Figure 30: Public Library Outlets Providing Dedicated Workstations or Flexible Time Limits for Other Uses

	Metropolitan Status			
	Urban	Suburban	Rural	Overall
Library provides one or more dedicated public workstations for this use	67.9% (n=266)	25.5% (n=118)	16.3% (n=115)	32.0% (n=500)
Library allows additional public workstation time for this use upon request	19.9% (n=78)	45.3% (n=210)	60.8% (n=430)	45.9% (n=718)
Library does not differentiate this public workstation use from others	14.7% (n=58)	33.3% (n=154)	25.0% (n=177)	24.9% (n=389)
Weighted missing values, n=14,415				

Figure 30 shows that libraries have dedicated workstations and extended time limits for uses other than those reported in Figures 27 thru 29. Many libraries indicated that time limits are not enforced if there are no other patrons waiting to use the computers. Another common response was that additional time is granted when requested, especially for students doing schoolwork or other patrons with special research projects. Libraries reported dedicated workstations for many other uses, including quickly checking email (usually a 15 minute time limit), database use, non-internet applications (e.g., word processing) and for children/young adult patrons.

Public Library Internet Connectivity Type, Speed, & Sufficiency

Figure 31: Type of Public Library Outlet Public Access Internet Connection, by Metropolitan Status

	Metropolitan Status			
Type of Public Access Internet Connection	Urban	Suburban	Rural	Overall
DSL (Digital Subscriber Line)	10.5% (n=282)	20.3% (n=1,105)	34.4% (n=2,604)	25.4% (n=3,991)
Cable	13.6% (n=367)	29.5% (n=1,605)	21.4% (n=1,621)	22.9% (n=3,593)
Leased Line	54.2% (n=1,458)	42.7% (n=2,319)	34.6% (n=2,621)	40.8% (n=6,398)
Satellite	*	*	2.0% (n=154)	1.2% (n=181)
Wireless (e.g., microwave)	9.8% (n=264)	14.0% (n=760)	15.2% (n=1,152)	13.9% (n=2,176)
Other	29.1% (n=782)	19.2% (n=1,045)	11.4% (n=866)	17.2% (n=2,693)
Don't know	*	*	*	*
Weighted missing values, n=283 **Key:** * Insufficient data to report (<1%)				

Figure 31 summarizes the type of public library outlet public access Internet connection. Leased line (40.8 percent) was the predominant type of connection reported by libraries at. A leased line is a type of high-speed Internet connection using frame relays and a dedicated line and includes ISDN, T1, cable modem, and DSL. Nearly the same percentage (48.3 percent) of libraries reported a connection type as either DSL or cable. High percentages of libraries (17.2 percent

overall) indicated the type of connection as other, most (30.7 percent) citing fiber optic connections (see Figure 33).

Figure 32: Source of Public Library Outlet Public Access Internet Connection by Metropolitan Status

	Metropolitan Status			
Source of Public Access Internet Connection	Urban	Suburban	Rural	Overall
Municipal Network	17.2% (n=463)	11.9% (n=644)	5.2% (n=393)	9.6% (n=1,500)
Regional Library Consortia	6.9% (n=186)	14.6% (n=794)	5.9% (n=446)	9.1% (n=1,426)
State Network	19.6% (n=528)	25.3% (n=1,375)	29.1% (n=2,203)	26.2% (n=4,106)
Internet Service Provider	59.6% (n=1,604)	56.7 (n=3,081)	65.0% (n=4,920)	61.2% (n=9,606)
Other	8.7% (n=234)	5.9% (n=319)	4.5% (n=337)	5.7% (n=890)
Don't know	*	*	*	*

Weighted missing values, n=288
Key: * Insufficient data to report (<1%)

Overall, the highest percentage of libraries have Internet service providers (ISP) as their source of Internet connection (61.2 percent) (see Figure 32). The majority of libraries report that the source of their connection is an ISP regardless of metropolitan status, with 59.6 percent of urban, 56.7 percent of suburban, and 65.0 percent of rural libraries responding accordingly. State networks are the second greatest source of Internet connection in public libraries with 19.6 percent of urban, 25.3 percent of suburban and 29.1 percent of rural libraries reporting this type of connection.

