



LOCUS Policy Snapshot

Bipartisan Infrastructure Bill: Energy Efficiency and Building Infrastructure

A real estate sector-focused analysis of the recently-enacted energy efficiency and building infrastructure programs.

This memo is one in a series of Policy Snapshots, brought to you by LOCUS, highlighting aspects of the infrastructure bill with direct relevance to real estate developers and investors focused on smart growth.

Funding highlight:

Energy efficiency and building infrastructure

How much?

Energy Efficiency and Conservation Block Grant Program	\$550 million	FY22
Energy efficiency revolving loan fund capitalization grant program	\$250 million	FY22
Cost-effective codes implementation for efficiency and resilience	\$225 million	FY22-26

What does it fund?

Helping state and local governments reduce energy demand is an important step to mitigate the effects of climate change and meet national carbon emissions reduction goals. In many cases, the infrastructure bill simply adds funding to existing energy efficiency programs. The infrastructure bill includes several programs to support these efforts, a selection of which is described below. It should be relatively easy for agencies to administer programs that are already established.

Energy Efficiency and Conservation Block Grant Program (EECBG)

The Block Grant program funds grants for state and local governments to support energy efficiency, energy conservation and renewable energy projects. Eligible activities include conducting residential and commercial building energy audits; creating energy efficiency and conservation programs for buildings and facilities; and updating building codes and inspection services to promote building energy efficiency. State and local grantees may work with private real estate developers, housing providers, contractors, and others to retrofit homes and buildings to lower operating costs.

The Infrastructure Law also amends EECBG to allow new programs and activities:

- Programs for financing energy efficiency, renewable energy, and zero-emission transportation
- Capital investments
- Projects and programs that leverage public-private partnerships
- Programs allowing rebates, grants or other incentives for the purchase and installation of renewable energy technologies.



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Energy Efficiency Revolving Loan Fund Capitalization Grant Program

This program features a new revolving fund to support grants and loans to state-administered programs that finance commercial and residential energy audits and energy efficiency retrofits.

Cost-Effective Codes Implementation for Efficiency and Resilience

A new competitive grants program within the U.S. Dept. of Energy Building Technologies Office to support state or regional partnerships to implement sustained, cost-effective updates to building energy codes.

Who will allocate the funds?

Department of Energy

How will the funds be allocated?

The programs described above are a mix of loans and competitive grants to state and local governments.

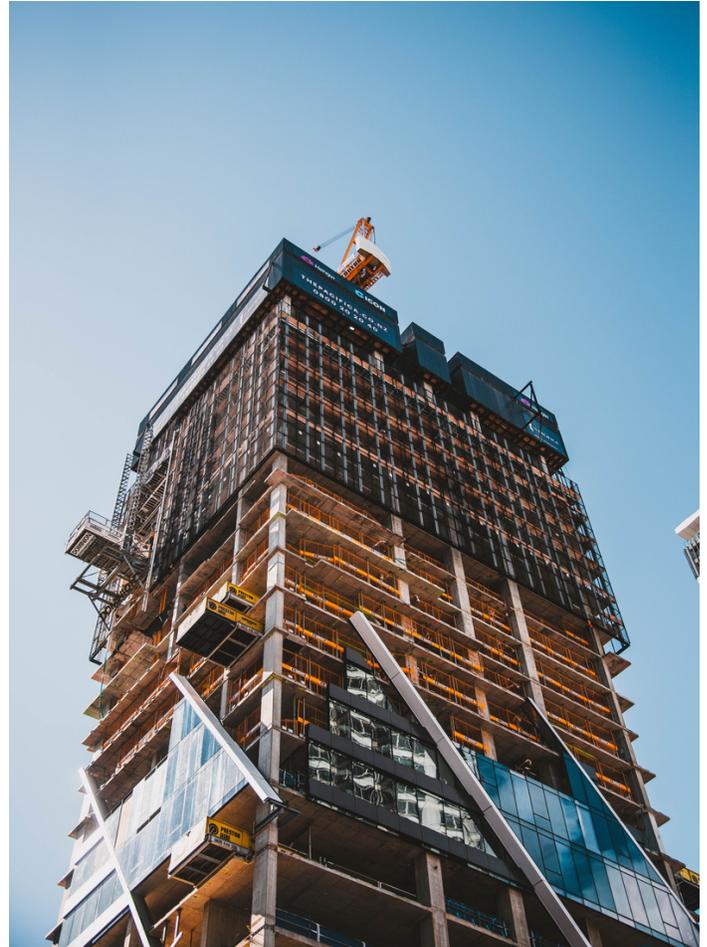


Image by Unsplash user Zane Lee (@zane404)

What does this mean for real estate developers?

In many major markets, new construction and major redevelopments are increasingly required to adhere to energy efficiency standards, to meet local carbon reduction goals. Energy efficient design also has the potential to increase Net Present Value given the operational savings, as well as the marketing appeal of sustainability, especially to commercial tenants. Additional federal funding to help state and local governments support energy efficiency, updated building codes, residential and commercial building energy audits, and related measures can benefit developers pursuing the rehabilitation of existing buildings as well as new construction.





