

The 2017 Public Library Data Service

Characteristics and Trends

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The 2017 PLDS: Characteristics and Trends

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The [Public Library Data Service \(PLDS\) annual survey](#) is conducted by [Counting Opinions \(SQUIRE\) Ltd. \(CO\)](#) on behalf of the [Public Library Association \(PLA\)](#). This 2017 survey of public libraries from the United States and Canada captured fiscal year 2016 (FY2016) data on finances, resources, service usage and technology. Each year PLDS includes a special section. This year the supplemental questions focused on young adult services.

The [PLAmetrics](#) online service offers subscribers access to the longitudinal PLDS data sets from FY2002. Also included is the Public Library Survey (PLS) annual data (from FY2000) as provided by the [Institute of Museums and Library Services \(IMLS\)](#). [PLAmetrics](#) provides real-time access to meaningful and relevant public library data for peer benchmarking and trend analysis using a custom reporting service.

This report includes an analysis of selected measures from the FY2016 PLDS and trends, conducted by CO using the [PLAmetrics](#) reporting service.

Research Method and Context

Participation in the PLDS is voluntary and participants have the option to provide responses to any and/or all questions that comprise the survey. As in previous years, public libraries in the United States and Canada are invited to participate in the survey.

CO sent 5,564 emails to launch the survey (January 2017). In addition, Public Libraries and state agencies were notified of the survey via email, social media and web page posts. Postcards promoting participation were handed out ALA Mid-Winter (2017). In total, over 5,591 unique libraries were contacted. Follow-up letters and emails were sent throughout February and March. The original deadline for submission (March 31st, 2017) was extended to April 30th, 2017.

State data coordinators from the U.S. and Provincial/Association coordinators in Canada were contacted about promoting the survey to their libraries. Their involvement led to increased participation including, 3,055 (2,704 in 2016) of U.S. (2,979) and Canadian (76) public libraries partially (1,661) or fully (1,394) responding to the request for data, a response rate of 54 percent (a 12.9 percent increase over 2016). **Note:** A full response is when 60% or more of the survey questions are completed.

Copies of the survey including definitions are available online via the PLDS Survey site, <http://pla.countingopinions.com/> and at <http://www.plametrics.org/>

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Summary

The following summary of key findings is based primarily on analysis of results from the cohort of continuously reporting libraries:

- Over the last 5 years library **programs per capita** have grown at a rate (6.3%) twice the decrease in **circulation per capita** (-3.0%)
- Since 2012, **staff expenditures** (representing over 67% of **operating expenditures**) increased **7.05%** while the number of **staff/capita** decreased **-1.5%**
- **Electronic circulation** is growing steadily at a rate of 11.7%, but not sufficiently to offset the decline in **physical materials circulation**
- **Consortial sharing** relationships for electronic materials significantly increased Holdings for libraries with a Population of Legal Service Area less than 100,000
- Declines in **circulation** may in part be a result of changes in measurement over time (differences in **circulation policies** especially for electronic materials) and due to an overall decline in library usage that mirrors the decline in unemployment rates (that have dropped steadily since 2011), reductions in usage of **CD/DVD** materials and a slowing uptake in **electronic usage**
- While expenditure on **CD/DVD** materials (\$2.26/capita) decreased \$0.02 in FY2016 there was a decline in share (-4.08%) **of overall circulation**

Operating Finances

Figure 1 shows that since FY2012, library income per capita increased \$3.87, an average of 2.9%/year, whereas the US and Canadian economies grew at an average annual rate of 2.06% and 1.86% respectively over the same period¹.

In the year between FY2015-16 the library group serving populations between 100,000 and 499,999 received the largest increase in **income per capita, 5.2%** (N=144), compared to increases of **2.3%** (N=221) for those serving

Figure 1: Income and Expenditure per capita and Growth US and Canadian Real GDP (N=428)

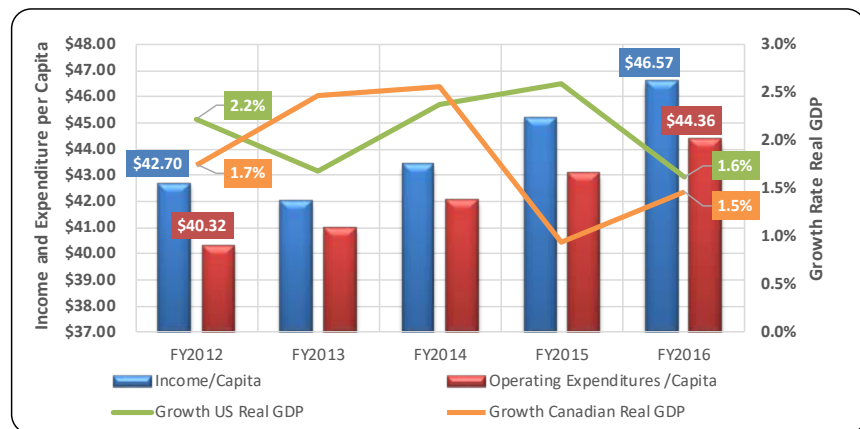
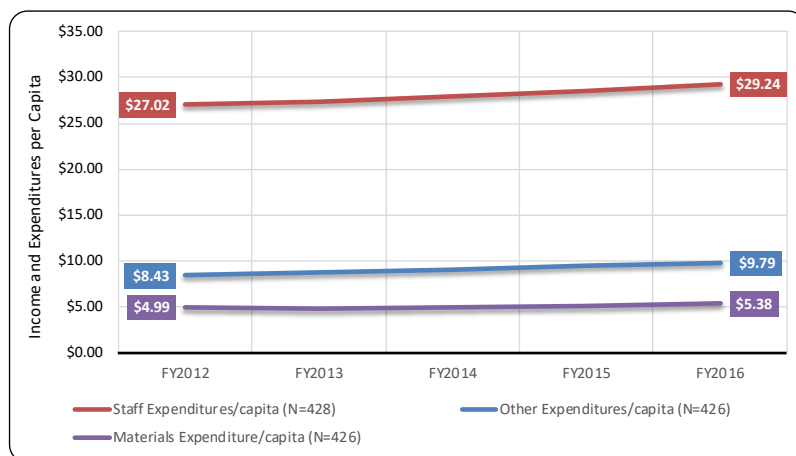


Figure 2: Five Year Trend Expenditures per capita by type



populations under 100,000 and **2.2%** (N=63) for those serving populations over 500,000. Large library expenditures increased at 2.9%, a 0.7% rate higher than their change in income. Expenditures for the small and medium libraries increase at 1.3% and 3.7% respectively.

