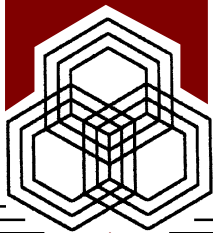




# BUILDING THE LIBRARY OF THE FUTURE

assessing service goals  
and space needs  
for  
Pines and Plains Libraries  
Elizabeth, CO

19 April 2024



---

Library Planning Associates, Inc.

P.O. Box 406    Normal, IL 61761



## TABLE OF CONTENTS

1	Executive Summary . . . . .	1
1.1	Scope of the study . . . . .	1
1.2	Key findings . . . . .	1
1.3	Moving forward. . . . .	2
2	Essential Planning Concepts . . . . .	3
2.1	Service goals determine a library's space need . . . . .	3
2.2	The planning horizon defines a long-range timetable. . . . .	5
2.3	Design population defines a context for future library services . . . . .	5
2.4	The library's mission statement conditions its services . . . . .	6
3	Pines & Plains Libraries – Current State . . . . .	7
3.1	Local trends in resources and services establish a foundation for future growth. . . . .	8
3.2	Comparative benchmarks with peer libraries provide a perspective for assessing library service . . . . .	10
3.3	Practical local realities drive an uncommon service configuration . . . . .	12
3.4	A library facilities "stress test" assesses conditions in the present buildings . . . . .	13
4	Pines & Plains Libraries – Community Input . . . . .	19
4.1	Characteristics of the P&PL service area . . . . .	19
4.2	How is the service area changing? . . . . .	20
4.3	What does Pines & Plains Libraries do well? . . . . .	20
4.4	How can Pines & Plains Libraries improve? . . . . .	21
5	Pines & Plains Libraries – Future State . . . . .	23
5.1	Comparative benchmarks with peer libraries provide a perspective for assessing library service . . . . .	23
5.2	National service trends inform the assessment of resource and service inventory goals. . . . .	25
5.3	Recommended systemwide resource and service inventory goals for Pines & Plains Libraries . . . . .	26
5.3.1	Collections . . . . .	27
5.3.2	Technology stations . . . . .	29
5.3.3	User seating. . . . .	30

5.3.4	Staff work stations . . . . .	31
5.3.5	Meeting / programming support . . . . .	33
5.3.6	Supporting “special use” functions . . . . .	33
5.3.7	Supporting nonassignable functions . . . . .	34
5.3.8	Supporting “dedicated allowance” functions . . . . .	34
6	Pines & Plains Libraries – Recommended Space Needs . . . . .	35
6.1	Space needs in a four facility service configuration . . . . .	35
6.1.1	Service profiles / Kiowa-Elbert-Simla and Elizabeth . . . . .	35
6.1.2	Space needs / Kiowa-Elbert-Simla and Elizabeth . . . . .	36
6.2	Space needs in a five facility service configuration. . . . .	40
6.2.1	Service profiles / Kiowa-Elbert-Simla-NW and Elizabeth . . . . .	40
6.2.2	Space needs / Kiowa-Elbert-Simla-NW and Elizabeth . . . . .	40
7	Pines & Plains Libraries – Next Steps . . . . .	45
7.1	Review / affirm recommended resource and service inventory goals . . . . .	45
7.2	Scenario 1 or Scenario 2 . . . . .	46
7.3	Scenario planning as a road map – evaluating facilities improvement options . . . . .	46
7.3.1	Big change / small change / “loose” change . . . . .	47
7.3.2	Quantity and quality of the space . . . . .	49
7.3.3	Expansion options . . . . .	50
7.3.4	Program development. . . . .	54
7.3.5	Architect selection . . . . .	55
Appendix A:	Library Service Goals & Space Needs – A Planning Model . . . . .	57
Appendix B:	Local Service Trends . . . . .	65
Appendix C:	Trendline / Comparative Benchmark Analysis – Current State. . . . .	79
Appendix D:	Trendline / Comparative Benchmark Analysis – Future State. . . . .	101
Appendix E:	National Service Trends . . . . .	111

## METHODOLOGY & ACKNOWLEDGMENTS

Library Planning Associates, Inc. was engaged to study future service goals and space needs for the Elbert County Library District dba Pines and Plains Libraries in Elizabeth, Colorado. LPA founding principal Anders C. Dahlgren was assigned to the project.

Following a review of existing data and documentation, the consultant made three site visits to the library. During the initial visit, on September 26-27, 2023, the consultant toured the library's four service locations and met with staff and board. On November 27-29, 2023 the consultant conducted a series of community engagement interviews, and met with staff and board. Following each of these site visits, the consultant worked virtually with library staff to interpret and assimilate findings. From this examination recommendations started to emerge, and the following report was prepared. The complete draft report was presented to the board of trustees at the third site visit, on March 27, 2024. Based on comments received then, this final draft report was prepared and conveyed to the library.

Many individuals contributed to the outcomes described in this study. The consultant acknowledges the participation and support of the Elbert County Library District Board of Trustees:

Robert Thomasson	President
RuthAnn Stricker	Vice-President
Alan Krenek	Treasurer
Maral Heggemeier	Trustee
Alessandra Navetta	Trustee

And the following staff members:

Susan Byrne	Library Director
Sarah Coleman	Elizabeth Library Branch Manager
Kim Miller	Elbert & Kiowa Libraries Branch Mgr
Kathy Wilkinson	Simla Library Branch Manager
Nat Nelson	Administrative Assistant

**THIS PAGE IS LEFT BLANK INTENTIONALLY**

# 1 EXECUTIVE SUMMARY

## 1.1 Scope of the study

The Elbert County Library District, doing business as Pines & Plains Libraries, headquartered in Elizabeth, CO, sought the assistance of a consulting librarian to develop a facilities space needs assessment to guide library decision-making in the future. Library Planning Associates, Inc. was engaged to support this effort. Specifically, this study sought to address the following:

- What collections and services should Pines & Plains Libraries provide for its community to meet residents' needs now and in the future?
- How should the library's service resources be deployed between its existing service locations?
- What other service configurations could the library consider?
- How does that recommended resource and service inventory along with its deployment condition the library's future space needs?

## 1.2 Key findings

Pines & Plains Libraries should anticipate housing the following inventory of collections and services in its facility to meet community needs to the year 2040:

- a collection of 98,000 items (print + audio

+ video) – 56,000 at the Elizabeth facility, 14,000 at each of the three smaller service locations

- 36 technology stations / computers for public use – 21 at the Elizabeth facility, 5 at each of the existing smaller service locations
- 136 reader seats – 88 at the Elizabeth facility, 16 at each of the existing smaller service locations
- 19 staff work stations at the Elizabeth facility, 9 at each of the remaining three libraries
- programming and activity space at the Elizabeth facility including a flat-floor multi-purpose room to seat 100, and a storytime room to seat 35
- programming and activity space at each of the remaining three libraries including a flat-floor multi-purpose room to seat 35.

Based on this inventory of recommended resources and services, Library Planning Associates, Inc. estimates the library will need a building of roughly 25,800 square feet to support its operations at the Elizabeth facility and a facility of roughly 7,250 square feet to support operations at each of its branch locations. These findings are presented recognizing that immediate action to improve the facilities at any of the library's service locations may not be possible. The findings are offered so that staff and board will be able to assess options in an informed way when those options do arise.

In an alternate service configuration scenario – supporting five service locations across the county, anticipating that future population growth will lead to the addition of a new branch, most likely in the northwest corner of the county – this distribution of services and resources shifts slightly, and the corresponding space needs change as well. In the alternate, five-facility service configuration, the Elizabeth facility will need a building of roughly 24,800 square feet while the remaining libraries will each need a building of roughly 6,500 square feet.

### 1.3 Moving forward

These findings lead to consideration of further strategic planning issues. P&PL trustees and staff and other local library supporters should:

- Carefully consider and reaffirm (or adjust) the underlying service goals that lead to a space need recommendation of 25,000 square feet at the Elizabeth facility and 7,000 square feet at the branch.
- Consider the four-facility service scenario and the five-facility service scenario and adopt one as the library's preferred long-term facilities plan.
- Explore expansion strategies at each service location in a manner now informed by the findings of this report.
- When it becomes apparent that additional branch service locations are warranted (most likely in the northwest corner of the County), use the branch library service profile and space model to guide the development of that new service.
- As facilities improvement options gain momentum, retain an architect as a valuable resource to assist in a more detailed examination of expansion and development options (and consider also retaining the architect to prepare designs and plans when the project is ready for implementation).
- Determine the suitable sequencing for the expansion / facilities improvement projects
- As the preferred expansion strategies emerge, work to build consensus in support of the project(s) among local governing authorities and other stakeholders within the community.
- When ready to proceed to the design of an expanded facility, authorize the development of a building program statement detailing the library's spatial and environmental requirements to be met in the plans for a new or expanded, improved building.
- Work with the project architect to develop plans that reflect the design parameters outlined in the building program statement.



## 2 ESSENTIAL PLANNING CONCEPTS

The following sections discuss a variety of broad concepts that form a foundation for the subsequent examination of service goals and space needs for Pines & Plains Libraries. Included among these concepts are:

- 2.1 Service goals determine a library's space need
- 2.2 The planning horizon defines a long-range timetable
- 2.3 Design population defines a context for future library services
- 2.4 The library's mission statement conditions its services

### 2.1 Service goals determine a library's space need

A direct connection exists between the resource and service inventories a library seeks to house and the amount of space it needs. To oversimplify the equation, all other things being equal a library will require more floor space if it establishes a service parameter to develop a collection of 250,000 volumes than would be the case if its collection development goal was 100,000 volumes; all other things being equal, a library will require more floor space if it seeks to provide 200 reader seats versus 120.

The particulars of Library Planning Associates's recommended space needs assessment methodology are detailed in Appendix A. That methodology is organized around seven kinds of floor space to be found in most libraries:

- *Collection space*: for the library's traditional print and nonprint collections.
- *Technology space*: for the library's inventory

of computers for public use to access digital content.

- *Reader seating space*: to provide a variety of comfortable seating for library patrons to use the library's resources in-house.
- *Staff space*: to provide staff work stations as needed to support the library's various routines and operations (circulation / charging, public services, technical services, administration, etc.).
- *Programming / meeting space*: to accommodate library programming for the general public, meetings of the library board and/or staff, as well as meetings of other community groups.
- *Special use space*: to house those pieces of unique library furniture or special library functions that have not been accounted for in previous types of space (e.g., photocopiers, microform readers, small group study rooms, a public lounge or coffee bar, staff lounge, and the like).
- *Nonassignable space*: to house those spaces which must be provided to support a functioning building but which cannot be

## UNIT SPACE ALLOCATIONS

	SPACE ALLOCATION		
	Opt	Mod	Low
<i>Collection space</i>			
Books -- volumes per sq.ft.	10.0	11.5	13.0
Nonprint -- items per sq.ft.	10.0	12.5	15.0
<i>Technology space</i>			
Public network stations -- sq.ft. per terminal	50.0	40.0	35.0
<i>Reader seating space</i>			
Reader seats -- sq.ft. per reader seat	35.0	32.5	30.0
<i>Staff work space</i>			
Staff desks / stations -- sq.ft. per work station	150.0	137.5	125.0
<i>Meeting room space</i>			
Auditorium -- sq.ft. per seat + allowance for stage	12.5	12.5	12.5
Program room -- sq.ft. per seat + allowance for stage	10.0	10.0	10.0
Storytime room -- sq.ft. per seat + allowance for stage	15.0	15.0	15.0
Conference room -- sq.ft. per seat + gallery	30.0	30.0	30.0
Computer training room -- sq.ft. per seat + instructor	50.0	50.0	50.0
<i>Special use space</i>			
Calculated as a percentage of gross building area	17.5%	15.0%	12.5%
<i>Nonassignable space</i>			
Calculated as a percentage of gross building area	32.5%	30.0%	27.5%
<i>Dedicated / special allowances</i>			
Factored in as needed			

assigned directly to library purposes (e.g., vestibules, restrooms, stairwells, furnace rooms, etc.).

In some cases, this methodology is adapted to make one or more specific, “dedicated” allowances to set aside and reserve space to accommodate essential services and functions that may not be clearly delineated within the conventional space planning model or to highlight a specific feature or service that the library wants to identify and emphasize at this early planning stage.

Regarding each of these types of space, specific, locally-determined service goals are

identified and a unit space allowance can be applied to translate the service goals into the corresponding spatial requirements, using the factors summarized in the adjacent figure, above, and detailed in Appendix A.

Several of the unit space allocations are described in a range from low to moderate to optimum, reflecting the fact that locally-determined preferences and priorities regarding just how these resources are best housed and displayed will impact how much space the library will need to house the resources that apply to each of the space planning categories. Collection space needs, for example, are plainly conditioned by the quantities in the inventory, but space needs are also conditioned by factors including

the height of the shelves (which determines the number of shelves per unit, which determines the number of items held per unit, which determines the number of units needed) and the width of the aisle (which determines the specific area needed by each individual unit).

When these allowances are applied to a library's recommended service parameters, an estimate of the library's space needs can be made, based on that library's distinct, locally-determined service needs and ranging from an optimum level to a minimum level. Within this range, a recommended estimate is defined based on expectations of density of housing the library's resources and economies of scale in the eventual building layout.

## **2.2 The planning horizon defines a long-range timetable**

A space planning study often leads to a capital project of significant scope and expense. In order to achieve the highest possible return on the community's capital investment, local authorities should strive to meet not only the present service needs of the community, but its future needs as well. A library should grow into its facility, with sufficient space provided for collections and other resources to insure the setting does not become too soon overcrowded.

The conventional planning timetable for library facilities planning is twenty years. Over the years, library planners have come to agree that a building designed to meet a twenty-year need will provide a suitable return on the community's investment, building to meet tomorrow's needs at today's pre-inflationary construction costs.

To meet this recommendation for a long-term planning time frame, the planning horizon

for the Pines & Plains Libraries study should be set to the year 2040.

The recommendations presented here are intended to define an environment from which the library may respond to the needs of the service community during the years to come, at the same time acknowledging that change is occurring so quickly – socially, technologically, in every way – that the best strategy for dealing with the library's future needs is to provide a plan that is flexible and can be adapted for different uses in the future.

## **2.3 Design population defines a context for future library services**

A library's space needs are conditioned by the resources and services it expects to house to meet the service demands of its community. The resource and service inventory is conditioned by an understanding of how the community is likely to change in the years to come. In this regard, the central characteristic that shapes the library's future service goals is the total population served: is the population growing? static? in decline?

The current population of the library's service area, taken from the library's latest annual report to the state library agency, is 27,123.

The latest projections for Elbert County forecast the population will grow to 37,044 to the year 2040 ([https://demography.dola.colorado.gov/assets/lookups/county\\_coc\\_lookup.html](https://demography.dola.colorado.gov/assets/lookups/county_coc_lookup.html)). In the context of this study, note that the nearer-term projection forecasts the county-wide population will grow to 33,089 to the year 2030. Service goals and space needs calibrated to this interim benchmark will be examined in addition to the long-range, year 2040 context.

(As a point of information, note that projections beyond the year 2040 anticipate growth will level off. The forecast to the year 2050 is 37,363.)

## 2.4 The library's mission statement conditions its services

As part of its current long-range plan of service, the library board adopted a mission statement to guide the development of resources and services at Pines & Plains Libraries:

*"To provide our patrons the resources  
to achieve their aspirations  
through literacy, technology,*

*and community engagement."*

The mission statement is further enhanced and informed by the accompanying statement of values:

***Empowering*** – *We believe in  
empowering individuals and  
communities with ideas.*

***Respectfully Adaptable*** – *We believe in  
respecting each unique individual's  
information needs and  
adapting to meet those needs.*

***Good Humored*** – *We believe in  
enriching lives through  
positive, friendly service.*

### 3 PINES & PLAINS LIBRARIES – CURRENT STATE

Pines and Plains Libraries (P&PL) serves all of Elbert County, Colorado, south and east of Denver. Elbert County is roughly equi-distant from Denver (43 miles / 52 minutes from Elizabeth) and Colorado Springs (52 miles / 57 minutes from Elizabeth). Portions of the county have more ready access to Colorado Springs over Denver.

The service setting for P&PL could hardly be more different from that of its large, metropolitan neighbors. In many ways, Elbert County marks one of the borders between urban Colorado and rural Colorado. Much of the Elbert County landscape is devoted to agriculture and ranching. The website for the Elbert County Economic Development Department notes additional economic emphases on renewable energy (450+ turbines in the county), oil and gas (70 approved drill permits) and manufacturing.

The library operates four facilities, one in each of the largest communities in the county:

- The largest facility is in Elizabeth, which is also home to the county's largest population concentration. The library building occupies 5,000 square feet in a larger stand-alone building toward the east side of Elizabeth. The library acquired this 13,000 square foot building in 2011, and renovated the 5,000 square feet for immediate use. The remaining 8,000 square feet in the building is held in reserve for possible future use. The library system's administrative offices are housed here.
- The branch in Kiowa serves the residents of the county seat. The Kiowa building is 1,688 square feet, occupying a building – formerly a church – along Kiowa's main street.
- The branch in Simla is the most remote service location from the library in Elizabeth. The Simla building offers 1,750 square feet in a simply-built structure, conveniently located across from the local schools.
- The fourth P&PL facility, in Elbert, presents a unique circumstance. It's jointly operated by the public library and the local schools, in a combined 1,920 square feet on the second floor of the high school. The operating agreement produces a unique condition in the consultant's observation of joint school-public libraries – the space operates as a public library only when the school is closed; when the school is open, only students are allowed to enter and use it. From one perspective, this can be seen a barrier to using the public library, but it also serves as a novel means to address a concern that often arises in the operation of a joint school-public library – the co-mingling of the library's student clientele and its general public clientele.

P&PL's multi-facility service configuration is uncommon among libraries that serve a relatively small population. As will be discussed later in this section, most public libraries that serve fewer than 50,000

population operate a single facility. There is a plain, practical reason for the library's choice to operate multiple service locations – the library's county-wide service jurisdiction is spread over 1,851 square miles. It's an unusually large geographic jurisdiction. The distances and travel times involved to get from here to there within the county provide a clear rationale why P&PL has made the unusual choice to operate multiple facilities. This fact was impressed upon the consultant on his first site visit, when he and the library director spent much of his on-site time visiting all four libraries, to see them and experience them in person. The fact that P&PL delivers service by way of an uncommon, multi-facility configuration necessarily conditions how its current (and future) performance and services should be interpreted.

This section of the service and space needs assessment report for Pines & Plains Libraries discusses the current state of the library. The intent is to establish a baseline from which to project future resource and service inventory goals for the library.

- 3.1 Local trends in services and inventory establish a foundation for future growth
- 3.2 Comparative benchmarks with peer libraries provide a perspective for assessing library service
- 3.3 Practical local realities drive an uncommon service configuration
- 3.4 A library facilities "stress test" assesses conditions in the present buildings

### **3.1 Local trends in resources and services establish a foundation for future growth**

A review of the library's annual reports to the Colorado state library agency provides an overview of the current status of library services at Pines & Plains Libraries as well as an understanding of recent trends in the development of the library's resources and use.

The data summarized here comes from two sources: annual report data through 2021 are drawn from the public library database maintained by the Institute for Museum and Library Services (IMLS); more recent data (for 2022) are drawn directly from the library annual reports, provided by the library.

A full discussion of P&PLs recent annual reports is presented in Appendix B. Note that some of the data elements reported in the IMLS database for 2021 were incorrect; that error is corrected here and in Appendix B. Key

highlights from that discussion follow.

- *Items held:* Over time, the combined inventory at P&PL has broadly increased, subject to year-to-year fluctuations. In 2000, the library maintained a collection of 36,600+ items; as of 2022, the latest reporting year, the library maintained a collection of 64,500+ items.
- *Collection distribution:* The largest portion of the collection is held at the library in Elizabeth, the largest community in the county. 35% of the combined inventory (print + nonprint) is housed there. The remaining inventory is distributed roughly equally among the three branches (23.5% at Simla, 21.3% at Elbert, and 20.0% at Kiowa).
- *Items held per capita:* Measuring collection size relative to population reveals a different aspect of collection management. Typically, a public

library's collection inventory grows as population grows; that is a reliable pattern. P&PL tallied 1.84 items held per capita in 2000 and 2.38 items held per capita in 2022. That this ratio increased shows that the library collection grew at a rate slightly faster than the rate of population growth.

- *Nonprint held:* The combined nonprint collection (audio + video) grew dramatically over the period. In 2000, P&PL held over 600 nonprint items; by 2022, the inventory had grown to just under 14,000 – a twenty-fold increase.
- *Audio versus video recordings:* Reflecting a broad national trend, growth in the video collection drove the overall growth in nonprint at P&PL. While the audio recording inventory at P&PL has been level and static since 2010, the inventory of video recordings during that same period has roughly doubled.
- *Nonprint as a percent of print:* As a result of these inventory development patterns, the balance within the collection has shifted notably in favor of nonprint materials. In 2000, nonprint holdings represented barely 4.5% of the total inventory; by 2022 the ratio stood at 21.6%.
- *Technology stations for public use:* P&PL has recently reduced its stated inventory of computer stations for public use, going from 46 in 2015 to 32 in 2016 and 28 in 2022.
- *Total annual circulation:* Total annual circulation at P&PL grew rapidly, roughly tripling between 2000 and 2013.

Since, there has been little change from year to year, leading to a count of 141,700+ transactions in 2019. The pandemic cut circulation transactions almost in half in 2020, and the library has reported a slow recovery since.

- *Total annual visits:* Total annual visits doubled, from 44,600+ in 2000 to a peak of 90,000+ in 2018. The pandemic impacted this measure substantially, as the library implemented cautious COVID protocols. Total annual visits in 2020, in the depths of the pandemic barely exceeded 10,000. Like circulation, this measure is recovering slowly.
- *Total annual program events:* In the early part of the reporting period, the number of program events sponsored by P&PL grew and shrank, but during the 'aughts, the number of program events sponsored by the library almost quadrupled, to just under 1,600 in 2018. The number of sponsored events fell off in 2019, then plummeted in 2020 in the wake of strict COVID protocols. This measure is recovering very slowly.
- *Program attendance:* Program attendance, like total program events, was variable in the early part of the reporting period, then rose through the 'aughts, albeit at a slower rate than total program events, which means that, on average, library programs were drawing a smaller audience. Total attendance has declined in 2019, 2020 and 2021, experiencing a modest rebound in 2022.

### 3.2 Comparative benchmarks with peer libraries provide a perspective for assessing library service

A trendline, or peer comparative, analysis is used to provide context within which one can assess an individual library's current-day performance. From P&PL's latest annual reports, it's known that the library maintains a collection of 64,500+ items. But that data point alone does not reveal whether the library's collection is substantial or less so. Perspective is gained by placing the subject library among a group of libraries deemed to be peers and distilling the collected experience of that peer cohort to establish benchmarks that can be used to assess the P&PL's current state. A peer comparative benchmark study provides context so we can understand P&PL's current condition better.

In this case, three sample cohorts of libraries deemed to be peers of Pines & Plains Libraries were drawn from the public library database maintained by the Institute for Museum and Library Services:

- all public libraries in the U.S. serving 25,000 to 40,000 population
- public libraries in the region serving 25,000 to 40,000 population (defining "region" as within a 500-mile radius of P&PL)
- public libraries serving 25,000 to 40,000 population that operate more than a single facility

Examining the relative combined experience of these three peer cohorts "triangulates" potential service benchmarks with which to assess the current state of Pines & Plains Libraries.

A full discussion of the current-state peer comparative benchmark study for P&PL is presented in Appendix C. Key highlights from

that discussion follow.

- *Items held:* P&PL maintains a collection of 78,299 items, as of the 2021 reporting cycle. Based on the combined experience of the library's national peer cohort, a library serving 27,100+ population can expect to maintain a collection of 84,000 items. Based on the experience of the library's regional peer cohort, P&PL can expect to maintain a collection of 58,750 items. Based on the experience of the subcohort of libraries that operate multiple service locations, P&PL can expect to have a collection of 92,500 items.
- *Items held per capita:* Measuring collection inventory relative to population served produces a similar result. P&PL maintains a collection equal to 2.77 items per capita. This is below the "expected" benchmark based on the combined experience of the national peer cohort (3.10 items per capita). P&PL's ratio is above the benchmark based on the experience of the regional cohort. And it is below the benchmark based on the experience of libraries that operate multiple facilities.
- *Audio recordings held:* P&PL's inventory of audio recordings is modest. The library's current inventory falls below the intercept point benchmark in relation to all three of the peer sample cohorts.
- *Video recordings held:* In contrast, P&PL's video collection, developed over time in response to local demands, is substantial. P&PL's current inventory of 10,800+ items is 36.4% greater than the current-day national peer cohort benchmark,



112% greater than the regional peer cohort benchmark, and 23.1% greater than the benchmark emerging from the cohort of libraries that operate multiple service locations.

- *Nonprint as a percent of total holdings:* This measure encapsulates the relative balance within a library's collection between nonprint and print, and, given P&PL's result on the preceding measure, it's no surprise to learn that the library's collection slants heavily in favor of nonprint materials, in comparison with its peers. P&PL's nonprint collection represents 17.2% of its total inventory. Against the library's national peer cohort, the expected ratio is 13.7%; against the regional cohort, 13.0%; and against the cohort of libraries operating multiple facilities, 12.5%.
- In consideration of print volumes held, audio recordings held, and video recordings held, only the category video recordings demonstrates a broad increase in inventory over the last ten years. Libraries in all three peer cohorts over the last ten years have reduced print and audio holdings, but video collections continue to grow.
- *Technology stations for public use:* As of the 2021 reporting cycle, P&PL maintained an inventory of 32 technology stations for public use. The corresponding benchmark based on the combined experience of the library's national peer cohort is 23 stations; based on the combined experience of the library's regional peer cohort, the benchmark is 24 stations. But based on the combined experience of the cohort of libraries that operate two or more facilities, the "expected" benchmark is 32 stations. Examining a narrower portion of that cohort – libraries that operate four or more facilities (like P&PL) – results in an even higher benchmark: 46 stations.
- *Total annual circulation:* In 2021, P&PL reported 100,200+ total circulation transactions. This is lower than the benchmark that emerges from the experience of the library's national peer cohort (139,000), but corresponds with the benchmarks that emerge from the regional cohort (108,000) and the multiple-facilities cohort (105,000). Note that reporting on activity / use levels in the 2021 reporting cycle continued to display affects of the pandemic downturn.
- *Total annual visits:* While P&PL's tally of total circulation transactions was at the "expected" level against two of its three peer cohorts, on the measure of 'Total annual visits' the library lags across the board. In 2021, P&PL reported 27,800+ total annual visits, while the national, regional, and multiple facilities cohort reported benchmarks of 47,500, 43,000 and 50,000 respectively.
- *Programming:* Pines & Plains Libraries sponsors a strong schedule of program events, but total program attendance has not yet recovered from the pandemic downturn. The library sponsored 145 events in 2021, against a national benchmark of 280, a regional benchmark of 181 and a multiple-facilities cohort benchmark of 280. Total program attendance at P&PL was 986, versus 6,725 against the national cohort, 4,950

against the regional cohort, and 5,950 against the multiple-facilities cohort.

- The current state examination revealed an important and consistent pattern between the national peer cohort and the regional peer cohort: results drawn from the regional peer cohort were almost always *below* the corresponding result from the national cohort. The only exception to this was the metric ‘Technology stations for public use.’ Broadly speaking, public libraries in the region tend to maintain smaller collections and tend to be used less assertively than do peer libraries in other parts of the country. The reason for this variation cannot be discerned from the data at hand, but it is a valuable distinction to be aware of.
- Another important distinction arises between the libraries in the full national cohort and the individuals in the subset cohort of libraries that operate more than a single facility. The subcohort of libraries that operate more than one facility tend to support a larger collection inventory. Most likely, the need to duplicate core collection resources in each location contributes to this pattern. As one compares a smaller subset of the multiple facilities cohort – libraries that operate four or more facilities – the corresponding benchmarks are even higher, lending credence to the notion that a library operating multiple facilities will tend to need a larger collection inventory than is the case for a library that operates just one building. This, too, is a valuable distinction to be aware of, given that P&PL operates four facilities.

### 3.3 Practical local realities drive an uncommon service configuration

The fact is, the service configuration employed by Pines & Plains Libraries – operating four facilities – places the library in rarified company.

Among libraries serving a population of similar size, most operate a single building. This was verified during the course of the current-day trendline / peer comparative examination: of the 738 public libraries in P&PL’s full national peer cohort, 533 operate a single building (72.2%); 93 operate two facilities (12.6%), and 51 operate three facilities (6.9%); the remaining 61 libraries in the sample cohort operate four or more facilities (8.3%).

This distribution occurs in the context of a long-standing service trend among U.S. public libraries that establishes the cohort of libraries serving 50,000 to 60,000 as a kind of marker that distinguishes between libraries that operate a single building and libraries that operate multiple buildings. Dating back to the mid-1990s, LPA from time to time has examined branch library distribution patterns. The consistent finding reveals that

- among libraries that serve fewer than 50,000 population, the majority operate a single building.
- among libraries that serve more than 60,000 population, the majority operate multiple buildings.
- libraries serving 50,000 to 60,000 population occupy a kind of “transition zone,” where the configuration balance shifts.

As service population increases, the share of libraries operating a single building decreases.

Among libraries serving fewer than 10,000 population, 97.0% operate a single building. Among libraries serving 10,000 to 20,000 population 88.3% operate a single building. As noted earlier, among libraries in P&PL's current-day peer cohort, libraries serving 25,000 to 40,000 population, 72.2% operate a single building. For the last almost 40 years, for as long as the IMLS has been gathering and publishing its database, that majority share has consistently applied for libraries of 50,000 population or less.

So Pines & Plains Libraries delivers service using a facilities configuration that is uncommon among libraries serving a population of similar size, but it has adopted this service configuration for a simple and practical reason – access. The library's service jurisdiction stretches across 1,851 square miles. Given the drive times to travel from one end of Elbert County to another, given the drive times to travel from one community to the next, it's entirely understandable and justifiable that P&PL has adopted this uncommon configuration profile in order to offer convenient access to library service for its residents.

Moreover, the scale of P&PL's service jurisdiction places the library at the far end of another scale. As LPA undertook the trendline / peer comparative analysis, LPA determined to examine a peer subcohort including libraries that operate on a county-wide basis. A subcohort of libraries organized to serve an entire county was expected to isolate and focus on libraries, like P&PL, that operate over a larger geographic jurisdiction (versus municipalities – cities and towns – that operate over smaller areas). This examination was expected to reveal how a large geographic service jurisdiction impacts resource and service inventories.

Except that no clear patterns or variations

emerged, save one: the libraries in this subcohort were more likely to operate multiple facilities. Among the 732 libraries in P&PL's full national cohort group, 72.2% operate a single building and 27.8% operate two or more buildings. Among the 157 libraries in the county jurisdiction subcohort, 33.8% operate a single building and 66.2% operate two or more buildings (24.2% operate four or more).

A close examination of the county jurisdiction subcohort revealed another distinction regarding P&PL. Among the libraries in the county subcohort, the median area of the service jurisdiction was 547 square miles, less than one-third the area served by P&PL. A substantial share of the libraries that operate on a county-wide basis are from the eastern part of the country, where counties were drawn less expansively. In fact, sorting the 157 libraries in the county subcohort by area revealed that among those 157 libraries only eleven were larger than Elbert County. The geographic area served by Pines & Plains Libraries is among the largest in the country, among libraries serving a population of comparable size.

These distinctions should inform the assessment of current conditions at Pines & Plains Libraries as well as the definition of future resource and service inventory goals for the library.

### **3.4 A library facilities "stress test" assesses conditions in the present buildings**

As part of the current study, LPS prepared an assessment of the immediate space need for each branch location operated by the library. The goal was to assess the general adequacy of each building given the inventory of resources and

services housed at each location, to explore how closely the available space at each location matches the resources and services housed there. The examination was based on the resource and service inventory that happens to be housed at each location; it does not speak to whether the resource and service inventory at any given location is suitable or appropriate to that location.

The Elbert Library was not included in this examination, owing to the blended operations at that location, jointly operated by the public library and the public schools. It was not possible to parse out precisely which parts of that shared setting belong to the public library and which belong to the school.

The space needs assessment methodology that will be applied to determine P&PL's future space needs was applied here to determine how much space *should* be available at the Elizabeth, Kiowa, and Simla facilities, given the service inventory housed at each location.

The existing buildings were all found to be undersized. This is not a surprise, given that public library staffs have a long heritage of working to house more and more within a limited amount of space. LPA has often observed that public librarians have a long heritage of being able to carry seven gallons in a five gallon bucket, a trait that has been emphasized in the facilities stress test applied here at Pines & Plains Libraries.

A generation ago, it was a measure of the efficiency of the interior layout if more could be fit into a particular space. But the problem with

increasing density was that it produced a setting that was difficult for users to use. Shelving in the collections was too tall for people to reach. Aisles were so narrow that it was uncomfortable to use and difficult for a wheelchair to pass.

Today, most public libraries prefer to house and display materials and to present their space in a way that is easy for patrons to access and use. As a result, interior space spreads out horizontally, which certainly contributes to the differential between how much space is available at each of P&PL's service locations and how much space each *should* otherwise offer.

Figures on the following pages present the application of the space needs assessment methodology to the resource and service inventories presently available at Elizabeth, Kiowa, and Simla.

According to the public library database maintained by the Institute for Museum and Library Services, the library in Elizabeth occupies 5,000 square feet; according to this stress test, the resource and service inventory found there, if it were suitably housed, *should* occupy 9,981 square feet.

The current Kiowa building offers 1,688 square feet; given the current resource and service inventory housed there, the building *should* be 4,234 square feet.

