Introduction

The mission of the Outagamie Waupaca Library System (OWLS) is to enable access to effective library service for all area residents by coordinating resource sharing, by providing appropriate services and programs, by developing new technologies, and by promoting desirable models for governance and funding.

OWLS is a federation of the public libraries in Outagamie and Waupaca counties. Each member library is completely autonomous, funded and governed locally, but contracts with OWLS for the purpose of coordinating and strengthening services. OWLS does not ordinarily provide direct library service; instead, it serves patrons through their local library. (Look at Member Libraries for a complete listing of federation participants.) It is one of sixteen public library systems in the state. Each system is funded primarily by state aids, which enable the systems to carry out the service requirements set forth in Chapter 43 of the Wisconsin Statutes. It is also the agent designated by Outagamie and Waupaca counties to provide access to library service for all residents of the system area. Each year the system requests county funds to reimburse member libraries for serving area residents who do not have municipal library service. OWLS is governed by a fifteen member board of trustees representing both counties. The trustees, appointed for three-year terms by the counties, meet monthly.
The Planning Process

Public library systems in Wisconsin are required to provide a variety of services in order to qualify for state funding. Section 43.24(2)(m) specifically requires systems to engage in "planning with the division and with participating public libraries and other types of libraries in the area in regard to library technology and the sharing of resources." State required system technology and resource sharing plans are to be submitted at least every five years.

Evaluation

The OWLS Director will be responsible for coordinating the evaluation of this plan. Evaluation will include a written assessment of the extent to which goals and objectives have been met. This assessment will include 1) a list of the goals and objectives that have been achieved, 2) a list of goals and objectives that have not been achieved with an explanation of why they weren’t achieved, 3) suggestions for how any unmet goals or objectives might be achieved in the future, and 4) a description of any unanticipated outcomes. Input for this assessment will be solicited from OWLS professional staff and member library directors.

This plan will be discussed at least annually at an OWLS director’s meeting, and a meeting of the OWLSnet Administrative Advisory Committee (AAC), and at an OWLS Board of Trustees meeting. Any revision to this plan will include an examination of the relevance of current goals and objectives and consideration of emerging needs and new technologies.

Authors/Approvals

This plan was developed by the OWLS administrative staff, with additional input and critique provided by OWLSnet member libraries, the OWLS Board of Trustees, and variety of other sources.

OWLS professional staff meets at least every other week throughout the year, primarily to discuss technology-related issues. Professional staff members also meet regularly with professional staff from Appleton Public Library and Nicolet Federated Library System, and they also meet frequently with the staff of member libraries. OWLSnet Administrative Advisory Committee (AAC) meetings, which are held an average of six times during the year, are a forum for the discussion of OWLSnet technology and resource sharing issues. These discussions provided significant input and direction into the development of this plan.

System technology and resource sharing planning has not been done in isolation. OWLS staff regularly participates in statewide meetings for system technology and interlibrary loan coordinators. The plan was presented to the OWLS Board and adopted on November 19, 2020.

Primary Contact: Bradley Shipps, Director, bshipps@owlsweb.org
Secondary Contact: Amanda Lee, OWLSnet Manager, alee@owlsweb.org
Technology Contact: Dave Bacon, Network Manager, dbacon@owlsweb.org
**Goals/Activities**

The following goals and objectives apply to all OWLS member libraries, unless otherwise specified. OWLSnet objectives are carried out in cooperation with NFLS and apply to all OWLSnet member libraries, i.e., libraries in both systems. OWLS objectives apply only to member libraries of the OWLS system.

**Summary of Major Goals:**

A. To provide services to OWLS and OWLSnet member libraries that help them increase patron access to library and information resources and that help increase the efficiency and effectiveness of library operations.

B. To further develop OWLS and OWLSnet services in order to improve and enhance the services and information available to member libraries and their patrons.

C. To facilitate effective resource sharing among OWLSnet member libraries, and between OWLS libraries and libraries beyond OWLSnet, in order to provide patrons with convenient access to library and information resources.

D. To provide training and assistance to member library staff in using services provided by OWLS and OWLSnet.

E. To work with the OWLSnet Administrative Advisory Committee to optimize the ongoing governance and operation of OWLSnet.

F. To engage in continuous study and planning in regard to OWLSnet services, library automation, resource sharing, and new technologies.

**Goal A:** To provide services to OWLS and OWLSnet member libraries that help them increase patron access to library and information resources and that help increase the efficiency and effectiveness of library operations.

Objectives:

1. OWLSnet will continue to provide and support Integrated Library System (ILS) software that offers a variety of functions to members including circulation control, a central bibliographic database, a central patron database, management reports, a discovery layer, online patron registration, e-commerce, overdue and reserve notices, resource sharing, acquisitions and SIP2 access to third party applications.

2. OWLSnet will continue to provide statistics, notices and reports to help libraries track items, report circulation, and develop collections.

3. OWLSnet will continue to identify and support peripherals that work with the ILS software, including receipt printers, barcode scanners, label printers, and signature capture devices, as well as implementing processes that take advantage of these devices.

