Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.  20554

In the Matter of

Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination

GN Docket No. 22-69

REPLY COMMENTS OF
THE NATIONAL MULTIFAMILY HOUSING COUNCIL
AND THE NATIONAL APARTMENT ASSOCIATION

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SUMMARY

The National Multifamily Housing Council (“NMHC”) and the National Apartment Association (“NAA”) submit these Reply Comments in response to the comments of other parties filed pursuant to the Notice of Inquiry (the “NOI”).\textsuperscript{1} NMHC and NAA urge the Commission to adopt a narrow reading of “digital discrimination of access based on income level,” as the term is used in Section 60506 of the Infrastructure Investment and Jobs Act,\textsuperscript{2} so that its rules are tailored to fit the comprehensive plan laid out by Congress.

Section 60506 Is One Element of a Much Larger Congressional Mechanism. Division F of the IIJA contains a full set of remedies aimed at every element of the broader problem of extending adequate broadband service to all Americans. Congress did not intend for Section 60506 alone to remove every conceivable obstacle to the delivery of broadband service. Section 60506 is only one provision of Division F, and it must be interpreted consistently with the rest of the Congressional plan. That plan is centered on a broad range of subsidies that will reduce costs for service providers and subscribers, thereby largely eliminating any incentives for discrimination based on income level and the effects of past discrimination that may result in discrimination based on income level today. The Commission’s new rules should apply only when a provider fails to comply with some aspect of the new Congressional vision going forward.


The Broadband Equity, Access, and Deployment ("BEAD") Program established by Section 60102(f) of the IIJA lies at the center of the Congressional plan. The IIJA authorizes over $40 billion in subsidies for the expansion and upgrading of broadband infrastructure because Congress understands that an enormous investment is needed to ensure adequate broadband service for all unserved and underserved communities. In defining the permitted uses of BEAD Program funding, Congress also expressly recognized that improving infrastructure within multifamily buildings is a critical need and that property owners will play a central, positive role in promoting further deployment. Property owners – especially providers of workforce and lower-income housing – do not have the financial resources to directly invest in broadband infrastructure. Existing demands for property operation and maintenance funds, exacerbated by the financial strain of COVID-19 on operating budgets, puts the cost of any new broadband infrastructure out of reach in most circumstances. Any significant investment in broadband infrastructure (or any large capital expenditure, for that matter) by rental property owners will ultimately put upward pressure on rents, at a time of serious housing affordability challenges across the country. Nor do housing providers have the technical skills to build, operate, or maintain networks. Consequently, it is up to the broadband providers to extend their networks to reach unserved communities and to upgrade facilities to deliver adequate broadband service in underserved properties. Properly-targeted BEAD grants alone will go a long way towards addressing the significant need in low-income rental housing communities.

In determining which entities should be governed by the Commission’s new rules, NMHC and NAA urge the Commission to reject the arguments of a handful of commenters, which suggest that property owners engage in income discrimination and therefore should be subject to the rules. Property owners have no control over the terms of a provider’s service or
the cost of infrastructure, and therefore cannot “discriminate” as the term is used in Section 60506.

**Subsidizing Network Expansion and Upgrades Is the Only Practical Way to Solve the Inequities in the Availability of Broadband Service.** The problems with broadband service in low-income and affordable communities stem from the economics of building communications networks, not from the actions of property owners. Service providers need to be able to reach their return-on-investment targets, and the reason that low-income communities suffer from a lack of adequate broadband service has to do with the multiple cost factors that affect a provider’s return on investment.

Those factors are: (i) the cost of extending a network to pass a particular property; (ii) the cost of installing a new distribution network (wireless or wireline), or (more commonly) upgrading existing wiring in an older building; (iii) the cost of end-user equipment allowing individual residents to make effective use of the broadband capability; and (iv) the recurring cost of subscriptions for every resident.

The four components of the access problem have one thing in common: they are all economic in nature. This is why Congress adopted a broad range of subsidies. In fact, subsidies are the only practical solution to the problem of ensuring adequate broadband access for every American.

Property owners contribute to the deployment of broadband networks in many ways, as explained in detail in the real estate industry’s comments in GN Docket 17-142 (the “MTE Proceeding”). Apartment owners routinely contribute to the cost of new inside wiring, or the upgrading of existing facilities. On the other hand, housing providers have no control over the cost of extending a network to reach a property, the actual cost of the infrastructure they help
fund, the cost of equipment, or the recurring cost of monthly subscriptions. And as noted above, providers of workforce and low-income housing, where infrastructure investment is so badly needed, simply do not have the resources to contribute to the cost of facilities.

For the BEAD Program and other initiatives addressed in the IIJA to succeed, NMHC and NAA believe that the Commission and other agencies should begin by assessing the underlying nature and full scope of the problem. There are approximately 20 million households in the United States living in multiple tenant properties. Roughly 75% of those households are served by two providers and very likely have up-to-date broadband service from at least one provider. Any building over 20 years old, however, probably does not have wiring suitable for transmitting adequate broadband service, and a very large proportion of lower income Americans live in such older buildings. Even if broadband service is available in the vicinity, the wiring must be upgraded. Therefore, the government’s efforts, including subsidies, should be concentrated on the five million or so apartment households that are served by a single provider, which is frequently a local telephone company offering low-speed DSL service. These households are essentially all in low-income housing. Those residential communities should be specifically identified, and funding directed towards building infrastructure to and within them. Upgrading the wiring in those buildings is essential to solving the overall access problem.

Of course, low-income residents need other kinds of assistance, because they often cannot afford suitable devices or monthly subscriptions. Congress and the Commission have adopted programs for those purposes.

**Section 60506 Does Not Address Competition.** Section 60506 does not require that subscribers have service from any particular number of subscribers, nor does it refer in any way to competition. The Commission’s rules, therefore, should not take competition into account. In
fact, doing so would be counterproductive because granting subsidies to fund duplicative infrastructure could result in some communities being served by multiple providers, while others would still have inadequate service.

Furthermore, promoting and protecting competition is not actually an issue in this context. As we have demonstrated in the MTE Proceeding, as many as 80% of apartment communities are currently served by two providers, and the Fiber Broadband Association has found that 68% of apartment residents have access to at least two broadband providers. In other words, roughly three-quarters of apartment residents have access to competitive broadband service. The question is how to improve the situation in those communities that lack adequate service.

**The Commission Should Protect Bulk Service.** The Commission must also be careful to ensure that its new rules do not affect agreements for the delivery of bulk broadband service. As the Commission has long recognized, bulk service offers multiple benefits; these include lower rates, elimination of credit checks and deposits, seamless property-wide service, and access to a range of IoT applications. Bulk service can be a cost-effective way of providing high-quality broadband service in senior and low-income housing, as well as other environments.

**No Further Action in the MTE Proceeding Is Required.** Only WISPA has proposed any further concrete action in that docket. WISPA has proposed only that the Commission (i) ban exclusive rooftop agreements, and (ii) develop model policies designed to ensure that states and localities amend or repeal certain mandatory access laws. NMHC and NAA oppose any action regarding rooftop agreements because Commission regulation would interfere with a thriving real estate market over which the Commission has no statutory authority. NMHC and NAA agree that some mandatory access laws are unfair, but the real problem with such laws is
that they are outmoded. They do nothing to address the digital divide or to improve broadband service in low-income communities. Any model policy issued by the Commission should call, not for the reform of such laws, but for their repeal.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>SUMMARY</strong></td>
<td>1</td>
</tr>
<tr>
<td>I.</td>
<td><strong>THE INFRASTRUCTURE INVESTMENT AND JOBS ACT EMPLOYS MULTIPLE TOOLS TO</strong></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>ENSURE THAT ALL AMERICANS HAVE ACCESS TO AN ADEQUATE LEVEL OF</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BROADBAND SERVICE.</strong></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td><strong>EQUAL ACCESS IN LOW-INCOME HOUSING IS A CHALLENGE BECAUSE OF THE</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>BUSINESS NEEDS OF BROADBAND PROVIDERS.</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. “Equal Access” Under the IIJA Means Access to a Defined, Adequate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level of Broadband Service that is Uniform Across a Provider’s Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area.</td>
</tr>
<tr>
<td></td>
<td>B. Delivery of Adequate Broadband Service in Low-Income Properties</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poses Particular Challenges to Broadband Providers and Housing Providers</td>
</tr>
<tr>
<td></td>
<td>C. The Scope of the Access Problem Needs To Be Defined in Quantitative</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terms.</td>
</tr>
<tr>
<td>III.</td>
<td><strong>THE ONLY EFFECTIVE WAY TO ADDRESS DISCRIMINATION BASED ON INCOME LEVEL</strong></td>
<td>13</td>
</tr>
<tr>
<td></td>
<td><strong>IS TO PROVIDE SUBSIDIES.</strong></td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td><strong>THE COMMISSION’S MANDATE UNDER SECTION 60506 IS TO ADDRESS</strong></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td><strong>DISCRIMINATION, NOT TO PROMOTE ARTIFICIAL LEVELS OF COMPETITION.</strong></td>
<td></td>
</tr>
<tr>
<td>V.</td>
<td><strong>FURTHER ACTION UNDER THE MTE DOCKET IS NOT REQUIRED, NOR WOULD IT</strong></td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>HAVE ANY SIGNIFICANT EFFECT ON THE DISCRIMINATION ISSUES POSED BY</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>THIS PROCEEDING</strong></td>
</tr>
<tr>
<td></td>
<td><strong>CONCLUSION</strong></td>
<td>24</td>
</tr>
</tbody>
</table>
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In the Matter of
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REPLY COMMENTS OF THE NATIONAL MULTIFAMILY HOUSING COUNCIL AND THE NATIONAL APARTMENT ASSOCIATION

