

# What is the US infrastructure bill? An expert explains

18 Aug 2021

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Infrastructure expert Joel Moser talks about why the bill is so necessary right now - and what needs to happen next.  
Image: REUTERS/Bing Guan

- The US Senate has passed the \$1 trillion Infrastructure Investment and Jobs Act.
- The 'historic' bill promises vital investment in areas from roads, bridges and trains to broadband access and clean drinking water.
- Here, infrastructure expert Joel Moser talks about what the bill would achieve – and what needs to happen next.

"Folks, above all, this historic investment in infrastructure is what I believe you, the American people, want – what you've been asking for for a long, long time."

That's US President Joe Biden, talking about the \$1 trillion [Infrastructure Investment and Jobs Act](#), which recently passed through the Senate. The administration has hailed this [bipartisan deal](#) as a once-in-a-generation initiative to create jobs and grow a more sustainable and resilient economy.

While the bill still has to be [approved by the House of Representatives](#) before it can be signed into law, it promises vital investment in areas from [public transit and trains](#) to clean drinking water and expanded access to high-speed internet.

The World Economic Forum spoke with [Joel Moser](#), a native New Yorker, infrastructure investor, and Professor of International Infrastructure Development and Finance at Columbia University, about the bill and his thoughts on what needs to happen next.

## Why is the US infrastructure bill so important?

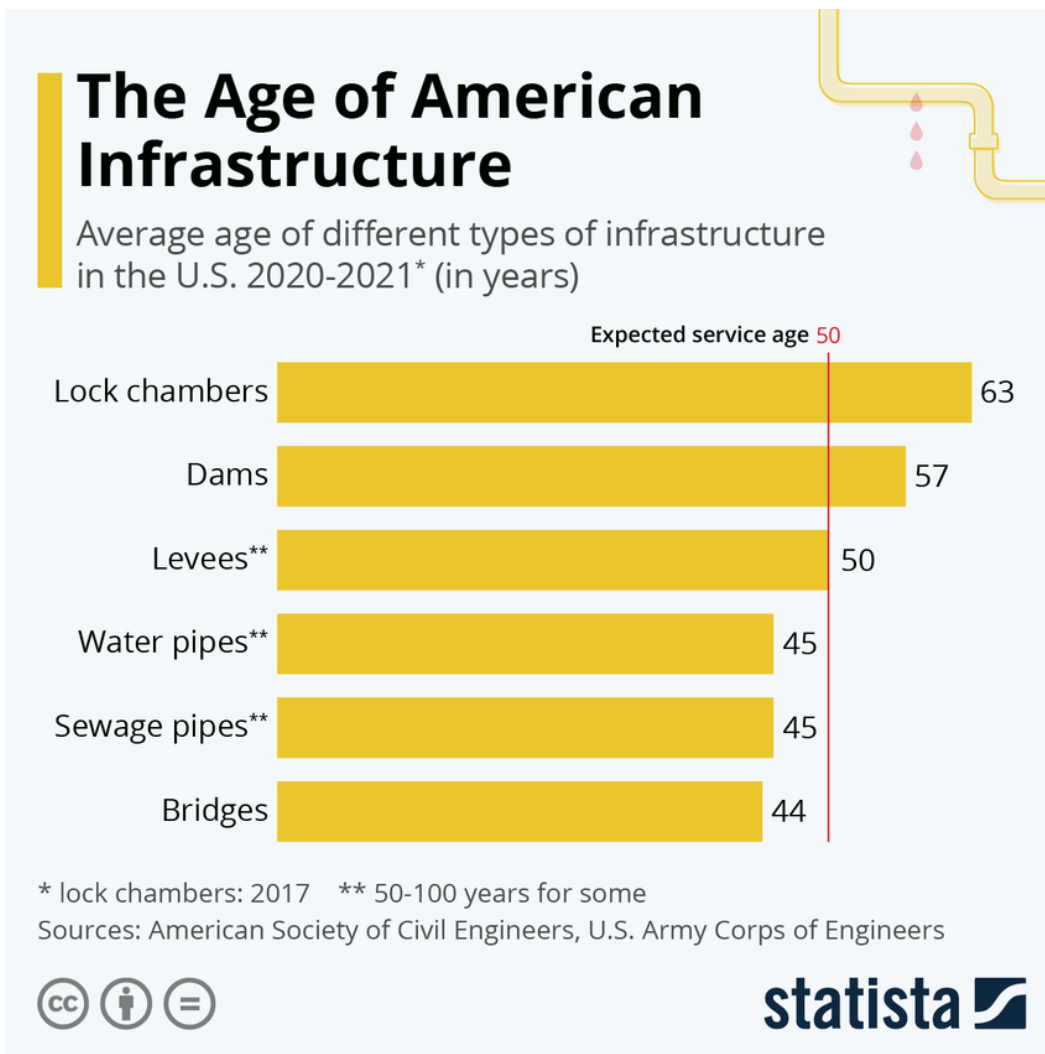
We've been waiting a generation for a big infrastructure investment. And it's critical for two reasons.

