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Joint Committee on Finance

Paper #525

Broadband Grants (Public Service Commission -- Broadband Provisions)

[LFB 2021-23 Budget Summary: Pages 500 to 502, #1, #4, #5, and #6]

CURRENT LAW

The Public Service Commission (PSC) administers the broadband expansion grant program to increase internet access and quality in Wisconsin. For-profit and not-for-profit organizations, telecommunications utilities, and municipalities partnering with those organizations and utilities are eligible to apply for grants. Priority is given to projects that include matching funds, involve public-private partnerships, affect areas with no broadband service providers, are scalable, promote economic development, will not delay broadband deployment to neighboring areas, or affect a large geographic area or a large number of underserved individuals or communities.

Broadband expansion grants were first awarded during the 2013-14 fiscal year. Through the 2020-21 fiscal year, the Commission has awarded grants totaling \$78 million to 279 projects, including \$28.4 million for 58 projects announced on March 18, 2021. Table 1 shows requests and awards by year.

Broadband expansion grants support the construction of service to households and businesses that are unserved or underserved. Definitions of unserved and underserved are based on the Federal Communications Commission (FCC) benchmark for advanced telecommunications capability or "broadband," currently set at a speed of 25 Megabits per second (Mbps) download speed and 3 Mbps upload speed. (Broadband service speeds are abbreviated in this paper, with 25/3 reflecting 25 Mbps download speed and 3 Mbps upload speed.)

TABLE 1

Broadband Expansion Grant Awards

<u>Round</u>	<u>Fiscal Year</u>	<u>Applicants</u>	<u>Amount Requested</u>	<u>Awards</u>	<u>Amount Awarded</u>
1	2014	24	\$2,967,609	7	\$500,000
2	2015	13	1,860,352	7	452,600
3	2016	28	4,413,096	11	1,500,000
4	2017	37	5,288,385	17	1,500,000
5	2018	51	7,413,227	13	1,500,000
6	2018	78	22,257,583	46	7,689,000
7	2019	83	17,181,829	37	7,053,600
8	2020	143	50,876,685	72	23,995,000
9	2021	11	5,378,500	11	5,378,500
10	2021	<u>124</u>	<u>62,628,813</u>	<u>58</u>	<u>28,431,700</u>
Total		592*	\$180,266,079*	279	\$78,000,400

*Totals may reflect double-counting of projects that reapply for funding.

For the 2020-21 grant round, unserved locations were those lacking any providers providing at least 5/0.6 service, and underserved locations were those lacking access to at least two providers providing service of at least 25/3. While projects targeting unserved areas are given priority, projects increasing the number of providers in an underserved area are also considered important to broadband expansion, as they induce competition and encourage more affordable service in areas that are typically higher cost. The attachment provides a map of Wisconsin showing areas designated as eligible (underserved) or high priority (unserved) for grant funding under the 2020-21 grant round. The Commission maintains a more detailed and interactive map of broadband service on its website at <https://maps.psc.wi.gov/apps/WisconsinBroadbandMap/>.

PSC reports that in general, broadband expansion grants do not support the construction of internet service slower than 25/3, although certain fixed wireless or digital subscriber line (DSL) service supported under previous grant rounds may have resulted in slower service, depending on the location of the subscriber. For the 2020-21 grant round, PSC reports all projects will support service of at least 25/3.

DISCUSSION POINTS

Broadband Access and Adoption

1. In its 2021 broadband report, FCC reported that, as of December 31, 2019, 83% of rural Americans and 98.8% of urban Americans had access to speeds of at least 25/3, as compared to 78% of rural Wisconsinites and 99.8% of urban Wisconsinites. Table 2 shows access rates for neighboring

states. Among neighboring Midwest states, Wisconsin ranks comparably in urban access to speeds of 25/3, but last in rural access and total access to speeds of 25/3. For the purposes of evaluating broadband access, FCC assigned 1,763,000 Wisconsinites as residing in rural areas and 4,060,000 Wisconsinites as residing in urban areas. Thus, FCC estimates approximately 392,500 Wisconsinites lack access to 25/3, consisting of 384,400 in rural areas and 8,100 in urban areas.

2. It should be noted that Table 2 shows availability of broadband, not subscription rates. Actual customer subscription rates are typically lower. While 25/3 broadband service was estimated to be available to 93.2% of Wisconsinites as of December 31, 2019, only 64.4% actually subscribed to 25/3 service. While increased access may not immediately result in increased customer subscriptions, broadband expansion grants also seek to increase the number of providers and improve competition in areas with only one provider. Improved competition between providers is expected to reduce prices, contributing to higher adoption rates over time. Thus, while Wisconsin's 25/3 access rate improved from 92.9% to 93.2% from December 31, 2018, to December 31, 2019, its 25/3 adoption rate improved from 56.1% to 64.4%.

TABLE 2

Broadband Access by State as of December 31, 2019

	Speed of at Least 25/3		
	<u>Rural</u>	<u>Urban</u>	<u>Total</u>
Illinois	88.0%	99.3%	98.0%
Minnesota	91.4	99.8	97.5
Indiana	87.4	99.4	96.1
Iowa	91.2	98.7	96.0
Michigan	86.3	99.1	95.8
Wisconsin	78.2	99.8	93.2
National Average	82.8%	98.8%	95.6%

Source: Federal Communications Commission

Broadband Data Collection and Mapping

3. Data provided in Table 2 is derived from reporting by telecommunications providers under FCC Form 477. Under Form 477 requirements, providers must indicate the minimum advertised service speed available to at least one premises in a census block. If one premises in a census block has access to 25/3 service, all inhabitants of that block in the dataset are represented to have access to that service. Thus, FCC acknowledges the limitations of Form 477 data and its likelihood to overstate access to broadband service. At the same time, Form 477 data remains useful for identifying census blocks that are entirely underserved, and those most in need of broadband expansion funding. Further, as Form 477 data has been collected in its current form since 2013, data serves as a useful comparison for measuring increasing access over time. It should also be noted that Form 477 data does not limit eligibility for state broadband expansion grants. If an applicant believes

Form 477 data is incorrect or insufficiently precise, they may provide supplemental service data as part of their application.