4. OWLSnet will continue to provide access to subscription-based electronic information resources (e.g., Ancestry, Overdrive, Tumblebooks) for all network libraries.

5. OWLSnet will continue to work with member libraries to provide enhanced information resources to patrons via InfoSoup (e.g., digital platform for local history, booklists, job search resources).

6. OWLSnet will continue to provide Internet services (e.g., web access, email accounts) to member libraries.

7. OWLSnet will continue to provide email and online collaboration services to member libraries.
through Office 365.

8. OWLSnet will continue to provide and support the network infrastructure necessary for OWLSnet services, including firewalls, servers, telecommunications equipment, data circuits, and software.

9. OWLSnet will continue working to secure sufficient bandwidth to meet the needs of members by monitoring the bandwidth needs of member libraries, upgrading bandwidth from the BadgerNet converged network, exploring alternatives bandwidth sources, and by securing adequate bandwidth to connect to an Internet Service Provider.

10. OWLSnet will continue to provide and support wireless Internet access in OWLSnet member libraries, including providing support for wireless access points and hosting and maintenance for wireless management software.

11. OWLSnet will continue to provide and support PC maintenance software that protects the computer’s configuration from changes, and antivirus software.

12. OWLSnet will continue to provide and support PC time management software in OWLSnet member libraries.

13. OWLSnet will continue to provide a printing solution for public access PCs and wireless devices in the library.

14. OWLSnet will continue to provide a VPN service to allow member libraries to use the ILS outside of the building.

15. OWLSnet will regularly replace servers, computer room network equipment (i.e., firewalls, routers, switches), uninterruptible power supplies, and backup units.

16. **Whenever possible, OWLSnet will continue to automate reports, notices and processes to more quickly and efficiently provide services to OWLSnet member libraries.**

17. OWLSnet will continue to cooperate with member libraries, Recollection Wisconsin, WPLC and DPLA to increase access to local and worldwide digitized historical content.

18. OWLS and APL technical services staff will continually monitor and make recommendations regarding OWLSnet technical services processes.

19. OWLS will continue to encourage the Administrative Advisory Committee of OWLSnet to standardize policies, procedures, and practices among network libraries.

20. OWLS will continue to provide consultation and assistance to member libraries in maintaining and upgrading computers and OWLS supported software, such as Microsoft Office.

21. OWLS will continue to develop and maintain websites, and provide web-accessible electronic content, including website analytics.

22. OWLS will continue to provide website design and hosting for member libraries and work with member libraries to move their sites from Drupal to WordPress.

23. OWLS will continue to maintain the equipment needed for printing and design services.

---

**Goal B:** To further develop OWLS and OWLSnet services in order to improve and enhance the services and information available to member libraries and their patrons.

**Objectives:**

1. **Cataloging staff will develop new workflows to help member libraries quickly and accurately add new items to the catalog, including creating original records and modifying existing records as appropriate.**
2. OWLSnet will investigate switching our bibliographic utility from SkyRiver to OCLC to improve record quality, cataloging workflows, and patron experience of the catalog.

3. OWLSnet will investigate adding an authority control service to clean up and standardize existing bibliographic records, and improve authority control on an on-going basis.

4. OWLSnet will explore moving statistics to a dashboard format to increase access to statistics.

5. OWLSnet staff will continue to act as a liaison with the ILS service provider, and keep up to date on enhancements, bug fixes and new products.

6. OWLSnet, in cooperation with member libraries, will continue to develop and enhance InfoSoup.

7. The OWLSnet Administrative Advisory Committee (AAC) will continue to assess the desirability and feasibility of implementing additional ILS software modules or other new services.

8. OWLSnet will regularly evaluate and work with WPLC on the current use of online electronic resource subscriptions and make any changes necessary to optimize the use and affordability of such resources.

9. OWLSnet will continue to work with member libraries to explore their participation in the acquisitions module of the ILS.

**Goal C: To facilitate effective resource sharing among OWLSnet member libraries, and between OWLS libraries and libraries beyond OWLSnet, in order to provide patrons with convenient access to library and information resources.**

**Objectives:**

1. **OWLSnet will implement the Bibliocommons discovery layer in 2021.**

2. **OWLSnet will continue to support print and online marketing of shared library collections and services.**

3. OWLSnet will continue to allow patrons to request the interlibrary loan of items by placing holds or sending email messages via the online catalog.

4. OWLSnet will continue to provide member libraries and their patrons with access to WISCAT and other library catalogs via InfoSoup.

5. OWLSnet will make its bibliographic records available to WISCNET in order for other libraries to have access to information about member library materials.

6. OWLS and NFLS will continue to monitor resource sharing among OWLSnet members and will implement methods for addressing resource sharing inequities that exist between systems and libraries.

7. OWLS will continue to contract for appropriate five-day-a-week delivery services between member libraries, the OWLS and NFLS offices, and other libraries throughout the state.

8. OWLS will continue to provide insurance for the community card agreement between Appleton Public Library and Lawrence University.

9. OWLS and its member libraries will continue to explore opportunities to facilitate resource sharing with other types of libraries in the service area.
Goal D: To provide training and assistance to member library staff in using services provided by OWLS and OWLSnet.

