

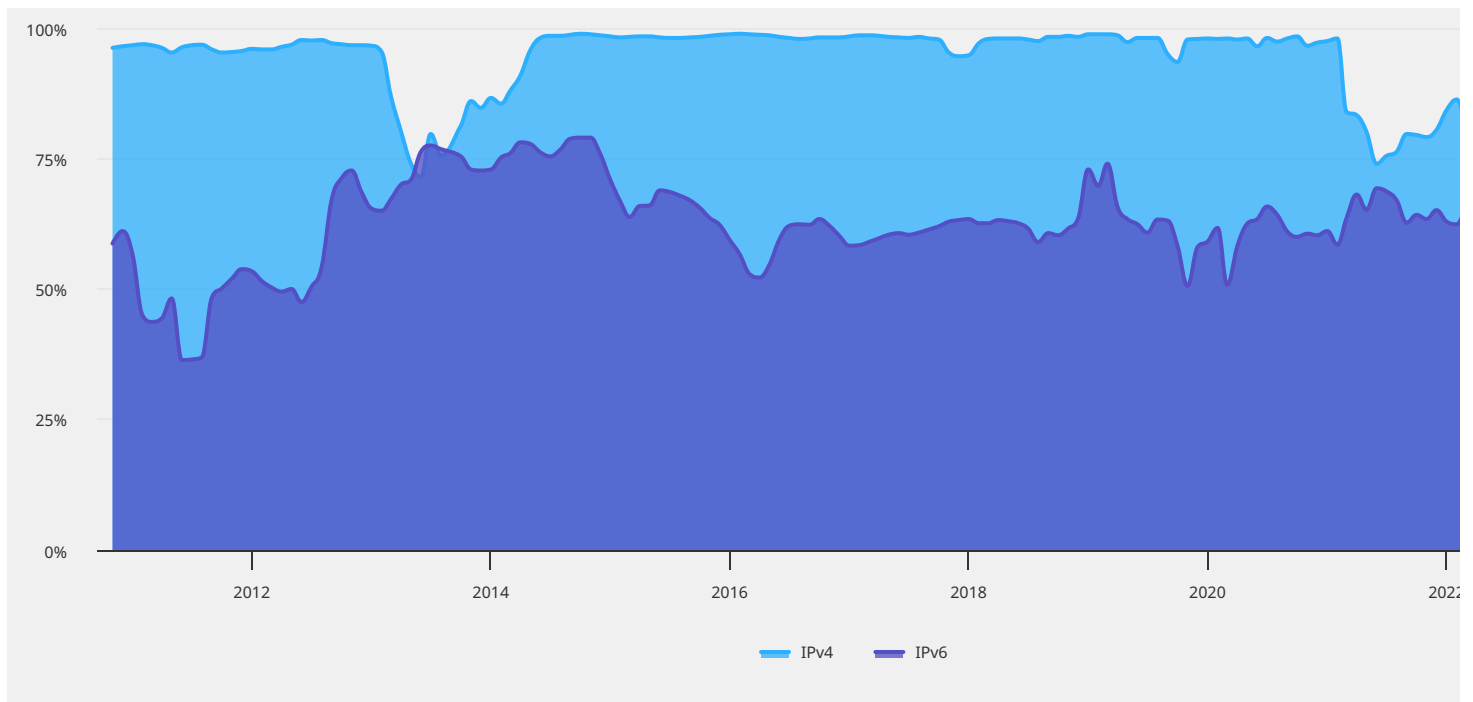


IPv6 in United States

These graphs show the evolution of default protocol, v6 address types, and average bandwidth in United States over time.

They are generated using the data collected by the ipv6-test.com connection test (<http://ipv6-test.com/>) page, and are updated on a monthly basis.

Overall IPv6 and v4 protocol support in United States



This graph shows the evolution of IPv6 support vs IPv4 for all our connection test.

