

HARBOR FREIGHT

TOOLS FOR SCHOOLS

SKILLED TRADES IN HIGH SCHOOL: WHAT VOTERS, PARENTS, AND STUDENTS WANT FROM POLICYMAKERS AND EDUCATORS

EXECUTIVE SUMMARY

Voters, parents, and high school students share a remarkably positive view of skilled trades classes and support greater investment in these courses to prepare students for life after high school, according to a new study from Harbor Freight Tools for Schools conducted by NORC at the University of Chicago. The study finds broad and bipartisan support among voters and parents alike for a variety of funding mechanisms to bolster skilled trades education. Both groups also want federal and local government to spend more on skilled trades education and would support candidates who favor increasing government funding for these classes.

This study features a nationally representative survey of voters, parents and students conducted in 2019 examining attitudes toward and experiences with skilled trades education and careers.

The study finds broad support among likely voters for policies to promote skilled trades education. Overall, more than 8 in 10 voters favor increased federal funding to support skilled trades education and want elected officials to do more to support skilled trades in high schools. They favor local bonds to generate funds for skilled trades in their local high schools and support a

Three Key Takeaways:

- 1) More than 8 in 10 voters favor federal funding for skilled trades and think trades should be a priority.
- 2) Eight in 10 parents believe their child would be more prepared for a career if there were more chances to study skilled trades in high school.
- 3) Students in high schools that offer skilled trades courses are more likely than those in schools without such classes to say skilled trades jobs are important (72% vs. 58%), creative (56% vs. 44%), and respected (53% vs. 38%).

federal program to allocate additional funds to train high school students in the skilled trades. When asked whom they think increased funding would benefit, voters see such funding increases as benefiting a large swath of the student population—those in urban, suburban, and rural areas; male and female students; and low- and middle-income students. Two-thirds say they would be more likely to support a candidate who favored increasing government funding for skilled trades. And in an era of strong political polarization, Republicans and Democrats find strong common ground here — a large majority in both parties support increased funding.

The results show that high school students have more positive views of the skilled trades with more exposure to these types of jobs through school or family. Students in schools offering skilled trades courses are more likely to say skilled trades jobs are important, respected, creative, and prestigious. Those with parents or family with skilled trades jobs are also more likely to say these jobs are important and respected, and to describe students who take skilled trades courses at school as smart.

When it comes to high school education and subsequent careers, the study finds that students, parents of high school students, and voters all see skilled trades as a key component. Among voters, three-quarters say it is important for high schools to prepare kids for their future careers, and an overwhelming majority say having more opportunities to study skilled trades would make high school students more prepared for a career. Parents express similar levels of optimism that more opportunities to study skilled trades in high school would help prepare their child for a career.

Nearly 8 in 10 parents say it is important that high schools offer classes in skilled trades and that their child would be more prepared for a career if their high school offered more opportunities to study skilled trades. Parents report engaging often with their child to discuss educational choices and future career paths. Nearly all parents say they talk to their child about future careers, and more than 6 in 10 say they are concerned that their child will have the skills to get a good job, make enough money to earn a good living, and be happy and fulfilled in their work. They see a range of options for achieving those goals. More than 7 in 10 parents say they would feel positive if their child attended a four-year or community college, and a similar number would also be happy if their child pursued a job or an apprenticeship immediately after high school.

This study from Harbor Freight Tools for Schools was conducted by NORC at the University of Chicago. It includes three nationally representative surveys. Interviews were completed online and over the phone.

- The survey of 2,033 voters age 18 and older was conducted May 17-30, 2019. All interviews were conducted using AmeriSpeak®, NORC's probability-based panel. The overall margin of sampling error is +/- 3.0 percentage points, including the design effect.
- The survey of 2,029 parents of high school students was conducted May 21-June 11, 2019, using TrueNorth®, which combines sample from AmeriSpeak, NORC's probability-based panel, with

nonprobability panel sample. The final sample includes 848 interviews from AmeriSpeak, along with 1,181 interviews collected using Dynata, an online opt-in survey provider. The overall margin of sampling error is +/- 4.0 percentage points, including the design effect.

- The survey of 1,687 high school students age 13-18 was conducted June 6-August 18, 2019, using TrueNorth®. The final sample includes 467 interviews from AmeriSpeak, along with 1,220 interviews collected using Dynata, an online opt-in panel. The overall margin of sampling error is +/- 3.3 percentage points, including the design effect.

More details on study methodology can be found at the end of this report.

KEY STUDY FINDINGS

Voters—Republican and Democrat alike—strongly support skilled trades education. Among likely voters:

- 83% say school districts should make funding for skilled trades classes a high priority.
- 83% say the government should provide more funding for skilled trades classes, and 81% say they favor a federal program to allocate this funding.
- 89% of Democrats, 76% of independents, and 73% of Republicans would favor a federal program to allocate this funding.
- 69% say a federal program rebuilding infrastructure in the United States should include funding to train high school students with the skills to do that work.
- 66% say they would be extremely or very likely to support a candidate who favored increasing government funding for skilled trades training.
- A majority of Democrats (77%), independents (64%) and Republicans (54%) would support a candidate who wanted to increase government funding for skilled trades training.

Students, parents, and voters share many priorities when it comes to high school education and subsequent careers.

- More than 7 in 10 students (72%), parents (77%), and voters (89%) say high schools could do a better job preparing students for life after graduation by giving them more chances to learn real-world skills.
- Majorities of voters (90%), parents (85%), and students (66%) identify offering more internships and apprenticeships as something high schools could do to better prepare students for success in life.

- 89% of voters say it would benefit students if high schools in their area offered more opportunities to learn a skilled trade.
- Majorities of students and parents say love of the work (80% and 85%, respectively), job security (77% and 86%), and money (76% and 69%) are very or extremely important in a future career. Fewer prioritize prestige (39% and 34%).

The more students are exposed to the skilled trades, the more positive their impression of them.

- 19% of students report having taken a skilled trades course, 53% say their school offers skilled trades courses, and 29% have parents in a skilled trade.
- Students in high schools that offer skilled trades courses are more likely to say skilled trades jobs are important (72% vs. 58%), creative (56% vs. 44%), respected (53% vs. 38%), and prestigious (37% vs. 25%) than those whose schools do not offer trades courses.
- Students with parents or family members in the skilled trades are more likely than those without family in the skilled trades to view them as important (72% vs. 59%) and respected (50% vs. 43%).
- 60% of those with parents or other family in skilled trades say “smart” describes students who take skilled trades courses very or extremely well, compared to 50% of those who don’t have family in the trades.

Parents view skilled trades classes as critical to a quality high school education, value learning real-world skills, and believe more students would be prepared for a career with access to skilled trades classes.

- 94% of parents say they talk with their child about future careers at least sometimes.
- Parents are extremely or very concerned about their child’s prospects for making a good living (71%), being happy or fulfilled (63%), and graduating college without debt (65%). Fifty-five percent were worried about college preparing their child for a job.
- 78% of parents say it’s very or extremely important that high schools offer classes in the skilled trades.
- Even more parents (89%) think American students would be more prepared for success for a career if there were more opportunities to study the skilled trades.

Overall, this study finds that voters, parents, and high school students share a highly positive view of skilled trades courses and jobs. They see skilled trades coursework as a critical part of a high school education and see greater access to skilled trades courses as beneficial to students’ future careers. This report explores the findings among each of these key stakeholder groups in greater depth.

