Washoe County Library System Facility Master Plan

February 2015

Final Report

Godfrey's Associates
an R.L. Waters Library Consultation Services Co.

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2 February 2015

Mr. Arnie Maurins, Director
Washoe County Library System
301 S. Center St.
Reno, NV 89501

Re: Washoe County Library System Master Plan Final Report   HAND DELIVER

Dear Arnie,

Enclosed please find forty (40) copies of the above referenced document. I've also included one (1) digital copy on a CD and one (1) copy on a flash drive for your records.

There are no nationally accepted standards for the amount of space a library should have on a per capita basis. The last national standard, developed by the American Library Association (ALA), was published in 1966. While this is an older standard, it is still in use extensively today as a guideline. It proposed a minimum square foot per capita standard of 0.60. For example, a library with a service area population of 100,000 would need 60,000 square feet (SF) of space to meet that now almost 50-year old standard. Most libraries constructed today are designed to a standard far exceeding this minimum, with a significant number targeting a goal of 1.0 square feet per capita or more.

As we developed our recommendations, we concluded that moving from the existing amount of space per capita (0.47 for estimated 2014 County population of 443,731) to 0.6 by 2035, for a total of 372,918 SF based on 2035 estimated population 621,530, was inadequate for Washoe County considering the improving economic climate and the potential for more residential and commercial growth.

Therefore, we have proposed four options with a target, or goal, 0.60 SF per capita by 2025 and 0.70-0.80 SF per capita by 2035.

As we developed our recommendations we determined that the Incline Village library was now "oversized" even at 0.80 SF per capita when projecting that library's service area to 2035. In addition, growth in the Northwest Reno service area is such that that facility need not be expanded until 2025 as any expansion prior to that date – if based strictly on SF per capita – would be extremely costly given that the amount of new space would be modest.

We share these details to explain that in each of the four options the total amount of space recommended when divided by either the 2025 (estimated population of 563,687) or the 2035 estimated Washoe County population does not equal an exact number, i.e. 0.60, 0.70 or 0.80. In summary – Option 1 = 0.70 by 2025, Option 2 = 0.77 by 2025, Option 3 – 0.66 by 2035, and Option 4 = 0.70 by 2035.

For Options 3 and 4 we have divided the projects into two phases as means of reducing the initial 10 year capital costs, while allowing for more modest improvements at each of the libraries during the first 10 years to bring each library up to a minimum standard, with additions during the next 10 year period to fulfill the 2035 requirements for both increased population and higher quality space.

We hope this is helpful in understanding the methodology used in the preparation of this report. As always, please feel free to call if you have any questions.

Sincerely,

Todd B. Lankenau, AIA, CSI, DBIA, LEED AP
Managing Partner
COLLABORATIVE DESIGN STUDIO

ACKNOWLEDGEMENTS

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1. Introduction

In May 2014, the Washoe County Library System (WCLS) issued a Request for Qualifications for Library Facilities Master Planning and in August, 2014 selected Collaborative Design Studio and their consultant Godfrey's Associates from a field of qualified candidates to perform this work.

The stated purpose of the Master Plan was to provide an analysis and comprehensive development plan for the libraries in Washoe County (except Gerlach) for the next 20 years. This is a critically important process to undertake, since it provides clear direction and timing for the necessary improvements to the library system to maximize the value of your investment dollars, while at the same time improving the operational efficiency and customer service where they are needed most.

The WCLS appointed a steering committee to represent the library stakeholders and inform the master planning process. We held regular meetings during the four month report preparation process. The members of the Steering Committee are listed in the Acknowledgements at the front of this report.

We held an initial meeting with the Steering Committee to confirm the scope of work and validate their expectations for the study. We also reviewed the methodology to ensure the study was conducted in an all-inclusive fashion, and that all pertinent stakeholders were consulted for their contributions.

We then developed and distributed a questionnaire to each library, and encouraged the staff to meet as a group and discuss each question, and respond in a fashion which was representative of the group. Our team then visited each library and assessed the existing location, size, layout, collections, general layout, furniture, services provided, parking, and other relevant factors, as well as interviewed the librarian and staff where possible to gain an understanding of the unique operational issues associated with each facility.

We assembled existing and projected population data, demographic information, library usage data, and other statistical information which informed the recommendations contained in this report.

We publicly noticed and conducted three (3) public meetings to solicit commentary from the general public. These were conducted in the evenings at branch libraries to make it convenient for the greatest number of citizens, although they were sparsely attended.

Our study was also informed by the Citizens Advisory Committee Final Report for the Future of the Washoe County Library System dated December 2011, the American Library Associations' Standards and report 'The State of America's Libraries 2014', standard best practices for libraries as well as Library Space Planning Guidelines developed by our Library Planning Consultant, Godfrey's Associates. These were all applied to the projected needs of the Washoe County Library System thru 2035.

Downtown Reno Branch Library

2. EXECUTIVE SUMMARY

The report is divided into the following sections to organize the data and projections in an easily understandable fashion, present our findings and recommendations and provide alternatives for the future development of the individual libraries in the Washoe County Library System.

Sections 3 and 4 review the current library locations and the size. Overall, the current distribution of libraries corresponds reasonably well to the location of library patrons, with the majority of the population living within 3 miles of a library. The consultants found that most libraries are currently undersized, given the current level of service and collection size. As the population increases, this shortfall will become more acute and negatively impact the service the libraries are able to provide.

Section 5 determines the population of Washoe County in 2035, projected to reach 621,531. This number is realized via the 2030 population estimates of the Washoe County Consensus Forecast 2010 – 2030 and The State's Department of Taxation's Nevada County Population Projections 2010 to 2030 and then projecting the population increase for 2030-2035.

Section 6 summarizes the current demographics of Washoe County as a whole as well as for Reno, Spanish Springs, Incline Village, and Sparks. Because library size and location are determined more by the population of the service area and location, this information did not significantly factor in to our facility recommendations. However, as outlined in Section 5, demographic information is important in determining the collections, programming, hours, and other aspects of library service. We believe the demographic information will be helpful in planning future public library service for all of Washoe County

Section 7 looks at recent historical and comparative library data from WCLS to inform our recommendations. The data, which shows circulation, visitation, and other use statistics for the WCLS from 2006 to 2013, indicates that library use has reduced significantly since 2007. It is our determination that the decrease in library hours of service, coupled with the loss of library staff positions, and the lack of technology improvements are the primary drivers that account for the decline in usage.

Section 8 sets out our system-wide operational recommendations:

1. Increase library hours of service,
2. Upgrade technology infrastructure,
3. Consider outsourcing collection procurement and processing,
4. Downsize collections of CDs, DVDs and other non-book media gradually over the next five years, and
5. Adding after hours pick-up lockers at various locations.

Section 9 contains a brief analysis and recommendations for each branch library, along with a floor plan showing the current layout of each library and the current square footage deficiencies.

Section 10 contains our recommendations for the facilities of the WCLS as a whole. It is our recommendation that the system strive to provide library space in a range of 0.7-0.8 square feet per person, roughly doubling the amount of library space currently in use.

As a result of our study, we propose 4 options for your consideration for the future development of the libraries within the System as follows:

Incline Village Branch Library

Option 1 is based on new population growth predominantly spreading outward from the existing city edges. Under this option, we suggest the closure of Duncan Traner and Verdi Libraries, and new or expanded facilities for all other libraries except Incline.

Option 2 is based on new population growth that is split between an increased density in the Reno/Sparks core and outward growth from the existing city edges. With this option, we recommend the closure of Duncan Traner and Verdi along with Sierra View, and the construction of a new Main Library located geographically between the existing Downtown and Sierra View libraries.

Option 3 is a 2 phase development option for Option 1 to allow more modest capital improvement funds to be spent on each library in the first 10 years, thereby allowing for the improvement of more libraries for the same funding level. This option defers the full build out of each library to the second 10 years, when the full utilization of space can be realized. This also allows for a revised projection in 2025, which will result in more accurate space needs dependent on the future growth patterns of the County.

Option 4 is a 2 phase development of Option 2, and provides the same benefits of phased development described in Option 3 above.

The costs and a prioritized time line for the proposed new facilities and additions are provided in Section 10. Each of these options will accomplish the goal of fulfilling the projected needs of the Library System The estimated total project costs (including design, permitting, construction and furniture, fixtures and equipment) of each option are as follows:

■	Option 1	$149,902,335
■	Option 2	$169,048,825
■	Option 3	
	■ Phase 1 (2015-2025)	$76,121,495
	■ Phase 2 (2025-2035)	$104,580,090
	■ Total Cost	$180,701,585
■	Option 4	
	■ Phase 1 (2015-2025)	$91,640,495
	■ Phase 2 (2025-2035)	$104,385,375
	■ Total Cost	$196,025,870

We believe the construction of a new North Valleys Library is the most critical first step, due to the significant space deficiency as well as the recent dramatic increase in cost due to the landlord eliminating previous discounts and now collecting full rent and CAM costs. We believe the library needs to move as rapidly as possible to turn the current rent payments into debt service for a new facility.

Other critical libraries needing attention as soon as possible are Downtown, Sparks and Sierra View (dependent on the option selected), and South Valleys.

It is also our recommendation that a detailed space planning exercise be performed immediately on a number of the severely impacted libraries which we believe can benefit significantly from a complete rearrangement of existing furniture and fixtures. This would greatly contribute to the efficiency of the operation of the libraries as well as the increased satisfaction of the patrons, while serving to defer construction of expansions to accommodate the immediate shortcomings of these facilities.

Northwest Reno Branch Library

3. LOCATION OF EXISTING FACILITIES

The majority of Washoe County residents have a WCLS library within three miles or less from their place of residence. To illustrate the service area for each library, the consultants developed a map that draws a 3-mile ring around all of major facilities (see Figure 1.1 on the next page). Because they serve areas of the County further to the north and south of the "urban core," the North Valleys, South Valley, and Spanish Springs libraries may serve an area larger than the 3-mile ring depicts (see Table 3A). The 3 mile radius population was used for Spanish Springs however, since the 5 mile radius includes populations predominately served by the Sparks and North Valleys libraries. Incline Village may also serve an area with a 5-mile radius, however, the area between a 3 and 5 mile radius in Nevada falls in Forest Service land which is undevelopable or across the State line in California where it would be served by the existing Kings Beach, California library.

The use of the three-mile radius as the estimated service area for a library is based on a study completed by Godfrey's Associates for the Fort Worth (TX) Library System that showed that 75 percent of the users of the Library drove an average of 8.5 minutes from their place of residence to a branch library. Assuming an average speed of 30 mph, that translates to approximately 4.25 miles ($s = d/t$) on the street grid or 3 miles as the crow flies. Though people are willing to travel a wide variety of distances to reach a library, the three mile radius has shown to be a good measure on numerous projects.

Examination of the map shows a good overall distribution of libraries with some considerable overlapping in the Reno/Sparks core:

- Downtown Reno's 3-mile ring covers about almost half of Sierra View and Sparks and about 20 percent of Northwest Reno; and

- Sparks covers about 20 percent of Sierra View.

Table 3A
Population Service Area Per 1-Mile, 3-Mile, & 5-Mile Rings

Branch Library	1-Mile	3-Mile	5-Mile
Downtown Reno	21,370	128,958	230,413
Duncan Traner	20,402	117,437	247,189
Incline Village	4,710	9,678	14,782
North Valleys	2,543	28,748	78,962
Northwest Reno	9,678	50,547	120,006
Senior Center	19,075	119,002	245,590
Sierra View	23,933	87,386	198,740
South Valleys	2,476	33,561	52,290
Spanish Springs	5,784	53,398	153,983
Sparks	20,047	100,978	225,488
Verdi	772	3,463	10,543

Fig. 3.1

HWY 395

SPANISH SPRINGS

NORTH VALLEYS

PYRAMID HWY

VIRGINIA STREET

SENIOR CENTER

DUNCAN TRANER

NORTHWEST

SPARKS

VERDI

DOWNTOWN

INTERSTATE 80

McCARRAN BLVD

SIERRA VIEW

SOUTH VALLEYS

INCLINE VILLAGE
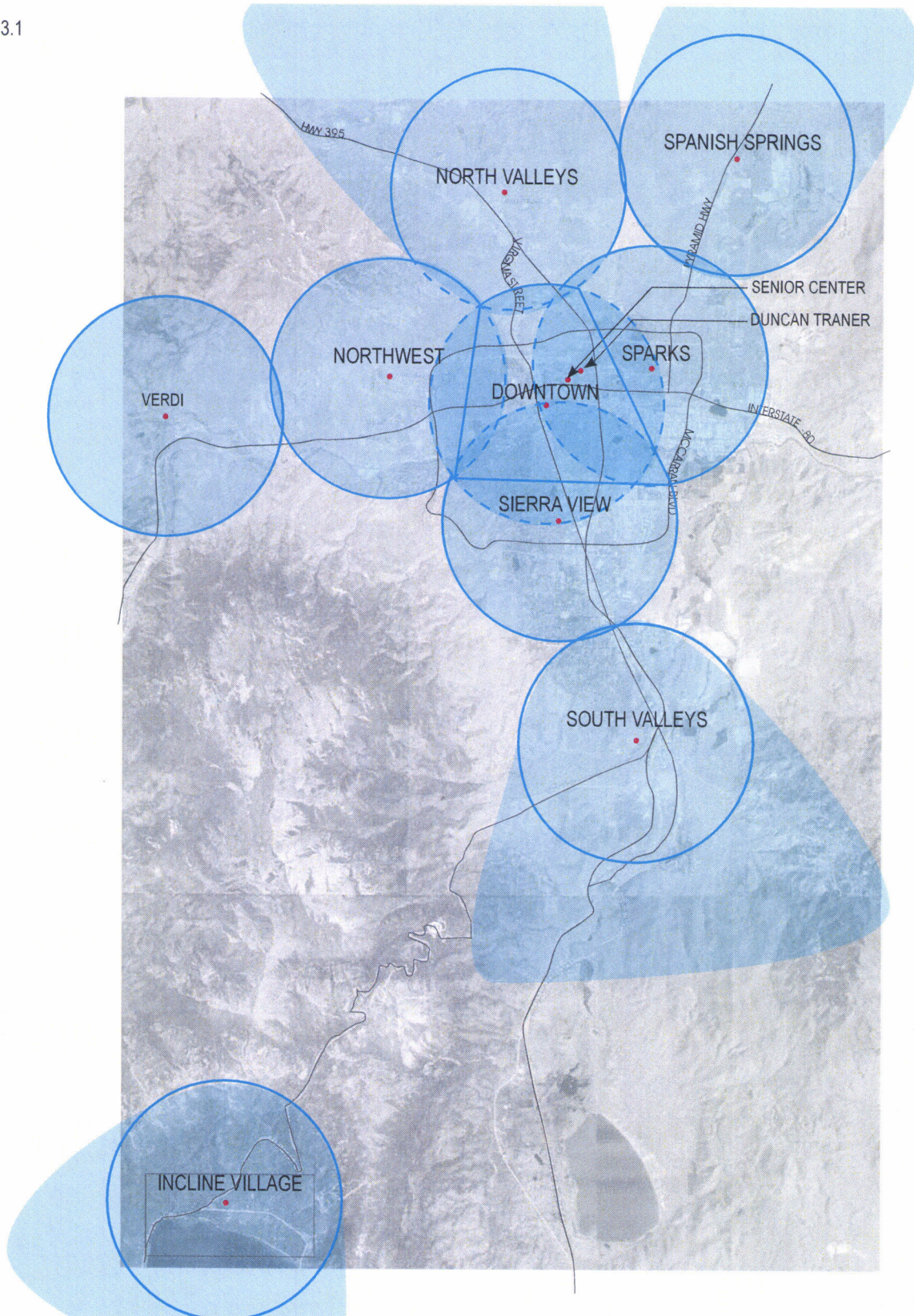
WCLS LIBRARY BRANCH SERVICE AREAS

4. Analysis Of Existing Facilities

Based upon a library facility that conforms to library space planning guidelines the consultants have found:

- Three libraries are currently "undersized" by 4,000 square feet (SF) or more – Sparks (6,440 SF), North Valleys (4,842 SF), and Downtown Reno (4,139 SF when both administration and branch library services are computed);

- The remaining eight libraries are currently "undersized" in amounts ranging from Spanish Springs (172 SF) to South Valleys (3,478 SF); and

- Most of the branch libraries have adequate parking, Downtown Reno being a glaring exception, with no dedicated customer parking.

The "Needed Size" square footages listed in table 4A are for the current services being provided, staffing levels, and collection sizes at each branch library.

They do not reflect future space needs or the space needs for the WCLS as a whole.

In table 4A Downtown Reno indicates the existing and required branch library spaces (stacks, branch staff space, etc) An additional 12,000 SF is required for system administrative functions, including Technical Services, Systems, Administration, and other support services.

Quantitative Analysis Of Each WCLS Facility

Using Library Space Planning Guidelines developed by Godfrey's Associates, Inc. Table 4A was developed for each library to determine the overall needed size for each. Please see Appendix C for these charts and for further explanation of the Library Space Planning Guidelines.

Table 4A
WASHOE COUNTY LIBRARY SYSTEM CURRENT SPACE ANALYSIS

Library	Existing Actual Size (SF)	Needed Size (SF)	Plus or Minus (SF)	Existing Parking Spaces*	Needed Parking Spaces*	Plus or Minus Spaces*
Downtown Reno	58,825	62,925	(4,100)	4	210	(206)
Duncan-Traner[1]	3,200	4,309	(1,109)	0	21	(21)
Incline Village	11,045	12,989	(1,944)	34	33	(1)
North Valleys[2]	9,178	13,290	(4,112)	NA	66	NA
Northwest Reno	28,634	28,531	103	92	95	(4)
Senior Center[3]	800	1,734	(934)	NA	NA	NA
Sierra View[4]	23,130	23,770	(640)	NA	79	NA
South Valleys	17,500	19,269	(1,769)	68	96	(28)
Spanish Springs	30,000	30,234	(234)	89	100	(11)
Sparks	22,832	28,087	(5,255)	83	94	(11)
Verdi[5]	3,184	5,772	(2,588)	16	29	(13)

NOTES:

*   Needed Parking Spaces are computed as follows: Total building space less than 20,000 SF need one space for every 200 building gross square feet of space. For buildings above 20,000 SF need one space for every 333 building gross square feet of space.

1.   No dedicated parking for library, street parking only.

2.   Now in a shopping center, no dedicated library parking.

3.   Parking part of Washoe County Government Center complex.

4.   Now in a shopping center, no dedicated library parking.

5.   Needed parking spaces computed for entire building, including the meeting room.

5. Planning For The Next 20 Years

A Citizens Advisory Committee issued their report "An Overview of Washoe County Library System History & Future Library Trends." FINAL REPORT of the Citizens' Advisory Committee on the Future of Washoe County Library System," on December 2011. The consultants applaud the Committee for their work and believe what they proposed has merit with regard to future planning for the WCLS.

From the report:

In 1904 the city of Reno made a commitment to the community when it opened the Carnegie Free Public Library in Reno. Carnegie would only fund communities which were willing to provide the site and tax themselves to maintain the building, purchase materials, and pay staff. Washoe County took over the library in 1931, during the early years of the Great Depression.

The growing use of electronic tools – smart phones, tablet computers, e-readers, and social media applications – require a total re-assessment of the role of WCLS services and facilities. Given the current economic conditions, the committee envisions the next two years as a "maintenance" period in which fewer, but critical, services are provided. Up to this point, library services have been at an acceptable level in terms of public perception. Keeping this perception alive is one objective of the committee's recommendations.

The Committee pointed out that a reduction in library service hours was "a clear impact on users." The report stated:

90% of survey respondents identified library hours of operation as a problem. *"The shortened hours make it much more difficult for me to get to the library!!" "The reduced hours in the evening are a problem for me."*

The Committee developed a list of "Long Term – Two to Eight Years" recommendations. Those recommendations, 11 in all, included these five:

17. Consider fewer, but full-service branches along with kiosks.
18. Combine Downtown Reno and Sierra View branches into one, community oriented "urban" consolidated library hub supporting public, business, and government needs, perhaps combined with other government offices.
19. Gradually replace, upgrade, or eliminate older facilities.
20. Provide infrastructure for a more robust web presence.
21. Close / rethink partnership libraries such as Duncan-Traner and Verdi.

Projected Population

A central piece of information needed to determine the need for the future is the projected population for 2035. The consultants utilized two sources to develop population projections for the next 20 years:

- Washoe County Consensus Forecast 2010 – 2030; and

- The State's Department of Taxation's Nevada County Population Projections 2010 to 2030.

Both sources, as their respective titles indicate, project only 15 years forward. To account for the last five years (2031 – 2035) we took the mid-point between the 2030 projections and averaged them per year.

Spanish Springs Branch Library

Table 5A
WASHOE COUNTY POPULATION PROJECTIONS 2015 – 2035

Year	County Consensus	State of Nevada
2015	472,718	487,936
2020	512,137	524,944
2025	551,012	554,134
2030	590,490	583,612

To move beyond 2030 we factored the following:

• 2025 – 2030 Increase 39,478	29,478
• 39,478 divided by 5 = 7,896	
• 29,478 divided by 5 =	5,896

Thus, 7,896 (County Consensus) + 5,896 (State of Nevada) divided by 2 = 6,896.
Multiplying 6,896 by 5 (years) = 34,480. Therefore:

2035	624,970	618,092

Average for 2035 = 621,531.

The consultants have rounded to 621,530 as the 2035 population projection for Washoe County, and thus for the Washoe County Library System (WCLS).
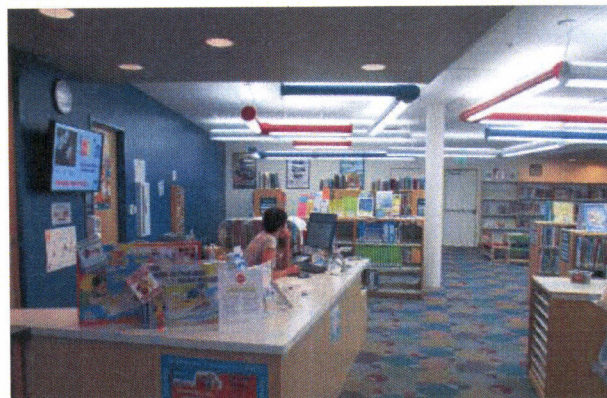
South Valleys Branch Library

6. WASHOE COUNTY DEMOGRAPHICS

The consultants developed two tables as a means of examining the demographics of the County as a whole as well as Reno and Sparks (the two cities within the County) and Spanish Springs and Incline Village (the two Census Designated Places [CDP] in Washoe County.

Tables 6A and 6B on next two pages were developed from data assembled by DecisionWhere, Inc., Scan/US 2014 Estimates (Jan1) except for 6B Land Area Sq. Miles and population Density data taken for US Census Bureau QuickFacts, December 4, 2014.

Table 6A
WASHOE COUNTY DEMOGRAPHIC PERCENTAGES

Demographic	County	Reno	Incline Village*	Spanish Springs*	Sparks
Age Cohort					
0 – 14	19.0	18.2	13.4	22.1	20.2
15 – 19	6.4	6,6	5.1	6.9	6.8
25 – 44	26.4	26.6	26.2	26.5	26.2
65 +	14.3	14.6	17.5	12.3	13.9
Median Age (Years)	37.7	40.6	49.2	38.6	38.2
Race/Ethnicity					
White	77.0	72.9	87.2	77.8	66.6
Black	2.3	2.9	0.3	1.9	3.7
Asian	5.2	5.7	2.1	4.4	5.8
Multiple Races	13.3	16.8	10.0	14.1	20.8
Hispanic Origin	23.4	29.7	19.3	34.4	36.5
Education (25 Yrs +)					
No HS Diploma	13.3	17.4	9.7	13.9	21.9
HS or GED	25.2	25.8	13.5	29.4	31.3
Some College	34.8	32.1	32.5	38.0	31.4
College Degree	17.5	15.8	29.3	12.8	11.3
Graduate Degree	9.6	8.9	18.1	5.8	4.1
Labor Force (16 Yrs +)					
Employed	61.1	59.5	57.6	62.1	57.2
Unemployed	6.9	7.6	4.5	7.3	10.1
Not in Labor Force	31.8	32.8	37.9	30.4	38.5
Households (170,138)					
Avg. HH Size (#)	2.53	2.41	2.27	2.89	2.57
Avg. Family Size (#r)	3.08	3.27	2.84	3.39	3.46
Married Couples w/Children	45.0	45.6	29.8	49.0	49.6
Male w/Children	60.8	56.8	70.4	64.7	60.8
Female w/Children	65.6	65.6	62.7	64.2	66.2
HH Available Vehicles					
0	7.5	11.7	1.6	2.0	13.4
1	32.1	38.4	28.5	25,8	38.4
2	39.4	34.5	47.7	43.4	32.2
Avg. (#)	1.8	1.6	2.0	2.1	1.6
Total Housing Units (#)	NA	102,317	8,129	19,234	42,055
Owner Occupied	59.2	44.8	65.2	77.0	42.9
Renter Occupied	40.8	55.2	34.8	23.0	57.1

NOTE:
*   Incline Village & Spanish Springs are defined by US Census Bureau as a Census Designated Place (CDP).

