



PHIL MURPHY
GOVERNOR

TAHESHA L. WAY
LT. GOVERNOR

State of New Jersey
BOARD OF PUBLIC UTILITIES
44 South Clinton Avenue
Post Office Box 350
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/
(609)777-3300

Christine Guhl-Sadovy
President

Dr. Zenon Christodoulou
Commissioner

Marian Abdou
Commissioner

Michael Bange
Commissioner

NOTICE

IN THE MATTER OF CAPITAL PROJECTS FUND (CPF) BROADBAND INFRASTRUCTURE DEPLOYMENT EQUITY (NJBIDE) PILOT PROGRAM

[Docket No. TO23030137](#)

REQUEST FOR INFORMATION

Staff of the New Jersey Board of Public Utilities (“NJBPU” or “Board”) invites all interested parties and members of the public to provide written responses on the Request for Information (“RFI”) contained in this Notice regarding the New Jersey Capital Projects Fund Broadband Infrastructure Deployment Equity (“NJBIDE”) Pilot Program.

Background and Procedural History

The New Jersey Office of Broadband Connectivity (“OBC”) at the NJBPU was established to help ensure all New Jerseyans have the opportunity to live, work, learn, and compete in a global economy by improving universal access to quality, reliable and affordable broadband.

In March of 2021, the American Rescue Plan Act of 2021, P.L. 117-2, 135 Stat. 233 (“ARPA”) established the Coronavirus State and Local Fiscal Recovery Funds (“SLFRF”) to provide state, local, and Tribal governments with the resources needed to respond to the pandemic and its economic effects and to build a stronger, more equitable economy during the recovery. The United States Treasury launched the Coronavirus Capital Projects Fund (“CPF”), funded by ARPA, which provides \$10 billion for eligible governments to carry out critical capital projects that directly enable work, education, and health monitoring, including remote options, in response to the public health emergency posed by the COVID-19 pandemic. The State of New Jersey was awarded \$194M from the United States Treasury State and Local Fiscal Recovery Fund to carry out critical capital projects improvements in response to the pandemic and its

economic effects.

ARPA specifically provides that SLFRF funds may be used to make necessary investments in capital projects, including broadband infrastructure. The State of New Jersey is poised to allocate \$50 million from the Capital Projects Fund (“CPF”) to the Board and its OBC to create and administer the New Jersey Broadband Infrastructure Deployment Equity program (“NJBIDE”) to combat the digital divide and address critical needs and inequities related to work, education, and health monitoring, including those exacerbated by the COVID-19 pandemic. More details surrounding the CPF can be found on the Department of Treasury’s Capital Projects Fund¹ Website.

NJBIDE will be launched with a focus on the deployment of broadband infrastructure to bring access to high-quality internet service to New Jersey homes, businesses, and communities in areas of critical need that are not currently served by a wireline connection. The program goal is to provide affordable universal access to reliable broadband services with a minimum of 100/100 megabits per second (“mbps”). The wide-spread prevalence of remote learning and work, telehealth services, online business, e-government, and day-to-day quality of life implications exemplify the compelling need for NJBIDE in those areas which lack high quality internet service. Aligned with the U.S. Treasury Coronavirus CPF guidance, fiber-optic infrastructure will be the preferred solution as it provides a future-proof capital investment for bandwidth scalability as technology evolves with future bandwidth requirements.

The OBC received over \$50 million for broadband infrastructure projects in New Jersey to support the growing shift toward long-term remote work, distance learning, and online health services. The transition toward an increasingly digital future must include all residents and New Jersey is focused on policies and programs to leverage this funding for universal broadband access. This information gathering process will help OBC in its administration of these important programs, making sure that programs are equitable and promote effective competition to provide customers with an array of service options, as the state works toward its goal of universal access to one gigabit per second (“gbps”) download speeds and 100 mbps upload speeds, or one gigabit down and 100 up.

An additional \$263 million is available to New Jersey through the Broadband Equity, Access, and Deployment (“BEAD”) Program, authorized pursuant to Section 60102 of the Infrastructure Investment and Jobs Act, Public Law 117-58, 135 Stat. 429. (“IIAJ”), to fund broadband planning, deployment, mapping, equity, and adoption activities.

