

# **CLEVNET Return on Investment (ROI) Analysis**

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**Overview**

The libraries of the CLEVNET resource sharing network requested this study. In 1982, the Cleveland Heights-University Heights Public Library joined in the Cleveland Public Library's automation program. From that beginning, CLEVNET has grown to forty-six public libraries. This study is a follow up to an initial study of the cost-effectiveness of CLEVNET completed by Bill Driscoll and Howard Fleeter in 2009. The current study focuses on the forty-five public libraries that were CLEVNET member libraries in 2019 (see Table 1 on page 3). Note that Stow-Munroe Falls Public Library joined in 2021, however due to the library service disruptions caused by the COVID-19 pandemic, 2019 was chosen as the primary year of analysis for this project.

Participating libraries join CLEVNET by paying into a Special Revenue Fund. The cost methodology was modified in 2019 and CLEVNET "dues" are now based on a 4-part formula designed by the Government Finance Officers Association (GFOA) (see page 4 for a brief description).

After joining, CLEVNET member libraries merge their catalog into a master catalog of the combined collections of all participants. Patrons of any public library in the resource sharing network can search the catalog and borrow materials from any collection in CLEVNET. The statewide delivery system is used to move materials among the libraries. From the patrons' perspective, the integration of library collections occurs seamlessly. In addition, CLEVNET provides access to millions of E-books, downloadable audiobooks, magazines and videos through its Overdrive subscription. In addition, 31 of the 46 CLEVNET libraries also have an "Overdrive Advantage" subscription provides additional digital materials to members of their own libraries which are then made available to patrons in other CLEVNET libraries after an initial exclusivity period. The Overdrive and Overdrive Advantage subscriptions allow patrons at CLEVNET member libraries to collectively access these electronic resources at much lower cost than if each library paid for these titles individually.

While there are other resource sharing consortiums in Ohio, many of these - such as SearchOhio - only provide access to physical materials and not to electronic materials. In addition, CLEVNET provides a wide array of additional services to its member libraries.

CLEVNET provides all members with access to the SirsiDynix Integrated Library System (ILS) software. The ILS system is the "beating heart" of a library's day-to-day operations. The ILS manages circulation by tracking inventory, acquisitions, borrowers, holds, fines and overdue notices. The SirsiDynix system is provided free as part of each library's membership in CLEVNET.

As part of creating a true shared catalog of library items, CLEVNET also takes charge of the actual cataloging of library items, which individual libraries would have to pay for themselves at a rate of \$2.57 per item (in 2019) through the Online Computer Library Center (OCLC). While CLEVNET achieves economies of scale by consolidating the routine aspects of managing the integrated library system (ILS) and maintaining the bibliographic database, member libraries retain complete control over acquisitions and other policies.

In addition to circulation management and cataloguing, CLEVNET also provides a wide array of IT support services to member libraries. In fact, the expansion of these services is one of the most significant differences between CLEVNET in 2007 and CLEVNET today. In 2007 CLEVNET provided the hardware and software for the shared catalog system. The provision of hardware is no longer necessary as a library consortium CLEVNET has access to the State of Ohio Computing Center (SOCC). The SOCC is a datacenter which means that all of the information that in the past needed to be maintained on servers in individual libraries (which CLEVNET would provide and maintain) is now handled offsite at the SOCC. The advantage to member libraries is that they would have to pay the SOCC for such services if they were not part of CLEVNET.

CLEVNET continues to provide 24x7 on call network support and also offers software which manages wi-fi and networking, cybersecurity, web-filtering, PC backup and management, printing, library scheduling, library interfaces with patrons, and basic “back office” functions through Office 365 and SharePoint. In addition, CLEVNET can also provide VOIP phone service for member libraries if they desire (libraries must purchase their own phones in order to take advantage of this).

### Scope of the Study

This study examines the benefits obtained by the member libraries through participation in CLEVNET. It compares the costs assessed as dues in CLEVNET with the benefits of participating in the resource sharing network. The results show the return on investment in CLEVNET both in terms of benefits for library patrons (Part I of this report) and in terms of improved ability to provide library services (Part II of this report).

Much of the data for the analysis conducted here was provided by CLEVNET. While data on library cardholders and circulation figures were found in the *Ohio Public Library Statistics* prepared annually by the State Library of Ohio. Additional data and insights were gathered from interviews with selected library directors in libraries that have recently joined CLEVNET as well as those that have been CLEVNET member for a number of years.

The appendix to this report provides some additional information regarding the rationale for the pricing used to quantify the benefits of library services to patrons and additional detailed data that was used to prepare the analysis discussed in the body of the report.

**Table 1: CLEVNET Member Libraries as of May 1, 2022**

<b>Library Name</b>	<b>County</b>	<b>Year Joined CLEVNET</b>	<b># of Registered Borrowers</b>
Andover Public Library	Ashtabula	2013	4,116
Barberton Public Library	Summit	2009	22,554
Bellevue Public Library	Huron	1996	7,717

Birchard Public Library	Sandusky	1999	17,438
Bristol Public Library	Trumbull	2011	3,433
Burton Public Library	Geauga	2005	4,756
Cleveland Hts.-University Hts. P. L.	Cuyahoga	1982	47,475
Cleveland Public Library	Cuyahoga	1982	298,394
Clyde Public Library	Sandusky	1997	4,883
Conneaut Public Library	Ashtabula	2013	8,081
East Cleveland Public Library	Cuyahoga	1985	10,508
Elyria Public Library	Lorain	1984	34,438
Euclid Public Library	Cuyahoga	1984	31,537
Fairport Harbor Public Library	Lake	1997	3,257
Geauga County Public Library	Geauga	2017	54,646
Girard Free Library	Trumbull	2011	10,109
Harbor-Topky Memorial Library	Ashtabula	2013	6,032
Henderson Memorial Pub. Lib. Assoc.	Ashtabula	2013	6,798
Hubbard Public Library	Trumbull	2011	8,527
Hudson Lib. & Historical Soc.	Summit	1985	25,675
Huron Public Library	Erie	2001	6,795
Kingsville Public Library	Ashtabula	2013	3,868
Kinsman Free Public Library	Trumbull	2011	3,530
Kirtland Public Library	Lake	1997	3,555
Lorain Public Library System	Lorain	1990	65,787
Madison Public Library	Lake	1993	13,642
McKinley Memorial Library	Trumbull	2011	13,989
Medina County District Library	Medina	1985	99,125
Mentor Public Library	Lake	2019	62,235
Milan-Berlin Library District	Erie	2000	4,127
Morley Library	Lake	2018	22,650
Newton Falls Public Library	Trumbull	2011	8,383
Norwalk Public Library	Huron	2012	10,201
Orrville Public Library	Wayne	1985	10,987
Peninsula Library & Historical Society	Summit	2002	1,677
Perry Public Library	Lake	1992	5,477
Ritter Public Library	Erie	1984	11,204
Rock Creek Public Library	Ashtabula	2013	2,036
Rocky River Public Library	Cuyahoga	2017	23,037
Sandusky Library	Erie	1984	22,021
Shaker Heights Public Library	Cuyahoga	1983	28,955
Stow-Munroe Falls Public Library	Summit	2021	78,166
Twinsburg Public Library	Summit	1985	27,746
Wayne County Public Library	Wayne	1985	49,674
Wickliffe Public Library	Lake	1995	9,257
Willoughby-Eastlake Public Library	Lake	1983	29,330

### **Comparison of CLEVNET Network Costs and Benefits**

As of 2019, CLEVNET contract libraries pay a four-part fee to participate in the network. Each library's annual fee is based on the following four components, each comprising a 25% share of the cost:

- Library Inventory (the number of physical items owned and included in the CLEVNET database)
- Library Circulation (the annual physical circulation count)
- The number of Active Library Users (patrons that have exhibited activity in the past year)
- Library Square Footage

Each of these 4 components, which CLEVNET refers to as “Cost Centers”, has a per unit cost and each library’s annual fee is based on the multiplication of the per unit cost times the library’s inventory, circulation, number of active users and square footage.

Each year, payment of the fees entitles a member library to certain benefits provided as CLEVNET services. CLEVNET Information Technology does the actual work and delivers the services. This study made no attempt to analyze the operation of the CLEVNET’s fee structure in detail. Rather, it focused on measurement of the benefits received from CLEVNET participation compared to the cost paid by libraries to belong to the resource sharing network.

## **Part I. Direct Benefits for Library Patrons**

### ***Interlibrary Loans***

CLEVNET member libraries operate a shared catalog of items for use by patrons. While each library maintains its own collection and makes its own purchasing decisions, the circulating items in each library’s collection appear in one consolidated catalog. Any registered patron of a library in the resource sharing network can borrow items from that catalog. For example, most libraries will stock well-known works by famous authors, such as James Patterson or Jodi Picoult. A patron of the relatively small Conneaut Public Library might find popular work by these authors and others in the collection of his or her community library. However, smaller libraries may only have limited copies of such works and even larger libraires may only have limited access to electronic or audio versions of many books. In addition, a larger library like Cleveland Public Library (CPL) maintains a larger collection designed to support research and more specialized interests as well as general reading and patrons of all CLEVNET libraries have access to CPL’s holdings as if they were a cardholder in Cleveland.

In the above example if the version of the book that the Conneaut patron requests is not available from the Conneaut library the patron will also (and automatically) see the availability of the desired book in other CLEVNET library’s collections. The book can then be ordered from the CLEVNET library which has the book by a Conneaut Public Library patron, either from home or other remote location, or from within the library, and the Statewide delivery system delivers the book to the Conneaut Public Library for its patron’s use. In fact, the Conneaut patron could order the book for delivery to *any* branch of *any* CLEVNET library. All of this occurs in a seamless manner. The Conneaut Public Library patron benefits directly by obtaining access to a book, video, CD or other physical item not otherwise available through the local collection only.

It is also important to note that Northeast Ohio libraries have access to other resource sharing networks such as Search Ohio. However, Search Ohio is not a true shared network. Rather, each Search Ohio library maintains their own collection and these collections are then linked with one another. While this may sound the same as CLEVNET's shared network, the experience for a library patron under Search Ohio is quite different than it is for a patron under CLEVNET. While the user searching for a book under CLEVNET immediately and automatically sees all copies and all versions (print, audio, electronic) of the title in question held at any of the 46 CLEVNET libraries the Search Ohio user will initially only see what their own library has to offer. If the item they are searching for is not available they then must initiate a second search at other Search Ohio libraries. The Search Ohio process is thus more cumbersome and time-consuming than is the CLEVNET process and thereby seems less likely to result in the user finding the item that they are requesting. Note also that Search Ohio only provides resource sharing, it does not provide cataloguing of physical items, nor does it offer any of the technology services that CLEVNET provides including, networking, cybersecurity, Wi-Fi, technical support, and many others.

The initial CLEVNET analysis found that in 2007, nearly 2.9 million such transactions occurred in the CLEVNET system where a patron of one "home" library obtained the loan of a physical item (book, video, music/other recording, or audiobook) from the collection of another library of the resource sharing network. These library patrons benefited directly by obtaining an item not otherwise available. ***By 2019 the number of physical items sent through interlibrary loan from one CLEVNET library to another had risen to more than 4.8 million books, videos, recordings and audiobooks.*** While other options for obtaining the loan of an item through interlibrary transactions do exist, they often involve transaction or postage costs. CLEVNET's interlibrary loan system eliminates any per item transaction costs, although each individual library pays for its own delivery service through contracting arrangements with the State Library which include both CLEVNET transactions as well as any others.

### ***Electronic Services***

CLEVNET also provides direct benefits to library patrons in electronic form. First, the resource sharing network provides patrons of participating libraries access to an electronic database collection. The combined purchasing power of the resource sharing network enables smaller libraries especially to obtain access to electronic database services otherwise beyond their ability to afford. In 2007 electronic databases provided through CLEVNET were accessed 689,000 times by patrons of CLEVNET member libraries. In 2019 the number of times CLEVNET databases had been accessed through CLEVNET had decreased to slightly more than 46,000. The primary reason for this is increased access to databases provided to all Ohio libraries through the Ohio Public Library Information Network (OPLIN). CLEVNET has redirected dollars previously spent on databases towards increasing access to Overdrive and other digital resources.

Second, the resource sharing network's electronic services also include access by which patrons can download electronic books, movies, audiobooks, and music directly to their own computers. This occurs through the access that CLEVNET provides through the "Overdrive" subscription service. CLEVNET's size allows it to exercise greater purchasing power than can individual libraries. As a result, patrons of CLEVNET

member libraries benefit directly by obtaining enhanced access to these electronic items. Individual libraries are also free to supplement the electronic offerings available through CLEVNET by purchasing an “Overdrive Advantage” subscription which provides access to additional electronic titles and also provides exclusive access to these titles to patrons of the Advantage library for the first 60 days a title is available. Patrons at other CLEVNET member libraries are also allowed to download materials that are made available from other library’s Overdrive Advantage accounts once the exclusive window has closed.