The current Simla building offers 1,750 square feet; given the current resource and service inventory housed there, the building *should* be 4,977 square feet.

**PINES & PLAINS LIBRARIES  
FACILITIES STRESS TEST  
ELIZABETH FACILITY**

		Units	SPACE ALLOCATION			
			Optimal	Moderate	Low	Recommend
A. Collection space						
Books+media(NOTE: 0% in circulation)						
Opt: @	10.0 vol / sq.ft.	23,102	2,310			2,310
Mod: @	11.5 vol / sq.ft.	23,102		2,009		
Low: @	13.0 vol / sq.ft.	23,102			1,777	
B. Public network stations						
Opt: @	50.0 sq.ft. / terminal	7	350			
Mod: @	40.0 sq.ft. / terminal	7		280		280
Low: @	35.0 sq.ft. / terminal	7			245	
C. Reader seating space						
Opt: @	35.0 sq.ft. / seat	35	1,225			
Mod: @	32.5 sq.ft. / seat	35		1,138		1,138
Low: @	30.0 sq.ft. / seat	35			1,050	
D. Staff work space						
Opt: @	150.0 sq.ft. / station	7	1,050			
Mod: @	137.5 sq.ft. / station	7		963		963
Low: @	125.0 sq.ft. / station	7			875	
E. Meeting room space						
Multi-purpose room 1						
@	10.0 sq.ft. per seat + speakers area	35	550	550	550	550
SUBTOTAL 1 (A+B+C+D+E)			5,485	4,939	4,497	5,240
F. Special use space (calculated against SUBTOTAL)						
Opt: @	17.5% of gross building area		1,920			1,747
Mod: @	15.0% of gross building area			1,347		
Low: @	12.5% of gross building area				937	
G. Nonassignable space (calculated against SUBTOTAL)						
Opt: @	32.5% of gross building area		3,565			
Mod: @	30.0% of gross building area			2,694		2,994
Low: @	27.5% of gross building area				2,061	
H. "Tailoring" allowance (calculated against SUBTOTAL)						
(not applied at P&PL)						
SUBTOTAL 2 (Subtotal 1 + F +G + H)			10,970	8,980	7,495	9,981
I. Dedicated allowances						
(not applied at P&PL)						
GROSS BUILDING AREA			10,970	8,980	7,495	9,981

**PINES & PLAINS LIBRARIES  
FACILITIES STRESS TEST  
KIOWA FACILITY**

		<u>Units</u>	<u>SPACE ALLOCATION</u>				
			<u>Optimal</u>	<u>Moderate</u>	<u>Low</u>	<u>Recommend</u>	
<i>A. Collection space</i>							
Books+media(NOTE: 0% in circulation)							
Opt: @	10.0	vol / sq.ft.	13,181	1,318		1,318	
Mod: @	11.5	vol / sq.ft.	13,181		1,146		
Low: @	13.0	vol / sq.ft.	13,181		1,014		
<i>B. Public network stations</i>							
Opt: @	50.0	sq.ft. / terminal	+	200			
Mod: @	40.0	sq.ft. / terminal	+		160	160	
Low: @	35.0	sq.ft. / terminal	+		140		
<i>C. Reader seating space</i>							
Opt: @	35.0	sq.ft. / seat	6	210			
Mod: @	32.5	sq.ft. / seat	6		195	195	
Low: @	30.0	sq.ft. / seat	6		180		
<i>D. Staff work space</i>							
Opt: @	150.0	sq.ft. / station	+	600			
Mod: @	137.5	sq.ft. / station	+		550	550	
Low: @	125.0	sq.ft. / station	+		500		
<i>E. Meeting room space</i>							
Multi-purpose room 1							
@	10.0	sq.ft. per seat + speakers area	0	0	0	0	
SUBTOTAL 1 (A+B+C+D+E)				2,328	2,051	1,834	2,223
<i>F. Special use space (calculated against SUBTOTAL)</i>							
Opt: @	17.5% of gross building area			815		741	
Mod: @	15.0% of gross building area				559		
Low: @	12.5% of gross building area				382		
<i>G. Nonassignable space (calculated against SUBTOTAL)</i>							
Opt: @	32.5% of gross building area			1,513			
Mod: @	30.0% of gross building area				1,119	1,270	
Low: @	27.5% of gross building area				841		
<i>H. "Tailoring" allowance (calculated against SUBTOTAL)</i>							
				(not applied at P&PL)			
SUBTOTAL 2 (Subtotal 1 + F +G + H)				4,656	3,729	3,057	4,234
<i>I. Dedicated allowances</i>							
				(not applied at P&PL)			
GROSS BUILDING AREA				4,656	3,729	3,057	4,234



**PINES & PLAINS LIBRARIES  
FACILITIES STRESS TEST  
SIMLA FACILITY**

		<u>Units</u>	<u>SPACE ALLOCATION</u>			
			<u>Optimal</u>	<u>Moderate</u>	<u>Low</u>	<u>Recommend</u>
<b>A. Collection space</b>						
Books+media(NOTE: 0% in circulation)						
Opt: @	10.0 vol / sq.ft.	14,806	1,481			1,481
Mod: @	11.5 vol / sq.ft.	14,806		1,287		
Low: @	13.0 vol / sq.ft.	14,806			1,139	
<b>B. Public network stations</b>						
Opt: @	50.0 sq.ft. / terminal	5	250			
Mod: @	40.0 sq.ft. / terminal	5		200		200
Low: @	35.0 sq.ft. / terminal	5			175	
<b>C. Reader seating space</b>						
Opt: @	35.0 sq.ft. / seat	16	560			
Mod: @	32.5 sq.ft. / seat	16		520		520
Low: @	30.0 sq.ft. / seat	16			480	
<b>D. Staff work space</b>						
Opt: @	150.0 sq.ft. / station	3	450			
Mod: @	137.5 sq.ft. / station	3		413		413
Low: @	125.0 sq.ft. / station	3			375	
<b>E. Meeting room space</b>						
Multi-purpose room 1						
@	10.0 sq.ft. per seat + speakers area	0	0	0	0	0
SUBTOTAL 1 (A+B+C+D+E)			2,741	2,420	2,169	2,613
<b>F. Special use space (calculated against SUBTOTAL)</b>						
Opt: @	17.5% of gross building area		959			871
Mod: @	15.0% of gross building area			660		
Low: @	12.5% of gross building area				452	
<b>G. Nonassignable space (calculated against SUBTOTAL)</b>						
Opt: @	32.5% of gross building area		1,781			
Mod: @	30.0% of gross building area			1,320		1,493
Low: @	27.5% of gross building area				994	
<b>H. "Tailoring" allowance (calculated against SUBTOTAL)</b>						
(not applied at P&PL)						
SUBTOTAL 2 (Subtotal 1 + F +G + H)			5,481	4,400	3,615	4,977
<b>I. Dedicated allowances</b>						
(not applied at P&PL)						
GROSS BUILDING AREA			5,481	4,400	3,615	4,977

**THIS PAGE IS LEFT BLANK INTENTIONALLY**



## 4 PINES & PLAINS LIBRARIES – COMMUNITY INPUT

Community engagement was an important effort in support of this study. With coordination by P&PL, Library Planning Associates conducted ten key informant interviews with representatives from the library's service area. Over three days in late November, 2023, LPA facilitated a series of open-call, structured group interviews at various locations across the county. Participation at those sessions was sparse, but the contributions were spirited. Reasons for the lack of participation are hard to determine. The expanse of the library's service area and the distances and travel times involved with any in-person activities certainly contributed. Schedules can be in conflict. Its possible that caution from the ongoing recovery from the pandemic prompted some prospective participants to stay at home.

Two sessions drew no attendees. This was perhaps telling inasmuch as they were held in the northwest and northeast corners of the county and scheduled during the evening. The early evening schedule was meant to avoid conflicts with work schedules and daytime obligations. These evening sessions were intended to explore interest in the prospect of introducing branch library service in two parts of the country where no in-person service is presently available. The lack of turnout perhaps was an indicator of how strong that interest is.

This section of the report summarizes key themes that emerged from the community engagement efforts.

### 4.1 Characteristics of the P&PL service area

The most frequently applied descriptors for Elbert County are not surprising. Nearly everyone who participated in the community engagement interviews commented on the county's recent growth. At the same time, many participants zeroed in on the expanse of the county, how spread out it is. One interviewee observed that "when we go to town, we have a long list of things to do; it's a whole day!"

The rural and ranching heritage of the

community was highlighted. That heritage provides the background and context for the county's recent growth: many of the newer residents come from more urban communities. Several interviewees commented on a degree of "disconnect" between longer-term residents and new arrivals. New arrivals, it was said, want the area to be "city-fied" but rural, too.

Elizabeth was commonly described as the commercial and population center of the county. Kiowa is distinguished as the county seat; county government and the local schools were characterized as the drivers of that community.

Local schools play an important role in community life in Elbert and Simla.

While the population has grown in recent years, interviewees observed that those increases don't necessarily translate into additional P&PL library users. Many of those new residents are oriented to the more urban areas north and west of Elbert County, or they reside in parts of Elbert County that are closer to commercial centers that are outside of Elbert County, or their routine commute takes them to work where it may be more convenient to use other libraries.

Several interviewees shared the perception that a substantial share of new residents work from home, noting that the public library should be a regular and steady resource for those individuals.

In a similar way, several interviewees noted that among those new residents there's a strong need to connect with community, and the public library becomes a natural venue to support that kind of community-building.

#### **4.2 How is the service area changing? How will Elbert County be different in five years? Ten years?**

Nearly all interviewees maintained that growth will continue. Most individuals concurred with the county's stated population projections, with some noting that they felt the projections could prove to be on the low side.

Growth will be centered mostly in the northwest corner of the county, with additional growth closer in to Elizabeth. Several mentioned a large subdivision planned north of Kiowa.

Some participants registered a practical

reality that the available water supply will ultimately moderate future growth.

One interviewee commented specifically that in the years to come, existing ranches will likely be sold to developers as fewer ranches will be passed down from parents to offspring. The county will shift away from its rural, ranching heritage.

Several participants anticipate rising polarity within the county between long-term residents and newer residents, citing more contentious elections. Others counseled to accept "urban creep."

Looking to the future, several participants reiterated the essential need to foster connections and community – between new residents and long-term residents, between new residents and the agencies and organizations that serve the county.

#### **4.3 What does Pines & Plains Libraries do well?**

At the top of almost everyone's list of what Pines & Plains Libraries does well is "great customer service. The staff was characterized as being helpful, friendly and pleasant; "super-dedicated" and "tenacious." The staff's ability to focus on the individual user translates into a much-appreciated level of personal service.

Through this customer service, on a fundamental level, the P&PL libraries "understand their communities."

Interlibrary loan was the library's most-cited service. Several participants highlighted the library's ability to secure requested items from within the P&PL system or from across the state

and beyond. One participant said “They get books from all over the place!” Another said interlibrary loan is “the most important service.”

The library’s programming efforts were praised, as well. The variety of programming was important. Programs connecting library users with legal experts and tax experts were specifically mentioned. And children’s programming as well: the library was urged to “keep the storytimes going.” Anything that gets children into the library, that was described as the library’s “bread and butter.”

One interviewee was pleased to acknowledge that P&PL is not a “shushing library.”

Another appreciated the library’s “grab and go” convenience.

Others highlighted P&PL’s essential role as a networking and meeting place: “meet me *at the library*.” Another said “I like the library because of the socialization,” citing specifically the book club. People can come together at the library to share common interests.

Seniors were cited as a “ready-made customer base.”

Participants also highlighted the essential role of not just P&PL, but every library: disseminating information.

#### **4.4 How can Pines & Plains Libraries improve?**

The most frequently offered commentary on ways P&PL can improve was to provide more and bigger meeting spaces. “I’ve been to

meetings where there have been too many people,” said one participant. Too many library programs draw more interest and a larger audience than the fire marshal’s regulations allow. There is “an incredible need for meeting space in the community.”

Although the library’s programming efforts were cited as one of the things P&PL does well, interviewees wanted the library to do more – more family programs, more craft programs, more children’s programs. Use programs to get teens into the library, provide more activities for middle school youth and older kids.

All of these comments reinforce earlier comments and observations about P&PL’s essential role in building community and fostering connections. It’s important that the library be a place where one can interact with other people. One interviewee who highlighted that Elizabeth now hosts a McDonalds also noted that the McDonalds did not put in a play space and young moms are “desperate” for a place to gather. Clearly, that space should be the public library.

At the same time, there were several comments that the library “looks dated.” “Kiowa doesn’t invite you to stay,” offered one participant. The Elizabeth library is “not very light inside.” The buildings need to be more inviting.

Several participants highlighted a need for better technology. Some said that many of those who work from home may have access to basic technology – a computer and Internet access – they may not have the kinds of high-end printers and scanners and other related equipment needed to produce high-end, work-from-home output.

One made a connection between better

technology and the need for meeting space, noting that all meeting facilities should support high-end presentation equipment.

While many individuals emphasized the library as a gathering place, others at the same time called out the need to have more quiet rooms. One participant called for “spread out space” so you don’t have to feel like you’re “on top of other people.”

This was one of several seemingly contradictory priorities expressed by interview participants, like those who extolled P&PL’s “grab and go” convenience while at the same time highlighting the need for the library to be a place that encourages one to linger, where one can enjoy exchanges with others.

Several individuals wanted the library to promote its offerings more effectively, to get the word out, to work with the schools, to improve the content of its newsletter. One participant wanted to see a purchase suggestion feature

incorporated into the library’s site. (As an aside, it is noted that better promotion of the library’s services and activities is the most commonly-heard suggestions in all of the community engagement efforts LPA has conducted over almost four decades. This in no way minimizes the commentary regarding promotions and publicity, but is offered as context.)

Expanded hours, including Sunday hours, was a suggestion.

“The Kiowa building feels cramped,” said one. “Simla can use more space,” said another.

Align library growth with community growth.

One interviewee summarized the balancing act facing P&PL and most libraries: “We can’t be static, but I don’t want it to get all fancy... it needs to be a building with books.” So change, but don’t lose sight of the essentials.

## 5 PINES & PLAINS LIBRARIES – FUTURE STATE

Having examined the current state of Pines & Plains Libraries in the preceding sections of the report, this section turns attention to exploring possible future states for library service in Elbert County. The examination of P&PL’s current state was informed by local library service trends and peer comparative studies. The examination of P&PL’s future state is informed by similar resources:

- 5.1 Comparative benchmarks with peer libraries provide a perspective for assessing library service
- 5.2 National service trends inform the assessment of resource and service inventory goals
- 5.3 Recommended systemwide resource and service inventory goals for Pines & Plains Libraries

### 5.1 Comparative benchmarks with peer libraries provide a perspective for assessing library service

The same kind of peer comparative / trendline analysis that was used to assess the current state of Pines & Plains Libraries can also be used as the basis for identifying prospective resource and service inventory goals for the subject library. Instead of calibrating the examination to the library’s *present* service population, this examination is calibrated to the library’s *projected* service population – to the year 2030 (when forecasts indicate P&PL’s population will be 33,089) and to the year 2040 (when forecasts indicate P&PL’s population will be 37,044). As a point of information, forecasts to the year 2050 (37,363) suggest the population of Elbert County will start to level off.

This additional examination is organized in the same way as the trendline / peer comparative study summarized in Part 3.2 of this report.

As with the current-state examination, three samples representing cohorts of libraries deemed to be peers of Pines & Plains Libraries were drawn from the IMLS database:

- all public libraries in the U.S. serving 25,000 to 40,000 population
- public libraries in the region serving 25,000 to 40,000 population (defining “region” as within a 500-mile radius of P&PL)
- public libraries serving 25,000 to 40,000 population that operate more than a single facility

A full discussion of the current-state peer comparative benchmark study for P&PL is presented in Appendix D. Key highlights from that discussion follow.

- *Items held:* Based on the combined experience of the full national peer cohort, a library that serves roughly 33,000 (P&PL’s year 2030 projected population) could expect to offer a

combined collection of 96,750 items (print + audio + video); a library that serves roughly 37,000 (P&PL's year 2040 projected population) could expect to offer a combined collection of 105,200 items. Based on the combined experience of the library's regional peer subcohort, those benchmarks are more moderate – 75,750 total items and 87,000 total items, respectively. According to the combined experience of the subcohort of libraries that operate multiple facilities, the reality of operating multiple facilities leads those libraries to maintain a larger collection inventory – 108,000 total items and 118,500 total items respectively.

- *Items held per capita:* Measuring collection inventory relative to population served produces a similar result. The full national peer cohort produces a year 2030 benchmark of 2.94 items per capita (which translates to 97,200+ items total) while the year 2040 benchmark is 2.85 items per capita (or 106,400+ items). The regional subcohort benchmarks are more modest – 2.28 items per capita to the year 2030 (75,400+ items) and 2.37 items per capita to the year 2040 (88,500+ items). The multiple facilities subcohort benchmarks are, again, more assertive – 3.25 items per capita to the year 2030 (107,500+ items) and 3.20 to the year 2040 (119,500 items).
- *Audio recording held:* Based on the combined experience of the library's full national peer cohort, P&PL can expect to support a collection of 5,400 audio recordings to the year 2030 and 6,000 to the year 2,40. Based on the regional subcohort, those benchmarks are 4,000 items to the

year 2030 and 4,700 items to the year 2040. Based on the subcohort of libraries that maintain multiple facilities, the benchmarks are 5,200 items and 6,400 items, respectively.

- *Video recordings held:* The corresponding benchmarks regarding video recordings are 9,000 items and 10,000 items based on the full national peer cohort; 7,250 items and 8,75 items based on the regional subcohort; and 10,500 items and 12,300 items based on the subcohort of libraries that operate multiple facilities. Remember that P&PL's current inventory is well above the corresponding current-day / current-state benchmarks because the library maintains a larger video collection to address the fact that the dispersed, rural character of the library's service area means that a relatively smaller share of households in P&PL's jurisdiction are able to benefit from the kind of high-speed connectivity required to support streaming access.
- *Technology stations for public use:* Based on the combined experience of the library's full national peer cohort, a library that serves 33,000+ population can expect to provide 26 computer network stations for public use, while a library that serves 37,000+ population can expect to provide 28 technology stations. Based on the combined experience of the library's regional peer subcohort, those benchmarks are 27 and 29 (note that on this particular metric, the benchmarks that emerge from the regional subcohort are actually higher than those that emerge from the full national cohort). Based on the combined experience of the

libraries that operate multiple facilities, the benchmarks are 40 stations and 36 stations.

One important take-away from this examination is the relative consistency of results among the three peer cohorts. The full national cohort tends to produce a more assertive benchmark than is evident from the regional subcohort. The cohort of libraries that operate multiple facilities tends to produce a benchmark that's more assertive than either the full national cohort or the regional subcohort.

## **5.2 National service trends inform the assessment of resource and service inventory goals**

To apply the preceding discussion of the trendline / peer comparative study for Pines & Plains Libraries in full, it's important to acknowledge that the IMLS dataset is in continuous flux. The results and outcomes change over time. The benchmarks that emerge from the future-state examination are useful, but the findings reflect current-day conditions. To apply them to a future state for P&PL, one needs to understand how these measures might change in the years to come.

To that end, an examination of recent national service trends provides an understanding of how some of these measures have shifted in recent years. This, in turn, can inform how the service benchmarks derived from current-day sources might shift as P&PL's long-term planning horizon approaches.

A full discussion of these national library service trends is presented in Appendix E. Key highlights from that discussion follow:

- For roughly a generation, collection inventories in U.S. public libraries have been getting leaner. This is a complete reversal of the growth and expansion experienced among U.S. public libraries during the last half of the 20<sup>th</sup> century. The number of items held in all U.S. public libraries peaked in 2009 and has decreased steadily ever since.
- Given that print collections represent, by far, the largest share of collection inventory in U.S. public libraries, it is no surprise that a reduction in print inventories has driven this overall trend. Among all public libraries in the U.S., print inventories reached their peak in 2008.
- The collection development pattern is different for audio recordings. The aggregate audio collection inventory in U.S. public libraries increased after the turn of the century, rising to a peak in 2009. Between 2009 and 2010, the aggregate audio inventory fell by 9.4%. It is not coincidental that 2009 marked the peak for both total collection inventory and audio recordings held. In the years since, the aggregate inventory of audio recordings has decreased steadily, albeit at a slower rate than witnessed for books.
- Video recordings present yet another pattern. The aggregate inventory of video recordings has increased steadily from 2000 through 2019. In 2019, however, the aggregate video inventory peaked, and over the last two reporting cycles, the aggregate inventory of video recordings has decreased.

- Similar patterns are seen when one focuses on libraries similar in size to Pines & Plains Libraries. Among U.S. public libraries serving 25,000 to 50,000 population, overall collection inventories started to decrease a year after they peaked in consideration of all U.S. public libraries. Audio and video inventories reached their peaks shortly after the full national cohort peaked. And among libraries serving 25,000 to 50,000, the subsequent rate of decrease has been more moderate.
- Among all U.S. public libraries, the number of items held *per capita* peaked in 2005; the number of books held *per capita* peaked two years earlier, in 2003. Since 2010, on average, the year-to-year decrease in the number of items held in all U.S. public libraries has been 2.1%.
- Among U.S. public libraries serving 25,000 to 50,000 population, the number of items held per capita peaked in 2009; the number of books held per capita peaked one year earlier, in 2008. Since 2010, on average, the year-to-year decrease in the number of items held in libraries that serve 25,000 to 50,000 population has been 1.3%.
- Recent reporting cycles have also highlighted a reversal of a long-standing trend regarding the inventory of computer network stations for public use in U.S. public libraries. Nationally, this aggregate inventory has increased consistently since it was first introduced in the mid-1990s. Over time, the rate of growth has slowed. In 2018, the aggregate national inventory peaked, at 303,700+. By the latest reporting cycle,

in 2021, the inventory had fallen to 262,900+ – a decrease of 13.4%. This is understood to be a clear indication that public libraries have reached a saturation point regarding computer network stations for public use. There is less impetus to provide as many of these stations when more users come to the library equipped with their own tablets, smartphones, laptops and other Internet-connectable devices.

- A similar pattern regarding technology stations for public use is evident among libraries serving 25,000 to 50,000. That inventory peaked in 2018 at 33,500+. As of 2021, the combined inventory among similarly-sized libraries was 27,500+ – a decrease of 17.9%.

### 5.3 Recommended systemwide resource and service inventory goals for Pines & Plains Libraries

Any library's space needs are predicated on its service goals. Specifically, space needs are conditioned by the service inventories the library should house to meet the needs of the community. The library's overall service inventory extends beyond collections, although collections remain a crucial and most substantial part of the overall service menu in today's public library.

The space needs assessment methodology applied here is based on the publication *Public Library Space Needs: A Planning Outline* from the Wisconsin state library agency. The methodology is described in more complete form in Appendix A. At its heart, the *Outline* establishes how a library's essential resource and service inventory goals determine space needs.



It's organized around several "types" of space provided by most public libraries, space for:

- collections (print, audio, video)
- technology
- reader seating
- staff work space
- meeting and programming space(s)

Beyond these five core service / space components, additional allocations are made to accommodate:

- special use space
- nonassignable space
- dedicated allowances

The specific goals established for the Pines & Plains Library in each of these areas become the basis for an estimate of space need, which is detailed in a following section of this report.

### 5.3.1 Collections

Collections can be considered from two distinct vantage points. One is organized around the major components that comprise the collection in most public libraries – print, audio and video. The other views the collection holistically, in terms of total items held. LPA prefers the second approach, because it more clearly treats the collection as an organic whole. In fact, the balance within the collection is constantly shifting between print and nonprint, audio and video. By considering the collection *in toto*, planners tacitly acknowledge the continuous change that occurs in the composition of the collection.

*A note about magazines:* When the space needs assessment methodology applied here was first conceived, it included a placeholder for the space that would be occupied by a library's magazine collection. Today, that placeholder is no longer needed, because magazine collections have,

frankly, dwindled away. Only a handful of public libraries maintain extensive subscription lists, and only a handful keep extensive backfile runs. Over the last few decades, periodical literature has evolved into a largely electronic form. Physical, hard-copy magazines – the kind of magazine collection that actually occupies floor space in a public library – are used today primarily for casual browsing. If a user seeks a specific article in a specific issue, that transaction almost always occurs today with an electronic version of the magazine in question. Physical magazine collections have dwindled to the point that in 2020, the IMLS removed magazines received as a data element from the annual report form the IMLS coordinates with the state library agencies.

**Total items held:** Total items held includes print, audio recordings and video recordings. LPA approaches a projection of recommended collection inventory using the metric "Items held per capita."

Per 2021 annual report data, P&PL maintains a collection of 75,255 items (62,253 books, 2,864 audio recordings, 10,104 video recordings). This translates into a collection of 2.77 items per capita. The combined experience of the library's national, year 2021 peer cohort suggests that the current-day collection should be 3.10 items per capita, while a subset of that full national cohort, focused on libraries drawn from the region, suggests the library should maintain a current-day collection of 2.15 items per capita. Another subset of the full national cohort, focusing on libraries (like P&PL) that operate two or more facilities, suggests the library should maintain a current-day collection of 3.35 items per capita.

Looking to the future, there was strong consensus across the library's management team

that a suitable collection inventory goal for P&PL should be based on the benchmarks that emerge from the library's regional peer cohort, moderated by the findings from the subset cohort of libraries that operate multiple facilities. Staff found greater resonance and relevance in the findings of the regional subset cohort and, at the same time, acknowledged that the findings of the IMLS peer comparative studies clearly demonstrated that operating multiple facilities impacts essential resource inventory goals (see the more complete discussions in Appendixes C and E). A "right-sized" collection for P&PL will fall somewhere between the regional and multiple facility cohort benchmarks.

As another point of reference, note that a still-smaller subset of the two subset cohorts examined in the peer comparative studies – a group of 12 libraries that represents the intersection of the regional subset cohort and the multiple facilities subset cohort – maintains a current-day aggregate collection inventory of 3.09 items per capita. This group of twelve libraries from the region that operate multiple facilities maintains a collection that's more assertive than the result drawn from the broader region and less assertive than the result drawn from the multiple facilities subcohort – a kind of middle ground.

The analysis based on P&PL's projected population to the year 2030 (33,089) recommends a collection of 2.28 items per capita according to the library's regional peer cohort, 3.25 items per capita according to the subset cohort of libraries that operate multiple facilities. Within that range, LPA recommends a collection of 3.03 items per capita as a representation of the "middle ground" described by the 12 regional libraries that operate multiple facilities.

The peer comparative / trendline analyses

based on P&PL's projected population to the year 2040 (37,044) recommends a collection of 2.37 items per capita according to the library's regional peer cohort, 3.20 items per capita according to the subset cohort of libraries that operate multiple facilities. Within that range, LPA recommends a collection of 3.02 items per capita, again, a kind of middle ground represented by the 12 libraries from the region that operate multiple facilities.

There was further strong consensus that these benchmarks should be adjusted to reflect the fact that they are drawn from current-day data sources and meant to be an indicator of a future state (to the year 2030 and 2040). As shown in the preceding discussion of broad national service trends, there is plain evidence that this metric has been in a state of steady decrease over the last 10+ years. Assuming that trend continues in the coming years, by the time the year 2030 or 2040 actually arrives, these benchmarks will be reduced.

A baseline scenario for collection development was developed, charting collection growth based on a current-day benchmark of 3.09 items per capita (83,800+ items), a year 2030 benchmark of 3.03 items per capita (100,200+ items) and a year 2040 benchmark of 3.02 items per capita (111,800+ items).

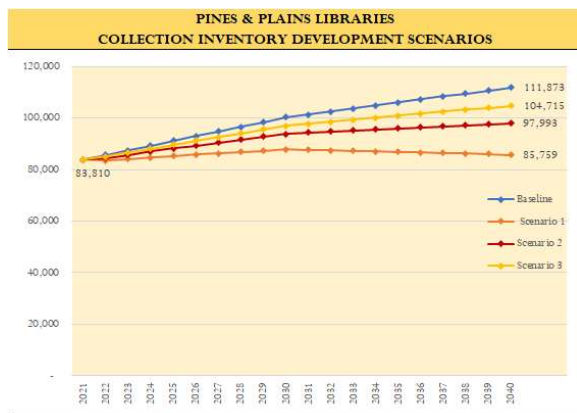
Three alternate scenarios were developed:

- The first assumed that the ratio of items held per capita would decrease annually at the same rate of decline that has been experienced by libraries serving 25,000 to 50,000 population since that cohort's rate of items held per capita peaked in 2009 – that the rate would decrease by 1.3% per year.
- The second variation was more cautious, assuming that the ratio of items held per

capita would decrease by one-half the rate experienced by the peer cohort since 2009 – a decrease of 0.66% per year.

- The third variation was more cautious still, assuming that the ratio of items held per capita would decrease by one-quarter the actual rate experienced – a decrease of 0.33% per year.

As shown in the following graphic, the baseline scenario produces a collection inventory forecast of 111,800+ items to the year 2040; Scenario 1 produces a collection inventory forecast of 85,700+ items to the year 2040; Scenario 2 produces a forecast of 97,900+ items; and Scenario 3 produces a projection of 104,700+ items to the year 2040.



Staff agreed that a moderate approach to this adjustment results in a more cautious end result (which is to say, a more assertive estimate for a larger collection inventory), which at this early stage in planning has the effect of reserving a wider array of future options for the library. While the library’s future-state peer cohorts have demonstrated that since the 2009 reporting cycle, the number of items held per capita has decreased by slightly more than 1.3% per year, this cautious approach to the adjustment reduces

the ratio of items held per capita at a lower rate – minus 0.66% per year for a ten year period.

LPA recommends that Pines & Plains Libraries anticipate a collection of 93,800 items to the year 2030, and 98,000 items to the year 2040.

### 5.3.2 Technology stations

Over the past generation, providing access to content and collections in electronic form has become an increasingly important part of the library’s overall mission. In space planning terms, supporting that access takes the form of technology stations provided by the library for public use. In short order, following the introduction of computers for public use in the library setting, the form of those stations took on a familiar form: a CPU, a screen, and a keyboard / mouse. Over time, the specifics have evolved and changed (hulking CRT screens gave way to slim flat panels, for example) and in the future, more of the access public libraries provide to e-content will be supported by way of wi-fi networks that users will access using their own Internet-connectable devices, but in terms of how much space a library needs, access to e-content will be based on the inventory of technology stations on offer.

As of the 2021 annual report, P&PL provides 32 technology stations for public use. The current-day national cohort suggests the library should have 23, based on a population of 27,1+, while the current-day regional cohort suggests an inventory of 24. The combined experience of the multiple facilities sub-cohort suggests a current-day inventory of 32 stations.

Note that among the 12 libraries that represent the intersection between the regional and multiple-facilities cohorts, the median

number of stations provided is 39.

Developing a resource and service inventory goal for P&PL regarding technology stations involves a similar approach to that used for collections – an initial benchmark based largely on the findings of the regional peer cohort, moderated by the findings of the peer cohort of libraries that operate multiple facilities. That initial benchmark is then further moderated to anticipate the likely future impact of recent broad national trends.

The library's year 2040 regional cohort suggests an inventory of 29 stations while the year 2040 multiple facilities cohort suggests an inventory of 34 stations. Noting that the "intersect" cohort of regional libraries that operate multiple facilities maintains a larger inventory of technology stations than either of the sub-cohorts do, an inventory of 42 stations is recommended for consideration.

Recent national service trends reveal that since 1998, when the Institute for Museum and Library Services started gathering data on network stations for public use, through 2018, the combined inventory in all U.S. public libraries grew from one year to the next. Over time, the rate of increase year to year did slow down, and consistently so. Two reporting cycles ago, the combined inventory of technology stations in all U.S. public libraries registered its first-ever decline. Another decrease was registered in the most recent reporting cycle. This starts to suggest that perhaps U.S. libraries have reached a saturation point with regard to the inventory of public network stations they provide. Acknowledging this trend, LPA encourages P&PL to moderate the peer cohort benchmarks modestly – by six stations, at least.

LPA recommends that the Pines & Plains

Libraries anticipate an inventory of 36 technology stations to the year 2040.

Note that some feedback from library staff suggests this might be a more assertive benchmark than is needed. As the planning process unfolds through its future steps, local planners can revisit this aspect with a careful eye.

### 5.3.3 *User seating*

Because the Institute for Museum and Library Services does not include a data element for reader seating as part of its collaborative effort with state library agencies to coordinate annual report data gathering protocols, a different approach is needed to define suitable goals for reader / user seating.

The literature on public library planning offers several formulas recommending a suitable inventory for reader seating. Most are based on a formula of X seats per 1,000 population, with X decreasing as population served increases, acknowledging the economies of scale at work as a library and its community grows. Over the years, LPA has worked with those formulas in the literature, developing a single, consolidated, population-based formula to recommend a benchmark for reader seating.

For a library that is to serve 37,000+ population – P&PL's year 2040 projected population – LPA recommends a benchmark of 136 reader seats.

Note that this includes general, open reader seats – seating at carrels, tables, and lounge settings. There will certainly be additional places where a library user may sit, but these are usually purpose-driven seats – seats at a technology station, seats in a small-group study room, seats that are provided in support of a specific activity.

Also be aware that this benchmark can be considered a starting point, a kind of opening bid. Depending on the library's specific service priorities, the benchmark may be adjusted up or down.