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Bipartisan Infrastructure Bill:
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Image by Unsplash user Anthony Fomin (@aginsbrook)

Background

On November 15, 2021, President Biden signed into law the \$1.75 trillion Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, or the infrastructure bill. The law will supercharge spending on infrastructure in nearly all of its forms, and presents exciting opportunities given the level of investment and that it represents the most significant commitment by Congress yet to acknowledge climate change.

However, it will also be a challenge to move the needle on many smart growth priorities given that the bill provides historic amounts of funding to status quo infrastructure, and does not require states to address repair, improve safety, or reduce emissions from transportation. SGA and LOCUS stand ready to work with local governments, state governments, and smart growth leaders to develop strategies to apply this historically significant funding towards equitable, sustainable outcomes.

Energy efficiency and building infrastructure today

Energy represents 30 percent of operating expenses in a typical commercial office building, making up the single largest operating expense and accounting for almost 20 percent of the nation's annual greenhouse gas emissions.¹

Cities and states are increasingly requiring new construction to adhere to ambitious energy efficiency standards. In 2019, New York City adopted Local Law 97 to reduce emissions included in the city's Climate Mobilization Act, and part of the Mayor's New York City Green New Deal. Under this trailblazing law, most buildings over 25,000 square feet will be required to meet new energy efficiency and greenhouse gas emissions limits by 2024, with stricter limits coming into effect in 2030.²

¹ Commercial Real Estate: An Overview of Energy Use and Energy Efficiency Opportunities. (undated) EnergyStar. Retrieved Dec 15, 2021 from <https://www.energystar.gov/sites/default/files/buildings/tools/CommercialRealEstate.pdf>

² Local Law 97. NYC Sustainable Buildings. Retrieved Jan. 20, 2022 from <https://www1.nyc.gov/site/sustainablebuildings/ll97/local-law-97.page>





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The Bipartisan Infrastructure Deal will turbo-charge clean energy deployment by funding several highly effective state and local programs that will spur projects that increase access to energy efficiency to save money for American families, businesses and communities, help achieve our clean energy goals and accelerate job growth.⁵



The California Energy Commission code, updated every three years, sets energy requirements such as minimum efficiency of walls, windows, and heating and cooling equipment, for both new and existing buildings in the state. Starting January 1, 2023, the CEC code will require that new buildings use less energy and cut carbon pollution, in part by transitioning away from fossil fuels. The 2019 update established requirements for rooftop photovoltaic solar panels for most new single-family homes.

The Energy Efficiency and Conservation Block Grant Program was originally enacted in 2007. However, it was last funded in 2009. The infrastructure bill did not change the underlying EECBG program, except to add selected new eligible program and activities. The renewal of the EECBG in the Infrastructure Law will provide federal funds to support state and local initiatives to develop comprehensive energy plans and invest in energy efficiency programs in their communities.⁴

³ Delforge, P. (2021, Aug. 11) California Forging Ahead on Zero Emission Buildings. Natural Resources Defense Council. Retrieved Jan. 20, 2022 from <https://www.nrdc.org/experts/pierre-delforge/california-forging-ahead-zero-emission-buildings>

⁴ Berndt, C. (2021, 3 December) What You Need to Know the Energy Efficiency and Conservation Block Grant. Retrieved December 14, 2021, from <https://www.nlc.org/article/2021/12/03/what-you-need-to-know-the-energy-efficiency-and-conservation-block-grant>

⁵ U.S. Department of Energy. (2021, 9 November). DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future. Retrieved December 14, 2021 from <https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0>



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Sources cited:

- [Infrastructure Investment and Jobs Act](#)
 - Title V—Energy Efficiency and Building Infrastructure
- [Commercial Real Estate: An Overview of Energy Use and Energy Efficiency Opportunities](#)
- [DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future](#)
- [What You Need to Know the Energy Efficiency and Conservation Block Grant.](#)
- [Local Law 97](#)
- [California Forging Ahead on Zero Emission Buildings](#)

Other resources:

- [Bipartisan Infrastructure Investment and Jobs Act Summary](#)
- [The Bipartisan Infrastructure Package: What it Means for Energy and Climate](#)
- [The Infrastructure Investment and Jobs Act Will Do More to Reach 2050 Climate Targets than Those of 2030](#)
- [NACo Executive Summary: the Infrastructure Investment & Jobs Act](#)





LOCUS Policy Snapshot

Bipartisan Infrastructure Bill: Broadband Expansion

A real estate sector-focused analysis of the recently-enacted broadband expansion program.

This memo is one in a series of Policy Snapshots, brought to you by LOCUS, highlighting aspects of the infrastructure bill with direct relevance to real estate developers and investors focused on smart growth.

Funding highlight:

Broadband expansion

How much?

\$65 billion

What does it fund?

The bulk of the funding, \$42 billion of the total funding, will go towards the Broadband Equity, Access, and Deployment Program.

Who will allocate the funds?

The U.S. Department of Commerce will award grants to states.

What projects can be funded through the grants?

- Unserved and underserved service projects;
- Connection of eligible community anchor institutions;
- Data collection, broadband mapping, and planning;
- Installation of internet and Wi-Fi infrastructure or reduced-cost broadband within a multi-family residential building;
- Broadband adoption, including programs to provide affordable internet-capable devices; and
- Any use determined necessary by the Department of Commerce to facilitate the goals of the program.

