

### System (Administrative) Level Findings

Participating libraries provided data regarding their applications for E-rate, operating budgets, and information technology budgets. This section of the report presents the analysis of these system (administrative) level data.

#### *Public Access Technology Infrastructure: Replacement and Use*

| Figure 35: Public Access Workstation Replacement Procedure, by Metropolitan Status |                     |                    |                    |                    |
|--|---------------------|--------------------|--------------------|--------------------|
|  | Metropolitan Status |                    |                    |                    |
| Replacement Procedure  | Urban               | Suburban           | Rural              | Overall            |
| Yes, library has a replacement schedule  | 66.4%<br>(n=335)    | 41.9%<br>(n=1,244) | 29.0%<br>(n=1,552) | 35.5%<br>(n=3,132) |
| No (As Needed)   | 31.4%<br>(n=159)    | 57.3%<br>(n=1,702) | 69.5%<br>(n=3,718) | 63.2%<br>(n=5,578) |
| Don't Know   | 2.2%<br>(n=11)      | *                  | 1.5%<br>(n=78)     | 1.3%<br>(n=114)    |
| Weighted missing values, n=205<br>Key: * : Insufficient data to report             |                     |                    |                    |                    |

Overall, a majority of public libraries (63.2 percent) do not have replacement schedules and replace their workstations as needed (Figure 35). There is a stark difference between the replacement policy schedules between urban when compared by metropolitan status. The majority of urban libraries (57.3 percent) have an established replacement policy whereas a majority of rural libraries (69.5 percent) do not. The majority of suburban libraries (53.4 percent) had a replacement schedule in 2010-2011, but this decreased to 41.9 percent in 2011-2012.

**Figure 36: Public Access Workstation Replacement Schedule, by Metropolitan Status**

| Schedule      | Metropolitan Status |                  |                  | Overall          |
|---------------|---------------------|------------------|------------------|------------------|
|               | Urban               | Suburban         | Rural            |                  |
| Every year    | 1.4%<br>(n=23)      | 1.2%<br>(n=14)   | 4.1%<br>(n=63)   | 2.6%<br>(n=82)   |
| Every 2 years | 1.4%<br>(n=5)       | 3.2%<br>(n=39)   | 6.0%<br>(n=93)   | 4.4%<br>(n=137)  |
| Every 3 years | 25.9%<br>(n=86)     | 22.8%<br>(n=282) | 29.1%<br>(n=449) | 26.2%<br>(n=817) |
| Every 4 years | 34.7%<br>(n=116)    | 28.8%<br>(n=357) | 21.7%<br>(n=335) | 25.9%<br>(n=808) |
| Every 5 years | 29.9%<br>(n=100)    | 34.0%<br>(n=422) | 28.1%<br>(n=434) | 30.6%<br>(n=955) |
| Other         | 6.8%<br>(n=23)      | 8.9%<br>(n=252)  | 11.0%<br>(n=170) | 10.2%<br>(n=318) |

Weighted missing values, n=15  
**Key:** \*: Insufficient data to report

A majority of public libraries (82.7 percent) replace workstations every 3 to 5 years (Figure 36). This represents a slight decrease from last year, when 86.9 percent of public libraries replaced their computers every 3 to 5 years.

**Figure 37: Ability to Maintain Public Access Workstations Replacement Schedule, by Metropolitan Status**

| Schedule  | Metropolitan Status |                  |                  | Overall            |
|---|---------------------|------------------|------------------|--------------------|
|   | Urban               | Suburban         | Rural            |                    |
| No, not able to maintain schedule   | 16.1%<br>(n=52)     | 11.4%<br>(n=136) | 13.4%<br>(n=200) | 12.9%<br>(n=388)   |
| Yes, able to maintain schedule  | 28.0%<br>(n=91)     | 32.8%<br>(n=390) | 30.7%<br>(n=458) | 31.2%<br>(n=938)   |
| Yes, but the library branch does not know how many workstations/laptops they will replace | 53.1%<br>(n=172)    | 52.1%<br>(n=618) | 47.5%<br>(n=709) | 49.9%<br>(n=1,499) |
| Don't Know  | 2.8%<br>(n=9)       | 3.6%<br>(n=43)   | 8.4%<br>(n=126)  | 5.9%<br>(n=178)    |
| The average number of workstations that the library plans to replace within the next year | 70.5<br>(n=59)      | 21.6<br>(n=304)  | 8.4<br>(n=329)   | 19.5<br>(n=692)    |
| Weighted missing values, n=128  |                     |                  |                  |                    |

Of the 35.5 percent of public libraries with a replacement schedule (Figure 35), 12.9 percent do not have the ability to maintain their replacement schedule (Figure 37). An average of 19.5 public access workstations are scheduled to be replaced within the next year, substantial increase from the average number of scheduled replacements reported in the 2009-2010 survey (7.9).