#### 5.3.4 *Staff work stations*

Forecasting the number of staff work stations a library needs is often a challenging topic, for many reasons:

- By the time a library starts to explore future space needs, staff is typically operating out of inadequate conditions. A library tends to reserve its space for the public it serves, often doing with less for staff. So the existing allocation for staff does not necessarily afford a meaningful baseline for future comparison.
- The unit of measurement for staff work stations does not correspond directly to FTEs. There is a rough correspondence, of course – a library with a large staff will likely need more staff work stations than a smaller library will – but not a direct one. One needs to determine the number of *stations* or places where staff will be needed to perform a certain task or operation. Some stations will be dedicated to a specific task or a specific individual while others may be shared by several staff during the course of a work week. Many those spaces are likely to take the form of a desk or an office landscape cube, but not all. One must quantify how many places will be needed in all.
- Work patterns are changing. Most libraries, for example, have moved or

are moving toward a self-service circulation model, which will have an impact on the number and configuration of work places needed in support of the circulation function.

- More libraries are moving away from a traditional, monumental service desk in favor of smaller, more compact service points like the one from the public library in Gothenburg, Sweden (see image, below). The compact, fluid form suggests approachability. It can be raised and lowered so as to operate in a standing or seated configuration. It can be placed on the floor in a way that creates a traditional definition of staff side / public side, but it can also be placed in a way that blurs the line and encourages a more collaborative approach to engagement with the user –



something that's needed more and more as staff and users need to look at the same information on the same screen at the same time.

As the board and staff move into more and more detailed facilities planning efforts, it will be especially important to revisit considerations surrounding staff support space, to make sure the configuration addresses future needs and are not bound by past practices and familiarities. For this iteration of P&PL's service goals and space needs, local library planners have been encouraged to be reasonable but inclusive in developing this inventory of current and future staff work stations, all the better to reserve options to respond to future staffing needs.

Two distinct staffing models have been developed, one for the library in Elizabeth, which includes accommodation for systemwide administration and one for the branch library service model, which is meant to be applied at Elbert, Kiowa and Simla.

Note that the proposed staffing configuration at Elizabeth anticipates that as P&PL grows and evolves as an organization over the coming generation, the library will feel an increasing need to develop selected, targeted, specialized stations in support of specialized services. Specifically, the configuration for Elizabeth anticipates developing and staffing

- a public service desk to focus on children's services and support, along with accompanying back-of-house work space for children's staff (this new position will also be responsible for coordinating children's services at the branches)
- work stations in support of a more formal technical services operation

The proposed staffing configuration at the branches anticipates providing varied work environments to support more effectively the variety of work activities undertaken by library staff. The proposed configuration of work stations does not anticipate an increase in the staffing complement at the branches, except should the library change (expand) the branch library service schedule.

## ELIZABETH

### PUBLIC SERVICE DESKS

- 3 stations @ customer service desk
- 1 station @ nearby desk for "other duties"
- 1 station @ youth services desk (future)

### STAFF BACK-OF-HOUSE

- 1 station for Elizabeth branch manager
- 2 stations for general clerical support
- 1 station for check-in
- 1 station for sorting and returns
- 1 station for children's services (future)
- 1 assembly table for projects
- 1 station for cataloging (future)
- 1 assembly table for processing (future)
- 1 station for network maintenance (future)
- 1 station for physical plant maintenance

### ADMINISTRATION

- 1 office for the library director
- 1 station for the office coordinator / administrative assistant
- 1 station for bookkeeping

## FOR ELBERT, KIOWA, SIMLA

### PUBLIC SERVICE DESKS

- 2 stations @ customer service desk
- 1 station @ nearby desk for "other duties"

### STAFF BACK-OF-HOUSE

- 1 station for branch manager

- 2 stations for general clerical support
- 1 station for check-in
- 1 station for sorting and returns
- 1 assembly table for projects

A total of 19 staff work stations is recommended for Elizabeth, and 9 in the branch service model.

### 5.3.5 *Meeting / programming support*

Space to support meeting and programming efforts is a more and more important element in the library's overall facilities plan. Public libraries today place increasing emphasis on providing spaces that foster engagement and dynamic exchange among users and groups of users. As noted in the national trends summary, library-sponsored programs and program attendance have grown dramatically over the last ten years. These services need to be accommodated in a suitable space.

Meeting spaces come in a variety of types and sizes, the particulars of which will vary according to the needs and priorities of each individual library. In P&PL's case, for a library that will serve 37,000+ population by way of four facilities, the following meeting spaces are recommended, reflecting the library's interest in sponsoring regular program events and the community's interest in having such spaces available to book for other events:

- **Multi-purpose room to seat 100 (at Elizabeth):** This is a flat floor space, supporting flexible audience arrangements with moveable chairs and tables. At an audience capacity of 100, the space should be designed with a demountable partition to divide the space into two smaller rooms for concurrent programming. The space should be

invested with high-end technology and audio-visual presentation equipment, to the extent supported by the capital project budget. This room would be available to support regular meetings of the library board.

- **Storytime room to seat 35 (at Elizabeth):** A dedicated space can be provided within the children's department to support storytimes and routine children's programs. Occasional, larger programs would be shifted to the multi-purpose room. An audience capacity of 35 accommodates children attending a program, along with their expected, extended entourage (caregivers, siblings, and such).
- **Multi-purpose room to seat 35 (at Elbert, Kiowa and Simla):** A flat floor space, supporting flexible audience arrangements with moveable chairs and tables should be provided at each of the library's branches. The smaller audience capacity reflects the more moderate scale of programming efforts at the branch. Nonetheless, the space should be invested with high-end technology and audio-visual presentation equipment, to the extent supported by the capital project budget. This room would be available to support children's programming held at the branch. Inasmuch as the library board's meetings are held in the branches from time to time, this room will be available to support those regularly scheduled meetings.

### 5.3.6 *Supporting "special use" functions*

A formulaic allocation will be made in support of special use activities at Elizabeth and as part of the branch service model.

### ***5.3.7 Supporting nonassignable functions***

Likewise, a formulaic allocation will be made in support of nonassignable functions at Elizabeth

and as part of the branch service model.

### ***5.3.8 Supporting “dedicated allowance” functions***

This study uncovered no reason to add any special, dedicated allowances to the planning matrix.



## 6 PINES & PLAINS LIBRARIES – RECOMMENDED SPACE NEEDS

The resource and service inventories recommended for Pines & Plains Libraries in the preceding section of the report become the basis for an estimate of future space needs. Consideration is given as to how the recommended system-wide resource and service inventory should be deployed into the library's individual service locations. Then the library space needs methodology described in Appendix A is applied to fashion an estimate of space needs. An understanding of the space needs at each of P&PL's service locations will inform the library board's decision-making with regard to capital improvements in the coming years.

The library's space needs are presented in two alternate scenarios. The first scenario anticipates that P&PL will operate four facilities, as it does today. The proposed distribution of the recommended system-wide resource and service inventory is modeled on the conditions in place today – each of the three smaller branches supports a modest, but roughly equal share of the system-wide resource and service inventory, with the remaining, larger share of the inventory housed at Elizabeth. Conceptually, a single, consistent service and space needs model is developed for each of the smaller branches, and a separate model is developed for the branch at Elizabeth. The second scenario anticipates that P&PL will operate five facilities. This scenario anticipates that the library will introduce a new service location to provide direct service to the growing population concentrated in the northwest corner of the county. While LPA has found that adding a new facility in the northwest corner is not an imminent or immediate concern, a new service point in the northwest is a strong prospect over the long term and so the option should be explored here to illustrate how it might impact service distribution and space needs.

### 6.1 Space needs in a four facility service configuration

A single service profile is created here for the three smaller facilities presently operated by P&PL. The idea is to fashion a single, consistent model that can be used to evaluate existing and prospective conditions and opportunities at each of these locations. A single, consistent model also insures that library users will be able to expect that their essential experience will be consistent regardless of which location they use.

A separate profile is created for P&PL's facility in Elizabeth. The respective service profiles in turn condition space needs at each location.

#### 6.1.1 *Service profiles / Kiowa-Elbert-Simla and Elizabeth*

**Collections:** Presently, the distribution of collection inventory is relatively equal at P&PL's three smaller service locations – Kiowa has a collection of 12,700 items, Elbert 13,800 items, and Simla 14,700 items. Over the last three

years, the distribution of inventory among these three locations has remained consistent. Kiowa on average has held 20.0% of P&PL's collection inventory; Elbert has held 21.3%; and Simla has held 23.3%. This consistency informs the service profile LPA recommends for these locations in a four facility service configuration.

LPA recommends the current state become the basis for the future deployment of collection inventory at P&PL: a collection inventory of 14,000 items is recommended for each of the existing locations in the more rural part of the county. This more or less corresponds to the current collection inventory at each of the three locations in question. Be aware, however, that this has the effect of producing a more centralized collection over time. Today, Kiowa, Elbert and Simla together maintain 64.6% of P&PL's total inventory. In this scenario, by the year 2040, the three locations will maintain 42.8% of P&PL's total inventory. But by moderating the share of inventory housed at each of these three service locations, it will also moderate the corresponding space need at each location, which LPA anticipates will make it easier to address future space needs in the context of the communities where these service points are located.

If 14,000 items are to be housed at each of the three smaller service locations, 56,000 items will remain to be housed at Elizabeth.

**Technology:** A similar approach is recommended with regard to technology stations. A collection of 14,000 items to be housed at each branch represents about 15% of P&PL's projected system-wide collection inventory. If a similar ratio is applied to the recommended system-wide inventory of 36 technology stations, 5 stations each will be deployed to Kiowa, Elbert and Simla, and 21

stations will be deployed to the branch at Elizabeth.

**Reader seating:** 16 seats are deployed to the three smaller service locations, with the remaining 88 seats being deployed to the branch at Elizabeth.

**Staff work stations:** As described in the preceding section of the report, 9 staff work stations will be supported at each of the three smaller service locations, and 19 at Elizabeth.

**Meeting / program facilities:** As described in the preceding section of the report, the service profile at Kiowa, Elbert and Simla should support a flat-floor, multi-purpose room to accommodate an audience of up to 35. The Elizabeth library service profile should support a flat-floor, multi-purpose room to accommodate an audience of up to 100 and a dedicated storytime / children's multi-purpose room to seat up to 35.

### ***6.1.2 Space needs / Kiowa-Elbert-Simla and Elizabeth***

Having defined the deployment of the system-wide resource and service inventories recommended for Pines & Plains Libraries, the corresponding space needs for all four facilities can be estimated.

The following allowances are made in the space needs model for Kiowa, Elbert and Simla in a four-facility service configuration.

- Given the 14,000 items to be housed in the collections at each branch, the collection will need to occupy between 1,077 square feet and 1,400 square feet, depending on factors such as shelving heights and aisle widths.

- Given the 5 technology stations to be housed, technology will require between 175 square feet and 250 square feet.
- 16 reader seats will require between 480 square feet and 560 square feet.
- 9 staff work stations will require between 1,125 square feet and 1,350 square feet.
- An allowance of 450 square feet should be reserved for the multi-purpose room.
- Special use space will require between 689 square feet and 1,404 square feet.
- Nonassignable space will require between 1,516 square feet and 2,607 square feet.

If the library were to apply the minimum space allowance at every juncture, the service profile recommended for the libraries in Kiowa, Elbert and Simla would require 5,512 square feet. If the library were to apply a moderate space allowance, the Scenario 1 space needs at Kiowa, Elbert and Simla are 6,591 square feet. If the library applies an optimum space allowance, the Scenario 1 library space needs at the three locations are 8,020 square feet.

Within that range from low to high, LPA recommends the library use an estimate of 7,252 square feet for planning purposes.

In a similar manner, the space needs based on the service profile for the branch at Elizabeth can be estimated.

- A collection of 56,000 items will require between 4,308 square feet and 5,600

square feet.

- 21 technology stations will require between 735 square feet and 1,050 square feet.
- 88 reader seats will require between 2,640 square feet and 3,080 square feet.
- 19 staff work stations will require between 2,375 square feet and 2,850 square feet.
- An allowance of 1,200 square feet should be reserved for the multi-purpose room and another 450 square feet should be reserved for the children's storytime room.
- Special use space will require between 2,439 square feet and 4,981 square feet.
- Nonassignable space will require between 5,366 square feet and 9,250 square feet.

Minimum allowances across the board produce an estimated space need of 19,513 square feet for the branch at Elizabeth in Scenario 1. Moderate allowances produce a space need of 23,331 square feet. And optimum allowances produce a space need of 28,460 square feet.

Within that range from low to high, LPA recommends the library use an estimate of 25,833 square feet for planning purposes regarding the branch at Elizabeth in this planning scenario.

Figures on the following two pages summarize the underlying calculations for the space needs estimates for the Kiowa-Elbert-Simla and Elizabeth facilities in Scenario 1.

**PINES & PLAINS LIBRARIES**  
**SCENARIO 1 / FOUR FACILITIES / YEAR 2040**  
**KIOWA / ELBERT / SIMLA**

				Units	SPACE ALLOCATION			
					Optimal	Moderate	Low	Recommend
A. Collection space								
Books+media (NOTE: 0% in circulation)								
Opt:	@	10.0	vol / sq.ft.	14,000	1,400			1,400
Mod:	@	11.5	vol / sq.ft.	14,000		1,217		
Low:	@	13.0	vol / sq.ft.	14,000			1,077	
B. Public network stations								
Opt:	@	50.0	sq.ft. / terminal	5	250			
Mod:	@	40.0	sq.ft. / terminal	5		200		200
Low:	@	35.0	sq.ft. / terminal	5			175	
C. Reader seating space								
Opt:	@	35.0	sq.ft. / seat	16	560			
Mod:	@	32.5	sq.ft. / seat	16		520		520
Low:	@	30.0	sq.ft. / seat	16			480	
D. Staff work space								
Opt:	@	150.0	sq.ft. / station	9	1,350			
Mod:	@	137.5	sq.ft. / station	9		1,238		1,238
Low:	@	125.0	sq.ft. / station	9			1,125	
E. Meeting room space								
Multi-purpose room 1								
	@	10.0	sq.ft. per seat + speakers area	35	450	450	450	450
SUBTOTAL 1 (A+B+C+D+E)					4,010	3,625	3,307	3,808
F. Special use space (calculated against SUBTOTAL)								
Opt:	@	17.5% of gross building area			1,404			1,269
Mod:	@	15.0% of gross building area				989		
Low:	@	12.5% of gross building area					689	
G. Nonassignable space (calculated against SUBTOTAL)								
Opt:	@	32.5% of gross building area			2,607			
Mod:	@	30.0% of gross building area				1,977		2,176
Low:	@	27.5% of gross building area					1,516	
H. "Tailoring" allowance (calculated against SUBTOTAL)						(not applied at P&PL)		
SUBTOTAL 2 (Subtotal 1 + F +G + H)					8,020	6,591	5,512	7,252
I. Dedicated allowances						(not applied at P&PL)		
GROSS BUILDING AREA					8,020	6,591	5,512	7,252

**PINES & PLAINS LIBRARIES**  
**SCENARIO 1 / FOUR FACILITIES / YEAR 2040**  
**ELIZABETH**

		<i>Units</i>	<i>SPACE ALLOCATION</i>			
			<i>Optimal</i>	<i>Moderate</i>	<i>Low</i>	<i>Recommend</i>
<i>A. Collection space</i>						
Books+media (NOTE: 0% in circulation)						
Opt: @	10.0 vol / sq.ft.	56,000	5,600			5,600
Mod: @	11.5 vol / sq.ft.	56,000		4,870		
Low: @	13.0 vol / sq.ft.	56,000			4,308	
<i>B. Public network stations</i>						
Opt: @	50.0 sq.ft. / terminal	21	1,050			
Mod: @	40.0 sq.ft. / terminal	21		840		840
Low: @	35.0 sq.ft. / terminal	21			735	
<i>C. Reader seating space</i>						
Opt: @	35.0 sq.ft. / seat	88	3,080			
Mod: @	32.5 sq.ft. / seat	88		2,860		2,860
Low: @	30.0 sq.ft. / seat	88			2,640	
<i>D. Staff work space</i>						
Opt: @	150.0 sq.ft. / station	19	2,850			
Mod: @	137.5 sq.ft. / station	19		2,613		2,613
Low: @	125.0 sq.ft. / station	19			2,375	
<i>E. Meeting room space</i>						
Multi-purpose room 1						
@	10.0 sq.ft. per seat + speakers area	100	1,200	1,200	1,200	1,200
Children's multi-purpose room						
@	10.0 sq.ft. per seat + presenter	35	450	450	450	450
<b>SUBTOTAL 1 (A+B+C+D+E)</b>			<b>14,230</b>	<b>12,832</b>	<b>11,708</b>	<b>13,563</b>
<i>F. Special use space (calculated against SUBTOTAL)</i>						
Opt: @	17.5% of gross building area		4,981			4,521
Mod: @	15.0% of gross building area			3,500		
Low: @	12.5% of gross building area				2,439	
<i>G. Nonassignable space (calculated against SUBTOTAL)</i>						
Opt: @	32.5% of gross building area		9,250			
Mod: @	30.0% of gross building area			6,999		7,750
Low: @	27.5% of gross building area				5,366	
<i>H. "Tailoring" allowance (calculated against SUBTOTAL)</i>				(not applied at P&PL)		
<b>SUBTOTAL 2 (Subtotal 1 + F + G + H)</b>			<b>28,460</b>	<b>23,331</b>	<b>19,513</b>	<b>25,833</b>
<i>I. Dedicated allowances</i>				(not applied at P&PL)		
<b>GROSS BUILDING AREA</b>			<b>28,460</b>	<b>23,331</b>	<b>19,513</b>	<b>25,833</b>

## 6.2 Space needs in a five facility service configuration

The second, alternate scenario anticipates that P&PL will come to operate five facilities. As the present study began, the library conveyed its interest in examining the implications of adding a new service point to more directly serve the northwest corner of Elbert County. In recent years, that part of the county has experienced the fastest growth, a pattern that's expected to continue in the near term, and the library sought to pro-actively consider options.

Although LPA found that recent growth in the northwest corner does not presently warrant establishing a fifth facility, continued growth in that sector will likely motivate adding a service point there over the long term. Scenario 2 explores how adding a fifth service location impacts the distribution of resources and services and the corresponding impact on space needs.

### 6.2.1 Service profiles / Kiowa-Elbert-Simla-NW and Elizabeth

How might adding a fifth facility affect the deployment of resources across the Pines & Plains Library system?

**Collections:** In Scenario 1, 14,000 items were deployed into the three smaller facilities – 42,000 items total. If a similar combined collection were deployed into four locations instead, estimate that 10,000 items are deployed to the four smaller branches, with 58,000 items deployed to the branch in Elizabeth.

**Technology:** In Scenario 1, five technology stations were deployed to each location served by one of the smaller service points. If five stations represents a minimum allotment, addition of a fourth branch will shift stations away from the

Elizabeth facility. Scenario 2 anticipates 5 technology stations deployed to each of the four smaller branches, 16 to the Elizabeth branch.

**Reader seating:** In a similar manner, 16 reader seats constitutes a kind of bare minimum seating deployment. If 16 seats are deployed to a new branch, it reduces the seating inventory at the Elizabeth library. Scenario 2 anticipates 16 reader seats apiece deployed Kiowa, Elbert, Simla and a new fourth small branch, 72 to the Elizabeth branch.

**Staff work stations:** As in Scenario 1, 9 staff work stations will be supported at each of the four smaller branches, and 19 at Elizabeth.

**Meeting / program facilities:** As in Scenario 1, the branch library service profile should support a flat-floor, multi-purpose room to accommodate an audience of up to 35. The Elizabeth branch service profile should support a flat-floor, multi-purpose room to accommodate an audience of up to 100 and a dedicated storytime / children's multi-purpose room to seat up to 35.

### 6.2.2 Space needs / Kiowa-Elbert-Simla-NW and Elizabeth

The adjusted resource deployment in Scenario 2 percolates through to a different estimate of space need for both of the recommended service profiles.

The following allowances are made for the space needs model for Kiowa, Elbert, Simla and the new branch in a five-facility service configuration.

- A collection of 10,000 items will need to occupy between 769 square feet and 1,000 square feet.

- 5 technology stations will require between 175 square feet and 250 square feet.
- 16 reader seats will require between 480 square feet and 560 square feet.
- 9 staff work stations will require between 1,125 square feet and 1,350 square feet.
- An allowance of 450 square feet should be reserved for the multi-purpose room.
- Special use space will require between 625 square feet and 1,264 square feet.
- Nonassignable space will require between 1,375 square feet and 2,347 square feet.

If the library were to apply the minimum space allowance at every juncture, the P&PL prototype branch library service profile in Scenario 2 would require 4,999 square feet. If the library were to apply a moderate space allowance, the Scenario 2 prototype branch library space needs are 5,958 square feet. If the library applies an optimum space allowance, the Scenario 2 prototype branch library space needs are 7,220 square feet.

Within that range from low to high, LPA recommends the library use an estimate of 6,490 square feet for planning purposes with regard to the prototype branch model.

In a similar manner, the space needs based on the Scenario 2 service profile for the Elizabeth branch can be estimated.

- A collection of 58,000 items will require between 4,462 square feet and 5,800

square feet.

- 16 technology stations will require between 560 square feet and 800 square feet.
- 72 reader seats will require between 2,160 square feet and 2,520 square feet.
- 19 staff work stations will require between 2,375 square feet and 2,850 square feet.
- An allowance of 1,200 square feet should be reserved for the multi-purpose room and another 450 square feet should be reserved for the children's storytime room.
- Special use space will require between 2,335 square feet and 4,767 square feet.
- Nonassignable space will require between 5,136 square feet and 8,853 square feet.

Minimum allowances produce an estimated space need of 18,678 square feet for the Elizabeth branch in Scenario 2. Moderate allowances produce a space need of 22,338 square feet. And optimum allowances produce a space need of 27,240 square feet.

Within that range from low to high, LPA recommends the library use an estimate of 24,843 square feet for planning purposes regarding the Elizabeth branch in this planning scenario.

Figures on the following two pages summarize the underlying calculations for the space needs estimates for P&PL's prototype branch and Elizabeth branch in Scenario 2.



**PINES & PLAINS LIBRARIES**  
**SCENARIO 2 / FIVE FACILITIES / YEAR 2040**  
**KIOWA / ELBERT / SIMLA / NW**

				Units	SPACE ALLOCATION			
A. Collection space					Optimal	Moderate	Low	Recommend
Books+media (NOTE: 0% in circulation)								
Opt:	@	10.0	vol / sq.ft.	10,000	1,000			1,000
Mod:	@	11.5	vol / sq.ft.	10,000		870		
Low:	@	13.0	vol / sq.ft.	10,000			769	
B. Public network stations								
Opt:	@	50.0	sq.ft. / terminal	5	250			
Mod:	@	40.0	sq.ft. / terminal	5		200		200
Low:	@	35.0	sq.ft. / terminal	5			175	
C. Reader seating space								
Opt:	@	35.0	sq.ft. / seat	16	560			
Mod:	@	32.5	sq.ft. / seat	16		520		520
Low:	@	30.0	sq.ft. / seat	16			480	
D. Staff work space								
Opt:	@	150.0	sq.ft. / station	9	1,350			
Mod:	@	137.5	sq.ft. / station	9		1,238		1,238
Low:	@	125.0	sq.ft. / station	9			1,125	
E. Meeting room space								
Multi-purpose room 1								
	@	10.0	sq.ft. per seat + speakers area	35	450	450	450	450
SUBTOTAL 1 (A+B+C+D+E)					3,610	3,277	2,999	3,408
F. Special use space (calculated against SUBTOTAL)								
Opt:	@	17.5% of gross building area			1,264			1,136
Mod:	@	15.0% of gross building area				894		
Low:	@	12.5% of gross building area					625	
G. Nonassignable space (calculated against SUBTOTAL)								
Opt:	@	32.5% of gross building area			2,347			
Mod:	@	30.0% of gross building area				1,787		1,947
Low:	@	27.5% of gross building area					1,375	
H. "Tailoring" allowance (calculated against SUBTOTAL)						(not applied at P&PL)		
SUBTOTAL 2 (Subtotal 1 + F +G + H)					7,220	5,958	4,999	6,490
I. Dedicated allowances						(not applied at P&PL)		
GROSS BUILDING AREA					7,220	5,958	4,999	6,490



**PINES & PLAINS LIBRARIES**  
**SCENARIO 2 / FIVE FACILITIES / YEAR 2040**  
**ELIZABETH**

				Units	SPACE ALLOCATION			
					Optimal	Moderate	Low	Recommend
A. Collection space								
Books+media (NOTE: 0% in circulation)								
Opt:	@	10.0	vol / sq.ft.	58,000	5,800			5,800
Mod:	@	11.5	vol / sq.ft.	58,000		5,043		
Low:	@	13.0	vol / sq.ft.	58,000			4,462	
B. Public network stations								
Opt:	@	50.0	sq.ft. / terminal	16	800			
Mod:	@	40.0	sq.ft. / terminal	16		640		640
Low:	@	35.0	sq.ft. / terminal	16			560	
C. Reader seating space								
Opt:	@	35.0	sq.ft. / seat	72	2,520			
Mod:	@	32.5	sq.ft. / seat	72		2,340		2,340
Low:	@	30.0	sq.ft. / seat	72			2,160	
D. Staff work space								
Opt:	@	150.0	sq.ft. / station	19	2,850			
Mod:	@	137.5	sq.ft. / station	19		2,613		2,613
Low:	@	125.0	sq.ft. / station	19			2,375	
E. Meeting room space								
Multi-purpose room 1								
	@	10.0	sq.ft. per seat + speakers area	100	1,200	1,200	1,200	1,200
Children's multi-purpose room								
	@	10.0	sq.ft. per seat + presenter	35	450	450	450	450
SUBTOTAL 1 (A+B+C+D+E)					13,620	12,286	11,207	13,043
F. Special use space (calculated against SUBTOTAL)								
Opt:	@	17.5% of gross building area			4,767			4,348
Mod:	@	15.0% of gross building area				3,351		
Low:	@	12.5% of gross building area					2,335	
G. Nonassignable space (calculated against SUBTOTAL)								
Opt:	@	32.5% of gross building area			8,853			
Mod:	@	30.0% of gross building area				6,701		7,453
Low:	@	27.5% of gross building area					5,136	
H. "Tailoring" allowance (calculated against SUBTOTAL)						(not applied at P&PL)		
SUBTOTAL 2 (Subtotal 1 + F +G + H)					27,240	22,338	18,678	24,843
I. Dedicated allowances						(not applied at P&PL)		
GROSS BUILDING AREA					27,240	22,338	18,678	24,843

**THIS PAGE IS LEFT BLANK INTENTIONALLY**

## 7 PINES & PLAINS LIBRARIES – NEXT STEPS

This section of the report seeks to develop a tool kit that the staff and board at Pines & Plains Libraries can use as they consider directions and options for facilities improvements. The tool kit is centered on a common, consistent service model for the smaller library service outlets operated by Pines & Plains Libraries. This in turn produces a common estimate of space need for these smaller service outlets which staff and board can use to evaluate and assess opportunities to improve and/or expand those facilities. This service and space model also represents a minimum level of service that should be considered, should the library choose to add a new facility in the northwest or northeast corner of the county. Service inventory resources that are *not* deployed to the smaller branches are deployed to the Elizabeth branch, which produces a space needs estimate tailored to the resource and service inventory to be housed there. That space needs estimate in turn informs decision-making regarding facilities and capital needs at that location.

### 7.1 Review / affirm recommended resource and service inventory goals

The immediate task facing Pines & Plains Libraries's board and managers is to review and affirm (or adjust) the recommendations made in Parts 5 and 6 of this report. The menu of resource and service inventory goals described in Part 5 represent one take on the blend of services and resources the library should expect to house in order to meet the long-term needs of its community. The discussion outlines factors local planners should take into account in consideration of those goals. The space needs assessment methodology is applied against this set of goals as a means of illustrating the critical connection between a library's service goals and its space needs. At the very least, the recommendations that emerge from this assessment are meant as a starting point in a larger, longer internal dialog.

The specific recommendations offered in Part 5, however, are not the only reasonable expression of resource and service inventory goals the library could adopt to meet the community's future library service needs. Board and staff might consider any of these variations:

- A different collection development scenario might be preferred. Scenario 3, discussed in the preceding section of the report, results in a more moderate overall collection inventory model. If the library were to adopt that as its goal, the change would percolate through the deployment of resources across the facilities in the system and the corresponding space needs estimates.
- Or, trustees and staff might determine to deploy a smaller collection inventory at the smaller service outlets, shifting inventory to the Elizabeth branch

instead. This would reduce the space need for the smaller service outlets, and increase the space need at Elizabeth.

- Trustees and staff might determine to offer a different configuration of meeting and program spaces at the Elizabeth branch and/or at the smaller branches.

Whatever adjustments might be made to the resource and service inventory goals recommended here, the changes would lead to a different estimate of space need. The intent here is to provide P&PL staff and board with that basic toolkit so that future options for service and facilities improvements can be evaluated from an informed perspective.

To the extent that board and staff may elect to change or edit these recommendations, Library Planning Associates, Inc. is ready to prepare a revised estimate of space needs based on the revised resource and service inventory goals.

## 7.2 Scenario 1 or Scenario 2

Two scenarios are presented in the preceding part of the report, one maintaining the status quo of operating four facilities, the other scenario exploring the impact of adding a fifth facility to extend direct service to residents in the growing northwest corner of the county.

While the differences between the two options are subtle – the service profile for the smaller library described in the report changes in a way that reduces the recommended space need of the small library from 7,250 square feet to 6,500 square feet and the recommended space needs for the Elizabeth facility shifts by 1,000 square feet – the choice between Scenario 1 and

Scenario 2 makes a significant statement regarding the library's future.

Simply put, it boils down to this: does the library anticipate a need for a fifth service outlet? Most likely, a fifth service outlet would be located in the northwest corner of the county, an area that has experienced notable recent growth. That trend is expected to continue.

Based on LPA's investigations, the need for a fifth service outlet is not pressing or immediate. A structured group interview scheduled in the northwest part of the county expressly to gauge interest in a prospective new branch drew no participants. Some key informant and structured group interview participants observed, anecdotally, that many residents in the northwest part of the county are likely oriented to other communities farther north and west in their work and day-to-day lives: they probably tend to use other libraries in surrounding communities. (Be aware, however, that even though individuals who reside in the northwest corner of the Elbert County may in fact use other, neighboring libraries, that does not supplant Pines & Plains Libraries's obligations to serve its residents directly.)

While the need for a fifth service outlet in the county is not immediate, LPA concludes that over the course of the library's planning horizon, introducing a fifth service outlet is highly likely, and LPA encourages the trustees and staff of Pines & Plains Libraries to prefer Scenario 2 over Scenario 1.

## 7.3 Scenario planning as a road map – evaluating facilities improvement options

Either of the scenarios discussed in this

report represents a significant shift for Pines & Plains Libraries. The library's current facilities are much more modest than the scenarios outlined here. It may seem daunting to aspire to the notably more substantial recommendations in this report.

It's important to keep in mind that these goals may be achieved over time through a series of smaller steps. At each point along this journey, P&PL board and staff should use the overall goals expressed here as a metric to evaluate the next step in the library's evolution. Given the library's long-term goal, does a particular near-term option retain the long-term goal as a realistic possibility? Or will a particular near-term option foreclose on the library's ability to achieve its long-term service goals and space needs?

It's also important to keep in mind the results of the stress test applied to P&PL's existing facilities in Part 3 of the report. In considering the differential between the size of the library's current facilities and their recommended size, remember that each of the libraries should be bigger, given the service profile each location supports. A certain amount of space is needed at each location to suitably house the resources and services presently deployed there. The remaining space need beyond *that* accommodates future growth.

### **7.3.1 *Big change / small change / "loose" change***

Certainly, the essential recommendations offered here represent a very assertive scenario, aimed at addressing the widest possible range of service and facilities improvements. In the near term, this kind of "big change" might well be out of reach, economically and politically. In the near term, board and staff might need to consider

alternate, or interim, steps to improve existing conditions. Smaller scale options like this might be considered "small change." The Elizabeth facility might offer an example of the kind of smaller change P&PL might choose to pursue.

The existing building at Elizabeth provides some 13,000 square feet. Roughly 10,000 square feet is provided on the entry level, of which the library presently occupies some 5,000 square feet. Another 3,000 square feet is available on a "mezzanine" above the existing, finished, occupied area. In lieu of pursuing a capital project to provide the full 25,000 square feet recommended for Elizabeth by this study, board and staff may instead choose to work with an architect to outfit and expand into the presently unfinished space in the existing building.

A slightly different variation on that theme might have the architect focus instead on finishing only the space on the entry level, leaving the space on the mezzanine for a later day. Leaving the mezzanine space out of the near-term capital improvement equation means the library would not have to address access concerns in the near term and could defer the expense of public stairways and elevators and such until some later date.

In either instance, LPA would encourage the board and staff to add a task to the architect's portfolio: to complete a high-level examination of the potential to expand the current building at the current site to the roughly 25,000 square feet recommended by this study. It's all about preserving options.

Also note that in either of these cases, the needs assessment process applied in this study is inverted. This study sought to identify space needs for Pines & Plains Libraries, doing so by

first defining the resource and service inventory the library should provide, then using that inventory as the basis for an estimate of space need. If the library were to initiate a project to finish out and occupy all or part of the available space at Elizabeth, the equation would start with the space available, and then ask “How can we spend that space most effectively to best meet the community’s needs?” In comparison with the process completed for this study, expanding into the unfinished space in the present building would involve a kind of “reverse engineering,” fitting resource and service inventories into the available space.

Whether the library were to pursue finishing and occupying *all* of the available space at Elizabeth or a part of the available space, the current study and recommendations provides context. It would be useful, in working with the project architect, to explore the feasibility of implementing a subsequent expansion that would align the gross area of the building with the needs outlined in this study. The current study would also provide context inasmuch as board and staff would need to consider which of the service priorities outlines in this report should be emphasized within the scope of this near-term project.

