REPORT OF THE REMOVAL OF STATE AND LOCAL REGULATORY BARRIERS WORKING GROUP

Broadband Deployment Advisory Committee (BDAC)

This report summarizes the consensus reached by the BDAC’s Removal of State and Local Barriers Working Group. These recommendations are being made to the full BDAC for its consideration, and may not be the final recommendations that BDAC ultimately makes to the Federal Communications Commission.

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On January 31, 2017, the Federal Communications Commission (FCC or Commission) established the Broadband Deployment Advisory Committee (BDAC) to “make recommendations to the Commission on how to accelerate the deployment of high-speed Internet access, or “broadband,” by reducing and/or removing regulatory barriers to infrastructure investment.”¹ To facilitate BDAC’s endeavors, the Commission created five Working Groups comprised of BDAC members as well as other selected individuals. Each of these Working Groups was tasked with analyzing specific topics to develop recommendations including possible recommendations for further study.

On May 16, 2017, the Commission announced the membership of the BDAC Removing State and Local Regulatory Barriers Working Group (“Barriers WG”). It was tasked to²—

1) Identify patterns of specific instances of actions at the state and local level that serve as barriers to broadband deployment, such as deployment moratoria, unfair or burdensome rights-of-way negotiation and approval processes, excessive fees and other costs, unreasonable conditions, and bad faith negotiation practices. The Working Group will provide policy recommendations to the Commission on how to address the patterns of specific instances identified.

2) Identify examples and discuss the consequences of local governmental restrictions that may “prohibit or have the effect of prohibiting” service by, for example, requiring “undergrounding for wireless facilities,” placing restrictions on the placement of communications facilities in a right of way, prohibiting upgrades to facilities, and prohibiting the placement of new poles in a right-of-way, and to recommend solutions.

3) Examine the extent to which municipalities may single out communications-related deployments for more burdensome treatment than other deployments that have the same or similar impacts on land use, and make policy recommendations for addressing such disparate outcomes.

² FCC staff instructed the Working Group to focus only on policy recommendations, not on a legal analysis or legal recommendations. Also, the FCC staff informed the Working Group that its scope did not include Tribal matters.
BACKGROUND

Broadband access is an increasingly essential component of modern life. It delivers important civic, educational, and recreational benefits and is an important driver of economic growth. To date, broadband has been deployed via a range of different technologies (wireline, fixed wireless, mobile) and has been deployed by a number of providers, including incumbent local exchange carriers (ILECs), competitive local exchange carriers (CLECs), cable companies, and wireless providers, all of whom operate under different federal and state regulatory regimes. These networks are constantly evolving. Indeed, new services, such as 5G wireless services, are on the horizon.

Deploying new broadband networks and upgrading existing ones is not easy. The deployment of broadband entails local franchising, zoning, permitting and access to rights-of-ways (ROW) as well as clearing environmental and historical approvals. These processes are generally overseen by each local government, and, in some instances, can act as barriers to the timely deployment of broadband. There are also instances when broadband providers delay the process by failing to provide all the necessary materials requested by a local government. Not all delays, however, are intentional. In many instances, local governments simply lack the resources or expertise to act on requests in a timely manner or otherwise develop deployment-friendly policies. In some cases, state governments have enacted regulations to direct and guide localities in carrying out their oversight of broadband deployment.

Recognizing the complexities of deploying broadband and the challenges faced by stakeholders in the public and private sectors, the Commission opened two proceedings to explore how it might accelerate broadband infrastructure deployment by, among other things, addressing regulatory barriers to wireline and wireless broadband infrastructure deployment consistent with the law and public interest.\(^3\) These proceedings elicited hundreds of comments from a range of stakeholders that provided key insights into the kinds of barriers and impediments to deployment that currently exist: (1) unjustified deployment moratoria; (2) unreasonable delays in negotiations and approvals for ROW agreements and permitting (delays caused by both providers and localities); (3) fees perceived as excessive or duplicative; (4) conditions or requirements perceived as unreasonable in the context of granting access to ROW, permitting, construction, or licensure; and (5) bad faith conduct in negotiations on both sides. While the Working Group reviewed all comments submitted in these proceedings, many comments fell outside the scope of the Working Group.

Leveraging the information included in these comments, along with the expertise and experiences of its members, the Working Group identified patterns of behavior that act as barriers to timely broadband deployment.
RESULTS IN BRIEF

State and local governments and broadband providers share the same goal—providing broadband service to as many communities and end users as possible. Successful partnerships between these parties are thus critical to ensuring universal broadband connectivity by way of a predictable and straightforward deployment process.

Oftentimes, local governments and broadband providers are able to come to an agreement regarding the deployment of broadband within local communities. However, in some cases, whether intentionally or unintentionally, actions or inactions by parties hinder deployment. These barriers, and the reasons for their existence, vary from locality to locality. Indeed, while a locality’s actions (or lack thereof) may act as a barrier to deployment, the locality may have cogent reasons for the existence of this barrier. Any process employed should recognize legitimate safety and aesthetic concerns of localities, while recognizing that providers cannot feasibly accommodate unique demands from each of the thousands of local governments.

The Working Group has identified the following six patterns that constitute regulatory barriers to broadband deployment. These have been grouped into the following categories: Ambiguity; Discrimination; Excessive Fees; Inflexibility; Inordinance; and Noncompliance (see Principal Finding section below for more descriptive detail on these barriers). To address these barriers, the Working Group offers the following recommendations (which are discussed in more detail in the Recommendation section below) to the FCC for consideration:

1) Encourage earlier and more comprehensive collaboration between broadband providers and local officials by: (1) promoting the creation and use of a “Broadband Ready” checklist, with input from all stakeholders, to facilitate improved, expedited information flow; and/or (2) publishing model codes.

2) Provide clarity on what actually constitutes an “excessive” fee for ROW access and use, and encourage greater transparency of fees.

3) Study whether a streamlined mediation and arbitration process administered by a neutral third-party (similar to a process detailed in 47 USC §252) would expedite deployment by resolving disputes more quickly.

4) Explain its approach to preemption decisions so that all stakeholders are on notice regarding the potential role of this action in removing state and local regulatory barriers to broadband deployment.

5) Explore how to leverage other expert stakeholders to provide localities and states with opportunities for acquiring the knowledge and skills needed to streamline the deployment of new broadband networks.
PRINCIPAL FINDINGS

While state/local governments and broadband providers share the same goal of providing broadband service to as many communities and end users as possible, they also have interests that may conflict with each other. Many of the delays in deploying broadband exist as a result of the friction between localities and broadband providers having competing economic interests. Localities have an obligation to properly maintain and update public infrastructure as well as managing the public ROW to balance the needs of competing services such as water, electricity, and sewers with telecommunications. Therefore, they need to raise the funds in order to do so—either from taxpayers or from the companies that use the ROW. At the same time, broadband providers want to quickly deploy technology via public ROW at the lowest cost possible, on the quickest timeline, with little regulatory burden. Many local governments also seek to charge what they consider to be “fair market rates” for public infrastructure, while industry often seeks “at cost” or otherwise predictable, standardized pricing. These competing interests create natural conflict.

