

The Complexities of Permitting: A Barrier to Connectivity

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Executive Summary

The Broadband Equity, Access, and Deployment (BEAD) program is a federal initiative that aims to expand high-speed internet access to underserved and unserved communities. With \$42.5 billion in funding, the program has the potential to significantly impact digital connectivity across the U.S.

However, a major challenge stands in the way: the permitting process. While permits are necessary for safety and compliance, the current system is fragmented and inconsistent. Each municipality has its own requirements and timelines, leading to delays—especially in rural areas with limited resources.

This white paper examines:

- 1. The inconsistencies in permitting across different jurisdictions.
- 2. How the influx of BEAD-funded projects will strain the current system.
- 3. Practical strategies to simplify and improve the process.

This paper outlines a path for municipalities, internet service providers, and Broadband developers to collaborate by highlighting real-world examples and practical solutions. Streamlining the permitting process will be key to getting broadband projects off the ground and delivering connectivity where it's needed most.



INTRODUCTION-

Introduction

Navigating the permitting process is essential for building network infrastructure, even though it can sometimes feel like more of a hassle than a benefit. Every city, county, and state has its own rules, timelines, and approval processes, creating a maze of regulations that slow down projects and drive up costs. For ISPs other providers. and these roadblocks can mean the difference between getting customers connected or watching projects stall out.

This challenge is even greater for rural and underserved areas, which need broadband the most. Limited resources at the local level make approvals slow, while inconsistent rules from one jurisdiction to the next add more complexity.



This paper covers the problem in plain terms. It examines why permitting is such a mess, how BEAD funding will put even more pressure on the system, and what can be done to fix it. The goal is simple: find real solutions that help ISPs and local governments cut through red tape and get broadband projects moving.



The Need For Standardization

Permitting shouldn't be the biggest obstacle to broadband expansion, but right now, it often is. Every municipality has its own permitting rules, application forms, and approval timelines. While local control sometimes makes sense, the lack of consistency creates a complicated system that delays projects and drives up costs.

For ISPs and Broadband providers, this patchwork approach means:

- **Unnecessary complexity:** Every jurisdiction has different rules, forcing ISPs to navigate a new process for every project.
- **Unpredictable delays:** Without clear review timelines, planning around approvals is impossible.
- **Redundant steps:** Overlapping inspections and approvals add time without adding value.

With BEAD funding ready to drive broadband expansion, these inefficiencies will only worsen. Many municipalities, particularly in rural areas, are already stretched thin. A surge in permit applications could overwhelm local offices, further delaying projects.

A standardized permitting system could ease these challenges by:

- Using a standard application format to simplify submissions.
- Setting clear review timelines so ISPs and municipalities can plan ahead.
- Encouraging regional cooperation to streamline projects that cross jurisdictional lines.

Achieving this level of coordination won't happen overnight, but the benefits are clear—less red tape, faster approvals, and a permitting process that helps, rather than hinders, broadband expansion.

Extended Wait Times

Permitting delays are one of the most common barriers to broadband expansion. Timelines vary widely depending on location, local resources, and approval processes. While rural areas are often seen as more challenging due to limited staffing and infrastructure, urban areas can be just as difficult because of their complex regulations and high volume of applications. Permitting isn't universally easier or harder in one setting—it depends entirely on the municipality and its structured process.

Rural Variances: From Simple to Frustrating

In rural areas, the permitting process can be surprisingly easy or painfully slow. Some towns have minimal oversight, while others lack the staffing and process to handle applications efficiently.

- **No Formal Process:** Some rural municipalities don't have strict permitting procedures, allowing projects to move forward quickly with little red tape.
- Limited Accessibility: On the other end of the spectrum, some rural governments lack websites, clear points of contact, or dedicated permitting offices. Getting approvals might require tracking down officials who wear multiple hats or attending town meetings.

These extremes mean that while rural permitting can be straightforward, it can also be time-consuming if local governments lack the structure to handle applications efficiently.



Urban Complexities: Layers of Approval

Urban permitting is typically more structured, but that structure often means more hurdles to clear.

- **Detailed Requirements:** Cities often require engineered drawings, environmental assessments, and land surveys, which add time and cost.
- **Multiple Departments:** Permits may need approval from public works, engineering, zoning, and code enforcement, creating bottlenecks.
- **High Volume:** Urban areas process a large number of applications, leading to backlogs that can delay even well-prepared projects.

