	50	50
2	2-Person Table	2	4	25	50
2	Gaming Chair	1	2	25	50
1	Window Seat	2	2	40	40
Totals			17		280
Adult					
Periodicals					
8	Lounge Seating	1	8	25	200
3	2-Person Table	2	6	25	75
Sub-total Periodicals			14		275
Adult Fiction					
2	4-Person Table	4	8	50	100
4	2-Person Table	2	6	25	75
6	Lounge Seating	1	6	25	150
Sub-total Adult Fiction			20		325
Adult Non-Fiction					
2	4-Person Table	4	8	50	100
3	2-Person Table	2	6	25	75
6	Lounge Seating	1	6	25	150
Sub-total Adult Non-Fiction			20		325
Café					
3	2-Person Table	2	6	25	75



2	Booth	4	8	50	100
4	Lounge Seating	1	4	25	100
Sub-total Café			18		275
TOTAL SEATS			123		2,046

Table 11. Christiansburg Library Seating Summary

Combined Library Seating Program					
Qty.	Description	No. / Unit	Total	SF / Unit	Total SF
Children					
3	4-Person Table – Low	4	12	50	150
2	4-Person Table – Standard	4	8	50	100
3	Parent and Child Seat	2	6	40	120
10	Pod/Child Seat	1	10	16	160
6	Lounge Seat	1	6	25	150
3	Window Seat	2	6	40	120
Totals			48		800
Young Adult					
1	Couch Seat	3	3		40
4	Lounge Seat	1	4		25
2	4-Person Table	4	8		50
3	2-Person Table	2	6		25
2	Gaming Chair	1	2		25
3	Window Seat	2	6		40
Totals			29		485
Adult					
Periodicals					
10	Lounge Seating	1	10	25	250
2	4-Person Table	4	8	50	100
4	2-Person Table	2	8	25	100
Sub-total Periodicals			26		450
Adult Fiction					
3	4-Person Table	4	12	50	150
4	2-Person Table	2	8	25	100
10	Lounge Seating	1	10	25	250
Sub-total Adult Fiction			30		500
Adult Non-Fiction					
3	4-Person Table	4	14	50	150
4	2-Person Table	2	8	25	100
8	Lounge Seating	1	8	25	200
Sub-total Adult Non-Fiction			28		450
Café					



4	2-Person Table	2	8	25	100
3	Booth	4	12	50	150
6	Lounge Seating	1	6	25	150
Sub-total Café			26		400
TOTAL SEATS			187		3,085

Table 12. Combined Library Seating Summary

C. Overall Space Requirements

The following overall space allocation tables for each respective branch were established after careful review and analysis of the collections, seating requirements, technology needs, program areas and staff needs for each branch. Input from the public and staff helped define the types and sizes of the required spaces. Space needs and square footage requirements were refined through several meetings with each respective library's staff. As the planning and design of new libraries continues, these space requirements should be updated to make sure the library program continues to meet the needs of current and future generation of library patrons and staff.

Blacksburg Library - Area and Adjacency Summary by Department								
Space Description	Qty	Unit Area SF	Net SF Area x Qty.	Sub-total Net SF	Grossing Multiplier	Gross SF	Adjacency	Remarks
Entry Zone								
Entry Vestibule	1	120	120				Entry	Visible from circulation desk
Book Return	1	40	40				Circulation Workroom	
Entry Area/Display/Gallery	1	300	300				Café, Meeting Room	Visible from circulation desk
Book Nook	1	50	50				Entry	Friends book sales
Coming Events Display	1	30	30				Entry	Digital display, forms, bulletin board
Public Restrooms							Entry, Meeting Room	
Men	1	225	225					Visible from circulation desk
Women	1	225	225					Visible from circulation desk
Vending Café	1	600	600				Entry Area, Adult Collection	Vending, counter, seating
Sub-total Department Area				1,590	1.25	1,988		
Meeting /Study/ Program Rooms								
Community Meeting Room	1	1,750	1,750				Entry Area	150 chairs in rows



Kitchenette	1	150	150				Meeting Room	Separate but adjacent to meeting room	
AV Equipment	1	35	35				Meeting Room		
Table and Chair Storage	1	200	200				Meeting Room		
Group Study Rooms								Non-Fiction	
2 -Person Study Room	2	75	150				Young Adult, Adult Area	Glass for observation	
4-Person Study room	2	120	240				Children, Young Adult	Glass with shade for privacy	
6-Person Study Room	1	150	150				Young Adult, Adult Area	Glass for observation	
Flexible Program Room	1	750	750				Young Adult/Adult	With sink and floor drain	
Storage Room	1	100	100						
Children's Program Room	1	750	750				Youth Services	With sink and floor drain	
Storage /Work Room	1	250	250					With staff workstation	
Business Center								Entry Area, Circulation	
Copy Area	1	100	100				Adult	Copier with side counter, cash machine	
Work Table	1	100	100				Adult		
Counter	1	50	50				Adult		
Laptop Storage/Charging	1	25	25				Business Center	Closet for supplies and charging cart	
Sub-total Department Area				4,800	1.25	6,000			
Adult Services									
Adult Print Collections	1	3,326	3,326						
New Books	1	119	119						
Adult Media Collections	1	495	495						
Periodicals	1	129	129						
OPACS	2	25	50				Fiction, Non-Fiction		
Public Computers	18	25	450				Circulation Desk		
Printer	1	25	25				Computers		
Quiet Reading Room	1	600	600				6 Lounge Chairs, Two (2) 2-Person Tables		
Seating									
4-Person Table	6	50	300						
2-Person Table	10	25	250						
Lounge Seating	24	25	600						
Sub-total Department Area				6,344	1.25	7,930			

Youth Services							Away From Main Entrance	
Youth Print Collection	1	1475	1,475					Visible from circulation desk
Youth Media Collection	1	119	119					
Staff Desk	1	150	150					
Self Check	1	25	25					
OPACS	1	25	25					
Stoller Parking	10	15	150					
Open Play Area/Story Time	1	400	400					Unique design
Storage	1	100	100					
Public Computers	6	25	150					
Early literacy AWE Computers	3	25	75					
Family Restroom	1	65	65					Visible from circulation desk
Seating								
4-Person Table	4	50	200					
Parent and Child Seat	2	40	80					
Lounge Seating	8	25	200					
Pods	8	16	128					
Interactive Furniture	2	100	200					
Window Seats	3	40	120					
Sub-total Department Area				3,662	1.25	4,578		
Young Adult							Children's Area, Circulation Desk	
Young Adult Collection	1	89	89					Visible from circ. Desk
Young Adult Media	1	20	20				Circulation Desk	
Open Space	1	110	110					
Public Computers	6	25	150					
OPACS	1	25	25					
Sound Booth	1	100	100					
Seating								
4-Person Table	1	50	50					High tables with stools
2-Person Table	3	25	75					High tables with stools
Couch Seating	1	40	40					
Lounge Seating	4	25	100					
Gaming Chairs	2	25	50					
Window Seat/Booth	2	40	80					
Sub-total Department Area				889	1.25	1,111		
Staff Areas								
Circulation Desk	1	250	250				Entrance	3 staff stations
Holds Shelving	5	9	45				Circulation	



							Desk	
Self Check	2	25	50				Circulation Desk	
Passport Processing	1	120	120					
Staff Workroom								
Branch Manager	1	150	150					Window to see circ. Desk
Open Workstations	5	36	180					Window to see circ. desk
Processing Stations	2	36	72					
Work Table	1	100	100					
Book Carts	20	15	300					
Interlibrary Totes Area	1	50	50					
Shelving	8	9	72					
Work Counter	1	75	75					
Copier	1	75	75					
Storage	1	120	120					
Staff break room	1	275	275					
Lockers	1	40	40					
Coat Closet	1	15	15					
Drive-Up Service Window/Return	1	120	120					
Book Return Room	1	50	50					
Staff Restroom	2	65	130					Storage cabinet in restroom
Shower	1	25	25				Restroom	In one of the restrooms
Network Closet	1	100	100					
Friends of the Library								
Shelving	12	9	108					
Work Table	1	100	100					
Work Counter	1	75	75					
Storage	1	150	150					
Shipping and Receiving	1	225	225					
Sub-total Department Area				3,072	1.25	3,840		
Building Support Areas								
Mechanical Room	1	1,200	1,200					
Electrical Room	1	110	110					
Janitor's Closet/ Storage	1	150	150					
Sub-total Department Area				1,460	1.25	1,825		
TOTAL DEPARTMENT AREA						27,272		
Building Grossing Multiplier						1.10		
TOTAL DEPARTMENT AREA						29,999		

Table 13. Blacksburg Library Program



Christiansburg Library - Area and Adjacency Summary by Department								
Space Description	Qty	Unit Area SF	Net SF Area x Qty.	Sub-total Net SF	Grossing Multiplier	Gross SF	Adjacency	Remarks
Entry Zone								
Entry Vestibule	1	120	120				Entry	Visible from circulation desk
Book Return	1	40	40				Circulation Workroom	
Entry Area/Display/Gallery	1	250	250				Café, Meeting Room	Visible from circulation desk
Book Nook	1	50	50				Entry	Friends book sales
Coming Events Display	1	30	30				Entry	Digital display, forms, bulletin board
Public Restrooms							Entry, Meeting Room	
Men	1	200	200					Visible from circulation desk
Women	1	200	200					Visible from circulation desk
Vending Café	1	500	500				Entry Area, Adult Collection	Vending, counter, seating
Sub-total Department Area				1,390	1.25	1,738		
Meeting /Study/ Program Rooms								
Community Meeting Room	1	1,400	1,400				Entry Area	100 chairs in rows
Kitchenette	1	120	120				Meeting Room	Separate but adjacent to meeting room
AV Equipment	1	35	35				Meeting Room	
Table and Chair Storage	1	150	150				Meeting Room	
Group Study Rooms							Non-Fiction	
2 -Person Study Room	2	75	150				Young Adult, Adult Area	Glass for observation
4-Person Study room	2	120	240				Children, Young Adult	Glass with shade for privacy
6-Person Study Room	1	150	150				Young Adult, Adult Area	Glass for observation
Flexible Program Room	1	600	600				Young Adult/Adult	With sink and floor drain
Storage Room	1	100	100					
Children's Program Room	1	750	750				Youth Services	With sink and floor drain
Storage /Work Room	1	250	250					With staff workstation
Business Center							Entry Area, Circulation	



Copy Area	1	100	100				Adult	Copier with side counter, cash machine
Work Table	1	100	100				Adult	
Counter	1	50	50				Adult	
Laptop Storage/Charging	1	25	25				Business Center	Closet for supplies and charging cart
Sub-total Department Area				4,220	1.25	5,275		
Adult Services								
Adult Print Collections	1	3,802	3,802					
New Books	1	66	66					
Adult Media Collections	1	307	307					
Periodicals	1	356	356					
Special Collections/Genealogy	1	300	300					
OPACS	2	25	50				Fiction, Non-Fiction	
Public Computers	16	25	400				Circulation Desk	
Printer	1	25	25				Computers	
Quiet Reading Room	1	400	400				6 Lounge Chairs, Two (2) 2-Person Tables	
Seating								
4-Person Table	4	50	200					
2-Person Table	9	25	225					
Lounge Seating	20	25	500					
Sub-total Department Area				6,631	1.25	8,289		
Youth Services							Away From Main Entrance	
Youth Print Collection	1	1,020	1,020					Visible from circulation desk
Youth Media Collection	1	89	89					
Staff Desk	1	150	150					
Self Check	1	25	25					
OPACS	1	25	25					
Stoller Parking	10	15	150					
Open Play Area/Story Time	1	300	300					
Storage	1	65	65					
Public Computers	6	25	150					
Early literacy AWE Computers	3	25	75					
Family Restroom	1	65	65					Visible from circulation desk
Seating								
4-Person Table	4	50	200					
Parent and Child Seat	2	40	80					



Lounge Seating	6	25	150					
Pods	6	16	96					
Interactive Furniture	2	100	200					
Window Seats	3	40	120					
Sub-total Department Area				2,960	1.25	3,700		
Young Adult							Children's Area, Circulation Desk	
Young Adult Collection	1	188	188					Visible from circulation desk
Young Adult Media	1	109	109				Circulation Desk	
Open Space	1	110	110					
Public Computers	6	25	150					
OPACS	1	25	25					
Sound Booth	1	100	100					
Seating								
4-Person Table	1	50	50					High tables with stools
2-Person Table	2	25	50					High tables with stools
Couch Seating	1	40	40					
Lounge Seating	2	25	50					
Gaming Chairs	2	25	50					
Window Seat/Booth	1	40	40					
Sub-total Department Area				962	1.25	1,203		
Staff Areas								
Circulation Desk	1	250	250				Entrance	3 staff stations
Holds Shelving	5	9	45				Circulation Desk	
Self Check	2	25	50				Circulation Desk	
Passport Processing	1	120	120					
Staff Workroom								
Branch Manager	1	150	150					Window to see circ. Desk
Open Workstations	3	36	108					Window to see circ. desk
Processing Stations	3	36	108					
Work Table	1	100	100					
Book Carts	15	15	225					
Interlibrary Totes Area	1	50	50					
Shelving	7	9	63					
Work Counter	1	75	75					
Copier	1	75	75					
Storage	1	120	120					
Staff Break Room	1	275	275					
Lockers	1	40	40					



Coat Closet	1	15	15					
Drive-Up Service Window/Return	1	120	120					
Book Return Room	1	50	50					
Staff Restroom								Storage cabinet in restroom
Women	1	130	130					Two (2) stalls, storage cabinet
Men	1	65	65					Storage cabinet
Network Room	1	175	175					
Friends of the Library								
Shelving	12	9	108					
Work Table	1	100	100					
Work Counter	1	75	75					
Storage	1	150	150					
Sub-total Department Area				2,842	1.25	3,553		
Regional Library Staff								
Executive Offices								
Library Director	1	250	250					
Executive Assistant	1	100	100					
Reception/Waiting	1	175	175					
Closet	1	40	40					
Staff Offices								
Systems Admin.	1	120	120					
Workstations	3	64	192					
Outreach Manager	1	120	120					
Business Manager	1	120	120					
Youth Services Manager	1	120	120					
Workstations	2	64	128					
Acquisitions Manager	1	120	120					
Workstations	2	64	128					
Book Carts	15	15	225					
Work Counter	1	75	75					
Copier	12	9	108					
Staff Conference Room	1	250	250					
Copy Print Work Room								
Work Table	1	100	100					
Shelving	7	9	63					
Work Counter	1	75	75					
Copier	1	75	75					
Storage	1	200	200					
Sub-total Department Area				1,450	1.25	1,813		
Building Support Areas								
Mechanical Room	1	1,200	1,200					
Electrical Room	1	100	100					



Janitor's Closet/ Storage	1	150	150					
Sub-total Department Area				1,450	1.25	1,813		
TOTAL DEPARTMENT AREA						29,049		
Building Grossing Multiplier						1.10		
TOTAL DEPARTMENT AREA						31,954		

Table 14. Christiansburg Library Program

Combined Library - Area and Adjacency Summary by Department								
Space Description	Qty	Unit Area SF	Net SF Area x Qty.	Sub-total Net SF	Grossing Multiplier	Gross SF	Adjacency	Remarks
Entry Zone								
Entry Vestibule	1	120	120				Entry	Visible from circulation desk
Book Return	1	40	40				Circulation Workroom	
Entry Area/Display/Gallery	1	250	250				Café, Meeting Room	Visible from circulation desk
Book Nook	1	50	50				Entry	Friends book sales
Coming Events Display	1	30	30				Entry	Digital display, forms, bulletin board
Public Restrooms							Entry, Meeting Room	
Men	1	200	200					Visible from circulation desk
Women	1	200	200					Visible from circulation desk
Vending Café	1	750	750				Entry Area, Adult Collection	Vending, counter, seating
Sub-total Department Area				1,640	1.25	2,050		
Meeting /Study/ Program Rooms								
Community Meeting Room	1	1,750	1,750				Entry Area	150 chairs in rows
Kitchenette	1	120	120				Meeting Room	Separate but adjacent to meeting room
AV Equipment	1	35	35				Meeting Room	
Table and Chair Storage	1	150	150				Meeting Room	
Multi-Purpose Room	1	1,000	1,000					50 seats, share storage and kitchen with community room
Group Study Rooms							Non-Fiction	
2 -Person Study Room	4	75	300				Young Adult,	Glass for



4-Person Study room	4	120	480				Adult Area	observation
6-Person Study Room	2	150	300				Children, Young Adult	Glass with shade for privacy
Flexible Program Room	1	900	900				Young Adult, Adult Area	Glass for observation
Storage Room	1	100	100				Young Adult/Adult	With sink and floor drain
Children's Program Room	1	900	900				Youth Services	With sink and floor drain
Storage/Work Room	1	250	250					With staff workstation
Business Center							Entry Area, Circulation	
Copy Area	1	100	100				Adult	Copier with side counter, cash machine
Work Table	1	100	100				Adult	
Counter	1	50	50				Adult	
Laptop Storage/Charging	1	25	25				Business Center	Closet for supplies and charging cart
Sub-total Department Area				6,560	1.25	8,200		
Adult Services								
Adult Print Collections	1	3,802	3,802					
New Books	1	66	66					
Adult Media Collections	1	307	307					
Periodicals	1	356	356					
Special Collections/Genealogy	1	300	300					
OPACS	4	25	100				Fiction, Non- Fiction	
Public Computers	25	25	625				Circulation Desk	
Printer	1	25	25				Computers	
Quiet Reading Room	1	750	750				6 Lounge Chairs, Two (2) 2-Person Tables	
Seating								
4-Person Table	4	50	200					
2-Person Table	9	25	225					
Lounge Seating	20	25	500					
Sub-total Department Area				7,256	1.25	9,070		
Youth Services							Away From Main Entrance	
Youth Print Collection	1	1,020	1,020					Visible from circulation desk
Youth Media Collection	1	89	89					
Staff Desk	1	150	150					



Self Check	1	25	25					
OPACS	1	25	25					
Stoller Parking	10	15	150					
Open Play Area/Story Time	1	300	300					
Storage	1	65	65					
Public Computers	8	25	200					
Early literacy AWE Computers	4	25	100					
Family Restroom	1	65	65					Visible from circulation desk
Seating								
4-Person Table	4	50	200					
Parent and Child Seat	2	40	80					
Lounge Seating	6	25	150					
Pods	6	16	96					
Interactive Furniture	2	100	200					
Window Seats	3	40	120					
Sub-total Department Area				3,035	1.25	3,794		
Young Adult							Children's Area, Circulation Desk	
Young Adult Collection	1	188	188					Visible from circulation desk
Young Adult Media	1	109	109				Circulation Desk	
Open Space	1	110	110					
Public Computers	8	25	200					
OPACS	1	25	25					
Sound Booth	1	100	100					
Seating								
4-Person Table	1	50	50					High tables with stools
2-Person Table	2	25	50					High tables with stools
Couch Seating	1	40	40					
Lounge Seating	2	25	50					
Gaming Chairs	2	25	50					
Window Seat/Booth	1	40	40					
Sub-total Department Area				1,012	1.25	1,265		
Staff Areas								
Circulation Desk	1	300	300				Entrance	3 staff stations
Holds Shelving	7	9	63				Circulation Desk	
Self Check	4	25	100				Circulation Desk	
Passport Processing	1	120	120					
Staff Workroom								
Branch Manager	1	150	150					Window to see circ.



									Desk
Assistant Branch Manager	1	150	150						
Open Workstations	6	36	216						Window to see circ. desk
Processing Stations	4	36	144						
Work Table	2	100	200						
Book Carts	20	15	300						
Interlibrary Totes Area	1	50	50						
Shelving	7	9	63						
Work Counter	1	75	75						
Copier	1	75	75						
Storage	1	120	120						
Staff Break Room	1	275	275						
Lockers	1	80	80						
Coat Closet	1	15	15						
Drive-Up Service Window/Return	1	120	120						
Book Return Room	1	50	50						
Staff Restroom									Storage cabinet in restroom
Women	1	130	130						Two (2) stalls, storage cabinet
Men	1	65	65						Storage cabinet
Network Room	1	175	175						
Friends of the Library									
Shelving	12	9	108						
Work Table	1	100	100						
Work Counter	1	75	75						
Storage	1	150	150						
Sub-total Department Area				3,469	1.25	4,336			
Regional Library Staff									
Executive Offices									
Library Director	1	250	250						
Staff Office	1	150	150						
Executive Assistant	1	100	100						
Reception/Waiting	1	175	175						
Closet	1	40	40						
Staff Offices									
Systems Admin.	1	120	120						
Workstations	3	64	192						
Outreach Manager	1	120	120						
Business Manager	1	120	120						
Youth Services Manager	1	120	120						
Workstations	2	64	128						
Acquisitions Manager	1	120	120						
Workstations	2	64	128						



Book Carts	15	15	225				
Work Counter	1	75	75				
Copier	12	9	108				
Staff Conference Room	1	250	250				
Copy Print Work Room							
Work Table	1	100	100				
Shelving	7	9	63				
Work Counter	1	75	75				
Copier	1	75	75				
Storage	1	200	200				
Sub-total Department Area				2,934	1.25	3,668	
Building Support Areas							
Mechanical Room	1	1,200	1,200				
Electrical Room	1	100	100				
Janitor's Closet/ Storage	1	150	150				
Sub-total Department Area				1,450	1.25	1,813	
TOTAL DEPARTMENT AREA						34,195	
Building Grossing Multiplier						1.10	
TOTAL DEPARTMENT AREA						37,615	

Table 15. Combined Library Program

VI. SITE CONCEPTS

Using the information developed from the programming sessions with each respective library's staff, conceptual layouts were developed that illustrate potential configurations for an expanded library on each existing site. Those layouts are described in greater detail below.

A. Blacksburg Library

Expanding the Blacksburg Library to the programmed 29,999 SF on its existing site would be highly problematic. As shown below, an enlarged Blacksburg Library would need to expand primarily to the north (towards Washington Street) and west (towards Harrell Street) in order to keep the parking lot west of the existing facility intact. Expansion to the east (towards Draper Road) is virtually impossible, as the building's southeast corner is close to the intersection of Draper Road and Miller Street. While some expansion at the northeast corner of the building might be possible, the clear directions for expansion are to the north and to the west. An expansion to the north would disrupt the popular Huckleberry Trail and necessitate either a re-routing of the Trail around an expanded library – which would eliminate parking in the lot to the north of the library – or a reduction in the length of the Trail. Neither of those two options appears feasible. Further, expansion of the library to the north would eliminate parking spaces in the north parking lot and would result in a number of overall library parking spaces that would be inadequate to serve the expanded facility. Expansion of the library as shown below also fails to provide for an adequate loading dock for the expanded facility, which would hamper the library's efficiency.

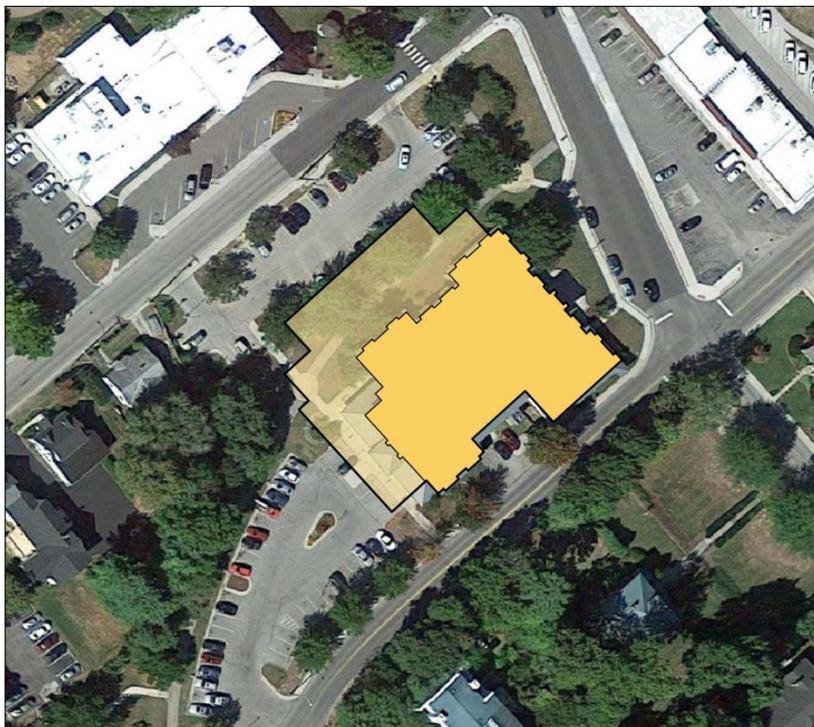


Figure 5. Conceptual Layout – Expanded Blacksburg Library

B. Christiansburg Library

Unlike the Blacksburg Library, the site of the Christiansburg Library lends itself much better to expansion to the programmed 31,954 SF. As shown below, an enlarged library would be expandable primarily to the east and to the west. Expansion on the west side would place the main entrance closer to the parking lot, which would reduce the walking distance from the parking lot to the main entrance at the current facility – an issue identified by older patrons at the public meetings. However, parking for the facility would be problematic. The library is within the zoning classification R-2 by the Town of Christiansburg, which is classified as Two-Family Residential. That classification does allow for a library (per Section 42-128(2).) The R-2 zoning classification does not stipulate a minimum or maximum number of parking spaces, but does include requirements for structural setback (30 feet minimum from any street right-of-way), frontage, building height (a maximum of 35 feet), etc. Using a typical criteria of one (1) parking spaces for every 400 gross SF of floor space, a 31,954 SF expanded Christiansburg Library would require 80 parking spaces. Currently, there are 68 parking spaces at the library, meaning an additional 12 spaces would be required. The walking trail and the park to the east of the library limit expansion of the parking lot in that direction, but it may be possible to pull the parking spots on the northeast corner closer to the building and create a row of spaces next to the trail.

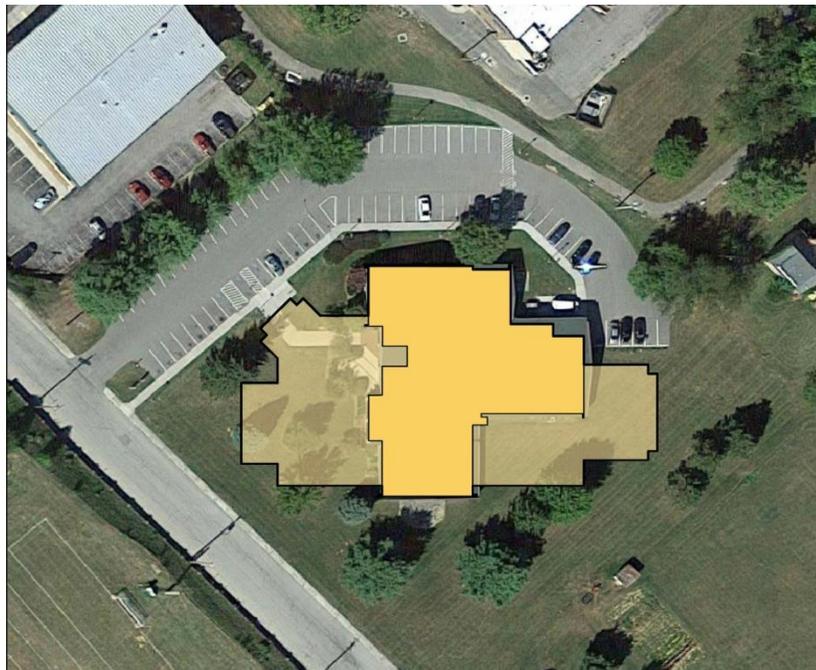


Figure 6. Conceptual Layout – Expanded Christiansburg Library

VII. COST PROJECTIONS

Projecting costs for renovated or new libraries at a conceptual stage must, by necessity, rely upon recent historical unit costs, i.e., dollars per square foot values, for similarly sized facilities of the same type in the same general geographic region. Based on generally available cost data for libraries, the below chart provides typical cost values for the southwest Virginia region.

Type	Low	Medium	High
Renovation	\$120	\$175	\$225
New Construction	\$175	\$275	\$450

Table 16. Typical Unit Costs for Construction in Southwest Virginia

Based on the programmed square footages for each respective library, a range of projected costs would be as follows:

Facility	Type	Size (SF)	Projected Cost		
			Low	Medium	High
Blacksburg	Renovated	29,999	\$3,599,880	\$5,249,825	\$6,749,775
	New		\$5,249,825	\$8,249,725	\$13,499,550
Christiansburg	Renovated	31,954	\$3,834,480	\$5,591,950	\$7,189,650
Combined Library	New	37,615	\$6,582,625	\$10,334,125	\$16,926,750

Table 17. Projected Library Renovation and New Construction Costs

VIII. CONCLUSIONS

A. Existing Conditions Assessments

1. Blacksburg Library

a. Civil

The site is on a location near the downtown Blacksburg area that allows many nearby residents to walk to the facility. The Huckleberry Trail that routes past the library gives the facility excellent visibility to trail walkers, joggers, etc., but occasionally users of the trail park at the site, which exacerbates an existing parking shortage. The site is incapable of horizontal expansion to claim additional area for parking due to development on all sides. Neither of the two (2) options identified for increasing the quantity of parking spaces – a parking structure located on the current parking lot to the northwest of the library building, and the creation of additional angled parking spaces (approximately four (4) total) – are deemed to be practical. To construct a parking structure at this location would entail a reduction of the library's available parking spaces to roughly half of its current capacity during construction. Also, since the lot is also utilized by the Blacksburg Police Department those spaces would also be displaced during construction of the structure. Additionally, the structure would be difficult to construct, as the lane (ramp) to get from the lower level to the upper level would necessarily reduce the number of parking spaces that could be gained. At a projected cost of between \$50 and \$70 per square foot, the cost to construct a structure would be on the order of \$600,00 to \$840,000 (based on a 12,000 SF footprint), which seems prohibitive. A structure would also be uncharacteristic of the facilities in and around the library.

The creation of additional angled parking spaces on Draper Road could adversely impact the Huckleberry Trail, and the cost to gain just four (4) spaces does not seem justifiable.

b. Architectural

The conclusions for the architectural discipline are interwoven within the RESULTS section of this report.

c. Structural

There are no apparent building structural deficiencies of a significant nature that warrant immediate attention, although it was not possible to view the structural framing members themselves due to concealment by architectural features (walls, column fur-outs, ceilings, etc.).

d. Mechanical

Several of the water source heat pumps are nearing the end of their useful lives and are candidates for replacement. The boiler, pumps and cooling tower are also vintage 1995 and

are nearing the end of their respective useful lives. The plumbing fixtures, though operational and adequate, are not of the modern, water-conserving type. The IT area needs to be addressed from a cooling standpoint, particularly in the summer months. Air flow issues at the circulation desk also need attention. The exhaust fan for the restroom near the Children's Area needs to be replaced. General modernization of the mechanical/HVAC and plumbing systems is needed.

e. Electrical

Generally, the Blacksburg Library's electrical and communications are in good working condition, but some elements of the various systems are showing their age. Several items are nearing the end of their useful lives and a replacement program, if not already in place, should be developed and implemented, as per the recommendations below.

2. Christiansburg Library

a. Civil

Utilizing Google Earth, T&L evaluated the site in order to provide additional parking. It is our opinion that the ideal location for a new parking lot would be to the southeast of the existing building. The benefits associated with a new parking lot in this location are as follows:

- Limited tree removal;
- The site is relatively flat; and
- An entrance to the building is located near the proposed parking lot.

The aforementioned parking lot could potentially provide an additional 18 parking spaces, including five (5) ADA spaces. It should be noted that the number of additional parking spaces is an estimation; therefore, a planimetric and topographic survey of the site and a site plan prepared by a professional engineer would be required to provide a more accurate number.

b. Architectural

The conclusions for the architectural discipline are interwoven within the RESULTS section of this report.

c. Structural

There are no apparent building structural deficiencies of a significant nature that warrant immediate attention. While the structure itself appears to be in generally good condition, there are some concerns about water erosion along the building perimeter, which could lead to long-term issues relative to the building's foundations.

d. Mechanical

The indoor mechanical units are in poor condition and are difficult to access. There is no energy management system, so optimizing energy performance is not possible. Refrigerant is frequently added to the piping, per discussions with maintenance personnel, indicating leaks are present which, in turns, indicates that replacement is warranted. The plumbing fixtures in the restrooms have been updated and are in good condition. The lack of a sprinklers system is a result of code requirements at the time of original construction not requiring such a system.

e. Electrical

Lighting fixtures throughout the facility are in generally good shape and illumination levels meet or exceed recommended levels, but modernization of the lighting fixtures would improve energy efficiency. The electric water heater installation does not currently meet code requirements; a disconnect switch is required. The security system needs to be updated and replaced.

B. Survey/Public Inputs

From the survey responses some key conclusions can be reached, as follows:

- The majority of users want to visit the library in person rather than using on-line or electronic services. The respondents want places to read, gather and attend programs.
- Physical collections are still important to the patrons and they want to expand availability of the collections.
- Both Children and Adult programming is popular and well attended.
- Additional space is desired for meeting rooms, programs and study rooms.
- Acoustics is a concern in the libraries, and separation of Adult areas form Children's and Teens' spaces is desired.
- More space is need for Children and Teens in collections areas, as well as program space
- Better access to technology is needed in Children and Teen areas.
- Outdoor program and seating space is desired.

IX. RECOMMENDATIONS

A. Existing Conditions Assessments

1. Blacksburg Library

a. Civil/Site

While there is little that can economically be done to gain additional parking spaces, the following are some recommendations – both short-term and long-term – that could be performed to better protect the library building and to guard against deterioration of the site's features:

Short Term (0 to 36 months)

- Regrade areas around the building to direct water away from the building.
- Overseed / landscape areas where current cover is bar or /thin.
- Repair / install access covers at cleanouts.
- Replace curb stops at the library entrance (approximately five (5) total)
- Have the property surveyed and procure engineering services to perform a detailed stormwater analysis of the existing site.

Long Term (greater than 36 months)

- Repair cracked sidewalks and curbs and gutters.
- Mill, pave, and re-stripe the parking lots.
- Add one (1) additional parking space to the south of the building adjacent to the two (2) existing employee parking spaces (adjust storm drainage as necessary).
- Address any issues discovered at the completion of the detailed stormwater analysis.

Furthermore, to increase parking available to the library, it is recommended that in the event that the Blacksburg Police Department is relocated, the library should secure all of the parking spaces currently utilized by the Blacksburg Police Department for library parking only.

b. Architectural

The recommendations for the architectural discipline are interwoven within the RESULTS section of this report.

c. Structural

Short Term (0 to 36 months)

- The deficient guardrail system is a safety issue that should be corrected in the near term as it could lead to someone falling if the individual supported their weight on the guardrail and the guardrail failed.

- Repair and replace the gutters, particularly in the vicinity of the cooling tower and at the canopy above the main entrance.
- Place sealant in the joint between the slab-on-grade and the retaining wall for the stairway into the Mechanical Room along Miller Street. Slope the grade above the retaining wall such that storm water doesn't flow toward the wall.
- Remove deteriorated sealant in the joints between the slab-on-grade and the exterior walls and column surrounds, in addition to the expansion joints in the slab-on-grade, and re-seal the joints with new, water-resistant sealant.

d. Mechanical

Short Term (0 to 36 months)

- Correct the observed condition of a condensate drain line on the north side of the building that penetrates the brick façade at a horizontal angle and stops just outside of the wall to include a 90-degree elbow and straight section of pipe downward to discharge into the at-grade storm water receptor.
- Tie condensate drainage from HP-7 and HP-8 to the existing above-ceiling condensate main. Install new condensate pumps for each unit.
- Install new supply duct mains for the central circulation desk area. Route new mains in a lower soffit or as exposed spiral duct to provide better airflow distribution and improve comfort. This recommendation will require coordination with the architectural and electrical (lighting) disciplines.
- Repair water-damaged gypsum board behind the mop sink and install a metal backsplash to prevent future damage
- Investigate the building envelope in the roof above the Server Room. Per building personnel, the room only gets hot during the daytime in the summer. The building envelope should be investigated in greater detail prior to consideration of installing a new water-source heat pump with a greater cooling capacity.
- Replace exhaust fan EF-2, which serves the restroom next to the Children's section.