The Working Group has identified the following patterns that can act as barriers to deploying broadband.

- **Ambiguity**: This barrier occurs when applications, procedures, and decision/approval timelines are absent, arbitrary, unclear, unreasonable, or inflexible, which often manifests as deployment moratoria. (See Appendices A and H).

- **Discrimination**: This barrier occurs when state or local authorities levy fees or impose obligations on broadband providers with insufficient transparency, which can result in discrimination among different network providers. (See Appendix B).

- **Excessive Fees**: This barrier occurs when fees for access to ROW and local assets are viewed as unreasonably high relative to the burden on the ROW, duplicative of fees already paid, or otherwise cannot be measured by some other objective metric. (See Appendix C).

- **Inflexibility**: This barrier arises when a local government is either unwilling or unable to appropriately adjust its review and approval processes to reflect different broadband technologies or deployment strategies. (See Appendix D).

- **Inordinance**: This barrier occurs when the conditions, requests, or requirements put forward by a state or local entity are unreasonable or overly burdensome. (See Appendix E).
• **Noncompliance:** This barrier occurs when a state or local authority or applicant fails to enforce or comply with their established rules or procedures. (See Appendix F).

As cited by many in comments to the FCC, broadband providers perceive these barriers as the cause of delayed broadband deployment and explained that these barriers discourage investment in communities. For example, uncertainty around fees—how they are set, and how they compare to fees elsewhere—can result in higher construction costs, which can cause providers to forgo or delay deployment projects. Such delays, coupled with lack of transparency in fee structures, even if unintentional, can increase costs to providers and discourage long-term network investments. Similarly, limited information and untimely communications from providers can frustrate localities that feel they do not have adequate insight into a provider’s long term planning of needs, and therefore cannot readily structure deployment workflows.

In many instances, the existence of these impediments is unintentional, stemming from a number of root causes that, with additional resources and greater collaboration with providers, could be addressed in a collegial and timely manner. These root causes include:

• **Lack of Capacity:** A government entity might not have the resources or required technical knowledge to process a request in the time frame expected by the provider. This may be a seasonal issue or may be an issue relating to the volume of applications.

• **Lack of Information:** Providers may not have provided the necessary information regarding requirements and expectations of the city, or the local government might not have the required information, knowledge and/or resources to make a decision.

• **Lack of Process:** The local government might not have a process to cover the type of application/request presented, especially in cases where new technology is being deployed.

• **Lack of Flexibility:** Some localities might seem to be inflexible because existing procedures embody their preferences and values for how networks should be built in their communities.

• **Lack of Agreement:** Local governments and broadband providers have conflicting goals and are driven by different incentives, a dynamic that can result in a lack of agreement. For example, a local government might require a provider to compensate them for access to ROWs while a broadband provider may believe the proposed compensation is unreasonable.

• **Lack of Principles Regarding Fees:** There is little guidance on what comprises an appropriate fee for ROW access and attachments to local assets, even when a provider already has access to the ROW. In certain cases, authorities may intentionally treat
providers differently based on technologies, in order to extract additional fees and impose additional obligations.

- **Lack of Transparency:** Negotiations stall and partnerships fray without insight as to how fees are calculated, both with respect to the fee itself and why fees might be allocated differently among providers.

During its analysis of these issues, the Working Group observed fundamentally different positions among stakeholders regarding the potential use of preemption as a means of removing certain state and local regulatory barriers. By and large, broadband providers support greater use of preemption, viewing it as a way to provide more consistency and certainty in processes impacting access to ROW. Localities and states, on the other hand, view preemption as unnecessary because it would undermine their ability to ensure their legal obligation to maintain the health, safety and welfare of their constituents are met, and to effectively manage the competing needs on the public ROW (e.g., electricity, water, sewers). Given the sensitivity of this issue, the Working Group elected to explore preemption as a standalone issue but could not reach consensus on a framework that might guide how the FCC approaches this issue in the context of removing state and local barriers to broadband deployment (see Appendix G).
The Commission can take proactive steps in both the near- and long-term to accelerate broadband deployment across the nation. As an overarching principle, any action taken by the Commission should support infrastructure investment in broadband across multiple types of technologies and avoid picking winners and losers. And, to the extent the Commission plans on removing unnecessary barriers to broadband infrastructure deployment, it should attempt to do so consistently, across wireline and wireless technologies.

In furtherance of these principles, and based on our findings, the Working Group has developed recommendations that fall within five general categories. Many of these recommendations can be acted upon immediately, but others may require further study before any action is taken. More specifics surrounding these recommendations can be found in the referenced Appendices.

1) **The Commission should encourage earlier, more comprehensive collaboration between broadband providers and local officials tasked with reviewing applications for deploying broadband.** This type of close consultation has assisted localities in more rapidly understanding technical aspects of new broadband networks, which in turn has helped to hasten agreement to ROW access and other critical elements of network deployment. While discussed in more detail in Appendices A, B, C, D, and F, the Commission should take immediate action to:

   a) **Create a “Broadband Readiness” Checklist to Facilitate Information Flow:** The FCC should work, either on its own or via the BDAC, with industry and state/local agencies (or national associations) to develop a broadband readiness checklist. There are a number of disclosures a locality can make up front—such as its fee schedule, permitting structure, and points of contact for various approvals—that aid in expediting broadband deployment yet are not typically included in a code or ordinance. A local government could use such a checklist as a proactive means to facilitate telecommunications development projects. (See Appendices A, C and F for further details, and Appendix I for such a checklist.)

   b) **Explore a “Broadband Ready” Certification for Localities:** The FCC should either develop or encourage states to develop a process by which localities can certify that they are “broadband ready.” Several states have had success in enacting such processes/checklists, which could be used as best practices for developing streamlined, simplified, and predictable permitting processes to guide localities. (See Appendix D for further details.)

   c) **Publish Model Codes:** The FCC should finalize, via BDAC, and with industry, states, and local governments that have implemented successful model codes, a flexible model
code or set of guidelines to speed broadband deployment. Simple principles, such as transparent pricing, better education on how to deploy next generation networks, and transparent design standards, can speed deployment in the long term. (See Appendices A and B for further details.)

2) **The Commission should provide clarity on what actually constitutes an “excessive” fee for right-of-way access and use.** The FCC should provide guidance on what constitutes a fee that is excessive and/or duplicative, and that therefore is not “fair and reasonable.” The Commission should specifically clarify that “fair and reasonable” compensation for right-of-way access and use implies some relation to the burden of new equipment placed in the ROW or on the local asset, or some other objective standard. Also, the Commission should encourage greater transparency regarding the way fees are calculated by requiring localities to make fee schedules publicly available, along with a brief explanation of how fees were calculated. (See Appendices B and C for further details.)