Figure 33: Availability of Fiber Optic Public Access Internet Connection at Public Library Outlets by Metropolitan Status

	Metropolitan Status			
Fiber Optic Public Access Internet Connection	Urban	Suburban	Rural	Overall
Yes, the connection is fiber optic	57.1% (n=1,536)	35.7% (n=1,940)	17.7% (n=1,337)	30.7% (n=4,813)
No, the connection is not fiber optic	40.5% (n=1,089)	52.4% (n=2,845)	62.3% (n=4,713)	55.1% (n=8,646)
Don't know	2.4% (n=65)	11.9% (n=649)	20.0% (n=1,512)	14.2% (n=2,226)

Weighted missing values, n=292
Key: * Insufficient data to report (<1%)

Figure 33 shows the percentage of library outlets with fiber optic public access Internet connections. A majority (57.1 percent) of urban library outlets offer fiber optic connection, with 35.7 percent of suburban outlets and 17.7 percent of rural outlets also offering fiber connections.

Overall, 55.1 percent of libraries do not offer fiber optic connections in their outlets currently, of which rural outlets (62.3 percent) represent the largest percentage.

Figure 34: Public Library Outlets Maximum Speed of Public Access Internet Services by Metropolitan Status

	Metropolitan Status			
Maximum Speed	Urban	Suburban	Rural	Overall
Less than 256 kbps	*	1.0% (n=55)	3.6% (n=274)	2.3% (n=354)
257 kbps - 768 kbps	1.9% (n=50)	5.0% (n=268)	8.5% (n=640)	6.1% (n=958)
769 kbps - 1.4 Mbps	2.1% (n=55)	5.8% (n=316)	8.3% (n=627)	6.4% (n=999)
1.5 Mbps (T1)	15.8% (n=425)	25.8% (n=1,397)	32.6% (n=2,452)	27.4% (n=4,274)
1.6 Mbps-3.0 Mbps	11.0% (n=297)	8.4% (n=456)	12.9% (n=969)	11.0% (n=1,722)
3.1 Mbps-6.0 Mbps	10.1% (n=272)	9.9% (n=536)	10.2% (n=765)	10.1% (n=1,572)
6.1 Mbps-10 Mbps	19.0% (n=510)	15.9% (n=859)	7.4% (n=560)	12.3% (n=1,929)
10.0-20.0 Mbps	16.4% (n=440)	9.2% (n=499)	3.7% (n=282)	7.8% (n=1,221)
20.1-30.0 Mbps	2.3% (n=63)	1.2% (n=65)	*	1.2% (n=194)
30.1-40.0 Mbps	3.6% (n=96)	1.3% (n=70)	*	1.4% (n=217)
Greater than 40 Mbps	14.8% (n=397)	9.5% (n=512)	4.5% (n=337)	8.0% (n=1,246)
Don't Know	2.2% (n=58)	6.9% (n=372)	6.8% (n=512)	6.0% (n=942)

Weighted missing values, n=359
Key: * : Insufficient data to report (<1%)

The maximum speed of public Internet access offered by library outlets is shown in Figure 34. The percentage of libraries offering speeds greater than 1.5 Mbps (T1) is steadily increasing. In the current survey, 51.8 percent of libraries reported connection speeds greater than 1.5 Mbps, compared to 44.5 percent in 2007-2008. There also is a reported decline in the percentage of libraries reporting connection speeds of less than 1.5 Mbps (14.8 percent in 2009-2010 compared with 21.9 percent last year). Further, the percentage of libraries reporting greater than 10 Mbps connection speeds has increased to 18.4 percent from 12.3 percent reported last year. Some urban and suburban libraries report connection speeds greater than 40 Mbps (14.8 and 9.5 percent, respectively), whereas only a small percentage – 4.5 percent – of rural libraries report connection speeds in this range. For rural library outlets, a nearly nine percent increase in maximum connection speeds of 1.5 Mbps (T1) was reported- 32.6 percent up from 23.8 reported last year. Coupled with a ten percent decrease in connection speeds below 1.5 Mbps (20.4 percent in 2009-2010 from 31.0 last year), rural libraries are showing modest improvements in connection speeds.. It should be noted that direct comparisons between these results and previous years' results are not possible in every case, as connection speed categories varied in each survey.