For example, a fiber installation in a city might require coordination with utility companies, multiple plan submissions, and sign-offs from different agencies. While these steps ensure thorough review, they also add time to the process.

The Key to Success: Adaptability

Whether in rural or urban settings, the key to navigating permitting is preparation and adjusting to local requirements.

- In Rural Areas: Finding the right decision-makers and demonstrating how a project benefits the community can help move things along. Building relationships is often more effective than simply following a rigid process.
- In Urban Areas: Having detailed plans ready and understanding each department's requirements can speed up approvals. City officials tend to value precision and professionalism.

Neither setting is inherently more difficult—the challenges are just different. Rural permitting requires persistence and flexibility, while urban permitting demands technical expertise and coordination.

The Ripple Effect of Delays

No matter the location, permitting delays have consequences:

- **Missed Start Dates:** Projects can't break ground without approvals.
- **Disrupted Schedules:** Contractors, suppliers, and crews must adjust plans, causing inefficiencies.
- **Higher Costs:** Delays lead to increased labor, equipment rental, and material costs.
- **Risk to BEAD Funding:** Strict deadlines mean delays could put project funding in jeopardy.

Understanding these challenges—and tailoring the approach to each municipality—can help minimize roadblocks and keep projects on track. The variability of the permitting process makes preparation, expertise, and flexibility essential for success.

Complex Requirements

Beyond being inconsistent, permitting can also be overly complicated. Broadband providers must navigate a mix of technical, environmental, and administrative hurdles that slow down projects and increase costs.



Engineering and Design Hurdles

Many municipalities require extensive documentation before even reviewing a permit application. While these regulations serve a purpose, they can add unnecessary delays—especially in areas with limited local expertise.

- **Certified Engineering Stamps:** Some jurisdictions require all project plans to be reviewed and stamped by a licensed engineer. This can create bottlenecks, particularly in rural areas where engineers are harder to find.
- Land Surveys and Right-of-Way Approvals: Many broadband projects need detailed land surveys to confirm they won't encroach on restricted areas such as highways and state roads. Due to the stringent requirements of the local DOT, these permits can be very time-consuming and expensive.

In some cases, local governments lack the staff or expertise to review these documents efficiently, leading to even longer wait times.

Environmental and Seasonal Constraints

Broadband deployment often overlaps with environmentally sensitive areas, adding another layer of regulation.

- Wildlife Protection Laws: Certain projects are restricted during nesting seasons for protected birds, delaying work for months.
- Wetland and Waterway Restrictions: Installing fiber near bodies of water requires additional approvals from environmental agencies, which can cause project delays.
- Seasonal Construction Limits: In colder regions, frozen ground restricts the timing of work, while hurricane-prone areas have stringent building codes that require additional review steps.

These environmental factors can make an already slow permitting process even more unpredictable.

Administrative Barriers and Outdated Processes

Beyond technical and environmental requirements, many municipalities still operate with inefficient, outdated permitting systems.

- **Multiple Approval Stages:** Some jurisdictions require sign-offs from several departments—planning, public works, environmental services—each with its own timeline and review process.
- **Paper-Based Applications:** Many municipalities still rely on physical paperwork, which can lead to more review delays and make progress tracking difficult.

These inefficiencies highlight the need for a more modern, standardized approach. Without better coordination and updated processes, permitting will remain a roadblock to broadband expansion.

Regulatory Issues

Conflicting Regulations

Some broadband projects cross multiple jurisdictions, and conflicting regulations create another layer of responsibility. Differences in permitting rules, environmental policies, and safety standards can lead to delays, forcing ISPs and Broadband providers to navigate a patchwork of requirements that often don't align.

Inconsistent Standards Across Jurisdictions

Even within the same state, municipalities and counties can enforce vastly different permitting rules, making it difficult to follow a single streamlined process.

- Varying Application Processes: Some jurisdictions accept digital submissions, while others still require physical copies with notarized signatures.
- **Different Utility Coordination Rules:** Regulations for underground and aerial fiber installations can change from one municipality to the next, forcing providers to adjust their approach with each project.

These inconsistencies require ISPs to modify their strategies on a case-by-case basis, adding time and administrative burdens to every deployment.

State vs. Federal Compliance Issues

Permitting gets even more complicated when state and federal regulations don't align.

• Environmental and Historic Preservation Rules: Federally funded projects may need to comply with the National Environmental Policy Act (NEPA) or the National Historic Preservation Act (NHPA), even if state regulations are less strict.