Objectives:
1. OWLSnet will continue to provide group and individual training to staff of member libraries in the effective use of the ILS.
2. OWLSnet will continue to provide assistance to staff of member libraries in troubleshooting problems with the use of OWLSnet services.
3. OWLSnet will provide training and assistance to staff of member libraries in running reports available to library staff through the ILS.
4. OWLSnet will continue to provide training to OWLSnet member libraries in using software to add digital collections to Milwaukee Public Library’s CONTENTdm server in partnership with Recollection Wisconsin.
5. OWLSnet and OWLS will continue using web conferencing software and remote access software for providing online programs, training, collaboration, and support to member libraries.
6. OWLS will continue to provide individual training or consultation to staff of member libraries in the effective use of electronic information resources, computers, software, and other new technologies.
7. OWLS will continue to provide training and documentation to member libraries and their patrons in downloading and using the digital media available from OWLSnet and the Wisconsin Digital Library.
8. OWLS will continue to assist OWLS libraries with the development and maintenance of local library websites, including locally created web-accessible databases.
9. OWLS, upon request, will assist member libraries with local library technology plans and policies.

Goal E: To work with the OWLSnet Administrative Advisory Committee to optimize the ongoing governance and operation of OWLSnet.

Objectives:
1. Representatives of OWLS, NFLS, and all member libraries (i.e., AAC) will meet at least quarterly to discuss the technical and administrative operation of the network.
2. OWLSnet will continue to codify membership requirements, policies, and procedures and will regularly communicate them to member libraries.
3. OWLSnet will monitor member library compliance with policies, procedures, and membership requirements and will notify any library that does not comply.

Goal F: To engage in continuous study and planning in regard to OWLSnet services, library automation, resource sharing, and new technologies.

Objectives:
1. OWLS will explore the feasibility of implementing the PLSR recommendation for a shared regional delivery hub in collaboration with neighboring systems.
2. OWLS will encourage and support participation by its staff in activities to help them keep abreast
of technological developments relevant to OWLS and OWLSnet services including serving on state-wide committees.

3. OWLS staff will keep abreast of developments in the publishing industry aimed at distributing media content electronically and will inform member libraries of such developments and their potential impact on public library services.

4. OWLS staff will keep abreast of best practices in network security and data privacy.

5. OWLS staff will continue to learn and adopt best practices for working remotely.

6. OWLS will evaluate existing and new services through the lens of accessibility and inclusion.

7. OWLS will share information about telecommunications discounts that may be available to member libraries through state or federal programs (e.g., E-rate, TEACH Wisconsin) and coordinate applications at the system level when cost effective.

8. OWLSnet will explore becoming CIPA compliant in order to be eligible for additional e-rate discounts.

9. OWLS will annually review this plan and make any necessary modifications as part of its annual planning process.

10. OWLS will develop and adopt a new Technology and Resource Sharing Plan. (2024)
Estimated Budget

The participating member libraries and systems provide the majority of funding for technology and resource sharing activities within OWLS and OWLSnet. The following 2021 budget information provides an example of the expenditures that OWLS will make to accomplish the technology and resource sharing activities described in this plan.

2021 Budgeted Income by Source

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Aid</td>
<td>$294,589</td>
</tr>
<tr>
<td>Federal Funds</td>
<td>$0</td>
</tr>
<tr>
<td>Local and County</td>
<td>$5,000</td>
</tr>
<tr>
<td>WPLC Buying Pool Shares</td>
<td>$55,522</td>
</tr>
<tr>
<td>Contracts</td>
<td></td>
</tr>
<tr>
<td>OWLS Member Libraries</td>
<td>$294,233</td>
</tr>
<tr>
<td>NFLS Member Libraries</td>
<td>$284,286</td>
</tr>
<tr>
<td>Nicolet Federated Library System</td>
<td>$265,920</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>$1,199,550</strong></td>
</tr>
</tbody>
</table>

The majority of activities contained in this plan are financed from OWLS Technology-Reference-Interloan program budget. This program is divided into two subprograms. The OWLSnet subprogram includes activities involved in operating the OWLSnet shared automation consortium. The OWLS subprogram includes technology, reference, and interloan services provided primarily to OWLS member libraries. The 2021 budgets and detailed information for both subprograms follow.

