

Characteristics of United States Academic Libraries in 2020 and Regional Changes from 1996 to 2020

Samantha Godbey and Starr Hoffman

This paper provides a snapshot of United States academic libraries in 2020 and explores longitudinal trends in staffing and expenditures for 1996 to 2020. The authors merged and analyzed academic library data from the National Center for Education Statistics from over 4,000 postsecondary institutions. Characteristics are explored by region and maps are provided. Total inflation-adjusted library expenditures have increased steadily for all regions from 1996 to 2020, including in the two major expenditure categories of staffing and collections. In the Northeast and West, averages are markedly higher in staffing and total expenditures than the other two regions.

Introduction

Beginning in 1966, the National Center for Education Statistics (NCES) began collecting data on library collections, services, and expenditures for all academic libraries in the United States via the Academic Libraries Survey (ALS). Despite the long history of this data collection, analysis of this data has proved challenging for researchers, especially over time. A prior study by the same authors¹ explored ALS data from 1996 to 2016. This paper expands on that study by providing regional comparisons that add nuance to previous benchmarking data and by extending the longitudinal analysis to include 2018 and 2020. We also include an examination of 2020 data in order to provide a recent snapshot of United States academic libraries.

Literature Review

The ALS is part of the mandatory annual reporting requirements for all degree-granting Title IV institutions in the United States, and this data is available at no cost from NCES as a subset of IPEDS (the Integrated Postsecondary Education Data System). We selected this data for study due to the survey's national scope, high response rate, and availability without cost. Two additional surveys are frequently used in similar studies of academic library characteristics: the Association of Research Libraries' (ARL) ARL Statistics Survey² and the Association of College and Research Libraries' (ACRL) Academic Library Trends and Statistics Survey.³ Collected since 1908, ARL Statistics provides useful data for member institutions⁴ and can

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be suggestive of broader trends or “valuable insights into the profession as a whole,”⁵ but ultimately this data comes from only approximately 125 institutions. The content of ACRL’s Academic Library Trends and Statistics Survey is more closely aligned with the ALS, currently consisting of the required questions from the IPEDS Academic Libraries Component as well as a section on library trends, which changes each year. The number of reporting institutions is generally high, for example, 1,672 libraries or 52.1% of U.S. libraries completed the 2020 survey;⁶ however, this is lower than the federally mandated ALS. Users previously paid for access to the full survey results by purchasing a single paperback edition for approximately \$600. Now the full survey is only available by subscribing to the ACRL Benchmark tool, which currently costs anywhere from \$99 for a one-month individual subscription to \$400 for a one-year library subscription. Independent published research using this dataset is limited. For example, Fagan used ACRL Survey results to investigate predictors such as library instruction for full-text article requests,⁷ while Mezick combined data from ACRL, ARL, and IPEDS to explore the relationship between library expenditures and library staffing numbers with student retention rates.⁸

Despite including the highest number of institutions compared to the alternatives and being freely available for download on the NCES website, longitudinal analysis of ALS data is challenging due to changes in survey questions and renaming of variables over time. Numerous studies have explored a single year of ALS data⁹ and, less frequently, two years.¹⁰ In fact, one of these papers that included a historical comparison was an official NCES report.¹¹ For example, Crawford¹² used 2010 ALS data for over 1,300 institutions to explore the relationship between library characteristics and student outcomes and found a correlation between library expenses per full-time equivalent (FTE) student and graduation and retention rates. Others have taken a regional approach to a single year of IPEDS data. Teske et al.¹³ explored academic library statistics as potential predictors for first-year retention and six-year graduation rate specifically for libraries within the Southern Regional Education Board interstate region, while Crawford¹⁴ looked at relationships between institutional and library variables for Pennsylvania colleges and universities.

Some researchers have examined three or more years of ALS data in order to identify trends or significant changes in academic libraries;¹⁵ however, aside from our previous study,¹⁶ the most recent of these studies is now ten years old. These studies nonetheless provide examples of the richness of this data and potential for longitudinal examination. Regazzi analyzed data on library expenditures, staffing, and usage from 1998, 2004, and 2008, noting an increase in other professional staff over this time period, especially among doctoral research institutions,¹⁷ later confirming these results after the addition of 2010 data.¹⁸ In Budd’s examination of statistics on staffing and library transactions over 4 years of IPEDS data between 1998 and 2008,¹⁹ the author noted a decline in library staffing over this period, but patrons nonetheless continued to visit libraries, pushing back against broader concerns about digital access to library materials reducing the importance of libraries. Lu provided the most comprehensive look at trends in United States academic libraries for the decade from 1994–2004, examining changes in library services and library resources over this time period.²⁰ Lu noted a positive trend in numbers of professional library staff and in library expenditures in multiple categories, including salaries and wages expenditures. While useful at its time, the data analyzed in this study is now nearly twenty years old.

In our previous study, we examined staffing and expenditure trends from 1996 to 2016 by Carnegie classification and institution size. Results indicated that the numbers of students per librarian increased over time in each Carnegie and size category, with baccalaureate institutions having the lowest student-librarian ratios. Additionally, average inflation-adjusted staffing expenditures remained steady for master's, baccalaureate and associate's institutions, and inflation-adjusted staffing expenditures declined across each size category. With the current paper, we provide an updated look at the state of U.S. academic libraries and examine trends among regional groupings of libraries. Our aim is to provide a benchmark reference; providing this data stratified by region as well as by Carnegie classification and institutional size should provide additional insight for academic library leaders looking for peer comparisons, particularly with respect to staffing and budgets. We provide commentary throughout as related to previously identified trends for the twenty years ending in 2016.

Method

We merged publicly available data from academic libraries at postsecondary institutions in the United States from 1996 to 2020 to create a single dataset that allows for the exploration of trends over time. Data is collected annually and maintained by NCES as part of federally mandated reporting for all United States higher education institutions. In particular, we merged and cleaned data from the ALS, which includes questions on library staffing, expenditures, collections, and services, and additional IPEDS surveys on student enrollment, faculty staffing, and institutional characteristics. Part of the complexity of analyzing this data for multiple years comes from changes over time with the administration of the ALS. It has also moved around within NCES, from being administered as a separate survey to being incorporated into the Integrated Postsecondary Education Data System (IPEDS) at different times since the 1960s.²¹ Currently, the questions about academic libraries exist as the Academic Libraries component in IPEDS. For the purposes of this paper, we refer to the various iterations of the survey during the time period studied as the Academic Libraries Survey or ALS.

The data for every second year from 1996 to 2020 was downloaded as separate files for the various components, cleaned and merged using R, and imported into Tableau for analysis and data visualization. Variables on institutional characteristics, including Carnegie classification, zip code, and student enrollment, come from the IPEDS Human Resources, Fall Enrollment, and Institutional Characteristics. The current full consolidated dataset includes 81 variables with 51,699 observations.²²

The data has been filtered for the current study to limit it to Title IV-eligible (i.e., federal financial aid), degree-granting postsecondary institutions reporting 10,000 USD or more in overall library expenditures. Private, for-profit institutions were excluded ($n = 1,861$), as were institutions outside of the regions noted below, i.e., from outlying areas and U.S. service schools ($n = 130$). The number of institutions varies from year to year, and this number consists of different institutions at different points as institutions fail to report or experience changes in library and institutional characteristics. The refined dataset examined here includes data across all years for 2,555 unique institutions and overall includes 4,104 unique institutions across the 50 states and District of Columbia.