(If P&PL were to pursue this kind of “small change” project, LPA would certainly encourage staff and trustees to favor service and programmatic elements that support community engagement and exchange – spaces that encourage users to come into the library and linger, spaces that can be used for programs and events – perhaps with less priority invested in growing the collections. Sari Feldman, when she was President of the American Library Association, said “The public library today is less about what we *have* for you and more about what we can *do* with you,” a notion that clearly

resonated in comments received through the community engagement process.)

There’s another category of change and improvement that P&PL staff and board can consider. Call it “loose change” – although that term perhaps infers too little thoughtfulness, too little intentional forethought. These can include specific, targeted changes and improvements to the library’s facilities:

- Remedies to any and all essential accessibility conditions.
- Redeploying existing spaces and furnishings to emphasize engagement and exchange over static storage. At Kiowa and Simla, upon entry the user faces tall shelving, conveying a subtle message that the library primarily is about what it *has* in its collection. It would be more in keeping with the messaging of today’s public library if some of that shelving were moved into other parts of the library and replaced with seating, to convey more effectively that the library is about community.
- Creative options for expanding access. Offering traditional library service is expensive; staffing the library to keep the doors open can stretch the fiscal resources in many smaller communities. One way P&PL addresses this challenge is by offering 24/7 wi-fi at Elizabeth, Kiowa and Simla. Other products and options have come to market recently, allowing a library to extend access at a relatively modest cost. After-hours delivery lockers, for example, if installed on the exterior of the building, offer users a chance to pick up reserves and holds at any time of the day or night.

### 7.3.2 *Quantity and quality of the space*

The focus of the current study has been to determine the scale of the library's space needs. In the lead-up to this study, the board and staff intuited that the facilities are limiting the library's ability to deliver services to the community. By recommending resource and service inventory goals for the library, this study provides an answer to a fundamental question – how big does the library need to be? The answer to that question shapes the library's continuing assessment of expansion strategies, costing scenarios, site assessments, and more.

At the same time, trustees and staff should remember that the quantity of space is balanced by the quality of the space. These two aspects operate in tandem. A full discussion of desirable qualities of library space would easily fill another report like this. For now, let us highlight three:

- flexibility
- wellness
- community aspirations

**Flexibility** has been the librarian's mantra regarding building design almost 100 years. Librarians have long advocated for open spaces with as few structural impediments as possible. Or designs based on a recurring structural module so the same essential dimensions apply routinely throughout the building. And while these tried and true characteristics enhance a library's flexibility, the economics of building technologies have led to designs that, on a fundamental level, are not flexible.

The infrastructure demands of a modern library call for a degree flexibility and

adaptability most designs and most existing buildings do not provide. Specifically, as more and more resources are available electronically, as more and more users bring network-connectable devices to the library, electrical distribution becomes an more and more critical concern. Library users and library staff need to be able to plug in and recharge, and do it conveniently. Moreover, the library should be able to adapt and reposition access to the electrical distribution system to meet the changing needs of users and the changing imperatives of library service. Conventional design strategies do not support this convenience.

But new construction strategies and new products continue to come to market, offering a new level of responsiveness.

On one hand, more libraries are choosing to incorporate a raised floor system into their plans. This construction system has been around for decades, but has previously been prohibitively expensive. Traditionally, its most common application has been in a space that supports a mainframe computer (hence its more common name – a computer floor). In this setting, a “false floor” is elevated some distance above the concrete floor, creating a plenum. In a mainframe computer room, electrical service runs through this plenum and can be readily relocated as needs change. A similar advantage arises when a library can incorporate such a flooring system into its plans for new or remodeled space. As user and staff needs change, the electrical distribution system can be readily changed to accommodate. There is still a premium to pay for this kind of system, but the fact that more and more libraries are choosing to specify these systems indicates that the price point is less demanding than was the case in the past.

Furniture vendors are likewise becoming more creative in addressing this concern. Some have started to market furnishings – reading tables, mostly – that have a built-in, rechargeable battery. This can deliver service and a connection to an interior place that might not otherwise be reachable. In a similar way, some libraries (and some offices) make portable battery packs available to users – with a borrowed battery pack in hand, the user gains the freedom and flexibility to make a connection wherever.

In this increasingly inter-connected and connectable service landscape ready access to power becomes a hallmark of flexibility.

**Wellness**, we can expect, will loom larger and larger as a design concern as we continue to progress out of the recent pandemic. The extent of any lasting changes in behavior or design trends that accrue to our experience of the pandemic continues to evolve, and it's easy to imagine an increased interest in places and spaces that support and cater to the notion of wellness.

Curbside service, for example, has been so well-received at many libraries, that it may become a conventional aspect of the library's services going forward. There may be greater interest in drive-up or drive-through services. Drive-up / drive-through service introduces specific requirements with regard to site development and staff distribution.

Users may have an increased interest in self-service circulation. Even more so as next-gen RFID charging systems come on line, systems that are sensitive enough to check out materials as a user carries them past the sensors and out the door – the user won't even have to touch the grubby touch-screen station.

Touchless fixtures in restrooms will become

even more common.

And many buildings of all types are already being retrofitted with air handling equipment with greater filtration capabilities.

**Aspirations.** Finally, the qualities of the library's space should reflect the community's aspirations for itself. As a public building, and as one of the most communal of all public buildings, the public library comes to represent the community. The very design of the space should reflect the hopes of the larger community. This might be found in the use of higher quality building and finishing materials. Or it might be found in a ratio in the design itself that expresses the idea that the library is a special space. There should be something about the quality of the space that makes the user stand a bit taller, that makes the user proud to be part of the community. Good public library design should inspire good posture.

### 7.3.3 *Expansion options*

The findings of this study offer insights into various expansion options P&PL staff and board member might entertain and explore. Or, a facilities improvement opportunity may be presented to staff and board, and the findings of this study will inform the evaluation of that option.

#### 7.3.3.1 Expansion at the present site

Conceptually, this study recommends that the facility in Elizabeth aspire to a building of 25,000 square feet. The facilities needed at each of the branch locations are called out at 7,650 square feet. These parameters give shape to consideration of expansion options at each present site.



Simply put, can the present site support a building of the scale needed?

The Elizabeth facility, at 25,000 square feet, will prefer a single-level building configuration. This is owing to economies of operation in a single level building, operating a single public service desk. Is there enough space on the existing site to support a floor plate of 25,000 square feet? Attendant parking? Set-backs and landscaping? If not, can additional, adjacent properties be acquired?

Be aware that the building proposed for Elizabeth is of a scale that it *could* possibly be configured over two levels, reducing the size of the floor plate and reducing the size of the property needed to support an expansion, but that cannot be considered a guarantee at this point.

The branch service model, at roughly 7,000 square feet, will *strongly* prefer a single level building configuration. Is there sufficient property to support a building of that scale? If not can additional, adjacent properties be acquired?

Owing to the nature of the shared operations at the Elbert Library, it's difficult to apply the recommendations of this report to the existing space the library operates in. LPA anticipates the findings of this report will be applied to the Elbert Library most directly should the board, at some future date, decide to explore establishing a public library branch in Elbert, apart from the current, joint operation with the schools.

Beyond the fundamental question of scale, expansion at any of the current locations should assess the condition of the existing building, its utility in the context of the expanded building, the degree to which it will need to be remodeled

and upgraded to meet current operation standards.

#### 7.3.3.2 New construction

If the present site for any of the existing buildings cannot be developed successfully, the library could look to new construction on a new site to meet the service and space needs described here. Inasmuch as new construction is an option, associated planning factors can be explored here.

Conventionally, new construction offers numerous advantages over an addition. Obviously, the structure would support the latest, most efficient mechanical systems, enhancing operations and reducing costs. A new building would likely be designed with abundant power distribution capabilities, addressing one of the most pressing concerns facing library users today. It would likely offer a design that minimizes internal fragmentation.

Of course, new construction would also obligate the library to suitably dispose of the current building(s). Another municipal or county department might need space that corresponds to the space available in the library's present building. Alternately, the building could be sold for conversion to some commercial use. At present, there is no specific indication of any such opportunity on the horizon, but the disposition of the existing building typically becomes a critical issue to address whenever a library proposes moving to a new location.

If the library should move to a new site, the findings of this report can be used to define site size parameters. Site size is impacted by the building floorplate – how much space the building will actually occupy on the site, which in turn is affected by the scale of the building and

whether it's configured over a single or multiple levels. Site size is impacted by any on-site parking needed – typically governed by local codes. Unless the site is in a developed, urban setting, there are likely to be greenspace and setback requirements. Finally, the optimum site size can be conditioned by reserving space on the site to support a future expansion.

As the population density in the northwest corner of the county continues to grow, it will surely reach a point where a new, fourth branch is warranted. LPA's investigations in support of this study suggest that population growth and density has not yet reached that point, but it will likely do so. When it does, staff and trustees will use the service and building parameters outlined here to guide their planning approach.

#### 7.3.3.3 Converting an existing building

Another option related to new construction involves converting an existing structure to a new use as a library. If the library pursues this option, the single most important assessment criteria must be a building that is at least as large as the building the library needs – 25,000 square feet for the Elizabeth facility, or 7,000 square feet for any of the branches. Likewise, when it comes time to introduce branch service in the northwest corner of the county, a 7,000 square foot metric should be applied to any existing building that's suggested to house the new branch.

Or, if a building under consideration is *not* of sufficient size, can it be expanded to meet the size requirement, either as part of the conversion remodeling or at a later date?

Beyond that, be aware that as a building *type*, a library imposes on the building it occupies a host of engineering and design requirements that,

frankly, most existing do not accommodate.

Because a library prefers an open, flowing, adaptable space, interior, load-bearing partitions or structures should be kept to a minimum; a space divided into multiple smaller rooms will be difficult to convert into an effective, working library. Note that load bearing structures by definition include columns that might be used to support the roof or upper structures in an existing building – ideally, the spacing from column to column will integrate efficiently with common library layouts (bookstacks, in particular).

There should be sufficient floor-to-ceiling clearances to accommodate library stacks. Usually this translates into a clear space of at least 12', a condition many existing buildings might not meet. (Although as public libraries today move to deploy collections in lower, more reachable shelving, this parameter may acquire some "give".)

Consider the placement of relatively fixed or "hard-built" elements such as restrooms and emergency exits. The placement of these elements may or may not correspond with their optimum placement in a public library setting, and relocation of these elements could prove costly.

Most notably, the floors should be engineered to bear the weight of library bookstacks – which impose a "live load" of 150 pounds per square foot, on average. This is a requirement that exceeds the engineering specifications of most existing buildings, reflecting the unique character of library space. Certain construction strategies in existing buildings – in particular, use of slab-on-grade construction – improve the odds of an existing structure meeting this criterion, but still the load

bearing capabilities of the floor in any existing building considered for conversion must be tested and verified. (The broad movement among public libraries to deploy collections on lower, more reachable shelving also affects this parameter, but it remains important *if* the library should ever need to install traditional, full-height shelving.)

This is meant to provide an introductory overview of essential factors to assess when considering an existing structure for conversion. Many additional factors comprise a full assessment, and of course exceptions to these general rules can always present themselves.

It is noted that no specific candidates for conversion surfaced in the course of this study.

#### 7.3.3.4 Phased construction

Local planners may determine that a project to expand the Elizabeth facility to 25,000 square feet or any of the branches to 7,650 square feet cannot be realized at this time. Although a clear need over the next 20+ years for buildings on this scale has been documented by this study, cost factors and concerns over voter acceptance of a project of that size may prompt consideration of a smaller structure. Many libraries opt to follow a phased approach in pursuit of their long-term service and space goals, but in following this approach, it's important to keep the library's long-term goal in mind.

The size and scale of that initial phase should be determined in collaboration with a consulting librarian and an architect.

Consider the immediate space needs of the library as a starting point. By the time a library undertakes a needs assessment study, the existing building is often filled beyond the building's

effective working capacity (librarians are adept at carrying seven gallons in a five gallon bucket!). How much space should the library provide today just to house the resource and service inventory it offers now?

Ideally, the "right size" for phase one construction also accommodates a certain amount of near-term growth. If an initial phase is undersized, the library will soon outgrow it and be forced to approach the voters to finance the addition before those voters are ready and willing to approve another capital expense for the library.

If phased construction is considered, the smaller initial structure should be designed to accept a later addition. Site selection decisions should be made from the vantage point of the library's long-term space needs. The chosen site should be capable of supporting the library's eventual full build-out, not just the smaller, initial structure. Any smaller initial structure should be placed and configured on its site in such a way as to accept that later, planned addition.

One advantage of phased construction is that the library will have a second opportunity to reconsider and redirect its long-range service goals when it comes time to place the addition on the building.

A disadvantage to phased construction is that the second phase may never come to pass. Local political conditions may change, and the expansion may not be feasible. The library would then be forced to live with the smaller, more constrained building.

Another disadvantage to phased construction is increased total project costs. In a phased approach, the library will realize an initial savings

in construction cost because the initial phase would be planned at a smaller scale than the full build-out. The addition, built at a later date, will incur increased costs subject to annual inflationary increases, raising the combined, overall project cost.

Clearly these options, if they are pursued, require careful consideration and input from all of the members of the library's design team, including the library's architect and the library's construction manager.

#### **7.3.4 Program development**

As the library determines which of these scenarios to pursue and prepares to start working with an architect to develop plans for implementation, this planning effort shifts into a new phase – programming and design.

The goal of the current study has been to define suitable long-term resource and service inventory goals in order to fashion an understanding of the space needs implications for the libraries that are part of the Pines & Plains Libraries system.

This study, however, has operated on a broad-brush, global plane – entirely appropriate to present an initial overview of space needs to guide initial strategic planning considerations such as site selection, site development and capital budgeting.

But this study is not intended to parse space needs at the finer level needed to guide an architectural design process. While this study defines the overall, or gross, space needs of the library, a more granular level of specificity is required for an architect to develop an actual plan. The architect will need the findings from this report further elaborated into an area-by-

area, space-by-space, room-by-room, department-by-department analysis of space need. It's appropriate to undertake that deeper level of analysis after a broad strategy for expansion has been adopted and just before the library is ready to embark on architectural planning. This more detailed analysis should be as fresh as it can be when the library initiates architectural planning.

This process of elaborating on the library's space need is called "programming." Every library – every building – needs to be programmed before it can be designed, and it's important to consider who will prepare the program.

Architects are trained to program buildings, but there is a difference between a program developed from an architectural perspective and a program developed from a librarian's perspective. The difference has been described like this:

*When an architect writes the program, it's an expression of the solution; when a librarian writes the program, it's an expression of the problem to be solved.*

A program prepared by an architect is a statement of what we are going to do; a program prepared by a librarian is a statement of what we want to do. LPA suggests that the latter is a more effective planning tool and strongly recommends that the program be developed from a librarian's perspective.

This is not to suggest LPA should develop the program for any facilities improvement project undertaken by P&PL, although program development is an essential service LPA offers. If not LPA, consider another consulting librarian. Or the library can develop the program

internally. The program should be expressed in a librarian's voice.

Program development offers a natural opportunity to revisit, review, and reconfirm the essential resource and service inventory goals recommended in this initial study. With these essential directions in hand, the architect can begin the conceptual / schematic design process.

In an optimum setting, the building program statement is developed concurrently with the library's architect selection process, completing program as the architect is brought on to join the planning team. This deepens and enriches the architect's understanding of program requirements.

### **7.3.5 Architect selection**

The library board may choose to engage an architect to assist with the evaluation of expansion options discussed in these pages. These issues involve critical factors that will shape the design of any future library space, and an architect's counsel would provide valuable support to the board's decision-making. If the trustees decide to not include an architect in the near term, certainly a selection will be made as the library prepares to design the expanded building.

Many guides outline a sound process for architect selection. Most often, a process known as comparative selection is used. In broad terms, comparative selection is similar to the process a library employs to fill staff positions, from the director on down: the commission is advertised (usually through an RFQ – Request for Qualifications), architects submit a statement of qualifications, which the board (or a selection committee) reviews to determine a short list. The short-listed candidates are interviewed, and

based on those interactions, a selection is made.

The process is often supplemented by reference checks, and sometimes by tours to completed projects.

Be aware that in many states, the process operates within an overlay often known as Qualifications-Based Selection (QBS). Sometimes QBS protocols are written into state procurement statutes. Under QBS, when an organization seeks to engage an architect, the organization does not ask questions as to a specific fee. The architect may be asked as to the basis of the fee, but not the specific fee. At the end of the interview process, the finalists are ranked, and the library enters into negotiations with the top-ranked firm, at which time the particulars of fees are discussed. If the two parties come to terms, all is well. If the two parties cannot agree, negotiations end, and the library proceeds to negotiate with the second-ranked firm. And so on, until a satisfactory agreement is reached. QBS recognizes the responsibility of the library board to be responsible stewards of the public trust, while ensuring that decisions regarding the choice of this critical professional service are driven first and foremost by the qualifications of the architect.

If the board opts to select an architect at this time, two important strategic issues should be resolved:

- Scope of work – a client library will typically engage an “architect of record” with the expectation that the same firm will support the project from start to finish, through these initial planning phases, and then through conceptual / schematic design, design development, and construction. While it's the most

common to approach selection in this context of start-to-finish, sometimes a client at this early stage prefers to clearly limit the scope of an architect's work to include only selected, early planning efforts, such as reviewing and evaluating the alternate expansion strategies outlined in this report, or assessing the build-ability of a proposed new site. In doing so, the library reserves the option to re-open the selection process for the actual design.

- Past experience – the library board should work out how much importance past experience in library design will be as a selection criterion. Most of the time, this is an important consideration, because the library is a specific building type, with specific uses and demands,

and prospective clients often prefer to work with an architect who is familiar with that learning curve.

But a lack of prior experience shouldn't necessarily disqualify an architect. A capable architect can certainly learn the things that make the library a unique building type. If the architect lacks prior experience with libraries, it will obligate the owner / library to devote more time and energy helping to school the architect. Or the library may choose to engage their consulting librarian to assist with this schooling.

In preparation for architect selection, library trustees should consider their comfort levels with regard to each of these concerns.

## **APPENDIX A: LIBRARY SERVICE GOALS & SPACE NEEDS – A PLANNING MODEL**

This section outlines a methodology for calculating a library's space needs based on its projected service goals. This discussion is organized around eight types of floor space:

- A.1 Housing the collection
- A.2 Supporting technology access
- A.3 Supporting readers using the library
- A.4 Supporting staff work routines
- A.5 Supporting program events and meetings
- A.6 Providing for "special use" support functions
- A.7 Providing for "nonassignable" support functions
- A.8 Providing for "dedicated allowances"

By establishing essential service goals in each of these areas, an estimate of the library's space needs can be developed. This section of the report will discuss environmental factors and choices that affect a library's need for space – a decision to employ a 36" aisle in the library's bookstacks versus a 42" aisle, for example – and describe how service goals can be translated into space needs.

When a library presents unusual or extraordinary conditions, this methodology can and should be adapted to reflect the practical impact of those special conditions. A library wishing to house its collection on compact, mobile shelving could reasonably expect to achieve a higher collection density and require less square footage for its collection than would be calculated using this methodology. A library that plans to support long-term / day-long research use might plan on providing all of its seating in oversized study carrels to accommodate the needs of researchers, and could reasonably apply a larger space allocation per reader seat than is recommended here. A library that needs to incorporate a garage could add a special allocation to this assessment for that feature, to reflect the fact that including a garage would skew the ordinary calculation of nonassignable space.

### **A.1 Housing the collection**

For purposes of this discussion, the library's collection is organized into two broad parts – printed books and nonprint (with nonprint often

further subdividing into audio recordings and video recordings). A generation ago, a third part described space needs for magazines, but over the course of the past generation, magazine inventories in most libraries have decreased

substantially, as has the typical run of back-issues. As a result, the space needed to house the typical library's magazine collection borders on inconsequential, and in most cases the space needed to house magazines can be easily "found" during the design process.

#### **A.1.1 Books**

Library books can be housed in a variety of settings. Some settings favor user convenience and ease of use; other settings seek to prioritize the density of the collection, thereby reducing the footprint of the collection. The relative density of public library collections can range from 5 volumes per square foot to 30 volumes per square foot, depending on such factors as the type of material being housed, the height of the shelving unit, and the width of the aisle in the bookstacks. Compact shelving units can accommodate even more material in the same amount of space.

An optimum estimate of library shelving capacity is 10 volumes per square foot. Ten volumes per square foot will certainly translate into a setting that allows an aisle wider than the bare minimum 36" required by the Americans with Disabilities Act – an aisle 42" or even 48" wide. Shelf units will be shorter than the full-height shelving traditionally found in most public libraries, so more users can reach more of the collection easily. Each individual shelf will be planned with a more generous "working capacity" – meaning that more of each shelf will be reserved to accommodate day-to-day shifting and use of the collection, which also makes the stacks easier for patrons to use. In general, this optimum allocation of 10.0 volumes per square foot establishes the best possible balance between a setting that provides a reasonable collection capacity while maximizing patrons' ease of use.

A library may elect to pursue more assertive strategies to house its collections, which will increase the number of volumes per square foot that it will accommodate. A moderate estimate of collection capacity is 11.5 volumes per square foot, while a low estimate is 13.0 volumes per square foot.

If the library increases its preferred collection capacity per square foot from the optimum level of 10 volumes per square foot, it means that the library is retreating from that optimum physical shelving environment. As the allocation of volumes per square foot increases, the library is less and less likely to be able to achieve a 42" aisle. Maximum shelving heights are almost certain to increase to 84" to 90" – which becomes more difficult for more of the library's patrons to use. There will be fewer opportunities to market the collection with face-out display.

#### **A.1.2 Nonprint**

Most audiovisual collections today take some form of digital disc media, though some alternate formats are also found. Downloadable and streaming media are making the future of physical nonprint collections difficult to forecast. Flexible storage and display strategies are essential if the library is to support these varying media formats.

As with the book collection, the library's nonprint collection can be housed in a variety of environments, some that afford more face-out display and marketing opportunities than others. Some strategies for housing the nonprint collection provide wider aisles and lower shelves that are generally easier to use. As with the book collection, the variables produce differing recommendations for how many nonprint items per square foot a library can expect to house.



An optimum shelving environment houses 10.0 nonprint items per square foot. A moderate setting houses 12.5 items per square foot. A low allocation provides 15.0 items per square foot.

In the past, some libraries chose to house the nonprint collection in a double-box display system, in hopes of improving the security and safety of the items in the nonprint collection. In a double-box display system, the actual item is stored securely behind a staff service point, while a dummy display case is available on the shelf, indicating the item is available for loan. There are obvious spatial implications inasmuch as the inventory is effectively housed twice. Few libraries today pursue a double-box storage system, but if that should be a priority in any given setting, this planning methodology needs to be adapted to accommodate.

## A.2 Supporting technology access

Access to information sources, audiovisual content, and general reading material increasingly is available in electronic formats. The balance between traditional formats and e-formats continues to shift, but traditional formats so far are proving to be durable. Both traditional and technological access will continue co-exist and complement one another.

As e-content was introduced into the library setting, the means of access came to take a common form. Access was made through a computer network station – a desktop PC with keyboard and monitor – and from a space planning standpoint, the library needs to estimate the number of such stations that will be needed to support adequate user access to e-content.

As with the traditional collection, technology stations can be housed in a variety of settings. In

an optimum setting, allow 50.0 square feet per station. This allows generous space for the computer and a monitor (possibly a large-screen monitor), perhaps with peripherals such as scanners or dedicated printers, and an ample space adjacent to the computer where a patron may place materials selected from the physical collection. A moderate allocation of 40.0 square feet per station will support a computer and monitor only, together with a reasonable allocation of space for patrons to use. A low allocation of 35.0 square feet per station crowds stations closer together, leaves less adjacent workspace, and provides more of the stations at a less-comfortable standing height. An absolute minimum allocation of 30.0 square feet per computer station may be employed in some circumstances where notable site or budget constraints exist.

Note that more and more users carry their own internet-connectible devices in the form of smartphones, tablets and laptops. This affects the imperative many libraries face regarding how many technology stations the library will need to provide. It also creates a new imperative for the library: to design its user space in a way that provides ready and convenient access to charging stations.

Until recently, the “traditional” technology station has assumed a certain configuration of equipment, typically a desktop computer or its equivalent. Moving forward, the settings in which users connect with e-resources will be more variable, they will be less likely to look like a “traditional” computer network station. Some stations will offer a traditional profile, but others will be different. In planning space to provide access to e-content, the library will still need to determine how many user stations it should be responsible for providing to support sufficient user access for its community, factoring in the

growing number of users who supply their own internet-connected devices, and determining a suitable balance between stations with hardware provided by the library and those to support the users own technology.

### A.3 Supporting readers using the library

Reader seating should be provided in a variety of settings to meet a variety of user needs:

- lounge seating is appropriate in a browsing area or in an audiovisual listening area
- carrel seating provides private spaces for individual study
- group seating at tables is appropriate to provide an opportunity for small groups of patrons to work quietly together or to allow one or two individuals to spread their research out in front of themselves.

Seating should also be varied to meet patrons' physical needs. Small-scale seating may be appropriate in the children's library; firm seating with arm rests is appropriate in a setting for seniors.

As with the collection, reader seating can be deployed in a variety of settings, each of which produces a different "seating density." A library that applies the optimum allocation of 35.0 square feet per seat will do so to reserve the ability to deploy a larger proportion of its seating in a generous setting (large work surfaces, or a high proportion of lounge seats). A moderate allocation for seating is 32.5 square feet per seat. A low allocation is 30.0 square feet per seat. An absolute minimum allocation is 25.0 square feet per seat.

As one applies a lower and lower allocation for reader seating, any work surface that accompanies the seat will become smaller and

smaller. The spacing between seats will narrow, ultimately compromising the readers' sense of secure personal space.

### A.4 Supporting staff work routines

The space needed to support individual staff work routines varies depending on the nature of the work being performed at any given station:

- public service desk work stations in this planning model are allowed an average of 150 square feet each, an allocation that provides space for the staff chair or stool, the desk, modest associated file space and, notably, space for patron queues to form
- staff work stations in work rooms and offices generally follow a space allocation model that allows 75 to 100 square feet for a clerical station (sufficient for a desk and chair, a PC and phone, some modest attendant file storage, and adjacent corridor space to approach the station)
- 100 square feet for a station to support a librarian (the larger area typically required for additional files and storage for those positions)
- 125 square feet for a supervisor / department head's station (the still larger area typically required to accommodate additional files *and* to better accommodate an enclosed office to provide the privacy a supervisor sometimes needs to deal with personnel and other issues)

The space required for each staff work station will vary, depending in part on how assertively or efficiently the library's space plan will need to be. In an optimum environment, allow 150.0 square feet per staff work station. In a moderate environment, allow 137.5 square feet

per staff work station. A low allocation will allow 125.0 square feet per staff work station. An absolute minimum allocation will allow just 100.0 square feet per staff work station (while also compromising the effectiveness of work routines).

### A.5 Supporting program events & meetings

The public library may offer different kinds of meeting space, depending on the programming activities the library seeks to offer and the kinds of general public activities the library seeks to support. The space needs for each kind of meeting space is estimated according to the type of use.

The most common kind of meeting space found in a public library is a **multi-purpose room**. A multi-purpose room is a flat-floor space that allows the library to support a variety of meeting and program activities. Seating can be configured in a variety of ways, but most often is configured with theater-style seating. The area needed for a multi-purpose room is typically determined by the library's desired capacity in a theater-style setting, allowing 10 square feet per seat. An additional allowance is made to accommodate a speaker, a panel, or a presentation at the front of the room.

Some libraries also provide a **children's program / storytime room**. A library may choose to add a dedicated storytime room to its menu of meeting spaces if it anticipates a bountiful schedule of children's program activities – a dedicated children's program room relieves the library's primary meeting space, making the primary room available for other functions. The scale of a storytime room is determined by the anticipated audience to

accommodate, allowing 10 square feet per person in the audience. Adjust that allowance to 15 square feet per person if the library anticipates doing craft programs (which require more space). Add an allowance at the front of the room for the program presenter.

Another common meeting space found in a public library is a **conference room**. Oftentimes, a library's conference room doubles as a board room. A conference room is a more formal meeting space typically centered around a large conference table. The scale of this room is likewise determined by the number of people to be accommodated around the table. Allow 30 square feet per person.

Still other types of meeting and program space can be provided in a public library setting. Examples may include a full, formal auditorium (fixed seating, raised stage, probably theatrical lighting), a seminar room, a computer training room. Strategies to accommodate the space needed for these other types of meeting and programming space may be found in the literature on library space planning.

### A.6 Providing for “special use” support functions

“Special use space” refers to a category of space that most libraries wish to provide, but that hasn't been directly accommodated in any of the preceding “types” of space. By way of example, special use space includes small group study rooms. It includes a copy center, possibly an area for public refreshment. Special use space includes a staff break room.

Typically, special use space in a public library constitutes an area equal to 10-15% of the projected gross area of the building. The amount

of special use space a library needs will be determined by the number of photocopiers or microfilm reader-printers the library wishes to provide. It will be determined by the number and size of small group study rooms that the library wishes to provide. It will also be determined by factors like whether or not the library wishes to provide a public lounge or a coffee shop within the library.

In an optimum setting, a library should reserve 17.5% of its gross area for special use purposes. A library that plans to provide a public lounge or coffee shop likely falls at this end of the spectrum. In a moderate setting, a library should reserve 15.0% of its gross area for special use purposes. With a low allocation, a library should reserve 12.5% of its gross area for special use purposes. A minimum allocation for special use purposes will be 10.0% of the library's gross area.

### **A.7 Providing for “nonassignable” support functions**

Nonassignable space is defined as “those areas or rooms of the library necessary for the general use and operation of the building but not serving specific library functions, such as foyers, vestibules, corridors (but not aisles in bookstacks or other furnishings), stairs, elevators, toilets, janitor rooms or closets, ventilation ducts, and mechanical equipment areas” (from *Measurement and Comparison of Physical Facilities for Libraries*, ALA, 1970).

Nonassignable space needs for mechanical systems are determined largely by engineering requirements. Design specialists will direct how large certain pieces of equipment need to be in order to meet the environmental specifications for the library. Other nonassignable space needs

will be determined by local codes. The number of fixtures needed in each restroom will likely be determined by code, and the number of fixtures will determine the space needs of those facilities (as will the accessibility regulations of the Americans with Disabilities Act).

While the amount of nonassignable space a library needs will be determined by “external” factors (codes, engineering requirements), it's important to make an allowance for these purposes in the early planning for an expanded building in order to gain a realistic estimate of the library's overall, or gross, space needs.

In an optimum setting, a library should reserve 32.5% of its gross area for nonassignable purposes. In a moderate setting, a library should reserve 30.0% of its gross area for nonassignable purposes. A low allocation will allow 27.5% of its gross area for nonassignable purposes. An absolute minimum allocation for nonassignable purposes will be 25.0% of the library's gross area.

Note that if the library is planning a small facility or if the library plans on an expansion strategy that incorporates an existing structure (an addition to the present library or the conversion of an existing structure from a prior use into a new use as a library), the proportion of space devoted to nonassignable space is likely to be at the higher end of this range. If the library is planning a large facility or anticipates new construction, the proportion of gross area that will be used for nonassignable purposes will likely be lower. This ratio should be chosen accordingly.

### **A.8 Dedicated allowances**

In some circumstances, it's sensible to make

an additional accommodation to cover the space needs of a special or unusual feature to be provided as part of the library. A special accommodation of this sort is warranted when the library will include a feature, function, or element that is not conventionally found in a public library. Because the feature in question isn't common, the space to support it will not be captured in conventional formulas for calculating a library's space need. With that in mind, a separate allocation should be made. Examples can include:

- *an allocation for a bookmobile garage:* This is perhaps the most common example of this "uncommon" accommodation. Among public libraries nationwide, fewer than 10% maintain a bookmobile; among libraries serving 50,000 and up, roughly 35% operate a bookmobile. Because relatively few libraries operate a bookmobile, space for a garage would not ordinarily figure into an estimate of space need using conventional formulas, so a special accommodation is warranted,
- *an allocation for a partner organization:* The library may share its facility with another organization – a local history museum, perhaps. The space need for the partner operation would not typically be accommodated by the conventional formulas. Therefore, a placeholder for the space needs of the partner organization could be added to the mix.

In some circumstances, a library might choose to make a special allocation as a means of drawing attention to the feature being highlighted. For example, at this early stage in planning, a library may want to insure that the notion of a coffee bar or refreshment service is incorporated into its plans and so opts to make a special accommodation for this function, outside of the conventional calculations. By reserving a specific line item for this function early on in the library's planning, the function is highlighted and therefore more likely to remain a topic for discussion. Or perhaps a library wishes to be sure to reserve space for display of traveling or seasonal exhibits, or the library intends to make a substantial commitment for public art display and wishes to reserve the space for this function. By creating a line item, it highlights the library's interest in this function.

At the same time note that the examples provided here – a refreshment service, exhibition space, or space for display of public art – are the kinds of functions often classified as "special use" space. An alternate strategy for accommodating these functions is to make an "optimum" allocation for special use space at the higher end of the range recommended for that purpose. If the library chooses to make a special accommodation instead for such functions, consider reducing the proportionate allocation for special use purposes.

**THIS PAGE IS LEFT BLANK INTENTIONALLY**

## APPENDIX B: LOCAL SERVICE TRENDS

A compilation of local service data provides a useful perspective, highlighting how local service trends have developed over time. The primary source for this data is the public library database maintained by the Institute for Museum and Library Services. The IMLS has worked with the state library agencies across the country since the late 1980s to coordinate the states' ongoing efforts to assemble public library annual report data. The IMLS database is the primary source of the data presented here, through the most recent data set released to date, from the 2021 reporting cycle. Data presented here from more recent reporting cycles has been provided directly by the library.

