



2020 Technology Planning Guide

Narrative for WVLS Member Libraries

Revision 1.1 (draft)

Introduction:

The “2020 Technology Budget Planning Details for WVLS Member Libraries” follows the service outline on the next page. The detail sheets include the planning year, 2020, and a forecast for 2021. In previous guides a two-year forecast was presented but WVLS has worked to move the planning year out well in advance of the planning year’s typical budgeting season. Our goal is to maintain the Technology Planning Guide’s applicable planning year approximately one year in advance giving member libraries a full year to plan for core technology services. Further, WVLS employs a “bill behind” model for the Digital Library shares meaning in any given year WVLS will pay WPLC for that year’s amount and then use that amount in the subsequent year for library budget planning. This means that member libraries will have about 18 months to plan against 2020 Digital Library shares as a concrete expenditure and should have close to two years for 2021 planning and beyond.

The inclusion of the Digital Library shares in the planning guide will not affect the accuracy of the budgeting details for the current planning year. The forecast year will be subject to change pending the actual amounts for the specific year determined by WPLC’s partner-level formula for shares and the WVLS formula for share distribution (based on population and usage). WVLS will continue to work with the membership to determine if this satisfies longer range budgeting needs or if we can find even better ways to predict expenditures in forecast years.

Our plan remains to reshape this guide into a more accessible and dynamic form as an online web resource. The conversion of this 2020 guide into a dynamic online resource is still the firm target. We will be working toward that in 2019 in the hopes of publishing the 2021 guide as an online resource natively. 2018 put the ability of our LEAN WI partnership to absorb significant change to the test. We were able to sustain services, and even finalize the majority of network upgrade and Active Directory projects effectively through some disruptive staffing changes in both parties. 2019 is seeing renewed pressures for the completion of core services “flyers” with the inclusion of Northern Waters Library Service into the LEAN WI partnership and we are planning to complete documentation in time for the 2021 planning guide (August-Sept. 2019).

The service outline following this introduction highlights the various core, specialize, and consultation services libraries have access to as a system membership benefit. Unless otherwise noted, these services are included in Libraries Win service membership without any additional individual/component costs.

For all technology goals, long and short-range planning, or other consultation needs please submit inquiries to the Help Desk (help@librarieswin.org) or directly to the technology consultant, Joshua Klingbeil (it.director@wvls.org).



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Service Outline:

Libraries Win Core Technology Services Include:

- General technical support, priority for Core Technology standards (this list)
- Local and wide area network equipment and operations management
- Computer procurement, staging, deployment, and maintenance (for supported models)*
- Fileserver / Filesharing hosting
- System state software management (Faronics Deep Freeze)
- Antivirus software management (Faronics Antivirus)
- Computer session software management (Pharos Signup)
- Automated installation and update maintenance for various third-party software applications (PDQ Deploy)
- Email account hosting for library staff (Office 365 – Exchange Online)
- Office Desktop Licensing for library staff** (Office 365 Pro Plus)

Libraries Win Specialized Technology Services Include:

- Illuminating Our Northwoods History (ION History) Digitized Content Repository (<https://ion.librarieswin.org/>)
- Website hosting (including website migration assistance and website management training)
- SharePoint Teams and Sites hosting
- Custom-use virtual server hosting**

Libraries Win Technology Consultation Services Include:

- Long and short-range technology plan review, assessment, and/or development
- Computer, software licensing, and other technology-related lifecycle planning and budgeting guidance
- Grant management assistance
- Collaboration facilitation
- Technology infrastructure improvement projects (including as part of new building or major renovation projects)

* Libraries will be invoiced for the direct cost of computers procured through WVLS.

** Additional costs may apply. Appropriate Office Desktop licensing for non-staff use (eg public computers) must be maintained by the library. Custom-use virtual server hosting may incur a capacity recovery cost, dependent on project status and capacity provisioned.