**Figure 38: Public Access Workstations Additions, by Metropolitan Status**

| Plans to add workstations  | Metropolitan Status |                    |                    |                    |
|--|---------------------|--------------------|--------------------|--------------------|
|  | Urban               | Suburban           | Rural              | Overall            |
| Yes  | 22.3%<br>(n=111)    | 13.4%<br>(n=393)   | 14.6%<br>(n=763)   | 14.6%<br>(n=1,267) |
| No   | 53.2%<br>(n=265)    | 58.2%<br>(n=1,712) | 58.4%<br>(n=4,642) | 58.1%<br>(n=5,031) |
| Unsure at this time if adding workstations   | 22.7%<br>(n=113)    | 23.8%<br>(n=701)   | 21.5%<br>(n=1,122) | 22.3%<br>(n=1,936) |
| Don't Know   | -                   | *                  | 1.3%<br>(n=66)     | 1.0%<br>(n=84)     |
| Other  | 1.8%<br>(n=9)       | 4.0%<br>(n=118)    | 4.2%<br>(n=221)    | 4.0%<br>(n=348)    |
| The average number of workstations that the library plans to add within the next year        | 41.8<br>(n=84)      | 7.3<br>(n=307)     | 5.1<br>(n=546)     | 9.0<br>(n=948)     |
| Weighted missing values, n=363<br>Key: - : No data to report, *: Insufficient data to report |                     |                    |                    |                    |

The majority of public libraries (58.1 percent) do not plan to add public access workstations in the next year (Figure 38). The percentage of libraries that do plan to add workstations decreased from 22.7 percent in 2010-2011 to 14.6 percent this year, an even further decrease from 28.7 percent in 2009-2010. In a change from last year when more rural libraries reported plans to add workstations (24.4 percent) than urban (22.8 percent) and suburban (20.3 percent) libraries, 22.3 percent of urban libraries reported plans to add workstations this year, followed by 14.6 percent of rural libraries and 13.4 percent of suburban libraries.

**Figure 39: Average Public Access Workstations Additions due to BTOP/BIP awards, by Metropolitan Status**

| Schedule  | Metropolitan Status |                 |                |                   |
|---|---------------------|-----------------|----------------|-------------------|
|   | Urban               | Suburban        | Rural          | Overall           |
| Workstations added/replaced LAST year due to BTOP/BIP awards        | 84.3<br>(n=82)      | 13.8<br>(n=397) | 7.1<br>(n=984) | 13.1<br>(n=1,462) |
| Workstations added/replaced in the NEXT year due to BTOP/BIP awards | 88.1<br>(n=50)      | 7.6<br>(n=154)  | 5.3<br>(n=455) | 12.1<br>(n=658)   |

In a new question for this year's survey, 13.1 percent of libraries added or replaced computers with funding provided by the Broadband Initiative Program or Broadband Technologies Opportunities Program last year, while 12.1 percent plan to add or replace systems with such funds next year. While urban areas have the highest percentage of libraries participating in these programs, the majority of computer replacements or additions last year and next year are for suburban or rural areas.