4. In 2017, FCC began considering modifications to its data collection to more accurately reflect premises-level access rather than census block-level access to broadband. In 2019, FCC issued an order beginning the process of requiring service providers to submit such location-based data to FCC. On March 23, 2020, the federal Broadband Deployment Accuracy and Technological Availability Act ("Broadband DATA Act") was enacted. The Broadband DATA Act generally incorporates FCC's 2019 order and requires FCC to: (a) collect and disseminate granular, location-based broadband service data; (b) create a process for public review and challenge of broadband service data; (c) conduct audits of service data submitted by telecommunications providers; and (d) provide assistance to tribal governments, states, local units of government, and small providers related to broadband data collection. Subsequently, the 2021 Consolidated Appropriations Act (CAA) provided \$98 million to FCC to implement provisions of the Broadband DATA Act. The Broadband DATA Act does not specify a date by which updated maps would be required to go into effect, and it is unclear at this time when granular data may begin being published.

Broadband Implementation Costs

5. Due to the scale and complexity of such a goal, it is difficult to estimate the cost of providing service at speeds of 25/3 to all residents of Wisconsin. However, PSC staff estimate that the total cost could be perhaps \$700 million to \$1.4 billion, the state share of which could be perhaps \$200 million to \$700 million. It should be noted this estimate reflects only the capital costs of broadband expansion, and does not include ongoing operational or maintenance costs. The wide range of the estimate reflects uncertainty and assumptions regarding a number of issues, including: (a) reliability of mapping data and estimates of access to broadband service; (b) increasing costs of expanding broadband service as overall access increases; and (c) availability and timing of federal funding provided for broadband expansion. As discussed previously, FCC mapping data overstates availability of broadband, but it is difficult to determine by how much. Additionally, as the broadband expansion grant program does not have a set matching requirement, it is expected that cost-share offers from project sponsors will decline as only the highest-cost projects remain to be built, requiring larger state incentives over time.

Federal Funding for Broadband

6. Federal funding provided for broadband has been derived from a multitude of sources and programs. PSC has identified the following major broadband funding initiatives and the funding allocation received to support projects in Wisconsin:

- **Connect America Fund (CAF) Phase II.** \$572.6 million is awarded from 2014 to 2021 to provide service of 10/1 to approximately 230,000 locations. Through 2019, \$455.3 million has been disbursed. As projects support service of 10/1, these locations would not be considered served by broadband service under Wisconsin state law.

- **Connect America Fund Phase II Auction.** \$4.7 million is awarded from 2019 to 2025 to provide service in extremely high-cost areas not supported by initial CAF Phase II funding. Funding

will support primarily satellite service of 25/3 to approximately 7,800 locations. Through 2019, no funding has been disbursed. As service is provided via satellite and not from a fixed wireless transmission point or a wired connection, these locations would not be considered served under Wisconsin state law.

- **Alternative Connect America Cost Model (ACAM).** \$323.9 million is awarded from 2014 to 2026 to provide service of primarily 25/3 to approximately 54,000 locations in Wisconsin. Through 2019, \$187.2 million has been disbursed.

- **Alternative Connect America Cost Model II.** \$163.1 million is awarded from 2018 to 2028 to provide service of 25/3 or 1000/500 to approximately 21,000 locations. Through 2019, \$7.0 million has been disbursed.

- **Rural Digital Opportunity Fund (RDOF).** \$373.7 million is awarded from 2021 to 2031 to provide service of primarily 1000/500 to approximately 240,000 locations. While winning bidders under the RDOF auction process have been determined, a final allocation of funding is still pending. Further, an additional \$11.2 billion in funding is expected to be awarded in a second phase of RDOF allocations.

- **U.S. Department of Agriculture (USDA) Broadband ReConnect Program.** \$3.1 million in grants and \$10.2 million in loans is awarded from 2020 to 2025 to provide service of 1000/1000.

TABLE 3

Major Federal Broadband Funding Allocations in Wisconsin

<u>Program</u>	<u>Speed/Type</u>	<u>Allocated</u>	<u>Disbursed through 2019</u>
CAF II	10/1 Mbps	\$572,632,176	\$455,320,179
CAF II Auction	25/3 Mbps, mostly satellite	4,709,504	0
ACAM	Mostly 25/3 Mbps	323,942,390	187,215,154
ACAM II	25/3 Mbps or 1000/500 Mbps	163,137,870	7,042,648
RDOF*	Mostly 1000/500 Mbps	373,715,051	0
USDA Reconnect [†]	1000/1000 Mbps	<u>13,312,922</u>	<u>0</u>
Total		\$1,451,449,913	\$649,577,981

*Anticipated awards, not yet approved by FCC.

[†]Includes \$10.2 million in loans.

7. Table 3 summarizes allocations under these programs. In total, these programs have awarded \$1.45 billion in federal funding for broadband in Wisconsin, \$649.6 million of which has been disbursed through 2019. Previously listed federal programs should not be considered a comprehensive listing of all federal funding awarded to support broadband expansion in Wisconsin, but do represent the vast majority of funding made available.