Each year, data is submitted the following winter for the previous academic year ending on June 30. For example, the 2020 data included here is for the 2019–2020 academic year, providing a snapshot as of the end of June 2020.

Institutional characteristics examined here include region, control, Carnegie classification, urban-rural classification, and institution size, as well library-specific data on numbers of librarians and expenditures. Each of these are self-reported by institutions completing the relevant survey. For *region*, designations are described in more detail below. *Carnegie classification* refers to the 2000 edition of Carnegie classifications (Carnegie, 2001); values from 1996, 1998, and 2000 were converted to the comparable Carnegie 2000 classification. For *institution size*, institutions were assigned to five size categories based on total FTE fall student enrollment. All expenditures are adjusted to their equivalent in 2020 USD using values from the United States Consumer Price Index.²³ The variable *urban-rural classification* consists of four possible values (rural, suburb, town, and city) and is assigned by NCES based on a combination of population size and proximity to populated areas.²⁴ For the longitudinal data, it is important to note the variation in specific reporting institutions in different years.

For the current examination, we have assigned institutions to one of four regions based on their location (Central, Northeast, Southeast, and West). Within IPEDS, institutions are assigned to one of ten regions; we excluded U.S. service academies and other U.S. jurisdictions, and further combined the remaining IPEDS regions into four larger regions of comparable size for the purposes of comparison in this study. The Central region consists of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The Northeast region consists of Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Southeast region consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The West region consists of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

Results and Discussion

Characteristics of U.S. Academic Libraries and Institutions with Academic Libraries in 2020

Regional characteristics of U.S. academic libraries in 2020 are provided in detail in table 1 and represented in map form in figures 1 through 5. While the four regions are similar in total numbers of academic libraries (Central=553, Northeast=517, Southeast=587, West=550, table 1), the map in figure 1 indicates that academic institutions are, unsurprisingly, much more spread out in the western part of the country. Comparisons between regions can also be seen in figures 6 through 9, which include results for each region as a percentage. For Carnegie classification, for example, the Central region has a total of 553 academic libraries, of which 36.9% are at associate's colleges (figure 6). The Southeast and West have higher concentrations of associate's colleges with academic libraries than the other regions, with 42.8% and 53.8% associate's colleges as compared to the Central (36.9%) and Northeast (30.4%). The West is an outlier in percentage of libraries at bachelor's colleges in only 11.1% of the region's institutions, whereas all other regions have approximately a quarter. Instead, the West has the largest number and percentage of libraries at associate colleges of any region. While all regions are similar in that they have the lowest percent share going to doctoral/research institutions, the Northeast and West regions have distinctly higher percentages (Northeast=13.7%, West=12.4%) compared to the Central (10.7%) and Southeast (9.4%) regions.

Regions also show differences in institutional control; the Southeast and West have more public institutions (Southeast=64.6%, West=76.4%), while Central (56.4% public) and Northeast (46.6% public) are more evenly split (figure 7). The stereotype of everything being larger out West is upheld as far as institutional size; the West has the lowest percentage of libraries in the smallest size category among all regions. Just 36% are at institutions with fewer than 2,500 students, compared to 46.4% of Northeast institutions, 51.9% of Central, and 54.5% of Southeast. The West also has the highest concentration of academic libraries in the two largest institution size categories, with 12.2% between 10,000 and 19,999 student FTE, and 9.5% at or above 20,000 student FTE (figure 8).

The NCES assigns each institution one of four geographical classifications: rural, suburban, town, or city, as noted above. Across all regions, institutions with academic libraries are more prevalent in cities (figure 9). The Northeast has a higher concentration in suburbs

TABLE 1
Characteristics of Regional Groupings, 2020

	Central	Northeast	Southeast	West	Row Totals
# of Academic Libraries	553	517	587	550	2207
Carnegie Classification					
Associate's Colleges	204	157	251	296	908
Bachelor's Colleges	148	127	156	61	492
Master's	142	162	125	125	554
Doctoral / Research	59	71	55	68	253
Control					
Private, nonprofit	241	276	208	130	855
Public	312	241	379	420	1352
Institution Size					
<2,500	287	240	320	199	1046
2,500–4,999	130	118	113	127	488
5K–9,999	74	97	79	105	355
10K–19,999	39	42	41	67	189
>20,000	23	20	34	52	129
Urbanity					
city	205	205	247	278	935
rural	65	47	90	45	247
suburb	108	190	92	116	506
town	175	75	158	111	519

Note: Central consists of IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI; Northeast consists of CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT; Southeast consists of AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV; West consists of AK, AZ, CA, CO, HI, ID, MT, NV, NM, OK, OR, TX, UT, WA, WY.

(36.8%), in fact, nearly as many as in its cities (39.7%), whereas Central and Southeast academic libraries tend to be found in cities or towns. Among regions, the West has the highest percentage in cities (50.5%), and the amount in suburbs (21.1%) and towns (20.2%) are quite similar. Figure 4 helps show this concentration in cities. For example, the numerous academic libraries clustered along the I-35 corridor in Texas that includes the cities Dallas, Ft. Worth, Waco, Austin, and San Antonio are visible running northeast to south. This map is also a useful visual representation of the suburb grouping of institutions in the Northeast.

Values for each of the considered academic library characteristics are provided in table 2. There are distinct regional differences among academic libraries. In 2020, the Southeast has the most academic libraries compared to the other regions but has the lowest average number of librarians (8.2, the same as Central), and the smallest average expenditures across all categories (total expenditures = \$2.78 million; staffing = \$1.16 million; collections = \$1.09 million). The Central region is similar but slightly higher with total expenditures of \$2.87 million on average, staffing expenditures of \$1.19 million, and collections expenditures of \$1.15 million. Conversely, as noted above, although the Northeast has the fewest libraries, it has the highest average number of librarians (12.3), and the highest average expenditures across all categories (total expenditures = \$4.59 million; staffing = \$1.94 million; collections = \$1.73 million). The West follows the Northeast in both average numbers of librarians (11.4) and expenditures (total expenditures = \$3.93 million; staffing = \$1.76 million; collections = \$1.37 million). These differences between regions can in part be explained by the differing distribution of institutional types, such as greater numbers of Carnegie doctoral/research institutions in the Northeast and West.

Trends Over Time for U.S. Academic Libraries, 1996–2020

For each of the following variables, data are provided as line charts to explore trends in the data (figures 10 through 13), in addition to the 2020 data in table 2.

Number of Librarians

Average numbers of librarians from 1998 to 2020 by region are provided in figure 10. As noted in the authors' earlier article on this data, the data source for number of librarians shifted in 2012 from being reported by libraries themselves in the ALS to being centrally reported to

TABLE 2
Characteristics of U.S. Academic Libraries by Region, 2020

	Central	Northeast	Southeast	West
# of Academic Libraries	553	517	587	550
Average # of Librarians	8.2	12.3	8.2	11.4
Average Expenditures				
Staffing Expenditures	\$1.19M	\$1.94M	\$1.16M	\$1.76M
Collections Expenditures	\$1.15M	\$1.73M	\$1.09M	\$1.37M
Total Library Expenditures	\$2.87M	\$4.59M	\$2.78M	\$3.93M
Note: Central consists of IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI; Northeast consists of CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT; Southeast consists of AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV; West consists of AK, AZ, CA, CO, HI, ID, MT, NV, NM, OK, OR, TX, UT, WA, WY.				