Skilled trades emphasize the expert use of tools and materials to build or repair products and structures. While not an exhaustive list, the large majority of skilled trades occur in these broad fields of trades:

- Construction: carpentry, plumbing, electrical, HVAC (heating, ventilation, air conditioning)
- Welding
- Automotive: repair, maintenance, engines
- Manufacturing

Education and training in skilled trades can take place in vocational schools, community colleges, or high schools. These classes are taught through hands-on learning. Skilled trades can also be taught in other settings, such as agriculture courses or makerspaces. We will refer to skilled trades and skilled trades classes throughout this survey.

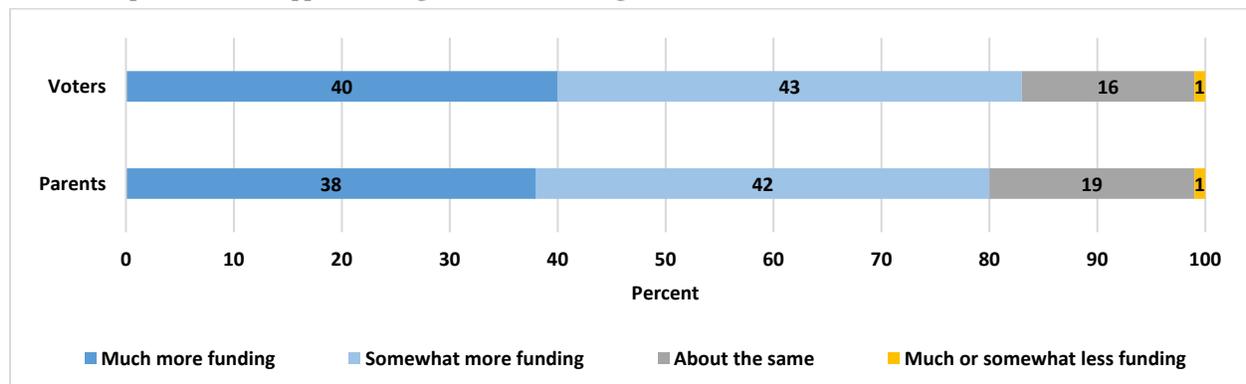
SECTION 1: PARENTS AND VOTERS WANT MORE SKILLED TRADES EDUCATION—EVEN IF IT MEANS MORE LOCAL AND FEDERAL GOVERNMENT SPENDING.

Voters and parents both strongly support more funding for skilled trades education.

Large majorities of voters and parents are in agreement that the government should provide additional funding for skilled trades education in high schools. Overall, 83% of voters and 80% of parents say that the government should provide more funding for these types of courses than it currently does, including 40% of voters and 38% of parents who say that they should provide “much more.”

Parents and voters alike strongly support increased funding for skilled trades from both federal and local governments. Sixty-six percent of voters would specifically vote for a candidate willing to increase skilled trades funding. While Democrats are more supportive, Republican support for government spending on skilled trades is also notably high.

Voters and parents both support more government funding for skilled trades courses.



Question: Should government provide more funding, less funding, or about the same amount of funding as it does now to support skilled trades education and programs?

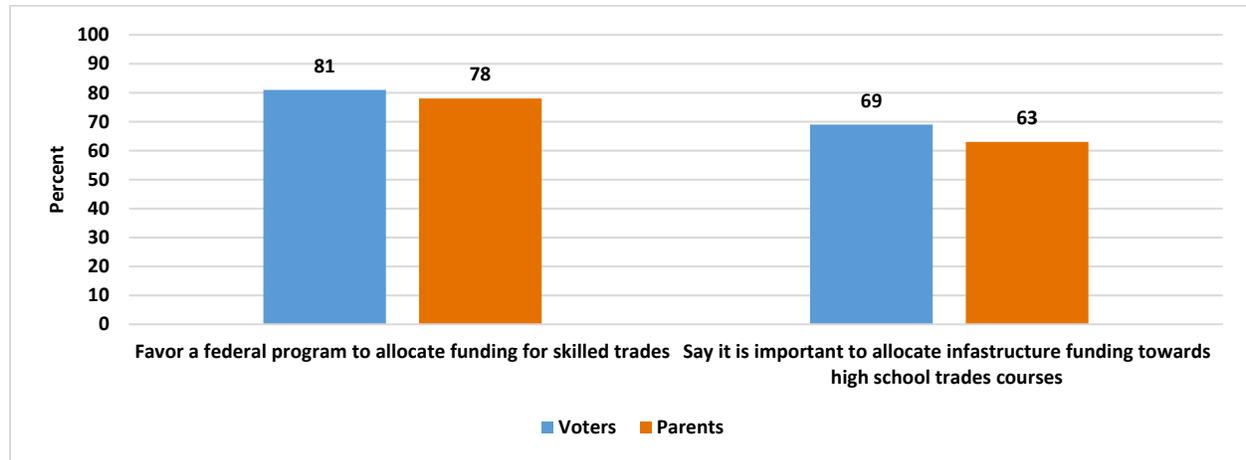
Source: Surveys of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Voters and parents are also highly supportive of school districts making skilled trades funding a priority. Eighty-three percent of voters and 79% of parents say that school districts should make the funding of skilled trades education a high priority, including 35% of voters and 37% of parents who think it should be a very high priority.

When asked about funding, 81% of voters and 78% of parents say that they would favor a federal program to allocate additional funding towards training high school students in the skilled trades, with 45% and 41%, respectively, saying they would strongly favor this program. Eighty-nine percent of Democrats and 76% of independent voters support such a program. A large majority of Republicans (73%) agree and favor such a program.

A further 69% of voters and 63% of parents think that if a federal program were proposed to rebuild infrastructure like roads, bridges, and ports in the United States, the program should also allocate additional funding to train high school students to do that type of work.

Voters and parents support skilled trades education funding from both general federal programs and infrastructure-specific programs.

