Davis County Library Board Meeting
Headquarters, Auditorium
133 S Main St, Farmington, UT 84025
January 12th, 2023
Called to Order by Jil Craythorne at 1:07 p.m.
Adjourned 2:40 p.m.

Present:
Jil Craythorne, Chair
Mary Lynne Morgan, Vice Chair
Scott Jones, joined electronically
Claudette Eastman
Lorene Kamalu, Commissioner
Connie May
Jennifer Somers
Josh Johnson, Director
Jenny Tankersley

Guests:
Lynnette Mills, Deputy Director
Matt Goff, Deputy Director
Ellen Peterson, Deputy Director
Lane Rose, Facilities Director
Neal Geddes, County Attorney
Brooke Freebairn, Bountiful City
Carolyn Myers, Bountiful Branch Manager
Rachelle Blackham, Senior Services, Health Dept
Bryce Haderlie, Woods Cross City Manager

Welcome
Jil Craythorne welcomed those present and called the meeting to order at 1:07 p.m.

Public Comments
There were no public comments.

Minutes (Action)
The minutes for November 17th, 2022 were presented for review.
Commissioner Kamalu moved to approve the minutes of the Library Board meeting held November 17th, 2022. Connie May seconded the motion. The motion was unanimously carried.

Proposed 2023 Holiday Closures (Action)
Josh presented the proposed 2023 Holiday Closures to the Board. He proposed the addition of November 11th as well as the county observance of November 10th for Veterans Day.
Jil Craythorne moved to approve the proposed Holiday closures. Claudette Eastman seconded the motion. The motion passed unanimously.

Proposed Changes to Policy #290 - Meeting Rooms (Action)
Josh explained the proposed change in policy will reduce the advance reservation time from twelve months to six months. This change streamlines the process, making the policy simple and gives more equitable access for the public. Josh noted that this change is needed as Library Market meeting room software does not work well with one-year advance reservation times. He also noted that this will be an inconvenience for some patrons.
Claudette Eastman moved to approve the proposed policy changes to #290 Meeting Rooms. Connie May seconded the motion. All were in favor.

Ratification of Bills - October 2022, November 2022 (Action)
The October 2022 and November 2022 expenditures were presented to the Board. Josh explained the overages in the end of year reports. As an example, the Employee Awards line was slightly over because the Library purchased more awards than they previously thought they would need. However, the county is concerned with the Operations budget as a whole and the Library is under budget in most areas. Claudette Eastman commented that it was worth it. Jil Craythorne mentioned how fun the Employee Awards were. Commissioner Kamalu said that Josh and his team are very good with the budget. She mentioned that Josh attended the county budget meetings.
Connie May moved to ratify the bills for October 2022 and November 2022. Claudette Eastman seconded the motion. The motion to ratify passed.

DAVIS COUNTY LIBRARY BOARD AGENDA

Davis County Library Board Meeting
Headquarters, Auditorium
133 S Main Street, Farmington, Utah

January 12th, 2023
1:00 p.m.

Welcome

1. Public Comments - 3 minute maximum

Action Items

2. Minutes - November 17th, 2022
3. Proposed 2023 Holiday Closures
4. Proposed changes to Policy #290 Meeting Rooms - decrease advanced reservations time
5. Ratification of Bills - October 2022, November 2022

Information & Discussion Items

6. Future Library Services & Capital Projects
    a. 2022 Public Survey Report
    b. 2022 Capital Construction Update
    c. 2021 South Branch Feasibility Study

Adjournment

Notes:

Pursuant to the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify Josh Johnson, Davis County Library Director, at 801-451-3050 prior to the meeting. Agenda items may not be discussed in the above order.

Pursuant to UCA 52-4-207, electronic and telephone participation is available to this body's members and invited guests; the general public is invited to attend at the anchor location indicated at the top of the agenda.

Future Library Services & Capital Projects (Information)

a) 2022 Public Survey Report

Josh presented the public survey report to the Board. The Library was hoping for 5,000 responses and received 13,000. The report is available at the end of these minutes.
Insights from the survey include: physical library locations are still important to Davis County residents, those who find our collections to be moderate or very good visit physical locations more often, and half of all respondents said they would consider additional funding to improve collections. Respondents were also interested in extra hours, traditional, off-site, and pick-up locations. The survey showed that the public wants language, business, employment, and education services and are more likely to use the library when these resources are up to date. Most of those surveyed are willing to travel 5-10 minutes to a physical library location.

Scott Jones asked how often the Library reevaluates the collection. Ellen said that ideally it's ongoing. There are sections that the Library can improve on education and business. Scott Jones said he believes the Library could expand their Business area. Josh agreed that based on the survey results the Library needs to do a deep dive into reevaluating the collection and this would be a good place to expand the Library's marketing efforts.

b) 2022 Capital Construction Update

Josh presented the Capital Construction Update to the Board. This report is available at the end of the minutes. Josh shared GIS maps made in conjunction with the IS department. These maps show how far patrons throughout the county drive to each location and which communities are underserved and show an overview of Library service for the entire county.

Jen Somers asked why there is a focus on the entire county now that it's time to do Bountiful. Josh explained that the Library is looking at a long term plan and by no means is suggesting that the South End should not be the next project. Based on the GIS map, the Board discussed possible locations. Claudette mentioned that many Bountiful library patrons do not have cars and walk or rely on public transit to visit the library. Commissioner Kamalu spoke about how people are willing to drive if their destination is near other areas of high demand such as groceries, paying bills, etc. The Board agreed that access to public transit is essential to the Bountiful branch library. Josh told the Board that more data was available and needed as the Library looks specifically at the South end.

The Board determined that they could not make a decision on location until they had estimates on the cost of land or a possible land swap with one of the cities. The Board then discussed the data from the North end of the county. South Weber and the Clinton area have to drive further than anyone in the county to reach a library. The Board discussed how both communities are close to Weber County branches and are able to use the Weber County system due to the reciprocal borrowing agreement. The Board agreed that looking into a reciprocal borrowing agreement with the Salt Lake City Library system would be a benefit to our patrons in the South end of the county.

Josh reminded the Board that the Library has been looking at construction costs for a long time. Lynnette worked with Lane on construction cost estimates. At the time Kaysville was built it was $280.00 per sq ft. Due to inflation, the Library is expecting to pay $490.00 per sq ft. To build a building the size of Kaysville, not including land or furnishings, the estimate is $10,163,200.00.

Josh brought up that if the Library builds on site in Bountiful the Board needs to think about how long that area will go without services. The Board discussed possibilities for service during construction in the South end including a kiosk, a trailer, and reintroducing the Bookmobile. Any options would need to have utility hookups, a restroom, and be handicap accessible. Commissioner Kamalu mentioned that when building a new building the county thinks about it as a one time cost. The much bigger expense is operating and maintaining the building over the years. Josh shared with the Board the cost of running each Library location per square foot.

c) 2021 South Branch Feasibility Study

The study reports that all systems in the current Bountiful Library need to be replaced. Josh reminded the Board that the Clearfield branch was constructed ahead of the South end because the systems were failing faster at Clearfield. The Feasibility Study estimated the cost for replacement in 2021 at $10,210,000.00. This estimate was pre inflation.
Commissioner Kamalu asked what promises were made with the 2017 tax increase. Josh informed her that they included the Syracuse branch remodel, rebuilding the Clearfield branch, and rebuilding or remodeling the Bountiful branch.

Josh pointed out that there is a lot of wasted space in the Bountiful branch and if designed correctly a smaller building would be more effective. Decreasing the size of the building would reduce construction and operational costs. Having two floors does increase the level of staffing needed. Lynnette mentioned that the South end needs a large 200-250 seat auditorium regardless of the size of the building based on current levels of use.
The Board discussed the Library's recommendations to the Board for Capital Construction which were

1) South end services will be addressed first
2) Next the Library would address services in the Northeast part of the county
3) Third, the Library would address services in the Northwest part of the county.

Josh told the Board that addressing the Northeast and Northwest areas does not necessarily mean that something will be built. It could be something as simple as curbside pickup with a bookdrop. Josh told the Board that staying vigilant about offering services to these underreached areas should be a future priority. Lynnette mentioned the possibilities of book vending machines in covered areas as well as reviving the Bookmobile. Several Board members liked the idea of reviving the Bookmobile. Commissioner Kamalu brought up partnering with cities as a solution in these areas. The Library could bring programming and services to an existing city center without the cost of maintaining a building.

Claudette Eastman moved to recommend to the Commission the intention to move forward with the project in the South end. Jennifer Somers seconded the motion. The motion to move forward with the South end passed unanimously.

Adjournment
Jil Craythorne moved to adjourn. The motion was seconded by Mary Lynne Morgan. The Board adjourned at 2:40 p.m..

Next Meeting: February 9th, 2023 - 1:00 p.m

Minutes Prepared by: Jenny Tankersley

Davis County Library

Public Survey Report

Survey Results and 3rd Party Analysis

November 2022

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Executive Summary

This report is intended to give the Library Board and other stakeholders tentative answers to key questions concerning the future of library services in Davis County.

Recommendations

- **The Library should improve its adult book and young adult book collections.** Based on survey results and the ALA report, improving these two collections (both physical and online) should increase physical library use. Improving employment, financial, and language options in both physical and online collections and continued improvement in ebook and eaudiobook collections is also important.
- **The Library should reach out regularly to patrons to remind them about relevant resources.** One patron suggested, "Advertise your services. Make them look exciting. Make them current. Let everyone know how they can benefit from all you have. People forget quickly."
- **The Library should contact those willing to be part of a focus group,** particularly regarding programming.
- **The Library should carefully review the free-form patron responses.** This report was a general overview. There is much information to be gained by reading all of the specific and "other" comments from respondents.
- **The Library should survey the public more regularly.** Considering the pace of technology and other relevant fields, we recommend that the library survey at least every 4-5 years (our most recent was in 1999). Future surveys should also
    - ask questions related to actual use, in addition to perceived importance.
    - focus on basic services and public opinion and utilize focus groups to gain more specific information after the main survey.
    - clearly indicate in the survey that using online materials is analogous to visiting a physical library.
    - continue to explore outreach to those in the community who don't use the library.

Insights

- Physical locations are still important to Davis County residents - even online patrons.
- Those who find collections and materials useful and up-to-date also visit more often.
- Half of all respondents said they would consider additional funding for library collections (physical and electronic); respondents are also interested in additional hours and locations (both traditional and offsite/pickup locations).
- Those who indicated they never use the library are generally interested in online resources, and do not value physical resources as highly as the general survey respondents.

Introduction

Purpose

This report is intended to give the Library Board and other stakeholders tentative answers to key questions concerning the future of library services in Davis County. It is based on both the public survey responses, as well as a survey report updated by Red Pepper staff (Appendix A), the original survey report created by ALA Consulting (Appendix B), and a printout of answers to survey questions (Appendix C) - all included at the end of this report.[1]

Scope

This survey, like most surveys, while informative and useful, is skewed. While we and our vendor were delighted to receive over 13,000 responses to our survey, we also recognize that this response was only a small portion (3.5%) of the more than 360,000 residents of Davis County.

It is also important to remember that, while much effort was made to include those who are not regular library users, the primary method of distribution was to email addresses who had already created accounts with the Library.

However, it is important to note that the response to our survey was so much larger than expected that it took extra time for our vendor to complete the report, which means that this survey was successful. While the data is, perhaps, unavoidably skewed, it is still useful for its intended purpose - understanding how a cross-section of Davis County residents view library services and collections so that decisions about future planning remain focused and relevant.

As with other reports, those reading the information presented should consider any information, data or recommendations together with other relevant data. Good decisions will be based on sound practices developed by library staff and other professionals over many years and reasonable presentation of data.

While we are confident that the data and recommendations are sound and attempt an objective understanding, survey interpretations are subject to discussion, alteration, or rejection - based on updated information or additional factors under consideration at any given time.

Background

The Davis County Library Board determined to conduct a public survey to assess public opinion on library services. While the impetus for this decision was finishing current construction plans, the survey itself serves multiple purposes, including understanding the need for future library-related capital projects throughout the County, finding opportunities for marketing library locations and services, and an overall understanding of how patrons use and perceive the library's services and buildings.

The Board felt that planning for future library services should not be made in a vacuum without consulting the public, and this survey to all residents of the county would see if the Library was meeting public need, while exploring possible ways to bring programming, technology and additional library services to areas that may be currently underserved.

[1] The answers to survey questions provided at the end of this report include the general answers. Free form responses were helpful, but not included because it is impractical to include so many responses in a report of this kind (as a reminder, the survey had 13,020 respondents).

The Board also wanted a third-party report on the survey to make it as unbiased as possible. This third-party report is included as Appendix A, below.

In addition to this survey, the Library has been gathering data and information related to construction costs, service areas, and potential branch locations for the Library Board to discuss and recommend a course of action to the Davis County Commission[2].

Methodology

After significant effort, the Library and County staff settled on the following overarching questions, intended to guide both the survey and discussion about the future of library services; specific survey questions were created with the following questions in mind.[3]

- What physical and digital expectations do the public have for library service?
- What level of library services does the public expect (hours of operation, collections of digital materials, study space, meeting space, etc)?
- Are current physical locations sufficient to serve the needs of the public for the next decade?
- What current library services, programming and collections do the public find relevant or worthwhile?
- What library services, programming and collections can we adopt to increase use of libraries by non-users?
- What is the willingness of the public to increase library funding to maintain or increase library services such that they respond to the answers given above?

Survey Gathering and Demographics

The public survey ran from August 2022 through October 15, 2022. Respondents were given the demographic options listed below (in no particular order) when completing the survey. Geographic locations are used to cluster responses in the discussion, and are also detailed below.

- **Geographic Locations**: Layton, Bountiful, Kaysville, Farmington, Syracuse, Centerville, Clearfield, North Salt Lake, Clinton, Woods Cross, West Point, Fruit Heights, West Bountiful, South Weber, Sunset, Hill Air Force Base, Unincorporated Davis County, and Other.
- **Age Ranges:** 85 or older, 75-84, 65-74, 55-64, 45-54, 35-44, 25-34, 18-24, and under 18.
- **Geographic Locations**: Southern Davis County (Bountiful, Centerville, North Salt Lake, West Bountiful and Woods Cross), Central Davis County (Farmington, Fruit Heights, Kaysville and Layton), Northern Davis County (Clearfield, Clinton, Hill Air Force Base, South Weber, Sunset, Syracuse and West Point).

[2] See 2022 Capital Construction Update: Cost Estimates & Data submitted by Library Director Josh Johnson, based on work with Library staff and Davis County Information Systems' GIS Team.

[3] There is one survey question that lies outside these questions, but that has great potential for more specific understanding of public interest and need for library services: "Would you be willing to be contacted in the future as part of a focus group?" We were pleased to find that approximately a quarter of those surveyed (25.6%) were willing to be contacted in the future, including some who said they never use the library.

Survey Results

Relevant points discussed below are based on the public survey (see Appendix C), and the reports provided by ALA Consulting and Red Pepper Staff (see Appendices A & B), or are derived from those sources.

Each broad section starts with general information, followed by items more specific to the respondents' ages, geographic locations, or frequency of library use (see "demographics" heading above for details about what these categories are).

Library Collections and Services

General Information

- **Respondents generally found Davis County Library materials and services useful and up-to-date.** The ALA reports tell us that 75% of respondents at least somewhat strongly agreed that our materials are up to date. This is true for physical and online collections, though there was more room to improve in online collections.
- **Most respondents visit the physical Library at least once per month.** The survey shows 58% visit at least once per month, 37% visit every 6 months to a year, and 5% never visit.
- **Respondents prefer access to both physical and online materials.** Survey data shows that more than half of respondents (55%) preferred to use both online and physical materials, with roughly a third (32%) who continue to prefer physical materials, and 13% who prefer only online materials.
- **Ratings should have been higher for adult books and teen collections, based on their impact on visit frequency.** Based on the ALA reports, (page 14) this means adult book collections represent an opportunity to increase public approval of our adult collections. This is also true of teen collections, to a lesser extent.
- **Ratings for Employment, Financial/Investment, and Language learning resources should have been higher, based on their overall rating in the survey.** Based on the ALA reports (page 16), this means that increasing the quality of our employment, financial/investment, and language learning materials and resources should lead to better public ratings for our collections. Borrowing materials, both physical and digital, is the most important service to survey respondents.
- **Borrowing physical materials, borrowing online materials, Library website, and catalog are the most important library services to respondents.** Based on the library survey, 77% said borrowing books, DVDs, Books on CD, and other physical materials was very important, 59% said borrowing ebooks, eaudio, and other online materials was very important, and 65% said the Library website and catalog was very important.
- **Assistance from librarians, Interlibrary Loan Services, were also important to respondents.** Library survey results show 74% of respondents felt assistance from librarians was at least moderately important. 77% of respondents said Interlibrary Loan services were at least moderately important.

- **Library Programs, WiFi, Computers, Printers and Photocopiers, and online databases divided public opinion.** Our survey showed 49% of respondents felt library programs were at least moderately important, 51% felt they were slightly important or less. 48% of respondents said public wifi, printers, and photocopiers were very or moderately important, 52% said these were slightly or not at all important; 59% felt online databases were slightly important or less; 41% of respondents said online databases were at least moderately important.

- **Help with computers, tablets, and smartphones, online databases, newspapers & magazines, and study or meeting rooms, were less important to respondents.** Survey results showed 66% felt help with computer devices was slightly or less important; 83% felt magazines and newspapers were slightly important or less; 67% felt quiet study rooms were slightly important or less; and 70% said meeting rooms were slightly important or less.

Respondent Age

- **Assistance from librarians became more important to users as they got older.** While ages 34 and younger did not find assistance to be as important, it increasingly became more important from ages 35 and older. Ages 75 and older found this to be the most important service to them after borrowing materials.
- **Those in the 75 and older age range had a much higher percentage of preference towards the physical collection over digital.** This included databases and help with computers and other electronic devices.

Respondent Geographic Location

- Geographic location did not change the results for collections and services. All followed the general trends.

Frequency of Respondent's Library Use

- Most of the trends for collections and services followed the general trends based on how often the patron came to the library.
- Programming is more important to those who frequent the library once a week and became increasingly less important the less they visited the library.

Library Programming

General Information

- **Public opinion concerning Library programs was mixed.** Overall, 49% found library programs at least moderately important, and 51% found them slightly or not at all important.
- **Programming, overall, tended to not be as important to the majority of survey respondents.** None of the programs listed on the survey was considered by more than 25% of survey respondents as very important.
- **Storytime and Summer Reading were generally the most important of the programs offered by the library.** 43% found storytime at least moderately important, and 51% found summer reading at least moderately important.
- **Movie screenings, book discussion groups and author visits tended to be the least important programs to the majority.** 75% found movie screenings slightly important or less, 72% found

book discussion groups slightly important or less, and 63% found author visits slightly important or less.

Respondent Age

- Programming, especially storytime and Summer Reading, were much more important to ages 34 and younger.
- Educational programs were more favorable in the 55-74 age range.
- Overall, those 75 and older did not think programming was important.

Respondent Geographic Location

- Most geographic locations followed the general trends for programming.
- Programming was more important to patrons living in the North end of the county.

Frequency of Respondent's Library Use

- Programming was much more important to patrons who used the library more often.
- Those who frequented the library less, one to two times a year, still found storytime and summer reading to at least be moderately important.

Additional Library Funding

General Information

- **By far, increasing the size of our collections was the number one reason patrons would be willing to support additional funding for the library.** Increasing collections was 50.13%.
- **Other reasons respondents would consider increasing funding were additional hours, additional offsite/pickup locations, and additional locations.** These were, respectively, 12.26%, 10.24%, and 8.6%, though they were still far below larger collections.
- Note: respondents could select more than one reason to support additional funding.

Respondent Age

- **All ages followed the general trends for additional funding,** though ages 55 and older had "other" in second place with 16.45%. More research will need to be done to find out if there are trends in the written answers for the "Other" response.

Respondent Geographic Location

Many respondents provided "Other" information in this part of the survey. More research will need to be done to find out if there are trends in the written answers for the "Other" response.

- South End responses:
    - "Other" was in second place behind collections.
    - 16.9% of respondents would support additional funding for additional locations (9.44% for physical locations; and 9.02% for offsite, remote locations).
- Central responses:
    - Additional Hours was in second place behind collections.
    - 14.4% of respondents would support additional funding for additional locations (9.84% for offsite, remote locations; and 5.96% for physical locations).
- North End responses:

- Additional offsite, remote locations were in second place behind collections.
- 22.3% of respondents would support additional funding for additional locations (12.42% for offsite, remote locations; and 12.38% for physical locations).

Frequency of Respondent's Library Use

- All frequencies followed the general trends for additional funding. Though, ages 55 and older had "other" in second place with 16.45%.

Physical Library Locations

The survey does not provide a great deal of information regarding where physical libraries should be located. The following points are relevant, but further data about viable locations is available in the 2022 Capital Construction Update report also sent to the Library Board.

General Information

- **Most respondents are willing to travel 5-10 minutes to visit a physical location.** The survey shows that nearly half (48.72%) would be willing to travel 10 -15 minutes, nearly a third (31.95%) would travel 5-10 minutes, and 19.33% would be willing to travel more than 15 minutes to visit a physical library location.
- **Increased physical collections were important to most respondents.** 91% of respondents said borrowing physical materials was important (books, DVDs, Books on CD, etc), and 77% said Interlibrary Loans were moderately or very important. It seems reasonable to assume that those interested in physical materials are also interested in closer physical locations to facilitate access to these collections.

Those Who Never Use the Library

Based on the 613 survey respondents who "never" use the library (4.7% of the 13,020 total responses), the following information is available.

- **It appears many of these patrons took the question literally, and responded that they "never" use the physical library, despite extensive use of its online resources.** This is an area the library can improve on in future surveys.
- **They overwhelmingly prefer online over physical resources.** 55.5% of those who never use the library prefer online resources, a small 10.4% prefer physical resources, and just over a third (34.1%) prefer both.
- **Borrowing ebooks, eaudio, and related materials are very important to this group.** 80% say that this is very or moderately important.
- **This group finds quiet study rooms, meeting rooms, and public WiFi, computers, printers, and photocopiers less important.** Unsurprisingly, this group responded were more likely than the general survey responses to find the following slightly or not at all important: quiet study rooms (75% instead of 67%), meeting rooms (82% instead of 70%), and public WiFi, computers, printers, and photocopiers (61% instead of 52%).

- **Those who use physical collections said the collections met their needs at least moderately well.** The adult collections met these respondents' needs best (66% said moderately or very well). It is worth noting that other collections got mixed response, with fewer very wells, and more saying it didn't meet their needs well at all.
- **eBooks, eAudiobook collections generally meet their needs at least moderately well, but there is room for improvement.** 32% of this group said that ebook and eaudiobook collections met their needs very well, basically the same percentage (32% for eaudiobook and 33% for ebooks) said that collections meet their needs only moderately well.
- **Library programs were clearly not important to this group.** More than 50% of respondents in this group chose "not at all important" for all types of library programs.
- **When asked how the library could improve the respondent's rating, results indicated an interest in more ebook and eaudiobook titles, and that many did not understand how to access the library's online collections.** Other frequent responses included satisfaction with current collections and levels of service, requests for emails reminding them of all the library has to offer, and increasing the number and availability of physical locations.

Insights & Recommendations

Before discussing the findings of the survey, it is important to acknowledge that survey results are always skewed. We are looking at a cross-section of the population who a) had time to take the survey, b) were willing to take the survey, and c) likely already had a library card at some point in the recent past or were familiar with traditional library services.

Another consideration is that those who took the survey were nearly always using a computer, smartphone, or related device. So when we see in the survey that 66% of those who responded didn't think Computer/Tablet/Smartphone help was an important Library service, we should not be particularly surprised, except by the interesting fact that 34% of a group of people who were capable of using a computer-like device to take a survey think help with computers is very or moderately important.

None of this makes the survey less valuable; it just means we need to consider the survey responses in light of the potential inaccuracies as we discuss recommendations and insights so we don't make incorrect assumptions.

Insights

- **Physical locations are still important to Davis County residents - even those who use online resources.** The survey and ALA reports clearly indicate that if patrons find collections useful and up-to-date, they are more likely to visit a physical location, even if they prefer online collections.
- **Those who find collections and materials useful and up-to-date also visit more often.** This is true, even when the patron prefers online collections.
- **Half of all respondents said they would consider additional funding for library collections (physical and electronic).** Also of interest to patrons are additional hours and additional locations (both traditional and offsite/pickup locations).
- **Those who indicated they never use the library are generally interested in online resources, and do not value physical resources as highly as the general survey respondents.** They also indicate that library collections meet their needs at least moderately well and that they do not value library programs.

Recommendations

- **The Library should improve its adult book and young adult book collections.** Based on survey results and the ALA report, improving these two collections (both physical and online) should increase physical library use. Books for children are highly rated in the survey, and collections like DVDs and Books on CD are much less of an influence on library use. In particular, the Library should:
    - Improve employment, financial, and language collections in both physical and online collections. The ALA report indicates employment and finance materials are strongly related to visit frequency and have lower ratings in the survey, which make them a good opportunity.

    - Continue to improve ebook and eaudiobook collections. These are important to users, and though the survey said they were adequate, respondents still felt there was room for improvement.

- **The Library should contact those willing to be part of a focus group to discover which types of programming are most beneficial.** It would also be helpful to ask questions specific to various demographics, rather than a single set of questions.

- **The Library should reach out regularly to patrons to remind them about relevant resources.** Many survey respondents asked for a regular email reminding them of all the collections and services provided by the library. To quote one patron, "Advertise your services. Make them look exciting. Make them current. Let everyone know how they can benefit from all you have. People forget quickly."

- **The Library should carefully review the free-form patron responses.** This report was a general overview. There is much information to be gained by reading all of the specific and "other" comments from respondents.

- **The Library should survey the public more regularly.** We've come a long, long way since the last survey in 1999. We need to survey more than once every 20 years. Considering the pace of technology and other relevant fields, we recommend that the library survey at least every 4-5 years. Based on this survey's results, future library surveys should

    - Ask questions related to actual use, in addition to perceived importance. Creating a survey is a complex task and the more the library conducts surveys, the better results we will get. As the library worked through the process of creating, distributing, and evaluating the 2022 survey, for example, we asked people how important they thought a library service was, rather than asking how often they used it. This essentially gets responses based on what patrons feel they "ought" to value, rather than gathering information about what services they actually use.

    - Focus on basic services and public opinion and utilize focus groups to gain more specific information after the main survey. This will save public and staff time, and will give more specific feedback and information as needed. This would only work well if the library surveyed the public more regularly as recommended above.

    - Clearly indicate in the survey that using online materials is analogous to visiting a physical library. Survey respondents who clearly used library resources also responded that they never visited the library - while technically true, future surveys should clarify for respondents to create cleaner survey responses.

    - Continue to explore outreach to those in the community who don't use the library. As only 3.5% of the residents in Davis County responded to the survey, finding more creative ways to reach those who don't use the library would improve survey results and also help market our services to those who may not know what the library can offer them.

Appendix A: Modified Davis County Library Driver Analysis

Updated/Modified on behalf of Davis County Library on 01/06/2023.

For original report see original “Davis County Library Driver Analysis - Dec 2 2022.pptx” report

Modified text appears in red font on each slide.

ALA CONSULTING GROUP



ALA CONSULTING GROUP

Davis County Library Driver Analysis

December, 2022

Summary of Findings

- While the library survey did not ask a question like overall satisfaction with the library, it did ask about two important aspects of the library user experience:
  - Agreement that the current library materials and services are useful and up-to-date
  - How often they visit the library
- These outcomes vary by the respondent's preferences for physical collections or online collections.
- These two questions are correlated – respondents that agree about useful and up-to-date visit more frequently, even if they prefer online collections.

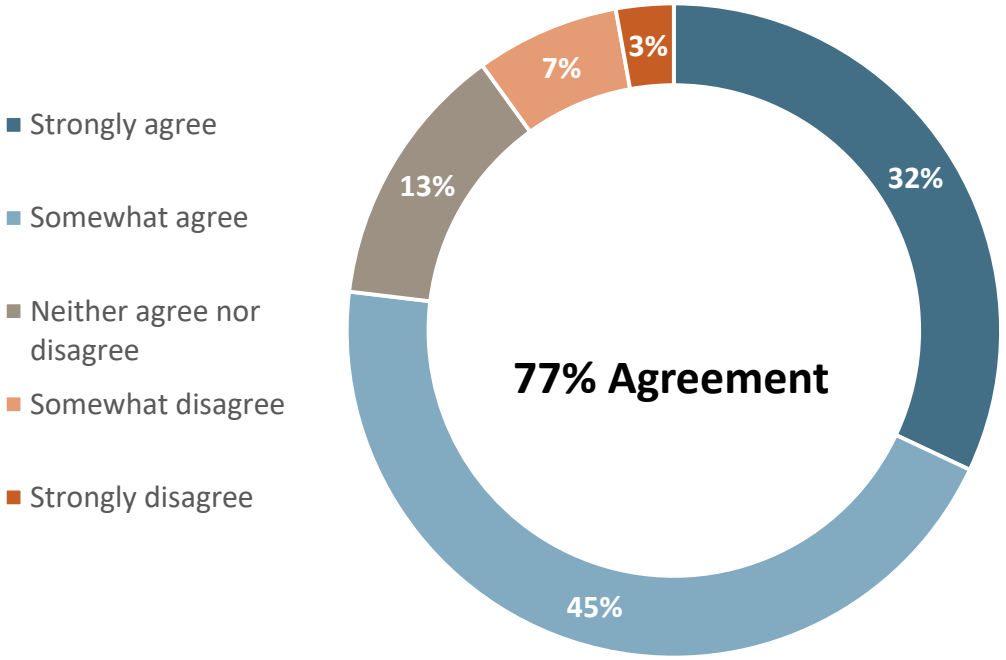
The purpose of the driver analysis is to statistically identify which collections matter most for those outcomes, and which represent opportunities or strengths

	Prefers Physical Collections	Prefers Online Collections
Agreement that the current library materials and services are useful and up-to-date	• **Adult books** are an opportunity. While already relatively highly rated, any improvement for visitors pays dividends in agreement. • **Kid** and **teen books** are relative strengths. They are already highly rated relative to the impact they have. • Books on CD and DVDs are lower rated, but do not strongly drive agreement	• **eBooks** and **eAudiobooks** have the strongest impact on agreement; they are opportunities as small improvements in ratings will make the greatest difference in agreement. • Topical materials are generally less important for agreement, though **educational** material is highly rated relative to its impact on agreement. • Some topic areas, like investment- and employment-related material, may represent secondary opportunities.
How often they visit the library **Location of Library:** • 29.27% would be willing to travel 5 - 10 minutes to the library • 50.71% would travel 5-10 minutes to the library • 20.03% would travel 15+ minutes to the library	• **Adult** and **teen books** are opportunities to increase visit frequency; improving ratings of teen books likely represents the best chance to increase visits. • **Kid books** are relatively highly rated, and represent a strength of the library. • Again, Books on CD and DVDs make less of a difference for visit frequency.	• In terms of what matters most, driving visit frequency is almost the opposite of driving agreement among online users. • **Employment-** and **financial-related** materials are strongly related to visit frequency, and are opportunities due to lower ratings. • **Language-learning** materials are also an opportunity. • **Educational** material is again a strength for increasing visit frequency.

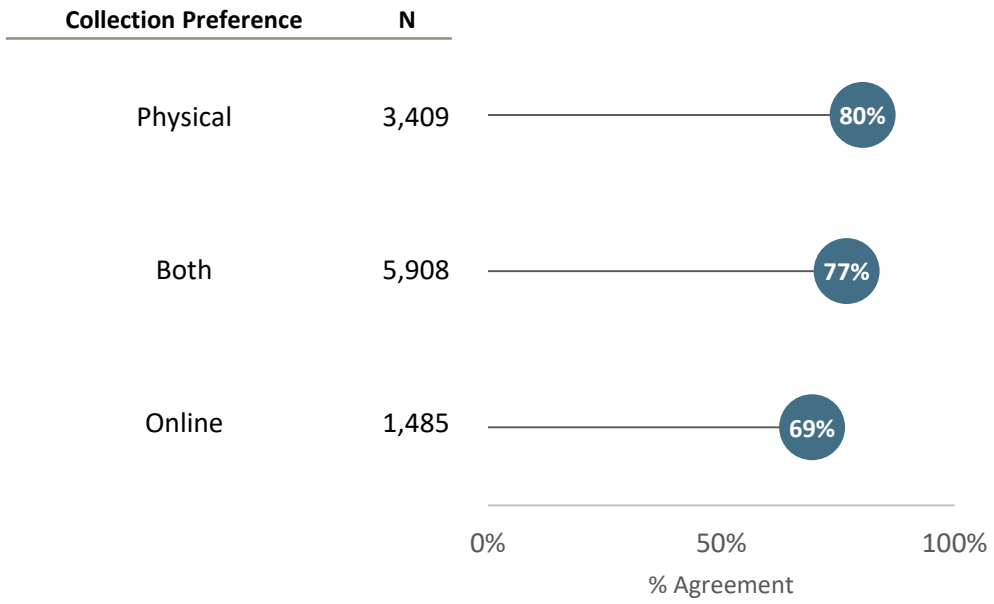
Most agree the library materials and services are useful

- Three-quarters (77%) agree materials and services they are useful and up to date.
- Agreement that materials and services are useful and up to date is slightly lower among users that prefer the **online collections,** but still quite high.

The current library materials and services are useful and up-to-date.



Useful and Up-to-Date by Do you prefer physical or online collections, or both?

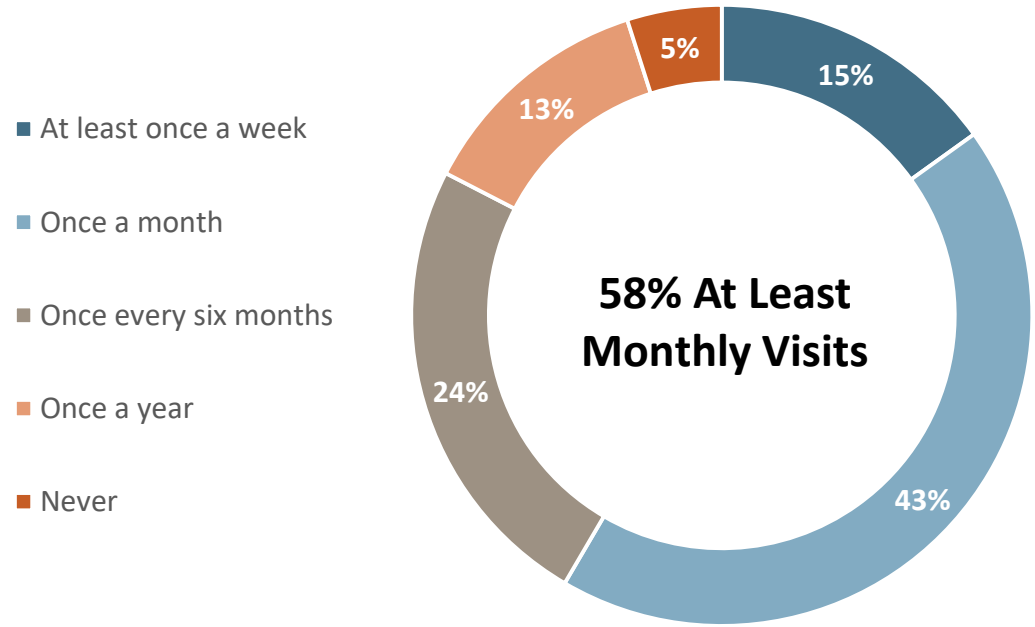


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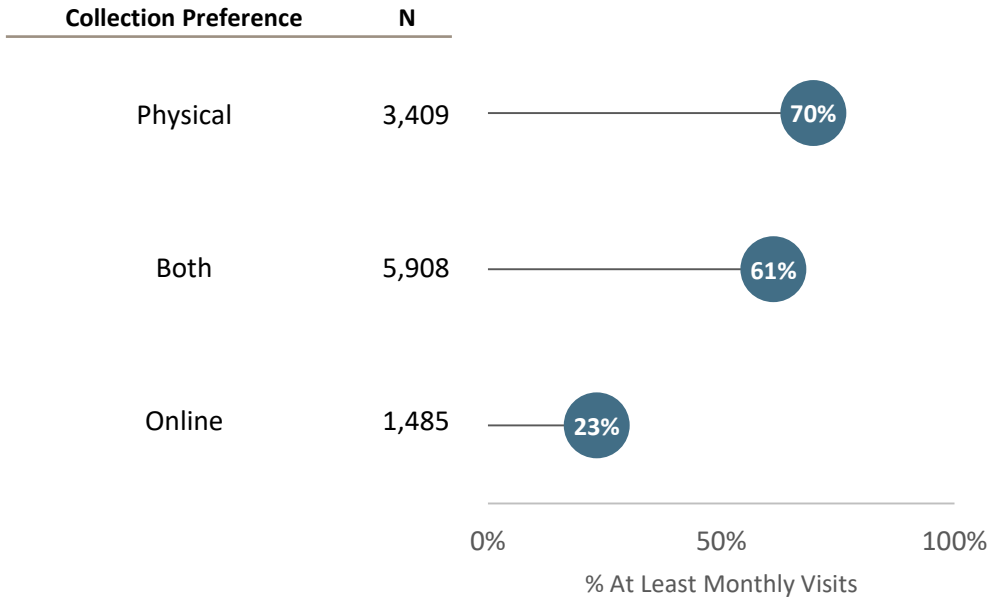
Over half of respondents say they visit the library at least monthly

- The median user visits once per month.
- Reported visits are much higher among respondents that prefer the **physical collections**, and only slightly lower among those that prefer **both physical and online**;
- Note: A quarter of respondents that prefer online collections still say they visit at least monthly.