Introduction

The National Multifamily Housing Council (“NMHC”) and the National Apartment Association (“NAA”) respectfully submit these Reply Comments to address issues raised by

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3 Based in Washington, D.C., the National Multifamily Housing Council is a national nonprofit association that represents the leadership of the apartment industry. Our members engage in all aspects of the apartment industry, including ownership, development, management and finance, who help create thriving communities by providing apartment homes for 40 million Americans, contributing $3.4 trillion annually to the economy. NMHC advocates on behalf of rental housing, conducts apartment-related research, encourages the exchange of strategic business information and promotes the desirability of apartment living. Over one-third of American households rent, and over 20 million U.S. households live in an apartment home (buildings with five or more units).

4 The National Apartment Association serves as the leading voice and preeminent resource through advocacy, education, and collaboration on behalf of the rental housing industry. As a federation of 141 state, local and global affiliates, NAA encompasses over 92,000 members representing more than 11 million apartment homes globally. NAA believes that rental housing is a valuable partner in every community that emphasizes integrity, accountability, collaboration, community responsibility, inclusivity and innovation.
other parties in response to the Commission’s Notice of Inquiry (the “NOI”), particularly with respect to the overarching goals of Division F of the Infrastructure Investment and Jobs Act (the “IIJA”), of which Section 60506 is only one component. NMHC and NAA respectfully urge the Commission to adopt a narrow interpretation of the phrase “digital discrimination of access based on income level,” and to recognize that the various subsidy programs provided for by other provisions of the IIJA will be the most effective mechanisms for addressing that type of discrimination.

I. **The Infrastructure Investment and Jobs Act Employs Multiple Tools To Ensure that All Americans Have Access to an Adequate Level of Broadband Service.**

Section 60506 is not the only provision of the IIJA. In enacting the IIJA, Congress designed a comprehensive mechanism for extending adequate broadband access to all Americans. Congress created new tools and expanded existing ones in a series of statutes that must work together for the entire mechanism to perform as intended. Some commenters, however, have urged the Commission to use this proceeding to adopt rules so broad that the agency would effectively regulate every aspect of the provision of broadband service – from subscription rates to customer service support to build-out obligations -- in the name of

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7 Section 60506(b)(1).
preventing discrimination. But Section 60506 cannot be interpreted in isolation. That single statute does not direct the Commission to adopt rules that would address every conceivable impediment Americans face in subscribing to broadband services, because other components of the IIJA address other barriers. Section 60506 addresses only issues narrowly related to access arising from the discriminatory policies of service providers.

The following provisions of the IIJA address the other aspects of the larger problem:

1. Section 60102 establishes the Broadband Equity, Access, and Deployment (“BEAD”) Program with the express purpose of bridging the digital divide by funding the construction of infrastructure;
2. Section 60103 is intended to improve the quality of broadband mapping by directing providers to submit any information requested by the Commission for that purpose;
3. Section 60104 requires the Commission to recommend actions for achieving the goal of universal service for broadband;
4. Section 60201 revises the funding mechanism for the Tribal Broadband Connectivity Program;
5. Section 60304 establishes the State Digital Capacity Equity Program, with the purpose of promoting digital equity and digital inclusion activities conducted by the states;
6. Section 60305 establishes the Digital Equity Competitive Program, which will make grants for the purpose of promoting digital equity and digital inclusion and spurring greater adoption of broadband by covered populations;
7. Section 60401 creates a program for supporting the construction of middle mile infrastructure;
8. Section 60502 extends the Emergency Broadband Benefit Program, which provides consumer subsidies for broadband service and devices, and renames it the “Affordable Connectivity Program;” and
9. Section 60504 directs the Commission to promulgate broadband consumer labelling regulations.

8 Comments of Public Knowledge, GN Docket No. 22-69 (filed May 16, 2022) (“Public Knowledge Comments”), at 5-9, 29-35; Comments of Lawyers’ Committee for Civil Rights, GN Docket No. 22-69 (filed May 16, 2022) (“LCCR Comments”), at 3-5.
In other words, Division F of the IIJA encompasses the full range of actions that Congress has determined are needed to ensure that every American has access to broadband service, and Section 60506 addresses just one of ten key actions identified by Congress.

The BEAD Program is especially important in this context because Congress has specifically authorized BEAD funds to be used to fund deployment of infrastructure within multifamily buildings, with priority to be given to residential buildings that have “a substantial share of unserved households,” or are in locations “in which the percentage of individuals with a household income that is at or below 150 percent of the poverty line . . . is higher than the national percentage . . . .” Such deployment could be performed by a service provider or a property owner, acting as a subgrantee. Congress thus acknowledged both the special nature of the deployment problem in low-income communities, and the central, positive role of property owners in promoting deployment.

In fact, in creating the BEAD Program, Congress essentially adopted the policy recommended by NMHC and NAA in comments in Improving Competitive Broadband Access to Multiple Tenant Environments, GN Docket No, 17-142 (the “MTE Proceeding”). In that proceeding, we stated that extending service to low-income properties was a discrete problem,

9 IIJA § 60102(f)(4).

10 NMHC and NAA have also submitted comments to the National Telecommunications and Information Administration (the “NTIA”) regarding implementation of the BEAD Program and the challenges of extending service in low-income communities. Joint Comments of National Multifamily Housing Council, National Apartment Association, National Leased Housing Association, National Association of Housing Cooperatives, Institute of Real Estate Management, Council for Affordable Rental Housing and National Affordable Housing Management Association, Docket No. NTIA-2021-0002 (filed February 4, 2022). These comments are attached as Exhibit A.
separate from the provision of service in the broadband market as a whole,\textsuperscript{11} and that “infrastructure costs are the paramount obstacle” to deployment of broadband service in low-income properties.\textsuperscript{12}

The need for subsidizing deployment is so critical and central that if the BEAD Program is properly implemented by the NTIA, many of the issues raised in this rulemaking and the \textit{MTE Proceeding} will be addressed very effectively. The other actions required by the IIJA will also promote deployment and adoption in ways that will ensure equal access and eliminate any reason for a provider to engage in discrimination based on income. The Commission should therefore interpret Section 60506 carefully and limit the scope of its regulations.

**II. EQUAL ACCESS IN LOW-INCOME HOUSING IS A CHALLENGE BECAUSE OF THE BUSINESS NEEDS OF BROADBAND PROVIDERS.**

\textbf{A. “Equal Access” Under the IIJA Means Access to a Defined, Adequate Level of Broadband Service that is Uniform Across a Provider’s Service Area.}

Section 60506(a)(2) defines “equal access” as “the equal opportunity to subscribe to an offered service that provides comparable speeds, capacities, latency, and other quality of service metrics in a given area, for comparable terms and conditions. . . .” It is clear from this definition that Congress intended the Commission’s rules to address access to a service, as offered by a specific provider of service. The “equal opportunity to subscribe” is to “an offered service,” and

\textsuperscript{11} Further Joint Comments of the Real Estate Associations, GN Docket No. 17-142 (filed Oct. 20, 2021) (“\textit{MTE 2021 Further Comments}”) at 15-16.

\textsuperscript{12} Further Joint Reply Comments of the Real Estate Associations, GN Docket No. 17-142 (filed Nov. 19, 2021) (“\textit{MTE 2021 Further Reply}”) at 17.
the “offered service” across a given area is to be comparable in various respects. In other words, Congress intended to require providers to make a uniform level and quality of service available to all of their subscribers and to prevent providers from treating subscribers within a service area differently based on the characteristics listed in Section 60506(b)(1).13

Consequently, this proceeding must be confined to the actions of service providers. The definition of “equal access” is central to the intended scope of Section 60506(b) (Commission’s rules are to facilitate equal access) and Section 60506(c) (Federal policy is to promote equal access). Only a service provider, and not some other class of entity, can “offer” a “service,” and only the service provider can assure the comparability of speed, capacity, latency, and other characteristics of the service. Therefore, those commenters that have argued that this proceeding should address the actions of property owners have misread the statute.14 Because owners do not control the terms of service, they cannot “discriminate,” as the term is used in Section 60506.