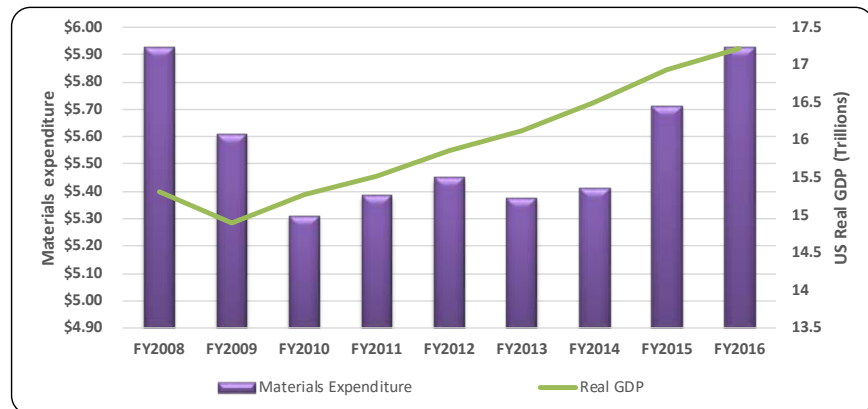
Figure 2 shows the 5-year trends for the continuous responding libraries for staff (N=428), materials (N=428) and other expenditures (N=426) per capita since FY2012. Since 2012, spending has increased \$2.22/capita (1.99% annually) on staff, \$0.39/capita (1.89% annually) on materials, and

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\$1.36/capita (3.81% annually) on other expenditures. As discussed later in this article, number of staff per capita has decreased -3.4% since FY2012, suggesting the combination of hours worked, staff composition and costs and not overall head counts, are driving the increase in staff spending.

Based on those libraries that have responded continuously for the past 10 years (N=161), **spending levels on materials** in FY2016 (\$5.92 per capita) is just shy of the pre-recession levels (\$5.93 per capita) which peaked in FY2008 (Figure 3). This pattern of spending also appears to be consistent with the growth in US GDP (most continuous responding libraries being American).

Figure 3: Materials Expenditure per capita (N=161) and US GDP



Service Levels

Figure 4 shows a significant increase (5.4%) in **holdings per capita** in FY2015, which increased from 2.83 to 2.86 items per capita (0.9%) in 2016. It bears noting that the FY2015 increase in **average holdings per capita** was primarily the result of several libraries reporting, for the first time, electronic materials holdings accessible through consortium agreements (see also Table 2 and related discussion).

Figure 4: Percentage change in Service Levels from FY2012 (N≤428)

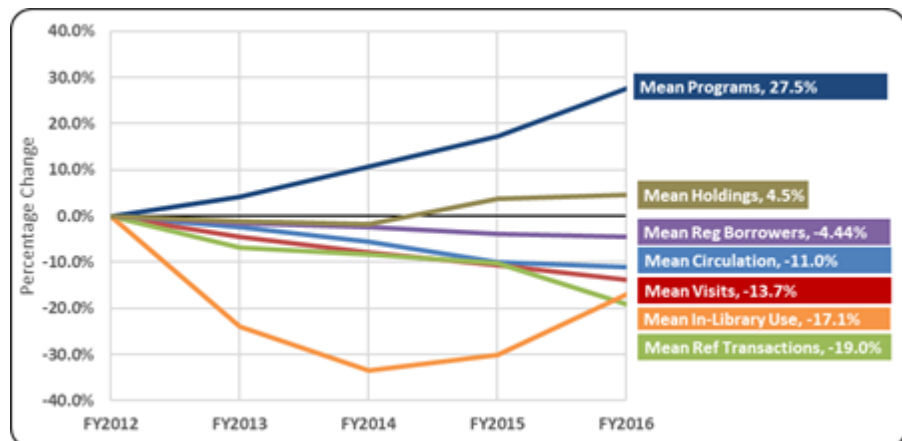
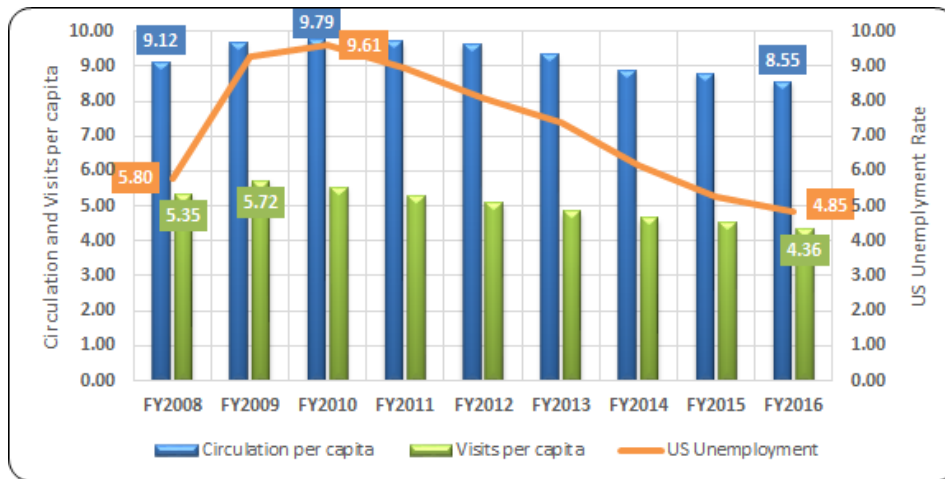


Figure 4 also shows that since FY2012, almost all output **service level indicators** (on a per capita basis) continue to decrease except for **programs** (11.7%), and **in-library use** (0.28 in-library uses/capita), which has rebounded significantly since FY2014, but still well below FY2012 counts. In the past year (FY2015-16) the following have decreased (least to greatest: **circulation** (-3.0%), **visits** (-3.6%), and **reference transactions** (-9.8%). Since 2012, only **programs per capita** increased (27%) from 11.97 to 15.26. This increasing emphasis on programming is one indication of how library services are transitioning. Pew Research, found from the “Libraries 2016” survey that 80% of respondents (U.S. adults 16 and older) say libraries should offer programs to teach people digital skillsⁱⁱ. As programming gains importance and requires more resources of the library (money, staff, space, collateral, equipment, etc.), libraries will need to better prepare to demonstrate their efficiency and effectiveness in service delivery. Efforts by the PLA and Project Outcome (<https://www.projectoutcome.org>) support measures of program effectiveness that are increasingly important. Libraries will also need to find better measures of program delivery costs and efficiencies, to complete the new measures of effectiveness in programming as evidence for stakeholders to support library’s as they maintain and grow these services.

