BROADBAND COVERAGE

AVAILABILITY AND SPEED IN MONTANA

Montana by many measures is among the least internet-connected states - 49th, according to Broadband Now.

Wide spaces make wired or fiber connections difficult. Satellite download speeds often are less than desired. Lack of consumer concentration usually makes return on investment less attractive for providers than investments in densely populated areas. Recognizing that the free market will not necessarily benefit all of Montana equitably, the federal government has provided rural broadband funding. The state, too, has extended funding for broadband to schools, but much of that money went unspent in the 2019 biennium and was returned to its original coffers.

What might help Montana consumers gain improved access and internet speed? The following table poses issues and policy options that might help to address barriers, recognizing that telecommunications largely is federally regulated. However, if Montana does provide incentives, there may be a way of requiring information or targets in

exchange for a benefit. Legislators are frequently reminded of the law of unintended consequences. The table is intended to provoke discussions on ways to meet policy goals, such as getting accountability in exchange for benefits.

As a reminder, providers currently can self-report broadband coverage under federal rules that have been widely criticized for allowing inaccurate assumptions as to speed and coverage availability, particularly in rural areas. For example, under current Federal

BROADBAND CONCERNS AND POLICY OPTION	S
CONCERNS	POLICY SOLUTIONS
Where is broadband available in Montana?	 Define broadband in terms of minimum download, upload speed. Link incentives to transparency in terms of service area and speeds. Develop a statewide broadband expansion plan and advisory council.
• Where have the federal dollars been used to expand broadband in Montana?	• Link reporting to incentives. This could include requiring reports of those wanting certification as eligible telecommunications carriers or use of right-of-way. The reports could be a short version of FCC-required reports.
At what speeds is broadband available for various technologies?	• Define broadband in terms of quality, deliverables, speeds, or other criteria that meet basic standards regardless of technologies and that can evolve as technologies advance.
• How can public policy balance affordability and encourage broadband adoption, especially among low-income communities, while ensuring a reasonable rate of return on investment? Further, if broadband is seen as a public good, to what degree is government involved?	Set a state policy or state standards for: assistance to reach hard-to-serve areas incentives that require reporting of service areas and average speed baseline permission to use right-of-way access along state highways

Communications Commission rules, which are in the process of being amended, a broadband provider can claim an entire census block as being "served" even if only one household in that census block actually has access at federally designated broadband speeds. FCC-designated speeds to qualify for certain types of federal funding range from 4 Megabits per second (Mbps) download and 1 Mbps upload (under old designations) to the current 25 Mbps download and 3 Mbps upload. Montana has no specification for speeds and has not so far attached any quid pro quo -- whether speed or reporting -- for financing incentives. The Federal Communications Commission requires eligible telecommunications carriers (ETCs) to file reports, but for other carriers there is no requirement for transparency that might help target any state or federal benefits for broadband providers.

The table below shows a range of technologies and speeds serving a selected group of Montana communities (based on zip codes). The projected speed availability is best-case scenario. Some may be the most expensive--not necessarily the most purchased. For some carriers, the more helpful number is the average download speed for an area, which Broadband Now estimates for each community and which is shown at the bottom of each column. In most cases, only BroadbandNow data is provided. High-Speed Internet (HSI) data provides a contrast for some areas, usually in access and speed.

Access and S	peed Reporte	ed by Broadb	and Now and	d High-Spee	Internet (Fort Benton		Glendive	lontana are Great Falls	as, by liste	d providers Havre	and by typ	oe of techr Kalispell	nology, if ava	ailable Miles City	Missoula	Red Lodge	Wolf Point
	59911	59101/59102	59715	59701	59447	59230	59330		59840	59601	59601	59901	59457	59301	59801	59068	59201
CenturyLink DSL Spread, Speed Fiber Spread Fiber Speed	BroadbandNow 95.4% 100Mbps HSI: 71% 40Mbps BroadbandNow 10.9% 1000Mbps	BroadbandNow 98.8% 140Mbps HSI - 84%; 40 Mbps BroadbandNow 5.1% 1000Mbps	BroadbandNow 97% 140Mbps HSI- 79%, 80Mpbs BroadbandNow 4.2%	20Mbps			Broadband Now 80.6% 20Mbps HSI - 83%, 20Mbps	Now 99.7% 100Mbps <i>HSI</i> - 79%,	BroadbandNow 92.4% 100Mbps (16.39 Mbps average) HSI - 76%, 20Mbps	Now 88.5% 20 Mbps HSI - 77% - 20Mbps	<i>Now</i> 95.1% 100 Mbps <i>HSI -</i> 77%, 20 Mbps	Now 98.1% 40Mbps HSI - 74% 40 Mbps	<i>Now</i> 87% 7Mbps <i>HSI</i> - 77% 20Mbps	Now 86.5% 100Mbps HSI - 79%,	Now 99.9% 140Mbps HSI- 81%,	Now 82% 80Mbps HSI - 59%, 20Mbps	
Spectrum Cable Spread Speed	BroadbandNow 72% 940Mbps HSI - 100% 100Mbps	BroadbandNow 99% 940Mbps HighSpeed Internet 100% 100Mbps	86.7%	·				Broadband Now 100% 940Mbps HSI 100%, 100Mbps	BroadbandNow 62.2% 940 Mbps HSI - 100% 100Mbps	HSI - 100%	<i>Now</i> 95.9% 940Mbps	Broadband Now 82.8% 940Mbps HSI- 100% 100Mbps			Broadband Now 100% 940Mbps HSI - 100%, 100Mbps	Now 74% 940Mbps HSI - 100%,	
MT Internet Fixed Wireless Spread, Speed			5.5% 2Mbps 99.8% 7Mbps					Broadband Now 100% 7Mbps HSI - 100%, 6Mbps			Broadband Now 100%, 300Mbps HSI -100%, 6Mbps		BroadbandNow 100% 5Mbps HIS - 100%, 6Mbps				