IPEDS by institutions' central human resources (HR) offices. Shifts from 2010 to 2012 should therefore be viewed cautiously. Only the Northeast region declined in number of librarians when the data reporting changed (from 12.6 in 2010 to 12.3 in 2012), while all other regions increased. However, this may not be an accurate representation of library staffing. For example, if there are units at an institution that did not previously report to the ALS but that include professionals who could be classified by central HR as providing related library or services, there would be an increase in "librarians" between 2010 and 2012 without any actual changes in staffing. Additionally, in the HR survey, institutions with fewer than 15 total staff do not separate the number of librarians from other archivists, curators, or museum workers.

The limitations of this data mean that it is not possible to compare the exact values for 1998 (the first year this number was collected) and 2020. The Central region, for example, has the same number of total librarians in 2020 as there was in 1998, but the reporting method has differed; it is better to look at the trend lines, particularly since 2012, to get a sense of changes. Prior to 2010, there was fairly steady but slow growth in librarians through 2008, then a slight decline for all regions in 2010, presumably following the 2008 recession. From 2012 onward, it is less consistent. The Southeast and Central follow a similar trajectory, with a slight increase in 2014 and declines from 2016–2020. The Northeast has fluctuated, ending at the same number in 2012 and 2020. The West was fairly steady over time but shows a slight increase from 2012 to 2020.

In the previous study, we observed a decrease in average number of librarians per institution across all Carnegie and size categories from 2012 to 2016. This trend continued into 2020 for the Central and Southwest regions, but differed for the Northeast and West, the two regions with higher concentrations of doctoral institutions. Institutions in the West have slightly increased in librarians since 2016 and the Northeast is overall higher but inconsistent in numbers of librarians in this time period.

Library Expenditures

In contrast to library staffing numbers, expenditures data is consistent in its reporting across all years from 1996 to 2020. For all expenditures data, values have been adjusted for inflation to 2020 dollars. Our previous study focused exclusively on staffing expenditures by Carnegie classification and institution size through 2016. When grouped by region, total library expenditures between 1996 and 2020 (figure 11) have increased across all regions. This increase across all regions is also noticeable across the two major expenditure categories of staffing (figure 12) and collections (figure 13). Overall, the Central region has experienced the smallest change over time in total library expenditures in this 24-year period. All regions were at least slightly down in total, staffing, and collections expenditures from 2018 to 2020. Within this time period, total expenditures decreased in all regions from 2010 to 2012, but then increased again from 2012 to 2014. Since 2014, total expenditures in the Central, Northeast, and Southeast regions have decreased, with the sharpest decline in the Central region. In contrast, the West has on average increased since 2014 in total library expenditures.

The decrease in total expenditures from 2010 to 2012 seems primarily driven by decreases in staffing expenditures across all regions. In figures 12 and 13, we see that in 2012, collections expenditures remained flat for the Southeast, and decreased by \$.1M in the other three regions, while there was a drop in staffing expenditures. During this period, 2010 to 2012, the average number of librarians fell slightly for all regions except the Southeast, which rose slightly from

9.0 to 9.1 FTE.²⁵ The average number of total library staff also decreased from 2010 to 2012, and had been decreasing since 2008 for all regions, although this does not completely explain the specific staffing expenditure decrease from 2010 to 2012.²⁶

In contrast, the increase in total expenditures from 2012 to 2014 appears to be driven by both staffing and collections increases, with a steeper increase in collections expenditures. All regions increased overall from 1996 to 2020 in collections expenditures, increasing almost every year until 2014, at which point the trajectory for all regions shifts to being flat or decreasing slightly, with the steepest decline in the Central region from 2014 to 2020 (figure 13).

For all three figures, the Northeast and West regions are the highest trend lines. The fact that Northeast and West have the highest concentration of doctoral/research institutions helps explain why their expenditures are so much higher than the other regions for total and staffing. Staffing is a large portion of total library budgets in general. In our previous study we noted that staffing expenditures by Carnegie grouping were on average anywhere from 40% to 70% of total expenditures in a particular year, with associate's institutions consistently devoting a higher percentage of their total expenditures to staffing and doctoral/research institutions spending a lower percentage on staffing and more on collections.²⁷ Although doctoral institutions spend a lower percentage of their total budgets on staffing, nonetheless their staffing expenditures are higher in total since they have higher staffing numbers. Given the higher concentration of doctoral institutions in the Northeast and West, higher overall expenditures make sense. Research institution expectations around collections and staffing contribute to higher expenditures in those categories for these regions.

Collections expenditures, which also increased across time for all regions, show more similarities across regions in their trajectories (figure 13). The Northeast and West are still highest, again perhaps due to the high number of research institutions, which tend to have larger collections budgets. The trend lines are mostly parallel for collections, with all regions exhibiting similar growth but on a different scale. For example, immediately following the 2008 recession, from 2008 to 2012, trend lines are flatter for all regions. These parallel trajectories across regions are logical, given that changes in collections expenditures are largely determined by increases in pricing that affect all institutions such as industry-wide increases in subscription costs.

The inflation-adjusted values discussed here provide insight into academic libraries' actual experiences. When not adjusted for inflation, the trend lines for all types of expenditures are much steeper, with almost completely consistent year-over-year increases in total, staffing, and collections expenditures. Budgets have increased substantially in dollar amounts since 1996, but this provides an incomplete representation of the resources academic libraries have available to them. As an example, ever-increasing collections costs, especially for academic journals, have outpaced inflation and have been of significant concern to academic libraries for decades.²⁸ Despite increases in budgets from year to year, inflation-adjusted values provide a more accurate indication of libraries' purchasing power over time.

Conclusion

The NCES data on academic libraries is a helpful tool for benchmarking library staffing and expenditures compared to peers, either by region as presented here, or by Carnegie classification as presented in our previous article. It is also useful as an overview of the current state and potential future direction of academic libraries regarding the key areas of staffing

and expenditures. Viewing this data over time can provide additional insight and stronger conclusions than can be observed in a single year's data snapshot. While NCES data for the most recent year is easier to use with some of the newer IPEDS data tools, viewing data over time and by distinct groups such as region remains challenging. The authors have made the dataset used in this study available for use²⁹ by anyone for further studies, or for creating custom peer institution comparisons.

Data limitations include those mentioned previously with regard to changes in reporting over time. Additionally, the authors noted the highly dispersed nature of this data in their previous article, which remains true for the additional years examined here. It is important to note that the population is large ($n = 2,207$ in the year 2020) and composed of highly varied institutions in terms of size and other characteristics. The exact institutions included vary across years as well, as not all institutions report every year. Averages are provided here to account for these variations within each year's data, but individual institutions may observe that these averages do not align with the data they have reported for their own academic libraries.