Table 6B
WASHOE COUNTY ADDITIONAL DEMOGRAPHICS

Demographic	County	Reno	Incline Village*	Spanish Springs*	Sparks
Median HH Income	$56,101	$50,125	$75,505	$51,406	$48,715
% Below Poverty Line	14.7	17.7	8.1	3.9	13.4
Mean Travel Time to Work (minutes)	21.1	19.4	15.2	28.0	21.8
Land Area Sq. Miles	6,302	103	21.5	56	36
Density Sq. Mile	1:67	1:2,186	1:408	1:271	1:2,524

NOTES:
* Median HH Income based on 5-mile ring.

Civic Technologies Data – On August 21, 2014, Civic Technologies, via a Staff Day Workshop, presented a "Briefing Book." The WCLS subsequently forwarded the information to the consultants.

The "Book" contains a large amount of data. The consultants have studied the last two sections – "Data Tables and Figures" that starts on page 75 and "Segment Descriptions" that begins on page 107.

As understood by the consultants, Civic Technologies to WCLS furnished library borrower card data to determine both the "customer base" and "customer segmentation of the Library System's current customers. From that data a series of charts were developed and presented to Workshop participants.

In turn, the consultants have used that information to identify, by percentage, the service area population (as determined by Civic Technologies) of current customers. The Duncan Traner Branch Library, according to Civic Technologies' data, has the highest percentage of service area population that are WCLS customers. Conversely, the Verdi Branch Library has the lowest percentage. Of the "full service" branch libraries, Northwest Reno and South Valleys have the highest percentages. As a system, WCLS has 17.84 percent of its service area population as customers.

Civic Technologies uses the Tapestry system that breaks down areas by US Census blocks (as opposed to Experian, whose data is at the household level) to determine the different market segments and their demographics, etc. There are 70 plus segments that defined the U.S. population.

Table 6C
Percentage of Service Area Population Who Are Customers

Library	Population	Customers	% Customers	Non-Customers
Duncan/Traner	3,795	1,241	32.7	2,554
Northwest Reno	44,406	9,823	22.12	34,583
South Valleys	52,391	10,818	20.65	41,573
Spanish Springs	64,421	11,916	18.49	52,505
Downtown Reno	53,736	9,548	17.77	44,188
Incline Village	9,195	1,507	16.39	7,688
Sparks	75,936	12,419	16.35	63,517
North Valleys	61,069	9,751	15.97	51,318
Sierra View	61,372	9,272	15.11	52,100
Verdi	1,341	13	0.1	1,328
Grand Total	427,662	76,308	17.84	351,354

NOTES:
1. Table developed from Civic Technologies data on page 86 of their report.

The consultants, as shown in Table 6D below, compared the percentage of the market segmentation population and the checkout (circulation) rankings. The top three market segments, in terms of percentage of population also have the highest checkout ranking. However, the 4th (Milk & Cookies) and 5th (Aspiring Young Families) percentage of population rank 10th and 8th respectively re checkout rankings. The consultants do not believe this to be a significant anomaly.

The consultants do believe that the best use of the "Briefing Book" data will be for collection development and library programs and programming services. Household-level data from Experian would be useful for pinpointing potential locations of new libraries or better locations for existing facilities.

Table 6D
Population, Share of Population, and Checkout Rank by Customer Type[1]

Customer Type	Population	Percentage Population	Checkout Rank
Up & Coming Families	54,273	12.7	1
Inner City Tenants	33,712	7.9	2
Exurbanites	28,869	6.7	3
Milk & Cookies	24,634	5.8	10
Aspiring Young Families	21,905	5.1	8
Old and Newcomers	18,497	4.3	4
Social Security Set	8,298	2.1	5

1. Table developed from Civic Technologies data, pp 76-77 of report.

Importance of Demographics

The consultants firmly believe that future library service should give demographics of the areas to be served as much consideration as population projections.

Two studies, one published in 2013 the other published in 2011, under- score the importance of demographics – and especially – educational attainment levels regarding use of the public library and – indirectly – circulation of library materials.

Pew Research Center's 2013 Internet & American Life Library Services Survey of 6,224 Americans ages 16 and older found that 86 percent of persons age 18 and older with an educational attainment level of "College +" had visited a public library in person and 58 percent had visited in the past 12 months. This compared with 67 and 34 percent respectively that did not have a high school diploma and 77 and 39 percent with a high school diploma.

In 2011, the American Library Association's A Strong Future for Public Libraries & Employment indicated that education level and household income are correlated with in-person or remote online use of public libraries. Those with higher levels of education and higher household incomes are more likely to be public library users (see Table 6E below).

The consultants believe the demographics that are the best predictors of library usage are:

- **Educational attainment level** – The more education a service area population has the greater the use of the library;

- **Families with children living at home** - These families will use the public library for both their children and themselves;

- **Home ownership** – Persons who live in the home they own typically make greater use of the public library than renters; and

- **Percentage of service area population between ages 0 – 14** – Many parents want the best for their children, and the public library is the first step in climbing the educational ladder.

Other demographics should be studied and taken into account when planning services and choosing locations. For example:

- Ethnicity is important for collection development and programming;

- Senior residents, those 65 and older, have special needs and often have more discretionary time at their disposal;

- Available vehicles is an influencing factor on hours of service as well as location in relation to public transportation; and

- High unemployment rates or high rates of "not in the labor force" in a service population are indicators of a greater need for library services, services that those in these two categories may not be aware of.

The demographics of each service area should be monitored closely and updated no less than every two to three years.

Table 6E
Proportion of Adults Who Visited Public Libraries In-Person or Remotely by Highest Level of Education in 2006 (n=993)

Educational Attainment Level	Percent Visiting Public Libraries
More than 4-year college degree (n=199) -	85.9%
4-year college degree (n=206) -	75.5%
Some college or 2-year degree (n=331) -	62.7%
High school graduate of GED (n=220) -	52.7%
Less than high school diploma (n=36)	30.6%

Downtown Reno Branch Library

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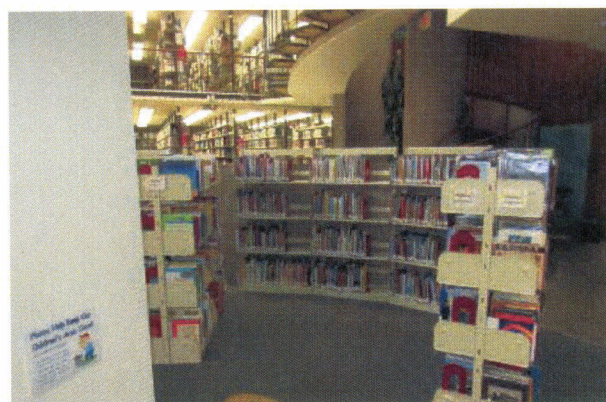
7. STATISTICAL USAGE COMPARISONS

The consultants developed tables on the following three sheets that provide a historical perspective regarding use of the WCLS:

- Table 7A looks at usage over the past three fiscal years – FY12, FY13, and FY14;

- Table 7B compares usage between FY07 and FY13; and

- Table 7C takes a look at the "productivity" of the 11 branch libraries.

Usage of WCLS in almost every measurable category has declined over the past three years. Only three of the eight categories of service studied show an increase. It is important to note that in the same three years the "Net Public Hours," i.e. when the public could use a WCLS library, had a very slight decline and the staff hours (public service staff only) had a significant decrease. These two factors had a negative impact on use of the WCLS.

The impact can be readily seen when comparing FY07 and FY13 (Table 7B). Across the board, usage declined – and quite sharply in terms of all but checkouts. A library that is not open cannot be used and if staff is reduced, even when a library may be open a customer, or potential customer, may leave as there is no one to provide needed assistance.

It should be noted that not only the current five-day a week schedule for the branch libraries has impacted service, but the impact has been felt by operations and staff area safety. For example, often the after hours library materials return bins cannot handle the volume of materials returned over a two day period. And, when they are left open in the public or staff areas of the buildings there is a higher potential of fire hazards.

Our rationale for Table 7C is NOT to set in motion a competition between the different libraries. It is to illustrate how the lack of user-friendly space and adequate financial support influences nearly every facet of library service. Collection items per capita in the WCLS is almost 50 percent less than the often cited "standard" of two items per capita. Circulation (checkouts) per capita pales when compared to many other libraries.

Planning for the next 20 years should establish a set of realistic achievable goals and measurable objectives.

Table 7A
Statistical Comparisons – Fiscal Years 12 – 14

Fiscal Year	County Population	Checkouts	New Registrations	Gate Count	Computer Use	Program Attendance	Meeting Room Use	Website Hits	Total Contacts
FY12	427,704	2,340,984	16,220	1,265,420	254,085	61,965	28,920	952,208	4,919,801
FY13	432,324	2,282,504	16,805	1,228,303	252,220	97,744	15,170	960,336	4,850,082
FY14	437,598	2,203,005	16,235	1,172,719	270,924	77,583	13,818	896,258	4,650,542
Numeric Change	9,984	(137,979)	15	(92,701)	16,839	15,618	(15,102)	(55,950)	(269,260)
% Change	2.31%	(5.89%)	0.09%	(7.73%)	6.63%	25,2%	(52.22%)	(5.88%)	(5.47%)
Per Capita FY12		5.47	0.038	2.96	0.59	0.14	0.07	2.23	11.50
Per Capita FY14		5.03	0.037	2.68	0.62	0.18	0.03	2.22	10.63
Numeric Change		(0.44)	(0.001)	(0.28)	0.03	0.4	(0.04)	(0.01)	(0.87)
% Change		(8.02%)	(2.17%)	(9.42%)	4.22%	22.37%	(53.3%)	(0.22%)	(7.71%)

Table 7B
Statistical Comparisons – Fiscal Years 07 and 13

Fiscal Year	County Population	Checkouts	Gate Count	Computer Use	Total Contacts	Net Public Hours	Total FTE Staff
FY07	403,202	2,309,941	1,658,733	385,082	4,353,756	26,958	221.00
FY13	432,324	2,282,504	1,228,303	252,220	3,763,027	18,418	100.00
Numeric Change	29,122	(27,437)	(430,430)	(132,862)	(590,729)	(8,540)	(121,00)
% Change	7.22%	(1.19%)	(25.95%)	(34.5%)	(13.57%)	(31.68%)	(54.75%)
Per Capita FY07		5.73	4.11	0.96	10.8	0.067	0.00054
Per Capita FY13		5.28	2.84	0.58	8.7	0.043	0.00023
Numeric Change		(0.45)	(1.27)	(0.38)	(2.1)	(0.024)	(0.00031)
% Change		(0.08%)	(0.31%)	(0.4%)	(0.19%)	(0.358%)	(0.57407%)

Sparks Branch Library

Table 7C
WASHOE COUNTY LIBRARY SYSTEM
Library-by-Library Productivity Comparisons

Library	Population Served	Square Feet	SF Per Capita	Collections	Collections Per Capita	Collections Per SF	Circulation	Circulation Per Capita	Collection Turnover	Visits	Visits Per Capita	Visits Per SF	FTE	Circ Per FTE	Visits Per FTE
Downtown Reno[1]	128,958	58,825	0.46	126,895	0.98	2.16	299,309	2.32	2.36	195,680	1.52	3.33	13.55	22,089	14,441
Duncan-Traner[2]	20,402	3,200	0.16	20,621	1.01	6.44	20,045	0.98	0.97	5,800	0.28	1.81	0.45	NA	NA
Incline Village	9,678	11,045	1.14	35,396	3.66	3.20	80,720	8.34	2.28	60,419	6.24	5.47	5.875	13,740	10,284
North Valleys	28,748	9,178	0.32	50,371	1.75	5.49	171,012	5.95	3.40	88,749	3.09	9.67	6.425	26,617	13,813
Northwest Reno	50,547	28,634	0.57	88,306	1.75	3.08	295,360	5.84	3.34	156,162	3.09	5.45	10.25	28,816	15,235
Senior Center	19,075	800	0.04	4,184	0.22	5.23	11,486	0.60	2.75	23,832	1.25	29.79	1	11,486	23,832
Sierra View	87,386	23,130	0.26	72,667	0.83	3.14	262,918	3.01	3.62	189,258	2.17	8.18	10.25	25,651	18,464
South Valleys	52,290	17,500	0.33	60,232	1.15	3.44	284,703	5.44	4.73	157,511	3.01	9.00	9.875	28,831	15,950
Spanish Springs	53,398	30,000	0.56	63,266	1.18	2.11	195,053	3.65	3.08	115,940	2.17	3.86	9.50	20,532	12,204
Sparks	100,978	22,832	0.23	102,443	1.01	4.49	346,496	3.43	3.38	177,594	1.76	7.78	9.50	36,473	18,694
Verdi[2]	772	3,184	4.12	12,142	15.73	3.81	16,862	21.84	1.39	1,774	2.30	0.56	0.625	26,979	2,838
System Totals	437,598	208,328		636,523			1,983,964			1,172,719			77.300		
System Averages	43,760	18,939	0.48	57,866	1.45	3.06	180,360	4.53	3.12	106,611	2.68	5.63	7.027	25,666	15,171
System Totals w/o Duncan-Traner, Sr. Cntr & Verdi	437,598	201,144		599,576			1,935,571			1,141,313			75		
System Averages w/o Duncan-Traner, Sr. Cntr & Verdi	62,514	28,735	0.46	85,654	1.37	2.98	276,510	4.42	3.23	163,045	2.61	5.67	10.7	25,730	15,172

NOTES:
1. FTE is public services staff and does not include system adminstration staff
2. Circulation figures for Ducan-Traner and Verdi include both school house and public hours.

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8. System Recommendations

Based on our findings and observations and the reviews of the draft reports the consultants offer the following recommendations:

1. First and foremost, the hours of service for at least three strategically located libraries need to be extended to a minimum of six-day a week service with four evening hours (at least until 8:00 PM) and two days of 6:00 PM closing. The opening hours should be the same each day, preferably opening no later than 9:30 AM, with staff on duty and at work no later than 9:00 AM.

2. Second in importance is Technology. We recommend the following two initiatives (the appendices include our full report on WCLS Technology).

   A. Thin Clients – The Technology Plan makes clear that replacing aging PCs is a priority. Thin Clients can provide significant cost savings in terms of purchasing, maintenance, and administrative costs. And while WCLS may not be able to replace all the PCs they want at the same time there is no reason to not initiate a replacement program.

   B. Koha ILS Upgrades – Desired and needed Koha upgrades are these:

   - Overdrive API;
   - Database API;
   - Acquisitions module;
   - Catalog clean up;
   - Responsive design for public catalog; and
   - Koha functionality will also affect use of kiosks in-house and remotely.

3. An objective in-house study should be undertaken regarding the cost and public service implications concerning an increase in the outsourcing of library materials procurement and processing activities. Specifically:

   - Complete processing of all materials;
   - Drop shipments to each branch library facility; and
   - All materials to be shelf-ready after library staff check-in and determination that all orders have been filled to WCLS satisfaction prior to invoice payment.

4. Initiate the process of selectively downsizing the physical copies of all media – Audiobooks, DVDs, and Music CDs. Concurrently, increase the promotion of the fact that WCLS libraries have download stations. Tutorials to help patrons with streaming and downloading should be offered. The acquisition of new media items should also be reduced with the net result of each year for the next five years the overall media collections will be reduced to zero – or very close to it.

5. Consider after hours pick-up lockers for all libraries.

6. WCLS should initiate a RFID project by "tagging" all new acquisitions for the next five years. Concurrently, if the present ILS is capable, a "dusty book" report should be run twice. In year one it should look for items (circulating items) that have not been borrowed in the last five years (if 2015 is year one, then items last borrowed in 2009 and before would show up on the report and become prime candidates for withdrawal. Then, in 2018 (there has now been three + years of "tagging," do another "dusty book" report and use a three year window. Once all of that has been accomplished, and the five-year timeframe has elapsed, it would be time to tag the balance of the collection.

   If Washoe County's financial policies count library materials – or at least library books – as a capital investment then a case can be made to treat RFID tags in a like manner since they are helping secure the investment in the books.

7. In order to meet the increasing demand for heavy content usage bandwidth available to WCLS and its customers must be increased. The consultants recommend the following ranges:

   - Minimum bandwidth = 512 kbps download 128kbps upload per computer;
   - Medium range = 768 kbps download 256 kbps upload per computer; and
   - Top end = 1024 kbps download 512 upload per computer.

Although these figures may look low at first glance it has to be re-

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membered that this is per computer so the actual amount of bandwidth required to meet these levels is based upon the number of computers and Wi-Fi connections made available rather than the service offered by the ISP .

For example, North Valleys has 17 wired and five wireless devices -- a total of 22 devices with the current amount of bandwidth available being 6mbps download and 768 mbps upload. In order to run these 22 devices at the minimum bandwidth requirement of 512 download and 128 upload it would be necessary to add 14.5mbps download and 3.625 mbps upload. To reach the medium range it would be necessary to add 21.75mbps upload and 7.25 download. And, to reach the top end, 29mbps upload and 14.5mbps download would have to be added to the existing bandwidth at North Valleys Branch Library.

The consultants do not have exact figures of PC and devices for every branch library, so we are unable to calculate the required bandwidth that would be required to be added to meet the defined levels. In addition, it needs to be remembered that if the supplied figures that are for public PCs only additional bandwidth would need to be added in order to ensure that staff PCs operate at the same level.

The demand for increased bandwidth is only going to increase in the months and years ahead. It would be easy to say that WCLS should seek as much bandwidth as they can obtain. But, the reality of cost of increasing bandwidth is a significant one. Therefore, the consultants recommend at this time a goal of implementing 512 kbps download 128kbps upload per computer. This will be achieved once WCLS has defined what the true current bandwidth allocation is, and how many computers will be accessing it in a given branch. Also, any future PCs (or other devices) added to a location would require the purchase of additional bandwidth in order to maintain the allocation.

Spanish Springs Branch Library

9. Facility Analysis And Recommendations

The consultants' analysis and recommendations for the 11 WCLS facilities that are part of this study follows. Facility floor plans are provided as a reference, and indicate the approximate existing facility layout.

Public School Partnerships

We recommend that the partnerships between WCLS and Duncan Traner Elementary and Verdi Elementary schools be ended at the conclusion of the current academic year. These two locations are primarily school libraries open a minimal number of hours for general public use. They utilize staff resources that could be best be deployed elsewhere in the system. Duncan Traner is very close to the Senior Center and is within 2.25 miles of three other libraries (Downtown Reno, Senior Center, and Sparks). It has no off-street parking. The Verdi library is similar to Duncan Traner; and primarily a school library with very low utilization.

Space Planning

For four of the branch libraries the consultants recommend a new space plan be developed and implemented. Space planning Incline Village, Northwest Reno, South Valleys and Spanish Springs would include these tasks:

1. WCLS would hire consultants who would produce, if not already available, a scaled floor plan of each of facility showing all exterior and interior walls, columns, rest rooms, mechanical spaces, custodial closets, etc. with precise measurements for each element.

2. A one-day space planning charette at each library would be scheduled and held, to be completed over four consecutive days (ideally a Monday – Thursday schedule).

3. The consultants would develop a blocking plan (see example below) to show the location of different program elements (e.g. Children's Area, Front Desk), and a Bird's eye view (also below) of the floor layout showing all furniture and equipment, rooms, etc. The consultants would prepare a cost estimate and a implementation schedule for each library. These items would be reviewed by the county and community, perhaps via a second set of charrete, then finalized by the consultants.
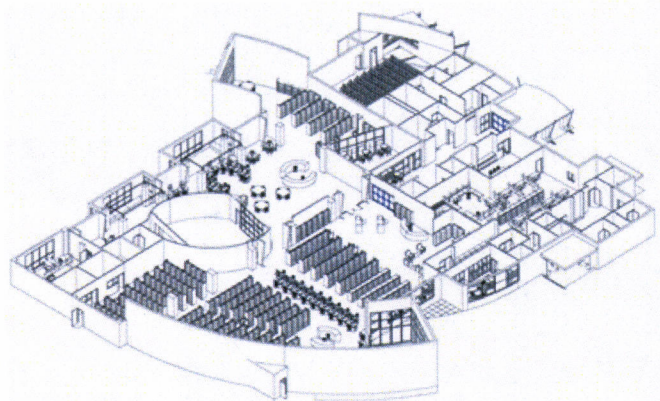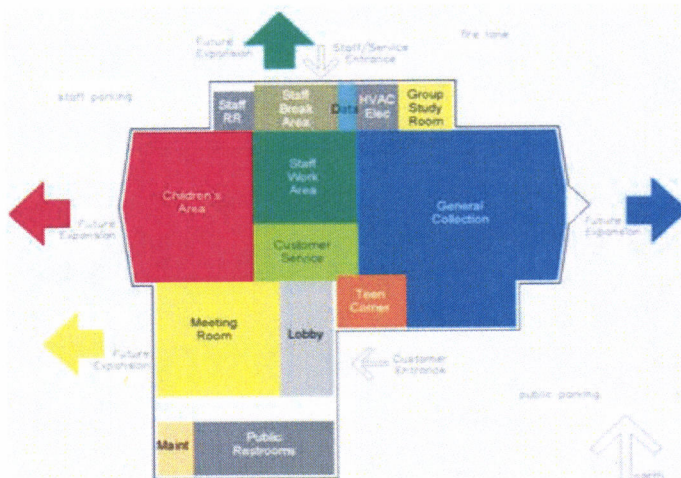
Furniture, Fixtures, and Equipment (FF&E)

In developing the Library Space Planning Spreadsheets for the 11 existing facilities the consultants noticed the absence of several spaces and/or FF&E items in many of the libraries. We believe selectively adding these elements should be considered as facility planning moves forward:

- Bench seating, especially for Adults, often located with "New Books;"

- Computers for Teens/Tweens and for Children of different ages;

- Computers where two persons can work together (one monitor but two control devices);

- Collaborative stations where three to four or five persons can work together sharing one screen;

- Four-place reader table for Children's, with smaller tables for very young;

- Floor seating for Children, often comprised of pillows around a 12"high round table (young children love to be on the floor);

- Spaces for tutoring that is private or semi-private;

- Read Aloud seating in Children's Services where a parent/grandparent/ older sib can read aloud to a children without unduly disturbing others;

- Conference rooms seating from eight to 12 or 20 to 30 depending upon building size and usage;

- Program room for Children's Services, best with both carpet (or similar) floor for story times, etc., hard surface for arts and crafts; and

- Group Study Rooms like at South Valleys, some seating four, some seating six.

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Existing Floor Plans
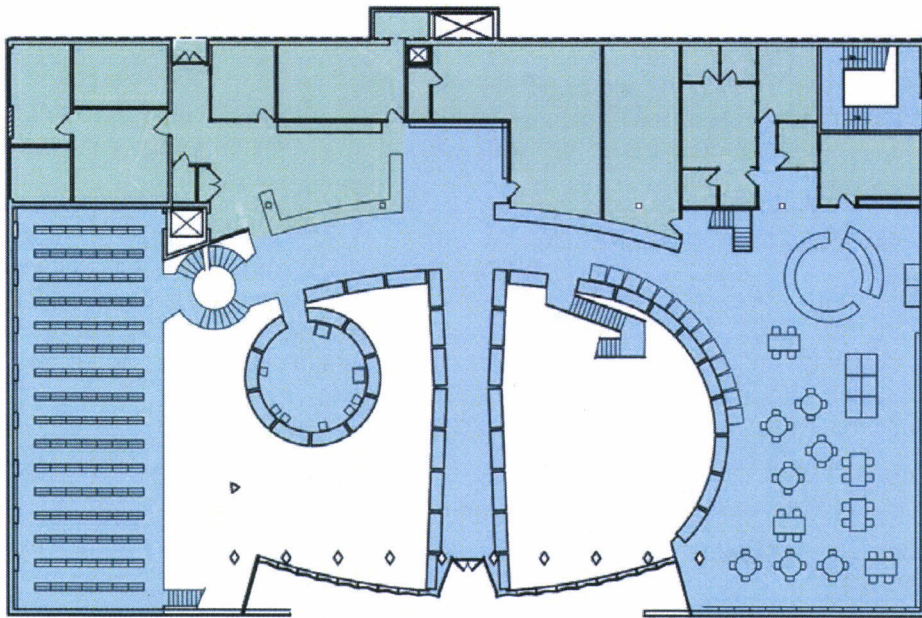
DOWNTOWN BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address: 301 S Center St., Reno, NV 89501
Current Square Feet: 58,825 sf
Construction Date: 1964
Construction Type: Masonry/Steel
Ownership: WCLS (City of Reno owns land)

LEGEND
- Public Areas
- Staff/Support Area

Space Analysis: Though of architectural interest and value, this library has a very inefficient floor plan and numerous facility issues. The amount of "back of house" and circulation space reduces the space available for library stacks and public use. The library is difficult to run given the inefficient use of space, seven different floor levels, and concerns about asbestos. Space for group study or small meetings is needed.