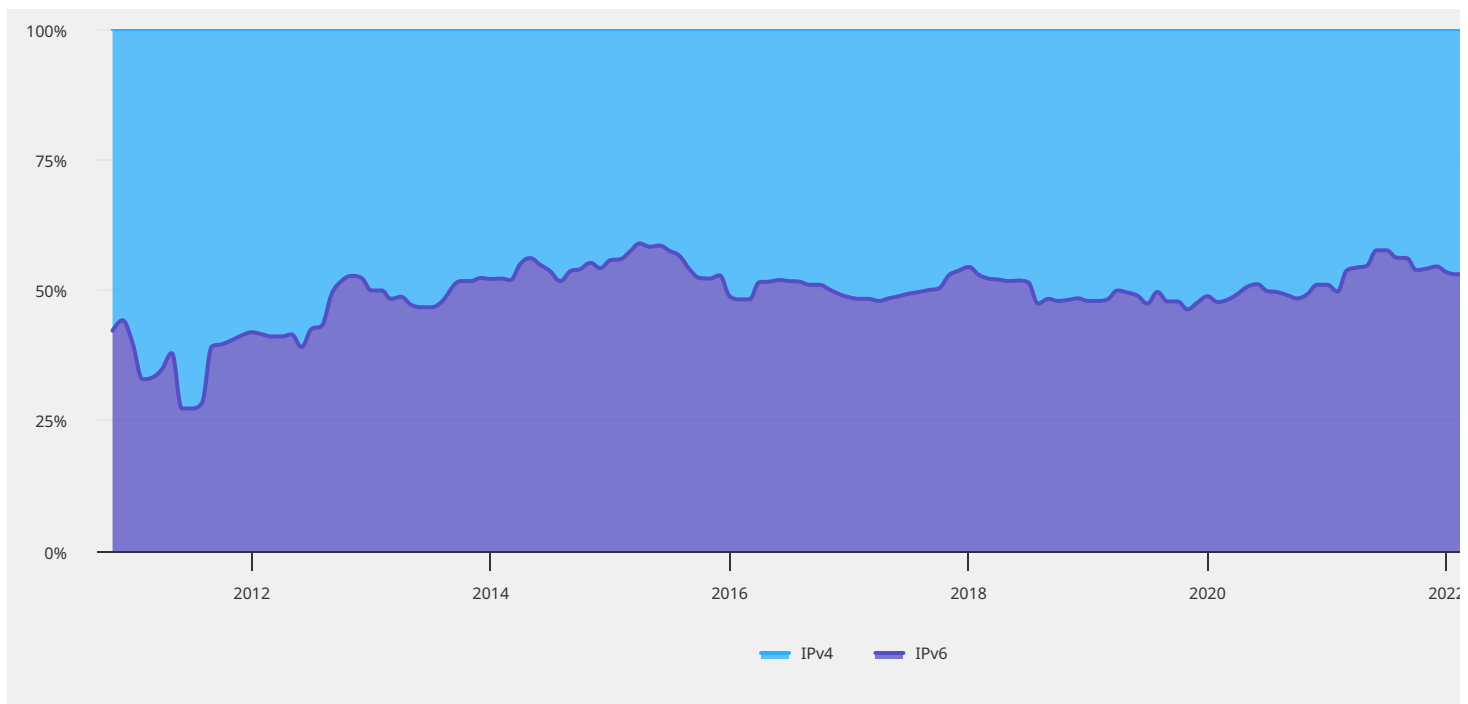
The numbers are percentages, so we can expect almost 100% of hosts supporting IPv4 with a slow growth for IPv6.