Long Term (greater than 36 months)

- Install a new cooling tower, boiler, condenser water pumps and controls
- Replace all remaining water-source heat pumps and thermostats from the original 1995 installation.
- Replace all electric instantaneous water heaters.

e. Electrical

Short Term (0 to 36 months)

The following relatively inexpensive actions should be undertaken to correct deficiencies and improve the aesthetics of the library, as follows. In particular, installing a disconnect switch for the electric water heater should be done immediately to meet code requirements.

- Repair all floor boxes that have broken brackets.

- Provide a direct connection for the security system to a 120V direct current (DC) power supply with battery back-up.
- Provide a local disconnect for the electric water heater as required by the NEC 422.31.
- Replace the current security system with a more technologically advanced system.
- Retrofit existing 2-foot by 4-foot fluorescent, recessed can lights, fluorescent strips, with LED sources or kits.

Long Term (greater than 36 months)

- Replace exterior building mounted fixtures, parking lot luminaires, poles, and lighting controls with LED sources to achieve higher outdoor illumination levels and improved energy efficiency.
- The existing fluorescent fixtures should be replaced with energy efficient LED fixtures with pre-set, dimmable controls.
- Replace aged receptacles with new ones that include RJ-45 data ports. This should occur within the next seven (7) years.
- Replace light switches within the next seven (7) years.

2. Christiansburg Library

a. Civil/Site

Short Term (0 to 36 months)

- Regrade areas around the building to direct water away from the building.
- Gutter outfalls should be extended to keep water away from the building. (Refer to the Structural section for additional text on this subject.)
- Overseed / landscape areas where current cover is bare or thin.
- Clean up and rebuild the patio area at the rear of the building.
- Revise the parking area to become ADA compliant;
- Have the property surveyed and procure engineering services to perform a detailed stormwater analysis of the existing site and analyze the potential of an additional parking lot to the southwest of the building.

Long Term (greater than 36 months)

- Replace curbs and sidewalks where obvious deterioration has occurred.
- Mill, pave and re-stripe the parking lot
- Resurface the dumpster pad.
- Address any issues discovered at the completion of the stormwater analysis.
- If deemed feasible and desirable, construct a new parking lot per the results of a detailed additional parking lot analysis.

b. Architectural

The recommendations for the architectural discipline are interwoven within the RESULTS section of this report.

c. Structural

Short Term (0 to 36 months)

- Water penetration of the joints in the flashing between the low roof and the wall of the clearstory should be investigated in greater detail and corrections made, as there appears to be some visual evidence of mold growth.
- Further examine and effect the necessary corrective actions at the joint in the wall cap flashing at the main entrance to prevent deterioration from water.
- Address spalling of the exterior concrete slabs-on-grade at the front entrance and at the rear loading dock stairs and truck ramp to prevent the development of tripping hazards.
- Further examine the downspouts/storm water drainage off of the building, particularly at the location where water has undercut the soil beneath a building wing wall.
- At the loading dock, remove rust from the edge protection angle, clean the angle and coat it with cold galvanizing before reinstalling, or replace the angle altogether with a new angle similarly treated.
- Install sealant in the cracks in the loading dock stairs and landing.
- Correct the condition at the rear recessed stairway and door entrance where the roof downspout discharges onto the recessed slab-on-grade and backs up during periods of heavy rain, leading to infiltration of the building at the door threshold.
- Correct the condition on the north side of the building where a roof gutter is damaged, causing rainwater to overflow and erode the soil at the wall below.

d. Mechanical

Short Term (0 to 36 months)

- Replace all split system heat pumps and refrigerant piping, utilizing R-410A.
- Consider new locations and configurations for replacement systems to improve maintenance and filter access.
- Check for drain pan leaks at AHU-4 and hot water piping leaks at WH-2; repair any leaks, and replace damaged ceiling tiles.
- Replace the existing backflow preventer with a vertical type located at floor level within the closet for easier access.

Long Term (greater than 36 months)

- The only long-term recommendation would be to replace the heat pumps and refrigerant piping if it has not already been done.

e. Electrical

Short Term (0 to 36 months)

- Due to the lack of a fire sprinklers system in the building, it is highly recommended that additional smoke detectors be installed throughout the building, ideally with direct communication to a monitored central station or to the adjacent fire station.

- Transient voltage surge suppression (TVSS) should be provided on the building's electrical service.
- The existing fluorescent fixtures should be replaced with energy efficient LED fixtures with pre-set, dimmable controls for increased energy efficiency.
- Provide additional emergency egress illumination devices along exit pathways.
- Replace the outdoor receptacle on the rear patio (damaged at the time of the walkthrough).
- Replace a receptacle in the lounge area near a sink with a ground fault device (for safety).
- Replace the existing outdated fire alarm system with an addressable system with ADA horns and strobes.

Long Term (greater than 36 months)

- Replace aged receptacles with new ones that include RJ-45 data ports..
- Although not currently experiencing visible signs of deterioration, it is recommended that exterior building mounted luminaires be replaced with LED sources to achieve improved energy efficiency.

C. Design Recommendations

The need for space to achieve the library mission and the goals of a 21st century library took many factors into consideration. These factors included input from staff and the community, evaluation of the respective libraries' existing conditions, a review of national and local library standards, comparison to similar facilities and consideration of current library design trends. Based on those factors, the following general design recommendations address improvements needed in the existing facilities.

1. Collections

Both the Blacksburg and Christiansburg libraries have a strong emphasis on collections, and both communities have indicated a need for more access to physical copies of books. However, the circulation statistics for both branches are relatively low. The variety and range of literature and collection items should be evaluated to make them more relevant to the community expectations. More desirable collections, better display of materials, and promotion of library resources should increase circulation rates and improve patron satisfaction.

2. Shelving

Reduce the height of shelving, increase the width of aisles, provide face out display at eye level.

3. Seating

Increase the amount and variety of seating including two person study tables, comfortable lounge seating, collaborative seating environments, and parent and child seating areas.

4. Children's Programming

Provide a separate children's program room with finishes, furnishings, equipment, and storage to accommodate a variety of activities. Create attractive, dynamic, and flexible program space within the children's collections area to accommodate small story time activities and interactive play.

5. Flexible Program Space

Provide flexible program space that can accommodate a variety of programs including computer instruction, content creation, media production and maker space activities. Incorporate technology, infrastructure and storage to allow for adaptability.

6. Expand Community Meeting Space

Expand the size of the main community rooms to accommodate the demand for community meeting space.

7. Study and Collaboration Space

Provide a variety of small meeting rooms that can accommodate groups from two (2) to six (6) individuals for tutoring, study, meetings and small group collaboration.

8. Teen Spaces

Create separate specially designed teen areas that are designed to attract and invite teen participation in the library. Teen areas should use finishes, materials, colors and furniture that teens identify with, and the space should accommodate activities appealing to, teens.

9. Acoustics

Improve acoustics by creating separate children's and teen spaces, and separate quiet reading rooms.

10. Technology

Technology is changing daily in our society. Integration of technology needs to be flexible and expandable. Desktop computers are still needed by many patrons for a variety of applications, but portable laptops and tablets can increase flexibility and provide needed access to computers by patrons. Touch screen monitors, smartboards and multi-media technology are needed to provide competitive resources and advantages to the community. Higher speed internet access is needed at the libraries.



11. Outdoor Spaces

Create outdoors spaces that connect to the interior environment to expand learning opportunities. Outdoors spaces should accommodate children's programs, casual reading and larger events.

12. Staff Service Points

Staff service points should encourage interaction between the staff and patrons. Large service desks that act as a barrier should be discouraged and the desks themselves should be designed to be approachable. Free standing kiosks and portable tablet computers should be used to allow the staff to provide services directly to a patron.

APPENDICES

- A. Public Meeting No. 1 – Blacksburg Library– Attendees Log
- B. Public Meeting No. 1 – Christiansburg Library – Attendance Log
- C. Public Meeting No. 1 – Presentation – Blacksburg & Christiansburg Libraries
- D. Public Survey – Questions and Results
- E. Demographics Analysis – Montgomery County, Blacksburg and Christiansburg
- F. Collections Area Calculation – Blacksburg Library
- G. Collections Area Calculation – Christiansburg Library
- H. Collections Area Calculation – Combined Library
- I. Blacksburg Library Staff Questionnaire and Responses
- J. Christiansburg Library Staff Questionnaire and Responses
- K. MFRL Regional Staff Questionnaire and Responses
- L. Public Meeting No. 2 – Blacksburg Library – Attendance Log
- M. Public Meeting No. 2 – Blacksburg Library – Presentation
- N. Public Meeting No. 2 – Christiansburg Library – Attendance Log
- O. Public Meeting No. 2 – Christiansburg Library – Presentation

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APPENDIX A

PUBLIC MEETING NO. 1 BLACKSBURG LIBRARY ATTENDANCE LOG

MEETING ATTENDANCE LOG



Project Name	Montgomery-Floyd Regional Library Study	Date of Meeting	24 Aug 2016	Time of Meeting	6:30 PM
T&L Project No.	13478	Location of Mtg.	Blacksburg Library		

Purpose of Meeting
 Public Meeting – Solicit Input on Future of Blacksburg Library

Last Name	First Name	Telephone No.	E-mail Address
Golden	Paula		
Friedman	Dianne		
Hall	Ellen		
Soriano	Frank		
Sawyers	Janet		
Zody	Mary Jane		
Zajac	Joan		
Dinkle	Lisa		
Witherspoon	Gail		
Wooten	Donna		
Heavener	Nan		
Lovejoy	Jennifer		
Reid	Kristine		
Hartsock	Beth		
Cherbaka	Natalie		
Sydor	Bill		

NOTE: Telephone numbers and e-mail addresses of the attendees have been redacted to protect the privacy of the attendees.

MEETING ATTENDANCE LOG



Last Name	First Name	Telephone No.	E-mail Address
Nottingham	Matt	<p>NOTE: Telephone numbers and e-mail addresses of the attendees have been redacted to protect the privacy of the attendees.</p>	
Springer	Brenda		
Greider	Karen		
Hager-Smith	L.		
Lendway	S.		
Mezdour	Amina		
Blouin-Genest	Gabriel		
Kasem	?		
Reisinger	Elizabeth		
McCommon	Elizabeth		
Tuchler	Liz		
Warren	Debora		
Warren	Allen		
Burgos	Julia		

APPENDIX B

PUBLIC MEETING NO. 1 CHRISTIANSBURG LIBRARY ATTENDANCE LOG

MEETING ATTENDANCE LOG



Project Name	Montgomery-Floyd Regional Library Study	Date of Meeting	23 Aug 2016	Time of Meeting	6:30 PM
T&L Project No.	13478	Location of Mtg.	Christiansburg Library		

Purpose of Meeting

Public Meeting – Solicit Input on Future of Christiansburg Library

Last Name	First Name	Telephone No.	E-mail Address
Ceperley	Pat	<p>NOTE: Telephone numbers and e-mail addresses of the attendees have been redacted to protect the privacy of the attendees.</p>	
Hood	Susan		
Cross	Carrie		
Polikoff	Heather		
Ranaivo	Yann		
Waters	Brian		
Johnson	Beth		

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX C

PUBLIC MEETING NO. 1

PRESENTATION

**BLACKSBURG & CHRISTIANSBURG
LIBRARIES**

Library Space Needs and Facility Feasibility Study



THOMPSON
& LITTON EST. 1956

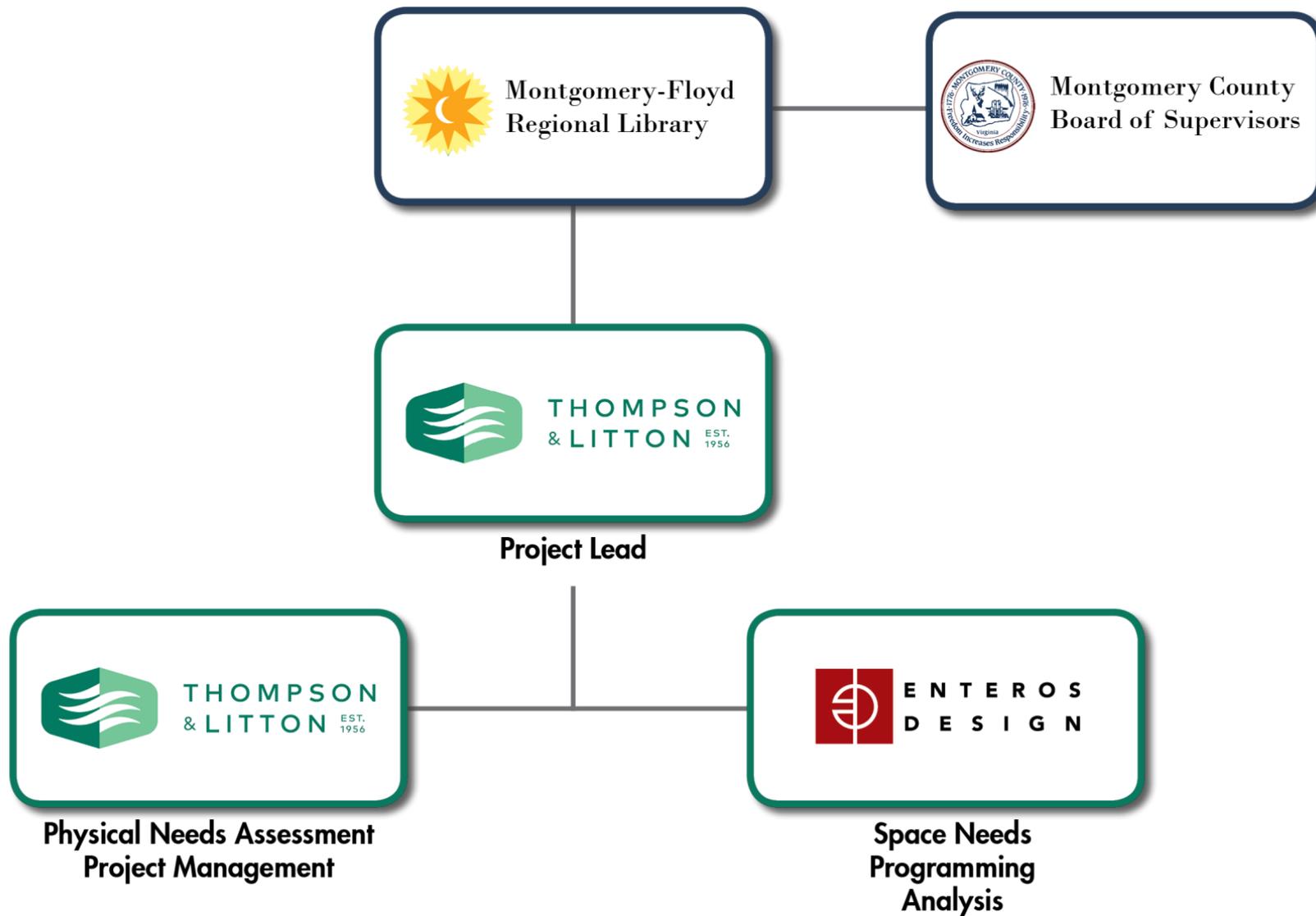
in association with:



ENTEROS
DESIGN

Blacksburg and Christiansburg Montgomery County, Virginia





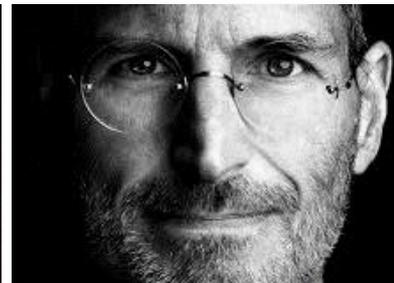
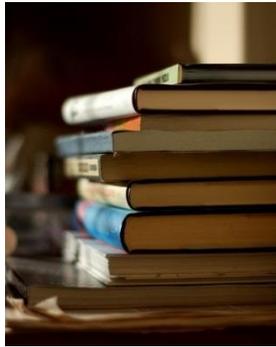
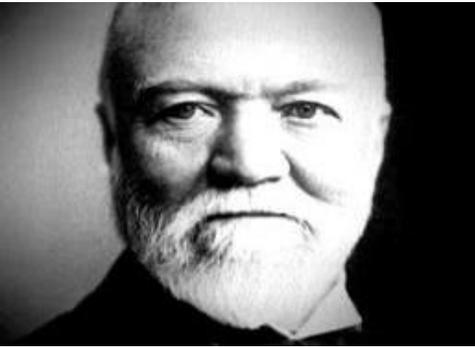
Approach



- Discovery
- Analysis
- Comparison
- Programming
- Inform



Understanding *Your* Vision



Library Design Trends

It's About the People







Library Design Trends

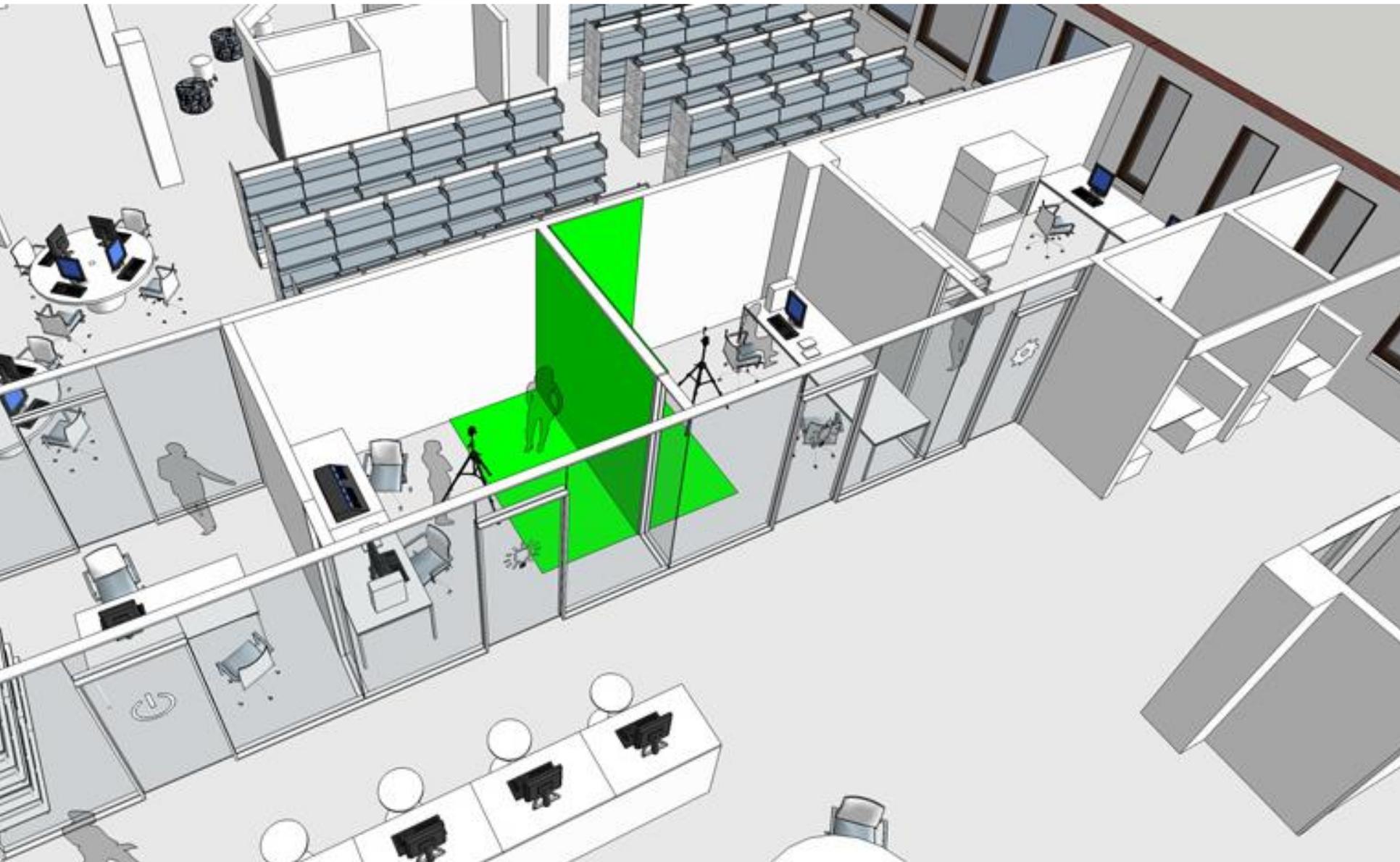
Work/Learn/Play













Library Design Trends

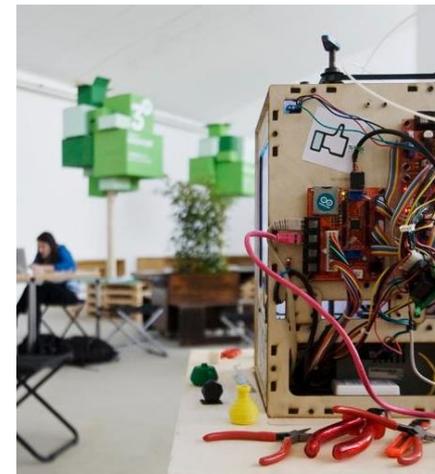
Active Learning

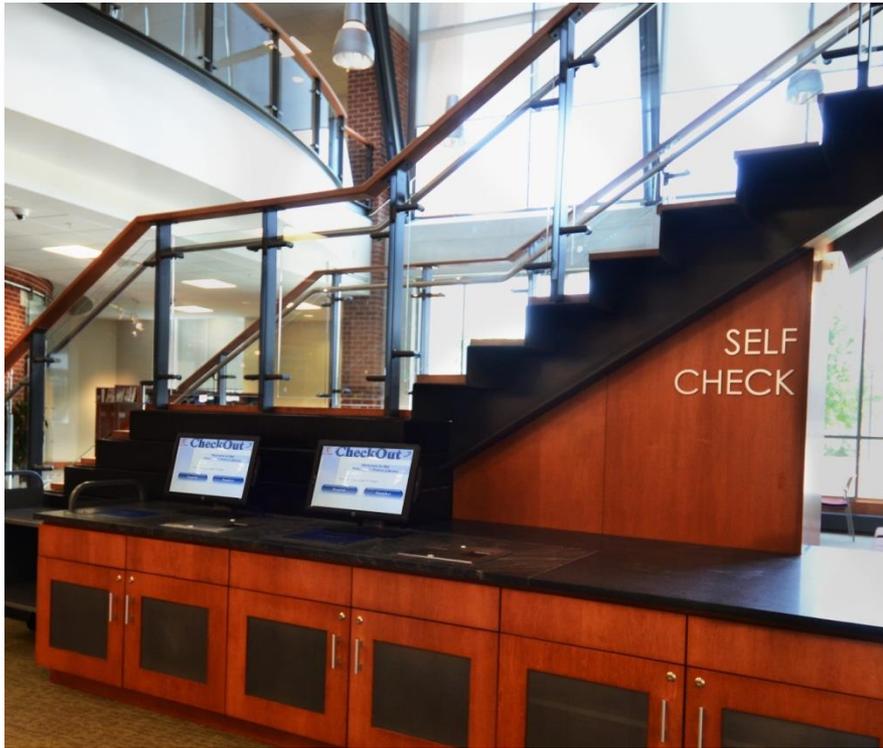




Milwaukee Public Library – Villard Square Branch, Milwaukee, WI











1. What do you like about the current library?
2. What would you like to see changed about the current library?
3. What would you like to see added in a new or renovated library?
4. What services do you use most in the library?
5. What services would you like to see added or expanded?
6. **Are there any outdoor features or enhancements you would like to see?**

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478

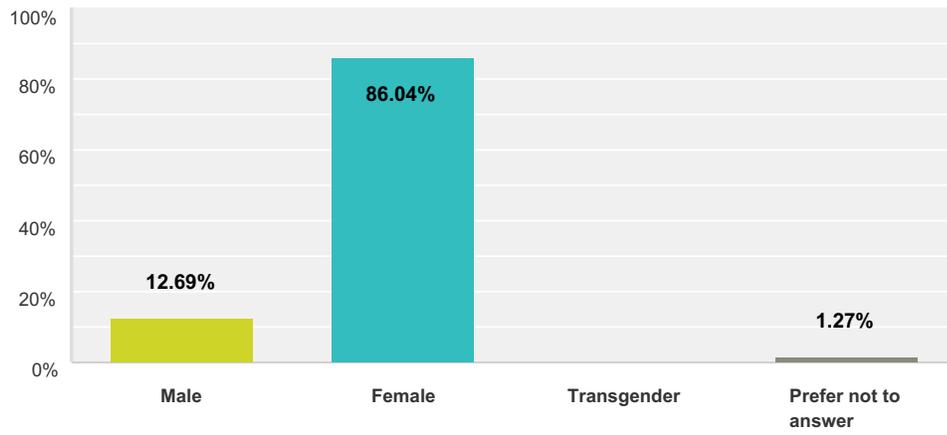


APPENDIX D

PUBLIC SURVEY QUESTIONS AND RESULTS

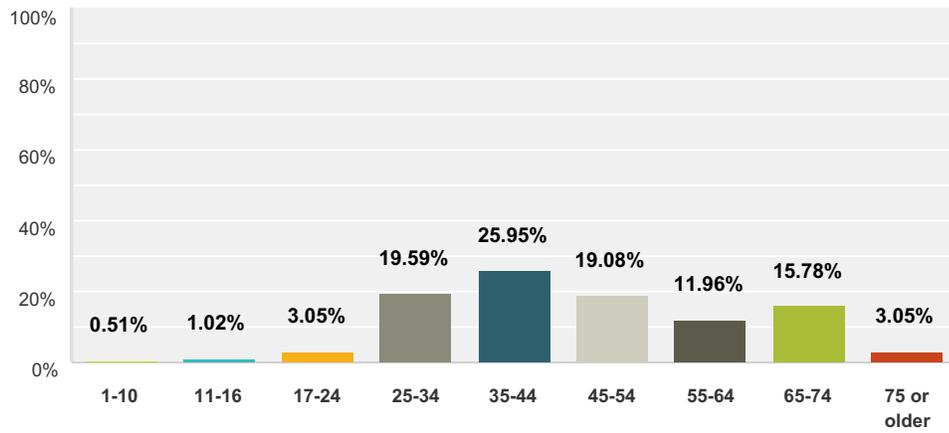
Q2 What is your gender?

Answered: 394 Skipped: 0



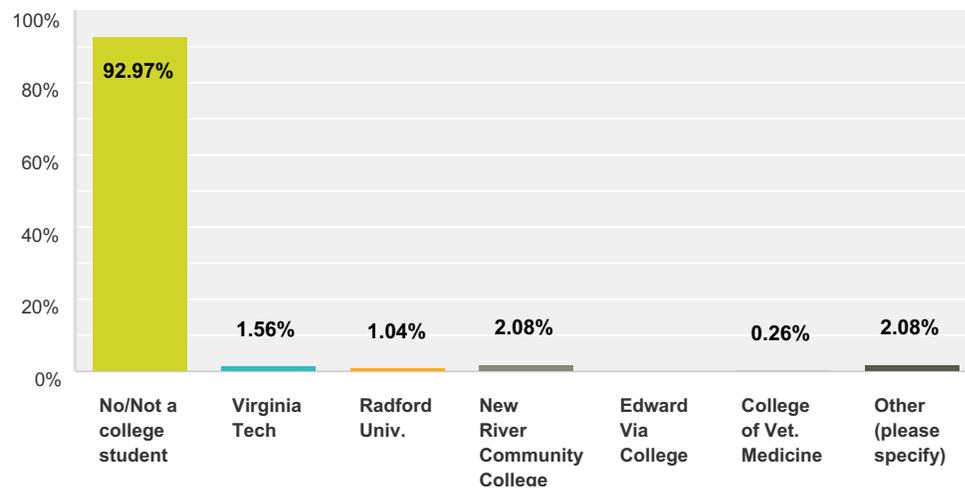
Q3 What is your age?

Answered: 393 Skipped: 1



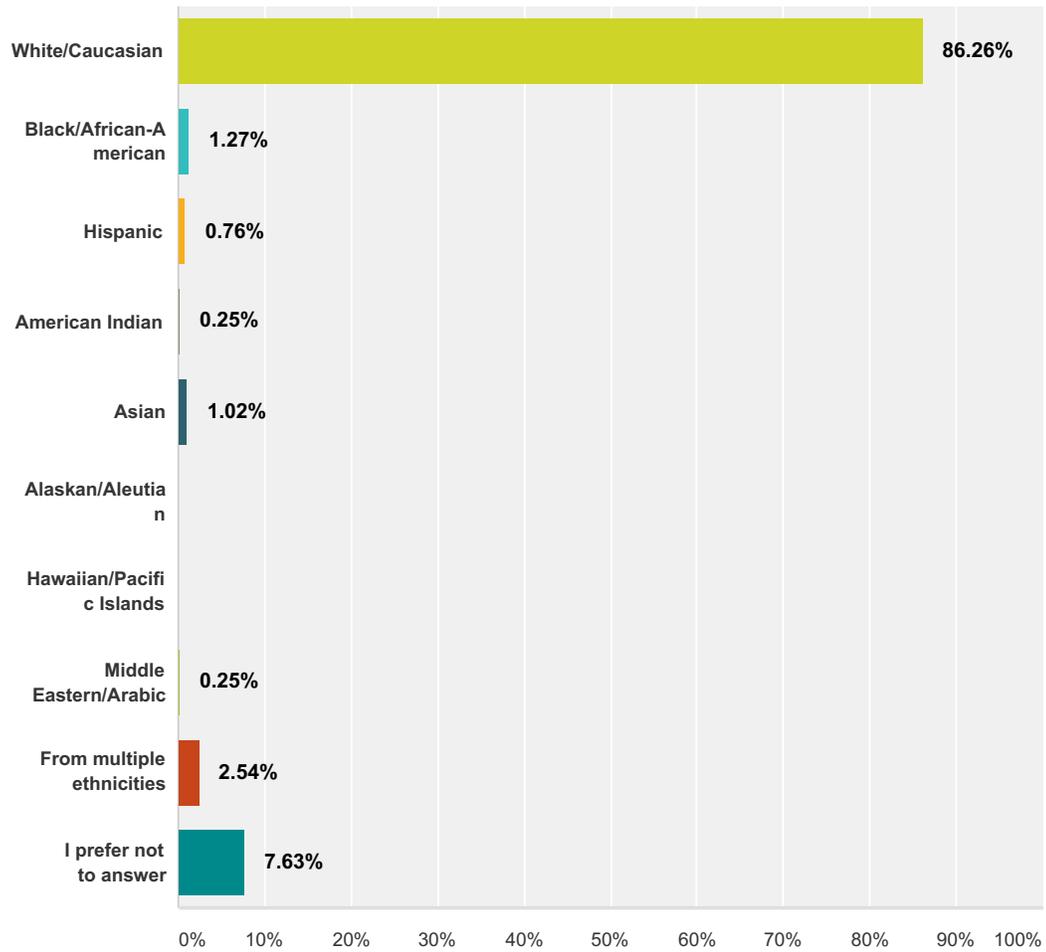
Q4 Are you a college student? If so, which college are you attending?

Answered: 384 Skipped: 10



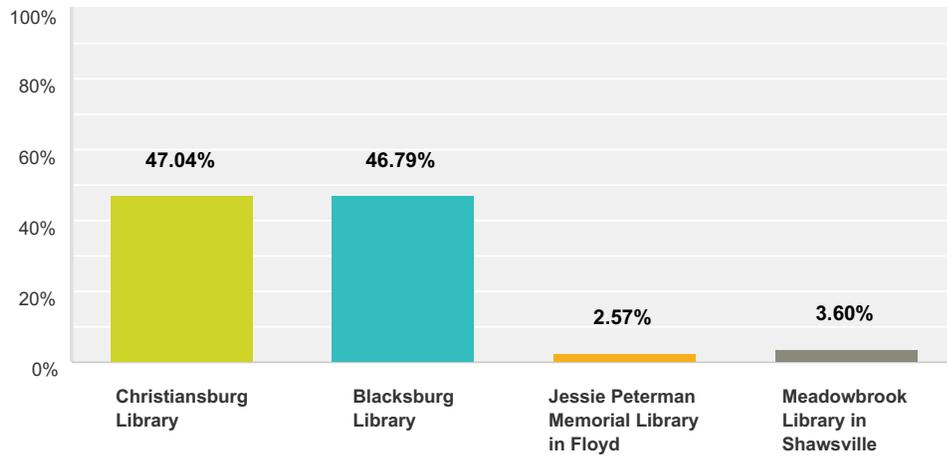
Q5 What is your ethnicity?

Answered: 393 Skipped: 1



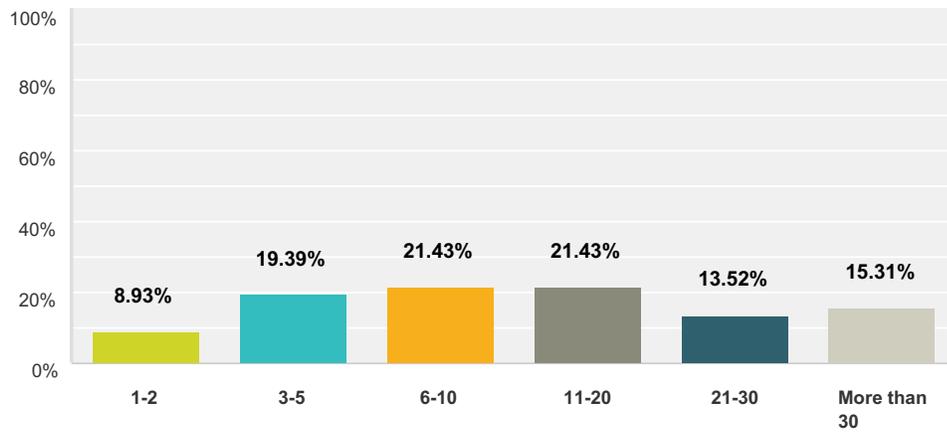
Q6 What Montgomery-Floyd Regional Library (MFRL) do you visit most frequently?

Answered: 389 Skipped: 5



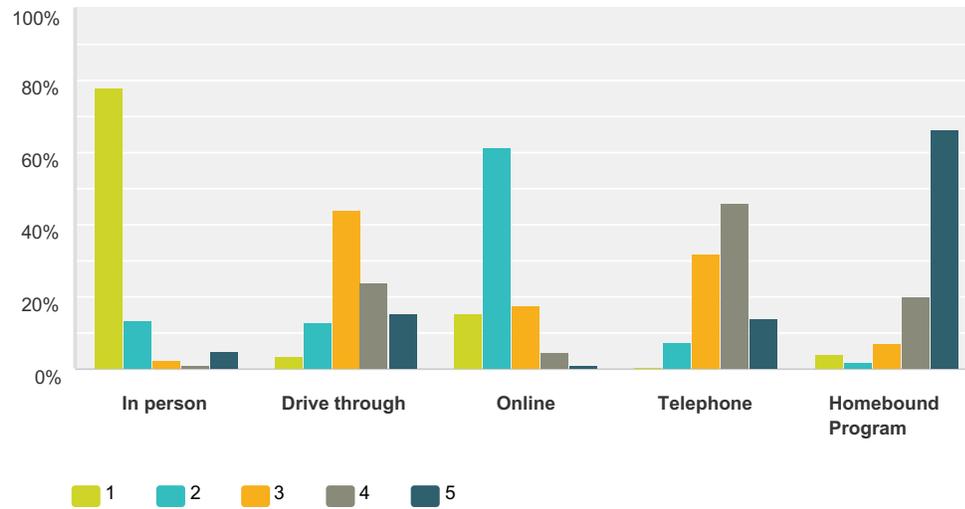
Q7 How many times in a typical six-month period do you use the library?