**Figure 40: Factors Affecting Adding Workstations/Laptops**

| Factors   | Overall            |                    |                    |                    |                    |                    | Average          |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------|
|   | Least Important    | Unimportant        | Neutral            | Important          | Most Important     | Not Applicable     |                  |
| Availability of Space   | 6.7%<br>(n=594)    | 3.9%<br>(n=346)    | 9.9%<br>(n=874)    | 17.0%<br>(n=1,508) | 45.2%<br>(n=4,003) | 17.3%<br>(n=1,534) | 4.1<br>(n=7,325) |
| Cost Factors  | 4.5%<br>(n=396)    | 4.1%<br>(n=364)    | 11.1%<br>(n=1,046) | 21.1%<br>(n=1,868) | 56.8%<br>(n=5,034) | 1.7%<br>(n=151)    | 4.2<br>(n=8,708) |
| Maintenance, upgrade, and general upkeep  | 11.8%<br>(n=1,006) | 14.6%<br>(n=1,248) | 26.7%<br>(n=2,285) | 25.5%<br>(n=2,177) | 21.0%<br>(n=1,798) | *                  | 3.3<br>(n=8,514) |
| Availability of public service staff to manage the use of the public access computers and users | 15.2%<br>(n=1,350) | 16.9%<br>(n=1,493) | 26.8%<br>(n=2,374) | 20.2%<br>(n=1,791) | 17.4%<br>(n=1,546) | 3.4%<br>(n=304)    | 3.1<br>(n=8,555) |
| Availability of technical staff to install, maintain, and update the public access computers    | 14.9%<br>(n=1,317) | 14.5%<br>(n=1,287) | 23.8%<br>(n=2,108) | 21.6%<br>(n=1,917) | 21.1%<br>(n=1,866) | 4.1%<br>(n=365)    | 3.2<br>(n=8,494) |
| Availability of bandwidth to support additional workstations                                    | 18.2%<br>(n=1,610) | 14.4%<br>(n=1,275) | 21.2%<br>(n=1,878) | 19.3%<br>(n=1,707) | 21.9%<br>(n=1,943) | 5.0%<br>(n=447)    | 3.1<br>(n=8,412) |
| Availability of electrical outlets, cabling, or other infrastructure                            | 11.8%<br>(n=1,048) | 9.7%<br>(n=861)    | 15.4%<br>(n=1,366) | 23.1%<br>(n=2,047) | 36.8%<br>(n=3,265) | 3.1%<br>(n=273)    | 3.7<br>(n=8,587) |
| Other   | 6.1%<br>(n=96)     | 4.6%<br>(n=72)     | 11.6%<br>(n=183)   | 23.1%<br>(n=364)   | 50.4%<br>(n=796)   | 67.7%<br>(n=832)   | 4.1<br>(n=1,512) |

1=Least Important; 5=Most Important

The three most important factors influencing the addition of public library workstations continue to be cost (77.9 percent when factoring important and most important), space (62.2 percent when factoring important and most important), and availability of electrical outlets, cabling, or other infrastructure (55.9 percent when factoring important and most important) (Figure 40).

**Figure 41: Factors Affecting Adding Workstations/Laptops**

| Factors   | Urban Public Libraries |                  |                  |                  |                  |                 | Average<br>(n) |
|---|------------------------|------------------|------------------|------------------|------------------|-----------------|----------------|
|   | Least Important        | Unimportant      | Neutral          | Important        | Most Important   | Not Applicable  |                |
| Availability of Space   | 5.4%<br>(n=27)         | 2.7%<br>(n=14)   | 13.5%<br>(n=68)  | 21.2%<br>(n=106) | 38.7%<br>(n=195) | 18.5%<br>(n=93) | 4.0<br>(n=410) |
| Cost Factors  | 1.8%<br>(n=9)          | 6.3%<br>(n=32)   | 17.1%<br>(n=86)  | 21.6%<br>(n=109) | 51.4%<br>(n=258) | 1.8%<br>(n=9)   | 4.2<br>(n=494) |
| Maintenance, upgrade, and general upkeep  | 11.0%<br>(n=54)        | 20.1%<br>(n=100) | 25.1%<br>(n=125) | 22.4%<br>(n=111) | 20.1%<br>(n=100) | 1.4%<br>(n=7)   | 3.2<br>(n=489) |
| Availability of public service staff to manage the use of the public access computers and users | 15.8%<br>(n=79)        | 21.2%<br>(n=106) | 26.6%<br>(n=134) | 22.5%<br>(n=113) | 11.7%<br>(n=59)  | 2.3%<br>(n=11)  | 2.9<br>(n=492) |
| Availability of technical staff to install, maintain, and update the public access computers    | 14.0%<br>(n=70)        | 18.5%<br>(n=93)  | 24.3%<br>(n=122) | 24.8%<br>(n=125) | 16.2%<br>(n=82)  | 2.3%<br>(n=11)  | 3.1<br>(n=492) |
| Availability of bandwidth to support additional workstations                                    | 21.6%<br>(n=109)       | 15.3%<br>(n=77)  | 17.1%<br>(n=86)  | 24.3%<br>(n=122) | 16.7%<br>(n=84)  | 5.0%<br>(n=25)  | 3.0<br>(n=478) |
| Availability of electrical outlets, cabling, or other infrastructure                            | 7.2%<br>(n=36)         | 14.9%<br>(n=75)  | 17.1%<br>(n=86)  | 25.2%<br>(n=127) | 34.2%<br>(n=172) | 1.4%<br>(n=7)   | 3.7<br>(n=496) |
| Other   | 7.3%<br>(n=7)          | 2.4%<br>(n=2)    | 19.5%<br>(n=18)  | 17.1%<br>(n=16)  | 51.2%<br>(n=48)  | 2.4%<br>(n=2)   | 4.1<br>(n=91)  |