8. PSC reports that in previous grant rounds federal funding has not regularly been a component of proposals seeking funding under the state broadband expansion grant program. In instances in which federal funding is a component, state funding has usually been provided to accelerate the buildout of broadband, to improve the quality of service being built, or to allow a provider to build out its infrastructure to reach areas eligible to receive federal support. PSC also notes there have been instances in which two providers may build in the same area, one with CAF II funding that results in service of 10/1, the other with state funding and resulting service of 25/3 or faster.

9. However, under the 2020-21 grant cycle, PSC staff identified significant overlap with RDOF project award areas and broadband expansion grant project proposals. Staff organized applications into three categories: (a) little or no overlap with RDOF recipient locations; (b) partial overlap with RDOF allocations of up to 2/3 of proposed project area; and (c) substantial overlap with RDOF allocations of more than 2/3 of project proposed project area. Based on these categories, 30 applications had little or no overlap, 67 had partial overlap, and 27 had substantial overlap. PSC staff expressed concern that if projects applying for state funding located in RDOF award areas were excluded from consideration, the Commission would have been unable to fully allocate state funding provided for broadband expansion grants. Recipients under the 2020-21 grant cycle included 10 projects with little or no overlap with RDOF award areas, 31 with partial overlap, and 17 with substantial overlap.

10. It should be noted that under RDOF awards, recipients are required to build out service to a certain number of locations in the designated area, but are not obligated to build service to specific locations or communities, as required to be identified under proposals seeking state broadband expansion grants. Thus, while federal funding allocations may overlap with state project awards, state projects could be considered more tailored allocations that take into account individual project circumstances. Further, state funding in federal project areas could still result in accelerated buildout of broadband service or increase the number of providers in an area to induce competition.

A. State Funding for Broadband Expansion Grants [LFB Budget Summary, Page 500, #1]

11. Table 4 shows broadband expansion grant funding by year and fund source. Funding for broadband expansion grants has been provided from several different sources: (a) transfers from the federal e-rate program administered by the Department of Administration (DOA); (b) universal service fund (USF) SEG appropriations and transfers; (c) federal funds allocated by the Governor under the Coronavirus Aid, Relief, and Economic Security (CARES) Act; and (d) a one-time transfer of DOA information technology and communications services PR. The following subsections describe the primary sources used to date and possible sources for future grants.

TABLE 4**State Broadband Expansion Grant Funding**

<u>Year</u>	<u>PR</u> ^a	<u>USF</u> <u>SEG</u>	<u>E-Rate</u> <u>FED</u>	<u>CRF</u> <u>FED</u>	<u>Total</u>
2013-14	\$4,300,000				\$4,300,000
2014-15					0
2015-16	-3,347,400	\$6,000,000 ^b			2,652,600
2016-17					0
2017-18			\$11,000,000		11,000,000
2018-19		2,242,600 ^c			2,242,600
2019-20		3,075,700 ^c	22,000,000		25,075,700
2020-21	_____	<u>3,392,500^c</u>	<u>22,000,000</u>	<u>\$5,378,500</u>	<u>30,771,000</u>
Total	\$952,600	\$14,710,800	\$55,000,000	\$5,378,500	\$76,041,900

^a From the Department of Administration's appropriation for information technology and communications services to nonstate entities. Remaining amounts were transferred to the general fund under 2015 Wisconsin Act 55.

^b From the unencumbered balance of the USF.

^c Sweeps of unexpended amounts from other USF program appropriations.

Universal Service Funding

12. PSC administers the universal service fund to ensure that all state residents receive essential telecommunications services. In addition to providing essential telecommunications services, the USF also funds aids to the state's public library systems. Base funding for library system aid is \$16.0 million USF SEG each year. Funding for USF programs is derived from PSC assessments on companies providing retail intrastate voice telecommunications services. Providers pay assessments monthly based on an assessment rate that the PSC adjusts annually. Funding amounts for USF programs other than the broadband expansion grant program are determined by appropriations determined by the Legislature, and PSC sets assessment rates at levels sufficient to cover these budgeted amounts. Beginning in 2018-19, broadband expansion grant USF funding consists of transfers, or "sweeps," of funds in other USF program appropriations that remain unexpended or unencumbered at the end of the fiscal year. If these swept amounts do not total \$2 million, PSC is authorized to assess contributing telecommunications providers the difference.

13. Historically, universal service funding has been provided to ensure access to "essential telecommunications services." Initial universal service fund programs under 1993 Wisconsin Act 496, the authorizing legislation of the state universal service fund, were generally targeted at ensuring affordable access to telephone service for those of low income, in underserved areas, or with disabilities. The federal universal service fund was later established under the 1996 Telecommunications Act and similarly provided support for affordable access to telephone service

14. As telephone service has become more affordable and accessible, state universal service programs have begun to support internet access, beginning in 1997 with funding in K-12 settings under the TEACH program and higher education settings under the Badgernet system. In 2007, the

federal universal service fund similarly began expanding its use towards internet service technologies, resulting in the federal broadband funding allocations under CAF, ACAM, and RDOF described previously. Unlike federal broadband programs, broadband expansion grants have generally been supported by non-USF sources. In instances where state USF funding has been provided for broadband expansion grants, funding has represented allocations of unused assessment revenues, and has not constituted a direct state assessment on telecommunications service customers.