Certain data elements presented here are not found directly within the IMLS data set, but are produced by combining two or more elements that *are* found in the IMLS database. When a new data set is published by the IMLS, LPA downloads the new set and combines selected data elements to create new “value-added” data bits. The measure ‘Nonprint as a percent of total inventory’ is one such, combining the data elements ‘Volumes held,’ ‘Audio recordings held,’ and ‘Video recordings held’ to create the measure ‘Total items held;’ then dividing the sum of ‘Audio recordings held’ and ‘Video recordings held’ into that total.

As this information is assembled, it’s not unusual to observe an occasional blip in the reporting. Most often, the blip is a simple quirk, it can be a matter of a data element definition changing or the result of someone new at the library gathering the data for the library’s annual reports. Most of the time, a seeming anomaly is no cause for alarm.

The following data elements are presented, organized into two categories – ‘Resource metrics’ and ‘Activity metrics.’

### Resource metrics

- Total inventory
- Distribution of inventory
- Items held per capita
- Nonprint held
- Nonprint as a percent of total inventory
- Technology stations for public use

### Activity metrics

- Circulation
- Children’s circ as a percent of total
- Total annual visits
- Program events
- Program attendance

Be aware that the reporting period includes the first two years of the pandemic. While the pandemic did not directly affect resource-related measures of service, it had a clear impact on activity-based measures.

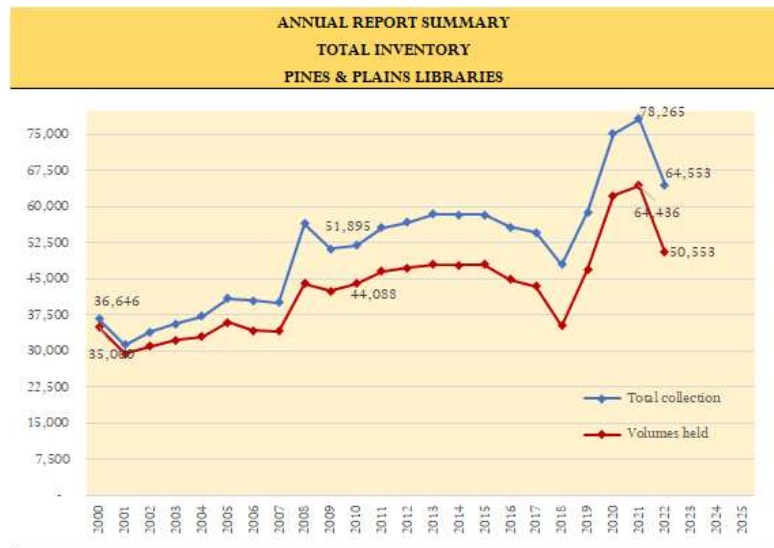
## RESOURCE METRICS – TOTAL INVENTORY

The chart to the right records P&PL's annual report data for total holdings and print volumes from 2000 through the latest annual report, for 2022.

Changes in a public library's inventory totals tend to be incremental, which is what P&PL reports throughout most of this reporting period. A blip appears between 2007 and 2009 – an abrupt infusion in 2008, followed by a tailing off the next year. Often, that's the result of a change in who has prepared the inventory report. The blip over the final years of the reporting period is more perplexing – the sharp increase that appears over two cycles (2019 and 2020), growing by more than +50%; then, in 2021, the

reported inventory is unchanged from the previous year. In 2022, the combined inventory tailed off sharply, to 64,500+ items.

It's also important to note that the patterns shown here for total inventory and print inventory are closely modeled after each other. That is common in most public libraries, inasmuch as print represents the largest share of total inventory at nearly all U.S. public libraries. Over the past generation, the share of total represented by nonprint has increased dramatically, but print remains, by far, the most significant portion of a public library's inventory and the driver of overall collection development trends.





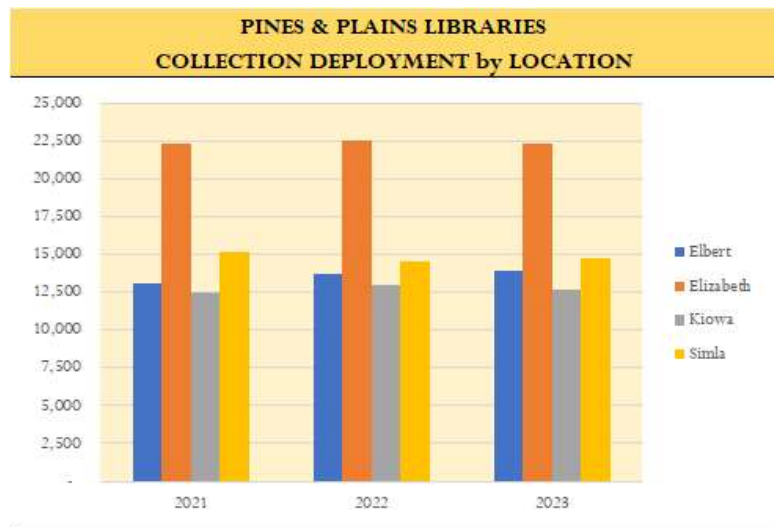
## RESOURCE METRICS – DISTRIBUTION of INVENTORY

It's important to know how P&PL's overall inventory has grown in recent years, it's useful to understand how that inventory is distributed among the four facilities the library operates. The chart to the right shows the distribution across the four locations over the last three years. This is drawn from internal reporting data supplied by the library.

The largest share of the collection is held the library at Elizabeth. It follows, given that Elizabeth represents the largest population concentration in the service area. Elizabeth supports a bit more than one-third of the total

inventory, and the rest is distributed among the other three locations – Elbert, Kiowa and Simla.

What's interesting to note here is how evenly balanced the collection distribution is among the three smaller branches and how constant the overall distribution has been during this three-year reporting period. On average, Elizabeth has been home to 35.2% of the collection; Elbert 21.3%; Kiowa 20.0%; and Simla 23.3%. It's as if a consistent service / collection development model has been applied to each of the three smaller locations operated by Pines & Plains Libraries.

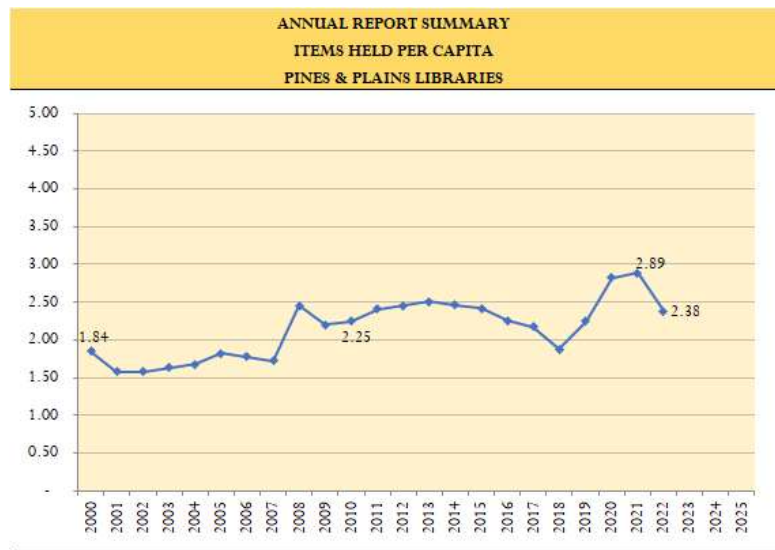


## RESOURCE METRICS – ITEMS HELD PER CAPITA

Another way to look at collection metrics is ‘Items held per capita.’ This measure tends to moderate slightly in comparison with the total inventory figures discussed above, but it reveals some of the same patterns discussed above. This is LPA’s preferred measure relating to collection inventory because it treats the collection in a holistic manner, acknowledging that the

composition within the collection is always shifting.

This measure shows the same brief uptick in 2008 that was evident in the preceding discussion – maybe the result of a collection infusion by way of a grant program? And a strong increase between 2018 and 2020, tailing off in 2022.

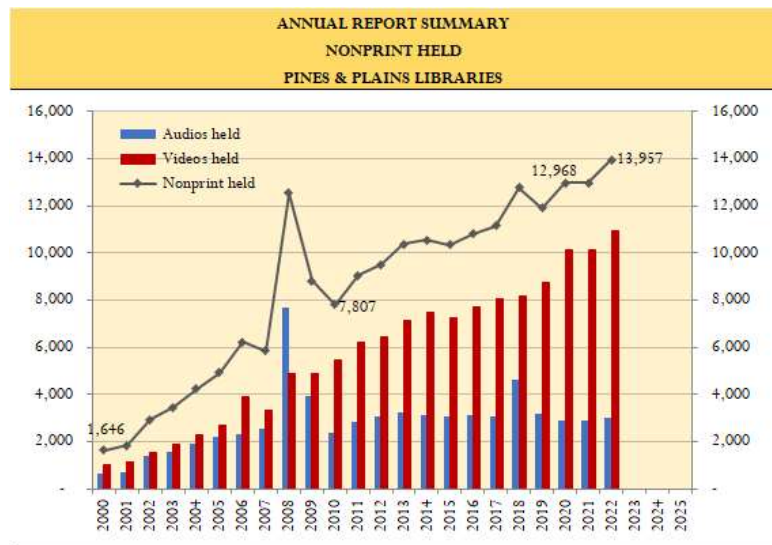


## RESOURCE METRICS – NONPRINT HELD

As we see in almost every U.S. public library, the story of nonprint collection development is “A Tale of Two Mediums.” Audio and video holdings have taken two distinctly different paths over the course of the past generation. P&PL is little different (see chart at right).

The chart tracks overall nonprint development trends since 2000. This collection at P&PL has grown almost ten-fold, from 1,600+ items to 13,900+ items in 2022. There’s an uncanny blip in 2008, when the library reported a dramatic increase in the audio collection. This certainly contributed to the overall collection inventory blip for that year (but note that print holdings also increased notably between 2007 and 2008, only to fall off again the following year – that the blip appears in print and nonprint alike suggests a reporting anomaly of some sort).

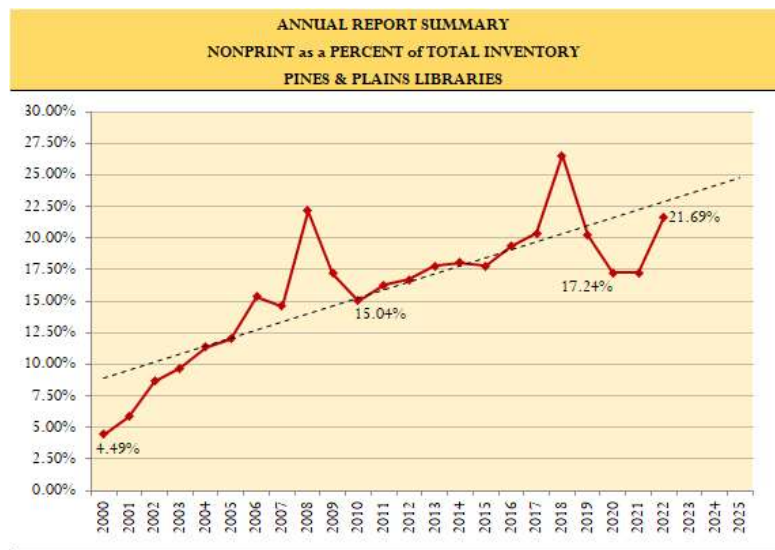
The 2008 blip notwithstanding, the combined nonprint inventory reveals a clear pattern of steady growth. This is not at all out of the ordinary, most U.S. public libraries have documented a similar pattern over the last 20 years. Moreover, a closer look at the overall pattern, broken out by format, reveals another pattern consistent with national service trends: the video inventory has grown, while the audio inventory has not. Nationally, and in broad terms, today video holdings are the only segment of the typical public library’s collection that has grown since the turn of the century. In the aggregate, print inventories started to decrease in the mid-aughts. Audio inventories started to decrease around ten years ago. Video remains a strong growing component throughout almost all of the period since the turn of the century. The service pattern at P&PL reflects those broad national trends.



## RESOURCE METRICS – NONPRINT as a PERCENT of TOTAL INVENTORY

The preceding discussions hint at the next point: that over the last generation, the balance within the collection at P&PL has shifted in favor of nonprint materials. This reflects a broad national trend, although the shift at P&PL has been more dramatic. At P&PL, in 2000, nonprint holdings represented barely 4.5% of the

combined inventory; by 2022, the ratio stood at 21.6%. Nationally, among all public libraries in the aggregate, in 2000, nonprint holdings represented 6.6% of the combined inventory; by 2021 (the latest year for which LPA has processed this data), the ratio stood at 13.8%.

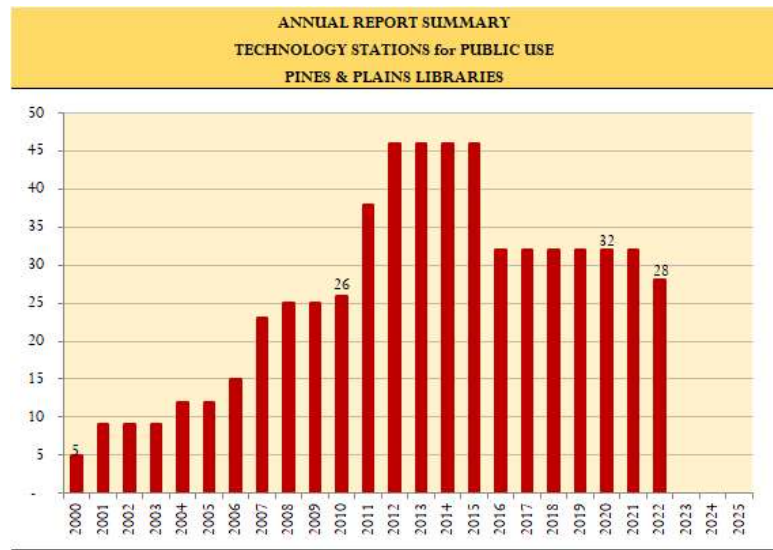


## RESOURCE METRICS – TECHNOLOGY STATIONS FOR PUBLIC USE

Because an increasing amount of information and entertainment resources are available and delivered electronically, the library needs to provide technology stations so as to insure the users's ability to access these resources. The number of technology stations a library provides is balanced by the users's access to their own connect-able devices. As more and more users come to the library with smartphones, tablets and laptops in hand, it impacts the number of stations the library needs to provide. At the same time, it increases the library's obligation to provide easy access throughout its physical space to network

connections and charging capabilities.

For much of the period since the turn of the century, P&PL has been able to increase its inventory of technology stations for public use, growing the number of stations from 5 in 2000 to 46 in 2013 (see graphic, preceding page). In 2016, the number of stations decreased to 32, and in 2022, there was a further decrease, to 28 stations. What brought about the reduction in 2016? Was the reduction in 2022 related in any way to the pandemic?



## LIBRARY VISITS PER TECHNOLOGY STATION

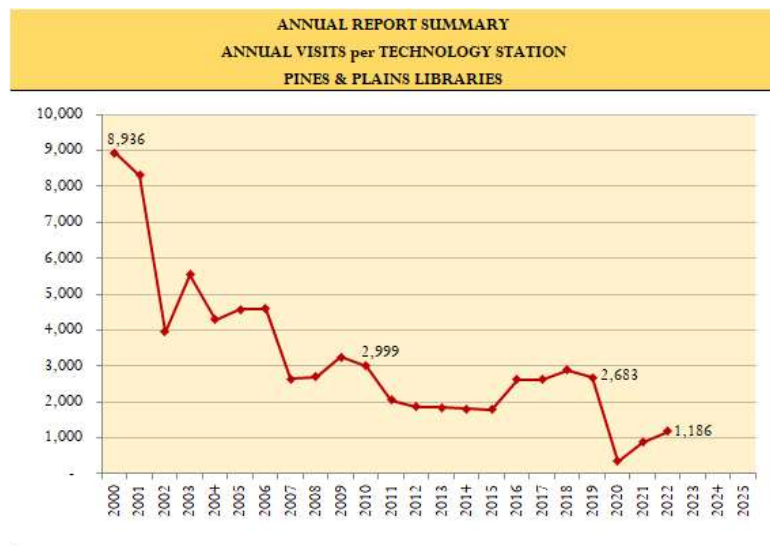
Another way to look at a library's technology station inventory is to correlate the inventory to the number of annual visits the library supports. Although no studies have linked these two metrics, it just seems intuitive that as a library experiences more foot traffic through the door, there will be a corresponding increase in demand for access to digital content. If this is so, it follows that a library would seek to reduce the number of annual visits per technology station, as an indicator of greater access to these resources.

P&PL has seen a broad, general progression toward a lower ratio for visits per technology station. This mirrors the patterns seen among public libraries nationwide. P&PL started the period with almost 9,000 visits per technology station in 2000. By 2010, that ratio had dropped to roughly 3,000 visits per station. The ratio fell further, to just under 2,000, but in 2016 bumped up to about 2,600 visits per station, corresponding with the library's decrease in the overall, system-wide inventory of technology

stations. In 2019, the last "normal" reporting year before the pandemic, the library reported 2,600+ visits per station. The following year, of course, the number of visits plummeted – thanks to the pandemic – as did this ratio.

During the pandemic, resource-centric service metrics were not greatly affected – measures like collection inventories, technology station inventories, and so on. Activity-centric service metrics, on the other hand, were – measures like total circulation, total annual visits, programming, and the like. 'Annual visits per technology station' provides clear evidences of the impact of the pandemic in 2020, along with the start of a recovery in 2021 and 2022.

Among all public libraries in the U.S., in the aggregate, this ratio has seen a steadier, smoother reduction over the period. In 2000, the ratio started at 2,700+ visits per station. The ratio consistently reduced to about 1,100+ in 2011 and has hovered in that range ever since.



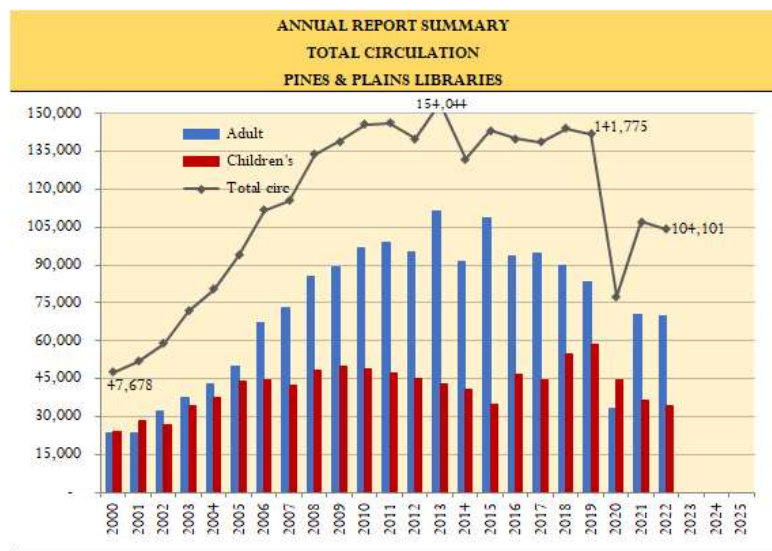
## ACTIVITY METRICS – CIRCULATION

Circulation is the most common measure of library use levels. Along with inventory reports, the number of loan transactions in any given period – week / month / year – is a most frequent tally at any public library.

At P&PL, the library has reported steady increases in total circulation during the first two-thirds of the reporting period. Total circulation grew from 47,600+ transactions in 2000 to a peak of 154,000+ in 2013 – a three-fold increase. Between 2014 and 2019, the pattern settled into a kind of plateau, at roughly 140,000 transactions per year. In 2020, the bottom fell out, as it did everywhere. Total circulation was about half that in the pre-pandemic period. In 2021, as the pandemic started to ease, P&PL showed signs of recovery, with total circulation increasing to 100,200+ transactions. But in 2022, total circulation fell, to 104,100+.

This local pattern is puzzling. For the first

ten years of the reporting period, the library tallied dramatic growth in circulation. Over the next ten years, total circulation effectively plateaued. Nationally, aggregate circulation among all U.S. public libraries peaked in 2010, at just under 2.5 million transactions. Total circulation declined steadily until 2017. There were tiny increases in 2018 and 2019, just enough to suggest the beginning of a reversal of the moment's trend, and then came the pandemic cliff. Total circulation nationally was 1.6 million; total circulation dropped off locally in the first year of the pandemic as well. Nationally, 2021 was little changed from 2020 – 1.5 million transactions – while locally, circulation started to rebound. The full national data set for 2022 will not be posted until late summer / early fall next year, but we have the local report for 2022 and it shows a tailing off from the previous year. Erratic results produced by the pandemic?

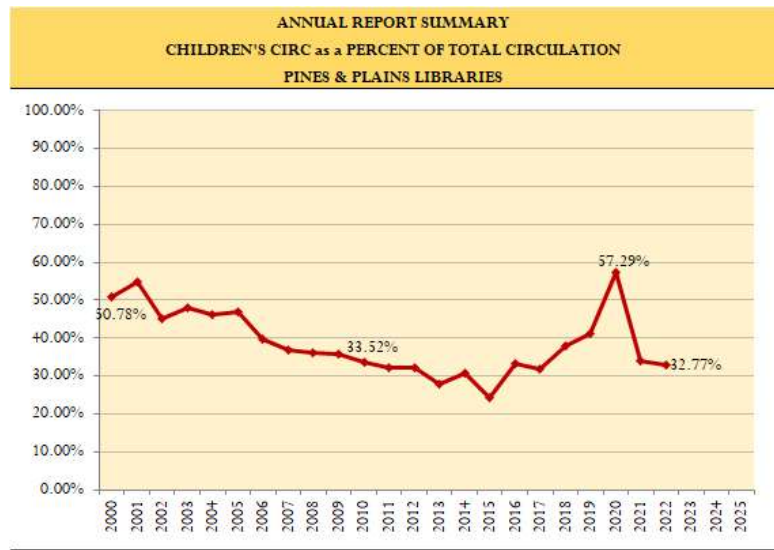


## ACTIVITY METRICS – CHILDREN’S CIRCULATION as a PERCENT of TOTAL

At P&PL, the share of circulation attributed to children’s material has been more volatile over the past generation than has been the case in the aggregate nationally. As seen in the chart to the right, in the earliest years of the reporting period, circulation of children’s materials accounted for more than half of total circulation transactions. That ratio soon started to fall and continued to fall through the mid-teens, reaching a low share of total, at 24.2% in 2015. The share then started to rebound, reaching 41.2% in 2019. During the first year of the pandemic, there was a spike, with children’s circulation

suddenly accounting for almost 60% of P&PL’s total circulation. In 2021 and 2022, the ratio fell once again, to the vicinity of one-third of total.

P&PL’s current ratio closely reflects the current national balance between children’s and adult circulation. Nationally, in 2020, children’s circulation accounted for 32.8% of total. That is actually this metric’s lowest mark nationally since the start of the reporting period, although throughout the period, this metric has fluctuated within a very narrow and consistent range (between 36.4% and 32.8%).



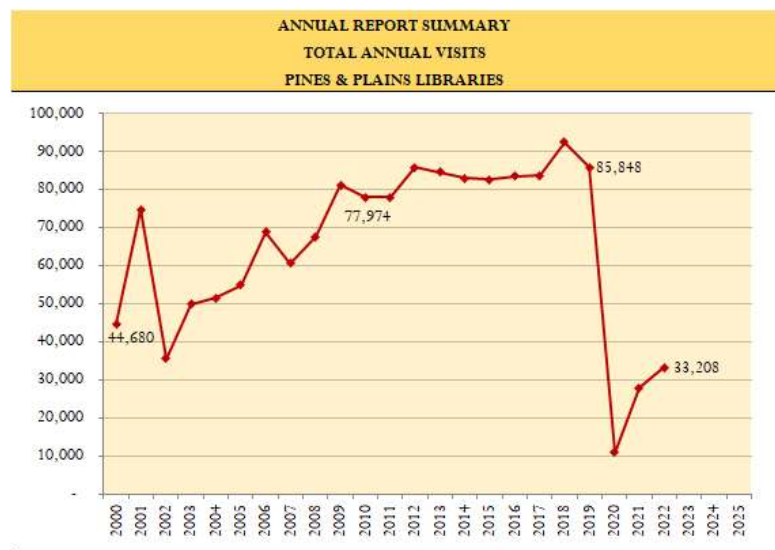


## ACTIVITY METRICS – TOTAL ANNUAL VISITS

Total annual visits is another core measure of library activity and use. The amount of foot traffic through the front door is a useful indicator of how busy the library is.

Often, the number of annual visits a library tallies bears a connection with circulation transactions. As the number of visits increases or decreases, total annual circulation shifts more or less in kind. That's not quite the case for P&PL. In the early years of the reporting period, this measure seems more volatile than the metric

total annual circulation. While total annual visits broadly increased from 2000 (44,600+) to a peak in 2018 (92,300+), the rate of increase for visits was two-fold, while it was three-fold for circulation. And the impact of the pandemic was felt far more significantly on this measure. While total circulation decreased by 46% between 2019 and 2020, total annual visits decreased by almost 90%. Visits reported a more modest recovery between 2020 and 2021, but continued its recovery in 2022 (instead of dropping off as was the case in 2022 with circulation).



## ACTIVITY METRICS – PROGRAMMING EVENTS

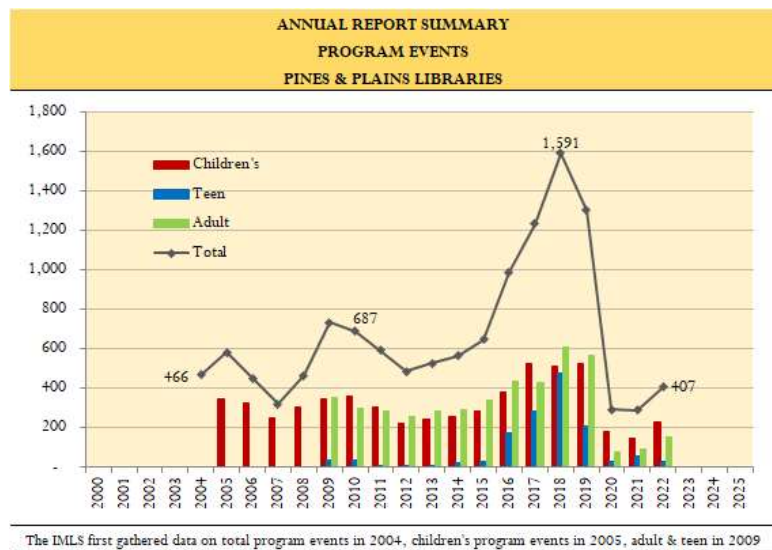
Over the course of the last generation, library-sponsored program events have become an increasingly important aspect of the library's overall menu of service to the community. The IMLS has gathered some program-related data for a long time (children's program attendance). A more complete range of program-related information has become available only recently, after the IMLS started to gather and disseminate data about programming for teens and adults in 2009.

As shown in the chart below, program activity at P&PL was on a rapid growth path prior to the pandemic. To no surprise, the number of program events fell off sharply in the first year of the pandemic, and at P&PL, program activities have been slow to recover thus far.

But the overall story line at P&PL is similar to the broader national experience. At P&PL, the library sponsored between 500 and 700

program events per year. After 2012, the number of programs started to increase, and increased sharply from 2015 (647 programs) through 2018 (1,591 programs). The number of programs tailed off in 2019 (1,300), and the bottom fell out in 2020, as we have seen to be the case with most activity-related service metrics.

Nationally, libraries have seen a similar pattern of growth, albeit perhaps more steady and not as dramatic as is witnessed at P&PL. Nationally, public libraries in the U.S. reported 2.5 million program events in 2004. The number of program events grew steadily over the next 15 years, peaking at 5.9 million in 2019. And, of course, the bottom fell out there too, in the first year of the pandemic. Still, it is an important question to consider: is it realistic to anticipate a return to pre-pandemic programming levels?



## ACTIVITY METRICS – PROGRAM ATTENDANCE

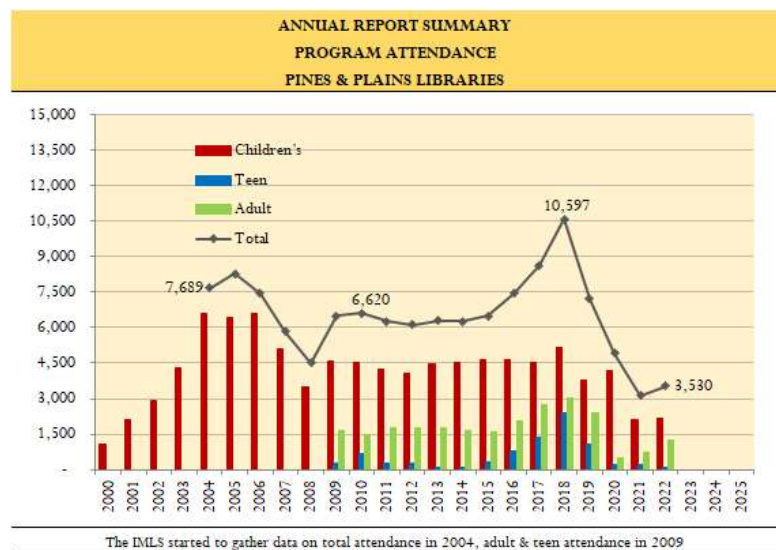
“Program attendance” is the complementary metric to “Program events.” It’s no surprise that the patterns evident with “Program events” are echoed in the metric “Program attendance” – the two are naturally related. In fact, at P&PL, program attendance rises and falls roughly as total program events rises and falls, but the rate of variability is not as great.

Between 2015 and 2018, when the number of program events increased 245%, program attendance increased by 162%. This means that attendance per program fell off markedly as the number of programs increased. From 2012 through 2015, average program attendance ranged between 12.6 and 10.0; in 2016, average program attendance was 7.5 and that ratio declined each successive year, until it reached 5.5 in 2019. Interestingly, the following year, as the pandemic settled in, while the number of program events fell to 290 (from 1,300 the

previous year), average attendance per program was 16.9.

Be aware that the underlying dynamic for programming measures is often driven by children’s programming, which constitutes the greatest focus for programming efforts at most U.S. public libraries (from 2005 through 2022, children’s programming has accounted for more than half of P&PL program events). So while average program attendance for all programs at P&PL was 16.9 in 2020, it was 22.8 for children’s programs, 8.0 for teen programs, and 6.5 for adult programs.

At Pines & Plains Libraries, also note that the facility in Elizabeth is the only space with a dedicated multi-purpose room to support programming, and that room is small, with a maximum audience capacity of 31.



**THIS PAGE IS LEFT BLANK INTENTIONALLY**

## **APPENDIX C: TRENDLINE / COMPARATIVE BENCHMARK ANALYSIS – CURRENT STATE**

A useful means of creating context for decision-making is to compare Pines & Plains Libraries with other libraries. On its latest annual report, for example, P&PL recorded an inventory of 64,500+ items. Good to know, but is that inventory a lot? Or not so much? So as to establish a context to answer that question, we can compare the library with a group of libraries determined (deemed) to be peers. This enhances our understanding of the current state of the library. Distilling the experience of a group of peers establishes a benchmark, from which one can determine whether the subject library is ahead of or behind that curve today. This kind of analysis can also be used to establish possible benchmarks for a future service goal by examining the experience of a group of libraries that are deemed to correspond to where the library is likely to be at some specific future date (usually defining this in terms of population served).

This appendix outlines our methods and strategies for assembling three cohorts of peer libraries to produce these service benchmarks. The appendix describes how the data from the analysis is presented and summarizes the analyses completed for Pines & Plains Libraries.

### **C.1 Source of the data**

The database of public library statistics maintained by the Institute for Museum and Library Services provides the source data for this examination. An alternate data source is sponsored by the Public Library Association – PLA’s Public Library Data Service. Each resource has advantages and disadvantages.

The IMLS resource tends to be more complete, because it’s developed in cooperation with the state library agencies across the country, all of which are mandated by their respective legislatures to gather this data. As annual report data comes in to the states, each state aggregates a state-level database and forwards it to the IMLS

where it’s aggregated into a national database, which eventually is published on the IMLS website. The latest database issued by the IMLS included 9,200+ libraries. Every year, a handful of libraries fail to report, and sometimes there’s a notable hiccup in the data (like the year when the Minnesota state library suffered a budget meltdown and did not participate), but by and large, the IMLS database represents a complete compilation of data from U.S. public libraries.

By contrast, the PLA project involves voluntary participation from a smaller, self-selected group of libraries. In a typical year, about 1,500 libraries submit to the PLA database. The libraries that submit tend to be libraries that serve larger jurisdictions. Among libraries serving more than 500,000 population, about

90% participate in the PLA database in a typical year. Among libraries serving 100,000 to 500,000 population, 55% participate. Among libraries serving fewer than 25,000 population – which account for more than 75% of U.S. libraries – just 10% participate.

The advantage of the PLA project, however, is timeliness. PLA's reporting year ends on December 31 and results are made available by the following summer. By contrast, the IMLS database is at least two years old when it's published, following a round of intensive error-checking at the state level and another round of error-checking as the national survey is compiled.

LPA prefers to use the IMLS database, because participation in the IMLS program is significantly more inclusive, especially among smaller library jurisdictions. LPA perceives the relative thoroughness of the IMLS service as a greater benefit than the relative timeliness of the PLA service.

Even so, a level of care and understanding is required when using the IMLS database. We need to be cognizant that the reporting is not absolutely current. The data set in question is two years old (in this instance, drawn from annual reports submitted for 2021).

