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Budget Model

Bipartisan Senate Infrastructure Deal: Budgetary and Economic Effects

Summary: The bipartisan Senate infrastructure deal, endorsed by President Biden, authorizes $1.2 trillion of spending, representing about $579 billion in *additional* infrastructure investments funded by a mix of deficits, user fees, and other tax provisions. This proposal would increase output in 2050 by 0.1 percent.

Key Points

- A bipartisan group of senators reached agreement with the White House on $1.2 trillion in infrastructure spending, representing a $579 billion increase from the current policy baseline.
- That new spending would be financed with a mix of additional deficits (relative to current policy), user fees, and other tax provisions.
- PWBM estimates that the proposal would decrease debt by 0.9 percent and increase output by 0.1 percent in 2050.

Introduction

A bipartisan group of senators announced an infrastructure spending agreement, later endorsed by President Biden. The agreement proposes $579 billion in *new* infrastructure spending ($1.2 trillion in *total* spending) over the next five years,[1] about $313 billion of which goes to transportation projects and $266 billion to digital, disaster, environmental, and energy infrastructure investments. Revenues for this program come from a wide variety of sources including "unused" funds, increased funding for Internal Revenue Service (IRS) enforcement activities as well as user fees. Any "unused" funds would add to the debt relative to a baseline where the funds were not spent.

We analyze the bipartisan Senate infrastructure proposal using the same framework as in our previous analysis of the Republican and bipartisan infrastructure proposals.[2] 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.

Spending

Table 1 shows how the $579 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	$109
Road Safety	$11
Public Transit	$49
Infrastructure Financing Authority	$20
Passenger and Freight Rail Repair and Expansion	$66
Electric Vehicle Infrastructure and Transit	$15
Airport Facility Infrastructure Investments	$25
Ports and Waterway	$16
Cyber Resiliancy; Environmental Management and Infrastructure	$47
Water Infrastructure	$55
Broadband	$65
Power Infrastructure	$73
Other	$26
Total	**$579**

Source: White House Fact Sheet

The bipartisan Senate infrastructure bill appropriates about $311 billion beyond what would likely have been spent on transportation infrastructure aid in the absence of this legislation. Of that $311 billion, about $49 billion is dedicated to public transportation, which includes low-emissions and electric transit. Another $66 billion is dedicated to rail service, $25 billion to airport facilities, $16 billion to ports and waterways. About $120 billion is dedicated explicitly to roads. The remaining $266 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 the $579 billion in new infrastructure funding.

Table 2. Revenue Provisions of the Bipartisan Senate Infrastructure Package

Billions of USD

Program	Cost	Additional Spending
Unused COVID Funds	$80	-
Public-Private Partnership, Private Activity Bonds, Asset Recycling, and Direct Pay Municipal Bonds	$100	-
Reduce IRS Tax Gap	$100	$40
Recoup Rejected UI	$25	-
Repurposed Broadband Funds	$20	-
Allow States to Sell or Purchase Toll Credits	$30	-
Adjust Customs User Fees	$6	-
Spectrum Auction	$65	-
Reinstate Superfund Fee on Chemicals	$13	-
Extenend Medicare Sequester	$9	-
Dynamic Scoring	$58	-
Sell Oil from Strategic Petroleum Reserve	$6	-
UI Program Integrity	$72	$8
Total	**$584**	**$48**

Source: reporting by Lisa Desjardins

The $125 billion in revenue from "unused" funds—COVID, UI, and broadband—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 $71 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.[3] 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 $136 billion in revenues from a variety of public-private partnerships, asset recycling, states to purchase and sell toll credits, and adjusted customs user fees. These financing methods typically rely on user fees to directly (through the collection of fees such as tolls) or indirectly (by auctioning the rights to revenue from future user fees) generate government revenue to fund the projects. Therefore, PWBM models these revenues as user fees over the next 10 years in its analysis of this proposal.

The $100 billion from greater IRS tax enforcement increases effective ordinary tax rates. We assume that both the spending and the revenue generated from this provision extend beyond the 10-year budgetary window. Lastly, the proposal expects to recover $72 billion in fraudulently disbursed unemployment insurance (UI) funds. Though it is unclear whether this amount of fraudulent activity exists in the UI system, for the purposes of this analysis, we assume the full $72 billion is recovered and that the revenue from the recovered UI funds does not extend beyond the 10-year budget window.

Dynamic scoring, which accounts for $58 billion in anticipated revenues in the proposal, is built into our analysis and is not counted separately. PWBM models the rest of the $22 billion in anticipated revenues as economy-wide, lump sum taxes.

Economic Effects

Table 3 shows the macroeconomic effects of the $579 billion bipartisan Senate infrastructure investment.

Table 3. Economic Effects of the Bipartisan Senate Infrastructure Package

Percent Change from Baseline

Year	Output	Capital Stock	Hourly Wage	Hours Worked	Government Debt
2031	0.0	0.1	0.1	-0.1	0.4
2040	0.1	0.2	0.1	-0.1	-0.4
2050	0.1	0.3	0.1	0.0	-0.9

The bulk of the spending on infrastructure occurs in the first few years. The spending during the first decade outpaces the increase in revenues, which leads to a 0.4 percent increase in government debt. Over time, as the new spending declines, IRS enforcement continues, and revenue grows from higher output, the government debt declines relative to baseline by 0.4 percent and 0.9 percent in 2040 and 2050 respectively. The additional public capital increases the productivity of private capital, and the lower government debt *crowds in* additional private investment, leading to a 0.2 and 0.3 percent increase in productive private capital in 2040 and 2050, respectively.

The additional private capital makes workers more productive. Workers' productivity is reflected in an increase in wages, which go up by 0.1 percent in 2040 and 2050. Although hours worked decline very slightly, by 0.1 percent in 2040, output increases because of the larger increase in productive private capital. Output goes up by 0.1 percent in both 2040 and 2050.

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

1. The total $1.2 trillion plan covers an eight-year budget window. Of the $1.2 trillion, $579 billion is new spending, all of which is appropriated in the first five years of that budget window. ↩

2. 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. ↩

3. Recent reporting confirmed that the spectrum sale in question occurred in February 2021. ↩