3) **The Commission should study whether a streamlined mediation and arbitration process administered by a neutral third-party (similar to a process detailed in 47 USC §252) would in fact expedite deployment.** Such a process could be administered by a neutral third-party with an escalator (i.e., appeals process) for non-functioning processes to a federal-level review for final de novo determination including preemption (with no deference granted to the mediation/arbitration decision). (See Appendix A and F for further details.)

4) **The Commission should explain its approach to preemption decisions so that all stakeholders are on notice regarding the potential role of this action in removing state and local regulatory barriers to broadband deployment.** Preemption is a remedy that should be deployed only after careful consideration, but which can play an important role in speeding broadband deployment.

5) **The Commission should explore how to leverage other expert stakeholders to provide localities and states with opportunities for acquiring the knowledge and skills needed to streamline the deployment of new broadband networks.** The Commission should take action to engage, along with expert partners, in comprehensive outreach and education efforts by: convening regional roundtables, creating a resource pool of experts, partnering with relevant national associations (e.g., NCSL, NGA, USCM) to develop and disseminate best practices; encourage communities to work together and share resources to better address novel issues as they arise; and develop an online “master” guidebook for use by local officials when engaging in reviews for new network deployments. (See Appendices A, B, D and F for further details.) The Commission should also—

a) Explore funding and certification programs for states and localities to engage in educational and self-improvement activities related to accelerating broadband deployment.
b) Help facilitate the creation of an information-sharing hub and/or a digital platform through which similarly situated communities could identify one another and connect.

c) Study the establishment of a voluntary pool of experts to which providers can contribute in order to offset a locality’s overtime pay costs, so that applications can be processed expediently where resources are otherwise limited.
APPENDICES

APPENDIX A: AMBIGUITY BARRIER: ANALYSIS AND RECOMMENDATIONS

APPENDIX B: DISCRIMINATION BARRIER: ANALYSIS AND RECOMMENDATIONS

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APPENDIX A

AMBIGUITY BARRIER:
ANALYSIS AND RECOMMENDATIONS

BARRIER SUMMARY. This barrier occurs when applications, procedures, and decision/approval timelines are absent, arbitrary, unclear, unreasonable, or inflexible, which often manifests as deployment moratoria (see Appendix H for more discussion on Moratoria).

WHY THIS BARRIER ARISES.

1. **Lack of Information** – Local governments do not have enough information regarding the requested application to make an informed decision. Providers do not have proper or complete information regarding requirements and expectations of the city.

2. **Lack of Process** – The local government does not have a process to cover the type of application/request presented. This may be the case in the deployment of new technologies and new techniques. Essentially it is policy and process that is not keeping up with the technology.

3. **Lack of Capacity** – Local government does not have the resources or required technical knowledge to process the request in a reasonably timely manner. This may be a seasonal issue or may be an issue relating to the volume of permits filed at once.

4. **Lack of Agreement** - When parties are not coming to agreement on terms. Improper assumptions or misaligned objectives may drive lack of agreement. There are also situations where there are different or non-transparent motives.

RECOMMENDATIONS.

1. **Lack of Information**
   a. Improve information flow – Recommend proactive discussion between industry and government groups to address each other’s information and understanding gaps and needs. Recommend pro-active leadership by local and state government in developing models for local and state governments to draw from.
   b. Recommend the engagement of ROW managers and recognize their critical role in developing the relationships between providers and local governments that contribute to closing the information gaps and facilitate smooth permit execution processes. ROW managers establish strong working relationships with industry partners and utility providers. They are a bridge to developing a common understanding of provider needs and goals, municipal requirements, and technical challenges for successfully working in the public right-of-way. Their work is to
facilitate the timely and safe deployment of infrastructure in the ROW. However, at a minimum, any ROW manager’s travel costs should not be imposed on providers, and any costs from a contingency or results-based arrangement should not be imposed on providers.

c. Recommend pre-permitting discussions, similar to pre-construction meetings where project stakeholders meet to share information. This may be particularly useful for facilitating bundling requests.

d. Recommend developing or establishing a common set of definitions or terminology to facilitate information sharing.

e. Recommend for new technologies the local government consider issuing RFI requesting further information on how to permit or process this technology or type of application. Assuming that this technology is not outside the current permitting process, this must not unnecessarily delay the application and must include specific timelines.

2. Lack of Process

   a. Development and implementation of model codes and streamlined permitting processes to address the implementation of new technologies, processes and techniques.

3. Lack of Capacity

   a. Recommend developing standards and process for bundling permits that streamlines the process but also meets both parties’ needs. Master agreements between cities and providers may be a starting point. Consider pulling out non-uniform issues to be dealt with individually and let the standard items move forward.

   b. Consider adding a joint site-visit/drive-through as part of the pre-permitting process. If it is too time-consuming or the ROI is not clear to do this for every bundling/permitting request, it could also be considered as a periodic component of a stakeholder education process.

   c. Recommend examining opportunities for contracting and outsourcing to share responsibilities and manage workloads. Look for opportunities in the process that can help expedite permitting. An example is the 811/call-before-you-dig system. A similar system could be considered for evaluating pole readiness.
4. **Lack of Agreement**

   a. Expectations need to be clearly and reasonably defined.

   b. As noted elsewhere in the Working Group’s recommendation, the Commission should explore whether mediation, arbitration or negotiation by outside parties (example: state public utility commissions), will expedite dispute resolution and actually better facilitate deployment than the current litigation remedy.
APPENDIX B

DISCRIMINATION BARRIER:
ANALYSIS AND RECOMMENDATIONS

Barrier Summary. This barrier occurs when state or local authorities levy fees or impose obligations on broadband providers with insufficient transparency, which can result in discrimination among different network providers.

Why This Barrier Arises. The potential for friction between localities and network providers exists in part because of competing economic interests. Localities have an obligation to properly maintain, manage and update public infrastructure and balance competing interests in the public ROW (e.g., water, sewer, and electricity). They need to raise the funds in order to do so—either from taxpayers or from the companies that use the public ROW and some localities seek to use ROW and attachment fees to generate revenues for purposes unrelated to broadband deployment. Companies want to quickly deploy technology on these public rights of way at the lowest cost possible, on the quickest timeline, with minimal regulatory delay. Additionally, some local governments believe that they are required to charge what they consider to be “fair market rates” for public infrastructure while industry often disagrees that this is required and seeks “at cost” pricing. These competing interests create natural conflict.

Discrimination does not occur in all states or localities. However, it is often found when the process to accessing ROWs is opaque and obligations, fees and other rules are not clearly defined. The barrier is worsened in cities and states where there is little transparency or public information on the fees and obligations of accessing public rights of way. This lack of transparency in how fees and obligations are levied creates an environment of distrust and creates the potential for discriminatory and unequal treatment between providers.

Lack of transparency can be driven by several factors: 1) cities not having permitting frameworks for new technologies 2) few reference points as new technology emerges and 3) the lack of internal resources to properly support and manage ROW access requests. Additionally, pricing models are sometimes outdated as they reference previous generations of networks; and cities and local governments, especially smaller ones, may lack capacity to update pricing.

