



FEWER NEW MILES

THE US TRANSMISSION GRID IN THE 2010s

By Jay Caspary, Michael Goggin, Rob Gramlich and Julia Selker

Construction of new high-voltage transmission lines significantly slowed in the United States over the last dozen years, according to data from the Federal Energy Regulatory Commission's monthly Energy Infrastructure Updates. Specifically, the U.S. dropped from installing an average of 1,700 miles of new high-voltage transmission miles per year in the first half of the 2010s, to averaging only 645 miles per year in the second half of the 2010s.

MILES OF 345 KV + TRANSMISSION LINES ADDED EACH YEAR

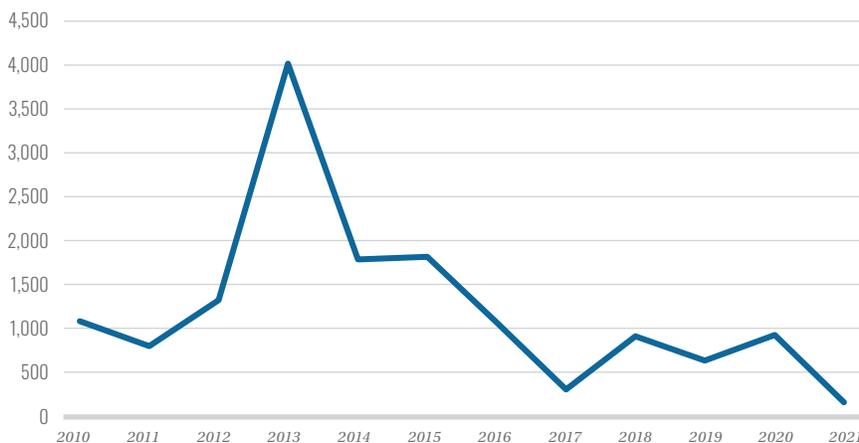
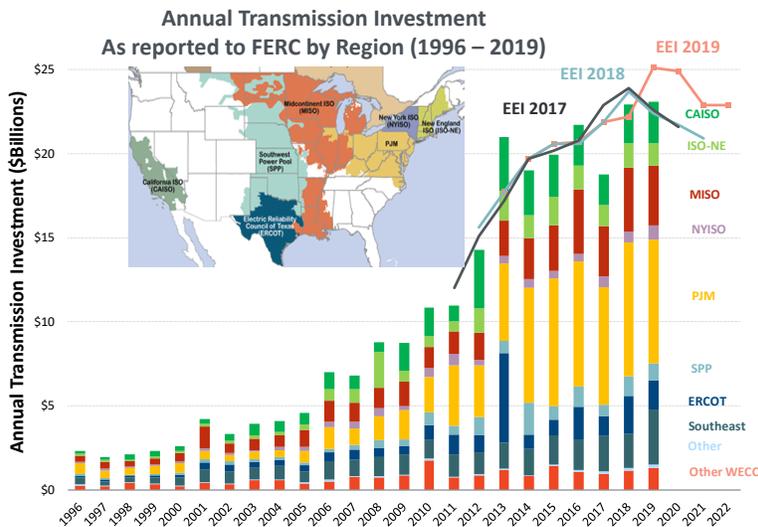


Chart based on Grid Strategies
summary of FERC reports.

At the same time, annual transmission spending increased from around \$10 billion in 2010 to around \$20 billion since 2013, driven by local reliability upgrades and the replacement of aging equipment per research by the Brattle Group. The Edison Electric Institute projects that investor-owned utilities will spend above \$25 billion per year on transmission investment through 2024.



From Transmission Investment Needs and Challenges, published by the Brattle Group in June 2021

Investment in transmission expansion has fallen, despite regional success stories. Texas's Competitive Renewable Energy Zones were a major driver of transmission expansion between 2010 and 2013, adding 2,400 miles of new transmission lines. The Southwest Power Pool added over 1,800 miles of new lines between 2010 and 2021, and MISO's Multi Value Projects contributed thousands of miles of new lines in the latter half of the decade. CREZ and SPP expansion alone account for nearly 30% of all new transmission line miles built over the decade. These three regional plans enabled nearly 35 GW of additional wind capacity. Analyses by MISO

and SPP found large net benefits for these investments.

Regional initiatives continue to be the primary driver of large-scale transmission expansion in the United States, with the Midcontinent ISO board approving over 2,000 miles of new transmission infrastructure in July 2022.