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It is equally important to better inform library administrators as they allocate resources. Currently, most data sets (PLDS included) have no data on budgets and program development expenditures. These might be combined with “other expenditures” and/or buried in the “staff” costs. While it is reasonable to assume that as more programs are offered, costs are also increasing, currently there is no data support measures at a macro level, and in most instances, libraries do not know their true programming costs at a micro level (e.g., per program, per participant, etc.). Currently, therefore, it is difficult to assess the impact on budgets resulting from increases in library program service delivery and on comparative resource allocations.

Figure 5: Circulation and Visits per capita (N=419) and US Unemployment Rate



Unemployment rates (Bureau of Labor Statistics, 2017)ⁱⁱⁱ more than doubled in the United States (Figure 5) during the recent recession. At the same time, library visits and circulation increased before steadily decreasing as unemployment declined to pre-recession levels. This is not likely the only factor affecting the decline in traditional measures of library usage, but it does indicate why libraries now need to consider new and better measures of their efficiency and effectiveness.

Materials Expenditures and Usage

Table 1, shows mean **materials expenditures** by population group since FY2012. Small and Medium Libraries serving populations less than 500,000 generally show year-over-year increases in mean **expenditures**. Medium and Large libraries show more variable spending on **materials**. The Larger Libraries serving populations of 500,000 or more spent more on **materials** in FY2016 than the previous 4 years, a 6.2% increase over FY2015. Ten Large Libraries reported greater than 25% increases in material spending compared to FY2015 resulting from increases in mill levies and other funding increases.

Table1: Materials Expenditure by Population Group, continuous responding libraries

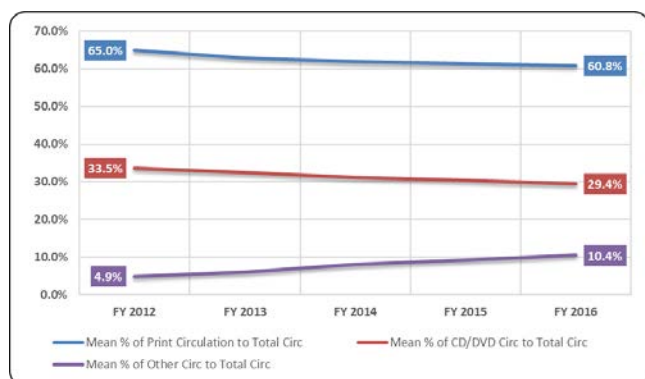
<100,000 PopLSA	FY2012	FY2013	FY2014	FY2015	FY2016	5 Year Trend
N	215	215	211	219	221	
Mean	\$6.08	\$6.10	\$6.26	\$6.33	\$6.45	▬▬▬▬▬
Median	\$3.87	\$3.60	\$3.93	\$3.69	\$3.82	▬▬▬▬▬
100,000-499,999 PopLSA	FY2012	FY2013	FY2014	FY2015	FY2016	5 Year Trend
N	142	143	144	144	144	
Mean	\$5.01	\$4.97	\$5.10	\$5.08	\$5.19	▬▬▬▬▬
Median	\$4.33	\$4.33	\$4.10	\$4.32	\$4.29	▬▬▬▬▬
500,000 or more PopLSA	FY2012	FY2013	FY2014	FY2015	FY2016	5 Year Trend
N	63	63	63	62	63	
Mean	\$4.85	\$4.72	\$4.81	\$5.03	\$5.34	▬▬▬▬▬
Median	\$4.90	\$5.10	\$5.16	\$5.19	\$5.72	▬▬▬▬▬

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Figure 6 shows changes in mean **materials expenditures** per capita by type. Mean **electronic materials expenditure** increased \$0.56 (55.9%). While average spending on **print materials** decreased \$0.12 (-4.5%) and mean **CD/DVD expenditures** decreased \$0.03 (-3.2%). Mean **other material expenditures** increased \$0.11 (23.2%).

These per capita spending trends align with patterns of usage that emerge from the data. For example, among the continuous responding libraries (N=427), Figure 7 shows per capita circulation by type of material as a percentage of total circulation for those that report circulation by type of material (i.e., not total circulation only).

Figure 7: Circulation per capita by Type of Material as a percentage of Total Circulation, continuous responding libraries (N≤266)



Print and **CD/DVD** materials circulation per capita continue to decrease relative to **total circulation** while **other materials** circulated (includes electronic materials), continue to increase. As a percentage of **total circulation** per capita, both **print circulation** and **CD/DVD** continue to comprise a smaller proportion of overall circulation. Since FY2012, increases in **electronic circulation** per capita (7.0%), as shown in Figure 8, account for a corresponding decrease in **CD/DVD** circulation per capita (-6.0%) and the remaining proportion by the decrease in print material circulation/capita (-4.2%).

Correspondingly, libraries are adjusting their spending on materials. As Figure 9 demonstrates, overall **circulation** per capita continues to decline at a rate of -3.0% per year while **overall materials** spending has increased at a rate of 1.9% per year.

Spending on **CD/DVD**, as shown in Figure 6, is relatively unchanged over the last 5 years but mean circulation of these items has decreased at -6.5% per year, as shown in Figure 10; likely a result of increases in use of music and video downloading services.

