

**APPENDIX E**

a report to the

# **Washington County Library System**

**Assessment of New and Emerging Trends In  
Library Services**

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**DRAFT**



**A Consulting Group of The Friends of the Saint Paul Public Library**

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# Washington County Library System

## Strategic Plan – 2015

### Assessment of New and Emerging Trends in Library Service

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## Executive Summary

This report was commissioned to examine and assess new and emerging trends in libraries and how they impact Washington County Library as part of the Washington County Library strategic planning process.

### *Methodology*

The primary methodology of this report relies on a literature review of library services, technology, and a content analysis of Washington County Library.

### *Key Findings*

In looking at national library trends, the key findings are:

- Reading among adults remains strong and constant among all age groups, although more people read on digital formats. The decline in use of print materials is slow.
- Technology is changing rapidly. Libraries need to keep pace, but are increasingly playing the role of helping individuals use various devices and access materials on those devices.
- Behind-the-scenes technology for operating libraries is not expected to change significantly.
- Analysis of library data will become more prevalent and allows libraries to offer better and more efficient service.
- Public libraries are playing key roles, in many different ways, in the economic development of communities.
- The range and array of library services is evolving and expanding.
- Libraries increasingly are serving a role in providing community or common space for residents.
- Organizational models and staffing patterns for libraries are changing to match evolving services and community needs.

## General Trends

### Readership Trends

Reading still remains very popular in the Internet age. Americans read an average of five books in 2013. More than 69% of Americans read at least one print book in 2013. On the other hand, 28% read an eBook and 14% had listened to an audio book. Readers tend to be women. Readership is strongly correlated to both education and income. Readership remains constant by age bracket, but younger people are significantly more likely to have read at least one eBook in the past 12 months<sup>1</sup>.

Reading habits have been tracked over time. From 1976 to the present, Americans have read roughly the same number of books per year. In other words, contrary to popular belief, the Internet has not had an adverse effect on reading habits<sup>2</sup>. This is evident in the extremely strong circulation numbers that libraries report year-after-year.

Simultaneously, eBooks and digital content usage continues to climb. More than half of adult Americans own an eReader or tablet. More than 33% of smartphone owners have used their device to read an eBook. While the demand for digital content continues to climb, and reshape the landscape of bookselling, public libraries are challenged to provide content on par with print resources. Publishers of digital content have not created a consistent purchasing system for libraries. Some publishers do not sell digital content to libraries at all. Other publishers sell without restriction but charge 3-4 times what the general public would pay. Yet other publishers remove the content after one year or a certain number of loans have taken place.

Reading, books and digital content remain a fundamental and vital part of American life. Moreover, providing access to these resources continues to remain a core service of libraries. As libraries continue to diversify their service offerings, focus on content will continue to be a pressing matter.

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<sup>1</sup> Pew Research Center (2014), *Snapshot of Reading in America in 2013*.

<sup>2</sup> Pew Internet and American Life Project (2013), *The Rise of eReading*.

## Technology Trends

Technology is changing at a pace that disrupts industries, communities and libraries. This section will briefly discuss technology trends in general and specific library-related trends. The common thread in all advancements in technology is the demand on libraries to provide support, service and education. For the vast majority of Americans, the public library is the only technology help center they can easily access.

The three major trends to affect American lives are: 1) the Internet of Things and wearable devices, 2) Devices, and 3) Maker technology.

1) **The Internet of Things** is the network of physical objects embedded with computer, software and Internet technology. These include Internet connected thermostats and appliances, to city garbage cans that send a notification when full. The philosophy behind the Internet of Things is to improve productivity and efficiency, while reducing human error. Self-driving cars are one major Internet of Things device that will have deep impact on American habits. There are several companies including Google and Apple working on self-driving cars.

A major area of growth in the Internet of Things is in wearable technologies. These include devices like activity trackers (FitBit) to wearable smart watches. Wearable devices provide push notifications for things like email, texts, and social media. They also provide a way to interface with a phone when the phone is out of sight, or in another location. These devices also allow for improved biofeedback and tracking of health measures such as heart rate or blood glucose monitoring for diabetes. Lastly, these devices provide yet another screen to explore content.