There are also cases cited in comments of industry purposely requesting excessive numbers of permits to overload or lock in assets early to prevent competition from competitors, which adds to the environment of distrust between local governments and providers.

Discrimination can occur in two ways:

- Unintentional. States and localities may lack the dedicated resources to creating a transparent and consistent framework of fees and obligations for access to ROWs. Cities may not have adequate personnel to review and determine the appropriate fees and
those individuals may lack subject matter expertise, which can unintentionally create barriers and an unequal playing field between providers.

- **Intentional.** In select cases, states and localities may use the process of accessing ROWs to extract fees from providers as a means to generate revenue. Some may treat providers differently based on technologies, or arbitrarily, in order to extract more fees and obligations. While there are no accurate counts on the frequency of this behavior, industry cites numerous examples through submitted comments.

Recommendations.

1. **Be Technology-Agnostic.** Increasing broadband deployment means recognizing that broadband, to the home or to the consumer, will be delivered in various ways: fixed wireline, fixed wireless, and mobile. Accessing ROWs to deploy broadband networks is critical, regardless of the type of technology used to deliver broadband to the consumer. The FCC should encourage states and local authorities to review their policies regarding ROWs access to encourage policies that encourage innovation and do not have the unintentional effect of picking winners and losers in broadband deployment technologies. The FCC should encourage local governments to not create policies that clearly confer a competitive advantage to one technology or set of providers over another.

2. **Encourage Transparency.** Discrimination often occurs when there is little to no information available to providers to help them understand the types of fees and obligations that may be levied in order for them to access ROWs. A lack of transparency creates opportunities for providers to be treated differently, even if they are providing similar services or seeking similar access, and not placing an additional burden on the ROW. Additionally, where economically justified, states and localities should seek to periodically review fees charged to earlier entrants with those of later ROW entrants to ensure nondiscrimination between providers. We recommend that states and local authorities work to create tools that allow for transparency in fees such as published rates on city websites for access to various right-of-way assets. Additionally, making public the formula or approach to calculating fees and obligations used by states and localities to any provider that seeks access to ROWs would be immensely helpful in creating trust, goodwill, and better help providers accurately plan capital investments in additional broadband deployment.

3. **Discriminatory Treatment Should be Looked at Holistically.** When discrimination occurs, it is often not a single occurrence. In order to better understand whether there is a pattern of intentional or unintentional discrimination, we recommend that states and local authorities take a holistic view of the fees being levied and obligations being imposed on providers. Taking a holistic view can help determine whether or not
improper discriminatory practices are being employed and how a provider is being treated across its efforts to provide its services.

4. **Encourage Education and Capacity-Building for State and Local Government.**
   Broadband has widespread economic benefits, and can boost educational and job opportunities for Americans. Working together, industry, states, and localities that have built successful model codes to speed broadband deployment that work for all sides should systematically share lessons acquired broadly. Simple principles such as transparent pricing, better education on how to deploy next generation networks, and transparent design standards can speed deployment in the long term.
APPENDIX C

EXCESSIVE FEES BARRIER:
ANALYSIS AND RECOMMENDATIONS

**Barrier Summary.** This barrier occurs when fees for access to ROW and local assets are viewed as unreasonably high relative to the burden on the ROW, or duplicative of fees already paid, or unrelated to some other objective metric.

**Why This Barrier Arises.** This deployment barrier arises when localities and providers cannot agree on appropriate compensation for ROW access and use of local assets. To some extent, this barrier is born of competing interests. Localities need funds to properly maintain public infrastructure and support other public services, and sometimes seek to generate revenues for purposes unrelated to the costs of the ROW and local assets. Private companies, on the other hand, want to quickly deploy technology within the public ROW at the lowest cost possible, on the quickest timeline, with minimal regulatory delay.

Many comments were submitted in the *Accelerating Broadband Deployment* dockets that named excessive fees as a deployment barrier. In comments, providers noted the numerous fees that they pay when deploying in the public ROW, and questioned whether some of those fees were excessive and/or duplicative. These fees included initial and recurring ROW access and licensing fees, pole attachment fees on municipal owned poles, consultant fees, and miscellaneous supplementary fees. These fees are often assessed in different ways depending on the municipality, and can include fees based on attachment location or revenue. Broadband providers also noted that it is often unclear why certain ROW fees are assessed, how those fees are calculated, or what authority is relied upon to assess those fees. Some providers suggest that they are suffering from discriminatory treatment. Some broadband providers also believe they are charged duplicative or excessive fees that are not related to the burden caused by placing these services and local assets in the ROW.

Excessive fees discourage investment and impede broadband deployment efforts. Higher construction costs and uncertain fee structures caused by the lack of transparency can cause providers to forgo or delay deployment projects. Excessive fees may also be passed through to consumers thereby increasing costs to consumers and depressing adoption. Lower adoption rates reduce projected rates of return, which can make broadband deployment uneconomic. This effect is especially undesirable in unserved or underserved areas, where ROW access and use fees can greatly compound already high deployment costs.

Based on the comments provided, below is an analysis of why this barrier exists.

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4 Municipalities in this Working Group had significant concerns around Appendix C being included in this report.

5 Municipalities in this Working Group do not believe that fees in the ROW are a major factor for lack of investment in unserved or underserved areas.
1. **Competing Economic Interests.** The potential for friction between localities and private companies exists because of their competing economic interests. As noted above, localities need funds to properly maintain public infrastructure and support other public services, and sometimes seek to generate revenues for purposes unrelated to broadband deployment. Private companies, on the other hand, want to quickly deploy technology in the public ROW at the lowest cost possible, on the quickest timeline, with minimal regulatory delay. Commenters suggested that increased competition between localities and private companies may add to this friction.

2. **Different Methods of Calculating “Fair and Reasonable” Compensation.** On record, stakeholders disagree regarding how best to determine “fair and reasonable” compensation for ROW use. For example, many municipal parties charge “rent-based” fees based on a “fair market value” calculus, which may include auctions or other methodologies. This difference of opinion extends to the courts, as to what constitutes a “fair and reasonable” fee.

3. **Lack of Principles Regarding Fees.** There are currently no principles that guide municipal fee assessment on broadband providers, which has led to disagreements and disputes. Many commenters provided examples of fees being charged that are duplicative and/or in excess of the burden providers are putting on the ROW and local assets to deploy broadband, and appear solely motivated to generate revenue. Litigating these disputes, commenters note, is not a sustainable solution or good policy. Litigation drains resources, further delays deployment, and creates inconsistent precedent between jurisdictions.

4. **Lack of Transparency.** Negotiations stall and partnerships fray without insight as to how fees are calculated, both with respect to the fee itself and why fees might be allocated differently between providers.

**Recommendations.**

Successful partnerships between localities and broadband providers are necessary to provide broadband connectivity to as many communities as possible. The Working Group acknowledges that providers must pay to use public property resources, and localities’ best serve constituents by making these resources available on mutually beneficial terms and conditions. In order to better facilitate those negotiations, the FCC should provide leadership and clarity on what actually constitutes an “excessive” or “duplicative” fee for ROW access and use fees.