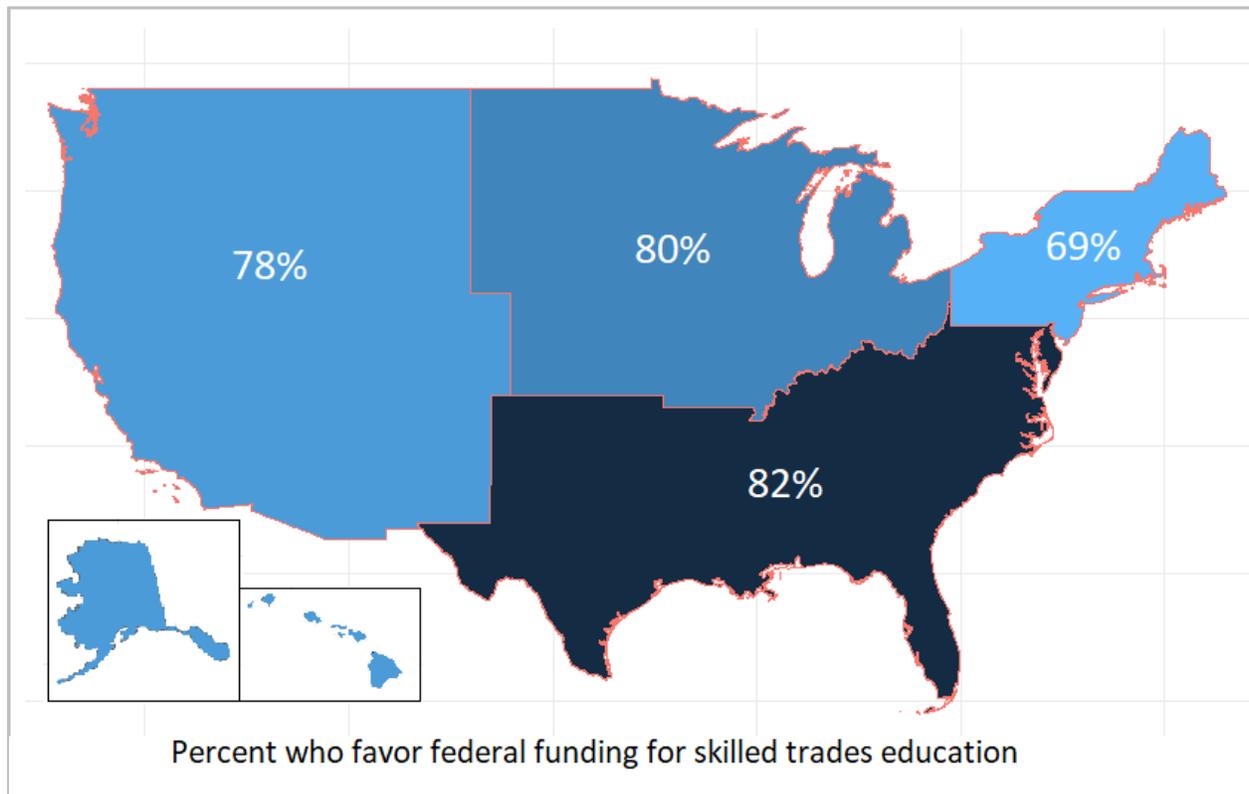


Questions: Do you favor, oppose, or neither favor nor oppose a federal program to allocate additional funding to train high school students and others in the skilled trades? / If a federal program were proposed to rebuild infrastructure like bridges, roads, and ports in the United States, how important would it be that such a program also allocates additional funding to train high school students and others with the skills to do that work?

Source: Surveys of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Majorities of parents are supportive across regions of the United States, though levels of support vary somewhat by geographic area. Parents in the South (82%), West (78%), or Midwest (80%) are more likely than those in the Northeast (69%) to support a program for federal funding for skilled trades education.

Parents from the South, Midwest, and West are more supportive than parents in the Northeast of skilled trades education funding.



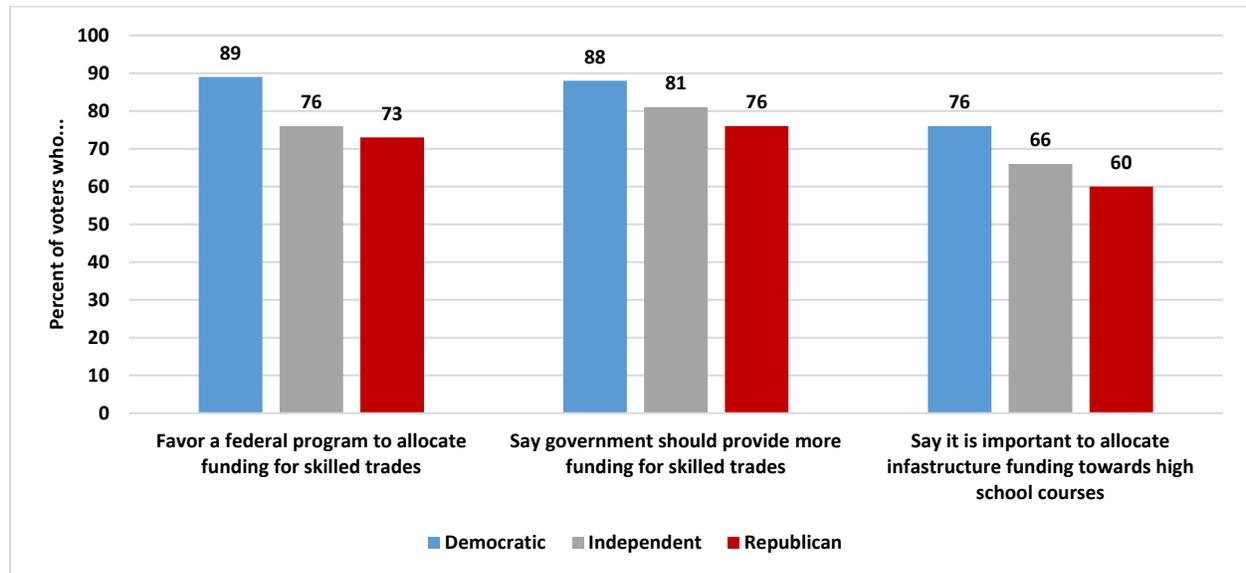
Question: Do you favor, oppose, or neither favor nor oppose a federal program to allocate additional funding to train high school students and others in the skilled trades?

Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents experienced in skilled trades are more likely to say there should be much more funding for skilled trades classes than are those without that experience (50% vs. 34%).

Support is strong for increased funding for skilled trades education across all political affiliations. Democratic voters are more likely than Republican voters to support federal programs to allocate funding (89% vs. 73%), and to believe infrastructure programs should allocate funding to train high school students to do related work (76% vs 60%). However, support amongst Republicans is still particularly high, especially when compared to Republican support for spending on other issues.

There is widespread support among Democrats, independents, and Republicans for federal funding for skilled trades classes.



Question: Do you favor, oppose, or neither favor nor oppose a federal program to allocate additional funding to train high school students and others in the skilled trades? / Should government provide more funding, less funding, or about the same amount of funding as it does now to support skilled trades education and programs? / If a federal program were proposed to rebuild infrastructure like bridges, roads, and ports in the United States, how important would it be that such a program also allocates additional funding to train high school students and others with the skills to do that work? Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

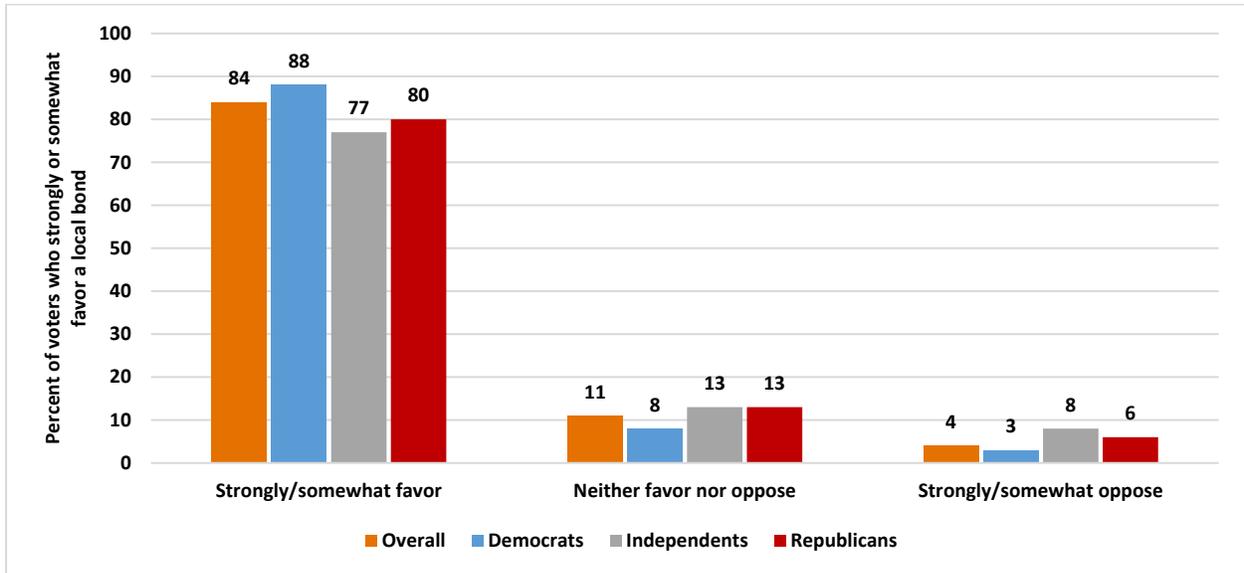
Voters want more action from the government on skilled trades education and would be more likely to support a candidate who calls for such action.