How often do you visit the library?



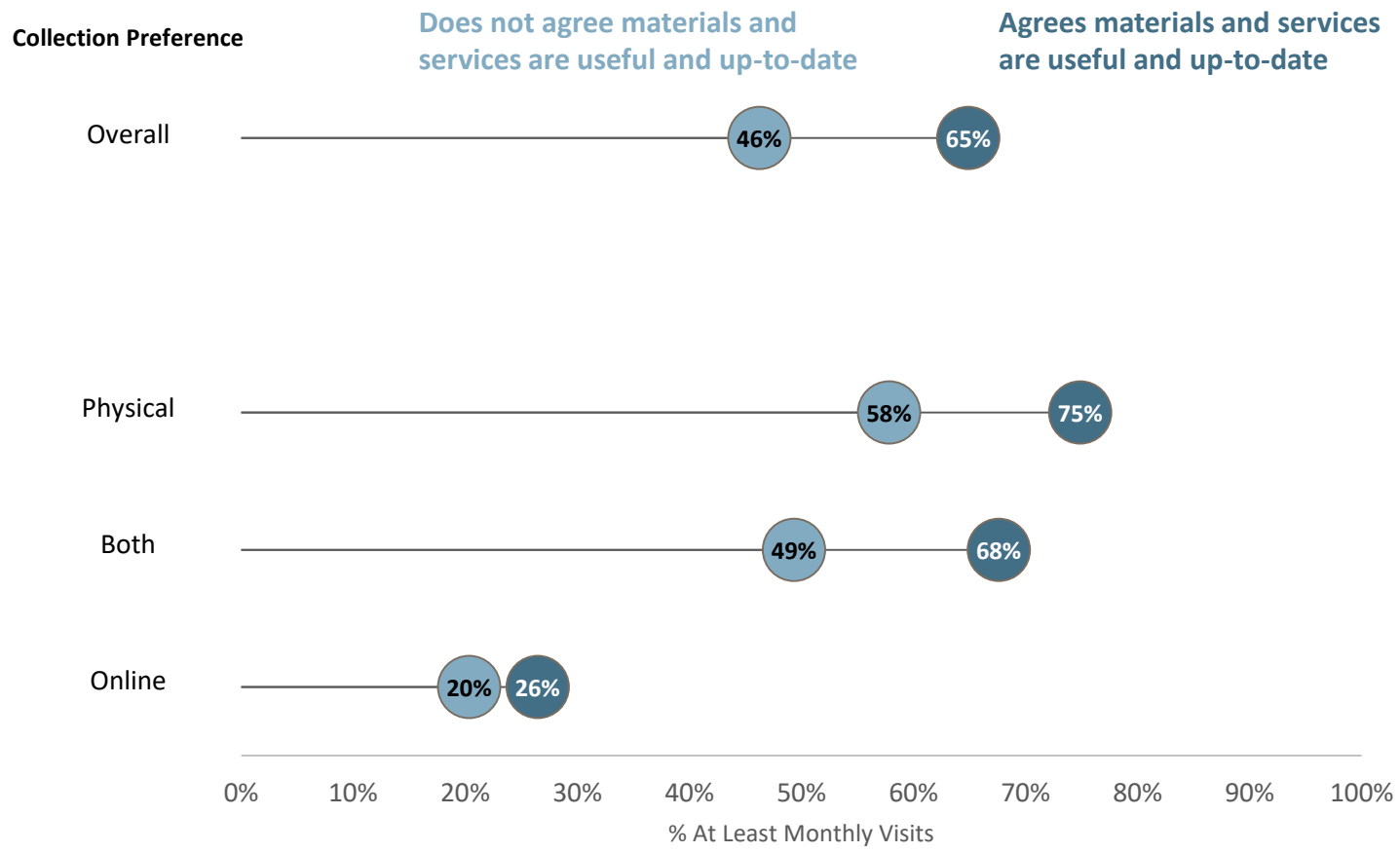
At Least Monthly Visits by Do you prefer physical or online collections, or both?



How often do you visit the library?

Respondents that agree the materials and collections are useful and up-to-date also visit more often

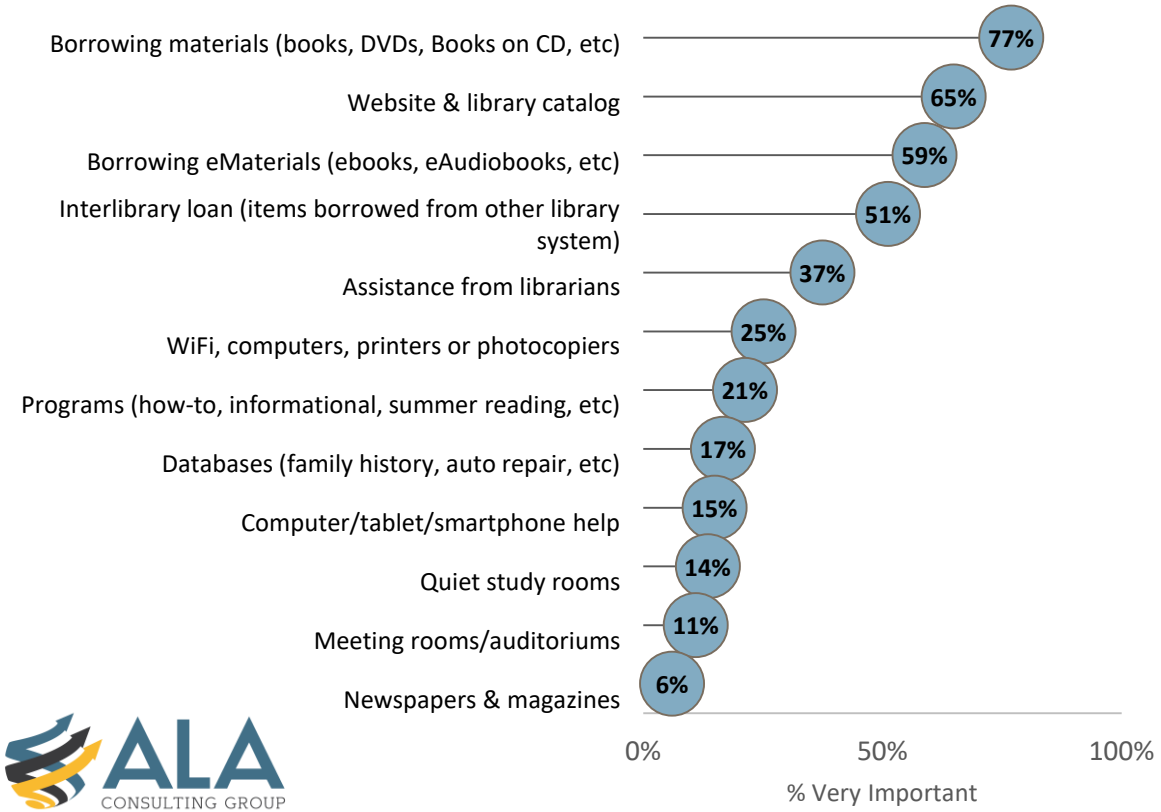
- Respondents that agree the materials and collections are useful and up-to-date also visit more often
- Even respondents that prefer online collections visit the library more often if they agree



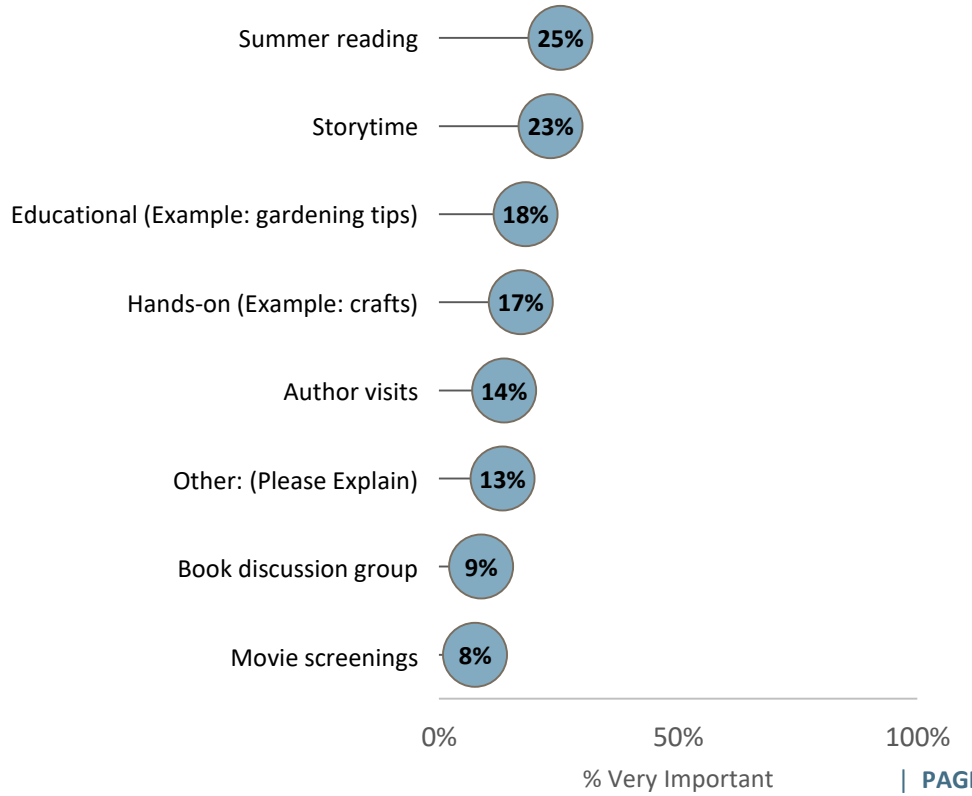
Respondents rated borrowing materials and the website/catalogue as most important to them

- Services - Borrowing materials (physical), Website & Library, Borrowing materials (electronic), Interlibrary loan (items borrowed from other library system) were the top-rated services regarding importance
- Programs - Summer reading, Storytime, Educational, and Hands-on were the top-rated programs for importance
- Note that all programs have are rated lower in importance than borrowing materials, the website, and interlibrary loans

How important are the following library services to you?



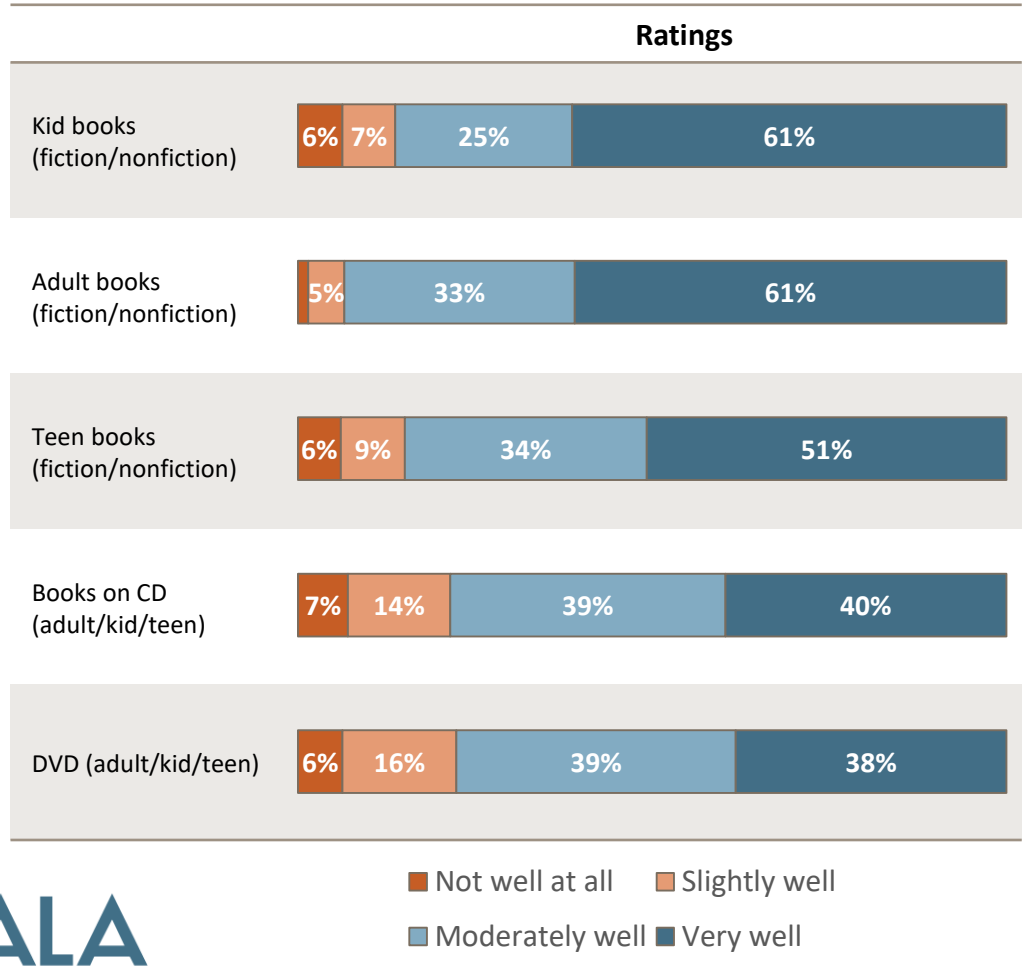
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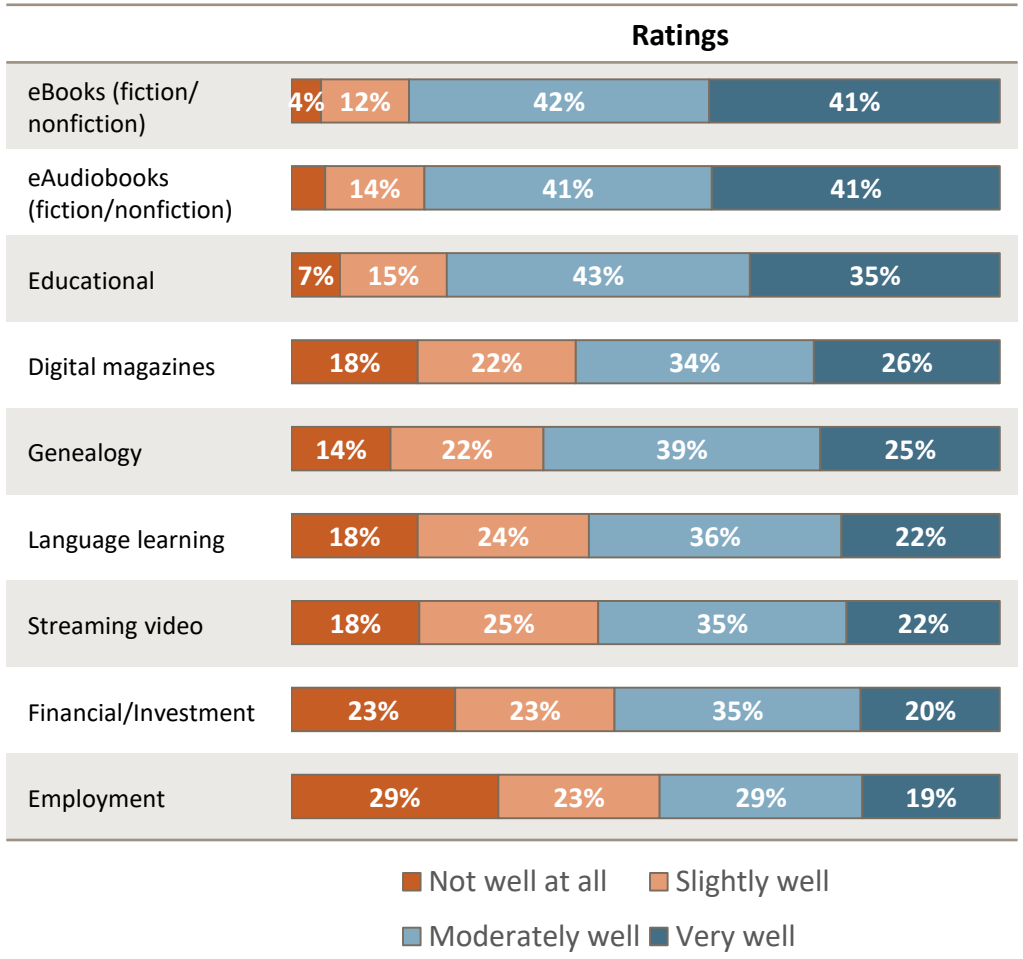
Physical collections of books meet the majority of respondents needs very well

- **Physical collections of books meet the majority of respondents needs very well**
- Online collections are generally lower rated, especially materials that are not eBooks or eAudiobooks.

How well do the following physical collections meet your needs?
Asked if prefer physical collections or both physical and online



How well do the following online collections meet your needs?
Asked if prefer online collections or both physical and online



Ratings of physical books have the largest impact on agreement

- Ratings of adult books are the most important for agreement on useful and up-to-date by a wide margin.

Drivers of "The current library materials and services are useful and up-to-date."

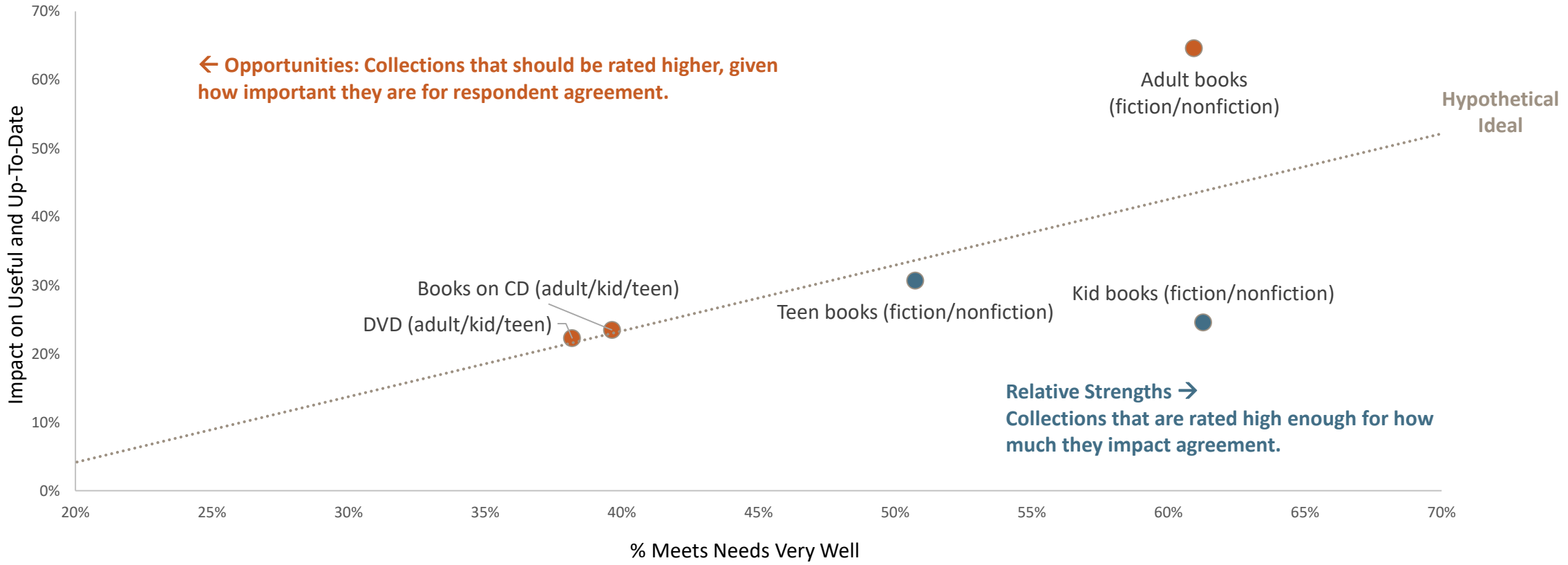
How well do the following physical collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Agreement
Adult books (fiction/nonfiction)	61%	35%		91%	100%	65%
Teen books (fiction/nonfiction)	51%		69%	93%	100%	31%
Kid books (fiction/nonfiction)	61%		74%	89%	99%	25%
Books on CD (adult/kid/teen)	40%		76%	94%	99%	23%
DVD (adult/kid/teen)	38%		77%	95%	99%	22%



*Predicted based on machine learning models

Adult books represent an opportunity to increase agreement on useful and up-to-date

- Book on CD and DVD represent collections that should be rated higher, given how important they are for respondent agreement
- Most respondents say the adult books collections meet their needs very well, but any improvement in this metric provides the largest increase in agreement.
- Teen books and kids books are likely as highly-rated as they need to be, given their impact on agreement.



eBooks and eAudiobooks have the largest impact on agreement for online collections users

- Topical materials like educational and genealogy materials also have some impact, but they are significantly less meaningful for respondents overall.

Drivers of "The current library materials and services are useful and up-to-date."

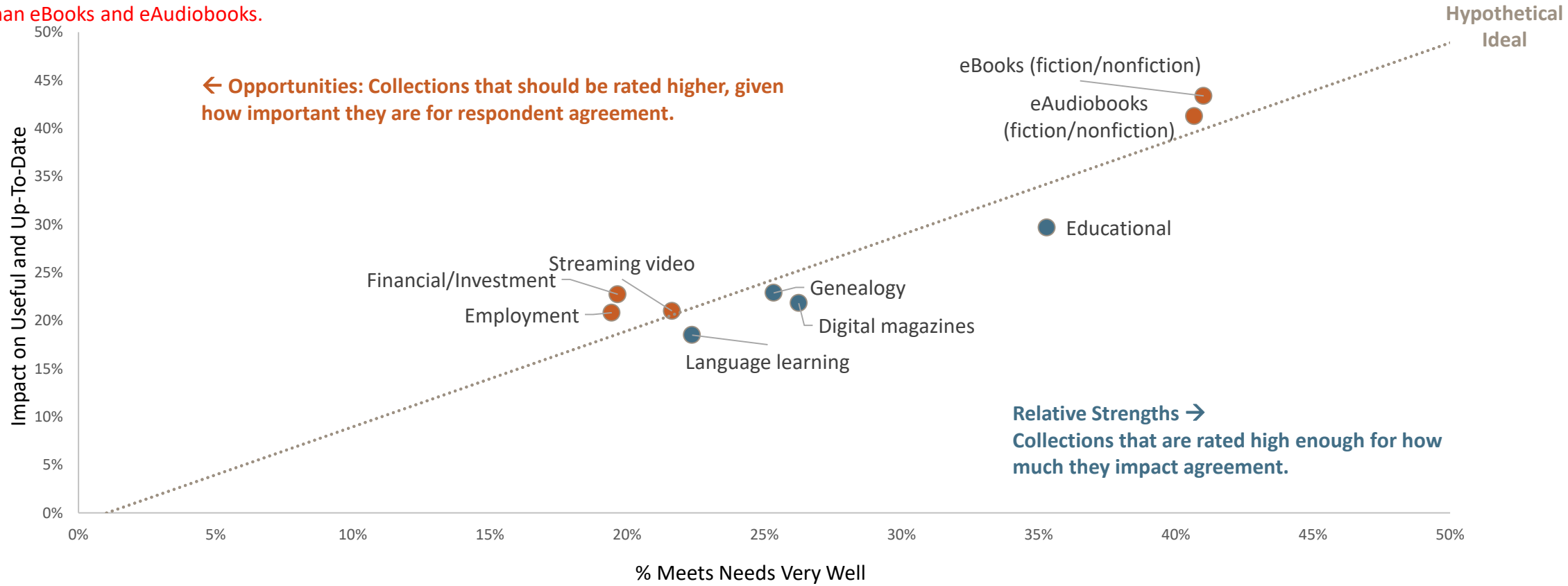
How well do the following online collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Agreement
eBooks (fiction/nonfiction)	41%	55%	93%	99%	43%
eAudiobooks (fiction/nonfiction)	41%	57%	94%	99%	41%
Educational	35%	68%	92%	97%	30%
Genealogy	25%	73%	90%	96%	23%
Financial/Investment	20%	72%	92%	95%	23%
Digital magazines	26%	75%	91%	97%	22%
Streaming video	22%	75%	92%	96%	21%
Employment	19%	74%	91%	95%	21%
Language learning	22%	75%		94%	19%



*Predicted based on machine learning models

eBooks and eAudiobooks also represent an opportunity to increase agreement on useful and up-to-date

- Ebook and eAudiobook ratings could be improved, given that most respondents do not say they these collections meet their needs very well.
- Most topics are as highly-rated as they need to be to maximize agreement regarding how well they meet needs.
- Streaming video, financial/investment and employment-related materials are secondary opportunities – they drive much less agreement regarding how well they meet needs.
- than eBooks and eAudiobooks.



Adult books are also the strongest drivers of frequency of visits among respondents that use physical collections

- Teen and kid books also have a substantial impact; CDs and DVDs do not drive visit frequency as powerfully.

Drivers of Frequency of Visit

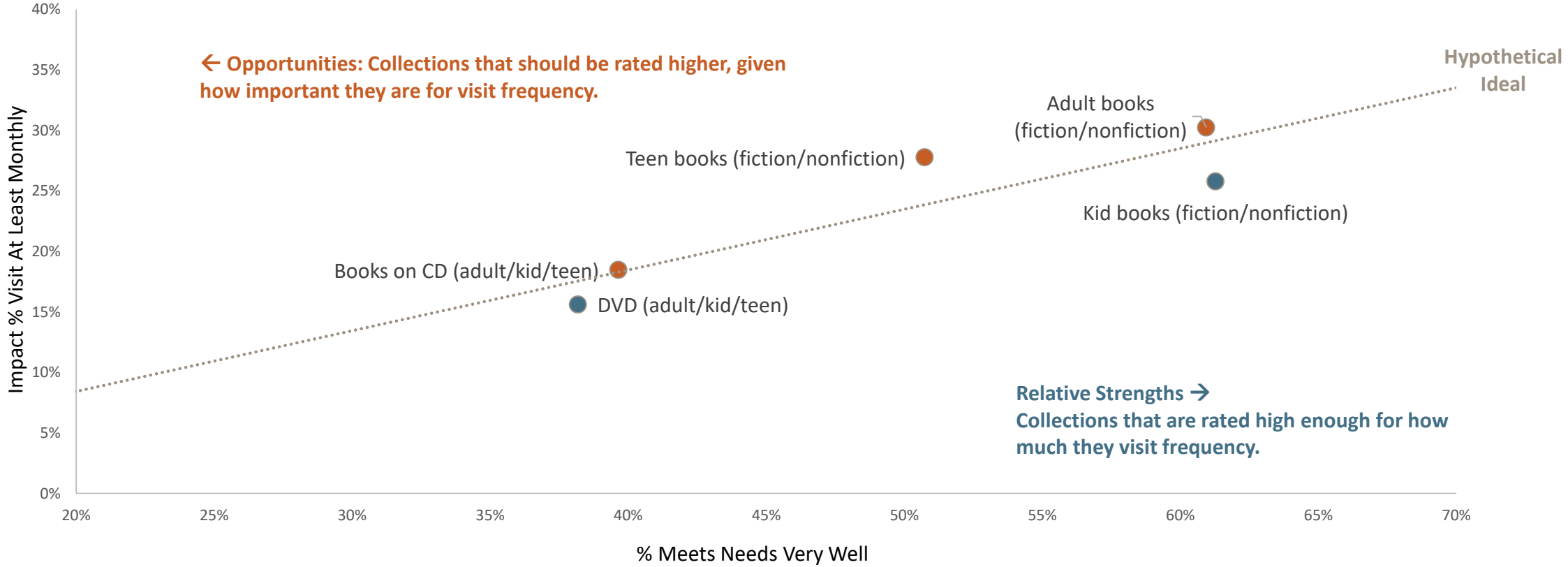
How well do the following physical collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Frequency
Adult books (fiction/nonfiction)	61%	64%	87%	94%	30%
Teen books (fiction/nonfiction)	61%	71%	88%	98%	28%
Kid books (fiction/nonfiction)	51%	72%	90%	98%	26%
Books on CD (adult/kid/teen)	38%	77%	90%	96%	18%
DVD (adult/kid/teen)	40%	78%	87%	94%	16%



*Predicted based on machine learning models

Adult and teen books also represent opportunities to increase frequency of visits to the library

- Teen books have more room for improvement
- Books on CD, Teen books, and Adult books are collections that should be rated higher, given how important they are for visit frequency.
- The size of the opportunity is relatively small for adult books; the rating is very near the target.
- Kid books are already rated as highly as they should be given their impact on frequency.



Online topical materials have the largest impact on visit frequency

- Online topical materials have the largest impact on visit frequency
  - **The impact is substantial** – over three quarters of users that say employment, educational, language and investment materials meet their needs very well also visit the library at least monthly.
- On the other hand, users that do not rate the collections as meeting their needs very well are much less likely to visit monthly.

Drivers of Frequency of Visit

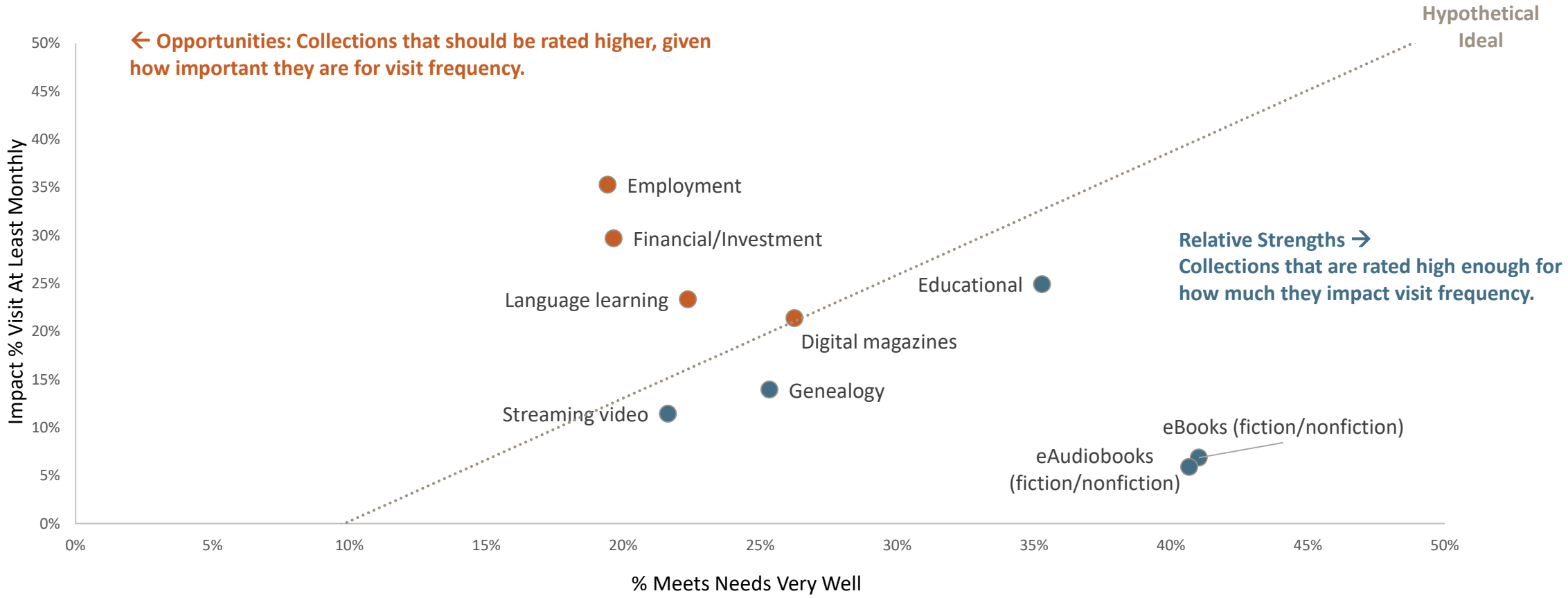
How well do the following online collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Frequency
Employment	19%	44%	56%	80%	35%
Financial/Investment	20%	46%	54%	76%	30%
Educational	35%	51%	65%	76%	25%
Language learning	22%	51%	58%	75%	23%
Digital magazines	26%	50%	59%	71%	21%
Genealogy	25%	52%	54%	66%	14%
Streaming video	22%	55%	58%	67%	11%
eBooks (fiction/nonfiction)	41%	60%	67%	67%	7%
eAudiobooks (fiction/nonfiction)	41%	61%	67%	67%	6%



*Predicted based on machine learning models

Employment, financial and language materials represent an opportunity for online collections

- Employment and financial materials are the largest opportunities – they have the largest impact on visit frequency but are the lowest-rated of all the materials.
- Language learning materials are a secondary opportunity.
- Relative strengths are Educational, eBook/eAudiobooks (fiction/nonfiction), Genealogy, and Streaming video



Appendix B: Davis County Library Driver Analysis



ASK | LISTEN | ACT

#AskListenAct
www.alaconsultinggroup.com

ALA CONSULTING GROUP

Davis County Library Driver Analysis

December, 2022

Summary of Findings

- While the library survey did not ask a question like overall satisfaction with the library, it did ask about two important aspects of the library user experience:
  - Agreement that the current library materials and services are useful and up-to-date
  - How often they visit the library
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- These two questions are correlated – respondents that agree about useful and up-to-date visit more frequently, even if they prefer online collections.

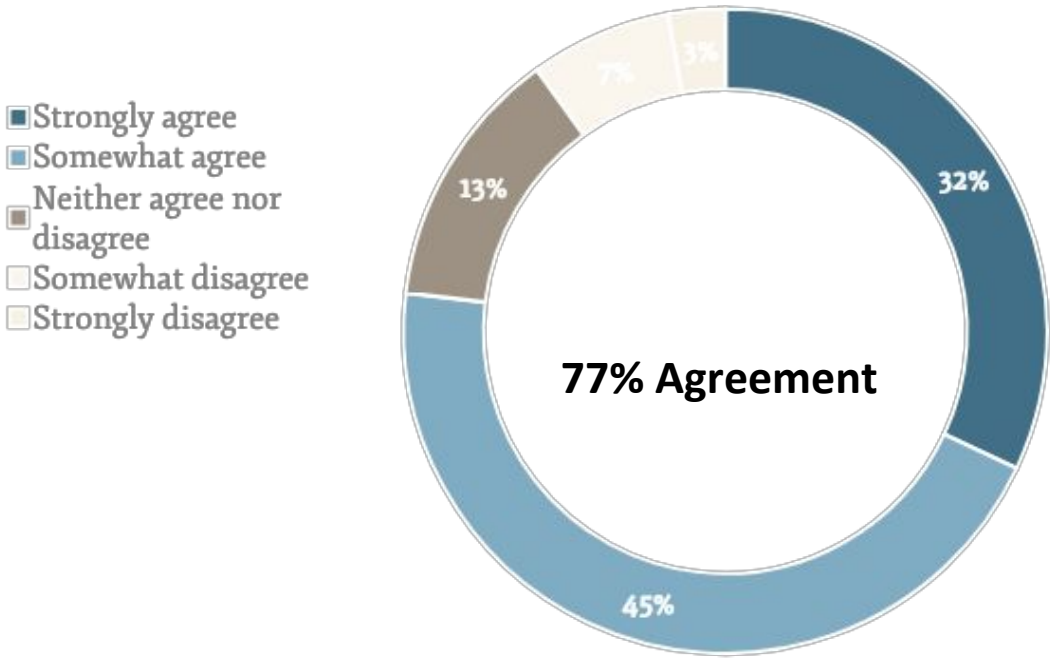
The purpose of the driver analysis is to statistically identify which collections matter most for those outcomes, and which represent opportunities or strengths

	Prefers Physical Collections	Prefers Online Collections
Agreement that the current library materials and services are useful and up-to-date	• **Adult books** are an opportunity. While already relatively highly rated, any improvement for visitors pays dividends in agreement. • **Kid** and **teen books** are relative strengths. They are already highly rated relative to the impact they have. • Books on CD and DVDs are lower rated, but do not strongly drive agreement	• **eBooks** and **eAudiobooks** have the strongest impact on agreement; they are opportunities as small improvements in ratings will make the greatest difference in agreement. • Topical materials are generally less important for agreement, though **educational** material is highly rated relative to its impact on agreement. • Some topic areas, like investment- and employment-related material, may represent secondary opportunities.
How often they visit the library	• **Adult** and **teen books** are opportunities to increase visit frequency; improving ratings of teen books likely represents the best chance to increase visits. • **Kid books** are relatively highly rated, and represent a strength of the library. • Again, Books on CD and DVDs make less of a difference for visit frequency.	• In terms of what matters most, driving visit frequency is almost the opposite of driving agreement among online users. • **Employment-** and **financial-related** materials are strongly related to visit frequency, and are opportunities due to lower ratings. • **Language-learning** materials are also an opportunity. • **Educational** material is again a strength for increasing visit frequency.