Top 25 internet service providers for IPv6 in United States (Nov 2023)

ISP		IPv6 tests count
1.	Comcast Cable Communications, LLC	2,828
2.	AT&T Services, Inc.	1,996
3.	Charter Communications Inc	1,655
4.	Verizon Business	1,543
5.	Hurricane Electric LLC	1,405

6.	T-Mobile USA, Inc.	1,119
7.	Charter Communications	931
8.	Cloudflare, Inc.	775
9.	Cox Communications Inc.	566
10.	I-Evolve Technology Services	478
11.	Google LLC	437
12.	SpaceX Starlink	306
13.	The Constant Company	301
14.	Charter Communications, Inc	228
15.	Sonic Telecom LLC	220
16.	Google Fiber Inc.	219
17.	Leaseweb USA	210
18.	Qualcomm, Inc.	184
19.	CenturyLink Communications, LLC	178
20.	Multacom Corporation	158
21.	Akamai Technologies, Inc.	149
22.	FranTech Solutions	134
23.	Amazon.com, Inc.	122
24.	AT&T Mobility LLC	98
25.	tzulo, inc.	95

IPv6 and v4 protocol support in United States (unique addresses)



This graph shows the evolution of IPv6 support vs IPv4 for unique users of our connection test.

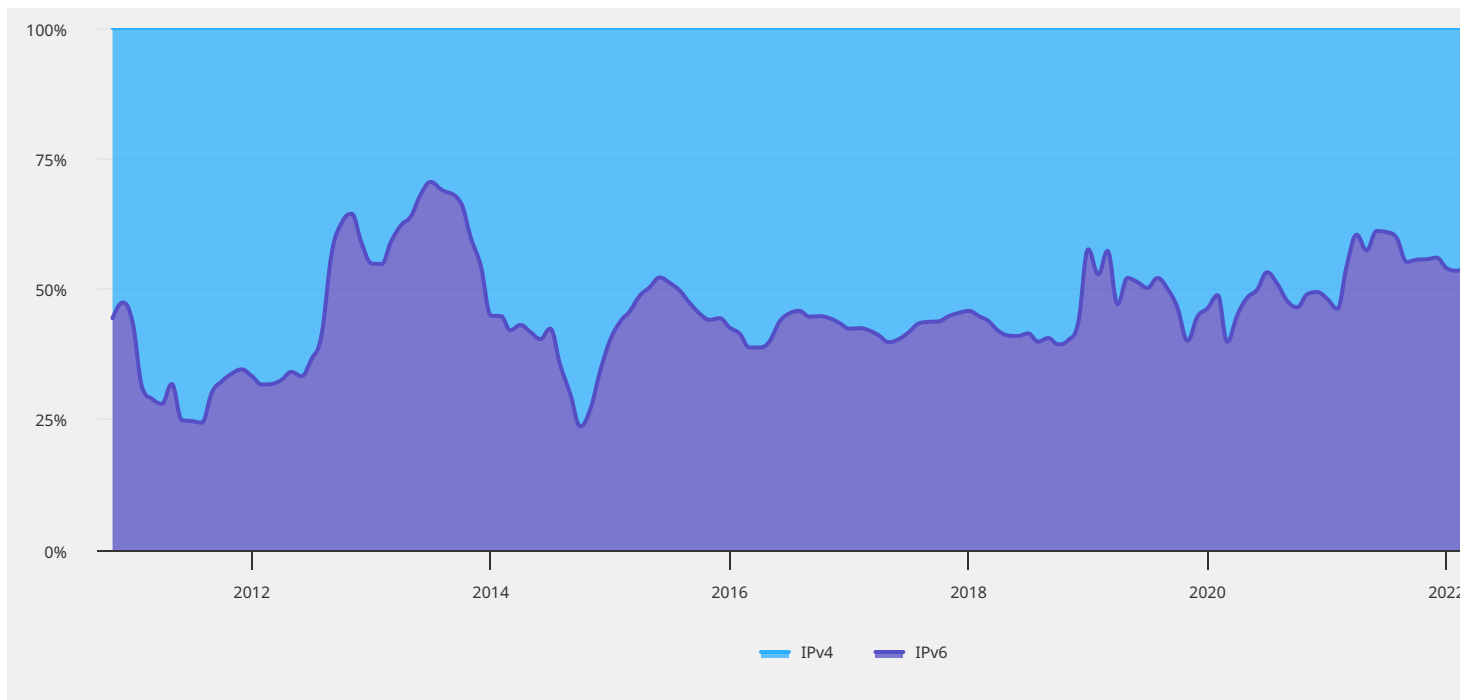
The numbers are percentages, so we can expect a slow growth towards 50% v4 / 50% v6.