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6 The considerable rate difference between rate-regulated investor-owned and unregulated municipal owned pole attachment rental rates underscores the ideas that many localities may be overcharging when it comes to ROW and use fees.
use, and is therefore outside the meaning of “fair and reasonable” compensation. Therefore, the Working Group recommends that the FCC take the following actions:

1. **The Working Group advises the Commission to introduce greater transparency regarding the way ROW fees are determined by requiring localities to make fee schedules publicly available, along with a brief explanation of how fees were calculated, and why fees may be applied differently between providers or services.** It is not necessary for the Commission to prescribe an identical fee calculation on every municipality to ensure next-generation networks are successfully installed. Publicly disclosing siting fees will introduce helpful cost predictability for deploying carriers, and the additional accountability will encourage thoughtful, rational ROW and use fees.

2. **The Commission should clarify that “fair and reasonable” compensation for ROW access and use implies some relationship to a deployment’s actual burden on the ROW and local assets.** As a policy matter, the Commission should recognize that local fees designed to maximize profit are barriers to deployment. A burden-oriented standard is flexible enough to suit varied localities and network architectures, would ensure that fees are not providing additional revenues for other localities purposes unrelated to providing and maintaining the ROW, and would provide some basis to challenge fees that, on their face, are so high as to suggest their sole intent is to maximize revenue. For example, record evidence shows some providers are charged around $10,000.00 per wireless node in up-front licensing and application charges, and similar annual rents. Several commenters also cited a Eugene, Oregon ordinance that requires broadband providers to pay the municipality seven percent of their broadband revenues for access to the public ROW, despite the fact that many providers are offering their service over existing plant for which they are already paying a franchise fee. The Commission could also establish a presumptively reasonable “safe harbor” for certain ROW and use fees, although the Working Group acknowledges this may be a challenge considering some similar services are nonetheless governed by different statutory fee rules.

3. **The Working Group also encourages the Commission to eliminate certain practices that the record suggests unreasonably restrict deployment.** For example, the FCC should discourage the practice of requiring broadband providers obtain additional

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7 The Municipalities in this Working Group do not believe that the FCC has the authority to dictate fee structures to local authorities, but the sharing of successful, voluntary models for rate structures that work for both municipalities and providers may be helpful.

8 Municipalities in this group do not believe fair and reasonable compensation for ROW access should necessarily be related to the burden. Instead, municipalities urge the consideration of other objective metrics.

9 Ibid.

10 Municipalities in this Working Group showed concern about singling out individual cases of excessive fees and drawing widespread conclusions for all cities. Municipalities want broadband deployment in their communities and many make trade-offs on fees to incentivize broadband investment in their communities.
franchise agreements, or pay additional fees, to deploy broadband facilities within the ROW when they have already paid to access the ROW and the additional facilities do not impose more burdens on the municipality. The Commission can also discourage states and localities from transferring to providers unending consulting fees by limiting to what extent consulting fees are considered “fair and reasonable,” and prohibit contingency-based compensation for consultants.

4. The Working Group acknowledges that the Commission has many tools to create positive changes throughout the siting process with respect to ROW fees. The Working Group advises the Commission to first ensure that the BDAC Model Code for States and Model Code for Localities each implement the fee-related policy recommendations described above. As a next step, the Commission should consider enacting new rules in the Accelerating Deployment dockets, issuing a declaratory ruling providing guidance, or developing best practices. Including fee schedule disclosure as part of any “broadband certified” checklist would also support expedited deployment.
APPENDIX D

INFLEXIBILITY BARRIER:
ANALYSIS AND RECOMMENDATIONS

Barrier Summary. This barrier arises when a local government is either unwilling or unable to appropriately adjust its review and approval processes to reflect different broadband technologies (e.g., 4G v. 5G) or deployment strategies (e.g., undergrounding v. aerial).

Why This Barrier Arises. There are several instances when an inflexibility barrier might arise:

1. Cities might be unwilling to change their review processes because they do not see the use in changing procedures that they perceive as working well. This likely stems from a lack of understanding of differences in how new technologies are deployed.

2. Some cities might be intentionally inflexible because existing procedures embody their preferences, values, etc. for how networks should be built.

3. Other cities might be unintentionally inflexible due to lack of resources, technical expertise, or general knowledge of new broadband network characteristics. Deployment moratoria and other process-related delays might arise as a result as cities attempt to clear a backlog of applications, seek to acquire the information to make informed decisions, etc.

Recommendations.

1. “Broadband Ready” Certification Checklists. The FCC should either develop or encourage states to develop a process (checklist) by which localities can certify that they are “broadband ready.” Such could be modeled on processes/checklists set forth in legislation recently enacted in Indiana and Wisconsin. Certification might include, at a minimum, requirements around:

   a. Specific commitments related to the determination of permit completeness (e.g., 10 days) and final approval or rejection (e.g., 60 days);

   b. Transparency and reasonable fees associated with the broadband investments; and

   c. Designating a single point of contact for broadband projects. This would allow broadband providers to know exactly who is responsible for the timelines outlined in the law.

2. Other Legislative Guidance. The FCC should encourage states, working with localities and other stakeholders, to adopt legislation that clarifies for localities that new
broadband technologies and network deployment strategies require different review and approval processes at the local level. A possible first step would be for the FCC – either on its own or via BDAC and its Working Groups – to work with national organizations representing state and municipal policymakers to develop and promote model codes that could be implemented across the country.

3. **Provider-Driven Education & Outreach.** The FCC should encourage greater collaboration between providers seeking to deploy new facilities and local officials tasked with reviewing applications for such. In a growing number of instances, such close consultation has assisted localities in more rapidly understanding technical aspects of new broadband networks, which in turn has helped to hasten agreement to ROW access and other critical elements of network deployment.

4. **Additional Educational Opportunities.** The FCC should explore how to leverage other expert stakeholders to provide localities and states with opportunities for acquiring the knowledge and skills needed to streamline the deployment of new broadband networks. These efforts might include:

   a. The convening of regional roundtables and/or online forums wherein state and local officials could gather for practical training, educational sessions, and the sharing of best practices. These might be modeled on workshops and webinars organized and hosted by NTIA over the last few years and could be broadened to include municipal and state perspectives to educate industry on how best to work with them.

   b. Designating a handful of higher educational institutions in key parts of the U.S. as hubs where localities and states in their regions might go for expert advice, resources, best practices, case studies, etc.

   c. Encouraging communities to work together and share resources to better address novel issues as they arise. The FCC could help to facilitate the creation of an information-sharing hub and/or a digital platform through which similarly situated communities could identify one another and connect.

   d. Partnering with relevant national associations (e.g., NCSL, NGA, USCM) to develop and disseminate tool kits, best practices, etc.

   e. Development of an online “master” guidebook for use by local officials when engaging in reviews for new network deployments.