Figure 35: Increase in Public Access Internet Connection at Public Library Outlets Over the Last Year by Metropolitan Status

	Metropolitan Status			
Public Access Internet Connection Increase	Urban	Suburban	Rural	Overall
Increased	33.3% (n=895)	23.8% (n=1,281)	19.1% (n=1,426)	23.2% (n=3,602)
Stayed the same	65.7% (n=1,765)	74.3% (n=4,006)	78.0% (n=5,832)	74.6% (n=11,602)
Don't know	*	1.9% (n=104)	2.9% (n=216)	2.2% (n=345)

Weighted missing values, n=429
Key: * Insufficient data to report (<1%)

Over the past year, most public library outlets have not increased their connection speeds with 74.6 percent reporting that the speed stayed the same (see Figure 35). This is consistent across metropolitan status categories, with the majority of rural (78.0 percent), suburban (74.3 percent), and urban (65.7 percent) libraries maintaining their connection speeds. Urban outlets reported the highest number of increases at 33.3 percent, and rural outlets the smallest number of increases at 19.1 percent.

Figure 36: Adequacy of Public Library Outlets Public Access Internet Connection, by Metropolitan Status

	Metropolitan Status			
Adequacy of Public Access Internet Connection	Urban	Suburban	Rural	Overall
The connection speed is insufficient to meet patron needs	18.5% (n=495)	13.3% (n=714)	14.4% (n=1,076)	14.7% (n=2,285)
The connection speed is sufficient to meet patron needs at some times	33.7% (n=905)	28.4% (n=1,527)	30.6% (n=2,287)	30.4% (n=4,720)
The connection speed is sufficient to meet patron needs at all times	47.6% (n=1,277)	57.9% (n=3,113)	54.3% (n=4,058)	54.4% (n=8,448)
Don't know	*	*	*	*

Weighted missing values, n=446
Key: * Insufficient data to report (<1%)

Figure 36 illustrates the adequacy of public access connection speeds to the Internet in library outlets. Although libraries reported increases in their connection speeds (Figures 34 and 35), 45 percent of libraries indicated those connection speeds are consistently insufficient to meet patron needs some or all of the time. This is an improvement from last year when 60 percent of libraries reported insufficient connection speeds some or all of the time. Adequate connection speeds were reported by 54.4 percent of public libraries and spiked 19 percentage points in urban libraries, up to 47.6 percent in the current survey. Correspondingly, adequate connection speeds were up 16 and 11 percentage points for suburban (57.9 percent) and rural (54.3 percent) libraries.

Figure 37: Possibility of Increasing Adequacy of Public Library Outlets Public Access Internet Connection by Metropolitan Status

	Metropolitan Status			
Increasing Adequacy of Connections	Urban	Suburban	Rural	Overall
No, the connection speed is already at the maximum level available	8.8% (n=236)	18.8% (n=1,011)	26.4% (n=1,971)	20.7% (n=3,218)
No, there is no interest in increasing the speed of public access Internet connection	10.6% (n=284)	13.9% (n=750)	12.0% (n=893)	12.4% (n=1,927)
Yes, there is interest in increasing the branch's bandwidth, but the library cannot currently afford to	32.9% (n=880)	27.0% (n=1,453)	30.1% (n=2,248)	29.5% (n=4,581)
Yes, and there are plans in place to increase the bandwidth within the next year	16.4% (n=437)	8.9% (n=478)	5.5% (n=409)	8.5% (n=1,325)
It is possible to increase the speed; however, there are no plans in place to increase the bandwidth within the next year	22.4% (n=598)	18.2% (n=980)	12.4% (n=924)	16.1% (n=2,502)
There is interest but the branch lacks the technical knowledge to increase the bandwidth in the library	*	*	1.5% (n=115)	1.0% (n=161)
Other	6.7% (n=178)	7.7% (n=413)	4.9% (n=368)	6.2% (n=959)
Don't Know	2.1% (n=55)	4.8% (n=258)	7.2% (n=541)	5.5% (n=854)

