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Budget Model

Updated Bipartisan Senate Infrastructure Deal: Budgetary and Economic Effects

Summary: The bipartisan Senate infrastructure deal, endorsed by President Biden, authorizes about $548 billion in *additional* infrastructure investments, which we estimate is funded by $132 billion in new tax provisions and $351 billion in new deficits. We project that proposal would have no significant effect on GDP by end of the budget window (2031) or in the long run (2050).

Introduction

Ongoing negotiations on the infrastructure bill have yielded a proposal that includes *new* infrastructure spending. Revenues for this program come from a wide variety of sources including "unused" funds, changes in tax revenues from increased cryptoasset reporting requirements, and reductions in other government spending. Any "unused" funds would add to the debt relative to a baseline where the funds were not spent.

We analyze the updated bipartisan Senate infrastructure proposal using the same framework as we used in our previous analysis of the June infrastructure compromise reached by a bipartisan group of senators and the White House.[1] As described in a PWBM explainer on infrastructure investment, our model captures the how investments in "public capital" like infrastructure boosts the productivity of private capital and labor. For example, improved transportation allows private firms to get their goods to market at a lower cost, which raises both the value of the firm's capital to private investors as well as the value of the labor that they employ. Unlike the infrastructure compromise outlined in June, we estimate that this bill would increase government debt by 2050. Even with current government borrowing rates being at historical low values, higher government debt mitigates the positive impact of public investment, as U.S. and international savings are diverted from private capital investment toward public debt.

Spending

Table 1 shows how the $548 billion in new infrastructure funding will be spent.

Table 1. Spending Provisions of the Bipartisan Senate Infrastructure Package

Billions of USD

Program	Cost
Roads, Bridges, and Major Projects	$110
Road Safety	$11
Public Transit	$39
Passenger and Freight Rail	$66
Electric Vehicle Infrastructure and Electric Buses	$15
Airports	$25
Ports and Waterway	$17
Environmental Remediation	$21
Clean Drinking Water	$55
High-Speed Internet	$65
Power Infrastructure	$73
Resilienace and Western Water Infrastructure	$50
Reconnecting Communities	$1
Total	**$548**

Source: White House Fact Sheet

The current draft of the bipartisan Senate infrastructure bill appropriates about $283 billion beyond what would likely have been spent on transportation infrastructure aid in the absence of this legislation. Of that $283 billion, about $39 billion is dedicated to public transportation. The bill appropriates about $15 billion to electric vehicle infrastructure and electric buses. Another $66 billion is dedicated to rail service, $25 billion to airport facilities, $17 billion to ports and waterways. About $121 billion is dedicated explicitly to roads. The remaining $265 billion is allocated to a wide variety of non-transportation projects that cover broadband expansion, water infrastructure (including lead pipe replacement), digital resiliency, power infrastructure, and a variety of other environmental and disaster-related projects.

Revenue

Table 2 shows the sources of revenue used to finance new infrastructure funding.

Table 2. Revenue Provisions of the Bipartisan Senate Infrastructure Package

Billions of USD

Program	Cost
Unused COVID Funds	$205
Delay Medicare Part D Rebate Rule	$49
Unused Enhanced Federal UI Supplement	$53
Spectrum Auctions	$87
Cryptocurrency Reporting	$28
Fees on Government Sponsored Enterprises (GSEs)	$21
Superfund Fees	$13
Extend Sequester	$9
Customs User Fees	$6
Sell Oil from Strategic Petroleum Reserve	$6
Reducing Medicare Spending on Discarded Medicine	$3
Interest Rate Smoothing for Defined Benefit Pensions	$3
Dynamic Scoring	$56
Total	**$539**

Source: https://static.politico.com/7e/74/659737a14980a049b2b233aa43c9/bif-summary.pdf

The $258 billion in revenue from "unused" funds—COVID and Unemployment Insurance—add to the debt relative to the baseline in which the funds were not spent and thus return to the Treasury. In addition, the announced deal allocates revenues from the sale of spectrum and oil totaling $93 billion. Proceeds from spectrum sales are slated to go to the U.S. Treasury, so this revenue source does not significantly change the government's budget relative to the baseline.[2] Furthermore, we assume that the strategic petroleum reserve will be restocked to its baseline value at some point in the future. Therefore, applying these sources of funding to infrastructure aid effectively adds to government debt.

The bipartisan Senate compromise package calls for $132 billion in funding from increased revenues and decreased federal spending. Some provisions, such as the increase in cryptocurrency reporting requirements, the Superfund tax, a customs fee, and the fees on government sponsored enterprises, are projected to bring in new revenues. The Joint Committee on Taxation (JCT) reports that the Superfund tax and the customs fees expire in 2031, while the cryptoasset reporting requirements extend indefinitely.

Other provisions, such as the delay in the Medicare Part D Rebate Rule and the extension of the mandatory sequester, reduce anticipated government spending. These provisions reduce government deficits relative to

the baseline that does not include the proposed infrastructure bill. PWBM assumes that those savings are realized over the next five years.[3]

Economic Effects

Table 3 shows the macroeconomic effects of the $548 billion bipartisan Senate infrastructure investment.

Table 3. Economic Effects of the Bipartisan Senate Infrastructure Package

Percent Change from Baseline

Year	GDP	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	0.0	-0.2	0.0	0.0	1.3
2040	0.0	-0.2	0.0	0.0	0.9
2050	0.0	-0.1	0.0	0.0	0.6

The bulk of the spending on infrastructure occurs in the first few years. Overall spending on infrastructure is much larger than the increase in revenues, which leads to a 1.3 percent increase in government debt in 2031. Over time, as the new spending declines and some provisions, particularly the cryptocurrency reporting requirements, continue to generate increased revenue, the increase in government debt shrinks. In 2040 and 2050, government debt increases relative to baseline by 0.9 and 0.6 percent, respectively. The additional public capital increases the productivity of private capital, however the higher government debt *crowds out* additional private investment, leading to a 0.2 and 0.1 percent decrease in productive private capital in 2040 and 2050, respectively.

The additional public capital makes workers more productive, however, this is offset by the decline in private capital, which makes workers less productive. Overall, workers' productivity is unchanged, which is reflected in wages that do not change in 2040 and 2050. Overall, similar hours worked and lower private capital lower GDP, an effect that is offset by the productivity benefits of the infrastructure investment. Overall, GDP does not change in 2031, 2040, or 2050.

This analysis was conducted by Jon Huntley and John Ricco under the direction of Efraim Berkovich. Prepared for the website by Mariko Paulson.

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1. Previously, PWBM reviewed empirical studies about how states and localities changed their spending and revenues in response to federal aid. In the current analysis, we estimate that total infrastructure investment increases by about 62 cents for every dollar of aid, the same state and local government estimate that we used in PWBM's analysis of the 2018 Senate Democrat infrastructure plan. ↵

2. Recent reporting confirmed that the spectrum sale in question occurred in February 2021. ↵

3. Dynamic scoring, which accounts for $56 billion in anticipated revenues in the proposal, is built into our analysis and is not counted separately. ↵