Figure 6: Mean Materials Expenditures per capita by Type

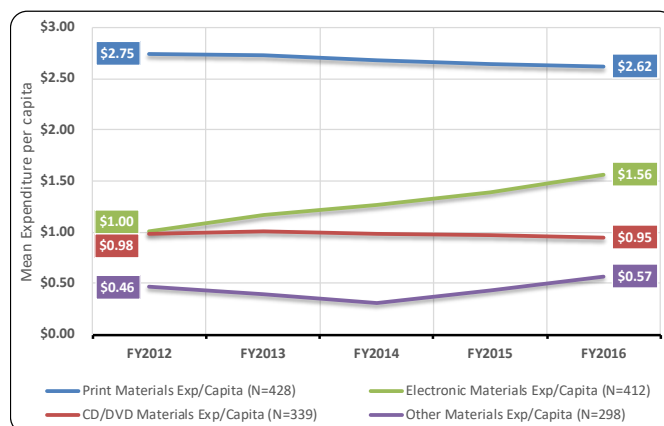


Figure 8: Electronic Circulation per capita as a percentage of Total Circulation (N≤275)

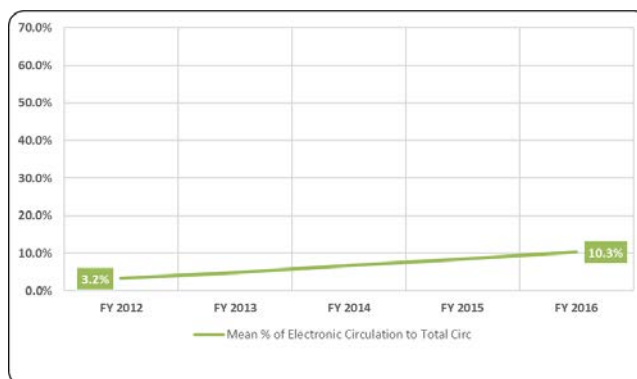
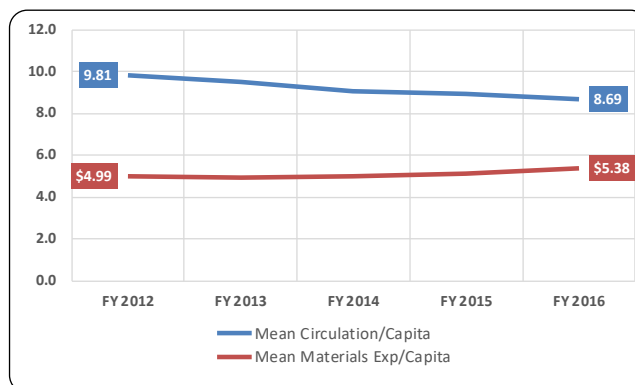


Figure 9: Circulation and Material Expenditure per capita (N=428)



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Similarly **print materials circulation** has decreased by **-2.9%** each year, as depicted in Figure 10. Since 2012, **print materials expenditure** has decreased at a rate **-1.1%** (see Figure 6).

Conversely **electronic material circulation** continues to expand at a rate of 30.0% per year (Figure 10), and **expenditure** on these materials has increased at a rate of 11.7% (Figure 6). Between FY2015-16 Electronic circulation increased at a rate of 15.0% indicating the service is maturing and growing at a slower rate each year. The costs for this rapid growth in electronic circulation is not always fully born by each library given widespread use of consortial purchasing arrangements many libraries have engaged in to provide these materials. As a result, spending on these materials has not had to increase at a similar rate.

Figure 10: Circulation by type per capita

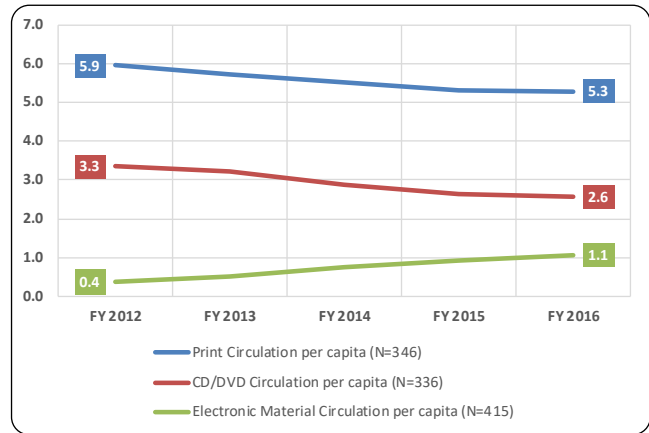


Table 2 shows the five-year trend for total circulation and **electronic circulation** per capita for all continuous responding libraries, grouped by population of the legal service area. Large libraries serving populations of 500,000+ show the highest decline in **overall circulation** per capita (**-3.2%** annually) whereas **electronic circulation** per capita shows the strongest growth rate (33.6% annually).

Table 2: Five Year Trend, Circulation and Electronic Circulation per capita by population group, continuous responding libraries (N=429)

Circulation/Capita	FY2012	% Change	FY2013	% Change	FY2014	% Change	FY2015	% Change	FY2016	5 Year Growth Rate	N
< 100,000	12.03	-1.8%	11.82	-3.3%	11.43	-2.8%	11.11	-2.4%	10.85	-2.6%	221
100,000 - 499,999	10.06	-1.5%	9.90	-2.5%	9.66	-3.0%	9.37	-3.4%	9.05	-2.6%	144
500,000 or more	9.40	-4.1%	9.01	-6.0%	8.47	0.3%	8.49	-2.9%	8.25	-3.2%	63
All Libraries	9.81	-3.1%	9.50	-4.7%	9.06	-1.1%	8.96	-3.0%	8.69	-3.0%	428
E-Circulation/Capita	FY2012	% Change	FY2013	% Change	FY2014	% Change	FY2015	% Change	FY2016	5 Year Growth Rate	N
< 100,000	0.39	19.4%	0.46	27.1%	0.59	26.7%	0.75	12.0%	0.84	21.1%	208
100,000 - 499,999	0.39	31.4%	0.52	28.3%	0.66	24.4%	0.83	12.9%	0.93	24.0%	144
500,000 or more	0.37	45.6%	0.54	49.8%	0.80	25.8%	1.01	16.2%	1.18	33.6%	62
All Libraries	0.38	39.5%	0.53	41.9%	0.75	25.4%	0.94	15.0%	1.08	30.0%	414

There are challenges in comparing **electronic circulation** with **other types of materials** circulation given the differences in lending policies across materials types. While a circulation means an item has been lent to a library user, a policy that mixes shorter and longer lending periods and/or auto-renewals will impact comparative analysis ... and turnover rates and other measures of materials availability (for lending). This means that circulation counts between peer institutions and between material types within the same institution and over time, are becoming increasingly difficult to compare. Some policies may not be solely at the discretion of the library especially with e-Materials downloaded from 3rd parties and/or as part of a consortium. Factors such as number of copies, simultaneous uses and/or total days of use are also factor in consistent measurement of circulation. As a result, the upcoming 2018 PLDS survey includes new questions about circulation policy and counts for various material types, in hopes of developing better measures for understanding these trends.