Top 25 internet service providers for IPv6 in United States (unique addresses, Nov 2023)

ISP		Unique IPv6 addresses
1.	Comcast Cable Communications, LLC	1,678
2.	AT&T Services, Inc.	1,178
3.	Charter Communications Inc	990
4.	Verizon Business	927
5.	T-Mobile USA, Inc.	683
6.	Cloudflare, Inc.	602
7.	Charter Communications	543
8.	Hurricane Electric LLC	480
9.	Cox Communications Inc.	339
10.	I-Evolve Technology Services	267
11.	SpaceX Starlink	156
12.	Charter Communications, Inc	146

13.	Google Fiber Inc.	132
14.	CenturyLink Communications, LLC	119
15.	Sonic Telecom LLC	109
16.	Akamai Technologies, Inc.	85
17.	The Constant Company	77
18.	AT&T Mobility LLC	71
19.	Multacom Corporation	48
20.	M247 Europe SRL	41
21.	Hosting Solution Ltd.	40
22.	Cincinnati Bell Telephone Company LLC	40
23.	FranTech Solutions	38
24.	Google LLC	38
25.	Mediacom Communications Corp	35

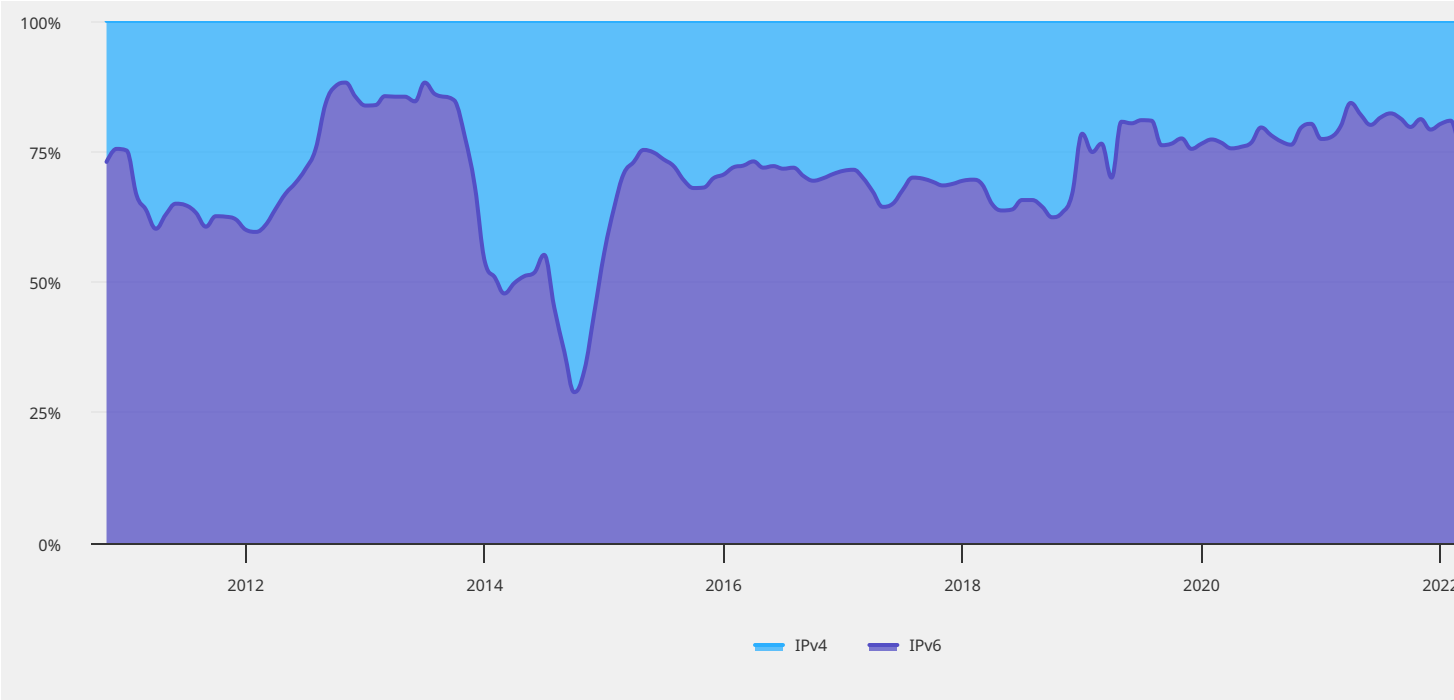
Default browser protocol in United States