**We've been waiting a generation for a big infrastructure investment. And it's critical for two reasons.**

**We've been underinvesting in the existing infrastructure stock in America for decades and it's in disrepair. In addition, the major infrastructure initiatives in America happened about 100 years ago and about 50 years ago. And they no longer address the needs of today in terms of a world moving to green energy, urban lifestyles and different population patterns.**

**Infrastructure creates the framework for how we live where we live, and it lasts for decades. So it's long overdue to have a completely holistic rethink about those things and spend the money to put the basics in place.**

**That's why it is important – it's just not quite enough money.**



Much US infrastructure is approaching or already beyond its expected service age.  
Image: Statista

## What are some of the most significant commitments in the bill?

Well, they're all important – and they're all a little bit underfunded. Some things

are missing – climate change is missing, largely, or enough money for climate change.

We need to fix the things that are broken, but the money for new investments is also important, because that's to me what's exciting about infrastructure.

We need to start living in a different way and encourage urban lifestyles that are easier on the environment. And we need to have a transition to green power and reduce our impact on the planet. It's now vital to build for resilience against climate change, because that's already happening and will continue to happen, regardless of how effective we are within the next few decades.

The real question will be around the decisions that are made and who makes those decisions. Will there be an orderly, thoughtful and constructive planning process? Because one of the things I often tell my class is that not all infrastructure is good. Infrastructure for its own sake is not an end.

## **Could you talk a bit more about the areas that could be improved?**

If you look at the numbers in this bill versus those that were in the original bill, it's short in almost every area. But particularly for climate change.

Hopefully, it's not the last time there will be money for climate change in the US, and we're told that it will be picked up in a big way by the budget reconciliation piece [a separate [\\$3.5 trillion plan](#) with money for education, healthcare and climate initiatives – the framework for this plan was approved by the Senate last week].

But the infrastructure bill is, I hate to say it, just not a lot of money. If you think about it, a trillion dollars over 50 states, considering all that has to happen when you start spreading out what's available – it's not going to be enough