In this article, we have provided a snapshot of characteristics of academic libraries in 2020 and noted several key trends over time:

1. Total library expenditures, even when adjusted for inflation, have increased overall for all regions from 1996 to 2020. This increase is also clear in the two major expenditure categories of staffing and collections. All regions except for the West have decreased in total library expenditures since 2014.
2. In the Northeast and West regions, where larger numbers of academic libraries are at doctoral/research institutions, there are higher numbers of librarians and expenditures across all categories as compared to the other two regions. The averages are markedly higher in staffing and total expenditures than the other two regions.
3. Data on the average number of librarians by region indicates slow but steady growth in numbers of academic librarians from 1998 to 2008. Since 2012, the Northeast and West regions have remained steady in numbers of librarians, while the Central and Southwest regions have declined.
4. Trend lines in collections expenditures show parallel trajectories across regions from 1998 to 2020, likely due to changes in pricing that affect all institutions.

The intention of this article was to provide an indication of trends among U.S. academic libraries as of 2020, not a completely thorough examination of the data. Future research might explore additional aspects of this plentiful dataset, for example, breaking down the data into more detail by exploring institutional characteristics within regions (e.g., by Carnegie classification, control, etc.) to gain further insight into the regional trends observed here. Further study with an expanded dataset could also explore changes in libraries in the years following the COVID-19 pandemic. The 2020 data included in this article covers the period ending in June 2020, so academic library staffing and budgets were not yet significantly affected by the pandemic. A future study would benefit from examining 2022 and even 2024 data to explore longer term impacts of the pandemic on staffing and budgets.