 Railroad and Highway Right-of-Way Rules: Broadband projects near transportation corridors often require detailed applications based on their guidelines, which may be even more thorough than the governing municipality.

This regulatory mismatch forces ISPs and Broadband providers to juggle multiple sets of requirements, often requiring legal and compliance teams to sort through the red tape.

Legal Risks and Compliance Challenges

Conflicting regulations don't just slow projects down—they also create legal uncertainty and financial risks.

- **Retrofitting Requirements:** Some jurisdictions require ISPs to upgrade existing infrastructure to meet newly imposed standards, adding unexpected costs.
- **Regulatory Disputes:** Conflicting interpretations of rules between municipalities can lead to disputes and in some cases, legal battles that stall projects indefinitely.

The Need for Regulatory Coordination

These regulatory conflicts highlight the need for better coordination between local, state, and federal agencies. Standardizing permitting requirements and improving inter-agency communication would remove unnecessary barriers, reduce delays, and allow broadband expansion to move forward more efficiently.

Challenging Permits

Broadband permitting challenges aren't just theoretical they happen in real projects across the country. Here are a few examples of complex permitting processes and how we successfully navigated them.

Perm-75 in New York

New York's Perm-75 requires professional engineering stamps and detailed land surveys for projects along DOTmaintained roads. These requirements often lead to delays in rural areas, where licensed professionals are scarce.

Our Approach: We streamlined the process by working with pre-approved engineering firms and securing survey data in advance, reducing review times and ensuring that applications were complete before submission. This proactive approach helped minimize delays and kept projects moving.

North Carolina Railroad

Broadband projects near railroads require precise installation methods, detailed equipment specifications, and extensive coordination with municipal and railroad authorities.

Our Approach: We worked closely with railroad engineers to align project designs with existing infrastructure, avoiding unnecessary modifications and speeding up approvals. By establishing clear communication channels early in the process, we reduced back-and-forth negotiations and kept timelines on track.



CHALLENGING PERMITS

City of Brunswick

Brunswick requires extensive documentation and coordination between multiple agencies, adding layers of review that can delay progress.

Our Approach: To navigate these requirements, we developed a standardized documentation package that met all municipal standards upfront, eliminating unnecessary revisions. We also coordinated directly with city officials to ensure all stakeholders were aligned, preventing unexpected delays.

Marshfield Utilities (Wisconsin)

Marshfield imposes seasonal construction restrictions and requires pole-loading analysis for any utility infrastructure project. These constraints, tied to weather and safety concerns, shrink construction windows and complicate project scheduling.

Our Approach: We mitigated these challenges by scheduling work around seasonal restrictions and conducting pole-loading studies in advance to avoid last-minute issues. By working with utility providers early in the process, we secured approvals ahead of time and optimized construction timelines.



Impact on Cost and Viability

Permitting delays can be one of the significant cost drivers in broadband deployment. Beyond increasing expenses, they create cascading effects that can threaten the overall success of Broadband projects.



Financial Impacts

Every day a project is stuck in permitting, costs continue to rise. Crews remain on standby, leased equipment racks up fees, and missing deadlines can lead to financial penalties. For example, a six-month delay on a \$10 million broadband project can result in:

- Labor Cost Overruns: Extending contractor agreements adds 15-20% to baseline costs.
- Idle Equipment Fees: Leased construction equipment can cost up to \$50,000 per month, even if it's not being used.
- **Missed BEAD Milestones:** Failure to meet funding deadlines could lead to lost grants or reallocated funds.

Smaller ISPs and cooperatives are hit the hardest, as they operate with tighter margins and have less financial flexibility to absorb delays.

Lost Revenue Opportunities

Delays don't just increase costs—they also push back revenue generation. Every month of stalled deployment, ISPs miss out on service revenue from new customers.

For example, an ISP expecting \$250,000 in annual revenue from a fiber expansion loses about \$20,000 per month for every month permitting holds up the project. Over time, these delays make network expansion less financially sustainable.

Community and Stakeholder Costs

Beyond financial impacts, permitting delays slow down the benefits of broadband access for businesses, schools, and healthcare providers. Communities waiting for reliable internet face:

- **Economic stagnation:** Local businesses struggle to expand, remote work remains inaccessible, and students lack reliable digital learning tools.
- **Strained municipal-ISP relationships:** Prolonged delays can frustrate ISPs, making them hesitant to invest in areas with complicated permitting processes.