Answered: 392 Skipped: 2



**Q8 How would you prefer to use the library?
Please rank with 1 being the most preferred
and 5 being the least preferred.**

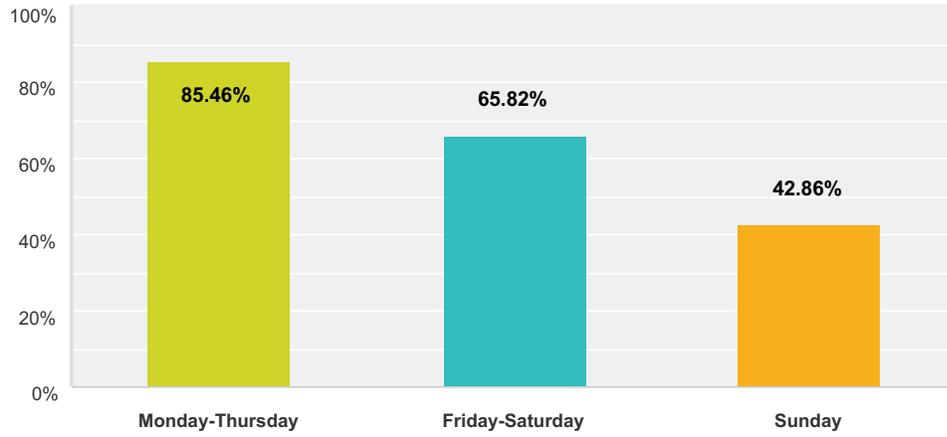
Answered: 389 Skipped: 5



	1	2	3	4	5	Total	Score
In person	78.10% 296	13.46% 51	2.64% 10	0.79% 3	5.01% 19	379	4.59
Drive through	3.70% 12	12.96% 42	43.83% 142	23.77% 77	15.74% 51	324	2.65
Online	15.63% 55	61.65% 217	17.33% 61	4.26% 15	1.14% 4	352	3.86
Telephone	0.30% 1	7.55% 25	32.02% 106	46.22% 153	13.90% 46	331	2.34
Homebound Program	4.15% 14	2.08% 7	7.12% 24	20.18% 68	66.47% 224	337	1.57

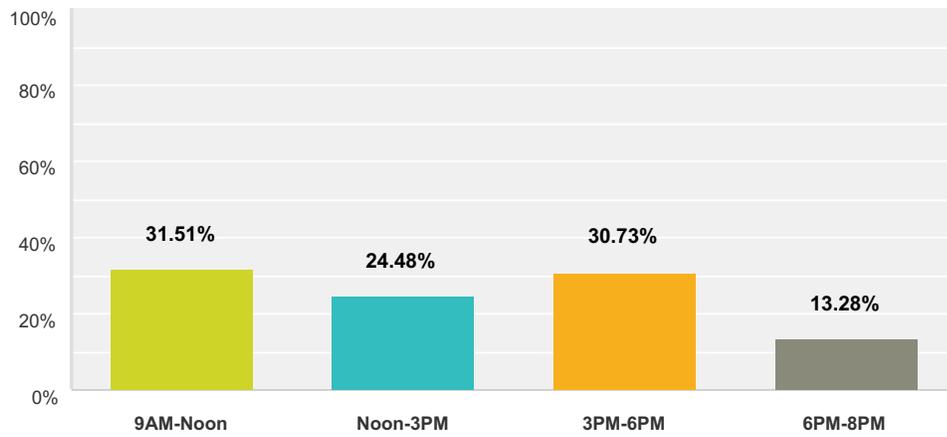
Q9 On what days do you use the library?

Answered: 392 Skipped: 2



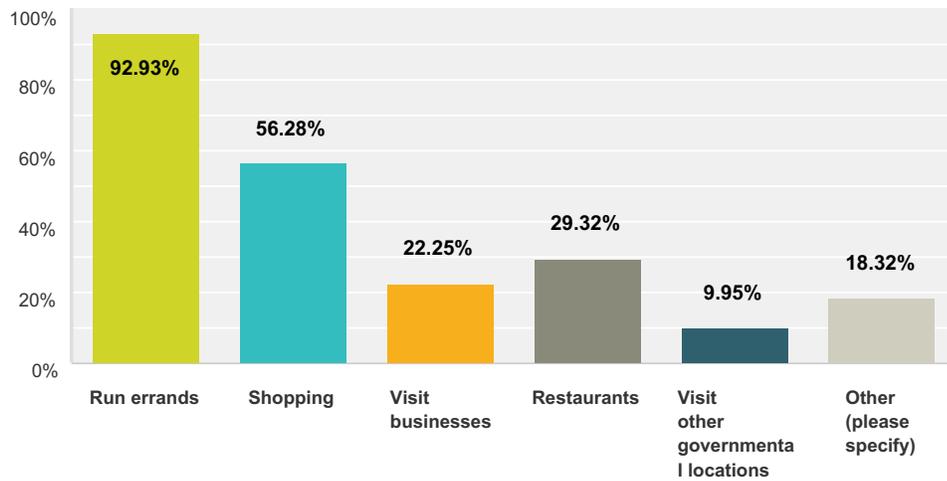
Q10 What time of day do you prefer to use the library?

Answered: 384 Skipped: 10



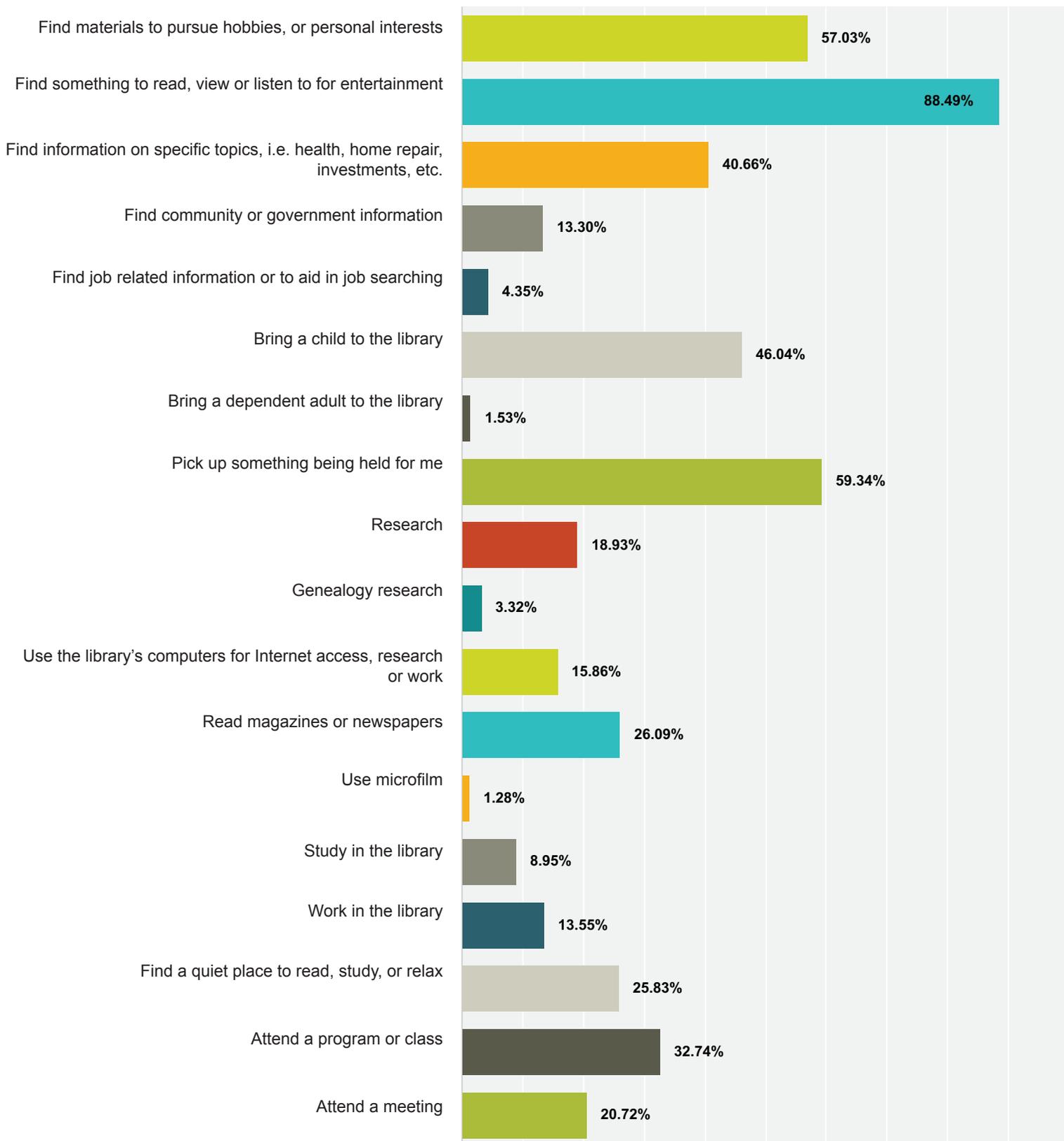
Q11 What other stops do you make when visiting the library? (choose all that apply)

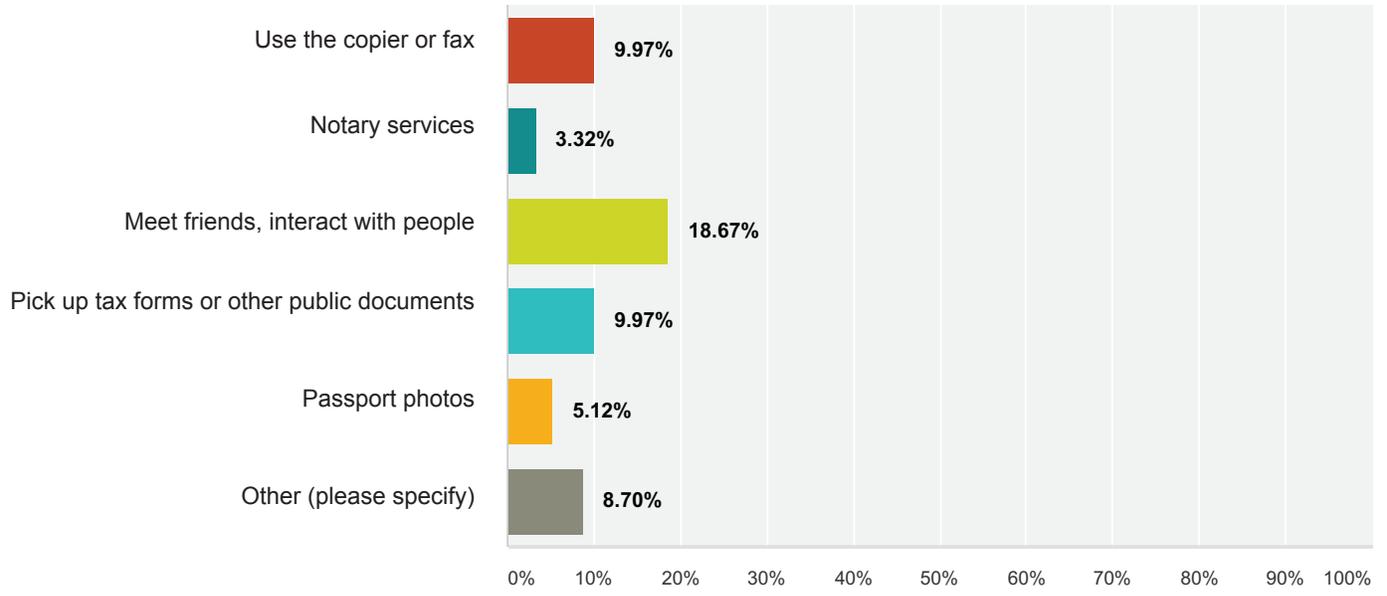
Answered: 382 Skipped: 12



Q12 For what purpose(s) do you most frequently use the library? (Choose all that apply.)

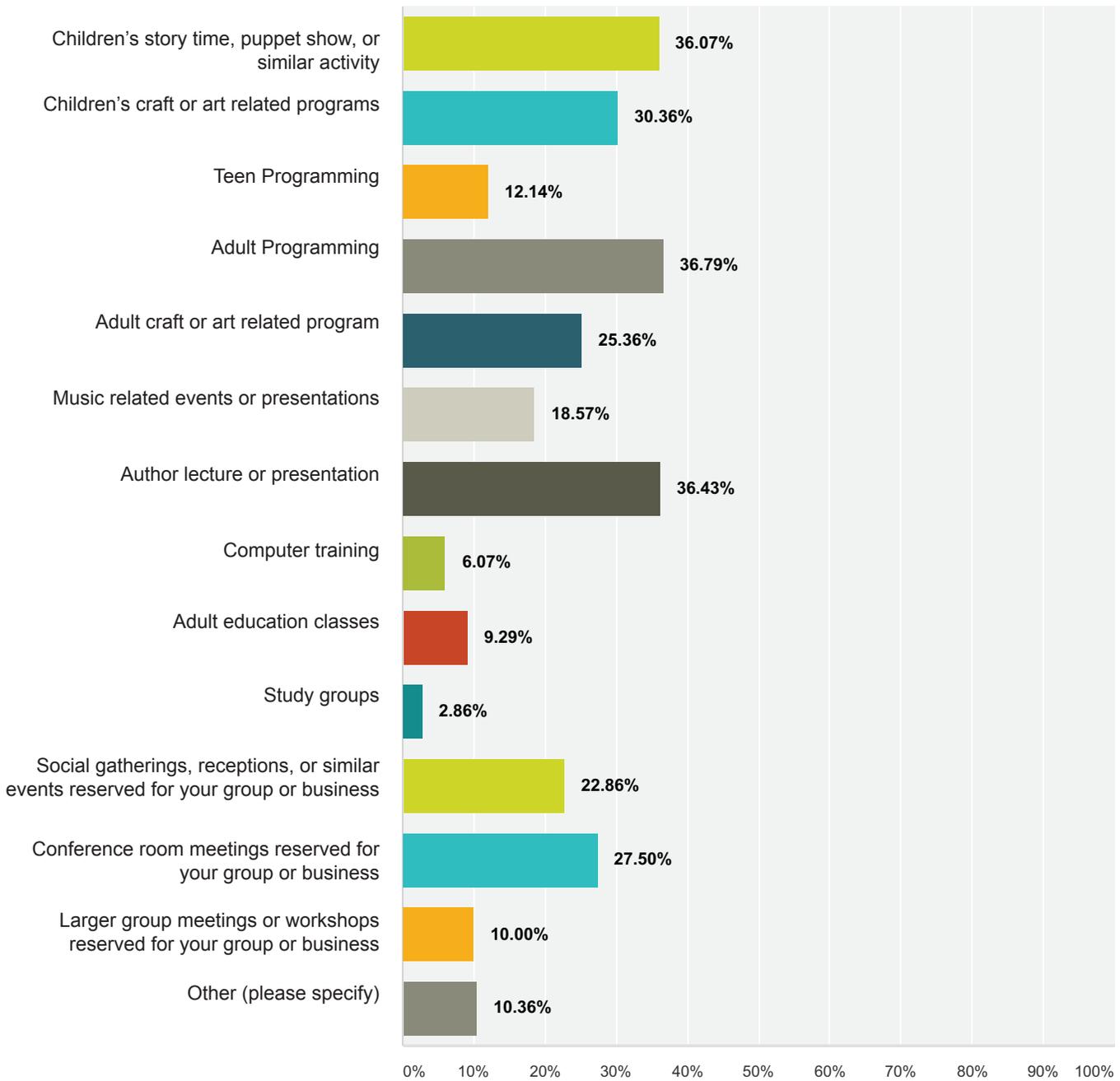
Answered: 391 Skipped: 3





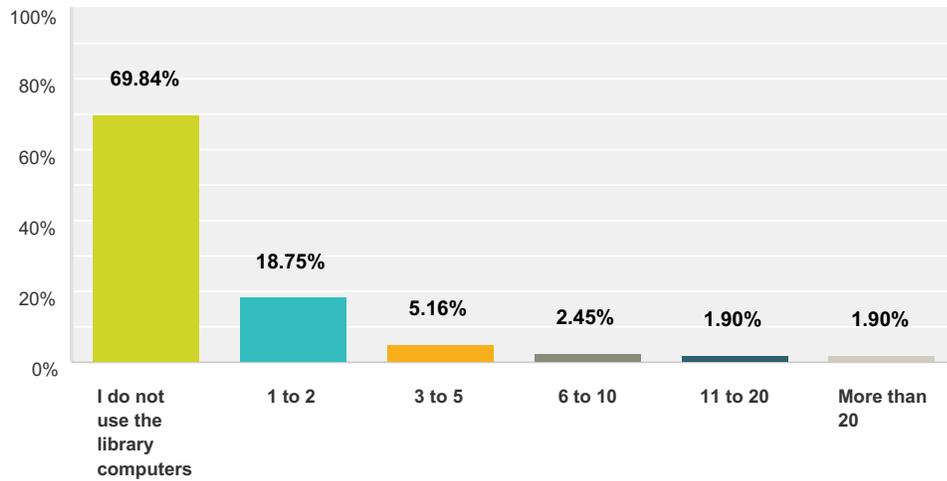
Q13 For what programs and services do you use the library? (Check all that apply)

Answered: 280 Skipped: 114



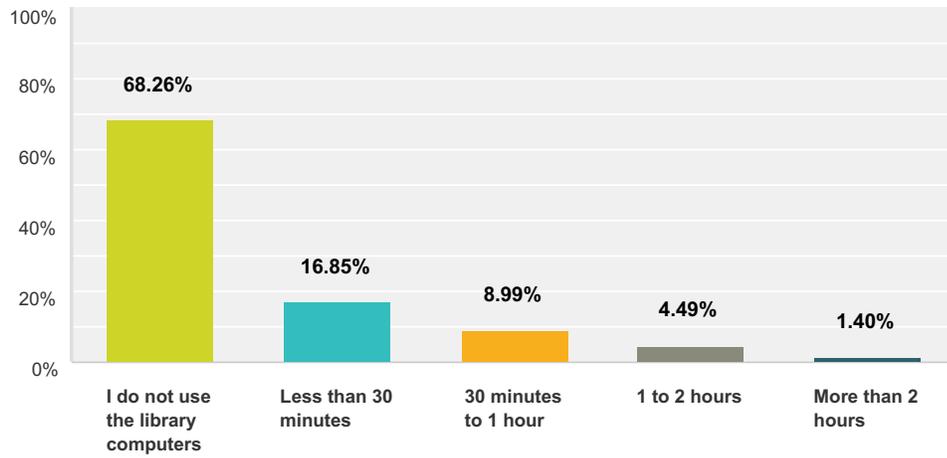
Q14 If you use the library for computer access, how many times per month do you use the computers?

Answered: 368 Skipped: 26



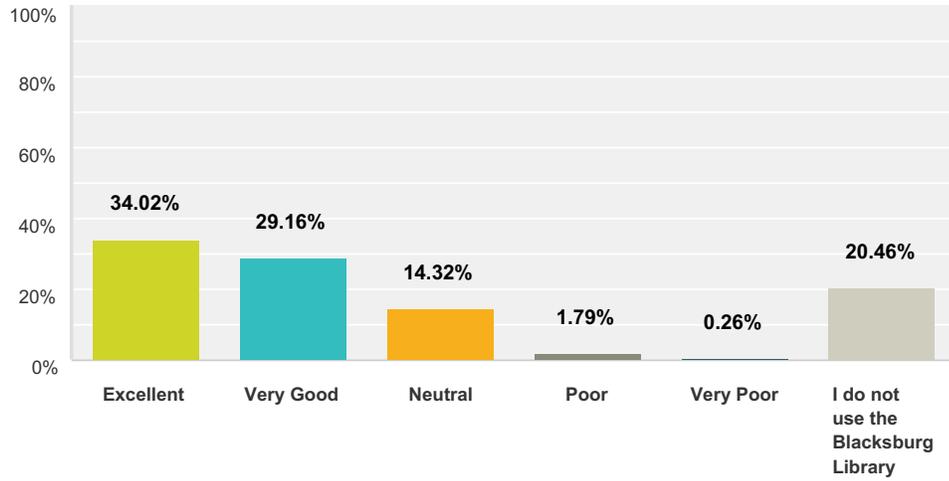
Q15 If you use the library for computer access, how long do you use the computer each visit?

Answered: 356 Skipped: 38



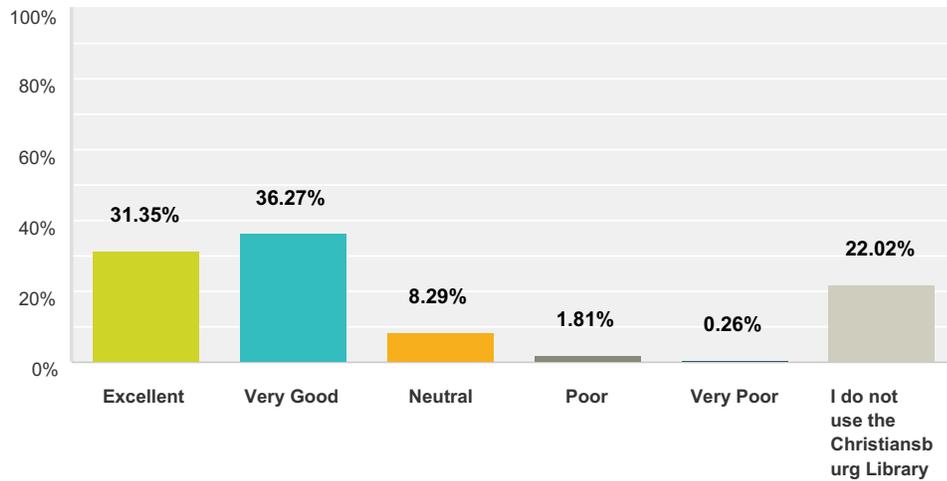
Q16 What is your impression / opinion of access to the Blacksburg Library's location?

Answered: 391 Skipped: 3



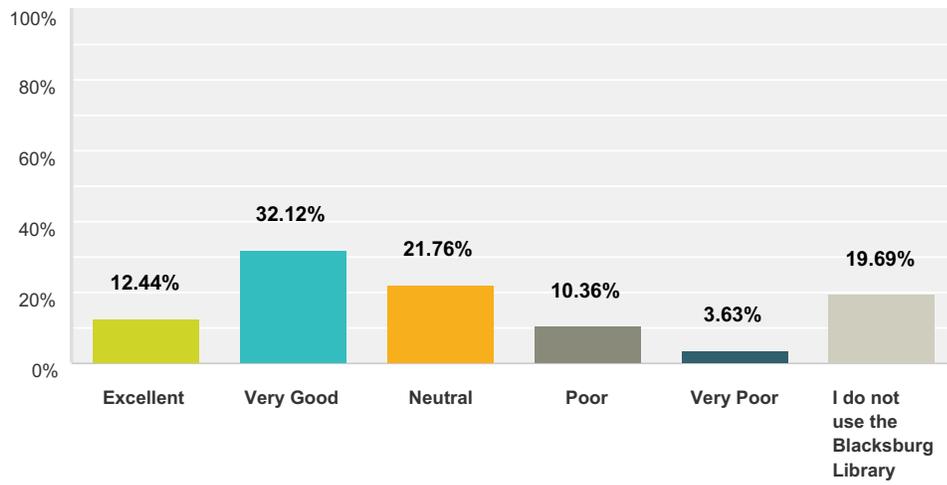
Q18 What is your impression / opinion of access to the Christiansburg Library's location?

Answered: 386 Skipped: 8



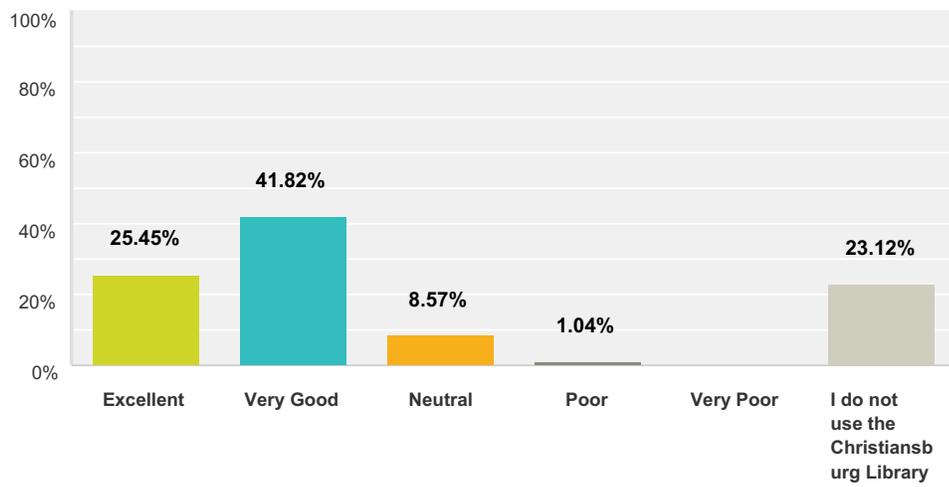
Q20 What is your impression of parking at the Blacksburg Library?

Answered: 386 Skipped: 8



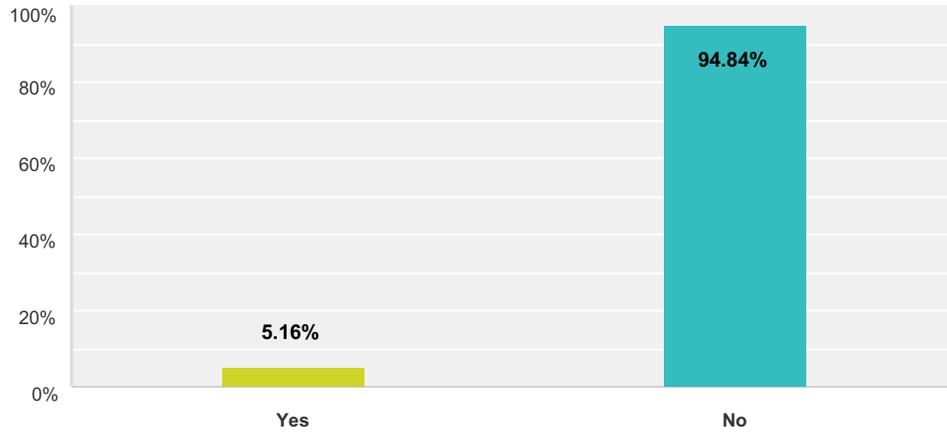
Q22 What is your impression of parking at the Christiansburg Library?

Answered: 385 Skipped: 9



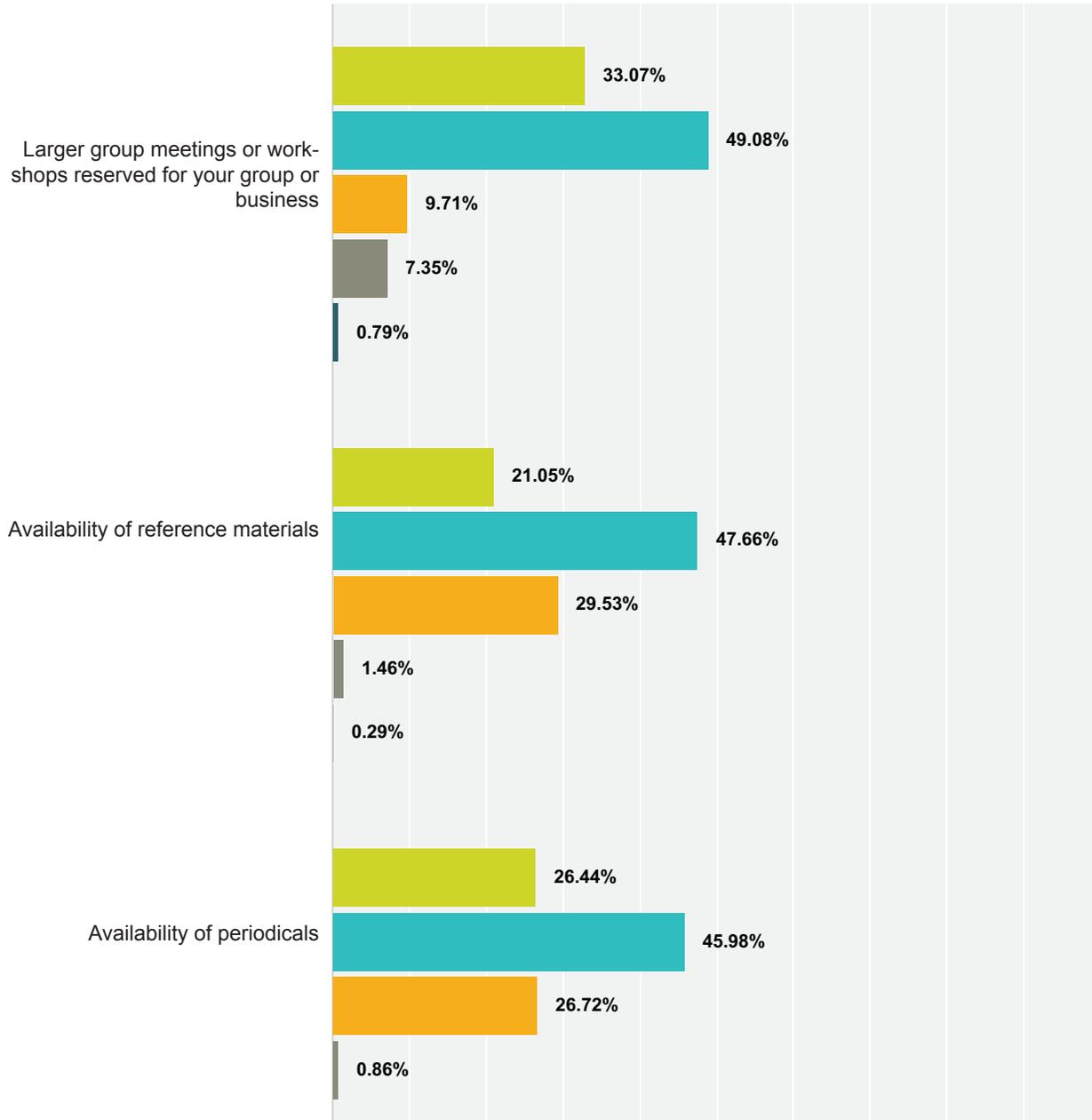
Q24 Are there any current services and features in the library which you feel should not be located in the library?