FIGURE 1
Geographic Distribution of 2020 Academic Libraries

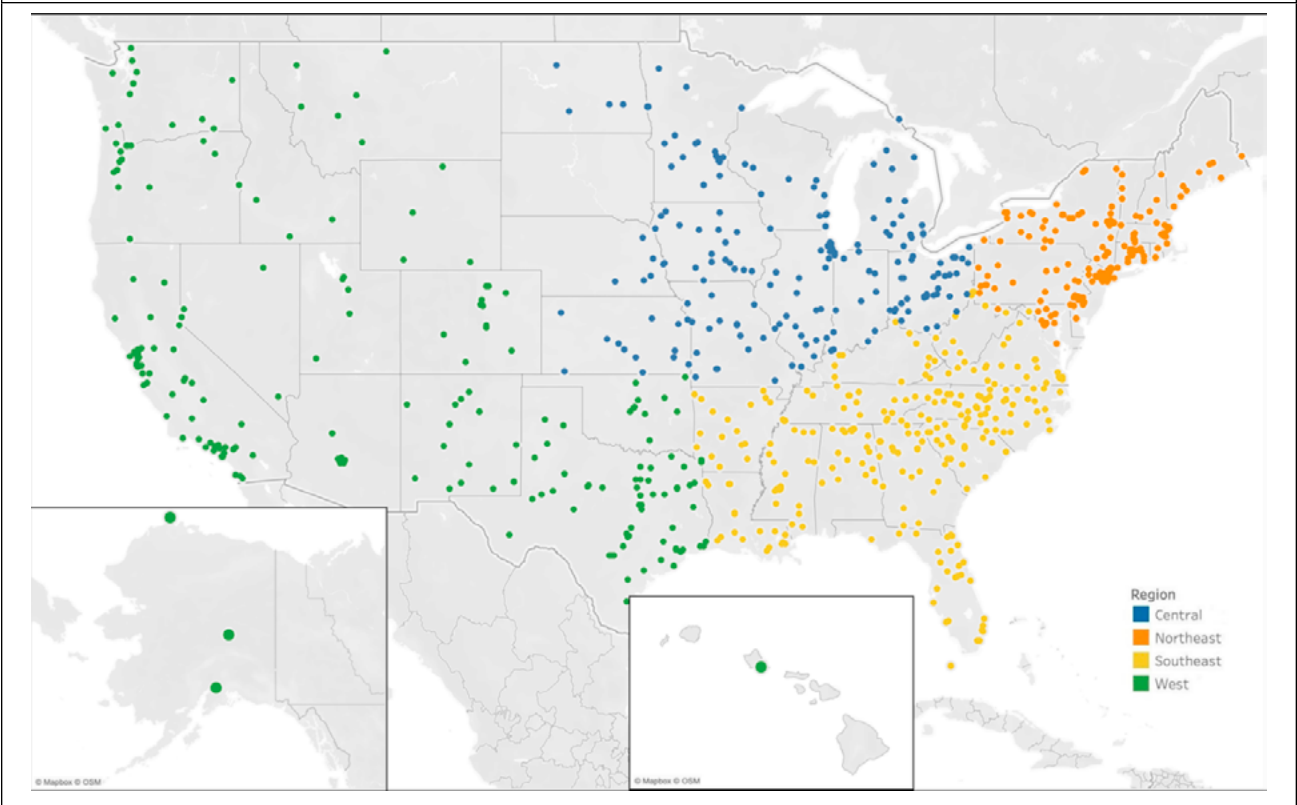


FIGURE 2
Carnegie Classification of 2020 Academic Libraries

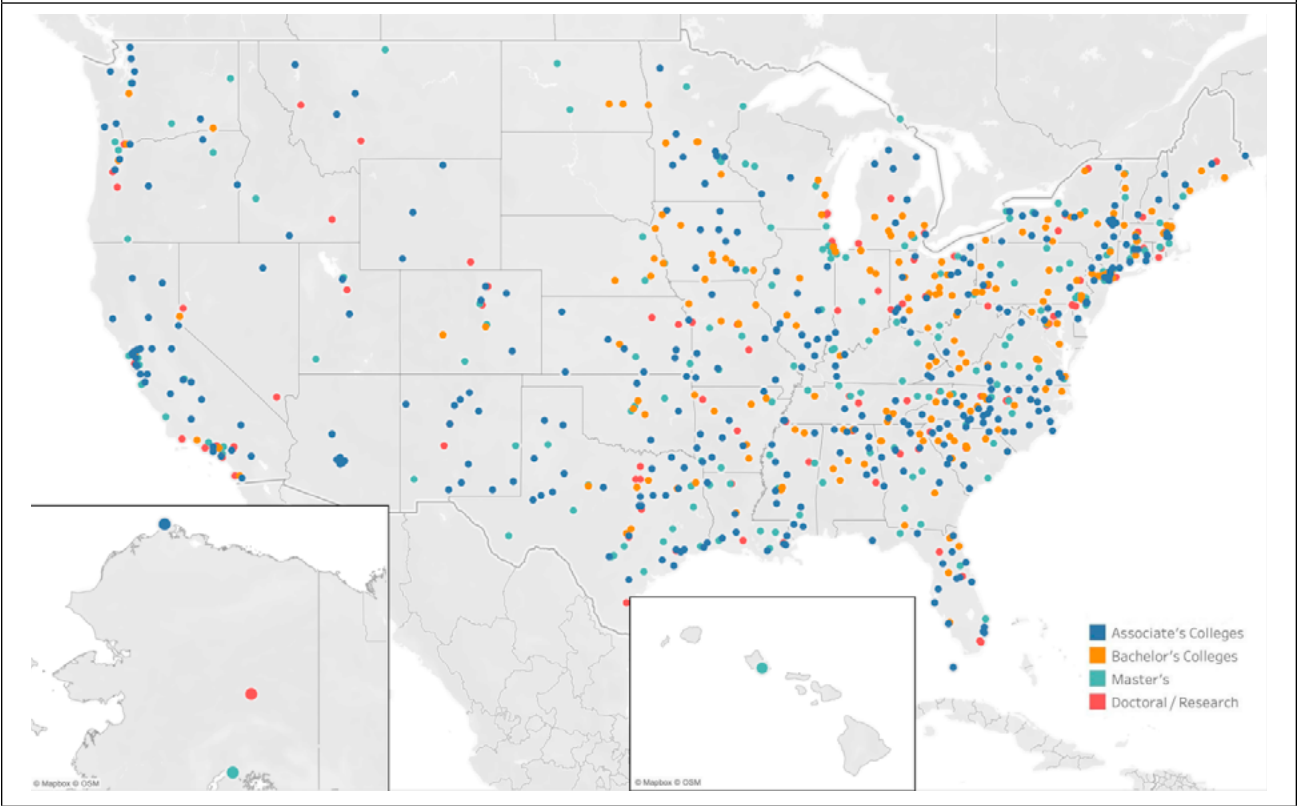


FIGURE 3
Control of 2020 Academic Libraries

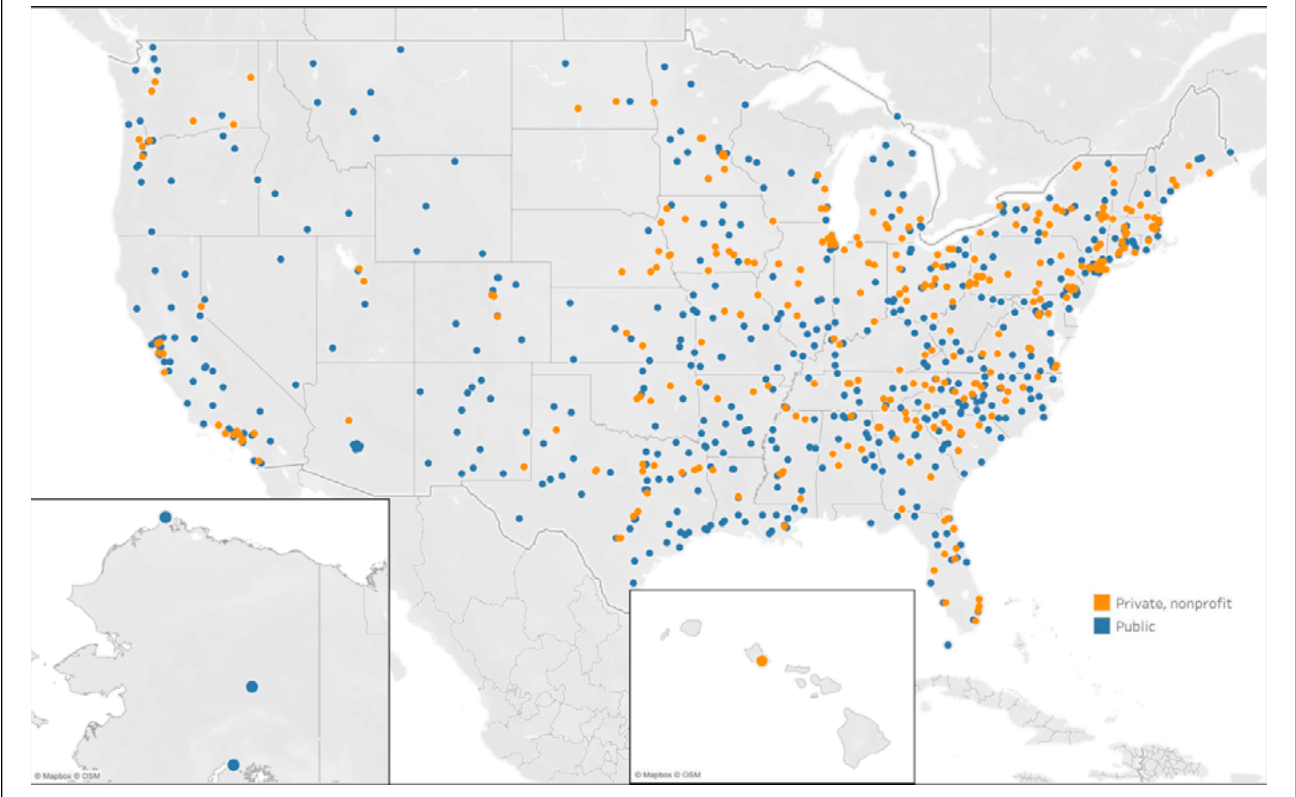
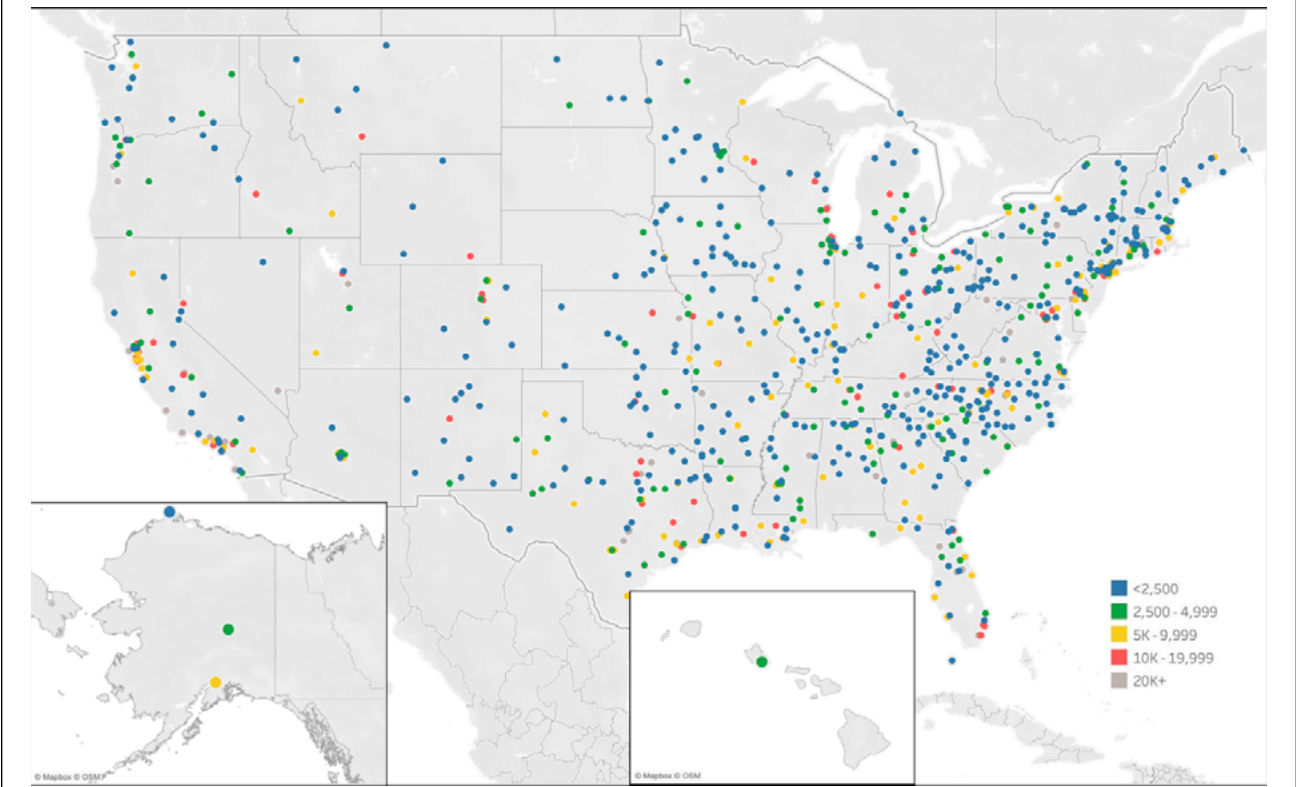


FIGURE 4
Institution Size of 2020 Academic Libraries



Note. Includes institutions reporting ≥ 1.0 FTE Student.