This graph shows the percentage of browsers that default to IPv6 vs. IPv4 when visiting the ipv6-test connection test.

Hopefully, in the not so distant future, the v6 part will grow taller than the v4 one.

Default browser protocol in United States (dual-stack users)



This graph shows the percentage of browsers that default to IPv6 vs. IPv4 for users that have both v4 and v6 connectivity.

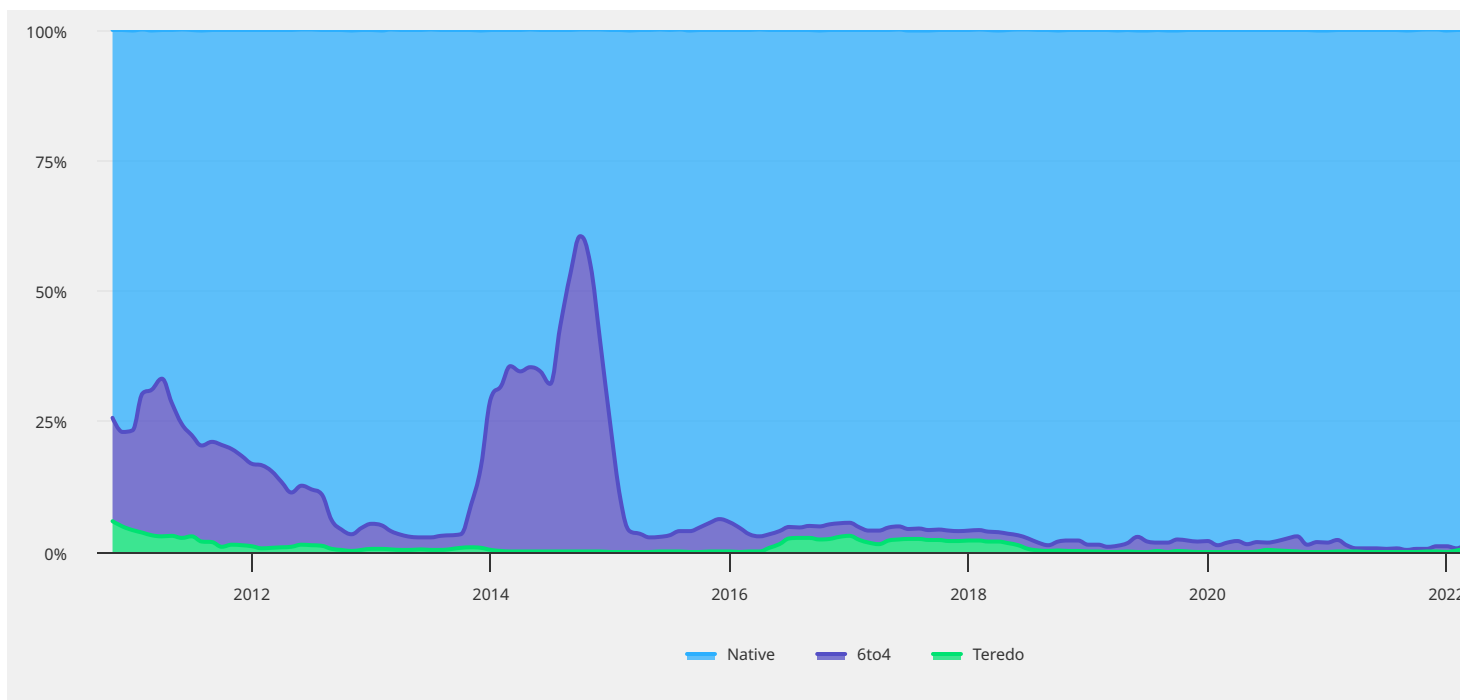
Usually a system will default to v6 when it's available, but in some cases with tunneled connections, v4 stays the default.