15. Due to the nature of telecommunications infrastructure, densely populated areas tend to have substantially lower costs of telecommunications service. In order to ensure affordable access in high-cost areas, universal services fees capture a portion of savings associated with cost-efficient service provision in high-density areas to offset increased costs for service in high-cost areas. As telecommunications technologies continue to evolve, the economic, health, social, and educational outcomes of Wisconsinites have become increasingly dependent on access to affordable internet service. Some have argued that the influences of technology on modern life have caused high-speed broadband internet service to be as essential in 2021 as telephone service was when the state and federal universal service funds were created in the 1990s. Consistent with this rationale, the federal universal service fund supports the vast majority of funding provided under federal broadband programs described previously, which are paid for in part by Wisconsin customers of telecommunications providers offering interstate services.

16. Given the evolution of the nature of essential telecommunications services over time and the customary use of universal service funding to offset higher telecommunications service costs in underserved areas, the Committee could consider supporting broadband expansion grant funding with universal service fund SEG [Alternative A3b]. USF assessment rates are set at a level sufficient to support amounts appropriated by the Legislature for USF programs. The most recent rate adjustment occurred in October, 2020, and set an assessment rate of roughly 4.1% of intrastate operating revenues. Universal service fees are paid on revenues associated with intrastate retail voice service, including landline and cellular service, but not including non-voice service such as text messaging or other data charges. Given the evolving nature of modern telecommunications services, this base of assessable revenue typically represents a small portion of bills for cellular service, and USF fees may represent less than 1% for most cellular telephone customers. During 2020-21, an assessment rate of approximately 6.3% would have been necessary to support current USF programs and the 2019 Wisconsin Act 9 allocation of \$22 million annually for broadband expansion grants.

Federal Funds

17. The federal e-rate program provides funding from the federal USF to reimburse the state for a percentage of funds used to support telecommunications availability in schools and libraries, provided primarily through the state's Technology for Educational Achievement (TEACH) program. As Wisconsin has received federal reimbursement for state USF funding dedicated to e-rate reimbursement-eligible expenditures under TEACH, funding has accumulated in the federal e-rate aid appropriation. These accumulated funds have been transferred to the broadband expansion grant program, with \$11 million in 2017-18 under the 2017-19 biennial budget, and \$22 million each year under the 2019-21 biennial budget. Due to transfers in prior years, it is estimated no additional funding will be available from the e-rate aid appropriation during the 2021-23 biennium.

18. Wisconsin is expected to receive approximately \$2.5 billion in direct payments under the American Rescue Plan Act of 2021 (ARPA). Among other eligible costs, ARPA specifies that funding may be used "to make necessary investments in water, sewer, and broadband infrastructure." Funding may support costs incurred before December 31, 2024.

19. On May 10, 2021, the U.S. Department of Treasury released guidance pertaining to use of ARPA funding for broadband expansion projects. That guidance specified that funding may only support: (a) construction of broadband infrastructure in areas currently lacking access to 25/3 service; and (b) projects that provide service of 100/100, or 100/20 in limited circumstances if it is not currently feasible to provide symmetrical service. Additionally, while not required, Treasury encourages allocation of funding: (a) in a manner that prioritizes last-mile connections; (b) to support broadband networks owned, operated, or affiliated with local governments, nonprofits, or cooperatives; (c) to projects that integrate affordability options into their design; and (d) to areas not already planned to receive service of at least 100/20 by December 31, 2024, through existing funding allocations or agreements.

20. The requirement for service of at least 100/100 represents a higher standard than current practice in provision of state broadband expansion grants. It is possible that a requirement of 100/100 service could limit applications for broadband expansion grants in certain higher cost or more technologically difficult-to-serve areas. At the same time, larger funding allocations made available under ARPA could offset any increased costs or challenges associated with provision of faster service to meet the 100/100 service requirement. Further, the most recent federal broadband grant allocation under the RDOF generally supports construction of service with speeds of at least 1000/500, suggesting such a requirement is feasible. Thus, it is unclear the extent to which a 100/100 service requirement might limit broadband expansion in certain areas. If the Committee were concerned about the impact of a 100/100 service requirement, it could consider providing GPR for broadband expansion grants, which would not be subject to such a requirement.

21. 2021 Assembly Bill 239/Senate Bill 278, as passed by the Legislature, directed the Governor to allocate \$500,000,000 of ARPA funding for broadband expansion grants. The bill would have required the Commission to allocate \$125,000,000 each calendar year from 2021 through 2024 for broadband expansion grants, and to report to the Joint Committee on Finance on its allocation of ARPA funding. On April 22, 2021, the Governor vetoed the bill. In March, 2021, the Governor indicated that "a significant portion" of \$200 million in ARPA funds would be allocated to expanding broadband access. The Governor has not yet announced specific allocations of funding to be made to broadband access with ARPA funding.

22. As described previously, federal broadband expansion grant funding has represented a significant component of broadband service construction in recent years. In certain instances, federal funding may increasingly overlap with proposed state broadband expansion grant projects. If the Committee were concerned about the overlap of RDOF or other future federal funding allocations and resulting duplication of government funding for broadband projects, it could prohibit such areas from receiving state funding [Alternative A5] or require the Commission to give priority to projects in areas not awarded federal broadband funding [Alternative A6].