FIGURE 5
Urbanization of 2020 Academic Libraries

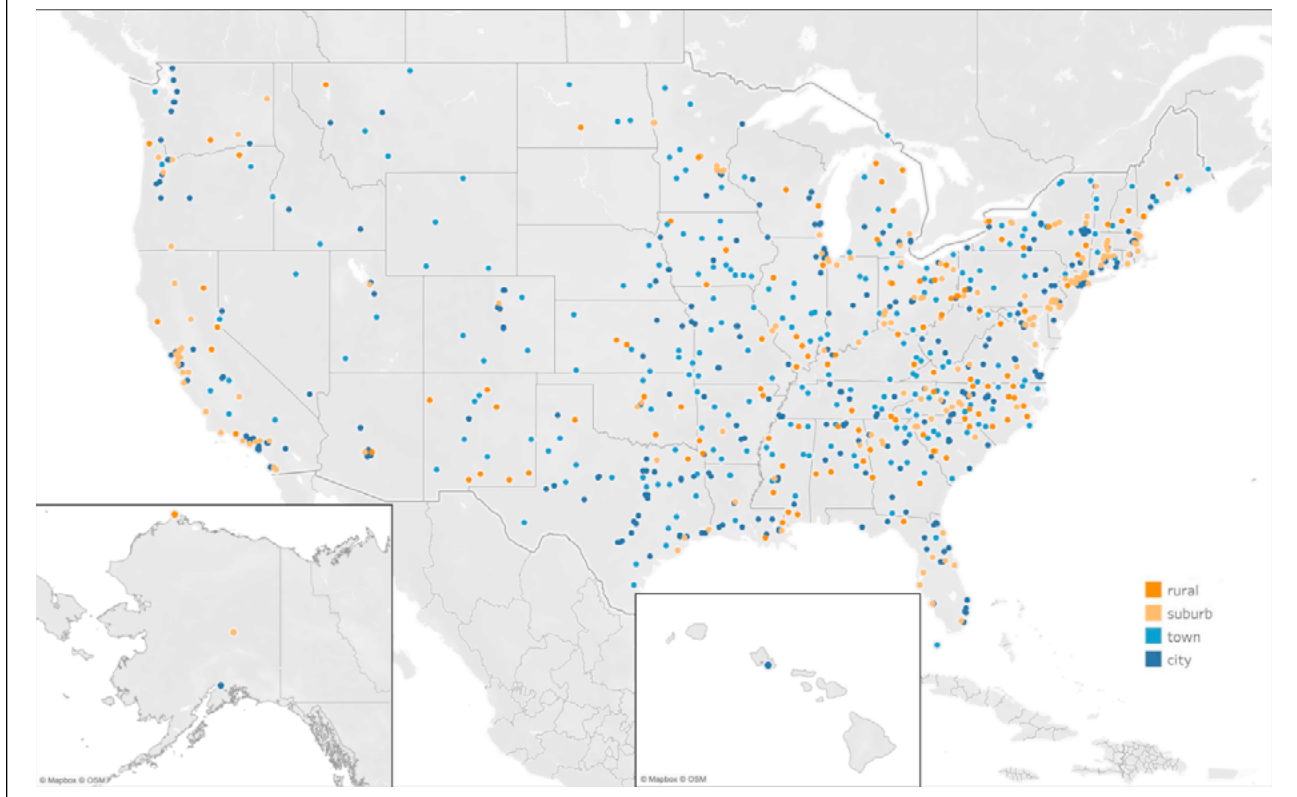


FIGURE 6
Carnegie Classification of 2020 Academic Libraries by Region

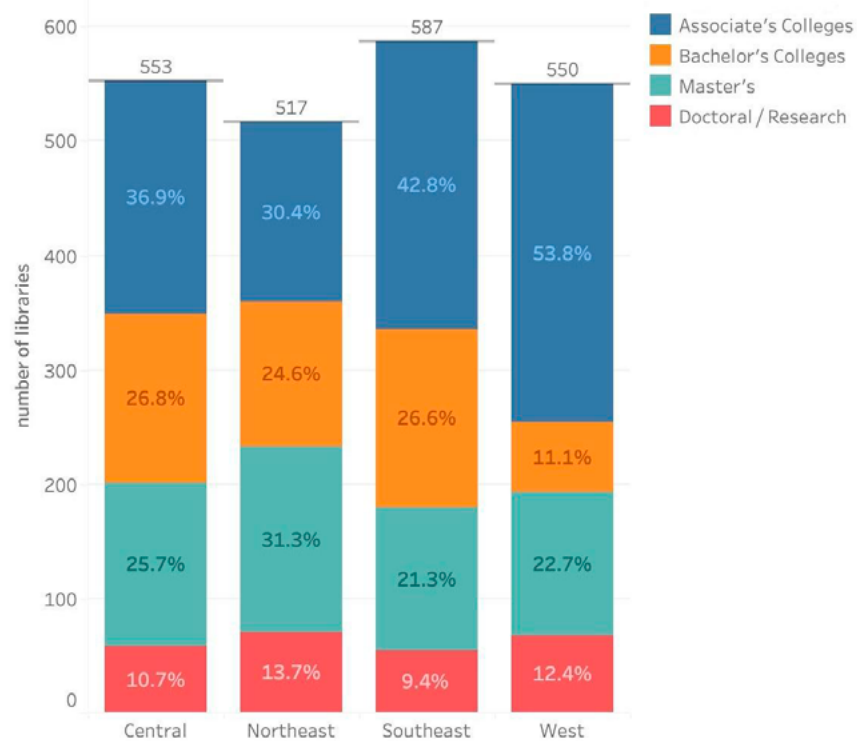


FIGURE 7
Control of 2020 Academic Libraries, by Region

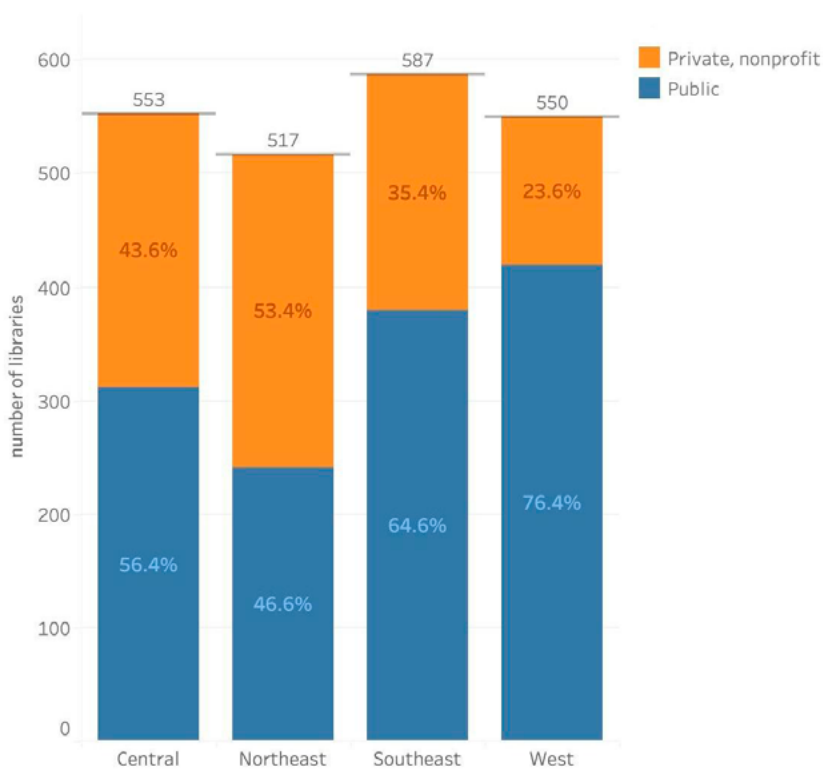
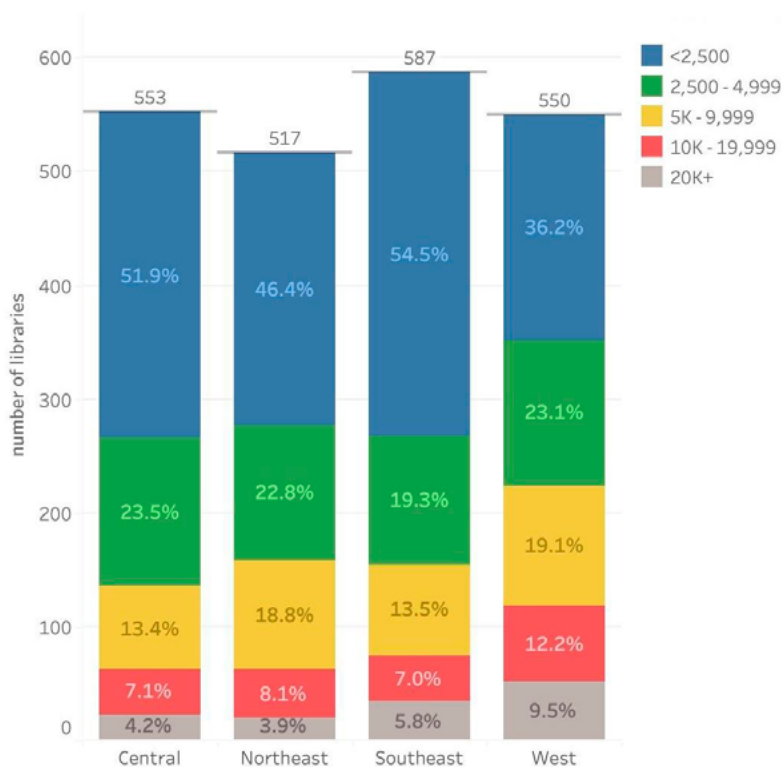