The NJBPU and OBC are focused on developing equitable policies and programs to bring the economic and social benefits of broadband access to the residents and businesses of New Jersey. This RFI will help identify potential barriers to access and adoption to ensure that everyone living and working in the state has affordable, reliable, and resilient broadband service. Important elements of the program will include:

- Progress toward the state-wide goal of universal access to broadband at speeds of 1Gbps/100Mbps (1 Gbps symmetrical for community anchor institutions) to enable participation in modern social and economic life.
- Investment in fiber-optic technology and last mile infrastructure to promote resilient and reliable networks.

¹ <https://home.treasury.gov/system/files/136/Capital-Projects-Fund-Guidance-States-Territories-and-Freely-Associated-States.pdf>

- Development of open access infrastructure to promote competition and affordable service plan options.

RFI QUESTIONS

In submitting responses to this RFI, respondents are encouraged to answer any questions they consider relevant and to the best of their ability. Respondents do not need to answer all questions for their response to be considered. Answers are understood to be preliminary and non-binding. Respondents are free to go beyond the scope of the questions and/or structure responses as necessary to increase clarity and efficiency of responses. Respondents should also feel free to submit additional or alternate information as deemed necessary and appropriate.

A. Program Structure

Participation in ARPA programs open eligibility to a wide range of potential applicants, including local governments, cooperatives, nonprofit organizations, public-private partnerships (“P3s”), private companies, public or private utilities, public utility districts, and other non-traditional broadband providers who are interested in meeting broadband needs. It is anticipated that proposals of various forms, including those based on P3s or other joint ownership or owner-operator models, may qualify for funding available through the Programs.

1. In order to address the broadband needs of the higher cost, lower return areas of the State, and to stimulate competition and innovation in the preparation of applications under these Programs, what models of partnerships should be considered and/or prioritized, and in what cases?
2. What are the risks and benefits of such partnerships, joint-ownership, or owner-operator models? How should the risks be mitigated, and benefits be maximized, and how should they be quantified?
3. Where there may be opportunities for partnerships for coordinated deployment with electric or municipal infrastructure, how should the costs be fairly allocated?
4. From a purely cost-based perspective, incumbent broadband providers may have an advantage in developing competitive bids due to their embedded infrastructure. What factors other than cost should be prioritized to maximize competition and public benefits?
5. How should proposals from non-traditional providers be compared to proposals from incumbent broadband providers?
6. How might the OBC structure the Programs to increase competition amongst providers with the goal of incentivizing affordable and reliable service plans?
7. Please describe your suggested approach for ensuring a reliable supply of skilled workers, creating jobs with competitive wages, and for recruiting and hiring women and other historically marginalized groups for the job opportunities created through the Programs.

8. How might OBC avoid an excessive number of grants, which could impose an undue administrative burden (i.e., should there be a requirement to cover a minimum territory, such as a census block, municipality, or franchise area, or a minimum number of customers)? Please comment on such a requirement and the minimum geographic area that should be covered by each bid.

i. Timeline

ARPA's CPF infrastructure program projects must be completed and operational by December 31, 2026. OBC will execute its Programs as expeditiously as possible to enable potential participants to meet federal timelines.

1. Please describe any specific geographic considerations and/or barriers that you believe might impair the Program's success in meeting its goals in your region of the State, and your proposed solutions for addressing those regional considerations/barriers.

2. Some stakeholders have commented that broadband infrastructure construction has been delayed or impacted due to "make ready" issues, pole attachment complications, and other core infrastructure issues, such as access to rights-of-way and trenching. Please share your concerns about any such issues that could delay or adversely impact network construction, and any potential solutions that could be leveraged through these Programs.

3. Are there any regulatory requirements that you believe would pose challenges for achieving the goals of the Programs?

4. Should the State prioritize shovel-ready projects, or projects where a potential program applicant has ready data to support the existence of unserved or underserved areas? Why or why not?

5. If the State prioritizes shovel-ready or data-ready projects, should it also reserve tranches of funding for projects that are more complex, or that require more planning and data gathering? If so, how should those tranches be designed?

ii. Matching Contributions

The ARPA's CPF program does not require a matching contribution, however, in order to successfully operate the program, the applicant will need to provide additional resources.

1. Should the State prioritize projects where the applicant is contributing a percentage of cost, even for the ARPA program? If so, what exceptions should apply?

2. Propose how the State should define "high-cost area" and any supporting data you may have.

3. The match requirement for the IIJA's BEAD program does not need to be fully met by the subgrantee. Under what conditions should the State consider contributing a portion of ARPA's CPF monies as a component of matching funds for IIJA's BEAD program?