5. **Identify Incentives to Assure Forward Progress.** The FCC should explore funding for states and localities to engage in the kinds of educational and self-improvement activities described above.
APPENDIX E

INORDINANCE BARRIER:
ANALYSIS AND RECOMMENDATIONS

Barrier Summary. This barrier occurs when the conditions, requests, or requirements put forward by a state or local entity are unreasonable or overly burdensome.

Why This Barrier Arises. The Working Group has identified that this kind of barrier occurs when a state or local authority’s conditions, requests, or requirements are unfair, inappropriate, unreasonable, or overly burdensome. To highlight the practical applicability of this definition, the Working Group and some commenters identified a number of practices that are considered “inordinately burdensome.” Some of the practices identified include:

- Conditions imposed that are unrelated to the project for which they were seeking ROW access;
- Unrealistic Conditions on size, space, and location, including unrealistic restrictions imposed on the size, amount of space, and location of equipment and facilities;
- Practices prohibiting upgrades to facilities in ROW, including requiring a full review process even when upgrading existing facilities or making changes that are not substantially different from existing equipment; and
- Requiring all infrastructure to be underground, without allowing for alternative facilities.

Recommendations.
The Working Group recognized that preemption should be a last resort and, as such, the FCC should work closely with states and localities to come to amicable solutions wherever possible. As the comments filed in the dockets made clear, certain barriers such as moratoria may arise unintentionally due to small cities or localities lacking the resources, time, or expertise necessary to conduct prompt and thorough reviews quickly. To this end, we recommend that the FCC investigate the costs and benefits of developing a process for timely and efficient review of disputes — perhaps resembling arbitration — to assist all parties with working through issues that arise.

For example, we recommend that the FCC:

a. Engage, along with expert partners, in comprehensive outreach and education efforts to communicate the impacts of inordinate review/approval processes on network deployment, consumers, etc. and find solutions to speed deployment while preserving public safety.
b. Work, either on its own or via the BDAC and with municipal stakeholders, to standardize the application process to the extent possible. While recognizing the need to accommodate unique needs of particular local areas, the goal should be the greatest uniformity possible. It should develop standard guidelines and materials that can be tailored to the need of local communities and that all providers could take advantage of. This will be helpful to identify the circumstances under which additional materials can be requested and conditions imposed.

c. Work with localities — perhaps through national organizations like NCSL, NLC, USCM, NATOA, etc. — to reach consensus on floor/ceiling standards vis-à-vis aesthetics and related items. These efforts should include the clear identification of the circumstances under which a locality or state can supplement/change these standards. Carve-outs for historic districts and similarly unique areas should also be considered.

d. Develop, either on its own or via the BDAC and with municipal stakeholders, a range of model codes/approaches that are tailored for different circumstances. Rather than one model code, the FCC might consider having model codes/approaches for large urban areas, smaller urban ones, rural towns, etc. Such an approach would ensure that each model code would properly take into account the nuances associated with its relevant geographic area.

e. Outline best practices for developing streamlined, simplified, and predictable permitting processes to guide states and localities.

f. Develop more clarity of “character of the neighborhood” or “aesthetics” between cities and providers. Such a discussion should occur prior to permitting in order to establish clear and transparent expectations and options on both sides up front.

g. Urge batch permitting for small cell antenna on structures in the ROW. Installations within the batch should be on the same kind of structure in areas with similar characteristics. Localities should have the ability to pull troublesome installations that might be caused by a number of things including ROW uses that are more complicated out of the batch, thus allowing the rest of the conforming batch to proceed forward.

h. Encourage cities to create more predictability in the permitting and install processes by developing zones as a layer in their comprehensive plans that predefine types of installations allowed, character of the neighborhood, compensation for use of the ROW and local assets, types of existing and available structures and guidance for new construction. These zones should remove barriers and increase predictability for providers to build out broadband networks. The zones could also potentially allow the city to incentivize deployment in areas that are underserved.
APPENDIX F

NONCOMPLIANCE BARRIER:
ANALYSIS AND RECOMMENDATIONS

BARRIER SUMMARY. This barrier occurs when a state or local authority or applicant fails to enforce or comply with its established rules or procedures.

WHY THIS BARRIER ARISES. There are typically two driving factors behind why instances of noncompliance might arise:

1. Unintentional. Incidental or unavoidable noncompliance barriers can occur when state or local authorities lack sufficient resources to meet its obligations or do not have an existing code in place by which to make decisions. Noncompliance can also occur when applicants inadvertently submit incorrect or incomplete applications.

2. Intentional. Willful noncompliance barriers can occur when state or local authorities resist or ignore shot clock obligations, lack the desire or ability to allow for nuanced or tiered treatment of applicants, or attempt to use their authority to extract unwarranted value from applicants or prioritize their own competing interests. Willful noncompliance can also occur when applicants submit bad-faith applications or install facilities prior to obtaining a permit.

RECOMMENDATIONS.

1. Education & Training. In order to head off noncompliance before it occurs, state and local authorities should be educated on newer technologies and their components (e.g. generalized background on small cell or fixed wireless technologies). This fosters a stronger understanding of the needs of various network providers, informs the decision-making process, and promotes opportunities for collaboration among all stakeholders.

2. Collaboration & Guidance Tools. Key industry, government, and trade or other collective interest representatives (e.g., alongside organizations like the National League of Cities) should work collaboratively to develop solutions to noncompliance challenges.

   • The development of a clear application, along with clear guidance materials that accompany the application, could promote mutual understanding among government and industry stakeholders and avoid and repair adversarial interactions.

   • Examples of related best practices: The states of Georgia and Michigan provide clear directives/guidance to localities with the METRO Act.
3. **State Default Agreement.** This would provide parties with the option to resort to a “default agreement” in instances where they cannot reach a mutually satisfactory agreement within a reasonable amount of time, or where localities lack sufficient resources to adhere to their shot clocks or other obligations.

- The default agreement must be sufficiently flexible to accommodate unique local needs, but create as standardized a process as possible. The agreement must comply with state constitutions and other laws. It must go into effect automatically if the parties cannot successfully negotiate other terms.

- "Other terms" would include things like an extension of the shot clock requirements or a fee reduction in exchange for additional review time, not just a "final" agreement.

- The state default agreement should be developed collaboratively with the input of all relevant stakeholder types to ensure fairness and respect for the process. Furthermore, this practice will incentivize adherence to the agreements, because the alternative may be preemption or a federal code.

4. **"Interconnection Contract."** Providers can negotiate a deal with one county or municipality and another county or municipality can request the same deal with the provider if they “opt-in” to be part of the network. Conversely, providers can request the same deal other providers previously negotiated with counties or localities. However, it should not be mandatory for the government entity or the provider to accept such a request. If parties aren’t able to negotiate mutually agreeable contract terms, they could utilize the state mandatory default agreement or take the issue to a PUC to arbitrate. (For more details regarding how this type of contract could operate, see Sections 251 & 252 of Title 47.)