Technology-Reference-Interloan: OWLSnet

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$333,626</td>
</tr>
<tr>
<td>Payroll Taxes</td>
<td>$25,522</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>$114,308</td>
</tr>
<tr>
<td>Facilities</td>
<td>$15,000</td>
</tr>
<tr>
<td>Telephone</td>
<td>$2,800</td>
</tr>
<tr>
<td>Supplies</td>
<td>$1,000</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>$59,400</td>
</tr>
<tr>
<td>Borrowers' Card Supplies</td>
<td>$3,500</td>
</tr>
<tr>
<td>Printing &amp; Promotion</td>
<td>$700</td>
</tr>
<tr>
<td>PC Equipment</td>
<td>$2,500</td>
</tr>
<tr>
<td>PC Repair</td>
<td>$500</td>
</tr>
<tr>
<td>Meeting and Travel</td>
<td>$3,000</td>
</tr>
<tr>
<td>Training/Consulting</td>
<td>$2,000</td>
</tr>
<tr>
<td>Software</td>
<td>$38,763</td>
</tr>
<tr>
<td>Cybersecurity Insurance</td>
<td>$3,500</td>
</tr>
<tr>
<td>Resource Library</td>
<td>$26,000</td>
</tr>
<tr>
<td>Online Databases</td>
<td>$24,777</td>
</tr>
<tr>
<td>Internet Access</td>
<td>$22,400</td>
</tr>
<tr>
<td>SkyRiver/WISCAT</td>
<td>$50,205</td>
</tr>
<tr>
<td>Digitization</td>
<td>$100</td>
</tr>
</tbody>
</table>
Enhanced Content $50,165
System Development $8,500
System Hardware $850
Network Hardware & Maintenance $57,014
System Maintenance (ILS/Discovery) $159,524

Subtotal $1,005,655

Salaries, Payroll Taxes, Fringe Benefits: Included are the costs for 6.375 FTEs.

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE OWLSnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloger</td>
<td>1.00</td>
</tr>
<tr>
<td>Cataloging Assistant</td>
<td>.55</td>
</tr>
<tr>
<td>Circulation Specialist</td>
<td>1.00</td>
</tr>
<tr>
<td>Computer Network Manager</td>
<td>.925</td>
</tr>
<tr>
<td>Computer Technology Coordinator</td>
<td>.375</td>
</tr>
<tr>
<td>Director</td>
<td>.40</td>
</tr>
<tr>
<td>OWLSnet Manager</td>
<td>.95</td>
</tr>
<tr>
<td>Library Services Manager</td>
<td>.30</td>
</tr>
<tr>
<td>Library Assistant</td>
<td>.45</td>
</tr>
<tr>
<td>Other Staff (4)</td>
<td>.425</td>
</tr>
</tbody>
</table>

Total FTEs 6.375

Facilities: 50% of OWLS rent and utilities is allocated to the OWLSnet program.

Telephone: This budget contains the costs for the telephone lines used by the automation staff.

Supplies: This includes everything from receipt paper to connectors for the ends of cables. Items like surge suppressors and printer cables get charged to this account.

Telecommunications: This budget pays for connecting remote sites to the OWLSnet WAN and connecting OWLSnet to the Internet.

Borrowers’ Card Supplies: OWLSnet members are provided with borrowers’ cards, patron barcodes, and barcode covers.

Printing and Promotions: Members are provided with a variety of printed and promotional items.

Computer Equipment: This budget is for PCs and peripherals for OWLSnet staff.

PC Repair: This budget is used to upgrade or repair components on OWLSnet staff computers.

Meeting and Travel: This budget covers the cost of travel to remote sites by OWLSnet staff. This account is also used to pay expenses for OWLSnet staff to attend ILS-related meetings or conferences.

Training/Consulting: This budget covers training or consulting from technology vendors.

Software: This budget is for shared software licenses for staff and public computers such as PC management, antivirus, and print management. It also covers miscellaneous software needed for OWLSnet staff PCs.

Resource Library: Appleton Public Library serves as a resource for all OWLSnet libraries, including
libraries in the OWLS and NFLS systems. This particular line item is used to purchase materials that enhance APL’s ability to serve as a resource for the network.

**Online Databases:** These funds are used to pay for the subscription-based electronic resources that are available to libraries in both OWLS and NFLS.

**Internet Access:** This budget pays for Internet service for all OWLSnet libraries.

**SkyRiver:** This budget is for various SkyRiver costs related to cataloging.

**Enhanced Content:** This budget is for enhanced content for InfoSoup (e.g., cover art, reviews, booklists, etc.) and digital materials.

**System Development:** This budget is used for implementing new projects. The amount varies significantly from year to year depending upon annual objectives. Development funds may also be withdrawn from the fund balance with board approval.

**System Hardware:** This budget is used to buy major hardware items, primarily servers, for the central computer room. In 2020 we moved to a hosted ILS, which will reduce this budget line going forward.

**Network Hardware & Maintenance:** This budget is used to buy equipment for the network infrastructure (e.g., routers, switches, firewalls) that may be placed in the central computer room or at libraries. The remainder of the funds are used to pay for maintenance on servers, software, switches, routers, wireless access controllers, wireless access points and other miscellaneous equipment.

**System Maintenance:** The biggest chunk of this budget is to pay TLC and Bibliocommons for software maintenance on our ILS and discovery layer. It also includes support for ShoutBomb text messaging.