General Purpose Revenues

23. To date, GPR has never been appropriated for broadband expansion grants. 2021 Assembly Bill 68/Senate Bill 111 would provide \$74,793,100 GPR in 2021-22 and \$72,941,000 GPR in 2022-23 for broadband expansion grants. It could be argued that general fund revenues are an appropriate source of grant funding because broadband expansion has direct benefits for the significant portion of Wisconsinites that lack broadband access, as well as indirect benefits to the economy and state as a whole. Further, given the estimated capital costs needed to reach universal broadband access statewide, other state funding sources may not be sufficient to meet the policy goals of broadband expansion. The Committee could consider providing GPR for broadband expansion grants [Alternatives A1, A2, or A3a].

24. During the Commission's April 7, 2021, agency briefing before the Joint Committee on Finance, the PSC Chairperson argued that federal funding related to broadband should not serve as a replacement for state broadband funding, but rather as a supplement, expressing concern that there could be delays in receipt of federal funding or uncertainty related to allowable use of funding. If the Committee were concerned about uncertainty in timing and availability of federal funding, it could consider allocating GPR or SEG in its supplemental appropriation for broadband expansion grants [Alternative A4]. The period for application, comment, consideration, and award of broadband expansion grants typically spans several months. For example, during the 2020-21 grant cycle, applications were released on September 1, 2020, and due on December 1, 2020; and awards were made on March 18, 2021. If at any time during the 2021-22 grant cycle it came about that federal funding were delayed or no longer available, PSC could submit a request to the Committee for release of funding held in the supplemental appropriation to ensure timely access to funding for broadband expansion.

Funding Alternatives

25. As described previously, PSC staff estimate the cost of providing 25/3 service to all premises in Wisconsin could total perhaps \$700 million to \$1.4 billion, with an estimated state share of \$200 million to \$700 million. However, given uncertainty related to broadband service data, ongoing provision of grants under federal broadband expansion programs, evolving technology, and increasing costs to reach the last unserved areas, it is difficult to determine the actual cost of universal 25/3 service. Thus, provision of additional funding for broadband expansion grants could be considered an allocation of resources towards improving broadband access in general, and the extent of improved access would be commensurate with the amount of funding provided.

26. The Committee could consider providing \$125,000,000 GPR each year, equal to the federal funding amount proposed under AB 239/SB 278 [Alternative A1]. Total budgeted funding for the 2021-23 biennium would be \$254,000,000, including USF SEG sweep amounts.

27. The Committee could consider the proposal under the biennial budget bill to provide \$74,793,100 GPR in 2021-22 and \$72,941,000 GPR in 2022-23 [Alternative A2]. Combined with the estimated transfer of unencumbered amounts in other USF appropriations of \$2,000,000 USF SEG each year, this would result in total budgeted funding of \$151,734,100 during the 2021-23 biennium.

28. The Committee could also consider providing the same amount of funding for broadband as during the 2019-21 biennium. Appropriation of \$22,000,000 each year for broadband expansion grants, when combined with the estimated transfer of unencumbered amounts in other USF appropriations of \$2,000,000 USF SEG each year, would result in total budgeted funding of \$48,000,000 during the 2021-23 biennium. Funding could be derived from GPR [Alternative A3a] or USF SEG [Alternative A3b].

29. If the Committee were concerned about the timing or eligible use of ARPA funding it could allocate the selected funding level to the Committee's supplemental appropriation, which the Committee could allocate at PSC's request if federal funding were not available in a timely manner [Alternative A4].

30. The Governor has indicated an intent to allocate perhaps \$200,000,000 for broadband expansion during the 2021-23 biennium from ARPA funding. Given the continuing allocation of federal funding for broadband expansion in Wisconsin, the Committee could take no action, and broadband grants would be estimated at \$2 million USF SEG each year, reflecting sweeps of unexpended amounts under current law [Alternative A7].

B. Broadband Mapping [LFB Budget Summary, Page 502, #6]

31. AB 68/SB 111 would require all internet service providers in Wisconsin to report to PSC by April 1 each year each premises they serve, the average minimum download and upload speeds at which they provide service, and their service territory. PSC argues that premises-level broadband service data is essential to determining eligibility and need as broadband service access continues to increase. Further, premises-level data would allow more targeted, and thus cost-effective, allocations of grant funding by avoiding over-building areas that already have access to sufficient service.

32. As the FCC is currently implementing efforts to collect and report premises-level service data under the Broadband DATA Act, it could be considered duplicative and administratively burdensome to implement a similar requirement at the state level, and the Committee could take no action [Alternative B3]. At the same time, PSC notes FCC data reporting is often delayed up to 18 months. For example, the most recent broadband deployment report by FCC, published on January 19, 2021, reflects broadband service data through December 31, 2019. It is possible reporting directly to PSC could decrease delays in data reporting and the Committee could consider imposing premises-level reporting requirements on broadband service providers [Alternative B1]. The Committee could also consider requiring service providers to provide PSC the same premises-level data they report to FCC within 30 days of submittal to FCC. This could expedite PSC analysis of broadband data and improve broadband grant provision, while limiting the potential administrative burden and costs associated with a separate state-level reporting requirement [Alternative B2].

33. In addition to the premises-level data reporting requirement, AB 68/SB 111 would provide \$76,100 GPR in 2021-22 and \$97,100 GPR in 2022-23 with 1.0 GPR position to implement the provision. A separate budget paper entitled "State Broadband Office Staff" provides information and alternatives related to that proposed position.

