

GLOBAL X ETFs RESEARCH

Authored by:  
Global X Team

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# What the Infrastructure Investment & Jobs Act Could Mean for Infrastructure Investors

On August 10th, 2021, the U.S. Senate passed the \$1.2T Infrastructure Investment and Jobs Act across bipartisan lines (69-30), after months of deliberation. The bill features \$550B of new spending, with remaining spending coming from existing infrastructure funds and repurposed funds from other areas. The bill is part 1 of 2 pieces of potential legislation drafted in the spirit of President Biden's physical and social infrastructure agenda as articulated by the American Jobs Plan and American Families Plan in the spring. In the following, we examine the areas the bill seeks to invest in, how it would be funded, its path to getting signed into law, and investment areas positioned to potentially benefit from the bill.

## Key Takeaways:

- Investments: Would invest \$260B+ in transportation & transit, almost \$90B in clean technologies, \$84B in water infrastructure, and \$100B+ in digital infrastructure and infrastructure resilience.
- Funding: Seeks to fund spending without raising the deficit by auctioning off portions of the 5G spectrum, Strategic Petroleum Reserve sales, increasing customs fees, red tape removal, economic growth, and more.
- Path to Enactment: Will likely stay with the House of Representatives until they can also vote on a potential \$3.5T budget reconciliation bill which invests in social infrastructure, buildings, and clean energy.
- Potential Beneficiaries: Infrastructure development companies including those involved in construction and engineering services, raw materials and composites, products and equipment, and industrial transportation.

## BREAKING DOWN THE BILL'S INVESTMENTS<sup>1</sup>

**Transportation & Transit:** The Infrastructure Investment and Jobs Act would invest almost \$260B of new funds across transportation and transit infrastructure. It seeks to rebuild, expand, and modernise roads, highways, bridges, public transit, airports, ports, and waterways across the country, improving their resilience to climate and obsolescence as well as their ability to facilitate commerce and travel.

- Roads & Bridges (\$110B+) – The bill would direct \$110B of new funds to roads, bridges, and related key transportation projects. This includes \$40B for repairing, retrofitting, and replacing bridges in what is the largest investment in bridge infrastructure since the 1960s. It also includes funding for projects related to smart cities, including to those related to connected cars, sensor-based infrastructure, transit integration, commerce delivery and logistics, smart traffic, smart grids.
- Rail (\$66B+) – The bill carves out \$66B for passenger and freight rail. Funds would be used to expand Amtrak, to address the ever-increasing Amtrak project backlog, to

modernise and improve the congested Northeast Corridor rail line, and expand the reach of rail to new areas, including between new lines between cities.

- Public Transit (\$39B+) – The bill would invest \$39B in modernising and improving the accessibility of public transit. Targeted areas include modernising bus/rail fleets and replacing many with zero-emission options, expanding public transit to areas without available options, and improving supporting transit infrastructure.
- Airports (\$25B+) – The bill purposes \$25B for modernising and building out airport infrastructure. Funds would be directed to projects that increase the capacity and accessibility of airport terminals and replace aging airport terminals, as well as to improving air traffic control towers and technology, among other areas.
- Ports & Waterways (\$17B+): The bill would direct \$17B to inland and land port-of-entry port facilities and infrastructure areas that assist in connecting ports to other methods of transportation; to port infrastructure electrification and efficiency improvements; and to projects that increase the resilience of ports to rising sea-levels, flooding and weather events.

**CleanTech & Clean Energy:** The Senate’s bipartisan bill would direct almost \$90B of new federal spending to clean technologies and infrastructure supportive of a transition to clean and renewable energy sources. Within this spending is the “single largest investment in clean energy transmission in American history.”<sup>2</sup>

- Power Infrastructure & Clean Energy (\$73B+) – The bill would invest \$73B of new spending in power transmission infrastructure designed to accommodate the electrification needs of clean energy sources. This includes investment in smart grid technologies and battery storage. The bill also indicates investment in and/or support of green hydrogen, carbon capture technology, hydropower, wind power, and solar power.
- Electric Vehicle Charging Stations (\$7.5B+) – The bill allocates \$7.5B for building out electric vehicle charging infrastructure, specifically focusing on installing chargers along highway corridors to enable travel over long distances, in towns and cities, and in hard-to-reach rural or disadvantaged areas.
- Low-Emission Buses & Ferries (\$7.5B+) – The bill designates \$5B of new spending for investment in electric and low-emission buses, as well as \$2.5B for investment in electric or low-emission ferries.