Eighty-four percent of voters think that their elected officials should be doing more to support skilled trades and hands-on learning in school, including 46% who think these officials should be doing “much more.”

Overall, two-thirds of voters say that they would be extremely or very likely to support a candidate who favored increasing government funding for skills training. Seventy-seven percent of Democrats would support such a candidate, along with 64% of independents and 54% of Republicans.

Additionally, 84% of voters would favor a local bond to generate funds for skilled trades and other career-focused classes in their local high schools, including 48% who strongly favor it. Although Democratic voters (88%) are more likely than those of other parties to say that they would support a proposed local bond, Republican (80%) and independent (77%) voters also show widespread support.

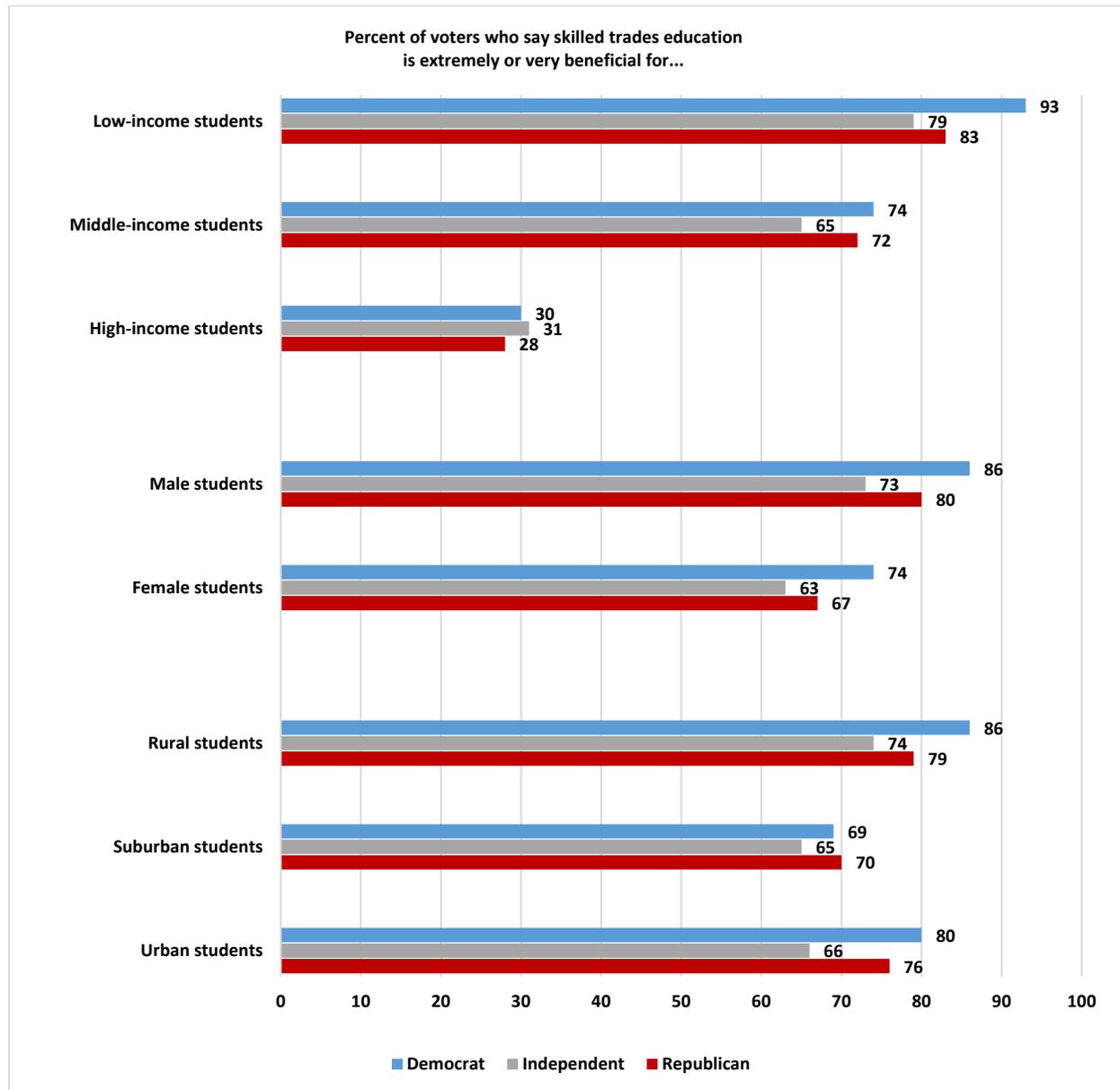
A large majority of voters would support a local bond to generate funds for skilled trades courses in local high schools.



Question: If a local bond were proposed to generate funds for skilled trades and other career-focused classes in your local high school, would you strongly favor, somewhat favor, neither favor nor oppose, somewhat oppose or strongly oppose?
 Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

An overwhelming share of voters see increased funding for skilled trades education as potentially beneficial for nearly every category of students, especially low-income students. In general, Democratic voters are more likely than Republican voters to believe that a variety of students would benefit from increased funding, though numbers for both are significant.

Voters consider increased funding for skilled trades education beneficial for many student demographics.



Question: If funding for skilled trades education was increased in the U.S., how beneficial would it be to each of the following groups?
 Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

SECTION 2: STUDENTS, PARENTS AND VOTERS VALUE SKILLED TRADES EDUCATION AND CAREERS, AND WANT MORE EMPLOYER INVOLVEMENT, REAL WORLD SKILLS TRAINING.

