

May 2021

INFRASTRUCTURE CONVERSATIONS EVERYWHERE

Why Aren't We Talking About High Schools as Part of the Solution?

All across America, **infrastructure** has become a headline topic as a strategy to boost post-Covid economic recovery, open doors of opportunity and uptick building and repair of the country's pipelines of all sorts -- roads, schools, hospitals, dams, power grids, and broadband, to start. While differing views about the exact definition of this headliner term are bandied about, one thing is certain: we will need skilled workers to build and maintain all of it. Nonetheless, employers report a critical shortage of qualified tradespeople. Skilled trades education is a known catalyst for economic uplift. Students want to learn these skills, their parents support them doing so, and their work is critical to a robust economic recovery.

But where could or should this formal education begin? We think in high school, which unfortunately is not included in many of the current conversations. This is a missed opportunity for policy makers at every level to grow and deepen the availability and quality of skilled trades education as an essential choice for students, families and their futures.

Through independent research commissioned by the philanthropic project Harbor Freight Tools for Schools, we've learned that voters across the spectrum are willing to pay for an increased investment in trades education, and say they will support candidates who make it a priority. This is a rare moment where need and opportunity for alignment can converge rather than collide – where educators, industry, policymakers, parents, and students agree.

At our behest, [Jobs for the Future](#) undertook a landscape study of high school trades education in all 50 states, and [NORC at University of Chicago](#) conducted nationwide opinion research on attitudes about the trades from voters, parents and students. The headlines emerging from the two rich and detailed studies is that education systems are not yet meeting the needs of American students or of our country's economy and infrastructure. Students, parents and voters want it fixed!

The big take-aways:

1 Support for skilled trades education is broad and deep – something that unites us as a country.

Students and their parents see the value of trades education, which also enjoys remarkably strong bipartisan support. In fact, the vast majority of parents — 89 percent — believe American students would be more prepared for success in a career if there were more opportunities to study the skilled trades. And more than 7 in 10 students (72 percent) say high schools could do a better job preparing students for life after graduation by giving them more chances to learn real-world skills. Parents (77 percent), and voters (89 percent) agree.

2 At least a million American students take skilled trades courses in high school every year.

Based on enrollment data from 32 states, an estimate of *at least* 1 million students study the trades nationwide. A substantial portion of these students “concentrate,” or take multiple, sequential courses in a trade.

3 There is a great need for skilled tradespeople in our country, and much better alignment is needed between high school trades offerings and workforce demands.

Across the country, there are far too few students enrolling in trades courses in high school, and often, those who do enroll are choosing fields that are less in demand.

In fact, there is no skilled trades field where current enrollment in high school programs is projected to meet even half of employer demand over the next decade. Given these sizeable gaps, and the fact that much demand is driven by retirements, the need will likely outpace the availability of trades workers for years to come. This is further complicated by JFF's findings showing a looming trades teacher shortage, and cuts to education funding that typically result from an economic recession. These trends are happening at the same time that construction is found to be one of the forerunners of spurring economic recovery.

4 Skilled trades education faces great stigma – or does it?

When we compare JFF's landscape analysis with the results of the NORC poll, one paradox is that education leaders unanimously point to a stigma against trades education, but the opinion research strongly suggests there is far less stigma. To us, this suggests a chasm in perspective between education insiders and the greater community. Unfortunately the supportive views of the community do not find their way into policy-making.

5 Outstanding trades education prepares students for college, careers and life.

The best trades programs incorporate project-based learning, hands-on problem solving, and teamwork, as well as real-world experiences, high-quality industry certifications, paid apprenticeships, and credits toward an associate degree. This training puts students on a faster path to a career with family-supporting wages and provides soft skills that transfer well to any path after high school. In fact, when students take in-depth trades courses throughout high school they are more likely to graduate than their peers.

Apprenticeships are a bright spot in trades education, combining technical training and hands-on work experience with classroom instruction and the chance to earn college credit and degrees. Apprentices with the International Association of Heat and Frost Insulators and Allied Workers, for example, take classes in math, applied physics, mechanical drawing, and digital technology. The New York City Plumbers' Union apprenticeship programs leads participants to a full associate degree.

In addition to certifications, skills, and workplace experience, a trades education also gives students an opportunity to work their way through college with a job that pays well – eliminating the need to take on significant college debt.

At this critical moment in our nation's recovery, we must take a holistic and long-term approach – recognizing that human infrastructure is key to rebuilding our nation, and investing in a pipeline of skilled workers for years to come. High school skilled trades education will play a significant role in creating the robust, long-term economic vitality our country needs, and the fulfilling, family-sustaining careers so many Americans seek.

Harbor Freight Tools for Schools is the flagship program of The Smidt Foundation, established by Harbor Freight Tools owner and founder Eric Smidt, to advance excellent skilled trades education in U.S. public high schools. We have a deep respect for the dignity of the skilled trades and for the intelligence and creativity of people who work with their hands. We believe that high-quality skilled trades education gives high school students a pathway to graduation, opportunity, and good jobs and a workforce our country needs.