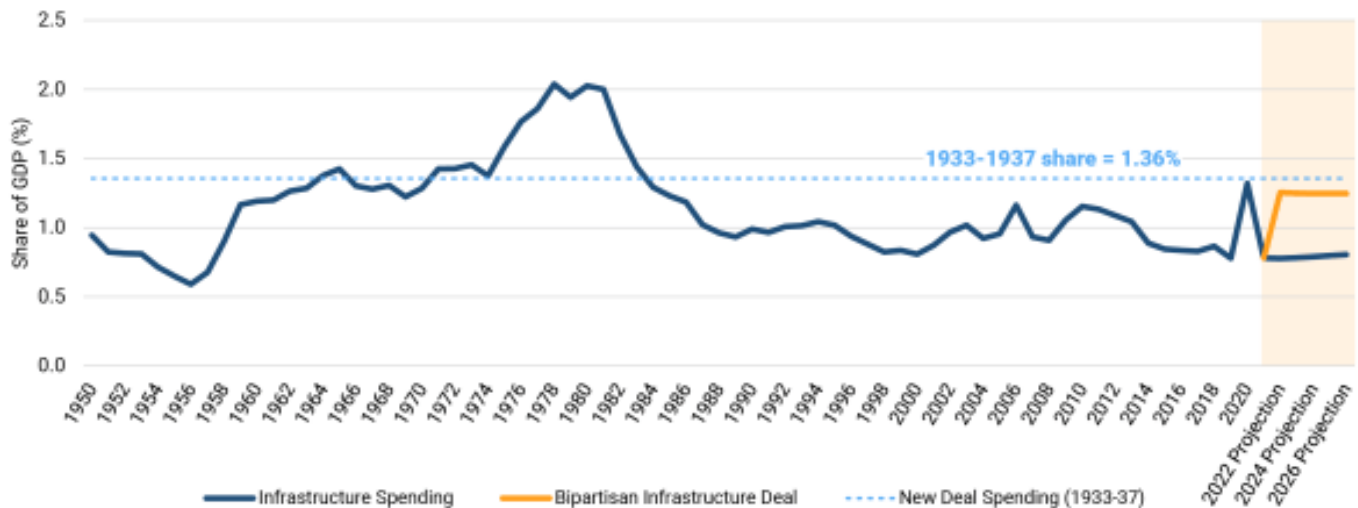


money to be instantly transformative.

I would also like to see more money for research, because we need to find out more about what we can actually do to solve these problems. But we'll see how much is in the next bill.

**Figure 1. Projected federal infrastructure spending (nominal)**

As a share of GDP, 1950 to 2026



Source: Brookings analysis of Office of Management and Budget Data.

Note: Projected GDP uses Federal Reserve estimates; projected infrastructure spending assumes 2.8% annual increase in outlays, using 2019 as a baseline.

**B** Metropolitan Policy Program  
at BROOKINGS

The bill increases federal infrastructure spending close to levels seen during the New Deal of the 1930s – but is it enough?

Image: Brookings

## You mention the climate crisis – do you think this bill will play any part in the fight against climate change?

There's a focus on electrification and the grid, which is sort of a big catch-all for getting power around to the right place. If there is to be a transition away from fossil fuel power, one of the critical pieces is connecting renewable power from where it can be produced to where it's needed.

This is about grid transportation and reliability, and modernization. And that's a

project that the government has to have a big role in because, particularly in the US, the grid is part private, part public. It's been built over decades. That's a big challenge and there's a lot of money earmarked for it – so that's a good first step.

## **Does any tension exist between an infrastructure commitment on this scale and realizing it in a way that's mindful of the planet?**

I don't think that there's going to be a practical tension because the roads-and-bridges piece is fixing what we've got, mostly. It's not mostly about building new stuff.

But there is a tension in the sense that we need to encourage mass transit and discourage individual automobiles. Electrification of cars is great. And I'm all in favour of repairing crumbling bridges and fixing potholes. Potholes are dangerous and they make driving less efficient, which consumes more gas.

But, big picture? We need to get people out of cars and onto mass transit. And I know this is a controversial concept. But, generally speaking, we need to get people comfortable with living in greater concentration. Of course, people will still need to live in rural areas too. But urban lifestyles are more efficient in terms of carbon footprint.

Many of the infrastructure projects from the post war-era facilitated a very inefficient use of resources. I'm not suggesting we force people into cities, it's happening naturally – urbanization is a global trend. And COVID notwithstanding, we need to make that easier.

That – setting aside specific climate dollars – is where the money needs to be spent.

## **What are the bill's big commitments likely to mean for people and their communities?**

Well as excited as I am that this finally seems to be happening, I'm going to be a bit cynical about the pace of impact. And no one should be disappointed to hear this because it's just the reality – infrastructure is slow. None of this is going to happen overnight.

The first places that will get the money are likely to be projects that are already in the pipeline. So there will be some pick-up in jobs. But, COVID aside, the construction industry was not underutilized in the US. And modern infrastructure projects require high-skilled work, so we're going to have to start training people to create the workforce.

The most critical thing is to choose carefully what to build, because once you build it, you're stuck with it. We're well aware of that in New York, where there are many projects built by the famous builder Robert Moses. Some of them are great – but some of them destroyed neighbourhoods.