Facility/Maintenance Issues: Asbestos in ceilings and floors, obsolete lighting system, inefficient and leaky windows, lack of accessible means of egress, and aging finishes requiring substantial rehabilitation.

Recommendations: The Downtown Reno should be labeled as the "Central Library" of the WCLS. Options for the Downtown Library Facility, not in order of preference are:

1. Major renovation that leaves the "garden" and the four stack levels in place but "guts" the balance of the building. The System Administration staff would move to a different location, with the staff for the Downtown Library to remain. A minor or moderate renovation of the facility is not recommended due to excessive cost and no remedy for the parking issue.

2. A totally new facility on a new site with public transportation access being a critical component of the site. The new site could be located downtown or slightly to the south near the intersection of Plumb and Virginia. The size and location of this facility will be based on the which option in Section 10 of this report is selected.
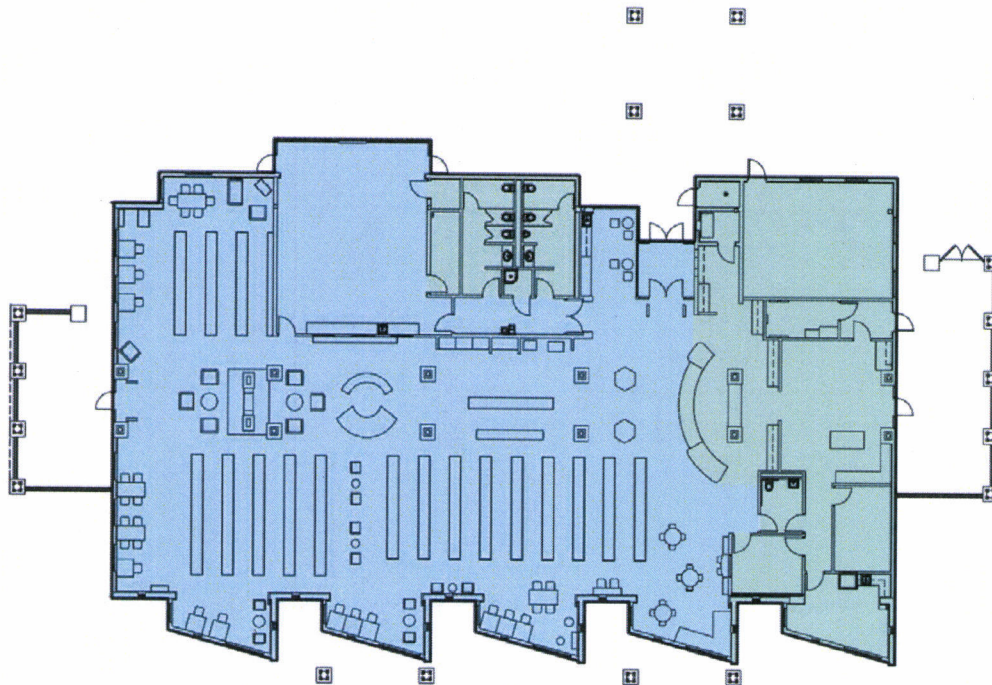
LEGEND

■ Public Areas

■ Staff/Support Area

INCLINE VILLAGE BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address:	845 Alder Ave, Incline Village, NV, 89451
Current Square Feet:	11,045 sf
Construction Date:	2005
Construction Type:	Heavy Timber
Ownership:	WCLS

Space Analysis: This is a very nice facility in good condition, but it is over crowded with shelving and furniture. A space plan should be developed in order to improve the efficiency of space use and provide improved public service. The space plan would also determine if either, or both, of the "patios" or "porches" at each end of the building could be enclosed to provide additional space.

Facility/Maintenance Issues: Parking lot drains toward the curb in front of the building entry, causing dangerous ice build-up. Roof drains onto and is damaging entry column. Slate floors need to be sealed.

Short Term Recommendations: New Space Plan. Attend to facility issues. The dangerous condition caused by ice build-up at the curb could be somewhat mitigated by adding hand rails along the curb. However, a longer term solution that redirects drainage water and provides for a typical curb cut at the curb in front of the entry is recommended. The roof drainage issue could be addressed at low cost with the addition of flashing to redirect water away from column.

Long Term Recommendations: Expansion
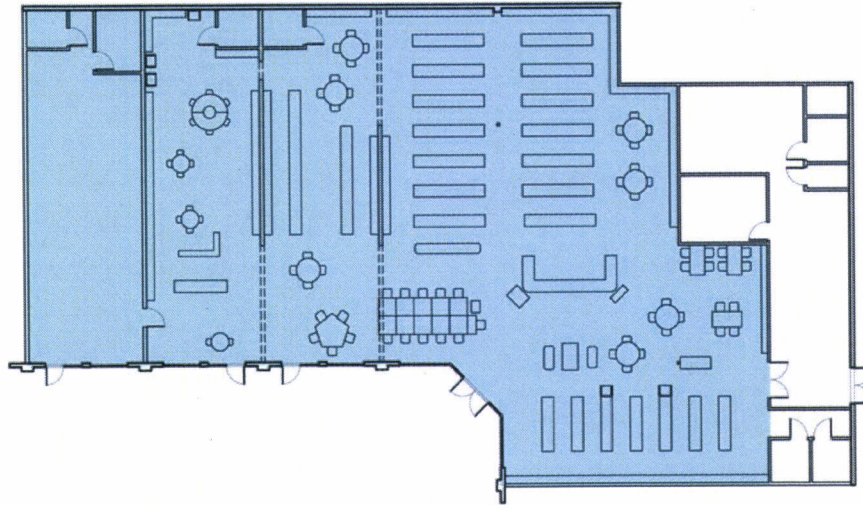
NORTH VALLEYS BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address: 1075 N. Hills, Blvd, Reno, NV 89506
Current Square Feet: 9,178 sf
Construction Date: Unknown
Construction Type: Unknown
Ownership: Leased Facility

LEGEND
Public Areas
Staff/Support Area

Space Analysis: This facility is busy and overcrowded. Of all of the major branch libraries, it has the largest deficiency in square footage in proportion to its size. The library is located in a leased space with a historically discounted lease rate and forgiveness of Common Area Maintenance (CAM) costs. THe lease expires in June 2015 and the annual cost of the lease will increase over $100,000 this year. Given the overcrowding it is questionable if that is a good expenditure of operational funds for more than one or two years.

Facility/Maintenance Issues: Insufficient internet speed. Book drop is not fire-rated.

Short Term Recommendations: Until a new facility is opened consider the following options:
1. Acquire a portable building and a site and operate until a new facility can be programmed, planned, designed, constructed, furnished, and equipped.
2. Renew the lease for two years and maintain the Meeting Room space.

Long Term Recommendations: A new branch library on a site of at least three to four acres.

NORTHWEST RENO BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

LEGEND
- Public Areas
- Staff/Support Area
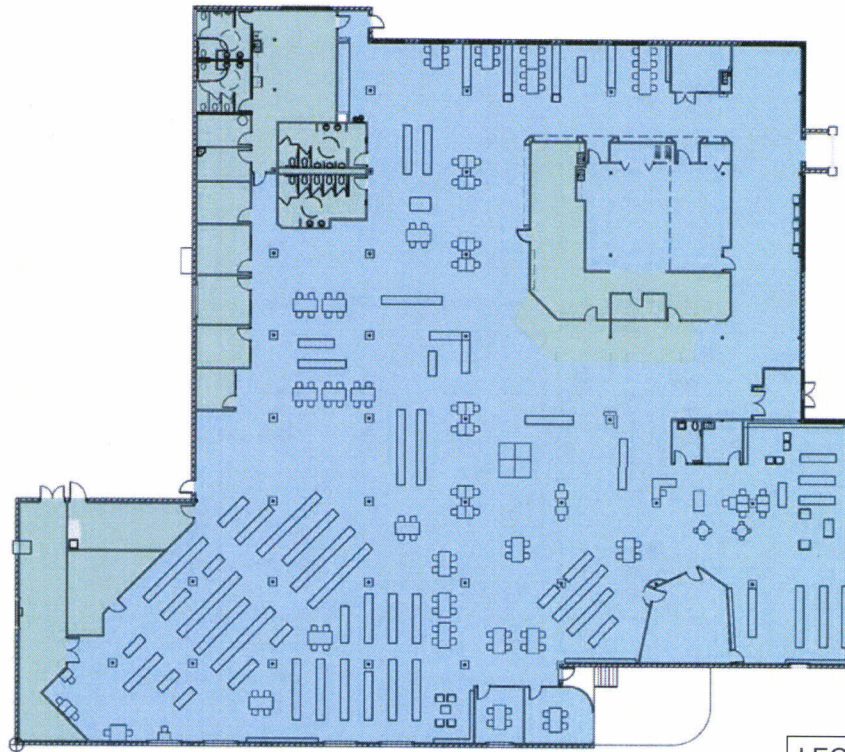
Address:	**2325 Robb Drive, Reno, NV 89523**
Current Square Feet:	**28,364 sf**
Construction Date:	**1989, Renovated 1999**
Construction Type:	**Masonry**
Ownership:	**WCLS**
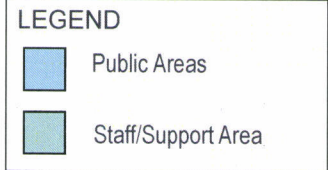
Space Analysis: The Northwest Reno facility functions well. The most difficult issue at this facility seems to be that the drive-up book window location is isolated from rest of staff areas and requires dedicated staff person to service. Without significant site and interior renovations, we do not see a good fix to this issue. Staff also reports feeling unsafe when working at the drive-up window due to the one-way glazing and insufficient exterior lighting.

Facility/Maintenance Issues: The monitoring system for the Solar PV panels does not function properly. Book drop is not fire rated. Concrete cracking and spawling at side entry steps. Roof and HVAC system need to be replaced.

Short Term Recommendations:
1. Develop a Space Plan for reorganization of the interior spaces with the goal of turning some unassignable space into assignable space, thus increasing the facility's capacity. The consultants refer to this as "found space."
2. Improve the exterior lighting on all sides of the building, and replace glass at drive-up book window.
3. Address maintenance issues.

Long Term Recommendations: Expansion.
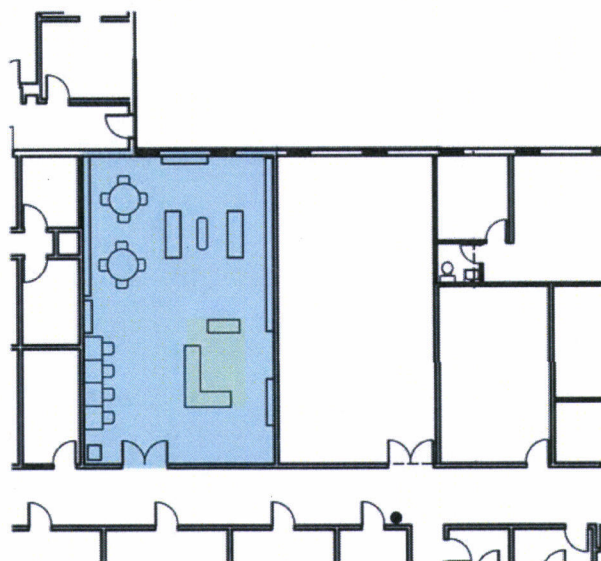
SENIOR CENTER BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

LEGEND

□ Public Areas

□ Staff/Support Area
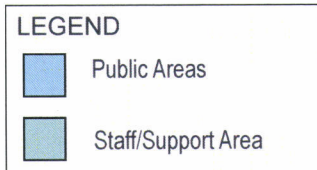
Address: 1155 E 9th Street, Reno, NV 89512
Current Square Feet: 800 sf
Construction Date: Unknown
Construction Type: Unknown
Ownership: Washoe County

Space Analysis:
By far the smallest library in the system, this 800 SF facility located within the Washoe County Senior Center serves a special clientele and has good usage. Besides the seniors who come to the Center, the library also serves as a convenient space for employees in the adjacent Washoe County governmental complex to pickup holds and return materials.

Facility Issues: N/A

Short Term Recommendations:
1. Add at least one computer for public use.
2. Replace the large round 4-place table with two lounge chairs with a side table.
3. Increase the service hours by extending the closing hour from 1:00 PM to 2:00 PM Tuesday - Friday

Long Term Recommendations: Expand
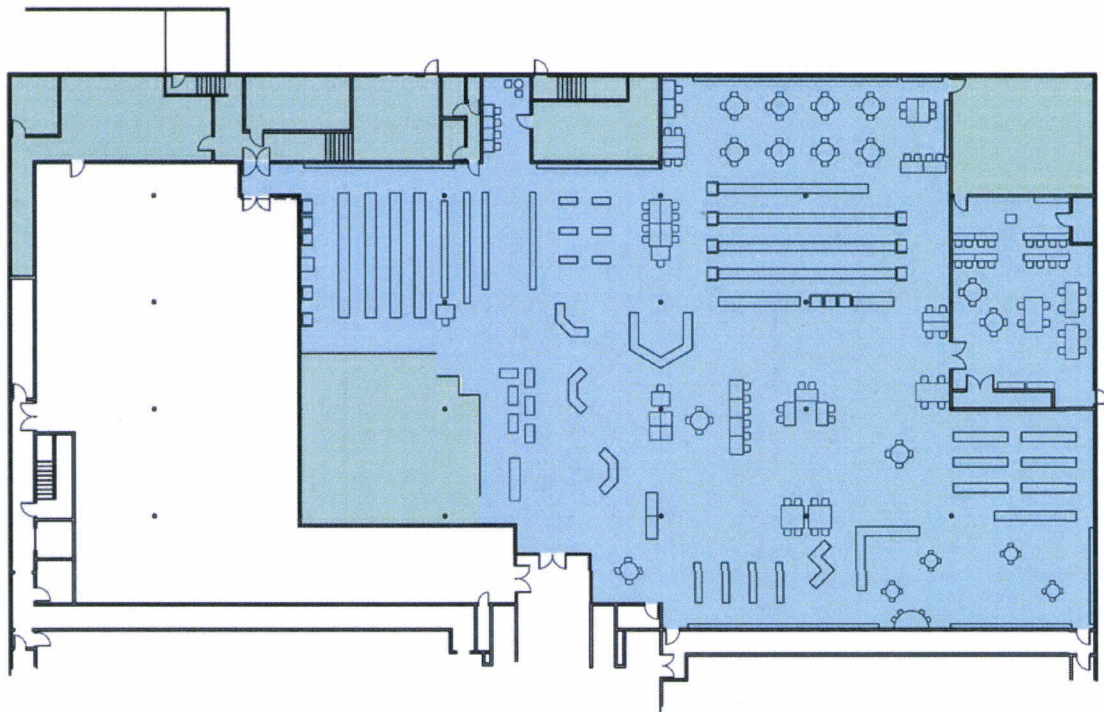
SIERRA VIEW BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address: 4001 S Virginia Street, Reno, NV 89502
Current Square Feet: 23,130 sf
Construction Date: Unknown
Construction Type: Unknown
Ownership: Leased Facility

LEGEND
Public Areas
Staff/Support Area

Space Analysis: The Sierra View Library is a leased facility within the Reno Town mall. The facility feels much more spacious than some libraries within the system, but is lacking in important respects. The facility is aging. Public restrooms are not easily accessed from the library, and are shared with the entire mall facility, leading to reported capacity and cleanliness issues. Because this is a short-term leased facility, the WCLS has understandably not invested the significant resources to address these issues. Though the computing resources at this facility seem well used, the circulation per capita is the lowest of the other true branch libraries.

Facility/Maintenance Issues: Poor restroom access. Non-functioning staff restrooms. Aging facility.

Recommendations: Housed in an aging retail center, and located less than three miles from the Downtown Reno Library, the consultants recommend that the facility should be closed, even though it currently has a "no cost" lease – in a manner of speaking. The consultants recognize that such a drastic step may have political fallout. However, given the other needs of the library system and the struggle for operational dollars that may persist for another few years, the 13.25 FTE staff can be of more value elsewhere in the WCLS. These FTE's could be used to extend the hours at other branches, significantly improving service. The Sierra View branch should be replaced within 5 years, either with a new branch near the current location, or by adding it to the square footage of a new downtown library. If Sierra View branch cannot be replaced within 5 years, an interim solution should be found to prevent loss of service to the patrons of Sierra View.
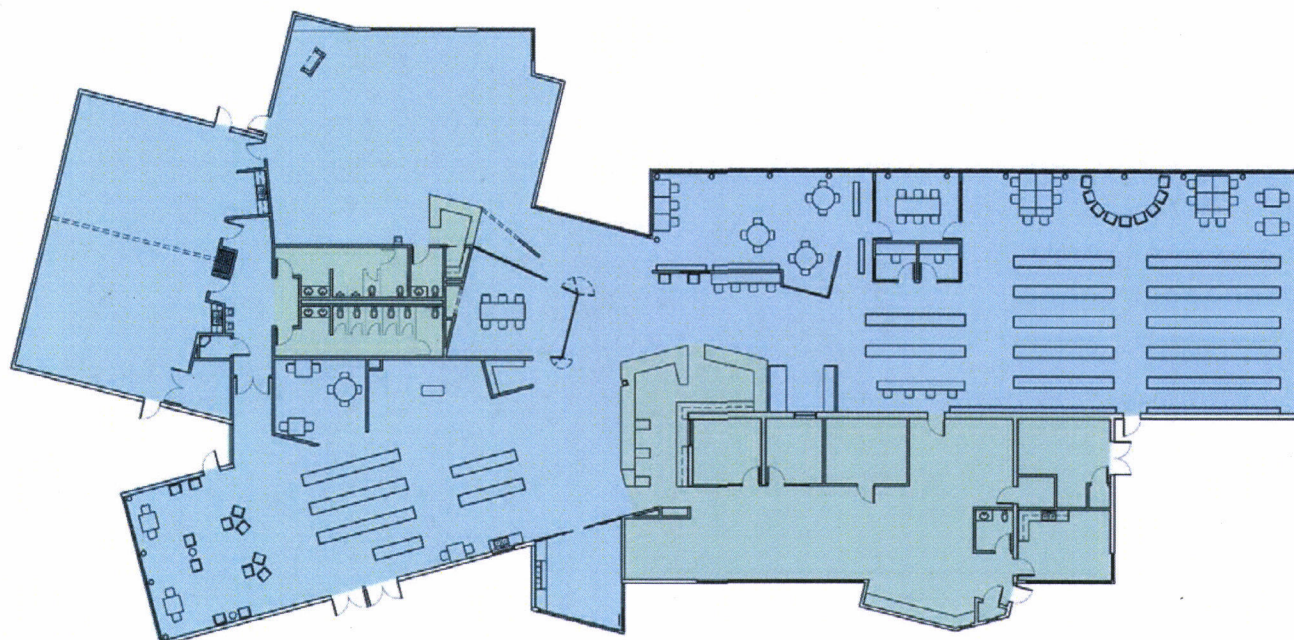
SOUTH VALLEYS BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address: 15650 Wedge Parkway, Reno, NV
Current Square Feet: 17,500
Construction Date: 2013
Construction Type: Metal Stud, Steel
Ownership: WCLS

LEGEND
Public Areas
Staff/Support Area

Space Analysis: Located inside the South Valleys Regional Park (a county park), this is one of the best, if not the best, planned WCLS library. However, like all of the other branches it is too small to meet its current demands. The circulation desk area is too large, and could be put to other use.

Facility/Maintenance Issues: The patio receives a lot of sun and, due to high winds, any temporary shading devices get ruined.

Short Term Recommendations:
1. A Space Plan.
2. Remove the "lockers" in the foyer and use the space for an electronic message board.
3. Install permanent shade structures in patio.

Long Term Recommendations: Expansion
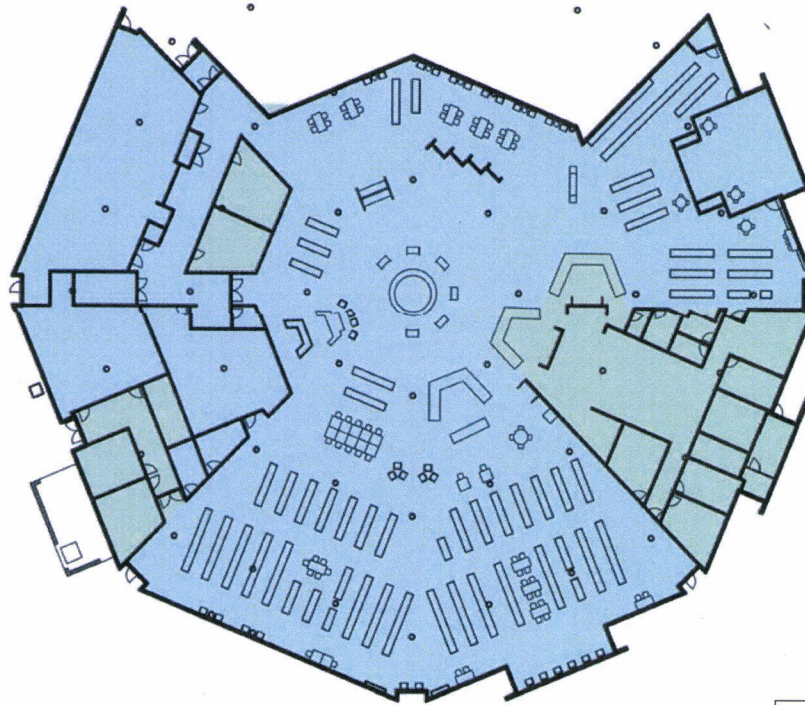
SPANISH SPRINGS BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address:	**7100 Pyramid Way, Sparks, NV 89436**
Current Square Feet:	**39,100 sf**
Construction Date:	**2005**
Construction Type:	**Masonry/Heavy Timber**
Ownership:	**WCLS**

LEGEND

Public Areas

Staff/Support Area

Space Analysis: The Spanish Springs Library is located inside the Lazy 5 Regional Park (a county park). Round library buildings are typically inefficient spaces and Spanish Springs is no exception. The central part of the building is cluttered with podiums, walls and other elements that inhibit use of the space and hamper the visual supervision of the building. On the bright side, the facility is in good condition and offers nice teen and children's areas and meeting rooms for the public that can be used after house.

Facility/Maintenance Issues: The library is accessed off of the Pyramid Highway with no traffic lights, creating a potentially dangerous conditions. It has a "right-in, right out" access configuration that is inconvenient and unsafe. There is no good exterior signage to direct highway traffic to the library. The most visible signage near the library is an unpermitted sign for a nearby church, which often causes confusion. Very high ceilings cause air stratification and decrease energy efficiency. In sufficient lighting throughout, but especially in the stacks.

Short Term Recommendations:

1. A Space Plan with the same goal as described for Northwest Reno and South Valleys.
2. Install exterior signage, visible from Pyramid Highway for traffic in both directions. Either an electronic sign that would provide information about hours of service and programs, or a simpler sign affixed to the building could be used.
3. Confer with the appropriate road/highway officials regarding improving entrance into and exiting from the property. The section of the Pyramid Highway next to the library is tentatively planned to become a 6-lane road as part of Phase 9 of RTCs Pyramid Highway US 395 Connection project. Improvements in the traffic access to the library are not currently included in the plans for the highway project.

Long Term Recommendations: Expansion
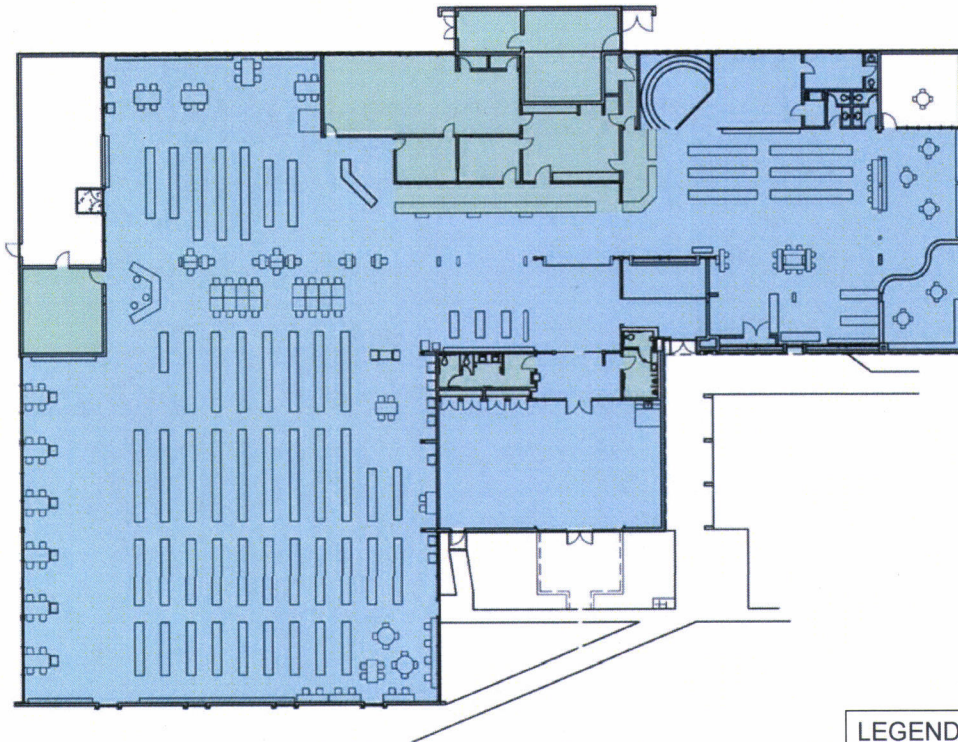
SPARKS BRANCH LIBRARY EXISTING GROUND FLOOR PLAN

Address: 1125 12th St., Sparks, NV 89431
Current Square Feet: 22,832 sf
Construction Date: 1965
Construction Type: Masonry
Ownership: WCLS

LEGEND
- Public Areas
- Staff/Support Area

Space Analysis: The Sparks Library is an aging and well used library, with the highest circulation totals of any library. It also has that highest current space deficiency within the system. The facility has a few issues that could be addressed in a new space plan to improve service and efficiency. The main circulation desk is too large, and an old information desk, which has been converted to computer stations, should be rebuilt to better suit its current use A story time pit in the children's area is too small for story time, so it goes unused and takes up needed space.