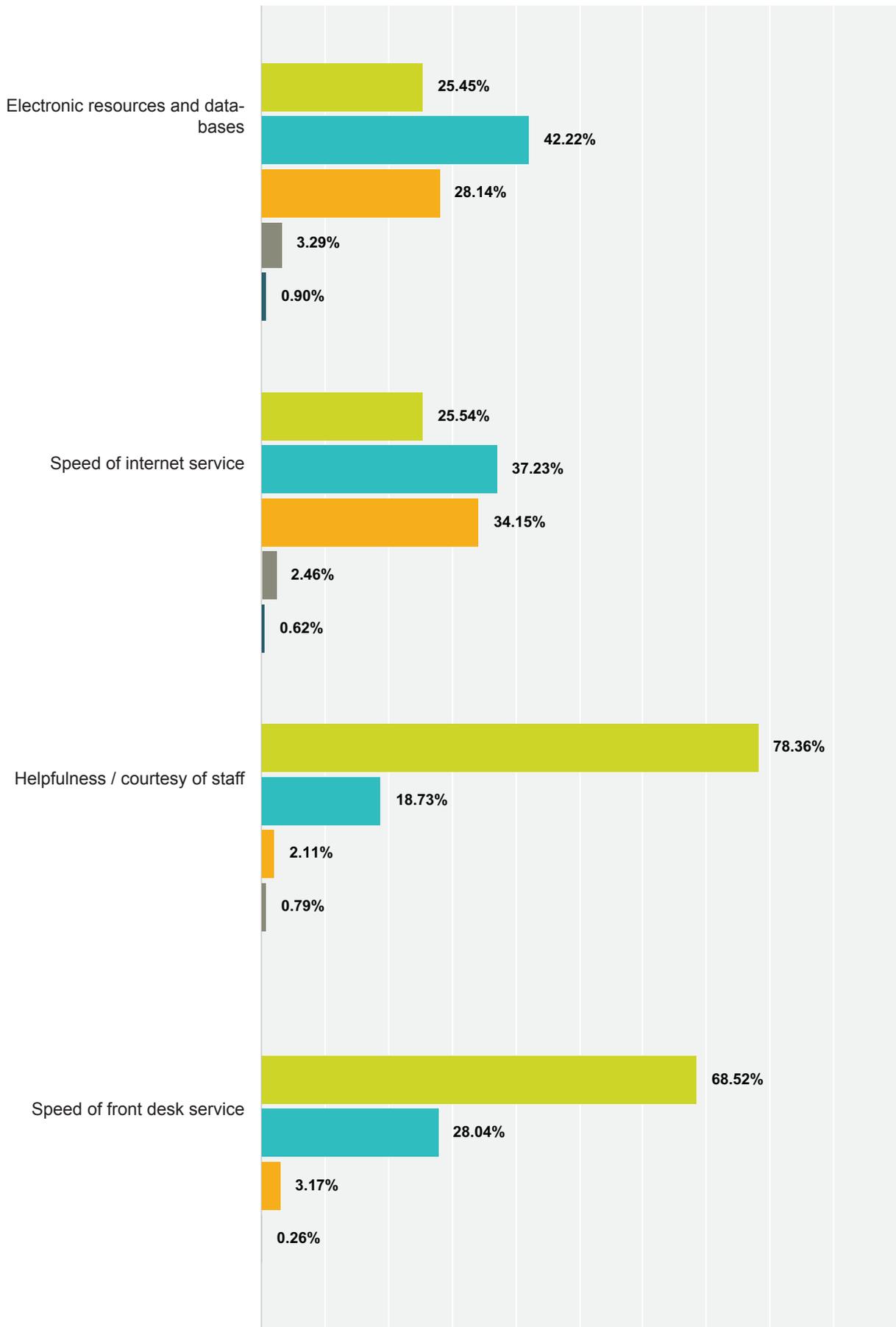
Answered: 368 Skipped: 26

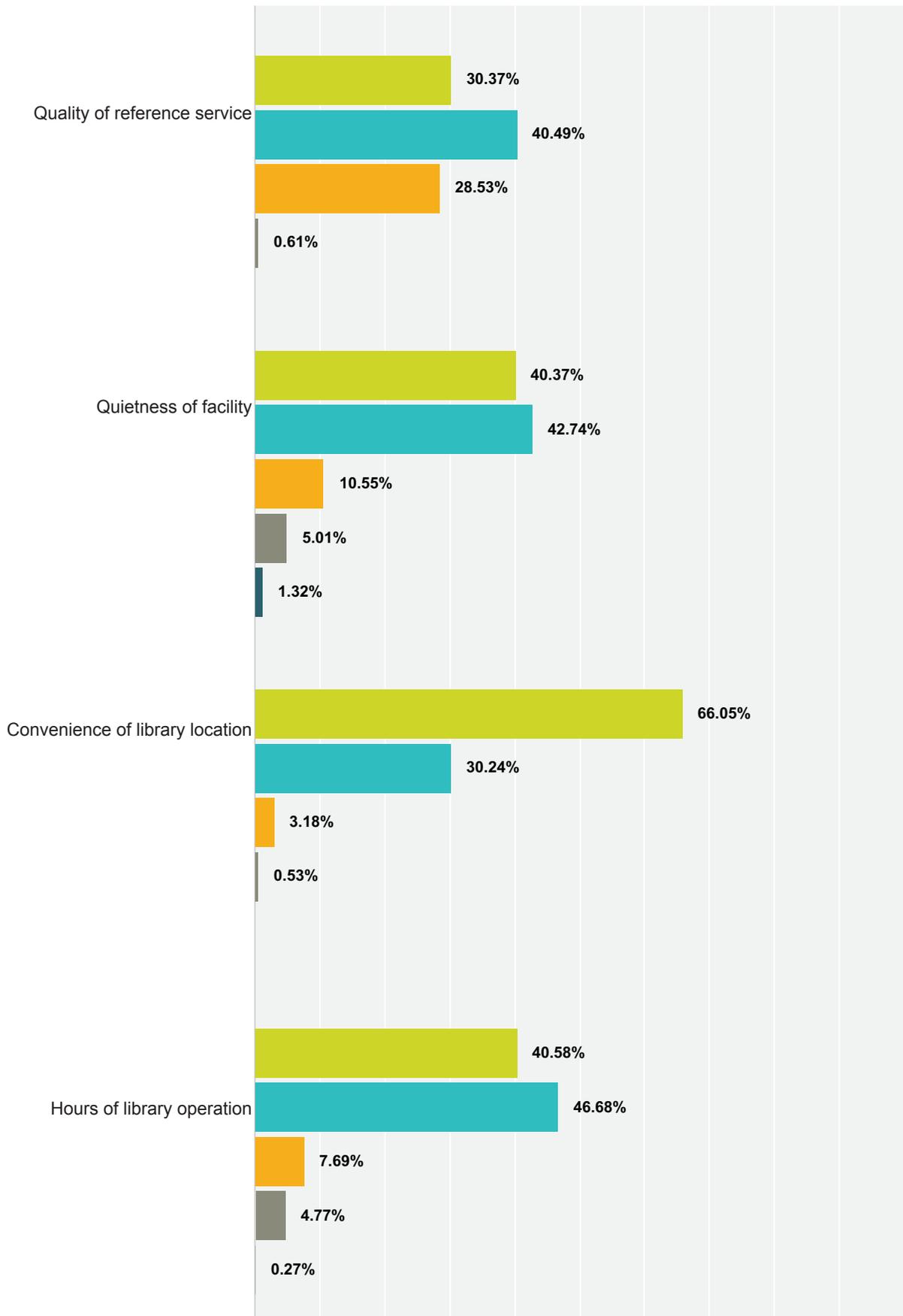


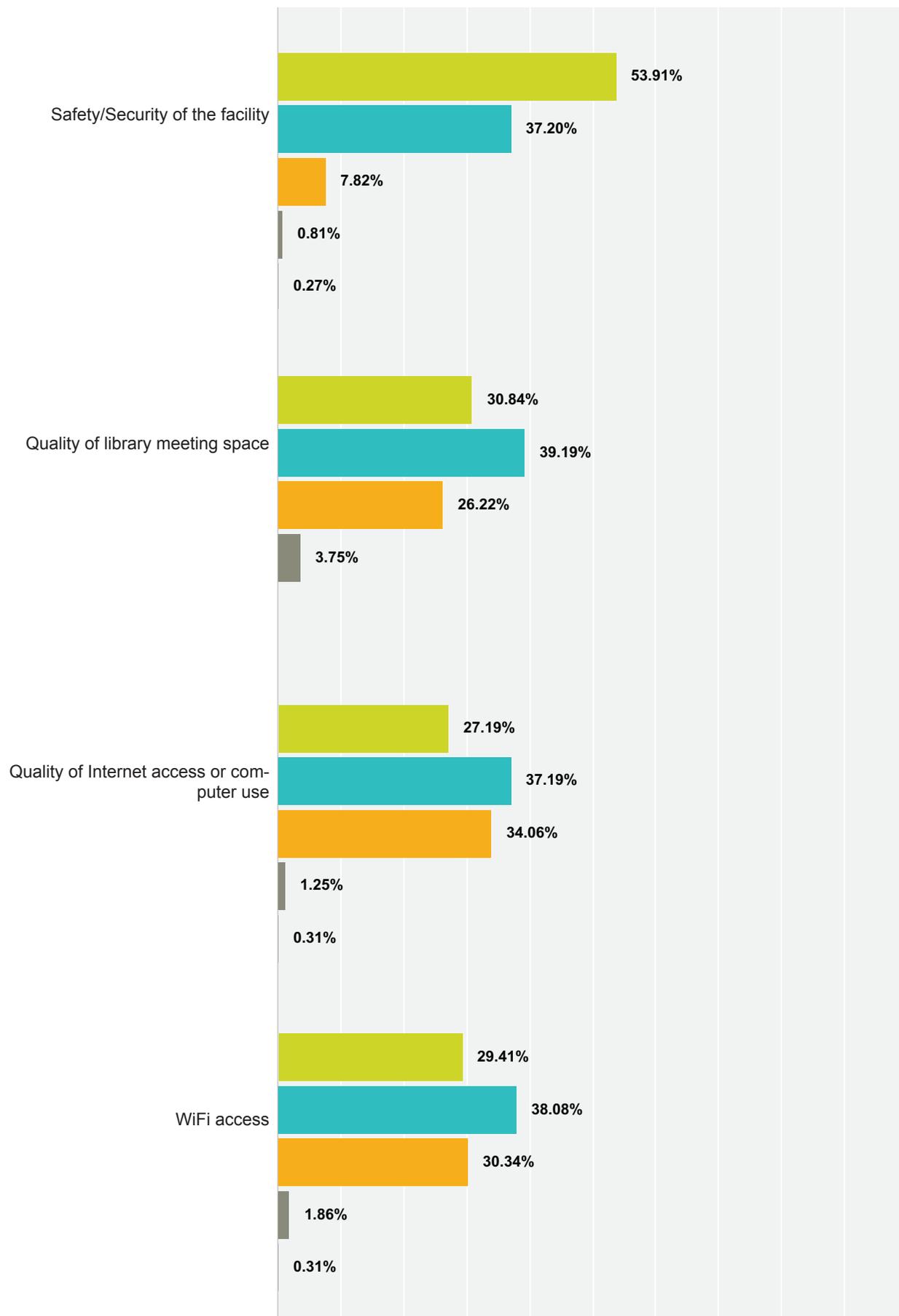
Q29 How would you rate each of the following for the library that you visit most frequently?

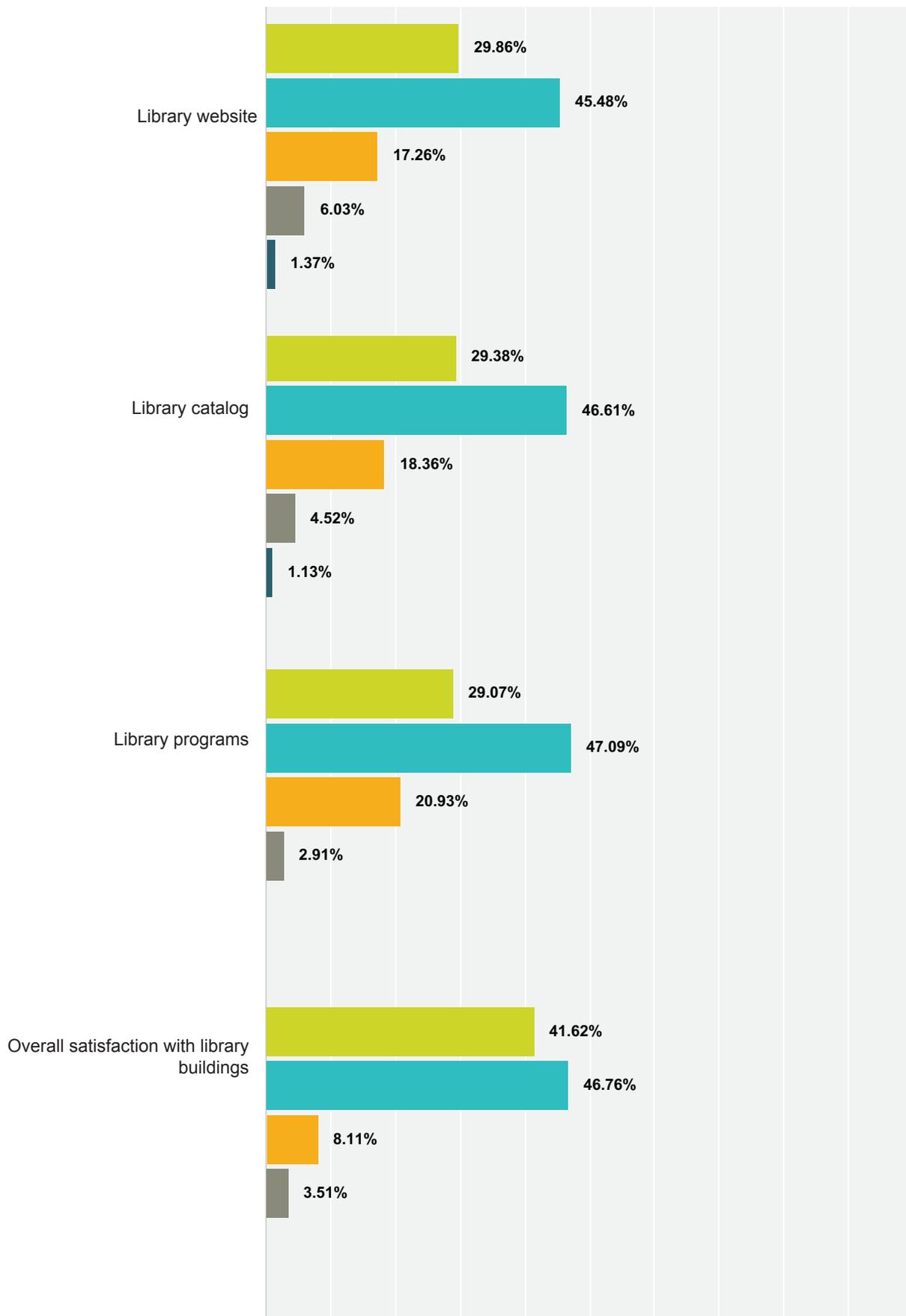
Answered: 383 Skipped: 11

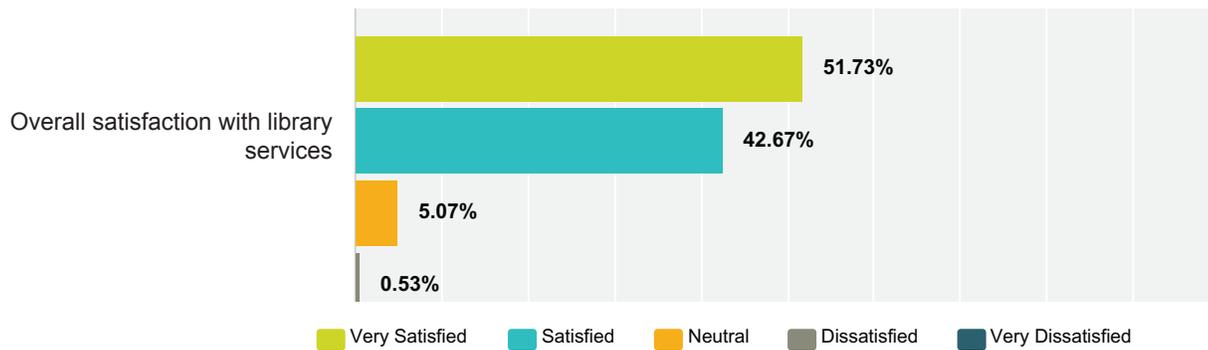








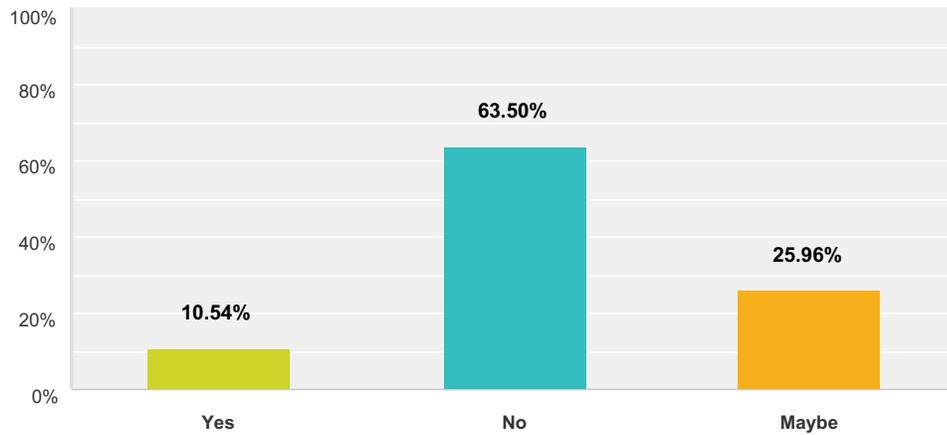




	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Total
Availability of books	33.07% 126	49.08% 187	9.71% 37	7.35% 28	0.79% 3	381
Availability of reference materials	21.05% 72	47.66% 163	29.53% 101	1.46% 5	0.29% 1	342
Availability of periodicals	26.44% 92	45.98% 160	26.72% 93	0.86% 3	0.00% 0	348
Electronic resources and databases	25.45% 85	42.22% 141	28.14% 94	3.29% 11	0.90% 3	334
Speed of internet service	25.54% 83	37.23% 121	34.15% 111	2.46% 8	0.62% 2	325
Helpfulness / courtesy of staff	78.36% 297	18.73% 71	2.11% 8	0.79% 3	0.00% 0	379
Speed of front desk service	68.52% 259	28.04% 106	3.17% 12	0.26% 1	0.00% 0	378
Quality of reference service	30.37% 99	40.49% 132	28.53% 93	0.61% 2	0.00% 0	326
Quietness of facility	40.37% 153	42.74% 162	10.55% 40	5.01% 19	1.32% 5	379
Convenience of library location	66.05% 249	30.24% 114	3.18% 12	0.53% 2	0.00% 0	377
Hours of library operation	40.58% 153	46.68% 176	7.69% 29	4.77% 18	0.27% 1	377
Safety/Security of the facility	53.91% 200	37.20% 138	7.82% 29	0.81% 3	0.27% 1	371
Quality of library meeting space	30.84% 107	39.19% 136	26.22% 91	3.75% 13	0.00% 0	347
Quality of Internet access or computer use	27.19% 87	37.19% 119	34.06% 109	1.25% 4	0.31% 1	320
WiFi access	29.41% 95	38.08% 123	30.34% 98	1.86% 6	0.31% 1	323
Library website	29.86% 109	45.48% 166	17.26% 63	6.03% 22	1.37% 5	365
Library catalog	29.38% 104	46.61% 165	18.36% 65	4.52% 16	1.13% 4	354
Library programs	29.07% 100	47.09% 162	20.93% 72	2.91% 10	0.00% 0	344
Overall satisfaction with library buildings	41.62% 154	46.76% 173	8.11% 30	3.51% 13	0.00% 0	370
Overall satisfaction with library services	51.73% 194	42.67% 160	5.07% 19	0.53% 2	0.00% 0	375

Q30 If it would achieve expanded services, more space and improved facilities, would you be in favor of building a single, new library facility located in Montgomery County to serve both the Blacksburg and Christiansburg communities?

Answered: 389 Skipped: 5



APPENDIX E

DEMOGRAPHICS ANALYSIS MONTGOMERY COUNTY, BLACKSBURG AND CHRISTIANSBURG

MONTGOMERY COUNTY, VIRGINIA DEMOGRAPHICS ANALYSIS

Demographics	Montgomery County	Christiansburg	Blacksburg
POPULATION ¹			
Total	97,653	21,943	44,215
Under 5	4.5%	7.4%	2.5%
Under 18	16.0%	23.1%	8.3%
18-65	68.2%	57.3%	84.2%
Over 65	11.3%	12.2%	5.0%
Female	47.9%	52.1%	45.0%
Male	52.1%	47.9%	55.0%
White	87.1%	89.5%	81.2%
Black	4.2%	6.2%	4.3%
Hispanic	3.1%	2.2%	3.5%
Two or More Races	2.2%	1.9%	2.8%
Other	3.4%	0.2%	8.2%
INCOME ²			
Median Income	\$44,810	\$51,508	\$29,271
EDUCATION ³			
High School or Higher	90.4%	91.3%	96.5%
Bachelor's or Higher	44.3%	40.9%	69.3%

¹ - United States Census (www.census.gov/quickfacts/table/PST045215/51121)

² - United States Census (www.census.gov/quickfacts/table/INC110214/51121)

³ - United States Census (www.census.gov/quickfacts/table/EDU635214/51121)

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX F

COLLECTIONS AREA CALCULATION BLACKSBURG LIBRARY

Montgomery County Public Library - Blacksburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

79,232 items 5,841 sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Adult Print

AS-Fiction	15,523		100%	15,523	10%	90%	13,971	8	72	5	0.7	84	166	9.00	1,494	1,494		166		0%
AS-Non-Fiction	17,515		100%	17,515	10%	90%	15,764	10	72	5	0.7	105	150	9.00	1,350	1,350		150		0%
AS-Large Type	1,453		115%	1,670	15%	85%	1,420	10	72	5	0.7	105	14	9.00	126	126		14		0%
AS-GN	234		100%	234	10%	90%	211	15	72	5	0.7	158	1	9.00	9	9		1		0%
AS-New	1,215		115%	1,397	45%	55%	768	8	72	5	0.7	84	9	12.00	108	108		9		0%
Reference	316		100%	316	0%	100%	316	8	72	5	0.7	84	5	9.00	45	45		5		0%
	36,256			36,655																
															Collection Area		3,132			
															Display Allowance	10.0%	313			
															Gross Collection Area		3,445			

Young Adults

YA-Fiction	809		115%	930	15%	85%	791	11	66	5	0.7	116	7	9.00	63	63		7		0%
YA-Graphic Novels	468		110%	515	15%	85%	398	17	66	5	0.7	179	2	9.00	18	18		2		0%
YA-Non Fiction & Biography	353		110%	388	0%	0%	0	10	66	5	0.7	105	0	9.00	0	0		0		
YA-New	0		0%	0	0%	100%	0	8	66	5	0.7	84	0	9.00	0	0		0		
	1,630			1,833																
															Collection Area	81.0	81			
															Display Allowance	10.0%	8			
															Gross Collection Area		89			

Youth Print

J-Board Books (Shelves)	550		115%	632	55%	45%	284	24	42	2	0.7	101	3	9.00	27	27		3		0%
J-Easy (Shelves)	7,881		115%	9,063	25%	75%	6,797	25	42	2	0.7	105	65	9.00	585	585		65		0%
J-I Can Read (Shelves)	944		130%	1,227	50%	50%	614	19	42	2	0.7	80	8	9.00	72	72		8		0%

Montgomery County Public Library - Blacksburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

79,232 items 5,841 sf

1	Projected Collection Data							Shelving Section Data					# Req'd		Area Required			Shelving Provided		
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	Collection Area	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving
J-Fiction	6,157	X	100%	6,157	15%	85%	5,233	16	66	5	0.7	168	31	9.00	279	279		31		0%
J-Non-Fiction & Biography	9,509	X	100%	9,509	10%	90%	8,558	20	66	5	0.7	210	41	9.00	369	369		41		0%
J-Graphic Novel	241	X	110%	265	10%	90%	239	25	66	5	0.7	263	1	9.00	9	9		1		0%
J-Paperback	0	X	0%	0	0%	100%	0	18	66	5	0.7	189	0	9.00	0	0		0		
J-New	0	X	0%	0	0%	100%	0	18	66	5	0.7	189	0	9.00	0	0		0		
	25,282			26,853																
																Collection Area		1,341		
																Display Allowance		10.0%	134	
																Gross Collection Area		1,475		

Montgomery County Public Library - Blacksburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

79,232 items 5,841 sf

1	Projected Collection Data							Shelving Section Data					# Req'd		Area Required			Shelving Provided		
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving
	No of expansion shelves	Expansion percentage																		

Adult Media

AS-Audio Books	2,414		110%	2,655	25%	75%	1,811	8	72	5	0.7	84	22	9.00	198	198		22		0%
AS-DVD	4,354		110%	4,789	25%	75%	3,592	14	72	5	0.7	147	24	9.00	216	216		24		0%
AS-Blueray	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
Hotflicks	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
AS-Music CDs	1,068			1,068	10%	90%	961	26	72	5	0.7	273	4	9.00	36	36		4		0%
	7,836			8,512																
															Collection Area	450.0				450
															Display Allowance	10.0%				45
															Gross Collection Area					495

Young Adult Media

YA-Audio Books-CDs	190		110%	209	10%	90%	188	9	66	5	0.7	95	2	9.00	18	18		2		0%
YA-DVDs	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Video Games	181		115%	208	15%	85%	177	26	66	5	0.7	273	1	9.00	9	9		1		0%
	371			417																
															Collection Area					18
															Display Allowance	10.0%				2
															Gross Collection Area					20

Youth Media

J-Audio Books-CDs	431		115%	495	30%	70%	347	11	66	5	0.7	116	3	9.00	27	27		3		0%
J-DVDs	1,736		110%	1,909	20%	80%	1,527	19	66	5	0.7	200	8	9.00	72	72		8		0%
J-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
J-Music CDs	261		100%	261	5%	95%	248	26	66	5	0.7	273	1	9.00	9	9		1		0%
	2,428			2,665																
															Collection Area					108

Montgomery County Public Library - Blacksburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

79,232 items 5,841 sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vol/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Display Allowance	10.0%	11
Gross Collection Area		119

Serials

Back Periodicals	1,550		85%	1,318	20%	80%	1,054	12	66P	4	1	144	7	9.00	63	63		7		0%
AS-Current Periodicals	117		85%	99	0%	100%	99	12	66P	4	1	144	2	9.00	18	18		2		0%
YA-Current Periodicals	6		83%	5	0%	100%	5	12	66P	4	1	144	1	9.00	9	9		1		0%
J-Periodicals	14		79%	11	5%	95%	10	12	66P	4	1	144	1	9.00	9	9		1		0%
Back Newspapers	98		100%	98	0%	100%	98	14	66P	4	1	168	1	9.00	9	9		1		0%
Current Newspapers	7		0%	7	0%	100%	7	7	66P	4	1	84	1	9.00	9	9		1		0%

1,792	1,538	Collection Area	117.0	117
		Display Allowance	10.0%	12
		Gross Collection Area		129

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX G

COLLECTIONS AREA CALCULATION CHRISTIANSBURG LIBRARY

Montgomery County Public Library - Christiansburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

71,596 items 6,039 sf

1	Projected Collection Data						Shelving Section Data						# Req'd		Area Required			Shelving Provided		
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Adult Print

AS-Fiction	17,658	X	100%	17,658	5%	95%	16,775	8	72	5	0.7	84	200	9.00	1,800	1,800		200		0%
AS-Non-Fiction & Bio	16,543	X	100%	16,543	5%	95%	15,716	10	72	5	0.7	105	150	9.00	1,350	1,350		150		0%
AS-Large Type	3,561	X	115%	4,100	15%	85%	3,485	10	72	5	0.7	105	33	9.00	297	297		33		0%
AS-GN	171	X	105%	180	10%	90%	162	15	72	5	0.7	158	1	9.00	9	9		1		0%
AS-New	765	X	110%	842	50%	50%	421	8	72	5	0.7	84	5	12.00	60	60		5		0%
Reference/Genealogy	963	X	104%	1,000	0%	100%	1,000	8	72	5	0.7	84	13	9.00	117	117		13		0%
	39,661			40,323																
															Collection Area		3,633			
															Display Allowance	10.0%	363			
															Gross Collection Area		3,996			

Young Adults

YA-Fiction	1,989	X	105%	2,090	10%	90%	1,881	11	66	5	0.7	116	16	9.00	144	144		16		0%
YA-Graphic Novels	372	X	108%	400	10%	90%	335	17	66	5	0.7	179	2	9.00	18	18		2		0%
YA-Non Fiction & Biography	0	X	0%	0	0%	100%	0	10	66	5	0.7	105	0	9.00	0	0		0		
YA-New	20	X	125%	25	25%	75%	19	4	66	5	0.7	42	1	9.00	9	9		1		0%
	2,381			2,515																
															Collection Area	171.0	171			
															Display Allowance	10.0%	17			
															Gross Collection Area		188			

Youth Print

J-Board Books (Shelves)	501	X	100%	501	45%	55%	276	20	42	2	0.7	84	3	9.00	27	27		3		0%
J-Easy (Shelves)	5,082	X	115%	5,845	20%	80%	4,676	25	42	2	0.7	105	45	9.00	405	405		45		0%
J-I Can Read (Shelves)	896	X	110%	986	30%	70%	690	29	42	2	0.7	122	6	9.00	54	54		6		0%

Montgomery County Public Library - Christiansburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

71,596 items 6,039 sf

1	Projected Collection Data							Shelving Section Data					# Req'd		Area Required			Shelving Provided		
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving
J-Fiction	4,136	X	105%	4,342	15%	85%	3,691	16	66	5	0.7	168	22	9.00	198	198		22		0%
J-Non-Fiction & Biography	5,910	X	100%	5,910	10%	90%	5,319	20	66	5	0.7	210	25	9.00	225	225		25		0%
J-Graphic Novel	286	X	110%	315	10%	90%	284	25	66	5	0.7	263	1	9.00	9	9		1		0%
J-Paperback	381	X	110%	420	10%	90%	378	25	66	5	0.7	263	1	9.00	9	9		1		0%
J-New	0	X	0%	0	0%	100%	0	0	66	5	0.7	0	0	9.00	0	0		0		
	17,192			18,319																
																Collection Area		927		
																Display Allowance	10.0%	93		
																Gross Collection Area		1,020		

Montgomery County Public Library - Christiansburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

71,596 items 6,039 sf

1	Projected Collection Data							Shelving Section Data					# Req'd		Area Required			Shelving Provided		
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Adult Media

AS-Audio Books	1,399		103%	1,441	25%	75%	1,049	12	72	5	0.7	126	8	9.00	72	72		8		0%
AS-DVD	3,607		100%	3,607	20%	80%	2,886	14	72	5	0.7	147	20	9.00	180	180		20		0%
AS-Blueray	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
Hotflicks	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
AS-Music CDs	819		100%	819	5%	95%	778	26	72	5	0.7	273	3	9.00	27	27		3		0%
	5,825			5,867											Collection Area	279.0				279
															Display Allowance	10.0%				28
															Gross Collection Area					307

Young Adult Media

YA-Audio Books-CDs	68		106%	72	10%	90%	65	8	66	5	0.7	84	1	9.00	9	9		1		0%
YA-DVDs	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Video Games	126		109%	137	25%	75%	103	19	66	5	0.7	200	1	9.00	9	9		1		0%
	194			209											Collection Area					9
															Display Allowance	10.0%				1
															Gross Collection Area					10

Youth Media

J-Audio Books-CDs	314		105%	330	20%	80%	264	11	66	5	0.7	116	2	9.00	18	18		2		0%
J-DVDs	1,317		105%	1,383	20%	80%	1,106	19	66	5	0.7	200	6	9.00	54	54		6		0%
J-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
J-Music CDs	233		100%	233	10%	90%	210	26	66	5	0.7	273	1	9.00	9	9		1		0%
	1,864			1,946											Collection Area					81

Montgomery County Public Library - Christiansburg Branch

Collection Area Calculation - By Growth Percentage -physical collection:

71,596 items 6,039 sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	Collection Area	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving
		No of expansion shelves	Expansion percentage													1				
																Display Allowance		10.0%	8	
																Gross Collection Area			89	

Serials

Back Periodicals	0		0%	0	0%	100%	0	12	66P	4	1	144	0	9.00	0	0		0		
AS-Current Periodicals	1,241		100%	1,241	10%	90%	1,117	3	66P	4	1	36	32	9.00	288	288		32		0%
YA-Current Periodicals	17		100%	17	0%	100%	17	3	66P	4	1	36	1	9.00	9	9		1		0%
J-Periodicals	51		100%	51	5%	95%	48	3	66P	4	1	36	1	9.00	9	9		1		0%
Back Newspapers	234		100%	234	0%	100%	234	10	66P	4	1	120	2	9.00	18	18		2		0%
Current Newspapers	0		0%	0	0%	100%	0	2	66P	4	1	24	0	9.00	0	0		0		
		1,543		1,543												Collection Area		324.0	324	
																Display Allowance		10.0%	32	
																Gross Collection Area			356	

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX H

COLLECTIONS AREA CALCULATION COMBINED LIBRARY

Montgomery County Public Library -Combined Branch

Collection Area Calculation - By Growth Percentage -physical collection:

158,961 items ##### sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Adult Print

AS-Fiction	33,181	X	110%	36,500	25%	75%	27,375	8	72	5	0.7	84	326	9.00	2,934	2,934		326		0%
AS-Non-Fiction & Bio	34,000	X	110%	37,400	25%	75%	28,050	10	72	5	0.7	105	267	9.00	2,403	2,403		267		0%
AS-Large Type	5,000	X	115%	5,750	30%	70%	4,025	10	72	5	0.7	105	38	9.00	342	342		38		0%
AS-GN	400	X	105%	420	10%	90%	378	15	72	5	0.7	158	2	9.00	18	18		2		0%
AS-New	2,000	X	110%	2,200	40%	60%	1,320	8	72	5	0.7	84	16	12.00	192	192		16		0%
Reference/Genealogy	1,250	X	100%	1,250	0%	100%	1,250	8	72	5	0.7	84	16	9.00	144	144		16		0%
	75,831			83,520																
															Collection Area		6,033			
															Display Allowance	10.0%	603			
															Gross Collection Area		6,636			

Young Adults

YA-Fiction	2,800	X	105%	2,940	25%	75%	2,205	11	66	5	0.7	116	19	9.00	171	171		19		0%
YA-Graphic Novels	840	X	110%	924	25%	75%	630	17	66	5	0.7	179	4	9.00	36	36		4		0%
YA-Non Fiction & Biography	500	X	0%	500	10%	90%	450	10	66	5	0.7	105	4	9.00	36	36		4		0%
YA-New	20	X	0%	60	0%	100%	60	4	66	5	0.7	42	2	9.00	18	18		2		0%
	4,160			4,424																
															Collection Area	261.0	261			
															Display Allowance	10.0%	26			
															Gross Collection Area		287			

Youth Print

J-Board Books (Shelves)	1,051	X	143%	1,500	40%	60%	900	20	42	2	0.7	84	11	9.00	99	99		11		0%
J-Easy (Shelves)	12,963	X	120%	15,555	30%	70%	10,889	25	42	2	0.7	105	104	9.00	936	936		104		0%
J-I Can Read (Shelves)	1,840	X	120%	2,208	30%	70%	1,546	29	42	2	0.7	122	13	9.00	117	117		13		0%

Montgomery County Public Library -Combined Branch

Collection Area Calculation - By Growth Percentage -physical collection:

158,961 items ##### sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo//lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving
J-Fiction	10,293	X	105%	10,808	30%	70%	7,566	16	66	5	0.7	168	45	9.00	405	405		45		0%
J-Non-Fiction & Biography	15,419	X	105%	16,189	15%	85%	13,761	20	66	5	0.7	210	66	9.00	594	594		66		0%
J-Graphic Novel	527	X	110%	580	10%	90%	522	25	66	5	0.7	263	2	9.00	18	18		2		0%
J-Paperback	381	X	110%	420	10%	90%	378	25	66	5	0.7	263	1	9.00	9	9		1		0%
J-New	0	X		50	10%	90%	45	5	66	5	0.7	53	0	9.00	0	0		0		
	42,474			47,310																
																Collection Area		2,178		
																Display Allowance	10.0%	218		
																Gross Collection Area		2,396		

Montgomery County Public Library -Combined Branch

Collection Area Calculation - By Growth Percentage -physical collection:

158,961 items ##### sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Adult Media

AS-Audio Books	3,813		110%	4,195	30%	70%	2,669	12	72	5	0.7	126	21	9.00	189	189		21		0%
AS-DVD	7,961		110%	8,758	30%	70%	6,131	25	72	5	0.7	263	23	9.00	207	207		23		0%
AS-Blueray	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
Hotflicks	0		0%	0	0%	100%	0	26	72	5	0.7	273	0	9.00	0	0		0		
AS-Music CDs	1,887		100%	1,887	10%	90%	1,698	30	72	5	0.7	315	5	9.00	45	45		5		0%
	13,661			14,840											Collection Area	441.0				441
															Display Allowance	10.0%				44
															Gross Collection Area					485

Young Adult Media

YA-Audio Books-CDs	258		107%	275	10%	90%	248	8	66	5	0.7	84	3	9.00	27	27		3		0%
YA-DVDs	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
YA-Video Games	307		111%	340	25%	75%	255	25	66	5	0.7	263	1	9.00	9	9		1		0%
	565			615											Collection Area					36
															Display Allowance	10.0%				4
															Gross Collection Area					40

Youth Media

J-Audio Books-CDs	734		115%	845	20%	80%	676	11	66	5	0.7	116	6	9.00	54	54		6		0%
J-DVDs	3,053		115%	3,511	20%	80%	2,809	19	66	5	0.7	200	14	9.00	126	126		14		0%
J-Blueray	0		0%	0	0%	100%	0	26	66	5	0.7	273	0	9.00	0	0		0		
J-Music CDs	494		105%	520	10%	90%	468	26	66	5	0.7	273	2	9.00	18	18		2		0%
	4,281			4,876											Collection Area					198

Montgomery County Public Library -Combined Branch

Collection Area Calculation - By Growth Percentage -physical collection:

158,961 items ##### sf

1	Projected Collection Data						Shelving Section Data					# Req'd		Area Required			Shelving Provided			
	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	13	18	19
Collection	Identify the current collection size	Collection expansion rate		Target Collection Size	Identify the % typically in circulation	% of collection to shelve	# of volumes to store	Rate (vo/lf)	Select Height from Pull-down List	# shelves including base shelf	Shelf capacity factor	Capacity, single face section	# of SF sections req'd	Select Density Factor (sf req'd per section)	Area required based on density factor	1	Departmental Gross	# of SF sections req'd	# of SF Sections on Plan	Percent of Req'd Shelving

Display Allowance	10.0%	20
Gross Collection Area		218

Serials

Back Periodicals	2,500		0%	0	10%	90%	0	12	66P	4	1	144	0	9.00	0	0		0		
AS-Current Periodicals	231		537%	1,241	0%	100%	1,241	3	66P	4	1	36	35	9.00	315	315		35		0%
YA-Current Periodicals	12		100%	12	0%	100%	12	3	66P	4	1	36	1	9.00	9	9		1		0%
J-Periodicals	28		100%	28	5%	95%	27	3	66P	4	1	36	1	9.00	9	9		1		0%
Back Newspapers	200		100%	200	0%	100%	200	10	66P	4	1	120	2	9.00	18	18		2		0%
Current Newspapers	14		0%	0	0%	100%	0	2	66P	4	1	24	0	9.00	0	0		0		

2,985	1,481	Collection Area	351.0	351
		Display Allowance	10.0%	35
		Gross Collection Area		386

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX I

BLACKSBURG LIBRARY STAFF QUESTIONNAIRE & RESPONSES

General Questions

1. What is special or unique about the Blacksburg Library and the way it serves the community?

CW – It isn't unique but it is extremely responsive to its community
JS – proximity to the Huckleberry Trail means traffic for restrooms and water
Provide exhibit with trail information.
Provide outdoor restroom at the trail.
ES- We receive a lot of foot traffic with its proximity to downtown and the Huckleberry Trail.
Very diverse patron base with many English as second language speakers. \
Language barriers are a problem.
Proximity to Virginia Tech. Tech students use the library to study during peak times. How can the library engage the college students more?
Library used by broad age groups, except teens. Need to bring teens into the library
2. What are the unique programs and services offered at the Blacksburg Library?