Interviews with CLEVNET member library directors unanimously cited the wide array of electronic resources available through CLEVNET’s Overdrive subscription as one of the principal benefits of CLEVNET membership. In 2007 library patrons accessed slightly fewer than 27,000 E-books through CLEVNET (downloads of audiobooks, magazines and videos were included in 2007 physical circulation totals but were relatively small). By 2019 CLEVNET’s electronic circulation had increased by over 100 times to more than 3.1 million downloads including E-Books, downloadable audiobooks and magazines, and videos streamed. 2021 data shows that CLEVNET electronic circulation has continued to increase to more 3.5 million downloads.

A third significant electronic service is that most Ohio libraries make Wi-Fi connection services available to patrons in their libraries. By taking care of the computer technology needs of member libraries CLEVNET facilitates and maintains Wi-Fi access. In 2007 Wi-Fi usage was an estimated 120,000 and has increased to nearly 3.3 million in 2019.

### **Valuing CLEVNET Benefits for Library Patrons**

The methodology for valuing the direct benefits to library patrons derived from CLEVNET services is well-established and straightforward. The methodology involves 4 steps.

#### **Step 1: Volume of Library Materials Accessed Through CLEVNET**

The CLEVNET resource sharing network’s control over the catalog and circulation system enables the creation of detailed statistics about inter-library loan activity and about the downloading of electronic materials as well as database and Wi-Fi usage by patrons of the CLEVNET member libraries. Detailed statistics about the kinds of items borrowed or used and the “home” libraries of the patrons who borrowed or used them provided a basis for assigning CLEVNET benefits to the system in aggregate as well as to each public library in the resource sharing network.

#### **Step 2: Quantifying the Value of Utilizing Library Materials and Services**

To quantify the value of the benefits obtained by patrons from physical and electronic library transactions as well as Wi-Fi usage, the initial 2009 study assigned a dollar amount to each type of item borrowed or downloaded based on conservative assumptions regarding the market value of books, films, database access, and other types of information shared through the combined catalog. The logic of this step is that library patrons' access for free books, audiobooks, videos, music, software, databases and Wi-Fi services, each of which would have a cost in the marketplace if they were not available from the library. This version of the analysis updates the original approach by utilizing

market pricing information developed by Howard Fleeter for the Ohio Library Council's Library Return-On-Investment (ROI) Calculator in order to place a value on the benefits derived by library patrons utilizing CLEVNET's services. Computing the value of CLEVNET library services is then simply a matter of multiplying each type of library material and service accessed by its market price:

$$\text{CLEVNET Library Value} = \text{Price} \times \text{Quantity of material accessed}$$

Appendix 1 of this report provides additional detail about the specific valuation methods used for the various library materials and services provided.

### **Step 3: Return on Investment = Library Benefits Divided by CLEVNET Costs**

The final step in the ROI calculation is to divide the total value of library services to patrons by the total cost of CLEVNET membership. This will produce an overall Return on Investment (ROI) benefit-to-cost ratio that reflects the aggregate benefit of the CLEVNET consortium to patrons of all member libraries as a group. A similar ROI calculation can then be made for each library, comparing the benefits derived by each library's own patrons from CLEVNET's services compared to that library's cost to be a member of CLEVNET.

### **2007 vs. 2019 CLEVNET Aggregate ROI Findings**

Table 2 below provides a comparison for the aggregate Return-on-Investment (ROI) from interlibrary loans, the provision of electronic materials, database access and Wi-Fi services through CLEVNET. Findings are presented from both the original 2009 analysis that was based on 2007 data, and for the current analysis which utilizes 2019 data.

Table 2 is structured so that Section 1 at the top provides data on the circulation of physical items through CLEVNET's interlibrary loan program. The quantity of books, videos, music, recorded books, software and magazines circulated is multiplied by the market price of each item (as determined through the methodology explained in Appendix 1) to reach a Value for all items of each type circulated through CLEVNET. 2007 data is shown in the left half of the table while 2019 data is shown in the right half of the table. For example, the top row of Table 2 shows that a total of 1,514,382 books were circulated through interlibrary loan in 2007 at an average price of \$7.96 each. Multiplying the price times the quantity results in 2007 value of \$12,054,481. In 2019, the number of books circulated through CLEVNET had nearly double to 2,737,859 and at an increased price of \$11.90 per book an aggregate value of \$32,580,522 results. Similar calculations for the other physically circulated items yielded total interlibrary loans of 2,877,797 items in 2007 worth a total value of \$19,514,774. By 2019 these figures had increased to 4,834,577 books, videos, recorded books and other physical items loaned through CLEVNET worth a total of \$41,102,248. These figures are shown in the "Physical Circ. Subtotal" row of Table 2.

**Table 2: Comparison of 2007 vs 2019 CLEVNET Return on Investment (ROI)**

	<b>2007 Price</b>	<b>2007 Quantity</b>	<b>2007 Value</b>		<b>2019 Price</b>	<b>2019 Quantity</b>	<b>2019 Value</b>
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<b>1. Physical Circulation</b>							
Books	\$7.96	1,514,382	<b>\$12,054,481</b>		\$11.90	2,737,859	<b>\$32,580,522</b>
Video - Films	\$3.00	743,290	<b>\$2,229,870</b>		\$3.00	1,551,042	<b>\$4,653,126</b>
Recordings - Music	\$4.96	401,298	<b>\$1,990,438</b>		\$5.00	301,130	<b>\$1,505,650</b>
Recorded Books	\$17.99	173,531	<b>\$3,121,823</b>		\$10.47	185,713	<b>\$1,944,415</b>
Games, Kits & Other	\$3.00	14,198	<b>\$42,594</b>		\$10.00	24,874	<b>\$248,740</b>
Magazines	\$2.43	31,098	<b>\$75,568</b>		\$5.00	33,959	<b>\$169,795</b>
<b>Physical Circ. Subtotal</b>		<b>2,877,797</b>	<b>\$19,514,774</b>			<b>4,834,577</b>	<b>\$41,102,248</b>
<b>2. Electronic Circulation</b>							
E-Books	\$7.00	26,863	\$188,041		\$12.50	1,966,486	<b>\$24,581,075</b>
Audiobook Downloads	\$17.99	NA*			\$21.00	1,129,251	<b>\$23,714,271</b>
Magazine Downloads	\$2.43	NA*			\$5.00	34,699	<b>\$173,495</b>
Videos Streamed	\$3.00	NA*			\$4.00	7,842	<b>\$31,368</b>
<b>Electronic Circ. Subtotal</b>		<b>26,863</b>	<b>\$188,041</b>			<b>3,138,278</b>	<b>\$48,500,209</b>
<b>Circulation Total Benefit</b>		<b>2,904,660</b>	<b>\$19,702,815</b>			<b>7,972,855</b>	<b>\$89,602,457</b>
<b>CLEVNET Cost</b>			<b>\$4,267,763</b>				<b>\$5,563,901</b>
<b>Circulation ROI Ratio</b>			<b>4.62</b>				<b>16.11</b>
<b>3. Databases &amp; Wi-Fi</b>							
Electronic Databases	\$10.00	689,122	<b>\$6,891,220</b>		\$10.00	46,136	<b>\$461,360</b>
Wi-Fi Use	\$5.00	119,662	<b>\$598,310</b>		\$5.00	3,277,480	<b>\$16,387,400</b>
<b>Databases + Wi-Fi Total</b>			<b>\$7,489,530</b>				<b>\$16,848,760</b>
<b>Total Benefit</b>			<b>\$27,192,345</b>				<b>\$106,451,217</b>
<b>Total ROI Ratio</b>			<b>6.37</b>				<b>19.13</b>

Notes: 1) 2007 Wi-Fi usage is estimated

2) 2007 downloads of audiobooks, magazines, and movies are included with the physical circulation totals

Section 2 of Table 2 goes through the same exercise for electronic items downloaded through CLEVNET. In 2019 12,807,432 E-Books, Audiobooks, magazines and videos were downloaded by CLEVNET patrons. These digital resources have a combined value of \$48,500,209. Note that data limitations prevented the separation of physical and electronic versions of audiobooks, magazines and videos in the 2007 data which is why only E-book electronic circulation is shown for that year.

Section 3 of Table 2 computes the value of database and Wi-Fi utilization by CLEVNET library patrons. In 2007 the total value of patrons accessing these resources was nearly \$7.5 million which by 2019 had increased to more than \$16.8 million.

In 2007 2.9 million circulation transactions occurred through CLEVNET. By 2019 the number of transactions of physical and electronic materials had increased to nearly 8 million. As a result, the total benefit to CLEVNET library patrons from physical and

digital items circulated more than quadrupled from \$19.7 million in 2007 to \$89.6 million in 2019. These figures are shown in the “Circulation Total Benefit” row of Table 2.

Over the same time frame that CLEVNET circulation was skyrocketing, CLEVNET costs only increased by only 30% from roughly \$4.3 million in 2007 to roughly \$5.6 million in 2019. When the total benefit figures discussed in the above paragraph are divided by total CLEVNET costs in each year, the 2007 and 2019 ROI benefit-to-cost ratios are determined. Below are the main findings from this analysis:

- The 2019 return-on-investment from circulation of physical and digital items of 16.11 is nearly 3.5 times higher than the 2007 circulation ROI of 4.62. This means that in 2019 CLEVNET’s circulation provided an average of more than \$16 in benefit to library users for every \$1 spent by CLEVNET.
- **When database and Wi-Fi usage is included, the 2019 total benefit to patrons of CLEVNET libraries was nearly \$106.5 million and the overall ROI was 19.13, meaning that patrons of CLEVNET member libraries received more than \$19 of benefit for every \$1 of cost of participating in the consortium.**
- *Note that these ROI figures do NOT include the value of the cataloguing, Wi-Fi, networking, cybersecurity and other computer services provided by CLEVNET or the cost-savings derived from CLEVNETs consolidated inter-library loan system.*

Additional findings from Table 2 are:

- The volume of materials circulated through interlibrary loan through CLEVNET has nearly doubled from 2007 through 2019 (2.88 million to 4.83 million items). While the number of libraries participating in CLEVNET has also nearly doubled over this time period, the increase in interlibrary loan circulation has outpaced the increase in the number of cardholders which has gone up by roughly 40% since 2007.
- The number of electronic materials downloaded through CLEVNET has increased exponentially since 2007. While the number of downloads of audiobooks, magazines, and movies are included with the 2007 physical circulation totals, the 2007 total digital circulation if these items were included would at most be only a small fraction of the 3.1 million items downloaded through CLEVNET in 2019. By way of comparison, The State Library Annual Statistical Reports show that statewide downloads of digital materials have increased from 5.5 million in 2012 to 26.4 million in 2019. CLEVNET’s electronic materials utilization mirrors this trend.
- In terms of total dollar benefit to users, digital downloads now provide more value to patrons (\$48.5 million than do physical items (\$41.1 million), although the circulation of printed books remains the single highest value library resource to CLEVNET patrons at \$32.6 million.
- The only area of service to CLEVNET library patrons that shows a decline in from 2007 to 2019 is database usage which has decreased from 689,122 to 46,136. The primary reason for this is that OPLIN has significantly increased the number of databases that it provides and CLEVNET now only provides a small

number of databases including Consumer Reports, Reference USA, Gale Legal Forms, Morningstar Investments, and several others.

### 2019 CLEVNET ROI Findings by Library

The table in Appendix 2 shows the number of physical items circulated through CLEVNET’s interlibrary loan program in 2019 for each of the 45 individual library systems that were members of CLEVNET that year. The Appendix 2 table 2 shows the number of books, audiobooks, movies and videos, music on CDs and other formats, magazines, and games and other items *received by each library* through interlibrary loan in 2019. The total number of items each type circulated shown in the bottom of row of the Appendix 2 table match the figures shown in the “2019 Quantity” column of Table 2 above.

The table in Appendix 3 shows the number of digital items by type downloaded in 2019 by each of the 45 individual library systems that were members of CLEVNET that year. The table in Appendix 3 shows the number of E-Books, audiobooks, magazines, and movies and videos *downloaded by each library* through Overdrive in 2019. The total number of items each type downloaded shown in the bottom of row of Appendix Table 3 match the figures shown in the “2019 Quantity” column of Table 2 above.

Appendix Table 3 also shows the number of wireless sessions initiated by patrons in each library in 2019. The total number of Wi-Fi sessions of 3,277,480 matches that shown in Table 2 above. Note that the individual library ROI analysis does not include databases accessed. This is because it is not possible for CLEVNET to always determine the home library of individuals that are accessing databases.