2020 Technology Budget Planning Details for WVLS Member Libraries

WVLS Member Libraries	Libraries Win - Membership Services					Virtual Desktops ⁷	Digital Library ⁸	2020 Total Share	Previous Share (2019)	Core Services Change from 2019 ⁵	Other: TEACH / BadgerNet ⁴
	PCs ¹	Base	+ PC ²	New Integrated Services ³	2020 Totals						
Abbotsford Public Library	11	\$ 1,350.00	\$ 275.00	\$ -	\$ 1,625.00		\$ 566.18	\$ 2,191.18	\$ 3,402.20	\$ (1,211.02)	\$ 1,200.00
Antigo Public Library	40	\$ 4,500.00	\$ 1,000.00	\$ -	\$ 5,500.00		\$ 3,888.01	\$ 9,388.01	\$ 13,684.50	\$ (4,296.50)	\$ 4,800.00
Colby Public Library	11	\$ 1,350.00	\$ 275.00	\$ -	\$ 1,625.00		\$ 1,087.95	\$ 2,712.95	\$ 3,768.30	\$ (1,055.35)	\$ 1,200.00
Crandon Public Library	10	\$ 1,350.00	\$ 250.00	\$ -	\$ 1,600.00		\$ 1,081.27	\$ 2,681.27	\$ 3,824.10	\$ (1,142.83)	\$ 1,200.00
Dorchester Public Library	8	\$ 1,350.00	\$ 200.00	\$ -	\$ 1,550.00		\$ 253.93	\$ 1,803.93	\$ 2,963.17	\$ (1,159.24)	\$ 1,200.00
Edith Evans Memorial Library (Laona)	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 260.25	\$ 1,835.25	\$ 2,982.92	\$ (1,147.66)	\$ 1,200.00
Edward U. Demmer Memorial Library (Three Lakes)	14	\$ 1,350.00	\$ 350.00	\$ -	\$ 1,700.00		\$ 765.62	\$ 2,465.62	\$ 3,467.78	\$ (1,002.17)	\$ 1,200.00
Frances L. Simek Memorial Library (Medford)	22	\$ 1,500.00	\$ 550.00	\$ -	\$ 2,050.00		\$ 2,758.23	\$ 4,808.23	\$ 5,759.89	\$ (951.66)	\$ 1,200.00
Granton Community Library	6	\$ 1,350.00	\$ 150.00	\$ -	\$ 1,500.00		\$ 174.91	\$ 1,674.91	\$ 2,900.42	\$ (1,225.51)	\$ -
Greenwood Public Library	8	\$ 1,350.00	\$ 200.00	\$ -	\$ 1,550.00		\$ 663.77	\$ 2,213.77	\$ 3,381.85	\$ (1,168.07)	\$ 1,200.00
Jean M. Thomsen Memorial Library (Stetsonville)	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 167.58	\$ 1,742.58	\$ 2,960.83	\$ (1,218.25)	\$ 1,200.00
Loyal Public Library	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 450.61	\$ 2,025.61	\$ 3,173.95	\$ (1,148.34)	\$ 1,200.00
Marathon County Public Library ⁶	150	\$ 6,900.00	(port rate - all locations)		\$ 6,900.00		\$ 28,967.16	\$ 35,867.16	\$ 35,884.67	\$ (17.50)	\$ -
Minocqua Public Library	32	\$ 1,500.00	\$ 800.00	\$ -	\$ 2,300.00		\$ 3,503.90	\$ 5,803.90	\$ 6,598.32	\$ (794.42)	\$ 1,200.00
Neillsville Public Library	12	\$ 1,350.00	\$ 300.00	\$ -	\$ 1,650.00		\$ 1,083.56	\$ 2,733.56	\$ 3,881.10	\$ (1,147.53)	\$ 1,200.00
Owen Public Library	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00		\$ 541.02	\$ 2,066.02	\$ 3,423.97	\$ (1,357.95)	\$ 1,200.00
Rhineland District Library	40	\$ 1,650.00	\$ 1,000.00	\$ -	\$ 2,650.00		\$ 5,255.05	\$ 7,905.05	\$ 9,030.45	\$ (1,125.40)	\$ 1,200.00
Rib Lake Public Library	12	\$ 1,350.00	\$ 300.00	\$ -	\$ 1,650.00		\$ 389.36	\$ 2,039.36	\$ 3,269.76	\$ (1,230.40)	\$ 1,200.00
T.B. Scott Free Library (Merrill)	44	\$ 1,650.00	\$ 1,100.00	\$ -	\$ 2,750.00		\$ 4,656.97	\$ 7,406.97	\$ 8,305.25	\$ (898.28)	\$ 1,200.00
Thorp Public Library	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 679.10	\$ 2,254.10	\$ 3,334.22	\$ (1,080.12)	\$ 1,200.00
Tomahawk Public Library	16	\$ 1,350.00	\$ 400.00	\$ -	\$ 1,750.00		\$ 2,038.78	\$ 3,788.78	\$ 5,155.76	\$ (1,366.99)	\$ 1,200.00
Wabeno	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00		\$ 144.56	\$ 1,669.56	\$ 2,830.07	\$ (1,160.51)	\$ 1,200.00
Westboro Public Library	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 87.68	\$ 1,662.68	\$ 2,814.63	\$ (1,151.95)	\$ 1,200.00
Western Taylor County Public Library	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00		\$ 340.91	\$ 1,915.91	\$ 3,118.79	\$ (1,202.88)	\$ 1,200.00
Withee Public Library	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00		\$ 212.74	\$ 1,737.74	\$ 2,890.11	\$ (1,152.36)	\$ 1,200.00