CW – The Gluten Free expo in September, food vendors and local restaurants, outdoor; the Chili crawl, February, local restaurants, 283 people, indoor in program room.
JS – art displays, need hanging system, art walk five to six times per year.
ES – We offer a few programs that involve 10-12 vendors and local businesses. There are many partnerships with the downtown merchants and Virginia Tech.
We have offered ESL conversation classes.
Bountiful Basket- fundraiser sells baskets with goodies inside
Nature programs
Therapy programs
Need outdoor charging ports for people using the trail, or reading/working outside.
Need outdoor payphone.
3. What programs and services would you like to offer in the new library which are not offered in the existing library?

ES - It would be ideal to have space outside the library for music, gatherings, seating, etc. We currently have no outdoor space for events outside.
Maker space for teens
4. Are there any special features or spaces you would like to see integrated into the design?

CW – there seems to be a desire for more quiet spaces
6 person, 4 person, and 2 person conference/study rooms, large conference room
Quiet reading room
One study room near children's area with shade for nursing mothers.

ES – More study rooms and flexible spaces. A place for children and teens that is visible from the circulation desk but is encased in some way to minimize noise and disruption to others. A drop down/ceiling projector for ease of program set-up for the public and library staff.

PA: separate children's area that is enclosed with a story time room; teen room enclosed; more individual study rooms, several conference rooms and a quiet reading room; nice foyer, outdoor bookdrop that goes into the back room; more work space for staff

5. What are the collections needs and shelving requirements for each department? Review collection summary provided by Enteros Design and filled in by Staff.

Youth Services

1. What programs are offered? How many children?

ES – Attendance is high in response to children's programs. 30 for typical story time, 40 to 50 for peak times

SP-We offer various youth programs for ages 0-12 every month. Attendance can vary from a small group to a large group depending on the program.

Need chairs for adults to sit in during story time and programs, could be 25 to 30 parents.

Craft activities?

ES –Craft activities are offered as part of storytimes and stay & plays on occasion. Sometimes craft supplies are left out for children and teens to help themselves.

SP-Weekly make and take crafts in the children's area.

Puppet shows?

ES – Currently no puppet shows, although that would be great fun! Built-in puppet show wall was requested

ES – Daily storytimes are held Tuesday –Friday in a small, storytime room with a maximum capacity of 40. Often the room is over capacity. Programs include storytimes offered by staff, STEM events, movies, crafting events, and programs delivered by professional performers via the Summer Reading Program yearly event.

2. Children's activities occur in the children's space, or in a separate room or both?

ES – both in the storytime room (off the children's space) and in the community room.

3. What are the goals for a separate program room?

Capacity?

ES – A separate program room to hold 150+ is great!

PA: That's a little large for a storytime room. If we get crowds like that, the program would be held in the community room; but story time room that holds 50 comfortably with room to store crafts, craft tables and a sink

Technology?

ES – Technology including a speaker/sound system, drop down projector and screen, etc.
Equipment that groups would find helpful

PA: we probably would use this equipment for programs but we would not let groups use the story time room; they would be in meeting rooms and conference rooms.

SP: Smart Board

PA: I wouldn't put a smart board in the story time room

Craft area, sink?

ES – Sinks for the areas in which both children's and adult's programs happen is ideal.

SP-a space for crafting and sink would be ideal.

Storage?

ES – Storage for equipment (podiums, extra chairs, etc.) would be helpful. Having a storage space for the children's program area would be particularly important!

SP-Build in cabinets would be extremely helpful.

Shared?

JS- Maker Space for children, near program room with movable wall

4. What are the seating goals?

Four person tables, high, low? **Mostly low, but a few high, 4 tables**

Two person tables, high, low? **Ditto**

Parent and child benches? **Yes in the children's room**

Lounge seating? **Yes, lots, esp in the quiet reading room**

Pods, or small seats for children? **Yes**

Specialty seating areas such as window seats? **Sounds good**

5. What are the technology needs?

Computers? **YES 6 computers in addition to the AWE computers**

Early literacy computers? **YES**

Printers **YES**

OPAC's? **YES**

Interactive displays? **YES**

Smartboards?

CE - There are two Early Literacy computers that get regular use. A third or fourth Early Lit computer could be beneficial. There is one OPAC in the child's area and that appears to be sufficient.

PA: a smart board in a small conference room and/or the meeting room

6. Is there a need for a separate children's staff desk?

How many staff? **3 or 4**

Check out? **No**

Self-check? **We could consider this**

Storage? **Please**

JS - a staffed desk would help with security issues

ES – a staff desk would provide better customer service. Staff would be better positioned to assist patrons in finding materials and would be nearby to suggest materials and just be more engaged and available to families.

PA: I'm hoping we would have a childrens staff of 3 or 4 . We would need storage, a separate desk but would not do check out at this desk; self checkout might be okay.

7. Is there a separate children's staff work room or office adjacent to the children's department?

CW – unless there is a whole revamping of the staff and there is a substantial amount of children's staff, I don't understand the need for a separate work room

PA: Yes we want a separate workroom for the children's staff.

8. Do you want a separate family bathroom in the children's area? **Yes**

CW – I think that's a necessity

JS- Yes

ES – Yes

SP- Yes

9. Do you need stroller parking area, how many?

ES – Yes! Especially during well attended programs.

SP-Absolutely! 10-15

10. Are there any specialty items?

Toy storage?

Display features?

End panel design?

Specialty equipment

PA: We would like plenty of display features, and a toy area, storage for toys; nice end panels.

11. Other requirements?

Active learning area. Not too big. Safe to climb on.

Young Adults

1. What programs are offered? How many teens?

2. Is there a need for a separate maker space or media lab?

CW – a media lab would be a great thing to have

JS – Yes

SP-Yes

3. What are the technology needs?

Computers?

SP-Yes

Printers?

SP-Maybe.

Game consoles?

SP-We have one on a game cart. I would add additional consoles providing there was space.

OPAC's?

Interactive displays?

A separate sound booth would be nice

Video game area with locking cabinet

Smartboards?

CE - The Blacksburg Library currently has 17 public computers in a centralized location in the "adult" section of the library. There are no computers in the teen area. In a larger library, I could envision five or six computers in a teen area. A new, larger Teen area would need at least one OPAC. I also think a self-checkout in the teen area is worth investigating.

PA: I agree with CE; we would want a big screen TV so they can game, teen type furniture; some display space

4. What are the seating needs?

Café area near teens

Four person tables?

Two person tables?

Gaming area with gaming chairs?

Lounge seating?

Specialty seating areas such as window seats?

PA: A gaming area with gaming chairs would be nice if that is still popular when we can build this place; a mix of 2 and 4 person tables and a mix of high and low. One-but lounge seating...you know teenagers!

5. What are the goals for adjacency and observation?

CW – the teen area needs to be in sight of the desk

PA: or manned during certain times

6. What are the requirements for study rooms and tutoring rooms?

SP-We currently have two. We could use an additional two.

7. What are the storage requirements?

SP-cabinet for games, crafting.

8. Are there any specialty items?

Game storage?

SP- Yes for additional consoles and games.

Display features?

End panel design?

Specialty equipment

9. Other requirements?

Periodicals

1. What is the preference for displaying periodicals?

CW – only the current copy is visible

PA: current issue face out

2. How are back issues stored?

CW – having them underneath the current copy has worked well for us
PA: with storage for back issues; we do not keep more than a year

3. What are the seating needs?

Four person tables? 1

Two person tables? 2

Lounge seating?

CW – Lounge seating for a browsing/reading area is a must

PA: mostly lounge seating

Specialty seating areas such as window seats? YES

5. What are the desires for adjacency and observation?

Does not need to be close to the desk

Non-Print

1. What types of non-print collection do you hold and how are they shelved/displayed?

PA: DVDs, CDs, books on CD, they are on regular shelving, not convenient for patrons.

2. Are there any special security devices/cases?

PA: We don't use security. You are free to steal.

3. Is there a need for a listening station?

PA: not at this time

4. Are there any seating requirements?

PA: none required, unless we sprinkle the tables around

5. Any other special requirements?

Adult Services

1. What are the seating needs?

Four person tables?

Two person tables?

Lounge seating?

Specialty seating areas such as window seats?

JS – all of the above

2. What are the technology needs?

Computers?

Printers?

Copiers?

Payment machines?

Fax machine?

OPAC's?

Interactive displays?

Smartboards?

CE - The Blacksburg Library currently has 17 public computers in a centralized location in the "adult" section of the library. This appears to be generally sufficient, especially if a future Teen area would have public computers that teens could use. Patrons will continue to print to printers at the circulation desk, though I see a benefit to a print vending kiosk.

PA: I would hope we could go to printers/copiers that are coin and card operated

3. Is there a reference collection, and if so how is it handled?

CW – I see less and less need for a reference collection

PA: it's small and I don't see it growing

4. What are the desires for adjacency and observation?

PA: no more than normal.

5. Are there special acoustical concerns?

PA: No

6. What are the requirements for study rooms, small meeting rooms, tutoring rooms?

PA: we would like at least 4 study rooms/tutoring spaces; at least one small conference room (6 people) and at least 2 separate community rooms (no dividing wall.)

7. What are the storage requirements?

PA: More than we have now

8. Are there any specialty items?

Display features?

End panel design?

Specialty equipment?

PA: Nice end panels that cover the entire library; several display features

9. Other requirements?

Specialty Collections

1. Are there any special collections?

ES – Not in Bburg.

Local History?

Genealogy?

Literacy?

Training?

English as a second language

Language tapes

Main Meeting Room

1. What activities will occur in the meeting room?

CW – keeping it as it is seems to work. I would hope to never see birthday parties and things of that sort in the meeting rooms

2. How many people should it serve?

CW – entirely dependent on the community it serves

PA: two rooms, one for 75; one for 150

3. What are the seating/furniture requirements?

CW – sturdy chairs and tables

PA: light weight tables, stackable chairs on rollers; laminate floors that are easy to clean; storage for chairs and tables; screen/projector; kitchen adjacent to room or shared by the two rooms

4. What are the adjacency requirements?

CW – not critical

PA: only to the kitchen

5. Will it be used after hours?

CW – absolutely

PA: so would need a separate entrance

6. What are the technology requirements?
CW – at the very least a DVD player, large screen TV, large screen for use with projectors
CE - A centrally located A/V connection to a ceiling mounted projector. An integrated sound system with microphone and lavalier.
7. Storage requirements?
PA: yes
8. Display requirements?
PA: no

Staff Areas

1. Circulation Desk

How many staff? 3 workstations at desk, with storage

ES- 17

PA: current staff is 17; would need larger staff if the building is bigger

How many check out stations?

ES – 3

How many self-check?

ES - 1

PA: currently have one but I would hope we would have at least 2

Book carts?

ES – about 20 that are kept in the workroom. Having a place to store carts nearby would be extremely helpful. We usually have at least 5-6 carts full of books that have been returned and are waiting to be shelved. We usually have 2-3 carts of donations to go through. And we also have 2-3 'problem' carts, or carts with materials that need to be reviewed for condition. None of these carts are kept out on the public floor area but are all in the workroom behind the circulation desk

4 carts at the circulation desk, new more space behind the desk.

Storage?

PA: some

Printers

ES-1

PA: one printer for staff use; would like a coin operating printer for patrons

Cash drawers?

ES – 3

Book return?

ES -2 (one external bookdrop from parking lot and another inside near the circulation desk)

PA: one internal and one from the outside into the workroom

Book security/detection?

ES – No

PA: We currently do not have it but we need it and it would be covered by RFID or whatever the current technology is.

RFID

ES – No, not currently. We've checked out our options a few times but haven't been able to afford it.

CE – If RFID could be an option, I would be in favor of it.

PA: RFID would be a necessity in the new building

Holds shelving

ES - Holds shelving is in the public area for patrons to help themselves to their holds

2. Other staff information desks?

ES – No

PA: Would like to see one main circulation desk, but separate desks in the kids room and the teen room

3. How many staff? What are their names and positions?

ES: 17 frontline staff

Cathy Prati, Asst. Supervisor; Cathi Smith, PT LSS; Chelsea Hottmann, PT LSS; Duncan Hall, FT LSS (LSS = Library Services Specialist, classified positions); Elizabeth Sensabaugh, Branch Supervisor
Part Time Circulation Specialists: Lorraine Proska, and Lead Worker; Linda Sanford; Laura Carruba; Dale Nielsen; Louann Jarmolowski; Angela Duncan; Juliet Rosso; Svetla Todorova-Zlatkova; Melissa Macomber; Ashley Whitman; Alyssa Carpenter; Julia Greider
IT Department: Chris Elledge (regional employee); One vacant IT Assistant position; Sarah Pahl, youth librarian (regional); Richard Sherman, PT Youth Librarian; Catherine Fae, PT Youth Librarian

4. How many private offices?
ES - One private office, 14 X 16, that the branch supervisor uses
PA: in a new building: one for the branch manager; other regional people would be moved to the Cb Library

5. How many open work stations?
ES – 3 in the far back area of the library for regional staff. Chris Elledge, IT; Asst. IT, and youth librarians have cubicles. One IT staff member uses the upstairs server room as an office.
PA: for Blacksburg staff only, in a new building we should have 5 or 6

6. Circulation work room?

How many workstations? ES - 5
Separate check-in station? ES -2
How many book carts? ES - 15
Work table and/or counter space? ES - Limited in workroom; PA: would need more in a new building
Shelving? ES - Limited shelving in workroom; PA : would need more
Storage? ES - No storage in workroom; PA: lots and lots please
Sink? – ES – No; PA: sure would be nice

7. Will there be a separate staff conference room?
ES – Ideally, there would be a space big enough for staff meetings and staff evaluations and smaller groupings as needed for conducting interviews or meeting with vendors/program presenters, volunteer interviews, training, etc.
PA: I would like to see a separate room in the Cb Library that could be used for board meetings; staff training, interviews; If we do two libraries, we would not need to duplicate this in Bb; they could use meeting rooms for staff meetings.

How many people? ES - Up to 25 at minimum

What are the technology needs?
JS – Using the public meeting rooms serves staff needs
CE - A centrally located A/V connection to a large television. Quality speakerphones for VoIP system. Camera for videoconferencing.

8. Will there be a separate staff break room? ES –Yes, please;
PA: Yes and at least 2 separate staff bathrooms

How many people? ES – for up to 25 to use including library staff and maintenance. Usually only 3-4 staff use it at the same time.

PA: two tables with 4 chairs

What appliances? ES - Fridge, microwave, toaster, coffee maker

Lockers? ES -Yes

Mailboxes? ES –Yes; PA: mailboxes could be in the staff workroom or a hall way

What are the technology needs?

9. Computer server room

How many racks? CE - Two

Desired adjacency?

Security requirements? CE - Basic physical security

Cooling requirements?

CE - A three ton HVAC system is currently inadequate for our 13 x 17 room.

Backup power requirements?

CE – Can be commercial product not integral to building electrical systems.

PA: All of that, but the server room for the whole system should be in Cb; so it would be any server needed for just the Bb library

10. Staff copy area

PA: staff copy area would be in the staff work room;; copier should be near a counter

What are the equipment requirements?

What are the requirements for a work counter/table?

What are the storage requirements?

Big work table in center

Disk cleaning unit

11. Friends of the Library space

Desks or workstations?

ES - Currently there is very little space allotted to the Friends in the workroom. They could use tables, chairs, and shelving.

Work counter and/or table? ES - Very little counter space

They need a separate space

Storage Space?

ES - A small room off the electrical closet, which is not ideal since it can often block the path to that electrical closet which needs to be accessible and with a clear path

Retail display?

ES - Small retail display in the public area near entrance, although it is tucked away behind a wall and not highly visible. It would be wonderful if there was a separate space for the Friends that could be well contained and also give them room to store materials, price books, etc. Currently we are very pressed with space in the work room when the Friends come to price books and put books out for sale.

JS – a separate space would be desirable, otherwise the groups tend to spread into work areas
PA: a retail space that is visible and accessible but not necessarily right up front.

12. Library to Your Door

PA: this can be handled in the staff workroom.

Desks or workstations?

Work counter and/or table?

Storage Space?

13. Need separate passport ID location

14. Janitors closet need space for ladders, equipment, floor buffer, vacuum, leaf blower, etc., need a place to store traffic codes.

Entry

1. Vestibule

CW – relatively uncluttered

PA: Yes if I taught them anything, its to maintain uncluttered spaces.

2. Lobby area

PA: display space is not necessary in the lobby, possible vending or café like area; we will need a donor area somewhere, as well as public art but not a coat room.

Display space?

Vending area?

Donor recognition?

Public art?

Coat room?

Adjacency requirements?

3. Popular books display? In the main part of the library

Outdoor Space

1. Outdoor children's learning space

ES – Currently there is none! But we would love it if there could be space for this. Currently the doors to outside from the children's area are locked and alarms sound if anyone tries to enter/exit through these doors. An enclosed space directly outside the building on this side might make an opportunity for small gatherings outside, a storytime outside, etc.

What types of activities?

How many children?

What type of seating?

Visibility?

Adjacency?

Access and security?

2. Other outdoor learning spaces?

ES – None

What types of activities?

How many people?

What type of seating?

Visibility?

Adjacency?

Access and security?

3. Large event space?

ES- None. We can take about 120 in our community room

4. Landscape?

ES – minimal

PA: but we want good landscaping

5. Hardscape?

PA: patio would be nice and could be combined with an outdoor learning space.

6. Public art or special features?

JS – interesting sculptures would be nice

PA: we would like public art in the building; special feature would be nice

ES – Not currently! A reading garden, study space, picnic table gathering spaces would be great!

7. Vehicle parking requirements?

ES – Currently we don't have enough parking spaces for the public and the staff. Staff have about 5 parking spaces allotted. Often people use library parking to walk downtown or use the huckleberry trail but not to use the library.

PA: would need adequate staff and patron parking

8. Drive through service window?

JS- would be convenient

ES – sounds great if we have additional staff to cover the service!

PA: Yes if it is still currently the rage.

9. Connection to neighborhoods or adjacent sites?

PA: definitely

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



THOMPSON
& LITTON



ENTEROS
DESIGN

APPENDIX J

CHRISTIANSBURG LIBRARY STAFF QUESTIONNAIRE & RESPONSES

General Questions

1. What is special or unique about the Christiansburg Library and the way it serves the community?

JS – Story walk
Adjacent to park, better connection to the park would be good.
MH – Large homeschool community; We know our patrons very well and have positive relationships with many, Could have specific home school program.
LS – located down town in walking distance from many homes
Increase in Latino population, possibly have a Spanish language collection
2. What are the unique programs and services offered at the Christiansburg Library?

MH - Art Club for homeschoolers; murder mysteries (teen, and prior to my arrival – adult)
Need gallery space
VR—Passport services, Notary
Passport could be taken in group study room, locate one between staff area and public area.
Do you need lockers for homeless population?
3. What programs and services would you would like to offer in the new library which are not offered in the existing library?

MH – I have a variety of ideas that I think would be fun and benefit the community. Coding and computer programming classes; Drones and 3-D printing; ESL, GED, and Driver’s Ed; work more closely with area homeless support services, career support services, and food banks.
VR—I would add to Monena’s list Robotics programs.
4. Are there any special features or spaces you would like to see integrated into the design?

JS – maker space for teens (film making, music recording...)
MH – Yes to June’s idea above! Larger teen space. Better space for small group/individual study; quiet study space. Larger, more inviting children’s space and community room. Storytime space plus community room space so that we are not competing with the community room for space. Special genealogy area for our local historians to use. More electrical outlets; space for public performance and public forum. Black Box Theater
LS- spaces for tutoring
VR – All of the above and also drive-up service window, Drive-up return bins, quiet reading room with fireplace, coffee shop, outside theater and courtyard, area for teens/children with gaming systems and large screen TVs, Scanners for public use, WiFi hotspots for checkout.
5. What are the collections needs and shelving requirements for each department? Review collection summary provided by Enteros Design and filled in by Staff.

MH – our shelves are full. Approximately 22 books per shelf would be ideal. Instead we have an average of 28-31 books per shelf (adult fiction). Our Large Type collection could be weeded

multiple times per year in order to maintain space. We need more space to house the existing collection.

Youth Services

1. What programs are offered? How many children?
SP- A variety of programs are offered for children ages 0-12.
Story time, summer reading, etc? SP-Yes, both
Craft activities? SP-Yes, weekly make and take crafts.
Puppet shows?
2. Children's activities occur in the children's space, or in a separate room or both?
MH – both
SP-We use the community room and the children's area.
PA: We want a separate children's room with a story time room.
3. What are the goals for a separate program room?
A separate room for story time and children's programs would be ideal.
Capacity?
SP-75 to 100 seated on floor at story time

Technology? Hi-speed Wifi, computer lab,
Craft area, sink? MH-Yes
SP- Yes for both

Storage? MH-large closet for tables, chairs, supplies
SP-cabinet for craft supplies, story time materials.
Shared? MH – shared with entire library, but potentially reserve for library programs
PA: not shared if it is a story time room
4. What are the seating goals? MH – 30-40
PA: 20
Four person tables, high, low? MH-2-4 low

Two person tables, high, low? MH-2-4 low-None
In a kids room, I would think we would want just 4 person tables.

Parent and child benches? MH 2

Lounge seating? MH Yes, plenty. Current children's space has room for 4 large chairs.

Pods, or small seats for children? MH-yes. Kids love furniture their size

Specialty seating areas such as window seats? MH – if it looks over a children’s garden or something equally as interesting

5. What are the technology needs?

Computers? VR—Yes, with some kids games 4 to 8

Early literacy computers? VR--Yes

Printers – VR--Yes

OPAC’s? VR--Yes

Interactive displays? VR--Yes

Smartboards? VR--Yes

CE - There are two Early Literacy computers that get regular use. A third or fourth Early Lit computer could be beneficial. There is one OPAC in the child’s area and that appears to be sufficient.

MH – An interactive display would be an excellent addition, as well as space for homework computers

PA: don’t need a smartboard in the kids room but all the rest yes.

6. Is there a need for a separate children’s staff desk?

How many staff?

Check out? VR--Yes

Self-check? VR--Yes

Storage? VR--Yes

PA; Checkout no but possibly self-check out; lots of storage

Is there a separate children’s staff work room or office adjacent to the children’s department?

SP-No

PA: but we want one

8. Do you want a separate family bathroom in the children’s area?

YES

9. Do you need stroller parking area, how many?

MH – 10 stroller, but this also depends on where a new library would be located

SP-Yes

10. Are there any specialty items?

Toy storage? SP-Yes VR--Yes

Display features? VR—yes, something child friendly

End panel design? VR--Yes

Specialty equipment VR—some equipment to accommodate children with disabilities

PA: yes to all of that

Tree house or loft, fun places to climb or crawl into; group spaces and places to be alone

11. Other requirements?

VR—Separate room with soundproofing so that children can be allowed to make some noise

Young Adults

1. What programs are offered? How many teens?

MH- murder mysteries, lock-ins, scavenger hunts

SP-Gaming

Could be gaming tournament

Is there a need for a separate maker space or media lab?

JS – yes, MH-yes

SP-Yes

VR—Yes

3. What are the technology needs?

Computers? MH-yes SP-Yes VR—Yes

Could check out laptops which could take the place of computers for teens

Printers? MH-yes

Game consoles? MH-yes SP-Yes VR--Yes

OPAC's? VR--Yes

Interactive displays? MH-yes SP-Yes VR--Yes

Smartboards? VR--Yes

CE - The Christiansburg Library currently has 14 public computers in a centralized location in the "adult" section of the library. There are no computers in the teen area. In a larger library, I could envision five or six computers in a teen area. A new, larger Teen area would need at least one OPAC. I also think a self-checkout in the teen area is worth investigating.

4. What are the seating needs?

Four person tables? VR--Yes

Two person tables? VR--Yes

Gaming area with gaming chairs? MH-yes SP-Yes VR--Yes

Lounge seating? MH-yes SP-Yes VR--Yes

Specialty seating areas such as window seats?

YES to all of that

What are the goals for adjacency and observation?

SP-Teen area should be observable by front desk.

VR—Separate room with soundproofing but with glass and direct view from the circulation desk

5. What are the requirements for study rooms and tutoring rooms?
MH- a few small study rooms
SP- Yes, at least two
VR—Definite need for them, minimum of 2
PA: if we are talking entire library we need at least 2; if we are only talking YA room, we don't need any.
6. What are the storage requirements?
SP-storage for Gaming consoles, games.
VR—Lots
8. Are there any specialty items?
Game storage? SP –Yes VR--Yes
Display features? VR—Yes
End panel design?
Specialty equipment
YES to all of that
Board games, Twister carpet
9. Other requirements?

Periodicals

1. What is the preference for displaying periodicals?
MH-face out
2. How are back issues stored?
MH – stacked underneath the shelving
3. What are the seating needs?
MH-A few lounge chairs, plus café tables

Four person tables?
Two person tables?
Lounge seating?
Specialty seating areas such as window seats?
VR—Yes, comfortable reading nooks
5. What are the desires for adjacency and observation?
MH-It would be useful to see the area for safety purposes

Non-Print

1. What types of non-print collection do you hold and how are they shelved/displayed?
MH- DVDs, music and audiobooks on CDs, MP3 audiobooks
2. Are there any special security devices/cases? MH-no
Possibly in future library; hub caps fit inside case
3. Is there a need for a listening station? MH-no
VR—Yes
4. Are there any seating requirements?
MH-it's useful to have a few chairs in the area for those that can't stand for long periods.
VR—Yes
5. Any other special requirements?
VR—Yes, DVD player or computers to watch DVDs at the library

Adult Services

1. What are the seating needs?
Four person tables? MH – 8-10
Two person tables? MH-4-8
Lounge seating? MH 20
Specialty seating areas such as window seats? MH – if it looked over a garden, a reading window would be a high interest area
VR—comfortable reading nooks, window seats with nice views
2. What are the technology needs?
Computers? – VR—more computers for public use than we have now
Printers? VR—wireless printing
Copiers? VR—Yes, as well as scanners
Payment machines? PA: Yes or coin operated printer/copier
Fax machine? VR—scanners that can also fax
OPAC's? VR--Yes
Interactive displays? VR--Yes
Smartboards?
CE - The Christiansburg Library currently has 14 public computers in a centralized location in the "adult" section of the library. This appears to be generally sufficient, especially if a future Teen area would have public computers that teens could use. Patrons will continue to print to printers at the circulation desk, though I see a benefit to a print vending kiosk.

VR—Yes

3. Is there a reference collection, and if so how is it handled?
MH – yes, it has decreased in size over the last several years. It also contains our genealogy materials which are more heavily used than the regular reference
4. What are the desires for adjacency and observation?
MH – none
5. Are there special acoustical concerns?
JS – older patrons seem to appreciate quiet space
MH – agree with June
VR—Yes—Need quiet areas for reading, studying, and tutoring
PA: dedicated quiet reading room would be nice.
6. What are the requirements for study rooms, small meeting rooms, tutoring rooms?
MH—we receive requests for small, quiet spaces weekly. It would be useful to have 2-6 small rooms that could be reserved for patrons
VR—Definitely needed, with maybe wall-mounted TVs with ability to connect a computer for the purpose of group study, classes, demonstrations.
PA: at least 2 tutoring rooms and one small conference room
7. What are the storage requirements?
VR—can never have too much storage space
8. Are there any specialty items?

Display features?
End panel design?
Specialty equipment?
PA: nice end panels and display features, need them both.
9. Other requirements?

Specialty Collections

1. Are there any special collections?

Local History? MH – yes, part of genealogy and reference
Genealogy? MH – yes, approximately 650-700 volumes, Climate controlled, scanner, digital library, microfilm reader will be phased out.

Literacy? **NO**

Training? **MH-** it would be useful to have a training room, or a separate room for the computers for the purposes of computer classes, coding classes, and various other training

Main Meeting Room

1. What activities will occur in the meeting room?
MH- Storytimes, staff meetings, community meetings of all types, crafting sessions (knitting club, art club) – this is all dependent on if we get a separate children’s space/room
2. How many people should it serve?
MH- minimum 200, (kids on the floor) but the room will work best if it can be broken into multiple rooms
PA: Or we have two rooms, I’m not impressed with rooms that can be divided.
100 adults in chairs
3. What are the seating/furniture requirements?
MH- 15-20 training tables, and the corresponding number of chairs to go with the tables.
4. What are the adjacency requirements?
MH- close enough to the desk that we can assist patrons with technology needs. Does not need to be monitored with regularity
PA: Separate door so can be used after hours
5. Will it be used after hours?
MH- yes
6. What are the technology requirements?
CE - A centrally located A/V connection to a ceiling mounted projector. An integrated sound system with microphone and lavalier.
MH – ceiling projector for both/ all sections of the room. In ceiling electronic projection screens on several walls. Mounted white boards/ pin boards.
7. Storage requirements?
MH – Need large storage closet for tables and chairs. I would be helpful to have a sink with storage under for storing coffee pot and supplies. Locking cabinets in the room would be useful.
PA: Galley kitchen
8. Display requirements?
MH - Display cabinet for show casing local history collections and other items of interest

Located in entry lobby space

PA: don't normally have displays in the meeting rooms.

Staff Areas

1. Circulation Desk

How many staff? MH -10-15 total staff

How many check out stations? MH 3-5 at circulation desk

How many self-check? MH 1-2

Book carts? MH 11-15 in circulation workroom, 4 carts at circulation desk

Storage? MH - Yes please

Printers – MH - yes

Cash drawers? MH- -yes 2 cash tray in lockable drawers

Book return? MH - yes

Book security/detection? MH - maybe

RFID

CE – If RFID could be an option, I would be in favor of it.

MH- It's really expensive. Is this something else on the market that is functional but more economical?

VR—while I like the idea some type of security, patrons who want to steal always seem to find a way to get around any type of security

PA: we will do RFID or whatever the latest is; need in-the-desk book return, cash drawers.

Holds shelving

MH – yes, both public and behind the desk , 2 out in public area, 3 low shelves behind desk

2. Other staff information desks?

MH - no

3. How many staff? What are their names and positions?

MH – 11 branch, Branch Supervisor, Assistant branch supervisor, 1 FT-Library Services Specialist, 2 PT-Library Services Specialist, 1 PT-Lead-Circulation Specialist, 5-PT Circulation Specialists

PA: staff would grow some if the building were larger

3 staff workstations and 3 processing stations

Window to see from workroom to circulation desk.

4. How many private offices? Sizes?

1 - midsized

5. How many open work stations?

4

6. Circulation work room? **YES**

How many workstations? **MH4** 3 staff workstations, plus 3 processing stations

Separate check-in station? **MH no**

How many book carts? **MH 15**

Work table and/or counter space? **MH yes, lots!**

Shelving? **MH - yes**

Storage? **MH-yes**

Sink? **MH - no**

7. Will there be a separate staff conference room? **Yes**

How many people?

What are the technology needs?

CE - A centrally located A/V connection to a large television. Quality speakerphones for VoIP system. Camera for videoconferencing.

JS – public meeting space work for staff needs

PA: no separate staff conference room Yes

8. Will there be a separate staff break room? **MH- yes**

How many people? **MH – 4-8**

What appliances? **MH – refrigerator, microwave, stove, coffee pot, sink**

Lockers? – **MH – yes, 10 or more**

Mailboxes? **MH – yes but can be shared with regional staff**

What are the technology needs? **MH - minimal**

JS - Yes

9. Computer server room

How many racks? **CE - Two**

Desired adjacency?

Security requirements? **CE - Basic physical security**

Cooling requirements?

CE - A three ton HVAC system is currently inadequate for our 13 x 17 room.

Backup power requirements?

CE – Can be commercial product not integral to building electrical systems.

10. Staff copy area **Part of overall workroom.**

MH – happy to share with Regional staff for cost reduction

VR—one for Youth services staff, one for regional staff, and one for circulation staff

What are the equipment requirements?
What are the requirements for a work counter/table?
What are the storage requirements?

11. Friends of the Library space

Desks or workstations? **MH - no**
Work counter and/or table? **MH – yes VR--Yes**
Storage Space? **MH – yes, lots VR--Yes**
Retail display? **MH - yes**
JS – need their own defined space separate from staff
VR—separate workroom

12. Library to Your Door

MH – not sure what this is...
VR—Yes
PA: minimal
Desks or workstations? **VR--Yes**
Work counter and/or table? **VR--Yes**
Storage Space? **VR--Yes**

Entry

1. Vestibule **MH - yes**

2. Lobby area

Display space? **MH – yes VR--Yes**
Vending area? **MH – technology vending**
Donor recognition? **MH - yes**
Public art? **MH – yes VR--Yes**
Coat room? **MH - no**
Adjacency requirements?
VR—Public restrooms
Self-serve vending machines
Courtesy phone on a counter near the desk
Public men’s restroom should have a baby changing station.

3. Popular books display? **MH - yes**

Outdoor Space

1. Outdoor children's learning space
What types of activities? VR—Performances, concerts, storytimes
How many children?
What type of seating? VR—Child friendly
Visibility?
Adjacency?
Access and security?
PA: this would be nice but not necessary
2. Other outdoor learning spaces?
What types of activities?
How many people?
What type of seating?
Visibility?
Adjacency?
Access and security?
PA: nice but not necessary
3. Large event space? MH – A large yard/ green space is an invitation to spend time at the library and a great space for music and art. Also, Black Box Theaters are fantastic multi-purpose spaces that can be used for performances, movies, community spaces, and more.
VR—Yes with comfortable seating and good acoustics
4. Landscape? MH – lots of flowers, outdoor seating, native landscaping
VR—also possibly community vegetable garden
5. Hardscape?
VR—Yes to complement the landscape
6. Public art or special features?
VR—Yes—maybe some local artists works
7. Vehicle parking requirements? MH 150
VR—large parking area, designated areas for school buses, school vans, etc.
8. Drive through service window? MH – yes!!
VR--Yes

9. Connection to neighborhoods or adjacent sites? – MH – yes. This will increase the foot traffic of the facility
VR—Yes

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX K

MFRL REGIONAL LIBRARY STAFF QUESTIONNAIRE & RESPONSES

General Questions

1. What are some of the special functions of the Regional Library?
Manages the regional library system
2. What are some of the challenges you face in the current space?
Too crowded and not all together
Isolated, not integrated (staff areas)
3. What are some of the spaces you would like to add that you do not currently have?
Better loading dock/back door; more office space; dedicated server room; dedicated space for cataloging
Ramp from loading space to back door would make deliveries easier.
Typical deliveries are from delivery box truck, van, and UPS size trucks. Larger trucks may come 2-3 times per year.
Doors need to be large enough to bring a palette through
Need more records storage space
4. What programs and services would you like to offer in the new library which are not offered in the existing library?
5. Are there any special features or spaces you would like to see integrated into the design?
I would like to see a separate wing that would be for Regional Library offices and functions.
Separate Friends of the Library space for workroom & storage. Should be part of Branch library function, not Regional
Heating and air conditioning does not work well. It is either hot or cold.