### Technology-Reference-Interloan: OWLS

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$81,005</td>
</tr>
<tr>
<td>Payroll Taxes</td>
<td>$6,197</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>$21,445</td>
</tr>
<tr>
<td>Facilities</td>
<td>$3,000</td>
</tr>
<tr>
<td>Postage for ILL</td>
<td>$150</td>
</tr>
<tr>
<td>Supplies</td>
<td>$800</td>
</tr>
<tr>
<td>Equipment</td>
<td>$1,000</td>
</tr>
<tr>
<td>Meeting and Travel</td>
<td>$1,000</td>
</tr>
<tr>
<td>Training/Consulting</td>
<td>$500</td>
</tr>
<tr>
<td>Software</td>
<td>$5,922</td>
</tr>
<tr>
<td>Statewide Projects</td>
<td>$61,377</td>
</tr>
<tr>
<td>Lender/Nonresident Payment</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

**Subtotal** $193,895

**Salaries, Payroll Taxes, Fringe Benefits:** Included are the costs for approximately 1.35 FTEs.

<table>
<thead>
<tr>
<th>Position</th>
<th>FTE OWLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Network Manager</td>
<td>.075</td>
</tr>
<tr>
<td>Computer Technology Coordinator</td>
<td>.625</td>
</tr>
<tr>
<td>Director</td>
<td>.30</td>
</tr>
<tr>
<td>Library Services Manager</td>
<td>.30</td>
</tr>
</tbody>
</table>
Marketing Coordinator  .05

Total FTEs  1.35

Facilities:  10% of OWLS total rent and utilities is allocated to the OWLS program.

Supplies:  This budget is for miscellaneous supplies.

Equipment:  Funds in this budget pay for computers and peripherals for OWLS staff that are not primarily assigned to the OWLSnet program.

Meeting and Travel:  Funds are budgeted for OWLS staff to travel to member libraries on system technology or resource sharing business.

Training/Consulting:  Funds are budgeted to pay for technology training and consulting outside of the OWLSnet program.

Software:  This budget contains funds for software for OWLS staff computers, software for OWLS library web sites, and WISCAT licenses for OWLS member libraries.

Statewide Projects:  This budget pays for OWLS library participation in statewide technology projects, e.g., WPLC membership, digital media buying pool.

Lender/Nonresident Compensation:  This program compensates OWLS member libraries that provide services to residents of other counties who are not compensated by those counties.

Background

The Outagamie Waupaca Library System (OWLS) was established in 1976 by joint resolution of Outagamie County and Waupaca County. OWLS was created to ensure that all residents of both counties would have access to convenient library service, to facilitate resource sharing, and to foster the development of local public libraries. The system serves over 240,000 people through its 17 member public libraries.

The use of developing technologies has been integral to OWLS efforts to achieve its mission. In the future, OWLS will continue to provide leadership in exploring, implementing, and supporting new technologies that assist member libraries with improving the services they provide to their patrons and with increasing efficiency in providing services.

Development of Services

Since its inception, OWLS has coordinated resource sharing among member libraries and has taken a leadership role in introducing and developing new technologies. The most significant technology and resource sharing development in OWLS history occurred in 1989 when OWLS began operating a shared automation network (OWLSnet) for its member libraries. In 1995, OWLS signed an agreement with Nicolet Federated Library System (NFLS) to cooperate in providing OWLSnet services to NFLS member libraries. It was a priority for both systems to connect all member libraries to OWLSnet as quickly as possible, and that task was completed in 2000.
**Integrated Library System**

The integrated library system (ILS) is used to provide circulation control, a central bibliographic database, a central patron database, management reports, overdue and reserve notices, resource sharing, online patron registration, e-commerce, digital signature capture, SMS notification and acquisitions functions to members. The discovery layer provides an online public access catalog. The network also provides member libraries with training, cataloging services, technical support, a network library card program, various electronic resources, email service, antivirus and security software, and Internet service.

In June 2005, a contract was signed with Innovative Interfaces, Inc. to migrate from GEAC to a new ILS, Millennium, and a new online catalog, InfoSoup, was developed. OWLSnet libraries went live on the new system on February 21, 2006, and public response to InfoSoup has been overwhelmingly positive since the first day. Since that time InfoSoup has received many enhancements.

The Innovative Interfaces Millennium software was replaced by Innovative’s new Sierra software in 2012. In 2015, the Encore Discovery Layer was implemented. This was an easier to use public interface that replaced the older Sierra WebPac. In 2020, OWLSnet migrated our ILS again from Innovative’s Sierra to The Library Corporation’s (TLC) CARL-X ILS. CARL-X provides all of the functions found in Sierra at a lower cost and with better customer support. In 2021 we will implement a new state-of-the-art discovery layer from Bibliocommons.

**Network**

In 2006, OWLSnet libraries were migrated to the state’s newly developed BadgerNet Converged Network (BCN). The OWLSnet network continues to connect 49 public library sites and both system offices. Most of these sites are connected directly to the OWLSnet wide area network (WAN) through the BCN. Two sites access OWLSnet resources via the Internet, and Appleton Public Library has a local area network (LAN) connection. OWLSnet has continued to add bandwidth as feasible and affordable to meet the needs of member libraries. OWLSnet has also continued to upgrade routers and switches as necessary at the central site and at member library sites. Now, at the end of 2020, almost all OWLSnet libraries are connected to OWLSnet on fiber, via the BCN with at least a 20 mbps circuit. A few larger libraries are connected with 50 mbps circuits.

