



Biden Administration Puts Rail Electrification on Track

President Biden's ["American Jobs Plan"](#) represents a historic shift in transportation spending. The \$2 trillion infrastructure plan, unveiled at the end of March, signifies an ambitious effort to change mobility strategies in America. By essentially doubling the federal investment in public transit, the large-scale proposal assigns \$80 billion towards reaching a broad range of goals, including rail electrification.

Rail electrification promotes the adoption of electricity as the main motive power of domestic railroad transportation (for both freight and passengers) and as an enabler of electric grid integration and innovation. The [Rail Electrification Council](#), organized in 2020 by NEMA, supports the modernization and economic revitalization of the transition towards renewable energy transportation modalities.

One key feature of the "American Jobs Plan" that would support electrification goals, including rail electrification, is creating a funding stream to enhance existing rail corridors and leverage existing rail rights-of-way. Rights-of-way are the "right to pass through property owned by another."¹ A right-of-way is a type of easement granted for transportation purposes, such as for rail transport. Rights-of-way can vary in size, legal title, and restrictions. In the United States, railroad rights-of-way are generally considered private property, although ownership can be conflicting and unclear.

The confusion and controversy surrounding rail rights-of-way is nothing new; questions about rail property access and use began in the 1830s when railroads first began operating in the United States. The federal government's first attempt to address this issue, the "Interstate Commerce Act of 1887" required companies to comply with "common carrier" requirements and provide public transportation. Mandating that railroads provide this public service meant compensating people and providing balance because the railroads obtained land through eminent domain and land grants. These benefits were used to assemble the first rights-of-way.²

To this day, many advocates urge policy reform to incentivize rail companies to sell, grant easement on, or lease rail companies' privately-owned land along existing rights-of-way. Among the important reasons, people desire access to rail rights-of-way to meet increasing demands for electricity. According to a recent National Academy of Sciences report,³ making greater use of existing rail rights-of-way "hold[s] the potential to change whether and how much transmission capacity will be expanded in the next three decades." Accessing rail rights-of-way

¹ Black's Law Dictionary, third edition.

² "Shared-Use of Railroad Rights-of-Way," Federal Railroad Administration Report to Congress, July 2019.

³ The Future of Electric Power in the United States; National Academy of Science Report (2021).

sidesteps many regulatory challenges and public opposition by using already existing private property corridors.

Therefore, the future of electric power transmission systems depends on our ability to overcome obstacles to the siting and building of new transmission lines along rail rights-of-way. This is especially true for interstate transmission from localized and distant alternative power supplies, such as midwestern wind energy and southwestern solar energy. And yet, the “challenges for siting transmission facilities appear to be particularly acute for lines that could cross multiple states—from locations that are rich in renewable resources to distant load centers with increasing demand for renewable resources.”⁴

Using existing railroad rights-of-way avoids the obstacles to building transmission lines that cross more than one state because they are private property, and state approval is usually not needed. Railroads are a complex linear network and capable of supporting network infrastructure installations like an electric transmission with fewer major environmental impacts. Furthermore, railroad networks often bisect the major U.S. and Canadian renewable energy resources located far from major electric load centers and must be transmitted considerable distances. In this way, railroads can contribute to the clean energy transformation in a major way.

The “American Jobs Plan” would create a funding stream to enhance existing rail corridors and leverage existing rail rights-of-way which is why this proposal is an important first step in the move toward a much-needed transportation transformation towards rail electrification this decade.

⁴ The Future of Electric Power in the United States; National Academy of Science Report (2021).