*All* of these metrics are dynamic, and results do shift over time. But while an individual library's current-day data may be different from what's reported in this "older" data set – possibly significantly so – that kind of dynamic individual change tends to be leavened by the experience of an entire cohort. To be sure, some metrics are more dynamic than others, but on balance, there tends to *not* be a drastic deviation in the overall trend from one year to the next. The results from an individual library can change substantially from one year to the next, but the

composition of the cohort at large, and more importantly the "measure of the middle" represented by this analysis of the IMLS data set, tends to not change so dramatically from year to year, even on the more volatile of metrics. Therefore, the analysis based on a cohort drawn from 2021 data can be interpreted as a reasonable approximation of current status.

## C.2 The cohorts

In a trendline / comparative benchmark analysis, the underlying idea is to draw from the IMLS database a sample of libraries deemed to be peers of the subject library. The combined experience of those libraries can be distilled to create benchmarks which in turn can be used to assess the current state of the subject library. (The same strategies can be applied to identify possible future resource and service inventory goals for purposes of estimating a library's future space needs, by drawing from the IMLS database a similar sample of peer libraries, but calibrated to the subject library's *projected* population.)

LPA prefers to draw multiple cohort samples from the IMLS database, in an effort to 'triangulate' an understanding of the current state of the subject library – to approach the subject library from multiple perspectives, thereby gaining a more rounded and complete understanding.

Typically, the starting point is a cohort based on libraries serving a population similar in size to that of the subject library. The idea here is that the experience of libraries serving a much larger or a much smaller population than the subject library will have little relevance to the experience of the subject library. Subsequent cohorts for examination are often drawn as targeted subsets of that primary cohort.

For Pines & Plains Libraries, the initial sample cohort included all U.S. libraries that serve 25,000 to 40,000 population. This population range brackets the library’s *current* service population (27,100+). The selection extends somewhat beyond the library’s current population so as to bracket the library’s *projected* population to the year 2030 (33,089) and its projected population to the year 2040 (37,044). This will allow a single cohort to serve two purposes – an assessment of the library’s current state *and*, separately, a projection of possible future resource and service inventory goals. Altogether, the primary, full national peer cohort includes 738 individual libraries.

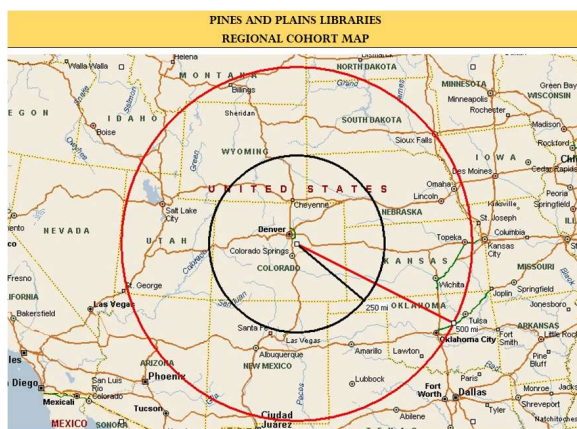
Two subsets of the full cohort are also drawn, to explore whether and how certain aspects of the library’s service setting impact these benchmarks:

- The first subset is drawn focusing on libraries in the region. “Region” is defined as being within a 500-mile radius of P&PL. This subcohort reflects the fact that there are different expectations, different histories, different capacities regarding public library services from one part of the country to another. The map below highlights the territory encompassed in this subset – effectively including all of Colorado, Wyoming and

Nebraska, substantial parts of South Dakota, Kansas and New Mexico, as well as parts of Oklahoma, Texas, Arizona, Montana, and a small corner of North Dakota. There are 94 libraries in this subcohort.

- The second subset of the full cohort as well and focuses on libraries – like P&PL – that operate multiple facilities. Out of the 738 libraries in the full national cohort, 533 operate a single building, while 205 operate two or more buildings. For a smaller-growing-to-mid-size library like those in the full national cohort, the dominant service configuration involves a single-building. The intent of this subset cohort is to explore the degree to which service configuration might impact these metrics.

A further subset was drawn, including libraries that operate four or more buildings, to explore whether these outliers among the full national cohort in terms of service configuration reveal further variations from otherwise “expected” results in these analyses. There were 61 libraries in this cohort – fewer than 10% of the full national cohort.



NOTE: In the original examination of trendline / peer comparative data, an additional subcohort was drawn from the full national peer cohort – including libraries that serve an entire county. Across the country, most libraries serve municipal jurisdictions. Counties typically span a larger geographic area, and the expanse of P&PL’s service jurisdiction is unquestionably notable. The intent of examining a subcohort of libraries that serve an entire county was to explore the degree to which a larger geographic service area might impact service benchmarks.



Except that no consistent variations from other cohort groups became evident. A reexamination of the county subcohort revealed that many of the county jurisdictions were relatively small, associated with states in the eastern U.S. The median area of the 151 counties in the subcohort was 547 square miles – less than one-third the area Elbert County serves. Of the 151 libraries in the county subcohort, Elbert County ranked as the 12th largest. In fact, there were very few library jurisdictions that are of similar size.

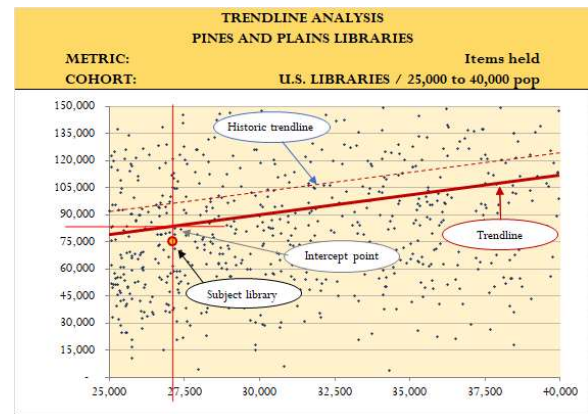
That led the study team to abandon further examination of the county-jurisdiction subcohort and instead develop the cohort(s) of libraries that operate multiple facilities.

### C.3 Presentation of the data

The data is presented in a simple scatter diagram, charting population served along the x-axis and the metric in question along the y-axis (see illustration, next column). The subject library is highlighted as a large orange disc amidst the field of small, dark blue diamonds.

A bright red trendline through the data field marks the relationship between population served and the metric in question, based on the combined experience of the libraries in the cohort. A dashed red trendline superimposes the trendline from the same peer cohort (in this case of the example at the top of the next column, U.S. libraries serving 25,000 to 40,000 population) from the data set released ten years previously. The differential between the current and historic trendlines provides an important indication of how volatile the metric in question is.

Note that a historic trendline is *not*



incorporated into the graphics drawn from the subcohort of libraries that operate multiple facilities. In that diagram, the solid trendline represents the entire subcohort, including all libraries from the full national cohort that operate two or more facilities. The dashed trendline represents a segment of the subcohort – libraries that operate four or more facilities (to explore how the number of facilities operated might affect results of the examination).

A red crosshair is calibrated to the library's current service population. The point where the crosshair intersects the trendline defines the result the subject library should expect to report, *based on the combined experience of the cohort*. This becomes a key benchmark against which the current state of Pines & Plains Libraries can be assessed.

### C.4 The metrics

The following essential service metrics can be used to assess the current state of Pines & Plains Libraries:

- **Resource metrics** – Resource metrics focus on the nature of a library's collection. In the U.S. today, the collection in most public libraries is comprised of three broad components – print, and two



nonprint categories, audio recordings and video recordings. The discussion of resource metrics extends to include data elements relating to technology stations for public use inasmuch as one primary reason a library provides space to house technology stations for public use is to support the users' ability to access intellectual and entertainment content available online.

Be aware that the nature of a library's collection constantly changes. Generations ago, microforms were found in many public libraries; less so today. More recently, magazines occupied a notable portion of the collection footprint; today, the physical magazine collection in most libraries has diminished to the point where it's almost an afterthought. In the last 2-3 years, some libraries have introduced what's coming to be commonly known as a "Library of Things." This may yet emerge as a new, 'traditional' kind of collection to be found in most libraries.

Resource metrics include:

- Items held
- Volumes held
- Audio recordings held
- Video recordings held
- Items held per capita
- Nonprint as a percent of total
- Technology stations provided
- Visits per technology station
- **Activity metrics** – Activity metrics focus on how the library is used – circulation activity and visits, and data elements relating to programming efforts. Be aware that the pandemic had a significantly greater impact on activity measures than it did on resource measures, and the data set accessed for this examination was from the 2021

reporting year, while many libraries were just starting to recover from the depths of the pandemic.

Activity metrics include:

- Total annual circulation
- Circulation per capita
- Total annual visits
- Visits per capita
- Total program events
- Total program attendance

## C.5 Caveats

Note these points regarding the benchmarking study:

- The sample cohorts are drawn from the most recent data set issued by the IMLS, which covers the 2021 reporting year. Service impacts drawn from the COVID pandemic are evident. Use metrics, in particular, reveal the persistent affects of the pandemic. Library planners may want to consider an additional, similar examination of the 2019 IMLS dataset, inasmuch as 2019 represents the last, full, "normal" year, before the pandemic interrupted and affected local library service patterns.
- In reviewing the following results, keep in mind that the results simply report what *IS*. Because the combined experience of one group of libraries distills into a particular benchmark or a given forecast, it doesn't *necessarily* follow that the condition at hand reflects something the subject library should aspire to.
- In reviewing any results, be cognizant that the composition of the cohort might need to be adjusted to relate even more effectively to the subject library. Variations in funding support levels, for example, can percolate through these

metrics. A well-supported library will likely be able to maintain a deeper, richer collection resource. It may be able to support a longer weekly operating schedule; the greater availability resulting from a longer weekly operating schedule could lead to more total annual circulation and visits. Consider whether there are any features applicable to the subject library that may impede the effectiveness of using the cohort in question for benchmarking purposes.

- Be aware that the nature of this examination tends to gravitate toward the center. The trendline reflects the experience of the full cohort, balancing

out the higher-ranking libraries with the lower-ranking libraries, leading to a result that approximates the middle of the cohort. For any given subject library, this kind of “measure of the middle” may be suitable, but for some libraries, it may not be suitable. Some libraries might aspire to (or have the resources to aspire to) a higher, more assertive level of service. Some libraries may not enjoy even the moderate resources and support that allow their users to enjoy a middlin’ level of service. In these cases, a different, deeper dive into the IMLS cohort may be valuable.

## ITEMS HELD

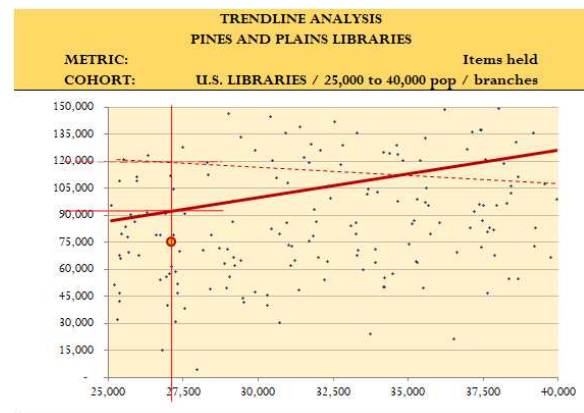
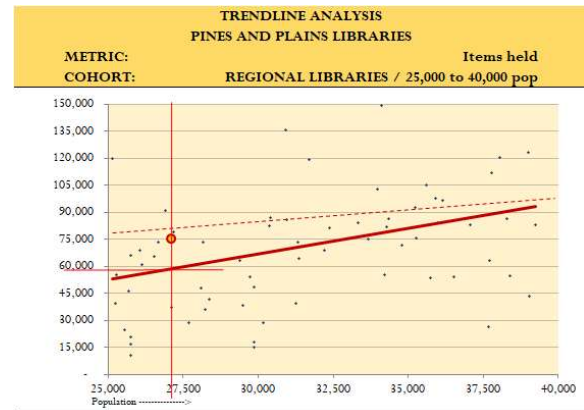
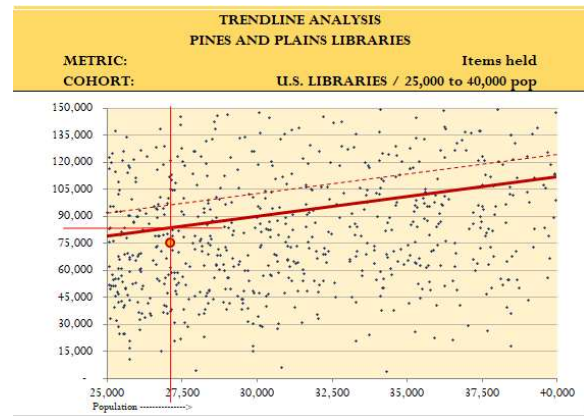
	Current
P&PL	75,244
National	84,000
Regional	58,750
2+ branch	92,500
4+ branch	120,000

As of the 2021 IMLS data set, Pines & Plains Libraries maintains a collection of 75,200+ items (books + audio + video). Based on the distilled experience of the full national peer cohort, a library serving 27,100+ population might anticipate offering a collection of some 84,000 items. P&PL's inventory is about 10,000 items (11.9%) shy of that benchmark.

Libraries in the region maintain a more modest overall collection. The trendline for this cohort generally appears below that for the full national cohort, and the intercept point – at 58,750 – is below the intercept point for the full national cohort. This may be an initial indicator that libraries in the region, for whatever reason, tend to maintain a smaller collection inventory.

Meanwhile, a library that operates multiple facilities apparently maintain an even larger collection. Among libraries serving 25,000 to 40,000 population that operate two or more facilities, the trendline intercept suggests an “expected” collection of 92,500 items. Among libraries operating four or more facilities, the intercept is even higher – 120,000 items. This suggests that operating multiple facilities results in a larger inventory, presumably because each location tends to replicate certain core titles and resources.

Note that in the national and regional cohorts, the historic trendline is above the



current-day trendline, an indicator that the libraries in these cohorts over the last ten years have followed the broad national trends toward leaner overall holdings.

## VOLUMES HELD

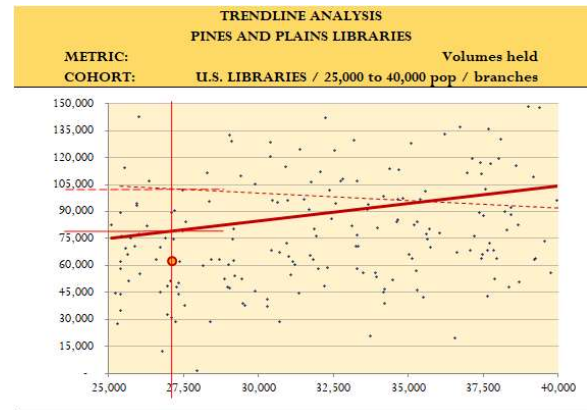
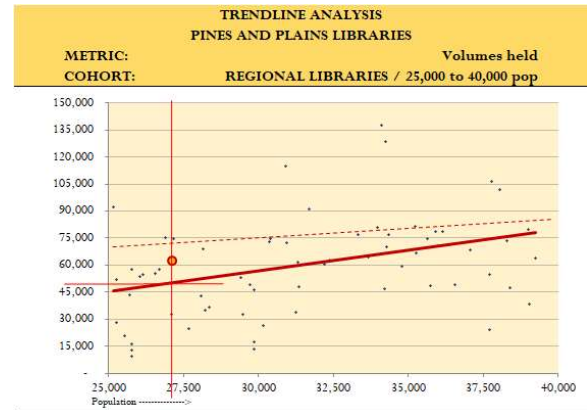
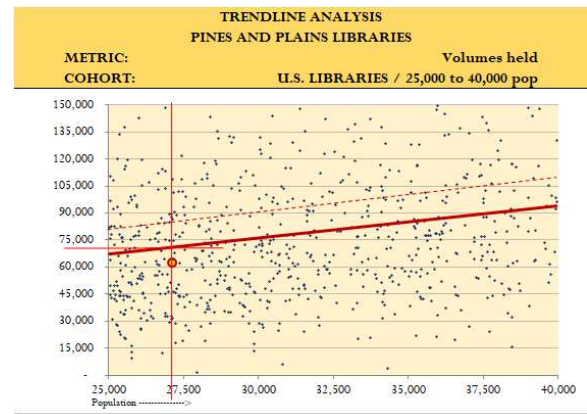
	Current
P&PL	62,253
National	71,000
Regional	49,500
2+ branch	79,500
4+ branch	102,500

In nearly all U.S. public libraries, print comprises most of the inventory (see following discussion, Nonprint as a percent of total), so it's no particular surprise that the results for this metric – Volumes held – closely follow the results for the preceding metric.

Pines & Plains Libraries maintains a collection of 62,200+ volumes. This is about 12% shy of the benchmark for a community serving 27,100+ population, based on the combined experience of the libraries in the full national cohort.

The results for the regional subcohort fall below the results for the full national cohort. In comparison with this peer cohort, P&PL's current inventory exceeds the intercept point.

Likewise, the intercept points for the subcohort of libraries that operate multiple facilities are above those for the full national cohort, and the intercept point for libraries that operate four or more facilities is greater than that for libraries that operate two or more facilities.



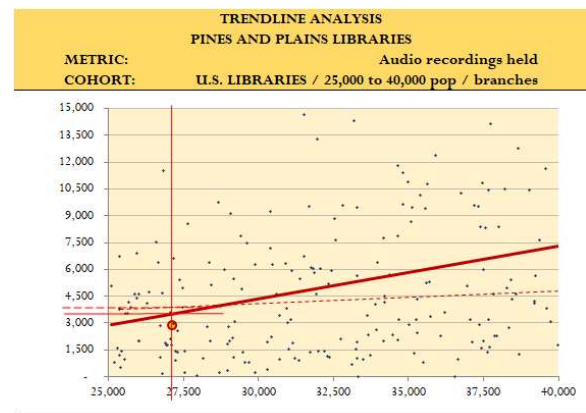
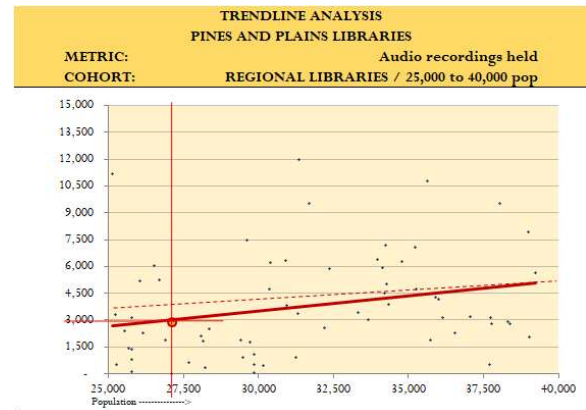
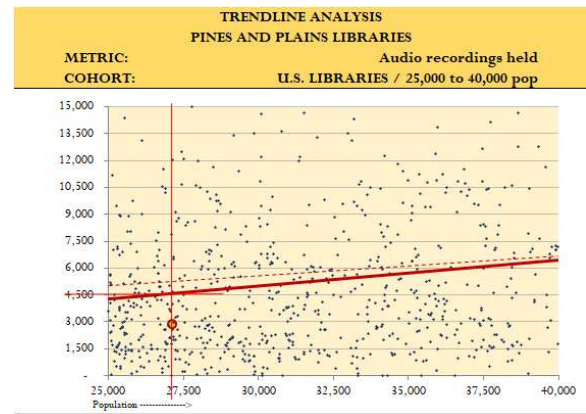
## AUDIO RECORDINGS HELD

	Current
P&PL	2,864
National	4,550
Regional	3,000
2+ branch	3,500
4+ branch	3,900

Pines & Plains Libraries maintains a relatively small collection of audio recordings. The library's audio inventory – 2,800+ items – is fewer than any of the benchmarks emerging from the three peer cohorts.

On this metric, the full national cohort reflects a more robust approach to this segment of inventory. The trendline attached to the full national cohort posts about half again greater than is the case with the regional subcohort. The subcohorts of libraries that operate multiple facilities produce intercept point results that fall between the national and county cohort results.

Note that the historic trendlines in the national and regional cohort studies roughly coincide with the current-day trendlines, indicating that on balance the libraries in these cohorts have largely held audio recording inventories more or less static over the last ten years. This reflects the pattern seen in national service trends over time: while print inventories have been slowly decreasing for almost a generation, a similar pattern has only recently become apparent regarding audio recordings. U.S. libraries have not been paring back audio holdings for as long as they've been reducing print holdings and they are paring this inventory back less assertively.



## VIDEO RECORDINGS HELD

	Current
P&PL	10,104
National	7,400
Regional	4,750
2+ branch	8,200
4+ branch	10,900

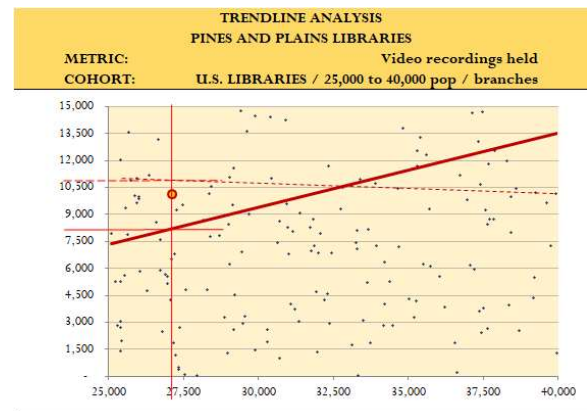
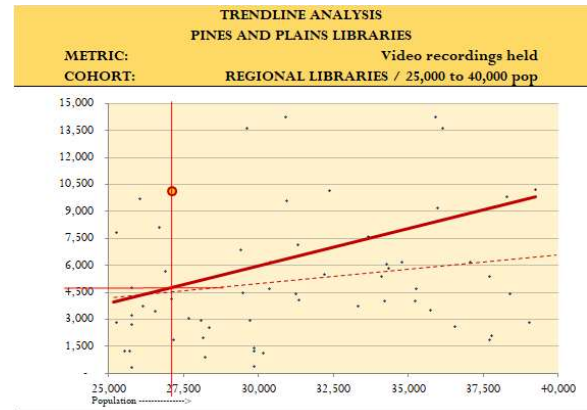
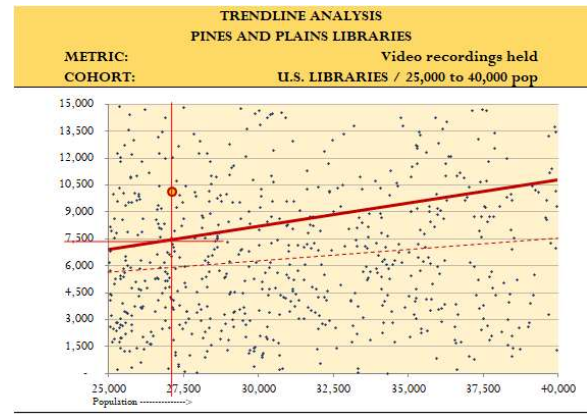
In contrast with audio, P&PL maintains a substantial video collection. The library's inventory of 10,100+ is well above the current-day benchmarks that emerge from any of the three peer library cohorts.

The national and regional library cohort benchmarks are 7,400 videos and 4,750 videos, respectively. Libraries that operate two or more facilities produce an intercept point of 8,200 videos; libraries operating four or more facilities produce an intercept of 10,900 videos.

Again, note that the regional subcohort of the full national cohort produces a lower intercept point than the national cohort does. This could reflect a variation in service heritage and service expectation between libraries in the Rockies and Plains versus libraries in other parts of the country.

Once again, the subcohorts of libraries that operate multiple facilities produce intercept points greater than the intercept point for the full national cohort.

P&PL's result on this measure reflects the library's response to specific conditions within its service area. Across the library's rural service area, it's challenging to deliver across the proverbial "last mile" the kind of high-speed internet service needed to support streaming subscriptions. Because the necessary connectivity



is not widely available across the county, P&PL has chosen to offer a larger-than-expected video collection, while many of the library's peers are able to maintain a more modest inventory.



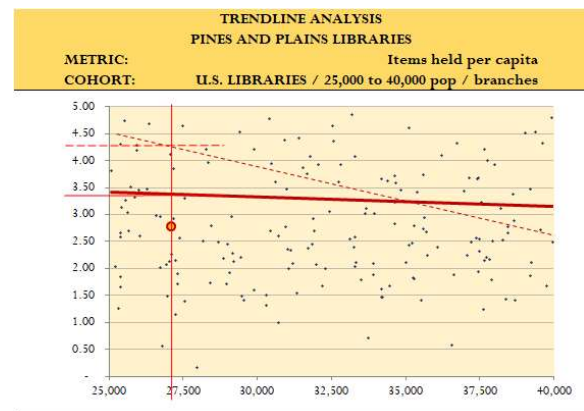
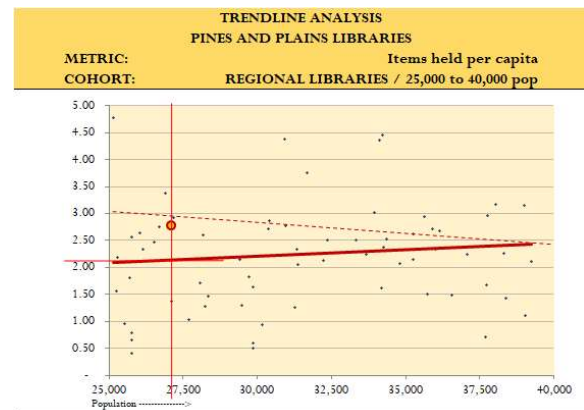
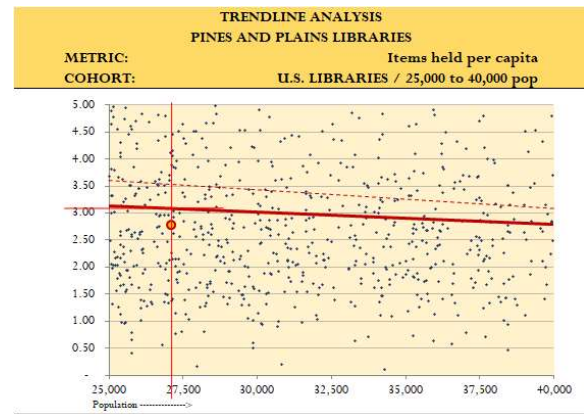
## ITEMS HELD per CAPITA

	Current
P&PL	2.77
National	3.10
Regional	2.15
2+ branch	3.35
4+ branch	4.30

Another way to look at library inventories is the measure “Items held per capita.” Generally speaking, “gross” measures of service – total inventory, total circulation, total annual visits, total revenue – tend to increase as service population increases. “Items held per capita” tends to moderate that pattern, producing a somewhat more uniform and ‘compare-able’ measure.

Pines & Plains Libraries maintains a collection inventory at a ratio of 2.77 items per capita. This is slightly below the benchmark that emerges from the combined experience of the libraries in the full national cohort; well above the benchmark from the regional subcohort; and below the benchmark from the subcohort of libraries that operate multiple facilities.

Note that the historic trendline is above the current-day trendline in the national and regional cohorts, again reaffirming the trend toward leaner overall inventories over the last ten years.



## NONPRINT as a PERCENT of TOTAL

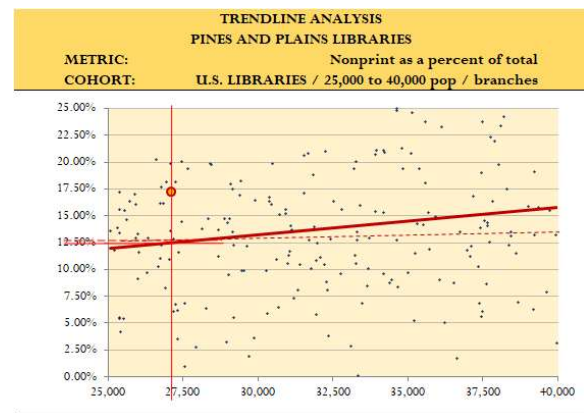
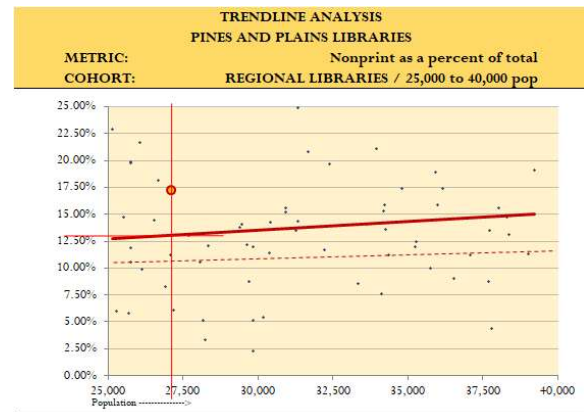
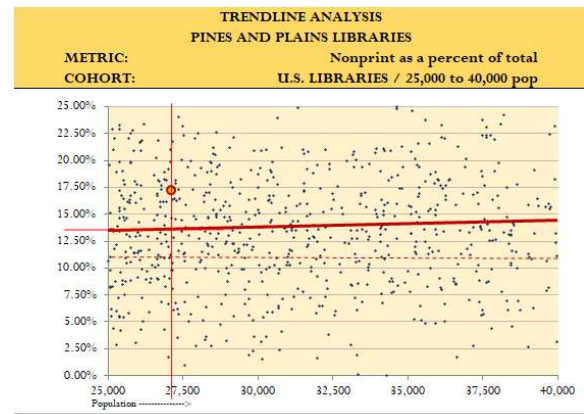
	Current
P&PL	17.23%
National	13.75%
Regional	13.00%
2+ branch	12.50%
4+ branch	12.60%

“Nonprint as a percent of total” is an interesting metric, getting at the fundamental composition of a library’s collection. Nationally, public library inventories have been shifting in favor of nonprint holdings for more than a generation. This trend is doubly fueled by increases in video holdings combined with decreases in print holdings, although as these examples reveal, print remains, by far, the dominant segment of the typical public library’s collection.

Pines & Plains Libraries presents a notable result on this measure. Against all peer cohorts, P&PL’s result is well above the trendline, indicating that the library has developed a collection inventory heavily weighted toward nonprint materials. In particular, this reflects the library’s emphasis on video holdings (see preceding discussion).

As of the 2021 reporting cycle, 17.2% of P&PL’s combined inventory is nonprint. According to the combined experience of the full national cohort, the “expected” benchmark ratio is 13.7%; 13.0% per the experience of the regional cohort; and roughly 12.5% per the experience of the subcohort of libraries that operate multiple facilities.

Again, note the placement of the historic trendline below the current-day trendline,



further illustrating the growth and development of nonprint holdings in U.S. public libraries over the last ten years.



## TECHNOLOGY STATIONS for PUBLIC USE

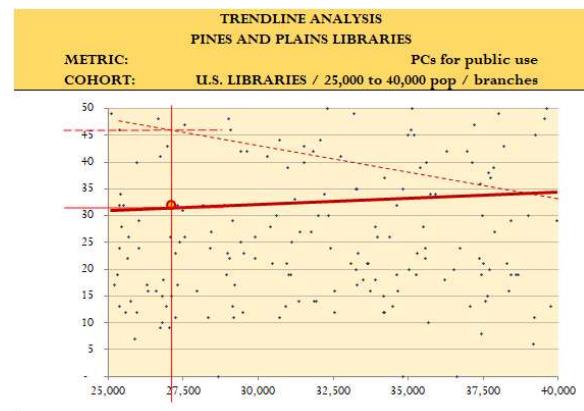
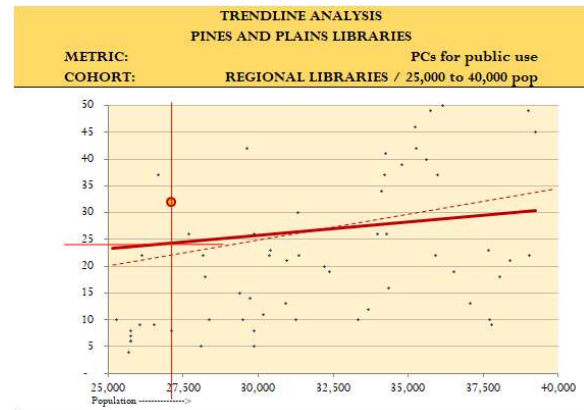
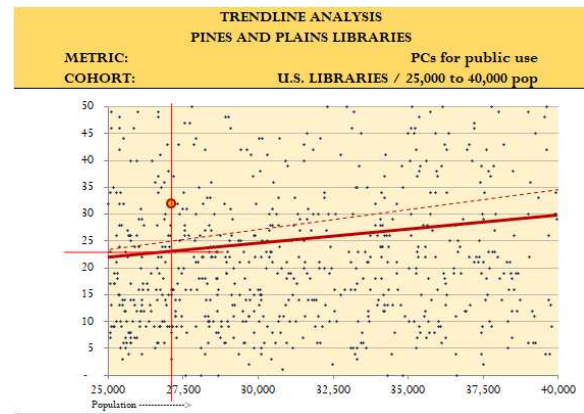
	Current
P&PL	32
National	23
Regional	24
2+ branch	32
4+ branch	46

The library provides content resources directly – in physical formats – and digitally. Users access the digital content by way of computer network stations provided by the library (or, increasingly, by way of personal, Internet connect-able devices that the user brings to the library). From a service standpoint, a library provides a certain number of network stations to afford access to digital resources; from a space planning standpoint, each one of those stations occupies a certain footprint.

Across its four buildings, P&PL provided 32 computer network stations as of the 2021 reporting cycle. This places the library above the trendline relative to the experience in each of the three peer cohorts.

It's also interesting to note that the intercept point emerging from the national cohort lags behind those from the regional library subcohorts. This upends the pattern evident on the preceding metrics, although there is no obvious reason why this should be.

The intercept point resulting from the subcohort of libraries that operate multiple facilities is almost 50% above the intercept for the national or regional cohorts, another potential indicator that these libraries seek to provide a certain baseline level of resource at each location, which compounds over all of the operational facilities, leading to a higher systemwide total.