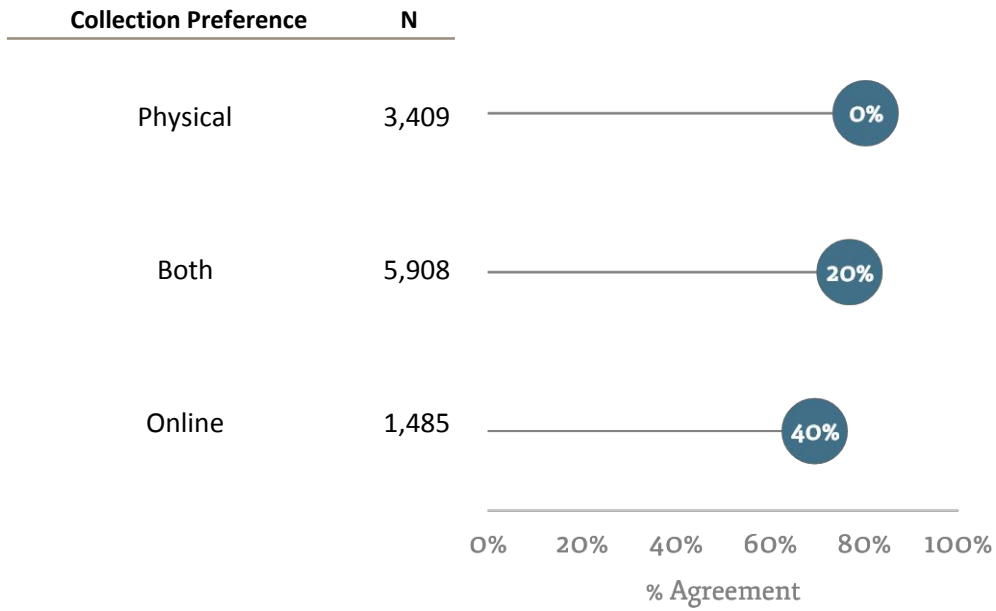
Most agree the library materials and services are useful

- Three-quarters agree they are useful and up to date.
- Agreement is slightly lower among users that prefer the online collections, but still quite high.

The current library materials and services are useful and up-to-date.



Useful and Up-to-Date by Do you prefer physical or online collections, or both?

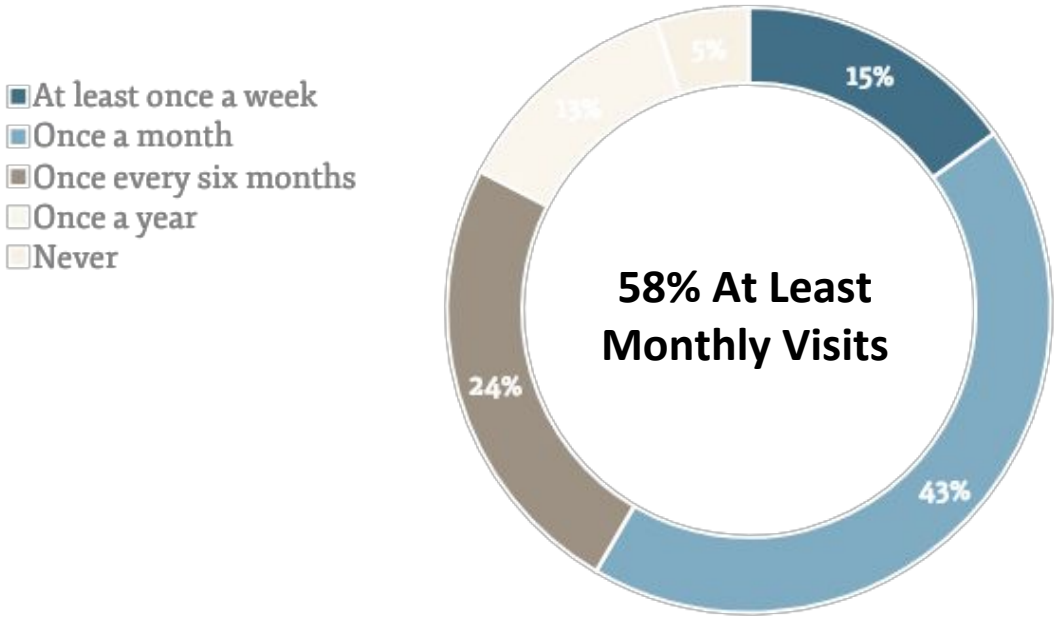


The current library materials and services are useful and up-to-date.

Over half of respondents say they visit the library at least monthly

- The median user visits once per month.
- Reported visits are much higher among respondents that prefer the physical collections, and only slightly lower among those that prefer both physical and online; Note that a quarter of respondents that prefer online collections still say they visit at least monthly.

How often do you visit the library?



At Least Monthly Visits by Do you prefer physical or online collections, or both?

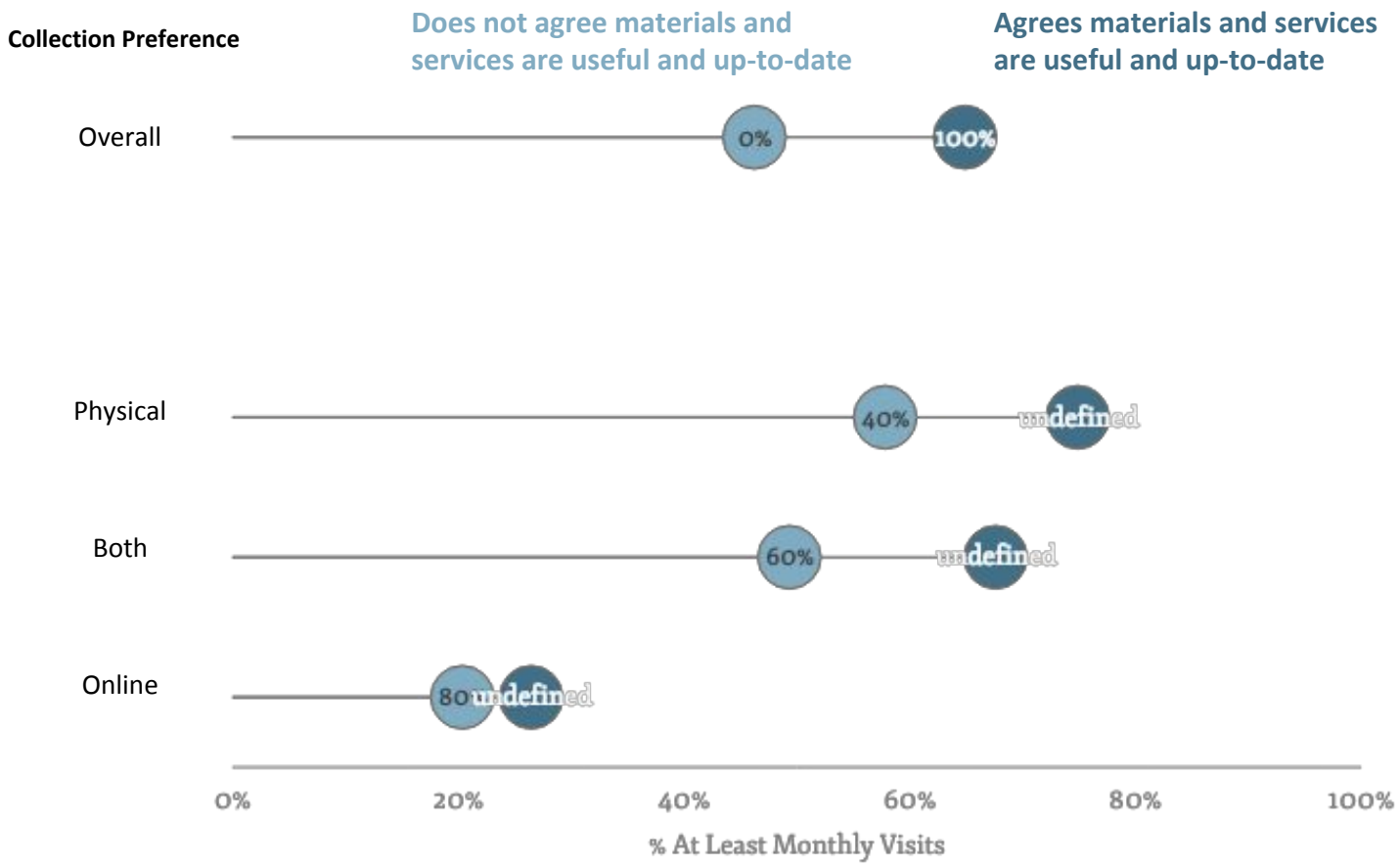
Collection Preference	N	% At Least Monthly Visits
Physical	3,409	0%
Both	5,908	20%
Online	1,485	40%

0% 20% 40% 60% 80% 100%

How often do you visit the library?

Respondents that agree the materials and collections are useful and up-to-date also visit more often

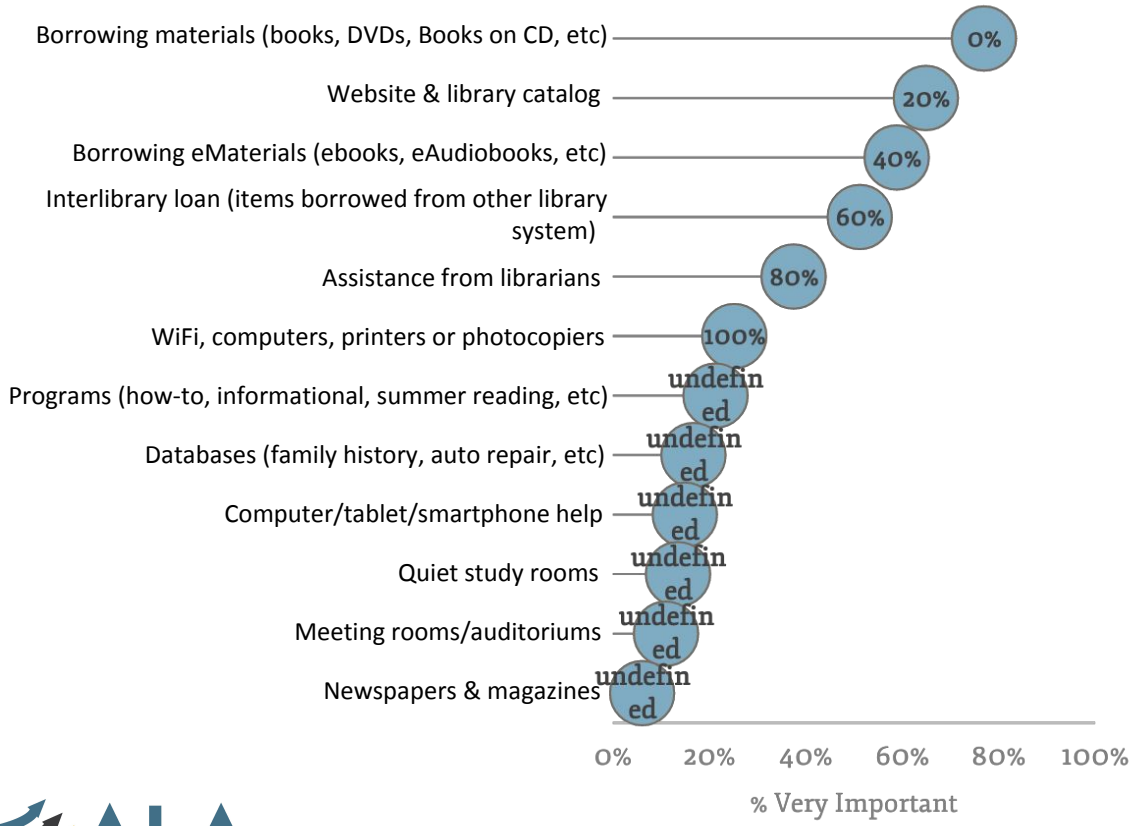
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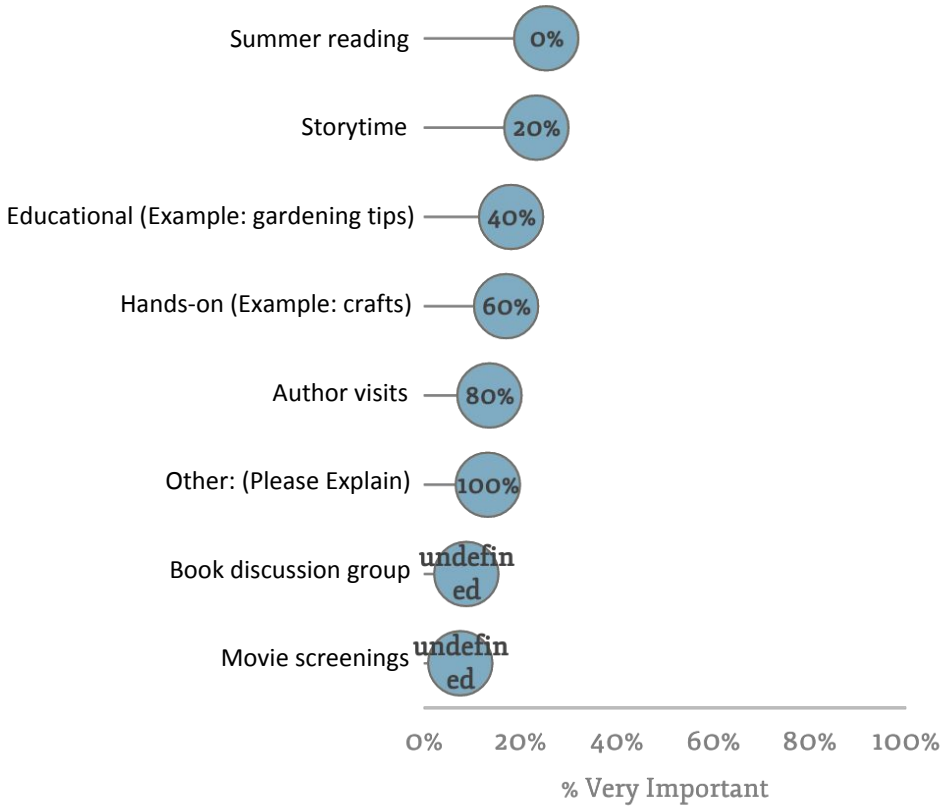
Respondents rated borrowing materials and the website/catalogue as most important to them

- Summer reading and story time were the top-rated programs for importance
- Note that all programs have are rated lower in importance than borrowing materials, the website, and interlibrary loans

How important are the following library services to you?



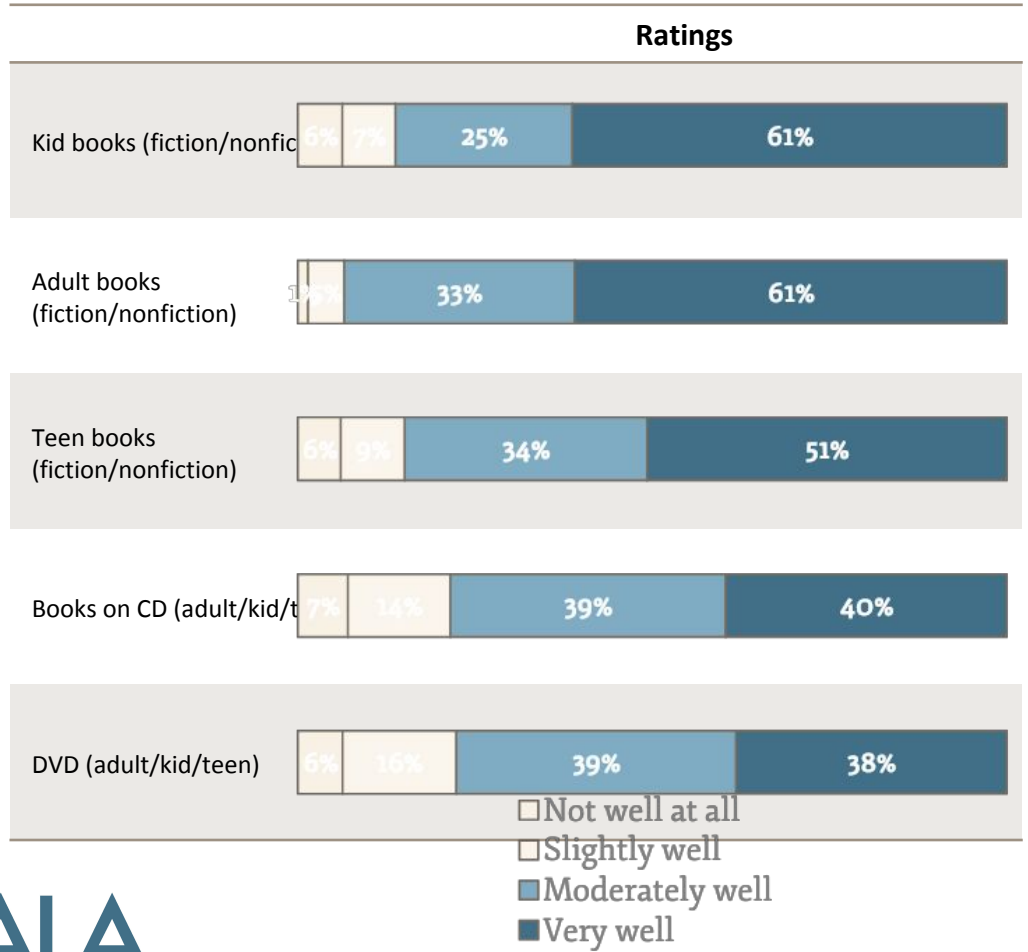
How important are the following types of programs to you?



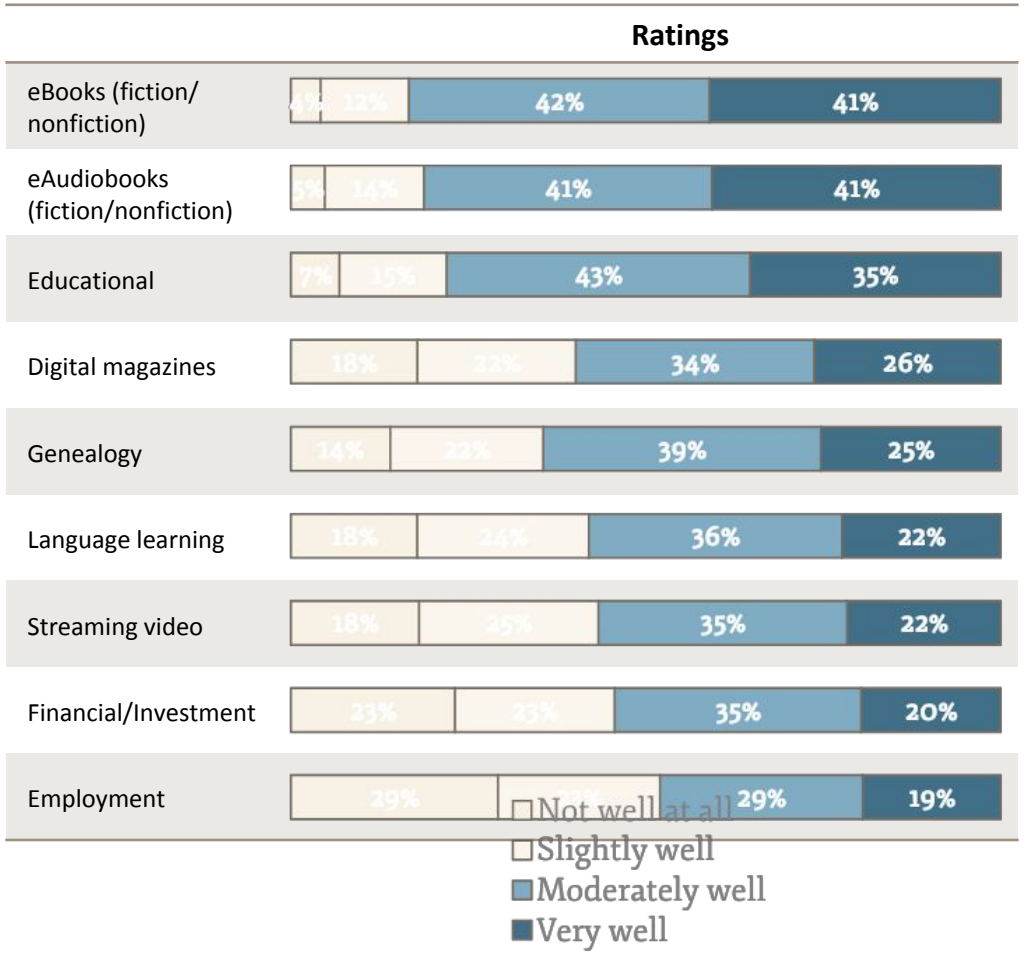
Physical collections of books meet the majority of respondents needs very well

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How well do the following online collections meet your needs?
Asked if prefer online collections or both physical and online

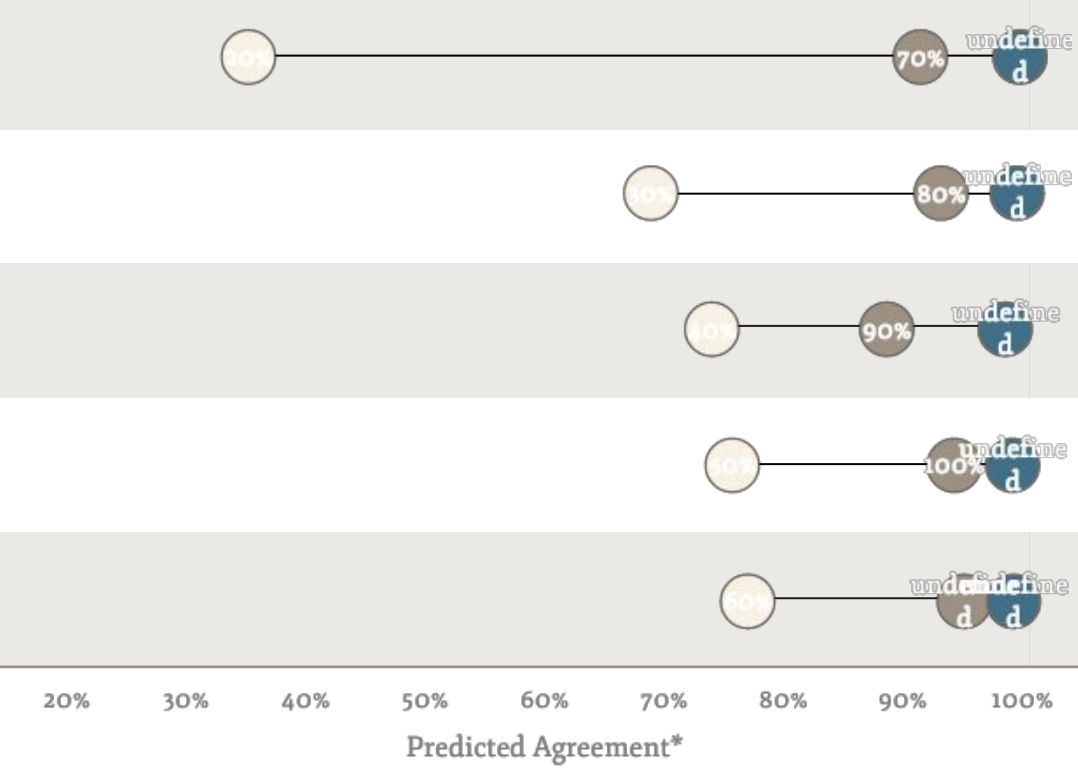


Ratings of physical books have the largest impact on agreement

- Ratings of adult books are the most important for agreement on useful and up-to-date by a wide margin.

Drivers of "The current library materials and services are useful and up-to-date."

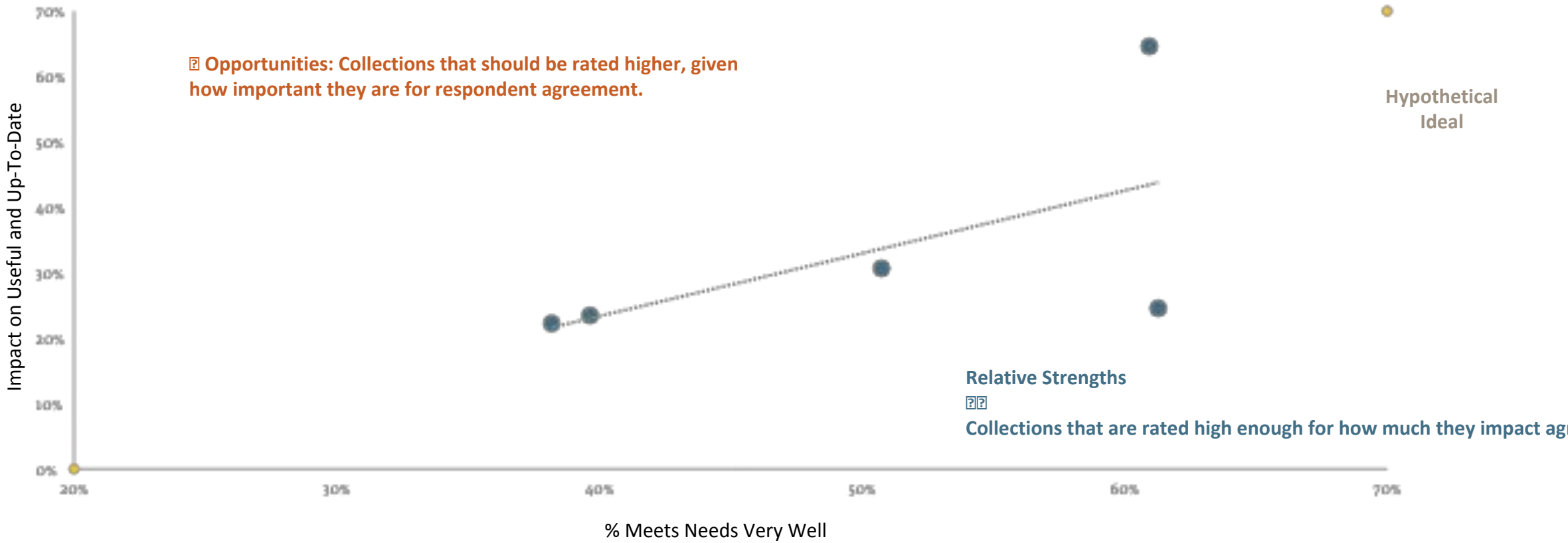
How well do the following physical collections meet your needs?	% Very Well	Difference in Predicted Agreement
Adult books (fiction/nonfiction)	61%	65%
Teen books (fiction/nonfiction)	51%	31%
Kid books (fiction/nonfiction)	61%	25%
Books on CD (adult/kid/teen)	40%	23%
DVD (adult/kid/teen)	38%	22%



*Predicted based on machine learning models

Adult books represent an opportunity to increase agreement on useful and up-to-date

- Most respondents say the adult books collections meet their needs very well, but any improvement in this metric provides the largest increase in agreement.
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eBooks and eAudiobooks have the largest impact on agreement for online collections users

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Drivers of "The current library materials and services are useful and up-to-date."

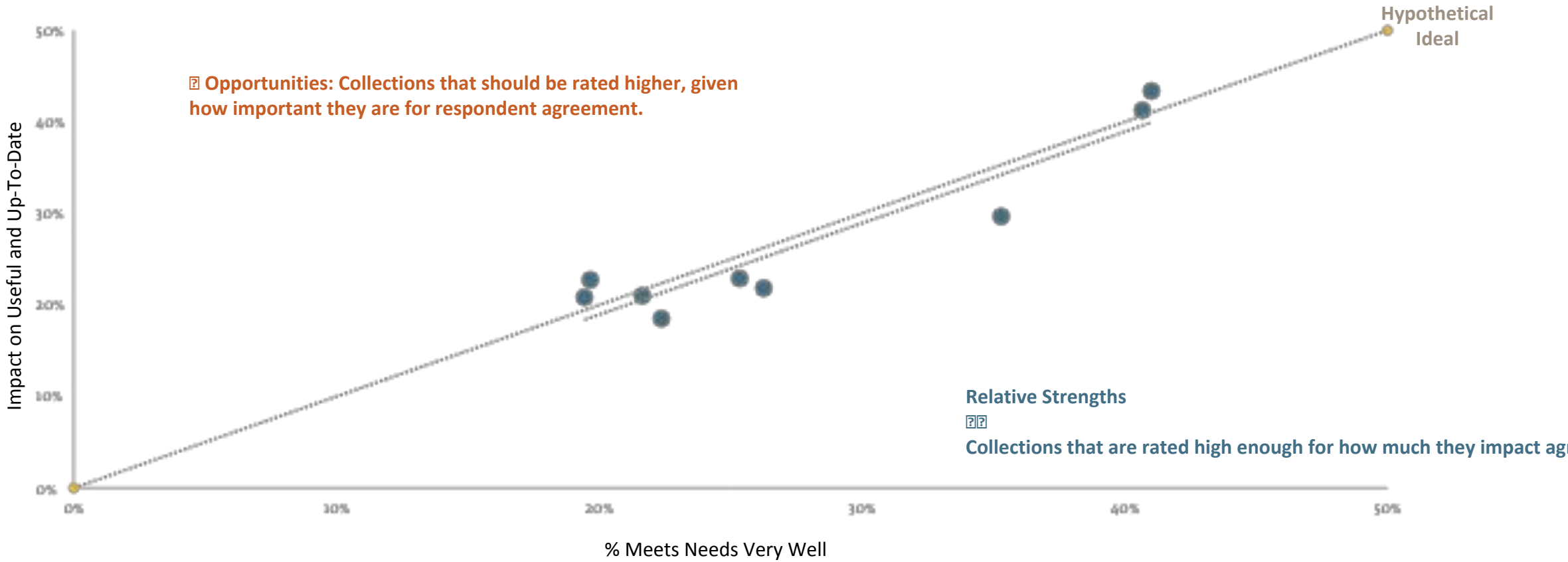
How well do the following online collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Agreement
eBooks (fiction/nonfiction)	41%				43%
eAudiobooks (fiction/nonfiction)	41%				41%
Educational	35%				30%
Genealogy	25%				23%
Financial/Investment	20%				23%
Digital magazines	26%				22%
Streaming video	22%				21%
Employment	19%				21%
Language learning	22%				19%



*Predicted based on machine learning models

eBooks and eAudiobooks also represent an opportunity to increase agreement on useful and up-to-date

- Ebook and eAudiobook ratings could be improved, given that most respondents do not say they these collections meet their needs very well.
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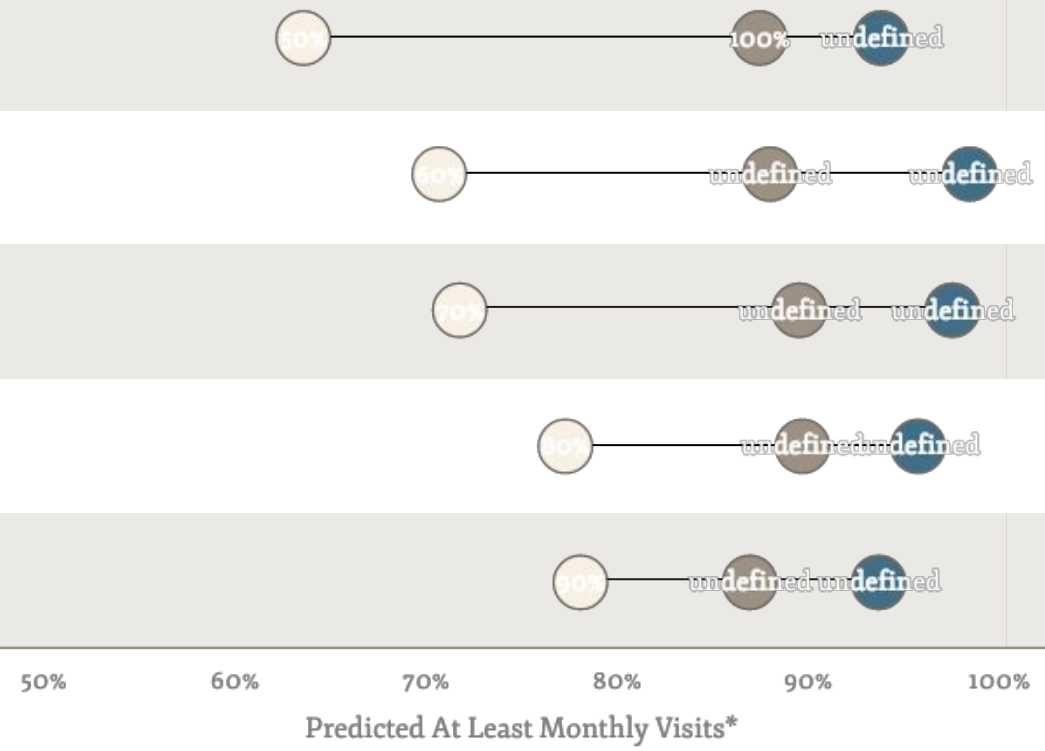


Adult books are also the strongest drivers of frequency of visits among respondents that use physical collections

- Teen and kid books also have a substantial impact; CDs and DVDs do not drive visit frequency as powerfully.

Drivers of Frequency of Visit

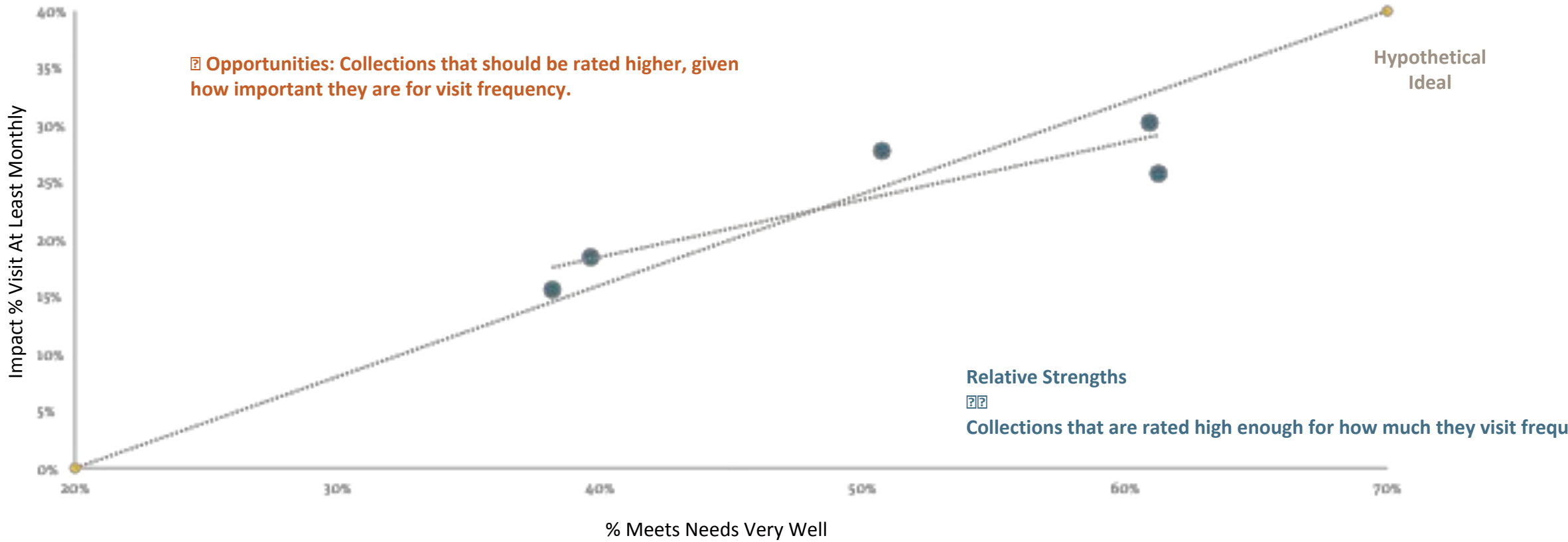
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Kid books (fiction/nonfiction)	51%				26%
Books on CD (adult/kid/teen)	38%				18%
DVD (adult/kid/teen)	40%				16%



*Predicted based on machine learning models

Adult and teen books also represent opportunities to increase frequency of visits to the library

- The size of the opportunity is relatively small for adult books; the rating is very near the target.
- Teen books have more room for improvement
- Kid books are already rated as highly as they should be given their impact on frequency.