Tables 3 and 4 below show the benefit received by patrons of each library from circulation through CLEVNET in 2019. Table 3 shows the value of physical items received by patrons of each library through interlibrary loan. Table 4 shows the value of digital materials downloaded through Overdrive. Note that these figures only include the value of those items from the CLEVNET collection or from other libraries Overdrive Advantage collections - not materials downloaded from a library’s own Overdrive Advantage collection. Table 4 also shows the value of wireless sessions by library.

**Table 3: Value of 2019 CLEVNET Circulation of Physical Items by Type & Library**

Library System	Books Value	Audiobooks Value	Videos Value	Music Value	Magazines Value	Games & Other	Phys. Circ. Total Value
Andover	\$101,709	\$7,099	\$14,580	\$1,365	\$175	\$2,720	\$127,648
Barberton	\$318,849	\$13,580	\$47,481	\$14,415	\$55	\$1,950	\$396,329
Bellevue	\$262,800	\$9,004	\$23,727	\$4,180	\$300	\$1,370	\$301,381
Birchard	\$436,897	\$22,039	\$73,761	\$17,440	\$1,745	\$2,230	\$554,112
Bristol	\$96,021	\$4,774	\$19,476	\$6,000	\$390	\$2,180	\$128,841
Burton	\$307,734	\$19,516	\$39,135	\$9,325	\$1,405	\$2,240	\$379,355
Cleveland	\$3,889,860	\$284,868	\$1,045,071	\$288,595	\$58,170	\$53,560	\$5,620,124
Cleveland Hts	\$2,975,036	\$144,999	\$252,960	\$105,365	\$16,635	\$11,470	\$3,506,465
Clyde	\$131,281	\$11,548	\$19,104	\$4,845	\$650	\$480	\$167,908
Conneaut	\$234,228	\$8,041	\$26,331	\$890	\$210	\$1,140	\$270,840
East Cleveland	\$119,321	\$8,428	\$62,037	\$9,610	\$920	\$3,390	\$203,707

Elyria	\$1,029,671	\$66,055	\$148,353	\$67,915	\$1,690	\$8,360	\$1,322,045
Euclid	\$666,793	\$55,282	\$163,668	\$37,900	\$5,145	\$4,820	\$933,607
Fairport	\$108,599	\$6,983	\$36,996	\$7,095	\$1,015	\$220	\$160,909
Geauga	\$2,050,061	\$131,775	\$194,469	\$83,500	\$3,355	\$14,410	\$2,477,570
Girard	\$121,820	\$5,800	\$23,289	\$8,395	\$125	\$1,800	\$161,230
Harbor-Topky	\$135,482	\$6,387	\$19,281	\$3,585	\$440	\$880	\$166,054
Henderson	\$301,582	\$11,821	\$37,182	\$12,735	\$1,290	\$1,550	\$366,159
Hubbard	\$260,491	\$17,422	\$36,759	\$15,255	\$0	\$940	\$330,867
Hudson	\$1,587,793	\$72,693	\$106,911	\$58,190	\$6,325	\$12,020	\$1,843,932
Huron	\$250,352	\$14,271	\$22,095	\$7,310	\$410	\$800	\$295,238
Kingsville	\$118,334	\$7,182	\$19,827	\$2,325	\$285	\$150	\$148,103
Kinsman	\$95,747	\$5,936	\$18,120	\$4,690	\$180	\$360	\$125,034
Kirtland	\$217,699	\$13,119	\$21,915	\$6,775	\$945	\$2,420	\$262,873
Lorain	\$1,773,481	\$115,358	\$310,959	\$89,910	\$2,845	\$19,680	\$2,312,233
Madison	\$467,349	\$26,154	\$54,579	\$22,910	\$2,440	\$5,320	\$578,752
McKinley	\$154,284	\$10,124	\$47,718	\$8,100	\$605	\$2,310	\$223,141
Medina	\$2,935,278	\$196,595	\$378,390	\$148,560	\$5,780	\$17,050	\$3,681,653
Mentor	\$548,364	\$27,034	\$76,860	\$21,380	\$2,725	\$3,550	\$679,912
Milan-Berlin	\$211,808	\$12,093	\$24,639	\$5,955	\$810	\$2,030	\$257,335
Morley	\$323,275	\$15,674	\$58,920	\$10,900	\$1,085	\$2,930	\$412,784
Newton Falls	\$128,913	\$11,360	\$33,804	\$2,960	\$25	\$2,150	\$179,212
Norwalk	\$194,077	\$10,030	\$24,228	\$6,260	\$395	\$2,000	\$236,990
Orrville	\$914,003	\$44,623	\$95,403	\$23,615	\$795	\$5,230	\$1,083,669
Peninsula	\$116,477	\$9,182	\$11,700	\$14,695	\$195	\$480	\$152,729
Perry	\$258,420	\$22,123	\$37,818	\$8,075	\$1,460	\$1,640	\$329,537
Ritter	\$366,199	\$21,034	\$36,741	\$7,285	\$495	\$970	\$432,724
Rock Creek	\$66,819	\$6,942	\$15,033	\$2,270	\$210	\$830	\$92,103
Rocky River	\$777,189	\$34,980	\$77,481	\$40,930	\$945	\$3,360	\$934,885
Sandusky	\$503,489	\$24,447	\$83,931	\$23,760	\$1,105	\$4,840	\$641,572
Shaker Heights	\$1,423,704	\$77,865	\$163,191	\$56,260	\$9,635	\$5,080	\$1,735,735
Twinsburg	\$1,360,598	\$75,625	\$139,956	\$79,100	\$10,670	\$10,310	\$1,676,259
Wayne County	\$2,671,122	\$156,003	\$246,594	\$64,695	\$15,965	\$14,180	\$3,168,559
Wickliffe	\$424,187	\$20,919	\$88,473	\$23,120	\$4,605	\$3,320	\$564,624
Willoughby-Eastlake	\$1,143,328	\$77,625	\$174,180	\$67,210	\$5,145	\$10,020	\$1,477,508
<b>CLEVNET Total</b>	<b>\$32,580,522</b>	<b>\$1,944,415</b>	<b>\$4,653,126</b>	<b>\$1,505,650</b>	<b>\$169,795</b>	<b>\$248,740</b>	<b>\$41,102,248</b>

**Table 4: Value of 2019 CLEVNET Digital Downloads and Wi-Fi, by Library**

Library System	E-Books Value	Audiobooks Value	Magazines Value	Videos Value	Elec. Circ. Total Value	Wi-Fi Value
Andover	\$128,050	\$72,660	\$1,545	\$44	\$202,299	\$80,250
Barberton	\$423,063	\$449,610	\$1,525	\$652	\$874,850	\$325,680
Bellevue	\$178,225	\$136,563	\$950	\$304	\$316,042	\$120,605
Birchard	\$443,750	\$332,346	\$1,750	\$348	\$778,194	\$293,525
Bristol	\$71,600	\$72,177	\$415	\$40	\$144,232	\$73,955
Burton	\$160,238	\$225,309	\$1,145	\$116	\$386,808	\$160,695
Cleveland	\$3,632,675	\$4,277,511	\$25,165	\$5,956	\$7,941,307	\$3,731,020
Cleveland Hts	\$1,282,000	\$1,377,789	\$8,155	\$2,668	\$2,670,612	\$1,701,425
Clyde	\$117,375	\$89,838	\$1,965	\$184	\$209,362	\$103,940
Conneaut	\$108,325	\$61,257	\$1,255	\$64	\$170,901	\$61,855
East Cleveland	\$20,438	\$33,789	\$230	\$44	\$54,501	\$450,000

Elyria	\$833,375	\$599,067	\$2,700	\$720	\$1,435,862	\$235,600
Euclid	\$370,563	\$413,952	\$3,575	\$448	\$788,538	\$447,125
Fairport	\$87,300	\$76,734	\$1,165	\$8	\$165,207	\$147,140
Geauga	\$1,522,125	\$1,574,643	\$13,350	\$1,120	\$3,111,238	\$104,240
Girard	\$145,763	\$100,170	\$2,205	\$36	\$248,174	\$74,510
Harbor-Topky	\$89,813	\$50,862	\$705	\$84	\$141,464	\$38,680
Henderson	\$122,600	\$106,617	\$2,405	\$320	\$231,942	\$94,205
Hubbard	\$276,350	\$234,003	\$1,110	\$332	\$511,795	\$55,760
Hudson	\$1,091,175	\$1,114,743	\$9,555	\$1,144	\$2,216,617	\$616,995
Huron	\$171,863	\$192,171	\$610	\$120	\$364,764	\$114,695
Kingsville	\$65,700	\$79,779	\$510	\$112	\$146,101	\$91,160
Kinsman	\$132,688	\$90,468	\$740	\$520	\$224,416	\$46,350
Kirtland	\$167,225	\$149,205	\$720	\$180	\$317,330	\$49,690
Lorain	\$1,500,225	\$1,216,950	\$7,610	\$1,776	\$2,726,561	\$826,265
Madison	\$283,138	\$275,898	\$1,465	\$224	\$560,725	\$194,805
McKinley	\$223,375	\$236,985	\$1,300	\$156	\$461,816	\$70,420
Medina	\$3,007,075	\$3,056,970	\$21,720	\$4,088	\$6,089,853	\$1,432,145
Mentor	\$475,350	\$299,670	\$2,685	\$376	\$778,081	\$349,680
Milan-Berlin	\$123,513	\$113,526	\$400	\$388	\$237,827	\$128,610
Morley	\$281,038	\$183,939	\$1,320	\$252	\$466,549	\$308,005
Newton Falls	\$143,313	\$132,195	\$575	\$120	\$276,203	\$63,480
Norwalk	\$215,000	\$188,622	\$1,715	\$96	\$405,433	\$89,210
Orrville	\$396,050	\$463,155	\$1,650	\$588	\$861,443	\$253,105
Peninsula	\$87,950	\$78,414	\$240	\$84	\$166,688	\$24,650
Perry	\$206,813	\$152,775	\$1,395	\$460	\$361,443	\$80,995
Ritter	\$327,513	\$284,319	\$2,335	\$400	\$614,567	\$235,800
Rock Creek	\$27,375	\$25,893	\$200	\$4	\$53,472	\$25,470
Rocky River	\$620,888	\$519,897	\$10,240	\$852	\$1,151,877	\$606,575
Sandusky	\$589,363	\$391,566	\$3,470	\$296	\$984,695	\$252,785
Shaker Heights	\$816,488	\$757,890	\$4,810	\$688	\$1,579,876	\$616,080
Twinsburg	\$827,700	\$865,221	\$4,105	\$2,016	\$1,699,042	\$378,995
Wayne County	\$1,527,075	\$1,457,526	\$9,130	\$1,640	\$2,995,371	\$583,265
Wickliffe	\$222,688	\$176,925	\$2,640	\$444	\$402,697	\$145,300
Willoughby-Eastlake	\$1,036,875	\$924,672	\$11,040	\$856	\$1,973,443	\$502,660
<b>CLEVNET Total</b>	<b>\$24,581,075</b>	<b>\$23,714,271</b>	<b>\$173,495</b>	<b>\$31,368</b>	<b>\$48,500,209</b>	<b>\$16,387,400</b>

Table 5 below shows the comparison of the benefits derived by patrons of each the member library with their CLEVNET membership costs. The amounts shown in the column labeled “Physical Circ. Benefit” of Table 5 come directly from the rightmost column in Table 3. Similarly, the amounts shown in the columns labeled “Electronic Circ. Benefit” and “Wi-Fi Access Benefit” of Table 5 come directly from the two rightmost columns in Table 4. A comparison of these benefits to the cost of CLEVNET participation shown in the “CLEVNET Dues” column of Table 5 shows that every library receives significantly more benefits in the form of additional access to library materials for its patrons than its cost of participation. This ratio is referred to as Return-on-Investment or “ROI”.

This benefit to cost ratio (which is also referred to as Return-on-Investment or “ROI”) can be seen in the rightmost column of Table 5 labeled “2019 ROI (Benefit to Cost)”. The Benefit to Cost ratios vary from 10.49 in Cleveland Public Library to 36.41 in

Orrville Public Library. This means that the individual libraries receive a minimum of \$1.49 in benefit for every dollar spent to join CLEVNET to a maximum of \$36.41 in benefits for every dollar spent. The overall average ROI shown in Table 5 is 19.05. Note that this is slightly lower than the 2019 ROI shown in Table 2 because the benefits derived from database usage is not included here because the CLEVNET data cannot easily break out the uses of the electronic databases according to each database user's library. Therefore, it is not possible to estimate the value of the database service on a library-by-library basis.