Administration

1. What are staff space needs (list staff positions, current and future, office type)?

Staff Position	Current No.	Future No.	Office Type (private/open workstation)
(example)			
Director	1	1	Private Office
Systems Admin	1	1	Private Office (adjacent to the server room and a work space for 2-3 employees)
Outreach Manager	1	1	Private Office
Business manager	1	1	Private Office

Youth Services Mgr	3	3	would be in the children's area One private office and 2 workstations in work room near children's area
Acquisitions manager	3	3	One private office and 2 workstations in technical services workroom

Regional Library staff would share a breakroom and bathrooms with branch staff, but the work spaces, copiers, and workrooms would be separate.

2. Is a separate lobby, reception, waiting area needed?

Reception area, with desk for the Director's assistant; copier; some storage
Nicer public entry from the public library space

3. Describe the function and operations for technical services.

Receive, process and catalog items

What are the needs for book carts?

10

What are the needs for shelving?

YES, and some shelving would eliminate the need for lots of carts

5 to 6 shelving units, normal library shelving

Shelving could be higher along a wall with a work counter below

4. Is a separate staff work room needed? If so, describe the basic functions and equipment.

One private office for the head of technical services and communal work space for 2-3; computers, printers; counter space.

Regional staff workroom should have space for a plotter, postage machine, laminator, and a large copier.

5. How is interlibrary sorting and delivery handled?

We do not need any special place for ILL

Shelving for book totes should be provided in the shipping and receiving area.

Sorting, storage, delivery? NO

4. How would you like to handle shipping and receiving?

Loading dock- YES,

Separate workroom- **separate area**

9. Do you intend to use automated sorting systems with RFID?

We will have RFID but I'm not a fan of the automated sorting system, so no.

No automated sorting systems.

10. Is a separate staff conference room needed?

A room for 15 with a nice table would be handy to hold board meetings, interviews, conferences, other staff functions system-wide

Conference room just for staff, not public

11. Are there any other special staff spaces needed for the Regional Library?

Need a larger kitchen off of program room. Not shared by staff breakroom.



APPENDIX L

PUBLIC MEETING NO. 2 BLACKSBURG LIBRARY ATTENDANCE LOG

MEETING ATTENDANCE LOG



Project Name	Montgomery-Floyd Regional Library Study	Date of Meeting	4 Oct 2016	Time of Meeting	6:30 PM
T&L Project No.	13478	Location of Mtg.	Blacksburg Library		

Purpose of Meeting
 Second Public Meeting to Discuss Future of Blacksburg Library

Last Name	First Name	Telephone No.	E-mail Address
Fought (Thompson & Litton)	Mark		
Entzminger (Enteros Design)	Gil		
Keith, Susan Regan Keith	Susan		
SPRINGER	Brenda		
NOTTINGHAM	Matthew		
CHAUSON	D. Su		
Kristina Reid	Kristine		
RAMM	Kris Annan		
Cherbaka	Natalie		
LOVEJOY	JENNIFER		
ROBERTS	RAYMOND D		

NOTE: Telephone numbers and e-mail addresses of the attendees have been redacted to protect the privacy of the attendees.

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX M

PUBLIC MEETING NO. 2 BLACKSBURG LIBRARY PRESENTATION

Thank you for joining us!





**THOMPSON
& LITTON** EST. 1956

Mark Fought, PMP, LEED AP

- Office in Radford
- Extensive experience in Montgomery
- 28 years experience



**ENTEROS
DESIGN**

Gil Entzminger, AIA, LEED AP

- 11 libraries
- 7 library systems
- 25 years experience



Approach

- Discovery
- Analysis
- Comparison
- Programming
- Inform



Public Input



Survey Responses - 394

Area Demographics



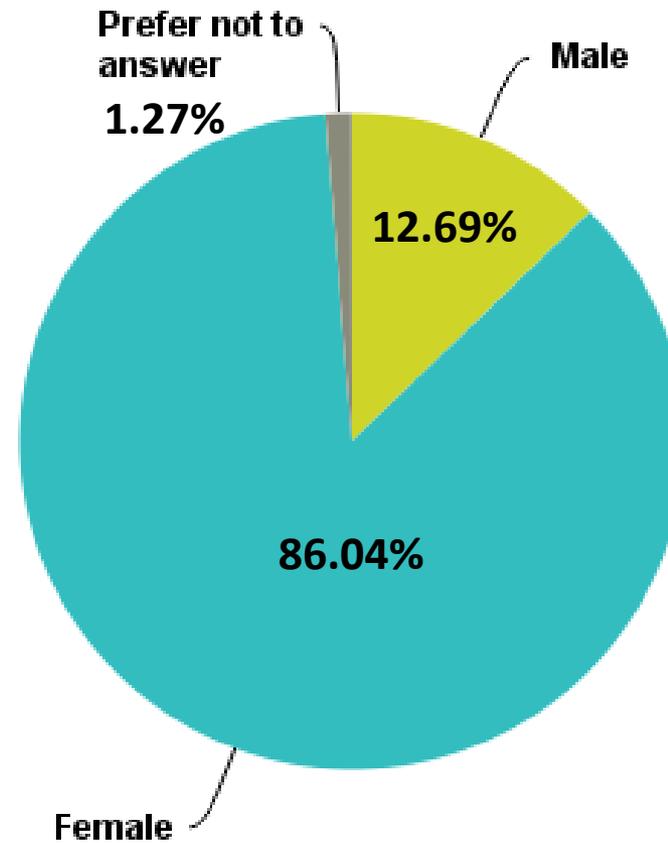
Montgomery County Data

Population	97,653
Under 5	4.5%
Under 18	16%
18-65	68.2%
Over 65	11.3%
Median Income	\$44,810
Female	47.9%
Male	52.1%
White	87.1%
Black	4.2%
Hispanic	3.1%
Two or More Races	2.2%
Other	3.4%
High School or Higher	90.4%
Bachelor's or Higher	44.3%

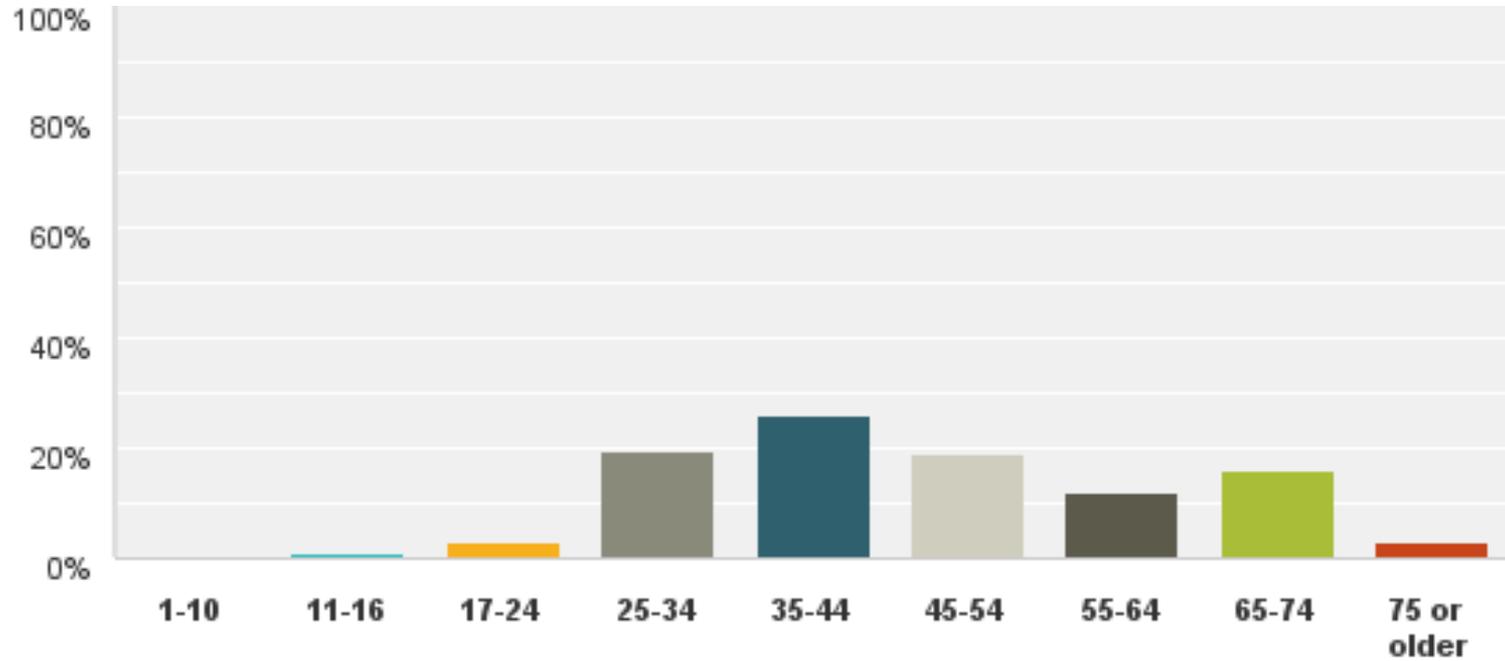
Blacksburg Data

Population	44,215
Under 5	2.5%
Under 18	8.3%
18-65	84.2%
Over 65	5.0%
Median Income	\$29,271
Female	45%
Male	55%
White	81.2%
Black	4.3%
Hispanic	3.5%
Two or More Races	2.8%
Other	8.2%
High School or Higher	96.5%
Bachelor's or Higher	69.3%

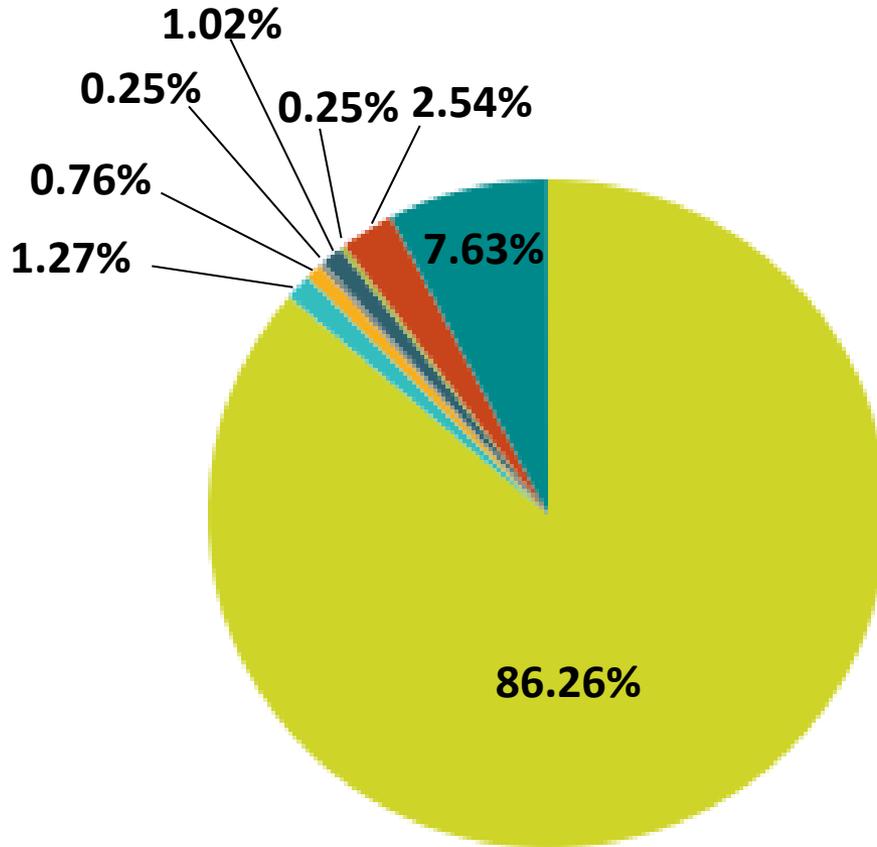
What is your gender?



What is your age?

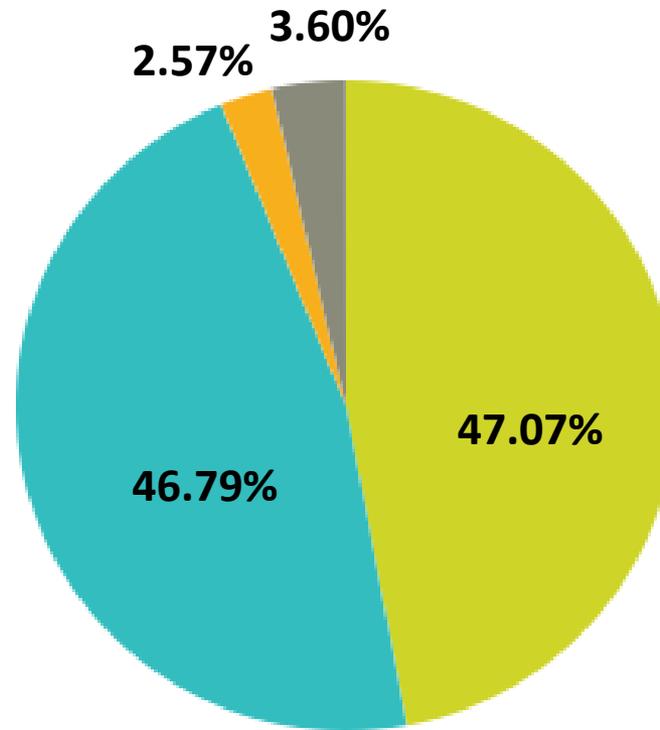


What is your ethnicity?



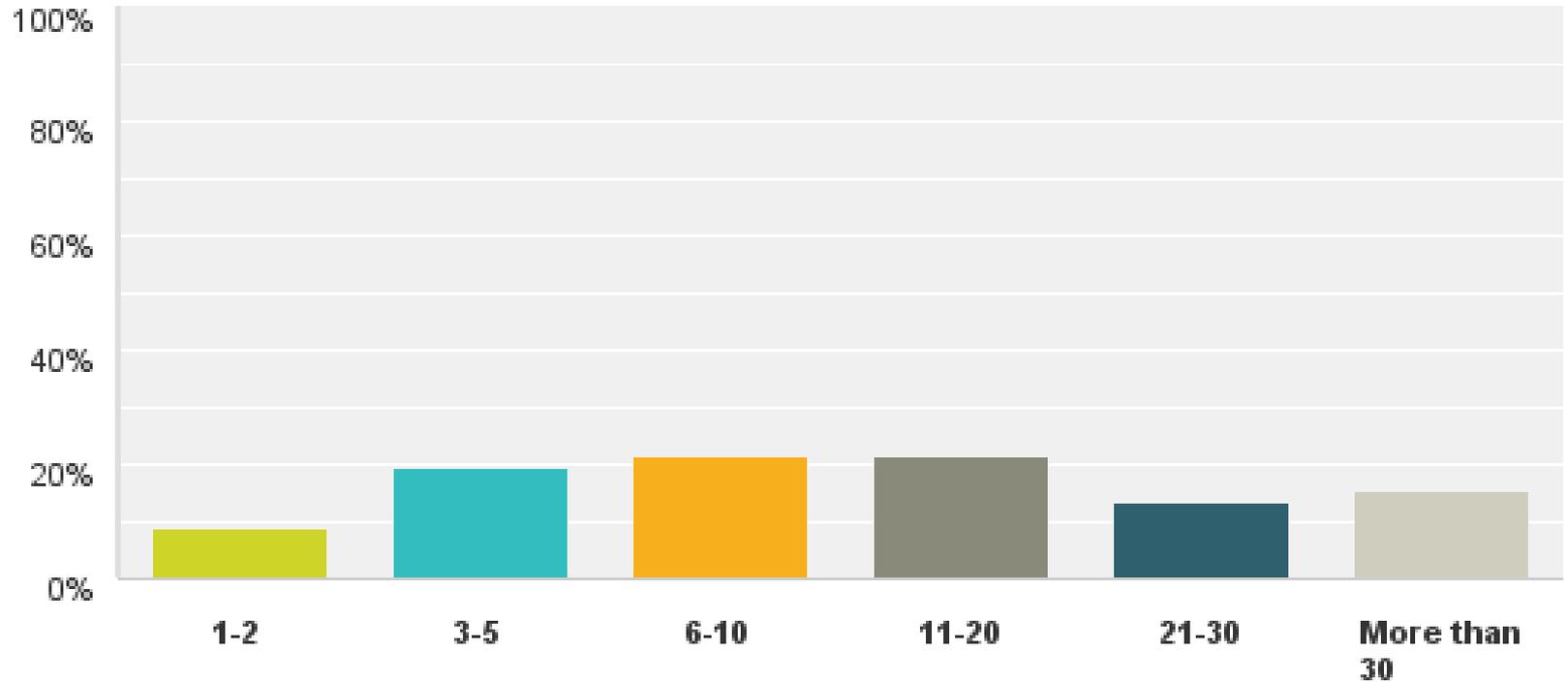
- White/Caucasian
- Black/African-American
- Hispanic
- Native American (American Indian)
- Asian
- Alaskan/Aleutian
- Native Hawaiian or other Pacific Islands
- Middle Eastern/Arabic
- From multiple ethnicities
- I prefer not to answer this question

What MFRL facility do you visit most frequently?



- Christiansburg Library
- Blacksburg Library
- Jessie Peterman Memorial Library in Floyd
- Meadowbrook Library in Shawsville

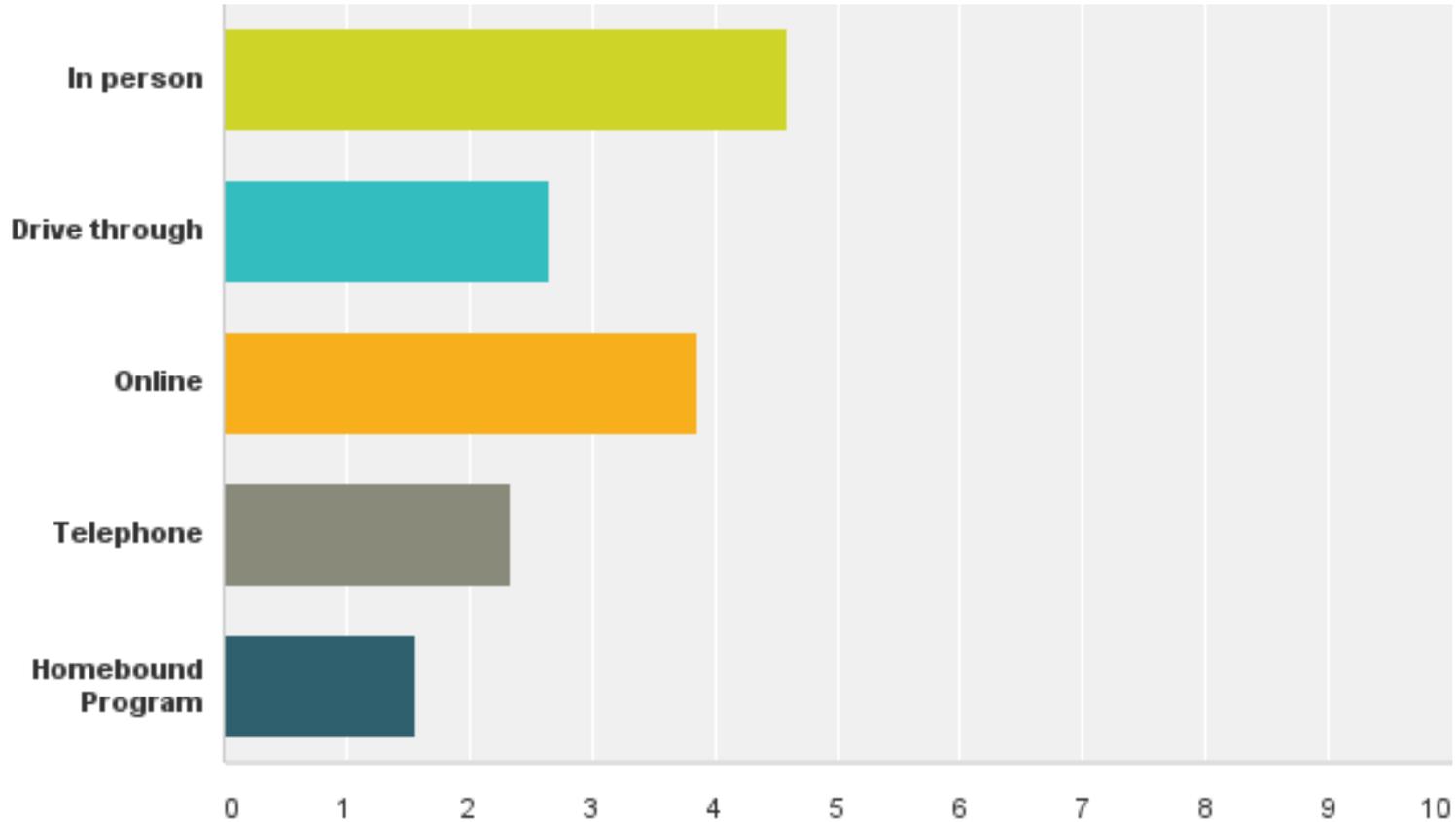
How many times in a 6 month period do you use the library?



How would you prefer to use the library?



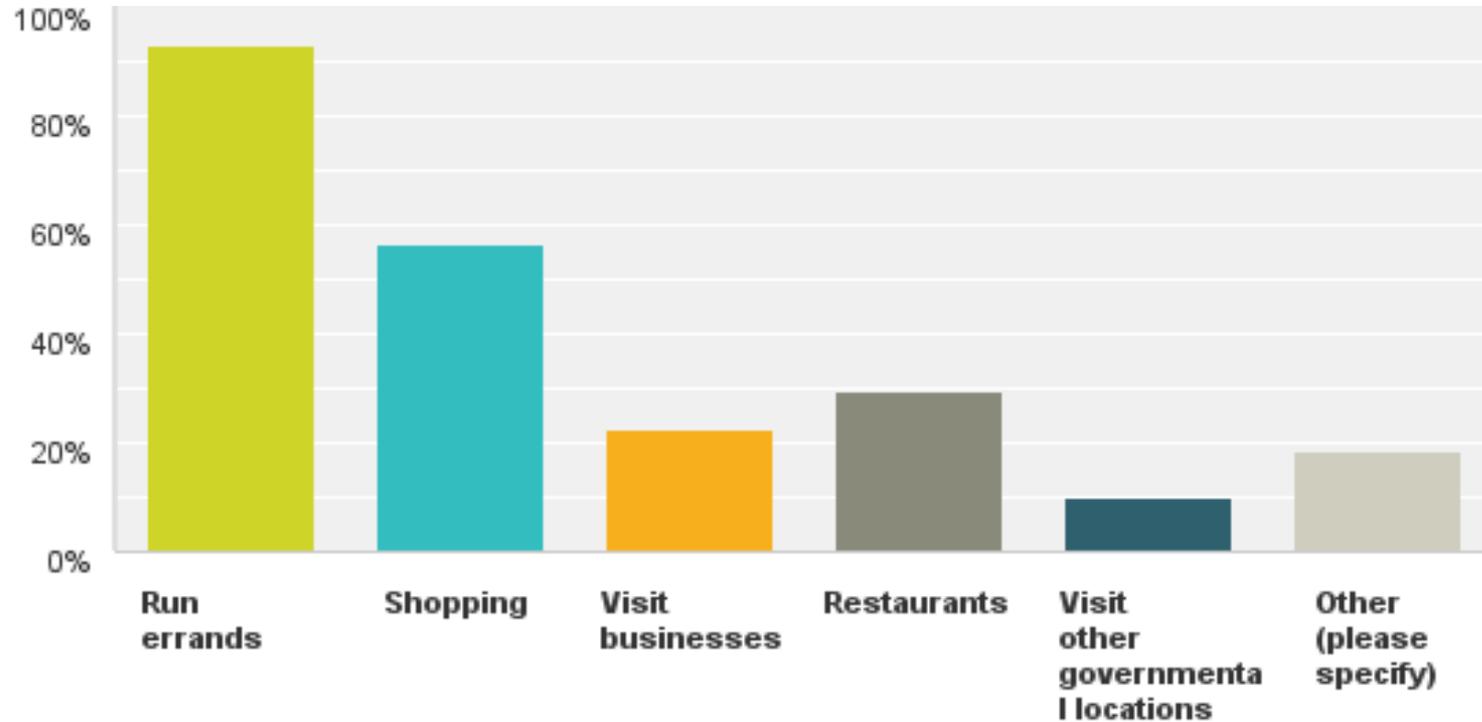
Please rank with 1 being the most preferred and 5 being the least preferred.



What other stops do you make when visiting the library?



Choose all that apply



What other stops do you make when visiting the library?



Choose all that apply

OTHER

- Church choir practice
- Walking on the Huckleberry
- Library is a direct destination
- To and from work
- Kids extracurricular activities
- Visit park
- Aquatic Center
- Going for a walk
- Medical appointments
- Pre-school drop off
- Virginia Tech
- Gym
- Yard Sales

For what purpose do you most frequently use the library?



Choose all that apply

TOP RESPONSES

- Find something to read, view or listen to for entertainment **88.49%**
- Find materials to pursue hobbies or interests **57.03%**
- Pick up holds **59.34%**
- Bring a child to the library **46.04%**
- Find information on Specific Topics, i.e. health, home repair, etc. **40.66%**
- Attend a program or class **32.74%**

For what programs/services do you use the library?

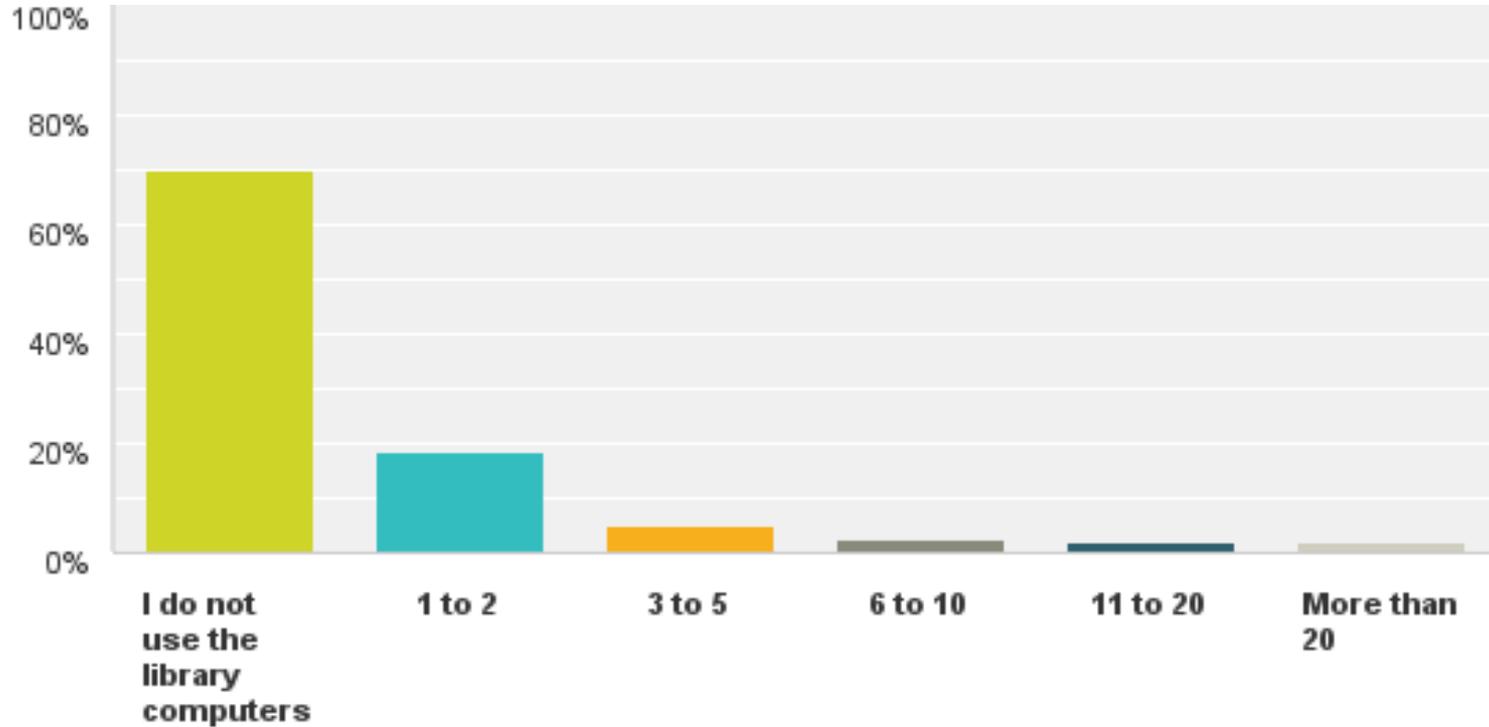


Choose all that apply

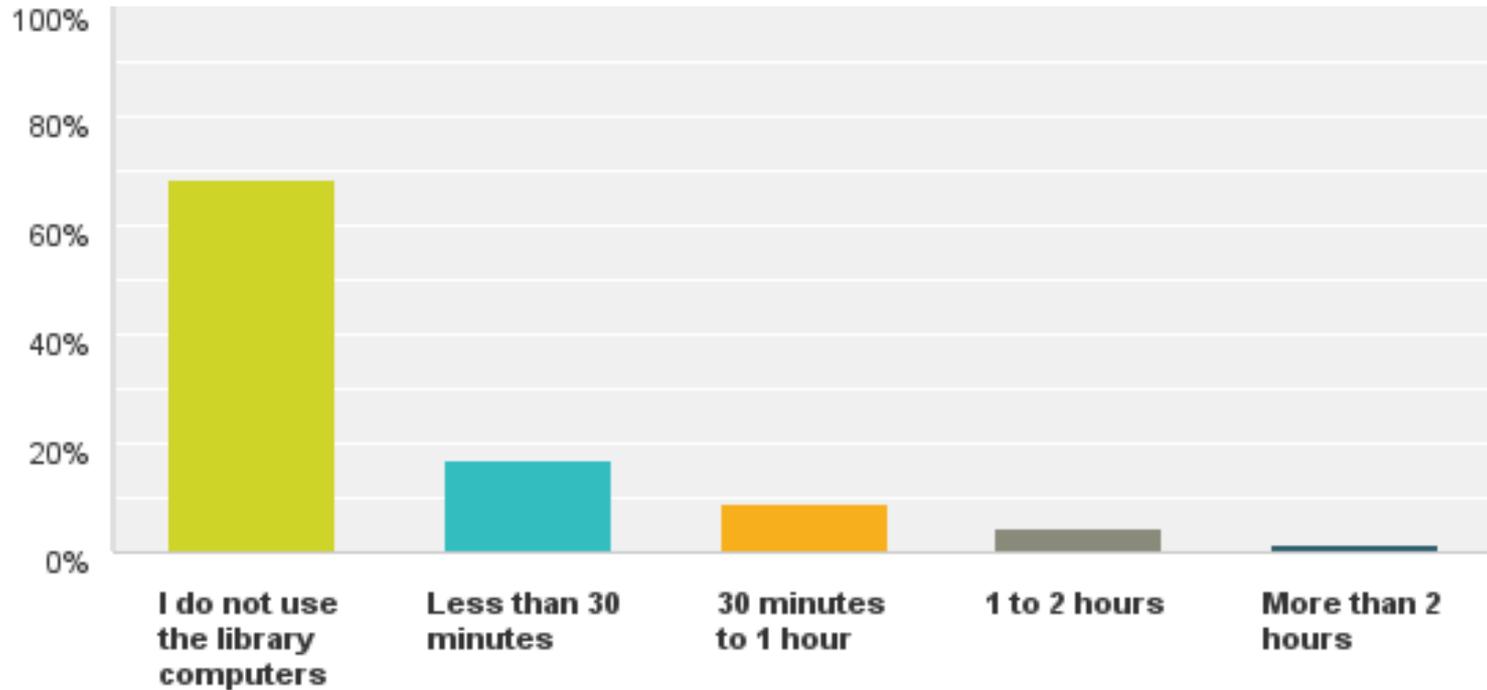
TOP RESPONSES

- Children's story time, puppet show, or activity **36.07%**
- Adult programming **36.79%**
- Author or lecture presentation **36.43%**
- Children's craft or art program **30.36%**
- Conference room meeting for business group **27.50%**
- Adult craft or art program **25.36%**
- Social gathering **22.86%**

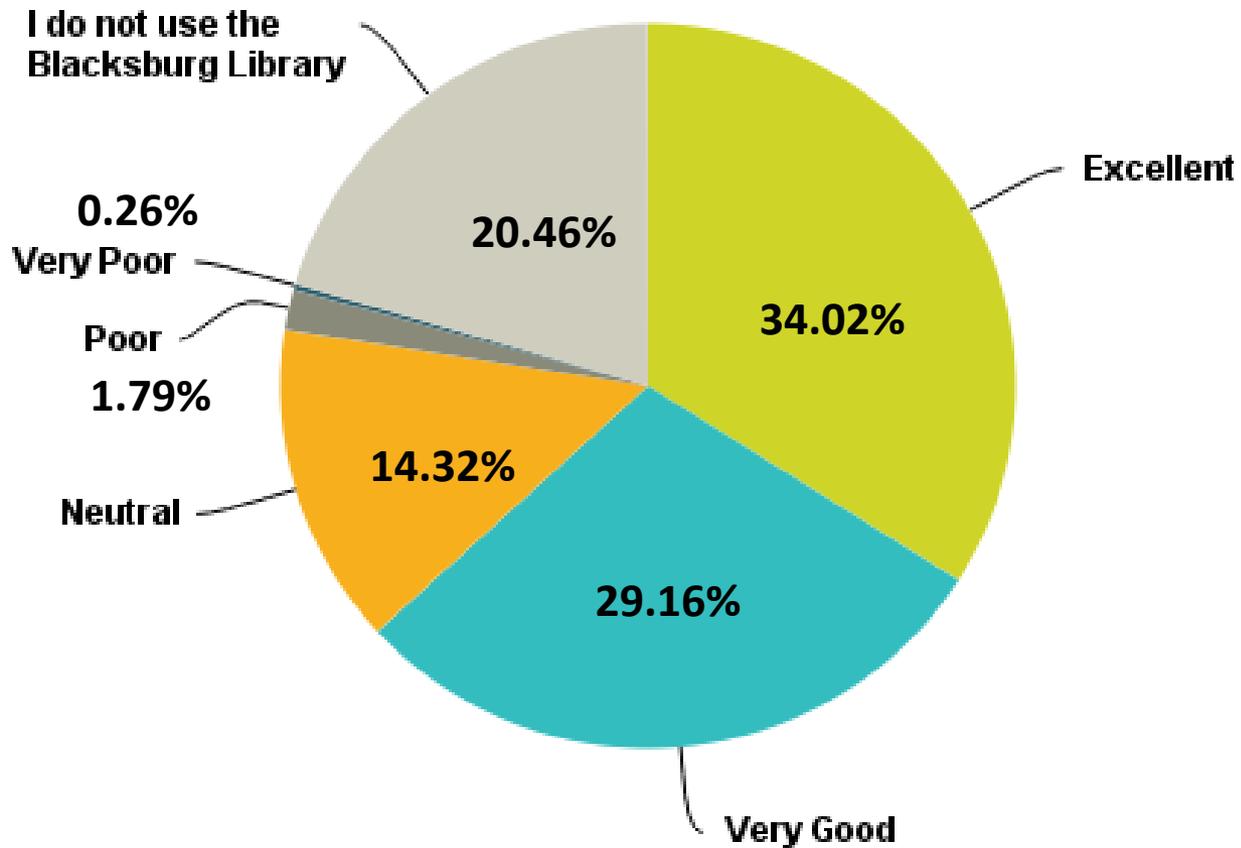
How many times per month do you use the computers?