Online topical materials have the largest impact on visit frequency

- The impact is substantial – over three quarters of users that say employment, educational, language and investment materials meet their needs very well also visit the library at least monthly.
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Drivers of Frequency of Visit

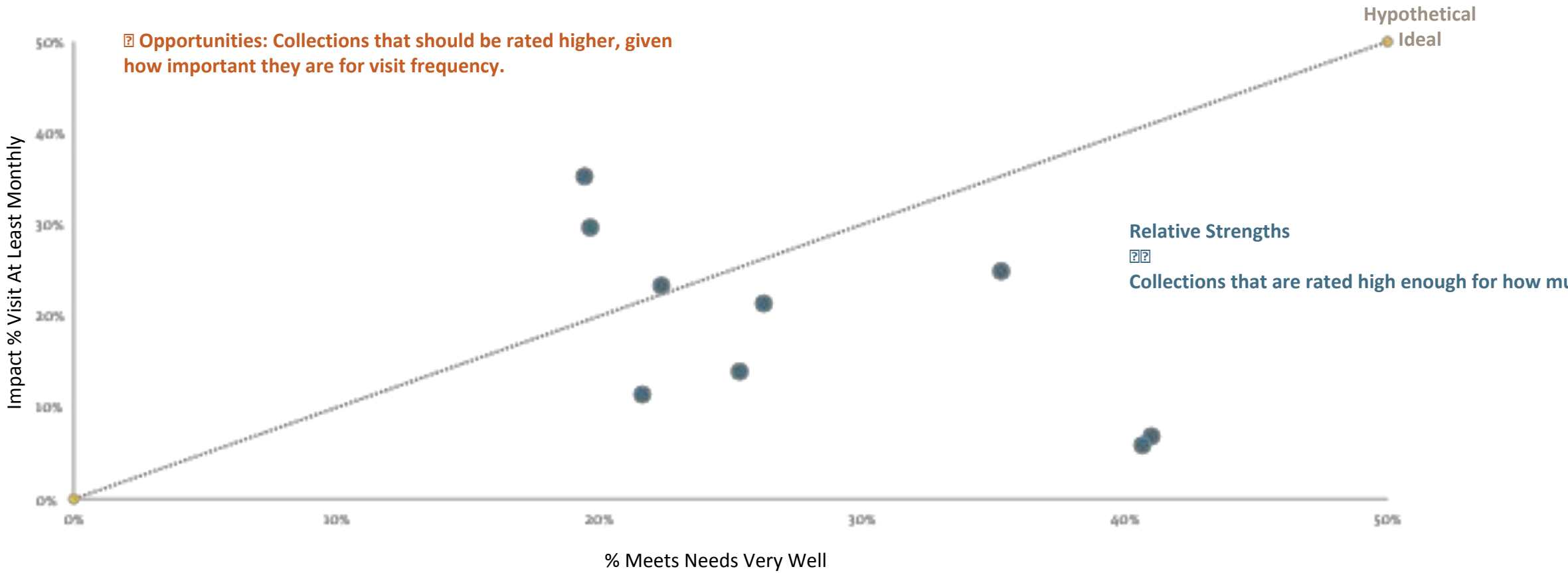
How well do the following online collections meet your needs?	% Very Well	Agreement if 1 or 2 on meets needs	Agreement if 3 on meets needs	Agreement if 4 on meets needs	Difference in Predicted Frequency
Employment	19%				35%
Financial/Investment	20%				30%
Educational	35%				25%
Language learning	22%				23%
Digital magazines	26%				21%
Genealogy	25%				14%
Streaming video	22%				11%
eBooks (fiction/nonfiction)	41%				7%
eAudiobooks (fiction/nonfiction)	41%				6%



*Predicted based on machine learning models

Employment, financial and language materials represent an opportunity for online collections

- Employment and financial materials are the largest opportunities – they have the largest impact on visit frequency but are the lowest-rated of all the materials.
- Language learning materials are a secondary opportunity.



Appendix C: Davis County Library Survey Dashboard

Davis County Library Dashboard

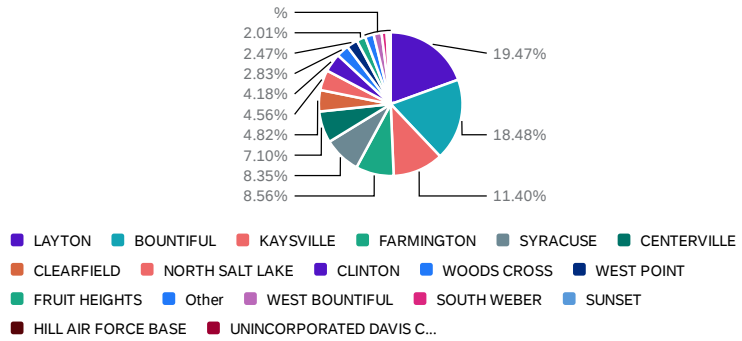
Main Dash

Filters

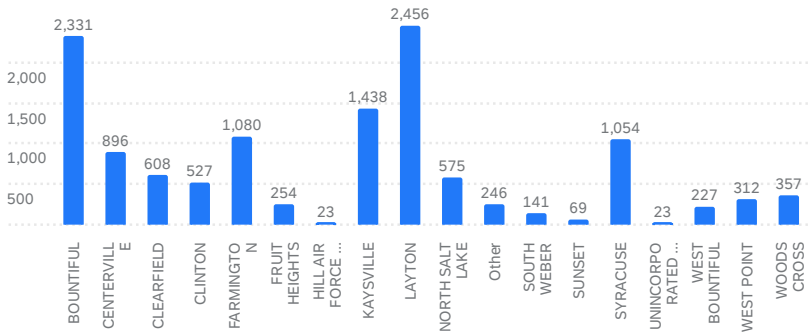
What city do you live in?: All | How often do you visit the library?: All | Do you prefer physical or online collections, or both?: All

Q16 - Which of the following would make you more likely to support additional lib...: All

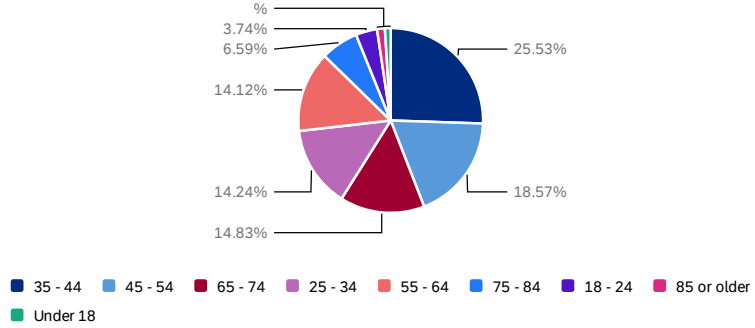
What city do you live in?



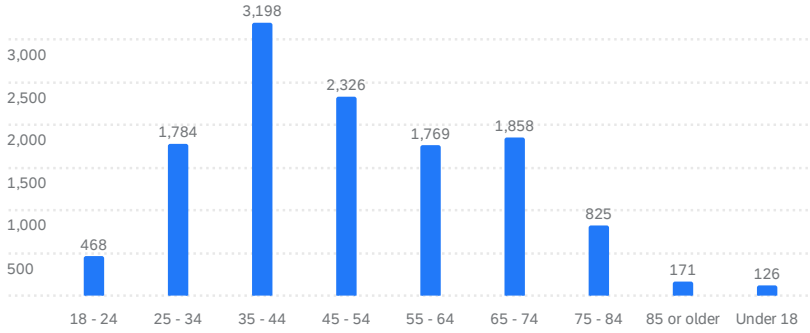
What city do you live in?



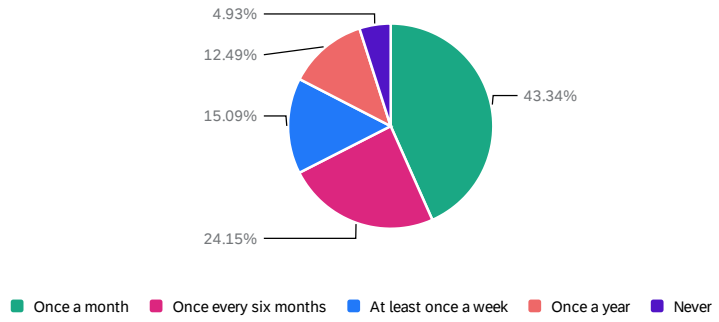
What age range best describes you?



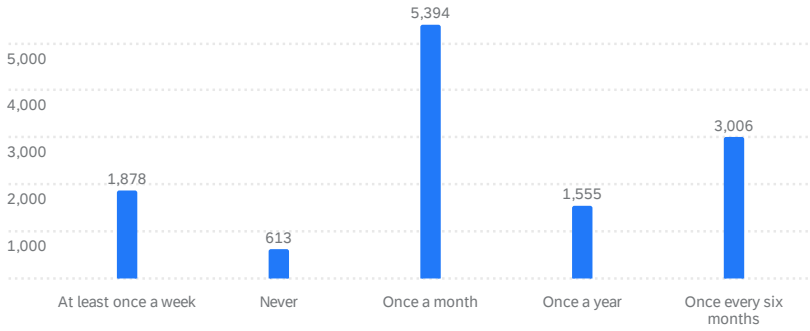
What age range best describes you?



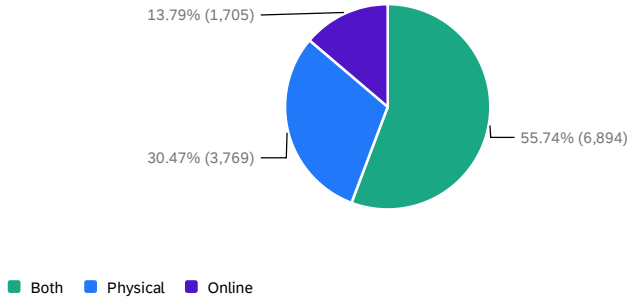
How often do you visit the library?



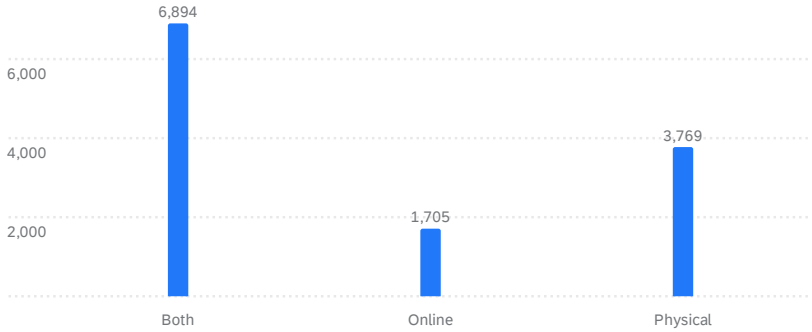
How often do you visit the library?



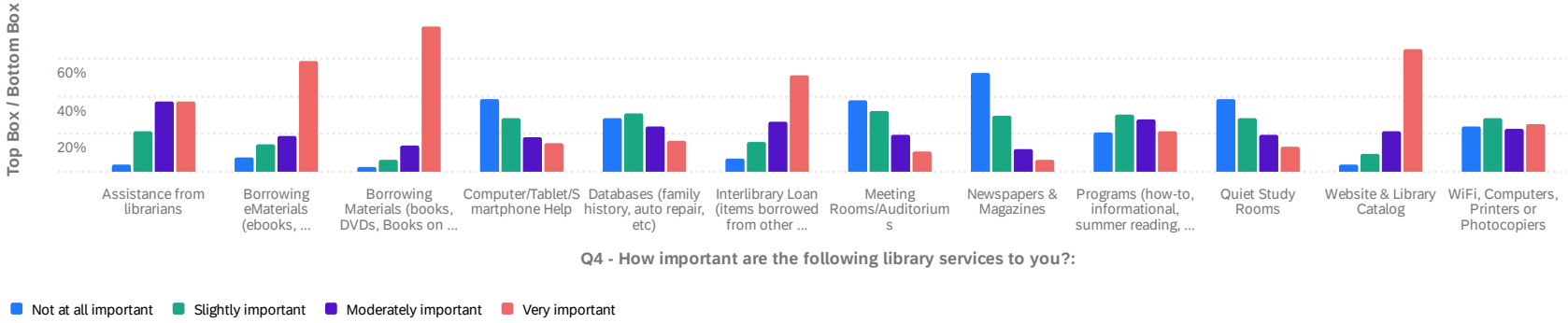
Do you prefer physical or online collections, or both?



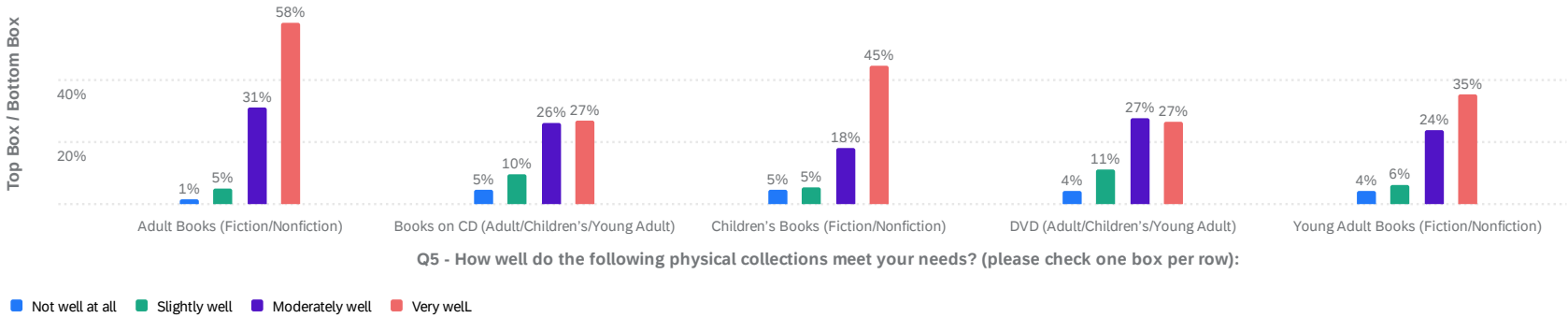
Do you prefer physical or online collections, or both?



How important are the following library services to you?:



How well do the following physical collections meet your needs? - Prefer Physical or Both



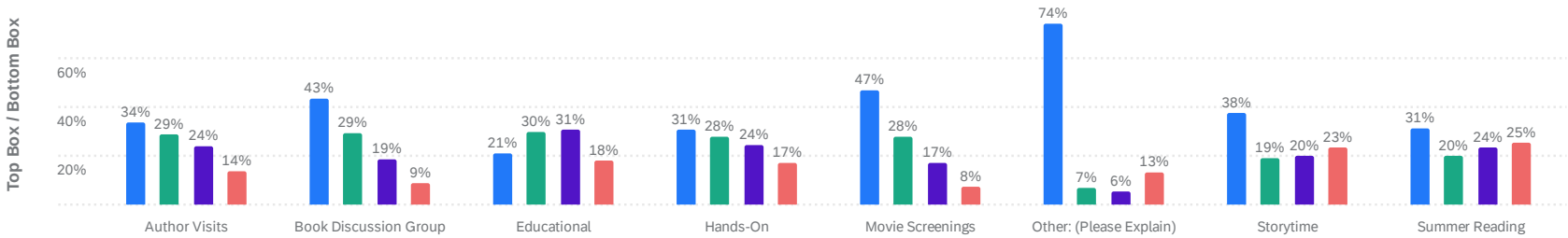
How well do the following online collections meet your needs? - Prefer Online or Both



Q6 - How well do the following online collections meet your needs? (please check one box per row):

Not well at all | Slightly well | Moderately well | Very welL

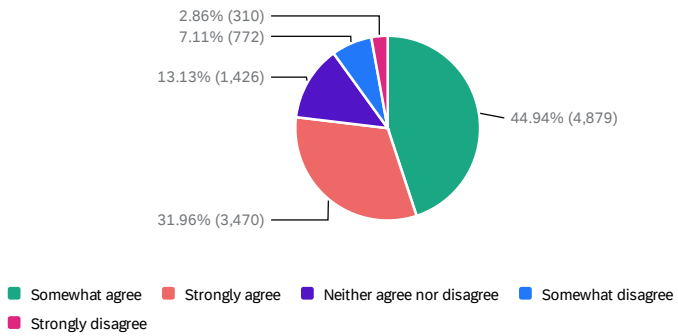
How important are the following types of programs to you?



Q7 - How important are the following types of programs to you? (please check one box per row):

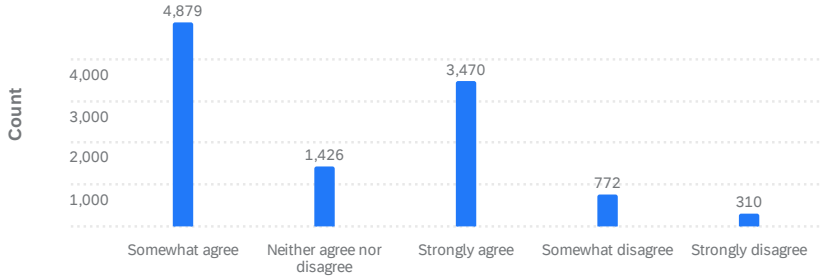
Not at all important | Slightly important | Moderately important | Very important

The current library materials and services are useful and up-to-date.



Somewhat agree | Strongly agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree

The current library materials and services are useful and up-to-date.



Q8 - The current library materials and services are useful and up-to-date.

What could Davis County Library do to improve your rating?

Q9 - What could Davis County Library do to improve your rating?

LAYTON

Nothing, you guys do a great job.

KAYSVILLE

Sometimes the website is hard to navigate

CENTERVILLE

What can the Davis County Library do to continue meeting your needs?

Q10 - What can the Davis County Library do to continue meeting your needs?

SYRACUSE

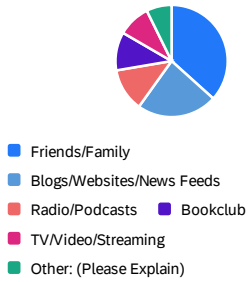
Receiving as a donation some of my autographed books for people to check out.

BOUNTIFUL

Keep providing up to date catalogs and inventory.

BOUNTIFUL

Where do you get your book/ebook recommendations? Select all that apply



Other

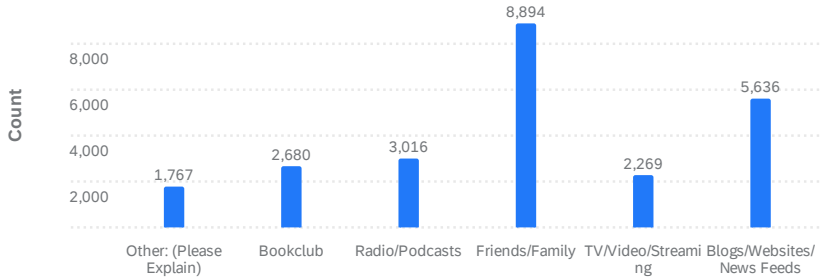
Q11_7_TEXT - Other: (Please Explain)

Just look

Sora

Libby

Where do you get your book/ebook recommendations? Select all that apply



Q11 - Where do you get your book/ebook recommendations? Select all that ...

Please list the specific TV/Video/Streaming show(s) where you get your recommendations.

Q12 - Please list the specific TV/Video/Streaming show(s) where you get your reco...

abc morning show.

Too many to list all, but more they just come up in the process of watching a show that has

Please list the specific radio show(s)/podcast(s) where you get your recommendations.

Q13 - Please list the specific radio show(s)/podcast(s) where you get your recomm...

NPR/Youtube

NPR Politics, NPR Shortwave, Crime Junkie, Wash Post, NYT, New Yorker, Twitter

Please list the specific blogs/websites/news feeds where you get your recommendations.

Q14 - Please list the specific blogs/websites/news feeds where you get your recom...

Various, talk radio

freebooksy.com

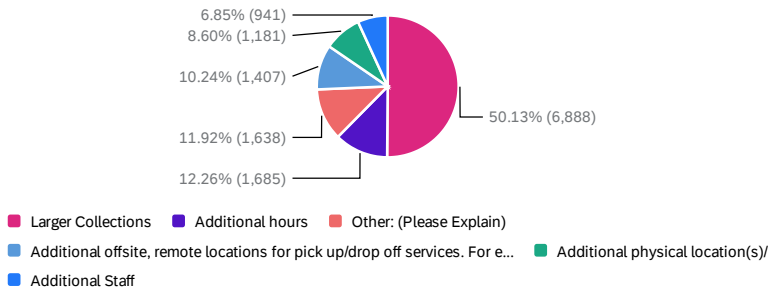
Please list the specific book clubs where you get your recommendations. (Example: Oprah's Book Club)

Q15 - Please list the specific book clubs where you get your recommendations. (Ex...

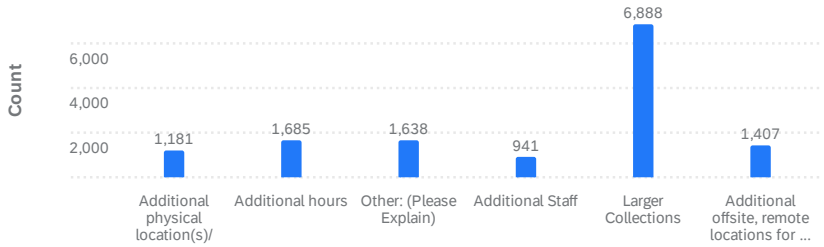
Our own book club

Non

Which of the following would make you more likely to support additional library funding? Select all that apply.

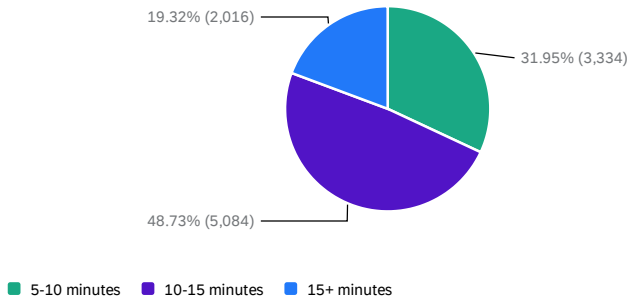


Which of the following would make you more likely to support additional library funding? Select all that apply.

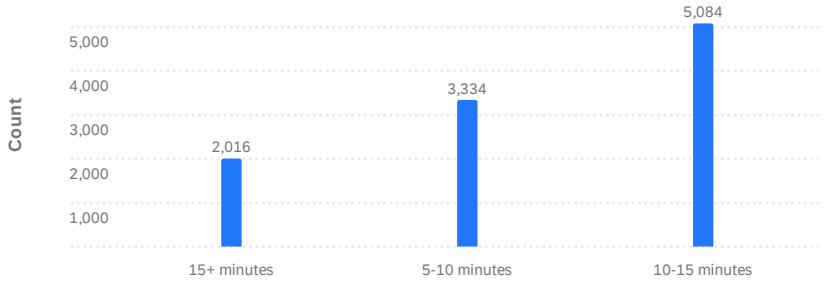


Q16 - Which of the following would make you more likely to support ...

How far would you be willing to travel to visit a physical library?

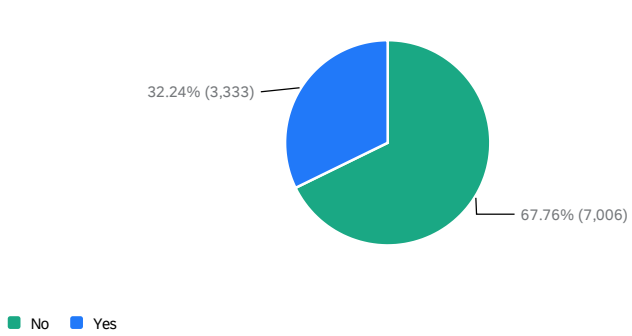


How far would you be willing to travel to visit a physical library?

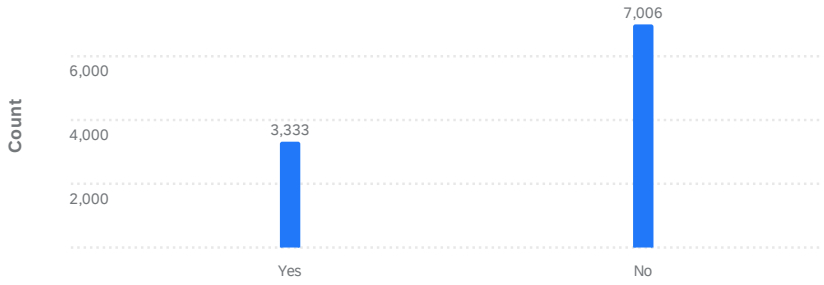


Q17 - How far would you be willing to travel to visit a physical library?

Would you be willing to be contacted to be a part of a special library focus group?



Would you be willing to be contacted to be a part of a special library focus group?



Q18 - Would you be willing to be contacted to be a part of a special library ...

Would you be willing to be contacted to be a part of a special library focu...	What city do you live in?	How often do you visit the library?	Do you prefer physical or online collections, or both?	Email Address
N/A	SYRACUSE	At least once a week	Physical	N/A
No	FARMINGTON	Once every six months	Physical	N/A
N/A	SYRACUSE	Once every six months	Physical	N/A
Yes	LAYTON	Once every six months	Physical	28hedwards@go.dsdmail.net
No	WEST BOUNTIFUL	Once a month	Physical	N/A
No	BOUNTIFUL	Once every six months	Both	N/A
N/A	KAYSVILLE	Once every six months	Physical	N/A

Is there anything else you would like to tell us about how we can improve library services?

Q20 - Is there anything else you would like to tell us about how we can improve l...

Great library. Very professional and very helpful

Update y'all's website please!

Nothing at this time.

Davis County Library

Capital Construction Update

Cost Estimates & Data

December 2022

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Conclusions & Recommendations **18**

Executive Summary

Conclusions & Recommendations

Based on the data provided in this report, Library staff make the following recommendations:

- **Make Plans for the Whole County.** Updated capital planning should include both the current and future construction cycles, particularly discussions about the number of locations needed in the south, but also the rest of the county to provide the best service.
- **Explore the Need for Additional Physical Locations.** The Library Board should explore opportunities to increase access to physical locations in the south, northeast, and northwest areas of Davis County to best serve the needs of all Davis County residents.
- **Plan Areas of Focus, Rather than a Timeline.** Based on previous commitments and the needs highlighted by the GIS study, the appropriate order to address new construction may be:
    1. South-End Services because the library has already committed to this course of action, it represents a large group of patrons in the 5-10 minute range of travel to a library, and the two most recent construction projects were in the north end of the county.
    2. Northeast Services because this part of the county has long been considered, it houses patrons who must travel the farthest to get to a library, and new locations have not brought services closer to this area of the county.
    3. Northwest Services - This area is still growing, and it's still unclear how the West-Davis Corridor project will affect patrons and travel in this area, which means it may be a good idea to revisit this when we have more information and have taken care of other projects. We rebuilt and remodeled the Syracuse Branch much more recently than most areas in the county - the new branch should serve that area well for the near future.

Construction Costs

- **Consider the Size of the Buildings Added.** Square footage creates construction cost as well as maintenance cost. Consider building smaller buildings with more impact.
- **Construction Costs Tend to Go Up.** Timing is important, and delaying decisions can be costly.

Operating Costs

- **Building a library is only the beginning.** There is no point in constructing a library if you cannot run it. In addition to the hard construction costs related to new construction, also consider the changes in operational costs associated with library construction.
- **Even if the Library were given a building, we may not be able to operate it.** The operational costs to use and maintain the building would remain the same. They are, quite literally, the costs of doing business.

Possible Locations

- **Current Locations** show 61.8% of residents within 5 minutes drive of a library, 93.8 are within 10.
- **Map A** shows an approximate location if the current Bountiful location were removed, providing a county-wide increase to 66.3% of residents within 5 minutes of a library, and 95.3% within 10.
- **Map B** shows two approximate locations if the current Bountiful location were removed, providing a county-wide increase to 68.6% of residents within 5 minutes of a library and 95% within 10. Our current Bountiful location is very close to one of the suggested locations.
- **Map C** shows approximate locations for the north end of the county that, with two locations in the south end, increase access to 80.4% within 5 minutes of a library, and 97.8% within 10. County-wide access is nearly the same with a single south-end branch relocated more centrally (79.4% and 97.7%).

Introduction

Purpose

This report contains information gathered by Davis County Library staff to inform the Davis County Library Board of Directors concerning current and potential costs and trends related to capital construction projects in the next few years. It is intended to supplement other documents, including a South Davis Branch Feasibility study[1] and a Public Survey Report[2], and allow them to fulfill their statutory obligations to be responsible for library funds, operations, and construction, lease or sale of library buildings/land.[3]

The following areas are discussed, followed by relevant conclusions and recommendations:

- Capital construction and cost estimates
- Operational costs related to capital construction
- Potential Library Locations, based on data models

Scope

Those reading this report should consider the information, data and recommendations as suggestions based on sound practices developed by library and other professionals over many years and reasonable presentation of data. While we are confident that the data and recommendations are sound and attempt an objective understanding of circumstances surrounding decisions to be made, data extrapolations and interpretations are subject to discussion, alteration, or rejection - based on updated information or additional factors under consideration.

Background

Capital construction decisions should be made in context. The Library's construction cycle has gone through many phases in the past two decades. Our current construction cycle began in 2017, when the Library took a tax increase. During the tax increase, the library promised to put a portion of the additional funding toward three capital projects:

1. Expand Syracuse Branch - Because of careful management of funds, the Library did not need to bond for funds to complete the Syracuse project. It was accomplished with a combination of fund balance and increased revenues from the 2017 increase. The building was closed for just over a year (2018-2019), and the Library offered services from a small, off-site location in Syracuse for most of the closure.
2. Rebuild/Remodel North Branch in Clearfield - Based on the deteriorating state of the existing building in Clearfield, the Davis County Facilities Department and the Library recommended, and Davis County Commission approved, moving forward with the Clearfield project because that buildings' systems were more likely to fail. The Library and County entered into a land swap agreement with Clearfield City in 2019, and the old building remained open until a few weeks before the new building opened in 2021. Clearfield City sold the old building prior to its closing, and the Library turned it over to Clearfield and the new owner in 2022.

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[1] FFKR Architects. (2021) *Feasibility Study for the South Branch of the Davis County Library, Bountiful*.

[2] This report was submitted to the Davis County Library Board by Library Director Josh Johnson, based on a survey conducted by Qualtrics and a report compiled using survey data.

[3] Library Board Duties – Library fund deposits, UT Code 9-7-504 (Accessed 2019) https://le.utah.gov/xcode/Title9/Chapter7/9-7-S504.html?v=C9-7-S504_2019051420190514)

3. Rebuild/Remodel South Branch in Bountiful - During other construction projects, the Library continued slow progress toward understanding Library services in the south end of the county, including forming a temporary work group consisting of City Managers from cities served by the Library's Bountiful location: West Bountiful, Woods Cross, Bountiful, and North Salt Lake. Discussions included offering "off-site" services similar to those offered during the Syracuse expansion/renovation, and expanded programming located in various cities.

Over time, it became clear that more information was needed to understand how the public viewed and valued Library Services. The group disbanded, awaiting more information from a public survey that was delayed until near the end of Clearfield Branch construction, and closed 10/15/2022.

In addition to this survey, the Library has been gathering data and information related to construction costs, service areas, potential branch locations for the Library Board to discuss and recommend a course of action to the Davis County Commission - which is what this report is intended to present.

Construction Cost Estimates

Current Construction Cost Estimates

Construction costs fluctuate - especially in the current economic climate. That means that construction costs are often difficult to predict, and data related to construction costs is constantly changing.

For example, the total cost of our Clearfield Branch (completed in 2021) was approximately $403.17/ft^2$ for everything related to construction. Fast forward to 2022, and supply difficulties related to a global pandemic combined with significantly higher inflation have significantly increased construction costs. Davis County Facilities Department suggested $490/ft^2$ for just construction, not including architectural fees, furniture, electronics, art, or contingency.

The following construction cost estimates are based on industry standards and practical experience Davis County Library staff have developed over more than a decade of work with other professionals on library-related building projects. Below is an estimate for the cost of constructing a 16,000 ft² building in 2023.

2023 Estimate	
16,000 sq ft	
Base Price	$7,840,000
Contingency 10%	$784,000
	$8,624,000
Arch Fees (8%)	$627,200
FFE ($57/sqft)	$912,000
Est. Constr Costs	**$10,163,200**

The estimate assumes the $490/ft² base price, a standard architectural fee (8% of base price), a standard contingency fee (10% of base price), and FFE (furnishings, fixtures & equipment) at $57/ft² - based on costs for our two most recent construction projects (2019 and 2021).

Additional Considerations & Estimates

In addition to the estimate above, it is important to remember that construction costs change over time. The same 16,000 ft² building estimate above, is unlikely to be accurate a year later. The following estimates illustrate an 8% inflationary cost increase to construct a 16,000 ft² building in 2024.

2024 Estimate	
8% Inflation	
16,000 sq ft	
Base Price	$8,467,200
Contingency 10%	$846,720
	$9,313,920
Arch Fees (8%)	$677,376
FFE ($57/sqft)	$992,000
Est. Constr Costs	**$10,983,296**

Multiple estimates are included below to show how costs can vary based on potential inflation and building size.

Estimated South End Construction Costs

8% inflation per year $490 initial sq ft construction cost

2023 Estimate

16,000 sq ft		15,000 sq ft		17,000 sq ft		10,000 sq ft		12,000 sq ft	
Base Price	$7,840,000	Base Price	$7,350,000	Base Price	$8,330,000	Base Price	$4,900,000	Base Price	$5,880,000
Contingency 10%	$784,000	Contingency 10%	$735,000	Contingency 10%	$833,000	Contingency 10%	$490,000	Contingency 10%	$588,000
	$8,624,000		$8,085,000		$9,163,000		$5,390,000		$6,468,000
Arch Fees (8%)	$627,200	Arch Fees (8%)	$588,000	Arch Fees (8%)	$666,400	Arch Fees (8%)	$392,000	Arch Fees (8%)	$470,400
FFE ($57/sqft)	$912,000	FFE ($57/sqft)	$855,000	FFE ($57/sqft)	$969,000	FFE ($57/sqft)	$570,000	FFE ($57/sqft)	$684,000
Est. Constr Costs	**$10,163,200**	**Est. Constr Costs**	**$9,528,000**	**Est. Constr Costs**	**$10,798,400**	**Est. Constr Costs**	**$6,352,000**	**Est. Constr Costs**	**$7,622,400**

2024 Estimate

8% Inflation

16,000 sq ft		15,000 sq ft		17,000 sq ft		10,000 sq ft		12,000 sq ft	
Base Price	$8,467,200	Base Price	$7,938,000	Base Price	$8,996,400	Base Price	$5,292,000	Base Price	$6,350,400
Contingency 10%	$846,720	Contingency 10%	$793,800	Contingency 10%	$899,640	Contingency 10%	$529,200	Contingency 10%	$635,040
	$9,313,920		$8,731,800		$9,896,040		$5,821,200		$6,985,440
Arch Fees (8%)	$677,376	Arch Fees (8%)	$635,040	Arch Fees (8%)	$719,712	Arch Fees (8%)	$423,360	Arch Fees (8%)	$508,032
FFE ($57/sqft)	$992,000	FFE ($57/sqft)	$930,000	FFE ($57/sqft)	$1,054,000	FFE ($57/sqft)	$620,000	FFE ($57/sqft)	$744,000
Est. Constr Costs	**$10,983,296**	**Est. Constr Costs**	**$10,296,840**	**Est. Constr Costs**	**$11,669,752**	**Est. Constr Costs**	**$6,864,560**	**Est. Constr Costs**	**$8,237,472**

2025 Estimate

8% Inflation

16,000 sq ft		15,000 sq ft		17,000 sq ft		10,000 sq ft		12,000 sq ft	
Base Price	$9,144,576	Base Price	$8,573,040	Base Price	$9,716,112	Base Price	$5,715,360	Base Price	$6,858,432
Contingency 10%	$914,458	Contingency 10%	$857,304	Contingency 10%	$971,611	Contingency 10%	$571,536	Contingency 10%	$685,843
	$10,059,034		$9,430,344		$10,687,723		$6,286,896		$7,544,275
Arch Fees (8%)	$731,566	Arch Fees (8%)	$685,843	Arch Fees (8%)	$777,289	Arch Fees (8%)	$457,229	Arch Fees (8%)	$548,675
FFE ($57/sqft)	$1,072,000	FFE ($57/sqft)	$1,005,000	FFE ($57/sqft)	$1,139,000	FFE ($57/sqft)	$670,000	FFE ($57/sqft)	$804,000
Est. Constr Costs	**$11,862,600**	**Est. Constr Costs**	**$11,121,187**	**Est. Constr Costs**	**$12,604,012**	**Est. Constr Costs**	**$7,414,125**	**Est. Constr Costs**	**$8,896,950**

These are estimates only based on current construction costs for commercial buildings.
Square foot costs for FFE are based on costs for Syracuse remodel and Clearfield construction.