FIGURE 8
Institution Size of 2020 Academic Libraries by Region



Note. Includes institutions reporting ≥ 1.0 FTE Student.

FIGURE 9
Urbanization of 2020 Academic Libraries by Region

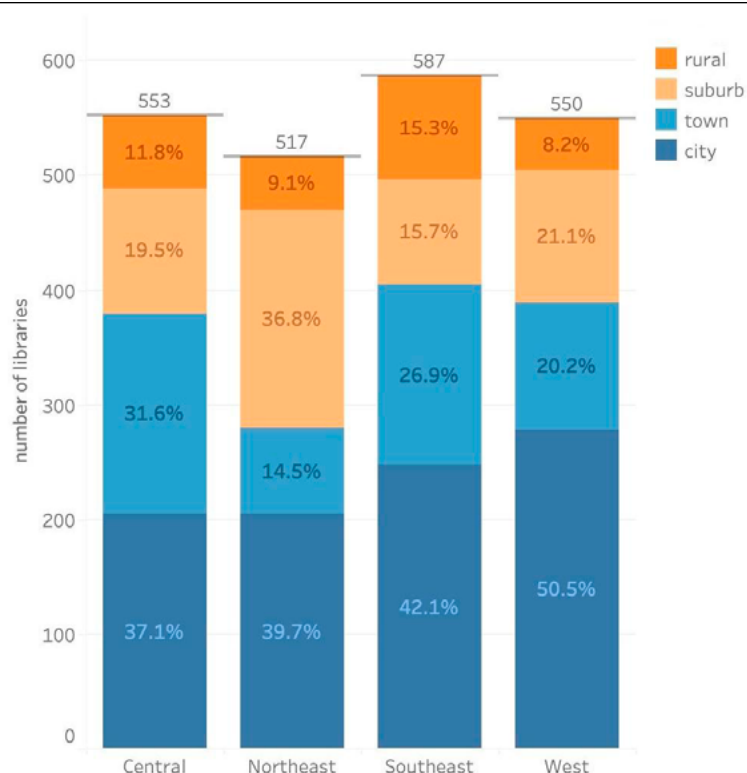
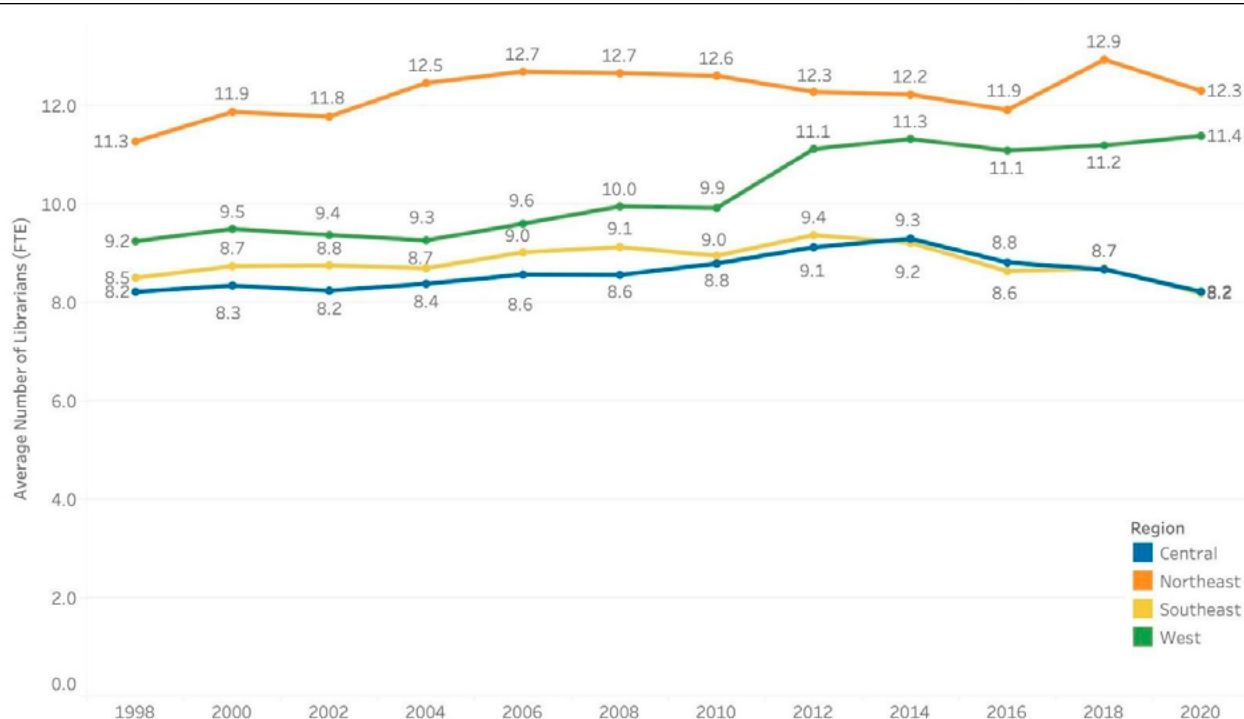
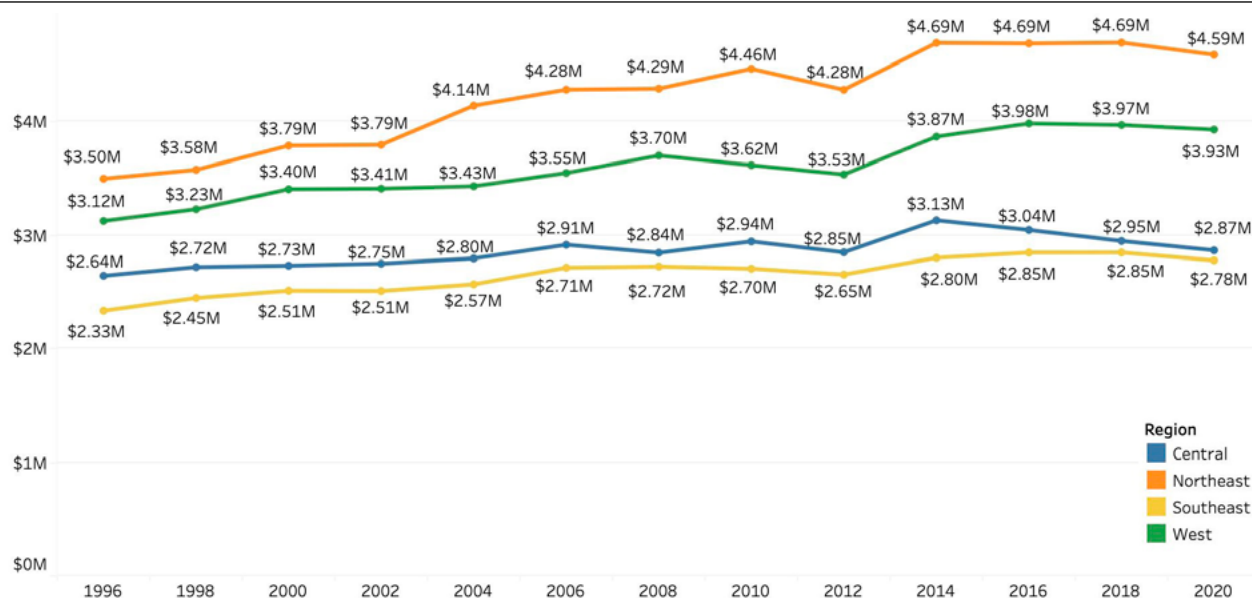