For example, CEO Action for Racial Equity argues that the term “entity” should be defined broadly, claiming that property owners can “influence” access, affordability and adoption.15 Section 60506, however, is not so broad. The only “entities” mentioned in the

13 We note that NTIA has designated two levels of service, a middle-class affordability plan, and a low-cost broadband service. Notice of Funding Opportunity, Broadband Equity Access and Deployment Program, National Telecommunications and Information Administration (rel. May 13, 2022) at p. 66. For the Congressional plan laid out in Division F of the IIJA to succeed, these services need to be available to all subscribers, and there must be no conflict between the NTIA’s program and standards and the Commission’s.

14 See, e.g., Comments of the City and County of San Francisco, GN Docket No. 22-69 (filed May 16, 2022) (“San Francisco Comments”), p. 6 “Commission should specifically address multiple tenant environments in this proceeding.”

15 Comments of CEO Action for Racial Equity GN Docket No. 22-69 (filed May 16, 2022) (“CEO Action Comments”) at 7; see also Public Knowledge Comments at 19 (“Landlords, homeowners associations, and other entities that can serve as a barrier to broadband access must
relevant subsections of the statute are “subscribers” and “service providers.” The Commission has acknowledged that it has no general authority over property owners. Therefore, without an explicit reference to multiple-tenant environments (“MTEs”) or apartment residents there is no reason to believe that Congress intended for property owners to be regulated under Section 60506. In fact, the mechanism used by the Commission in the MTE Order is not available in this instance: imposing positive obligations directly on owners is not the same thing as regulating them indirectly, by prohibiting service providers from entering into contracts containing certain types of provisions.

In addition, neither the word “influence” nor any of its synonyms appears in the statute; neither do “affordability” or “adoption.” Affordability and adoption are concerns, to be sure – but they are addressed by other elements of the IIJA.

Similarly, the National Digital Inclusion Alliance (“NDIA”) claims that owners can discriminate “by limiting consumer choice to certain service options from certain service providers.” It is not clear what NDIA means by this phrase, but it seems to suggest that owners should be required to permit entry by any and every service provider. The statutory phrase “equal opportunity to subscribe” cannot extend that far, however, for two reasons. First, nothing in Section 60506 suggests that Congress intended to adopt a mandatory access requirement,
under which every service provider has the right to serve anywhere it chooses regardless of the effect on private property rights. Congress cannot authorize the Commission to order a physical occupation of private property without saying so expressly, and without providing for payment of compensation to the affected owners. And second, forcing owners to accept all comers does nothing to extend access to properties that are uneconomical for providers to serve. In fact, it would exacerbate the problem, because scarce capital would be expended on extending duplicative service, leaving many properties still underserved. Unfortunately, NDIA and some other commenters simply do not understand the economic factors underlying the access problem.

The fundamental problem is that extending broadband networks is expensive, and sometimes providers determine that extending a network to serve an area or upgrading the wiring inside a building will not produce sufficient revenue to cover the cost.

B. Delivery of Adequate Broadband Service in Low-Income Properties Poses Particular Challenges to Broadband Providers and Housing Providers.

As we have discussed in the MTE Proceeding, extending broadband networks capable of delivering an adequate level of service to and within low-income residential buildings is a challenge for all of the affected parties because of its complexity. The problem has four components: (i) the cost of extending a network to pass a particular property; (ii) the cost of installing a new distribution network (wireless or wireline), or (more commonly) upgrading existing wiring in an older building; (iii) the cost of end-user equipment allowing individual residents to make effective use of the broadband capability; and (iv) the recurring cost of

18 MTE 2021 Further Comments at 20-33; 75-79; MTE 2021 Further Reply at 15-31.
subscriptions for every resident. These components have one thing in common: they are all economic in nature.

In most of the residential MTE market, the four factors underlying lack of service in low income environments are either not present, or are substantially ameliorated. On the other hand, the combination of the four creates a very difficult problem for any provider seeing to serve properties with a large proportion of lower income residents or located at a substantial distance from the provider’s distribution network. For example, the high broadband penetration rates in most apartment communities indicate that residents have access to end user equipment and can afford their monthly subscriptions. In addition, the cost of upgrading facilities inside a building can usually be addressed through contractual mechanisms developed by the marketplace, as we explained in the MTE Proceeding.\textsuperscript{19} The cost of extending the network to the property may still be significant, but if the property owner is contributing to the cost of on-site facilities, and residents can be expected to subscribe in high numbers, the provider can typically justify the investment. The key factor in lower-income environments, however, is clearly that many residents cannot afford devices or subscriptions, and even those that can are unlikely to subscribe to the more expensive premium levels of service. This also makes it very difficult for providers to meet their return-on-investment targets.

Housing providers face even greater challenges than service providers, because they have no control over any of the relevant economic factors. They do not own and cannot build or use outside plant. They do not provide and cannot set the price of any of the devices needed by

residents or of the broadband service itself (with the exception of negotiated rates charged in bulk agreements, which are lower than the provider’s standard rate). If a provider happens to be willing to install or upgrade inside wiring, the property owner will frequently bear a substantial portion of the cost of the wiring and related facilities.\textsuperscript{20} Even if the inside wiring belongs to the property owner, the owner does not control the technical characteristics of the service and therefore must accept the provider’s standards and costs, if an upgrade is required. Finally, owners cannot simply demand service from any provider: a provider must be willing to serve and will not do so if its return-on-investment requirements are not met.

Not only do apartment owners frequently underwrite a portion of a provider’s costs, but owners do not impose significant or undue costs on providers. Owners sometimes negotiate to include performance standards in agreements, but those standards are for the benefit of subscribers.\textsuperscript{21} In those cases in which owners are compensated by providers, the payments are generally modest.\textsuperscript{22} In many instances -- especially in lower income communities – the owner receives no compensation.

The foregoing assumes that a provider is actually willing to invest in the facilities needed to deliver adequate broadband service at a property. Often, they are not, as discussed above, especially in smaller apartment communities and in affordable and low-income housing. This is

\textsuperscript{20} MTE 2021 Further Reply at 34-35; MTE 2021 Further Comments at 39-42, 48-54; MTE 2019 Comments at 14-15, 57-63.

\textsuperscript{21} MTE 2021 Further Comments at 15-18, 42.

\textsuperscript{22} MTE 2021 Further Reply at 31-34; MTE 2021 Further Comments at 54-59; MTE 2019 Comments at 78-84.
why Congress explicitly called for BEAD Program funding to be used for infrastructure within unserved and low-income residential buildings.  

Several commenters have observed that historical residential redlining may be affecting the broadband market today, because past discrimination may have resulted in a lack of network capacity in the vicinity of many lower-income residential buildings. Regardless of the origin of the problem, however, the problem today turns on the needs of broadband providers and is economic in nature, and therefore requires an economic solution.

Each of the four components of the cost problem must be addressed, and the IIJA does that through the various statutory provisions outlined in Part I. The IIJA correctly recognizes that these components are all fundamentally economic problems. The failure to address them may result in a form of discrimination, but an anti-discrimination statute is not an effective way of addressing an economic problem, especially when economic solutions are available.

C. The Scope of the Access Problem Needs To Be Defined in Quantitative Terms.

In the MTE Proceeding, the Real Estate Associations pointed out that if the affordability problem is to be fully addressed, its scope must be properly defined. This issue is largely outside the scope of this proceeding; in fact, if the BEAD Program and other elements of the IIJA are properly implemented, we believe it will be because the NTIA and the Commission will have properly assessed the scope of the problem and assigned priorities accordingly. Nevertheless, we think it is useful to review this issue briefly here because it may help focus this proceeding on the

23 IAJA, § 60102(f).
24 See, e.g, LCCR Comments at 6.
right concerns. The key question is “How many multifamily communities or households are there in the underserved category of lower-income properties?”

The record in the MTE Proceeding shows that there are three categories of households living in apartments that probably need assistance:25 (i) 2.8 million in HUD-assisted apartments; (ii) 5.2 million with incomes under $20,000 (which include the first group); and (iii) 8.8 million with incomes under $35,000 (which include the first two groups).

There are roughly 20 million apartment households in the United States.26 As we discuss further below in Part IV, between 68% and 80% of apartment properties in the country have two or more providers. Therefore, using round numbers, taking 75% of 20 million means that around 15 million apartment households in the country have access to at least two broadband providers. These two providers will typically be the local franchised cable operator and the ILEC, although the combination of providers can vary and in many cases there will be three or more providers at any given property. In any event, the real estate industry’s analysis suggests that there are around 5 million households in residential MTEs that are served by only one provider.27 This group must include a very large proportion of the 2.8 million in HUD-assisted apartments. If these properties have any broadband service at all, it is typically low-speed, unreliable DSL delivered over very outdated wiring.28

26 MTE 2021 Further Reply at 24, Exhibit A.
27 MTE 2021 Further Reply at 24-25.
28 MTE 2021 Further Reply at 17-19 (existing wiring in low-income housing and other underserved apartment communities is typically too old or of a type that will not support high speed broadband service).
NMHC and NAA believe that the Commission, NTIA, and other agencies must first identify the universe of multifamily households that are unserved or underserved and then concentrate their efforts at promoting deployment and adoption on that universe. In essence, the problem is that around a quarter of apartment residents live in communities that are underserved because the combination of the cost of extending or upgrading infrastructure and the low incomes of the residents makes it difficult for providers to meet their return-on-investment criteria.