C. Broadband Planning Grants and Technical Assistance [LFB Budget Summary, Page 501, #5]

34. Applying for broadband expansion grants requires expertise related to state program requirements, technical aspects of broadband technology and service provision, engineering and design of broadband infrastructure, budgeting and cost estimation, outreach activities, and broadband mapping. As part of COVID-19 recovery efforts, the Wisconsin Economic Development Corporation (WEDC), in consultation with PSC, offered a Broadband Connectors Pilot, which sought applications from school districts, local governments, and tribal governments interested in technical assistance related to planning and applying for broadband grants. WEDC received 96 applications, and the pilot supported technical assistance to six bodies, including the Owen-Withee School District, the Town of Cross (Buffalo County), Fond du Lac County, St. Croix County, the Ho-Chunk Nation, and the Lac du Flambeau Band of Lake Superior Chippewa. Pilot project activities were conducted from October through December of 2020, coinciding with the application period for the 2020-21 broadband expansion grant cycle. Notably, several applications were received for projects in Fond du Lac and St. Croix counties, one of which was awarded funding.

35. AB 68/SB 111 would provide PSC \$300,000 GPR each year to provide grants to municipalities, school districts, tribal governments, regional planning commissions, nonprofit organizations, and local economic development organizations to conduct planning activities related to broadband. Grants would be up to \$50,000 per recipient and would support feasibility engineering, adoption planning, and digital inclusion activities. Further, the bill would also authorize PSC to provide training, technical assistance, and information related to broadband engineering and deployment. While particular allocation decisions would be subject to Commission determination, PSC staff suggest planning grants could be targeted at communities with low access rates and high service costs, substantial community engagement, or populations that are disadvantaged or need assistance to use the internet.

36. PSC contends that smaller municipalities or other local organizations may lack the staff capacity and expertise for the planning and community engagement necessary for broadband development. As more projects are built, it may be increasingly difficult to recruit applications from high-cost and remote areas of the state. It is possible technical assistance and planning grants to organizations in unserved and underserved areas could increase the quality and quantity of projects seeking broadband expansion grant funding, resulting in the most cost-effective use of broadband funding. Given the potential benefits of technical assistance and broadband planning to pursuit of universal broadband access, the Committee could consider creating a broadband planning grant program and providing GPR for the program [Alternatives C1a and C1b]. The Committee could also consider providing USF SEG for broadband planning grants [Alternative C2].

37. Broadband planning grants are intended as an additional form of assistance in pursuit of universal broadband service. Given planning grants and expansion grants both seek improve broadband service, the Committee could consider allowing PSC to provide technical assistance to interested applicants, and authorize the provision of broadband planning grants from the same appropriation as broadband expansion grants [Alternatives under C3]. This would allow planning grants to be funded from the broadband expansion grant allocation selected under previous

alternatives, and give the Commission flexibility to allocate broadband funding in the manner most efficient for achieving universal broadband. If the Committee were to provide funding from the existing broadband expansion grant allocation, it could consider capping the total annual grant awards for broadband planning grants at \$600,000 [Alternative C3a] or \$300,000 [Alternative C3b] each year. The Committee could also consider specifying no limit, which would leave annual allocations for broadband planning grants to PSC's discretion [Alternative C3c].

D. Broadband Line Extension Grants [LFB Budget Summary, Page 501, #4]

38. Under current practice, broadband expansion grants are typically provided to internet service providers and partnering municipalities to build out broadband access to a number of premises in a new service area. However, existing infrastructure in a service area, such as a neighborhood or along a highway, may be insufficient to reach all premises within or adjacent to that infrastructure. In these instances, the cost to an individual premises of placing optical fiber or other internet service lines from the premises to the property line, or a short distance up a residential road to a right of way, may be several thousand dollars. Thus, such line extension costs may be prohibitively expensive and prevent a premises otherwise within an area served with broadband from accessing it.

39. While an individual premises may be eligible to apply for a broadband expansion grant, the Commission has rated such projects as a low priority and none have received funding. Due to limitations in broadband mapping data, PSC staff are not able to provide an estimate of such premises generally within served areas but lacking access to broadband service. However, PSC staff report anecdotal evidence suggests there is demand for such funding, as PSC staff receive approximately three calls per month related to line extension issues. In one instance, a resident less than a mile from existing optical fiber service coordinated with four neighboring homeowners and one business to apply for a broadband expansion grant during the 2020-21 grant cycle, although that project did not receive funding.

40. AB 68/SB 111 would provide \$1,750,000 GPR in 2021-22 and \$3,500,000 GPR in 2022-23 to create a broadband line extension grant program. The program would provide grants of up to \$4,000 to unserved residential properties to cover costs of connecting to broadband service. The bill would require PSC to establish criteria for awarding grants, and specify that the Commission give priority to properties of primary residence. While particular criteria would be subject to Commission determination, PSC staff suggest such criteria could include matching requirements, prioritization of certain difficult-to-serve areas, or limitations based on household income or property value.

41. As broadband expansion grants support more projects and reach more locations, achieving universal broadband service may increasingly require individual grants to address pockets of unserved premises within otherwise served areas. Creation of a broadband line extension grant program could provide clear guidelines to such unserved premises and a consistent process for the Commission to consider such projects. The Committee could create a broadband line extension program funded from GPR [Alternatives D1a or D1b], or USF SEG [Alternative D2]. As written, the broadband line extension program would only support grants to residences seeking line extensions. Current broadband expansion grants support broadband infrastructure deployment to both residences and businesses. The Committee could consider specifying both residences and businesses be eligible for line extension grants [Alternative D4].

42. As broadband line extension seeks to address the same goal of universal broadband service as broadband expansion grants, the Committee could also consider creating the broadband line extension program and funding it from the same appropriation as broadband expansion grants, [Alternatives under D3]. Further, the Committee could consider capping the total annual grant awards for broadband line extension grants at \$3,500,000 [Alternative D3a] or \$1,000,000 [Alternative D3b]. The Committee could also take no action [Alternative D5]. Line extension projects could still apply for broadband expansion grants, although it is expected these proposals would be of low priority and unlikely to receive funding.