In response to member library requests, OWLSnet began installing wireless networks in member libraries in 2007. Currently, all OWLSnet sites make wireless Internet service available to patrons, and in 2020-2021, nine sites will add outdoor wifi access points with grant funding.

**Resource Sharing**

The development of OWLSnet has led to an explosive increase in the volume of resource sharing. In 2019, over 782,000 items were shared among OWLSnet members as a result of placing and filling holds using the ILS. The workload associated with handling this volume of materials has become a significant burden for OWLS, NFLS, and many member libraries. Because the growth of resource sharing had become unsustainable, OWLSnet libraries voted in 2009 to reduce the maximum number of holds allowed to 15 per patron in order to reduce the dramatic growth in resource sharing among OWLSnet libraries. In 2012, for the first time in the history of OWLSnet, resource sharing among members...
decreased, and it has continued to decrease through 2020. Because of this continuing drop, in 2016 OWLSnet libraries voted to increase the maximum number of holds to 25 per patron. It is likely that this trend is the result of fewer items being added to library collections and the increasing availability and popularity of digital materials.

In late 2006, OWLS made a significant change in how resources are shared with libraries outside of OWLSnet. Prior to 2006, OWLS libraries had used WISCAT to borrow items from other libraries in the state, and OWLS operated an interlibrary loan clearinghouse to respond to requests for materials owned by OWLS libraries from libraries throughout the state. In December 2006, OWLS libraries discontinued using WISCAT and began using OCLC/BadgerCat for out-of-network resource sharing, and NFLS began serving as the interlibrary loan clearinghouse for OWLS libraries. In 2014, when OWLS moved from OCLC to SkyRiver for a bibliographic utility, OWLS libraries also moved from OCLC to WISCAT for interlibrary loan. At the same time, the clearinghouse was discontinued, and OWLS libraries now place and receive their own requests for items outside of the OWLSnet consortium.

Other technology services

In addition to operating the ILS, managing the WAN, and facilitating resource sharing for member libraries, OWLS engages in a variety of other technology-related activities. Activities include providing additional electronic resources, using technology to convey information to member libraries, providing technology training, helping member libraries to create and maintain websites, providing professional technology support and consulting assistance to member libraries, providing PC support to member libraries, coordinating participation in the Wisconsin Public Library Consortium, and assisting with the development of local technology resources.

Assessment of Current Technology-Related Services

The following services are provided to all OWLSnet member libraries, except as noted.

- Wide area network (WAN) equipment, data circuits, and management
- Local area network (LAN) infrastructure for file and printer sharing
- TLC’s CARL-X Integrated Library System
  - Circulation control
  - Central bibliographic database
  - Central patron database
  - Online patron registration
  - Digital signature capture
  - Management and statistical reports
  - Overdue and reserve notices via paper, email, and SMS
  - Online public access catalog (InfoSoup)
  - Mobile-friendly catalog web site
  - Resource sharing

---

1 Appleton maintains its own local area network.
Z39.50 target
Acquisitions control¹
Virtual and on-site staff training
E-Commerce module for online fine payment
Collection Agency module
• OWLSnet library card program
• Internet access for staff and public
• PC time management software²
• Print management software
• Wireless Internet access for staff and public
• Email accounts for library staff³
• Antivirus software and network security provisions
• SkyRiver cataloging utility
• WISCAT for interlibrary loan
• Assistance with digitization projects using CONTENTdm software to add digital collections to Recollection Wisconsin
• Staff and patron access to electronic resources
  Ancestry Library Edition
  Newspaper Archive
  TumbleBooks
  WI Digital Library (Overdrive)
• Technical support, training, and troubleshooting

OWLS provides the following services to OWLS member libraries.
• Assistance in developing local web-accessible information resources
• Assistance with equipment purchases
• Customized individual or on-site training in the effective use of electronic resources, computer software, and the Internet
• Development and submission of technology grants and proposals to enhance member libraries services
• Online continuing education and technology training opportunities for library staff through the NEWI CE partnership
• Online training, troubleshooting, and support via GoToMeeting and LogMeIn
• PC maintenance and troubleshooting
• System wide technology planning
• Technology planning and consulting services

¹ Only Appleton, New London, Door County, Scandinavia, and Waupaca currently use the acquisitions module.
² APL uses Envisionware software. Some libraries have elected not to implement PC time management.
³ Appleton operates its own email server, and Kaukauna uses its city’s email service.
• Website development and hosting services
• Website development and maintenance training
**Evaluation of 2017 – 2020 Plan**

The OWLS Technology and Resource Sharing Plan: 2017 – 2020 contained 6 goals and 62 objectives. Significant progress was made toward achieving all of the goals during the period covered by the Plan, and only a handful of the objectives were not achieved. The Evaluation contains a list of all the objectives that were achieved with some comments to further illuminate how they were achieved. Also included below is a list of the objectives that were not achieved.