It may be possible to improve on the analysis of the scope of the problem laid out in detail in the real estate industry’s MTE Proceeding comments and we urge the Commission and NTIA to do so. Once that has been done, the Federal agencies and the states can move on to identify specific areas within local jurisdictions and particular residential housing communities (both public and privately-owned) that are unserved or underserved and concentrate their efforts on identifying providers able to extend service at a level defined by the Commission under one of the IIJA’s applicable programs.

III. **The Only Effective Way To Address Discrimination Based On Income Level Is To Provide Subsidies.**

Unlike other forms of discrimination, discrimination based on income level is fundamentally an economic issue. This means that preventing and curing such discrimination requires some form of subsidy, whether indirect and implicit, or direct and explicit. For instance, the government could require each provider to deliver a certain level of service to all customers at the same rate, regardless of location or any other considerations. To do so, the provider would have to charge some customers a rate substantially above cost to ensure that it covered its costs at other locations. This is, of course, the kind of implicit subsidy mechanism that the
Telecommunications Act of 1996 sought to eliminate. The alternative is a direct subsidy of the kind to be provided under the BEAD Program, the middle mile program, and the Affordable Connectivity Program.

Accomplishing the goals of the IIJA will require providing subsidies for extending networks to pass rural and other unconnected communities, to pass lower income properties in otherwise well-served areas, upgrading wiring in older buildings, end-user equipment, and subscription costs. In combination, the various subsidy mechanisms will eliminate much of the incentive providers have to distinguish among residential properties based on the income of their residents.

Nevertheless, the Commission must fulfill the Congressional mandate and adopt rules to provide for equal access and to prevent discrimination. Even though other sections of the IIJA will deal with most of the circumstances that might be deemed income discrimination, Congress has directed that the new rules address income discrimination in some fashion.

Some commenters argue, in essence, that lack of adequate service today is a result of past redlining, which is *prime facie* evidence of discrimination of various types, including on the basis of income, and therefore must be remedied under Section 60506.29 While this may be true in some cases, it is probably not true in others, and as we noted earlier, the problem today is fundamentally an economic one: what measures are needed to induce providers to extend networks to and within buildings? Furthermore, Congress made no finding in the IIJA to the effect that any present disparities are the consequence of past discrimination. Consequently, it would be unreasonable for the Commission to declare that a provider or any other type of

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29 CEO Action Comments at 5; LCCR Comments at 6-9, 13-15; NDIA Comments at 11.
entity\textsuperscript{30} is discriminating today in violation of the law, based only on historical circumstances. The rules may take various forms, but they should not impose a disparate impact standard. Instead, they should apply only after a finding of actual, intentional discrimination, as defined in the rule.

In particular, any Commission rule governing discrimination on the basis of income should be prospective and tied to the overall goals and the other mechanisms adopted by Congress in the IIJA. This is one of many areas in which the Commission’s rules under Section 60506 can be harmonized with the other provisions of Division F of the IIJA to create a coherent approach to the problems of deployment and access, consistent with the overall Congressional scheme. For example, a rule could require providers to deliver a standard, basic level of broadband service inside every property to which they have a right of access, regardless of the location or income level of any of the residents. Such a requirement might encourage providers to apply for grants, or to cooperate with grantees, to ensure that they can extend coverage within all of the buildings they have the right to serve. With that kind of rule in place, the Commission would have a clear standard for determining whether a provider has complied with the requirement, and failure to meet the standard could be deemed discrimination under Section 60506. Providers could also be required to participate in designated programs that subsidize equipment or subscription costs for MTE residents. In any case, regardless of the specific

\textsuperscript{30} Public Knowledge claims that “gatekeeper” entities, including property owners, may have contributed to redlining and should be subject to the new rules because they continue to have the power to “frustrate access.” Public Knowledge Comments at 19. This completely ignores the return-on-investment problem we have already discussed, which is a provider problem, and seems to assume both that every consumer must have access to every provider, and that the Commission has the power to mandate access to every property.
requirements of any given rule, the standards should be clearly set in the rule and only applied prospectively.

IV. THE COMMISSION’S MANDATE UNDER SECTION 60506 IS TO ADDRESS DISCRIMINATION, NOT TO PROMOTE ARTIFICIAL LEVELS OF COMPETITION.

Section 60506 does not require that subscribers have access to service from any particular number of providers. The fundamental goal of the IIJA is “to ensure that all people of the United States benefit from equal access to broadband Internet access service.” If equal access meant access to the same number of providers, then the Commission’s rules would have to ensure that residents of rural areas and other high-cost regions have access to the many multiples of providers available in the densest and best-served areas. This is clearly not feasible, and not the intent of the statute. What is required is access to an adequate level of broadband for all, from at least one provider.

In fact, given the very large amount of money needed to fund network construction to reach every unserved and underserved person in the country, without an express requirement to deliver competition, rather than merely service, the Commission must assume that a single provider is sufficient. It is highly unlikely that Congress meant to authorize the construction of duplicate networks without expressly saying so, precisely because it is so important to ensure that every household gets adequate service. It is one thing to encourage competition, but something else entirely to try to require it.
The issue of competition is also important because the NOI asks whether building owners can “digitally discriminate.” In response, several commenters have suggested that property owners deliberately limit the number of providers serving their buildings for self-serving reasons. This is clearly incorrect. As discussed in the MTE Proceeding, NMHC and NAA data indicate that roughly 80% of apartment communities in the United States are served by at least two providers. It is also not uncommon for apartment properties to have three or even more providers on site. Although the Commission has rejected our 80% figure without analysis, the Commission has not determined an alternative figure. NMHC and NAA are confident that, were the Commission to investigate this issue in detail, as we have proposed, it would find that our fundamental conclusion is correct. In fact, a survey conducted for the Fiber Broadband Association in 2021 found that 68% of apartment residents have a choice of providers. Although lower than the figure suggested by the real estate industry’s filings in the MTE docket, it still demonstrates that a substantial majority of apartment residents have a choice of provider.

Where competition and choice are lacking is in low-income and smaller properties deemed unworthy of investment by providers because of their perceived lack of profitability. In

31 NOI at ¶ 25.
32 See, e.g., Public Knowledge Comments at 19 (apartment owners can block or give preference to “specific services”).
33 MTE 2021 Further Reply at 5-6, n.14, 7; MTE 2021 Further Comments at 10-14.
34 MTE Order at ¶ 12.
35 What Residents Want!, survey conducted by RVA LLC, on behalf of the Fiber Broadband Association (Sep. 2021) (“FBA Survey”) at p. 30. The FBA Survey is attached as Exhibit B. These Reply Comments are also being filed in GN Docket No. 17-142 so that the FBA Survey will be in the record of that proceeding.
the residential market as a whole, however, the situation is very different.\textsuperscript{36} That market is very competitive, as demonstrated by the growing number of providers serving that market. Apartment properties at the higher end are often served by three, four, or more broadband providers, and the newer competitive providers are aggressively seeking access to those buildings. The evidence in the \textit{MTE Proceeding} indicates that three-provider competition nearly doubled in just the two years between 2019 and 2021.\textsuperscript{37}

Furthermore, as discussed in Part II, while there is a lack of competition in the lower-income sector of the broadband market, the critical problem there is that many properties are unserved or underserved. A focus on competition will not ensure that residents of every one of those communities has adequate service: instead, it would lead to duplicative service at some locations and inadequate service at the rest. To accomplish the goals of Congress, it would therefore be wiser to concentrate on assuring that every one of those residents has access to reliable broadband service from one suitable provider, as opposed to setting arbitrary competition targets that providers may be unable or unwilling to meet. The best way to achieve this in affordable housing settings or other cases in which a provider’s return on investment would be too low is often by means of a bulk service arrangement or property wide wifi offering that guarantees connectivity to all residents.

\textsuperscript{36} \textit{MTE 2021 Further Reply} at 8-12.
\textsuperscript{37} \textit{MTE 2021 Further Reply} at 10.
Indeed, over a decade ago, the Commission ruled that bulk service offers many benefits to subscribers, especially in senior housing, student housing, and low-income residences.\(^{38}\) One of those benefits is a lower subscription rate.\(^{39}\) When it last ruled on the issue in 2010, the Commission also noted that bulk billing arrangements promote the deployment of security channels, closed circuit monitoring, and wifi broadband access in common areas, among other benefits.\(^{40}\) In today’s market, bulk billing arrangements allow for property-wide, seamless, always-on broadband service, which is not only convenient for residents, but allows the property owner to implement an integrated set of IoT management tools ranging from security features to energy monitoring. Bulk arrangements also allow service providers to dispense with credit checks and security deposits, since the owner is committed to paying the cost of delivering service to every resident.