**Water Infrastructure & Environmental Remediation:** The Infrastructure Investment and Jobs Act features significant and vital potential investment in clean water infrastructure and environment, totalling ~\$84B. Every day, tens of millions of Americans drink contaminated water.<sup>3</sup> The bipartisan infrastructure bill seeks to address this, improving public health and more in the process.

- Water Distribution, Sourcing, & Storage (\$63B) – The bill includes \$63B of new spending on water infrastructure. \$55B of this spending will be directed to water distribution infrastructure enhancements and assorted clean drinking water initiatives, including the full replacement of all lead pipes, funding for wastewater management, and investment in technologies that enhance water treatment, monitoring, and sustainability. An additional \$8B of spending will be made available for investment in water storage, groundwater storage, water recycling and reuse, desalination technology, among other areas.

- Environmental Remediation (\$21B) – The bill seeks to address the impacts of legacy pollution that impacts water quality and public health by investing \$21B in environmental remediation projects. These projects include cleaning up superfund and brownfield sites, as well as plugging orphaned oil and gas wells.

**Digital Infrastructure & Resilience:** The United States faces a growing education gap due to digital inequity; mounting cyberattacks that threaten its economy and national security, and the mounting impacts of climate change. If enacted into law, the bipartisan bill would move the needle on addressing these threats, investing over \$100B across digital infrastructure areas like broadband and cybersecurity and in physical infrastructure resilience.

- Broadband (\$65B) – The bill appropriates \$65B to provide broadband internet for all Americans, stipulating high-speed download/upload speeds and latency low enough to support real-time applications.
- Cybersecurity & Resilience (\$50B) – The bill dedicates \$50B of proposed new spending to bolstering the country's resilience to cyberattacks, both broadly and specifically for infrastructure related to transportation, electric grids, and water infrastructure. It also allocates funds from this amount to improving the resilience of physical infrastructure to the impacts of climate change.

## **PAYING FOR THE BILL**

The bipartisan bill seeks to fund its spending without raising the deficit through a number of creative policies which include auctioning off portions of the 5G spectrum, sales from the Strategic Petroleum Reserve, delaying Medicare expenses, increasing customs fees and taxes on chemical companies' superfund fees, thoughtfully removing red tape around infrastructure projects, capturing economic growth driven by the bill, and increasing tax revenue from cryptocurrency transactions by expanding the reporting requirements of cryptocurrency companies. Other spending will be derived from repurposed COVID-19 relief funds, unused federal unemployment aid, and regular infrastructure spending dollars.

The language within the cryptocurrency provision has been controversial, to say the least. It broadly defines many cryptocurrency operators as brokers subject to financial reporting and is seen by many as unworkable as the decentralised technology involves more parties than just those involved in transactions. While an amendment that sought to change the language failed to garner unanimous consent as was required in the senate due to a sole objection, it is possible, if not likely, that the House introduces a similar amendment.

Notably, there is criticism that the bill will raise the deficit, despite bipartisan agreement in the Senate that bill is fully paid for. The Congressional Budget Office (CBO) announced last week that the bill would raise the deficit by \$256B.4 In response, Senate Democrats and Republicans indicated that this was expected as the CBO did not include economic growth in their calculations.

## **NEXT STEPS FOR THE BIPARTISAN BILL, MOVING ON TO BUDGET RECONCILIATION**

The next stop for the Infrastructure Investment and Jobs Act is the U.S. House of Representatives, where it could be subject to further debate and amendments before going to a vote. Important to the timeline on passing the bipartisan bill, House Speaker Nancy Pelosi indicated that the chamber will not look at the bipartisan bill until a more sweeping budget

reconciliation bill focusing on social and clean energy infrastructure is also passed through the Senate.