Wearables, like the Internet of Things devices, put pressure on libraries to provide education and guidance. When residents need assistance in selecting or using these devices they often turn to libraries for help. Moreover, libraries will need to consider providing library content (renewal notices, for example) as well as book content to these devices.

2) **Devices** are also changing at a rapid pace. The iPod was released less than 15 years ago, and the first iPhone (often considered the first smart phone) is less than 8 years old. These two devices have drastically altered how we communicate and consume content. The “ownership” of music has been replaced by subscription streaming services. Tablets, eReaders, and portable computers have all been created or altered over the same time period.

Much like with the Internet of Things and wearables, libraries have seen an explosion in requests for help, education and selection assistance for these devices. Many libraries around the country teach classes on accessing eBooks, digital content and apps from devices. The role of library as community technology support will continue to rise as the plethora of devices continues to evolve.

America is also on the cusp of two new devices changing the technology landscape. Augmented reality and virtual reality headsets already exist in early forms, and will likely garner higher market share penetration over the next five years.

Augmented reality is the interface between the physical world and the digital world. While Google Glass was not intended for a mass market, Microsoft's HoloLens is designed for mass consumer use. This device is expected to be released within quarter 3 of 2015. Initial applications for augmented reality deal with location based services, shopping and games.

Virtual reality differs from augmented reality through its immersive nature. While you still see and interact with the physical world with augmented reality, in virtual reality you eliminate the physical world. Virtual reality will likely be used to consume and interact with content, from movies to video games. Oculus Rift is the primary product in this arena. Their device will be released in 2016.

The impact of both of the reality altering devices on libraries is yet to be determined. One may speculate that community education and assistance will be required. Moreover, there will be content implications as well. Libraries that provide access to movies may need to purchase multiple formats in order to meet the demand of various devices.

3) **Maker Technology** is the last trend discussed here. Maker technologies are the devices that allow regular people to have access to the means of production. From 3D printers and laser cutters, to inexpensive digital creation tools, soon people will be able to make just about anything. Of the three trends listed, maker technology is the most difficult for public libraries, though many libraries have begun purchasing, providing access to and training on making devices. A particular challenge for library users is to understand they must learn a new software or program language in order to make each device create what they want.

Chicago Public Libraries Innovation Lab is one of the most recognized spaces for maker technology. Residents of Chicago can go to this lab to learn about and use 3D printers, CNC lathe machines, laser cutters and a variety of other pieces of equipment. This type of equipment is also useful for small businesses, companies that need to rapid prototype products, and creators who sell their wares on sites like Etsy.

One of the most touching stories about using this equipment comes from Johnson County Library, KS. Robotic prosthetic hands are seldom purchased for children because the \$50,000 price tag is cost prohibitive for person who will outgrow the device in months. However a teen that regularly uses the library heard the plight of a child who just wanted to fit in and have a functioning hand. This teen created a working hand by 3D printing the parts and using basic robotics to create a hand for a few hundred dollars.

Libraries can play an increased in role solving the science, technology, engineering and math (STEM) skill shortage in America by providing services, programs and trainings for children and teens on these exciting tools. "Libraries offer powerful experiences that engage children and young adults in a wide variety of STEM fields."<sup>3</sup> For example, many public libraries run coding clubs and camps or robotics clubs for teens. The outcome of these programs is increased interest in STEM fields, particularly for women and minorities.

### **Library Operations-Related Technology**

Library operations technology has entered a sustaining phase. There is not much expected change to library technologies, from how patrons locate books and check them out, to how patrons log on and use public access computers. Behind the scenes, automated material sorters and inventory tracking are significant investments for systems and will be expected to fill their purpose for many years. However, we have seen the industry change in two key ways. First, many of the companies in this sector are owned and operated by private firms. These firms have gone through, and continue to go through massive merger and acquisitions.

This has impacted competition and service levels for libraries and their public. This is counteracted through the creation of open source software.