¹ Estimated active "traditional" staff or patron computers only. **Please request PC count adjustments by Nov 16, 2019**

² Utilized to support equitable sharing of per-computer related expenses (eg Antivirus, DeepFreeze, LogMeIn Licensing).

³ Integrated services services introduced in 2018, including lifecycle management for routers, switches, and managed WiFi are now included in the Base. No new integrated services are expressly planned for 2020. This column is intended to highlight the expansion of services to meet needs/demands for a given year and will be merged into the base column in subsequent planning guides. MCPL works in partnership with the City-County IT Commission (CCITC) to self-manage all HQ and branch network routing and switching equipment and managed WiFi, operating within a Marathon County focused shared services stack (with CCITC, Northcentral Technical College, and other educational and governmental organizations).

⁴ In 2020, TEACH will be sending invoices directly to libraries. This column will be removed in future plans, and a reminder fixed in the planning narrative. MCPL opted out of BadgerNet services, utilizing cable broadband internet services for branch interconnects, Wausau CAN with a WVLS-affiliate WiscNet transit connection, and direct port attachment to WVLS WAN. Granton has previously expressed an interest in establishing its own BadgerNet circuit, but for accuracy in planning against current operations, its BadgerNet cost estimate has been zero'd out.

2020 Technology Budget Planning Details for WVLS Member Libraries

- ⁵ Reflects the removal of BadgerNet considerations (WVLS passthrough) for all members as TEACH will be sending BadgerNet service invoices directly to member libraries. Differences in Wisconsin Digital Library cost shares from the previous year are reflected. Adjustments to estimated computer counts may be reflected. Confirm final PC counts by Nov 15, 2019 for invoicing.
- ⁶ MCPL receives a single, discounted port rate for all branches as it self-manages its WAN interconnections. Shared license costs are built in (also discounted due to lower relative usage).
- ⁷ Virtual Desktops will likely be phased out by the end of 2019 due to reduction in costs for physical computers. Remaining virtual desktop instances will be maintained as feasible, with computer replacement as end of lifecycle replacement strategy.
- ⁸ WVLS manages the Digital Library Shares through WVLS Technology Services to simplify passthroughs. A "bill behind" model is used for the Digital Library shares. 2018 was a "bridge year" with Digital Libraries Shares tied to the 2017 WPLC cost share. 2019 utilized the 2018 WPLC cost share which includes our portion of the buying pool increase. 2020 will utilize the 2019 WPLC cost share.

NOTE: This component remains variable from year to year and is thus subject to change for the 2nd and third "preview" years in these details sheets.