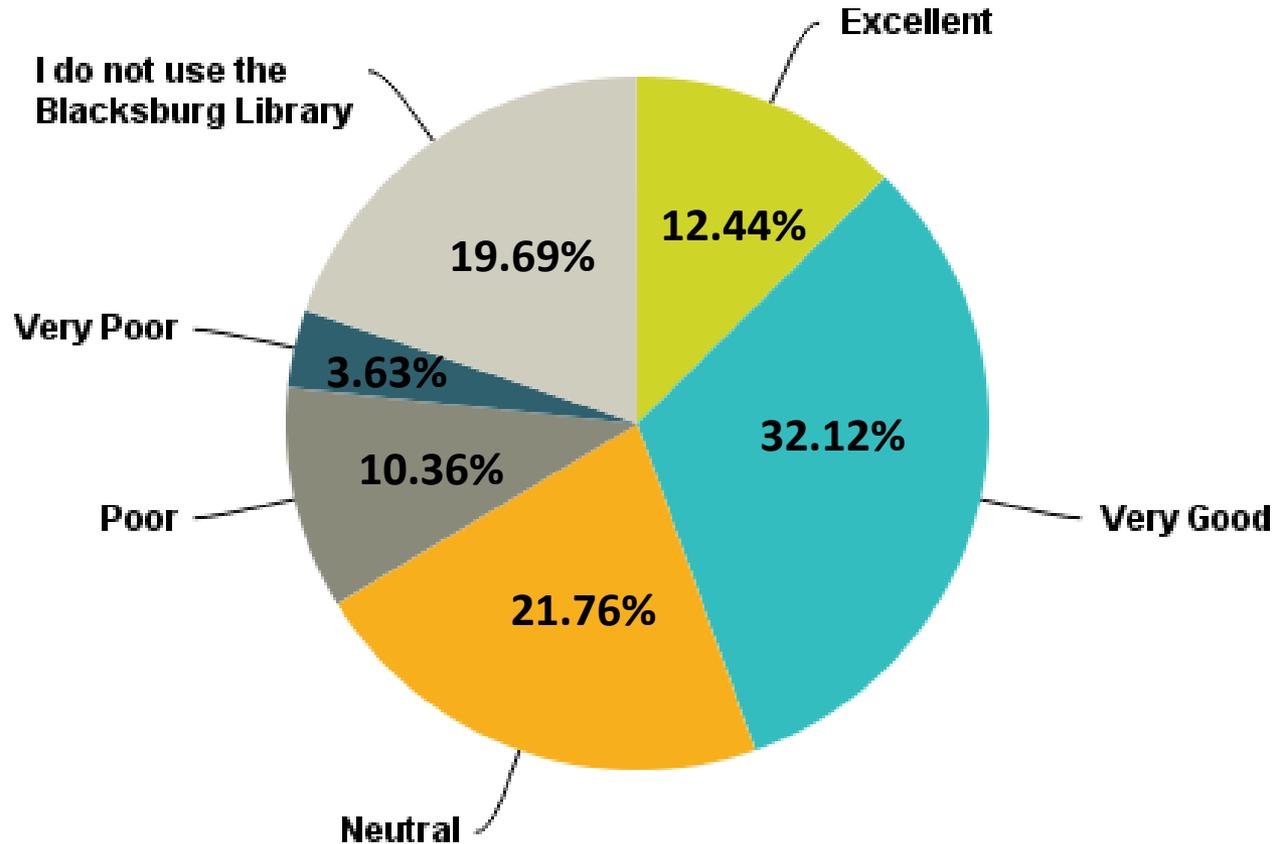
How long do you use the computers each visit?



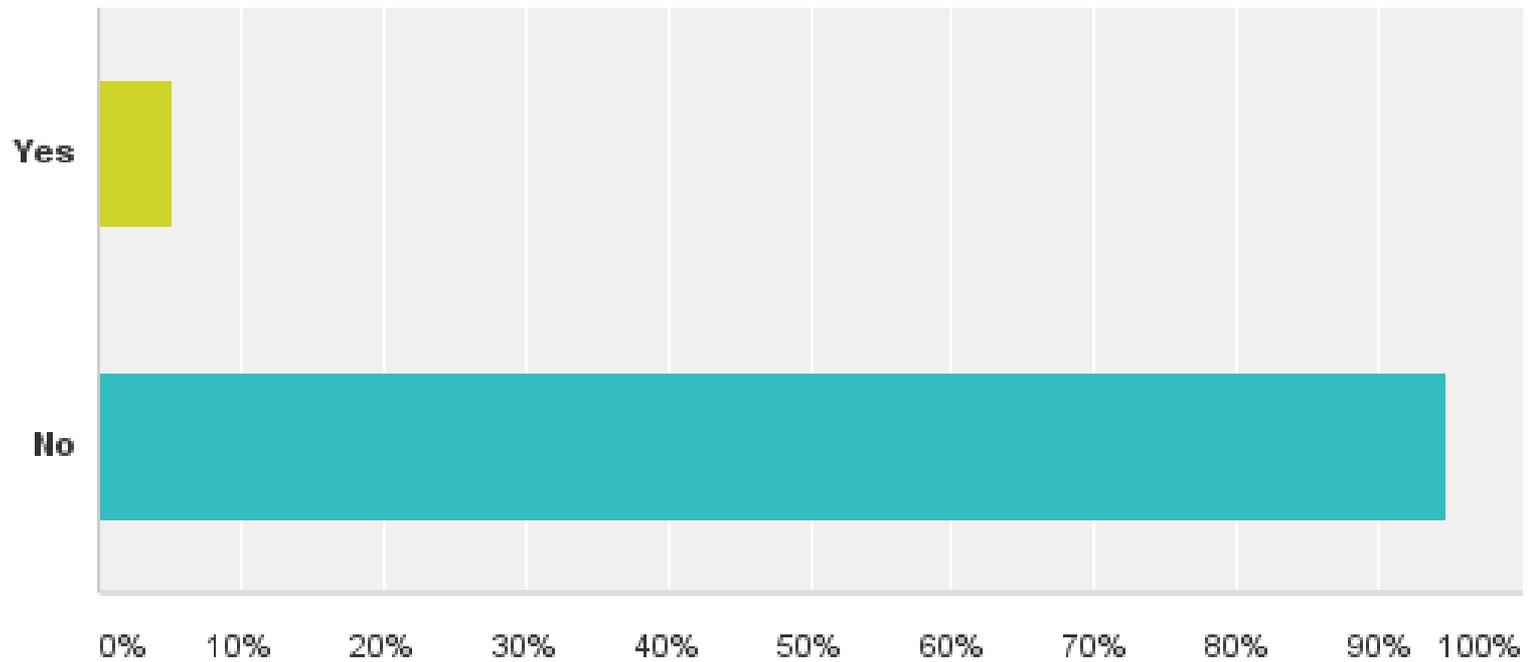
What is your opinion of access to the Blacksburg Library Location?



What is your impression of parking at the Blacksburg Library?



Are there any services/feature that shouldn't be at the library?



What services would you like to see in a modern library?



TOP RESPONSES

- More copies of popular books
- More meeting Space
- Separate teen section
- Separate children's section
- Maker Space
- More activities
- Business services center
- Coffee shop
- Outdoor spaces
- Separate computer area
- More study rooms/meeting rooms
- Drive through windows
- Better restrooms
- More programs
- Tablets and laptop computers

What features would you like to see in a Children's section?



TOP RESPONSES

- More newer books
- Shelves at child height
- More comfortable seating
- Separate, physical and acoustical
- Bigger story time area
- Larger program room
- Maker space
- More computers for kids
- Separate restroom
- Graphic novels
- Puppet show center
- Interior more appealing for kids
- Safe outdoor area
- Make sure area accommodates strollers
- Open space
- More digital and interactive media

What features would you like to see in a Teen's section?



TOP RESPONSES

- Expanded book collection
- Career idea section
- Soundproof
- Gaming area
- Comfortable seating
- Interactive display space
- Separate section
- Larger hang out area
- Lounge feel
- Study areas/Coffee shop vibe
- More digital access
- Separate computers
- Charging stations
- Study tables

How would you rate each of the following?



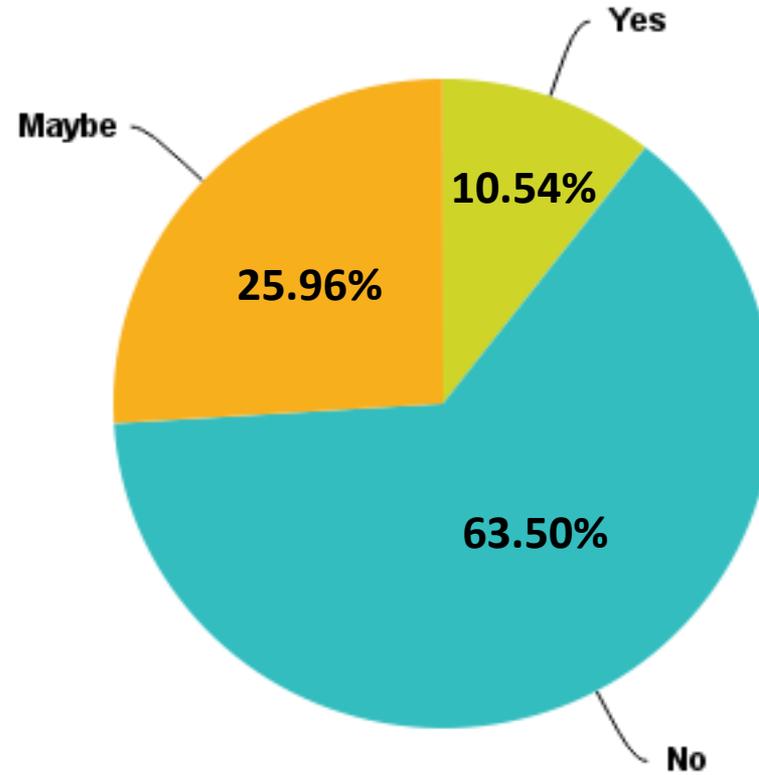
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Availability of books	33.07%	49.08%	9.71%	7.35%	0.79%
Availability of reference materials	21.05%	47.66%	29.53%	1.46%	0.29%
Availability of periodicals	26.44%	45.98%	26.72%	0.86%	0.00%
Electronic resources and databases	25.45%	42.22%	28.14%	3.29%	0.90%
Speed of internet service	25.54%	37.23%	34.15%	2.46%	0.62%
Helpfulness/courtesy of staff	78.36%	18.73%	2.11%	0.79%	0.00%
Speed of front desk service	68.52%	28.04%	3.17%	0.26%	0.00%
Quality of reference service	30.37%	40.49%	28.53%	0.61%	0.00%
Quietness of facility	40.37%	42.74%	10.55%	5.01%	1.32%
Convenience of library location	66.05%	30.24%	3.18%	0.53%	0.00%
Hours of library operation	40.58%	46.68%	7.69%	4.77%	0.27%
Safety/security of the facility	53.91%	37.20%	7.82%	0.81%	0.27%
Quality of library meeting space	30.84%	39.19%	26.22%	3.75%	0.00%
Quality of internet access or computer use	27.19%	37.19%	34.06%	1.25%	0.31%
Wifi access	29.41%	38.08%	30.34%	1.86%	0.31%
Library website	29.86%	45.48%	17.26%	6.03%	1.37%
Library catalog	29.38%	46.61%	18.36%	4.52%	1.13%
Library programs	29.07%	47.09%	20.93%	2.91%	0.00%
Overall satisfaction with library buildings	41.62%	46.76%	8.11%	3.51%	0.00%
Overall satisfaction with library services	51.73%	42.67%	5.07%	0.53%	0.00%

How would you rate each of the following?



	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Availability of books	33.07%	49.08%	9.71%	7.35%	0.79%
Availability of reference materials	21.05%	47.66%	29.53%	1.46%	0.29%
Availability of periodicals	26.44%	45.98%	26.72%	0.86%	0.00%
Electronic resources and databases	25.45%	42.22%	28.14%	3.29%	0.90%
Speed of internet service	25.54%	37.23%	34.15%	2.46%	0.62%
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Quietness of facility	40.37%	42.74%	10.55%	5.01%	1.32%
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Library programs	29.07%	47.09%	20.93%	2.91%	0.00%
Overall satisfaction with library buildings	41.62%	46.76%	8.11%	3.51%	0.00%
Overall satisfaction with library services	51.73%	42.67%	5.07%	0.53%	0.00%

Would you be in favor of a single library to serve both communities?





OVERVIEW

- 14,600 sf first floor
- 1,400 SF second floor
- Former hardware store
- Converted to library in 1988
- Renovated in 1996
- Limited parking (78 spaces)
- No outdoor reading space
- Modest landscaping





EXTERIOR

- Exterior masonry—good condition
- Gutters deteriorated—replace
- Appears structurally sound
- Aluminum-clad wood windows—good condition, re-caulk
- Standing seam metal roof—good condition
- Front doors bind--replace





INTERIOR: PUBLIC

- Good natural light
- Pleasing interior
- Shelving too high
- Limited observation
- Security in Children's area
- Limited children's program space
- Lack of teen space
- Limited seating
- Limited computers and technology





INTERIOR: STAFF

- Crowded circulation workroom
- Limited Friends of the Library space
- Inefficient flow
- Lack of storage space
- No shipping and receiving area
- No loading area





MECHANICAL, ELECTRICAL, PLUMBING

- HVAC systems nearing end of life
- 15 water-source heat pumps
- 64-ton cooling tower
- 900 BMH gas-fired boiler
- Trane Energy Management System
- Plumbing fixtures older, but functional
- Wet-pipe sprinkler system
- 150kVA pad-mounted transformer
- Lighting meets recommended levels—not energy efficient
- Fire alarm system—in good condition
- Honeywell security system



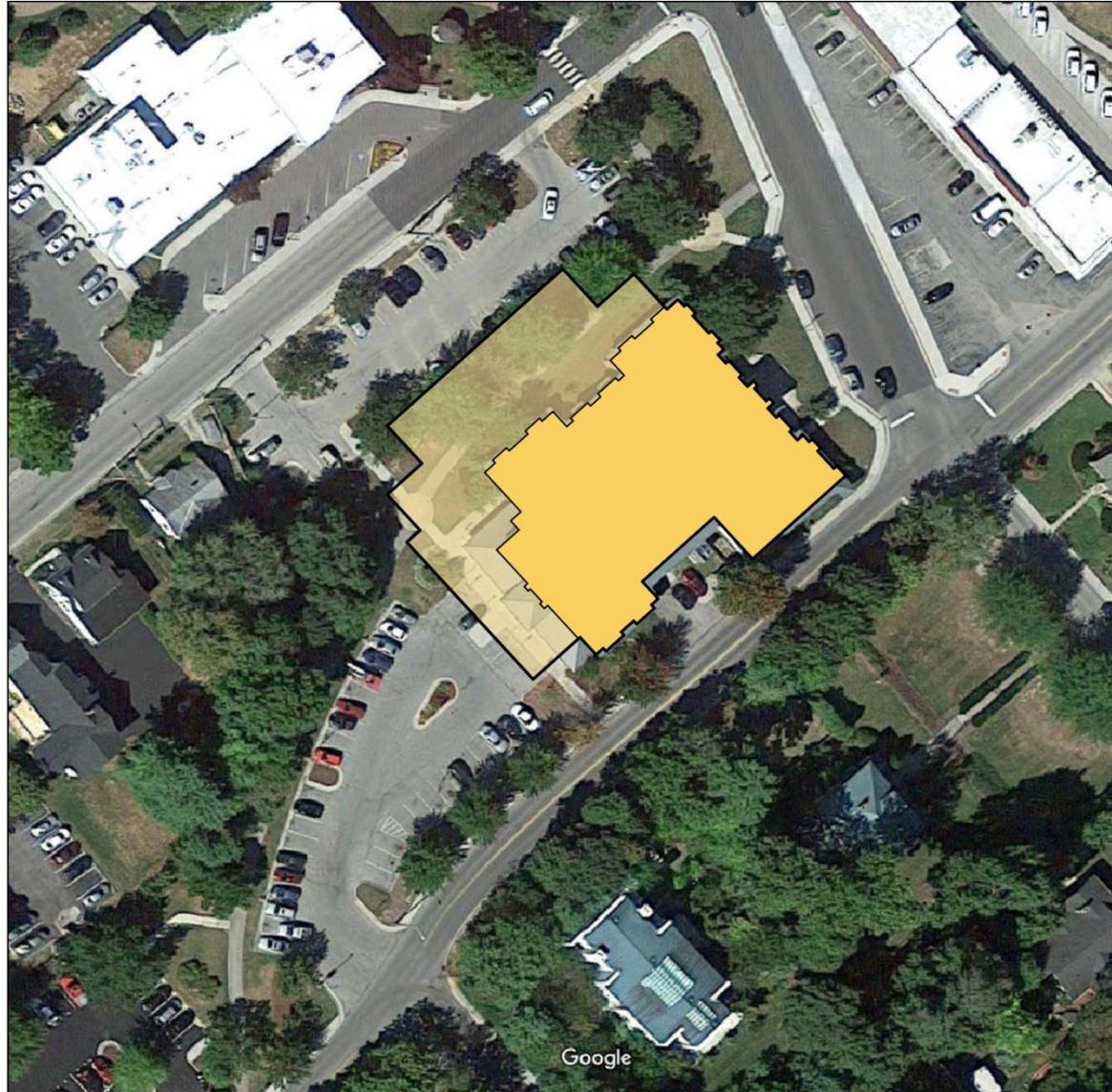


	Existing	Needed	South County	England Run	Northside
Library Size	16,000	27,796	53,892	30,000	30,000
Collections	75,955	79,232		77,728	92,014
Main Meeting Room	1,564	1,750		2,158	1,566
Children's Program	220	750		0	658
Other Program	0	750		270	1,100
Study/Tutoring	2	5		6	6
Quiet Reading Room	0	400		0	766
Adult Services	6,394	7,309		9,608	8,050
YA Services	514	943		1,450	1,442
Youth Services	2,406	4,409		5,164	3,100
Computers	17	33		54	40
Staff Space	2,868	3,615		5,168	5,196



Site Options

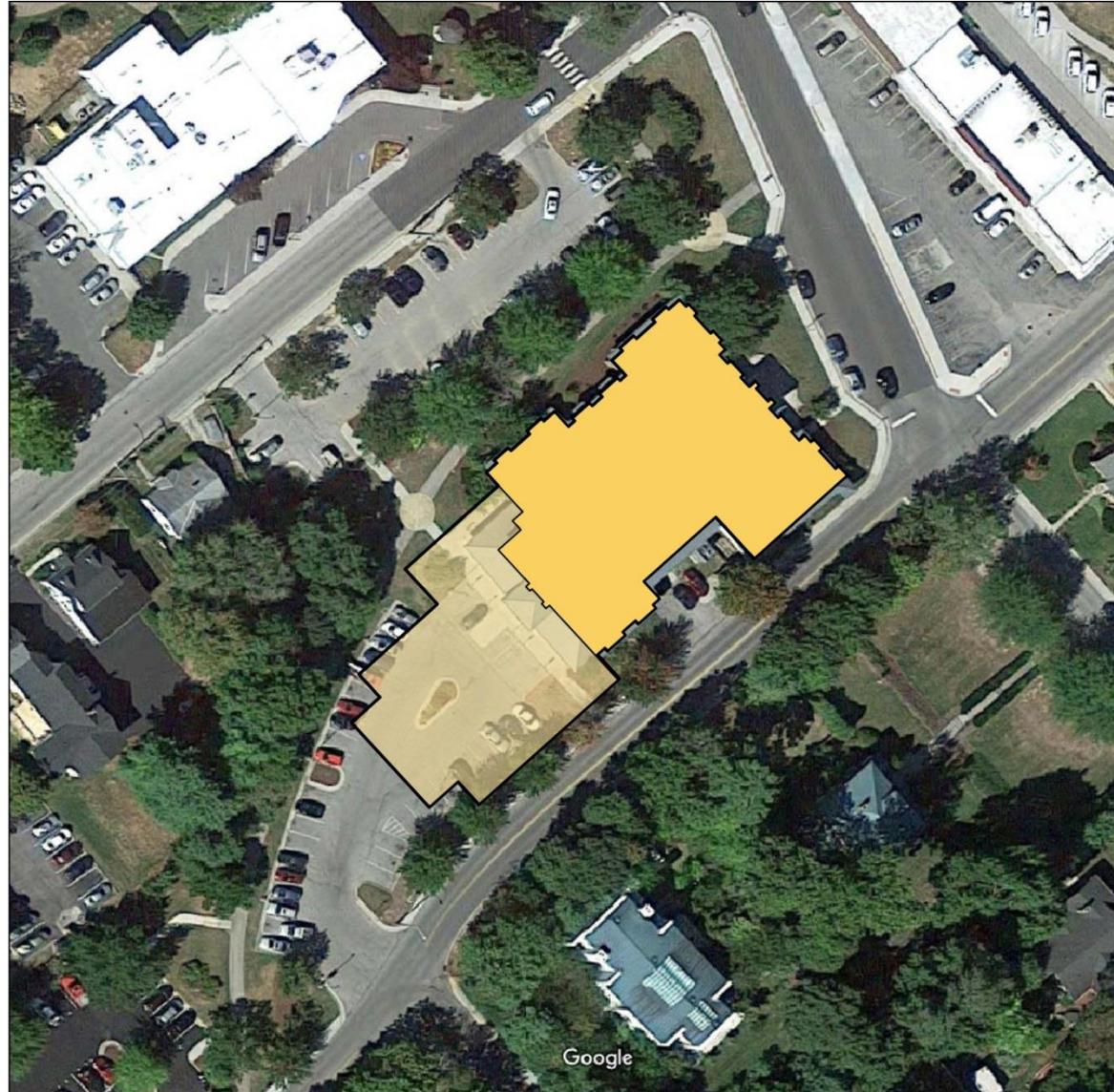
- Re-route Huckleberry Trail
- Lose approximate 20 parking spaces.
- Grading and drainage issues.
- Limited land area for expansion.





Site Options

- Preserves Huckleberry Trail
- Lose approximate 27 parking spaces.
- Grading and drainage issues.
- Handicapped accessibility
- Limited land area for expansion.





APPENDIX N

PUBLIC MEETING NO. 2 CHRISTIANSBURG LIBRARY ATTENDANCE LOG

MEETING ATTENDANCE LOG



Project Name	Montgomery-Floyd Regional Library Study	Date of Meeting	5 Oct 2016	Time of Meeting	6:30 PM
T&L Project No.	13478	Location of Mtg.	Christiansburg Library		

Purpose of Meeting
 Second Public Meeting to Discuss Future of Blacksburg Library

Last Name	First Name	Telephone No.	E-mail Address
Fought (Thompson & Litton)	Mark		
Entzminger (Enteros Design)	Gil		
McClintock	Molly		
Polikoff	Heather		
Welles	Karen		
Banaivo	Yann		
Peterson	Irene		
WATERS	BRIAN		
Thomas	A. PAUL		
SCHWARTZ	LINDA		
Schwartz	William		

NOTE: Telephone numbers and e-mail addresses of the attendees have been redacted to protect the privacy of the attendees.

Montgomery-Floyd Regional Library
Blacksburg and Christiansburg
Libraries Study
T&L Project No.: 13478



APPENDIX O

PUBLIC MEETING NO. 2 CHRISTIANSBURG LIBRARY PRESENTATION

Thank you for joining us!





**THOMPSON
& LITTON** EST.
1956

Mark Fought, PMP, LEED AP

- Office in Radford
- Extensive experience in Montgomery
- 28 years experience



**ENTEROS
DESIGN**

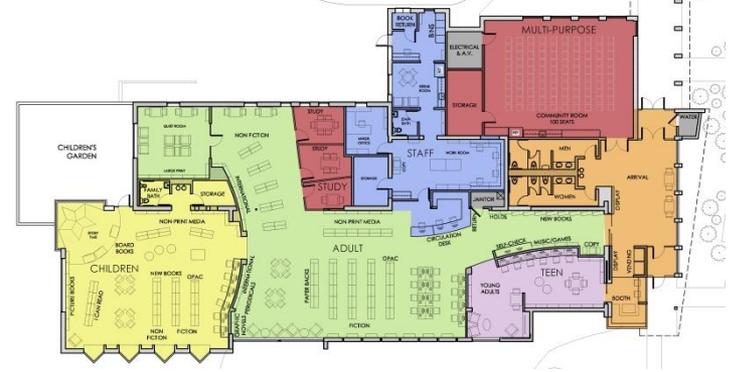
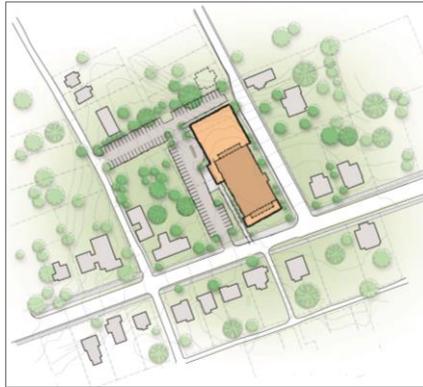
Gil Entzminger, AIA, LEED AP

- 11 libraries
- 7 library systems
- 25 years experience



Approach

- Discovery
- Analysis
- Comparison
- Programming
- Inform



Public Input



Survey Responses - 394

Area Demographics



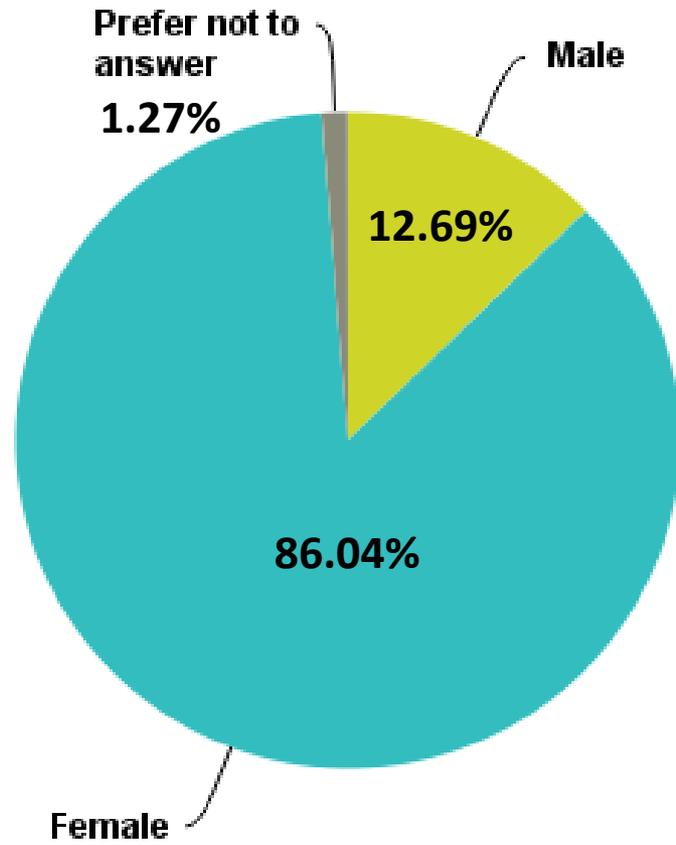
Montgomery County Data

Population	97,653
Under 5	4.5%
Under 18	16%
18-65	68.2%
Over 65	11.3%
Median Income	\$44,810
Female	47.9%
Male	52.1%
White	87.1%
Black	4.2%
Hispanic	3.1%
Two or More Races	2.2%
Other	3.4%
High School or Higher	90.4%
Bachelor's or Higher	44.3%

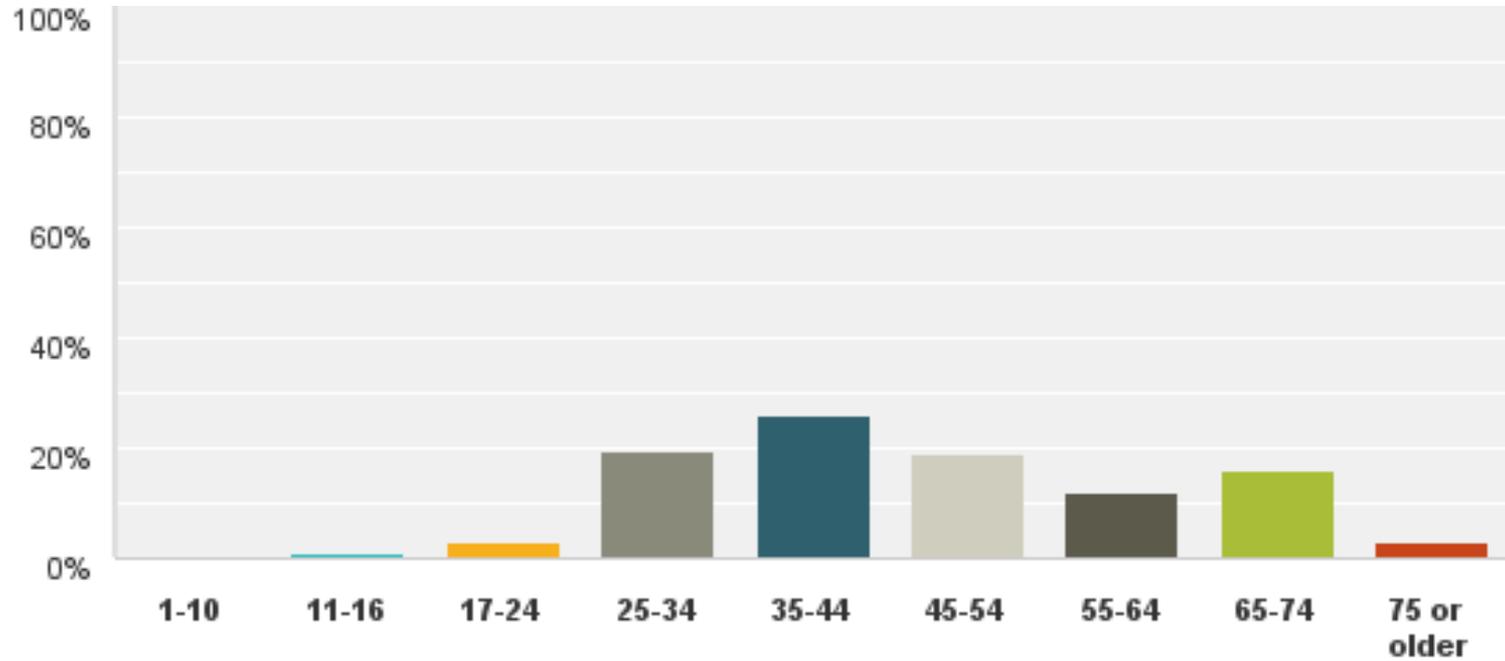
Christiansburg Data

Population	21,943
Under 5	7.4%
Under 18	23.1%
18-65	57.3%
Over 65	12.2%
Median Income	\$51,508
Female	52.1%
Male	47.9%
White	89.5%
Black	6.2%
Hispanic	2.2%
Two or More Races	1.9%
Other	0.2%
High School or Higher	91.3%
Bachelor's or Higher	40.9%

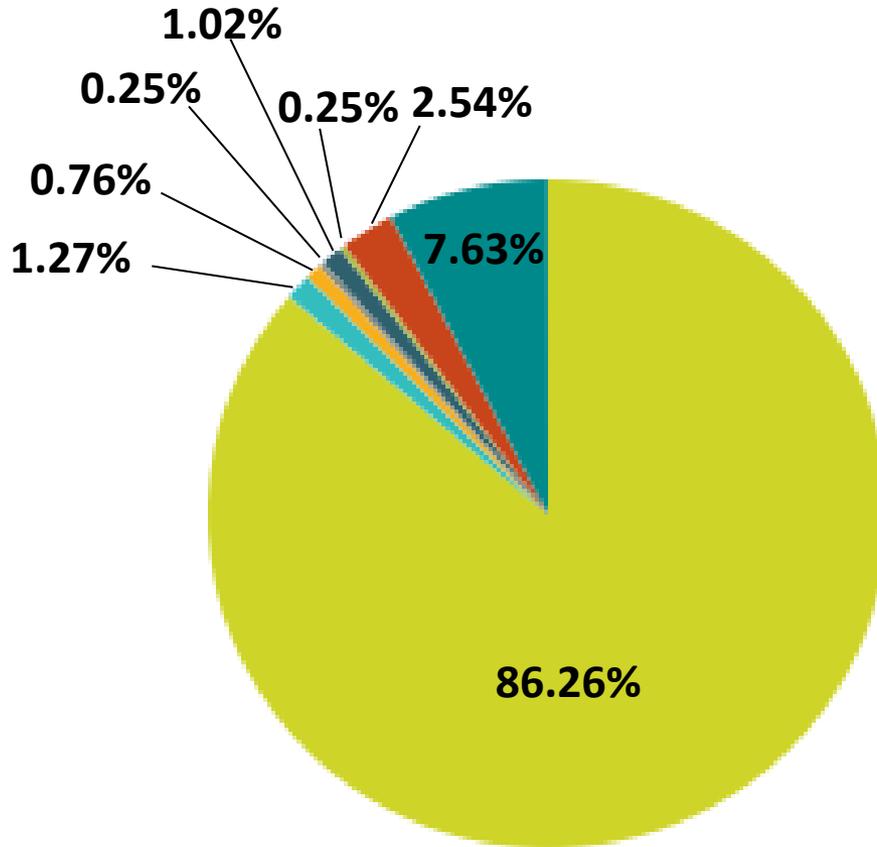
What is your gender?



What is your age?

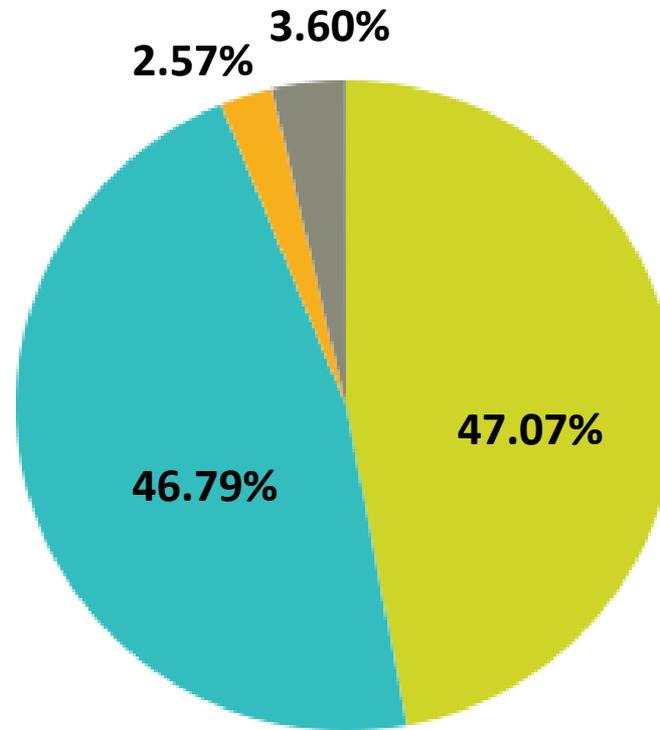


What is your ethnicity?