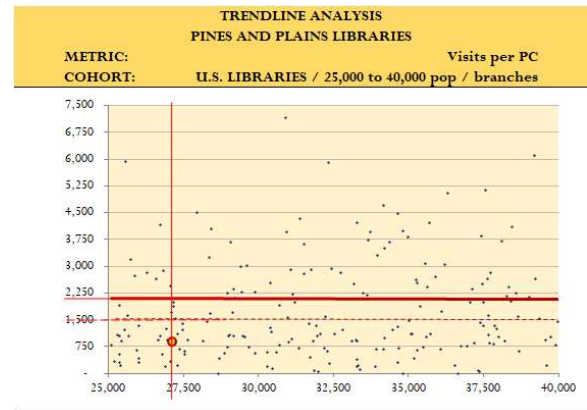
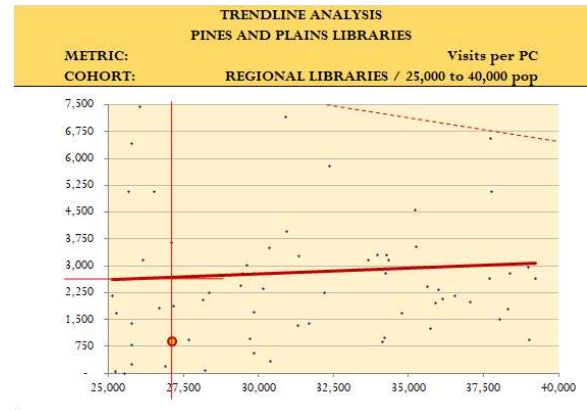
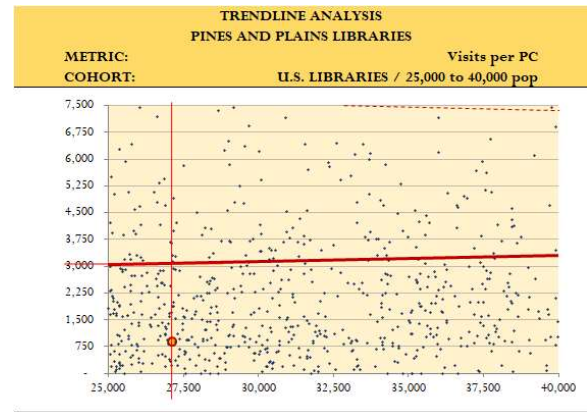
## VISITS per TECHNOLOGY STATION

	Current
P&PL	870
National	3,050
Regional	2,675
2+ branch	2,100
4+ branch	1,500

Another useful metric relating to technology stations tracks the number of visits per technology station. The assumption here is that a lower number is better. A lower number suggests that there is less potential for library users to contend for access to a technology station. A higher number – translating to more individuals entering the library relative to each computer station the library provides – suggests there will be greater competition for access to any given computer station.

Except that a low number on this measure can be a two-edged sword. Pines & Plains Libraries registered just 870 visits per technology station in 2021 – on the surface a positive result – but this outcome stems from a relatively lean door count. Against all three cohorts, P&PL experienced fewer annual visits than would otherwise be expected (see following discussion).

Comparing the results from the three cohorts, broadly reinforces the findings from the previous metric. The subcohorts of libraries that operate multiple facilities reported the highest number of technology stations on offer and here report the lowest ratios relative to door count.



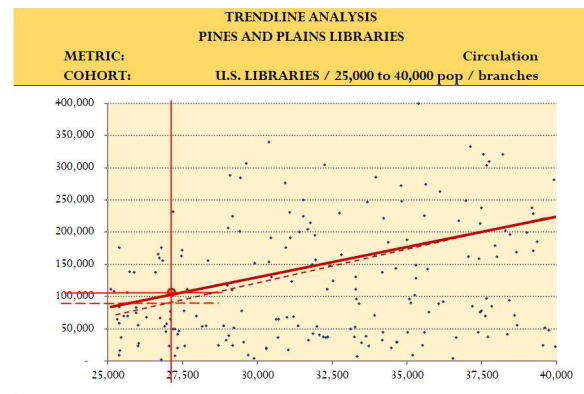
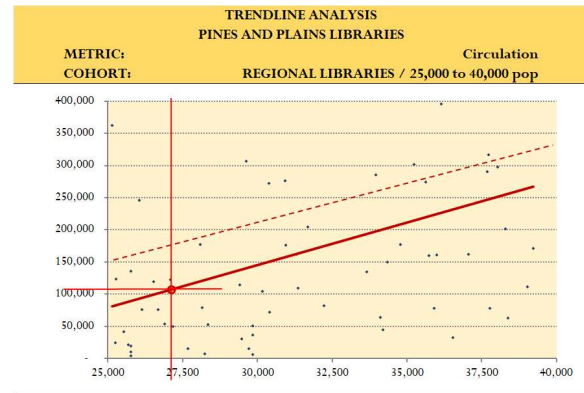
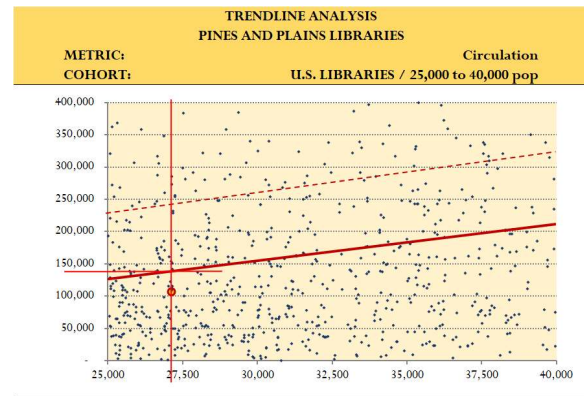
## TOTAL ANNUAL CIRCULATION

	Current
P&PL	107,131
National	139,000
Regional	108,000
2+ branch	105,000
4+ branch	90,000

The bedrock metric of library activity is how many items the library circulates per year. There are other, complementary ways to represent the services a library offers to its community (which is why examinations of annual visits follow, along with two metrics that describe programming efforts), but circulation remains the most common measure of use and activity.

In the 2021 reporting cycle, Pines & Plains reported 107,100+ circulation transactions. Based on the distilled experience of the full national peer cohort, it would be reasonable for P&PL to expect to record about 30% more transactions during the course of a year. P&PL's experience relative to this metric is more closely aligned with the experience of the regional subcohort (libraries in the region tend to be used less assertively than is the case with libraries in other parts of the country). P&PL also roughly corresponds with the benchmarks that emerge from the experience of the subcohorts of libraries that operate multiple facilities.

Note the placement of the historic trendline relative to the current-day trendline. The differential accrues, in large part, to the fact that as of 2021 most public libraries had not fully recovered from the impact of the pandemic.

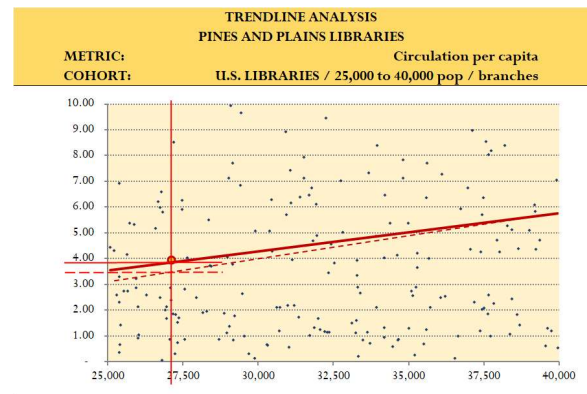
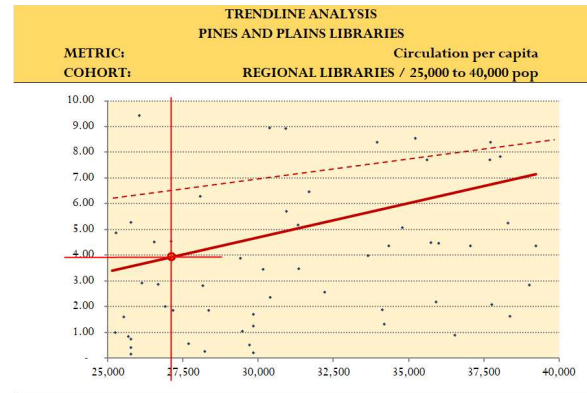
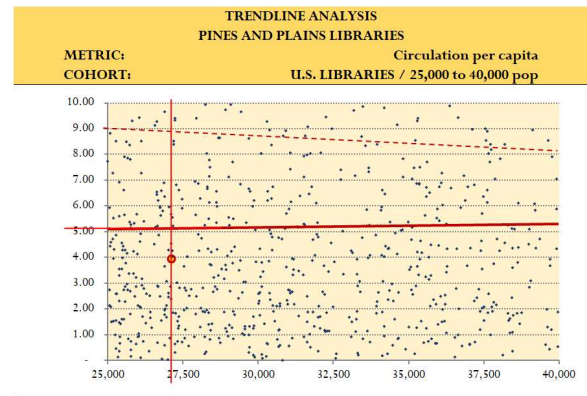


## CIRCULATION per CAPITA

	Current
P&PL	3.95
National	5.10
Regional	3.92
2+ branch	3.80
4+ branch	3.50

Just as the measure “Items held per capita” provides an alternate view of a library’s inventory, “Circulation per capita” provides an alternate view of a library’s performance on the key characteristic of circulation activity. In this case, P&PL’s results largely follow the results seen on the preceding metric.

In the context of the full national cohort, Pines & Plains Libraries appears to be less well used, it’s ratio of 3.95 circulation transactions per capita placing below the benchmark of 5.10 transactions. In the context of the regional library subcohort, P&PL’s result is effectively spot-on. In the context of the subcohorts of libraries that operate multiple facilities, P&PL’s result is likewise effectively spot-on.





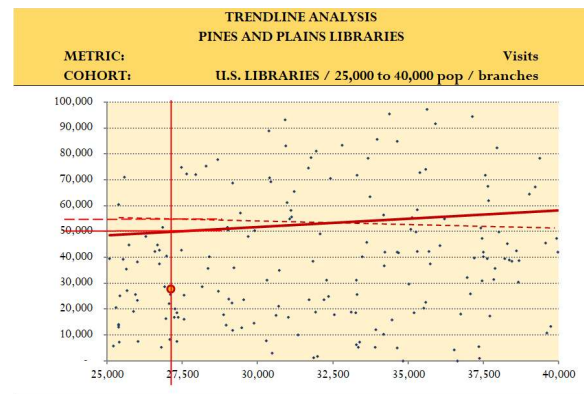
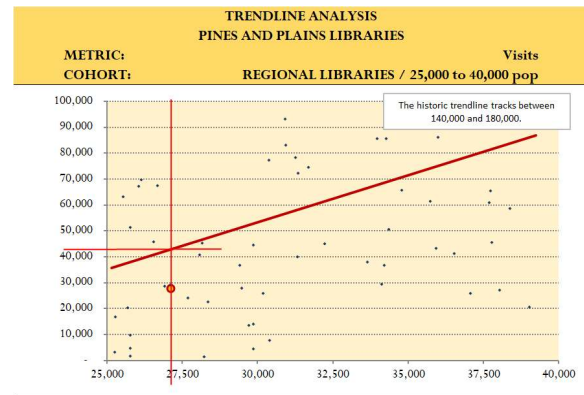
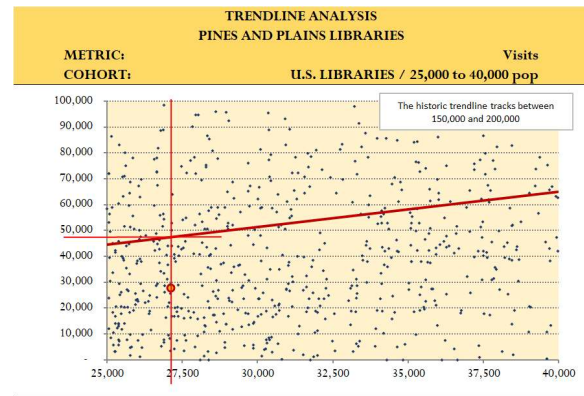
## TOTAL ANNUAL VISITS

	Current
P&PL	27,831
National	47,500
Regional	43,000
2+ branch	50,000
4+ branch	53,000

Another essential metric of library activity is “Total annual visits.” In comparison with “Total annual circulation” this measure offers interesting insights.

To start, the trendline intercept points on this measure extend over a narrower range than is the case with “Total annual circulation.” This suggests that while library users visit libraries in the region at roughly the same rate as they do in other parts of the country, for some reason these visitors among the regional subcohort libraries do not check out material in the same quantity that they do in other parts of the country. For the consultant, this variation suggests that circulation – the traditional measure of library activity – doesn’t necessarily relate a full and complete picture of how a library serves its community.

In each of these three cases, however, note that Pines & Plains Libraries falls below the trendline and below the intercept point. Based on the combined experience of these three cohorts, P&PL appears to be less frequently used than might otherwise be anticipated. This could be because during the pandemic, P&PL adopted a cautious response to public safety protocols, resulting in a sharp drop in in-person visits. As of the 2021 reporting cycle, the effects of that shift were still very much in evidence.

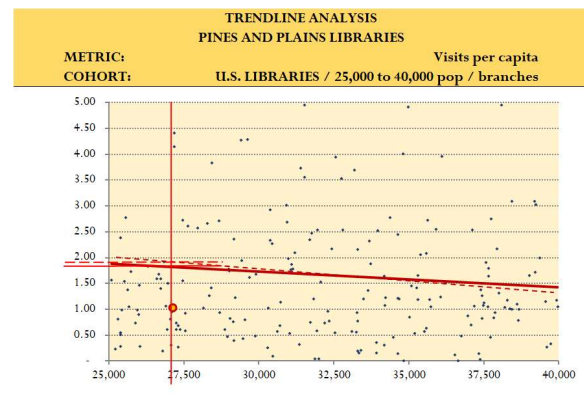
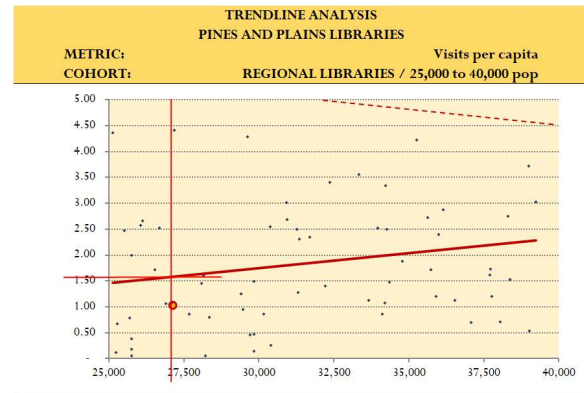
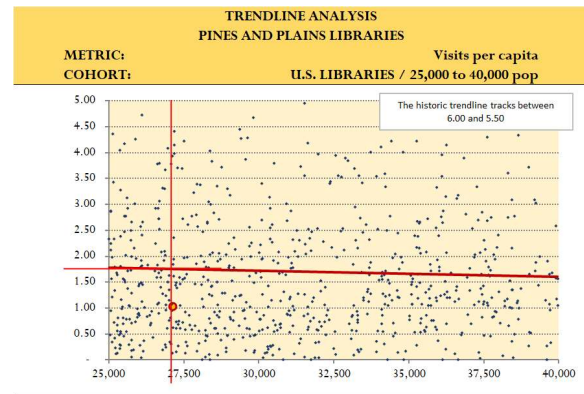


## VISITS per CAPITA

	Current
P&PL	1.03
National	1.75
Regional	1.57
2+ branch	1.80
4+ branch	1.90

“Visits per capita” offers another take on one of the library’s core activities. Just as the results on “Circulation per capita” mirror “Total annual circulation” so does “Visits per capita” mirror “Total annual circulation.”

Against the combined experience of each of the three cohorts, P&PL comes up short, and by roughly the same percentage that is seen in the differential between P&PL and the intercept point on the measure “Total annual circulation.”



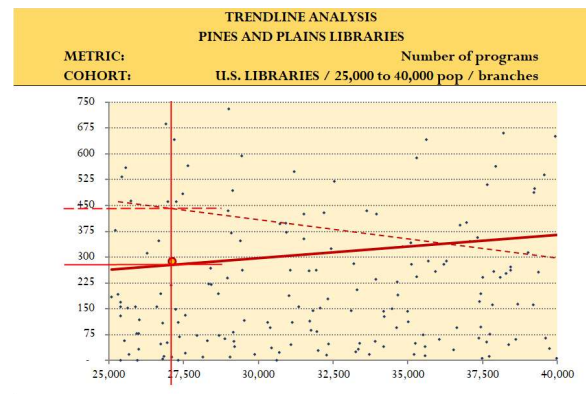
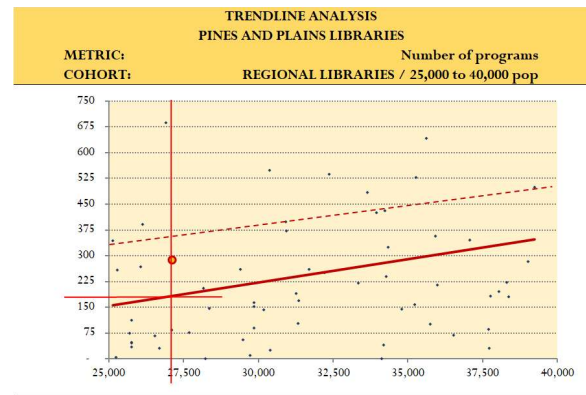
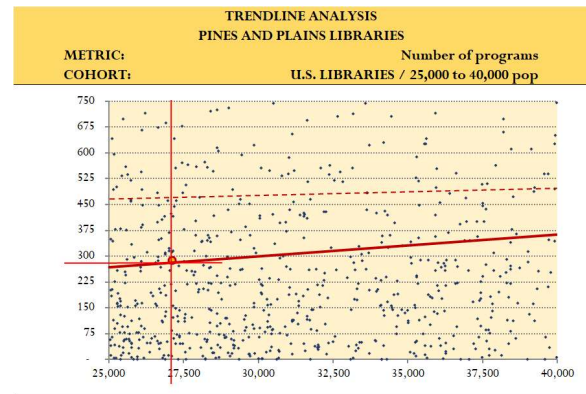
## TOTAL PROGRAM EVENTS

	Current
P&PL	288
National	280
Regional	181
2+ branch	280
4+ branch	440

Pines & Plains Libraries sponsors a notable array of program events. During the 2021 reporting cycle, P&PL sponsored 288 programs, slightly more than the benchmark that emerges from the combined experience of the full national cohort.

As has been the case on many other measures, the trendline from the regional peer subcohort is positioned at a less assertive level. Libraries in this subcohort do not program as assertively as libraries do nationwide.

Note the placement of the historic trendline in the national and regional cohorts. This metric is another activity-centric measure that was impacted by the pandemic. Libraries in these cohorts still have ground to make up.



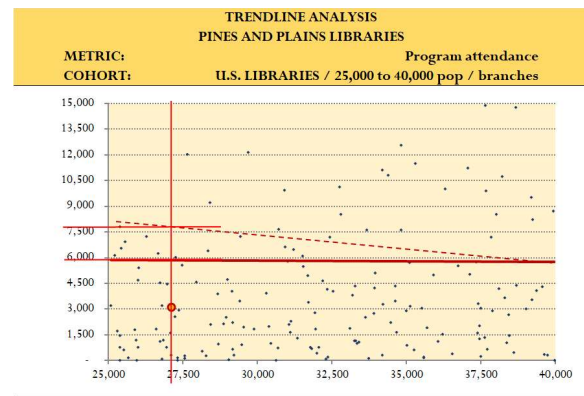
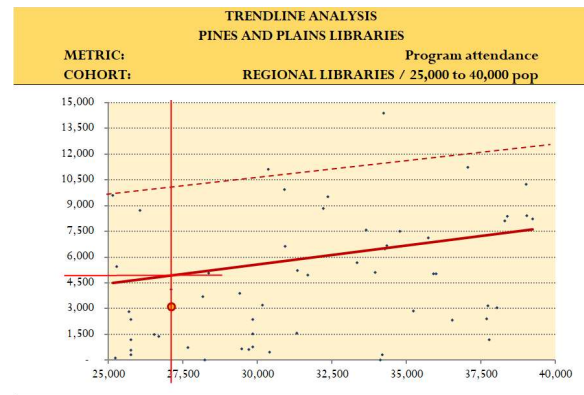
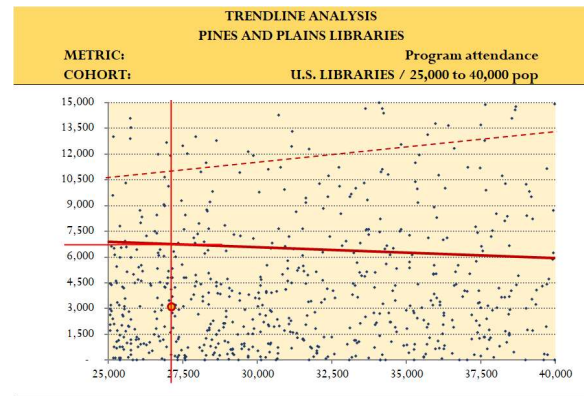
## TOTAL PROGRAM ATTENDANCE

	Current
P&PL	3,117
National	6,725
Regional	4,950
2+ branch	5,950
4+ branch	7,750

While Pines & Plains Libraries offers a substantial number of program events, total program attendance is below “expected” levels in the context of all three peer cohorts. This may highlight the library’s measured recovery to prepandemic activity levels. It may also highlight the fact that the audience capacity at the one meeting / program space at Elizabeth is capped at 31, while none the remaining three facilities offer a dedicated meeting / program space.

This also translates into a relatively small audience attending the typical program sponsored by the library. In 2021, P&PL’s average attendance per program was 10.8. The benchmark for the full national cohort was 32.5; for the regional subcohort 23.0; for the subcohorts of libraries that operate multiple branches the benchmarks were 24.5 and 28.0, respectively.

The results from these cohorts regarding attendance per program are much more in line with observations from similar previous examinations for other client libraries. The “expected” audience per program often runs in the range of two to two-and-a-half dozen. This comes about because at most U.S. public libraries, children’s programming accounts for the largest share of total programming events (two-thirds or more). Storytime programs constitutes the largest share of children’s programming at a typical library, and many



libraries cap storytime attendance at 24 to 30, so it’s easy to understand how this common practice drives overall service trends.



## C.6 Concluding observations

The following points stand out from the trendline / peer comparative examination:

- On resource-based metrics, P&PL today is relatively under-resourced, based on the combined experience of all public libraries nationwide serving 25,000 to 40,000 population, but adequately resourced based on the combined experience of all public libraries in the region serving 25,000 to 40,000 population.
- Over time, in response to community demands and interests, P&PL has developed an overall collection that is notable for its emphasis on nonprint material, video in particular. The library's emphasis on its video collection is a specific response to the fact that it's more challenging to deliver high-speed network access across the 'last mile' to individual homes in P&PL's rural service area than is the case in more densely-populated areas. Because the requisite high-speed access for streaming is not as widely available in P&PL's service area as it is among many of the library's peers, P&PL chooses to maintain a more substantial physical video inventory.
- On activity-based metrics, P&PL generally lags behind the experience of its national and regional peer groups. This appears to be the byproduct of a cautious approach to public health concerns taken by the library during the pandemic. In general, the data set employed for the trendline / peer comparative study was affected by continuing fallout from the pandemic. It will likely take some additional time before P&PL and the larger library community fully recover.
- On most metrics, there is a consistent difference between the benchmarks that emerge from the national and regional cohorts. On resource-based metrics, public libraries in the region tend to offer smaller, more limited collections than is the case with peer libraries nationwide. On activity-based metrics, libraries in the region tend to be used less assertively than is the case with peer libraries nationwide. The reasons for this are not wholly evident, but the variation is useful to acknowledge.
- There is also a clear differentiation between the benchmarks emerging from the national cohort and the subcohorts of libraries that operate multiple facilities, especially on resource-based metrics. Libraries that operate two or more facilities appear to maintain larger collection inventories and offer more technology stations for public use than do libraries that operate a single facility. And libraries that operate four or more facilities appear to maintain even larger collection inventories and offer even more technology stations. Again, the reasons for this are not wholly evident, but the variation is useful to acknowledge.

**THIS PAGE IS LEFT BLANK INTENTIONALLY**

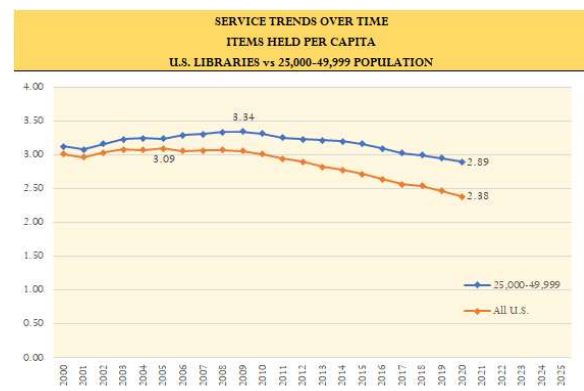
## APPENDIX D: TRENDLINE / COMPARATIVE BENCHMARK ANALYSIS – FUTURE STATE

The same trendline / peer comparative benchmark analysis can be used to anticipate a future resource and service inventory goal for Pines & Plains Libraries. The examination can be calibrated to the library’s projected service population to make an estimate of the benchmark that will be in place when the library reaches its projected service population.

Like the examination leading to the current-state benchmarks, this study uses data curated by the Institute for Museum and Library Services. The same three cohorts were drawn from the IMLS database. The presentation of the data uses the same protocols. The metrics examined in this study zero in on a more limited selection of collection and resource-related measures, all of which directly impact a library’s space needs:

- items held
- volumes held
- audio recordings held
- video recordings held
- items held per capita
- nonprint as a percent of total
- technology stations for public use

Note one caution, however. Understand that the benchmarks derived from this examination describing potential future-state conditions are based on current-day experiences. In fact, all of these metrics are in flux, and each of the metrics discussed here can be expected to shift between the current day and the year 2030 or 2040. As a point of fact, the number of items held per capita peaked in 2005, at 3.09, and has been in slow, steady decline ever since. The graph to the right shows that among libraries more akin to Pines and Plains Libraries in terms of population served – U.S. public libraries serving 25,000 to 50,000 population – the peak came a little later, in 2009 at 3.24 items per capita, but a similar trend is evident. Among U.S. public libraries serving 25,000 to 50,000 population, over the last ten annual report cycles, the number of items held per capita has decreased by 1.3%



per year, on average. This is less than the rate of decrease among *all* U.S. libraries over the same period – 2.3% per year, on average.

The caution is this: the examination in the appendix proposes to use current-day benchmarks to inform a future-state condition. Recognizing that these measures are in flux, in cases where a metric exhibits a consistent trend over time to shift in one direction of another, consideration should be given to adjusting the measure to account for the likely shift that will occur between the present day and the arrival of the planning horizon. Given the clear and consistent trend toward leaner collection inventories, for example, any future-state benchmark derived from the experience of the current day should be adjusted downward in some manner.

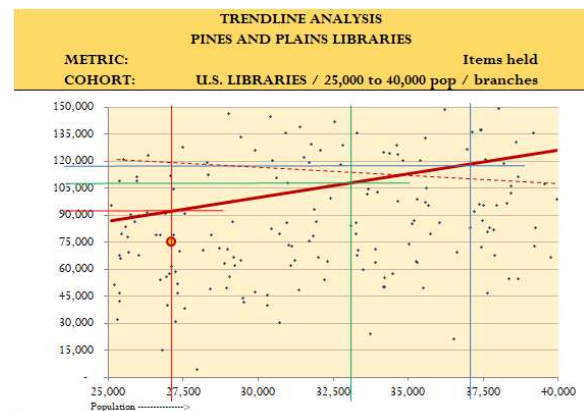
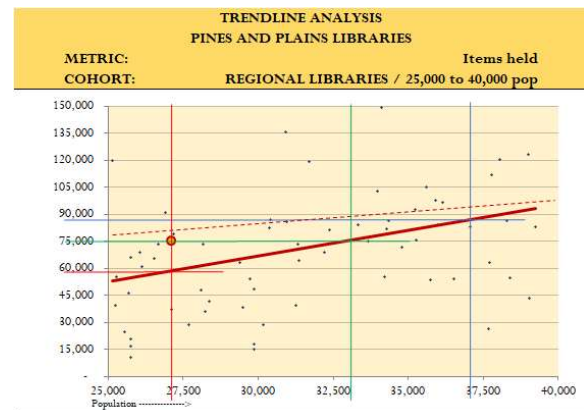
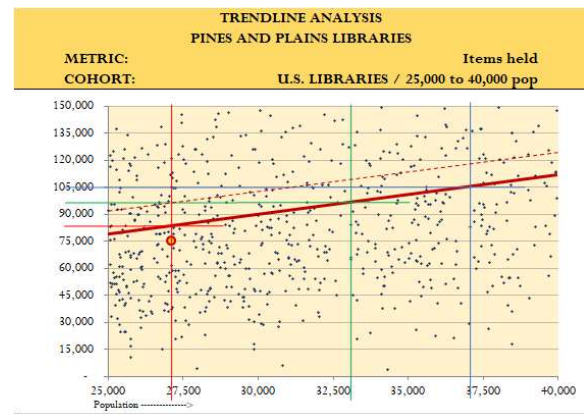
## ITEMS HELD

	Year 2023	Year 2030	Year 2040
P&PL today	75,244		
National	84,000	96,750	105,200
Regional	58,750	75,750	87,000
2+ branches	92,500	108,000	118,500
4+ branches	120,000	114,000	110,500

In its four service locations, Pines and Plains Libraries maintains a collection of 75,244 items (books + audio + video). That's below the "expected" result for a library that serves 27,100 population, according to the combined experience of the libraries in the full national cohort and according to the experience of libraries that operate multiple facilities, but well above the "expected" result according to the combined experience of the regional cohort.

An examination of the combined experience of the library's three peer cohorts produces varied results. The experience of the full national cohort suggests P&PL produces a combined collection inventory benchmark of 96,750 items, based on the library's projected population to the year 2030 and 105,200 items based on the library's year 2040 population. The experience of the regional subcohort produces a benchmark of 75,750 items to the year 2030 and 87,000 items to the year 2040. The experience of the multiple facility subcohort produces the most assertive benchmarks of all.

This is largely consistent with the findings of the current state examination (see Appendix C) – the regional subcohort benchmark is less assertive than the benchmark from the full national cohort, while the multiple facilities benchmark is more assertive. Note that the subcohort of libraries that operate four or more facilities reveals an inverse relationship between population served and collection inventory. Among this group of libraries, as population increases, total collection inventory decreases – the opposite of the usual pattern. This is likely a byproduct of the fact that the subcohort is the smallest of those examined and thus more prone to reveal unexpected results such as this.



## VOLUMES HELD

	Year 2023	Year 2030	Year 2040
P&PL today	62,253		
National	71,000	81,800	88,200
Regional	50,250	64,000	73,000
2+ branches	79,500	91,000	98,500
4+ branches	102,500	98,000	94,000

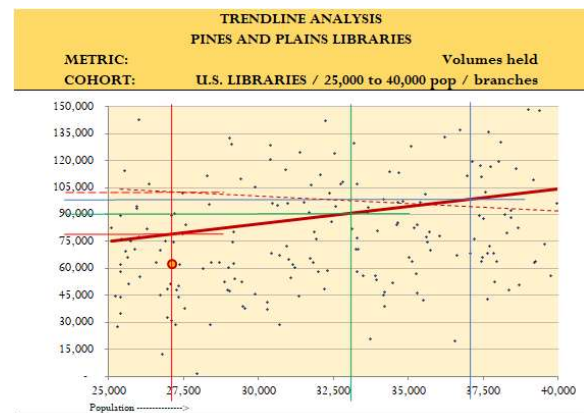
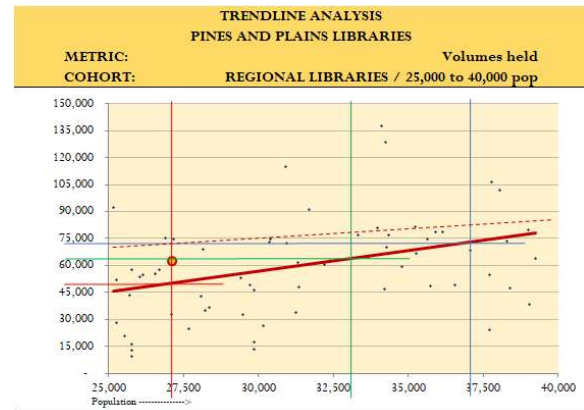
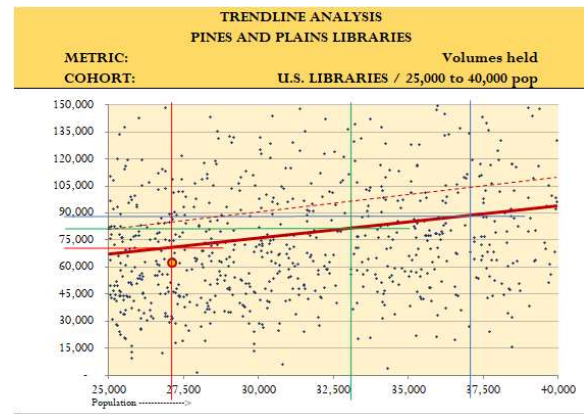
With regard to volumes held, a similar pattern results among three cohorts – Pines and Plains current print inventory is slightly below the expected result against the full national cohort, comfortably above the expected result against the regional cohort, and below the benchmark derived from the multiple facilities cohort. And another pattern repeats as well: the regional cohort benchmark is below the full national cohort benchmark, while the multiple facilities benchmark is above the benchmark derived from the full national cohort.