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Table 3 shows the five-year trend for holdings per capita for all continuous responding libraries grouped by legal service area. Small Libraries serving populations less than 100,000 (N=222) show the highest per capita increase in **holdings** (8.7% annually), largely impacted by consortial membership agreements providing access to large repositories of electronic materials, first reported in FY2015. The addition of these titles has significantly increased the average number of **holdings per capita**. Similarly, libraries serving populations of 100,000–499,999 also increased their **holdings per capita** in FY2015 (5.2%) and FY2016 (6.8%). This new reality likely means greater variability in holdings trends given the immediate impact of sizeable changes afforded by such consortial arrangements. The Large Libraries have reduced their holdings on average -1.6% despite higher spending in FY2015-16 as compared to the three preceding years (see Table 1).

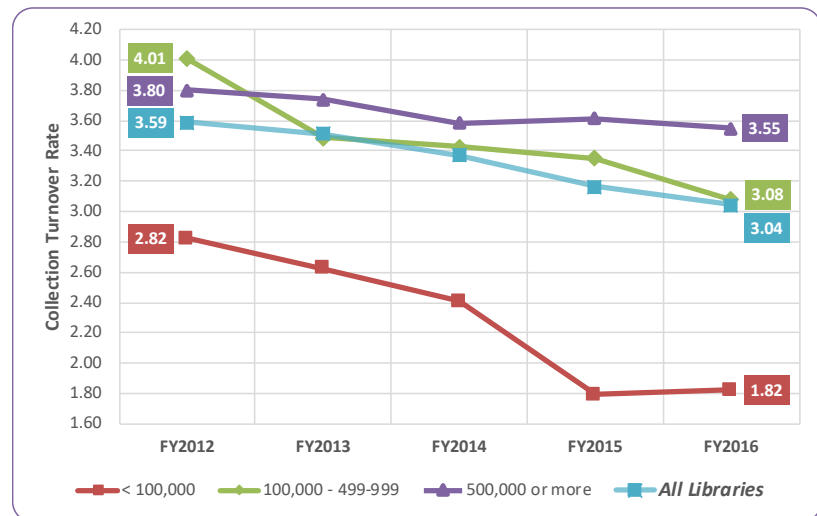
Table 3: Five Year Trend, Holdings per capita by population group, continuous responding libraries (N=429)

Holdings/Capita	FY2012	% Change	FY2013	% Change	FY2014	% Change	FY2015	% Change	FY2016	5 Year Growth Rate	N
< 100,000	4.27	5.6%	4.50	5.4%	4.75	30.5%	6.20	-3.8%	5.96	8.7%	221
100,000 - 499,999	2.86	-0.9%	2.83	-0.5%	2.82	5.2%	2.96	6.8%	3.16	2.6%	144
500,000 or more	2.47	-2.6%	2.41	-2.0%	2.36	-0.6%	2.35	-1.1%	2.32	-1.6%	63
All Libraries	2.73	-1.1%	2.70	-0.6%	2.69	5.4%	2.83	0.9%	2.86	1.1%	428

Collection turnover rates also reflect the trends in the composition of holdings and circulation. These large increases in holdings have led to lower collection turnover rates. Figure 11 shows that since FY2014 libraries serving populations less than 500,000 have the highest decline in the turnover rate. Larger libraries serving populations over 500,000 show a decrease in holdings over the last 5 years, with corresponding declines in circulation and turnover.

Decreasing circulation and collection turnover rates create a perception that the need for and/or value of libraries is somehow diminishing. Instead these measures continue to emphasize that the mix of library services are changing, and that holdings and circulation counts are increasingly becoming more difficult to consistently measure.

Figure 11: Five Year Trend, Collection Turnover Rate by population grouping and all libraries, continuous responding libraries (N=428)



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Programs and Attendance

In contrast to the downward trend in **circulation/capita** (-11.4% since FY2012), there has been significant growth in **programs per capita** (27.5% since FY2012) and **program attendance per capita** (16.9% since FY2012) (Figure 12). Interestingly, **circulation/capita** has decreased annually at a rate of -3.0% since FY2012, **programs per capita** has increased by more than twice that rate (6.3%) and **attendance per capita** a rate of 4.0%.

While libraries continue to invest in **holdings** (despite decreasing use), it is apparent that Libraries are allocating more resources to **programming** although there are no specific measures available to confirm this other than the obvious. Programming competes for resources including space, personnel, equipment, materials, management time, time spent on community engagement, and more. As this trend continues, library management will increasingly need better ongoing measures (efficiency and effectiveness data) as they adapt and optimize the mix of traditional and new services including programming.

Figure 12: Percentage Change Annual Mean Programs per 1000 Capita and Annual Mean Circulation, continuous responding libraries (N=429)

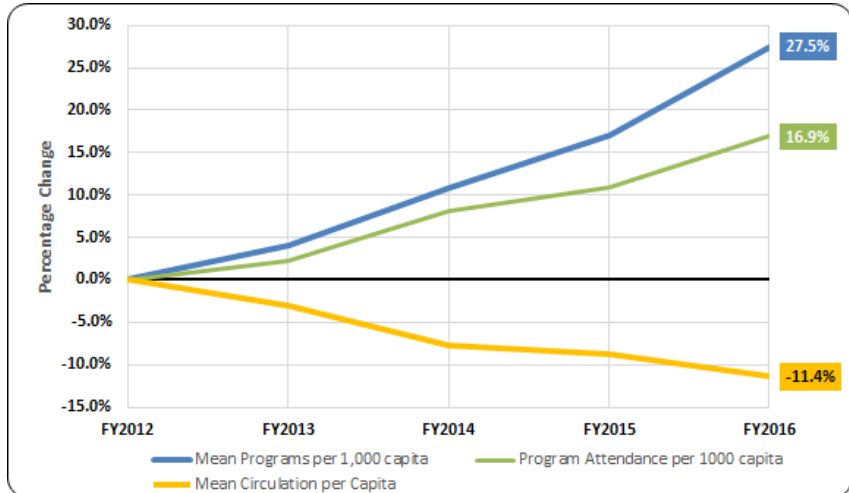


Figure 13: Percentage Change Programs, Hours Open and Staff per capita, continuous responding libraries (N=429)