While it makes sense that Cleveland has the lowest ROI because its collection of materials is by far the largest and it thus stands to gain relatively less from the consortium than do smaller libraries, size by itself does not seem to be strongly correlated with the ROI results. However, higher ratios of benefits to costs appear to result from two different features of member libraries. First, many of the libraries whose ROI's are relatively lower (although still high in absolute terms) are those where more physical materials are sent out rather than received. Second, libraries whose ration of physical and/or electronic materials borrowed through CLEVNET are the highest tend to have higher ROIs. In essence, libraries with higher ROI's tend to be those whose patron's behaviors have served to expand their collections the most. *Again, it is very important to stress that in absolute terms all CLEVNET libraries exhibit very favorable benefit-to-cost ratios.* This information is provided in the table in Appendix 4.

For comparative purposes, the Table in Appendix 5 shows the library-by-library benefits received from physical and electronic circulation in 2007. Cumulatively, the expanded opportunities enabled by the integrated CLEVNET catalog delivered \$19.7 million in benefits to patrons of the contract libraries. When the additional \$6.9 million in the value of 2007 database usage is included the cumulative benefit to the 26 libraries of membership in CLEVNET increases to more than \$26 6 million.

The table in Appendix 6 shows the 2007 library-by-library ROI benefit to cost ratios for each of the 26 member libraries. As discussed above in the context of Table 2, the 2007 ratios are much lower than those shown in Table 5 above for 2019.

**Table 5: 2019 CLEVNET Return on Investment (ROI) By Library**

Library System	Physical Circ. Benefit	Electronic Circ. Benefit	Wi-Fi Access Benefit	Circulation + Wi-Fi Benefit	CLEVNET Dues	2019 ROI (Benefit to Cost)
Andover	\$127,648	\$202,299	\$80,250	\$410,197	\$16,648	24.64
Barberton	\$396,329	\$874,850	\$325,680	\$1,596,859	\$70,109	22.78
Bellevue	\$301,381	\$316,042	\$120,605	\$738,028	\$35,307	20.90
Birchard	\$554,112	\$778,194	\$293,525	\$1,625,831	\$90,309	18.00
Bristol	\$128,841	\$144,232	\$73,955	\$347,028	\$21,444	16.18
Burton	\$379,355	\$386,808	\$160,695	\$926,858	\$36,210	25.60
Cleveland	\$5,620,124	\$7,941,307	\$3,731,020	\$17,292,451	\$1,648,050	10.49
Cleve. Hts.-Univ Hts.	\$3,506,465	\$2,670,612	\$1,701,425	\$7,878,502	\$270,669	29.11
Clyde	\$167,908	\$209,362	\$103,940	\$481,210	\$22,249	21.63
Conneaut	\$270,840	\$170,901	\$61,855	\$503,596	\$29,944	16.82
East Cleveland	\$203,707	\$54,501	\$450,000	\$708,207	\$45,055	15.72
Elyria	\$1,322,045	\$1,435,862	\$235,600	\$2,993,507	\$156,053	19.18
Euclid	\$933,607	\$788,538	\$447,125	\$2,169,270	\$147,152	14.74

Fairport	\$160,909	\$165,207	\$147,140	\$473,256	\$15,062	31.42
Geauga	\$2,477,570	\$3,111,238	\$104,240	\$5,693,048	\$334,139	17.04
Girard	\$161,230	\$248,174	\$74,510	\$483,913	\$32,613	14.84
Harbor-Topky	\$166,054	\$141,464	\$38,680	\$346,198	\$23,738	14.58
Henderson	\$366,159	\$231,942	\$94,205	\$692,306	\$27,510	25.17
Hubbard	\$330,867	\$511,795	\$55,760	\$898,422	\$34,836	25.79
Hudson	\$1,843,932	\$2,216,617	\$616,995	\$4,677,544	\$140,836	33.21
Huron	\$295,238	\$364,764	\$114,695	\$774,696	\$43,695	17.73
Kingsville	\$148,103	\$146,101	\$91,160	\$385,364	\$16,838	22.89
Kinsman	\$125,034	\$224,416	\$46,350	\$395,799	\$26,290	15.05
Kirtland	\$262,873	\$317,330	\$49,690	\$629,893	\$27,158	23.19
Lorain	\$2,312,233	\$2,726,561	\$826,265	\$5,865,059	\$279,666	20.97
Madison	\$578,752	\$560,725	\$194,805	\$1,334,281	\$62,441	21.37
McKinley	\$223,141	\$461,816	\$70,420	\$755,377	\$45,300	16.67
Medina	\$3,681,653	\$6,089,853	\$1,432,145	\$11,203,651	\$379,617	29.51
Mentor	\$679,912	\$778,081	\$349,680	\$1,807,673	\$111,002	16.28
Milan-Berlin	\$257,335	\$237,827	\$128,610	\$623,771	\$33,337	18.71
Morley	\$412,784	\$466,549	\$308,005	\$1,187,337	\$102,355	11.60
Newton Falls	\$179,212	\$276,203	\$63,480	\$518,894	\$29,916	17.35
Norwalk	\$236,990	\$405,433	\$89,210	\$731,633	\$30,757	23.79
Orrville	\$1,083,669	\$861,443	\$253,105	\$2,198,217	\$60,381	36.41
Peninsula	\$152,729	\$166,688	\$24,650	\$344,067	\$18,639	18.46
Perry	\$329,537	\$361,443	\$80,995	\$771,974	\$33,155	23.28
Ritter	\$432,724	\$614,567	\$235,800	\$1,283,090	\$57,312	22.39
Rock Creek	\$92,103	\$53,472	\$25,470	\$171,045	\$9,944	17.20
Rocky River	\$934,885	\$1,151,877	\$606,575	\$2,693,337	\$123,134	21.87
Sandusky	\$641,572	\$984,695	\$252,785	\$1,879,052	\$100,334	18.73
Shaker Heights	\$1,735,735	\$1,579,876	\$616,080	\$3,931,691	\$152,974	25.70
Twinsburg	\$1,676,259	\$1,699,042	\$378,995	\$3,754,296	\$141,949	26.45
Wayne County	\$3,168,559	\$2,995,371	\$583,265	\$6,747,195	\$250,999	26.88
Wickliffe	\$564,624	\$402,697	\$145,300	\$1,112,621	\$53,492	20.80
Willoughby-Eastlake	\$1,477,508	\$1,973,443	\$502,660	\$3,953,611	\$175,281	22.56
<b>CLEVNET Total</b>	<b>\$41,102,248</b>	<b>\$48,500,209</b>	<b>\$16,387,400</b>	<b>\$105,989,857</b>	<b>\$5,563,901</b>	<b>19.05</b>

## Part II. Benefits for Member Libraries

A second way to look at the benefits provided by CLEVNET is to look at the impact the consortium has on the member libraries themselves rather than on the benefits to library patrons. These benefits fall into 4 main categories:

- Expanded access to physical items through the shared catalog and CLEVNET’s interlibrary loan services
- Expanded access to digital through CLEVNET’s Overdrive subscription and the sharing of other member library’s Overdrive Advantage subscriptions
- Provision of the SirsiDynix ILS software free with CLEVNET membership. CLEVNET also typically pays the cost of cataloging physical items for member libraries.
- CLEVNET provides extensive IT services to member libraries including 24x7 IT support, cybersecurity, and access to the State of Ohio Computing Center (SOCC)

Interviews with a number of library directors consistently reported that membership in CLEVNET provided access to a much greater volume of physical and electronic materials at a lower cost than would be possible for the libraries to provide interdependently. These same interviews also reported that CLEVNET provides more and better IT services at a lower cost than would be possible for libraries to provide on their own.

### A. Expanded Access to Physical and Digital Materials

One method of demonstrating the impact of CLEVNET on the libraries themselves is to examine data demonstrating the extent to which CLEVNET has expanded offerings available to libraries that have recently joined.

**Table 6: Comparison of Physical Circulation in Libraries that have Recently Joined CLEVNET in Year Prior, Year Joined, and Year After Joining**

Library System	Year Joined CLEVNET	Physical Circ. Year Prior	Physical Circ. Year Joined	Physical Circ. Year After Joining	% Increase Year Joined	% Incr. Yr. After vs. Year Prior
Andover	2013	104,382	96,945	85,302	-7.1%	-18.3%
Conneaut	2013	116,831	109,946	108,459	-5.9%	-7.2%
Harbor-Topky	2013	158,235	158,830	153,013	0.4%	-3.3%
Henderson	2013	117,654	139,403	151,215	18.5%	28.5%
Kingsville	2013	95,760	88,355	89,632	-7.7%	-6.4%
Rock Creek	2013	52,697	60,498	59,629	14.8%	13.2%
Geauga County	2017	2,050,078	2,154,034	2,552,965	5.1%	24.5%
Rocky River	2017	687,495	695,886	800,278	1.2%	16.4%
Morley	2018	484,550	491,985	601,685	1.5%	24.2%
Mentor	2019	998,794	1,110,191	696,207*	11.2%	-30.3%*
<b>Totals</b>		<b>4,866,476</b>	<b>5,106,073</b>	<b>5,298,385</b>	<b>4.9%</b>	<b>8.9%</b>

\* Mentor “Year After” data is from 2020 so it is adversely impacted by the COVID pandemic. All data from State Library of Ohio annual *Ohio Public Library Statistics* reports.



Table 6 on the preceding page shows the total circulation of physical materials in the 10 libraries that have most recently joined CLEVNET (not counting Stow-Munroe Falls who joined in 2021). The table shows physical circulation in the year prior to joining CLEVNET, the year joining, and the year after joining. Percentage change is shown comparing circulation in the year joining CLEVNET to the year prior to joining, and also to the year after joining to the year prior to joining. 2 years of data are looked at because sometimes libraries join CLEVNET early in a calendar and other times they join later in the year. The data in Table 6 was gathered from the annual *Ohio Public Library Statistics* datafile available at the State Library of Ohio website at:

<https://library.ohio.gov/services-for-libraries/ohio-public-library-statistics/>

The 6 of the 8 libraries in Ashtabula County joined CLEVNET in 2013. Of these six libraries, only the Henderson and Rock Creek libraries exhibited a significant increase in the circulation of physical materials after joining. Circulation in Henderson increased from 117,654 items in 2012 to 139,403 items in 2013 and to 151,215 items in 2014. Rock Creek circulation increased from 52,697 items in 2012 to 60,498 items in 2013 and fell slightly to 59,629 items in 2014 (which is still a 13.2% increase over 2012 circulation).

In contrast, Table 6 shows that the 4 libraries which joined CLEVNET from 2017 to 2019 all show significant increases in the circulation of physical materials. Geauga County library showed an increase of 5.1% in physical materials circulation in the year it joined CLEVNET (2017) which was followed by an increase of 24.5% after joining (2018) compared to circulation in 2016 the year prior to joining CLEVNET. Similarly, both Rocky River and Morley showed a small increase in physical circulation in the year it joined CLEVNET, but a much larger (16.4% for Rocky River and 24.2% for Morley) increase in the year after joining. Finally, Mentor exhibited an 11.2% increase in physical circulation the year it joined CLEVNET (2019) but showed a precipitous decrease in 2020. However, the 2020 data for Mentor – and all other libraries – was significantly impacted by the library closures resulting from the COVID-19 pandemic.

Table 7 provides data similar to that in Table 6 for the downloading of electronic materials before and after the same 10 libraries joined CLEVNET. This data is also from the State Library of Ohio annual *Ohio Public Library Statistics* reports.

Table 7 shows that every single library shows a substantial increase in the circulation of digital materials after joining the CLEVNET consortium. In Conneaut digital downloads increased from 17 in 2012 to 1860 in 2013 – an increase of over 100 times. Downloads then nearly doubled again from 2013 to 2014. This pattern is repeated in all 6 of the Ashtabula libraries that joined CLEVNET in 2013.

Even in a large library like Mentor, digital downloads more than doubled from 2018 to 2019 after Mentor joined CLEVNET (Mentor's 2020 data is again compromised by the pandemic, but even so, 2020 digital downloads are still more than 50% higher than in 2018). In fact, the smallest increase in electronic circulation among the 10 libraries that most recently joined CLEVNET (apart from Stow) is in Geauga County which shows an increase of 46.7% from 2016 to 2018.

**Table 7: Comparison of Electronic Circulation in Libraries that have Recently Joined CLEVNET in Year Prior, Year Joined, and Year After Joining**

Library System	Year Joined CLEVNET	Elec. Circ Year Prior	Elec. Circ Year Joined	Elec. Circ Year After Joining	% Increase Yr. Joined	% Increase Yr. After vs. Prior Year
Andover	2013	1,240	2,172	4,522	75.2%	264.7%
Conneaut	2013	17	1,860	3,314	10841.2%	19394.1%
Harbor-Topky	2013	37	634	2,650	1613.5%	7062.2%
Henderson	2013	2,620	5,419	7,998	106.8%	205.3%
Kingsville	2013	1,719	2,979	5,976	73.3%	247.6%
Rock Creek	2013	N.A.	348	1,113	N.A.	219.8%**
Geauga County	2017	144,184	167,764	211,476	16.4%	46.7%
Rocky River	2017	31,626	41,739	60,534	32.0%	91.4%
Morley	2018	17,905	20,393	56,689	13.9%	216.6%
Mentor	2019	156,675	316,592	249,203*	102.1%	59.1%
<b>Totals</b>		<b>356,023</b>	<b>559,900</b>	<b>603,475</b>	<b>57.3%</b>	<b>69.5%</b>

\* Mentor “Year After” data is from 2020 so it is impacted by the COVID pandemic.