For broadband projects within multi-family residential buildings, the focus is on low-income, unserved residents. Priority will be given to residential buildings that have a substantial share of unserved households or are in low-income locations. Locations are considered low-income if the percentage of individuals with a household income at or below 150 percent of the poverty line is higher than the national percentage (19.4 percent)¹

¹ "POV.1. Age and Sex of All People, Family Members and Unrelated Individuals." U.S. Census Bureau, October 8, 2021. Retrieved December 6, 2021 from https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-01.html#par_textimage_24



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Bipartisan Infrastructure Bill:
Broadband Expansion

Background:

On November 15, 2021, President Biden signed into law the \$1.75 trillion Infrastructure Investment and Jobs Act (IIJA), also known as the infrastructure bill. The law will supercharge spending on infrastructure in nearly all of its forms, and presents exciting opportunities given the level of investment and that it represents the most significant commitment by Congress yet to acknowledge climate change. However, it will also be a challenge to move the needle on many smart growth priorities given that the bill provides historic amounts of funding to status quo infrastructure, and does not require states to address repair, improve safety, or reduce emissions from transportation. SGA and LOCUS stand ready to work with local governments, state governments, and smart growth leaders to develop strategies to apply this historically significant funding towards equitable, sustainable outcomes.

What does this mean for real estate developers?

Broadband is critical to residential, commercial and institutional types of development, and also presents an important economic development tool to local governments. With infrastructure bill funding, real estate developers have the opportunity to bring broadband to underserved communities where they are developing housing. The infrastructure bill will support a variety of types of broadband projects, and includes funding specifically earmarked for multi-family.

Broadband access today

Access to affordable and reliable broadband is essential. As of today, roughly 77 percent of Americans have broadband access at home. 15 percent of American adults are “smartphone only” internet users, meaning they have a smartphone but not home broadband service. Additionally, 7 percent of U.S. adults say they do not use the internet. This is strongly connected to age, with Americans over 65 being one of the least likely groups to use the internet.

Racial inequities exist in broadband access. As measured by the Pew Research Center, 80 percent of white households have access to broadband while Black households have 71 percent access and Hispanic households only 65 percent access.

Educational attainment and household income are also indicators of a person’s likelihood to be offline. Fourteen percent of adults with a high school degree or less do not use the internet, and adults living in households earning less than \$30,000 per year report not using the internet far more than households where income is \$75,000 or more.

²Broadband Factsheet. Pew Research Center, April 2021. Retrieved December 6, 2021 from <https://www.pewresearch.org/internet/factsheet/internet-broadband/>

³Broadband Factsheet.

⁴Broadband Factsheet.



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Bipartisan Infrastructure Bill:
Broadband Expansion

Of households that make less than \$30,000 per year, only 57 percent have broadband access. Of those that make \$75,000 or more per year, 92 percent have broadband access.⁵

COVID has underscored the importance of broadband access in allowing people to work, learn, and connect remotely. Broadband access is being increasingly thought of as a public health issue and a social determinant of health. Roughly half of those who do have high-speed internet connection at home, or 48 percent say they have problems with speed, reliability, or quality of their home connection. Additionally, 26 percent of home broadband users and smartphone owners said in an April 2021 survey that they worried a lot or some about paying their internet and cellphone bills over the next few months.⁶



Building out broadband infrastructure isn't enough. We must also ensure that every American who wants to can afford high-quality and reliable broadband internet.

- President Biden



COVID and broadband access have been especially difficult for school-age children. Federal data shows that 14 percent of school-age children live in households with no internet access, an extreme detriment to education over the past two years and looking ahead to future learning environments.⁷ Children are facing the “homework gap,” crisis especially those of lower incomes. This describes the difficulty millions of students have in getting online at home to complete school assignments.⁸

At the start of the pandemic, as many as 15 million of the country's 50.7 million public school students lacked access to adequate connectivity. On top of this, 10 percent of public school teachers nationwide did not have sufficient internet capacity for online learning. In a study done by the Pew Research Center, 46 percent of parents with lower incomes whose children faced school closures said their children had at least one problem related to the homework gap.⁹

⁵ Perrin, A. and S. Atske. “7% of Americans don't use the internet. Who are they?” Pew Research Center, April 2, 2021. Retrieved on December 6, 2021 from <https://www.pewresearch.org/fact-tank/2021/04/02/7-of-americans-dont-use-the-internet-who-are-they/>

⁶ Perrin, A.