Facility/Maintenance Issues: HVAC system is slated for replacement. Finishes and shelving are aged. The restrooms do not contain accessible stalls. Portions of the children's area are inaccessible.

Short Term Recommendations: A Space Plan that takes into consideration:
1. Converting one, or perhaps both, of the existing outdoor "patios" to enclosed and conditioned space.
2. Adding a drive-up service.

Long Term Recommendations: New Facility. Consider two (2) new branch libraries more appropriately located to serve the current and projected population.

10. Vision For 2035

There are 11 library facilities that have a total of 208,058 square feet (SF) of space serving a Washoe County population of 437,598 (estimated 2014 population). The space allocation equals 0.47 SF per capita, far less than the recommended minimum standard. What can guide us to an appropriate vision for 2035?

Standards

State Standards - The Nevada State Library and Archives has a set of Public Library Standards for calendar year 2014. Standard 6 deals with facilities:

The library consists of a specific space designated for providing library services with the facilities, equipment, and staff necessary to enable public access to information.

National Standards - The Chief Officers of State Library Agencies (COSLA) published, in 2003, PUBLIC LIBRARY STANDARDS: A Review of Standards and Guidelines from the 50 States of the U.S. This document can be can be accessed at:

www.cosla.org/documents/kb/Public_Library_Standards_July03.doc

What this document shows is, regarding library size, there is no hard and fast standard for determining library size. The American Library Association (ALA) last published standards, often cited as ALA Minimum Standards, in 1966. That document set the space per capita at 0.6 SF per capita. WCLS falls 0.13 SF per capita below that 48-year old standard. Other standards, such the State of Illinois Avenues of Excellence,

set the needed space per capita at .8 SF per capita and the standards issued by Louisiana Library Association indicated that if a public library wee to provide a full range of "traditional library services" as well as electronic accessible services the space per square foot should be 1.0.

The consultants recommend a goal for WCLS of 0.7 square feet of space per capita.

Looking Forward to 2035

Twenty years hence in 2035, the projected population for Washoe County is expected to be 621,530. If the current 11 libraries remain the totality of WCLS the space per capita will be 0.33. Even if adjusted for the service area population of 554,205 (excluding outlying areas of the County), the floor area ratio is only 0.37 sf per capita, or approximately half the suggested floor area.

The consultants believe there would be a significant loss of service if more space is not provided. Why? As more users crowd into the existing libraries many potential users would turn away. All of the existing facilities, with the exception of Incline, are now crowded beyond their intended capacity. More library space needs to be constructed to meet the current needs – and certainly the needs for the projected 2035 population.

We have prepared four Options for addressing future space needs for the WCLS. We recommend a reasonable goal of 0.7 square feet per capita.

Northwest Branch Library

Option 1

Option 1 includes a total of eight full-service libraries plus the Senior Center. There are new buildings for Downtown Reno (new location), North Valleys (new location), Sierra View (new location), and Sparks (new location). The South Valleys and Spanish Springs libraries will also have a new space plan that is implemented leading to subsequent expansion. The Senior Center will be expanded.

Incline Village and Northwest Reno remain as they are at this time in terms of space. However, new space plans will be developed and implemented. All projects would be completed by the end of FY2025.

The total estimated cost for Option 1 is $149,902,335.

On the basis of an estimated 2025 population Washoe County of 563,687, the cost per resident would be $265.93. If the total project cost were subject to a 20-year Capital Improvements Bond (CIP) the cost per resident would be $13.30 plus debt service costs. The space per capita would be 0.70 compared to 0.36 if the nine libraries remain the same size.

Table 10A
WASHOE COUNTY LIBRARY SYSTEM 2035 FACILITY PLAN
OPTION 1 – Single Phase - Completed FY25

Library	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Opening Facility Year	Required Parking Spaces	Estimated Project Cost	Total Est. Project Cost
Downtown Reno	58,825	128,000	69,175	2020	384	$59,520,000	$59,520,000
Incline Village (space plan) (implement space plan)	11,045	11,045	0	2015 2016	33	$2,760 $100,000	$102,760
North Valleys	9,178	23,500	14,322	2018	70	$10,898,500	$10,898,500
Northwest Reno (space plan) (implement space plan)	28,634	28,634	0	2015 2017	86	$7,160 $257,700	$265,200
Senior Center (expansion)	800	1,225	425	2016	NA	$135,000	$135,000
Sierra View (new location)	23,130	50,000	26,870	2019	150	$22,550,000	$22,550,000
South Valleys (space plan) (implement space plan) (expansion)	17,500	17,500 23,500	0 23,500	2015 2016 2023	52 70	$4,375 $100,000 $11,585,000	$13,689,375
Spanish Springs (space plan) (implement space plan) (expsnsion)	30,000	30,000 13,000	0 13,000	2015 2017 2025	90 39	$7,500 $200,000 $7,007,000	$13,214,500
Sparks (new location)	22,832	63,500	40,668	2020	191	$29,527,000	$29,527,000
Totals	**201,944**	**389,904**	**187,960**		**1,165**		**$149,902,335**

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Option 2

Option 2 differs from the first Option in that there are a total of seven, not eight, full-service libraries plus the Senior Center. This is a result of the closure of Sierra View. There are new buildings for Downtown Reno (a much larger facility than proposed for Option 1), North Valleys (new location), and Sparks (new location). The South Valleys and Spanish Springs libraries are expanded.

Incline Village will remain at its current size with a new, implemented space plan. Northwest Reno will be expanded and will have a new, implemented space plan to meet increased increasing service needs until the building is expanded.

The total estimated cost Option 2 is $169,048,825.

On the basis of an estimated 2025 population Washoe County of 563,687, the cost per resident would be $299.90. If the total project cost were subject to a 20-year Capital Improvements Bond (CIP) the cost per resident would be $14.99 plus debt service costs. The space per capita would be 0.77 compared to 0.36 if the nine libraries remain the same size.

Table 10B
WASHOE COUNTY LIBRARY SYSTEM 2035 FACILITY PLAN
OPTION 2 – Single Phase – Completed FY25

Library	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Opening Facility Year	Required Parking Spaces	Estimated Project Cost	Total Est. Project Cost
Downtown Reno	58,825	155,000	96,175	2022	465	$74,245,000	$74,245,000
Incline Village (space plan) (implement space plan)	11,045	11,045	0	2015 2017	33	$2,760 $100,000	$102,760
North Valleys	9,178	29,760	20,582	2019	89	$13,451,520	$13,451,520
Northwest Reno (space plan) (implement space plan)	28,634	28,634	0	2015 2017	86	$7,160 $257,700	
(expansion)		18,211	18,211	2025	55	$9,833,940	$10,098,800
Senior Center	800	1,740	940	2017 NA		$100,000	$100,000
South Valleys (space plan) (implement space plan	17,500		0	2015	52	$4,375 $175,000	
(expansion)		54,130	36,630	2022	110	$18,058,590	$18,240,965
Spanish Springs (space plan) (implement space plan)	30,000		0	2016 2017	90	$7,500 $450,000	
(expansion)		55,280	25,280	2024	76	$13,256,720	$13,704,220
Sparks	22,832	81,640	27,168	2021	245	$39,105,560	$39,105,560
Totals	**201,944**	**435,440**	**233,576**		**1,301**		**$169,058,825**

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Option 3

Option 3 is similar to Option 1 with one notable exception – it would be implemented over two phases.

The total estimated cost for Phase 1 of Option 3 is $76,121,495. For the second phase the total estimated cost is $104,580,090. For the combined phases, $180,701,585.

On the basis of an estimated 2035 population Washoe County of 621,530, the cost per resident would be $290.82. If the total project cost were subject to a 20-year Capital Improvements Bond (CIP) the cost per resident would be $14.54 plus debt service costs. The space per capita would be 0.66 compared to 0.36 if the nine libraries remain the same size.

Table 10C
WASHOE COUNTY LIBRARY SYSTEM 2035 FACILITY PLAN
OPTION 3 – Two Phases - Completed FY35

Library	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Opening Facility Year	Required Parking Spaces	Estimated Project Cost	Total Est. Project Cost
Downtown Reno - phase 1	58,825	65,000	6,175	2020	195	$29,315,000	
Downtown Reno - phase 2		128,000	63,000	2032	189	$41,895,000	$71,210,000
Incline Village (space plan)	11,045	11,045	0	2015	33	$2,760	
(implement space plan)				2016		$100,000	$102,760
North Valleys - phase 1	9,178	13,500	4,322	2018	41	$6,088,500	
North Valleys - phase 2		23,500	10,000	2030	30	$6,260,000	$12,348,500
Northwest Reno (space plan)	28,634	28,634	0	2015	86	$7,160	
(implement space plan)				2017		$257,700	
Northwest Reno - phase 2		46,845	18,211	2030	55	$11,400,090	$11,664,950
Senior Center – phase 1	800			2015 NA		$60,000	
Senior Center – phase 2		1,225	425	2026 NA		$95,000	$155,000
Sierra View (new location)	23,130						
Sierra View - phase 1		30,000	6,870	2019	90	$13,530,000	
Sierra View - phase 2		50,000	20,000	2034	60	$13,700,000	$27,230,000
South Valleys (space plan)	17,500	17,500	0	2015	53	$4,375	
(implement space plan)				2016		$100,000	
South Valleys - phase 1		15,000	15,000	2022	45	$7,410,000	
South Valleys - phase 2		25,500	10,500	2034	31	$7,402,500	$14,916,875
Spanish Springs (space plan)	30,000	30,000	0	2015	90	$7,500	
(implement space plan)				2017		$200,000	
Spanish Springs - phase 1		37,500	7,500	2024	22	$3,930,000	
Spanish Springs - phase 2		43,000	5,500	2034	16	$3,877,500	$8,015,000
Sparks - phase 1	22,832	33,500	10,668	2019	100	$15,108,500	
Sparks - phase 2		63,500	30,000	2032	90	$19,950,000	$35,058,500
Totals	**201,944**	**392,615**	**208,171**		**1,226**		**$180,701,585**

Option 4

In Option 4 there are a total of seven full-service libraries plus the Senior Center that is expanded. There are new buildings for Downtown Reno (a much larger facility than proposed in the other three Options), North Valleys (new location), and Sparks (new location). The South Valleys and Spanish Springs libraries are expanded. Sierra View library has been closed and consolidated into the new Downtown Reno Library

Incline Village will remain at its current size with a new, implemented space plan. Northwest Reno will be expanded and will have a new, implemented space plan to meet increased increasing service needs until the building is expanded.

This Option is proposed to be undertaken in two phases. Phase 1 to be completed by the end of FY25 and Phase 2 completed by the end of FY35

Table 10D
WASHOE COUNTY LIBRARY SYSTEM 2035 FACILITY PLAN
OPTION 4 – Two Phases - Completed FY35

Library	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Opening Facility Year	Required Parking Spaces	Estimated Project Cost	Total Est. Project Cost
Downtown Reno - phase 1 *	58,825	100,000	41,175	2020	300	$46,500,000	
Downtown Reno - phase 2		155,000	55,000	2034	165	$37,675,000	$84,175,000
Incline Village (space plan)	11,045	11,045	0	2015	65	$2,760	
(implement space plan)				2017		$100,000	$102,760
North Valleys - phase 1	9,178	15,000	5,822	2018	45	$6,765,000	
North Valleys - phase 2		29,800	14,800	2030	44	$9,264,800	$16,029,800
Northwest Reno (space plan)	28,634	28,634	0	2015	86	$7,160	
(implement space plan)				2017		$257,700	
(expansion) - phase 2		46,845	18,211	2032	55	$11,746,095	$12,010,955
Senior Center - phase 1	800	1,225	425	2015	NA	$60,000	
(expansion) - phase 2		1,760	535	2018	NA	$85,000	$145,000
South Valleys (space plan)	17,500	17,500	0	2015	52	$4,375	
(implement space plan						$175,000	
(expansion) - phase 1	17,500	30,000	12,500	2022	37	$6,175,000	
(expansion) - phase 2		54,130	24,130	2035	72	$17,518,380	$23,872,755
Spanish Springs (space plan)	30,000	30,000	0	2016	90	$7,500	
(implement space plan)				2017		$450,000	
(expansion) - phase 1		45,000	15,000	2024	45	$7,886,000	
(expansion) - phase 2		55,300	10,300	2034	31	$7,055,500	$15,399,000
Sparks - phase 1	22,832	50,000	27,168	2019	150	$23,250,000	
Sparks - phase 2		81,640	31,640	2033	95	$21,040,600	$44,290,600
Totals	**201,944**	**435,520**	**233,576**		**1,332**		**$196,025,870**

* One strategy for this project could involve construction of the entire 155,000 SF and
  (a) lease the 55,000 SF or (b) have "shell" space.

11. Estimated Costs

The estimated costs are approximate and based on the implementation timing suggested by the consultants later in this section. The costs do not include site acquisition or improvements costs, as experience informs us that these vary widely and are difficult to predict.

Facility and Maintenance Costs

The costs for implementing facility improvements to existing libraries (furniture reconfiguration, etc.) or deferred maintenance costs are not determined or budgeted in this report. These items should be covered in separate operations or maintenance budgets.

Space Plans and Short Term Recommendations

Costs for the procurement and execution of space plans will vary from as little as $5 to as much as $30 per square foot, depending on the scope of the recommendations. The costs for other short term recommendations are not included in this report. If desired, the consultants can take a closer look at these items to assist you in preparing budgets and developing priorities.

System Wide Recommendation Costs

The prioritization of system wide recommendations costs vs. 2035 options should be discussed further. System wide recommendations should be addressed within the libraries normal operating budget, or where appropriate, within the scope of capital improvement projects.

Cost Per Square Foot

Each December, Library Journal publishes their "Year in Architecture" article that is a summary of reported library construction projects for the prior 12 months (July-June). For 2014, the cost per square foot (construction, furniture, fixtures, equipment and other [fees, technology, art, etc.]) was $412.68. Escalating these national figures by 3.02% per year to 2020, based on RS Means historical cost index for the Reno area from 1994 to 2013, we calculated the project cost for each project in the recommended options. Where library expansion was recommended, the cost of renovating existing floor space was added to the project cost.

Partnerships

Partnerships with other organizations and institutions should not be over-looked as a way to supplement available funds. The consultants, based on their experience with other library systems throughout the country, believe WCLS and the Washoe County community would benefit from one or more partnerships. In other locales, for example:

- Broward County FL Libraries has two large regional libraries on the campuses of Broward County Community College and one large branch library on the first floor of Nova Southeastern University Einstein Library;

- Saint Paul (MN) Public Library has a 36,000 SF branch library at street level with three floors of housing above the Library as a true public/private partnership;

- Saint Paul also has a branch library located on the campus of Metropolitan State University; and

- Dallas Public Library has a 12,000 SF branch library at one end of a new elementary school building with a separate entrance for the public and another entrance for the students.

Sierra View Branch Library

Downtown Reno

Each of the four Options propose a totally new – and larger – public library for Downtown Reno -- a Library building to be designated as the "Central Library" of the WCLS. As such it would be a:

- Branch library for Reno's downtown and near downtown residential and business community populations;

- Special and research collections center;

- Government documents and retrospective magazine/journal resource; and

- Administrative and system support services.

In addition the Central Library would be a place for the:

- Visual and performing arts;

- Scientific exhibits, displays, symposia, and lectures;

- Film showings; and

- Lectures and classes on a variety of current and historical topics and issues.

It will be the flagship facility of the Washoe County Library System.

The consultants believe that serious consideration should be given to a building that not only houses a great library for all of Washoe County and the City of Reno but could be a multi- purpose building. For example:

- Library on two or three levels and residential and/ or office space above; or perhaps

- Retail at street level with the two/three story library above; or

- A combination of library, retail, housing, and office.

The Central Library could be an exciting and vibrant public/private project that would establish the County and the City as trendsetters, drawing visitors from far and near to see the 21st Century of tomorrow!

Funding Options

Over the past several years most public library building projects have been funded by a capital improvements bond (CIP) that was either approved by the voters in an election or authorized by the governing body, e.g. county commissioners, city council, etc.

Major projects, such as a downtown central library, also have a good track record of attracting significant private funds. The private dollars often result in a space, or spaces, within the building being named after the donor or the donor's designee. It is not unusual for several million dollars to come from the private sector.

One option for constructing new libraries is to have them built under a "Build to Suit" or a lease-back arrangement. For example, a developer would finance the construction of a new library in exchange for a long-term lease of the facility by the WCLS. As a stable institution, the library would make a good partner for this type of arrangement. New facilities could be built with minimal capital outlay by the governing body – county and/or city.

South Valleys Branch Library

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COLLABORATIVE
DESIGN
STUDIO architecture of experience and place
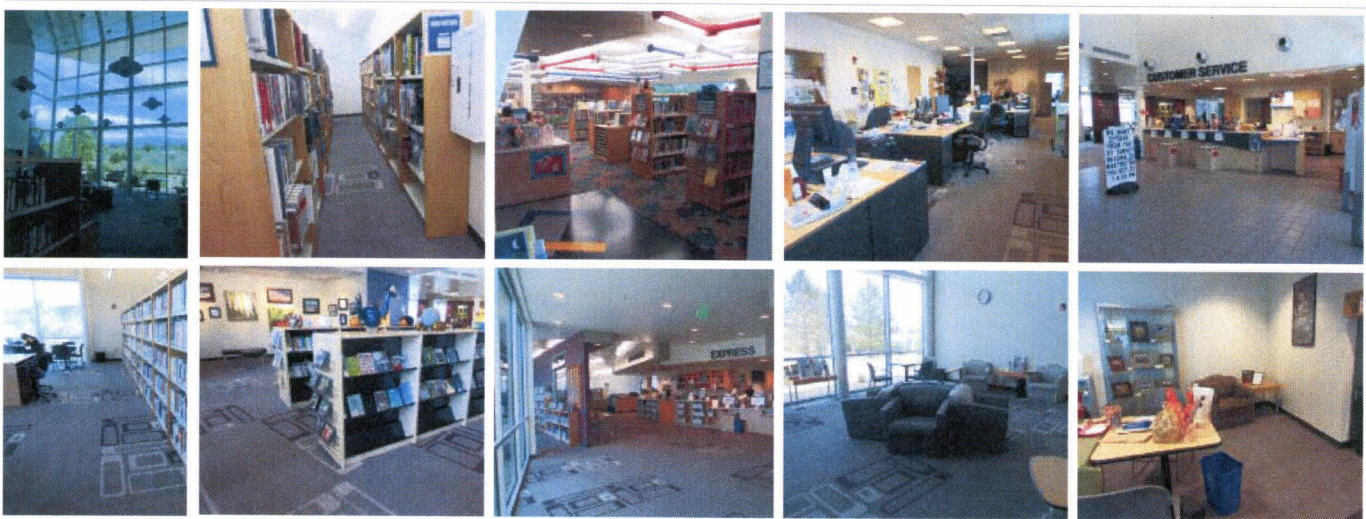
Appendix A: Economic Impact Of Public Libraries

Over the past several years there have been studies measuring the economic impact of public library services. For example:

- Seattle, New Central Library in Downtown Seattle – Library responsible for $16 million in net new economic activity in its first full year of operation; projected to total $80 million over 5-year period, $160 million for 10 years, and $320 million over a 20-year period

- Public libraries in the State of Texas provide significant economic benefits for their communities according to a study conducted by the Bureau of Business Research IC² Institute, The University of Texas at Austin, December 2012. This report examines these economic benefits, and documents those activities that contribute to economic activities throughout Texas. In 2011, Texas public libraries collectively provided $2.407 billion in benefits while costing less than $0.545 billion, a return on investment of $4.42 for each dollar invested.

- South Carolina – Total direct and indirect return on investment for every $1 expended on public libraries by state and local governments is $4.48

- Florida – Florida's public libraries return $6.54 for every $1.00 invested from all sources.

- The application of a Household Expenditure multiplier, as published by the Bureau of Economic Analysis, U.S. Department of Commerce, that there were $190.4 million worth of library benefits resulting in a total quantifiable economic benefit of library investment equal to about $283.6 million or about $3.81 per $1.00 expended on library operations.

Two Case Histories

In Nashville, Tennessee, subsequent to the selection of a site in downtown Nashville on Church Street for its new 300,000 SF Central Library, a multi-story condominium building was designed and construction started (now completed). In addition, several older buildings located across the street from the new Library have been renovated as residential, retail, and commercial properties.

The Public Library of Des Moines' new 110,000 SF Central Library is located in what is known in Des Moines as the "Western Gateway," about six blocks west of the Des Moines River. The site for the new building was selected in 2000 – 2001. Following the site selection decision for the new library there has been considerable construction of new private sector and public sector buildings:

- Allied Insurance with a $142 million expansion of their headquarters;

- A $50 million mixed-use project; and

- An older commercial building converted into retail and residential space.

Study Of Value Of Public Libraries

A study conducted by the Marist Institute for Public Opinion concluded that 94 percent of Americans rate their local public library as "very valuable" or "valuable." The majority even said that they would pay more taxes to support libraries – an average of $49 more per year.

National Opinion Survey

A random-sample telephone survey of 1,003 adult Americans, conducted by KRC Research and Consulting, revealed that two of every three persons surveyed visited their public library. Nearly all of those surveyed, 96 percent, believe that because public libraries provide free access to materials and resources they play an important role in giving all persons a chance to succeed in life. The survey, commissioned by the American Library Association, had a confidence factor of + or – 3.1 percent. The survey also found:

- 85 percent indicated that public libraries deserve more funding, including nearly six of ten (58%) who strongly agreed;

- 52 percent believed $41 or more should be spent per person in local tax support (the national average at the time the survey was administered was about $25 per person);

- 92 percent believed libraries will be needed in the future even with all of the information available on the Internet; and

- Over one in three persons ranked the benefits of libraries at the top of the public services list as compared to schools, roads, and parks (an increase of six points over a 2002 survey).

Appendix B: Public Meeting And Survey Input

Community Meetings

Three community meetings were held October 21 – 23, 2014. The meetings were held at the Sparks, Northwest Reno, and South Valleys branch libraries. Although the participation was sparse, there was a good exchange of information.

At the first community meeting, public input was to the effect that there is a lack engagement in the library by the public. The "hard" data of gate counts, square footage, and circulation statistics does not tell the whole story and should not be the sole basis for funding and decision-making. "The library is about a lot more than books. Interaction is the mother of engagement," responded one community member. A healthy library should function more as a community center.

The challenge is to find a way to foster the role as a community center. Self-check has led to a decline in interaction. It is possible to make the library so efficient that people will stop coming. Community engagement needs to improve.

At the second community meeting, we heard the following from participants:

- Service hours are more important for the population served than more square feet or more buildings.;

- Some branch libraries need more programs to serve their immediate communities and more programs require more staff and more open library hours; and

- Take care of immediate problems in current buildings such as replacing carpeting, furniture and shelving.

The consensus of opinion was that there should be more open hours and days for all branch libraries. Communities would like to see WCLS libraries open seven days a week and open at least until 8:00 PM. This concept was preferred over targeting three or four libraries for seven days of service with the remaining libraries open six days a week.

The expressed thoughts and suggestions at the third community meeting included:

- Provide programming that deals with history of the area and such events as a Christmas Tea Party and a murder mystery;

- Start a volunteer program for senior citizens where they could read to children;

- Develop the libraries as community gathering places, perhaps establishing them as "the living room of the community;" and

- Charging fees to use the meeting rooms seems to be a bad choice since use has plummeted over the last few years.

Note: Meeting Room use statistics are skewed for the last three years due to some branch library statistics being reported incorrectly. The use of the WCLS meeting rooms have not declined as much as the statistics have indicated.