4. Should the State consider “in-kind” or other forms of matching contributions? Why or why not, and what forms might make sense in meeting program goals?

B. Program Strategy

i. Broadband Technologies and Speed

The ARPA’s CPF program requires infrastructure projects to deliver broadband Internet service with reliable speeds of at least 100 mbps symmetric unless impracticable. CPF federal program encourages prioritizing investment in fiber-optic infrastructure. Proposals that use end-to-end fiber-optic architecture will be considered priority projects.

1. What is the best technology to address these requirements and priorities, and why?

2. Given the federal programs’ preference for fiber-optic infrastructure, the State will prioritize projects that deliver last mile service via fiber. Should any exceptions, other than those noted in federal program guidance², be made? If so, under what conditions?

3. The ARPA’s CPF program has no requirement for a specific latency measurement, but IJJA’s BEAD program and the National Telecommunications and Information Administration (“NTIA”) recommends latency measurement be at or below 100 milliseconds round-trip time. Should the State adopt a similar requirement for the Broadband Infrastructure Program? Why or why not?

4. What consumer and commercial applications of broadband do you anticipate will drive the need for increased speeds over the next five years? In five years, what download, and upload speeds do you anticipate will be required by consumers? By businesses? Please explain your rationale.

5. The State’s current goal is universal access to 100 mbps symmetrical speeds. Given your answer to the question above, will the State’s current speed goal provide adequate service for residents and businesses in New Jersey to participate meaningfully in a competitive economy, fully engage in civic life, and access health services, job opportunities, and educational resources? If not, what speed goal should the State consider and why?

6. Please provide any other comments and/or recommendations relative to the technology to be used by participants in the Program.

ii. Open Access

The ARPA’s CPF program encourages the State to adopt selection criteria promoting subgrantees’ provision of open access wholesale last-mile broadband service for the life of the subsidized networks, on fair, equal, and neutral terms to all potential retail providers. This approach has proven successful in expanding access and increasing competition in other areas of the country. Although not a requirement under ARPA’s CPF program, the IJJA’s BEAD program requires that any funded network deployment project that involves laying fiberoptic cables or conduit underground or along a roadway must include interspersed conduit access point at regular and short intervals for

² <https://home.treasury.gov/system/files/136/Capital-Projects-Fund-Guidance-States-Territories-and-Freely-Associated-States.pdf>

interconnection by unaffiliated entities.

1. Which open access models would you suggest and why? What design elements are important to successful open access implementation?
2. Given the above speed and future-proofing parameters, should the State prioritize open access architecture in criteria for all programs, including the Broadband Infrastructure Program under ARPA's CPF program? Why or why not?

iii. Underground Infrastructure

Some stakeholders have expressed that aerial telecommunications infrastructure is susceptible to delays due to attachments or 'make ready' work and is an operational risk due to the potential for storm damage.

1. In what contexts should the State prioritize undergrounding infrastructure?
2. What are the costs of undergrounding infrastructure versus aerial infrastructure?
3. How could the Programs be coordinated with state or municipal road improvements, or other telecommunications carrier, broadband service provider, or utility trenching events? If coordination did occur, how should costs be allocated?
4. How could the Programs be coordinated with undergrounding efforts by the electric utilities? What regulatory approaches would be necessary to ensure timely construction under ARPA and IIJA requirements? If coordination did occur, how should costs be allocated?

iv. Middle Mile Network Infrastructure

Middle mile infrastructure generally refers to the physical mid-section of the infrastructure required to enable internet connectivity for homes, businesses, and community institutions. Expansion and extension of middle mile infrastructure can reduce the cost of connecting unserved and underserved areas to the backbone of the Internet and improve connection resiliency by preventing single points of network failure.

1. Are there areas of the state that need middle mile infrastructure to add Internet resiliency and reliability?
2. Are there areas of the state where additional middle mile infrastructure would enable the participation of additional last-mile providers or partnerships and ultimately reduce costs to end users, especially in underserved areas? Many states are expanding middle mile networks as a means of ensuring communications to community anchor institutions and facilitating last mile deployments by broadband Internet service providers.
3. What would be the advantages or disadvantages to an investment in and scaling up of a provider(s) open access capabilities for last mile network providers? If it would be advantageous to do so, where and how?
4. Under what conditions would or should last mile operators consider using the State's local incumbent exchange carrier(s) for transport and/or Internet?

v. Program Alignment

The ARPA's CPF program has different and, in some ways, less restrictive award criteria than IJJA, including speed requirements and prioritized areas. As discussed above, the IJJA's BEAD program requires projects to prioritize unserved followed by underserved areas and community anchor institutions, while the ARPA simply requires projects to deliver 100 mbps symmetrical broadband speeds where practicable. The State will need to tailor its broadband programs to maximize the opportunity of both federal programs while aligning to the requirements.