⁷ Barna, M. “Access to internet crucial during COVID-19 outbreak: Broadband connection considered a social determinant of health.” The Nation's Health, September 2020. Retrieved on December 6, 2021 from <https://www.thenationshealth.org/content/50/7/5.2>

⁸ Klein, A. “Acting FCC Chair: The ‘Homework Gap’ is an ‘Especially Cruel’ Reality During the Pandemic.” Education Week, March 10, 2021. Retrieved on December 6, 2021 from <https://www.edweek.org/technology/acting-fcc-chair-the-homework-gap-is-an-especially-cruel-reality-during-the-pandemic/2021/03>

⁹ McClain, C., EA. Vogels, A. Perrin, S. Sechopoulos and L. Rainie. “The Internet and the Pandemic.” Pew Research Center, September 1, 2021. Retrieved on December 6, 2021 from <https://www.pewresearch.org/internet/2021/09/01/the-internet-and-the-pandemic/>



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Bipartisan Infrastructure Bill:
Broadband Expansion

Funding in the Infrastructure Bill will go a long way in bridging the gap the U.S. now faces in broadband access. The White House goals for broadband access prioritize building “future proof” broadband infrastructure in unserved and underserved areas to reach 100 percent high-speed broadband coverage. They also promote transparency and competition among internet providers by lifting barriers that prevent municipally-owned or affiliated providers and rural electric co-ops from competing on an even playing field with private providers.¹⁰ The Infrastructure Bill specifically states that such entities cannot be excluded from eligibility for sub-grant funds for broadband projects. Recognizing that low-income Americans are disproportionately affected by a lack of broadband access, the White House has set aside \$14 billion aimed at helping low-income Americans pay for service.¹¹



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Sources cited:

- [How will the \\$65 billion broadband service plan impact you?](#)
- [Access to internet crucial during COVID-19 outbreak: Broadband connection considered a social determinant of health](#)
- [Fact Sheet: The American Jobs Plan](#)
- [Acting FCC Chair: The ‘Homework Gap’ is an ‘Especially Cruel’ Reality During the Pandemic](#)
- [The internet and the pandemic](#)
- [7% of Americans don’t use the internet. Who are they?](#)
- [Broadband factsheet](#)
- [Age and sex of all people, family members and unrelated individuals, U.S. Census Bureau](#)

Other resources:

- [Thirty-four percent of lower-income home broadband users have had trouble paying for their service amid COVID-19](#)
- [Five steps to get the internet to all Americans](#)
- [The benefits and costs of broadband expansion](#)

¹⁰ Fact Sheet: The American Jobs Plan. The White House, March 10, 2021. Retrieved on December 6, 2021 from <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>

¹¹ Arbel, T. “How will the \$65 billion broadband service plan impact you?” USA Today, The Associated Press. August 12, 2021. Retrieved December 6, 2021 from <https://www.usatoday.com/story/tech/2021/08/12/broadband-internet-plan-65-billion-biden-infrastructure/8107732002/>





LOCUS Policy Snapshot

Bipartisan Infrastructure Bill: Power Grid Upgrades

A real estate sector-focused analysis of recently-enacted plans for power grid upgrades in the 2021 Infrastructure Investment and Jobs Act.

This memo is one in a series of Policy Snapshots, brought to you by LOCUS, highlighting aspects of the infrastructure bill with direct relevance to real estate developers and investors focused on smart growth.

Funding highlight:

Power grid updates

How much?

\$65 billion

What does it fund?

The infrastructure bill upgrades the power grid infrastructure in the U.S. by adding and upgrading thousands of miles of older power lines and cables, investing in grid resilience and reliability,

and investing in clean-energy research. Funding for grid infrastructure and resiliency includes \$1 billion directed specifically for rural and remote areas.



Image by Unsplash user Jordan Cormack (@jordancormack)

Major funding items include:

- Clean energy demonstrations **\$21.5 billion**
- Clean hydrogen hubs **\$8 billion**
- Carbon management **\$7.5 billion**
- Nuclear energy infrastructure **\$6 billion**
- Grid infrastructure and resiliency **\$5 billion**
- Clean direct air capture hubs **\$3.5 billion**
- Smart Grid investment matching grants **\$3 billion**
- Carbon dioxide transportation infrastructure finance and innovation **\$2.1 billion**
- Grid reliability and resiliency upgrades: Rural or remote areas **\$1 billion**
- Hydroelectric production incentives **\$800 million**
- Cybersecurity, energy security, and emergency response **\$550 million**
- Energy security program **\$50 million**
- Prizes for pre-commercial direct air capture technology prize competitions **\$15 million**

Who will allocate the funds?

U.S. Department of Energy will distribute funds to federal agencies, state and local governments, tribes, and utilities, grid operators, and other entities. The majority of the funding is divided in the annual federal budget over five years, starting in fiscal years beginning October 1, 2021 – September 2022 through September 30, 2026.



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Bipartisan Infrastructure Bill:
Power Grid Updates

What does this mean for real estate developers?

Power grid infrastructure updates are an aspect of the infrastructure bill's focus on climate and the clean energy transition and will also enhance climate resilience by increasing preparedness for disruptive weather events. Building out a more robust and resilient power grid will expand opportunities for modern amenities in rural and remote areas, creating new real estate development potential. The infrastructure bill's investment in smart grids may also lead to more innovation with smart grids for real estate; smart grids can reduce energy usage and operational costs through demand-response programs, and enable better integration of renewable energy technologies. Improved grid reliability could also potentially reduce business interruption on account of extreme weather.

Background

On November 15, 2021, President Biden signed into law the \$1.75 trillion Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, or the infrastructure bill. The law will supercharge spending on infrastructure in nearly all of its forms, and presents exciting opportunities given the level of investment and that it represents the most significant commitment by Congress yet to acknowledge climate change.