5. **Study a Mediation/Arbitration Process.** Legal action is one of the few remedies to this barrier, but it is expensive and precludes limited-resource newer entrants. In order to maintain an appropriate level of municipal and state authority in the resolution of state and local matters, expanding legal recourse for noncompliance through the development of streamlined, state-level complaint and remediation/arbitration process that incorporates financial or other penalties for noncompliant parties on each side could serve as a more efficient, transparent, and cost-effective method of resolving noncompliance challenges than going to court. Such a process could be administered by a neutral third party with an escalator (i.e., appeals process) for non-functioning processes to a federal-level review for final de novo determination including preemption (with no deference granted to the mediation/arbitration decision).

- Examples of related best practice: Public and private stakeholders in Minnesota developed and utilize a noncompliance adjudication process established with the
PUC. The New York state Broadband Program Office serves as state-level agency that coordinates between state and local agencies for all permitting.

6. **Resource "Sharing".** Establish a voluntary pool to which providers can contribute in order to offset a locality’s overtime pay costs, so that applications can be processed expediently where resources are otherwise limited. Require the pool to operate on a 1st-in-1st-out processing basis to prevent special treatment in favor of businesses that contribute to the pool over those that do not contribute or businesses that contribute greater amounts to the pool than other contributors. Establish a “human capital sharing” program among localities to enable localities with limited human capital to access qualified personnel in times of greater need than the local market can supply.
APPENDIX G

PREEMPTION ANALYSIS

The Working Group discussed at length the issue of preemption. An array of fundamentally different perspectives was offered, preventing consensus from being reached on a framework that might guide how the FCC approaches this issue in the context of removing state and local barriers to broadband deployment. Nevertheless, the issue of preemption is too important to ignore. In lieu of offering recommendations that splintered the Group, we instead offer the following observations that might inform discussions on this issue going forward (these have been endorsed by the entire Working Group).

1. Each level of government has a legitimate and compelling interest in assuring timely deployment of communication services. For cities and states, these interests revolve primarily around protecting the safety and welfare of their citizens, as well as delivering 21st century infrastructure.

2. There is a history of federal preemption of state and local actions impacting the delivery of telecommunications and broadband services. Putting aside the merits of these actions – the FCC has a statutory obligation to engage in preemption when certain conditions warrant. The Group takes no position as to the specific condition under which such preemptive actions might be legally feasible or appropriate.

3. The Group is unable to offer guidance regarding how the FCC should engage in preemption. Some feel preemption should be used often; others feel it should be used sparingly, if at all. Even so, the Group agrees that there might be categories of behavior that are more deserving of serious scrutiny vis-à-vis preemption than others. Similarly, there might be actions by state and local governments in the context of broadband deployment that are immune from federal preemption. Further inquiry might be appropriate.
APPENDIX H

PREEMPTION OF MORATORIA ANALYSIS

In Consideration of Moratoria: This appendix offers ideas for framing the use of explicit moratoria by local governments as it relates to the deployment of advanced communications infrastructure. Implied or effective moratoria, stemming from other factors are outside the scope of this document. The attempt here is to find where opportunity may exist for compromise and consensus among differing perspectives on moratoria as an appropriate policy management tool when applied to advanced communications deployment.

Can we define appropriate/reasonable use of moratoria? Unbounded or unjustified moratoria are clearly bad for everyone. Bad for providers because it prevents expansion of new services. Bad for other municipalities because they can be painted with the same brush when working to secure service improvements in their city. Bad for everyone because of Metcalfe’s law: the network is more valuable to its users when everyone is connected.

From the perspective of a municipal government, a moratorium in the context of advanced telecommunications deployment is used for two primary purposes. One use relates to project planning and the other provides time for the organization to adapt to change. From the perspective of broadband providers, moratoria can be used as leverage in negotiations over other terms such as price and aesthetics.

The first use-case (project planning and coordination) is largely non-controversial and involves a process for dealing with known, common planning and coordination issues involving foreseeable disruptive events. This usually takes the form of a temporary ban on deployment in an area that is scheduled for construction, or safety concerns associated with deployment. While most understand the need for this type of situational moratoria, there are opportunities for process improvements that have the potential to reduce the drag on deployment timeframes:

- Clear and timely posting of construction windows that includes all pertinent details such as justification, location, and timeframes.
- Set black-out dates for the actual construction, but not the permitting process. Accept and process permit applications before and during situational moratoria.

These targeted, situational moratoria that meet notification and justification standards may be considered reasonable as long as applied on a non-discriminatory basis to all users of the ROW. The second use of moratoria by municipalities (to provide for organizational change) has come in to highlight recently because of a fast-moving wave of technological changes that bring new variables to local rights-of-way management policies and processes. These changes have prompted more municipalities to employ moratoria to create time for local policymakers to
develop a framework and set of processes to appropriately respond to these new external circumstances.

While there is not universal agreement on the appropriate use of this tool, there is value in identifying some of the major concerns and defining potential remedies. Problems arise when the parameters and the justification for the moratorium are not made clear and the timeframe extends to a point to be considered excessive. Moreover, because this justification can be invoked at any time, there is no effective end date by which municipal governments must be prepared to begin accepting applications to deploy broadband services.

The workgroup report makes numerous recommendations on how to mitigate the need for these process-driven moratoria by doing more work on the front-end preparing local jurisdictions to be responsive to broadband deployment requests when they come in. While not immediate, the results of doing this work will likely lead to a longer-term solution and contribute to a much less toxic relationship between providers and the communities they serve. Greater investment in training and capacity building for cities can help to speed deployment if playbooks are developed to assist in rapid retooling of staff capacity and, in some cases, helping to provide resources to augment staff capacity to speed reviews, permitting, and inspections.

While carriers and municipalities may not agree on the appropriate use of moratoria, or whether moratoria are being used in an appropriate way in any particular situation, there are some actions that could reduce the tensions they create:

- Justification for a process moratorium should be fully articulated and clearly noticed.
- States should initiate a program that works with and supports municipalities in updating their local processes now to avoid the need for moratoria in the future.
- Moratoria should not be used as an unreasonably extractive tool in negotiations, but rather as a tool to ensure the best outcome for communities.
- Municipalities should accept input, including provisional permit applications, during the temporary moratorium so that it may be used to inform how changes are implemented.

A place where it may be difficult to find compromise is on the issue of aesthetics as a policy driver. There doesn’t seem to be any immediately evident common ground on this issue.

The moratoria discussion highlighted the fundamental tension between the ability of municipalities to pause deployment activity while not undermining the policies which are the basis of shot clock laws. Municipalities believe moratoria are a necessary policy tool to provide them the ability to adjust to new circumstances, while carriers believe that shot clocks or other deadlines are necessary to move approvals forward within reasonable timeframes. While we have not resolved this fundamental tension, we have attempted to provide some suggestions that may mitigate the causes of disputes.
It should be highlighted that any use of moratoria remains subject to existing state and Federal restrictions and should be subject to some controls. Municipalities must act in good faith, in a non-discriminatory manner, and set a limited duration. They need to articulate a factual basis and a public necessity for the moratorium and the moratorium must be reasonably calculated to alleviate the identified concern.
APPENDIX I

BROADBAND READINESS CHECKLIST

The Working Group identified a number of items that aid in expediting advanced telecommunications deployment within localities that do not necessarily rise to the level of inclusion in a code or ordinance. The recommendation is to develop a list of these items that a community can use as a tool to proactively prepare to facilitate telecommunications development projects. Below is a high level draft of what might be included in such a list.