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MT Internet DSL Spread, Speed Fiber Spread, Speed				100% 7Mbps							Broadband Now 100% 7 Mbps, 13.2% 1000Mbps		BroadbandNow 100% 7Mbps				
	Bigfork	Billings	Bozemar	Butte	Fort Benton	Glasgow	Glendive	Great Falls	Hamilton	Havre	Helena	Kalispell	Lewistown	Miles City	Missoula	Red Lodge	Wolf Point
HughesNet Satellite Spread, Speed	100% 25Mbps	100% 35Mbps				100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps	100% 25Mbps
Viasat Satellite Spread, Speed	BroadbandNow 100%, 25Mbps HSI -99%, 25Mbps	100%, 25Mbps <i>HSI</i> -99%,					Broadband Now 100% 35Mbps HSI- 99%, 25Mbps	Broadband Now 100% 35Mbps HSI - 99%, 25Mbps	BroadbandNow 100% 100 Mbps HSI - 99% 25Mbps	100% 35Mbps	Broadband Now 100% 100 Mbps HSI - 99% 25Mbps	Broadband Now 100%, 25Mbps	BroadbandNow 100%, 35Mbps HSI - 99%, 25Mbps	Broadband Now 100% 35Mbps HSI - 99%, 25Mbps	Broadband Now 100% 100Mbps HSI - 99%, 25Mbps		BroadbandNow 100%; 35Mbps <i>HSI</i> - 99%, 25Mbps
Blackfoot DSL Spread, Speed Fiber Spread, Speed Fixed Wireless Spread, Speed	2.3% 40Mbps	201V/hnc	7.4% 30Mbps								7.0% 7Mbps				16.7% 15Mbps		
MidRivers DSL Spread, Speed Cable Spread, Speed Fiber Spread, Speed							Broadband Now 99.6% 8Mbps 87.2% 900Mbps 7.4% 1000Mbps HSI- 90%, 900Mbps						BroadbandNow 85.9%, 8Mbps BroadbandNow 68.2%, 900Mbps HSI - 95%, 900Mbp BroadbandNow 23.3%	Broadband Now 91.5% 8Mbp, 89% 900Mbps HSI - 90%, 900Mbps Broadband Now 7.8% 1000Mbps			89.8% 8Mbps
Nemont DSL Spread DSL Speed Fiber Spread Fiber Speed Fixed Wireless Spread, Speed						Broadband Now 98.4% 30Mbps, 3.8% 1000Mbps 99.6% 1.5Mbps <i>HSI</i> - ?%,25Mbps,										HSI- No % information; 768Kb	

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	Bigfork	Billings	Bozeman	Butte	Fort Benton	Glasgow	Glendive	Great Falls	Hamilton	Havre	Helena	Kalispell	Lewistown	Miles City	Missoula	Red Lodge	Wolf Point
WispWest Fixed Wireless Spread, Speed		Broadband Now 100% 35Mbps	Broadband Now - 99% 35Mbps HSI - 98%- 10Mbps													53.7% 35Mbps	
Montana OptiCon Fiber Spread, Speed DSL Spread, Speed			21.9% 225Mbps 20.9% 20Mbps														
MontanaSky Fiber Spread, Speed DSL Spread, Speed Fixed Wireless Spread, Speed (SkyConnect)	31.9% 100 Mbps 97.5% 10 Mbps 80.5% 20Mbps											Broadband Now 100% 10Mbps HSI -74% 768 Kbps Broadband Now 83.8% 75Mbps					
Global Net Fixed Wireless Spread, Speed			Broadband Now and HSI - 98% 10Mbps	10Mbps				<i>HSI-</i> 100%, 10 Mbps			<i>HSI -</i> 99% 50Mbps						
Range Telephone Coop DSL Spread, Speed														Broadband Now 2% 1000Mbps HSI - 3% 3Mbps			
SpeedConnect Fixed Wireless Spread, Speed				HSI - 98%; 10Mbps	8.3% 10Mbps			Broadband Now 5.5% 10Mbps HSI - 100%, 10 Mbps	29.6% 10Mbps						<i>HSI</i> - 100%, 10Mbps		
Three Rivers Communications Fiber Spread, Speed	,				Broadband Now 6.5% 50Mbps HSI -5%, 50 Mbps						<i>HSI -</i> 1%, 50 Mbps		3.2% 200Mbps				