Weighted missing values, n=450
Key: * Insufficient data to report (<1%)

The extent to which library outlets can increase their connection speeds to meet demand is presented in Figure 37. Overall, the percentage of libraries reporting maximum level connection speeds dropped six percentage points to 20.7 percent in the current survey from last year's survey. Another notable difference is the decline in the percentage of urban libraries that plan to increase the bandwidth within the next year (16.4 percent), down ten percentage points from last year. Libraries also reported that even though higher bandwidth was available they could not afford it - 32.9 percent of urban libraries reporting so, jumping 10.8 percent from last year, and both suburban (27.0 percent) and rural libraries (30.1 percent) increasing about six percent each from last year. This may reflect the funding situation in which libraries find themselves due to the economic downturn, as discussed further in the Funding Landscape section of the report.

Figure 38: Public Access Wireless Internet Connectivity in Public Library Outlets by Metropolitan Status

	Metropolitan Status			
Availability of Public Access Wireless Internet Services	Urban	Suburban	Rural	Overall
Currently available for public use when the library is open and closed	60.9% (n=1,634)	62.4% (n=3,364)	60.4% (n=4,513)	61.2% (n=9,511)
Currently available for public use only when library is open	26.6% (n=714)	24.9% (n=1,342)	16.1% (n=1,205)	21.0% (n=3,261)
Not currently available, but there are plans to make it available within the next year	5.7% (n=153)	5.5% (n=297)	8.0% (n=601)	6.8% (n=1,051)
Not currently available and no plans to make it available within the next year	6.0% (n=161)	6.9% (n=372)	15.0% (n=1,121)	10.6% (n=1,654)
Weighted missing values, n=425				

Public libraries continue to increase wireless (Wi-Fi), as 82.2 percent of libraries offer wireless connection up from 76.4 percent in 2008-2009 (see Figure 38). Roughly the same percentage of urban (87.5 percent) and suburban (87.3 percent) outlets offer wireless connections both when the library is open and closed. Wireless access in rural libraries has shown modest increases, up six percent to 76.5 percent from last year. The percentage of rural libraries that do not provide wireless access and have no plans to make it available decreased to 10.6 percent from 14.4 percent last year.

Figure 39: Public Library Outlets Shared Wireless-Workstation Bandwidth by Metropolitan Status

	Metropolitan Status			
Shared Bandwidth connection	Urban	Suburban	Rural	Overall
Yes, both the wireless connection and public access workstations share bandwidth/connection; no management techniques	41.6% (n=978)	48.0% (n=2,254)	68.8% (n=3,939)	56.1% (n=7,171)
Yes, both the wireless connection and public access workstations share bandwidth/connection; but have management techniques	33.9% (n=797)	26.4% (n=1,240)	16.1% (n=919)	23.2% (n=2,957)
No, the wireless connection is separate from the public access workstation bandwidth/connection	24.4% (n=573)	22.5% (n=1,054)	12.5% (n=716)	18.3% (n=2,344)
Don't know	*	3.1% (n=147)	2.6% (n=148)	2.4% (n=300)
Weighted missing values, n=3,206 **Key:** * : Insufficient data to report (<1%)				

Figure 39 details the level of sharing between wireless and public access workstation connections. New to the survey last year, this question asks libraries if they employ bandwidth management techniques to alleviate traffic congestion when the connection is shared. More urban libraries report sharing the wireless and public access workstations connections - up to 41.6 percent from 31.5 percent last year - and show a correlated decrease in separate connections - 24.4 percent from 34.2 percent last year. Similarly to last year, the percentage of rural libraries that share the wireless and public access workstation connection without

management techniques to alleviate traffic congestion is the highest reported at 68.8 percent. This may reflect the lack of IT staff reported by public libraries, with 36.6 percent relying on public services staff to support IT and 30.7 percent (rises to 43.7 percent for rural libraries) relying on the library director to support IT.