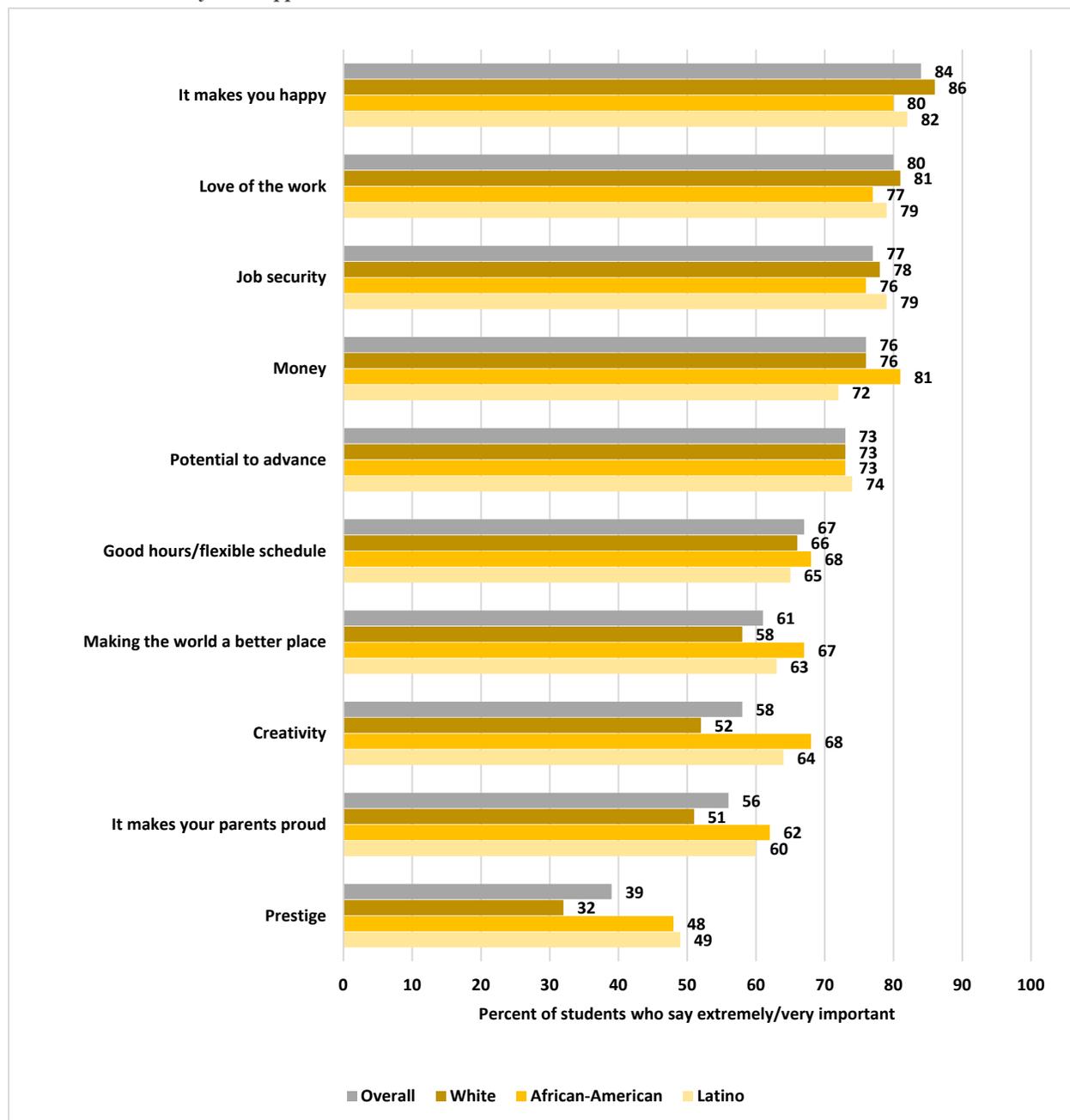
A majority of students, parents, and voters describe the skilled trades as important. Many also say skilled trades are creative, a quality that a majority of parents value in their child’s future career. Students, parents, and voters all think that high schools could do more to provide students with real-world skills. To prepare students for real-world skills, all groups surveyed would welcome the involvement of employers in high schools to connect students to jobs, train in real-life skills, and offer internships, apprenticeships, and scholarships.

Students, parents, and voters are generally on the same page about what matters in a career—job security, love of work, and doing something that makes you happy.

Students overwhelmingly value being happy and secure in a career. There are differences by gender among students, with male students more often mentioning job security (81%) compared to female students (74%), while female students more often value creativity (63% vs. 53%).

Students across various ethnicities seek happiness and security when considering future careers. The survey of students reflects the racial makeup of students nationwide and is 51% white, 13% African-American, 25% Latino, and 10% other races and ethnicities.

Students seek security and happiness in their future careers.

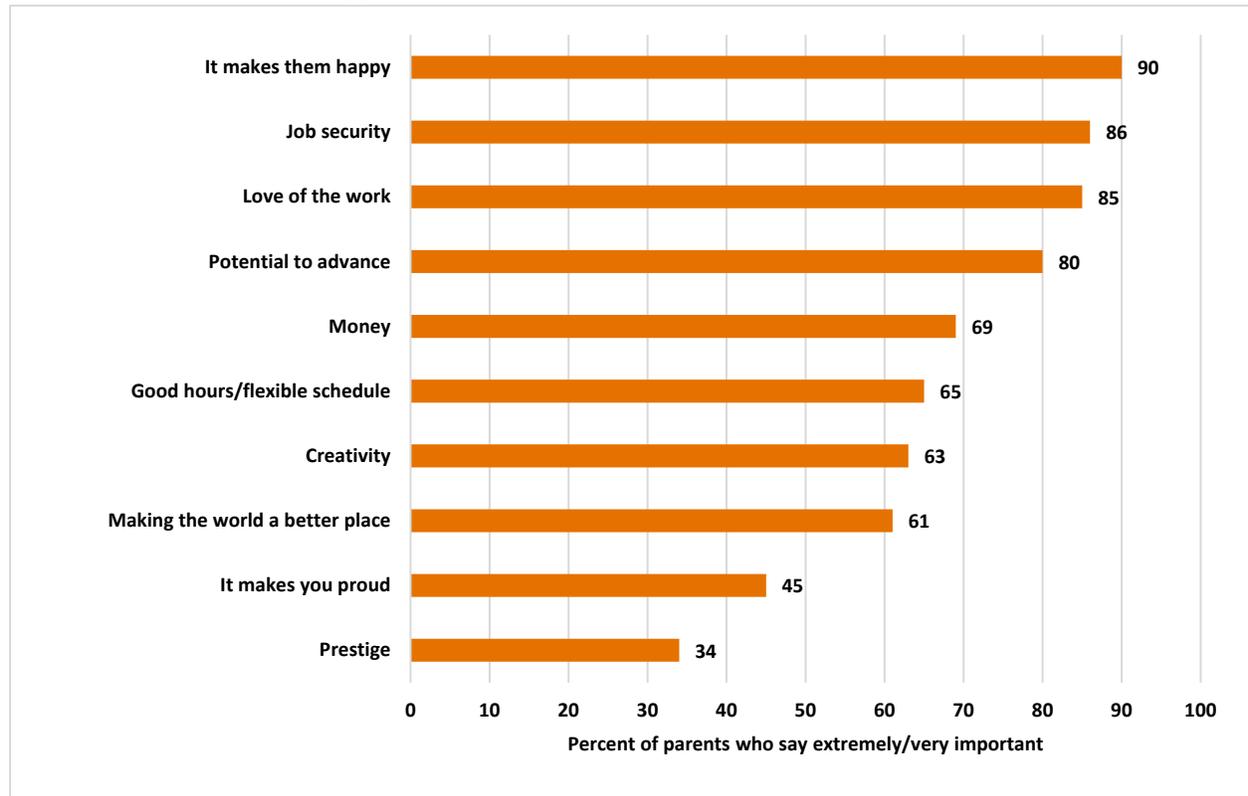


Question: How important are each of the following to you in your future career?

Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents overwhelmingly want their child to be happy. They are most likely to say it is important that their child’s future career provides happiness, security, and a love for the work.

Parents value their children’s happiness in their chosen career above all.



Question: How important are each of the following to you in your child’s future career?

Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Demographic differences emerge among parents on the basis of race and type of place they live. African-American parents are more likely than white parents to find it important that their child’s future career allows them to make money, be prestigious, and make the world a better place. Latino parents also find these things important to their child’s future career. Urban parents tend to place greater importance on prestige (46%) than suburban (30%) and rural (33%) parents.