\*\* Rock Creek electronic circulation for 2012 not available so increase from 2013 to 2014 shown.

One final way of examining the extent to which CLEVNET has enhanced access to materials is to look at the breakdown of electronic circulation by source. Table 8 shows for each CLEVNET member library the number and percentage of 2021 digital downloads from the CLEVNET Overdrive account, another library’s Overdrive Advantage account and from their own Overdrive Advantage account.

Table 8 shows that 15 libraries do not have their own OverDrive Advantage accounts (or else have a small account with zero digital circulation) and 5 additional libraries circulate fewer than 150 items from their own OverDrive Advantage accounts. All but one of these 20 libraries (Birchard) is among the 24 smallest CLEVNET libraries as measured by the 2021 number of library registered borrowers (all have fewer than 11,000 borrowers). These libraries all receive 99% or more of their electronic circulation from CLEVNET or other library’s OverDrive Advantage accounts which is understandable as smaller libraries have fewer resources to expend in this area.

In fact, only 5 libraries receive more than 20% of their electronic circulation from their own OverDrive Advantage account, and the average across the 46 libraries is 15.3% of digital downloads coming from their own account. In total, 3,521,026 downloads in 2021 came from the CLEVNET or other library’s Advantage accounts while only 635,131 came for a library’s own Advantage account. This means that for every 1 digital download that come from a library’s own account, 5.5 digital downloads are made available through CLEVNET. **Table 7 clearly shows that all CLEVNET libraries enjoy significant benefits from the consortium’s pooling of digital resources. Table 8: 2021 Digital Downloads from CLEVNET OverDrive, Other Library Overdrive Advantage, and Own Library Overdrive Advantage Accounts**

<b>Library System</b>	<b># From CLEVNET OverDrive</b>	<b># From Other OD Advantage</b>	<b># From Own OD Advantage</b>	<b>Total # OverDrive Circ</b>	<b>% CLEVNET OverDrive</b>	<b>% Other Advantage</b>	<b>% Own Advantage</b>
Andover	8,424	7,242	0	15,666	53.8%	46.2%	0.0%
Birchard	32,819	28,828	0	61,647	53.2%	46.8%	0.0%
Bristol	5,660	4,911	0	10,571	53.5%	46.5%	0.0%
Clyde	7,659	6,473	0	14,132	54.2%	45.8%	0.0%
Conneaut	7,838	6,597	0	14,435	54.3%	45.7%	0.0%
East Cleveland	2,196	2,427	0	4,623	47.5%	52.5%	0.0%
Fairport	5,686	5,585	0	11,271	50.4%	49.6%	0.0%
Hubbard	17,886	17,134	0	35,020	51.1%	48.9%	0.0%
Henderson	9,468	7,515	0	16,983	55.7%	44.3%	0.0%
Harbor-Topky	5,142	4,016	0	9,158	56.1%	43.9%	0.0%
Milan-Berlin	9,632	8,938	0	18,570	51.9%	48.1%	0.0%
Norwalk	17,677	15,204	0	32,881	53.8%	46.2%	0.0%
Peninsula	6,525	6,266	0	12,791	51.0%	49.0%	0.0%
Rock Creek	2,793	2,115	0	4,908	56.9%	43.1%	0.0%
Wickliffe	18,385	16,468	0	34,853	52.8%	47.2%	0.0%
Orrville	31,885	31,314	48	63,247	50.4%	49.5%	0.1%
Newton Falls	10,688	8,932	65	19,685	54.3%	45.4%	0.3%
Girard	9,438	7,458	129	17,025	55.4%	43.8%	0.8%
Kinsman	8,785	8,728	144	17,657	49.8%	49.4%	0.8%
Wayne County	129,936	116,311	2,125	248,372	52.3%	46.8%	0.9%
Kingsville	6,316	4,862	135	11,313	55.8%	43.0%	1.2%
Madison	24,507	20,993	1,012	46,512	52.7%	45.1%	2.2%
Huron	14,568	13,020	710	28,298	51.5%	46.0%	2.5%
Perry	14,681	12,687	741	28,109	52.2%	45.1%	2.6%
Burton	14,331	13,003	1,104	28,438	50.4%	45.7%	3.9%
Barberton	31,314	28,724	2,490	62,528	50.1%	45.9%	4.0%
McKinley	20,104	14,976	1,526	36,606	54.9%	40.9%	4.2%
Hudson	89,836	95,295	8,105	193,236	46.5%	49.3%	4.2%
Twinsburg	69,547	71,146	6,818	147,511	47.1%	48.2%	4.6%
Morley	32,663	29,495	3,251	65,409	49.9%	45.1%	5.0%
Elyria	58,219	49,869	6,114	114,202	51.0%	43.7%	5.4%
Ritter	25,140	21,702	2,844	49,686	50.6%	43.7%	5.7%
Kirtland	12,032	11,049	1,543	24,624	48.9%	44.9%	6.3%
Lorain	118,282	102,363	15,204	235,849	50.2%	43.4%	6.4%
Sandusky	40,316	33,480	6,705	80,501	50.1%	41.6%	8.3%
Bellevue	12,052	9,782	2,106	23,940	50.3%	40.9%	8.8%
Euclid	29,313	24,316	6,172	59,801	49.0%	40.7%	10.3%
Cleveland Heights	108,600	95,554	27,840	231,994	46.8%	41.2%	12.0%
Stow-Munroe Falls	7,510	7,889	2,779	18,178	41.3%	43.4%	15.3%
Willoughby-Eastlake	73,663	55,081	23,912	152,656	48.3%	36.1%	15.7%
Mentor	65,806	51,950	23,198	140,954	46.7%	36.9%	16.5%
Rocky River	48,085	37,075	21,897	107,057	44.9%	34.6%	20.5%
Geauga	128,494	83,525	58,025	270,044	47.6%	30.9%	21.5%
Shaker Heights	63,998	53,005	34,384	151,387	42.3%	35.0%	22.7%
Medina	231,894	139,009	121,924	492,827	47.1%	28.2%	24.7%
Cleveland	315,475	123,446	252,081	691,002	45.7%	17.9%	36.5%
<b>CLEVNET Total</b>	<b>2,005,268</b>	<b>1,515,758</b>	<b>635,131</b>	<b>4,156,157</b>	<b>48.2%</b>	<b>36.5%</b>	<b>15.3%</b>

Quantification of Benefits of Resource Sharing of Physical Items

The data in Tables 6, 7 and 8 above clearly show that CLEVNET membership significantly increases access to both physical and electronic materials. However, it is

conceptually difficult to quantify the cost savings that this provides to individual libraries.

In 2019 nearly 2.74 million books were sent among libraries through CLEVNET's interlibrary loan program. If the average discounted price per book (i.e., a library's purchase price) was \$18 this would result in a savings of \$49.3 million. However, this figure is a significant overstatement as it clearly does not make sense for each library to buy every single book that its patrons which to borrow – especially if these books are available at essentially zero marginal cost from another library through interlibrary loan. There is certainly a savings to library's because they can reduce their acquisition costs as the result of joining a consortium, it is just very difficult to quantify by how much. Furthermore, this calculation in and of itself is an illustration of how library consortiums make economic sense.

In addition, if a library were not a member of CLEVNET it could join another library consortium such as SearchOhio. It was not possible to get a clear sense of how SearchOhio pricing works. Rocky River library reported paying nearly \$38,00 for SearchOhio prior to joining Cleveland but it's not clear how (or if) that would vary across libraries of different sizes. What is clear, however, is that CLEVNET offers a more comprehensive array of services beyond just the interlibrary loan of physical materials that SearchOhio offers and that many library directors indicated that service under CLEVNET was faster than what they had experienced prior to joining. Furthermore, SearchOhio requires each library to purchase its own copy of the Innovative Interfaces, Inc. (III) ILS system, whereas CLEVNET provides the SirsiDynix ILS as part of the membership cost.

#### Quantification of Benefits of Resource Sharing of Electronic Items

With respect to the cost savings from OverDrive, a similar issue arises. One library estimated that it would need to more than triple its Overdrive expenditures from \$150,000 annually to more than \$500,000 in order to provide its users with access to digital titles similar to that provided through CLEVNET. Numerous other libraries echoed this estimate. However, this library also said that such an increase would also be fiscally irresponsible because many titles available through CLEVNET are accessed very infrequently. As is the case with physical materials libraries clearly can reduce their own expenditures on digital items as a result of CLEVNET membership, the question I simply "by how much?"

In this regard Rocky River provides an illustration. Their own analysis suggested that their electronic materials expenditures were cut roughly in half as a result of joining CLEVNET. This worked out to a reduction of (conservatively) \$2.50 per cardholder. Assuming that expenditures are proportional to the number of borrowers and that the total number of registered borrowers among CLEVNET libraries is 1,227,828 the following calculation can be made:

**\$2.50 savings per borrower x 1,227,828 = \$3,069,570 total CLEVNET cost savings**

This figure is an estimate of the reductions that libraries can make in their own purchase of electronic materials as result of CLEVNET membership. The fact that the 15 libraires that don't have their OverDrive Advantage accounts (and hence spend \$0) have a

combined circulation of 297,500 electronic items suggests that the savings in this are very real.

One frame of reference for whether the \$3.1 million in Overdrive cost savings estimated above is plausible is to look at how much CLEVNET currently spends on electronic resources. The 2019 CLEVNET cost statement shows a line item of \$1,060,000 for Electronic Database Access. As this figure actually includes roughly \$500,000 for CLEVNET's Overdrive subscription as well as the cost of the databases that CLEVNET subscribes to, the \$3.1 million in estimated savings to member libraries is 5.5 times the CLEVNET cost of Overdrive. This suggests that the notion that member libraries would need to triple their Overdrive Advantage expenditures to mimic the digital inventory that CLEVNET makes available, is likely an understatement.

A final way to gauge whether the \$3.1 million estimated cost savings above is plausible is to apply it to the library mentioned above which felt it would need to increase its Overdrive Advantage budget from \$150,00 to over \$500,000 annually. Applying the \$2.50 per borrower cost savings from Rocky River to this library would yield a total expenditure on digital resources without CLEVNET of roughly \$400,000. Because this figure is \$100,000 less than their own estimate of what it would cost to provide the same array of titles as through CLEVNET this estimate seems realistic as it presumably means that for \$400,000 infrequently accessed items would not be provided without CLEVNET.

By any of these measures, libraries both save money on digital resources through CLEVNET membership and also access to low-frequency materials that they would not choose to purchase themselves.

## **B. ILS Software and Services and Cataloging**

As mentioned at the beginning of this report, CLEVNET provides all members access to the SirsiDynix Integrated Library System (ILS) software. This software is called Symphony 3.5. The ILS system controls a library's day-to-day operations. The ILS manages circulation by tracking inventory, acquisitions, borrowers, holds, fines and overdue notices. The SirsiDynix Symphony 3.5 system is provided free as part of each library's membership in CLEVNET.

Based on data from 2 of the libraries that have most recently joined CLEVNET, the Symphony 3.5 software appears to cost roughly \$50,000 if libraries must pay for it themselves. This computes to an estimated \$2.3 million savings to the 46 CLEVNET member libraries from having it provided as part of its membership fee. While part of the cost of the CLEVNET membership certainly goes towards CLEVNET's cost for the Symphony software it is also true that no library can function without an ILS system and the SearchOhio resource sharing network requires libraries to pay for this themselves, on top of the cost to join the network. It thus seems appropriate to credit the full \$2.3 million figure as a cost savings of CLEVNET membership.

Each library needs bibliographic records for most essential library processes (acquisitions, serials control, providing a patron catalog, and circulation activities). Since the CLEVNET system is a single shared database, the costs of acquiring and maintaining

bibliographic records is greatly reduced for each member library. They can use records entered for other libraries. With only a few exceptions, CLEVNET does not charge for entering bibliographic records, whereas individual libraries would have to pay this cost themselves at a rate of \$2.57 per item (in 2019) through OCLC (non-CLEVNET libraries may also have the ability to negotiate alternate cataloging fee structures with OCLC).

One library estimated that it would cost \$5,000 to do their own cataloging through OCLC. Extrapolating from their number of borrowers across the cumulative number of borrowers of all 46 CLEVNET libraries comes up with an estimate of \$650,000 as the cost of cataloging if libraries had to do this themselves. The 2007 CLEVNET study estimated that it would cost \$293,000 to catalog 155,993 records. At \$2.57 each, the estimated current cost of \$650,000 to catalog the items equates to roughly 250,000 records. This would be an increase of roughly 60% which does not seem implausible considering that there are now nearly twice as many libraries in CLEVNET as there were in 2007. Note that CLEVNET was unable to extract the number of newly cataloged records from its data system.