Web Survey Results

As of 12:00 PM, November 3, 2014, 131 persons had available themselves of the opportunity provided them to respond to a survey mounted on the WCLS website. The Survey asked three questions. The questions and the responses to numbers 1 and 2:

1) *Do you use one or more branch libraries*?
     Yes – 122 responses, 93.8% of the responses.

2) *Do you use the Library's website?*
     Yes – 106 responses, 80.9% of the responses.

Question 3, "*What is the most important reason you want or need a library in your community?*," provided for open-ended responses. A total of 121 persons, or 92.4% of the respondents chose to provide comments. Some of the comments follow (with an effort by the consultants to not be redundant.)   Perhaps the following is a good a summary of the majority of the comments:

- *Free and continuous access to books! DVDs! CDs! Books on tape!*

- *I LOVE THE LIBRARY! "A library outranks any other one thing a community can do to benefit its people. It is a never failing spring in the desert."* — *Andrew Carnegie.*

Other comments included:

- *Our kids need and want a place to study, read, and do programs. Our library hours and staff was cutback and our community is hungry to get it back to where we were;*

- *Borrow books;*
- *Access to research materials, including state legislative journals and newspaper microfilm;*
- *Provides access to variety of resources would not have otherwise, especially children's books, media, and programming;*
- *To be able to have affordable access to new ideas and information;*
- *The Library provides a home away from home - a place to read, a place to access computers, a place for community meetings;*
- *Access to reading material for all ages;*
- *A library provides resources and knowledgeable staff to encourage learning and community interaction to build strong and well-informed citizens;*
- *Research and periodicals unavailable elsewhere;*
- *I look at the library as a key component of the education process;*
- *The library is a wonderful resource for everyone in our community;*
- *I want a safe and commercial-free place to introduce children (and seniors) to books and technology - and maybe art and performance as well;*
- *It is a much needed learning resource;*
- *Public libraries provide ALL citizen's equal access to information;*
- *Levels the economic playing field with access to information and resource;*
- *Great place for community to be together and lots of information can be found.*
- *Education, enlightenment of upcoming generations. Screens can't do this alone: need buildings and real books too; and*
- *There are still times when people cannot afford or obtain their own technologies and research and education remain important and being able to access information is vital.*

There were several persons who provided other information that bears repeating:

- *Free access to computers, wi-fi, reading materials, a place to sit and reflect, a place to meet with co-workers, friends, acquaintances, a place to do research for free, to hear and discuss stories, and to participate in discussions, listen to talks, and enjoy music, singing, and dance, all for free - a cultural community center;*
- *Knowledge is Power! The Information and knowledge is provided by our libraries. The Library makes our community members more knowledgeable people, helps us develop our potential, entertains and provides a place for our community to gather!;*

- *Democracy depends on a strong literate middle-class. The library is one of the ways to ensure access to all, regardless of socio-economic status;*
- *High rates of literacy are only achieved if reading is encouraged and developed among children and young adults. Young readers need free and easy access to books. Without public libraries this is nearly impossible. Help our children, promote and develop libraries;*
- *Opportunity to learn more about best practices for educating our children and the latest in popular childrens books. The library could provide a portal for parents to meet with subject experts on parenting for very young and learning opportunities. In addition, they should be available to those who are economically, physically, or mentally inhibited. While self directed studies are important and valuable, there are those with needs who need an additional hand to just point them in the right direction;*
- *Every community needs a library. Wherever there are people there is need of education;*
- *Because the library is and should be a big part of our community and in the lives of our families. So much of your staff time is spent on your non-traditional library users, computer, internet, ebooks, etc.;*
- *It is the most vital government agency in my opinion. The library improves the quality of life of all its users. It can assist in obtaining a job or enhancing one's current position. It can teach what it means to be free, expand understanding of any subject of interest and provide valuable recreational downtime;*
- *The library system is a valuable community resource that allows access to information and learning (both hard copy and via the internet) for all. The library system is a hub of our community's culture and needs to be maintained;*
- *Libraries are integral to the health and growth of a community and culture. They provide a common meeting place regardless of race, creed, politics, age, and more. They provide knowledge and recreation for all; and*
- *Opportunity to learn more about best practices for educating our children and the latest in popular childrens books. The library could provide a portal for parents to meet with subject experts on parenting for very young and learning opportunities. In addition, they should be available to those who are economically, physically, or mentally inhibited. While self directed studies are important and valuable, there are those with needs who need an additional hand to just point them in the right direction.*

These last two comments state very well the consultants' belief regarding the importance of the public library – in Washoe County and throughout the world:

- *Libraries are essential to every community! The library is the only place where every citizen can come to learn, to be entertained, to connect with their neighbors, or escape into another world - with no extra expense. Libraries are also a cornerstone of a free, democratic society; no matter what values you hold or goals you wish to achieve, there are resources available to you at the library to get you the knowledge and tools you need to flourish in your own life.*
- *Public libraries are the living rooms of a community - a place where people can come together with their neighbors for information and entertainment. They are a great place to meet new people and get away from home and work. Every really good community has a really good library.*

Appendix C: Library Space Planning Charts

Library Space Planning Guidelines

Every library building, indeed, every building regardless of what it houses, has three kinds of space – net, net assignable, and building gross.

Net Usable Square Footage (NSF) - NSF represents the actual unobstructed floor area or square footage assigned to a primary use for an individual unit of space contained within a defined perimeter. In effect, net area is the actual area of bookstacks, offices, computer workstations, support areas, or special function areas exclusive of partitions, exterior walls, public and private corridors, columns, pipe chases, stairs, mechanical and electrical space, and all similar, non-usable areas. Standard NSFs for basic library functions include the following:

- Bookstacks (regardless of height) = 20 NSF for one double-sided section;
- Reader table = 100 NSF for one 4-place table;
- Public use computer = 36 NSF for one workstation;
- Private office for a librarian, non-administrative = 150 NSF; and
- Open office workstation for library assistant = 36 NSF to 80 NSF depending upon functions performed.

Net Assignable Square Footage (NASF) - NASF includes all net areas assigned to a given unit, as well as related corridor space for movement, interior partitions, and other areas incidental to the spatial organization or construction. Additionally, internal corridor (circulation) space shared by or connecting units is included in this total area. Net assignable area excludes the area required for mechanical and electrical spaces and distribution shafts, stairs, rest rooms, elevators, and other common building elements. In effect, this is the total area assigned to a use and is comparable to the amount of area occupied for a specific tenant as if it were leased from a landlord.

Efficiency factors added to the pure net square footage to accommodate these other assignable spaces might range from 10 to 30 percent of the total net area. The net-to-net assignable square footage relationship is primarily a factor of the size, type, configuration, number of individual spaces, and the anticipated width of internal personnel movement and service corridors.

Generally, units comprised of larger individual spaces will require less space for inter- and intra-unit movement. Units comprised of many smaller workstations, especially private offices, require a higher degree of intra- and inter-unit movement and wall space. Experience has shown the efficiency of older facilities is generally less than new construction due to the area required for structure, walls, and formalistic approaches to space planning.

- Large open space, e.g. bookstack area with reader tables = 10 percent;
- Office area with private offices and staff workstations = 20 percent; and
- Large gathering spaces, e.g. auditorium = 30 percent.

Building Gross Square Footage (BGSF) - BGSF reflects the total area of the building, including all net and net assignable areas as defined above, plus any additional area occupied by rest rooms, vertical movement, janitorial/custodial closets, central mechanical and electrical space, chases, and other spaces related to primary air and power distribution, columns, and exterior walls.

When programming space requirements for new facilities the total building gross area is estimated by applying an overall facility grossing factor to the total programmed net assignable area. Typically, these factors range from 15 to 20 percent in smaller, single-level buildings up to 30 percent in larger, multi-level facilities.

When analyzing existing buildings, the grossing factor, which is a measure of overall efficiency, can be calculated by dividing the total net assignable area by the total building gross area. As a general rule, higher efficiency factors are used for public library facilities due to the amount of open space that accommodates horizontal movement. In a multistory building however, this is partially offset by the vertical movement required for public access as well as the movement of staff, books, and other library materials.

Quantitative Analysis Of Each WCLS Facility

The following charts were developed using Godfrey's Library Space Planning Guidelines. For Downtown Reno, which houses system wide administrative functions, four charts were developed, one each for Public Services, Technical Services, Systems, and Administration.

Projected Space Requirements per Planning Guidelines

Building: Public Services- Downtown Reno Library Spreadsheet

Population Served: 443731- County, 233,294- City

Personnel

functional component	personnel/space designation	space code	square feet (unit area) x	existing 2014 (# of personnel) =	existing 2014 (net square footage)	notes
personnel	Librarian III	PO-C	150	1.00	150	
	Librarian II	SPO-C	64	1.00	64	
	Librarian I	SPO-D	48	2.00	96	
	Library Assistant III	SPO-D	48	2.00	96	
	Library Assistant II	SPO-E	36	5.00	180	
	Library Aide	SPO-F	24	2.55	61	
	TOTAL FTE PERSONNEL:			13.55		
	SUBTOTAL SQUARE FOOTAGE:				647	

Collections

functional component	personnel/space designation	space code	unit area x	existing 2014 (# of volumes)	existing 2014 (net square footage)	notes
collections	Reference	SHLV-R	0.12	1,815	218	Adult, Children's & Atlas & Map Shelf/Case.
	Special collections					
	Nevada collection	SHLV-A	0.10	1,610	161	
	Gampling collection	SHLV-A	0.10	3,775	378	
	Staff collection	SHLV-A	0.10	145	15	
	Popular display	SHLV-B	0.20	1,723	345	
	Government documents	SHLV-C	0.05	4,448	222	
	Adult fiction	SHLV-A	0.10	24,785	2,479	
	Adult non-fiction	SHLV-A	0.10	44,677	4,468	
	Adult large print	SHLV-A	0.10	1,943	194	
	Adult foreign languages	SHLV-A	0.10	2,018	202	
	Adult media	SHLV-M	0.07	16,505	1,155	
	Children's easy/picture/board	SHLV-A	0.07	6,198	434	
	Children's fiction/non-fiction	SHLV-A	0.10	8,204	820	
	Children's foreign languages	SHLV-A	0.10	660	66	
	Children's media	SHLV-M	0.07	1,845	129	
	Teens/Tweens media	SHLV-M	0.10	2,600	260	
	Teens/Tweens fiction/non-fiction	SHLV-M	0.07	182	13	
	Current periodicals	SHLV-P	1.00	0	0	
	Periodicals	SHLV-P	1.00	102	102	
	Newspapers	SHLV-PN	2.00	13	26	
	Backfile periodicals	SHLV-CR	0.10	3,647	365	Adult & Children.s.
	TOTAL ITEMS			126,895		
	ITEMS PER CAPITA			0.54		
	SUBTOTAL SQUARE FOOTAGE:				12,050	

Seating

functional component	personnel/space designation	space code	unit area x	existing 2014 (# of seats)	existing 2014 (net square footage)	notes
seating	Adult six-place	SEAT-AR	20	6	120	
	Adult four-place	SEAT-AR	25	20	500	
	Adult three-place	SEAT-AR	25	27	675	
	Adult two-place	SEAT-AR	35	28	980	
	Adult one-place	SEAT-AR	35	1	35	
	Adult lounge	SEAT-AL	30	7	210	
	Adult computer	SEAT-AT	36	29	1,044	
	Adult bench	SEAT-AB	5	18	90	
	Teens/Tweens four-place	SEAT-AR	25	8	200	
	Teens/Tweens two-place	SEAT-AR	25	2	50	
	Teens/Tweens lounge	SEAT-AL	30	5	150	
	Teens/Tweens café booth	SEAT-AB	20	4	80	
	Teens/Tweens stool	SEAT-AS	8	3	24	
	Teens/Tweens bench	SEAT-AB	5	2	10	
	Teens/Tweens computer	SEAT-AT	36	1	36	
	Children's computer	SEAT-CT	35	4	140	
	Children's lounge	SEAT-CR	30	1	30	
	Children's computer	SEAT-CR	30	2	60	
	Children's early learning	SEAT-CR	20	2	40	
	Children's floor	SEAT-CF	5	6	30	
	Group study room	SEAT-AR	30	13	390	
	TOTAL READER SEATS:			189		
	RATIO OF ITEMS PER SEAT:			671		
	Multi-Purpose Meeting room	SEAT-S	22	106	2,332	Includes 2 Green Rooms.
	Conference room	SEAT-C	30	12	360	
	SUBTOTAL SQUARE FOOTAGE:				7,586	

Circulation / Support spaces

functional component	personnel/space designation	space code	square feet (unit area) x	existing 2014 (# of units) =	existing 2014 (net square footage)	notes
	CIRCULATION:					
support spaces	Service desk station	SVDSK-A	48	5	240	Three Circulation & Two Reference.
	Self-check station	SELF-CK	30	4	120	
	PAC station	SPO-G	24	6	144	
	PC espress station	PC-EXP	24	1	24	
	PC reservation station	PC-RES	24	2	48	
	PC low vision	PC-LOW V	36	2	72	
	Docking station	DOCK-STA	36	2	72	
	Multifunction station	SPO-H	48	3	144	
	Microform reader/printer	MICRO-RP	36	3	108	
	Microform cabinets	MICRO-CAB	20	10	200	
	Map case	CASE-M	40	2	80	
	Gallery	GAL-ART	350	1	350	
	Atlas case	CASE-A	25	1	25	
	Dictionary stand	DICT-S	25	2	50	
	Literature rack	LIT-R	15	3	45	
	Pamphlet file	FILE-L	20	1	20	
	Workroom shelving	SHLV-X	9	28	252	Five sections are 4' length.
	Staff worktable	WKTBL-A	75	3	225	
	Work counter	CNTR-A	48	3	144	
	Work counter w/sink	CNTR-AS	48	3	144	
	Booktruck parking (large)	BKTRK-AM	8	36	288	
	Booktruck parking (medium)	BKTRK-AL	6	23	138	
	Staff break room	STFF-LO	490	1	490	
	Staff lockers	STFF-LK	2.5	10	25	
	Supply cag	SPLY-C	36	3	108	
	Storage room	STOR-S	630	1	630	
	Server room	PC-S ROOM	120	1	120	
	Library materials return room	LIB-MTLS Rt	424	1	424	
	Mail room	MAIL-RM	216	1	216	
	Recycle room	RECY-RM	120	1	120	
	Maintenance room	MAINT-R	1990	1	1,990	Includes Lobby, Bridge, & Guard Station.
	Entrance lobby	ENT-LOB	1240	1	1,240	Restrooms part of Unassignable Space.
	SUBTOTAL SQUARE FOOTAGE:				8,296	

Average Component Efficiency Factor = 0.80
Existing Building Efficiency Factor = 0.65

TOTAL NSF: 28,580
TOTAL NASF: 35,724
BGSF: 54,961

Projected Space Requirements per Planning Guidelines

Building: Downtown Reno Library (Administration) Spreadsheet

Population Served: 443,731   County

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of personnel =)	existing 2014 net square footage	notes
personnel	Library Director	PO-A	400	1.00	400	
	Sr. Public Services Librarian	PO-C	150	1.00	150	
	Librarian III	PO-C	150	1.00	150	
	Development Officer	PO-B	200	1.00	200	
	Program Coordinator	PO-C	150	1.00	150	
	Administration Secretary Supervs.	SPO-C	64	1.00	64	
	Administration Secretary	SPO-C	64	1.00	64	
	Office Support Specialist	SPO-D	48	2.00	96	
	Office Assistant II	SPO-E	36	1.00	36	
	Storekeeper	SPO-E	36	2.00	72	
	TOTAL FTE PERSONNEL			12.00		
	SUBTOTAL SQUARE FOOTAGE				1,382	

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of units =)	existing 2014 net square footage	notes
support spaces	Multifunction station	SPO-H	48	2	96	
	File cabinet	FILE-L	20	19	380	
	Workroom shelving	SHLV-X	9	4	36	
	Staff worktable	WKTBL-A	75	2	150	
	Work counter	CNTR-A	48	2	96	
	Booktruck parking	BKTRK-A	8	2	16	
	Supply cabinet	SPLY-C	36	11	396	
	SUBTOTAL SQUARE FOOTAGE				1,170	
	Average Component Efficiency Factor = 0.80				TOTAL NSF 2,552	
	Existing Building Efficiency Factor = 0.80				TOTAL NASF 3,190	
					BGSF 3,988	Restrooms part of Unassignable Space.

Building: Downtown Reno Library (Technical Services) Spreadsheet

Population Served: 443,731   County

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of personnel =)	existing 2014 net square footage	notes
personnel	Librarian I	PO-D	150	1.00	150	
	Senior Library Assistant	SPO-C	80	1.00	80	
	Library Assistant III	SPO-C	80	1.00	80	
	Library Assistant II	SPO-D	64	5.00	320	
	TOTAL FTE PERSONNEL			8.00		
	SUBTOTAL SQUARE FOOTAGE				630	

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of units =)	existing 2014 net square footage	notes
support spaces	Workroom shelving	SHLV-X	9	10	90	
	Staff worktable	WKTBL-A	75	3	225	
	Work counter	CNTR-A	36	2	72	
	Booktruck parking	BKTRK-A	8	10	80	
	SUBTOTAL SQUARE FOOTAGE				467	
	Average Component Efficiency Factor = 0.80				TOTAL NSF 1,097	
	Existing Building Efficiency Factor = 0.65				TOTAL NASF 1,371	
					BGSF 2,110	Restrooms part of Unassignable Space. Efficiency factor 0.65 due to being on more than one level.

Building: Downtown Reno Library (Systems) Spreadsheet

Population Served: 443,731   County

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of personnel =)	existing 2014 net square footage	notes
personnel	Systems & Access Svcs Librarian	PO-B	200	1.00	200	
	Internet Librarian	SPO-A	120	1.00	120	
	Department Systems Specialist	SPO-A	120	3.00	360	
	Volunteer	SPO-F	24	0.00	0	
	SUBTOTAL SQUARE FOOTAGE				680	

functional component	personnel/space designation	space code	square feet (unit area x)	existing 2014 (# of units =)	existing 2014 net square footage	notes
support spaces	Multifunction station	SPO-H	48	1	48	
	File cabinet	FILE-L	20	1	20	
	Workroom shelving	SHLV-X	9	4	36	
	Staff worktable	WKTBL-A	75	0	0	
	Work counter	CNTR-A	48	1	48	
	Work counter w/sink	CNTR-AS	48	1	48	
	Booktruck parking	BKTRK-A	8	2	16	
	Supply cabinet	SPLY-C	36	9	324	
	SUBTOTAL SQUARE FOOTAGE				540	
	Average Component Efficiency Factor = 0.80				TOTAL NSF 1,220	
	Existing Building Efficiency Factor = 0.80				TOTAL NASF 1,525	
					BGSF 1,906	Restrooms part of Unassignable Space.

Projected Space Requirements per Planning Guidelines

Building: Duncan/Traner Library Spreadsheet

Population Served: 20,402 — 2014 | 20,000 — 1 mile ring

personnel

functional component	personnel/space designation	space code	unit area x square feet	# of personnel	= net square footage existing 2014	notes
personnel	Library Assistant II	SPO-E	36	0.45	16	Two positions, each @ 15 hpw.
	TOTAL FTE PERSONNEL:			0.45		
	SUBTOTAL SQUARE FOOTAGE:				16	

collections

personnel/space designation	space code	unit area x square feet	# of volumes	existing 2014	notes
Reference	SHLV-R	0.12	284	34	Adult, Children's & Staff Collection.
Popular display	SHLV-B	0.20	57	11	
Adult fiction	SHLV-A	0.10	687	69	
Adult non-fiction	SHLV-A	0.10	1,211	121	Includes Oversize & Nevada Collection.
Adult media	SHLV-M	0.07	699	49	
Adult foreign languages	SHLV-M	0.10	157	16	
Children's easy/picture/board	SHLV-YEP	0.07	5,971	418	
Children's fiction/non-fiction	SHLV-A	0.10	9,720	972	
Children's foreign languages	SHLV-A	0.10	873	87	
Children's media	SHLV-M	0.07	278	19	
Teens/Tweens fiction/non-fiction	SHLV-A	0.10	522	52	
Teens/Tweens media	SHLV-M	0.07	1	0.07	
Current periodicals	SHLV-P	1.00	8	8	
Backfile periodicals	SHLV-CR	0.10	153	15	
TOTAL ITEMS:			20,621		
ITEMS PER CAPITA:			1.01		
SUBTOTAL SQUARE FOOTAGE:				1,872	

seating

personnel/space designation	space code	unit area x square feet	# of seats	= net square footage existing 2014	notes
Adult four-place	SEAT-AR	25	12	300	
Adult one-place	SEAT-AR	35	1	35	
Adult lounge	SEAT-AL	30	2	60	
Adult computer	SEAT-AT	36	10	360	
TOTAL READER SEATS:			25		
RATIO OF ITEMS PER SEAT:			825		
Children's Program room	SEAT-CF	10	12	120	Not a room, but floor space for programming.
SUBTOTAL SQUARE FOOTAGE:				875	

support spaces

personnel/space designation	space code	unit area x square feet	# of units	= net square footage existing 2014	notes
Service desk station	SVDSK-A	48	2	96	
PAC station (stand-up)	SPO-G	24	2	48	
Multifunction station	SPO-H	48	1	48	
Display case	CASE-X	15	1	15	
Display table	TAB-DSPL	15	1	15	
File cabinet	FILE-L	20	3	60	
Workroom shelving	SHLV-X	9	3	27	
Staff worktable	WKTBL-A	75	1	75	
Work counter w/sink	CNTR-A	36	1	36	Now, 2 small, 1 medium, 2 large.
Booktruck parking	BKTRK-A	6	5	30	
Supply cabinet	SPLY-R	36	2	72	
SUBTOTAL SQUARE FOOTAGE:				522	
			TOTAL NSF:	3,285	
Average Component Efficiency Factor = 0.85			TOTAL NASF:	3,865	
Existing Building Efficiency Factor = 0.85			BGSF:	4,547	Restrooms part of Unassignable Space.
EXISTING BUILDING TOTAL SQUARE FEET				3,200	
			over (under)	(1,347)	
			PARKING GUIDELINES	16	Per capita SF 0.16. One space per every 200 SF of building
			PARKING SACES	0	Include 3 handicap spaces.
			over (under)	(16)	

Projected Space Requirements per Planning Guidelines

Building: Incline Village Library Spreadsheet

Population Served:	14,247	5 mile ring

functional component	personnel/space designation	space code	square feet (unit area x)	# of personnel	=	existing 2014 (net square footage)	notes
	CIRCULATION:					81,000	
personnel	Librarian II	PO-D	150	1.00		150	
	Librarian I	SPO-D	48	1.00		48	
	Library Assistant III	SPO-E	36	1.00		36	
	Library Assistant II	SPO-E	36	2.00		72	
	Library Aide	SPO-F	24	1.875		45	
	TOTAL FTE PERSONNEL:			6.875			
	SUBTOTAL SQUARE FOOTAGE:					351	

functional component	personnel/space designation	space code	unit area x	# of volumes	=	existing 2014 (net square footage)	notes
collections	Reference	SHLV-R	0.12	209		25	
	Popular display	SHLV-B	0.20	738		148	
	Oversize	SHLV-B	0.20	53		11	
	Adult fiction	SHLV-A	0.10	7,172		717	
	Adult non-fiction	SHLV-A	0.10	8,149		815	
	Adult large print	SHLV-A	0.10	497		50	
	Adult foreign languages	SHLV-A	0.10	408		41	
	Special collections	SHLV-A	0.10	881		88	
	Adult media	SHLV-M	0.07	3,916		274	
	Children's easy/picture/board	SHLV-YEP	0.07	3,876		271	
	Children's fiction/non-fiction	SHLV-A	0.10	6,176		618	
	Children's foreign languages	SHLV-A	0.10	525		53	
	Children's media	SHLV-M	0.07	521		36	
	Teens/Tweens fiction/non-fiction	SHLV-A	0.10	744		74	
	Teens/Tweens media	SHLV-M	0.07	71		5	
	Current periodicals	SHLV-P	1.00	66		66	
	Current newspapers	SHLV-pN	2.00	6		12	
	Backfile periodicals	SHLV-CR	0.10	1,388		139	Adult & Children's.
	TOTAL ITEMS:			35,396			
	ITEMS PER CAPITA:			2.48			
	SUBTOTAL SQUARE FOOTAGE:					3,442	

functional component	personnel/space designation	space code	unit area x	number of seats	=	existing 2014 (net square footage)	notes
seating	Adult six-place	SEAT-AR	20	6		120	
	Adult five-place	SEAT-AR	20	10		200	
	Adult four-place	SEAT-AR	25	4		100	
	Adult two-place	SEAT-AR	35	4		140	
	Adult one-place	SEAT-AR	35	3		105	
	Adult lounge	SEAT-AL	30	21		630	
	Adult computer	SEAT-AT	36	8		288	
	Adult bench	SEAT-AB	5	8		40	
	Teens/Tweens two-place	SEAT-AR	35	2		70	
	Teens/Tween lounge	SEAT-AL	30	2		60	
	Teens/Tweens computer	SEAT-AT	36	3		108	
	Teens/Tweens bench	SEAT-AB	5	3		15	
	Children's four-place (older)	SEAT-CR	25	4		100	
	Children's four-place (younger)	SEAT-CR	20	4		80	
	Children's lounge	SEAT-CL	30	2		60	
	Children's lounge (Rocking)	SEAT-CL	20	1		20	
	Children's computer	SEAT-CR	24	2		48	
	Children's early learning	SEAT-CR	20	2		40	
	Children's floor	SEAT-CF	5	12		60	
	Children's bench	SEAT-CB	4	5		20	
	TOTAL READER SEATS:			105			

functional component	personnel/space designation	space code	square feet (unit area x)	# of units	=	existing 2014 (net square footage)	notes
support spaces	Service desk station	SVDSK-A	64	4		256	
	Self-check station	SELF-CK	30	2		60	
	Express station	EXP-STA	24	3		72	
	Download station	DOWN-L	24	1		24	
	Reservation station	RES-STA	24	1		24	
	ADP station	SEAT-AT	48	1		48	
	Multifunction station	SPO-H	48	2		96	
	Holds	SHLV-A	10	2		20	
	Free books	SHLV-A	10	2		20	
	Book sale	SHLV-A	10	4		40	
	Display table	TAB-DSPL	20	2		40	
	Display case	CASE-X	20	2		40	
	Atlas case	CASE-A	25	1		25	
	Literature rack	LIT-R	15	3		45	
	File cabinet	FILE-L	20	1		20	
	Library materials return room	LIB-MTLS	42	1		42	
	Workroom shelving	SHLV-X	9	6		54	
	Work counter	CNTR-A	42	4		168	
	Booktruck parking	BKTRK-A	7	21		147	
	Staff break room	STFF-LO	160	1		160	
	Data room	DATA-RM	104	1		104	
	Entrance lobby	ENT-LOB	200	1		200	
	Library café	LIB-C	130	1		130	To become "Makerspace" space.
	Receiving	LOAD-D	35	1		35	
	SUBTOTAL SQUARE FOOTAGE:					1,870	