However, it will also be a challenge to move the needle on many smart growth priorities given that the bill provides historic amounts of funding to status quo infrastructure, and does not require states to address repair, improve safety, or reduce emissions from transportation. SGA and LOCUS stand ready to work with local governments, state governments, and smart growth leaders to develop strategies to apply this historically significant funding towards equitable, sustainable outcomes.

The power grid today

U.S. electric grid is made up of a vast network of power plants, transmission lines, and distribution centers that carry electricity long distances to be distributed to our homes, schools, and businesses. Yet, even as renewable energy has expanded energy options, [the basic power grid infrastructure has been largely static since 1882](#).¹

Aging power infrastructure increasingly endangers the grid's reliability: more than 70 percent of the nation's grid transmission lines and power transformers are over 25 years old.² In addition, massive blackouts generated by extreme weather events and exacerbated by climate change are a growing concern. For example, Texas experienced these large-scale blackouts [during a major winter storm in February 2021](#), causing more than 200 deaths.

¹ McBride, J. and Siripurapu, A. (2021, May 14) How Does the U.S. Power Grid Work? Council on Foreign Relations. Retrieved December 10, 2021 from <https://www.cfr.org/backgrounder/how-does-us-power-grid-work>

² Holbrook, E. (2022, Jan. 13) DOE Launches Initiative to Provide More Reliability to Power Users, Resilience to the Grid. Environment + Energy Leader. Retrieved Jan. 19, 2022 from <https://www.environmentalleader.com/2022/01/doe-launches-initiative-to-upgrade-nations-electric-grid/>



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Bipartisan Infrastructure Bill: Power Grid Updates

Risks of cyberattacks add to the apprehension. With numerous key sectors of the nation's economy dependent on electricity, the U.S. power grid has long been considered a ripe target for a cyberattack.⁴ In 2021, a ransomware group forced Colonial Pipeline Co. to shut down its gasoline distribution networks in the U.S. South until the company paid \$4.4 million to the hackers.⁵ Smart grids' smart meters, sensors and advanced communication tools are also thought to be at risk of security breaches.⁶

Other pressures to the aging traditional grid arise from expanded options for renewable energy. According to the [U.S. Energy Information Administration \(EIA\)](#), solar, wind, and other renewable energy sources generated close to 20 percent of U.S. electricity in 2020, with fossil fuels contributing about 60 percent and 20 percent from nuclear energy. The [EIA predicts](#) the share of renewable energy sources in the U.S. will double by 2050.⁷ Yet, as the share of renewables added into the grid increases, the unpredictable nature of sources such as sun and wind can pose challenges for [grid operators](#) to meet electricity demand consistently.⁸

The Infrastructure Bill will help to deliver significant investments to massively modernize the U.S. power grid, adding and upgrading thousands of miles of transmission lines, investing in clean energy, and increasing smart grid technologies to increase reliability and reduce power outages.



Image by Unsplash user Andrey Metelev (@metelevan)

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The infrastructure bill “upgrades our power infrastructure, including by building thousands of miles of new, resilient transmission lines to facilitate the expansion of renewable energy.”

Source: White House Fact Sheet

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⁴ Knake, R. (2017, April 3) A Cyberattack on the U.S. Power Grid. Contingency Planning Memorandum No. 31. Council on Foreign Relations. Retrieved January 19, 2022 from <https://www.cfr.org/report/cyberattack-us-power-grid>

⁵ Associated Press. (2021, June 6) Energy chief cites risk of cyberattacks crippling power grid. WXIA. Retrieved January 19, 2022 from <https://www.11alive.com/article/news/nation-world/energy-chief-cites-risk-cyberattacks-crippling-power-grid/507-e1301792-7350-49b4-b762-972090d81c13>

⁶ Mansour, K. (2020, March 16) Key trends and challenges for the smart grid market. Early Metrics. Retrieved January 19, 2022 from <https://earlymetrics.com/key-trends-and-challenges-for-the-smart-grid-market/>

⁷ Dubin, K. (2021, February 8) EIA projects renewables share of U.S. electricity generation mix will double by 2050. U.S. Energy Information Administration. Retrieved December 10, 2021 from <https://www.eia.gov/todayinenergy/detail.php?id=46676>

⁸ Cleary, K. and Palmer, K (2020, 15 April) *Renewables 101: Integrating Renewable Energy Resources into the Grid. Resources for the Future*. Retrieved December 10, 2021 from <https://www.rff.org/publications/explainers/renewables-101-integrating-renewables/>



Smart Grids: The Basics

A smart grid's sensing and measurement technologies produce a bidirectional flow of energy and communication between generation sources and loads, enabling dual communication between end-users and power companies.

With information from sensors and collaborative actions between the utility and its energy-consuming customers, smart grids can avoid imbalances between energy supplied versus used.

Real-time monitoring of electricity demand, production and storage helps to optimize power usage, which in turn lowers costs and environmental impact.

What are the advantages offered by smart grids?

Smart grids can help to better leverage and distribute renewable energy, make energy usage more reliable and secure, reduce power at peak times and reduce the environmental impact of electricity systems.