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<sup>3</sup> Institute of Museum and Library Services. (2014). *Guide to Funding Programs and Opportunities*.

A Library of Washington County's size could expect to spend well over \$150,000 annually for licenses for library-related software. From integrated library systems, print management, PC reservation systems, proxy services, etc..., libraries need to continue to explore models, vendors and software that meets the needs of their residents both in terms of price and service level.

### **Data Analytics**

Libraries, like other industries and organizations, struggle to make use of big data. From better understanding of reading habits and making smart suggestions, to understanding market segmentation, big data presents many opportunities for libraries to serve their residents more effectively and efficiently. However, big data presents challenges for libraries too. Libraries strive to keep patron records private and confidential, but using big data can, at times, conflict with those values. Saint Paul Public Library has begun tracking patron metadata, using Gale's *Analytics on Demand*. Big data and data analytics will play a key role in the success of libraries in the future.

### **Economic Development**

Public libraries are continuing to recognize the key roles they play in local economic development. From resources provided, to space, programs and classes, the local public library continues to focus on improved partnership and support of small businesses. While many libraries measure their return on investment, as Washington County Library has, that will not be the focus of this section. However it is notable that Washington County Library generated almost \$60 million in value to county's residents<sup>1</sup>.

Many libraries support the educational and technological needs of small businesses. For example, Arlington Heights Public Library, IL provides a series of classes for small businesses. These include the standard Microsoft productivity software, but also include Photoshop, social media for marketing, audio and video editing, and graphic design. They also provide businesses with the tools and technologies to print compelling graphics, brochures, and fliers.

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<sup>1</sup> Library Research Services (n.d.), *Return on Investment Calculator*. Retrieved from <http://www.lrs.org/public/roi/calculator.php>

Carson City Public Library, NV has taken a different spin on economic development. Tesla Motors is building a new factory near Carson City Public Library. Carson City, like so many other locales, does not have the workforce capable to handle advanced manufacturing. Carson City recognized this issue and worked to create the first advanced manufacturing certificate program funded and facilitated by the library. The *Pacific Standard* (July 27, 2015) confirms the role libraries will play in the future of manufacturing in an article entitled "Libraries are the Future of Manufacturing in the United States."

Libraries also support the space needs of businesses. Group rooms for conference and high technology rooms that allow for video conferencing are becoming commonplace. Libraries also provide co-working facilities. These shared work environments not only drive down startup costs for small businesses, but they also provide a network that allow for enhanced collaboration between businesses. This trend has even been covered by business trade publications. For example, *Fast Company* stated, "Over the past decade, dozens of reading rooms have been reincarnated as de facto co-working spaces. Some, including D.C.'s Digital Commons and Scottsdale, Arizona's Eureka Loft, cater expressly to startups by helping them find funding, mentors, and other resources to advance their business plans".<sup>2</sup>

## Services

Libraries, as previously mentioned, continue to add to their core services. Libraries are much more than book distribution points. The mission of libraries has evolved to include education and social services. As mentioned elsewhere, libraries have adopted many educational and learning experience roles.

Libraries have also increasingly become social services agencies for the public, as the result of funding cuts to other organizations. Some libraries have even gone as far as hiring social workers and teachers to provide services for patrons. What we are seeing is that the basic library mission has evolved to keep up with the demands of new technology, cuts to other agencies, and demand of the public, which they serve.

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<sup>2</sup> Fast Company (2014), *The Public Library Wants to be Your Office*

## Spaces

Libraries have begun to adapt to how they create, fill and provide space. Libraries are often touted as the “third space” or the “safe space” or the “community space”. In many ways the library operates as the space people go to when not at work or home.

The library also serves as common space. From politicians kicking off campaigns, to current event clubs, the Library is one of the first locations citizens turn to for accessible, free, safe space. This is more evident when crisis happens, as was the case in Ferguson, MO. When the city erupted after long tension, the town library served as the only “calm” and “serene” space for residents.