As noted in the discussion of the current state, this is not surprising, given that print continues to represent, by far, the largest share of collection inventory at most libraries. Patterns and trends related to print inventories will tend to drive corresponding patterns for the collection as a whole.

The differential between the regional and the full national cohort runs roughly between -20% and -25%. That is, the results from the regional cohort are generally 20% to 25% below the results from the full national cohort.

The differential between the cohort of libraries that operate multiple facilities and the full national cohort roughly runs at +12%. Libraries that operate multiple facilities maintain a book collection that is roughly 12% greater than is found among all libraries in the full national cohort.

Because print inventories represent such a large share of total collection inventory, these differentials also apply broadly to the preceding metric – total items held.



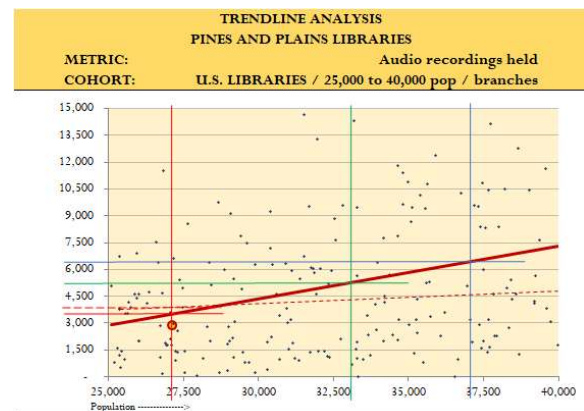
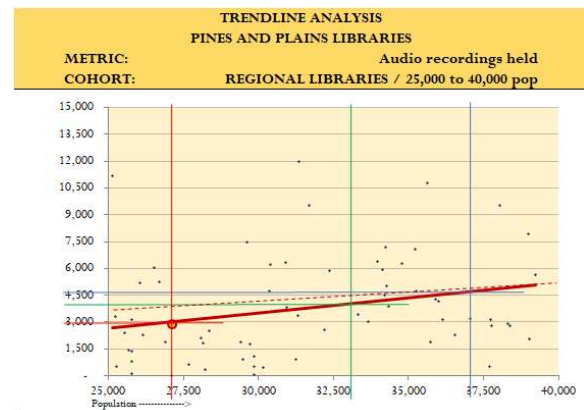
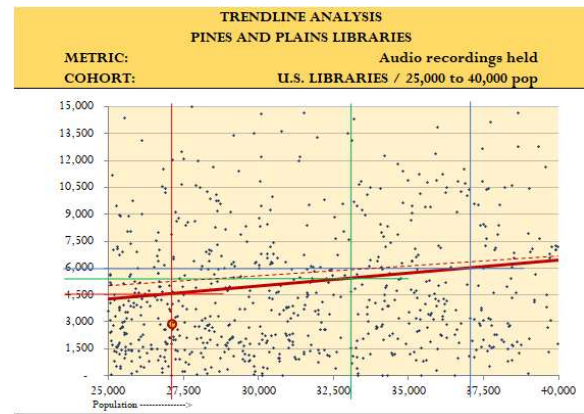
## AUDIO RECORDINGS HELD

	Year 2023	Year 2030	Year 2040
P&PL today	2,864		
National	4,550	5,400	6,000
Regional	3,000	4,000	4,700
2+ branches	3,500	5,200	6,400
4+ branches	3,900	4,250	4,500

In the discussion of P&PLs current state (see Appendix C), it was evident that the library presently maintains a smaller than expected inventory of audio recordings. P&PL's audio inventory is some 37% below the inventory benchmark derived from the full national cohort, 5% below the benchmark from the regional cohort and 18% below the benchmark from the multiple facilities cohort.

All of the cohorts examined here show that the inventory of audio recordings is expected to grow as population increases. In each case, the year 2030 benchmark exceeds the current-day benchmark, and the year 2040 benchmark exceeds the year 2030 benchmark.

Libraries in the full national cohort reveal the most moderate correlation between population served and audio recording inventory. The slope of the trendline in this examination is the most shallow. There is a stronger connection within the regional subcohort and a still stronger connection within the multiple facilities subcohort.



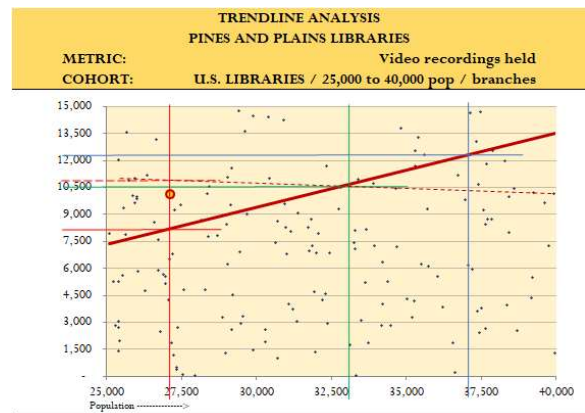
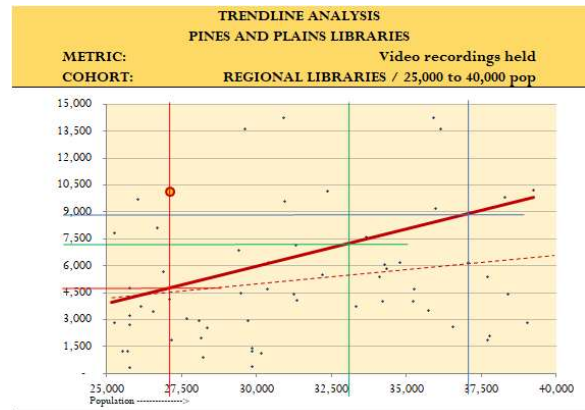
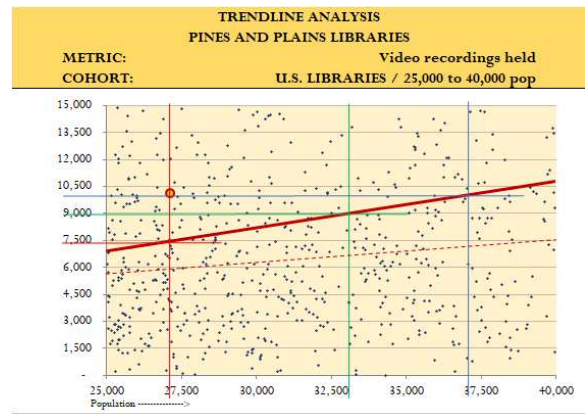


## VIDEO RECORDINGS HELD

	Year 2023	Year 2030	Year 2040
P&PL today	10,104		
National	7,400	9,000	10,000
Regional	4,750	7,250	8,875
2+ branch	8,200	10,500	12,300
4+ branch	10,900	10,500	10,300

By contrast, as shown in the current-state review, P&PL maintains a robust inventory of video recordings. Its current collection is 36% larger than the “expected” benchmark produced by the full national cohort, more than two times the benchmark produced by the regional cohort, and 23% more than the benchmark from the multiple facilities cohort.

All of the cohorts document a positive correlation between population served and video recording inventory, except that the examination of libraries that operate four or more facilities reveals a negative correlation. The trendline slopes down from left to right, indicating that among this group of libraries, as population increases, the corresponding video inventory decreases. Again, this is likely the byproduct of the cohort in question being small and therefore more prone to being influenced by a small number of atypical individual results.





## ITEMS HELD *per* CAPITA

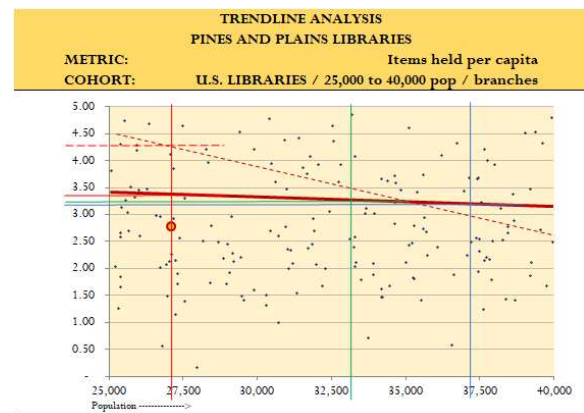
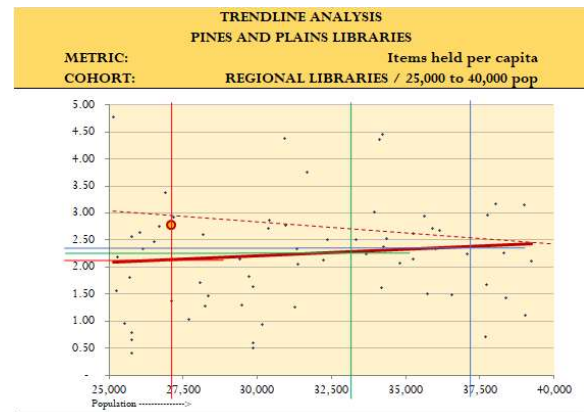
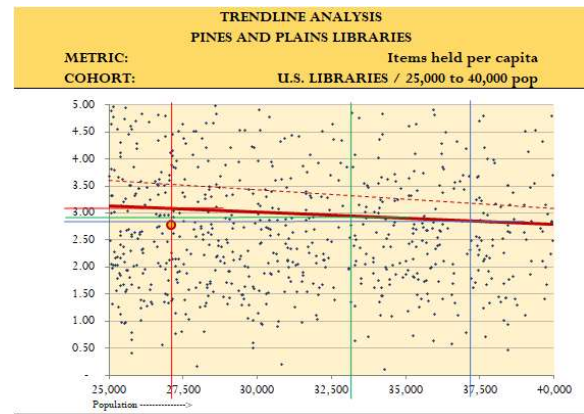
	Year 2023	Year 2030	Year 2040
P&PL today		2.77	
National	3.10	2.94	2.85
Regional	2.15	2.28	2.37
2+ branch	3.35	3.25	3.20
4+ branch	4.30	3.50	2.95

Over time, Items held per capita has become LPA’s preferred benchmark for collection inventory because it treats the collection as an organic whole, blurring the distinction between print and nonprint formats. This measure provides a tacit acknowledgment that the balance between print and nonprint shifts continuously. The measure “Total items held” does this as well, but the measure “Items held per capita” by calculating collection inventory as a function of population size moderates the fact that overall collection size tends to increase as service population increases.

Even so, it is reassuring, in its way, to see patterns from prior measures reflected here. The full national cohort provides its benchmark, while the regional cohort benchmark is less assertive and the benchmark(s) that emerge from the multiple facilities cohort are more assertive.

On this measure, the trendline is expected to reveal an inverse, or negative, relationship between population and the measure in question. While total inventory tends to increase as population increases, usually service population increases at a faster rate than does collection inventory, and as a result items held *per capita* tends to decrease as population grows.

Most of the cohorts examined here reveal the expected correlation between population served and items held per capita, except the regional cohort. The regional cohort reveals a positive correlation – the trendline slopes up from left to right. The reason for this is unclear.

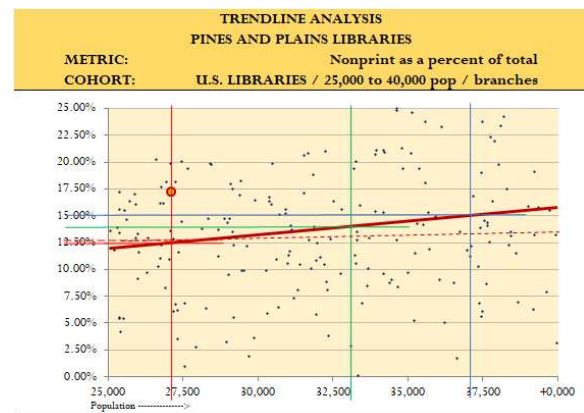
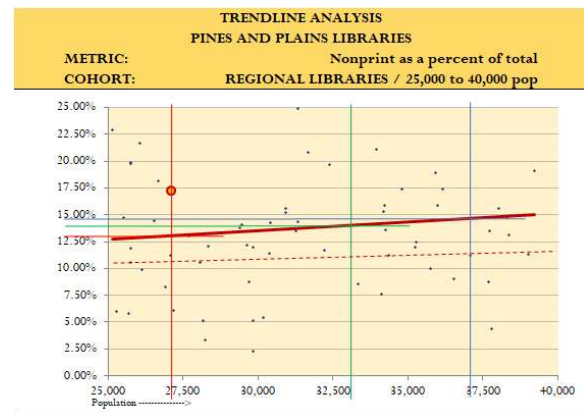
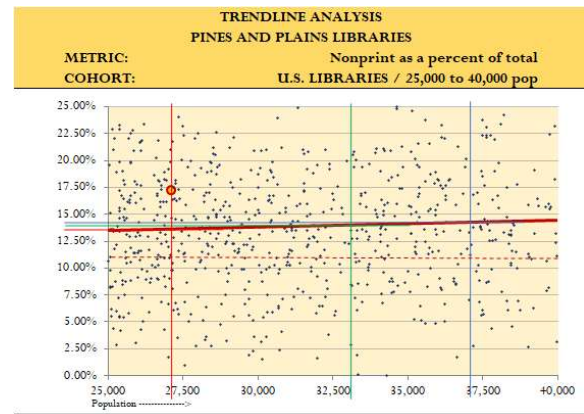


## NONPRINT as a PERCENT of TOTAL

	Year 2023	Year 2030	Year 2040
P&PL today	17.23%		
National	13.75%	14.00%	14.25%
Regional	13.00%	14.00%	14.65%
2+ branch	12.50%	14.00%	15.10%
4+ branch	12.60%	13.00%	13.30%

This measure is included in the current discussion not because it will have a direct bearing on how much space the library will need<sup>1</sup>, but because it adds nuance, speaking to the character of a library's collection, the balance between print and nonprint holdings. It also further emphasizes a distinguishing characteristic of the collection at Pines & Plains Libraries: over the years, in response to user demands and interests, the library has developed a collection that emphasizes nonprint holdings to a greater degree than is the case with most of the library's peers. As noted in the earlier discussion of "Audio recordings held" the library maintains a more modest collection of audios than most of its peers do, but its robust inventory of video recordings more than compensates.

As the library looks to the future, we will want to consider whether and how to sustain this emphasis on video holdings.



<sup>1</sup> Essentially, print and nonprint collections today are estimated using the same unit space allocations; while print collections were commonly stored more densely than nonprint a generation ago, in recent years public libraries have taken to favoring mid-height shelving for print, which is more accessible and reachable, and also has the effect of housing the print collection in a less dense manner, in a way more akin to nonprint, with a comparable unit space allocation.

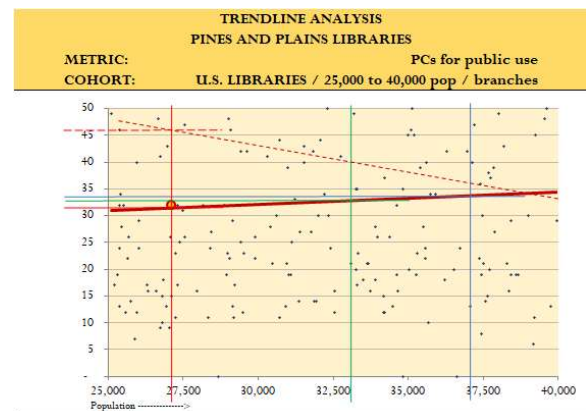
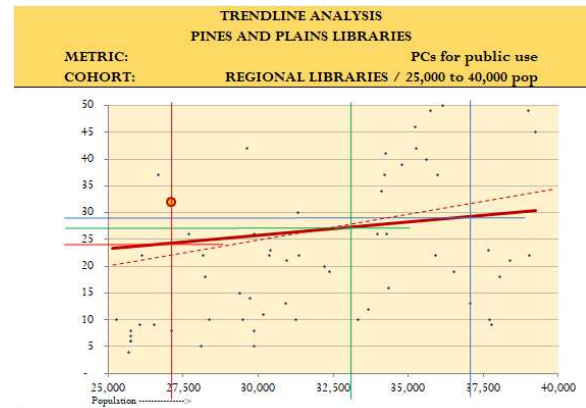
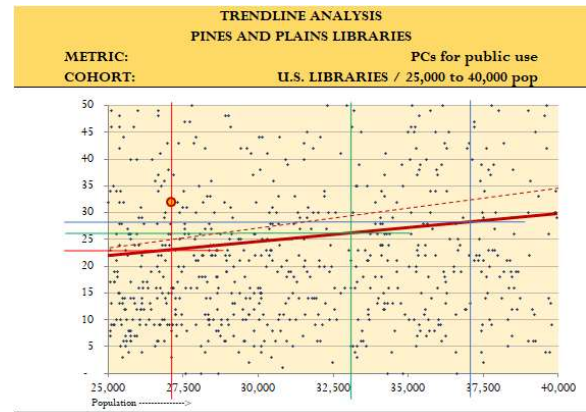
## TECHNOLOGY STATIONS for PUBLIC USE

	Year 2023	Year 2030	Year 2040
P&PL today	32		
National	23	26	28
Regional	24	27	29
2+ branch	32	33	34
4+ branch	46	40	36

Pines & Plains Libraries maintains 32 computer network stations for public use today, roughly a third more than the benchmarks recommended by the full national and regional cohorts. The cohort of libraries that operate multiple facilities produces a current-day benchmark that P&PL aligns more closely with.

The cohorts examined here by and large reveal the expected positive relationship between population served and number of technology stations provided. As a gross, or overall, measure of service, the total number of technology stations provided by a library will typically increase as service population increases.

Again, the subcohort of libraries that operate four or more facilities reveals a negative correlation on this measure. Again, the reason for this is unclear.



**THIS PAGE IS LEFT BLANK INTENTIONALLY**

## APPENDIX E: NATIONAL SERVICE TRENDS

Using a database of public library statistics maintained by the Institute for Museum and Library Services (IMLS), national library service trends can be described. The database is the product of a collaboration between federal offices and the state library agencies across the country. The project originated in the 1980s when the National Center for Education Statistics (NCES) in the U.S. Department of Education undertook to coordinate the efforts of state library agencies as they gathered annual report data from the libraries in their states. Data element definitions were standardized. Procedures were put in place to aggregate the data at the state level and then at the national level. By the early to mid-1990s, these efforts had developed a level of completeness and consistency that made the database a powerful tool for planning. Over time, responsibility for coordinating the project shifted from the NCES to the IMLS.

Each year, when the IMLS releases its report, Library Planning Associates, Inc. downloads the database and combines selected data elements to create new data points (for example, circulation and population served are used to calculate each library's rate of circulation *per capita*).

That data is examined here to identify broad national service trends over time. The data offers a useful context to understand how service patterns have shifted and continue to shift over time within the American library community as a whole. The data set is examined from two distinct perspectives. The first includes every library that submits annual report data (in any given year, only a very few individual libraries elude the state library agencies's net, the IMLS database is effectively a comprehensive data set). The second zeroes in on public libraries serving 25,000 to 49,999 population, the standard population cohort that covers Pines & Plains Libraries. The first identifies service trends from the broadest viewpoint, while the second seeks to explore whether and how the combined experience of smaller libraries differs from the combined experience of the larger group.

An understanding of these broad national trends – in the aggregate, and among libraries like Pines & Plains Libraries serving a population of between 25,000 and 49,999 – will likely condition the priorities we choose to apply locally as we envision the future of library services for Pines & Plains Libraries.

## ITEMS HELD / VOLUMES HELD

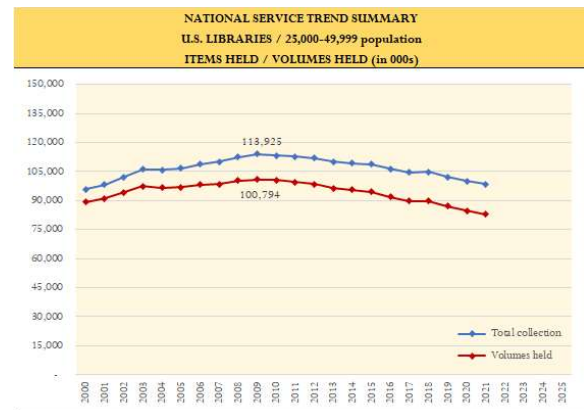
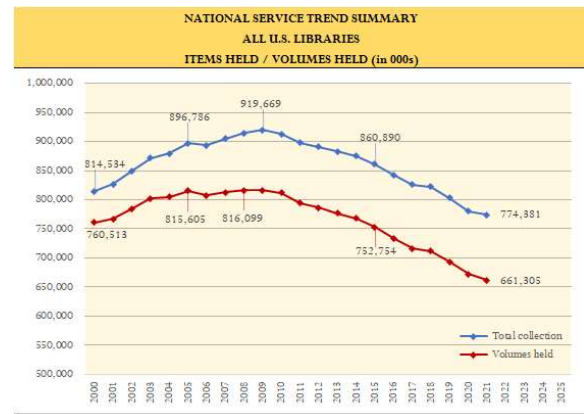
The total number of items held in all U.S. public libraries peaked in 2009, at just under 1 billion items (print + audio + video). The total number of volumes held in all U.S. public libraries peaked the year before, in 2008, having essentially flat-lined during the three preceding years.

Among U.S. libraries serving 25,000 to 50,000 population, a similar pattern is evident. Both measures – total items held and total volumes held – peaked in 2009 and have been in decline ever since.

The rate of decline has been greater among all U.S. libraries. Since 2010, the combined collection inventory in all U.S. public libraries has declined by 15.2%. Among libraries serving 25,000 to 50,000, the combined collection inventory has declined by 13.2%. In the graphics to the right, it appears that the rate of decline for all U.S. public libraries is markedly greater than the rate for libraries serving 25,000 to 50,000, but the appearance is the byproduct of a y-axis on the national chart, adjusted to highlight and emphasize the rate of decline.

It is clear that larger U.S. public libraries and smaller U.S. public libraries have moving toward leaner overall collection inventories in recent years, but larger libraries have pursued this pattern more assertively.

Zeroing in specifically on the aggregate book inventory, the national aggregate reveals that



book holdings decreased more sharply than did the collection inventory as a whole – -18.6% for books versus -15.2% for the collection as a whole. This means that reductions in the book collection were offset by less sharp reductions and/or gains in other parts of the collection.

A similar pattern occurs among libraries serving 25,000 to 50,000 population. While the combined collection inventory decreased by 13.2% between 2010 and 2021, the combined book inventory decreased by 17.7%.



## ITEMS HELD *per* CAPITA / VOLUMES HELD *per* CAPITA

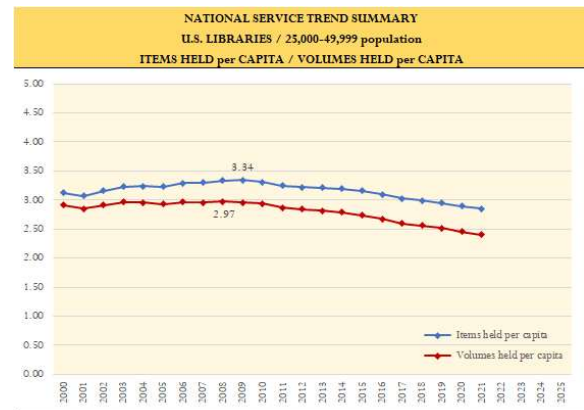
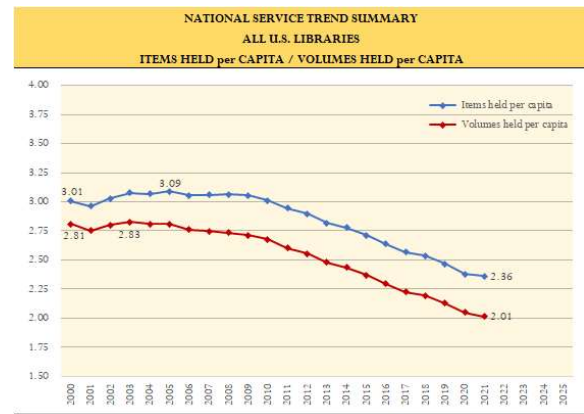
Approaching this data from the perspective of items / volumes held *per capita* produces a slightly different perspective, especially in consideration of the full aggregate national cohort.

Among all public libraries nationwide, the number of items held *per capita* peaked in 2005, four years *before* the aggregate combined nationwide collection inventory peaked. This means that while the overall combined collection continued to increase, it grew at a less assertive rate than was the case for the combined service population in all U.S. public libraries.

The number of books held in all U.S. public libraries peaked even earlier – in 2003 – while the combined inventory kept growing until 2009.

Among public libraries serving 25,000 to 50,000 population, the number of items held per capita peaked in 2009. The number of volumes held per capita peaked in 2008.

Between 2010 and 2011, among all U.S. public libraries, the number of items held per capita decreased by 21.6%. Among libraries serving 25,000 to 50,000 population, the ratio decreased by 13.9%. Nationwide, the number of books held per capita decreased by 24.7% during the period. Among libraries serving 25,000 to 50,000 population, the number of books held per



capita decreased by 18.3%.

In every instance the rate of reduction is highest for books, indicating that a reduction in book inventory is driving the overall reduction in inventory evidenced by U.S. public libraries. And these results further support the notion that larger libraries are reducing collections at a faster rate.

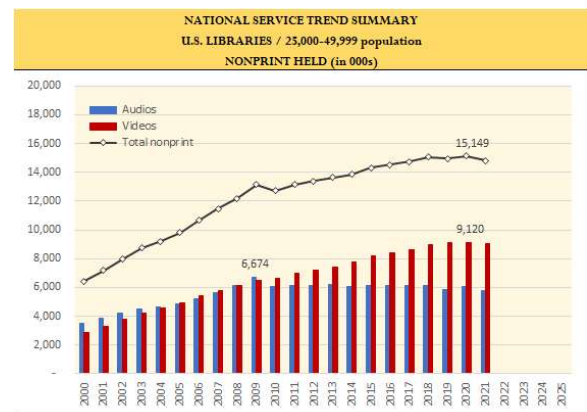
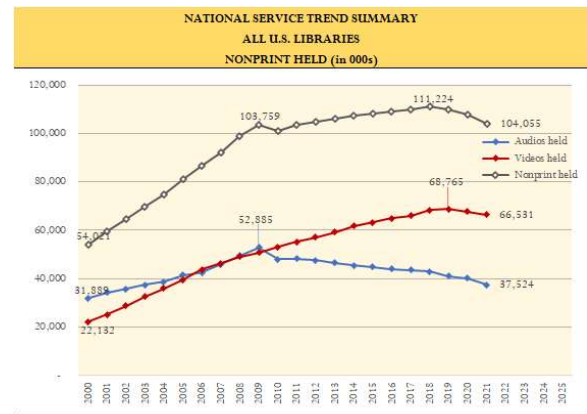
## NONPRINT HELD

Among all libraries nationwide, collection development trends in nonprint holdings offer a kind of “tale of two cities.”

In the first years of the 21<sup>st</sup> century, leading up to 2009, the combined nonprint inventory increased by 7.8% per year, on average. Between 2009 and 2010, there was a wholesale adjustment in the combined nonprint inventory (driven by a reduction in the number of audio recordings reported). After that adjustment, starting in 2011 and running through 2018, total nonprint holdings resumed their upward track, but at a slower rate – just 1.2% per year. The combined inventory of nonprint holdings nationwide peaked in 2018 and has decreased every year since.

A similar pattern is evident among libraries serving 25,000 to 50,000 population – a sharp year-to-year increase through 2009, the adjustment in 2010, followed by a slower year-to-year rate of increase, leading to a peak, not in 2018, but in 2020.

Within the nonprint category, a sharp difference is evident between audio recordings and video recordings. Nationally, audio holdings peaked in 2009, while video holdings continued to grow until 2019. Among libraries serving 25,000 to 50,000 population, audio holdings peaked in 2009 and video holdings continued to grow until 2020. The rate of decline among audio recordings has been more pronounced



among all U.S. public libraries than has been the case among libraries serving 25,000 to 50,000 population.

The most important consideration here is that as of 2021, *all three collection components* found in most U.S. public libraries – print, audios, and videos – now appear to be in decline, after generations of continuous growth and expansion.

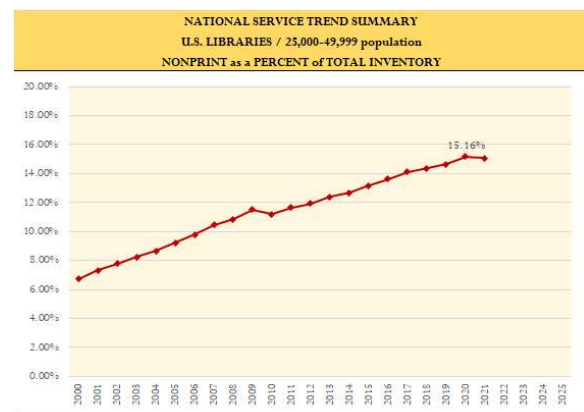
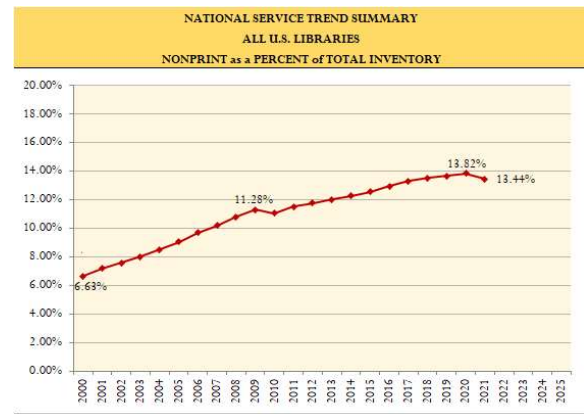


## NONPRINT as a PERCENT of TOTAL INVENTORY

Over the course of the past generation, these national trends have marked a significant reversal of historic trends. Historically, for generations, collection inventories in U.S. public libraries have grown over time. But in the early part of the 21<sup>st</sup> century, book inventories started to contract. This pattern was driven initially by larger, urban libraries, but in time has been witnessed in public libraries of all sizes. About ten years later, libraries started to reduce their audio inventories. This redirection took place as more and more audio resources were becoming available digitally and from streaming sources. Finally, over the last couple reporting cycles, video inventories have started to decrease. It will be interesting in the next few years to see if these latest trends continue, and if they accelerate or moderate.

All of this has come to affect the overall composition of the collection in U.S. public libraries. “Nonprint as a percent of total inventory” measures the relative balance between print and nonprint collections. As shown in the two graphics to the right, this ratio has been increasing steadily in favor of nonprint over the last generation. Among all U.S. public libraries, nonprint holdings represented 6.6% of the total inventory in 2000. It grew to a peak of 13.8% in the 2020 reporting cycle. Among libraries serving 25,000 to 50,000 population, nonprint represented 6.7% of the combined inventory and grew to a peak of 15.1% in the 2020 reporting cycle.

What’s important to note here is that in *both* cases, this ratio appears to have started to reduce in the latest reporting cycle. It will be interesting to note in future years is this pattern will now level out.



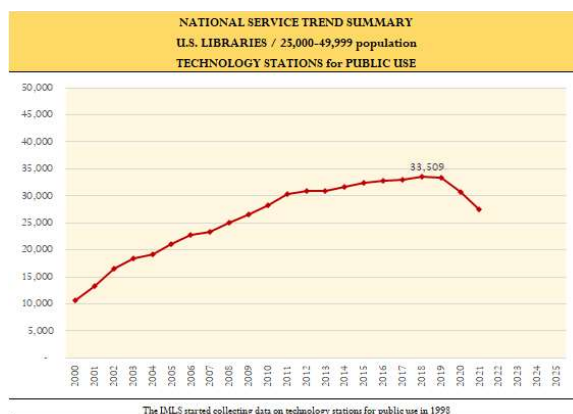
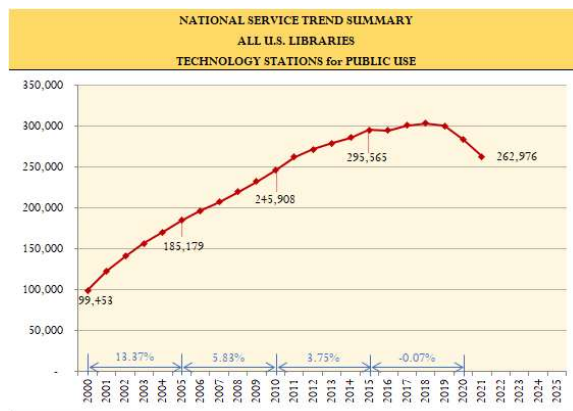
## TECHNOLOGY STATIONS for PUBLIC USE

‘Technology stations for public use’ is the last metric to be examined here, as it is the last of the IMLS data elements that can be used to define a resource and service inventory goal that relates directly to a public library’s space need.

In this instance, we see another pattern of continuing growth through the early years of the 21<sup>st</sup> century, leading to a recent peak. In this case, the full national aggregate inventory of technology stations reveals a consistent pattern over time. While there was a pattern of regular increase starting in the mid-1990s when the IMLS started to gather data on this resource inventory, the rate of growth slowed over time. Between 2000 and 2005, the rate of growth year-to-year was 13.3%. In the next five years, the rate of growth slowed, to 5.8% per year. Then 3.7%. Nationally, the number of technology stations for public use peaked in 2018. As of the 2021 reporting cycle, the combined technology station inventory in all U.S. public libraries is off from its peak by 13.5%.

Among libraries serving 25,000 to 50,000, a similar pattern – steady growth to a peak in 2018. Among these smaller libraries, the current inventory is off from that peak by 17.9%.

Plainly, it’s evident this reversal in earlier trends comes about because more and more library users bring their own internet connectable devices to the library – laptops, phones, tablets. It becomes clear that U.S. public libraries have reached a saturation point in the inventory of technology stations they have on offer for public use.



**THIS PAGE IS LEFT BLANK INTENTIONALLY**