Top 25 internet service providers for IPv6 default in United States (Nov 2023)

	ISP	Test count	IPv4	IPv4 %	IPv6	IPv6 %
1.	Conexon Connect	9	0	0.0%	9	100.0%
2.	Google, LLC	30	0	0.0%	30	100.0%
3.	Hughes Network Systems	5	0	0.0%	5	100.0%
4.	Charter Communications, Inc.	10	0	0.0%	10	100.0%
5.	HIVELOCITY, Inc.	6	0	0.0%	6	100.0%
6.	Deutsche Telekom AG	7	0	0.0%	7	100.0%
7.	CenterClick LLC	7	0	0.0%	7	100.0%
8.	Hancock Rural Telephone Corp.	6	0	0.0%	6	100.0%
9.	ReliableSite.Net LLC	8	0	0.0%	8	100.0%
10.	FyberCom, LLC	6	0	0.0%	6	100.0%

11.	Interserver, Inc	6	0	0.0%	6	100.0%
12.	Elevate	9	0	0.0%	9	100.0%
13.	Tomas Oliveira Valente Leite de Castro	17	0	0.0%	17	100.0%
14.	NetSpeed LLC	15	0	0.0%	15	100.0%
15.	UnReal Servers, LLC	5	0	0.0%	5	100.0%
16.	HERN Labs AB	37	0	0.0%	37	100.0%
17.	Buckeye Cablevision	19	0	0.0%	19	100.0%
18.	Contabo Inc.	10	0	0.0%	10	100.0%
19.	Ericsson Inc.	16	0	0.0%	16	100.0%
20.	XMission, L.C.	13	0	0.0%	13	100.0%
21.	Wes Mills	5	0	0.0%	5	100.0%
22.	AT&T Corp.	9	0	0.0%	9	100.0%
23.	EPB Fiber Optics	5	0	0.0%	5	100.0%
24.	Another Corporate ISP, LLC	11	0	0.0%	11	100.0%
25.	Evoxtv6	7	0	0.0%	7	100.0%