There is progress on the reconciliation front, however. Following the passage of the bipartisan bill, Senate Democrats voted to adopt a \$3.5T budget resolution which includes \$720B for education, \$332B for affordable housing, almost \$200B for clean energy, and \$83B for science and technology, as well as funding for other areas like affordable health care.<sup>5</sup> The Senate's passage of the resolution moves them a step closer to passing a budget reconciliation bill along party lines that would enable such spending (without needing bipartisan support). First though, House Democrats must also adopt the resolution, the vote for which is expected to occur following the return of Representatives from their summer recess on August 23rd, almost a month earlier than originally planned.<sup>6</sup> The Senate is also now in recess until mid-September, giving the House time to pass the resolution and for Senators to draft the initial text of the reconciliation bill by a September 15th deadline set by Senate Majority Leader Schumer. We expect that both bills will pass through the House and additional procedural steps, reaching President Biden's desk in October.

The path to getting both bills to President Biden to sign them into law is clear, but Congressional Democrats must collaborate and compromise to ensure an optimal outcome. While details around the underlying policies that will be included in the reconciliation bill are unclear at this stage, the sum of new spending across the resolution and bipartisan bill pales in comparison to the combined \$4.1T number from the American Jobs Plan and American Families Plan announced in March/April. Progressive Democrats in the House might be irked by this, but in our view, the spending outlined in the spring was higher than what is realistic in order to accommodate negotiations and compromise. We are encouraged by the significant funding appropriated for clean energy in the reconciliation bill and also expect hundreds of billions of dollars invested in affordable housing, education, and health care to go toward additional physical infrastructure in the form of buildings and clean technologies.

## EVALUATING THE BENEFICIARIES OF THE BIPARTISAN INFRASTRUCTURE BILL

### Expected U.S. Infrastructure Development Beneficiaries

#### U.S. INFRASTRUCTURE DEVELOPMENT SUB-THEMES

<b>CONSTRUCTION &amp; ENGINEERING SERVICES</b> <p>Companies that provide engineering, design, maintenance and construction services for large-scale infrastructure projects such as energy generation/distribution, water/wastewater, telecommunications, transportation (roads, bridges, tunnels, rail), airports and seaports.</p>	<b>RAW MATERIALS &amp; COMPOSITES</b> <p>Companies that produce and supply raw and composite materials (steel, copper, nickel, tin, aluminum, concrete, asphalt, cement and specialty chemicals) that are utilized in the construction and development of infrastructure projects.</p>
<b>PRODUCTS &amp; EQUIPMENT</b> <p>Companies that sell or rent heavy construction equipment, cranes, electric and fiber optic cables, pipes, pumps, smart meters and other products or equipment utilized in large-scale infrastructure projects.</p>	<b>INDUSTRIAL TRANSPORTATION</b> <p>Companies that transport infrastructure raw materials and equipment.</p> 

Source: Indxx U.S. Infrastructure Development Index Methodology, November 2020.

**Construction & Engineering:** Companies involved in the planning, design, and construction of infrastructure related to transportation and transit, power and clean energy infrastructure, water

infrastructure, and digital infrastructure could see heightened revenues on the back of this spending.

**Products & Equipment:** Companies that produce, distribute, or lease products and equipment that serve as components across the above infrastructure areas could realise additional revenues from large-scale federal funding:

- Transportation & Transit: Relevant products include those related to mixing and paving asphalt/concrete as well as traffic management, signage, and safety for roads, highways, and bridges; railcars, barges, axles/couplers, and used in waterways, rail, and public transit; and construction equipment including cranes, aerial work platforms, and materials-handling and earthmoving vehicles/equipment.
- CleanTech & Clean Energy: Relevant products include those related to power transmission and electrification such as electrical wiring, connectors, insulators, meters and measurement systems, power structures and distribution poles, transformers, circuit breakers, enclosures, arresters and bushings, electric control boxes and related components; electric vehicle charging station components; and clean energy components like structural wind towers.
- Clean Water Infrastructure: Relevant products include water distribution pipes and protective lining, pumps, valves, water meters, filtration systems and membranes.
- Digital Infrastructure: Relevant products include wiring and cables for data and related power transmission, connectors, contacts, and communication towers and related components.