NOTE: It is recommended that libraries budget for approximately $1/n$ (where 'n' is the supported product life in years) of the replacement cost of any capital equipment. For technology equipment, 3 or 5 years should be a general default for anything with service agreements or warranties less than 3-5 years. WVLS has traditionally supported specific Dell Computers with 5 year comprehensive warranties, and will likely continue to do so indefinitely within the new LEAN WI partnership and Libraries Win technology services suite. We continue to recommend budgeting \$900 per desktop computer; \$1300 per laptop; and \$3500 per physical server. One strategy is to appropriate 1/5 of the cost for total replacement of all computers each year until a reserve fund has been established which can cover the cost of at least 80% of all equipment. To help save money, replacements can be pushed beyond five years but we recommend maintaining a 100% cost-of-replacement reserve in those cases. Another strategy is to work toward a long term plan of replacing 1/5 of the library's computers in any given year. This helps establish a consistent appropriation each year. Except for MCPL which self-manages, and Granton Community Library which shares resources with its K12 cohabitant, member libraries no longer need to budget separately for network router, network switching, or Wireless Access Point equipment.

2020 Technology Budget Planning Details for WVLS Member Libraries

WVLS Member Libraries	2017		2017 Extended County		Avg % of Usage + Population		2019	Est. Cost	Ratio of
	Usage	%	Population	%	Population	Member Shares	per Unit of Service	Usage to Population	
Abbotsford Public Library	1,388	0.67%	3,440	1.22%	0.943%	\$ 566.18	\$ 0.41	40.3%	
Antigo Public Library	12,156	5.83%	20,072	7.12%	6.478%	\$ 3,888.01	\$ 0.32	60.6%	
Colby Community Library	2,509	1.20%	6,824	2.42%	1.813%	\$ 1,087.95	\$ 0.43	36.8%	
Crandon Public Library	2,901	1.39%	6,231	2.21%	1.802%	\$ 1,081.27	\$ 0.37	46.6%	
Dorchester Public Library	663	0.32%	1,488	0.53%	0.423%	\$ 253.93	\$ 0.38	44.6%	
Edith Evans Memorial Library (Laona)	565	0.27%	1,680	0.60%	0.434%	\$ 260.25	\$ 0.46	33.6%	
Edward U. Demmer Memorial Library (Three Lakes)	3,477	1.67%	2,487	0.88%	1.276%	\$ 765.62	\$ 0.22	139.8%	
Frances Simek Memorial Library (Medford)	8,593	4.12%	14,281	5.07%	4.596%	\$ 2,758.23	\$ 0.32	60.2%	
Granton Community Library	59	0.03%	1,563	0.55%	0.291%	\$ 174.91	\$ 2.96	3.8%	
Greenwood Public Library	2,016	0.97%	3,507	1.24%	1.106%	\$ 663.77	\$ 0.33	57.5%	
Jean M. Thomsen Memorial Library (Stetsonville)	289	0.14%	1,183	0.42%	0.279%	\$ 167.58	\$ 0.58	24.4%	
Loyal Public Library	1,106	0.53%	2,736	0.97%	0.751%	\$ 450.61	\$ 0.41	40.4%	
Marathon County Public Library	104,439	50.13%	130,777	46.40%	48.263%	\$ 28,967.16	\$ 0.28	79.9%	
Minocqua Public Library	15,637	7.51%	11,755	4.17%	5.838%	\$ 3,503.90	\$ 0.22	133.0%	
Neillsville Public Library	2,075	1.00%	7,370	2.61%	1.805%	\$ 1,083.56	\$ 0.52	28.2%	
Owen Public Library	1,676	0.80%	2,814	1.00%	0.901%	\$ 541.02	\$ 0.32	59.6%	
Rhineland District Library	20,229	9.71%	21,990	7.80%	8.756%	\$ 5,255.05	\$ 0.26	92.0%	
Rib Lake Public Library	1,383	0.66%	1,786	0.63%	0.649%	\$ 389.36	\$ 0.28	77.4%	
T.B. Scott Free Library (Merrill)	16,813	8.07%	20,994	7.45%	7.759%	\$ 4,656.97	\$ 0.28	80.1%	
Thorp Public Library	1,177	0.56%	4,786	1.70%	1.131%	\$ 679.10	\$ 0.58	24.6%	
Tomahawk Public Library	8,354	4.01%	7,847	2.78%	3.397%	\$ 2,038.78	\$ 0.24	106.5%	
Wabeno Public Library	5	0.00%	1,351	0.48%	0.241%	\$ 144.56	\$ 28.91	0.4%	
Westboro Public Library	61	0.03%	741	0.26%	0.146%	\$ 87.68	\$ 1.44	8.2%	
Western Taylor Co Public Library (Gilman)	354	0.17%	2,723	0.97%	0.568%	\$ 340.91	\$ 0.96	13.0%	
Withee Public Library	417	0.20%	1,434	0.51%	0.354%	\$ 212.74	\$ 0.51	29.1%	
	208342		281860			\$ 60,019.09	\$ 0.29	Average	