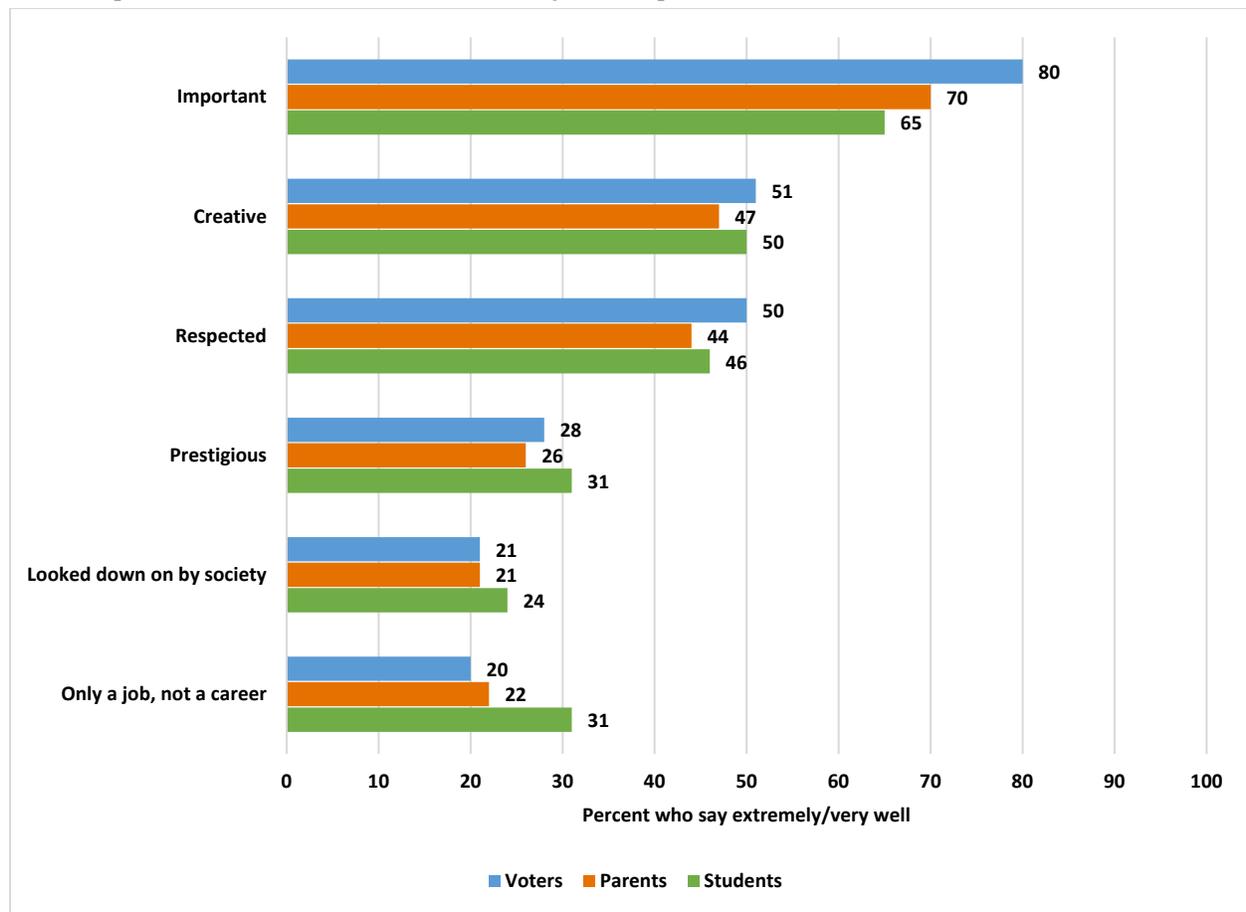
Students, parents, and voters alike describe skilled trades jobs as important.

Students, parents, and voters were each asked whether several terms described skilled trades from “extremely well” to “not well at all.” A strong majority of all three groups described skilled trades jobs as important, and there was general agreement among each group that the skilled trades are also creative and respected. While relatively few describe skilled trades jobs as prestigious, even fewer say they are looked down on by society.

Sixty-five percent of students view skilled trades as important, and 50% say creative describes them very or extremely well. Forty-six percent say they are respected. Only 31% say they are prestigious, yet few (24%) think they are looked down on by society.

Seventy percent of parents and 80% of voters view them as important. Fewer, but still around half, of both groups view them as creative and respected. Twenty-two percent of parents and 20% of voters say skilled trades are only a job and not a career, but 31% of students characterized them that way.

Students, parents, and voters all view skilled trades jobs as important.



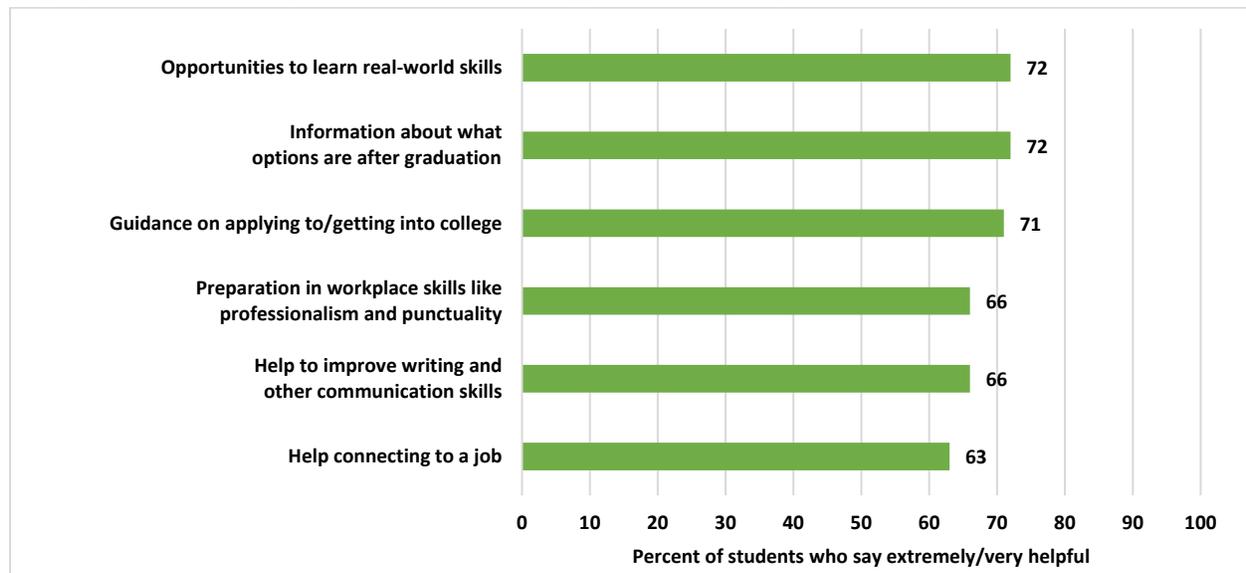
Question: How well would you say each of the following describes skilled trades?
 Source: Surveys of 1,687 high school students age 13-18 June 6-August 18, 2019, of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Students, parents, and voters say high schools could do more to provide students with real-world skills.

Parents, voters, and students all agree that opportunities to learn real-world skills would benefit students' preparation for a future career. Seventy-seven percent of parents believe that their child's high school could better prepare them for life after graduation by providing more opportunities to learn real-world skills. Seventy-two percent of students and 89% of voters agree. Significant percentages of all three groups indicated that fostering direct connections to jobs would be helpful to students, with 63% of students and parents and 74% of voters flagging this as helpful in preparing for life after graduation.