43. To support policy development and implementation of the broadband line extension program, AB 68/SB 111 would provide \$71,900 GPR in 2021-22 and \$91,500 GPR in 2022-23 with 1.0 GPR position. A separate budget paper entitled "State Broadband Office Staff" provides information and alternatives related to that proposed position.

ALTERNATIVES

A. State Funding for Broadband Expansion Grants [Page 500, #1]

1. Create an annual GPR appropriation and provide \$125,000,000 GPR each year of the 2021-23 biennium for broadband expansion grants. Additionally, reestimate year-end transfers of unencumbered amounts in universal service fund appropriations at \$2,000,000 SEG each year for broadband expansion grants.

ALT A1	Change to Base
GPR	\$250,000,000
SEG	<u>4,000,000</u>
Total	\$254,000,000

2. Create an annual GPR appropriation and provide \$74,793,100 GPR in 2021-22 and \$72,941,000 GPR in 2022-23 for broadband expansion grants. Additionally, reestimate year-end transfers of unencumbered amounts in universal service fund appropriations at \$2,000,000 SEG each year for broadband expansion grants.

ALT A2	Change to Base
GPR	\$147,734,100
SEG	<u>4,000,000</u>
Total	\$151,734,100

3. Provide \$22,000,000 each year of the 2021-23 biennium for broadband expansion grants. Additionally, reestimate year-end transfers of unencumbered amounts in universal service fund appropriations at \$2,000,000 SEG each year for broadband expansion grants. Specify funding be provided from:

- a. GPR, and create an annual appropriation for this purpose.

ALT A3a	Change to Base
GPR	\$44,000,000
SEG	<u>4,000,000</u>
Total	\$48,000,000

- b. Universal service fund SEG.

ALT A3b	Change to Base
SEG	\$48,000,000

4. Specify that funding be provided under the Committee's supplemental appropriation, and direct PSC to request release of broadband expansion grant funding if federal funding for broadband expansion grants were unavailable or delayed. (This alternative may be selected in conjunction with A1, A2, A3a, or A3b.)

5. Prohibit allocation of state broadband expansion grants to areas receiving federal funding under the Rural Digital Opportunity Fund or other federal broadband infrastructure programs.

6. Require the Commission to prioritize allocation of broadband expansion grants to projects in areas not awarded federal funding for broadband expansion.

7. Take no further action on broadband expansion grants, except to reestimate year-end transfers of unencumbered amounts in universal service fund appropriations at \$2,000,000 SEG each year for broadband expansion grants.

ALT A7	Change to Base
SEG	\$4,000,000

B. Broadband Mapping [Page 502, #6]

1. Require all internet service providers in Wisconsin to report to PSC by April 1 each year each premises they provide service, the average minimum download and upload speeds at which they provide service, and their service territory.

2. Require all internet service providers in Wisconsin to report to PSC the same premises-level broadband service data they provide to the Federal Communications Commission within 30 days of submitting that data to FCC.

3. Take no action. (FCC would still receive and compile premises-level service data for PSC use.)

C. Broadband Planning Grants and Technical Assistance [Page 501, #5]

1. Create a broadband planning grant program and provide PSC \$300,000 GPR each year to provide grants to municipalities, school districts, tribal governments, regional planning commissions, nonprofit organizations, and local economic development organizations to conduct planning activities related to broadband. Limit grants to \$50,000 per recipient. Specify grants support feasibility engineering, adoption planning, and digital inclusion activities, and allow PSC to provide technical assistance, training, and information related to broadband engineering and deployment. Provide funding under one of:

- a. The GPR appropriation created above for broadband grants; or

ALT C1a	Change to Base
GPR	\$600,000

- b. A new annual GPR appropriation for this purpose.

ALT C1b	Change to Base
GPR	\$600,000

2. Create a broadband planning grant program and provide PSC \$300,000 universal service fund SEG each year to provide grants to municipalities, school districts, tribal governments, regional planning commissions, nonprofit organizations, and local economic development organizations to conduct planning activities related to broadband. Limit grants to \$50,000 per recipient. Specify grants support feasibility engineering, adoption planning, and digital inclusion activities, and allow PSC to provide technical assistance, training, and information related to broadband engineering and deployment. Create an annual USF SEG appropriation for provision of broadband planning grants.

ALT C2	Change to Base
SEG	\$600,000

3. Create a broadband planning grant program and allow funding provided for broadband expansion grants to be used to provide to municipalities, school districts, tribal governments, regional planning commissions, nonprofit organizations, and local economic development organizations to conduct planning activities related to broadband. Limit grants to \$50,000 per recipient. Specify grants support feasibility engineering, adoption planning, and digital inclusion activities, and allow PSC to provide technical assistance, training, and information related to broadband engineering and deployment. Specify the following limit on annual broadband planning grant allocations:

- a. \$600,000 each year.

- b. \$300,000 each year.
 - c. Do not limit annual planning grant allocations.
4. Take no action.

D. Broadband Line Extension Grants [Page 501, #4]

1. Create a broadband line extension grant program and provide \$1,750,000 GPR in 2021-22 and \$3,500,000 GPR in 2022-23 to provide grants to underserved residential properties to cover costs of connecting to broadband service. Limit grants to \$4,000 per recipient. Require PSC to establish criteria for awarding grants and specify that the Commission give priority to properties of primary residence. Provide funding under one of:

- a. The GPR appropriation created above for broadband grants; or

ALT D1a	Change to Base
GPR	\$5,250,000

- b. A new annual GPR appropriation for this purpose.