Some libraries have turned to joint use facilities as a way to collaborate with governmental agencies or organizations, as a way to reduce facilities cost, and as a way to improve services. These spaces run the gamut in terms of operations. San Jose Public Library and San Jose University share a space but are operated as two distinct organizations. This structure is similar to the structure of the R.H. Stafford branch of Washington County Library.

However, another interesting model is one in which the non-library organization outsources space and resources to the public library. In essence, the public library creates a single library that serves the patrons of both organizations. For example, in 2013 Chicago Public Library co-located a Chicago Public Library branch in the Back of the Yards College Preparatory High School. The library is totally owned and operated by Chicago Public Library with a licensed K12 library media specialist provided by the school to provide specialized services for the student population. These types of joint use facilities allow for maximum efficiency in terms of resources and service levels.

## Organizational Structures

Library organizational structures have changed very little over the last century. This is rather surprising considering the staff, service, and processes of libraries have changed so drastically over the same time period. Libraries have typically organized structurally around technical services, adult services, children services and administration. This model has had trouble adapting to technology, focus on teens, and the role of programs, outreach, partnerships and social services. Yet some libraries are examining and challenging their traditional library structural model.

Libraries have begun to reorganize their structures and departments around core strategic goals. For example, Skokie Public Library conducted a strategic planning process in 2013. From this process, Skokie Public Library determined its three core functions were providing access to materials, fostering learning, and helping build a stronger Skokie community. As a result their organizational structure looks like this:



# Washington County

This section will explore trends as they directly relate to Washington County Library.

## Readership

Washington County, as it continues to evolve as a suburban county, has witnessed its population increase, become more highly educated, and increase their income. The percentage of Washington County residents with a bachelor's degree or higher has risen from 33% in 2000 to 40.5% in 2013. Furthermore household income has risen from \$66,305 in 2000 to \$81,540 in 2013. Both of these factors correlate strongly with reading habits and library usage, and indicate increased demand in the future.

## Community Engagement

As mentioned in the SWOT analysis, there are many opportunities for Washington County Library to increase its impact via interfacing with other organizations. Washington County Library has some partnerships, but they tend to be inconsistent from branch to branch. This is likely the result of two forces. The Library currently does not have designated staff with adequate time to foster relationships in which each partner is able to trust the other will carry out its commitments. Moreover, there may be County policies that staff perceive as inhibiting the Library's ability to foster partnerships. For example, Library staff have the perception that they are prohibited from attending certain types of meetings.

The three most important partnerships for the Library to pursue in order to support both Library and County mission are: K12 schools, workforce development centers, and community education organizations. Other smaller partnerships could be with area historical societies and STEM related organizations.<sup>3, 4, 5, 6</sup>

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<sup>3</sup> Murvosh, M. (2013). Partners in Success: When School and Public Librarians Join Forces, Kids Win. *Library Journal*.

<sup>4</sup> Reference and User Services Association. (2008). *Guidelines for Library and Information Services to Older Adults*.

<sup>5</sup> Johnson, A. (2012). Make Room for Homeschoolers. *American Libraries*.

<sup>6</sup> Adkins, D., & Bala, E. (2004). Public Library Outreach as a Function of Staffing and Metropolitan Location. *Library and Information Science Research*, (26)3

### **Information Technology**

The staff, management and community forum attendees all mentioned the low functionality of the Library's website. While many area libraries rely on county information technology infrastructure and support, many also have websites that are standalone from the County site. These websites need to be created using responsive design so that the website scales appropriately to whatever device a resident is using.

### **Access to Technology**

Computer access and Internet access still remain fundamentally important needs for Washington County residents. This is particularly highlighted in the County's *Economic Development Strategic Plan*. The economic and educational development of the County depends on high-speed Internet infrastructure, reliable and new computers, and other technologies to support the economic and educational needs of the community. The library uniquely provides this access free of charge to the community.

### **Funding and Revenue**

As has been mentioned elsewhere, the Washington County Library has financial constraints in meeting the needs of residents. Beyond increasing County support of the Library, the Library should consider expanding revenue streams. For many years, libraries relied on taxpayer dollars, fines, and occasional grants including grants from local library foundations. Libraries are now beginning to explore revenue streams that also improve services to the public. All of these for-fee services can generate significant income while also making life better for residents.