**Raw Materials & Composites:** Companies that produce or supply raw materials and composites (or chemicals) that comprise infrastructure across the above infrastructure areas could derive new revenues from the spending carved out in the bill.

- Transportation & Transit: Relevant materials and composites include concrete and asphalt for roads, highways, bridges, and transportation structures; aggregates that comprise composites like concrete/asphalt or are used as stand-alone materials; and metals like steel and aluminium which are used in structures and for reinforcement across transportation infrastructure.
- CleanTech & Clean Energy: Relevant materials and composites include metals and alloys like copper, aluminium, nickel, brass and other metals used in electrical transmission; as well as plastics used for electrical insulation.
- Clean Water Infrastructure: Relevant materials, composites, and chemicals include concrete, copper, plastics and other materials used to make water distribution pipes; sealants and coatings for distribution and storage infrastructure; and chemicals used in water treatment like calcium carbonate.
- Digital Infrastructure: Relevant materials and composites include metals and alloys like copper, aluminium, and other metals used in data transmission cables; as well as steel and aluminium for communications towers.

**Industrial Transportation:** Companies that transport products, equipment, and materials used in transportation infrastructure could benefit from heightened freight volumes intended for use in infrastructure projects.

- Transportation & Transit: Industrial transportation companies might see longer-term benefit from the government footing the bill for billions of dollars of capital expenditure on the rail networks they operate on, as well as from expanded networks allowing for the improved and increased freight delivery.

#### **Other Thematic Beneficiaries**

- The Internet of Things and Autonomous & Electric Vehicles themes could benefit from funding directed to connected cars, sensor-based infrastructure, transit integration, commerce delivery and logistics, and smart traffic.
- The CleanTech, Renewable Energy, Autonomous & Electric Vehicles, and Hydrogen themes could benefit from increased electrification and emissions reduction efforts across transportation areas, as well from improvements to energy efficiency and funding for smart grids.
- The Renewable Energy and Hydrogen themes could benefit from federal support and/or investment in clean energy sources and green hydrogen.
- Clean Water theme could benefit from investment in clean water infrastructure, including federal investment in water distribution, water filtration and treatment, wastewater management, and new water extraction methods like desalination.
- The Cybersecurity and Digital Infrastructure themes could benefit from increased spending on cybersecurity and digital infrastructure like broadband.

## INVESTING IN US INFRASTRUCTURE DEVELOPMENT

Infrastructure in the United States is chronically underfunded and deteriorating. ***The Infrastructure Investment and Jobs Act*** represents the most significant investment in infrastructure in the country's history and would serve as a remedy to these issues for many years to come if it is enacted into law. The potential for additional spending on clean energy and social infrastructure would take this a step further and could reshape the future of the United States. In our view, such spending will translate to revenues for companies involved in infrastructure development and that derive a significant share of their revenues from the U.S. (for examples, see [Four Companies That Could Help Develop Infrastructure in the United States](#)).

**This document is not intended to be, and does not constitute, investment research.**

1. U.S. Congress, H.R. 3684, August 10, 2021. (If not otherwise specified, this is the source for information on the legislation)
2. The White House, "FACT SHEET: Historic Bipartisan Infrastructure Deal," July 28, 2021.
3. Consumer Reports, "More Than 25 Million Americans Drink From the Worst Water Systems," February 26, 2021.
4. New York Times, "Senators rush to pass infrastructure bill as new analysis shows it would add \$256 billion to deficit over the next decade," August 5th, 2021.
5. U.S. Senate, Budget Resolution Outline released August 11, 2021.
6. CNBC, "Senate approves framework of \$3.5 trillion budget plan that would expand Medicare, tax credits and climate initiatives," August 11, 2021. Bloomberg, "Chip Shortage: Taiwan, South Korea's

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