The OWLS Technology and Resource Sharing Plan: 2017 – 2020 Goal Summary:

A. To provide services to OWLS and OWLSnet member libraries that help them increase patron access to library and information resources and that help increase the efficiency and effectiveness of library operations.
B. To further develop OWLS and OWLSnet services in order to improve and enhance the services and information available to member libraries and their patrons.
C. To facilitate effective resource sharing among OWLSnet member libraries, and between OWLS libraries and libraries beyond OWLSnet, in order to provide patrons with convenient access to library and information resources.
D. To provide training and assistance to member library staff in using services provided by OWLS and OWLSnet.
E. To work with the OWLSnet Administrative Advisory Committee to optimize the ongoing governance and operation of OWLSnet.
F. To engage in continuous study and planning in regard to OWLSnet services, library automation, resource sharing, and new technologies.

Achieved Objectives

- **OWLSnet** will continue to provide and support Integrated Library System (ILS) software from Innovative Interfaces that offers a variety of functions to members including circulation control, a central bibliographic database, a central patron database, management reports, a discovery layer, online patron registration, e-commerce, overdue and reserve notices, resource sharing, acquisitions and SIP2 access to third party applications.
  - In 2019, OWLS conducted an evaluation of ILS platforms, and in 2020, we migrated to CARL-X from TLC. It provides all of the functions listed above at a lower cost and with better customer support.
- **OWLSnet** will continue to provide statistics, notices and reports to help libraries track items, report circulation, and develop collections.
- **OWLSnet** will continue to identify and support peripherals that work with the ILS software, including receipt printers, barcode scanners, label printers and signature capture devices, as well as implementing processes that take advantage of these devices.
- **OWLSnet** will continue to provide access to subscription-based electronic information resources (e.g., Ancestry, Overdrive, OneClickDigital, Tumblebooks) for all network libraries.
- **OWLSnet** will continue to work with member libraries to provide enhanced information resources to
patrons via InfoSoup (e.g., digital platform for local history, recently added materials database, booklists, Zinio).

- OWLS and APL technical services staff will continually monitor and make recommendations regarding OWLSnet technical services processes. Cataloging staff will continue to focus on helping member libraries quickly and accurately add new items to the catalog, including creating original records and modifying existing records as appropriate.

- OWLSnet will continue to provide Internet services (e.g., web access, email accounts) to member libraries.

- OWLSnet will continue to provide email services to member libraries. Currently, we use an email/SMTP server in-house; we will consider moving to Microsoft 365, webhost-based email and other options, including replacing the existing server.
  - OWLSnet moved to Office 365 for email and additional services in 2018.

- OWLSnet will continue to provide and support the network infrastructure necessary for OWLSnet services, including firewalls, servers, telecommunications equipment, data circuits, and software.

- OWLSnet will continue working to secure sufficient bandwidth to meet the needs of members by monitoring the bandwidth needs of member libraries, upgrading bandwidth from the BadgerNet converged network, exploring alternatives bandwidth sources, and by securing adequate bandwidth to connect to an Internet Service Provider.

- OWLSnet will continue to provide and support SAM PC management software, or an equivalent software program, in OWLSnet member libraries. We will also evaluate and explore alternatives to SAM.
  - In 2019, we switched from SAM PC time management to TBS MyPC.

- OWLSnet will continue to provide and support wireless Internet access in OWLSnet member libraries, including providing support for wireless access points and hosting and maintenance for wireless management software.

- OWLS will apply for appropriate telecommunications discounts that may be available to member libraries through state or federal programs (e.g., E-rate, TEACH Wisconsin).
  - The telephone discounts for which we had applied on behalf of libraries have been phased out. Currently only one OWLS library is CIPA compliant and eligible for further discounts, so we have stopped applying on behalf of libraries for the time being.

- OWLS will continue to provide consultation and assistance to member libraries in maintaining and upgrading computers and OWLS supported software, such as Microsoft Office.

- OWLSnet will continue to provide and support PC maintenance software that protects the computer’s configuration from changes, and antivirus software.

- OWLS will continue to develop and maintain websites, and provide web-accessible electronic content, including website analytics.

- OWLS will continue to provide website design and hosting for member libraries and work with member libraries using Drupal to move their sites over to a more current version of the software.

- OWLSnet will continue to provide a VPN service to allow member libraries to use Sierra outside of the building.

- OWLS will continue to maintain the equipment needed for printing and design services.