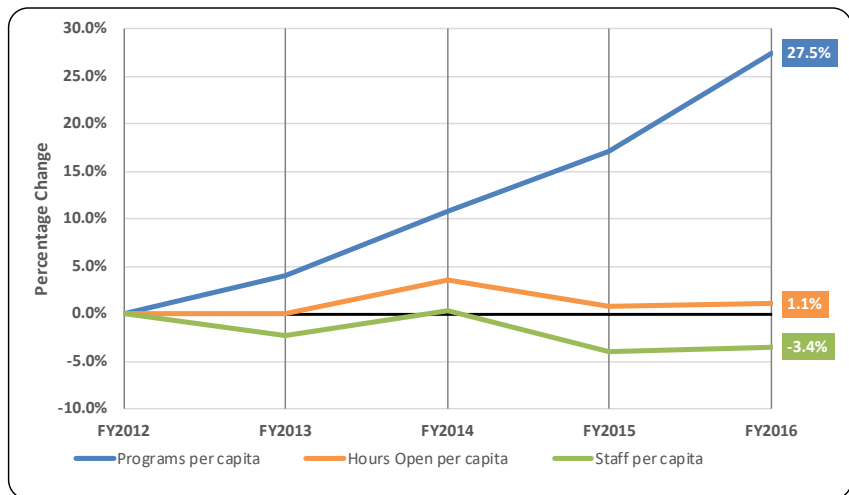


Figure 13 contrasts the rate of increase in **programming** with a much slower growth in **hours of operation** and declines in **staff per capita**. If the growth in **programming** continues, it may be constrained by potential capacity issues, such as **hours open, staff resources** and **space**, although these may not be of immediate concern depending on where/when and how programs are delivered (in-library, online, asynchronously, in community). Nevertheless, expanding the number of hours open to accommodate more programming (perhaps at more convenient times) implies a potential increase in commitment for additional resources, including staff. Correspondingly, there will be a need for libraries to justify those commitments.

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Staff

In the past five years, as shown in Figure 14, little has change regarding staffing head counts among the continuous responding libraries (N=429). The average number of staff is relatively static over the past 5 years decreasing at a rate of **-0.87%**, mostly due to the increase in population over the same period (1.0%). Since FY2012, **staff expenditure per capita** increased at a rate of 1.99% with the largest increase (2.3%) in FY2016. Staff expenditure are increasing faster than the number of staff. The increase reflects changes in the composition of staff and/or costs per person and/or hours per staff member.

Figure 14: Staff and Staff expenditure per capita, continuous responding libraries (N=427)

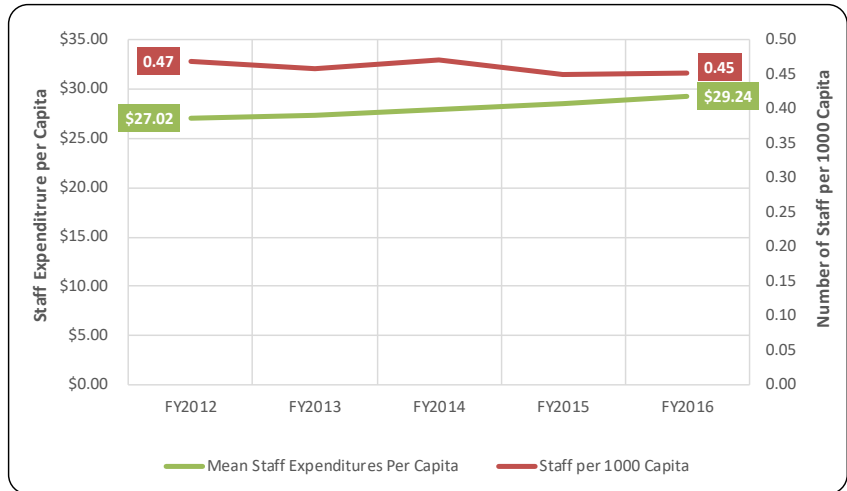
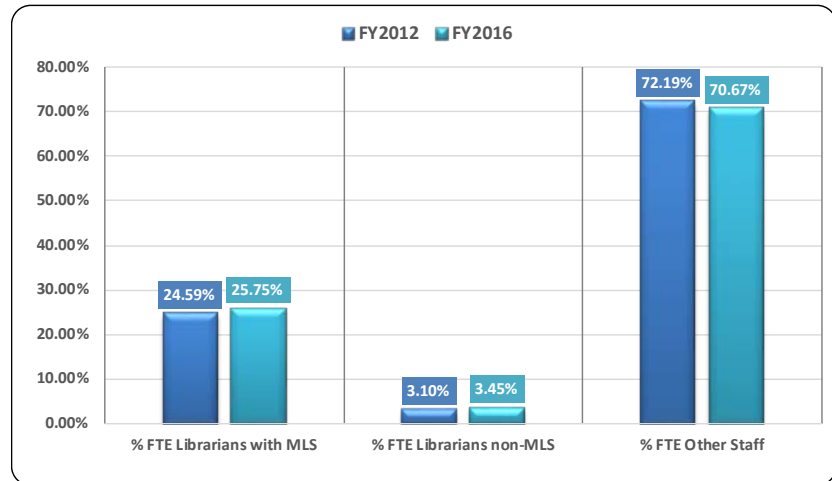


Figure 15 compares FY2012 with FY2016 results for the average percentage of **MLS**, **Non-MLS** and **Other staff** for the continuous responding libraries. In the last 5 years, the average percentage of **MLS** librarians has increased at a rate of 0.54%. The average percentage of **Non-MLS** librarians has increased faster (3.24%), offset by declines in **other staff** (**-1.42%**) which are likely lower on a per capita basis (due the increase in population over the same period).

Figure 15: Mean Percentage Composition of Staff (MLS, Non-MLS and Other) continuous responding libraries (N=427)



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Technology

Web visits (see Figure 16) continue to decline (-5.8% in FY2016). This may be attributed by several factors that complicate the process of tracking virtual visits. This includes factors such as: almost 70% of continuous responding libraries reporting having library apps for mobile devices and over 95% use social networking (see Figure 17). Since native apps are distinct from the website, it is likely these users are using an app rather than visiting the library website for the service/materials they need. Similarly, social network pages can be accessed without first visiting or possibly ever visiting the library website, so these web visits may not be counted – or worse – may be double or triple counted as they navigate across and between distinct web properties (e.g., ILS, FB, YouTube, Pinterest, Linked-in, Twitter, online Databases, 3rd party e-media services, etc.)