2019 WPLC Buying Pool Share \$ 60,019.09

2021 Technology Budget Planning Preview for WVLS Member Libraries

WVLS Member Libraries	Libraries Win - Membership Services					Digital Library ⁶	2021 Total Share	Previous Share (2020)	Core Services Change from 2020 ⁴
	PCs ¹	Base	+ PC ²	New Integrated Services ³	2021 Totals				
Abbotsford Public Library	11	\$ 1,350.00	\$ 275.00	\$ -	\$ 1,625.00	\$ 566.18	\$ 2,191.18	\$ 2,191.18	\$ -
Antigo Public Library	40	\$ 4,500.00	\$ 1,000.00	\$ -	\$ 5,500.00	\$ 3,888.01	\$ 9,388.01	\$ 9,388.01	\$ -
Colby Public Library	11	\$ 1,350.00	\$ 275.00	\$ -	\$ 1,625.00	\$ 1,087.95	\$ 2,712.95	\$ 2,712.95	\$ -
Crandon Public Library	10	\$ 1,350.00	\$ 250.00	\$ -	\$ 1,600.00	\$ 1,081.27	\$ 2,681.27	\$ 2,681.27	\$ -
Dorchester Public Library	8	\$ 1,350.00	\$ 200.00	\$ -	\$ 1,550.00	\$ 253.93	\$ 1,803.93	\$ 1,803.93	\$ -
Edith Evans Memorial Library (Laona)	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00	\$ 260.25	\$ 1,835.25	\$ 1,835.25	\$ -
Edward U. Demmer Memorial Library (Three Lakes)	14	\$ 1,350.00	\$ 350.00	\$ -	\$ 1,700.00	\$ 765.62	\$ 2,465.62	\$ 2,465.62	\$ -
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Granton Community Library	6	\$ 1,350.00	\$ 150.00	\$ -	\$ 1,500.00	\$ 174.91	\$ 1,674.91	\$ 1,674.91	\$ -
Greenwood Public Library	8	\$ 1,350.00	\$ 200.00	\$ -	\$ 1,550.00	\$ 663.77	\$ 2,213.77	\$ 2,213.77	\$ -
Jean M. Thomsen Memorial Library (Stetsonville)	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00	\$ 167.58	\$ 1,742.58	\$ 1,742.58	\$ -
Loyal Public Library	9	\$ 1,350.00	\$ 225.00	\$ -	\$ 1,575.00	\$ 450.61	\$ 2,025.61	\$ 2,025.61	\$ -
Marathon County Public Library ⁵	150	\$ 6,900.00	(port rate - all locations)		\$ 6,900.00	\$ 28,967.16	\$ 35,867.16	\$ 35,867.16	\$ -
Minocqua Public Library	32	\$ 1,500.00	\$ 800.00	\$ -	\$ 2,300.00	\$ 3,503.90	\$ 5,803.90	\$ 5,803.90	\$ -
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Owen Public Library	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00	\$ 541.02	\$ 2,066.02	\$ 2,066.02	\$ -
Rhineland District Library	40	\$ 1,650.00	\$ 1,000.00	\$ -	\$ 2,650.00	\$ 5,255.05	\$ 7,905.05	\$ 7,905.05	\$ -
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Wabeno	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00	\$ 144.56	\$ 1,669.56	\$ 1,669.56	\$ -
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Withee Public Library	7	\$ 1,350.00	\$ 175.00	\$ -	\$ 1,525.00	\$ 212.74	\$ 1,737.74	\$ 1,737.74	\$ -

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