In addition, libraries would need to employ their own catalogers if they were not a part of CLEVNET. Discussions with libraries that have recently joined indicated that the tendency was to reassign the catalogers to other duties rather than to lay them off. However, it seems likely that libraries that have been members of CLEVNET for quite some time, have likely lost some catalogers to attrition and then decided not to replace them. If it is assumed that a library cataloger makes an average of \$50,000 and membership in CLEVNET means that each library needs an average of one less full-time cataloger, this would result in savings of  $\$50,000 \times 46 = \$2.3$  million. More information is likely needed to assess whether this estimate is reasonably accurate or not.

Table 9 provides a summary of the estimated savings from shared cataloging and provision of the Symphony ILS system to all CLEVNET member libraries.

**Table 9: Estimated ILS and Cataloging Savings from CLEVNET Participation**

<b>Library Savings or Benefit</b>	<b>Estimated Dollar Value</b>
1. Provision of Symphony 3.5 ILS Software	\$2,300,000
2. Shared Cataloging	\$650,000
3. Need for Fewer Catalogers	Possibly \$2,300,000
<b>Total ILS &amp; Cataloging Savings</b>	<b>\$2,950,000 - \$5,250,000</b>

Table 9 shows that depending on the reduced need for catalogers, *the savings are estimated to range from \$2.95 million to \$5.25 million.*

**C. IT Services, Software, & Database Access**

The original 2009 CLEVNET analysis only examined catalog services, cataloging hardware and software, technical assistance, and assorted report generation provided through CLEVNET to member libraries. CLEVNET now provides a much more extensive array of services to member libraries, particularly IT and software. These additional services including the provision of networking hardware and software, Wi-Fi, access to the State of Ohio Computer Center (SOCC), computer security and 24x7

technical support services, VOIP telecommunications services, library-related and general business software, and others. Savings from these types of services can allow CLEVNET member libraries to enhance their collections or to improve other programmatic offerings.

In addition, CLEVNET provides member libraries access to a number of national databases, although this is much less extensive than it was in 2007 because OPLIN has greatly expanded its own collection of databases which all Ohio libraries can access for free. CLEVNET has reallocated its budget away from databases and towards enhanced availability of downloadable digital materials.

This section of the report explains the variety of services that CLEVNET provides to its member libraries and provides estimates of the cost-savings resulting from this centralized approach to IT-related services.

### Software

CLEVNET provides a variety of software to its member libraries. This software falls into several categories:

- **Specifically library-related:** This category includes Cassie (allows patrons to reserve computers), LibChat and LibAnswers (enable librarians to interact with patrons) and LibCal (allows patrons to schedule and register for events)
- **General library use:** This category includes Papercut (facilitates printing by customers), Deep Freeze (“locks” public PCs so that customers cannot make permanent changes), Traps/Cortex (cybersecurity, important on public PCs), OpenDNS (internet filtering to limit what can be searched on a public PC)
- **Computer maintenance:** This category includes Automate (manage PCs and generate reports), Rubrik (backup system for servers)
- **General business software:** This category includes Informacast (notification and paging system for staff), Office 365 (typical offerings including email, calendars, Word, Excel & Powerpoint, along with Sharepoint which facilitates group collaboration)
- **VOIP Phone service:** Available to libraries that are interested, requires one-time equipment purchase cost

Estimating the savings from CLEVNET’s provision of software is difficult because costs will likely vary with library size because software licensing costs typically escalate based on how many copies will be required. A library with larger staff will need more copies of Office 365 and a library with more PCs will need to manage more cybersecurity, printing, back-ups, protection from modification, and other related issues.

Estimates of the cost of providing CLEVNET’s software themselves from 2 libraries produced costs ranging from \$26,000 to \$52,500. To take into account library size, these costs were computed on a “per borrower” basis with the cost ranging from roughly \$.50 (50 cents) per borrower in the larger library to roughly \$1.00 per borrower in the smaller library. Extrapolating these per borrower costs to the total of 1,227,828 registered

borrowers in *the 46 CLEVNET libraries produces a range of roughly \$600,000 to \$1,200,000 in software cost savings.*

### CLEVNET IT Staff Services & Technical Support

CLEVNET has a depth of expertise in IT (Information Technology) management and sustainability that would be overly expensive for an individual institution to implement and manage. This includes but is not limited to ILS (Integrated Library System) management, library specific applications, workstation management, networking (WAN and LAN), Wi-Fi, Microsoft administration, server administration for Windows and Linux, Virtualization, VoIP, and Cyber Security including firewall administration. CLEVNET's IT staff provides 24x7 IT support. For example, if a library has its email hacked, its network go down, or other similar issue, a trouble ticket can be submitted to the CLEVNET help desk and the IT staff will work to resolve the problem. As a result, CLEVNET can take advantage of economies of scale and provide these services to the member libraries in a much more cost-effective manner than they could themselves.

The impact of CLEVNET's extensive IT services on member libraries is that many libraries – particularly smaller ones – can significantly reduce, or in many cases eliminate, their own IT staff. Information provided by CLEVNET indicates that 16 of the 46 CLEVNET libraries (all among the 22 smallest libraries by number of borrowers) no longer have their own IT staff. In addition, 3 of the remaining 6 smaller libraries only employ part-time IT staff.

Assuming that the 16 libraries that have eliminated their IT staffs would employ them on only a part-time basis if they were not in CLEVNET, it is possible to estimate the cost savings of their CLEVNET membership. Information provided by both libraries and from economic data indicate that the average salary of a software engineer is nearly \$100,000 annually. If “part time” equates to 2.5 days a week then cost savings of \$50,000 per library will be enjoyed. Multiplied by 16 libraries these assumptions produce *cost savings of \$800,000* ( $\$50,000 \times 16 = \$800,000$ ).

Discussion with library directors suggest that larger libraries are not significantly reducing their IT staffs but rather are redirecting their work away from maintenance and security issues (which are now handled by CLEVNET) and towards more customer facing issues. *This is a good example of how in some cases CLEVNET does not necessarily “save money” but instead results in a higher level of service being provided for the same level of expenditure.*

A second way to look at the value of IT services provided by CLEVNET is to consider the libraries by size:

- There are 20 CLEVNET libraries with fewer than 10,000 cardholders
- There are 8 CLEVNET libraries with between 10,000 and 20,000 cardholders.
- There are 18 CLEVNET libraries with more than 20,000 cardholders

The analysis on the preceding page indicating that 16 of the smaller libraries have completely eliminated their IT staffs and that several other smaller-to-mid-size libraries currently have half-time IT staffs suggests the following assumptions are reasonable:



- Membership in CLEVNET will allow the 20 smallest libraries to reduce from half-time IT staff to no IT staff at all
- Membership in CLEVNET will allow the 8 mid-size libraries to reduce from full-time IT staff to half-time IT staff
- Membership in CLEVNET will allow the 18 largest libraries to reduce their IT staff by one FTE (likely an under-estimate for several of the largest libraries)

Based on a Full time IT staffer having a cost of \$100,000, the cost savings resulting from the above assumptions result in the following cost savings:

Smaller libraries: 20 x \$50,000 = \$1,000,000

Mid-size libraries; 8 x \$50,000 = \$400,000

Largest libraries: 18 x \$100,000 = \$1,800,000

**Total IT cost savings = \$3,200,000**

Note that this approach is not incompatible with the reported experience that larger libraries are redirecting their existing staff away from maintenance and security issues and towards more customer facing duties. Rather, this approach quantifies the benefit of the libraries to this approach. A mid-size library might redirect half of an IT staffer's time towards customer issues as a result of its CLEVNET membership. A larger library might redirect one of its IT staff members towards such issues. *The \$3.2 million figure above simply quantifies the value of the increased flexibility that libraries now have to either reduce IT staff entirely or in part, or to maintain their staff and redirect them toward additional services that they would have not been able to provide were it not for its membership in CLEVNET.*

#### CLEVNET IT Equipment

Back in 2007 CLEVNET provided a significant amount of equipment (servers, etc..) for libraries to use on-site. The estimated value of this equipment was \$317,000. However, the computing world has changed significantly over the past 15 years and much more service is provided in a virtual environment now. The State of Ohio Computing Center (SOCC) allows library consortiums free access to its data center services. Each CLEVNET member library is allocated two "virtual servers" and those carry out the tasks that physical servers used to perform.

From the standpoint of the libraries, this might appear to be a distinction without a difference – they still are receiving the same computer support from CLEVNET that they did before, it is just occurring in a different manner. However, libraries do actually experience equipment savings as a result of the virtualization provided by CLEVNET's access to the SOCC. Without the SOCC libraries would need 2 computer servers to manage their libraires; one to carry out their day-to-day operations and second to serve as backup in case the first server malfunctioned or needed maintenance or service. In addition, some larger libraries might need a 3<sup>rd</sup> server for additional functions such as hosting and managing applications.

Assuming that the average cost of a computer server is \$5,000 and the average number of servers needed per library without the SOCC is 2.5, the following calculation can be made:

$46 \times \$5,000 \times 2.5 \text{ servers} = \$575,000 \text{ in annual savings}$

Thus, from the standpoint of both CLEVNET and the member libraries, it is clear that leveraging the resources of the SOCC is more cost effective than the former equipment-driven environment.

CLEVNET still provides some equipment to member libraries. This equipment primarily consists of wireless access points for use by library patrons and staff and routers and switches to direct and manage network traffic. All of these devices require and receive support from CLEVNET IT staff. Data limitations prevent any estimates of cost savings from the provision of this equipment.

CLEVNET now also provides VOIP phone service to libraries that are interested. However, this requires the participating library to purchase the phone equipment themselves which entails a one-time upfront expenditure which will typically be in the low tens of thousands of dollars. This upfront expenditure can act as an impediment (at least in the short run) to a library opting for phone service through CLEVNET as can the existence of long-term phone contracts that must expire before libraries can transition to VOIP. It is likely that VOIP will save libraries money over time, but more information is required to further analyze this topic.

#### VOIP Phone Service

Another benefit that CLEVNET provides to member libraries is VOIP phone service. Once the library expends the upfront cost for purchasing its own phones CLEVNET provides the phone service which includes a total of 30,000 minutes of free long-distance calls per month (shared among the libraries). Currently 27 of the 46 CLEVNET libraries use the CLEVNET VOIP phone service, and 12 more libraries are ready to implement it.

Libraries that opt for CLEVNET's VOIP service will save both the phone line charge and any charges that they currently incur for long-distance calling. There are currently 115 branches of CLEVNET member libraries. Assuming that each branch library has at least three phone lines means that there will be 345 (115 x 3) fewer line charges with attendant costs. Assuming an average monthly cost of \$75 per phone line (including long-distance calling charges) the following calculation can be made:

$115 \text{ branches} \times 3 \text{ lines} \times \$75 \times 12 \text{ months} = \$310,500 \text{ in annual savings}$

These savings must be offset by the one-time cost of purchasing the phones, the cost of which will vary from library to library.

#### Database Access

Major databases that CLEVNET provides include Consumer Reports, Gale Legal Forms, HeritageQuest (genealogy), Morningstar Financial, Reference USA and Novelist Plus and Novelist K-8. As mentioned above, many databases that used to be provided by CLEVNET are now available free of charge through OPLIN. Individual library estimates of the cost of purchasing these databases themselves range from \$20,000 to \$45,000. It

seems likely that database access costs will vary based on the expected number of users, but precise pricing data was not available. Based on computed “per borrower” database costs, the *savings to CLEVNET libraries is estimated to range from \$575,000 to \$1.1 million.*

Table 10 below provides a summary of the estimated cost savings derived from CLEVNET’s provision of software, comprehensive IT services, and databases to CLEVNET member libraries. *The aggregate cost savings are estimated to range from \$5.3 million to \$6.4 million.*

**Table 10: Library Savings Obtained from CLEVNET Software, IT & Databases**

<b>Library Savings or Benefit</b>	<b>Estimated Dollar Value</b>
1. Library and Workplace Software	\$600,000 - \$1,200,000
2. IT Services & Technical Support	\$3,200,000
3. Computer Equipment & SOCC Data Services	\$575,000
4. VOIP Phone Service	\$310,500
4. Database Access	\$575,000 - \$1,100,000
<b>Total IT-Related Benefit</b>	<b>\$5,260,500 - \$6,385,500</b>

**Summary of Cost Savings to Libraries**

The above discussion explored the cost savings that CLEVNET member libraries receive by virtue of their membership in the consortium. The logic of this approach is to assess how much the member libraries would pay to obtain the same level of services in the absence of the CLEVNET network. The cost estimates discussed above attempt to extrapolate efficiency benefits from a small base of information. With the caveat that the data are limited, cost savings to member libraries derive from expanded access to digital materials, provision of the Symphony 3.5 ILS software, CLEVNET assuming the cost of cataloging new items, additional library-related and workplace software, IT services and technical support and database access. Other areas such as increased access to physical materials through the interlibrary loan program, possible reductions in library cataloging staff, and the value of computer equipment and SOCC data center services are difficult to quantify with existing data.