The percentage of libraries that indicate they have community links (83.2%) and library staff content (80.7%) decreased again in FY2016, but over 80% of continuous responding libraries still provide such content (see Figure 17). Fewer libraries reported they support patron books reviews (37.5%) and online book clubs/discussion forums (26.3%). More libraries affirmed that they offer social networking (96.4%), virtual reference services (81.8%), content in languages other than English (47.6%), and user driven content (32.4%). Better integration of library content (website, ILS, ...) with major search engines, providing/promoting a mix of curated content on the website and other efforts should help drive traffic and possibly slow and/or reverse the downward trend in website visits.

The percentage of libraries that circulate laptops (33.0%), tablets (27.2%) and e-readers (27.0%) decreased in FY2016 (see Figure 18). This appears to coincide with the growth in ownership of web enabled devices (smartphones, laptops and tablets) reported

Figure 16: Web Visits per capita, continuous responding libraries (N=357)

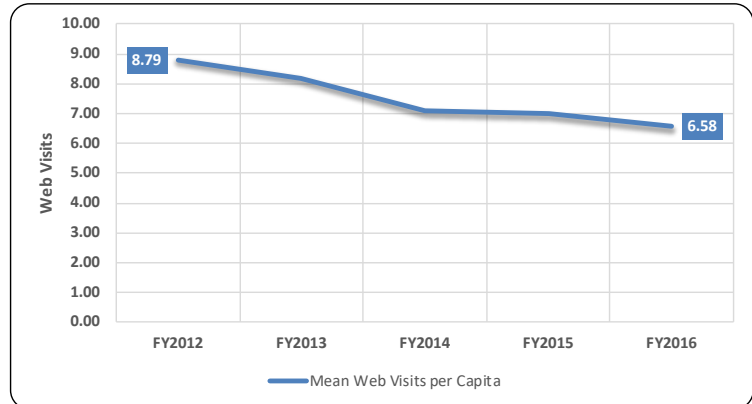


Figure 17: Selected Website Features Provided, Continuous responding libraries (N ≤ 363)

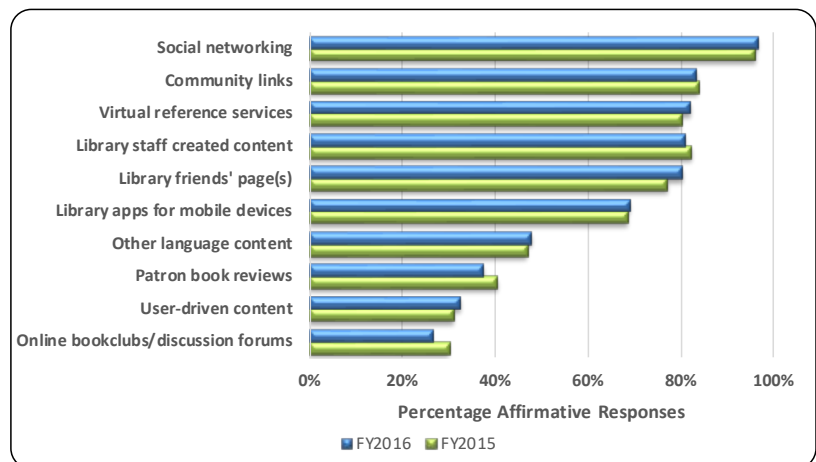
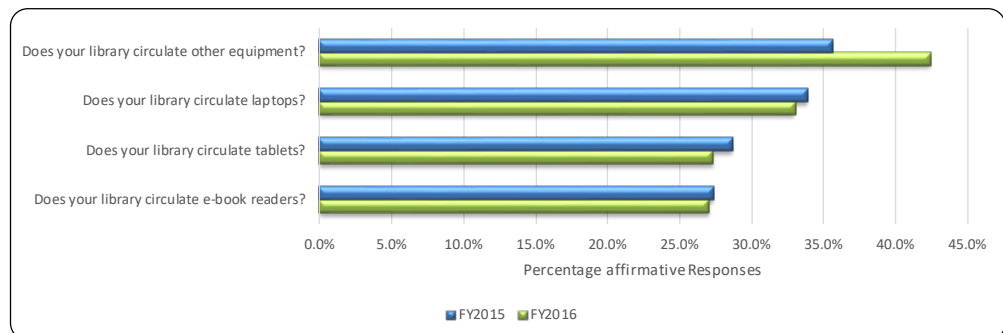


Figure 18: Circulation of Electronic Equipment, Continuous responding libraries (N ≤ 371)



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by Pew Research in mid-2015 (see appendix). More libraries affirmed that they circulate other equipment (42.4%), an increase of 6.8% from FY2015.

Population

In the analysis of the data, many key ratios are based on the population of legal service area – i.e., trends on a per capita basis. Among the continuous reporting libraries (N=428), Table 4 shows population growth for all Library groups in FY2016: **1.3%** for larger libraries serving population of 500,000 or greater (N=63) grew; **0.4%** for medium sized libraries serving population of 100,000 to 499,999 (N=144); **0.2%** and small sized libraries serving populations of less than 100. These increases account for an overall population growth (**1.1%**) among all continuous reporting libraries. Prior year decreases in population are notably due to 1 or 2 libraries moving upward from one group to another because of an increase in their reported population size. Changes in populations served should be included in any analysis of the results. As such, our analysis of the data includes such comparisons using per capita results.

Table 4: Five Year Trend Mean Population of Legal Service Area – Continuous reporting libraries (N=428)

Mean PopN Legal Service Area	FY2012	% Change	FY2013	% Change	FY2014	% Change	FY2015	% Change	FY2016	5YR Growth
<100,000	38,292.57	-1.7%	37,654.46	0.4%	37,793.09	0.1%	37,832.58	0.2%	37,909.24	-0.3%
100,000-499,999	225,657.78	-0.2%	225,284.39	-0.7%	223,706.50	0.0%	223,602.22	0.4%	224,490.70	-0.1%
500,000 or more	1,042,471.60	1.2%	1,054,871.48	-0.6%	1,048,185.97	0.4%	1,052,474.86	1.3%	1,066,257.46	0.6%
All Libraries	242,104.09	0.9%	244,259.58	1.0%	246,708.72	1.0%	249,252.03	1.1%	252,053.32	1.0%

The 2017 PLDS: Characteristics and Trends

PLDS Survey Summary FY2016

Table 5 summarizes usage data captured during the 2017 PLDS survey (FY2016 data). Overall more libraries reported all the measures listed in Table 5, however fewer libraries reported each component of circulation: print, CD/DVD, and other. As well, fewer libraries reported annual renewals in FY2016. Although fewer libraries reported these components of circulation, more libraries reported electronic circulation compared to FY2015.