We also note that a strict definition of equal access would prohibit most, if not all, bulk agreements. This is because a bulk agreement allows MTE residents to obtain service at a rate lower than the standard rate offered by the provider to customers living elsewhere in the same service area. If “equal access” is defined to mean all subscribers must pay the same subscription fee for the same service, then bulk agreements could be said to result in discrimination against those customers who do not have the benefit of the bulk agreement. Such a result would lead to higher prices for vulnerable individuals, harm subscribers, and hinder deployment. This is


\(^{40}\) *Id.* at ¶ 20.
clearly neither what Congress intended, nor in line with the Commission’s stated support of the benefits of bulk service arrangements. Consequently, equal access and discrimination must be defined to exclude bulk agreements.

Commissioner Starks has recognized that bulk service is a valuable option that benefits residents. In his separate statement in support of the order adopting the Emergency Broadband Benefit program, Commissioner Starks stated:

The Order we adopt today acknowledges the critical efforts of local governments, community institutions, housing providers, schools, state departments of education, and other organizations that have created their own broadband programs. Many of these organizations connected thousands of households in senior and student residences, mobile home parks, apartment buildings, and federal housing units using bulk or sponsored billing arrangements, in which households receive service through an intermediary. We will need to work with these organizations—frequently serving at the local level—to make sure that we don’t lose eligible families that can and want to move to EBB.41

It would be highly regrettable if the Commission were to undermine the overall goals of the IIJA by treating bulk arrangements, or any other arrangement in which a property is served by a single provider, as a denial of equal access. The key is whether residents have access to service of adequate speed and other characteristics. That is equal access and only one provider is needed for that goal to be met.

V. FURTHER ACTION UNDER THE MTE DOCKET IS NOT REQUIRED, NOR WOULD IT HAVE ANY SIGNIFICANT EFFECT ON THE DISCRIMINATION ISSUESPOSED BY THIS PROCEEDING.

The NOI asks whether the Commission should take further action in the MTE Proceeding to address the digital discrimination and equal access issues presented by this docket.\footnote{NOI at ¶ 32.} As discussed in Part II, several commenters suggest that rules adopted in this proceeding should apply to MTEs in some fashion,\footnote{CEO Action Comments at 7 (definition of “entity” should include “landlords”); LCCR Comments at 29 (property owners can “discriminate against tenants”); NDIA Comments at 13 (“The Commission should enforce its existing rules against such practices in MTE’s and ensure that owners of MTEs in addition to internet service providers are prevented from and penalized for engaging in digitally discriminatory practices”); Public Knowledge Comments at 19 (“Landlords, homeowners associations, and other entities that can serve as a barrier to broadband access must also be reachable through Commission rules”); and San Francisco Comments at 6-7 (San Francisco appreciates the policies adopted in the MTE Order but Commission should also address MTEs in this proceeding).} but only WISPA calls for specific further action in the MTE Proceeding.\footnote{Comments of Wireless Internet Service Providers Association, GN Docket No. 22-69 (filed May 16, 2022) (“WISPA Comments”), at 27-29.} With that one exception, the commenters are unanimous: no further action is required in the MTE Proceeding. We agree, and respectfully take this opportunity to urge the Commission to terminate the MTE docket without further action.

Even WISPA does not propose that the Commission adopt extensive new regulations in the MTE Proceeding. WISPA requests action on only two issues: (i) a ban on exclusive rooftop agreements; and (ii) development of model policies and best practices designed to encourage the repeal of certain mandatory access laws.
NMHC and NAA oppose any regulation of rooftop agreements for the reasons stated in the MTE docket.\textsuperscript{45} There is an existing and thriving market for access to rooftop space, which depends on freely-negotiated terms between property owner and wireless providers. That market currently ensures that wireless services are available to the full range of wireless customers, and there is no evidence that it is not functioning well. Commission intervention could create distortions that hinder further rooftop deployments in unpredictable ways. Furthermore, the existing system is purely a real estate market: although the lessees are communications providers, the Commission has no more authority to regulate in this area than it would in the market for tower ground leases.

With respect to the repeal or modification of state and local mandatory access laws, we agree that they are outmoded and unfair.\textsuperscript{46} Mandatory access is outmoded as a concept because it is not needed to ensure competition for broadband service inside MTEs. WISPA argues that such laws are unfair because they typically grant rights only to preferred categories of broadband providers. While this is true, mandatory access laws are also unfair – and unconstitutional – because they impose unreasonable obligations on MTE owners and constitute a \textit{per se} physical taking of the property.\textsuperscript{47} Further, mandatory access does nothing to address the digital divide or improve broadband service in low-income communities or at smaller, affordable apartment properties. The existing statutes are often used to gain access to the high-end of the rental

\textsuperscript{45} MTE 2019 Comments at 69-70; MTE 2019 Reply at 28; MTE 2021 Further Reply at 47-49.

\textsuperscript{46} MTE 2021 Further Reply at 39-41; MTE 2021 Further Comments at 72-74; MTE 2019 Reply at 26-27; MTE 2019 Comments at 75-77.

\textsuperscript{47} MTE 2019 Comments at 75-77; MTE 2019 Reply at 26; MTE 2021 Further Comments at 72-74; MTE 2021 Further Reply at 39-41.
market, which is in general saturated with a high number of providers, while offering no increase
in service or improved access to broadband by consumers in affordable, low-income, and smaller
properties. Consequently, mandatory access laws should not be modified to encompass
additional classes of providers: they should be repealed entirely, and any Commission model
policy should call for their elimination.

Finally, further action in the *MTE Proceeding* will not prevent or eliminate any kind of
discrimination. As we have discussed, the fundamental reasons that lower-income Americans
lack access to adequate broadband service are economic in nature, which means that the solution
is also an economic one. The various subsidy programs addressed in the IIJA are the proper
remedy.
CONCLUSION

For all the foregoing reasons, the Commission should adopt a narrow interpretation of the phrase “digital discrimination of access based on income level,” tailor its rules to be consistent with the overall plan of Congress as laid out in the IIJA, and move to officially close the MTE docket.

Respectfully submitted,

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June 30, 2022
EXHIBIT A

Comments of the Real Estate Industry in
Docket No. NTIA-2021-0002
In the Matter of
Infrastructure Investment and Jobs
Act Implementation
Docket No. NTIA-2021-0002

JOINT COMMENTS OF:
NATIONAL MULTIFAMILY HOUSING COUNCIL,
NATIONAL APARTMENT ASSOCIATION,
NATIONAL LEASED HOUSING ASSOCIATION,
NATIONAL ASSOCIATION OF HOUSING COOPERATIVES,
INSTITUTE OF REAL ESTATE MANAGEMENT,
COUNCIL FOR AFFORDABLE RENTAL HOUSING,
MANUFACTURED HOUSING INSTITUTE,
NATIONAL AFFORDABLE HOUSING MANAGEMENT ASSOCIATION

The National Multifamily Housing Council, the National Apartment Association, the National Leased Housing Association, the National Association of Housing Cooperatives, the Institute of Real Estate Management, the Council for Affordable Rental Housing, the Manufactured Housing Institute, and the National Affordable Housing Management Association submit these Comments in response to the Public Notice released on January 7, 2022. These national associations represent for-profit and non-profit owners, operators, developers, property managers and housing cooperatives involved in the provision of rental housing, both affordable and conventional.

The COVID-19 pandemic has forced millions of Americans to rely on connectivity for reality of home schooling and teleworking. It has also laid bare the challenges many families continue to face in gaining access to the internet whether because of a lack of service, subpar service and
speed availability or real challenges in affordability of service when it does exist. Whether in rural communities or low and middle-income communities in our urban core, COVID-19 has highlighted how essential broadband service has become. The opportunity presented by the historic investments made in broadband deployment and adoption by the Infrastructure Investments and Jobs Act (IIJA) is of huge importance in achieving our shared goal of ending the digital divide once and for all and ensuring that every American – regardless of where they live or how much money they make – can benefit from the promise of the internet.

The laudable, bipartisan work done by the Biden Administration and Congress in crafting the IIJA includes the establishment of the Broadband Equity, Access, and Deployment Program (BEAD) at the National Telecommunications and Information Administration (NTIA). The $42.5 billion allocation to this program demonstrates the serious commitment of federal policymakers to bringing all stakeholders together to make long-overdue progress in deploying and upgrading broadband infrastructure across the country and acknowledging what broadband really is—essential to daily life and economic activity. Further, the creation of BEAD provides a historic opportunity to bring the public and private sectors together with significant resources to achieve our shared goals.

On behalf of the rental housing industry and our nation’s renters, we applaud the bipartisan work done to establish BEAD and thank NTIA for the opportunity to present our views on how best to capitalize on this important moment as we build and modernize our broadband infrastructure for the future.