FIGURE 10
Average Number of Librarians (FTE) per Institution Over Time, by Region



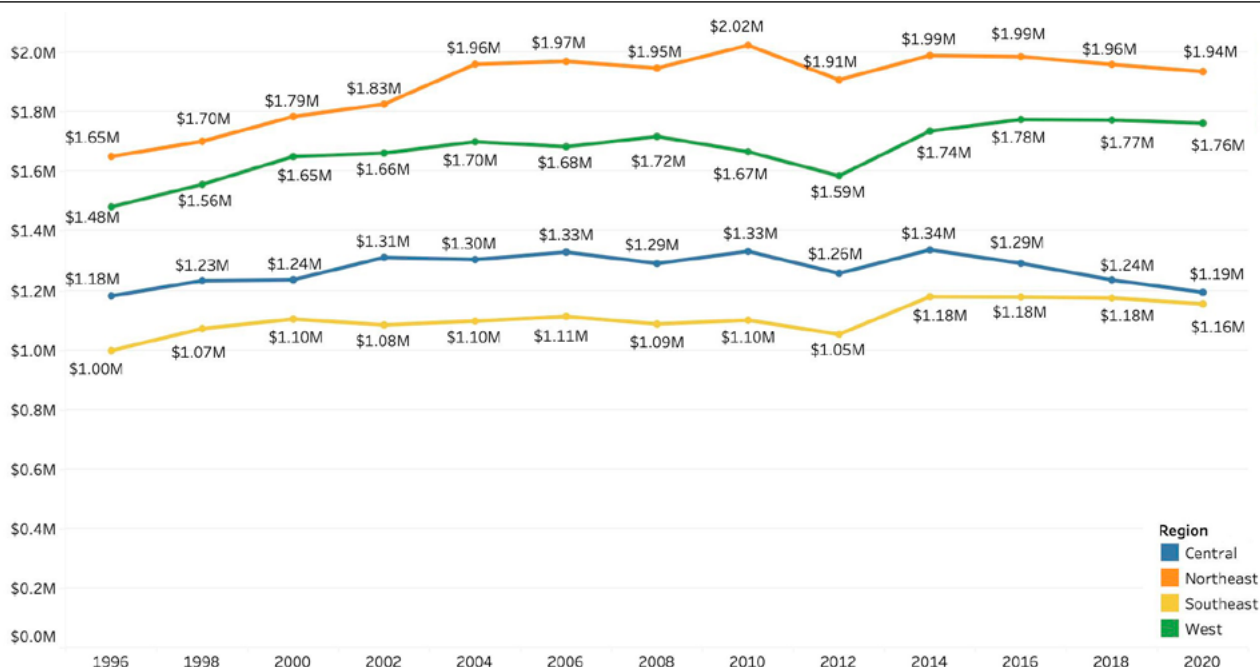
Note. Includes institutions reporting ≥ 1.0 FTE librarian. Data source for number of librarians: Academic Libraries Survey, 1998–2010; IPEDS Human Resources survey, 2012–2020.

FIGURE 11
Inflation-adjusted Average Total Library Expenditures per Institution Over Time, by Region



Note. All expenditures are converted to their equivalent value in the year 2020.

FIGURE 12
Inflation-adjusted Average Library Staffing Expenditures per Institution, by Region



Note. Staffing expenditures refers to salaries/wages, excluding fringe benefits. Includes libraries reporting library staffing expenditures ≥ 1.00 USD. All expenditures are converted to their equivalent value in the year 2020.

FIGURE 13
Inflation-adjusted Average Library Collections Expenditures per Institution, by Region



Note. Includes libraries reporting library collections expenditures $\geq$ 1.00 USD. All expenditures are converted to their equivalent value in the year 2020.

Notes

1. Starr Hoffman and Samantha Godbey, "US Academic Libraries' Staffing and Expenditure Trends (1996–2016)," *Library Management* Vol. 41 No. 4/5 (2020) 247–268, <https://doi.org/10.1108/LM-12-2019-0093>.
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