ALT D1b	Change to Base
GPR	\$5,250,000

2. Create a broadband line extension grant program and provide \$1,750,000 universal service fund SEG in 2021-22 and \$3,500,000 USF SEG in 2022-23 to provide grants to underserved residential properties to cover costs of connecting to broadband service. Limit grants to \$4,000 per recipient. Require PSC to establish criteria for awarding grants and specify that the Commission give priority to properties of primary residence. Create an annual USF SEG appropriation for provision of broadband line extension grants.

ALT D2	Change to Base
SEG	\$5,250,000

3. Create a broadband line extension grant program and allow funding provided for broadband expansion grants to be used to provide grants to underserved residential properties to cover costs of connecting to broadband service. Limit grants to \$4,000 per recipient. Require PSC to establish criteria for awarding grants and specify that the Commission give priority to properties of primary residence. Specify the following limit on annual broadband line extension grant allocations:

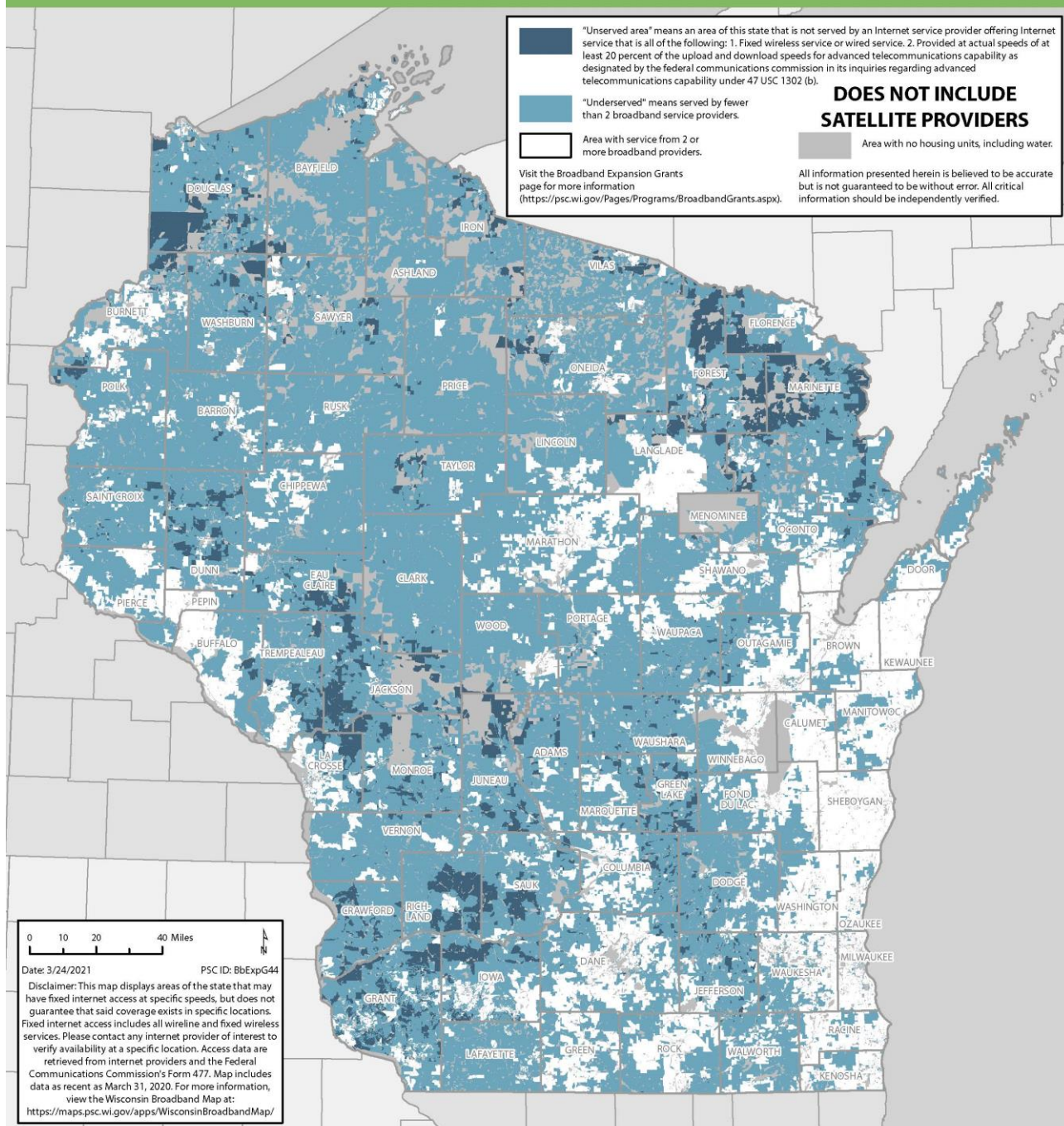
- a. \$3,500,000 each year.
- b. \$1,000,000 each year.

- c. Do not limit annual line extension grant allocations.
- 4. Specify that businesses also be eligible for broadband line extension grants. (This alternative may be selected conjunction with D1, D2, or D3.)
- 5. Take no action.

Prepared by: Rory Tikalsky
Attachment

ATTACHMENT

INTERNET SERVICE AVAILABILITY UNDER CURRENT UNSERVED & UNDERSERVED DEFINITIONS Presented by the Wisconsin Broadband Office



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