Operational Costs Related to Capital Construction

Building a library is only the beginning - there is no point in constructing a library if you cannot run it. So, in addition to the hard construction costs related to new construction, we also need to consider the changes in operational costs associated with library construction.

It is important to remember that, even if the Library were given a building[4], the operational costs to use and maintain the building would remain the same. They are, quite literally, the costs of doing business.

Estimating Cost per Square Foot

Using 2021 costs, building square footage, and hours open to the public (these are the most recent, audited figures); the cost per square foot and per hour for significant portions of the Library's operating budget can be represented by the chart below.

SQFT Costs	Total (All Locations)	Payroll	Operating	Allocations	Capital Maintenance
Cost per sqft (Public Services)	$65.91	$36.46	$10.90	$17.69	$0.86
Cost per hour (All Areas)	$2,681.27	$1,586.01	$405.35	$657.86	$32.05

It is important to note that these statements are generalized. Some key points to remember as we talk about square foot costs include:

- All square footage is not used equally in all branches.
- Branches with multiple floors often require more staff to maintain appropriate levels of safety and customer service.
- The costs for labor, services, and pretty much everything increase over time, so these figures will become less relevant over time.
- Each year's expenses are necessarily different, so every year will not match up exactly with 2021 expenditures. The estimates above are just that, estimates.

While these figures are obviously not exact, they are a good indication of the kinds of costs we can expect to see after new construction - keeping in mind that there are limitations to this way of looking at operational costs.

Estimating Operational Costs

Using the cost/ft² above, the following chart shows a breakdown of payroll, operating, allocations, and capital maintenance costs the Library accrued in 2021. It also shows the cost of each branch, based on a square footage. Operating hours are included for your information.

[4] The work group of Davis County staff, Library staff and Board members, and city managers mentioned above had some discussion centered around the possibility of cities providing a building that the County would lease to provide county or library services.

	Total 2021 Cost	Payroll 2021 Cost	Operating 2021	Allocations 2021	Capital Maintenance Projects	SqFt	Hrs Open to Public
DCL Total	**$8,365,575**	**$4,948,355**	**$1,264,689**	**$2,052,531**	**$100,000**	**116,036**	**21,840**
Bountiful	$1,570,064	$868,515	$259,639	$421,381	$20,530	23,822	3,120
Centerville	$678,195	$375,158	$112,152	$182,017	$8,868	10,290	3,120
HD (Admin)	$508,472	$478,433	$11,117	$18,043	$879	1,020	3,120
HQ (Tech Service)	$489,559	$394,407	$35,215	$57,152	$2,784	3,231	3,120
HQ (Public Service)	$1,049,390	$580,492	$173,536	$281,640	$13,722	15,922	3,120
Kaysville	$1,004,770	$555,810	$166,157	$269,665	$13,138	15,245	3,120
Layton	$1,077,994	$596,315	$178,266	$289,317	$14,096	16,356	3,120
Clearfield	$915,464	$506,409	$151,389	$245,697	$11,970	13,890	3,120
Syracuse	$1,071,667	$592,815	$177,219	$287,619	$14,013	16,260	3,120

Using this format, we can also predict what it might cost to maintain a replacement or additional building. For example, if we were to rebuild the Bountiful Branch at the same size as the Kaysville branch (16,000 ft²), we could expect it to look something like the chart below.

	Total 2021 Cost	Payroll 2021 Cost	Operating 2021	Allocations 2021	Capital Maintenance Projects	SqFt	Hrs Open
DCL Total	**$7,850,042**	**$4,663,177**	**$1,179,436**	**$1,914,170**	**$93,259**	**108,214**	**28,080**
New South End	$1,054,531	$583,336	$174,386	$283,020	$13,789	16,000	3,120
Centerville	$678,195	$375,158	$112,152	$182,017	$8,868	10,290	3,120
HD (Admin)	$508,472	$478,433	$11,117	$18,043	$879	1,020	3,120
HQ (Tech Service)	$489,559	$394,407	$35,215	$57,152	$2,784	3,231	3,120
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Clearfield	$915,464	$506,409	$151,389	$245,697	$11,970	13,890	3,120
Syracuse	$1,071,667	$592,815	$177,219	$287,619	$14,013	16,260	3,120

You will note that the Headquarters location has been broken into three separate sections. This is because it is used for three distinct purposes - public service, technical services (ordering and processing materials, and delivering items to the branches, etc), and library administration and staff services. This

distinction is important, because the cost of building a new location does not necessarily include an increase in the cost of administration - at least not in this case.

So, because we estimated the ft² of the new branch to be less, the cost to maintain the building went down, and the Library saved on annual operating expenditures. Similarly, the following chart shows an estimate of what it might cost to maintain two library branches instead of one, as in the chart below. In this case, it estimates the cost of two new locations (based on our Kaysville Location - approx. 16,000 ft2, and our Clearfield Location - approx. 14,000 ft²) and what that might look like for the Library's overall operational costs.

	Total 2021 Cost	Payroll 2021 Cost	Operating 2021	Allocations 2021	Capital Maintenance Projects (48-260 & 48-720)	SqFt	Hrs Open
DCL Total	**$8,772,756**	**$5,173,596**	**$1,332,023**	**$2,161,812**	**$105,324**	**122,214**	**31,200**
New 1	$1,054,531	$583,336	$174,386	$283,020	$13,789	16,000	3,120
New 2	$922,714	$510,419	$152,587	$247,642	$12,065	14,000	3,120
Centerville	$678,195	$375,158	$112,152	$182,017	$8,868	10,290	3,120
HD (Admin)	$508,472	$478,433	$11,117	$18,043	$879	1,020	3,120
HQ (Tech Service)	$489,559	$394,407	$35,215	$57,152	$2,784	3,231	3,120
HQ (Public Service)	$1,049,390	$580,492	$173,536	$281,640	$13,722	15,922	3,120
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Clearfield	$915,464	$506,409	$151,389	$245,697	$11,970	13,890	3,120
Syracuse	$1,071,667	$592,815	$177,219	$287,619	$14,013	16,260	3,120

The above chart is a good example of the real cost of maintaining new construction. The two buildings increase the total ft² of the Library system, which also increases maintenance costs. The additional $407,181 in maintenance costs are annual - which means that they will continue for the life of the buildings - and likely increase as the buildings age.

Potential Library Locations & Data Modeling

Background

Traditionally, the Library has worked with cities and the County to discuss appropriate new locations. Often this has included work between city and county officials and/or employees. Often new locations are proposed by these officials or staff based on a reasonable compromise and available options.

While these methods are and will continue to be used, the Library has made an effort to be more data-driven in our decision-making. Library staff have worked extensively with the Davis County Information Systems' GIS (Geographic Information Systems) Team, using data mapping software to better understand current service levels - as well as how and where additional physical locations could benefit the public.

Methodology

The County's GIS team has created several data models suggesting possible future library locations. We appreciate their efforts, the information they provided was invaluable.

Any type of worthwhile data modeling is built upon specific methodology. GIS and Library staff used the following parameters to project potential future locations that will best serve Davis County including criteria for selecting a site, user demand, service areas, and closest facility.

It should be noted that all data mapping and modeling projects are simply one way of looking at a set of data. The Library Board should explore multiple viewpoints and opportunities as they undertake strategic planning and look at future capital construction projects.

Site Selection Criteria

- Closest Location and Service Area zones for each current branch were identified.
- Valid, vacant addresses in proper zoning were separated into a future branch location layer. Vacant lots without an address point were given point representation and added to the future branch locations layer.
- Preferred commonplaces (education, public attractions, government, commercial, mail) were identified, and given a positive geographical weight based on drive time proximity.
- Non-preferred commonplaces (industry, energy, water supply and treatment) were identified, and were given a negative geographical weight based on drive time proximity.
- When considering potential locations, the following weights were applied:
    - Commercial locations were given a 1.3x multiplier.
    - Educational locations were given a 1.1x multiplier.
    - Vacant lots were given a 2x multiplier.
- Suitability scores were calculated for future branch locations by net summing the proximity weights (described above) of intersecting preferred and non-preferred commonplaces.

User Demand

- All valid Davis County addresses are considered to have equal demand potential.
- Units are stored as individual points in the GIS which naturally leads to better accommodation for denser housing when running models.

Service Areas

- Service Area models are calculated along the Davis County road network using 5 and 10-minute cutoffs.
- Service Areas are recalculated for each Proposition and the current system using the proposed location and existing libraries.
- Driveways and Service roads are not included in the analysis. All demand points are located at the nearest Local class road during runtime.
- Shaded service areas are calculated by distance from the road network.

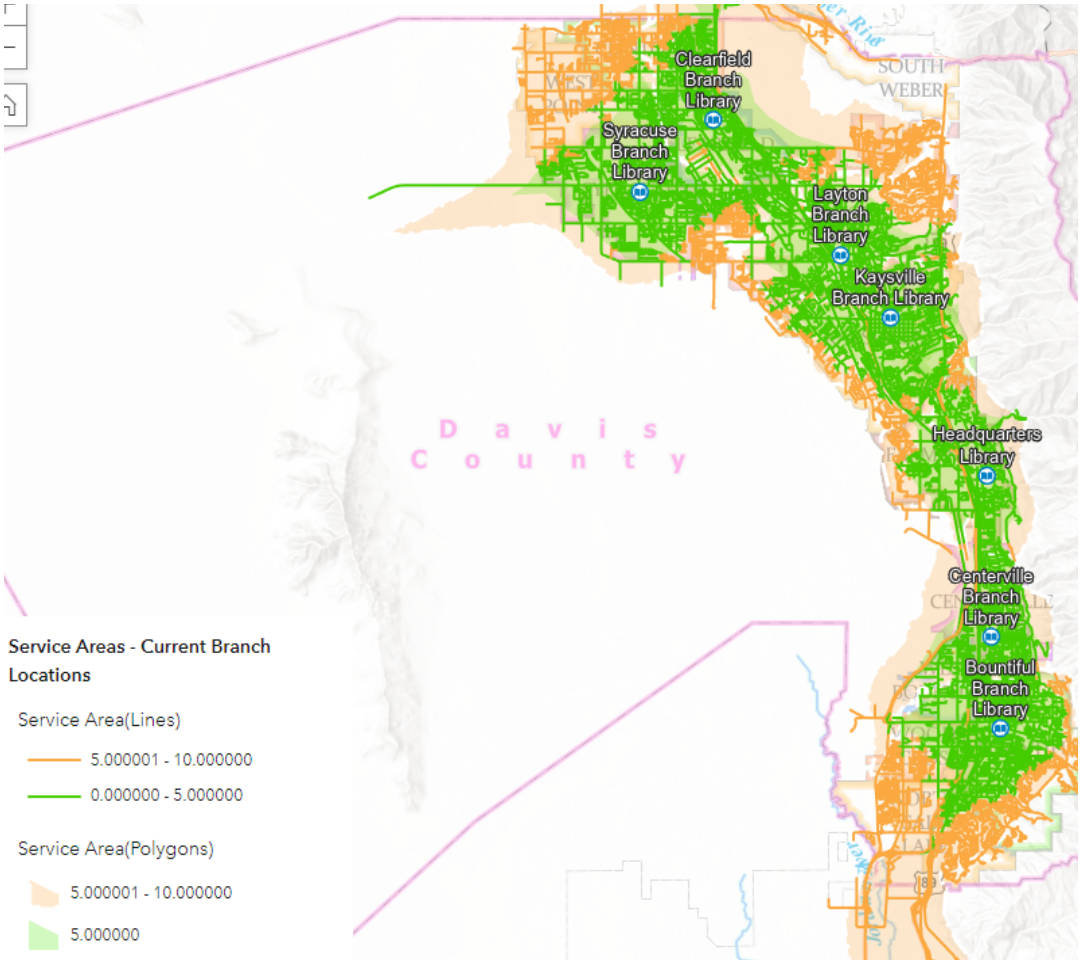
Closest Facility

- Closest Facility models are calculated along the Davis County road network using a 10-minute cutoff.
- Each demand point is set to locate only 1 closest facility.

Current & Future Locations

Current Facilities

Based on the GIS study, with current locations, we have reasonably good coverage for physical locations. 61.8% of Davis County residents are within a 5 minute drive to a physical library location; 93.8% of residents are within a 10 minute drive. However, let me draw your attention to the map below.



The map above shows specific areas in the northeast and south ends of the county that are clearly in the 6.2% traveling more than 10 minutes to a library location, surrounded by large sections of patrons who travel up to 10 minutes to reach a library.

Again, based on the map, it seems our most recent construction efforts have made library services easier to access in the middle and northwest areas. It looks like more could be done - particularly in the south, northeast, and eventually northwest areas of the county.

Southern Davis County

The Library is reaching the end of the promises we made when we took a tax increase in 2017. As the last phase of the Library's current planned construction projects, this is a highly anticipated step. In addition to the other data library staff has gathered to help make decisions about this project, the GIS Team has provided some insight into potential locations.

Because we are discussing all of our location options, we asked the GIS team to run some statistical models without the current Bountiful Branch - so that we can see what the ideal placement of south end location(s) might look like.

It should be understood that these are statistical models - they do not represent an intent to remove the current branch location. These are simply recommended locations, based upon the methodology discussed above. As you can see in the maps at the end of this section, it gives us a good way to visualize how it would look to place a branch in the suggested locations.

Map A shows an approximate location based on removing the current Bountiful location and replacing it with a single branch. This model also shows an increase to 66.3% of patrons within a 5 minutes of a branch, and a small increase to 95.3% within 10 minutes. As stated in the map's legend, the green coloring would be the locations closest to this proposed branch location, and the blue would be closest to the current Centerville location.

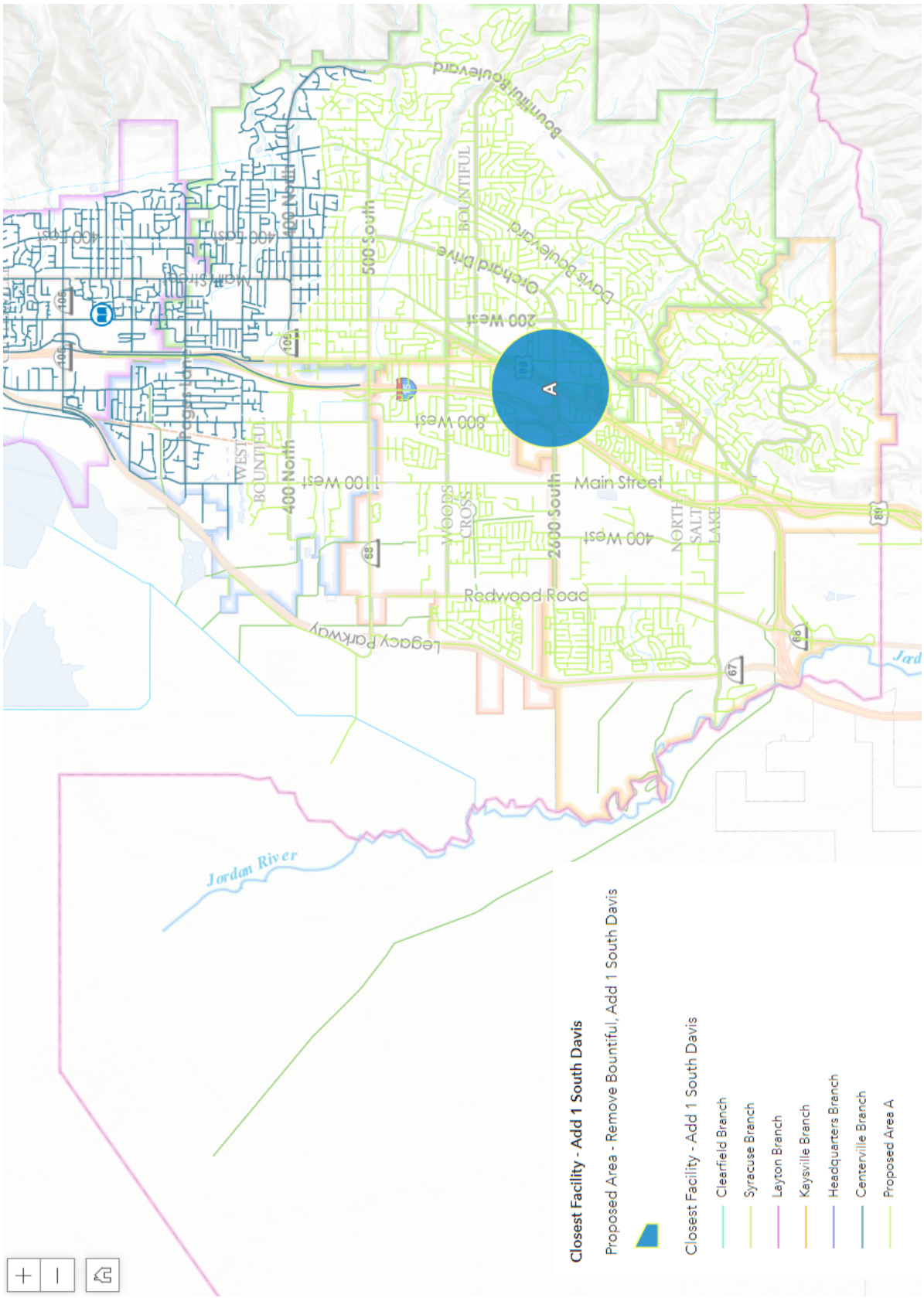
For **Map B** the Library asked the GIS team to remove the current Bountiful location, and replace it with two new locations. This model shows an increase to 68.6% of patrons within 5 minutes and 95% of patrons within 10 minutes of library locations. In addition, our current Bountiful location is very close to one of the suggested locations.

Northern Davis County

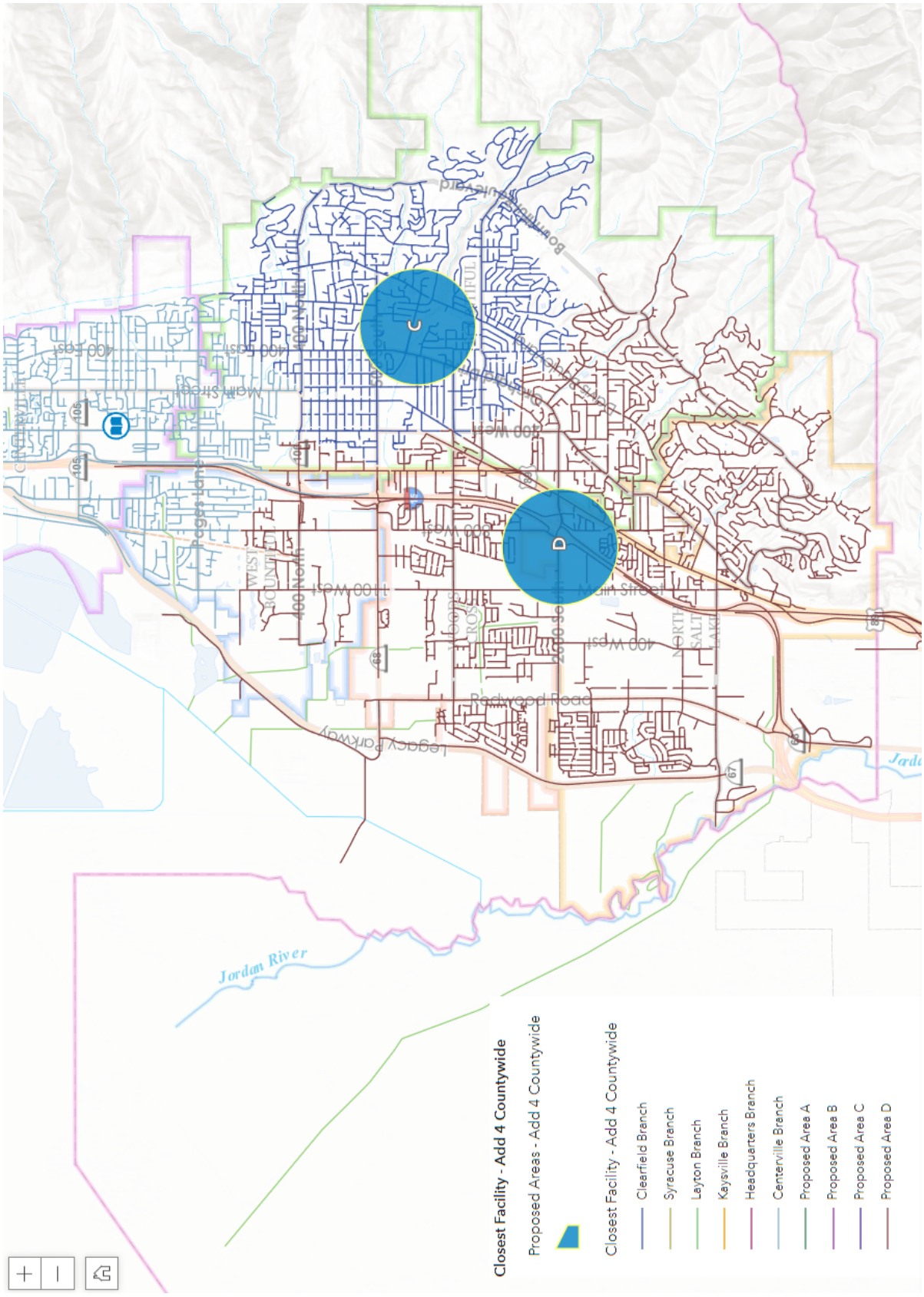
Clearly, the Library must consider more than just the south end of the county when looking at the current map shown above. All benefit most from our reciprocal borrowing agreement with the Weber County Library system, but they really should be receiving benefit from the tax dollars they pay into our library system. Library staff and Board have long considered what might be best in the northeast end of the county. They have the largest spot on the map where patrons drive further than 10 minutes to access library services. On the other hand, in the northwest, there is, and will continue to be, significant and sustained population growth. The map clearly indicates these patrons must travel further than most to reach a physical library location.

Map C shows proposed locations for libraries in the north end of the county. The GIS team explained that the most likely reason for how far west the suggested northeast location was placed is due to the housing density located just south of Hill Air Force Base. Based on the study, with the two north-end libraries and two south end libraries, 80.4% of Davis County residents are within 5 minutes of a Davis County Library, and 97.8% are within 10 minutes. This is only slightly different with the two north-end libraries constructed and only one south-end library in place of the current location (79.4% and 97.7%).

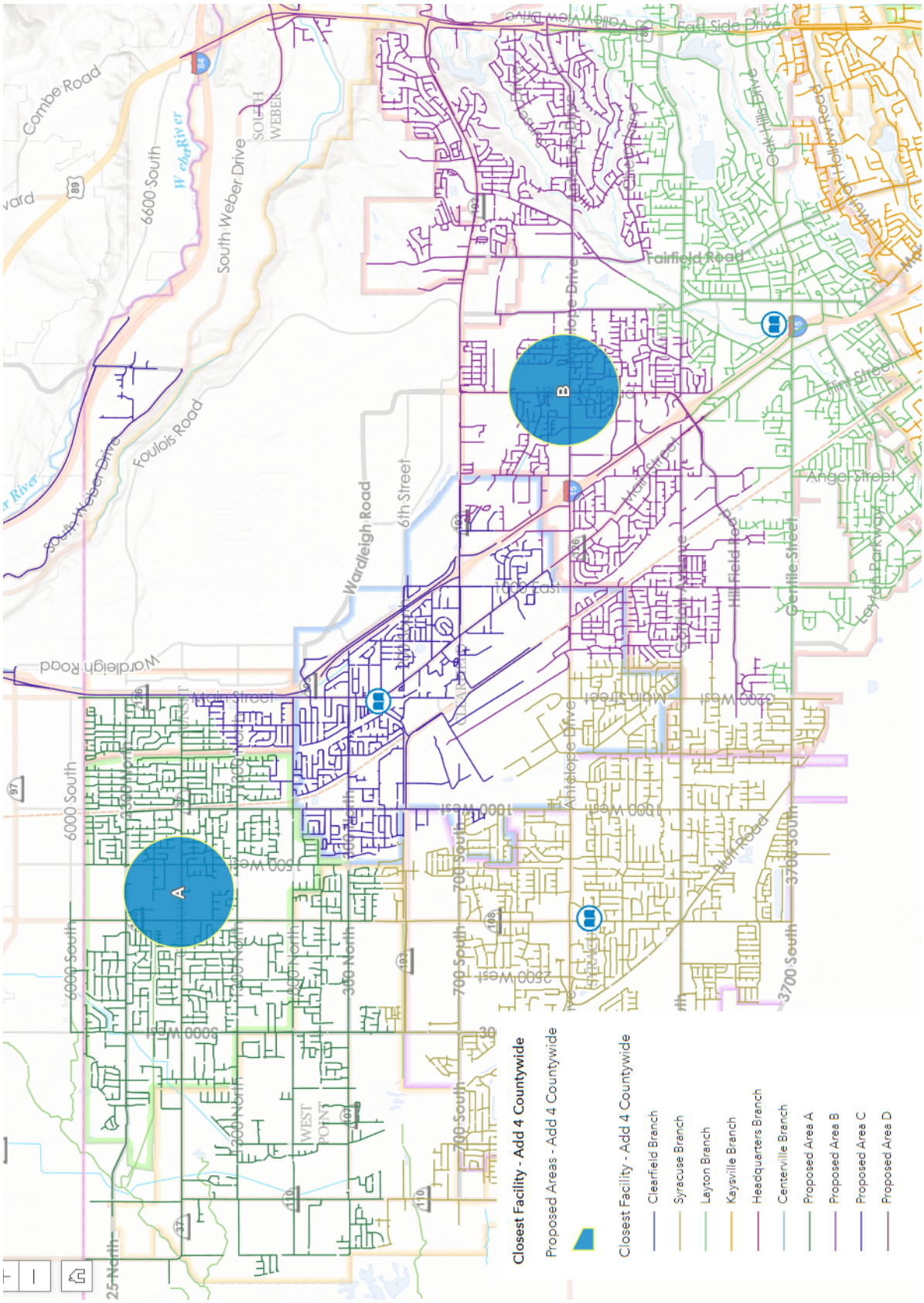
MAP A


A
Main Street
Redwood Road
Legacy Parkway
Jordan River
500 South
200 West
800 West
1100 West
400 North
2600 South
400 West
Bountiful Boulevard
Davis Boulevard
Orchard Drive
Closest Facility - Add 1 South Davis
Proposed Area - Remove Bountiful, Add 1 South Davis
Closest Facility - Add 1 South Davis
Clearfield Branch
Syracuse Branch
Layton Branch
Kaysville Branch
Headquarters Branch
Centerville Branch
Proposed Area A

MAP B


C
D
Jordan River
Redwood Road
Legacy Parkway
Closest Facility - Add 4 Countywide
Proposed Areas - Add 4 Countywide
Closest Facility - Add 4 Countywide
Clearfield Branch
Syracuse Branch
Layton Branch
Kaysville Branch
Headquarters Branch
Centerville Branch
Proposed Area A
Proposed Area B
Proposed Area C
Proposed Area D

MAP C


Combe Road
6600 South
South Weber Drive
Foulois Road
Wardleigh Road
6th Street
Fairfield Road
Angel Street
Gentile Street
Hill Field Road
Antelope Drive
Main Street
6000 South
5500 West
3700 South
700 South
300 North
A
B
Closest Facility - Add 4 Countywide
Proposed Areas - Add 4 Countywide
Closest Facility - Add 4 Countywide
Clearfield Branch
Syracuse Branch
Layton Branch
Kaysville Branch
Headquarters Branch
Centerville Branch
Proposed Area A
Proposed Area B
Proposed Area C
Proposed Area D

Conclusions & Recommendations

Specific details given in this report should be discussed by the library board. However, there are some broad recommendations to be made, based on the data and previous history.

- Consider the Size of the Buildings Added - Square footage creates construction cost as well as maintenance cost. Consider building smaller buildings with more impact. Most recently this worked well in Clearfield - many patrons and stakeholders have found this building uses space particularly well; it would be good to capitalize on what we've done there.
- Make Plans for the Whole County - updated capital planning should include both the current and future construction cycles, particularly discussions about how many branches are needed in the south, but also the rest of the county to provide the best service. Any discussions should be considered as a part of total library services, rather than in a vacuum.
- Explore the Need for Additional Physical Locations - the Library Board should explore opportunities to increase access to physical locations in the south, northeast, and northwest areas of Davis County to best serve the needs of all Davis County residents.
- Plan Areas of Focus, Rather than a Timeline - based on previous commitments and the needs highlighted by the GIS study, the appropriate order to address new construction may be:
    1. South-End Services - this is part of a previous tax increase with promises made that it would be taken care of before other projects. It also represents a large group of patrons who are in the 5-10 minute range of travel to library locations, and the two most recent construction projects were in the north end of the county.
    2. Northeast Services because this part of the county has long been considered, it houses patrons who must travel the farthest to get to a library, and new locations have not brought services closer to this area of the county.
    3. Northwest Services - This area is still growing, and it's still unclear how the West-Davis Corridor project will affect patrons and travel in this area, which means it may be a good idea to revisit this when we have more information and have taken care of other projects. We rebuilt and remodeled the Syracuse Branch much more recently than most areas in the county - the new branch should serve that area well for the near future.

Feasibility Study for the

South Branch of the Davis County Library, Bountiful



DAVIS COUNTY LIBRARY + FFKR ARCHITECTS

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SECTION A

EXECUTIVE SUMMARY

Executive Summary



The Bountiful or South Branch of the Davis County Library was built in 1968. It is a two-story structure that has served south Davis County patrons with only minor alterations – an outdoor terrace was enclosed as a reading room in 1995 and the lower-level Children's Area was remodeled in 2000. This report contains an evaluation of the building's structural, architectural, mechanical, plumbing, electrical, lighting, fire alarm and audio-visual systems and is intended to serve as a determination if the building is a feasible home for the branch for the next 50 years. The results of the evaluation have determined that the building is not suitable for use as a branch library and the profession recommendation is that the County proceed with one of two options:

Option #1 - Perform a major renovation to the building that will replace every component of the building's infrastructure and allow for a complete seismic upgrade.

Option #2 - Demolish the existing building and build a new library on the existing site.

The basis for this recommendation is a follows (by discipline):

Executive Summary



Structural

The building is constructed from lightly reinforced masonry walls with poor connections to the floor and roof diaphragms and does not meet the minimum standard of performance for life safety considerations during a major seismic event and it is expected that significant portions of, if not the entire building would collapse during a maximum considered earthquake due to the walls falling away from the roof.

Architectural

The building is in good condition visually, but has serious deficiencies in the building envelope, energy performance and accessibility. The building spaces are compartmentalized and inefficient for modern library programs and uses and results in large areas of the building not being well utilized. Storage spaces are inadequate and overfilled resulting in hazardous conditions. The uninsulated exterior walls and predominance of single pane glazing result in the building's poor energy conservation performance.

Mechanical

The mechanical system components are in one of two categories – 1) approaching or 2) have grossly exceeded their expected service life. The air distribution system is inadequate and inefficient. The controls system provides only minimal system controls and is completely lacking in some occupied spaces. The plumbing fixtures and supply lines are generally outdated and inefficient. The drainage system appears to be failing and is in need of significant repair. Fire sprinkling is only provided on the lower level and does not serve the main level.

Electrical

The electrical distribution system for the building has exceeded its service life and is in need of replacement from the utility connection to the individual devices. The lighting is outdated and inefficient and the lighting controls system provide only the most basic aspects of lighting control. The increasing need for data and audio-visual systems are poorly met with the existing systems.

SECTION B

EVALUATION PROCEDURES

Evaluation Procedures

The evaluation contained in this report was conducted through the collection and evaluation of existing building plans and printed reports of previous studies conducted by the County. A site visit was conducted on March 10, 2021 to visually observe and note the existing conditions and a perform a careful evaluation of the data collected on systems components, age, function, condition and performance.

The FFKR team was led by



Mike Leishman, AIA, LEED AP
Principal-in-Charge



Arrin Holt, AIA, LEED AP
Project Manager

Consulting engineers as follows:

STRUCTURAL
BHB Structural



Brett Goodman, SE
Principal Structural Engineer



Jordan Perkes, PE
Project Engineer

MECHANICAL AND PLUMBING
Heath Engineering



Jeffrey B. Anderson, PE
Principal Mechanical Engineer



Robert J. Kesler, PE
Principal Plumbing Engineer

ELECTRICAL
Envision Engineering



Jeff R. Owen, PE, LC, LEED AP
Senior Principal Electrical Engineer



Aleksandar Rankovic, PE, LEED Green Associate
Project Engineer

SECTION C

STRUCTURAL EVALUATION

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April 2, 2021

Arrin Holt
FFKR Architects
730 Pacific Ave S.
Salt Lake City, UT 84104

RE: South Davis Library Building Assessment

Dear Mr. Holt,

The purpose of this report is to summarize the findings from our site visit and evaluation of the South Davis Library building for Bountiful City and its feasibility to sustain another 50 years of service. Results and recommendations are outlined in the letter below and evaluation forms are attached.

The existing structure was constructed in approximately 1968 based on the existing drawings. An additional to the North entrance was added in approximately 1995, with an interior remodel around the year 2000. The building is one level of open library on the main level, with another library and assembly areas at the basement level.

Based on the existing documents, the basic roof structural system is comprised of open web wood trusses spaced at 24" o.c. These wood trusses are supported by the exterior masonry walls and interior steel girder beams. The steel girder beams span approximately 80 feet in the North to South direction and bear on masonry pilasters on the exterior masonry walls.

The floor system consists of 4'-0" wide Cor-Dek precast concrete panels with a 3" structural light-weight concrete topping slab. Per the existing structural drawings, it appears the topping slab is reinforced. These precast panels are supported by interior steel beams and concrete walls or exterior concrete basement retaining walls.

The foundation system consists of standard spread or continuous footings. The concrete slab on grade appears to be 4.1/2" thick reinforced concrete slab.

The lateral force resisting system of the building consists of lightly reinforced multi-wythe brick masonry bearing walls. Based on the age of the building, this style of construction is very common for this time period. These lightly reinforced masonry walls will perform better then unreinforced masonry, however will be prone to significant damage in a maximum considered earthquake.

BHB Consulting Engineers performed a site visit on March 10th, 2021 to perform a "Tier 1 Life Safety" level of analysis as defined by the code ASCE 41-13 *The Seismic Evaluation and*

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Retrofit of Existing Buildings. The Tier 1 evaluation consists of a series of checklists that are meant to quickly document the potential building seismic deficiencies. Each Tier 1 checklist identifies building components as either "Compliant", "Non-Compliant", "Not Applicable", or "Unknown". The Tier 1 screening determines if non-compliant deficiencies should be retrofitted, or if further investigation is required. Existing structural drawings were not available as part of this investigation.

The evaluation and recommendations presented in this report are limited to structural issues only, both seismic and non-seismic structural components. The condition of non-structural components of the building is outside the scope of this evaluation. Although some incidental statements may be included regarding non-structural systems, the focus of the report is on structural issues. No other warranty, either expressed or implied is offered with regard to these services.

Our evaluation is based on visual observations of the existing structure and provided structural drawings. Assumptions were made in our evaluation when structural conditions could not be verified by visual observations. Some assumptions include properties of building materials, construction practices, verification of as-built conditions, etc. As a result, the conclusions and recommendations are based upon professional judgment and experience, rather than known conditions. As a result, additional conditions detrimental to the structure may exist which were not visible, not noted in the available documents, or outside the scope of this evaluation.

The structural items found to be non-compliant per the ASCE 41-13 checklist are the following:

Gravity Deficiencies

1. There is a vertical irregularity with the exterior load carrying masonry walls around the perimeter. Due to the offset with the perimeter brick wall and the exterior foundation wall, this presents additional stresses due to eccentric loading.
2. There are visible cracks exceeding 1/8 of an inch in the exterior foundation and interior partition walls.
3. The existing precast floor slab was designed for 125 psf. Current code requires stack rooms for library floors to be designed for 150 psf. These floor framing members may be under designed when subject to current design floor live loads. However, the floor framing is adequate subject that the owner keeps the floor and loading within the original design limits.