### The Digital Divide & Rental Housing—the Challenge at Hand

The digital divide is often discussed in a binary way, where broadband service exists and where it does not. But in reality, the challenge is much more complicated. In urban or suburban low-income and workforce housing communities where broadband service does exist, adoption can be impacted by a variety of considerations such as affordability of service or the quality and reliability of that service. The FCC’s Lifeline program and the FCC’s new Affordable Connectivity Program (ACP) attempts to address the affordability of service challenge. ACP funding, in particular, will be of great help in getting service to those who need it. But in all too many cases, low and middle-income renters are faced with the choice of using limited funds, even with subsidies, to pay for broadband service that is slow, unreliable, and unable to support modern demands such as e-learning, remote work or video streaming.

To improve the reliability and quality of the broadband service at low-income and workforce rental properties of all types, including manufactured housing, housing cooperatives, and apartment communities, significant investments and upgrades are needed. The economics of financing those updates have continued to prevent meaningful improvements to the communications networks at low-income and workforce rental properties and exacerbated a different side of the digital divide. Housing owners and operators of affordable rental housing units are often small firms, housing cooperatives, non-profits or individual owners operating with little-to-no profit margin and must provide essential services such as property maintenance, security, etc. Broadband providers, where they do exist in low-income communities, often do not invest capital on necessary maintenance or upgrades of existing infrastructure because the return on investment on such investments is not deemed to be economically viable. Other segments of the rental market also face a similar dynamic, where
broadband providers have increasingly tried to shift the cost burden of building out or maintaining networks to property owners, which in turn drives up operating costs and puts upward pressure on rents residents pay, even as housing shortages and affordability challenges grow across the nation.

The result of these financial hurdles is subpar and dated infrastructure, such as aging copper wire installed decades ago, continuing to be relied upon although it is unable to meet current and future needs. To understand the gravity of the infrastructure challenge at hand, one needs to look no further than at a snapshot of the nation’s rental housing stock:

Over 75% of rental housing is in buildings with fewer than 20 units, with the majority of those being in very small properties. Broadly speaking, naturally occurring affordable housing, properties that accept Section 8 Housing Choice Vouchers or participate in other affordable housing programs are generally going to be a part of this housing stock. The nation’s rental housing stock is aging rapidly — in fact, the Joint Center for Housing Studies estimates that more than half of all rental units were built before 1980 and nearly a fifth built before 1950. Rehabilitation, including the modernization of their communications backbone, of these and other rental properties is key to affordability and preventing displacement in communities across the country.

**Cost Barrier & Impact on Housing Affordability:**

Improvements or modernization of existing broadband infrastructure in low-income and workforce housing communities will, again, require significant financial resources that many low-income and workforce housing rental providers do not have. Without broadband providers being able or willing to contribute to upgrading and modernizing a building’s network, housing providers are left with little recourse and their residents without access to the promise of high-speed and reliable internet service. Existing demands for property operation and maintenance funds, exacerbated by the financial strain of COVID-19 on operating budgets, means that the cost of any new broadband infrastructure is not feasible in most circumstances. Given the financial pressure on these properties, any significant investment in broadband (or any large capital expenditure for that matter) by rental property owners will ultimately put upward pressure on rents, at a time of serious housing affordability challenges across the country. BEAD grants have the potential to meet a significant need at low-income rental housing communities while helping maintain a property’s overall affordability.

**BEAD Implementation: Impact on Rental Housing Communities & Renters**

The establishment of BEAD to address the digital divide is historic and has the potential to provide broadband to the millions of Americans who lack access to reliable, affordable service. In conjunction with additional resources dedicated to broadband deployment at the state and local levels, as well as those provided by federal policymakers at the FCC, and the US

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In passing the IIJA and establishing BEAD, Congress rightly acknowledged the challenges faced by operators of rental housing in making needed upgrades or deploying modern broadband infrastructure in low-income rental housing communities. Our industry is deeply appreciative that Congress explicitly authorized BEAD grantees to make subgrants available for “installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a multi-family residential building.” Purposefully including multifamily properties and their residents to benefit from BEAD funding is an incredibly important step to addressing the digital divide in many communities faced with subpar or obsolete broadband infrastructure that prohibits the delivery or adoption of internet service.

It is also important to highlight the role that BEAD will play in building out broadband to areas that lack service completely—mainly in exurban or rural areas of the country—where rental properties and their residents are desperate for broadband. Here too, BEAD will be instrumental in delivering broadband to communities comprised of rental housing of all types, including manufactured housing, housing cooperatives and apartment communities. Again, BEAD funding coupled with USDA, FCC and state and local resources will make great strides in delivering or enhancing internet service for millions of Americans.

With the shared goal of seeing BEAD succeed and guided by the principle that those harmed by the digital divide—regardless of where they live—need access and benefit from high-speed, reliable broadband, we offer the following specific comments to questions posed by NTIA as it develops program rules and distributes funds to grantees. We also provide input on the need for BEAD rules to allow for technology flexibility.

1. What are the most important steps NTIA can take to ensure that the Bipartisan Infrastructure Law’s broadband programs meet their goals with respect to access, adoption, affordability, digital equity, and digital inclusion?

As NTIA works to develop Notices of Funding Opportunity (NOFOs) for each of the broadband grant programs to be implemented pursuant to the IIJA, the rental housing industry urges continued collaboration between all stakeholders in both the public and private sectors. Of particular importance to the rental housing industry is NTIA’s work to implement BEAD rules, funding guidance and technical recommendations for grantees.

As highlighted earlier, Congress rightly authorized multifamily properties to be eligible subgrantees under BEAD and we encourage NTIA to reassert this eligibility as a priority for grantees as a critical tool in bridging the digital divide. Too often, even when allowed under federal program rules, the rental housing sector is excluded from participation or allocated a very small portion of available funding when federal grant dollars are distributed by state or local grantees. Again, it is important for policymakers at all levels of government to acknowledge that the digital divide impacts both urban and rural America, and significant resources should be dedicated to addressing the problem in both regards.
18. The Bipartisan Infrastructure Law provides that BEAD funding can be used in a variety of specific ways, including the provision of service to unserved and underserved areas, connection of community anchor institutions, data collection, installation of service within multi-family residential buildings, and broadband adoption programs. The law also permits the Assistant Secretary to designate other eligible uses that facilitate the program’s goals. What additional uses, if any, should NTIA deem eligible for BEAD funding?

By Congress authorizing grantees to make subgrants to multifamily properties, it established priority for properties with a substantial share of unserved households unserved or that are located in an area where the percentage of individuals with a household income at or below 150% of the Federal Poverty Line (FPL) is higher than the national percentage. We appreciate and support prioritizing BEAD funding in this fashion given the significant need for broadband infrastructure investments in multifamily communities that typically house these populations.

As the Assistant Secretary considers designating additional eligible uses for BEAD funding, we encourage NTIA to expand eligibility to include a broader population of the rental housing stock and our nation’s renters. As discussed previously, broadband infrastructure challenges are significant across the housing ecosystem and are especially acute in older, smaller, low-income, middle-income and workforce housing. Properties that are comprised of renters earning up to 80% of Area Median Income (AMI) should also be granted eligibility under this funding. Too often, owners and operators of these types of properties are not able to find service providers who are willing to invest resources in installing, upgrading or maintaining broadband infrastructure given their inability to meet their own need return on investment targets, which leads to either limited-to-no broadband service options or limited internet speed. Similarly, and much like owners and operators of low-income housing, those operating middle-income, workforce or smaller housing properties of all types face the same economic challenges, which is why BEAD eligibility should be extended to them and their residents.

24. Affordability is a key objective of the Bipartisan Infrastructure Law’s broadband programs. What factors should be considered in the deployment of BEAD funds to help drive affordability beyond the low-cost option?

As NTIA crafts implementation guidelines and provides much-needed technical assistance for BEAD grantees, the rental housing industry believes funding distributed at the state and local level must take into consideration the critical investment that is needed in infrastructure to ensure that affordable housing units are preserved, and residents have the services they so desperately need.

The rental housing industry has long worked to provide its residents with access to technology and connectivity that would support their needs. Varying segments of the market have done so, always guided by federal rules that govern how broadband providers and property owners can partner to deliver broadband service. In much of the market, the existing partnership model between property owners and broadband providers has facilitated competition and ultimately led to the deployment and operation of reliable, high-speed broadband networks at rental housing communities where renters receive faster speeds and higher service standards at a more affordable price than what is available in the broader community.
In some cases, often with access, affordability and reliability in mind, housing providers have partnered with broadband providers to provide bulk internet services to residents. This model provides significant consumer benefits to residents and is especially effective in getting broadband service to typically underserved populations in low-income, HUD-supported and senior housing. A typical bulk model allows for instant access to broadband service upon move-in, no need for credit checks or financial deposits, often comes at a significantly reduced cost and provides for better, more reliable service than if a resident were to secure service on their own. When this model is utilized, property owners also have the ability to negotiate with providers to ensure their residents are well served. As NTIA and grantees look to ensure affordability and access, grantees should be encouraged to allow the use of BEAD funds to deploy bulk internet service.