This approach to assessing the value and benefits provided by CLEVNET is fundamentally different from the approach taken in Part I of this report. That method estimated the value of library services as realized by patrons as a direct benefit of the CLEVNET resource sharing network. In contrast, the approach taken in Part II of this report focuses on the cost savings for the CLEVNET member libraries themselves obtained by access to a broader array of library materials and from the services, software and equipment (either real or virtual) that CLEVNET provides. *These savings should not be added to the patron benefits summarized in Table 5 on page 15. Rather, direct patron benefits and library savings present two different ways to think about and estimate the benefits of CLEVNET.*

Table 11 shows that total savings obtained from member libraries through CLEVNET participation is estimated to range from \$11.3 million to \$14.7 million. In comparison, CLEVNET’s 2019 costs were \$5.587 million. *These figures establish that the value that CLEVNET provides to member libraries is 2.02 to 2.63 times CLEVNET’s costs.* Furthermore, these figures should be considered to be conservative because they do not include any quantifiable value to the libraries of the expanded access to physical items through the interlibrary loan program, minimal estimates of the value of the SOCC and a likely underestimate of the cost savings attributable to the ability of larger libraries to repurpose their IT staff to focus on more customer facing issues rather than on the basic nuts and bolts of keeping the library up and running. *All of these are examples of how CLEVNET can result in member libraries providing a higher level of service at the same cost, which is another aspect of savings.*

**Table 11: Library Savings Obtained from CLEVNET Participation**

<b>Library Savings or Benefit</b>	<b>Estimated Dollar Value</b>
1. Expanded Access to Physical Items (ILL)	Not Quantifiable
2. Expanded Access to Digital Items (OverDrive)	\$3,070,000
3. Provision of Symphony 3.5 ILS Software	\$2,300,000
4. Shared Cataloging	\$650,000
5. Need for Fewer Catalogers	\$0 - \$2,300,000
6. Library and Workplace Software	\$600,000 - \$1,200,000
7. IT Services & Technical Support	\$3,200,000
8. Computer Equipment, SOCC & VOIP	\$885,500
9. Database Access	\$575,000 - \$1,100,000
<b>Total Increased Circulation, ILS &amp; Cataloging, and IT-Related Savings</b>	<b>\$11,280,500 - \$14,705,500</b>
<b>2019 CLEVNET Costs</b>	<b>\$5,587,200</b>

### III. Conclusion

This report has focused on the value of participation within the CLEVNET resource sharing network. Two different perspectives provide insight into this value.

Part I examines the additional value received by the patrons of CLEVNET member libraries. This value takes the form of expanded access to circulating library materials and to expanded access to electronic information sources through the electronic media as well as the additional electronic databases provided through CLEVNET and the provision of Wi-Fi services to library patrons. The CLEVNET portion of the libraries’ cumulative value to patrons equals \$41.1 million in physical circulation benefits, \$48.5 million in electronic circulation benefits, and an additional \$16.85 million in electronic database and Wi-Fi access for *a total incremental value from CLEVNET participation of \$106.45 million.* In comparison, the aggregate cost to member libraries of belonging to CLEVNET is \$5.56 million. Therefore, *this analysis estimates a return of more than \$19.00 of additional benefits derived by CLEVNET library patrons from increased access to physical and electronic materials made available through the resource*

*sharing network along with enhanced database and Wi-Fi access for each \$1.00 invested by the member libraries in the CLEVNET system.*

Part II of the report considers the benefits of CLEVNET from the perspective of the cost savings to the libraries themselves obtained from participation in the resource sharing network. While it is relatively easy to identify these benefits in a narrative sense, the quantification of the savings for libraries is more difficult. Nevertheless, this analysis identified a range of \$11.3 million to \$14.7 million in estimated cost savings from the perspective of the libraries. To maintain their existing level of service, member libraries would need to spend about that much in additional services or on additional items for the libraries' collection. ***Therefore, in terms of savings obtained by libraries through CLEVNET membership, the return for each dollar invested in participation is estimated to result in \$2.02 to \$2.63 in savings.*** It is imperative to note that these figures are an underestimate of CLEVNET's value to libraries because several aspects of CLEVNET membership – such as increased access to physical materials and IT equipment and support – likely result in a higher level of service provided to library patrons rather than cost savings to the library. Higher level of service for the same level of expenditure is also a legitimate benefit to CLEVNET member libraries, it is just inherently more difficult to quantify.

Finally, it is important to note that the addition of the benefits shown in Part I and Part II of this report would double count the benefits of CLEVNET participation. These perspectives are distinct from one another and should not be accumulated into a combined total. Rather, they offer alternative ways to think about and value participation in the resource sharing network. The valuation methods in Parts I and II each quantify benefits many times as large as the \$5.59 million cost of the CLEVNET system.

## **Appendix 1: Explanation of Library Materials & Services Market Price Methodology**

This Appendix focuses on the consumer surplus method of placing a value on the benefits obtained by library patrons from various library services. The consumer surplus method refers to actual costs of counterparts to library services in the local marketplace. These market costs inform an estimate of the value of library services by reflecting the cost savings that patrons enjoy by receiving these services for free. For some items (such as movies and audiobooks) a rental market exists, which creates a good analogy for borrowing the item from a library. However, for other items, such as books and music CDs where there is no rental market to speak of, another approach must be taken.

Some methods for estimating the value of library circulation may use the publishers list price for a book as a basis for setting the value of each time when a patron borrows a book. In contrast, the method described here use the average of actual acquisition costs and then reduces these costs to account for the resale value of a purchased book. A library patron who borrows a book does not have the resale value because they must return it (much the same as a person who leases a car instead of buying it outright).

For example, if a person buys a book for \$20, they can resell it to a used bookstore or on eBay if they do not wish it to keep it when they are done reading it. If they can sell the book for \$12 then their net cost of purchasing the book is reduced from \$20 to \$8. Thus, the value received by a person who borrows the same book from the library and returns it when they are done reading it is \$8 by this method. In both cases the individual was able to read the book, and in both cases, they no longer have the book to keep once they are done. The same logic also applies to music CDs.

It is also important to mention that this valuation method produces a conservative result by using library average acquisition cost rather than retail price. The use of average actual acquisition cost reduced the per book value to the extent that volume purchases and other discounts permitted the libraries to purchase books for less than the suggested retail price.

### **1. Physical Materials**

**Book Value = \$11.90.** \$23.80 = the Public Library of Cincinnati/Hamilton County (PLCH) 2019 average non-discounted price of circulating books purchased. Because there is market for used books, "Sellback" reflects fact that books have resale value to consumers once they have been read. The resale value based on prices in used bookstores and online is set at 50%. The net price is thus 50% of the \$23.80 price = \$11.90

**Audiobooks Value = \$10.47.** Audiobooks can be rented for 1 week at Cracker Barrel for \$3.49 which provides a market benchmark value. Assuming that 3 weeks is a typical library rental period,  $3 * 3.49 = \$10.47$

**Video Value = \$3.00.** \$3 was the two day Redbox cost per DVD rental in 2015.

**Music Value = \$5.00.** \$9.99 is the typical cost of a music CD based on online retailers. Like books, music CDs also have resale value which is also set at 50% based on prices on eBay. Thus, the net price =  $\$9.99/2$  reflects the 50% "sellback" value.

**Periodicals Value = \$5.00.** This is the average cost per issue of a typical magazine.

**Games, Kits & Other Items Value = \$10.** Common board games (such as Monopoly and Life) typically cost \$20-\$25 new and many have a \$10-\$12 priced for used versions on eBay. Thus \$10 represents a conservative estimate of the value of games, kits and other items.

### **2. Digital Materials**

**E-Books Value = \$12.50 per book.** This reflects the approximate average price of eBooks on Amazon in 2019 (new releases are typically \$14.99, older books are typically \$9.99, and recent books are in between at \$10.99-\$13.99).

**Audiobook Downloads Value = \$21.00.** This is the estimated average price per book (including sales tax) of purchasing an audiobook from Audible. This cost is based on an assumption of 2 books purchased per month at a membership price of \$14.95 with the 2nd book costing \$24.00

**Magazine Downloads Value = \$5.00.** Again, this is the average cost per issue of a typical magazine.

**Videos Streamed Value = \$4.00.** iTunes, Amazon Prime, & Cable On-Demand prices are \$5.99 for new movies and \$3.99 for older movies. Avg. Netflix movie prices vary with usage but are generally lower.

**Appendix 2: 2019 CLEVNET Interlibrary Loans Received by Library**

<b>Library</b>	<b>Books</b>	<b>Audiobooks</b>	<b>Videos</b>	<b>Music</b>	<b>Magazines</b>	<b>Games &amp; Other</b>	<b>Phys. Circ. Total</b>
Andover	8,547	678	4,860	273	35	272	14,665
Barberton	26,794	1,297	15,827	2,883	11	195	47,007
Bellevue	22,084	860	7,909	836	60	137	31,886
Birchard	36,714	2,105	24,587	3,488	349	223	67,466
Bristol	8,069	456	6,492	1,200	78	218	16,513
Burton	25,860	1,864	13,045	1,865	281	224	43,139
Cleveland	326,879	27,208	348,357	57,719	11,634	5,356	777,153
Cleveland Hts	250,003	13,849	84,320	21,073	3,327	1,147	373,719
Clyde	11,032	1,103	6,368	969	130	48	19,650
Conneaut	19,683	768	8,777	178	42	114	29,562
East Cleveland	10,027	805	20,679	1,922	184	339	33,956
Elyria	86,527	6,309	49,451	13,583	338	836	157,044
Euclid	56,033	5,280	54,556	7,580	1,029	482	124,960
Fairport	9,126	667	12,332	1,419	203	22	23,769
Geauga	172,274	12,586	64,823	16,700	671	1,441	268,495
Girard	10,237	554	7,763	1,679	25	180	20,438
Harbor-Topky	11,385	610	6,427	717	88	88	19,315
Henderson	25,343	1,129	12,394	2,547	258	155	41,826
Hubbard	21,890	1,664	12,253	3,051	0	94	38,952
Hudson	133,428	6,943	35,637	11,638	1,265	1,202	190,113

Huron	21,038	1,363	7,365	1,462	82	80	31,390
Kingsville	9,944	686	6,609	465	57	15	17,776
Kinsman	8,046	567	6,040	938	36	36	15,663
Kirtland	18,294	1,253	7,305	1,355	189	242	28,638
Lorain	149,032	11,018	103,653	17,982	569	1,968	284,222
Madison	39,273	2,498	18,193	4,582	488	532	65,566
McKinley	12,965	967	15,906	1,620	121	231	31,810
Medina	246,662	18,777	126,130	29,712	1,156	1,705	424,142
Mentor	46,081	2,582	25,620	4,276	545	355	79,459
Milan-Berlin	17,799	1,155	8,213	1,191	162	203	28,723
Morley	27,166	1,497	19,640	2,180	217	293	50,993
Newton Falls	10,833	1,085	11,268	592	5	215	23,998
Norwalk	16,309	958	8,076	1,252	79	200	26,874
Orrville	76,807	4,262	31,801	4,723	159	523	118,275
Peninsula	9,788	877	3,900	2,939	39	48	17,591
Perry	21,716	2,113	12,606	1,615	292	164	38,506
Ritter	30,773	2,009	12,247	1,457	99	97	46,682
Rock Creek	5,615	663	5,011	454	42	83	11,868
Rocky River	65,310	3,341	25,827	8,186	189	336	103,189
Sandusky	42,310	2,335	27,977	4,752	221	484	78,079
Shaker Heights	119,639	7,437	54,397	11,252	1,927	508	195,160
Twinsburg	114,336	7,223	46,652	15,820	2,134	1,031	187,196
Wayne County	224,464	14,900	82,198	12,939	3,193	1,418	339,112
Wickliffe	35,646	1,998	29,491	4,624	921	332	73,012
Willoughby-Eastlake	96,078	7,414	58,060	13,442	1,029	1,002	177,025
<b>Totals</b>	<b>2,737,859</b>	<b>185,713</b>	<b>1,551,042</b>	<b>301,130</b>	<b>33,959</b>	<b>24,874</b>	<b>4,834,577</b>