Seismic Deficiencies

4. The reinforcement in the walls that is less than required to meet the code dictated amount for life safety.
5. The interior masonry partition walls are braced at the top by the ceiling system and show visible cracks. These would need to be adequately braced to the roof diaphragm system to prevent the potential for the walls to fall in a seismic event.

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6. There are not positive connections between the exterior masonry wall and the roof diaphragms. This creates the potential these walls could fall away in a seismic event. A positive connection will need to be provided to provide roof anchorage to walls.
7. There are connections between the wall and roof that introduces cross-grain bending on the wood ledgers.
8. There does not appear to be blocking in the construction documents to provide shear transfer between the roof diaphragm and shear walls.
9. There are floor diaphragm openings at the main stair that exceed the 8 feet long requirement adjacent to exterior masonry shear walls.
10. There do not appear to be cross ties between the diaphragm chords. Diaphragm straps would need to be added to prevent tearing of the roof diaphragm.

Non-Structural Deficiencies

11. The ceilings are not seismically braced at the maximum 12 ft^2 of area.
12. The library stacks are not adequately braced or anchored to prevent potential to fall.

Based on our limited assessment, the building is in relatively good shape based on the age of the building. However, it is our opinion that the current building structure is inadequate to resist the maximum considered earthquake forces for this location based on the current seismic code. Various retrofits would be required to bring the building up to the current seismic code and maintain it for another 50 years. The walls do not have the code mandated reinforcing for life safety. The walls are not anchored properly to the roof and will potentially fall away. There is also some deterioration of the masonry units that need to be repaired. There are interior partitions that are unbraced and have the potential for collapse. Various seismic connections as indicated above would be required for proper bracing and transfer of shear forces.

Please feel free to contract us if you have any questions about our evaluation or conclusions.

Sincerely,

Jordan Perkes, PE, Associate
BHB Consulting Engineers, P.C.

Brett Goodman, SE, Principal
BHB Consulting Engineers, P.C.

SECTION D

ARCHITECTURAL CONDITIONS EVALUATION

Architectural Conditions Evaluation






Exterior Components / Building Envelope

Concrete Foundation Walls

The building rests on a cast-in-place concrete foundation with a projecting concrete band at the main floor slab. The foundation walls are exposed all around the building. The amount of wall exposed varies from about 18 inches on the east elevation, from 18 inches increasing to about 42 inches as one moves west along the south elevation, then increasing to 60 inches at the northwest corner and then fully exposed along the lower-level service drive entrance and the north elevation near the Children's Area exit. The foundation wall does not have a parge coat and all the forming panels are visible in the concrete. This exposed construction technique is particularly evident and unsightly at the north addition stair. The sloping top of the foundation wall and the stair treads interface is very uneven and pronounced. The foundation has reddish-orange mineral staining all along the level of grade around the entire perimeter of the building. The staining appears to be a result of irrigation overspray onto the wall. Other areas of dark staining are visible on the north and west elevations. The foundation wall has minor cracking, typical with cast-in-place concrete, but no significant areas of cracking or damage are visible.

Exterior Walls

The exterior walls of the Library are double wythe brick with pilasters of brick over block. The white colored brick and tan mortar are in good condition. The brick is laid in a common (running) bond pattern with projecting stacked bond accent piers at the sides of the full height windows. The accent piers extend half-way into the projecting band at the top of the walls. There are minor areas which could be repointed, but overall, the veneer is in good condition. Also evident are areas of reddish-orange mineral staining, particularly at the lowest points of the wall at the south side of the main entry, north entry, west elevation and southwest corner of the building. Consistent with the staining on the concrete foundation wall, the staining appears to be vegetation or irrigation caused and does not appear to be due any particular water leak from the roof or exterior walls

Architectural Conditions Evaluation

Roofing

The roof over the main portion the building is a modified built-up, pea-gravel stone ballasted roof with no parapet wall. The edge detail is a very shallow gravel stop. The gravel is spread over the roof in a consistent layer. The ballast layer is a thin at the seams in the built-up roofing and the seams are telegraphing through the gravel ballast layer. The roof hatch is surrounded by a layer of ballast that is of a different size and color than the remainder of the roof. The roof has eight roofing penetrations as well as the roof access hatch and the caulking around each of the penetrations is brittle and cracking. There are 5 roof drains, all located along the north edge of the roof. Each drain has a strainer / debris guard loosely laid in place. The three primary drains (those set lower in the roof surface) all have debris accumulation at the edge of the strainer. Based on the shallow height of the gravel stop and the primary drains are semi-recessed into the roof surface, it is expected that the current roof is not original to the building and was installed approximately in 1990. Based on the condition of the caulking and the variations in gravel ballast layer depth, the roofing is approaching its expected life cycle and should be replaced in the near future.

The roofing over the 1995 terrace enclosure remodel is a modified built-up roof. The level of the roofing is about 36" lower than the main roof level. The parapet caps are intact, but have large gaps at the interfaces with the existing roof. The roofing extends up the inside of the parapet wall and tucks beneath the metal parapet cap. An aluminumized coating has been applied to the roof and this coating currently exhibits significant cracking and exposure of the underlying base roofing system. There are a primary and secondary roof drain on this roof and they too have the strainer / debris guards in place. There is a significant amount of debris on the roof consisting primarily of fallen leaves and other vegetative material. The debris is holding water against the membrane and has contributed to moss and other biological growth. Lying on the roof is a small aluminum step ladder. The ladder is expected to be used to allow maintenance staff to climb out of the well created by the lower roofing elevation and onto the main roof level after servicing the mechanical equipment. The ladder is folded and lying flat collecting debris in between the rungs. It is expected that the procedure for accessing the addition roof is for maintenance staff to step onto the ledge in the flashing between the main and addition roofs. Exiting the lower roof is likely accomplished by unfolding the ladder to use it to climb out of the well. Once on the main roof, it is likely that staff fold the ladder and drop it onto the lower roof. This procedure has not been observed and is conjectural, but if accurate, could contribute to significant potential for puncture damage to the membrane as well as damage to the flashing ledge used as a step.





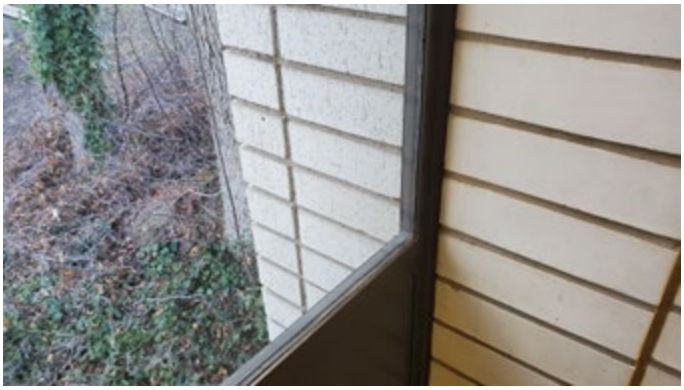




Architectural Conditions Evaluation









Windows

The windows in the building are a mixture of single pane aluminum windows installed during the original construction of the building and a few new insulated glazing unit windows installed during the 1995 and 2000 remodel projects. The original windows on the main floor are a single pane aluminum window with spandrel glass inserts. The window frame sits on the floor slab and extends above the lay-in tile ceiling. The aluminum window frames are not thermally broken and unless individual glass panes have been replaced with modern glass, the glass does not have spectrally selective or low emissivity coatings.

The windows installed in the 1995 terrace enclosure project are all clear insulated glazing units inside thermally broken aluminum frames. The window sill is about 36" off the floor and the windows extend to the lay-in ceiling to reflect the installation of the original windows. It is unknown if the glazing in the addition windows are low e, but they do not have a spectrally selective coating as early versions of these coatings were not available when the addition was built.

The large window in the west elevation was installed during the 2000 remodel. This window is also an insulated glazing unit in an improved, thermally broken aluminum frame. The window is configured to match the original windows – extending from floor stab to above the ceiling with spandrel glass in the same configuration.

The two basement windows in the north elevation were added at the time of the 2000 remodel. The windows are also insulated glazing units in an improved thermally broken aluminum frame. The windows have miniblinds and are the only windows with any treatments. The windows were cut into the existing foundation wall. There is evidence of a water leak in the west jamb of the northeast window. The damage has exposed the gypsum core of the drywall in the jamb, but the gypsum is dry so it is unclear if the damage is from a one-time issue or a persistent leak. It is expected that the leak is exacerbated by the irrigation system outside the building as the window is located in an area with the reddish-orange staining on the exterior of the foundation wall.

With the exception of the northeast basement window, none of the windows exhibit evidence of water damage or other leaks. The original windows are expected to provide poor thermal and energy conservation performance. The insulated glazing units are expected to perform much better than the original windows, but they do not perform as well as current thermally broken windows with spectrally selective glazing.

Architectural Conditions Evaluation

Doors

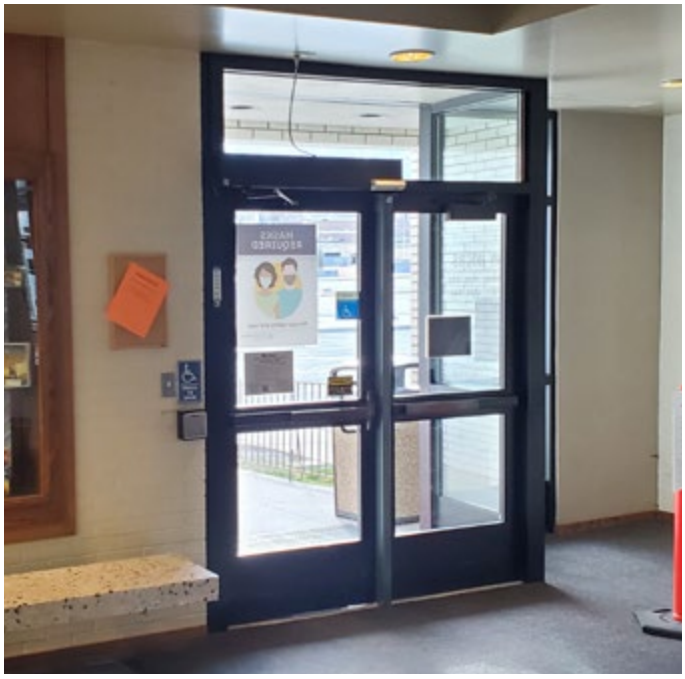
There are seven exterior doors in the building. The main entry doors are located the south elevation bump-out under a protective overhang. Both entry door systems are an aluminum storefront with insulated glazing units in what is expected to be a thermally broken aluminum frame. The east entry door is a double door with a pair of sidelights and transoms. The door has no internal vestibule. The west entry door is a single door deeply recessed under the roof overhang. The storefront in this entry has 3 sidelight and associated transoms. Similar to the east door, this door has no internal vestibule.

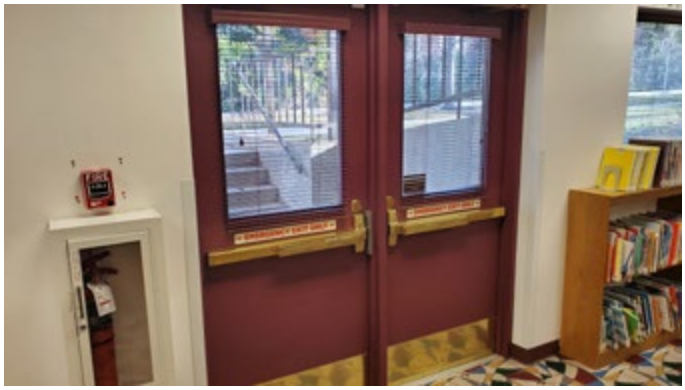
The east elevation has a flat panel hollow metal door in the window system. Directly over the door is a clear transom and a spandrel panel. The door appears to be insulated. The door opens directly into the book storage / work area and has no internal vestibule.

The north elevation contains the exit from the lower-level Children's Area, the north addition exit and the hollow metal doors into the mechanical room and the exit from the west meeting room. The Children's Area door is a double, painted, insulated hollow metal door with large lites. This door has no internal vestibule. The north addition door is a single, aluminum storefront door with a large sidelight and two transoms to match the window systems. The door into the mechanical room and from the west meeting room are a double, painted, hollow metal door. The mechanical room door has a large louver in the west leaf and a surface mounted astragal. Both of the doors appear to be replacements for the original doors. It is expected that they are both insulated, but they have no internal vestibules.

All the doors have fire exit devices with push bars (panic hardware), closers and aluminum thresholds. The doors appear to be weathertight and do not exhibit evidence of leakage.







Architectural Conditions Evaluation

Site and Landscaping

The building is located on a small site bordered on the south by a single loaded parking lot adjacent to a drive lane to access other city government buildings and parking areas, on the west by Main Street, on the north by a canal and on the east by another single loaded parking lot. The site constraints and building placement does not allow for a re-configuration of parking to obtain additional stalls. The northwest corner of the site is underutilized. The area between the building and the canal fence could be developed as an outdoor amenity and improve the patron experience. Possible reconfiguration of this space could result in outdoor study seating, an intimate amphitheater for library programs or a patio or deck for outdoor gatherings.



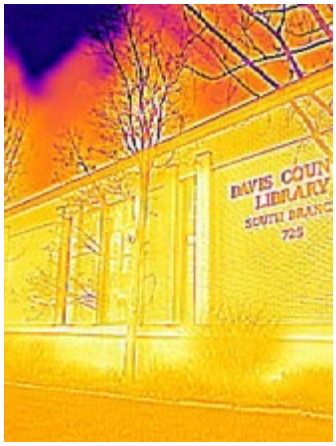


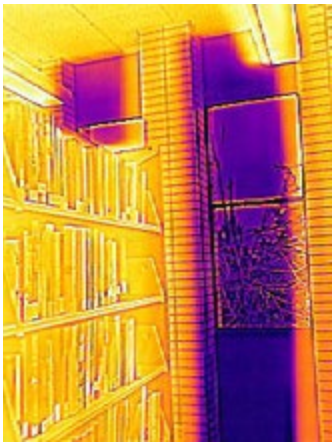
Architectural Conditions Evaluation

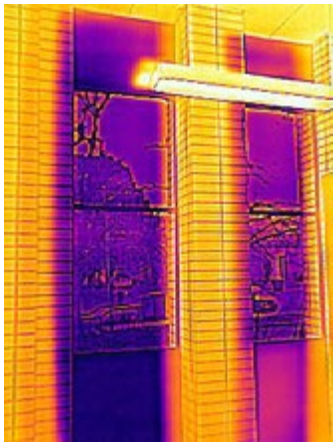












General Energy Performance

The building is expected to perform rather poorly in energy conservation compared to current building construction. The exterior walls are load bearing brick masonry and have exposed brick faces on both the exterior and interior of the building. The projecting piers have a structural concrete masonry unit (cinderblock) core. The as the brick is exposed to view on the inside of the building, there is no provision for building insulation. The original windows are single pane, non-thermally broken aluminum frames which conduct heat very well. The original drawings indicate that the roof insulation was specified to be R20, which is woefully inadequate. The investigative site visit took place at 8:00am on March 10, 2012 while the exterior ambient temperature was 35°F. Thermal photographs taken during the site visit exhibit significant energy loss through the exterior walls, windows and at the interface between the walls and roof, especially at the covered entry vestibules.

The north addition was expected to and proved to perform better than the original portions of the building. The insulated glazing unit windows in their thermally broken frames and insulated walls are much more energy efficient. Current building standards requiring continuous exterior insulation and spectrally selective glazing in improved thermally broken frames will make a significant reduction in overall operating costs.

The attached photos represent surface temperature variations through the distribution of color. Lighter / brighter colors such as yellow and white indicate areas of higher temperature and areas of darker colors such as dark blue and purple represent areas of lower temperature. In photos of the exterior of a building that performs well in energy conservation, the exterior surfaces of the buildings should exhibit colors representative of the exterior ambient temperatures – in our case toward the darker colors of the spectrum. Areas of brighter colors represent heat (energy) loss through the building envelope. In the interior of the building, the reverse is expected, the interior photos should be dominated by lighter/brighter colors, areas of darker colors indicate cold temperatures and a failure of the energy conservation through the envelope.

It was expected that the exterior photos would show medium bright colors on the exterior walls and very bright colors in the windows. It was a interesting, but not too surprising to see the brighter colors at the roof to wall interfaces on the entry vestibules. In the interior of the building, it was expected to see bright colors on the walls and darker colors in the windows.

Architectural Conditions Evaluation

Interior Components & Finishes

ADA Accessibility

The County has been successful in providing public accessibility measures in the building. The entry is on an accessible path from the handicapped parking stalls. The public spaces on the main floor is accessible and includes an accessible restroom for both men and women. An elevator provides and accessible path to the lower level which also has a pair of accessible restrooms. The accessible restrooms have been remodeled to achieve accessibility compliance but as remodeled spaces, are not efficient in their use of space and layout of fixtures and are a reasonable compromise at best. The children's restrooms on the lower level were designed to meet current accessibility guidelines. The most glaring public area to not be accessible is the performance platform in the lower level. The platform has one step at the proscenium and at the entry door from the hallway.

The most significant accessibility challenges within the building are related to the areas of the library accessed by the staff. The most common non-conforming component are the door clearances on both the push and pull sides of the doors. These challenges are caused by a combination of non-conforming placement of doors and the placement of furniture items within the rooms. The Staff Room toilet is not accessible. Measures to correct these deficiencies are costly, invasive and disruptive to the function of the building and as a result, have not been taken to date.

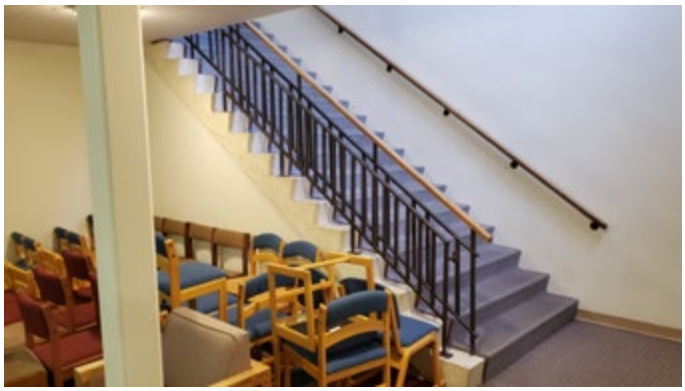
Stairs

The building has two stairways connecting the main and lower levels. The original stair is located in the entry area and is separated from the main level by a glass partition wall and a glass door. The stair is a precast concrete stair with a carpet runner and appears to meet the current riser and tread length dimension requirements. The edge of each tread has a rubber flooring nosing which has no visual contrast with the carpet. Current design guidelines require a nosing with high contrast. The original guardrail has been augmented with an additional rail surface mounted on the outside of the walking surface which appears to meet the requirements for baluster spacing (less than 4"), but not the 6" rule at the riser gap below the rail or the 42" vertical height requirement. The original guardrail has a square profile wood handrail. The wall side of the stair has a matching wood handrail bolted to the wall. Neither the new nor existing handrails meet the handrail extension requirements at the top and bottom of the stair. The landings at the top and bottom appear to meet the current landing requirements.

The second stair is located at the northwest corner of the lower-level Children's area. The stair is carpeted and has a rubber flooring nosing that has high contrast with the carpet. The guardrail is a metal tube with glass infill panels and appears to meet all the current guardrail and handrail requirements.

Interior Finishes

The building's furnishings and interior finishes reflect its age but appear to be very well maintained. The carpeting exhibits slight to medium wear patterns in the highest traffic areas near doors and in the corridors but are in good overall condition. The paint on the interior brick and gypsum board walls is in good condition with only very minor indications of wear or damage. The ceiling tiles on the main level are a 2'x2' mixture of heavy fissured tile with a "square" of four less textured tiles arranged in a repeating pattern throughout the floor. The combination of the heavy texture and the lower textured tiles makes the heavy textured tiles look dirty and the less textured tiles appear to be maintenance replacements at first glance which makes the entire ceiling appear dingy and unsightly. The repeating pattern is discerned only after a more careful examination of the entire ceiling. Other interior finishes such as furniture and fixtures are also in good condition, but appear quite dated in their design.



SECTION E

MECHANICAL AND PLUMBING EVALUATION

April 2, 2021

ENGINEERING REVIEW OF
MECHANICAL AND PLUMBING SYSTEMS
FOR THE DAVIS COUNTY LIBRARY
SOUTH BRANCH (BOUNTIFUL)

INTRODUCTION

The purpose of this report is to provide recommendations for the updating and improving of the existing mechanical and plumbing systems currently serving the building. Making recommendations to meet the following objectives:

Provide mechanical and plumbing systems for that can function and serve the facility for another 20-25 years. The building is to function for another 50 years.
Provide improve occupant comfort.
Provide improve energy efficiency.
Correct code deficiencies.

A brief site visit was made to visually observe and note the existing conditions. No destructive analysis was done. Record drawings of the existing mechanical and plumbing systems were reviewed.

Conducting the visit for Heath Engineering were Jeff Anderson, P.E. (Mechanical) and Robert Kesler P.E. (Plumbing)

MECHANICAL

GENERAL BUILDING DESCRIPTION

The building is a two level structure, originally constructed in 1968-1969. A single level addition located to the North was added in 1995.

The main level has lending book and reading area, staff offices, staff break room, staff restroom, janitor closet, large storage room and Public men and women restrooms.

The main level north addition is used as a reading area.

The lower level contains lending book and children activity area, multipurpose-meeting room, storage room, and mechanical room.

ASSESSMENT OF CONDITIONS

AIR HANDLING

The building is served from multiple air handling systems. The main level is served from two central air handling units. The Lower level is served from two twined gas fired furnaces systems. The North Addition is served from a rooftop gas fired heating, DX refrigeration cooling unit.

The two air handling units and the two twined furnaces are located on the Lower Level Mechanical Room.

CENTRAL AIR HANDLERS

The two central air handling units serve the spaces located on the Main Level. The Main Level is divided into two zones, an East zone and a West zone.

The air handling units are Carrier Model 39MN17B005 central air handlers, each having a dual circuited DX cooling coil, filter section and mixing box with outside air and return air dampers. The fan speed is controlled with a variable frequency drive.

Duct mounted, natural gas fired duct heater, Reznor Model HEEDU400-6, power vented, are used to provide heating of the supply air from each of the air handling units.

Outside air is ducted from a common louvered intake to each of the air handling units. Relief air is gravity relief through a louvered and dampered opening from the mechanical room. Air handling unit filters are 2” thick fiberglass having Merv 8 rating.

FURNACES

The two twined furnace systems serve the spaces located on the Lower Level. One system (Furnace System A) serves the west half serving the multipurpose-meeting area. The other system (Furnace System B) serves the East half which serves the Children book lending and activity area. The furnaces are vertical discharge units. The furnaces are gas fired heating having DX cooling coils, and remote condensing units.

The twined unit serving the Lower Level multipurpose-meeting room is American Standard model AUH1C080A9601AA, direct vent, 96% AFUE, using PVC combustion air intake piping and PVC flue piping.

The twined furnace serving the Lower Level Children book lending activity area is Lennox model G40UH-60C-110-15, 80% AFUE, using metal type B vent. Furnaces filters are 1” fiberglass having Merv 8 rating.

ROOFTOP UNIT

The rooftop unit serving the Main Level North Addition is located on the roof of the addition.

The unit is Lennox Model GCS16-651-75-8P, R-22 refrigerant. Nominal 60,000 btuh heating, 58,000 btuh cooling.

CONDENSING UNITS

The condensing units serving the central air handlers and the twined furnaces are located north of the building. The units are in an open yard between the building service access drive and the property line. The condensing units are located beneath a group of deciduous trees.

Refrigeration piping from the condensing units is routed underground to the Lower Level Mechanical through split clay tile pipe.

Condensing units serving each of the central air handlers are Carrier model 38ARD016, using R22 refrigerant.

The condensing unit serving the furnace system serving the Lower Level Children book and activity area is Lennox model HS29-12-3Y using R22 refrigerant.

The condensing unit serving the furnace system serving the Lower Level multipurpose-meeting room is American Standard (model not visible) using R-410a refrigerant.

AIR DISTRIBUTION

Upper Level

Galvanized sheet metal supply air ductwork from the two central air handling units is routed from the Lower Level up to the ceiling space of the Upper Level. The ductwork is internally lined with acoustical lining.

Supply air is distributed to the Upper Level space through a combination of pressurized ceiling plenum and linear slot type diffusers. The pressurized ceiling plenum system relies on the supply air being feed into airtight ceiling plenum from which the air is forced through narrow +/- 1/8” wide x 1” long slots in the lay-in ceiling tiles. The pressurized ceiling system is used in the open Library areas. Supply air to the offices, break room and the entry areas is through ducted linear type diffusers.

Return air is from the spaces is through multiple floor mounted return air grilles located around the perimeter of the Upper Level. The return air grilles are connected to sheet metal, acoustically lined ductwork located in the ceiling space of the Lower Level. Return air is ducted back to the central air handling units.

The installed ductwork, diffusers and grilles are from the original construction.

Lower Level

Galvanized sheet metal supply air ductwork from the two furnaces systems is routed from the mechanical room to the Lower Level ceiling spaces. The ductwork is internally lined with acoustical lining.

Supply air is distributed to the spaces through square louvered face diffusers and liner slot type diffusers. Linear slot type diffuser are used primarily in the multipurpose-meeting room.

Return air for the Furnace System A is through a common return air grille located in the wall of the mechanical room. Return air from the grille is ducted back to the furnace system. Return air ductwork is acoustically lined.

Return air from the Kitchenette and the Storage spaces are transferred to the adjoining hallway from which it is returned to the furnace system through the sidewall grille.

If the movable walls of the multipurpose-meeting room are closed return air from the space is transferred from the space to the hallway for return to the furnace system through the sidewall grille.

Return air for Furnace System B is through a common return air grille located in the Children's Activity- Book area. Return Air from the grille is routed back to the furnace system through a concrete tunnel.

An office area and storage room/data room located in the northwest corner of the Children's Activity- Book area. These spaces are not supplied with any conditioned air.

The installed ductwork, diffusers and grilles are from the original construction.

EXHAUST

Toilet Rooms, Janitor Closets, Breakrooms and Kitchenette are exhausted.

The Upper Level Public Men's and Women's Toilet Rooms are exhausted by a common ductwork and exhaust fan system. The exhaust fan is in the ceiling space above the Toilet Room. Exhaust is discharged to the outside through a roof termination.

The Upper Level Staff Toilet Room, Breakroom, Janitor Closet and Storage Room are exhausted by a common ductwork and exhaust fan system. The exhaust fan is in the ceiling space. Exhaust is discharged to the outside through a roof termination.

The Lower Level Toilet Room spaces and Kitchenette are exhausted to the outside through ductwork and exhaust fan system. The exhaust fan is in the Mechanical Room. Exhaust is terminated to the outside through a sidewall discharge at the Mechanical Room wall.

The installed ductwork and grilles are from the original construction. Age of exhaust fans are not known.

The elevator equipment (located on the Lower Level) is exhausted to the outside through a sidewall exhaust fan. The exhaust fan and ductwork appear to be from the original construction.

OUTSIDE AIR

Outside air is introduced into the two central air handling systems and the two furnace systems. The central air handling units have outside air economizer capability. Outside air is from a louvered opening into an enclosed concrete tunnel located on the north side of the mechanical room. Outside air ductwork connected to the outside air tunnel is routed and connected to the air handling units.

CONTROLS

The air handling units with associated condensing unit and duct furnace, furnace systems with associated condensing unit, and the rooftop heating and cooling unit are controlled from a DDC control system.

The DDC controls are Alerton brand controls.

The control system has the capability to communicate with the county's central maintenance support facility for remote monitoring and control of the systems. The systems are controlled based upon room temperature setpoint. The outside air economizer of the two central air handling systems is controlled by the DDC system.

SERVICE LIFE

ASHRAE and other resources have produced estimates of median service life for mechanical and plumbing equipment. Though not an exact prediction of equipment life, it does provide a range that may be expected. Service Life varies based upon degree and frequency of maintenance, initial quality of equipment, etc. Some equipment may operate longer or shorter than the estimate. Taken at face value service life for equipment related to this building are:

Estimate of Mechanical Equipment Service Life					
Equipment	Estimated Service Life	Year Installed (*)	Years in Operation	Service Life Remaining	Remarks
Central AHU AH-1 and 2	20-25	2007	14	6-11	
Duct Furnace	15-18	2007	14	1-4	
Furnace A	15-18	2010	11	4-7	
Furnace B	15-18	2007	14	1-4	
Condensing Unit CU-1 and CU-2	18-20	2007	14	4-6	
Condensing Unit CU-3	18-20	2007	14	4-6	
Condensing Unit CU-4	18-20	2007	14	4-6	
Rooftop Heating and Cooling Unit	18-20	1995	26	-8	Estimated Service Life Exceeded
Exhaust Fans	15	Unknown			
DDC Controls	15-18	2010	11	4-7	
Refrigeration Piping	25	1968	53	-28	Estimated Service Life Exceeded
Ductwork	30	1968	53	-23	Estimated Service Life Exceeded

(*) assumed installation date.

MECHANICAL OBSERVATIONS

The mechanical systems are simple in their configuration and operation. The systems are constant volume serving single large zones having groups of multiple rooms having differing functions and exposures. The systems use basic on/off control of heating and cooling for space temperature control.

The pressurized ceiling plenum approach for air distribution is a very ineffective and inefficient method of air distribution.

Single long length linear diffusers in large spaces is not an effective method of air distribution.

R22 refrigerant has been phased out and is no longer being manufactured. Replacement R22 is only available through after market sales and is very expensive and not easily obtained.

The Data Room is not currently conditioned.

Office space located adjacent to the Lower Level Children Activity area is not conditioned.

Mechanical systems are approaching their end of the expected service life. Ductwork, and rooftop heating and cooling units have exceeded the estimated service life.

MECHANICAL RECOMMENDATIONS

If the building is to be remodeled and provide service to the community for another 50 years, the existing mechanical system should be replaced in its entirety. A remodel of the building would want to include upgrading of the building envelope insulation and replacement of existing windows.

The replacement mechanical system should be designed to meet the following criteria:

1. Use high efficiency rated equipment.
2. Use systems that have modulating capacity to meet the varying HVAC load of the building.
3. Provide improved and increased zoning. Providing separate controlled zoning for perimeter areas and interior areas for large open spaces.
4. Providing separate controlled zoning for enclosed spaces having differing functions and exterior exposures I.E., office, work rooms, studies breakroom etc.
5. Provide improved air distribution systems. Eliminate the pressurized ceiling air plenum. Use ducted supply air to diffusers.
6. Provide air handling systems with improved air filtration. Providing a minimum of Merv 13
7. Locate grade mounted equipment within a walled enclosure away from trees and plantings that drop their leaves and foul the equipment.
8. Utilizing DDC controls that provide for remote monitoring and adjusting. Using current technology and system that meets the County's preferred manufacturer standard.

Replacement Systems to consider:

1. Variable air volume air distribution with central air handling units.
    a. Cooling provided by:
        i. Option A: Chilled water system using an air cooled water chiller with associated pumping system.
        ii. Option B: DX refrigeration using VRF style condensing units with variable speed compressors.
    b. Heating water for heating at the air handlers and at the VAV terminal boxes produced by natural gas fired, high efficiency, direct vent type boilers. Multiple boilers controlled in a cascading sequence to meet the varying building load. Heating water pumping system to circulate heating eater to the heating coils.
    c. Outside air economizer. Using outside air for cooling when conditions exists.

PLUMBING

DOMESTIC WATER SYSTEM

Potable water is delivered to the building through a 1-1/2" water meter located northeast of the building. We were not able to locate the meter to verify the exact location. The 1-1/2" supply rises up through the floor of the lower level in the mechanical room and appears to be original to the building. The line then transitions to new copper piping with a ball valve shut-off, pressure reducing valve and pressure gauge. The building pressure is currently set at 45 psi. Adjacent to the water entry is a gas-fired water heater, natural draft type, with expansion tank. The water heater was installed around 2013. The water heater does not have seismic strapping. The hot water is then routed to follow the path of the cold-water supply to extend and supply the fixtures located throughout the building. There is not a hot water recirculation loop on the system.

From the water entry to the lower-level toilet room area the original galvanized water main lines have been replaced with copper piping with press-fit fittings. The existing branches throughout appear to be the original galvanized pipe.

NATURAL GAS SYSTEM

A natural gas system services the building and is distributed to feed the gas-fired furnaces and duct heaters located in the mechanical room. The gas meter is located remote from the building on the north side with the supply to the building routing underground until it enters the mechanical room through the foundation wall. The meter provides 4oz gas to the building. The piping routes through the mechanical room exposed high in the space to the furnaces and water heater.

DRAINAGE SYSTEM

The original drainage system is cast iron hub and spigot piping with cast iron and/or galvanized vent piping. The hub and spigot has a mix of rubber seals and lead and oakum seals. The main 4" sewer lateral exits the build near the southwest corner of the building. A cleanout to grade outside the building was not visible.

There are two floor drains located in the mechanical room. The drains are in fair condition.

There are four toilet rooms located on the lower level. The two south toilet rooms are original to the building and do not have floor drains. The two north toilet rooms were added as part of the 2000 remodel and include floor drains.

There are three toilet rooms located on the upper level. The two public toilet rooms include floor drains that are original to the building. These toilet rooms were remodeled in 2004 to improve accessibility by adding an ADA toilet stall. The unisex toilet room located in the rest area does not have a floor drain.

Some of the waste piping has been modified with toilet room remodels or to make repairs. There is some PVC DWV piping located in the ceiling space of the lower level.

STORM DRAINAGE

The main roof is drained by three primary roof drains that combine and drop at the northeast corner of the building. The pipe then drops to below grade and extends to the north to discharge into the nearby creek. The north addition room has two primary drains that extend and connect to the original roof drain system. The secondary drains extend to the west and east to downspout nozzles located high on the wall.

The entry roof has two scupper drains located at the southern corners of the roof which drop to connect to a storm drainpipe with metal downspouts exposed on the exterior of the building. There are two small area drains located at the landing of the lower-level dock area on the north side of the building. There is no documentation for these drains. The elevations suggest that they could extend to the creek. The drains appear to function adequately.

PLUMBING FIXTURES

The building plumbing fixtures at the time of the visit were all in working condition. The following is a summary of the fixtures:

- Upper-level women's room: Toilet room consists of three floor mounted flush valve type water closets, a single counter type lavatory with manual faucet and a floor drain. The fixtures are in good condition.
- Upper-level men's room: Toilet room consists of a single floor mounted flush valve type water closet, a wall mounted urinal with flush valve, a single counter type lavatory with manual faucet and a floor drain.
- Upper-level unisex toilet room: Toilet room consists of a single tank type water closet and a wall mounted lavatory with manual faucet. There is not a floor drain.
- Lower-level unisex toilet rooms: There are two unisex toilet rooms, each with a single floor mounted flush valve type water closet, wall mounted lavatory with manual faucet and a floor drain. All are in good condition.
- Lower-level women's room: Toilet room consists of two floor mounted tank type water closets, a single wall type lavatory with manual faucet. There is not a floor drain. The fixtures are older but in fair condition.
- Lower-level men's room: Toilet room consists of a single floor mounted tank type water closet, a wall mounted urinal with flush valve and a single wall mounted lavatory with manual faucet. There is not a floor drain. The fixtures are older but in fair condition.

- Janitor Sink: There is one janitor sink in the building located on the upper level. It is original to the building and has a mixing type faucet that appears to be original to the building and is mounted to the tile wall above the sink. The sink is functional and in fair condition.
- Kitchen Sink: There is a kitchen sink located on the lower level. The sink is an enameled cast iron two-compartment sink with a single handle mixing faucet. The sink original with a newer faucet and is functional in fair condition.
- Drinking Fountains: There are two bi-level electric water coolers in the building. One on each level. Both are newer and in good condition. The one located on the lower level does not have the lower apron required to make it fully compliant with current accessibility requirements.
- Hand Sink: The original construction included a hand sink located on the upper level in the storage room. The sink has been removed. The water and waste rough-in is still in place and visible at the wall. There are not caps on the stop valves to control water flow if the valves were to be turned on.

PLUMBING RECOMMENDATIONS

1. Provide new water efficient fixtures to replace the existing fixtures.
2. Provide an apron fitting for the electric water cooler on the lower level for accessibility compliance.
3. Add seismic straps for the gas-fired water heater and expansion tank.
4. Remove all existing galvanized water piping and replace with new copper piping. Add a recirculation loop to improve hot water delivery to the fixtures for energy code compliance.
5. Replace existing cast-iron and galvanized waste and vent piping exposed in ceiling spaces with new cast iron or PVC DWV piping.
6. A camera inspection of the existing sewer lateral to the sewer main is recommended to verify the condition of the existing.

