

Build Back Better With Bytes

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The median household in the United States is realizing year-on-year declines in income due to weak real wage growth coupled with a rapid rise in housing and [out-of-pocket health care costs](#). The minimum wage is 50 years behind inflation, and an unacceptably large portion of the nation is struggling to pay utilities, rent, and food. These losses in household income also mean that lower-income households cannot afford the high-quality housing, safe neighborhoods, and healthy foods needed to sustain health. As a result, these economic losses have been coupled [with declines in health and life expectancy](#).

These problems will begin to be fixed with the recently signed Bipartisan Infrastructure Deal because the bill will create better paying jobs and jumpstart growth. China's (admittedly more aggressive) infrastructure program contributed to all but erasing poverty in that country with physical infrastructure alone. The proposed Build Back Better bill would greatly expand social welfare programs, including an expansion in health care, if ultimately funded. Unfortunately, as our politicians bicker about quantity, quality and vision—building back better than we have in the past—has been lost in the debate.

Lacking vision

Earlier infrastructure projects focused on highways that too often incised healthy and happy neighborhoods into pieces, sometimes with blatant racist motives. The Cross Bronx Expressway is one of the most poignant example of racist infrastructure, splitting the Bronx into two pieces. When the highway opened, residents were inundated with noise and pollution. Landlords burned their worthless buildings for insurance money. Crime rose so high that ambulance drivers refused to deliver babies in fear of their lives.

Now, we have to spend dollars from current infrastructure bills to fix these historical problems. Columbia professors are working with Congressman Torres and Senator Schumer to heal this wound in the Bronx, [capping the expressway with a deck park](#). This will prevent further deaths, but will never bring back the tens of thousands of lives lost to pollution and violence. We have also had to remove many of the highways that were built, to better accommodate space for public transportation, parks, and bikes. We are about to embark on a similar costly mistake of spending money without fully thinking through the implications.

Today's big mistake

Just as we are coming around to putting infrastructure money into social programs, [Estonia](#) and [South Korea](#) are rushing ahead in administering their generous welfare programs with automation—infrastructure to make their social programs work. In these countries, opening a business, voting, or renewing a driver's license [can be done from home in seconds](#). Welfare programs are not only universal and automatic, welfare dollars are spent on recipients, not on administrators. In the US, only a fraction of eligible recipients actually enroll in the programs because they are unaware of them or unable to surmount the huge bureaucratic hurdles.

Remarkably, even without the Build Back Better bill, the US already spends as much on welfare programs as its peers. The US spends more per capita than virtually any other nation on education, and twice the per capita expenditure on health care. Yet we rank at the bottom of the OECD in terms of life expectancy and student performance. Why? Nearly every aspect of the US welfare state is in as much need of repair as our crumbling bridges. We spend as much money, but spend it poorly.

The digital solution

Our peer nations use digital identities that are securely linked to data across multiple, highly secure, blockchain protected datasets. With a digital identity, data can only be accessed by the person who owns the data. Neither the government nor Google can access it without your permission, not only opening the door for a much more secure data future, but also a more efficient way to deliver welfare.

Let's take a look at how this works in health care. Everyone who has seen a doctor knows that they must write the same information on multiple forms. This may seem primitive and annoying to the patient, but the bureaucracy only gets worse after that. All the information you write down must be entered into medical billing systems that do not communicate with one another. So, this medical information is siloed within most provider networks rather than shared between them. Just as you must write your name multiple times, each provider usually must order the same tests over again. According to [a recent study in the Journal of the American Medical Association](#), 250 billion dollars are wasted each year on administrative inefficiencies that other nations do not have. This adds to \$2 trillion over 8 years—enough to completely pay off the Build Back Better plan. With a digital identity linked to unified and secured data systems, you don't need to write anything down in the first place. You simply provide your identity card, and the system does the rest.

Better still, these changes will make all welfare programs easy to access. Right now, only a tiny fraction of people eligible for welfare benefits actually apply for them. But if a worker can file taxes at the click of a button, it means that this person can also receive the Earned Income Tax Credit (commonly known as the EITC, and a part of Build Back Better), thereby increasing money for housing, parenting, and medical care while offsetting year-on-year declines in spending power. The EITC [also improves health](#), thereby reducing demands on the medical system.