Average Component Efficiency Factor = 0.85	TOTAL NSF	8,867
Existing Building Efficiency Factor = 0.80	TOTAL NASF	10,432	Restrooms part of Unassignable Space.
	BGSF	13,040
EXISTING BUILDING TOTAL SQUARE FEET	11,045	SF per capita 0.78
over (under)		(1,995)	One space per every 200 SF of buildin...
PARKING GUIDELINES	55
PARKING SACES	34	Include 3 handicap spaces.
over (under)		(21)

Godfrey's Associates

COLLABORATIVE DESIGN STUDIO architecture of experience and place

Projected Space Requirements per Planning Guidelines

Building: North Valleys Library Spreadsheet

Population Served: 78,962 — 5 mile ring

CIRCULATION: 172,000

functional component	personnel/space designation	space code	square feet (unit area) x	# of personnel =	net square footage existing 2014	notes
personnel	Librarian II	PO-D	150	1.00	150	
	Librarian I	SPO-D	48	1.00	48	
	Library Assistant III	SPO-E	36	1.00	36	
	Library Assistant II	SPO-E	36	2.00	72	
	Library Aide	SPO-F	24	1.875	45	
	TOTAL FTE PERSONNEL:			6.875		
	SUBTOTAL SQUARE FOOTAGE:				351	

functional component	personnel/space designation	space code	unit area x	# of volumes =	net square footage existing 2014	notes
collections	Reference	SHLV-R	0.12	266	32	
	Oversize	SHLV-R	0.12	26	3	
	Special collections	SHLV-R	0.12	425	51	Nevada Collection & Staff Collection
	Popular display	SHLV-B	0.20	937	187	
	Adult fiction	SHLV-A	0.10	11,133	1,113	
	Adult non-fiction	SHLV-A	0.10	8,638	864	
	Adult large print	SHLV-A	0.10	899	90	
	Adult foreign languages	SHLV-A	0.10	298	30	
	Children's easy/picture/board	SHLV-YEP	0.07	9,294	651	
	Children's fiction/non-fiction	SHLV-A	0.10	11,827	1,183	
	Children's foreign languages	SHLV-A	0.10	590	59	
	Children's media	SHLV-M	0.07	1,460	102	
	Teen/Tweens fiction/non-fiction	SHLV-A	0.10	2,522	252	
	Teen/tweens media	SHLV-M	0.07	126	9	
	Current periodicals	SHLV-P	1.00	100	100	
	Current newspapers	SHLP-PN	2.00	2	4	
	Backfile periodicals	SHLV-CR	0.10	1,325	133	Adult & Children's.
	TOTAL ITEMS			49,868		
	ITEMS PER CAPITA:			0.63		
	SUBTOTAL SQUARE FOOTAGE:				4,862	

functional component	personnel/space designation	space code	unit area x	number of seats =	net square footage existing 2014	notes
seating	Adult four-place	SEAT-AR	25	8	200	
	Adult two-place	SEAT-AR	35	4	140	
	Adult lounge	SEAT-AL	30	7	210	
	Adult computer	SEAT-AT	36	21	756	
	Adult typewriter	SEAT-AT	36	1	36	
	Adult bench	SEAT-AB	5	8	40	
	Children's four-place (older)	SEAT-CR	25	12	300	
	Children's four-place (younger)	SEAT-CR	20	8	160	
	Children's lounge	SEAT-CL	30	3	90	
	Children's computer	SEAT-CR	30	8	240	
	TOTAL READER SEATS			80		
	RATIO OF ITEMS PER SEAT:			623		
	Multi-Purpose Meeting room	SEAT-S	15	35	525	
	SUBTOTAL SQUARE FOOTAGE:				2,697	

functional component	personnel/space designation	space code	unit area x	# of units =	net square footage existing 2014	notes
support spaces	Service desk station	SVDSK-A	48	5	240	
	Self-check station	SELF-CK	30	2	60	
	Reservation station	RES-STA	24	2	48	
	Multifunction station	SPO-H	48	2	96	
	Holds	SHLV-A	10	1	10	
	Book sale	BOOL-S	15	1	15	
	Atlas case	CASE-A	25	1	25	
	Dictionary stand	DICT-S	25	1	25	
	Display table	TAB-SPL	15	2	30	
	Literature rack	LIT-R	15	4	60	
	Library materials drop box return	LIB-MTLSR	16	1	16	
	File cabinet	FILE-L	20	6	120	
	Workroom shelving	SHLV-X	9	15	135	
	Staff worktable	WKTBL-A	65	2	130	
	Work counter	CNTR-A	24	2	48	
	Booktruck parking	BKTRK-A	6	25	150	
	Staff break room	STFF-LO	182	1	182	
	Supply cabinet	SPLY-C	36	4	144	
	Entrance lobby	ENT-LOB	100	1	100	Restrooms part of Unassignable Space.
	SUBTOTAL SQUARE FOOTAGE:				1,634	

Average Component Efficiency Factor = 0.85	TOTAL NSF	9,533
Existing Building Efficiency Factor = 0.80	TOTAL NASF	11,216
EXISTING BUILDING TOTAL SQUARE FEET	BGSF	14,020
		9,178
	over *(under)*	*(4,842)*
	PARKING GUIDELINES	46 — Per capita SF 0.12.
	PARKING SACES	0 — One space per every 200 SF of building.
	over *(under)*	*(46)*

Projected Space Requirements per Planning Guidelines

Building: Northwest Reno Spreadsheet

Population Served: 50,547   3 mile ring
292,000

CIRCULATION:

functional component	personnel/space designation	space code	unit area x	# of personnel =	existing 2014	net square footage existing 2014	notes
personnel	Librarian II	PO-D	150	1.00	150		
	Librarian I	SPO-D	48	1.00	48		
	Library Assistant III	SPO-E	36	1.00	36		
	Library Assistant II	SPO-E	36	5.00	180		
	Library Aide	SPO-F	24	2.25	54		

TOTAL FTE PERSONNEL: 10.25
SUBTOTAL SQUARE FOOTAGE: 468

functional component	personnel/space designation	space code	unit area x	# of volumes	existing 2014	net square footage existing 2014	notes
collections	Reference	SHLV-R	0.12	970	116		
	Oversize	SHLV-R	0.12	246	30		
	Special collections	SHLV-R	0.12	2,876	345		Holocaust, Nevada, & Staff collections.
	Popular display	SHLV-B	0.20	1,721	344		
	Adult fiction	SHLV-A	0.10	13,731	1,373		
	Adult non-fiction	SHLV-A	0.10	22,096	2,210		
	Adult foreign languaes	SHLV-A	0.10	1,884	188		
	Adult large print	SHLV-A	0.10	798	80		
	Adult media	SHLV-M	0.07	7,422	520		
	Children's easy/picture/board	SHLV-YEP	0.07	9,354	655		
	Children's fiction/non-fiction	SHLV-A	0.10	17,924	1,792		
	Children's foreign languages	SHLV-A	0.10	458	46		
	Children's media	SHLV-M	0.07	1,479	104		
	Teens/Tweens fiction/non-fiction	SHLV-A	0.10	3,342	334		
	Teens/Tweens media	SHLV-M	0.07	141	10		
	Current periodicals	SHLV-P	1.00	186	186		
	Current newspapers	SHLV-PM	2.00	7	14		
	Backfile periodicals	SHLV-CR	0.10	3,671	367		

TOTAL ITEMS: 88,306
ITEMS PER CAPITA: 1.75
SUBTOTAL SQUARE FOOTAGE: 8,713

functional component	personnel/space designation	space code	unit area x	number of seats =	net square footage
seating	Adult four-place	SEAT-AR	25	40	1,000
	Adult two-place	SEAT-AR	35	20	700
	Adult one-place	SEAT-AR	35	9	315
	Adult lounge	SEAT-AL	30	18	540
	Adult computer	SEAT-AT	36	14	504
	Adult typewriter	SEAT-AT	36	1	36
	Teens/Tweens four-place	SEAT-AR	25	8	200
	Teens/Tweens two-place	SEAT-AR	35	10	350
	Teen lounge	SEAT-AL	30	3	90
	Group study room	SEAT-AR	30	10	300

TOTAL READER SEATS: 133
RATIO OF ITEMS PER SEAT: 664

	Multi-Purpose Meeting room	SEAT-S	15	106	1,590

SUBTOTAL SQUARE FOOTAGE: 5,625

Support spaces

functional component	personnel/space designation	space code	square feet	unit area x	# of units =	existing 2014	net square footage existing 2014	notes
support spaces	Service desk station	SVDSK-A	64		7	448		
	Self-check station	SELF-CK	30		5	150		
	Holds	SHLV-A	10		6	60		
	PAC station (stand-up)	SPO-G	24		7	168		
	Reservation station	RES-STA	24		2	48		
	ADA computer	SEAT-AR	48		1	48		
	Express station (stand-up)	SEAT-0	24		2	48		
	Download station	DOWN-STA	24		1	24		
	Multifunction station	SPO-H	48		2	96		
	Holds shelving	SHLV-A	10		8	80		
	Display table	TAB-DSPL	20		4	80		
	Display case	CASE-X	15		7	105		
	Atlas case	CASE-A	25		1	25		
	Dictionary stand	DICT-S	25		1	25		
	Literature rack	LIT-R	15		1	15		
	File cabinet	FILE-L	20		7	140		
	Workroom shelving	SHLV-X	9		6	54		
	Staff worktable	WKTBL-A	75		1	75		
	Work counter	CNTR-A	48		2	96		
	Booktruck parking	BKTRK-A	6		38	228		
	Staff break room	STFF-LO	540		1	540		
	Staff lockers	STFF-LK	2		15	30		
	Supply cabinet	SPLY-C	36		3	108		
	Storage room	STOR-S	400		1	400		
Friends of Library:	Store	FOL-STR	220		1	220		
	Storage	FOL-STOR	360		1	360		
	Entrance lobby	ENT-LOB	400		1	400		
	Foyer	SNT-FOY	120		1	120		
	Lobby	SNT-LOB	480		1	480		
	Loading dock	LOAD-D	216		1	216		

SUBTOTAL SQUARE FOOTAGE: 4,887

Average Component Efficiency Factor = 0.85
Existing Building Efficiency Factor = 0.80

TOTAL NSF: 19,693
TOTAL NASF: 23,169
BGSF: 28,961
EXISTING BUILDING TOTAL SQUARE FEET: 28,634
over (under): (327)
PARKING GUIDELINES: 95
PARKING SPACES: 92
over (under): (3)

Restrooms part of Unassignable Space.

Per capita SF 0.57.

One space per every 300 SF of building.

Projected Space Requirements per Planning Guidelines

Building: Sparks Library Spreadsheet

Population Served: 100,978   3 mile ring

functional component	personnel/space designation	space code	square feet unit area x	existing 2014 # of personnel =	net square footage existing 2014	notes
			CIRCULATION:		345,000	
personnel	Librarian III	PO-A	150	1.00	150	
	Librarian II	SPO-C	64	1.00	64	
	Librarian I	SPO-D	48	1.00	48	
	Library Assistant III	SPO-D	48	2.00	96	
	Library Assistant II	SPO-E	36	8.00	288	
	Library Aide	SPO-F	24	2.40	58	
	TOTAL FTE PERSONNEL:			15.40		
	SUBTOTAL SQUARE FOOTAGE:				704	

functional component	personnel/space designation	space code	unit area x	# of volumes	net square footage	notes
collections	Reference	SHLV-R	0.12	1,516	182	Adult and Children's
	Popular display	SHLV-B	0.20	1,932	386	
	Special collections:					
	Auto repair	SHLV-A	0.12	1,155	139	
	Nevada collection	SHLV-A	0.10	1,434	143	
	Rail City	SHLV-A	0.10	155	16	
	Staff collection	SHLV-A	0.10	400	40	
	Adult fiction	SHLV-A	0.10	19,492	1,949	
	Adult non-fiction	SHLV-A	0.10	30,443	3,044	
	Adult large print	SHLV-A	0.10	2,336	234	
	Adult foreign languages	SHLV-A	0.10	1,703	170	
	Adult media	SHLV-M	0.07	13,516	946	
	Oversize	SGLV-B	0.20	168	34	
	Children's easy/picture/board	SHLV-YEP	0.07	6,748	472	
	Children's fiction/non-fiction	SHLV-A	0.10	13,989	1,399	
	Children's media	SHLV-M	0.07	2,394	168	
	Teen/Tween fiction/non-fiction	SHLV-A	0.10	3,490	349	
	Teen/Tween media	SHLV-M	0.07	184	13	
	Current periodicals	SHLV-P	1.00	102	102	
	Current newspapers	SHLV-PN	2.00	6	12	
	Backfile periodicals	SHLV-CR	0.10	1,280	128	Adult and Children's
	TOTAL ITEMS:			102,443		
	ITEMS PER CAPITA:			1.01		
	SUBTOTAL SQUARE FOOTAGE:				9,926	

functional component	personnel/space designation	space code	unit area x	# of seats	net square footage	notes
seating	Adult four-place	SEAT-AR	25	48	1,200	
	Adult lounge	SEAT-AL	30	15	450	
	Adult computer	SEAT-AT	36	28	1,008	
	Adult typewriter	SEAT-AT	36	1	36	
	Adult bench	SEAT-AB	5	22	110	
	Teens/Tweens four-place	SEAT-AR	25	8	200	
	Teens/Tweens ne-place	SEAT-AR	35	3	105	
	Teen lounge	SEAT-AL	30	4	120	
	Teen computer	SEAT-AT	36	3	108	
	Children's four-place (older)	SEAT-CR	25	16	400	
	Children's four-place (younger)	SEAT-CR	20	8	160	
	Children's computer	SEAT-CR	30	12	360	
	Children's slanttop table	SEAT-CB	15	8	120	
	Children's bench	SEAT-CB	5	2	10	
	TOTAL READER SEATS:			178		

functional component	personnel/space designation	space code	unit area x	# of units =	net square footage	notes
support spaces	Service desk station	SVDSK-A	64	9	576	
	Self-check station	SELF-CK	30	5	150	
	Express station	EXP-STAT	24	2	48	
	PAC station (stand-up)	SPO-G	24	8	192	
	Reservation station	RES-STAT	24	1	24	
	ADP station	ADP-STAT	48	1	48	
	Downloadable station	DLOAD-S	36	1	36	
	Multifunction station	SPO-H	48	1	48	
	Holds	SHLV-A	10	5	50	
	Book sale	BK-SALE	10	1	10	
	Display case (large)	CASE-X	100	2	200	
	Display case (smaall)	CASE-XS	15	2	30	
	Map case	CASE-M	40	1	40	
	Display table	TAB-DSPL	15	2	30	
	Literature rack	LIT-R	15	6	90	
	Microform reader/printer	MICRO-RP	45	1	45	
	Microform cabinet	MICRO-C	20	2	40	
	Atlas case	CASE-A	25	1	25	
	Dictionary stand	DICT-T	25	1	25	
	File cabinet	FILE-L	20	4	80	
	Workroom shelving	SHLV-X	9	8	72	
	Booktruck parking	BKTRK-A	7	28	196	
	Staff break room	STFF-LO	300	1	300	
	Supply closet	SPLY-C	40	1	40	
	Vending machine	VEND-M	20	1	20	
	Entrance lobby	ENT-LOB	504	1	504	
	SUBTOTAL SQUARE FOOTAGE:				2,919	

Average Component Efficiency Factor = 0.85	TOTAL NSF	19,905
Existing Building Efficiency Factor = 0.80	TOTAL NASF	23,418	Restrooms part of Unassignable Space.
EXISTING BUILDING TOTAL SQUARE FEET	BGSF	29,272	SF per capita 0.23
		22,832
	over/(under)	(6,440)
	PARKING GUIDELINES	76	One space per every 300 SF of building.
	PARKING SPACES	83
	over/(under)	(7)

Projected Space Requirements per Planning Guidelines

Building: Senior Center Library Spreadsheet

Population Served:	19,075	1 mile ring

functional component	personnel/space designation	space code	unit area x square feet	# of personnel existing 2014	= net square footage existing 2014	notes
				CIRCULATION:	11,600	
personnel	Library Assistant II	SPO-E	36	1.00	36	Two positions, each @ 15 hpw.
		TOTAL FTE PERSONNEL:		1.00		
	Volunteer	SPO-F	24	0.35	8	
			SUBTOTAL SQUARE FOOTAGE:		44	

functional component	personnel/space designation	space code	unit area x square feet	# of volumes existing 2014	= net square footage existing 2014	notes
collections	Reference	SHLV-R	0.12	50	6	Adult, Children's & Staff Collection.
	Popular display	SHLV-B	0.20	151	30	
	Adult fiction	SHLV-A	0.10	910	91	
	Adult non-fiction	SHLV-A	0.10	1,211	121	Includes Large Print fiction.
	Adult media	SHLV-M	0.07	1,103	77	Includes Large Print non-fiction & Nevada Collection.
	Foreign languages	SHLV-A	0.10	18	2	Adult & Children's.
	Children's easy/picture/board	SHLV-YEP	0.07	79	6	
	Children's fiction/non-fiction	SHLV-A	0.10	117	12	
	Children's media	SHLV-M	0.07	38	3	
	Teens/Tweens fiction/non-fiction	SHLV-A	0.10	40	4	
	Teens/Tweens media	SHLV-M	0.07	8	1	
	Current periodicals	SHLV-P	1.00	8	8	
	Backfile periodicals	SHLV-CR	0.10	159	16	
		TOTAL ITEMS:		3,892		
		ITEMS PER CAPITA:		0.20		
			SUBTOTAL SQUARE FOOTAGE:		376	

functional component	personnel/space designation	space code	unit area x square feet	# of seats existing 2014	= net square footage existing 2014	notes
seating	Adult four-place	SEAT-AR	25	8	200	
	Adult two-place	SEAT-AR	25	2	50	
	Adult computer	SEAT-AT	36	4	144	
	Adult bench	SEAT-AB	5	4	20	
		TOTAL READER SEATS:		18		
		RATIO OF ITEMS PER SEAT:		216		
			SUBTOTAL SQUARE FOOTAGE:		414	

functional component	personnel/space designation	space code	unit area x square feet	# of units existing 2014	= net square footage existing 2014	notes
support spaces	Service desk station	SVDSK-A	48	3	144	
	PAC station (sit-down)	SELF-CK	24	1	24	
	PC espress station	EXP-STAT	24	1	24	
	Reservation station	RES-STAT	24	1	24	
	Multifunction station	SPO-H	48	1	48	
	Workroom shelving	SHLV-X	9	1	9	
	Staff worktable	WKTBL-A	50	1	50	Now, 1 small, 1 medium, 2 large.
	Booktruck parking	BKTRK-A	6	4	24	
	Supply cabinet	SPLY-RC	24	1	24	
			SUBTOTAL SQUARE FOOTAGE:			
				TOTAL NSF:	785	
	Average Component Efficiency Factor =	0.85		TOTAL NASF:	1,619	Restrooms part of Unassignable Space
	Existing Building Efficiency Factor =	0.85		BGSF:	1,905	
		EXISTING BUILDING TOTAL SQUARE FEET:			2,241	
				over (under):	(1,441)	Now. 0.04 SF per capita.