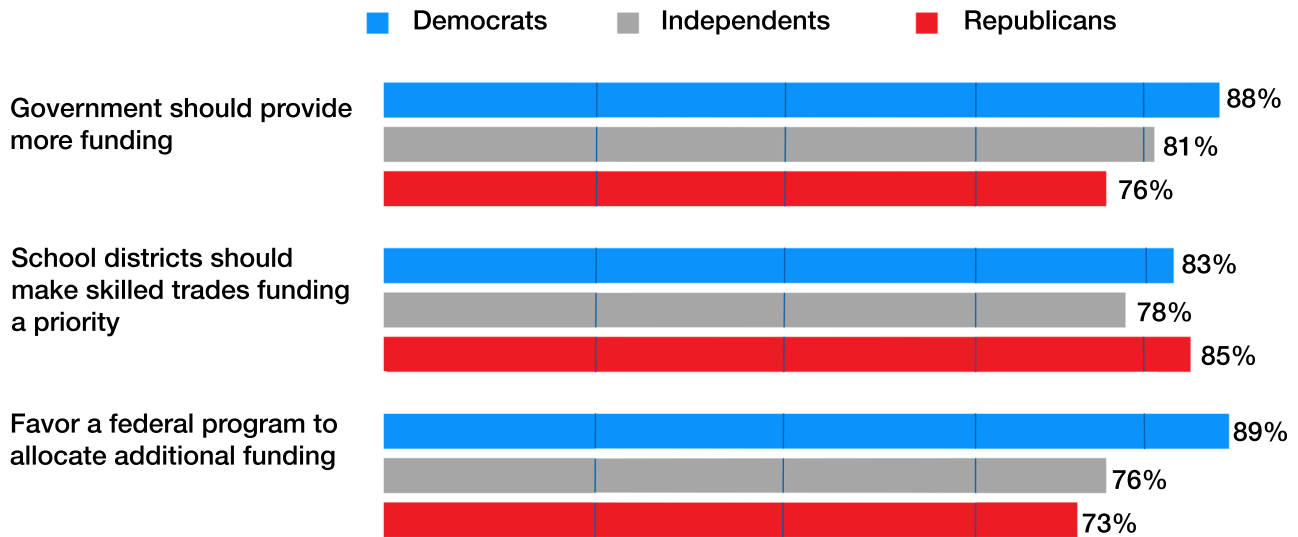
To learn more, access the reports [here](#). The [Platinum Standard](#) we developed compiles the components of excellence in this sector.

Americans Voice Strong Support for Skilled Trades Education

Parents, students, and voters agree.

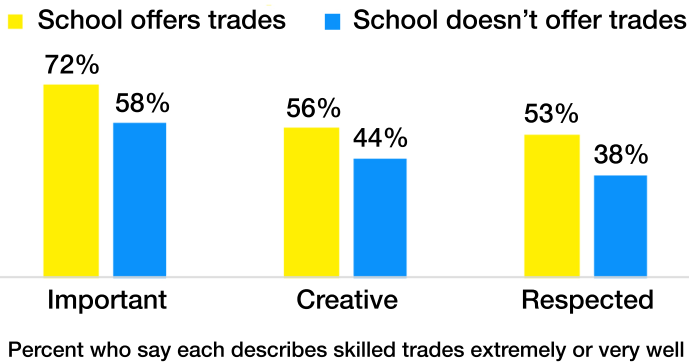
Voters Favor Increased Spending

8 in 10 voters favor increased public funding for skilled trades education and think trades should be a priority in high schools.



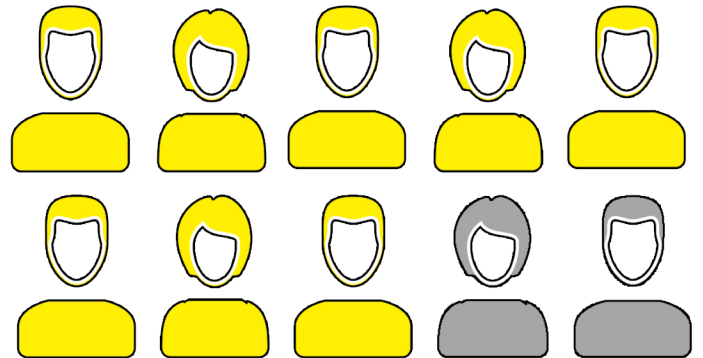
Students with Trades Classes at School are More Positive

Students in high schools that offer skilled trades courses are more likely to say skilled trades jobs are important, creative, and respected.



Parents Want Opportunities

8 in 10 say their child would be more prepared for a career if there were more chances to study skilled trades in high school.



This study was conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools. Data was collected by NORC at the University of Chicago in 2019. For more information and additional findings, please visit <https://harborfreighttoolsforschools.org/>.