1=Least Important; 5=Most Important

**Figure 42: Factors Affecting Adding Workstations/Laptops**

| Factors   | Suburban Public Libraries |                  |                  |                  |                    |                  | Average          |
|---|---------------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
|   | Least Important           | Unimportant      | Neutral          | Important        | Most Important     | Not Applicable   |                  |
| Availability of Space   | 6.4%<br>(n=193)           | 4.9%<br>(n=147)  | 9.5%<br>(n=286)  | 18.1%<br>(n=543) | 49.6%<br>(n=1,487) | 11.4%<br>(n=343) | 4.1<br>(n=2,656) |
| Cost Factors  | 4.5%<br>(n=136)           | 4.3%<br>(n=129)  | 11.0%<br>(n=329) | 22.8%<br>(n=683) | 55.9%<br>(n=1,677) | 1.5%<br>(n=46)   | 4.2<br>(n=2,953) |
| Maintenance, upgrade, and general upkeep  | 12.9%<br>(n=368)          | 15.3%<br>(n=436) | 27.2%<br>(n=776) | 25.0%<br>(n=711) | 19.1%<br>(n=543)   | *                | 3.2<br>(n=2,835) |
| Availability of public service staff to manage the use of the public access computers and users | 15.9%<br>(n=475)          | 17.5%<br>(n=526) | 27.5%<br>(n=826) | 19.0%<br>(n=568) | 16.6%<br>(n=497)   | 3.6%<br>(n=107)  | 3.0<br>(n=2,892) |
| Availability of technical staff to install, maintain, and update the public access computers    | 15.1%<br>(n=454)          | 14.8%<br>(n=443) | 23.1%<br>(n=694) | 21.5%<br>(n=644) | 19.3%<br>(n=579)   | 6.2%<br>(n=186)  | 3.2<br>(n=2,814) |
| Availability of bandwidth to support additional workstations                                    | 19.5%<br>(n=586)          | 15.5%<br>(n=465) | 21.3%<br>(n=640) | 16.9%<br>(n=508) | 19.9%<br>(n=597)   | 6.8%<br>(n=204)  | 3.0<br>(n=2,796) |
| Availability of electrical outlets, cabling, or other infrastructure                            | 10.0%<br>(n=300)          | 10.8%<br>(n=325) | 15.1%<br>(n=454) | 23.2%<br>(n=697) | 37.2%<br>(n=1,115) | 3.6%<br>(n=107)  | 3.7<br>(n=2,892) |
| Other   | 4.6%<br>(n=18)            | 6.5%<br>(n=25)   | 10.2%<br>(n=39)  | 25.9%<br>(n=100) | 44.4%<br>(n=172)   | 8.3%<br>(n=32)   | 4.1<br>(n=354)   |
| 1=Least Important; 5=Most Important<br>Key: *: Insufficient data to report                      |                           |                  |                  |                  |                    |                  |                  |

**Figure 43: Factors Affecting Adding Workstations/Laptops**

| Factors   | Rural Public Libraries |                  |                    |                    |                    |                    | Average          |
|---|------------------------|------------------|--------------------|--------------------|--------------------|--------------------|------------------|
|   | Least Important        | Unimportant      | Neutral            | Important          | Most Important     | Not Applicable     |                  |
| Availability of Space   | 7.0%<br>(n=374)        | 3.5%<br>(n=185)  | 9.7%<br>(n=520)    | 16.0%<br>(n=858)   | 43.3%<br>(n=2,321) | 20.5%<br>(n=1,098) | 4.1<br>(n=4,259) |
| Cost Factors  | 4.7%<br>(n=251)        | 3.8%<br>(n=203)  | 11.8%<br>(n=631)   | 20.1%<br>(n=1,077) | 57.8%<br>(n=3,099) | 1.8%<br>(n=96)     | 4.3<br>(n=5,261) |
| Maintenance, upgrade, and general upkeep  | 11.2%<br>(n=583)       | 13.7%<br>(n=712) | 26.6%<br>(n=1,385) | 26.0%<br>(n=1,355) | 22.2%<br>(n=1,155) | *                  | 3.3<br>(n=5,189) |
| Availability of public service staff to manage the use of the public access computers and users | 14.9%<br>(n=796)       | 16.1%<br>(n=861) | 26.4%<br>(n=1,415) | 20.7%<br>(n=1,110) | 18.5%<br>(n=990)   | 3.5%<br>(n=185)    | 3.1<br>(n=5,171) |
| Availability of technical staff to install, maintain, and update the public access computers    | 14.8%<br>(n=793)       | 14.0%<br>(n=751) | 24.1%<br>(n=1,292) | 21.4%<br>(n=1,149) | 22.5%<br>(n=1,205) | 3.1%<br>(n=167)    | 3.2<br>(n=5,139) |
| Availability of bandwidth to support additional workstations                                    | 17.1%<br>(n=915)       | 13.7%<br>(n=733) | 21.5%<br>(n=1,152) | 20.1%<br>(n=1,077) | 23.6%<br>(n=1,262) | 4.1%<br>(n=218)    | 3.6<br>(n=5,198) |
| Availability of electrical outlets, cabling, or other infrastructure                            | 13.3%<br>(n=712)       | 8.6%<br>(n=461)  | 15.4%<br>(n=826)   | 22.8%<br>(n=1,223) | 36.9%<br>(n=1,977) | 3.0%<br>(n=159)    | 3.6<br>(n=5,198) |
| Other   | 6.5%<br>(n=72)         | 4.1%<br>(n=45)   | 11.4%<br>(n=126)   | 22.6%<br>(n=248)   | 52.4%<br>(n=577)   | 3.0%<br>(n=33)     | 4.1<br>(n=1,068) |
| 1=Least Important; 5=Most Important<br>Key: *: Insufficient data to report                      |                        |                  |                    |                    |                    |                    |                  |