1. Due to the timing of these federal funding sources, the BEAD program's grant application period will likely begin after the CPF-funded Broadband Infrastructure Program begins awarding grants. In order to conserve sufficient CPF funding for locations not covered by the BEAD program, should the State structure the Programs so that proposals for known unserved locations are deferred to the BEAD program? Why or why not? If so, which criteria should it use to make that determination?

2. How might the State equitably balance funding for projects in low-density rural areas with proposals in high-density urban and suburban areas? What other geographic obstacles or disparities (i.e., economic) should the State consider?

3. What type of projects would be most applicable or beneficial under the ARPA's CPF Broadband Infrastructure Program?

4. Comment on or recommend approaches to align and maximize funds from both federal programs.

C. Affordability, Adoption, and Equity

The ARPA's CPF program require recipients to consider affordability to target markets in proposed service areas. The U.S. Treasury's CPF Guidance encourages state broadband offices to require that service include at least one low-cost option offered at speeds that are sufficient for a household with multiple users to simultaneously telework and engage in remote learning. Service providers for a completed project must address a "critical need" of the community it serves and participate in federal programs that provide low-income consumers with subsidies on broadband internet access services.

The ARPA's CPF program requires a plan to ensure that all consumers have access to affordable high-speed internet, in addition to at least one low-cost plan option.

1. Please comment on how the State should determine the threshold of affordability for broadband service under ARPA.

2. Which elements of an affordable program (e.g., service price, speed, device subsidy, content) do you believe are most critical?

3. How would you define "low-cost service broadband option"? How would you propose addressing this requirement?

4. Per CPF guidelines, the State may choose to consider any available data it deems relevant when determining the individuals and communities with a "critical need,"

including federal and/or state collected data, interviews with community members and business owners, and reports from community organizations. What types of data should the state consider when evaluating whether (h) a project will serve a critical need?

5. How should equity be considered in the selection of projects? What criteria should define a project as advancing equity?

6. Communities that lack broadband are also often the most vulnerable to extreme weather and climate events. Because retrofitted and new infrastructure for broadband might be expected to have a lifetime of 20 years or more, how might OBC account not only for current risks but also for how the frequency, severity, and nature of extreme events may plausibly evolve as our climate continues to change over the coming decades?

7. What test method should be applied in funding curb-to-building projects? Should any other metrics be considered?

8. What other approaches do you believe could be successful in connecting all New Jersey residents with access to broadband at affordable costs?

D. Data

The ARPA's CPF program allows for the inclusion of a variety of available data in determining communities to be served by broadband infrastructure projects while the IJA aligns to forthcoming FCC broadband maps to delineate unserved and underserved locations and areas. The ARPA allowable data sets include, but are not limited to:

- Documentation of existing broadband ISP performance
- Federal or State collected broadband data
- User speed results
- Interviews with community members and business owners
- Reports from community organizations

Compliance will be a requirement to grant program participation.

1. Should areas where such data exists be prioritized, or should tranches be reserved for areas that need time or assistance to gather data?

2. For municipal respondents, non-profits, businesses, community organizations, utilities, and other potentially eligible program recipients, or other entities, what data do you have that meets any of the criteria above, and for what specific geographic areas?

3. What type of information would support coordinated broadband deployment planning (e.g., number of attachment points, locations, timing, etc.)?

E. Other

1. Do you have any other general comments and/or recommendations relating to how the State might structure the Programs to best achieve its goals? If so, please elaborate.

2. Are there any other project eligibility or selection criteria that the state should

consider?

3. Please provide any other comments and/or recommendations relevant to the Programs.

Information Requested from Broadband Service Providers and Eligible

Entities Only

Questions in this section are specific to broadband internet service providers and potential eligible Program recipients that would be interested in running a network individually or in partnership with one or more other eligible entities. Please skip this Section if it is not relevant to you or your entity.

1. Please briefly describe your experience, capabilities, and qualifications in the broadband sector, including other networks your organization has designed, built, maintained, or operated.

2. Identify any New Jersey municipalities and/or regions that you represent or in which you conduct, or would conduct, business as a current or potential broadband service provider.