- Whenever possible, OWLSnet will continue to automate reports, notices and processes to more quickly and efficiently provide services to OWLSnet member libraries.
• OWLSnet will continue to cooperate with member libraries, Recollection Wisconsin, WPLC and DPLA to increase access to local and worldwide digitized historical content.
• OWLS will continue to encourage the Administrative Advisory Committee of OWLSnet to standardize policies, procedures, and practices among network libraries.
• OWLSnet staff will continue to act as a liaison with the ILS service provider, and keep up to date on enhancements, bug fixes and new products.
• OWLSnet, in cooperation with member libraries, will continue to develop and enhance InfoSoup.
• The OWLSnet Administrative Advisory Committee (AAC) will continue to assess the desirability and feasibility of implementing additional Sierra software modules or other new services.
• OWLSnet will regularly evaluate and work with WPLC on the current use of online electronic resource subscriptions and make any changes necessary to optimize the use and affordability of such resources.
• OWLSnet will continue to work with member libraries to explore their participation in the acquisitions module of the Sierra ILS.
• OWLSnet will regularly replace servers, computer room network equipment (i.e., firewalls, routers, switches), uninterruptible power supplies, and backup units.
• OWLSnet will evaluate the Encore Discovery layer and consider alternatives.
  o In 2019, we evaluated discovery layers and selected Bibliocommons, to be implemented in 2021.
• OWLSnet will investigate offering a printing solution for public access PCs and wireless devices in the library.
  o In 2019, we implemented wireless print management through Papercut ePrintIT.
• OWLSnet will continue to allow patrons to request the interlibrary loan of items by placing holds or sending email messages via the online catalog.
• OWLS will continue to contract for appropriate five-day-a-week delivery services between member libraries, the OWLS and NFLS offices, and other libraries throughout the state.
• OWLSnet will continue to provide member libraries and their patrons with access to WISCAT and other library catalogs via InfoSoup.
• OWLSnet will make its Sierra server available as a z39.50 target in order for other libraries to have access to information about member library materials.
• OWLS and NFLS will continue to monitor resource sharing among OWLSnet members and will implement methods for addressing resource sharing inequities that exist between systems and libraries.
• OWLS and its member libraries will continue to participate in the Fox Valley Library Council (FVLC) in order to facilitate resource sharing with other types of libraries in the FVLC area.
  o The Fox Valley Library Council dissolved in 2019. OWLS is exploring new opportunities for multitype collaboration.
• OWLSnet will continue to provide group and individual training to staff of member libraries in the effective use of Sierra software and related management reports.
• OWLSnet will continue to provide assistance to staff of member libraries in troubleshooting problems with the use of OWLSnet services.
• OWLSnet will continue to provide training to OWLSnet member libraries in using software to add
digital collections to Milwaukee Public Library’s CONTENTdm server in partnership with Recollection Wisconsin.

- OWLSnet and OWLS will continue using GoToMeeting, GoToWebinar, and LogMeIn for providing online programs, training, collaboration, and support to member libraries.
- OWLS will continue to provide individual training or consultation to staff of member libraries in the effective use of electronic information resources, computers, software, and other new technologies.
- OWLS will continue to provide training and documentation to member libraries and their patrons in downloading and using the digital media available from OWLSnet and the Wisconsin Digital Library.
- OWLS will continue to provide training to member libraries in use of social media, software, and websites (e.g., Facebook).
- OWLS will continue to assist OWLS libraries with the development and maintenance of local library websites, including locally created web-accessible databases.
- OWLS, upon request, will assist member libraries with local library technology plans and policies.
- Representatives of OWLS, NFLS, and all member libraries (i.e., AAC) will meet at least quarterly to discuss the technical and administrative operation of the network.
- OWLSnet will continue to codify membership requirements, policies, and procedures and will regularly communicate them to member libraries.
- OWLSnet will monitor member library compliance with policies, procedures, and membership requirements and will notify any library that does not comply.
- OWLS will encourage and support participation by its staff in activities to help them keep abreast of technological developments relevant to OWLS and OWLSnet services including serving on state-wide committees.
- OWLS staff will continue to monitor the development of social media sites and services and will make recommendations to member libraries about their participation in social media sites or services.
- OWLS staff will keep abreast of developments in the publishing industry aimed at distributing media content electronically and will inform member libraries of such developments and their potential impact on public library services.
- OWLS will annually review this plan and make any necessary modifications as part of its annual planning process.
- OWLSnet will explore becoming CIPA compliant in order to be eligible for additional e-rate discounts.
  - At this time, we estimate that the available Erate discounts would not exceed the cost of filtering and Erate administrative overhead unless a new building project is involved. We will re-evaluate this assumption regularly.
- OWLSnet will continue to follow advancements in linked data/BibFrame.
- OWLSnet will explore mobile apps for access to shared resources.
- OWLSnet will investigate methods to streamline support and supply requests, including adding helpdesk software.
  - OWLS staff evaluated several Help Desk software solutions in 2019 and 2020, but the project was put on hold due to COVID-19. We redesigned our email help list to make more effective use of Office 365 features.
- OWLSnet will investigate visiting each member library site on an annual basis in order to help all
libraries keep up to date on OWLSnet services, procedures and plans.

- OWLS will investigate replacing the overhead projector in the OWLS meeting room with a large screen TV to facilitate on-site training sessions.
  - OWLS decided not to invest in this enhancement while the future of the APL building remains uncertain.
- OWLS will develop and adopt a new Technology and Resource Sharing Plan. (2020)

While the vast majority of objectives included in the 2017 – 2020 Plan were achieved, the following objectives were not achieved due to limitations in staffing and funding.

**Unmet Objectives**

- OWLSnet will explore moving statistics to a dashboard format to increase access to statistics.
- OWLSnet will provide training and support to help more member libraries digitize unique local resources and share them online through Recollection Wisconsin.
- OWLSnet will investigate adding an authority control service to clean up and standardize existing bibliographic records, and improve authority control on an on-going basis.