**Figure 44: Sources of IT Support Provided to Public Library Outlets, by Metropolitan Status**

| Source of IT Support                            | Metropolitan Status |                    |                    | Overall            |
|---|---------------------|--------------------|--------------------|--------------------|
|   | Urban               | Suburban           | Rural              |                    |
| Public service staff                            | 41.7%<br>(n=211)    | 45.5%<br>(n=1,366) | 32.8%<br>(n=1,759) | 37.6%<br>(n=3,335) |
| Library director                                | 10.8%<br>(n=54)     | 40.8%<br>(n=1,223) | 59.5%<br>(n=3,194) | 50.4%<br>(n=4,471) |
| Building-based IT staff (IT specialist)         | 36.3%<br>(n=183)    | 25.1%<br>(n=754)   | 10.9%<br>(n=586)   | 17.2%<br>(n=1,524) |
| System-level IT staff                           | 58.3%<br>(n=294)    | 28.6%<br>(n=858)   | 18.2%<br>(n=975)   | 24.0%<br>(n=2,128) |
| Library consortia or other library organization | 13.0%<br>(n=66)     | 24.8%<br>(n=744)   | 17.3%<br>(n=930)   | 19.6%<br>(n=1,739) |
| County/City IT staff                            | 34.5%<br>(n=174)    | 19.5%<br>(n=586)   | 9.9%<br>(n=529)    | 14.5%<br>(n=1,290) |
| State telecommunications network staff          | 2.7%<br>(n=14)      | 2.7%<br>(n=82)     | 3.0%<br>(n=159)    | 2.9%<br>(n=254)    |
| State library IT staff                          | 4.0%<br>(n=20)      | 6.9%<br>(n=207)    | 9.9%<br>(n=532)    | 8.6%<br>(n=760)    |
| Outside vendor/contractor                       | 19.3%<br>(n=97)     | 34.2%<br>(n=1,026) | 42.8%<br>(n=2,297) | 38.5%<br>(n=3,421) |
| Volunteer(s)                                    | 2.7%<br>(n=14)      | 7.0%<br>(n=211)    | 16.3%<br>(n=876)   | 12.4%<br>(n=1,101) |
| Other source                                    | 1.3%<br>(n=7)       | 6.0%<br>(n=179)    | 6.1%<br>(n=329)    | 5.8%<br>(n=515)    |

**Key:** \*: Insufficient data to report

Sources of information technology (IT) support used by public library outlets (Figure 44) continue to indicate that non-IT specialists are providing the majority of support services (88.0 percent), a large increase from the 70.7 percent reported in the 2010-2011 survey. In urban (41.7 percent) and suburban (45.5 percent) libraries, public service staffs are providing most of this type of support, while rural libraries depend more on library directors (59.5 percent). The metropolitan variation has as much to do with overall staffing in rural libraries compared with larger suburban and urban libraries. There are large metropolitan discrepancies for system-level IT staff as a source of IT support: urban (58.3 percent), suburban (40.8 percent), and rural (18.2 percent). Outside vendors/contractors are another important source (38.5 percent), particularly for rural libraries (42.8 percent).