Projected Space Requirements per Planning Guidelines

Building: Spanish Springs Library Spreadsheet

Population Served:	153,983	3 mile ring

Personnel

functional component	personnel/space designation	space code	square feet (unit area)	# of personnel (existing 2014)	net square footage (existing 2014)	notes
personnel	Librarian III	PO-D	150	1.00	150	
	Librarian I	SPO-D	48	1.00	48	
	Library Assistant III	SPO-D	48	1.00	48	
	Library Assistant II	SPO-E	36	5.00	180	
	Library Aide	SPO-F	24	1.50	36	
	TOTAL FTE PERSONNEL:			9.50		
	SUBTOTAL SQUARE FOOTAGE:				462	
	CIRCULATION:			192,000		

Collections

collections	space code	unit area	# of volumes	net square footage	notes
Reference	SHLV-R	0.12	839	101	Adult and Children's.
Special collections	SHLV-R	0.12	1,000	120	Includes Staff Collections.
Popular display	SHLV-B	0.20	970	194	
Adult fiction	SHLV-A	0.10	12,307	1,231	
Adult non-fiction	SHLV-A	0.10	14,206	1,421	
Adult foreign languages	SHLV-A	0.10	758	76	
Large print	SHLV-A	0.10	1,608	161	
Oversize	SHLV-B	0.20	62	12	
Adult media	SHLV-M	0.07	6,349	444	
Children's easy/picture/board	SHLV-YEP	0.07	7,665	537	
Children's fiction/non-fiction	SHLV-A	0.10	11,505	1,151	
Children's media	SHLV-M	0.07	1,328	93	
Teens/Tweens fiction/non-fiction	SHLV-A	0.10	2,937	294	
Teens/Tweens media	SHLV-M	0.07	254	18	
Current periodicals	SHLV-P	1.00	122	122	
Current newspapers	SHLV-PN	2.00	7	14	
Backlisk periodicals	SHLV-CR	0.10	1,349	135	Adult and Children's
TOTAL ITEMS:			63,266		
ITEMS PER CAPITA:			0.41		
SUBTOTAL SQUARE FOOTAGE:				6,122	

Seating

seating	space code	unit area	# of seats	net square footage	notes
Adult four-place	SEAT-AR	25	16	400	
Adult three-place	SEAT-AR	25	15	375	
Adult two-place	SEAT-AR	35	4	140	
Adult lounge	SEAT-AL	30	33	990	
Adult stool	SEAT-AS	10	1	10	
Adult computer	SEAT-AT	36	30	1,080	
Adult low vision	SEAT-AT	36	1	36	
Adult handicap station	SEAT-AT	48	1	48	
Adult bench	SEAT-AB	5	3	15	
Teens/Tweens café booth	SEAT-CB	20	18	360	
Teen/Tweens computer	SEAT-AT	36	8	288	
Children's four-place	SEAT-CR	25	4	100	
Children's four-place (small)	SEAT-CR	20	4	80	
Children's lounge	SEAT-CL	30	5	150	
Children's computer	SEAT-CR	30	5	150	
Early learning station	SEAT-CR	20	4	80	
Children's bench	SEAT-CB	5	3	15	
Group study room	SEAT-AR	30	14	420	Now, 2 rooms for 4 & 1 room for 6.
TOTAL READER SEATS:			169		
RATIO OF ITEMS PER SEAT:			374		
Multi-Purpose Meeting room	SEAT-S	15	125	1,875	
Children's Program room	SEAT-CF	12	100	1,200	
SUBTOTAL SQUARE FOOTAGE:				7,812	

Support Spaces

functional component	personnel/space designation	space code	square feet (unit area)	# of units (existing 2014)	net square footage (existing 2014)	notes
support spaces	Service desk station	SVDSK-A	64	9	576	
	Self-check station	SELF-CK	30	5	150	
	Express station	EXP-STAT	24	2	48	
	PAC station (stand-up)	SPO-G	24	8	192	
	Reservation station	RES-STAT	24	1	24	
	ADP station	ADP-STAT	48	1	48	
	Downloadable station	DLOAD-S	36	1	36	
	Multifunction station	SPO-H	48	1	48	
	Holds	SHLV-A	10	5	50	
	Book sale	BK-SALE	10	1	10	
	Display case (large)	CASE-X	100	2	200	
	Display case (small)	CASE-XS	15	2	30	
	Map case	CASE-M	40	1	40	
	Display table	TAB-DSPL	15	2	30	
	Literature rack	LIT-R	15	6	90	
	Microform reader/printer	MICRO-RP	45	1	45	
	Microform cabinet	MICRO-C	20	2	40	
	Atlas case	CASE-A	25	1	25	
	Dictionary stand	DICT-T	25	1	25	
	File cabinet	FILE-L	20	4	80	
	Workroom shelving	SHLV-X	9	8	72	
	Booktruck parking	BKTRK-A	7	28	196	
	Staff break room	STFF-LO	300	1	300	
	Supply closet	SPLY-C	40	1	40	
	Vending machine	VEND-M	20	1	20	
	Entrance lobby	ENT-LOB	504	1	504	
	SUBTOTAL SQUARE FOOTAGE:				2,919	

		notes
TOTAL NSF	19,905	Restrooms part of Unassignable Space.
TOTAL NASF	23,418	
BGSF	29,272	
EXISTING BUILDING TOTAL SQUARE FEET	22,832	
over (under)	(6,440)	
PARKING GUIDELINES	76	SF per capita 0.23
PARKING SPACES	83	One space per every 300 SF of building
over (under)	(7)	

Average Component Efficiency Factor = 0.85
Existing Building Efficiency Factor = 0.80

Projected Space Requirements per Planning Guidelines

Building: South Valleys Library Spreadsheet

Population Served: 52,290 5 mile ring

CIRCULATION: 280,000

functional component	personnel/space designation	space code	square feet (unit area) x	# of personnel =	existing 2014 net square footage	notes
personnel	Librarian III	PO-E	150	1.00	150	
	Librarian I	SPO-H	48	1.00	48	
	Library Assistant III	SPO-H	48	1.00	48	
	Library Assistant II	SPO-I	36	5.00	180	
	Library Aide	SPO-J	24	1.875	45	

TOTAL FTE PERSONNEL: 9.875
SUBTOTAL SQUARE FOOTAGE: 471

functional component	personnel/space designation	space code	unit area x	# of volumes =	existing 2014 net square footage	notes
collections	Reference	SHLV-R	0.12	279	33	Adult & Children's.
	Oversize	SHLV-R	0.12	145	17	
	Special collections	SHLV-R	0.12	732	88	Nevada & Staff collections.
	Popular display	SHLV-B	0.20	1,424	285	
	Adult fiction	SHLV-A	0.10	9,865	987	
	Adult non-fiction	SHLV-A	0.10	12,212	1,221	
	Adult foreign languages	SHLV-A	0.10	223	22	
	Adult large print	SHLV-A	0.10	1,483	148	
	Adult media	SHLV-M	0.07	7,925	555	
	Children's easy/picture/board	SHLV-YEP	0.07	8,187	573	
	Children's fiction/non-fiction	SHLV-A	0.10	12,739	1,274	
	Children's foreign languages	SHLV-A	0.10	364	36	
	Children's media	SHLV-M	0.07	1,470	103	
	Teens/Tweens fiction/non-fiction	SHLV-A	0.10	1,641	164	
	Teens/Tweens media	SHLV-M	0.07	131	9	
	Current periodicals	SHLV-P	1.00	117	117	
	Current newspapers	SHLV-PN	2.00	8	16	
	Backfile periodicals	SHLV-CR	0.10	1,287	129	Adult & Children's.

TOTAL ITEMS: 60,232
ITEMS PER CAPITA: 1.15
SUBTOTAL SQUARE FOOTAGE: 5,778

functional component	personnel/space designation	space code	unit area x	# of seats =	net square footage	notes
seating	Adult four-place	SEAT-AC	25	28	700	3 in Business Center (238 NSF).
	Adult two-place	SEAT-AE	35	4	140	
	Adult lounge	SEAT-AD	30	22	660	
	Adult computer	SEAT-ACT	35	12	420	
	Adult typewriter	SEAT-ACT	35	1	35	
	Teen/Tween five-place	SEAT-AE	25	10	250	
	Teen lounge	SEAT-AD	30	3	90	
	Teen computer	SEAT-ACT	35	3	105	
	Children's lounge	SEAT-CD	30	4	120	
	Children's computer	SEAT-CD	30	3	90	
	Children's bench	SEAT-CK	5	10	50	
	Group study room	SEAT-AR	30	14	420	

TOTAL READER SEATS: 114
RATIO OF ITEMS PER SEAT: 528
Multi-Purpose Meeting room | SEAT-S | 15 | 106 | 1,590
SUBTOTAL SQUARE FOOTAGE: 4,670

functional component	personnel/space designation	space code	unit area x	# of units =	existing 2014 net square footage	notes
support spaces	Service desk station	SVDSK-A	120	4	480	
	Self-check station	SEAT-D	30	4	120	
	PAC station	SEAT-AE	25	5	125	
	Download station	SEAT-AE	25	1	25	
	Reservation station	SEAT-AE	25	1	25	
	Express station	SPO-F	20	2	40	
	ADA station	SEAT-AA	45	1	45	
	Laptop docking	DOCK-LAP	12	4	48	
	Fax station	SEAT-F	20	1	20	
	Multifunction station	SPO-H	48	2	96	
	Holds	SHLV-A	10	1	10	
	Booksale	SHLV-A	10	3	30	
	Booksale storage	SHLV-A	10	4	40	
	Display case	CASE-X	30	3	90	
	Display table	TAB-DSPY	20	3	60	Two in Teen/Tween space.
	Literature rack	LIT-R	15	3	45	
	Atlas case	CASE-A	25	2	50	
	Dictionary stand	DICT-S	25	1	25	
	Work counter	CNTR-A	48	2	96	
	Work counter (small)	CNTR-AS	24	1	24	
	Booktruck parking	BKTRK-A	6	26	156	
	Book bins	BLBIN-A	4	4	16	
	Staff break room	STFF-LO	300	1	300	
	Supply closet	SPLY-CL	20	1	20	
	Storage room	STOR-S	190	1	190	In Children's Services area.
	Gallery	GAL-ART	264	1	264	
	Library materials room	LIB-MTLSR	80	1	80	
	Fireplace (faux)	FIRE-P	16	1	16	
	Entrance lobby	ENT-LOB	594	1	594	
	Library snack bar	LIB-SB	216	1	216	Drive-up checkout 4' x 4'.

SUBTOTAL SQUARE FOOTAGE: 3,346

Average Component Efficiency Factor = 0.85	TOTAL NSF	14,265
Existing Building Efficiency Factor = 0.80	TOTAL NASF	16,782
	BGSF	20,978
EXISTING BUILDING TOTAL SQUARE FEET		17,500
over (under)		(3,478)
PARKING GUIDELINES		88
PARKING SPACES		68
over (under)		(20)

Restrooms part of Unassignable Space
SF per capita 0.33
over (under)
One space per every 200 SF of building

Appendix D: Washoe County Library System Technology Plan Review And Priority Order Of Recommendations

The Technology Plan is fairly comprehensive and addresses the needs of customers and, to some extent, staff. The Plan, although aimed directly at meeting certain requirements and demands, is more of a wish list than a document with clearly defined priorities. The Plan does establish clear goals the Washoe County Library System (WCLS) would like to achieve and the types of technology to employ, along with the reference to the infrastructure and hardware that will be needed to meet the goals. There is some inclusion of professional development in the document that highlights the need for staff training, learning how to use the technology implemented, and how this can affect library services and the time needed or saved as a result.

From a number of document comments there is clearly a need for an improvement in technology infrastructure to support the desire and aspirations of WCLS. As an example:

North Valleys has no affordable solution to a low problem for staff and public networks, yet their demand for Internet access remains high.

In order to implement many of the plans points, access and increased bandwidth (see bandwidth thoughts below, following priority listing of recommendations) are going to be required. Although some of the solutions identified creatively suggest the use of 4G, ultimately networked photocopiers, staff mobile devices for roaming reference and circulation, self service kiosks, self registration at PAC stations, as well as the continued rise in mobile device use within the library are going to force more and more strain on networks and Wi-Fi access that are already stretched. While there is constant pressure on library systems throughout the world to do more and more with less, the truth of the matter is that without a suitable robust infrastructure to support the technology it will at some point become impossible to do more without increasing bandwidth, access, network points and the like. The technology plan alludes to these potential problems and there is a network section on page 5 of the plan, however there is no real mention of what the library system would like to prioritize within the Plan. As part of the ongoing development and evaluation process of the Plan, a section needs to detail what the library needs to do in developing the infrastructure, and if needs be, to be done building by building, as technology levels and the amount allocated for investment may vary depending on use and the level of the existing infrastructure.

Much has been written and discussed on the writing of technology plans. The general consensus suggest that incorporation of the following will result in a more comprehensive plan, as well as being able to track progress and revise goals as technology and demand continue to evolve and develop.

1. The principal problem with the Plan is the lack of budget information. Everything listed in the plan can and will have budget implications. We recognize that it is impossible to accurately predict the cost of some of these projects until the decision to implement is made and the necessary work is undertaken. However, it is possible to structure potential costs. Potential cost information should be included in the document. Technology costs range beyond the cost of implementation. Software and hardware can have, and usually do have, on-going licensing and maintenance costs that need to be factored into any decision to implement. This will, of course, have an impact on WCLS budget forecasts.

2. The Plan makes no mention of how the various technologies are evaluated, or how the technology plan itself is reviewed and evaluated, and if necessary changed as new technologies become available and user demands shift.

3. The Plan has a static feel to it. It is mentioned that the plan was created from "brainstorming sessions, and by thinking of possibilities, not just realities." This is an excellent first step but needs more precision and better documentation.

4. The steps in the document have no real time line. Although a number of the points listed give a date, e.g. May 2014, or spring 2015, the document does not mention if this particular date is an implementation date, a completion date, or merely a suggested date. The reader has no idea if the line item has in fact been completed and why that particular line item was chosen.

5. A Technology Plan should be reviewed at least every 4-6 months and those reviews documented as part of the plan, as well as any changes such as new projects or completion of projects.

Other Comments

Our primary recommendation for this document would be to re-format it and create a spreadsheet with each

line on the spreadsheet having the same columns to indicate the priority of the line-item, a potential time line for implementation, associated budget costs, training requirements, evaluation of competitive technologies, and a column to show review dates for those items not yet completed.

We have noted that the plan mentions video tutorials twice under the Koha open source ILS section as well as the following section on open source software. Similarly, self-registration is mentioned two times under kiosks, in-house and remote, as well as access to virtual branch library services. For action items such as these stated more than one time WCLS should perhaps consider these a higher priority as it goes through the prioritization process. By re-writing this document and prioritizing line items WCLS may find that certain items can be achieved quickly and for little cost. For example video tutorials can be created easily and quickly using software such as Camtasia (approx $250.00) Freeware screen casting equivalents such as Jing, and Webinaria, can also be used quickly and easily and the recordings mounted on a library web page or YouTube channel to use as finding aids. By picking a few relatively low cost easy to finish projects in conjunction with more expensive longer-term projects WCLS will be making progress and improving services.

The following paragraphs address specific action items within the Technology Plan.

Online Payment - Although on the surface online payment seems an easy way to process library financial transactions, especially fines, the reality of e-commerce is different. Most e-commerce has to involve a 3rd party company such as PayPal or Sage, both of whom are PCI (Payment Card Data Industry Security Standard) compliant, which establishes secure and controlled methods of data storage and transmission for electronic monetary transactions. These services are not free and before any implementation of e-commerce takes place it is advised to do through and detailed research to understand the technical and financial implications of implementing e-commerce. The implementation process for e-commerce can be a lengthy. WCLS should prepare fully before embarking down this path. The concept is valid. But as it is often said, "the devil is in the details."

One of the strengths of this technology plan is that staff is prepared to embrace change from existing software. It can be a hard cultural shift to move from a particular piece of software to something new as in the case of the line item to investigate Libki to replace the Envisionware software for non-windows based platforms as well as Windows platforms. This move is necessitated by the desire to expand training on computers using both Windows and Linux operating systems. If the library was to proceed with thin clients it is possible to have dual boot workstations. This should be investigated as part of any thin client project. The real success of these types of systems depends upon the evaluation and testing prior to implementation. As each line item project is initiated a comprehensive testing protocol needs to be developed to ensure the best return on the investment in the product.

Thin Clients – Thin clients have become more common in libraries in recent years. Terminal services can provide a modern windows interface to desktop PC's that are older. Add in the factor that an existing server can sometimes be re-purposed or upgraded at a low cost and it becomes an attractive option in extending the life of existing desktop installations without the need to replace every PC at the same time. The plan mentions that Washoe County is only willing to replace 91 new machines out of the 365 that should be replaced. Thin client has the potential to upgrade existing machines and should be considered a matter of priority if customer PC's need upgraded software. A single person can administrate thin clients.

However, software updates generally take a bit longer than a Zero Client. Investing in thin client architecture increases the lifespan of the hardware (up to 5 years) as there are no real moving parts, and replacement costs are usually associated with peripherals such as a mouse or keyboard. This has the effect on reducing costs in terms of IT staff, as well as maintenance costs of the hardware. The hardware itself is more energy efficient especially if it is energy star rated. Thin clients also have the advantage of providing quick access to remote workers at stations off site is required.

One of the biggest advantages is security. All thin clients access the server via the network. Different levels of security can be implemented which in turn can protect sensitive data stored on the server. As a result back up and protection of the server is the priority so that in the event of fire terminals only need to be replaced at a hardware level. If the server is secure so is the data. Infection via malware is also dramatically reduced. All software used on thin clients comes directly from the server. All patches and updates, as well as the addition of new software, are done at the server level. This helps with security and also reduces the time taken to update individual machines and reduces the costs of personnel to do so. The set up and implementation of thin client architecture can be an expensive initial outlay, long term budget savings can be made in a number of areas and should be factored into the planning phase of any implementation project.

Lockers - The lockers concept is a far more cost effective method than full blown vending machines. Library systems such as Washington County and Carver County have had good success with them. However their success depends upon the placement of the lockers in areas where the community gathers on a regular basis, and the marketing of these lockers must be kept up after implementation in order drive usage and ultimately success. Given the advent of more and faster Wi-Fi connectivity, the use of kiosks near to these sites may no longer be needed. Smartphones and tablets – and the ever-increasing use of apps and mobile PACs no longer make it necessary to provide access points. Money may need to be spent on adding a hotspot to ensure Wi-Fi connectivity in the locker areas to encourage use of an individual's own device.

Self-Registration - Although the plan highlights the idea of self-registration at PAC computers it does not mention the possibility of using of self-check machines. WCLS may want to investigate self-check alternatives along with their ideas for PAC machines as self- checks, if promoted properly, can reduce the amount of staff time spent on circulation, thereby freeing staff for more interaction with the customer as well as other duties.
There are alternatives that allow PCs to be re-tasked as self-checks with a barcode an attached scanner and, perhaps, a touch screen to facilitate ease of use. Multiple self-checks can be installed for the cost of a single custom-built machine. Since WCLS is part of an open source community, checking within the community to see what options other Kona clients have used, or have tried to use, could be instructive.

Loaning Tablets - In checking out tablets to customers WCLS may want to consider having tablets tethered within the facility for electronic magazines. This would negate the need to control them directly. Tablets could be gathered in at the end of the day for charging and deployed again first thing the following morning. If WCLS is considering a loan of tablet devices overnight it will need to look at security options and the ability to either track or disable devices. One option used by some libraries is to present a valid form of photo ID at time of checkout so if the device is not returned the user can be identified.

RDA – Having access to the open source community for Koha will provide WCLS a cost effective advantage in developing the ILS and its public access catalog. Short cuts, such as using RDA (Resource Description and Access) can be found via a subscription on the RDA website. A number of online training materials are also available. If WCLS is an OCLC member it would be possible to run a reclamation project to update records to make them RDA compliant.

Conclusion

We strongly believe the section on Network Improvements needs to be addressed first. Thin clients, mobile devices, and general connectivity will all be affected by the Network and as such the investment in finding out what the system is currently capable of, and what work and technology needs to be purchased and completed prior to the implementation of some of the other projects, will ensure that those projects -- once instigated – will be completed more quickly and smoothly.

Priority Order Recommendations

Assuming WCLS is satisfied with the current network capability we recommend the following order for the implementation schedule for the Technology Plan.

1. **Thin Clients** – The Technology Plan makes clear that replacing aging PCs is a priority. Thin Clients can provide significant cost savings in terms of purchasing, maintenance, and administrative costs although WCLS may not be able to replace all the PCs they want at the same time.

   There could be a phased implementation of Thin Clients. This would allow the Library System to perfect the implementation process as well as the image that works best. It would also minimise the impact on your customers, as well as also providing an easy solution for the dual boot machines listed in the Plan.

2. Koha ILS Upgrades – Koha upgrades were mentioned a number of times; as follows:

- Overdrive API;
- Database API;
- Acquisitions module;
- Catalog clean up;
- Responsive design for public catalog; and
- Koha functionality will also affect use of kiosks in-house and remotely.

All of these do not have to be implemented simultaneously An on-going project to focus on an element at a time would eventually be completed, depending on what is already available from the open source community and what needs to be developed. Completing these tasks would finish assigned tasks in multiple areas of the Technology Plan.

A **Virtual Branch including content creation:** This is the next logical step after the upgrades to Koha. It can be done at the same time as the Koha upgrades and encompasses a number of different areas that directly affect services and customers

B **Kiosks:** Once the Thin Clients is in place and the upgrades to Koha and content are complete the library will have a better product to market through kiosks, the core piece of which will be the virtual branch and the services it presents, not just registration and check out.

C **Mobile Staff:** This could be fit in anywhere but staff mobility and its associated cost will be better served once they have a more robust suite of services from Koha that can be interfaced by a well designed and optimized web front end.

RFID

Radio Frequency Identification Data (RFID) is the wireless use of electromagnetic fields to transfer data for the purposes of automatically identifying and tracking tags attached to objects.

The tags contain electronically stored information. Some tags are powered by electromagnetic induction from magnetic fields produced near the reader. Other types collect energy from the interrogating radio waves and act as a passive transponder. Still others have a local power source, e.g. a battery, and may operate at hundreds of feet from the reader. Unlike a barcode, the tag does not necessarily need to be within line of sight of the reader, and may be embedded in the tracked object. RFID is one method for Automatic Identification and Data Capture (AIDC).

RFID tags are used in many industries, including an increasing number of public libraries. An RFID tag attached to an automobile during production can be used to track its progress through the assembly line. Pharmaceuticals can be tracked through warehouses. Livestock and pets may have tags injected, allowing positive identification of the animal. RFID tags can be attached to cash, clothing, possessions, books, or other forms of library materials.

For libraries, the benefits are these:

1. Placement of a tag reader at, for example, a book return chute, will automatically check-in the item, capture it if there is a hold (or reserve) on the item, and let you know if the item is overdue.

2. Self-check is possible without RFID, but an Automated Materials Handling System (AMHS) is not feasible. An AMHS automatically sorts returned materials by type or format or location and is another labor-saving, productivity enhancing piece of equipment and benefit of RFID.

3. The inventory of the collection can be accomplished much faster and with greater accuracy by "wanding" a shelf of books to determine if there is a missing item (of course, the item could be checked-out or misshelved).

4. Items can even be checked-out much faster. With the right system a stack of books can be checked out at once instead of one item at a time.

RFID tags have dropped in price considerably since their introduction into the library marketplace. However, like many other products, "you get what you pay for." Buying the least expensive tag may well cost more in the long run. A reasonable cost estimate is in the range of $0.40 - $0.50 per tag for a book and slightly more, perhaps $0.10 - $0.15, for a tag for a DVD or a CD. Bulk purchases should reduce the price. The cost of inserting the tag will depend upon labor costs at the library.

Recommendation – The WCLS should initiate a RFID project by "tagging" all new acquisitions for the next five years. Concurrently, if the present ILS is capable, a "dusty book" report should be run twice. In year one it should look for items (circulating items) that have not been borrowed in the last five years (if 2015 is year one, then items last borrowed in 2009 and before would show up on the report and become prime candidates for withdrawal. Then, in 2018 (there has now been three + years of "tagging," do another "dusty book" report and use a three year window. Once all of that has been accomplished, and the five-year timeframe has elapsed, it would be time to tag the balance of the collection.

If Washoe County's financial policies count library materials – or at least library books – as a capital investment then a case can be made to treat RFID tags in a like manner since they are helping secure the investment in the books.

Bandwidth

In computer networking and science bandwidth, network bandwidth, data bandwidth, or digital bandwidth is a measurement of bit-rate of available or consumed data communication resources expressed in bits per second or multiples of it (bit/s, kilobit/s, Megabit/s,

Gigabit/s, etc.). This is in contrast to the use of the term bandwidth in the field of signal processing. In textbooks or wireless communications, etc. bandwidth is used to refer to analog signal bandwidth measured in hertz. The connection to the computing term is that, according to Hartley's Law, the digital data rate limit of a physical communication link is proportional to its bandwidth in hertz.

Network Bandwidth Capacity sometimes defines the net bit rate, or physical layer (the useful bit rate), channel capacity, or maximum throughput of a logical or physical communication path in a digital communication system. For example, bandwidth tests measure the maximum throughput of a computer network. The reason for this usage, according to Hartley's Law, the maximum data rate of a physical communication link is proportional to its bandwidth in hertz, which is also called frequency bandwidth, spectral bandwidth, RF bandwidth, signal bandwidth or analog bandwidth.

Network Bandwidth Consumption in bit/s may also refer to consumed bandwidth, corresponding to achieved throughput, i.e. the average rate of successful data transfer through a communication path. A bit stream's bandwidth is proportional to the average consumed signal bandwidth in Hertz during a studied time interval.

There is a huge amount of literature about libraries and bandwidth. As a result, there is no single recommendation that can be used as a definitive figure. In a recent report the FCC upgrades the standard from 200 kilobits per second downstream, a standard set over a decade ago when web pages were largely text-based, to 4 megabits per second (Mbps) downstream and 1 Mbps upstream. This is a minimum speed generally required for using today's video-rich broadband applications and services, while retaining sufficient capacity for basic web browsing and e-mail. "

The amount of bandwidth required is further distorted by the number of devices being used at any given connection. PCs and devices both wired, and using Wi-Fi can have an impact on real bandwidth availability, and not the speeds advertised by the ISP. As a result, though the library may subscribe to a high-speed connection, the user experience can be one of slow connectivity and near dial-up speeds. As an example, take a common scenario: a public library has 15 public access workstations in constant use; it offers Wi-Fi that supports another 10-15 simultaneous connections, typically in use; the library has a T1 connection (1.5 Mbps or megabits per second leased line broadband service); and the Wi-Fi and public access workstations share the same connection. With up to 30

devices sharing the same 1.5 Mbps connection, the connection speed at the device level is the equivalent of dial-up service, severely affecting the quality of the user experience."

In most cases user at libraries are heavy users who not only use e-mail and social media but are more likely to stream video and multimedia content as well. As ISP's provide bandwidth usually on a tiered level the best way to calculate bandwidth "requires determining the maximum number of simultaneous users and multiplying that number by the desired level of bandwidth capacity the library wants to provide. Each public access computer or Internet-enabled device provided in the library counts as one user. For libraries with wireless networks for patrons, the number of wireless users is estimated at one wireless user per three public computers users."

Recommendations

Therefore, in order to meet demand for heavy content usage the consultants recommend the following ranges:

- Minimum bandwidth = 512 kbps download 128kbps upload per computer;
- Medium range = 768 kbps download 256 kbps upload per computer; and
- Top end = 1024 kbps download 512 upload per computer.

Although these figures may look low at first glance it has to be remembered that this is per computer so the actual amount of bandwidth required to meet these levels is based upon the number of computers and Wi-Fi connections made available rather than the service offered by the ISP .

For example, North Valleys has 17 wired and five wireless devices -- a total of 22 devices with the current amount of bandwidth available being 6mbps download and 768 mbps upload. In order to run these 22 devices at the minimum bandwidth requirement of 512 download and 128 upload it would be necessary to add 14.5mbps download and 3.625 mbps upload. To reach the medium range it would be necessary to add 21.75mbps upload and 7.25 download. And, to reach the top end, 29mbps upload and 14.5mbps download would have to be added to the existing bandwidth at North Valleys Branch Library.

In as much as the consultants do not have exact figures of PC and devices for every branch library we are unable to calculate the required bandwidth that would be need to be added to meet the defined levels. In ad-

dition, it needs to be remembered that if the supplied figures that are for public PCs only additional bandwidth would need to be added in order to ensure that staff PCs operate at the same level.