Project Management
- Establish, identify and publish a single point of contact/project manager/ROW manager for broadband deployment projects. Include other relevant contacts as appropriate.
- Identify clear escalation process/procedures with specific contact information for any issue that arise.

Assets & Data
- Identify and locate any existing maps of available infrastructure, planned construction, etc.
- Identify expeditious process for making existing GIS data available.
- Identify any known contacts for electrical and backhaul sources.

Rate Structure
- Publish detailed rate/application fee information:
  - Wireline attachment, microcell (by type of pole).
  - Establish pre-program master attachment and maintenance agreements.
  - Summarize impacting state/federal/local regulations, pole/strand exemptions/restrictions, utility impacts; identify impact of currently in place agreements (if any).
- Publish a rate study guide.

Permitting
- Publish permit fees.
- Create or identify rapid processes for permit review and processing along with specific timeframes for permit issuing.
- Identify duration of permit and any restrictions that may be relevant.

Construction
- Publish underground and aerial standards (e.g. boring, micro-trenching, National Electrical Safety Code (NESC), minimum clearances between communications attachments and power attachments).
- Publish insurance and bonding requirements.
- Identify seasonal timelines and any other time-based limitations.
- Identify utility reroute/deployment/maintenance policies.
• Identify any required use of specialized crews/deployment management on assists.
• Publish any additional training requirements mandated by a particular utility to work on/access a site, and identify any requirements for partnerships with utility-approved contractors.
• Publish aesthetic considerations that have been codified, and are clear and consistent across providers.
• Publish any provisions that are in place to expedite moving of pole attachments so that each attachment doesn’t need a separate truck roll to be moved, such as one touch make ready.
• Publish engineered plans showing equipment that will be attached to poles and an analysis of the existing pole and if it will handle the new attachments.
• Publish the layout of power supplies and cable or fiber to receive and send signals to new equipment.

**Maintenance**

* Create and make available a policy on emergency facilities maintenance procedures.
* Create a process for sharing road closure information.
* Identify appropriate communication channels for maintenance issues.
* Identify requirements for incumbent utility/municipal/DOT maintenance agreements.
This appendix highlights the process that the Removal of State and Local Barriers Working Group (Working Group) utilized to complete its assigned tasks: (1) Identify patterns of specific instances of actions at the state and local level that serve as barriers to broadband deployment; (2) Identify examples and discuss the consequences of local governmental restrictions that may "prohibit or have the effect of prohibiting" service; and (3) Examine the extent to which localities may single out communications-related deployments for more burdensome treatment than other deployments that have the same or similar impacts on land use.

To the extent that our main task was to identify patterns and consequences, we undertook a thematic analysis to pinpoint and evaluate patterns (or "themes") within data that we gathered. Given the extensive experience of the Working Group’s members, we initially focused on categorizing each of their experiences regarding state/local barriers to broadband deployment. This resulted in 189 examples of the experiences that the industry faced in deploying broadband. Recognizing that this represented only the industries’ perspective, we then reviewed and summarized over 200 sets of comments that were filed in the FCC’s related proceedings.\textsuperscript{11} This provided us with over 706 pertinent examples of and rational for the existence of these barriers—484 from industry entities and 222 from city, state and other parties.

Using this extensive data set, we undertook a qualitative analysis to identify patterns and root causes, i.e., identify thematic barriers. We initially tabulated the number of comments, which identified the patterns but that did not adequately describe the root causes and rationale for such barriers. Therefore, we created subgroups to evaluate individual barriers to discuss and determine—

(1) Why does the barrier exist—root causes and rationale?
(2) What is the consequence of the barrier?
(3) How have some states/localities dealt with such barriers?
(4) What solutions have been recommended?

We then identified 6 common themes across all of these barriers. Subgroups where then tasked to independently summarize the barriers, identify why the barrier exists, and make recommendations for addressing the barrier. The subgroups reports (Appendices A-F in this report) were discussed including the development of recommendations. Furthermore, a

subgroup was developed to provide an analysis of the preemption process for consideration of its applicability to the Work Groups efforts (Appendix G of this report), a subgroup looking at preemption of moratoria (Appendix H of this report) and another subgroup developed a list of these items that a community can use as a tool to proactively prepare to facilitate telecommunications development projects checklist (Appendix I of this report).
APPENDIX K

BDAC APPROVED RECOMMENDATIONS

At the November 9, 2017, meeting of the whole BDAC, the following recommendations were discussed and approved.

1. The FCC should work, either on its own or via the BDAC, with industry and state/local agencies (or national associations) to develop a broadband readiness checklist.

2. The FCC should either develop or encourage states to develop a process by which localities can certify that they are “broadband ready.”

3. The FCC should finalize, via BDAC, and with industry, states, and local governments that have implemented successful model codes, a voluntary, flexible model code or set of guidelines to speed broadband deployment.

4. The FCC should encourage greater transparency regarding the way fees are calculated by requiring localities to make fee schedules publicly available, along with a brief explanation of how fees were calculated.

5. The FCC should explore how to leverage other expert stakeholders to provide localities and states with opportunities for acquiring the knowledge and skills needed to streamline the deployment of new broadband networks.

6. The FCC should study whether a streamlined mediation and arbitration process administered by a neutral third-party would in fact expedite deployment.

7. The FCC should explore funding and certification programs for states and localities to engage in educational and self-improvement activities related to accelerating broadband deployment.

8. The FCC could help to facilitate the creation of an information-sharing hub and/or a digital platform through which similarly situated communities could identify one another and connect.

9. The FCC should study the establishment of a voluntary pool of experts to which providers can contribute in order to offset a locality’s overtime pay costs, so that applications can be processed expediently where resources are otherwise limited.
APPENDIX L

REMOVAL OF STATE AND LOCAL REGULATORY BARRIERS WORKING GROUP MEMBERS

Chair: Robert DeBroux, TDS Telecom
      Timothy Ulrich, TDS Telecom*

Vice-Chair: Kim Keenan, Multicultural Media, Telecom and Internet Council
           Rikin Thakker, Multicultural Media, Telecom and Internet Council*

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Christianna Barnhart, Charter
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      Elizabeth Bowles, Aristotle
      Randy Brogle, Zayo
      Kyle Burgess, Consumers’ Research
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      Bill Esbeck, Wisconsin State Telecommunications Association
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      Andy Huckaba, City of Lenexa KS
      Marc Hudson, Rocket Fiber
      Mark Johnson, The Quilt
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      Mayor Sam Liccardo, City of San Jose, California
      Shireen Santosham, City of San Jose, California*
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