Streamlining permitting timelines doesn't just cut costs—it accelerates broadband deployment, boosts local economies, and guarantees funding programs like BEAD can deliver on their promise.

Luck Grove's Strategic Solutions

Navigating permitting challenges requires more than patience—it takes expertise, technology, and a proactive approach. Luck Grove has developed a streamlined system to cut through red tape, accelerate approvals, and give clients the tools they need to succeed.

Centralized Permitting Intelligence

Luck Grove's strategy is a proprietary database that consolidates permitting requirements for thousands of municipalities nationwide. This system provides:

- **Direct Contacts:** Up-to-date information on officials responsible for approvals.
- Jurisdiction-Specific Requirements: Ready-to-use templates and documentation guidelines.
- Step-by-Step Workflows: Clear roadmaps for navigating local permitting processes.

By eliminating guesswork, this resource reduces research time by up to 50%, allowing Luck Grove to fast-track applications and meet tight deadlines. Unlike off-the-shelf software, this database evolves with each new project, continuously improving its accuracy and efficiency.

Managed Permitting Services

Luck Grove offers a managed service for clients needing hands-on support that simplifies the entire permitting process. Key benefits include:

- **Priority Handling:** Retainer clients receive expedited service, reducing approval wait times.
- **Client Empowerment:** Sample documents and compliance templates help clients navigate the process independently if needed.
- **Cost Savings:** Discounted rates on permit submissions make long-term partnerships more affordable.

Proven Success in Complex Jurisdictions

Luck Grove's experience spans diverse regulatory environments, from navigating Perm-75 in New York to managing seasonal construction constraints in Marshfield, Wisconsin. The team's deep knowledge of local, state, and federal permitting ensures consistent results, no matter the challenge.

By combining real-world expertise with innovative solutions, Luck Grove eliminates permitting roadblocks and helps clients scale their broadband deployments more efficiently.

Best Practices and Recommendations

Efficient permitting isn't just about technical know-how—it requires collaboration, innovative processes, and the right tools. Based on years of experience, Luck Grove recommends the following best practices to improve permitting efficiency and accelerate broadband deployment.

1. Build Strong Partnerships

Permitting works best when ISPs, municipalities, and regulators are aligned. To foster better collaboration:

- Host Stakeholder Workshops: Regular meetings help set expectations, clarify requirements, and reduce miscommunication.
- **Designate a Single Point of Contact:** Assign a dedicated permitting manager to establish a relationship.
- Establish Shared Milestones: Setting clear goals and holding all parties accountable helps keep projects on schedule.

The goal is to build trust, improve communication, and prevent delays before they happen.



2. Use Technology to Reduce Roadblocks

Technology can eliminate many of the inefficiencies that slow down permitting. Municipalities and ISPs should invest in:

- **Centralized Permitting Databases:** A shared system consolidating jurisdiction-specific requirements saves time and minimizes duplication.
- Automated Workflows: Real-time tracking tools provide visibility into application progress.
- **Digital Submission Portals:** Moving away from paper-based systems speeds up reviews and reduces errors.

Automation can reduce the need for additional staffing for rural municipalities with limited resources.

3. Advocate for Regional Standardization

A single national permitting standard may be unrealistic, but regional coordination can make a significant impact. Luck Grove supports:

- **Regional Permitting Pilots:** Testing unified application formats and shared review processes in targeted areas to prove their effectiveness.
- **State-Led Initiatives:** Encouraging states to set permitting benchmarks and offer incentives for municipalities to adopt them.

Reducing regulatory fragmentation at the regional level makes broadband deployment faster and more predictable.

4. Strengthen Local Permitting Capacity

Many municipalities struggle with permitting due to limited staffing and expertise. ISPs and regulators can help by:

- Funding Training Programs: Workshops on permitting best practices and technology adoption can improve efficiency.
- **Providing Technical Assistance:** ISPs can support municipalities with GIS mapping and other resources to streamline evaluations.

Investing in local permitting capacity benefits everyone—faster approvals mean faster broadband deployment.

CONCLUSION

Permitting challenges don't have to stand in the way of future broadband expansion. With better collaboration, more innovative processes, and modernized systems, stakeholders can eliminate unnecessary delays and reduce costs. Luck Grove's approach—leveraging data, technology, and real-world expertise—demonstrates that even the most complex permitting obstacles can be managed effectively. By addressing these challenges head-on, broadband providers and municipalities can accelerate deployment and deliver on the promise of universal connectivity.

LUCK GROVE



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