Advantages of smart grids include:

- Provide consumers with more control over their use of energy and the price they pay.
- Produce excess energy on the property through the use of renewable energy sources like solar panels on their roofs, which end users can sell.
- Increase the efficiency of renewable energy being created.

What are challenges to expanding smart grids?

- Smart meters, sensors and advanced communication tools could result in greater vulnerability to cyberattacks.
- The high cost to install and deploy these grids throughout the lifecycle of smart grid development.
- A lack of incentives to replace fossil fuels with smart grid infrastructure

What should building owners know about smart grids?

Building owners can do many things now to begin to reap the benefits and prepare for additional benefits in the future:

- With the trend toward low-energy and net zero energy buildings, buildings can become generators of electricity as well as consumers.
- Utility rate structures are changing to provide financial incentives for homes and buildings to be operated in a grid-friendly way.
- Applying smart grid concepts to building operations can be part of a strategy to maintain resilience during storms and other kinds of events that impact reliability.



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Bipartisan Infrastructure Bill:
Power Grid Updates

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- [Key Trends and Challenges For The Smart Grid Market](#)
- [EIA projects renewables share of U.S. electricity generation mix will double by 2050.](#)
- [Renewables 101: Integrating Renewable Energy Resources into the Grid. Resources for the Future.](#)
- [Energy Chief Cites Risk Of Cyberattacks Crippling Power Grid](#)
- [A Cyberattack on the U.S. Power Grid](#)
- [DOE Launches Initiative to Provide More Reliability to Power Users, Resilience to the Grid](#)

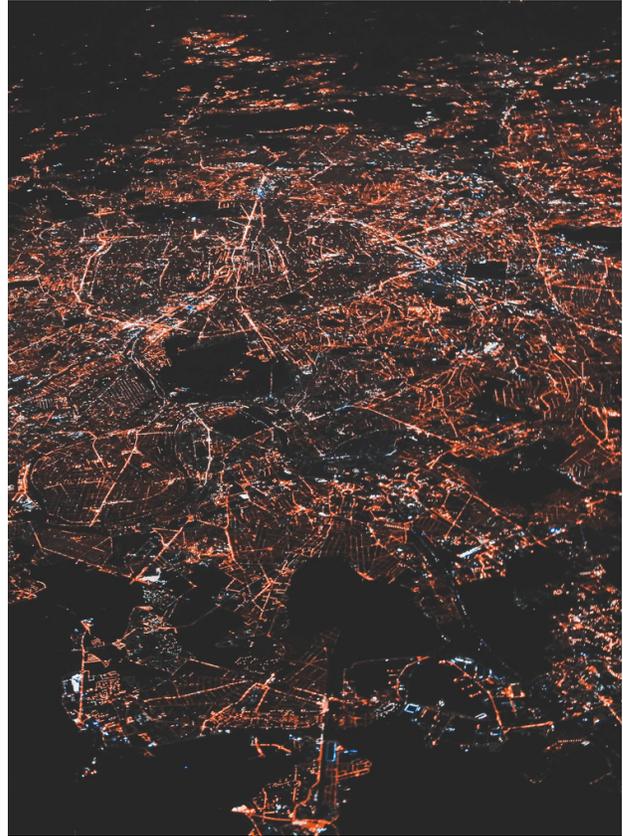


Image by Unsplash user Nastya Dulhiier (@dulhiier)

Other resources:

- [Full text of the Infrastructure Investment and Jobs Act](#)
- [The Grid Wins Big in the IIJA](#)
- [Here's how the infrastructure bill improves the grid](#)
- [The Infrastructure Bill & The Real Estate Industry](#)
- [Infrastructure Investment and Jobs Act: Power Grids, Utilities and Electric Vehicles](#)
- [Infrastructure Investment and Jobs Act Part 2: Investing In Transmission](#)
- [US Infrastructure Bill Is Good, but Not Enough to Transform the Electricity Grid](#)





LOCUS Policy Snapshot

Bipartisan Infrastructure Bill: TIFIA, RRIF, and Public-Private Partnerships

A real estate sector-focused analysis on updates to the Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation & Improvement Financing (RRIF). This analysis also includes a look at new opportunities for Public-Private Partnerships for projects funded with TIFIA and RRIF.

This memo is one in a series of Policy Snapshots, brought to you by LOCUS, highlighting aspects of the infrastructure bill with direct relevance to real estate developers and investors focused on smart growth.

Policy highlight:

Updates to the Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation & Improvement Financing (RRIF), plus a look at new opportunities for Public-Private Partnerships in these programs.

What's new?

The infrastructure bill allows both TIFIA and RRIF eligible projects to include economic development projects adjacent to passenger rail stations or similar facilities, including residential and commercial development and related infrastructure.¹ Up to 15 percent of the TIFIA budget authorization can be used for these transit-oriented projects, provided project sponsors submit their letters of interest no later than September 30, 2026.

This amendment expands on capacity added under the last surface transportation reauthorization bill in 2015 that allowed TIFIA to include public improvements within walking distance of a transit facility, passenger rail station, intercity bus station or intermodal facility.

TIFIA, RRIF, and Public Private Partnerships

The infrastructure bill creates several provisions to support the growth of public-private partnerships (P3s) that leverage public and private resources to develop and execute infrastructure projects.