Lastly, to ensure this funding improves access and affordability, BEAD grantees should be prohibited from imposing regulation that, while often well-intended, could ultimately harm the goal of deployment, competition, affordability and ultimately adoption of broadband services in low-income communities. Currently, federal telecommunications rules allow for marketing, cost-share, access, bulk billing and wiring agreements to guide the partnership between property owners and broadband providers. Attempts by grantees to prohibit or limit such agreements would not only run counter to FCC regulation but also be counter-productive, likely resulting in broadband providers opting not to serve the exact communities that are in desperate need of their investment and service, increased costs and reduced service quality for residents.

**BEAD: The Need for Technology Flexibility**

As NTIA crafts implementation guidelines and provides much-needed technical assistance for BEAD grantees, the rental housing industry believes funding distributed at the state and local level must allow for flexibility in a number of ways. Flexibility is needed to navigate the significant architectural, design and engineering challenges of the nation’s rental housing stock.

- Grantees should be required to be technologically neutral in their program criteria. For example, in the rental housing context, given the age or size of some affordable housing stock in need of BEAD support, Wi-Fi technology may not be the best or most cost-effective solution to deploy at a property. In some instances, deploying fiber throughout a property or utilizing other technologies to ensure robust and seamless connectivity both within resident's individual homes and throughout the community may be most effective. Conversely, a combination of technologies may be most appropriate and should be allowed, and even encouraged by NTIA and administering grantees. Ensuring that BEAD allows for flexibility will make sure that whatever technology is deployed will be able to provide reliable connectivity for years to come and support continually changing needs of consumers and building systems.

- Grantees should also be flexible in what eligible expenses are allowed under program rules. Installing or upgrading broadband infrastructure and wiring to enable high-quality and reliable broadband connectivity at rental communities can carry with it a wide range of expenses that should also be allowed. Examples of some common expenses include...
installation or expansion of wiring panels, Intermediate Distribution Frames (IDF), or aesthetic and other necessary repairs as a result of the installation or expansion of broadband infrastructure.

Conclusion

On behalf of the owners, developers, and operators of rental housing as well as our nation’s renters, we greatly appreciate the opportunity to share our thoughts on how best to ensure that the IIJA’s BEAD program is a success and helps to preserve the livability and affordability of our nation’s rental housing stock. The digital divide in this country remains significant, with the potential to do long-term damage on a number of levels if this divide is not reversed. We must do better. We will need collaboration between policymakers, property owners, and service providers of all kinds to erase this line between those who have broadband and those who do not. BEAD funding will be a game-changer across that nation, and we applaud Congress, the Biden Administration and the NTIA for making bold investments to address all sides of the digital divide.
Council for Affordable and Rural Housing (“CARH”):

CARH is a national industry trade association with headquarters in Alexandria, Virginia. For over 40 years, CARH has represented the interests of for-profit and non-profit builders, developers, management companies, and owners, as well as financial entities and suppliers of goods and services to the affordable rental housing industry in rural communities throughout the country.

Institute of Real Estate Management (“IREM”):

IREM® is an international institute for property and asset managers, providing complete knowledge to take on real estate management’s most dynamic challenges. That means knowledge prepared for the day-to-day and the one-of-a-kind: from solving the latest tenant crisis to analyzing market conditions.

For over 85 years, our members have made us the world’s strongest voice for all things real estate management. Today, almost 20,000 leaders in commercial and residential management call this home for learning, certifications, and networking.

Manufactured Housing Institute (“MHI”):

The Manufactured Housing Institute (MHI) is the only national trade association that represents every segment of the factory-built housing industry. Our members include home builders, suppliers, retail sellers, lenders, installers, community owners, community operators, and others who serve the industry, as well as 49 affiliated state organizations. In 2019, our industry produced nearly 95,000 homes, accounting for approximately 10 percent of new single-family home starts. These homes are produced by 32 U.S. corporations in 129 plants located across the country. MHI’s members are responsible for close to 85 percent of the manufactured homes produced each year.

National Apartment Association (“NAA”):

The National Apartment Association (NAA) serves as the leading voice and preeminent resource through advocacy, education, and collaboration on behalf of the rental housing industry. As a federation of 149 state and local affiliates, NAA encompasses over 93,000 members representing more than 10.5 million apartment homes globally. NAA believes that rental housing is a valuable partner in every community that emphasizes integrity, accountability, collaboration, community responsibility, inclusivity and innovation.

National Affordable Housing Management Association (“NAHMA”):

The National Affordable Housing Management Association (NAHMA) is the leading voice for affordable housing management, advocating on behalf of multifamily property managers and owners whose mission is to provide quality affordable housing. NAHMA supports legislative and regulatory policy that promotes the development and preservation of decent and safe affordable housing, is a vital resource for technical education and information and fosters strategic relations between government and industry. NAHMA’s membership represents 75 percent of the affordable housing management industry and includes its most distinguished multifamily owners and management companies.
**National Association of Housing Cooperatives (NAHC):**

The National Association of Housing Cooperatives (NAHC) represents housing cooperatives, mutual housing associations, other resident-owned or controlled housing as well as professionals, organizations and individuals who work with and advocate for housing cooperatives. Incorporated in 1960 as a 501(c)(3) non-profit, NAHC is the only national cooperative housing association in the U.S. Members govern the organization through a national board of directors responsible for developing and implementing the organization’s strategic plan and priorities. Housing cooperatives offer the more than one million families who live in them several benefits such as: a collective and democratic ownership structure, limited liability, lower costs and non-profit status.

**National Leased Housing Association (“NLHA”):**

NLHA is widely recognized as the only national organization serving all major participants—private and public—in the multifamily rental housing field. NLHA is a vital and effective advocate for nearly 500 member organizations, including developers, owners, managers, public housing authorities, state housing finance agencies, local governments, investment bankers, attorneys, accountants, architects, non-profit sponsors and syndicators involved in government related rental housing. This unique coalition is committed to public and private sector interaction as the most pragmatic means of meeting this nation’s rental housing needs. Though NLHA’s constituencies are many, the goal of the Association is one: the provision and maintenance of decent, affordable rental housing for all Americans, particularly those of low and moderate income.

**The National Multifamily Housing Council (“NMHC”):**

Based in Washington, D.C., the National Multifamily Housing Council (“NMHC”) is a national nonprofit association that represents the leadership of the apartment industry. Our members engage in all aspects of the apartment industry, including ownership, development, management and finance, who help create thriving communities by providing apartment homes for 40 million Americans, contributing $3.4 trillion annually to the economy. NMHC advocates on behalf of rental housing, conducts apartment-related research, encourages the exchange of strategic business information and promotes the desirability of apartment living. Over one-third of American households rent, and over 20 million U.S. households live in an apartment home (buildings with five or more units).
EXHIBIT B

Fiber Broadband Association
Apartment Resident Survey
Most U.S. MDUs are rental apartments, in a garden style, and in the medium price range. The majority of apartments rent from $500-$1000.
What Residents Want In A Community
Based on a 2021 random survey of 3,295 U.S. consumers, high quality broadband is one of the most important attributes to a community. (Affordable housing has moved up in the past three years.)
Comparing attitudes deemed important in a community to the perceptions of quality in the respondent’s local community illuminates some gaps - including for broadband. Perhaps unsurprisingly, those with fiber at their home rate the community best for Internet access.

Importance Of Community Attributes Versus Local Perceptions
Attributes Important 2021, Community Rating 2020
2021 RVA Google Survey Of General

- Safe streets/ Low crime: 74% important, 93% rated good or excellent
- Affordable living and housing: 63% important, 91% rated good or excellent
- Very high-speed/ reliable Internet access: 77% important, 90% rated good or excellent
- Greenspace/ walking, jogging, biking trails, etc.: 75% important, 78% rated good or excellent
- Reasonable commuting time: 64% important, 72% rated good or excellent
- Being a sustainable/ clean energy city: 67% important, 81% rated good or excellent
- Shops, bars and restaurants in walking distance: 66% important, 72% rated good or excellent
- Affordable and convenient transportation choices: 65% important, 73% rated good or excellent
- Vibrant centers of entertainment and culture: 57% important, 73% rated good or excellent
- Number and diversity of employment opportunities: 57% important, 72% rated good or excellent
- Great school system: 55% important, 57% rated good or excellent

Community Internet access rated good or excellent based on type of service at home:
- Overall: 77%
- Fiber: 84%
- Cable: 81%
- Mobile wireless: 76%
- DSL: 72%
- Fixed wireless: 58%
- Satellite: 11%
What Residents Want In A Property
The single most important apartment or condominium amenity was very high-speed reliable broadband the last time this question was asked (in the 2018 Broadband Consumer Study).