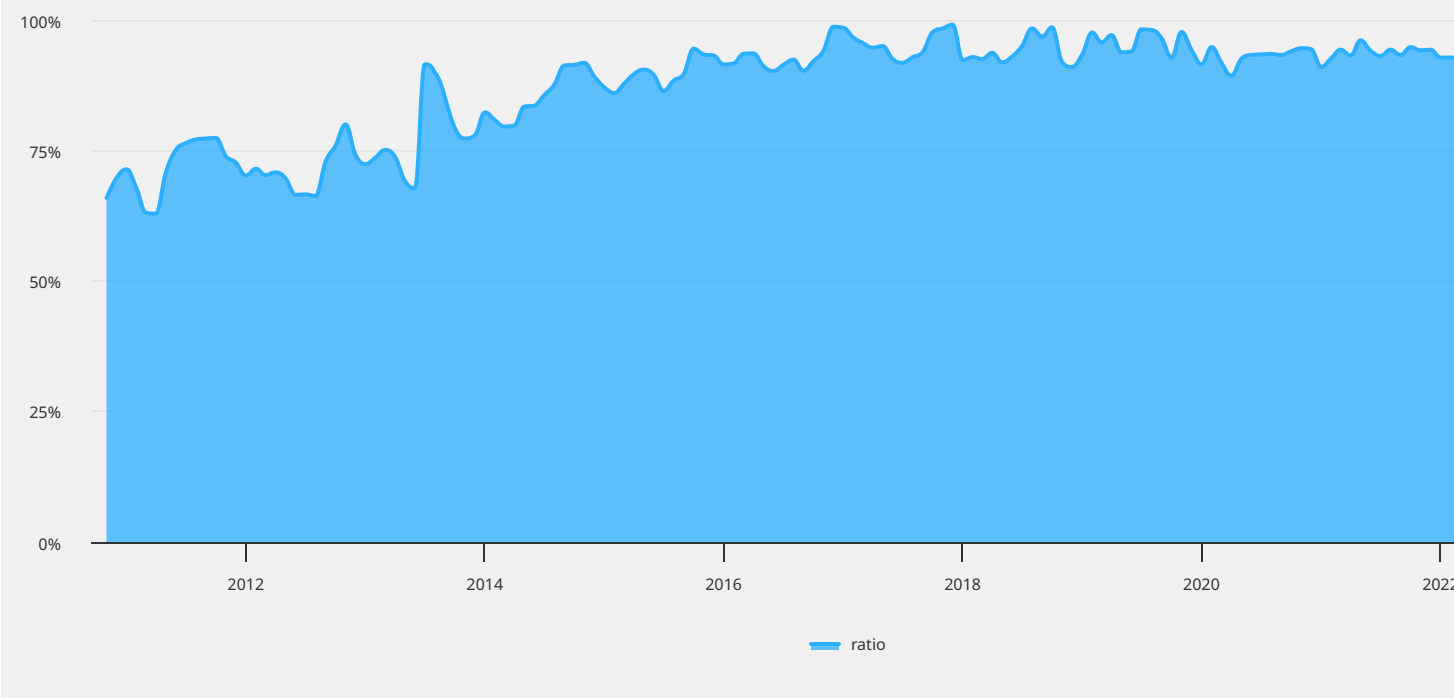
IPv6 address types in United States



Here you can see the evolution of address types over time, and measure usage of 6to4 (<http://en.wikipedia.org/wiki/6to4>) and Teredo (http://en.wikipedia.org/wiki/Teredo_tunneling) tunneled connectivity.

It should be noted that because 6rd (<http://en.wikipedia.org/wiki/6rd>) works with native addresses, it cannot be detected here as tunneled. This is also the case with VPN based tunnels.

Downstream bandwidth in United States



This graph illustrates the connection speed gap between IPv4 and IPv6, numbers represent v6 speed as percentage of v4 speed.

The lower IPv6 speeds are often caused by tunneling overhead or insufficient v6 connectivity or peering capacity at ISPs.

Top 25 internet service providers for IPv6 speed in United States (Nov 2023)

	ISP	Test count	IPv6 average
1.	Google Fiber Inc.	219	266.2 Mbps
2.	Cloudie Networks	58	240.4 Mbps
3.	NetSpeed LLC	15	228.9 Mbps
4.	Visionary Communications, Inc.	7	198.4 Mbps
5.	Verizon Business	1,543	169.3 Mbps
6.	Cincinnati Bell Telephone Company LLC	81	142.6 Mbps
7.	Oracle Corporation	56	134.5 Mbps

8.	Google LLC	437	133.8 Mbps
9.	Charter Communications, Inc	228	120.1 Mbps
10.	American Registry Internet Numbers	45	118.0 Mbps
11.	Cloudflare, Inc.	775	116.9 Mbps
12.	Cogent Communications	5	110.5 Mbps
13.	Webpass Inc.	12	107.9 Mbps
14.	Cox Communications Inc.	566	100.8 Mbps
15.	Comcast Cable Communications, LLC	2,828	100.5 Mbps
16.	Charter Communications	931	100.1 Mbps
17.	Sonic Telecom LLC	220	98.8 Mbps
18.	Charter Communications Inc	1,655	96.9 Mbps
19.	Akamai Technologies, Inc.	149	90.0 Mbps
20.	AT&T Services, Inc.	1,996	86.4 Mbps
21.	Midcontinent Communications	30	80.2 Mbps
22.	XMission, L.C.	13	73.5 Mbps
23.	iboss, inc	12	71.9 Mbps
24.	T-Mobile USA, Inc.	1,119	71.2 Mbps
25.	QuadraNet Enterprises LLC	34	68.0 Mbps

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