Ela Public Library in Lake Zurich, IL provides passport services for residents. Lake Zurich is a village of approximately 20,000 residents. Residents prefer using the library, as opposed to the post office, for two main reasons: the library has longer hours, and more importantly, the library provides better customer service. Significantly, the residents can make use of other library services at the same time. In other words, passport services at the library are more convenient than the post office. This single service generates over \$100,000 in revenue for the library annually.

## Marketing

Marketing has become increasingly important to public libraries as it is now necessary to compete for anyone's attention in the "information age". Many libraries have created marketing departments, sometimes as standalone departments, other times attached to outreach or programming. Numerous studies indicate the average American doesn't know what services their library offers. For example, in 2012 only 31% of people knew that libraries provided access to eBooks. If a Library wishes to be recognized as a vital service, it must intentionally overcome challenges to that understanding. Libraries have begun to battle the lack of library services awareness by creating marketing departments.

Libraries prefer in-house marketing departments for several reasons. In-house marketing departments generally operate faster and have quicker turn around times. This would help the Library support the County value of responsive service. Moreover, in-house marketing expertise is needed when considering "merchandising" book displays. For example, the "Queens Borough (New York) Public Library found that "merchandizing the collection" - promotion of the circulation of library materials via advertising or display – resulted in a 137 percent increase in circulation over a period of seven years".<sup>5</sup>

Las Vegas-Clark County Library, just a few weeks ago, created an executive level Branding and Marketing Director position to oversee branding, communications, marketing, promotions, social media, and website strategies. Beyond proving strong brand and marketing messages to the general public, a major benefit of adding a department like this is improved, streamlined, and effective communication both within and outside of the library.

## Programming

Across the country, programs have become vital in building successful, well-used libraries. Programs provide entertainment, educational, and shared community experiences for patrons improving quality of life and developing an educated and engaged community. Moreover, programming serves as the strongest method for the Library to reach out to non-library users. As mentioned in the SWOT section, Washington County Library provides less than the average number of programs for its constituents, particularly for adults.

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<sup>5</sup> Katz, L. (2013). *Strategic Marketing in Library and Information Science*. Binghamton, NY: Haworth Press. P. 222.

## **Learning Experiences**

Many libraries have begun offering technology, software, health and financial classes. For example, St. Johns County Library (a peer library) offers courses on Understanding and Improving Your Credit Score, Health Screenings, DIY Craft Clinic, Restorative Yoga and Fitness Pole Walking. These are all examples from one week at the St. Johns County Library. As residents of Washington County Library continue to hear about exciting learning experiences conducted at area libraries, demand for unique and robust programming will increase.

Due to a self-identified lack of classroom space and staff availability, Washington County Library offers few learning experiences for residents of Washington County. During the SWOT analysis, the staff and management generally agreed that they would offer more learning experiences if they had lab space and staff to do so.

The Library should consider Community education programs as a strong potential partnership and collaborator for library learning experiences. While some duplication of programs may occur, because the Library can offer programs free of charge and at times that community education cannot, the Library should look to collaborate more than compete.

## **Staffing**

Libraries have adapted staffing models to further the library's work towards achieving its mission. From Community Engagement librarian (Anoka County), to Outreach Services librarian (Hennepin), to School Coordinator (Lisle Public Library), libraries have created positions to fulfill library goals for outreach, programming, and education. Once the Library finalizes its strategic planning process, the Library should consider creating additional staff and units to support its strategic priorities.

## **Spaces**

For many years libraries believed that space preference for patrons was driven by personality, however, we now understand that it is less personal preference and more task driven. Libraries need to provide private-alone; private-together; public-alone; and public-together spaces to meet the needs of residents.

As mentioned elsewhere, Washington County Library does meet the minimum space required by various library standards. Not only does the Library need an additional 39,000 square feet to meet today's basic standards requirements, the Library is short on particular space needs in several areas. Washington County needs spaces dedicated to teens, to small business owners and classroom/lab and meeting space.