Private investment may be incorporated initially or over the life of a project or joint venture. Examples of private investment may include private equity, in-kind contributions of private property or services, project debt repaid by private sources of funding, or investment of revenues generated from value capture mechanisms into the construction or improvement of the related passenger rail station or service.²

¹ Allison, B. (2021, 15 Nov.) New Infrastructure Bill Expands TIFIA Program. JD Supra. Retrieved Dec. 10, 2021 from <https://www.jdsupra.com/legalnews/new-infrastructure-bill-expands-tifia-1601764/>

² Build America Bureau, U.S. Dept of Transportation. (2021, 27 July) Transit Oriented Development - Guidance FAQs. Retrieved on Dec. 14, 2021 from <https://www.transportation.gov/buildamerica/TOD/faqs>.



LOCUS Policy Snapshot

Bipartisan Infrastructure Bill:
TIFIA, RRIF, and Public-Private Partnerships

With a massive investment in infrastructure under the infrastructure bill, P3s offer a way for state and local agencies to expand capacity to meet infrastructure development needs by sharing more project risks and responsibilities with private partners. Under the infrastructure bill, P3s are likely to grow as part of the development, financing, and operation of infrastructure in the U.S.

Examples of P3 opportunities in the infrastructure bill that are relevant to real estate development:

Transit-Oriented Development

- Section 12001 amends TIFIA to make transit-oriented development projects eligible for loans. Residential and commercial development and related infrastructure activities that are physically or functionally related to passenger rail stations or multimodal facilities that include rail service and incorporate private investment may qualify for the TIFIA program.
- Railroad Rehabilitation & Improvement Financing (RRIF) loans are available for commercial and residential development and related infrastructure and activities proximate to a passenger rail station or multimodal station that includes rail service and incorporate private investment.

*An illustrative example of an eligible TIFIA TOD project from the Build America Bureau: a private real estate developer purchases several acres of land near a new transit station that they intend to develop into a mixed-use, transit-oriented community consisting of several new buildings, a street network, open space and other amenities.*³

Permitting reforms

Permitting delays can be a significant barrier to P3s. Measures intended to reduce costly and time-consuming delays in permits and other project approvals include:

- Establishing a federal goal of reviewing and permitting projects within two years
- Making the Federal Permitting Improvement Steering Council permanent, and
- Increasing funding for federal agencies responsible for permitting decisions.

Other amendments to TIFIA and RRIF in the infrastructure bill that may be of interest to LOCUS members:

- Increases the repayment period for TIFIA loan to up to 75 years from 35 years for some projects.
- Lifts the requirement that borrowers prepay TIFIA loans with excess revenues if those revenues are used for surface transportation.
- Increases the threshold for TIFIA projects from \$75 million to \$150 million.
- Adds new eligibilities for the TIFIA program, including infrastructure projects located near transportation facilities, airport-related projects.
- Allows acquisition of plant and wildlife habitats to mitigate any TIFIA project-related environmental impacts.
- Makes permanent the eligibility of RRIF transit-oriented development projects.

³ Build America Bureau, U.S. Dept of Transportation. (2021, 27 July) Transit Oriented Development - Guidance FAQs. Retrieved on Dec. 14, 2021 from <https://www.transportation.gov/buildamerica/TOD/faqs>.



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Also of related interest in the infrastructure bill: The expansion of the Federal Transit Administration's Pilot Program for Planning Transit Oriented Development (TOD) Program, to add site-specific planning as an eligible activity.⁴ Previously, only comprehensive planning was supported.⁵

Grants are available to state or local government agencies to finance eligible transit-oriented development projects, including mixed-use development. Planning is for efforts associated with an eligible transit project for which the project sponsor will seek funding through FTA's Capital Investment Grants Program. These planning funds will be awarded competitively, growing from \$13.1 million in FY22 to \$14.4 million in FY2026.

Who is implementing these policy changes?

The Build America Bureau, under the U.S. Department of Transportation, administers TIFIA and RRIF.

What does this mean for real estate developers?

TOD leverages public investments in transit and supports transit systems by increasing ridership and fare revenue. The infrastructure bill expands support for transit-oriented development to grow compact, mixed-use communities around transit stations and foster convenient access to jobs and services.

In addition to commercial and residential real estate development, eligible projects include office, institutional, industrial, entertainment, and recreational uses, or any land uses permitted under local law and economically feasible based on applicants' own analysis.

The infrastructure bill also creates new opportunities for private real estate developers to partner with public agencies on projects that advance economic development through transit-oriented development. The TIFIA program's fundamental goal is to leverage Federal funds by attracting substantial private and other non-Federal co-investment to support critical improvements to the nation's surface transportation system. A likely P3 would involve forming a joint venture with a public agency and applying for a TIFIA or RRIF loan to support the TOD project.