## **What is the World Economic Forum doing on infrastructure?**

Infrastructure is one of the least technologically transformed sectors in the entire economy, with crucial components like construction ranking second to last in digitization according to [industry rankings](#). Technologically-enabled infrastructure has the potential to change the way we plan, design, finance, build and operate our infrastructure systems and, more importantly, help achieve broader goals around sustainability, social cohesion and inclusive economic growth.

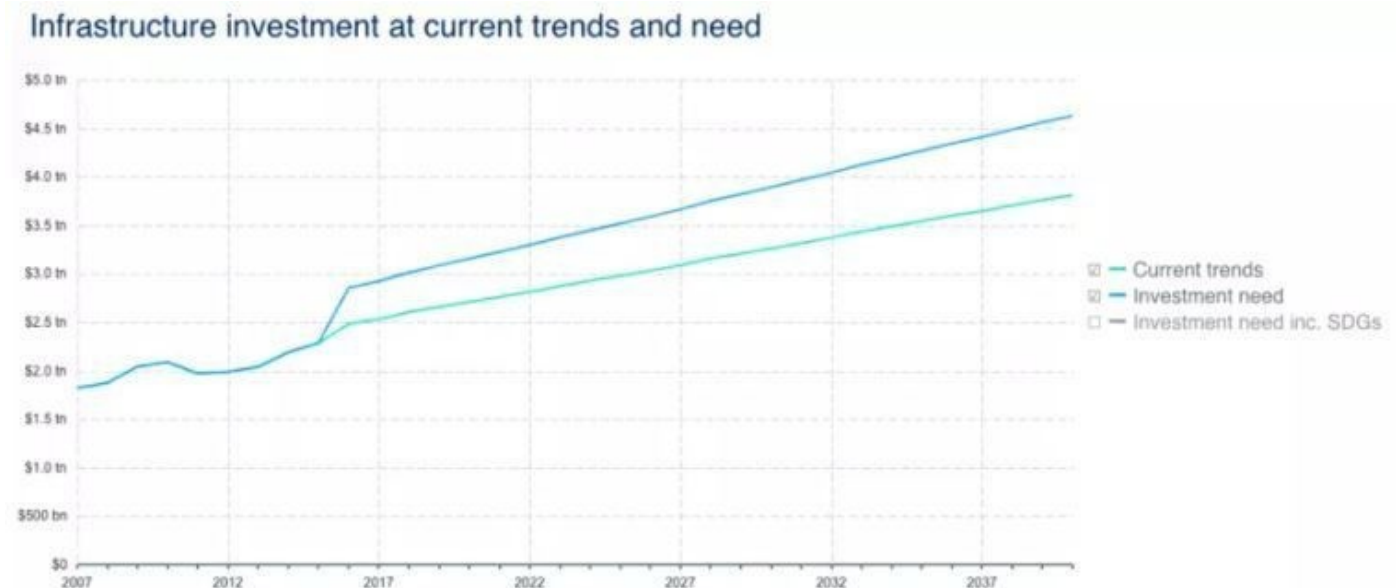


Image: Global Infrastructure Hub

The World Economic Forum's [Infrastructure 4.0](#) initiative, supported by the [Global Infrastructure Hub](#), is working to improve the adoption of emerging infrastructure technologies across asset and system lifecycles.

By creating recommendations for decision-makers and providing best-practice case study examples to the Global Infrastructure Hub's G20 [Infratech Use Case library](#), this initiative aims to refocus the infrastructure development conversation around how infrastructure as a tool to provide better outcomes in people's lives and technology's role in enabling this people-first future.

## So what needs to happen next?

The trillion dollars in the US infrastructure bill is actually only about \$500 billion of new spending – some of those things were already in past budgets. So ultimately the most important thing is what's in the budget reconciliation.

We need to look at the big transformation trends, which are resiliency and reduction in terms of the climate. Let's get to the real game of providing the beginning of an investment for a transformative relationship with how we use



our infrastructure in America.

But I cannot emphasise enough how important it is to manage expectations and be patient. Things will not transform right away. Infrastructure is slow, and it should be because considered decisions need to be made. That's not exciting or sexy – but it's really important.