FIRE PROTECTION

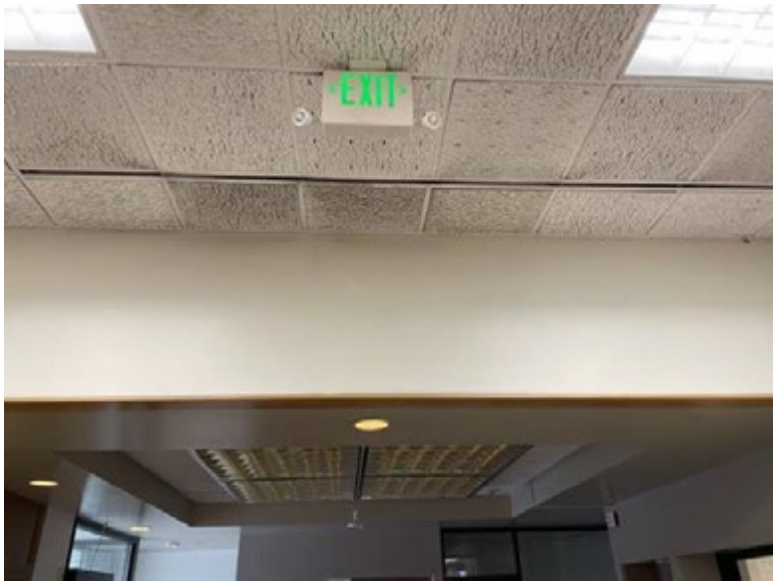
The building has a 6” fire supply with a single 4” riser assembly that supplies fire sprinklers located throughout the lower level. The fire riser and entry are located on the lower level north wall. The fire department connection, main test and alarm bell are located on the north wall east of the north terrace addition.

FIRE PROTECTION RECOMMENDATION

1. Extend fire sprinkler service to the upper level. This will require an additional zone valve assembly adjacent to the existing in the lower level.

APPENDIX

MECHANICAL AND PLUMBING PHOTOS



PERFORATED CEILING TILE FOR SUPPLY AIR DISTRIBUTION AT UPPER LEVEL. LINEAR SLOT DIFFUSER AT MAIN ENTRY



TYPICAL SQUARE LOUVERD FACE DIFFUSER. LOWER LEVEL SUPPLY AIR



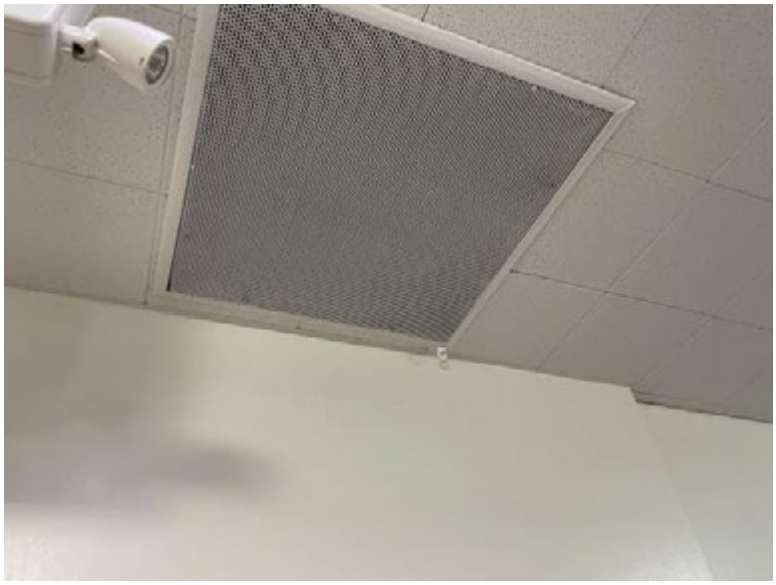
TYPICAL LINEAR SLOT DIFFUSER. LOWER LEVEL MULTIPURPOSE SUPPLY AIR



FLOOR RETURN AIR GRILLES, FOR RETURN AIR FROM UPPER LEVEL



TYPICAL SIDEWALL RETURN AIR GRILLE. FOR RETURN FROM LOWER LEVEL SPACES



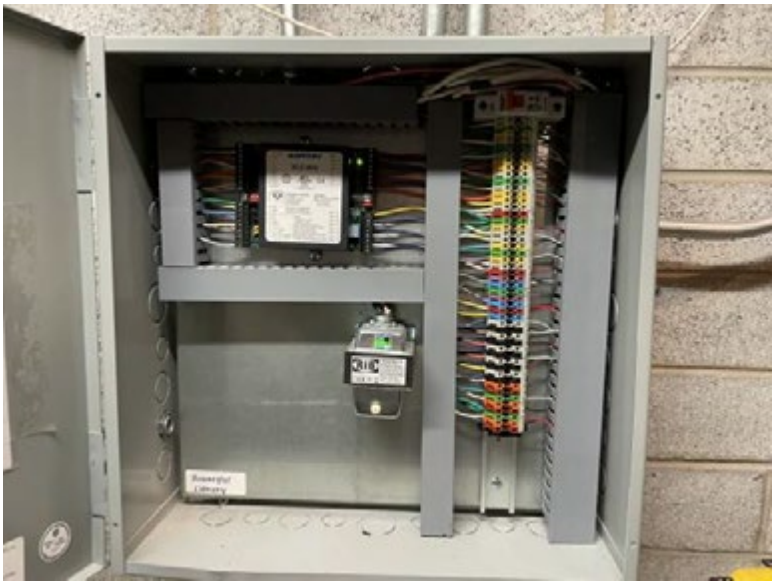
TYPICAL CEILING TRANSFER AIR GRILLE



TYPICAL SPACE TEMPERTURE SENSOR



DDC CONTROL PANEL. ALERTON CONTROLS



DDC CONTROL PANEL AND LOW VOLTAGE TRANSFORMER



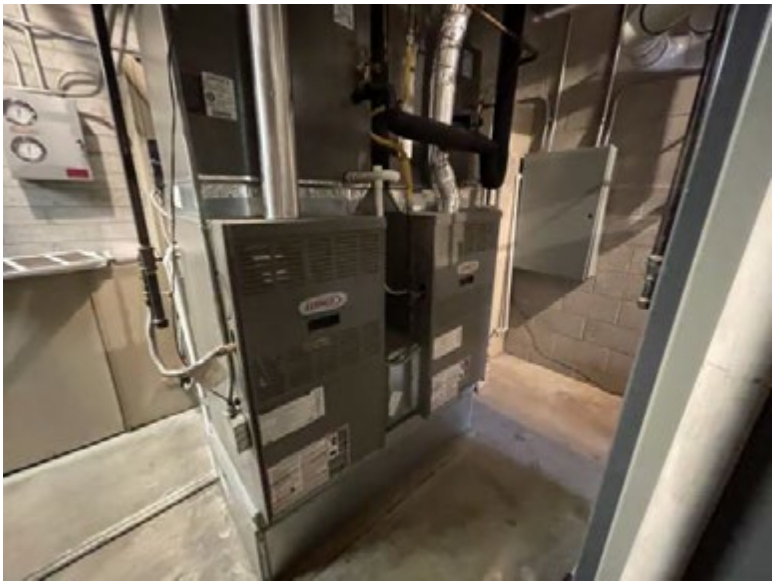
CONTROL DAMPER AND ACTUATORS



CARRIER AIR HANDLER SERVING UPPER LEVEL



VFD SERVING CARRIER AIR HANDLING UNIT



TWINNED LENNOX FURANCES SERVING LOWER LEVEL



TWINNED AM STANDARD FURANCES SERVING LOWER LEVEL



GAS FIRED DUCT HEATER. SERVING UPPER LEVEL



FLUE DRAFT INDUCER FAN SERVES DUCT FURNACES AND LENNOX FURNACES



RELIEF AIR LOUVER



OUTSIDE AIR INTAKE LOUVER AND AREA WELL, FLUES AND COMBUSTION AIR FROM AM STANDARD FURNACES



CONDENSING UNITS. LOCATED LEFT UNITS SERVING THE CARRIER AIR HANDLING UNITS. LOCATED RIGHT UNIT SERVING LENNOX FURNACE



CONDENSING UNIT SERVING LENNOX FURNACES



CONDENSING UNIT SERVING AM STANDARD FURNACES



REFRIGERATION PIPING FROM CONDENSING UNITS, DROPPING AND ROUTING UNDERGROUND THROUGH CLAY TILE



REFRIGERATION PIPING AT CONDENSING UNITS.



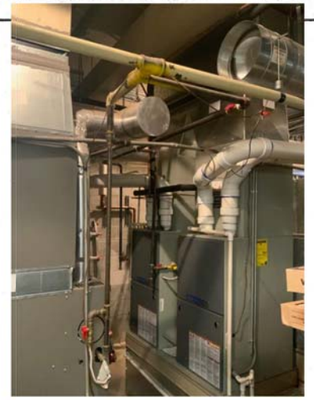
ROOFTOP HEATING AND COOLING UNIT SERVING QUIET STUDY



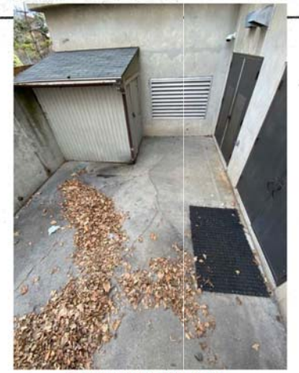
ROOFTOP HEATING AND COOLING UNIT SERVING QUIET STUDY



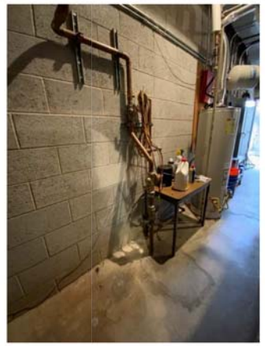


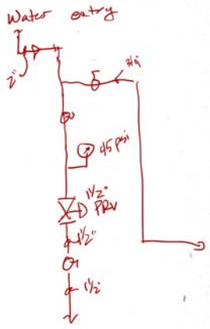


Gas piping to furnaces.



Two area drains. May route to the creek to the North.





Water entry. New copper piping and valves.



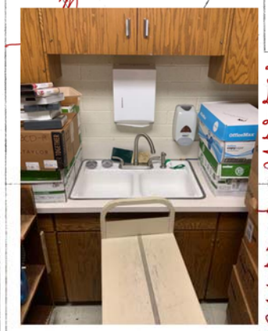
Remote gas meter. Pipe drops to below grade and extends into the mechanical room below the north terrace addition structure.



Wall hydrant installed vertical. It is a horizontal style and should be remounted.

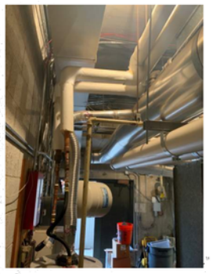


Access panel to wall hydrant valve











Clean out not visible

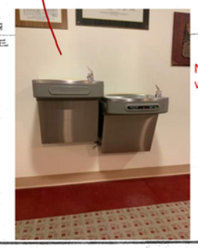


Water heater.
Manufactured in 2013

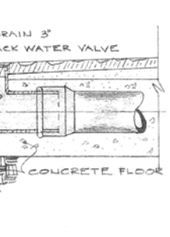


During visit we were alerted that there are existing low points in the waste line below the lower level floor slab in this area.

Water pipe branches are still galvanized throughout this area.



Newer fixture with water filter.









Lower level is fully sprinkled. Upper level has no sprinkler protection.

4" Fire riser
8" supply



No caulk at Water closet





No floor drain in original toilet rooms, older fixture



Wall clean out by Water closet. New Fixture.



No floor drain. Newer faucet and flush valve on urinal.



Wall clean out below sink - 1-1/2"

2 BASEMENT FLOOR PLAN

REFERENCE NOTES

GENERAL NOTES

1. ALL SHELVING IS SUPPLIED BY OWNER.
2. ALL FURNITURE IS SUPPLIED BY OWNER.

COOPER/ROBERTS ARCHITECTS, A.I.A.
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MECH TECH
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LOGAN, UT 84321
(435) 753-0515 (435) 753-0557

SOUTH BRANCH
DAVIS COUNTY LIBRARY

BOUNTIFUL, UTAH

PROJECT # : 1100-01
DATE : FEB '10
SUBMITTAL : SD

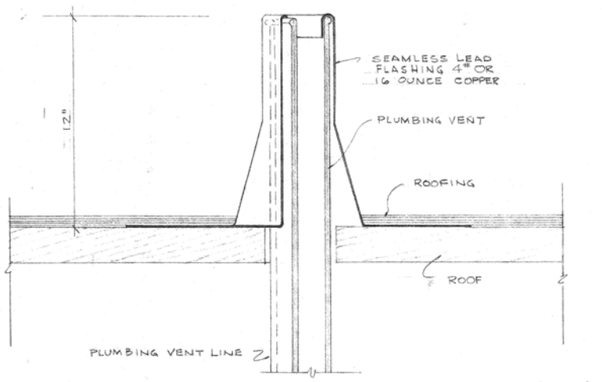
BASEMENT FLOOR PLAN

A102

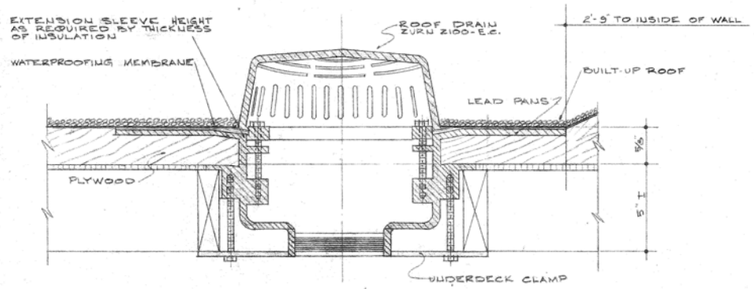
PLUMBING FIXTURE SCHEDULE

SYMBOL	LEGEND	FIXTURE	WASTE	VENT	TRAP	C.W.	H.W.	FIXTURE UNITS	BRANCH SIZING ½"	⅝"	1"	1¼"
WC-1		WATER CLOSET	4"	2"	-	⅞"	-	4	1	2	4	7
U-1		URINAL	2"	1½"	2"	⅜"	-	5	-	1	3	6
L-1		LAVATORY	2"	1½"	1¼"	½"	½"	½	2	4	8	15
SS-1		SERVICE SINK	3"	2"	3"	⅜"	⅜"	3	1	2	5	10
KS-1		KITCHEN SINK	2"	1½"	1½"	½"	½"	3	1	2	5	10
S-1		SERVING SINK	2"	1½"	1½"	½"	½"	2	2	4	8	15
DF-1		DRINKING FOUNT	1½"	1¼"	1½"	½"	-	1	3	6	12	0
S-2		KITCHEN UNIT	2"	1½"	1½"	½"	½"	2	2	4	-	-
HB-1		HOSE BIBB	-	-	-	⅜"	⅜"	3	1	2	5	10
WC-1		NON FREEZE HYDRANT	-	-	-	⅞"	-	4	1	2	4	7
FD-1		TOILET RM. DRAIN	3"	-	-	-	-	-	-	-	-	-
FD-2		EQUIPMENT RM. DRAIN	3"	-	-	-	-	-	-	-	-	-
RD-1		ROOF DRAIN	3"	-	-	-	-	-	-	-	-	-

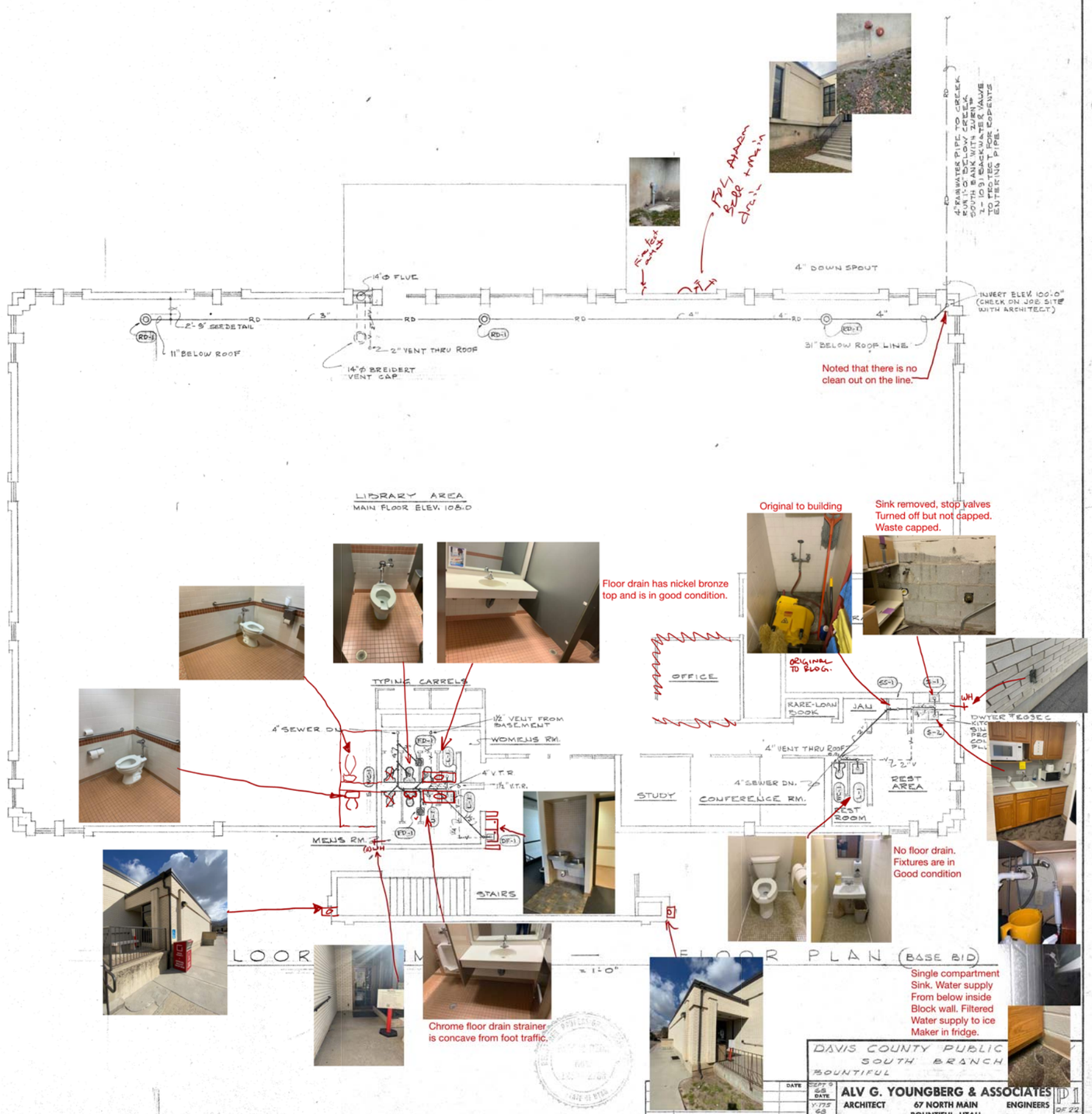
KITCHEN UNIT SUPPLIED BY OTHERS, CONNECTED BY PLUMBER.



TYPICAL ROOF VENT DETAIL (V.T.R.)
NOT TO SCALE



TYPICAL INSTALLATION OF ROOF DRAINS (RD-1
NOT TO SCALE



FLOOR PLAN (BASE BID)
1/4" = 1'-0"

DAVIS COUNTY PUBLIC
SOUTH BRANCH
BOUNTIFUL

DATE: SEPT 9
DATE:
V-175
JOB NO.

ALV G. YOUNGBERG & ASSOCIATES
ARCHITECT 67 NORTH MAIN ENGINEERS
BOUNTIFUL, UTAH

P1
SHEET OF 22

SECTION F

ELECTRICAL, FIRE ALARM, AUDIO VISUAL SYSTEMS EVALUATION

Bountiful Library
Electrical Assessment Report

April 15th, 2021

Introduction & Background

The purpose of this study is to evaluate the existing electrical related systems for the Bountiful Library – South Branch, located in at 725 South Main Street, Bountiful, Utah. The Library was originally constructed in 1968. The specific scope of this study includes onsite field observations, review of the as-built drawings, reporting of conditions and recommendations for the power, lighting, and other electrical related systems in the building. To complete this study field investigation was performed to observe, document, and take pictures of accessible areas of the building.

The following sections of this report provide an evaluation of the buildings individual electrical systems along with observed potential code violations, safety concerns or other deficiencies of each system. These are followed by recommendations proposed to resolve these deficiencies.

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Existing Conditions and Electrical System Analysis

1. Electrical Service and Power

a. Electrical service is provided by Bountiful City Light & Power. The building is fed from a pad mounted 300KVA transformer. In addition to the library building meter, the same transformer feeds another meter, which is believed to be associated to one of the adjacent buildings.



Exhibit 1 – Utility transformer and meter #1



Exhibit 2 – Utility transformer and meter #2

b. The secondary conductors are run underground from the transformer to 120/208V, 3ph, 4w, 600A main panel 'M' located in the mechanical room on the lower level. The maximum peak demand for a period of 1/20/2020-1/20/2021 is 98.95KW. Assuming the power factor of 0.9, the peak demand is 305 Amps. The service panel size seems to be adequate for the current loads. The main service disconnect is located in panel 'M'. The main panel seems to be original to the building. It has exceeded its useful life and should be replaced as soon as possible. Breakers may not all be functioning properly and show no signs of testing. It is not clear if the equipment is installed above flood plain or not. This should be evaluated as renovations are considered.

c. Grounding and bonding systems, including grounding electrodes and bonding jumpers, were not completely accessible or visible during the site observations. The only observed grounding electrode was water pipe. These portions of the electrical system are critical to safety and power quality of the system. Further investigation should be done to confirm the existence, resistance readings and condition of the grounding and bonding systems. A licensed electrician will be required to safely open and check these systems.



Exhibit 3 – Existing water main grounding electrode



Exhibit 4 – Dedicated equipment space above panel 'M'

d. A large mechanical duct is located above main panel 'M' which not in compliance with *NEC 110.26 (E).* A new dedicated space for main service panel should be considered if renovations take place.

e. The main panel feeds the individual 120/208V lighting and appliance panelboards as well as the elevator and mechanical equipment in the library. Panels are distributed at different areas around the building to serve electrical loads near-by.

f. Exposed conduits routed inside the buildings appear to have been protected for the most part, but there are some EMT conduits are not properly supported as required by *NEC 358.30*.

g. The existing outlets seem to be in fair condition.

h. Some of the electrical panels appear to be original to the building construction. Most of the panels are Square D brand, but we also discovered an old ITE panel (today Siemens). The original panels are past their useful life and should be replaced with new as soon as possible. Our recommendation is that all distribution equipment and panels, with exception to possibly the recently replaced panels, be replaced with new.



Exhibit 5 – Panelboard 'C' in janitor closet



Exhibit 6 – ITE panelboard

i. Panelboard 'C' is located in the janitor closet on main level. Working clearance directly in front of the panelboard (*NEC 110.26(A)*) is not sufficient and may cause a working hazard for any staff required to perform maintenance on it while energized. An alternate, more accessible location should be provided.

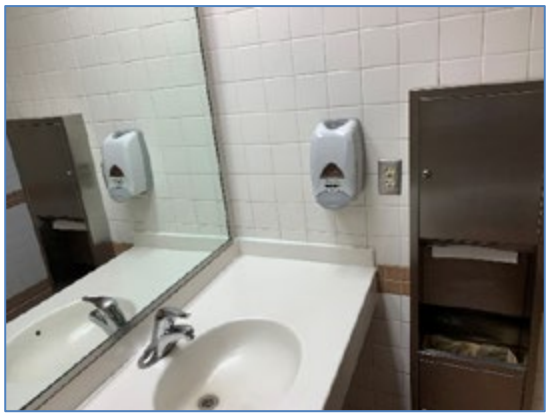


Exhibit 7 – One of the non-GFCI restroom outlets



Exhibit 8 – Abandoned conduits and wiring in mechanical room

j. The existing restroom outlets are not GFCI protected as required in *NEC 210.8 (B)(1)*. These should be corrected and replaced as soon as possible to reduce potential for shock hazard.

k. A GFCI outlet (required by Elevator code) is not provided in the elevator machine room.

l. Over the years expansions and remodels have led to having abandoned conduit, wiring and equipment throughout the building. This abandoned equipment and wiring can lead to confusion, clutter, and safety hazards/violations with NEC. These items should be removed from the building or labeled at both ends if they may be needed in the future.

m. There were no visible surge suppression devices installed at this building. It is recommended to install surge suppression devices on the main service panel and at the selected panelboards that serve sensitive loads or expensive equipment.

2. Lighting Systems

a. Majority of the building has surface or recessed florescent T8 troffers. The recessed downlights have compact fluorescent bulbs. Incandescent bulbs are still present in a few areas.

b. Existing light sources are outdated and inefficient. All existing light fixtures and bulbs are recommended to be replaced with new LED lighting. Each space will need to be evaluated individually to determine the extent of the upgrade needed.



Exhibit 9 – T8 recessed parabolic troffers

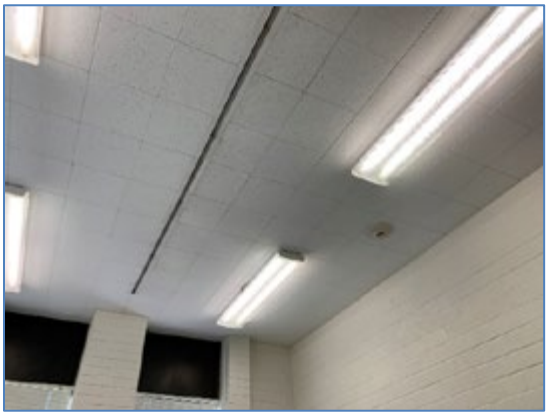


Exhibit 10 – T8 surface troffers



Exhibit 11 – Compact fluorescent downlights

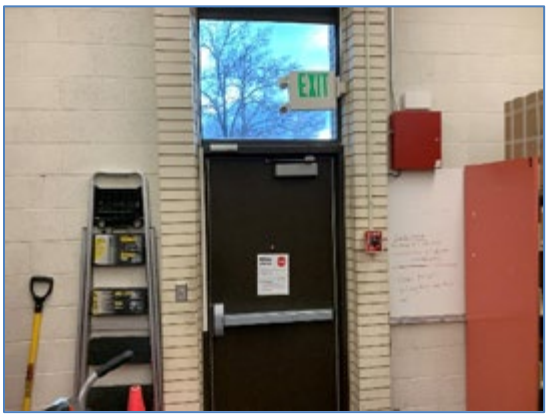


Exhibit 12 – Exit sign/emergency bug-eye combo

c. Existing lighting controls consist solely of the toggle switches. There is a lighting control panel in the storage room on the main level that appears to be controlling large library areas. Significant upgrades to the interior and exterior lighting control systems are needed to meet the latest energy codes. There are opportunities for energy savings by installing lighting controls such as occupancy sensors and timed relay controls.

d. Modifications to the interior or exterior lighting over 10% will require that the lighting meet the latest International Energy Codes. This will require LED sources at most all locations and additional lighting controls to reduce energy usage.

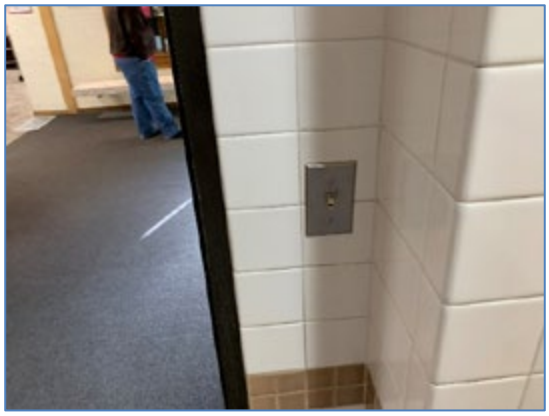


Exhibit 13 – Interior lighting toggle switch



Exhibit 14 – Interior lighting control panel

3. Fire Alarm System

a. A complete code analysis should be done with the different renovation options to determine the latest fire alarm system requirements when renovations are performed.

b. The existing fire alarm system is Silent Knight. The system appears to be in good condition.

c. Fire alarm smoke and heat detectors (required by Elevator code) are not provided in the elevator machine room.

d. The existing fire alarm devices are present in red and white finishes. Some of the devices appear to be installed at the heights that exceed those allowed by code (i.e. horn-strobe in *Exhibit 14*).



Exhibit 15 – Fire alarm control panel (Silent Knight, IFP-50)

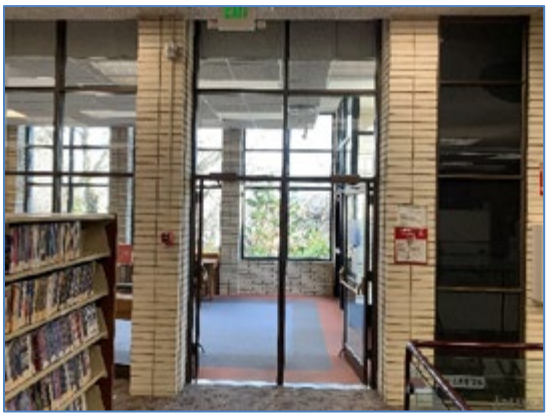


Exhibit 16 – Fire alarm pull station and horn-strobe

4. Telecommunications System

a. The original analog telephone wiring (CAT 3) is abandoned in place. It has been replaced with CAT 5 network data cabling fed from more recent telecom racks. It is recommended that any older cabinets, blocks, conduit, and wiring be removed in all areas. The newer data cabling has not been routed as orderly as it could have and proper supports and penetrations through ceilings and walls should be considered during any future renovations.



Exhibit 17 – Data rack in storage room on lower level

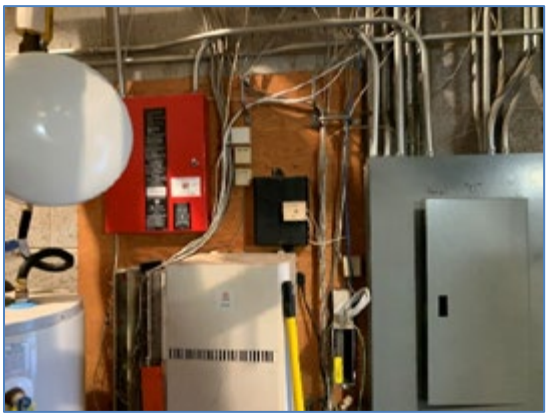


Exhibit 18 – Abandoned analog cables

b. The server and network switches are located in the storage room in the lower level. Another network switch is located behind the partition wall in the library area on the main level. This switch should be relocated and placed in a conditioned dedicated telecom room and telecom enclosure.

c. The data racks appear to be in good condition. They are open racks others are enclosed in a closet or cabinet. Dedicated cooling system for the telecom racks does not appear to be provided. A dedicated telecom room and split system HVAC systems should be considered for the telecom racks to extend the life of the equipment.



Exhibit 17 – Data rack in storage room on lower level



Exhibit 18 – Wireless access point

d. It is also recommended to consider providing additional stand-by power distribution from any future backup generator to allow for backup of data equipment, in addition to the UPS. This will help the UPS equipment to maintain charge and extend their operational life as well as remain operational throughout outages.

e. Wireless Access Points (WAP) are provided throughout the building. A detailed heat map analysis should be performed to determine the WAP coverage.

f. Depending on the Owner's needs and desires, the telecommunication system may require a simple or a more complex upgrade. The telecommunication system needs also depend on the complexity of the other electronic systems such as video surveillance and audio/video system.

5. Security Systems

a. The current security system consists of Aviglion video surveillance system and iMag access control system with HiD card readers.

b. In discussion with the Owner representatives, we found that the video surveillance system is newer and operates as expected. The access control system does not appear to be meeting Owner's expectations and may need to be upgraded.

c. Depending on the Owner's needs and desires, the video surveillance and access control systems may require a simple or a more complex upgrade.

6. Audio/Video

a. The existing Audio/Video system is simple, and it consists of an audio cabinet, a few microphone inputs, and two speakers all located in the auditorium on the lower level. Additional speakers are present in the small conference room on the lower level.



Exhibit 19 – Audio cabinet in the auditorium on lower level

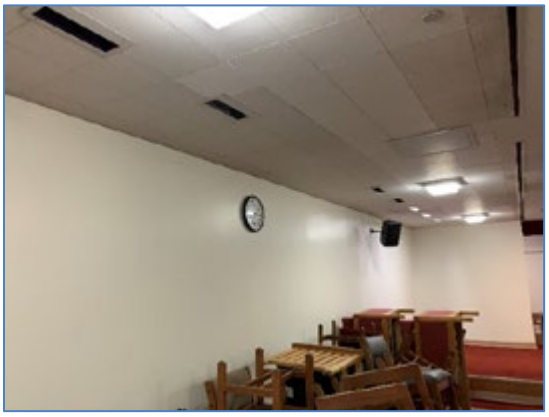


Exhibit 20 – Speaker in the auditorium on lower level

b. Depending on the Owner's needs and desires, the audio/video system may require a simple or a more complex upgrade.