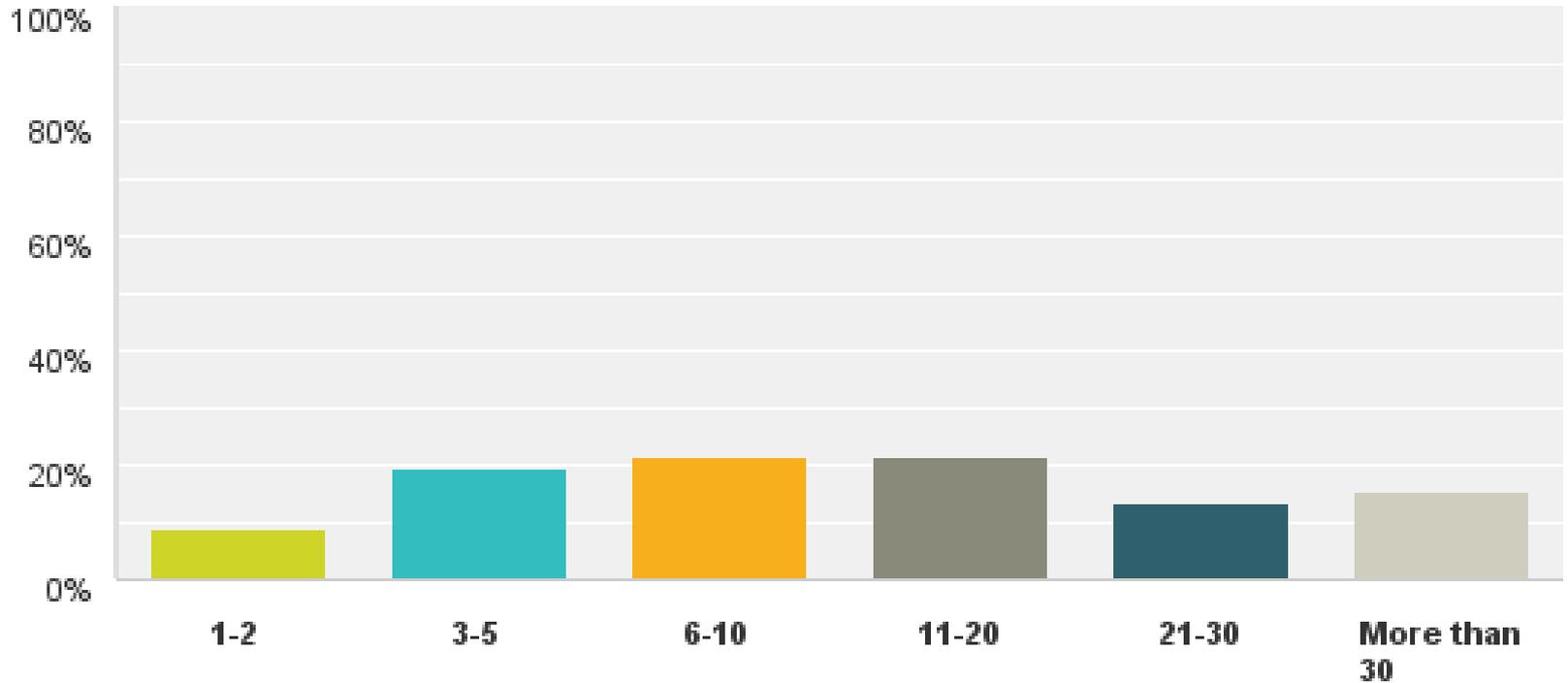
- White/Caucasian
- Black/African-American
- Hispanic
- Native American (American Indian)
- Asian
- Alaskan/Aleutian
- Native Hawaiian or other Pacific Islands
- Middle Eastern/Arabic
- From multiple ethnicities
- I prefer not to answer this question

What MFRL facility do you visit most frequently?



- Christiansburg Library
- Blacksburg Library
- Jessie Peterman Memorial Library in Floyd
- Meadowbrook Library in Shawsville

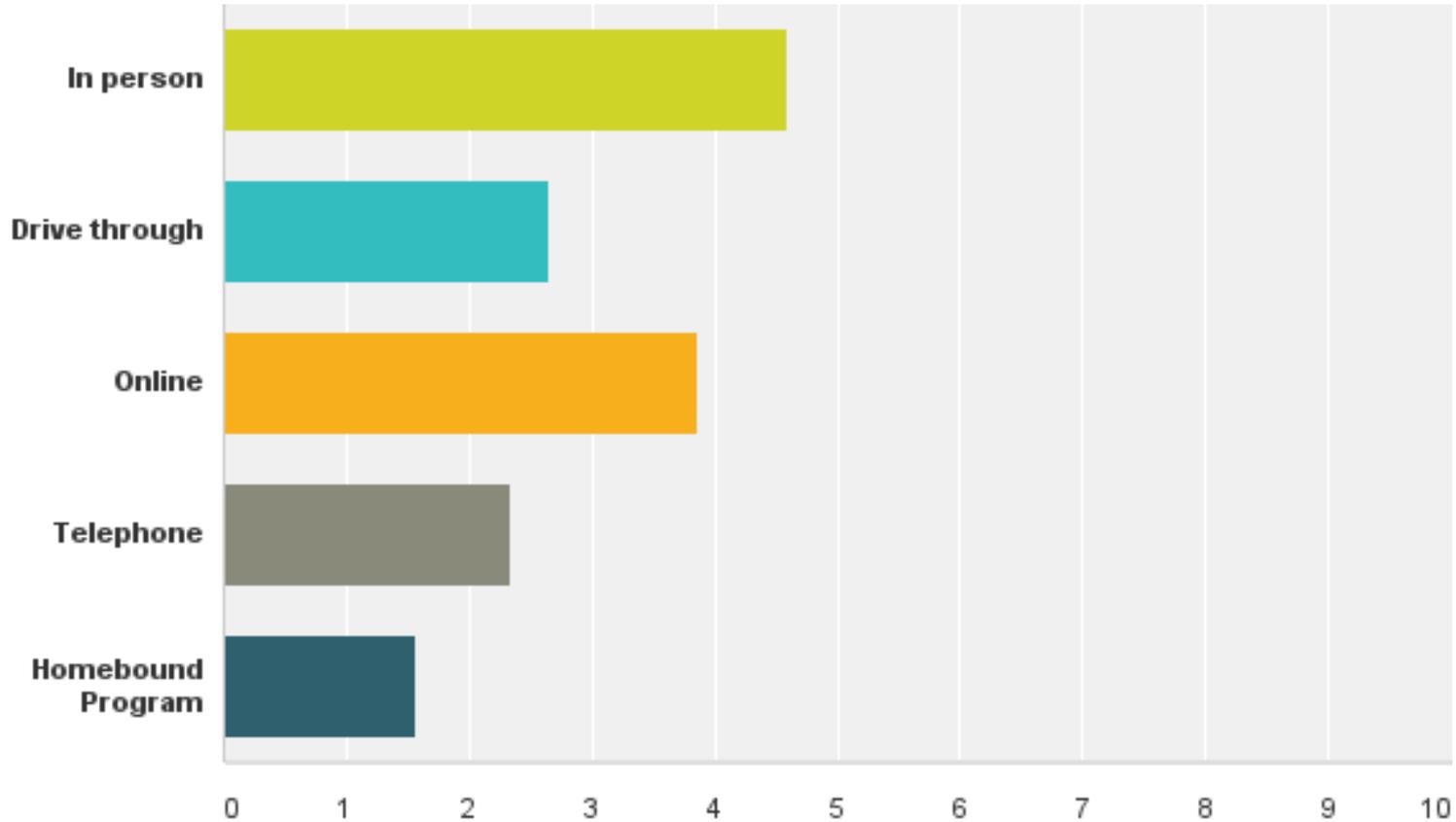
How many times in a 6 month period do you use the library?



How would you prefer to use the library?



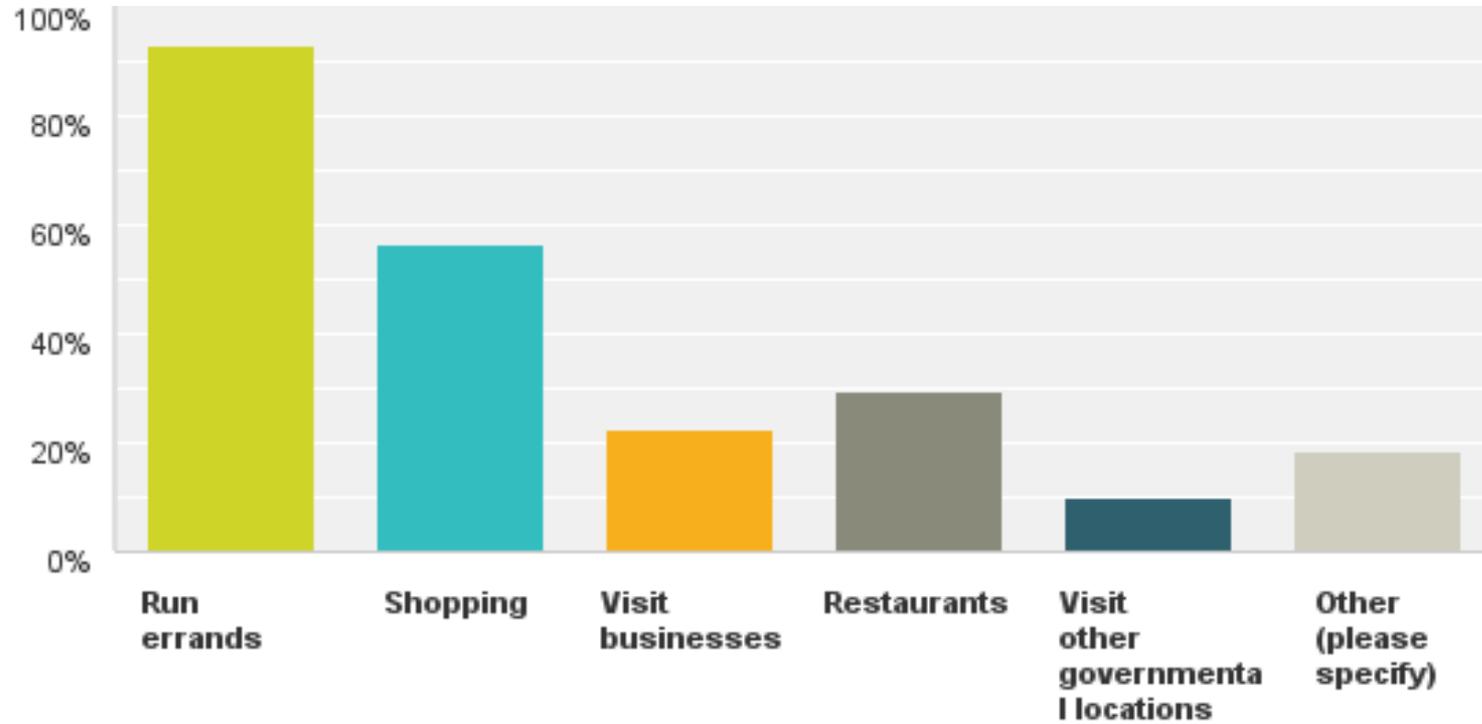
Please rank with 1 being the most preferred and 5 being the least preferred.



What other stops do you make when visiting the library?



Choose all that apply



What other stops do you make when visiting the library?



Choose all that apply

OTHER

- Church choir practice
- Walking on the Huckleberry
- Library is a direct destination
- To and from work
- Kids extracurricular activities
- Visit park
- Aquatic Center
- Going for a walk
- Medical appointments
- Pre-school drop off
- Virginia Tech
- Gym
- Yard Sales

For what purpose do you most frequently use the library?



Choose all that apply

TOP RESPONSES

- Find something to read, view or listen to for entertainment **88.49%**
- Find materials to pursue hobbies or interests **57.03%**
- Pick up holds **59.34%**
- Bring a child to the library **46.04%**
- Find information on Specific Topics, i.e. health, home repair, etc. **40.66%**
- Attend a program or class **32.74%**

For what programs/services do you use the library?

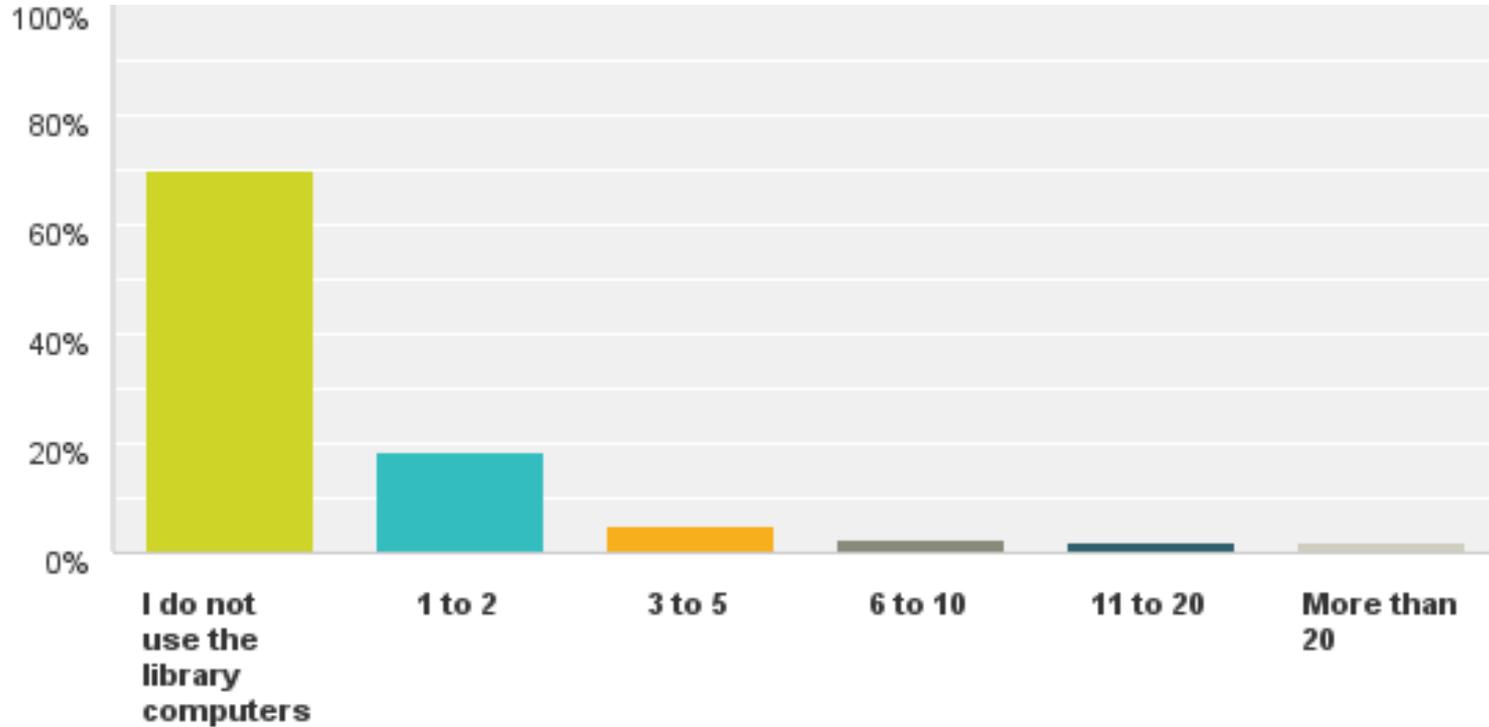


Choose all that apply

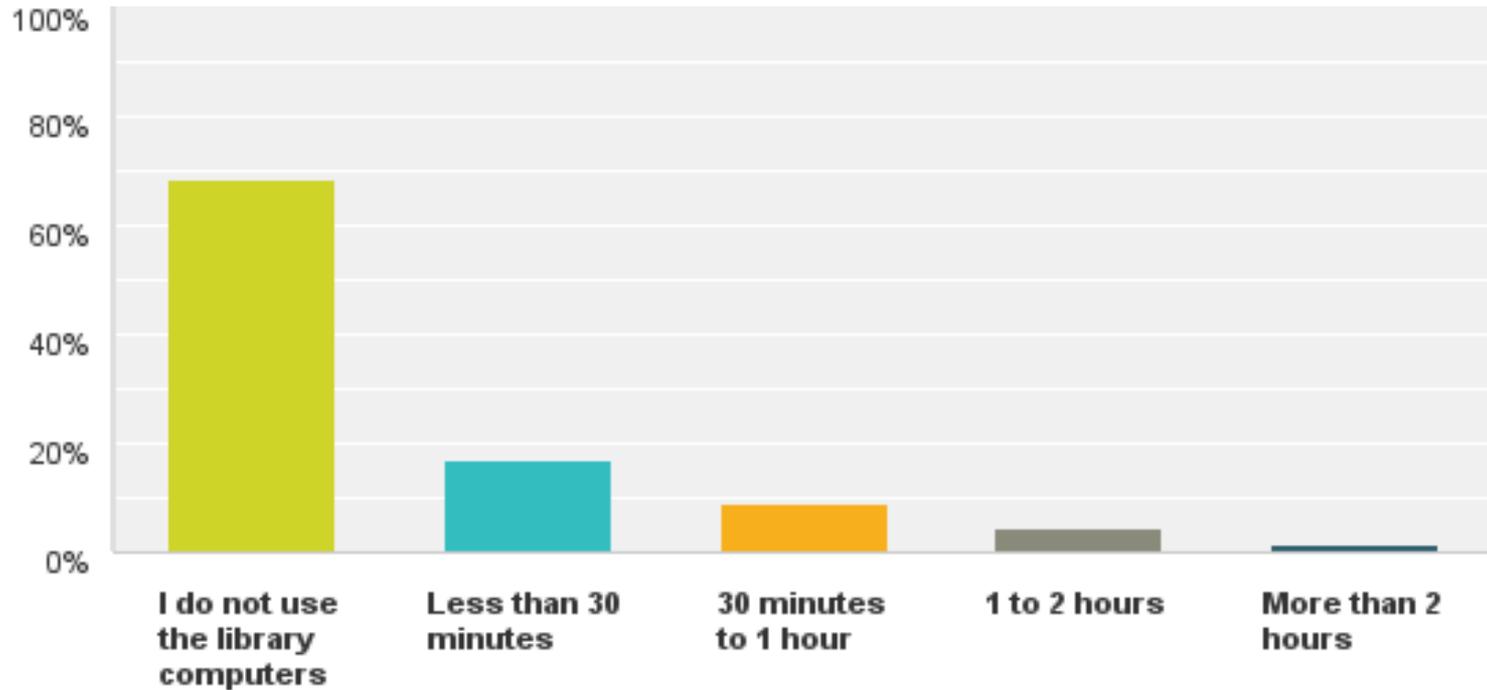
TOP RESPONSES

- Children's story time, puppet show, or activity **36.07%**
- Adult programming **36.79%**
- Author or lecture presentation **36.43%**
- Children's craft or art program **30.36%**
- Conference room meeting for business group **27.50%**
- Adult craft or art program **25.36%**
- Social gathering **22.86%**

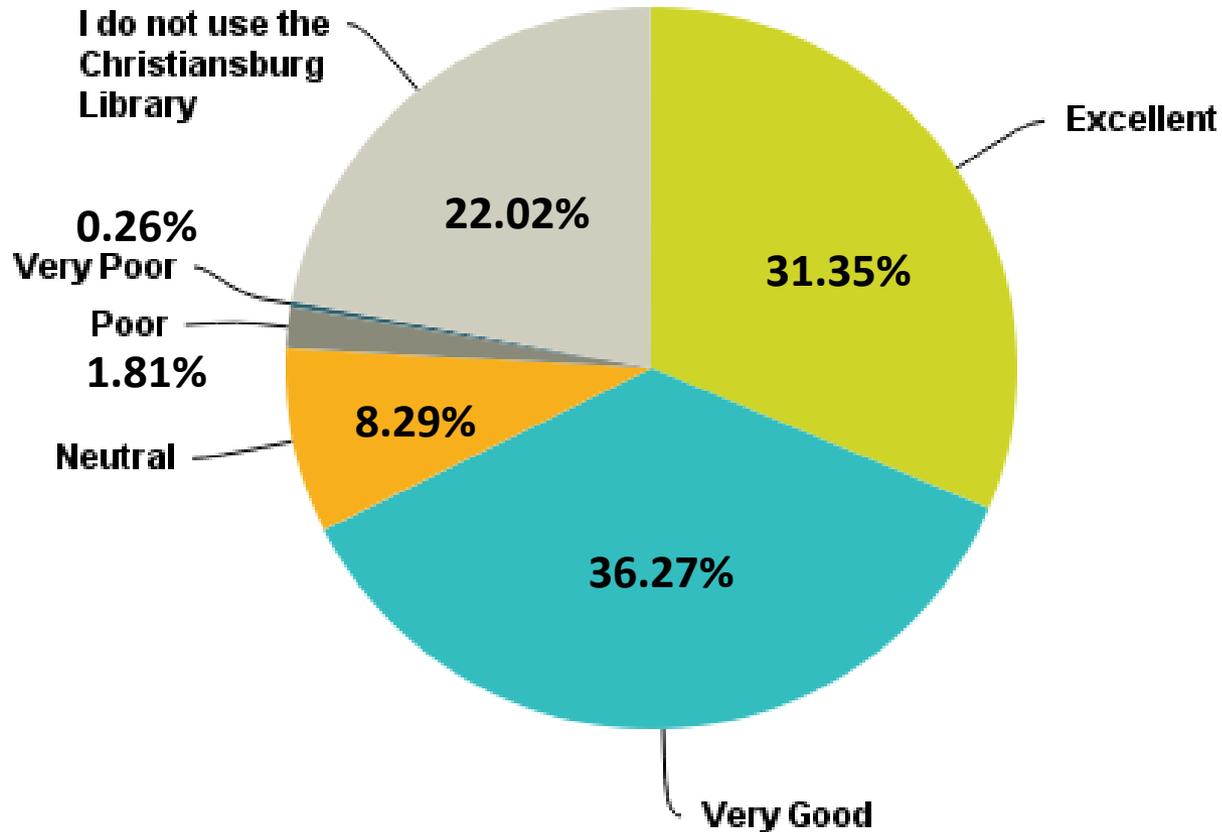
How many times per month do you use the computers?



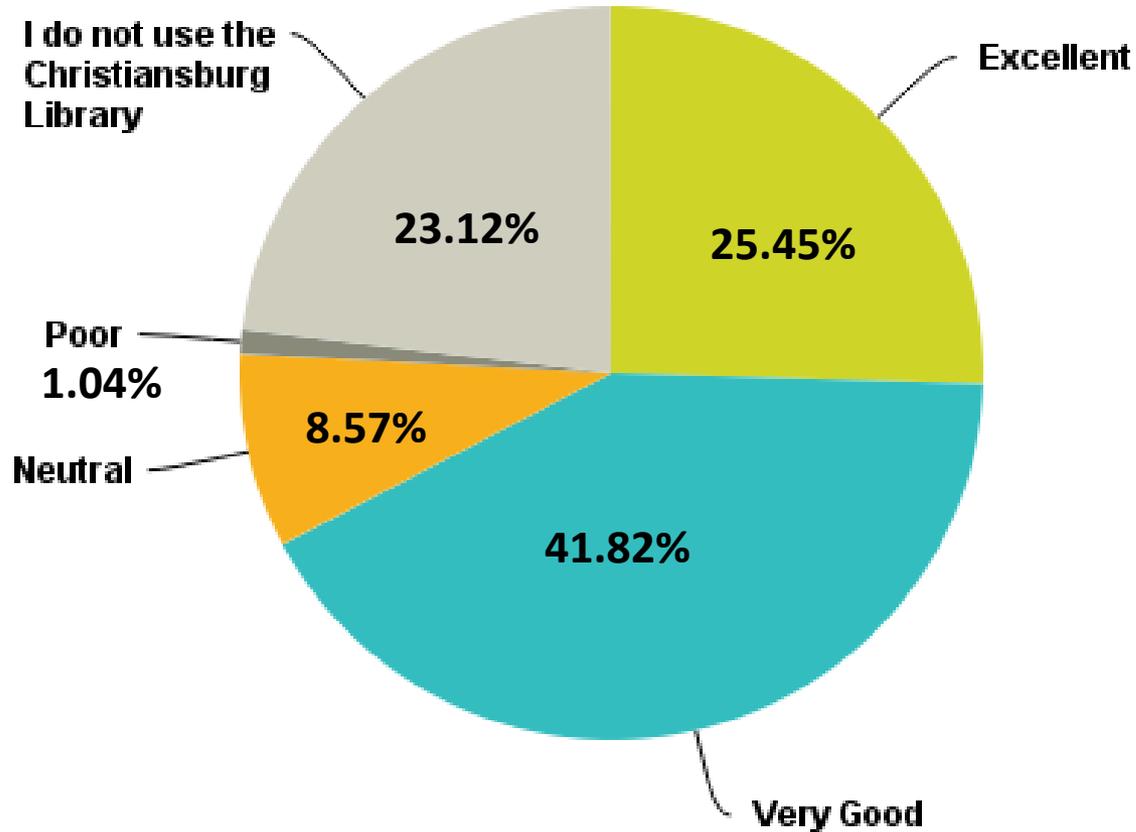
How long do you use the computers each visit?



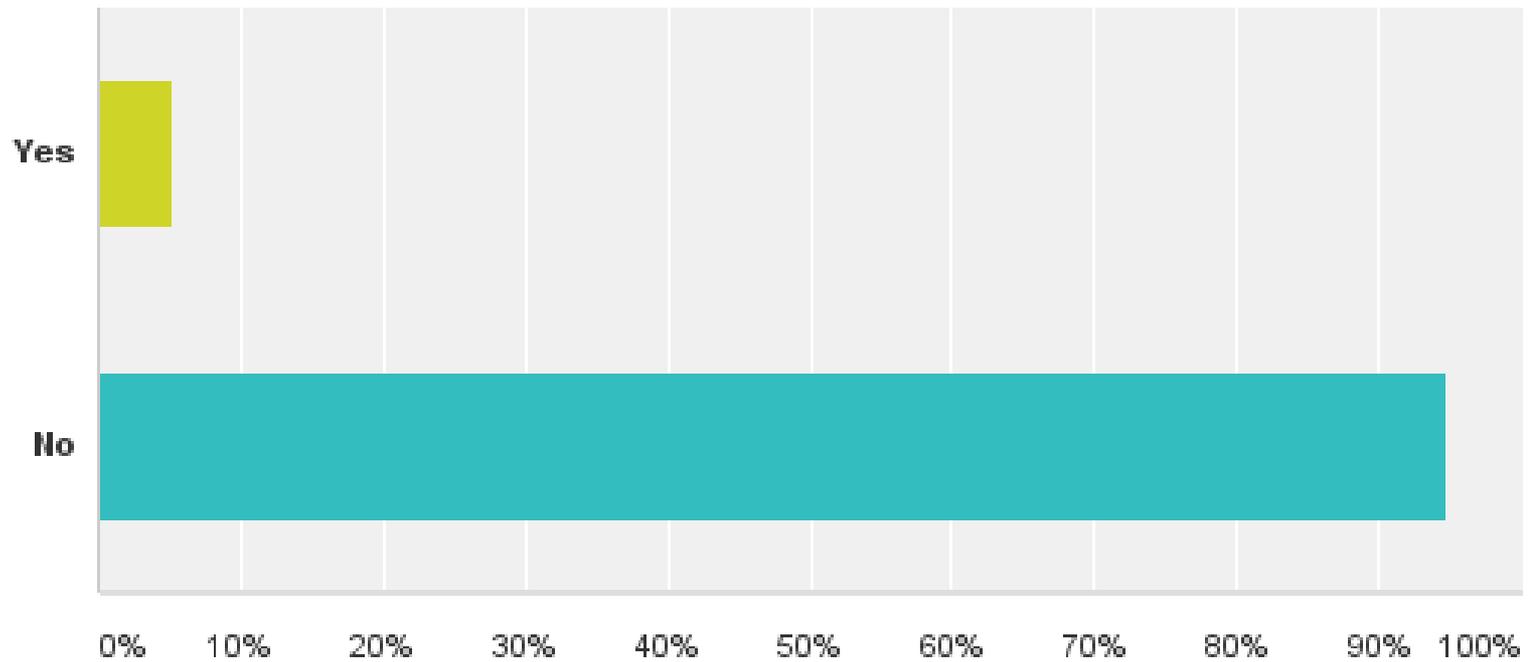
What is your opinion of access to the Christiansburg Library Location?



What is your impression of parking at the Christiansburg Library?



Are there any services/feature that shouldn't be at the library?



What services would you like to see in a modern library?



TOP RESPONSES

- More copies of popular books
- More meeting Space
- Separate teen section
- Separate children's section
- Maker Space
- More activities
- Business services center
- Coffee shop
- Outdoor spaces
- Separate computer area
- More study rooms/meeting rooms
- Drive through windows
- Better restrooms
- More programs
- Tablets and laptop computers

What features would you like to see in a Children's section?



TOP RESPONSES

- More newer books
- Shelves at child height
- More comfortable seating
- Separate, physical and acoustical
- Bigger story time area
- Larger program room
- Maker space
- More computers for kids
- Separate restroom
- Graphic novels
- Puppet show center
- Interior more appealing for kids
- Safe outdoor area
- Make sure area accommodates strollers
- Open space
- More digital and interactive media

What features would you like to see in a Teen's section?



TOP RESPONSES

- Expanded book collection
- Career idea section
- Soundproof
- Gaming area
- Comfortable seating
- Interactive display space
- Separate section
- Larger hang out area
- Lounge feel
- Study areas/Coffee shop vibe
- More digital access
- Separate computers
- Charging stations
- Study tables

How would you rate each of the following?



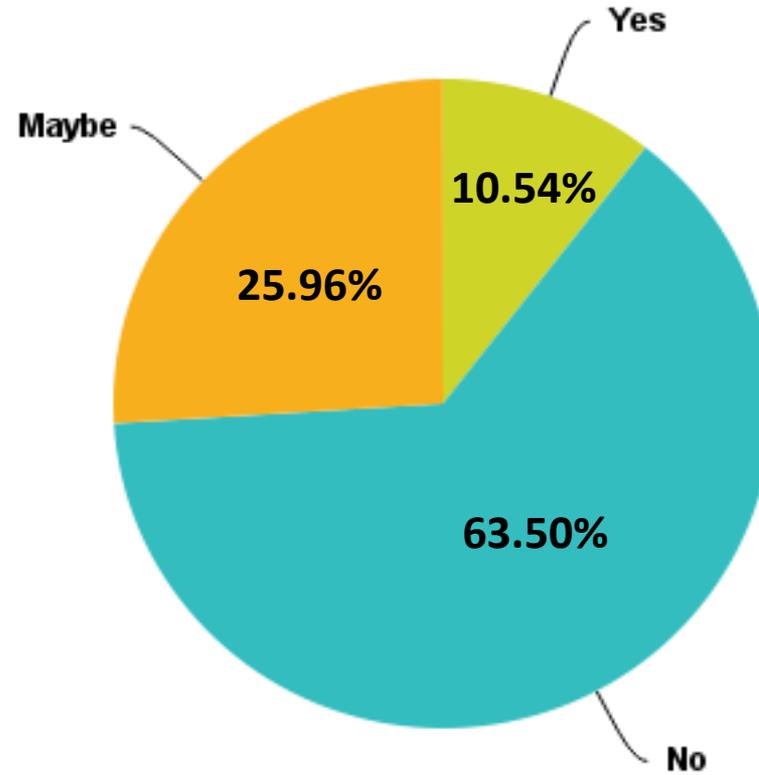
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Availability of books	33.07%	49.08%	9.71%	7.35%	0.79%
Availability of reference materials	21.05%	47.66%	29.53%	1.46%	0.29%
Availability of periodicals	26.44%	45.98%	26.72%	0.86%	0.00%
Electronic resources and databases	25.45%	42.22%	28.14%	3.29%	0.90%
Speed of internet service	25.54%	37.23%	34.15%	2.46%	0.62%
Helpfulness/courtesy of staff	78.36%	18.73%	2.11%	0.79%	0.00%
Speed of front desk service	68.52%	28.04%	3.17%	0.26%	0.00%
Quality of reference service	30.37%	40.49%	28.53%	0.61%	0.00%
Quietness of facility	40.37%	42.74%	10.55%	5.01%	1.32%
Convenience of library location	66.05%	30.24%	3.18%	0.53%	0.00%
Hours of library operation	40.58%	46.68%	7.69%	4.77%	0.27%
Safety/security of the facility	53.91%	37.20%	7.82%	0.81%	0.27%
Quality of library meeting space	30.84%	39.19%	26.22%	3.75%	0.00%
Quality of internet access or computer use	27.19%	37.19%	34.06%	1.25%	0.31%
Wifi access	29.41%	38.08%	30.34%	1.86%	0.31%
Library website	29.86%	45.48%	17.26%	6.03%	1.37%
Library catalog	29.38%	46.61%	18.36%	4.52%	1.13%
Library programs	29.07%	47.09%	20.93%	2.91%	0.00%
Overall satisfaction with library buildings	41.62%	46.76%	8.11%	3.51%	0.00%
Overall satisfaction with library services	51.73%	42.67%	5.07%	0.53%	0.00%

How would you rate each of the following?



	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Availability of books	33.07%	49.08%	9.71%	7.35%	0.79%
Availability of reference materials	21.05%	47.66%	29.53%	1.46%	0.29%
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Overall satisfaction with library services	51.73%	42.67%	5.07%	0.53%	0.00%

Would you be in favor of a single library to serve both communities?





OVERVIEW

- 15,100 SF single story
- Built in 1986
- Approximately 70 parking spaces
- Loading—difficult to access
- Sidewalks and curbs fair to poor
- Parking lots/ramp not ADA compliant
- Well landscaped
- Limited outdoor reading area
- Opportunity for amphitheater





EXTERIOR

- Exterior masonry good condition
- Erosion around some walls
- Aluminum clad wood windows—replace
- Asphalt shingles roof—good condition
- Entry doors—replace
- Appears structurally sound





INTERIOR: PUBLIC

- Good natural light
- Pleasing, but dated, interior
- Older inconsistent furniture
- Shelving too high
- Congestion
- Small program space
- No separate children's program space
- Lack of teen space
- No study rooms
- Limited seating
- Limited computers and technology





INTERIOR: STAFF

- Crowded circulation workroom
- Limited Friends of the Library space
- Inefficient flow
- Lack of storage space
- No shipping and receiving area
- Loading area with difficult access





MECHANICAL, ELECTRICAL, PLUMBING

- HVAC system—nearing end of life
- Plumbing fixtures older, but functional
- No fire sprinklers system
- 800-Amp main distribution panel
- 4 sub-distribution panels—in good condition
- Lighting meets recommended levels—not energy efficient
- Receptacles and wiring device—replace
- Fire alarm system old—replace
- Zone-type security system (6 cameras)





	Existing	Needed	South County	England Run	Northside
Library Size	15,100	30,500	53,892	30,000	30,000
Collections	67,591	71,596		77,728	92,014
Main Meeting Room	968	1,400		2,158	1,566
Children's Program	0	750		0	658
Other Program	0	600		270	1,100
Study/Tutoring	0	5		6	6
Quiet Reading Room	0	400		0	766
Adult Services	5,002	8,041		9,608	8,050
YA Services	400	940		1,450	1,442
Youth Services	1,996	3,700		5,164	3,100
Computers	14	31		54	40
Staff Space	3,828	6,820		5,168	5,196



Site Options

- Preserves existing parking
- Limited opportunities to add parking.
- Grading and drainage issues.
- Appears to be enough land for expansion.
- Review roof design and structural challenges with additions