When all is said and done the demand and need for increased bandwidth is only going to increase in the months and years ahead. It would be easy to say that WCLS should seek as much bandwidth as they can obtain. But, the reality of cost of increasing bandwidth is a significant one. Therefore, the consultants recommend at this time a goal of implementing 512 kbps download 128kbps upload per computer. This will be achieved once WCLS has defined what the true current bandwidth allocation is, and how many computers will be accessing it in a given branch. Also, any future PCs (or other devices) added to a location would require the purchase of additional bandwidth in order to maintain the allocation.

WCLS Branch Libraries – Bandwidth

The Technology Plan document has four columns. The first column is a listing of the branch libraries. The second column, Bandwidth, deals with the current download and uploads speeds available to the users at each location. For example, Gerlach has a speed of 384 KBPS for downloading data and upload speed of 384 KBPS. Duncan Traner, Verdi, Incline Village, and North Valleys all have a download of 6MPBS and an upload speed of 768KBPS. The six branch libraries on Charter have 100 MBPS download speed and a 5MBPD upload speed. The third column is "Info," and the fourth is "Build Outs."

Information Column

The information ("Info") column describes the type of connection(s) in place at this time. The consultant has included descriptions of what the various terms mean, such as DSL T- 1, etc. (see below). Given the information provided in the spreadsheet, Gerlach has less bandwidth than Duncan Traner, Verdi, Incline Village, and North Valleys (MBPS is bigger than KBPS). If Duncan Traner is closed the money currently spent for DSL there could be re-tasked along with the PC's to other branch libraries.

The Gerlach speed seems slow considering that it is sharing a T1 line. On paper, the Senior Center is the best of the grouping of libraries and no change/modification is recommended. One or two additional PCs from DuncanTraner could be re-tasked without much impact on bandwidth.

The six branch libraries using Charter listed as 100

MBPS download speed and 5 MBPS upload speed are doing fine. 100 MBPS is a good speed for most users. The document does not, however, state if that speed is constant, or if it varies at peak times. Assuming WCLS is satisfied with these speeds the consultant suggests that the focus of bandwidth investment initially focus be on North Valleys, Incline Village, Verdi (if it remains open), and Gerlach. As the Technology Plan highlights, North Valley specifically is suffering the most from bandwidth problems.

Build Out

The document states that the Charter build out for North Valleys will be complete January 2015. Given that bandwidth is a problem there we recommend conferring with Charter about alternatives to increase from DSL to fiber optic, and what would be involved in putting a T-1 line or equivalent alternative. The six libraries on Charter with the 100mbps 5mbps are not referenced in the Technology Plan as problematic. If this is so, we believe it would be best to bring up the remaining branch libraries to at least the same standard, prioritizing North Valleys first if the current Charter build out has not already done the job.

The Plan does, however, mention WCLS would like to create a staff wireless network in the larger libraries for mobile devices. The Bandwidth document states that some bandwidth has been split off for the six libraries on Charter for staff use. If this has been completed does it provide staff with enough bandwidth for the tasks they require? Have they been able to progress per the Technology Plan with the implementation of mobile devices for roaming reference, check out, etc. Again, no mention is made if this has or has not been done.

Finally, there is no mention in either document of the monitoring of bandwidth. There are number of online tools such as Net Flow Analyzer that allow the setting of thresholds for bandwidth use, and send notifications via e-mail alerts when problems of thresholds are exceeded. WCLS may already have something similar in place. But, if there were problems a fairly inexpensive set of tools would provide a stronger ability to monitor, identify times that are problematic, and enforce better usage controls to optimize usage. In addition, provide hard data to show that development of expensive options such as Fiber optic is required in order to maintain service levels.

Terminology

Broadband - Can be accessed and its services delivered via varying technologies. These technologies will

decide upon the speed of the connection being used, which in turn contributes to the speed at which the Internet, downloading files, watching videos, listening to music, etc. is operating at.

In its most basic form, speed determines quality for video, music, etc. At some point almost everyone has been stuck with the dreaded phrase "buffering," or been disappointed by the lack of quality for a movie, etc.

The two main factors in measuring the speed of a connection:

1. Bandwidth: This is the size of the conduit within which the data travels.

2. Speed: This is the rate at which the data travels.

Using this broad definition it becomes apparent that if a library has a lot of bandwidth then more data can travel, which in turn affects the speed at which the data travels. However, as the bandwidth is used and more data demand is placed upon it, the speed at which the data flows decreases with the inevitable consequences. Because of this it is essentially impossible for ISP (Internet Service Providers) to maintain a consistent speed, hence the reason that when advertising their services they always show a range of service speed that they can provide, e.g. 75 Mbps/35 Mbps. None of the speeds shown in the document cited here state a range of speeds. Therefore, we are assuming WCLS as probably put the top end of the speed range in the Bandwidth column.

Traditionally the majority of users download far more data that they ever upload. Theoretically the speed for either action should be the same; however the reality is that for most users the download speed is usually faster than the upload speed, although this can be addressed with an ISP if the user/s wants.

Measurements Used – Broadband speed is measured in megabits per second, more commonly known as Mb or Mbps. In the early days of Internet connectivity 56kbits was considered the common standard for most home connections with, 1 byte = 8 bits and 1000 bits = 1 kilobyte. Since the advent of broadband (measured in megabits per second) speeds have become much higher and faster.

DSL – A Digital Subscriber Line (DSL) is one of the most common forms of Internet access. ISPs providing this service often use existing telephone lines that are copper based and generally installed in homes and businesses. Alternatively, those with cable can also access the Internet broadband using the coaxial cables that are part of the set up for televisions receiving a cable signal.
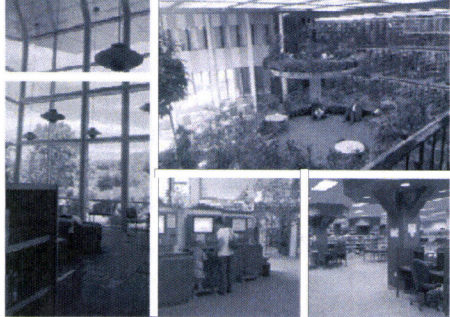
Fiber Optic Broadband – The main alternative to DSL is fiber optic broadband. The cables for fiber optic are very narrow glass bands. Electrical signals are converted to light that is carried in the glass fibers. Fiber optics transmit data at a far superior rate to that of DSL, but factors such as how the connection is configured can affect the speed at which data travels. Fiber can either be run directly to a business or home (or a library), or in some cases it may be run to a community where the existing telephone lines (copper) supply the signal to individual properties as required.

Wireless Broadband – Essentially wireless broadband uses a radio link between the ISP and the user without the need for cabling. This is most advantageous for areas in rural communities that require Internet access. However, the downside is that speeds are similar to DSL.

T-1 – A T-1 line is a fiber optic line that is bought into a building by the company (usually a telephone company) providing the service. T-1 lines can carry 24 digested voice channels and/or data at varying rates. Assuming that the shared T-1 line is for data only, rather than a combined telephone/data line, it is most likely plugged into the network router at the building, e.g. branch library. The T-1 line carries data at roughly 192,000 bytes a second. To put this in perspective that is about 60 times faster than a normal modem. Typically a T-1 line costs about $1,000-$1,500 a month (but this may, of course, vary depending on the service provider location, etc.).
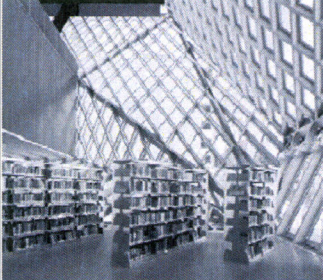
Satellite Broadband – This is a good option for those areas that would be to expensive to cable. However this can be problematic in bad weather and can sometimes cause delays and spotty service.

Washoe County Library System Master Plan

Goals | Washoe County Library System Master Plan
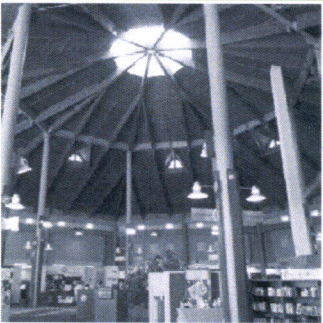
- Define the needs of the library system thru 2035
- Assessment of current facilities
- Projection of future needs
- Cost model and prioritization
- Define a clear path forward

Process | Washoe County Library System Master Plan

- Questionnaires distributed to each library
- Tours of facilities
- Interviews with library staff
- Meetings with steering committee
- Data collection and analysis

Site Analysis | Washoe County Library System Master Plan
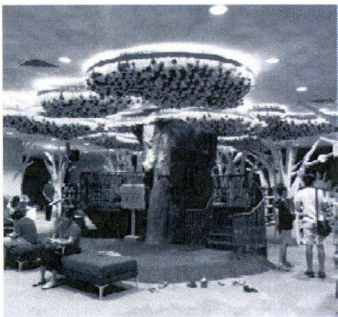
- Location of each branch
- Population of service area for each library
- Spatial analysis of building and site
- Parking analysis
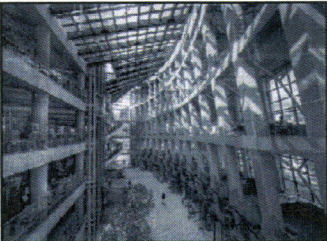
Demographic Analysis | Washoe County Library System Master Plan

- Age cohort
- Race/Ethnicity
- Education
- Income
- Household composition
- Others

Statistical Analysis | Washoe County Library System Master Plan

- Checkouts
- New registration
- Gate count
- Computer usage
- Program attendance
- Meeting room use

System Recommendations | Washoe County Library System Master Plan

- Increase hours of operation
- Improve technology-new computers, increased bandwidth
- Study cost and service implications of selective outsourcing
- Selectively downsize Audiobook, DVD, and music CD collections
- Consider after hours pickup lockers
- Implement RFID tagging of new acquisitions

Facility Recommendations | Washoe County Library System Master Plan
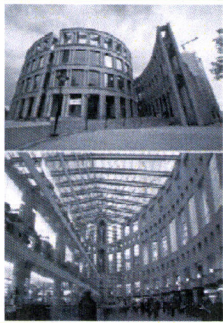
- Individual Facility Recommendations
  - Space planning to increase efficiency
  - Renovation
  - Additions where possible
  - New construction where required
  - 4 optional approaches to construction and financing
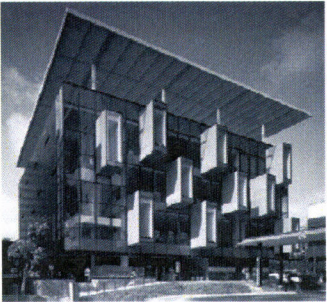
Major Recommendations | Washoe County Library System Master Plan

- Close Verdi and Duncan Traner
- New Libraries
  - Downtown Reno
  - North Valleys
  - Sierra View
  - Sparks
- Consolidate Downtown and Sierra View (Options 2 & 4 only)

Priorities| Washoe County Library System Master Plan

- New
  1. North Valleys
  2. Sparks
  3. Sierra View
  4. Downtown
- Expansions
  1. Senior Center
  2. South Valleys
  3. Spanish Springs

Option 1 (Table 10A)| Washoe County Library System Master Plan

Library	Renovation	Expansion	New Building	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	128,000	69,175	$59,520,000
Incline Village	X			11,045	11,045	0	$102,760
North Valleys			X	9,178	23,500	14,322	$10,898,500
Northwest Reno	X			28,634	28,634	0	$265,200
Senior Center		X		800	1,225	425	$135,000
Sierra View			X	23,130	50,000	26,870	$22,550,000
South Valleys	X	X		17,500	41,000	23,500	$13,689,375
Spanish Springs	X	X		30,000	43,000	13,000	$13,214,500
Sparks			X	22,832	63,500	40,668	$29,527,000
Totals				**201,944**	**389,904**	**187,960**	**$149,902,335**

Option 2 (Table 10B)| Washoe County Library System Master Plan

Library	Renovation	Expansion	New Building	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	155,000	96,175	$74,245,000
Incline Village	X			11,045	11,045	0	$102,760
North Valleys			X	9,178	29,760	20,582	$13,451,520
Northwest Reno	X			28,634	46,845	18,211	$10,098,800
Senior Center		X		800	1,740	940	$100,000
South Valleys	X	X		17,500	54,130	36,630	$18,240,965
Spanish Springs	X	X		30,000	55,280	25,280	$13,704,220
Sparks			X	22,832	81,640	27,168	$39,105,560
Totals				**201,944**	**435,4400**	**233,576**	**$169,058,825**

Option 3A (Table 10 C) | Washoe County Library System Master Plan

Phase 1

Library	Renovation	Expansion	New Building	Existing Size (SF)	2025 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	65,000	6,175	$29,315,000
Incline Village	X			11,045	11,045	0	$102,760
North Valleys			X	9,178	13,500	4,322	$6,088,500
Northwest Reno	X			28,634	28,634	0	$264,860
Senior Center		X		800	800	0	$60,000
Sierra View			X	23,130	30,000	6,870	$13,530.00
South Valleys	X	X		17,500	32,500	15,000	$7,514,375
Spanish Springs	X	X		30,000	37,500	7,500	$4,137,500
Sparks			X	22,832	33,500	10,688	$15,108,500
Totals				**201,944**	**252,479**	**50,535**	**$76,121,495**

Option 3B (Table 10 C) | Washoe County Library System Master Plan

Phase 2

Library	Renovation	Expansion	New Building	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	128,000	63,000	$41,895,000
Incline Village	X			11,045	11,045	0	$0
North Valleys			X	9,178	23,500	10,000	$6,260,000
Northwest Reno	X			28,634	46,845	18,211	$11,400,090
Senior Center		X		800	1,225	425	$95,000
Sierra View			X	23,130	50,000	20,000	$13,700,000
South Valleys	X	X		17,500	43,000	10,500	$7,402,500
Spanish Springs	X	X		30,000	43,000	5,500	$3,877,500
Sparks			X	22,832	63,500	30,000	$19,950,000
Totals				**201,944**	**410,115**	**208,171**	**$104,580,090**

Option 4A (Table 10 D) | Washoe County Library System Master Plan

Phase 1

Library	Renovation	Expansion	New Building	Existing Size (SF)	2025 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	100,000	41,175	$46,500,000
Incline Village	X			11,045	11,045	0	$102,760
North Valleys			X	9,178	15,000	5,822	$6,765,000
Northwest Reno	X			28,634	28,634	0	$264,860
Senior Center		X		800	1,225	425	$60,000
South Valleys	X	X		17,500	30,000	12,500	$6,354,375
Spanish Springs	X	X		30,000	45,000	15,000	$8,343,500
Sparks			X	22,832	33,500	10,688	$23,250,000
Totals				**201,944**	**377,404**	**35,460**	**$91,640,495**

Option 4B (Table 10 D)| Washoe County Library System Master Plan

Phase 2

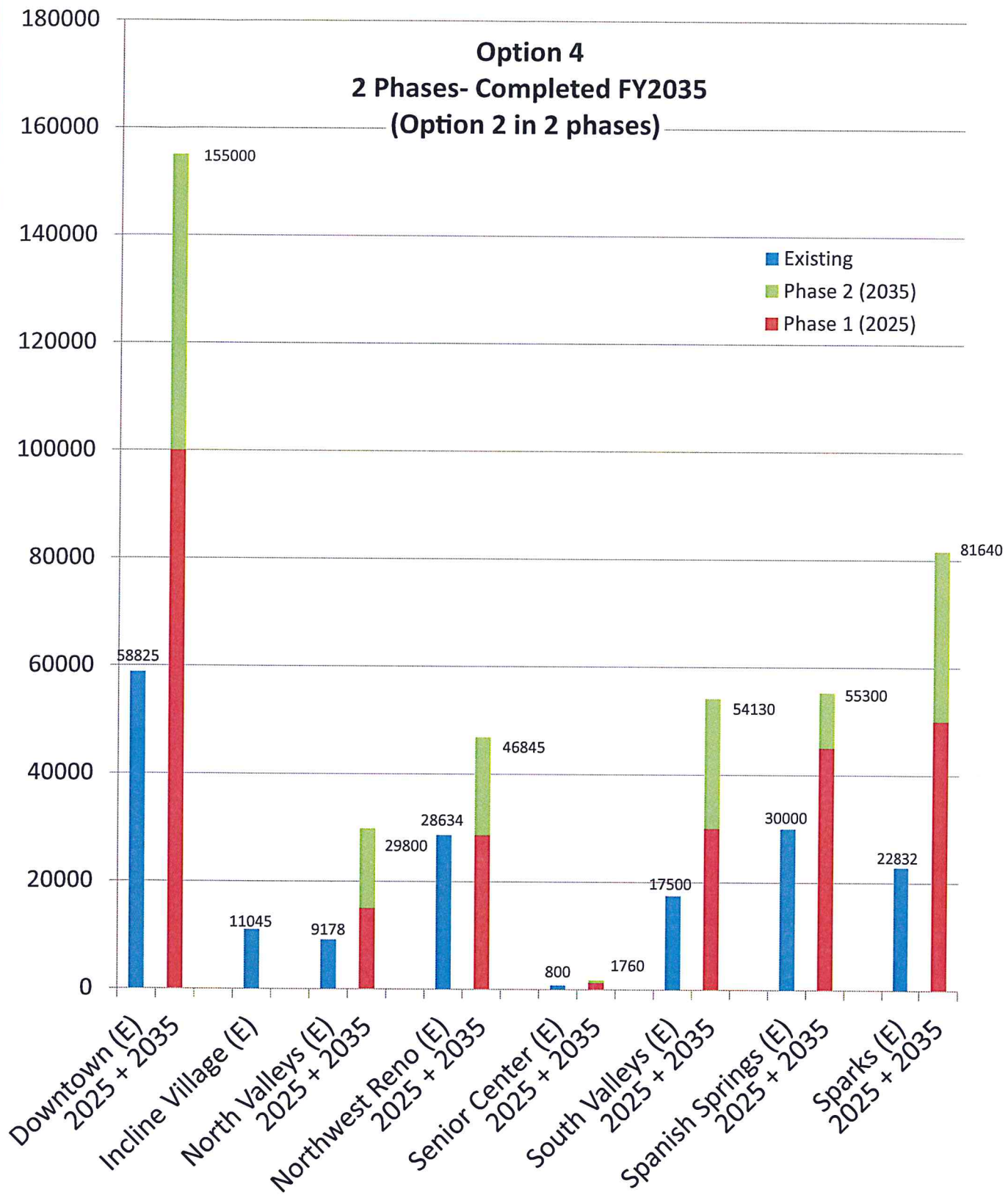| Library	Renovation	Expansion	New Building	Existing Size (SF)	2035 Size (SF)	Increase Size (SF)	Total Est. Project Cost
Downtown Reno			X	58,825	155,000	55,000	$37,675,000
Incline Village	X			11,045	11,045	0	$0
North Valleys			X	9,178	29,800	14,800	$9,264,800
Northwest Reno	X			28,634	29,800	14,800	$11,746,095
Senior Center		X		800	1,760	535	$85,000
South Valleys	X	X		17,500	54,130	24,130	$17,518,380
Spanish Springs	X	X		30,000	55,300	10,300	$7,055,500
Sparks			X	22,832	55,300	10,300	$21,040,600
Totals				**201,944**	**392,135**	**190,191**	**$104,385,375**

Option Comparison| Washoe County Library System Master Plan

- Option 1 $149,902,335

- Option 2 $169,048,825

- Option 3
  - Phase 1 (2015-2025) $76,121,495
  - Phase 2 (2025-2035) $104,580,090
  - Total Cost $180,701,585

- Option 4
  - Phase 1 (2015-2025) $91,640,495
  - Phase 2 (2025-2035) $104,385,375
  - Total Cost $196,025,870

The attached document was submitted to the **Washoe County Board of Commissioners** during the meeting held on _____2-24-15_____.

by ____Annie Maurins - Library____

for Agenda Item No. ___15___

and included here pursuant to NRS 241.020(7) as amended by AB65 of the 2013 Legislative Session.

Option 3
2 Phases- Completed FY2035
(Option 1 in 2 phases)

WASHOE COUNTY LIBRARY SYSTEM
2015 MASTER PLAN
LIBRARY SIZE PROJECTIONS
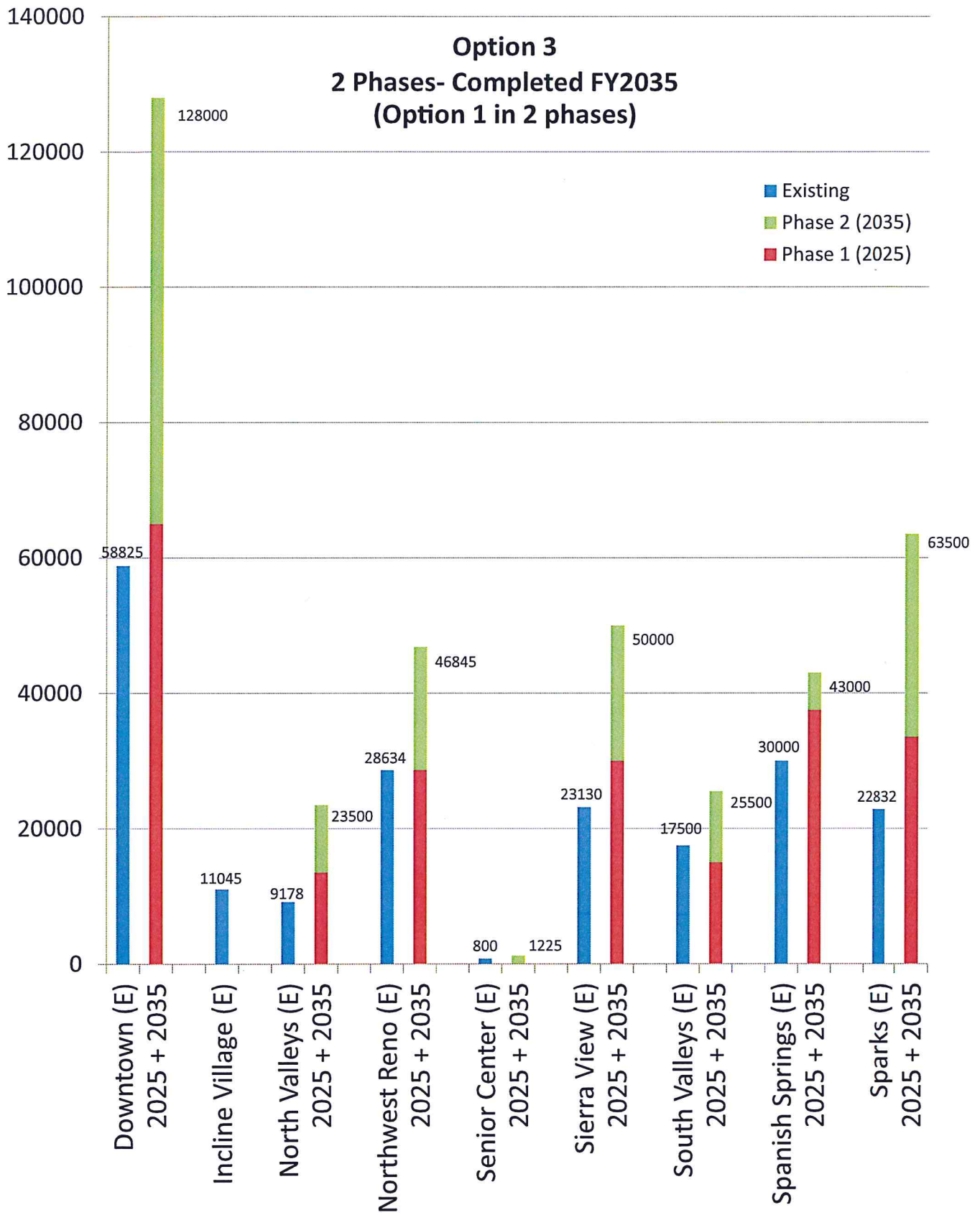
Option 4
2 Phases- Completed FY2035
(Option 2 in 2 phases)

Legend:
- Existing
- Phase 2 (2035)
- Phase 1 (2025)

Data labels:
- Downtown (E) 2025 + 2035: 58825 / 155000
- Incline Village (E) 2025 + 2035: 11045
- North Valleys (E) 2025 + 2035: 9178 / 29800
- Northwest Reno (E) 2025 + 2035: 28634 / 46845
- Senior Center (E) 2025 + 2035: 800 / 1760
- South Valleys (E) 2025 + 2035: 17500 / 54130
- Spanish Springs (E) 2025 + 2035: 30000 / 55300
- Sparks (E) 2025 + 2035: 22832 / 81640

WASHOE COUNTY LIBRARY SYSTEM
2015 MASTER PLAN
LIBRARY LOCATION ANALYSIS

COLLABORATIVE
DESIGN
STUDIO architecture of experience and place

WASHOE COUNTY
LIBRARY SYSTEM
www.washoecountylibrary.us