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	Bigfork	Billings	Bozeman	Butte	Fort Benton	Glasgow	Glendive	Great Falls	Hamilton	Havre	Helena	Kalispell	Lewistown	Miles City	Missoula	Red Lodge	Wolf Point
Triangle Communications Fiber Spread, Speed DSL Spread,					Broadband Now 95.7%					19.7% 200Mbps 3.3%			HSI - Spread not available, 50 Mbps				
Speed Fixed Wireless Spread, Speed					200Mbps <i>HSI</i> - 92%, 100Mbps					50Mbps 93.6% 10Mbps							
Other	HSI - Earthlink 71%, 40 Mbps	HSI - Earthlink 98%, 20 Mbps Tri-County Telephone Assn. Inc 100%, 6Mbps Northwest Com'cations Cooperative	LittleApple Technologies Fixed Wireless Spread 15.8% Speed 32Mbps		Landmark Wireless Fixed Wireless Spread 98.2% Speed 6Mbps HSI - 99%,			Broadband Now KDS Networks Fixed Wireless Spread 7% Speed 25Mbps HSI - Konceptio Data	Cybernet1 Fixed Wireless Spread 99.9% Speed 32Mbps BigSky Internet Fixed Wireless Spread 24.7% Speed 20Mbps			Bullitt Communi- cations Fixed Wireless Spread, 86.9% Speed 30Mbps HSI - Earthlink:		Cybernet1 Fixed Wireless Broadband Now 100% 32Mbps	Cybernet1 Fixed Wireless Broadband Now 100% 32Mbps HSI - 96%, 6Mbp	Broadband Now Visionary Broadband Fixed Wireless Spread 16.4%, Speed 50Mbps HSI - Tri- County	
Dealer Manustain		Spread ?, 768Kpbs						Services 100%, 10Mbps	BroadbandNow			74%, 40Mbps		100%	HSI - 100%	Telephone Assn. Inc 11%, 768Kbps	
Rocky Mountain Internet Fixed Wireless Spread, Speed									100% 3Mbps HSI - 100%, 10 Mbps					3Mbps	10Mbps		
Bottom Line Per	Bigfork Average		Bozeman	Butte	Fort	Glasgow	Glendive	Great Falls	Hamilton	Havre	Helena	Kalispell	Lewistown	Miles City	Missoula	Red Lodge	Wolf Point
BroadbandNow	download	download	Average	Average	Benton	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	speed 36.98 Mbps	speed 40.02Mbps	download speed -	download speed -	Average download	download speed -	download speed -	download speed -	download speed	download speed 37.11	download speed -	download speed -	download speed -	download speed -	download speed -	download speed -	Download Speed -
	Access - 200	Access - 7,000	47.35Mbps	•	14.99Mbps	10.98Mbps-	41.5Mbps	39.51Mbps	22.81Mbps	Mbps	36.52Mbps	47.25%	33.2Mbps	48.47Mbps	39.17Mbps	24.67Mbps	13.62Mbps
	people have	people have	Access - 1,000		- 1000	4000 people	Access -	Access -	Access - 4,000	1000 people	Access -	Mbps	Access - 300	Access -	Access -5,000	Access - 900	Access - 1,000
	access to 1 or	access to 1 or	people have	1000 people	people	(96.5%)	600 people	1,000	people (38%)	(14.2%) have	2,000 people	Access	people (4.4%)	900 people	people (6.6%)	people (25.8%)	people have
	fewer providers	fewer	access to 1 or		(88.7%)	have access	(8.1%)	people have	have access to	access to 1	have access	100% have	have access	(4.8%) have	have access to	have access to	access to 1 or
		providers.	fewer wired	1 or fewer	have access	to 1 or	have	access to 1 or fewer	1 or fewer	or fewer	to 1 or fewer	some form	to 1 or fewer	access to 1	1 or fewer	1 or fewer	fewer wired
			providers.	wired providers	to 1 or fewer wired	fewer wired providers;	access to 1 or fewer	or fewer wired	providers.	providers 200 in Hill	providers.	of access-	wired providers.	or fewer wired	wired providers.	wired providers	providers
				providers	providers	96% can access fixed.	providers.	providers.		Co. have 0 access			providers.	providers.	providers.	providers	

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^{*}Based on information compiled by BroadbandNow. Information also compiled from High-Speed Internet: https://www.highspeedinternet.com/. If unmarked, the information is from BroadbandNow. Average internet download speed in Montana, according to BroadbandNow, is 39.05Mbps.

https://broadbandnow.com/Montana/Wolf-Point?v=a&zip=59201&utm_expid=.PJ9POvv8RdC78MC6h_wbqQ.1&utm_referrer=https% aS3A%2F%2Fbroadbandnow.com%2FMontana%2FGreat-Falls%3Fv%3Da%26zip%3D59401.