Table 5: Descriptive Statistics for the 2017 PLDS Participating Public Libraries (FY2016) – All Libraries (N=3226)

	Number of Reporting Libraries	Total	Minimum	Maximum	Mean	Median
Population of legal service area	3226	225,230,380	61	4,137,076	69,817	10,525
Registrations	2841	114,145,663	7	3,045,443	40,178	6,283
Holdings	2551	686,826,089	1	15,890,923	269,238	124,304
Total annual circulation	2817	1,619,985,483	23	31,910,577	575,075	73,616
Print circulation	1156	771,590,645	115	16,917,921	667,466	107,394
CD/DVD circulation	1109	340,566,114	6	9,236,650	307,093	42,000
Other circulation	1040	147,820,780	1	8,880,842	142,135	11,473
Electronic circulation	2516	184,889,815	1	8,640,543	73,486	4,944
Annual renewals	936	304,295,337	1	9,149,263	325,102	75,919
In-library use of materials	1290	133,750,731	1	14,676,247	103,683	10,185
Reference transactions	2584	167,368,143	1	9,141,000	64,771	6,236
Library visits	2714	904,371,301	45	18,232,347	333,225	62,036
Programs attendance	2746	71,159,962	3	1,713,362	25,914	5,476
Number of programs	2677	3,142,249	1	91,281	1,174	311
Interlibrary loan to other libraries	2578	36,221,566	1	855,560	14,050	2,877
Interlibrary loan from other libraries	2587	39,481,427	1	2,525,952	15,261	2,546

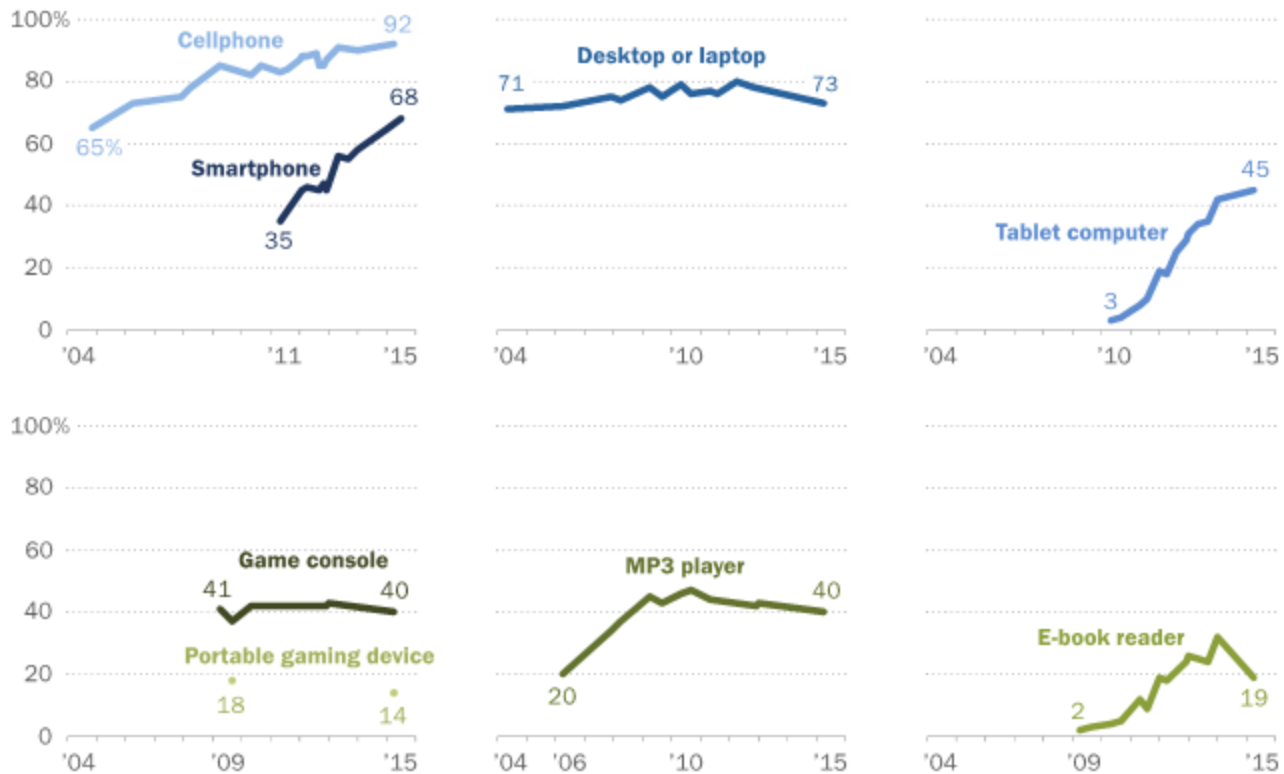
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Appendix

Pew Research: Technology Device Ownership: 2015^{iv}

Smartphones, Tablets Grew in Recent Years; Other Devices Declined or Stayed Flat

% of U.S. adults who own the following devices



Source: Pew Research Center survey conducted March 17-April 12, 2015. Smartphone data based on Pew Research survey conducted June 10-July 12, 2015. Trend data are from previous Pew Research surveys.

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ⁱ The World Bank Group. 2017. *Data Bank | World Development Indicators, United States and Canada, (GDP, PPP (constant 2011 international \$))*, [ONLINE]. Available at:

<http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.MKTP.PP.KD>. [Accessed 4 September 2017]

ⁱⁱ Pew Research Center: Internet, Science & Tech. 2017. *Libraries 2016 | Pew Research Center*. [ONLINE] Available at: <http://www.pewinternet.org/2016/09/09/libraries-2016/>. [Accessed 5 September 2017].

ⁱⁱⁱ Bureau of Labor Statistics. 2017. *Employment status of the civilian noninstitutional population, 1946 to date*. 2017. Available at <https://www.bls.gov/cps/cpsaat01.htm> [Accessed 30 October 2017].

^{iv} Pew Research Center: Internet, Science & Tech. 2017. *Smartphones, Tablets Grew in Recent Years; Other Devices Declined or Stayed Flat | Pew Research Center*. [ONLINE] Available at: http://www.pewinternet.org/2015/10/29/technology-device-ownership-2015/pi_2015-10-29_device-ownership_0-01/. [Accessed 7 September 2017].