⁴ Federal Transit Administration. (2021, 9 Dec.) Bipartisan Infrastructure Law Fact Sheet: Pilot Program for Transit-Oriented Development Planning. Retrieved Dec. 10, 2021 from <https://www.transit.dot.gov/funding/grants/fact-sheet-pilot-program-transit-oriented-development-planning>

⁵ Federal Transit Administration. (undated) Pilot Program for Transit-Oriented Development Planning – Section 20005(b) Retrieved Dec. 10, 2021 from <https://www.transit.dot.gov/TODPilot>



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Background

On November 15, 2021, President Biden signed into law the \$1.75 trillion Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, or the infrastructure bill. The law will supercharge spending on infrastructure in nearly all of its forms, and presents exciting opportunities given the level of investment and that it represents the most significant commitment by Congress yet to acknowledge climate change.

However, it will also be a challenge to move the needle on many smart growth priorities given that the bill provides historic amounts of funding to status quo infrastructure, and does not require states to address repair, improve safety, or reduce emissions from transportation. SGA and LOCUS stand ready to work with local governments, state governments, and smart growth leaders to develop strategies to apply this historically significant funding towards equitable, sustainable outcomes.

About TIFIA & RRIF ⁶

TIFIA

Since 1998, the federal Transportation Infrastructure Finance and Innovation Act (TIFIA) program has provided credit assistance for qualified regional and national to public and private sponsors of eligible surface transportation projects. The goal of the TIFIA Program is to leverage Federal funds by attracting substantial private and other non-Federal co-investment to support critical improvements to the nation's surface transportation system. TIFIA credit assistance is often available on more advantageous terms than in the financial market, making it possible to obtain financing for needed projects when that financing might not otherwise be available. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities.



Gold Line train on East 1st Street, July 2017.JPG" image by wikipedia user Pi.1415926535 is licensed under CC BY-SA 3.0

⁶ Build America Bureau (2017, 1 March) Credit Programs Guide: Transportation Infrastructure Finance and Innovation Act and Railroad Rehabilitation & Improvement Financing. U.S. Dept. of Transportation. Retrieved Dec. 10, 2021 from <https://www.transportation.gov/buildamerica/financing/program-guide>





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RRIF

Also established in 1998, the Railroad Rehabilitation and Improvement Financing Program (RRIF) provides direct loans and loan guarantees to finance the development of railroad infrastructure. Eligible applicants include state and local governments, interstate compacts, government sponsored authorities and corporations, railroads, limited option rail freight shippers that own or operate a plant or other facility, as well as joint ventures that include at least one of the above entities.

TIFIA, RRIF, and Public-Private Partnerships

While Congress had previously allowed TIFIA and RRIF financing to support TOD projects under the FAST Act, the US Department of Transportation's Build America Bureau had not established clear eligibility guidelines for public and private entities seeking loans for TOD projects. This became an obstacle to using these funds for that purpose.



Link train passing new apartments in Rainier Valley (8755134034).jpeg" Image by Sound Transit Special Selection is licensed under CC by 2.0



“There are numerous aspects of the Bipartisan Infrastructure Law that will enhance the Build America Bureau services, making our credit programs more flexible for a broader range of projects.”

- Morteza Farajian,
Ph.D., Executive Director,
Build America Bureau⁷



⁷ Farajian, M. (2021, 29 Nov.) Executive's Summary, Build America Bulletin. Retrieved Dec. 10, 2021 from <https://content.govdelivery.com/accounts/USDOT/bulletins/2f92415>



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Sources cited:

- [Infrastructure Investment and Jobs Act](#)
 - TITLE II—Transportation infrastructure finance and innovation
 - Sec. 12001. Transportation Infrastructure Finance and Innovation Act of 1998 amendments.
 - Sec. 12002. Federal requirements for TIFIA eligibility and project selection.
 - TITLE I—Multimodal and freight transportation
 - Subtitle C—Railroad rehabilitation and improvement financing reforms
 - Sec. 21301. RRIF codification and reforms.
 - Sec. 21302. Substantive criteria and standards.
 - Sec. 21303. Semiannual report on transit-oriented development eligibility.
 - DIVISION C—Transit
 - Sec. 30009. Transit-oriented development.
- [New Infrastructure Bill Expands TIFIA Program.](#)
- [Transit Oriented Development - Guidance FAQs](#)
- [Bipartisan Infrastructure Law Fact Sheet: Pilot Program for Transit-Oriented Development Planning](#)
- [Pilot Program for Transit-Oriented Development Planning – Section 20005\(b\)](#)
- [Credit Programs Guide: Transportation Infrastructure Finance and Innovation Act and Railroad Rehabilitation & Improvement Financing.](#)
- [Executive’s Summary, Build America Bulletin](#)

Other resources:

- [AASHTO Comprehensive Analysis of the Bipartisan Infrastructure Bill](#)
- [Bipartisan Infrastructure Investment and Jobs Act Summary](#)
- [FTA Guidance - Bipartisan Infrastructure Law](#)
- [The infrastructure bill is finished—what you need to know - Transportation For America](#)
- [New Infrastructure Bill Expands TIFIA Program | JD Supra](#)
- [Infrastructure Investment and Jobs Act: Selected Changes Impacting Public-Private Partnerships](#)
- [Pilot Program for Transit-Oriented Development Planning](#)
- [Progress For America's Infrastructure Under The Infrastructure Investment And Jobs Act](#)
- [Transit Oriented Development - Guidance FAQs](#)