

NextGen Highways Coalition Primer

Background

With the passage of the historic Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), the United States has a once-in-a-generation opportunity to transform our energy and transportation systems, dramatically improving the environmental, economic, and social health of our country for decades to come.

According to Department of Energy research, every dollar invested in a national grid infrastructure – a macrogrid – would generate one to two dollars of net benefit. This interregional transmission enables the integration of low-cost, domestic clean energy and increases the reliability and resilience of the electricity grid.

The experience of the last two decades shows how difficult it is to get new large-scale infrastructure built, however. Local opposition and a byzantine permitting process have prevented building the interregional transmission that is key to a modern electricity system. Strategically co-locating new electricity transmission in existing highway rights-of-way can overcome these barriers.

Capitalizing on momentum created by the coming federal investments, we are building a coalition that unites energy and transportation stakeholders with a shared interest in building the coordinated, cost-effective infrastructure the country needs.

The NextGen Highways Vision

The NextGen Highways (NGH) concept reimagines highways as **infrastructure corridors where electric transmission and communications infrastructure are strategically and safely co-located in *existing* highway rights-of-way (ROW)**. Prioritizing the use of existing ROW for new infrastructure – such as transmission and communication infrastructure – benefits the public in several ways:

- Reduces the need to use private land and eminent domain for large projects.

- Reduces the permitting time for large projects, which will lower costs for consumers.
- Optimizes the value of the land already used for siting infrastructure.
- Prepares the highway system for the future of electric, connected, and automated transportation by incorporating the electricity and communications infrastructure needed to support them.
- Opens new revenue streams for states, including potential revenue from land use fees.

Proactive, coordinated, and holistic planning among multiple stakeholders will be key to realizing this vision and reaping the benefits.

The NextGen Highways Coalition

The NGH team will promote this concept by building a NextGen Highways Coalition, at the national and state levels, to advocate broadly for strategic co-location of infrastructure within highway ROW.

GOALS OF THE COALITION

- Build awareness of the nation's opportunity to speed energy and communications infrastructure development by considering existing infrastructure corridors, like highway ROWs.
- Develop state-based coalitions focused on advancing discussions about the use of existing highway ROW for co-location of electric transmission and statutory and/or policy changes needed for consideration of co-location.
- Foster an environment conducive to utilities, regulators, transmission planning organizations and other stakeholders considering the use of highway ROW for the placement of new transmission lines.
- Over the long term, every state will appreciate the value of using existing ROWs for new energy and communications infrastructure and will be actively siting both aboveground and underground AC and DC transmission in highway ROWs.

Achieving these goals in the short term can unlock the following long-term benefits:

- A transportation future in which electric and communications infrastructure are integrated with our existing transportation system.
- A clean energy economy enabled by expanding the electric transmission needed to move clean power from where it is generated to population centers where demand is located.
- Removal of barriers so that private investment in transmission and renewable resources can flourish — investment that will create new jobs, services, and technologies.
- Strengthened national security with an energy and communications backbone hardened against everything from severe weather events to cyber-attacks.
- In low-income and communities of color located close to interstate highways, the electrification of transportation will provide health benefits by reducing tailpipe emissions and by increasing broadband access.

WHO SHOULD JOIN THE COALITION?

Representatives of transportation agencies; public and private utilities; infrastructure developers, suppliers, and operators; transportation- and energy-focused non-profits, community groups impacted by projects.

WHAT LEVEL OF COMMITMENT IS EXPECTED OF MEMBERS?

The Coalition will meet at least quarterly to discuss how to advance the NextGen Highways mission by:

- Improving understanding of the benefits and challenges associated with the NextGen Highways concept by convening experts
- Increasing visibility around the Coalition through communications
- Addressing regulatory barriers through research and information sharing and identifying solutions to overcome barriers
- Expanding the Coalition to potential new members

The success of the Coalition will be rooted in its ability to provide a space for members to collectively engage in discussions to transform the national highway system to achieve electrification, carbon reduction and resilience goals.

Sources

- [NextGen Highways Feasibility Study for the Minnesota Department of Transportation](#)
- Department of Energy National Renewable Energy Lab: [Interconnections Seam Study](#)
- Vibrant Clean Energy: [Consumer, Employment and Environmental Benefits of Electricity Transmission Expansion in the Eastern United States](#)

NextGen Highways is an initiative promoting the use of highways as infrastructure corridors where electric and communications infrastructure are strategically and safely co-located in existing highway right-of-way (ROW).