Recommendations

The following table summarizes the list of the recommended upgraded. All recommended upgrades are prioritized from 1 to 3, where:

1 → Highly recommended upgrades (code violations, life safety, fire hazards, outdated systems, poor conditions, and similar)
2 → Recommended upgrades (border line code violations, upgrades that provide additional comfort and flexibility, technology upgrades)
3 → Optional upgrades (owner desired upgrades)

System	Recommended Upgrade	Priority
Electrical service	• Replace and relocate main service panel and feeder.	1
Electrical distribution	• Replace and relocated existing panelboards and associated feeders. New location shall comply with *NEC 110.26*. • Replace panelboard feeders.	1
Emergency and Standby system	• Provide emergency/standby generator and ATS switches for emergency and standby loads.	3
Grounding and bonding	• Provide new grounding electrodes and properly ground new electrical system and equipment.	1
Electrical conduits and wiring	• Provide new support for existing conduits that are to be reused.	1
GFCI outlets	• Replace non-GFCI outlets with GFCI outlets in all locations specified in *NEC 210.8 (B)*. • Provide GFCI outlet in the elevator machine room.	1
Outlets and branch circuit wiring	• Provide additional outlets, replace damaged outlets, and replace branch circuit wiring as needed.	3
Lighting	• Replace all interior and exterior lighting with new LED lights. • Provide new battery packs for egress lighting and exit signs (if new generator is not provided).	1
Lighting controls	• Provide new lighting controls as needed to comply with the latest adopted IECC.	1
Telecommunication system 1	• Relocate existing network switch from behind the partition wall in the library area on level 1. • Replace CAT 5 with CAT 6 and CAT 6A cables.	1
Telecommunication system 2	• Provide dedicated telecom room with proper cooling for all telecom racks and equipment. • Remove unused data cables and equipment.	2
Telecommunication system 3	• Provide heat map analysis to determine WPS coverage.	3
Fire Alarm system 1	• Provide code required initiating devices in the elevator machine room. • Fix fire alarm notification devices that are installed above code allowed heights.	1

Fire Alarm system 2	• Replace fire alarm devices so that all devices are of the same finish (red or white). • Significant building upgrades may warrant a complete fire alarm system upgrade.	2
Security systems	• As recommended by the Owner.	3
Audio/Video system	• As recommended by the Owner.	3

SECTION G

PROGRAMMATIC NEEDS EVALUATION

South Branch Program Summary Sheet

5/25/21

Room	Functional Requirements	South Branch: Current Program Area	South Branch: Proposed	South Branch: Work Stations	South Branch: Catalog Computers	South Branch: Internet Computers	Design Occupancy	Primary Adjacencies	Equipment (impacting program S.F.)	Furnishings & FF&E	Other Features	Notes
General Circulation												
Entry Vestibule	- Keep doors light and easy to use by patrons - Clear location of door switch ** New area **		120					Parking Entry/Lobby			walk-off mats	- Distance to desks should be considered to keep cold air away from desks. - Stagger opening cycle of interior and exterior doors to reduce infiltration of outside air. - Provide good and easily maintainable doors. Standard aluminum doors preferred by facilities.
Entry/Lobby	- Primary vertical circulation - Staging for Auditorium - Movable Display - Inviting space	542	500		2		20-30	Circulation Desk Auditorium Group Study/Conference Restrooms	- Built in Book Display - Community Display Board - Drinking Fountain - Electronic Sign	(2) Loose Chairs (1) Love Seat (1) End Table		- Transition between park and library (wet to dry) - Promote wayfinding through the library
Browse/Display	- Location of display units to "share" main walk through spine for the entire building; emphasize wayfinding - Spot lighting over or near display units is not required if there is good natural light in the space	1334	1500					Entry/Lobby	Copy machine " corral" serves dual use as mini display and an area to house equipment	(3) movable display units (1) small bulletin board (1) electronic signage (near entry)		- Electronic signage is "current", expected
Basement Browse/Display	- Location of display units to "share" main walk through spine for the entire building; emphasize wayfinding	3052	1500					Entry/Lobby	Copy machine " corral" serves dual use as mini display and an area to house equipment	(3) movable display units (1) small bulletin board (1) electronic signage (near entry)		- Electronic signage is "current", expected
		4,928	**3,620**									
Staff Areas												
Reference Desk	- Reference librarians to face entry doors - Direct line of sight to internet computers - Configure desk to allow quick access to the floor - Avoid shop corners on the desk	621	108	2			2	Circulation Desk Auditorium Internet Computers Work Room	- Custom Reference Desk - (2) Work Stations - (2) Receipt Printers - (2) barcode scanners - (1) Laser Printer	(2) Chairs	Access to wiring chase in desk	- Mounting position of computer to allow use of memory stick and easy access to turn on/off. - Circulation and reference desks should be in close proximity but separate. - Centerville and Syracuse have to small of desks - Farmington has good Reference Desk and slightly to long circulation desk - Use Farmington draws and back of desk configuration - Position self- checkout station so que does not interfere with general patron movement
Circulation Desk	- View to as much of the library as possible - Close to work room - Able to have up to 8 trucks behind desk		220	4			2	Work Room Hold Shelves	Custom Circulation Desk (no two tiered desks) - Built-in Drop Box - (4) Receipt Printers - (1) Laser Printer '- (4) work stations (1) Check in station (1) Registration Computer (2) General Work Stations - (1) Self checkout station (locate on circulation desk) Space for (8) trucks	(4) Chairs	Access to wiring chase in desk	
Basement Circulation Desk	- View to as much of the library as possible - Close to work room - Able to have up to 8 trucks behind desk ** Proposed a single circulation desk at the main entry of the building on Level 1	120	108	2			2	Work Room Hold Shelves	Custom Circulation Desk (no two tiered desks) - Built-in Drop Box - (4) Receipt Printers - (1) Laser Printer '- (4) work stations (1) Check in station (1) Registration Computer (2) General Work Stations - (1) Self checkout station (locate on circulation desk) Space for (8) trucks	(4) Chairs	Access to wiring chase in desk	

Basement Reference Desk	- Reference librarians to monitor vertical circulations - Direct line of sight to internet computers - Configure desk to allow quick access to the floor - Avoid shop corners on the desk - Close to the auditorium	100	220	2			2	Circulation Desk Auditorium Internet Computers Work Room	- Custom Reference Desk - (2) Work Stations - (2) Receipt Printers - (2) barcode scanners - (1) Laser Printer	(2) Chairs	Access to wiring chase in desk	
Staff Work Area	- Open/view to circulation desk - Allow librarians in work room to see patrons at circulation desk - Space for discard material - Space for projects - Access to book drop - Access to van loading zone	180	400	1			1	Circulation/Reference Desk Book Drop Van Parking	- (1) Work Station to process check-in - Scanner, receipt printer, laser printer - 8' work counter with upper cabinets - 6'-8' work counter for work station (verify counter depth is appropriate for computer) - 6-8 shelf sections for Holds - (6) shelves for Blood Trust Collection - Shelves for (12) delivery boxes - (2) CD Cabinets - Fax/copy machine - Keybox - First aid/defibrillator - 8x4 White board - Phone	(1) Chair Room for (4) book carts		- General office supplies to be stored in workroom - Verify door is big enough for book drop cart (3'-6")
Staff Lounge	- Place for staff to relax - Natural light	192	256				4	Staff Entrance	- Standard Refrigerator - Microwave - Bulletin Board - 8' Counter with upper cabinets and sink (with disposal) - (20) Half size staff Lockers - Coat storage	- (2) Recliner - Table - (4) chairs - Ice Machine	- Flooring that does not show dirt - Good storage - Separate door to the Exterior	Make sure hot water heater is close to sink. The ice machine is dependent on budget otherwise the freezer will require an ice maker kit. This room will be the buildings safe room and will require a dead bolt and an exit to the exterior
Wellness Room	Mothers Room, quite Room, meditation	0	60					Staff area	- Standard Refrigerator	- Recliner	-Acoustically Separated	
Staff Restroom	- Easily maintainable finishes - Acoustically separated	30	56				1	Breakroom or workroom	(1) Toilet (1) Sink		- Need a mirror that allows one to be "close up" e.g.: putting in contact lenses	Do not open up directly to staff lounge if possible
Managers/circulation supervisor Office	Shared office	0	220	2			2	Work Area Circulation/Reference Desk		- (2) work desks (system furniture) - (2) chairs - Small conversation table - (2) guest chairs		This will be a shared office. Discussed having a small conversation table that can be used for interviews and more informal discussions. - No sideways lateral files
		1,243	**1,648**									

Assembly

Auditorium/ Performance Space	- Place entry to auditorium to avoid disruption to rest of library - Maintain "line of sight" from public service desk - Acoustically separate air handlers from Auditorium - Acoustically separate from adjacent spaces - No platform	1581	1640				150-200	Entry/Vestibule Vertical Circulation Circulation Desk	Retractable Screen Ceiling Mounted Projector	200 Loose chairs xx Tables	Sound System Projector Drop down screen Window coverings (?)	- Should seat up to 200 - Needs to be a flexible space
AV Closet	- Similar to Farmington, a small closet to hold AV loose equipment as well as mounted equipment - Separate lock	0	16					Auditorium	Podium Microphone Stand Microphone Amp DVD		Ventilated closet	Will coordinate with DC IT Input for personal phones
Piano Storage	Large enough to easily move piano in and out	0	144					Auditorium	Baby Grand Piano		Double door to allow movement of piano	
Chair/Table Storage		0	120					Auditorium	- 200 Chairs - Vacuum - (6) 6' Life time table - (1) Movable whiteboard			

Quiet Study	- Allow 6-8 patrons space for quite study - Lots of natural light - Locatable by Patron - Window by door to room to allow for monitoring - Acoustically separated	0	120				2-4			(6) Wide carols with outlet (6) Chairs (2) Lounge Chairs	Adjustable shades	Provide door with half glass Provide outlet at carol table top
Flex Room 1	Movable walls between two small rooms; part of information commons	120	240				4	5-6 Internet Computers	Retractable Screen Projector White Board in cupboard	Small Table (4) Chairs	Adjustable shades	Open to other Flex Room via folding partition wall
Flex Room 2	Movable walls between two small rooms; part of information commons	0	240				4	5-6 Internet Computers	Retractable Screen Projector White Board in cupboard	Small Table (4) Chairs	Adjustable shades	Open to other Flex Room via folding partition wall
Tech Nook 1	GIS, 3D Printer, Scanner	0	130				2	Circulation or Reference Desk	GIS Computer 3D Printer Scanner	Small Table (2) Chairs		
Tech Nook 2	Video and Sound Editing Equipment Acoustically Separated	0	100				2	Circulation or Reference Desk	Computer Sound Equipment	Small Table (2) Chairs		
Tech Storage Closet	Storage Close for Information Closet	0	80					Circulation or Reference Desk				
Small Study Room	- Allow 6-8 patrons space for group work or meetings - Acoustically Separated - Natural Light	198	198				6	Circulation or Reference Desk	Retractable Screen Projector White Board in cupboard	(1) Conference Table (6) Chairs	Adjustable shades	Provide power at table for projector Provide windows to allow monitoring Provide glazing system with good acoustical performance
Large Study Room	- Allow 6-8 patrons space for group work or meetings - Acoustically Separated - Natural Light	775	775				6	Circulation or Reference Desk	Retractable Screen Projector White Board in cupboard	(1) Conference Table (6) Chairs	Adjustable shades	Provide power at table for projector Provide windows to allow monitoring Provide glazing system with good acoustical performance
		1,779	**1,958**									

Patron Spaces

Children Library - Children Non-Fiction - Children Fiction - Children Seating - Children Computers	- 39" between shelves - Provide line-of-sight from both Reference and Circulation Desks - Space to be flexible to allow movement of shelves/furnishings - Provide wheel chair turning space at end of rows - Easy to maneuver in stacks and find books	2249	2249		3	5		Reference Desk		- 3 'Cozy' seating area for 10-12 people	- Access Flooring - Run lights perpendicular to shelves to provide future flexibility.	- Reference Collection intergraded into Adult and Youth Collection
Adult/YA Library - Adult Reading - YA Stacks - Adult Reading - YA Reading - Periodicals - AV Collection	- 39" between shelves - Provide line-of-sight from both Reference and Circulation Desks - Space to be flexible to allow movement of shelves/furnishings - Provide wheel chair turning space at end of rows - Easy to maneuver in stacks and find books	7457	7457		4	20-25		Adult Reading YA Stacks Reference Desk	- 20 to 25 computers with 5 of those directly connected to the Information Commons	- Youth reading area should accommodate 6-10 '- Adult reading area should accommodate 8-10	- Access Flooring - Run lights perpendicular to shelves to provide future flexibility.	
		9,706	**9,706**									

Building Systems

Men's Restrooms 1 **(Ground Level)**	- Avoid sight lines into the restrooms - Sight lines from desks to restroom entries - Easily maintainable finishes	120	192					Entry/Lobby	(3) Toilets/Urinals (2)Sinks Baby Changing Station Garbage Can shelf/table for keys, purse, etc....		Finishes: tone down amount of stainless and glass - Phenolic partitions larger floor tiles Solid surface counters	Final plumbing fixture count will be determined as the floor plan is developed
Women's Restroom 1 **(Ground Level)**	- Avoid sight lines into the restrooms - Sight lines from desks to restroom entry's - Easily maintainable finishes	120	192					Entry/Lobby	(3) Toilets (2) Sinks Baby Changing Station Garbage Can		Finishes: tone down amount of stainless and glass - Phenolic partitions larger floor tiles	Final plumbing fixture count will be determined as the floor plan is developed
Men's Restrooms 2 **(Basement)**	- Avoid sight lines into the restrooms - sight lines from desks to restroom entry's - Easily maintainable finishes	72	192					Entry/Lobby	(3) Toilets/Urinals (2)Sinks Baby Changing Station Garbage Can shelf/table for keys, purse, etc....		Finishes: tone down amount of stainless and glass - Phenolic partitions larger floor tiles Solid surface counters	Final plumbing fixture count will be determined as the floor plan is developed
Women's Restroom 2 **(Basement)**	- Avoid sight lines into the restrooms - sight lines from desks to restroom entries - Easily maintainable finishes	72	192					Entry/Lobby	(3) Toilets (2) Sinks Baby Changing Station Garbage Can		Finishes: tone down amount of stainless and glass - Phenolic partitions larger floor tiles	Final plumbing fixture count will be determined as the floor plan is developed
Family Assist Restroom	- Sight lines from desks to restroom entries - Easily maintainable finishes	0	56					Entry/Lobby	(1) Toilet (1) Sink Baby Changing Station Garbage Can	Toddler Chair	Standard fixture height	- Not required if there is a Youth Restroom
Youth Restroom (unisex)	- Sight lines from desks to restroom entries - Easily maintainable finishes	112	56						(1) Toilet (1) Sink Baby Changing Station			- If the main restrooms are close enough this restroom will not be used. Discussed the potential risks of having a lockable room directly off of the youth area.
Janitor's Closet	- Opens to a hallway - Large enough to allow access to shelves and sink without moving equipment around - one on each level	16	50					Patron Restroom	- Service Sink - Storage Shelves - Broom and mop rack - Mobile chemical dispensing station - (2) vacuums - (1) rolling garbage - Rubbermaid - xx months of storage			
Mechanical Rooms	- HVAC equipment on grade - Limit lighting controls to parking lot - Away from public area - Acoustically Separated	888	1,400									Locate on Ground Level
Data Room/IS Closet	- Exclusive use for data and communication equipment and services '- One per level	16	160								- 3/4" plywood mounted on any wall where conduit enters the room. Plywood to be with 18" of conduit and 18" max. above finished floor - Independent split colling system to maintain a preferred temperature of 70 degrees year around	- Seal concrete floors - Single rack installation 8x10 room preferred - Min. (2) 4" conduits to an outside vault - Secured access to room - Ladder rack for wire management within room - See "Data Closet Requirements" for power needs

Electrical Room	- Exclusive use for electrical gear and services - One per level	20	160									
Security	- We will be using a security monitoring company – need to discuss wiring/keypad/motion sensor locations - We will be using access/proxy card readers on at least the staff entrance door – Mark and Marshall can provide additional information - Security cameras will be installed on exterior perimeter (Camera by County)	0	16						High Def camera on front door.			
Fire Riser Room		0	16									Locate in mechanical room
Storage	- Open to outside - Provide a double door	682	64						Snow Blower ATV		8' shelving on three walls	Exterior and interior storage
Basement Storage 1	- Open to outside - Provide a double door	259	0									
Basement Storage 2	- Open to outside - Provide a double door	630	0									
		3,007	**2,746**									
	Total Programmed Gross Sq. Ft.	**20,663**	**19,678**									

Exterior

Library Van Parking/Drop off area												
Book Drop	- Signage for patron navigation - Avoid tight turns with excessive curb and gutter - Provide route for carts								(2) Book Drops			Use same box that is at Farmington
Flag Pole												Lights mounted in ground have been a problem at CTV and HD. Flag accent lights to be building mounted
Entry Plaza	- Entry plaza is inviting and colorful									Bench seating		
Outdoor Spaces	- Intergrade into Park - Promotes wayfinding - Inviting - Easy maintained									Bench seating		- Landscaping requests – no pea gravel or mulch that tends to blow away in the wind - Parking lot – where do we push snow? - Light fixtures – design so they are functional, fit into the overall park design and yet are easily maintained – include the option of a banner arm - Include an electrical outlet somewhere on "islands" in the parking lot to facilitate maintenance/programming needs - No pavers - Dumpster enclosure to be truck accessible - Exterior should welcome and invite the patron to enter and to make use of that landscaped space - Adequate parking spaces

SECTION H

COST ESTIMATES

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…..DCL SOUTH DAVIS BRANCH **RENOVATION & VESTIBULE ADDITION**
LOCATION……..……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…..FFKR SF 24,492
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	BUILDING COST ESTIMATE			
02	EXISTING CONDITIONS		$ 8.35	$ 204,447
03	CONCRETE		$ 1.39	$ 34,102
04	MASONRY		$ 1.23	$ 30,138
05	METALS		$ 2.56	$ 62,820
06	WOODS & PLASTICS		$ 10.55	$ 258,391
07	THERMAL & MOISTURE PROTECTION		$ 18.95	$ 464,041
08	DOORS & WINDOWS		$ 13.21	$ 323,624
09	FINISHES		$ 54.26	$ 1,328,928
10	SPECIALTIES		$ 5.00	$ 122,460
11	EQUIPMENT		$ -	$ -
12	FURNISHINGS		$ 0.92	$ 22,644
13	SPECIAL CONSTRUCTION		$ 39.35	$ 963,680
14	CONVEYING SYSTEMS		$ 3.47	$ 85,000
21	FIRE SUPPRESSION		$ 4.00	$ 97,968
22	PLUMBING		$ 9.98	$ 244,520
23	HVAC		$ 40.98	$ 1,003,772
26	ELECTRICAL		$ 27.98	$ 685,376
27	COMMUNICATION		$ 15.00	$ 367,380
28	ELECTRONIC SAFETY AND SECURITY		$ 5.25	$ 128,583
31	EARTHWORK		$ 0.14	$ 3,463
32	EXTERIOR IMPROVEMENTS		$ 25.13	$ 615,390
33	SITE UTILITIES		$ 2.86	$ 70,000
	SUBTOTAL		$ 290.57	$ 7,116,726
	GENERAL CONDITIONS	8%	$ 23.25	$ 569,338
	OVERHEAD & PROFIT	4%	$ 11.62	$ 284,669
	BONDS & INSURANCE	2%	$ 5.81	$ 142,335
	DESIGN CONTINGENCY	15%	$ 43.59	$ 1,067,509
	TOTAL CONSTRUCTION COST		$ 374.84	$ 9,180,576

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…DCL SOUTH DAVIS BRANCH **RENOVATION & VESTIBULE ADDITION**
LOCATION……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…FFKR SF 24,492
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**			
	Remove Roofing	24,092 SF	$ 1.50	$ 36,138
	Remove Ceilings	24,092 SF	$ 0.99	$ 23,851
	Remove Flooring	24,092 SF	$ 0.89	$ 21,442
	Interior Finishes, Millwork Removal	24,092 SF	$ 3.50	$ 84,322
	Interior Slab Removal Allowance	2,409 SF	$ 3.50	$ 8,432
	Sawcutting & Core Drilling	1 Allow	$ 10,000.00	$ 10,000
	Hazardous Material Abatement			NIC
	Site Demolition at Vestibule Addition	600 SF	$ 3.00	$ 1,800
	Site Clearing & Demolition	41,026 SF	$ 0.45	$ 18,462
	TOTAL EXISTING CONDITIONS			**$ 204,447**
03	**CONCRETE**			
	Continuous Footing at Vestibule Addition	10 CY	$ 395.00	$ 3,950
	Foundation Wall at Vestibule Addition	160 SF	$ 40.00	$ 6,400
	Floor Slab at Vestibule Addition	400 SF	$ 3.95	$ 1,580
	Vapor Barrier	400 SF	$ 0.20	$ 80
	Existing Concrete Seismic Upgrade			Div. 13
	Slab Patching Where Removed	2,409 SF	$ 5.00	$ 12,046
	Floor Patching & Level	20,092 SF	$ 0.50	$ 10,046
	TOTAL CONCRETE			**$ 34,102**
04	**MASONRY**			
	Misc. Masonry Repair, Patch at New Glazing	20,092 SF	$ 1.50	$ 30,138
	TOTAL MASONRY			**$ 30,138**
05	**METALS**			
	Metal Roof Structure at Vestibule Addition (12 LBS/SF)	4,800 LBS	$ 2.40	$ 11,520
	Metal Roof Deck at Vestibule Addition	400 SF	$ 3.25	$ 1,300
	Structural Modification at New Glazing	1 Allow	$ 50,000.00	$ 50,000
	Structural Steel Seismic Upgrade			Div. 13
	TOTAL METALS			**$ 62,820**
06	**WOOD & PLASTICS**			
	Carpentry			
	Wood Plates & Blocking	24,492 SF	$ 0.55	$ 13,471
	Subtotal for Carpentry			**$ 13,471**
	Millwork			
	Building Millwork	24,492 SF	$ 10.00	$ 244,920
	Stacks & Stack Ends			By Others
	Subtotal Millwork			**$ 244,920**
	TOTAL WOOD & PLASTICS			**$ 258,391**
07	**THERMAL & MOISTURE PROTECTION**			
	Roof Membrane	24,492 SF	$ 3.75	$ 91,845
	Rigid Roof Insulation	24,492 SF	$ 3.85	$ 94,294

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…DCL SOUTH DAVIS BRANCH **RENOVATION & VESTIBULE ADDITION**
LOCATION……..……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…..FFKR SF 24,492
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Roof Weather Barrier	24,492 SF	$ 3.25	$ 79,599
	Roof Protection Board	24,492 SF	$ 1.85	$ 45,310
	Rigid Wall Insulation	8,745 SF	$ 2.65	$ 23,174
	Weather Barrier	15,525 SF	$ 3.25	$ 50,456
	Foundation Insulation	5,880 SF	$ 2.25	$ 13,230
	Wall Batt Insulation	8,745 SF	$ 0.75	$ 6,559
	Exterior Sheathing at Vestibule Addition	900 SF	$ 1.85	$ 1,665
	Exterior Wall Finish at Vestibule Addition	900 SF	$ 40.00	$ 36,000
	Metal Wall Cap	523 LF	$ 12.50	$ 6,538
	Flashing & Sheet Metal	1,046 SF	$ 6.50	$ 6,799
	Caulking & Sealants	24,492 SF	$ 0.35	$ 8,572
	TOTAL THERMAL & MOISTURE PROTECTION			**$ 464,041**
08	**DOORS & WINDOWS**			
	Doors - Interior & Exterior	24,492 SF	$ 7.00	$ 171,444
	Exterior Storefront	1,790 SF	$ 42.00	$ 75,180
	Additional Exterior Storefront	1,000 SF	$ 42.00	$ 42,000
	Interior Glazing Allowance	1,000 SF	$ 35.00	$ 35,000
	TOTAL DOORS & WINDOWS			**$ 323,624**
09	**FINISHES**			
	Exterior Wall Framing at Vestibule Addition	900 SF	$ 4.00	$ 3,600
	Furring at Exterior Wall	15,525 SF	$ 2.95	$ 45,799
	Interior Partitions	36,738 SF	$ 2.95	$ 108,377
	Gyp. Wallboard	89,901 SF	$ 2.05	$ 184,297
	Ceilings	24,492 SF	$ 8.00	$ 195,936
	Flooring	24,492 SF	$ 10.00	$ 244,920
	Raised Access Floor			N/A
	Base	5,993 LF	$ 3.50	$ 20,977
	Paint Interior Gyp	89,901 SF	$ 0.84	$ 75,517
	Wall Finishes, Slatwall, Wall Protection	89,901 SF	$ 5.00	$ 449,505
	TOTAL FINISHES			**$ 1,328,928**
10	**SPECIALTIES**			
	Building Specialties	24,492 SF	$ 5.00	$ 122,460
	TOTAL SPECIALTIES			**$ 122,460**
11	**EQUIPMENT**			
	TOTAL EQUIPMENT			**$ -**
12	**FURNISHINGS**			
	Window Coverings	1,790 SF	$ 12.65	$ 22,644
	TOTAL FURNISHINGS			**$ 22,644**
13	**SPECIAL CONSTRUCTION**			
	Building Seismic Upgrade - Concrete, Masonry, Steel	24,092 SF	$ 40.00	$ 963,680

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			5/25/2021
PROJECT NAME……..…..DCL SOUTH DAVIS BRANCH		**RENOVATION & VESTIBULE ADDITION**		
LOCATION……..……..……BOUNTIFUL, UT				
ARCHITECT…..…..…..…..FFKR		SF	24,492	
STAGE OF DESIGN……CONCEPT				

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	TOTAL SPECIAL CONSTRUCTION			**$ 963,680**
14	**CONVEYING SYSTEMS**			
	Replace Passenger Elevator - 2 Stop	1 EA	$ 85,000.00	$ 85,000
	TOTAL CONVEYING SYSTEMS			**$ 85,000**
21	**FIRE SUPPRESSION**	24,492 SF	$ 4.00	**$ 97,968**
22	**PLUMBING**			
	Plumbing Demolition	24,092 SF	$ 1.00	**$ 24,092**
	Building Plumbing	24,492 SF	$ 9.00	**$ 220,428**
	TOTAL PLUMBING			**$ 244,520**
23	**HVAC**			
	HVAC Demolition	24,092 SF	$ 1.00	**$ 24,092**
	HVAC	24,492 SF	$ 40.00	**$ 979,680**
	TOTAL HVAC			**$ 1,003,772**
26	**ELECTRICAL**			
	Electrical Demolition	24,092 SF	$ 1.00	**$ 24,092**
	Service & Distribution	24,492 SF	$ 8.00	**$ 195,936**
	Power	24,492 SF	$ 6.00	**$ 146,952**
	Lighting	24,492 SF	$ 13.00	**$ 318,396**
	TOTAL ELECTRICAL			**$ 685,376**
27	**COMMUNICATION & AV**			
	Telecommunications	24,492 SF	$ 5.00	**$ 122,460**
	A/V	24,492 SF	$ 10.00	**$ 244,920**
	TOTAL COMMUNICATION & AV			**$ 367,380**
28	**ELECTRONIC SAFETY & SECURITY**			
	Fire Alarm System	24,492 SF	$ 2.75	**$ 67,353**
	Security System, Surveillance	24,492 SF	$ 2.50	**$ 61,230**
	TOTAL ELECTRONIC SAFETY AND SECURITY			**$ 128,583**
31	**EARTHWORK**			
	Excavation at Vestibule Addition	44 CY	$ 25.00	$ 1,111
	Backfill & Compact at Vestibule Addition	13 CY	$ 35.00	$ 467
	Haul Away Excess	44 CY	$ 25.00	$ 1,111

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			5/25/2021
PROJECT NAME……..…DCL SOUTH DAVIS BRANCH		**RENOVATION & VESTIBULE ADDITION**		
LOCATION……..……..……BOUNTIFUL, UT				
ARCHITECT…..…..…..…..FFKR		SF	24,492	
STAGE OF DESIGN……CONCEPT				

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Gravel Under Slab	8 Ton	$ 35.00	$ 274
	SWPPP	1 LS	$ 500.00	$ 500
	TOTAL EARTHWORK			**$ 3,463**
32	**EXTERIOR IMPROVEMENTS**			
	Site Improvements	41,026 SF	$ 15.00	$ 615,390
	TOTAL EXTERIOR IMPROVEMENTS			**$ 615,390**
33	**SITE UTILITIES**			
	Water Utility			Existing
	Fire Utility			Existing
	Sewer Utility			Existing
	Storm Drainage	1 LS	$ 70,000.00	$ 70,000
	Gas Line			Existing
	Communications Utility			Existing
	TOTAL SITE UTILITIES			**$ 70,000**

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…..DCL SOUTH DAVIS BRANCH **REPLACEMENT**
LOCATION……..……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…..FFKR SF 24,000
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	BUILDING COST ESTIMATE			
02	EXISTING CONDITIONS		$ 7.95	$ 190,711
03	CONCRETE		$ 11.08	$ 265,900
04	MASONRY		$ 8.39	$ 201,344
05	METALS		$ 31.80	$ 763,165
06	WOODS & PLASTICS		$ 10.55	$ 253,200
07	THERMAL & MOISTURE PROTECTION		$ 18.69	$ 448,536
08	DOORS & WINDOWS		$ 20.21	$ 484,982
09	FINISHES		$ 59.49	$ 1,427,846
10	SPECIALTIES		$ 5.00	$ 120,000
11	EQUIPMENT		$ -	$ -
12	FURNISHINGS		$ 1.22	$ 29,388
13	SPECIAL CONSTRUCTION		$ -	$ -
14	CONVEYING SYSTEMS		$ 3.96	$ 95,000
21	FIRE SUPPRESSION		$ 4.00	$ 96,000
22	PLUMBING		$ 9.00	$ 216,000
23	HVAC		$ 40.00	$ 960,000
26	ELECTRICAL		$ 27.00	$ 648,000
27	COMMUNICATION		$ 15.00	$ 360,000
28	ELECTRONIC SAFETY AND SECURITY		$ 5.25	$ 126,000
31	EARTHWORK		$ 8.58	$ 205,868
32	EXTERIOR IMPROVEMENTS		$ 34.17	$ 820,000
33	SITE UTILITIES		$ 8.33	$ 200,000
	SUBTOTAL		$ 329.66	$ 7,911,941
	GENERAL CONDITIONS	8%	$ 26.37	$ 632,955
	OVERHEAD & PROFIT	4%	$ 13.19	$ 316,478
	BONDS & INSURANCE	2%	$ 6.59	$ 158,239
	DESIGN CONTINGENCY	15%	$ 49.45	$ 1,186,791
	TOTAL CONSTRUCTION COST		$ 425.27	$ 10,206,404

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…DCL SOUTH DAVIS BRANCH **REPLACEMENT**
LOCATION……..……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…..FFKR SF 24,000
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**			
	Demolish Existing Building	361,380 CF	$ 0.45	$ 162,621
	Hazardous Materials			NIC
	Site Clearing & Demolition	53,000 SF	$ 0.53	$ 28,090
	TOTAL EXISTING CONDITIONS			**$ 190,711**
03	**CONCRETE**			
	Continuous Footing	100 CY	$ 395.00	$ 39,500
	Spot Footing	100 CY	$ 398.00	$ 39,800
	Foundation Wall	1,760 SF	$ 40.00	$ 70,400
	Elevator Pit	1 Allow	$ 15,000.00	$ 15,000
	Recessed Slab at RAF	100 SF	$ 40.00	$ 4,000
	Slab On Grade	12,000 SF	$ 3.95	$ 47,400
	Topping Slab	12,000 SF	$ 3.95	$ 47,400
	Vapor Barrier	12,000 SF	$ 0.20	$ 2,400
	TOTAL CONCRETE			**$ 265,900**
04	**MASONRY**			
	Masonry Veneer (50% of Exterior)	7,744 SF	$ 26.00	$ 201,344
	TOTAL MASONRY			**$ 201,344**
05	**METALS**			
	Floor Structural Steel (13 LBS/SF)	156,000 LB	$ 2.40	$ 374,400
	Roof Structural Steel (9 LBS/SF)	108,000 LB	$ 2.40	$ 259,200
	Metal Floor Deck	12,000 SF	$ 3.25	$ 39,000
	Metal Roof Deck	12,000 SF	$ 3.25	$ 39,000
	Decorative Stair	150 SF	$ 150.00	$ 22,500
	Decorative Freestanding Rail	35 LF	$ 355.00	$ 12,425
	Metal Pan Stairs	150 SF	$ 55.00	$ 8,250
	Freestanding Rail	22 LF	$ 295.00	$ 6,490
	Wall Rail	20 LF	$ 95.00	$ 1,900
	TOTAL METALS			**$ 763,165**
06	**WOOD & PLASTICS**			
	Carpentry			
	Wood Plates & Blocking	24,000 SF	$ 0.55	$ 13,200
	Subtotal for Carpentry			**$ 13,200**
	Millwork			
	Building Millwork	24,000 SF	$ 10.00	$ 240,000
	Stacks & Stack Ends			By Others
	Subtotal Millwork			**$ 240,000**
	TOTAL WOOD & PLASTICS			**$ 253,200**
07	**THERMAL & MOISTURE PROTECTION**			
	Roof Membrane	12,000 SF	$ 3.75	$ 45,000
	Rigid Roof Insulation	12,000 SF	$ 3.85	$ 46,200

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	5/25/2021

PROJECT NAME……..…DCL SOUTH DAVIS BRANCH **REPLACEMENT**
LOCATION……..……BOUNTIFUL, UT
ARCHITECT…..…..…..…FFKR SF 24,000
STAGE OF DESIGN……CONCEPT

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
	Roof Weather Barrier	12,000 SF	$ 3.25	$ 39,000
	Roof Protection Board	12,000 SF	$ 1.75	$ 21,000
	Rigid Wall Insulation	15,488 SF	$ 2.65	$ 41,043
	Weather Barrier	15,488 SF	$ 3.25	$ 50,336
	Exterior Sheathing	15,488 SF	$ 1.85	$ 28,653
	Exterior Wall Finish (20% of Exterior Surface)	3,098 SF	$ 40.00	$ 123,904
	Foundation Insulation	1,200 SF	$ 2.25	$ 2,700
	Wall Batt Insulation	36,000 SF	$ 0.75	$ 27,000
	Metal Wall Cap	600 LF	$ 12.50	$ 7,500
	Flashing & Sheet Metal	1,200 SF	$ 6.50	$ 7,800
	Caulking & Sealants	24,000 SF	$ 0.35	$ 8,400
	TOTAL THERMAL & MOISTURE PROTECTION			**$ 448,536**
08	**DOORS & WINDOWS**			
	Doors - Interior & Exterior	24,000 SF	$ 7.00	$ 168,000
	Exterior Storefront (15% of Exterior Surface)	2,323 SF	$ 42.00	$ 97,574
	Exterior Curtainwall (15% of Exterior Surface)	2,323 SF	$ 65.00	$ 151,008
	Interior Glazing Allowance	1,800 SF	$ 38.00	$ 68,400
	TOTAL DOORS & WINDOWS			**$ 484,982**
09	**FINISHES**			
	Exterior Wall Framing	15,488 SF	$ 4.00	$ 61,952
	Interior Partitions	36,000 SF	$ 2.95	$ 106,200
	Gyp. Wallboard	87,488 SF	$ 2.05	$ 179,350
	Ceilings	24,000 SF	$ 8.00	$ 192,000
	Flooring	24,000 SF	$ 10.00	$ 240,000
	Raised Access Floor Allowance	6,000 SF	$ 19.50	$ 117,000
	Base	5,833 LF	$ 3.50	$ 20,414
	Paint Interior Gyp	87,488 SF	$ 0.84	$ 73,490
	Wall Finishes, Slatwall, Wall Protection	87,488 SF	$ 5.00	$ 437,440
	TOTAL FINISHES			**$ 1,427,846**
10	**SPECIALTIES**			
	Building Specialties	24,000 SF	$ 5.00	$ 120,000
	TOTAL SPECIALTIES			**$ 120,000**
11	**EQUIPMENT**			
	TOTAL EQUIPMENT			**$ -**
12	**FURNISHINGS**			
	Window Coverings	2,323 SF	$ 12.65	$ 29,388
	TOTAL FURNISHINGS			**$ 29,388**
13	**SPECIAL CONSTRUCTION**			
	TOTAL SPECIAL CONSTRUCTION			**$ -**

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			5/25/2021
PROJECT NAME……..…DCL SOUTH DAVIS BRANCH			**REPLACEMENT**	
LOCATION……..……BOUNTIFUL, UT				
ARCHITECT…..…..…..…..FFKR		SF	24,000	
STAGE OF DESIGN……CONCEPT				

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
14	**CONVEYING SYSTEMS**			
	Passenger Elevator - 2 Stop	1 EA	$ 95,000.00	$ 95,000
	TOTAL CONVEYING SYSTEMS			**$ 95,000**
21	**FIRE SUPPRESSION**	24,000 SF	$ 4.00	**$ 96,000**
22	**PLUMBING**			
	Building Plumbing	24,000 SF	$ 9.00	**$ 216,000**
	TOTAL PLUMBING			**$ 216,000**
23	**HVAC**			
	HVAC	24,000 SF	$ 40.00	**$ 960,000**
	TOTAL HVAC			**$ 960,000**
26	**ELECTRICAL**			
	Service & Distribution	24,000 SF	$ 8.00	**$ 192,000**
	Power	24,000 SF	$ 6.00	**$ 144,000**
	Lighting	24,000 SF	$ 13.00	**$ 312,000**
	TOTAL ELECTRICAL			**$ 648,000**
27	**COMMUNICATION & AV**			
	Telecommunications	24,000 SF	$ 5.00	**$ 120,000**
	A/V	24,000 SF	$ 10.00	**$ 240,000**
	TOTAL COMMUNICATION & AV			**$ 360,000**
28	**ELECTRONIC SAFETY & SECURITY**			
	Fire Alarm System	24,000 SF	$ 2.75	**$ 66,000**
	Security System, Surveillance	24,000 SF	$ 2.50	**$ 60,000**
	TOTAL ELECTRONIC SAFETY AND SECURITY			**$ 126,000**
31	**EARTHWORK**			
	Building Excavation	1,333 CY	$ 8.00	$ 10,667
	Backfill & Compact	267 CY	$ 30.00	$ 8,000
	Fill In Demolished Building Basement	4,435 CY	$ 30.00	$ 133,044
	Haul Away Excess	1,333 CY	$ 8.00	$ 10,667
	Gravel Under Slab	235 Ton	$ 30.00	$ 7,040
	Building Grading	12,000 SF	$ 0.53	$ 6,360
	Site Grading	41,000 SF	$ 0.49	$ 20,090
	SWPPP	1 LS	$ 10,000.00	$ 10,000
	TOTAL EARTHWORK			**$ 205,868**

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			5/25/2021
PROJECT NAME……..…DCL SOUTH DAVIS BRANCH			**REPLACEMENT**	
LOCATION……..……..……BOUNTIFUL, UT				
ARCHITECT…..…..…..…..FFKR		SF	24,000	
STAGE OF DESIGN……CONCEPT				

CSI #	DESCRIPTION	UNIT QTY	UNIT COST	TOTAL
32	**EXTERIOR IMPROVEMENTS**			
	Site Improvements	41,000 SF	$ 20.00	$ 820,000
	TOTAL EXTERIOR IMPROVEMENTS			**$ 820,000**
33	**SITE UTILITIES**			
	Water Utility	1 LS	$ 35,000.00	$ 35,000
	Fire Utility	1 LS	$ 35,000.00	$ 35,000
	Sewer Utility	1 LS	$ 30,000.00	$ 30,000
	Storm Drainage	1 LS	$ 70,000.00	$ 70,000
	Gas Line	1 LS	$ 15,000.00	$ 15,000
	Communications Utility	1 LS	$ 15,000.00	$ 15,000
	TOTAL SITE UTILITIES			**$ 200,000**