3. Describe the assets and capabilities you have that might lead you to participate in the expansion of broadband access in New Jersey, including, but not limited to, fiber, conduits, towers, poles, and other physical infrastructure.

4. If you are considering participating in the Programs, describe in which program(s) and in what capacity you would consider participating (e.g., as a last mile provider, middle mile provider, or other).

5. For any respondents that are non-incumbent providers, or that may constitute a potential partnership of a non-incumbent with an incumbent, please summarize the business model you would consider proposing, including but not limited to the division of network and operations responsibility and ownership. How would your business plan help to meet the State's goals? What are the State's main areas of risk, and how will you attempt to reduce the risk to the State?

6. Do you foresee any obstacles, such as requirements or processes, to your participation? If so, please explain with the greatest specificity possible.

7. Explain how you would prioritize which areas should be constructed first, and why.

8. Are there specific middle-mile or backhaul gaps that the State should address for which your potential project is especially suited?

9. What middle mile locations/colocation facilities are desirable to connect to in the New York-Newark-Jersey City, NY-NJ-PA Metro region in order to serve the New Jersey broadband market?

10. Describe any specific threats to broadband infrastructure that may be caused by extreme weather and climate events such as (1) sea-level rise, storm surge, and coastal

flooding; (2) increased precipitation and inland flooding; and (3) storm damage to aerial infrastructure. Which technical and regulatory solutions do you recommend and why?

11. Please provide information related to the determination of your target Return-on-Investment (“ROI”) for broadband projects such as those contemplated herein:

- a. What is the primary financial metric by which you assess project buildout acceptability (e.g., IRR, payback period)?
- b. What return threshold would you be seeking in connection with projects relative to these Programs, and over what time frame would you be seeking that return threshold to be achieved?
- c. What assumptions would you make about adoption (“take-rates”) in currently underserved or unserved markets where you may begin to provide service? What is your experience with adoption rates in previously unserved areas?
- d. What sources of capital would be used to fund the contemplated projects, other than Program grants (e.g., debt, equity)? What is the assumed weighted average cost of capital that you would use in your calculations for identifying the cost of debt, cost of equity, and the assumed debt/capital ratio?

12. What download and upload speeds does your entity plan to make available within the next five years?

13. If you would propose a DOCSIS-based solution, are there any areas in the state where your technology cannot support a minimum of 100 mbps symmetric speed?

14. Would you be willing to provide open infrastructure for use by other providers in some way, shape or form? Why or why not and if so, what infrastructure and how?

15. Are you able to provide data to meet project requirements now or in the near future? If not, in what time frame would you be able to collect such data, and what types of assistance would be helpful?

16. Are there strategic partners whose cooperation would enhance your ability to deliver services under the Programs and/or reduce your time and cost to deploy? If appropriate, please list the partners you are currently working with or could be interested in working with in the future.

17. Would you be willing to partner with other broadband providers and/or municipalities to provide broadband access to underserved and unserved areas of New Jersey? If so, please explain under what circumstances you would be willing to enter such partnerships.

18. Are there types of interconnection arrangements that would foster innovative models to reach underserved and unserved areas?

COMMENTS

All public comments should be filed under Docket No [TO23030137](#).

The deadline for comments on this matter is 5:00 p.m. Eastern Time on February 16, 2024.

Comments may be submitted directly to the specific docket listed above using the “Post Comments” button on the Board’s Public Document Search. Comments are considered public documents for purposes of the State’s Open Public Records Act. Only public documents should be submitted using the “Post Comments” button on the Board’s [Public Document Search tool](#).

Any confidential information should be submitted in accordance with the procedures set forth in N.J.A.C. 14:1-12.3. In addition to hard copy submissions, confidential information may also be filed electronically via the Board’s e-filing system or by email to the Secretary of the Board. Please include “Confidential Information” in the subject line of any email. Instructions for confidential e-filing are found on the Board’s webpage <https://www.nj.gov/bpu/agenda/efiling/>.

Emailed and/or written comments may also be submitted to:

Sherri L. Golden
Secretary of the Board
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350
Phone: 609-292-1599
Email: board.secretary@bpu.nj.gov

Please direct all questions on this matter to Elena Thaxton at elena.thaxton@bpu.nj.gov with the subject “In the matter of, Docket No. TO23030137.”

Staff looks forward to receiving and reviewing your responses.

Sherri L. Golden

Sherri L. Golden
Secretary of the Board

Dated: January 12, 2024