### Appendix 3: 2019 Digital Downloads & Wi-Fi Usage by Library

Library System	E-Books	Audiobooks	Magazines	Videos	Electronic Circ. Total	Wi-Fi Access
Andover	10,244	3,460	309	11	14,024	16,050
Barberton	33,845	21,410	305	163	55,723	65,136
Bellevue	14,258	6,503	190	76	21,027	24,121
Birchard	35,500	15,826	350	87	51,763	58,705
Bristol	5,728	3,437	83	10	9,258	14,791
Burton	12,819	10,729	229	29	23,806	32,139
Cleveland	290,614	203,691	5,033	1,489	500,827	746,204
Cleveland Hts	102,560	65,609	1,631	667	170,467	340,285
Clyde	9,390	4,278	393	46	14,107	20,788
Conneaut	8,666	2,917	251	16	11,850	12,371
East Cleveland	1,635	1,609	46	11	3,301	90,000
Elyria	66,670	28,527	540	180	95,917	47,120
Euclid	29,645	19,712	715	112	50,184	89,425
Fairport	6,984	3,654	233	2	10,873	29,428
Geauga	121,770	74,983	2,670	280	199,703	20,848
Girard	11,661	4,770	441	9	16,881	14,902
Harbor-Topky	7,185	2,422	141	21	9,769	7,736
Henderson	9,808	5,077	481	80	15,446	18,841
Hubbard	22,108	11,143	222	83	33,556	11,152
Hudson	87,294	53,083	1,911	286	142,574	123,399



Huron	13,749	9,151	122	30	23,052	22,939
Kingsville	5,256	3,799	102	28	9,185	18,232
Kinsman	10,615	4,308	148	130	15,201	9,270
Kirtland	13,378	7,105	144	45	20,672	9,938
Lorain	120,018	57,950	1,522	444	179,934	165,253
Madison	22,651	13,138	293	56	36,138	38,961
McKinley	17,870	11,285	260	39	29,454	14,084
Medina	240,566	145,570	4,344	1,022	391,502	286,429
Mentor	38,028	14,270	537	94	52,929	69,936
Milan-Berlin	9,881	5,406	80	97	15,464	25,722
Morley	22,483	8,759	264	63	31,569	61,601
Newton Falls	11,465	6,295	115	30	17,905	12,696
Norwalk	17,200	8,982	343	24	26,549	17,842
Orrville	31,684	22,055	330	147	54,216	50,621
Peninsula	7,036	3,734	48	21	10,839	4,930
Perry	16,545	7,275	279	115	24,214	16,199
Ritter	26,201	13,539	467	100	40,307	47,160
Rock Creek	2,190	1,233	40	1	3,464	5,094
Rocky River	49,671	24,757	2,048	213	76,689	121,315
Sandusky	47,149	18,646	694	74	66,563	50,557
Shaker Heights	65,319	36,090	962	172	102,543	123,216
Twinsburg	66,216	41,201	821	504	108,742	75,799
Wayne County	122,166	69,406	1,826	410	193,808	116,653
Wickliffe	17,815	8,425	528	111	26,879	29,060
Willoughby-Eastlake	82,950	44,032	2,208	214	129,404	100,532
<b>CLEVNET Grand Total</b>	<b>1,966,486</b>	<b>1,129,251</b>	<b>34,699</b>	<b>7,842</b>	<b>3,138,278</b>	<b>3,277,480</b>

**Appendix 4: 2019 CLEVNET ROI By Library with Circulation Data**

<b>Library</b>	<b>2019 Circulation + Wi-Fi ROI</b>	<b>2019 Received to Sent Ratio</b>	<b>Phys. Circ. To Borrowers Ratio</b>	<b>Elec. Circ. To Borrowers Ratio</b>
Cleveland	10.49	0.82	2.60	1.68
Morley	11.60	0.60	2.25	1.39
Harbor-Topky	14.58	0.76	3.20	1.62
Euclid	14.74	0.60	3.96	1.59
Girard	14.84	0.85	2.02	1.67
Kinsman	15.05	0.51	4.44	4.31
East Cleveland	15.72	1.96	3.23	0.31
Bristol	16.18	0.72	4.81	2.70
Mentor	16.28	0.81	1.28	0.85
McKinley	16.67	0.67	2.27	2.11
Conneaut	16.82	2.17	3.66	1.47
Geauga	17.04	1.29	4.91	3.65
Rock Creek	17.20	1.26	5.83	1.70
Newton Falls	17.35	1.25	2.86	2.14
Huron	17.73	1.02	4.62	3.39
Birchard	18.00	1.00	3.87	2.97
Peninsula	18.46	0.81	10.49	6.46
Milan-Berlin	18.71	1.55	6.96	3.75
Sandusky	18.73	1.19	3.55	3.02
Elyria	19.18	0.95	4.56	2.79

Wickliffe	20.80	0.85	7.89	2.90
Bellevue	20.90	1.29	4.13	2.72
Lorain	20.97	1.31	4.32	2.74
Madison	21.37	0.67	4.81	2.65
Clyde	21.63	0.90	4.02	2.89
Rocky River	21.87	1.04	4.48	3.33
Ritter	22.39	1.10	4.17	3.60
Willoughby-Eastlake	22.56	0.46	6.04	4.41
Barberton	22.78	0.77	2.08	2.47
Kingsville	22.89	1.34	4.60	2.37
Kirtland	23.19	0.81	8.06	5.81
Perry	23.28	0.81	7.03	4.42
Norwalk	23.79	1.35	2.63	2.60
Andover	24.64	1.96	3.56	3.41
Henderson	25.17	1.95	6.15	2.27
Burton	25.60	0.74	9.07	5.01
Shaker Heights	25.70	1.25	6.74	3.54
Hubbard	25.79	1.66	4.57	3.94
Twinsburg	26.45	0.97	6.75	3.92
Wayne County	26.88	1.97	6.83	3.90
Cleveland Heights	29.11	0.99	7.87	3.59
Medina	29.51	1.51	4.28	3.95
Fairport	31.42	1.53	7.30	3.34
Hudson	33.21	1.04	7.40	5.55
Orrville	36.41	1.58	10.76	4.93
<b>CLEVNET Average</b>	<b>19.05</b>	<b>1.00</b>	<b>4.21</b>	<b>2.73</b>

**Appendix 5: 2007 Value of Items Borrowed by a Patron of a Contract Library from Another CLEVNET Library Plus Value of Downloaded Items**

Library	Print Books	Video - Films	Recordings - Music	Recorded Books	Software	Magazines	E-Books	Total Value
BIR	\$190,642	\$27,900	\$23,972	\$54,294	\$672	\$389	\$4,060	\$301,928
BLV	\$124,375	\$10,125	\$13,347	\$25,672	\$357	\$182	\$833	\$174,891
BTN	\$110,214	\$22,560	\$18,005	\$28,010	\$381	\$158	\$343	\$179,671
CH	\$1,670,939	\$262,518	\$236,101	\$325,691	\$3,384	\$12,497	\$17,969	\$2,529,100
CLY	\$61,563	\$8,574	\$5,089	\$17,450	\$249	\$450	\$1,155	\$94,529
CPL	\$2,153,005	\$552,141	\$465,159	\$643,574	\$10,554	\$23,957	\$42,595	\$3,890,985
EC	\$144,283	\$20,937	\$12,336	\$18,206	\$198	\$734	\$252	\$196,945
EL	\$458,974	\$86,865	\$82,703	\$123,861	\$945	\$1,545	\$8,372	\$763,265
EU	\$451,189	\$86,535	\$81,508	\$111,718	\$2,346	\$3,737	\$3,066	\$740,099
FH	\$74,227	\$18,144	\$17,950	\$39,650	\$207	\$51	\$329	\$150,558
HRN	\$121,008	\$15,216	\$13,764	\$30,727	\$195	\$156	\$1,722	\$182,787
HU	\$453,425	\$65,052	\$78,606	\$136,472	\$2,430	\$4,770	\$8,379	\$749,135
KRT	\$96,045	\$15,702	\$20,996	\$31,357	\$252	\$270	\$2,863	\$167,484
LOR	\$844,612	\$166,803	\$119,015	\$223,400	\$3,249	\$1,742	\$13,090	\$1,371,911
MDSN	\$209,993	\$35,262	\$37,686	\$58,827	\$921	\$729	\$9,408	\$352,826
ME	\$1,151,326	\$218,634	\$199,377	\$300,487	\$4,527	\$4,126	\$16,520	\$1,894,998
MIL	\$64,396	\$10,053	\$7,068	\$21,372	\$231	\$90	\$1,344	\$104,554
OR	\$376,229	\$48,423	\$36,446	\$71,780	\$624	\$1,225	\$6,090	\$540,817
PEN	\$43,828	\$7,419	\$13,630	\$22,272	\$96	\$85	\$343	\$87,673

PER	\$145,541	\$24,471	\$24,929	\$41,791	\$246	\$695	\$1,218	\$238,890
RIT	\$157,122	\$20,136	\$20,589	\$46,828	\$369	\$231	\$1,050	\$246,325
SA	\$331,900	\$41,859	\$39,849	\$62,263	\$624	\$685	\$9,296	\$486,476
SH	\$601,474	\$105,297	\$99,245	\$147,644	\$1,125	\$6,585	\$11,298	\$972,667
TW	\$420,145	\$101,172	\$84,012	\$160,435	\$1,680	\$2,671	\$5,194	\$775,309
WA	\$931,575	\$131,055	\$124,937	\$188,787	\$4,161	\$3,157	\$9,422	\$1,393,094
WE	\$416,579	\$90,690	\$79,489	\$144,496	\$1,656	\$2,821	\$10,115	\$745,846
WKPL	\$249,872	\$36,327	\$34,631	\$44,759	\$915	\$1,830	\$1,715	\$370,049
<b>Total</b>	<b>\$12,054,481</b>	<b>\$2,229,870</b>	<b>\$1,990,438</b>	<b>\$3,121,823</b>	<b>\$42,594</b>	<b>\$75,568</b>	<b>\$188,041</b>	<b>\$19,702,815</b>

**Appendix 6: 2007 Value of Items Borrowed by a Patron of a Contract Library from Another CLEVNET Library Compared to Cost of CLEVNET Membership**

<b>Library</b>	<b>Contract Formula Cost</b>	<b>Electronic Database Cost</b>	<b>Total Cost</b>	<b>Interlibrary Loan + Electronic Media Download Benefit</b>	<b>ROI (Benefit Per Dollar of Cost)</b>
Birchard	\$58,957	\$19,336	\$78,293	\$301,928	\$3.90
Bellevue	\$25,827	\$8,681	\$34,508	\$174,891	\$5.10
Burton	\$29,512	\$8,681	\$38,193	\$179,671	\$4.70
Cleveland Hts.	\$181,603	\$84,446	\$266,049	\$2,529,100	\$9.50
Clyde	\$16,941	\$8,681	\$25,622	\$94,529	\$3.70
Cleveland	\$1,081,998	\$371,720	\$1,453,718	\$3,890,985	\$2.70
E. Cleveland	\$69,149	\$44,985	\$114,134	\$196,945	\$1.70
Elyria	\$115,731	\$43,012	\$158,744	\$763,265	\$4.80
Euclid	\$123,331	\$44,196	\$167,527	\$740,099	\$4.40
Fairport	\$12,911	\$5,130	\$18,041	\$150,558	\$8.30
Huron	\$27,462	\$14,995	\$42,457	\$182,787	\$4.30
Hudson	\$64,936	\$20,914	\$85,850	\$749,135	\$8.70

Kirtland	\$17,882	\$5,525	\$23,406	\$167,484	\$7.20
Lorain	\$239,502	\$99,836	\$339,338	\$1,371,911	\$4.00
Madison	\$47,672	\$16,968	\$64,640	\$352,826	\$5.50
Medina	\$230,747	\$62,743	\$293,489	\$1,894,998	\$6.50
Milan	\$32,114	\$13,022	\$45,136	\$104,554	\$2.30
Orrville	\$41,050	\$13,811	\$54,862	\$540,817	\$9.90
Peninsula	\$13,508	\$6,708	\$20,217	\$87,673	\$4.30
Perry	\$24,665	\$6,708	\$31,374	\$238,890	\$7.60
Ritter	\$28,805	\$10,654	\$39,459	\$246,325	\$6.20
Sandusky	\$84,262	\$44,196	\$128,458	\$486,476	\$3.80
Shaker Hts.	\$133,830	\$53,667	\$187,496	\$972,667	\$5.20
Twinsburg	\$88,669	\$31,569	\$120,238	\$775,309	\$6.40
Wayne County	\$150,753	\$54,061	\$204,814	\$1,393,094	\$6.80
Willoughby	\$133,150	\$41,434	\$174,584	\$745,846	\$4.30
Wickliffe	\$43,701	\$13,417	\$57,117	\$370,049	\$6.50
<b>Total</b>	<b>\$3,118,667</b>	<b>\$1,149,096</b>	<b>\$4,267,763</b>	<b>\$19,702,815</b>	<b>\$4.60</b>