### MDU Amenities Considered Important
#### 2018 RVA Broadband Consumer Study

- **Very high speed reliable broadband**: 85%
- **Washer/dryer in unit**: 78%
- **Reasonable commuting time to my employment or school**: 69%
- **Balcony or patio**: 63%
- **Cable television**: 62%
- **Covered parking**: 60%
- **Security monitoring for complex**: 58%
- **Having a choice of multiple broadband suppliers**: 57%
- **Alarm system in unit**: 47%
- **Outdoor recreational activities/building grounds**: 43%
- **Workout facilities**: 39%
- **Pool**: 37%
- **Having “maker space” or office space in building**: 19%
- **Fireplace**: 19%
What Residents Want In Technology

The average household has about 2.4 maximum online, but nearly 20% of households have 4 or more online. On average consumers spend 5.9 hours online at home per day.
Among the sample, about 62% of those currently employed indicated they are site-flexible – and could work from home (or otherwise remotely). Other employees are presumably site-restricted because their jobs currently entail work interfaces with people or equipment in direct proximity – service counters, construction equipment, etc. Most employees who are site-flexible reported that – influenced by the Pandemic - they do now at least sometimes work from home.

**Current Employment Status**

**2021 RVA Broadband Consumer Study**

_Flexibility To Work From Home Among Those Employed_

- **Site flexible**: 62%
- **Site restricted**: 38%

_Those Answering They Ever Worked From Home Among Those Employed_

- **Yes**: 58%
- **No - Do not work from home**: 42%

Sample sizes= 3,295 total/ 1,779 employed/ 1,102 site flexible
A significant shift in work attitudes occurred as a result of the 2020 Pandemic. The vast majority of those working from home in 2020 would like to continue this mode – and spend nearly 62% of their working time at home. This is about the same amount of work from home as during the height of the Pandemic. Respondents perceived their employer desires for work from home to be slightly lower, at 48%, however. (A January 2021 PWC Study of office workers and their employers yielded similar results.) Employers have some concerns about collaboration and productivity, have concerns about unused office space, and have pressure from host cities to bring back workers. The actions of employers in later 2021 is uncertain, of course – but at least 50% of work will probably be conducted at home.
The use of video conferencing keeps increasing.

Use Of Advanced Two-Directional Video Conferencing Has Exploded

Frequent Video Conferencing Use Among Entire Sample

2021 RVA Broadband Consumer Study

![Graph showing the increase in video conferencing use from 2016 to 2021 across different sectors: Family, Business, Healthcare, and Education. The graph indicates a steady increase in usage across all sectors over the years.]
Estimated Television/ Video Content Streamed (Versus Broadcast/ Cable)  
2021 RVA Broadband Consumer Study

Based on annual estimates from consumers, the percentage of total content from streaming (versus from broadcast television, cable TV, or satellite TV) is now approaching 40% - greatly increasing download broadband capacity needs over time. MDU residents are heavier streamers.
Broadband is particularly important in Luxury units and less important in Low cost/subsidized rental units.

**Broadband Considered Very Important**

**By MDUs Characteristics**

2021 RVA Broadband Consumer Study

- **Rent MDU:**
  - Garden style: 61%
  - Mid rise (up to 6 stories high): 65%
  - High rise (7 stories or higher): 63%
  - Low cost/subsidized: 40%
  - Medium price range: 61%
  - Luxury: 72%

- **Own MDU:**
  - Garden style: 62%
  - Mid rise (up to 6 stories high): 64%
  - High rise (7 stories or higher): 66%
  - Low cost/subsidized: 63%
  - Medium price range: 65%
  - Luxury: 76%
What Residents Want In An Internet Provider
There is a clear need for exceptionalism in our industry!

NPS = Promoters - Detractors
Importance Of Factors Key To Customer Satisfaction
Top 1-2 Factors Selected As Most Important
Source: RVA Google Survey Of General Consumers 2021

- Trust - they keep their word, no tricks: 57%
- Reliability - product is rarely down: 42%
- Performance - product advantages: 38%
- Care - they help solve any problems: 29%
Reliability is the single most important factor to consumers, and fiber clearly wins.

### Reliability Is Important.. And Fiber Wins

#### Number Of Reboots Required In Past Month

<table>
<thead>
<tr>
<th>Service</th>
<th>2021 RVA Broadband Consumer Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>1.9</td>
</tr>
<tr>
<td>Cable</td>
<td>1.9</td>
</tr>
<tr>
<td>DSL/ FTTN</td>
<td>2.5</td>
</tr>
<tr>
<td>Fixed Wireless</td>
<td>3.3</td>
</tr>
</tbody>
</table>

#### Service Outage Last Week – Problem Outside Home

<table>
<thead>
<tr>
<th>Service</th>
<th>2021 RVA Broadband Consumer Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber</td>
<td>19%</td>
</tr>
<tr>
<td>Cable</td>
<td>21%</td>
</tr>
<tr>
<td>DSL/ FTTN</td>
<td>23%</td>
</tr>
<tr>
<td>Mobile Wireless</td>
<td>23%</td>
</tr>
<tr>
<td>Satellite</td>
<td>34%</td>
</tr>
<tr>
<td>Fixed Wireless</td>
<td>40%</td>
</tr>
</tbody>
</table>
Based on average speed tests taken during surveys, FTTH has a significant advantage over DSL/FTTN and wireless for download speeds and an even greater advantage over all other technologies for upload speeds.
While latency is rated lowest in importance, probably because many do not understand the concept, latency is very important to the broadband experience.

Latency Is Important.. And Fiber Wins

Average Random Latency Test - Milliseconds
2021 RVA Broadband Consumer Study

- Fiber: 31
- Cable: 41
- DSL: 54
- Fixed Wireless: 63
- Mobile Wireless: 170
- Satellite: 1,165
In general, Internet ISPs register some of the lowest satisfaction scores of any industry. Fiber clearly has the highest satisfaction score among Internet delivery types.

**Satisfaction Is Important.. And Fiber Wins**

How likely are you to recommend your Internet service to a friend who needs similar services?

**Net Promoter Scores By Broadband Type**

<table>
<thead>
<tr>
<th>Broadband Type</th>
<th>NPS</th>
<th>2021 RVA Broadband Consumer Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTTH</td>
<td>20.1%</td>
<td></td>
</tr>
<tr>
<td>Cable</td>
<td>-4.8%</td>
<td></td>
</tr>
<tr>
<td>DSL/FTTN</td>
<td>-10.3%</td>
<td></td>
</tr>
<tr>
<td>Mobile Wireless</td>
<td>-10.4%</td>
<td></td>
</tr>
<tr>
<td>Fixed Wireless</td>
<td>-13.0%</td>
<td></td>
</tr>
<tr>
<td>Satellite</td>
<td>-44.7%</td>
<td></td>
</tr>
</tbody>
</table>

NPS = Promoters - Detractors
What Do Residents Want In Wi-Fi?
Homes with an in-home Wi-Fi extender or mesh network have significantly better speed performance than do those without. Better Wi-Fi clearly has an impact reducing practical speeds. (Unfortunately, data was not collected on those who connect their computer via direct ethernet. This will be reviewed in 2022.)

**Influence Of Advanced Wi-Fi On Tested Speeds**

**2021 RVA Broadband Consumer Study**

- Only 26% have a Wi-Fi extender or Wi-Fi mesh
- 32% of Wi-Fi devices are over 3 years old
Better Wi-Fi (extenders or mesh networks) also have a dramatic influence on overall broadband satisfaction as measured by net promoter scores (NPS).

Satisfaction With FTTH (NPS Score) By Type Of Wi-Fi Used
2021 RVA Broadband Consumer Study

- With Wi-Fi extender or mesh: 41%
- With single Wi-Fi device: 18%
What Does This Mean To A Property?
There is a slight difference in satisfaction with an MDU home itself based on having fiber to the home.

Satisfaction With MDU Home By Broadband Type
2020 RVA Broadband Consumer Study: United States

FTTH

Other Broadband

0% 20% 40% 60% 80% 100%
70% 66%

FiberBroadband
if it’s not fiber, it’s not broadband
RVA LLC
Market Research & Consulting
Based on the latest information, fiber continues to add value to real estate transactions.
Status Of FTTH In MDUs
The highest number of FTTH connections in MDUs are in condominiums and high-rise apartments, and in student and luxury units.

FTTH Connections By MDU Characteristics
2021 RVA Broadband Consumer Study

- **RENT OR OWN:**
  - Apartment: 17%
  - Condominium/Cooperative: 28%

- **TYPE:**
  - Duplex or tri-plex: 15%
  - Garden style: 18%
  - Mid rise (up to 6 stories high): 23%
  - High rise (7 stories or higher): 35%

- **CATEGORY:**
  - Student oriented: 32%
  - Low cost/subsidized: 15%
  - Medium price range: 17%
  - Luxury: 39%
  - Senior living: 17%
  - Other: 14%

- **MONTHLY RENT (APARTMENTS):**
  - $1-$500: 13%
  - $501-$1000: 15%
  - $1001-$1500: 19%
  - Over $1500: 29%
About two-thirds have broadband choice within their MDU.

Degree Of Broadband Choice Within MDUs
2021 RVA Broadband Consumer Study

- Choice of Internet: 61%
- One free via rent/ others choice for pay: 7%
- Only one serves the building: 32%
Despite the obvious importance of Broadband to MDU owners and renters, only about 39% recalled a discussion about broadband with the owner or lessor upon their last move. There is a clear opportunity for more marketing among those with fiber broadband.
What Residents Want

September 2021