Students identify a number of other actions their schools could take to help prepare them for life after high school, including preparation in workplace skills and guidance on college applications, but increasing opportunities to learn real-world skills tops this list.

To prepare for life after high school, students seek support for both college and careers.

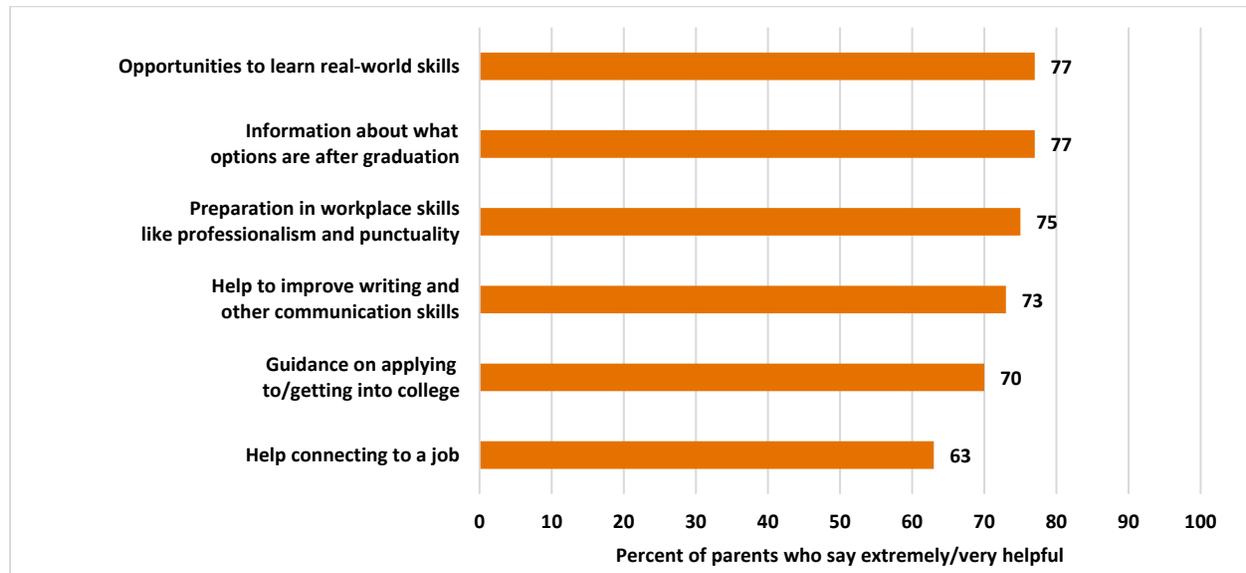


Question: Thinking about what your high school could do to better prepare you for life after graduation, please indicate how helpful each of the following would be.

Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents' views mostly align with those of students, with slightly more support for options to help prepare for life after high school. More than 7 in 10 would like schools to prepare their child with information about options after graduation (77%), opportunities to learn real-world skills (77%), and preparation in workplace skills (75%).

Parents tend to most value their child accessing information about options after graduation and workplace skills.



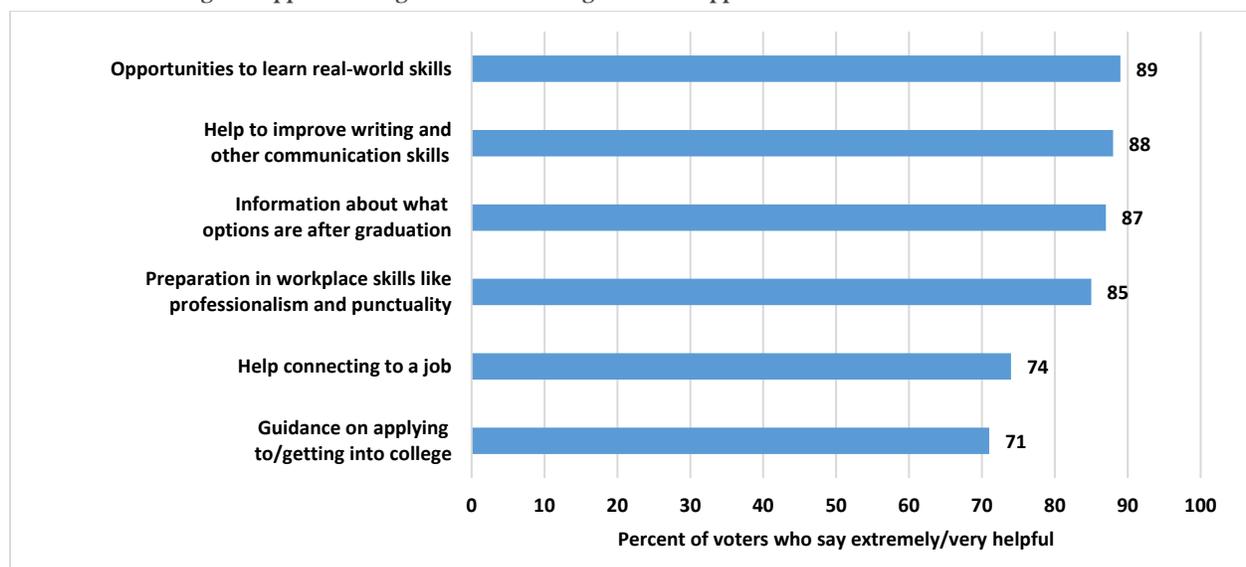
Question: Thinking about what your child’s high school can do to better prepare him or her for life after graduation, please indicate how helpful each of the following would be.

Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Eighty-nine percent of voters also say it would benefit students if high schools in their area offered more opportunities to learn a skilled trade.

While voters most often cite more opportunities to learn real-world skills as valuable, more than 8 in 10 also say that preparation in workplace skills, help with writing and communication, and information on options after graduation would be helpful. Fewer, but still a large majority, think help connecting to a job or applying to and getting into college would help students.

Voters show strongest support for high schools offering students opportunities to learn real –world skills.

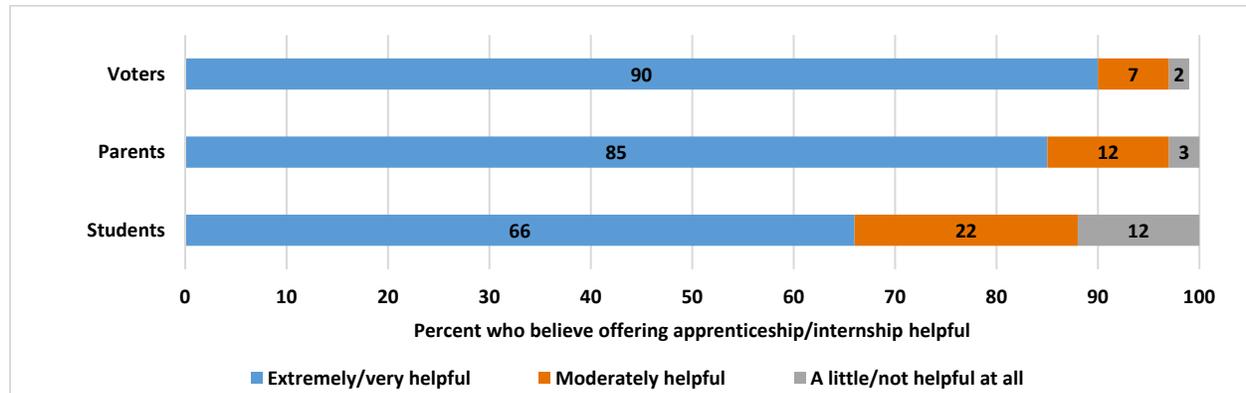


Question: Thinking about what high schools can do to better prepare kids for life after graduation, please indicate how helpful each of the following would be.

Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Voters (90%) and parents (85%) overwhelmingly identify internships and apprenticeships as offerings high schools could provide to better prepare students for life after graduation. Students are slightly less ardent in their demand for internships, but 66% still say expanding internships would be helpful.

Nearly all voters and parents believe schools should help students by offering more internship and apprenticeship opportunities.

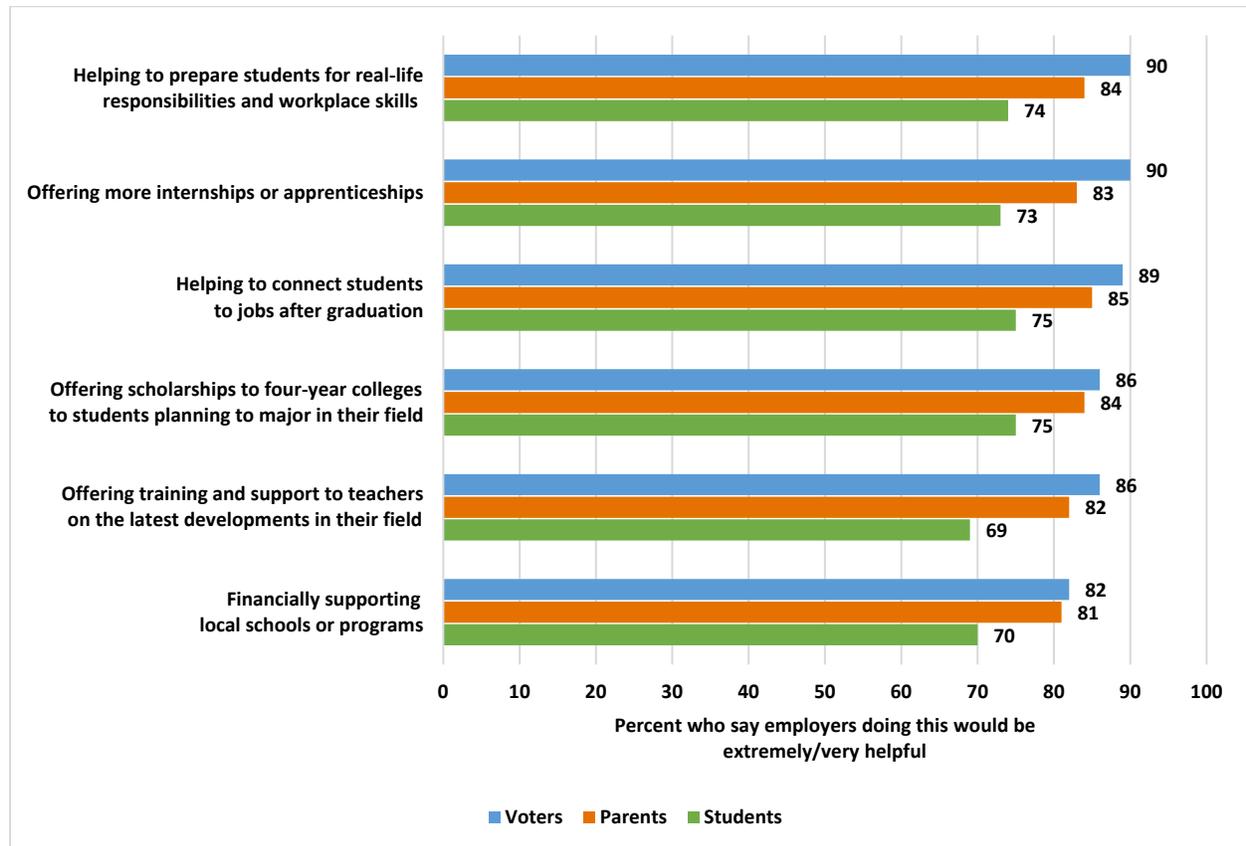


Question: How helpful would it be for students/your child if high schools in your area/their high school offered more opportunities for them to participate in internships or apprenticeships?
 Source: Surveys of 1,687 high school students age 13-18 June 6-August 18, 2019, of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Voters, parents, and students want employers to do more to support high school students’ education.

Voters, parents, and students all believe that employers should play a greater role in supporting high school education, and in various ways. Again, demand for internships is particularly high: 9 in 10 voters, more than 8 in 10 parents, and more than 7 in 10 students say it would be very or extremely helpful if employers offered more internships and helped prepare students for real-life responsibilities and skills. Slightly fewer, yet still a large majority of the three groups, say it would be extremely or very helpful if employers would connect students to jobs, offer trainings to teachers, offer scholarships, and financially support local schools and programs.

Voters, parents, and students demand employers do more to support skilled trades education.

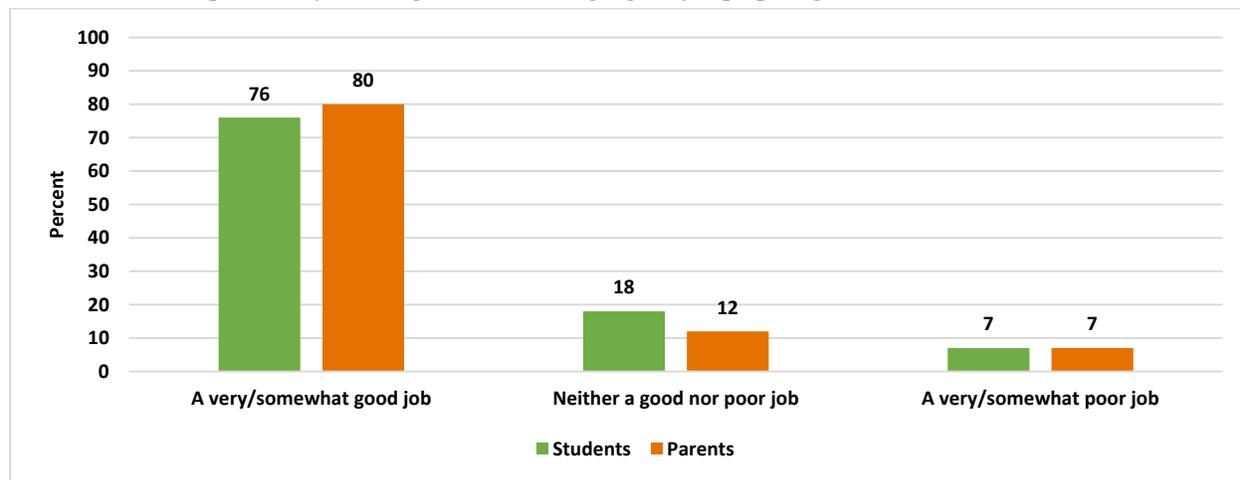


Question: If employers nationwide were to do each of the following, how helpful would each be in supporting high school students' education?
 Source: Surveys of 1,687 high school students age 13-18 June 6-August 18, 2019; of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Students and parents are more likely than voters to say high schools are doing a good job preparing students for life after high school.

While students and parents identify a variety of ways their high school could better prepare students for life after graduation, a majority of both say *their own* high school is doing a good job at preparing them for success.

Most students and parents say their high school is doing a good job preparing students for success in life.



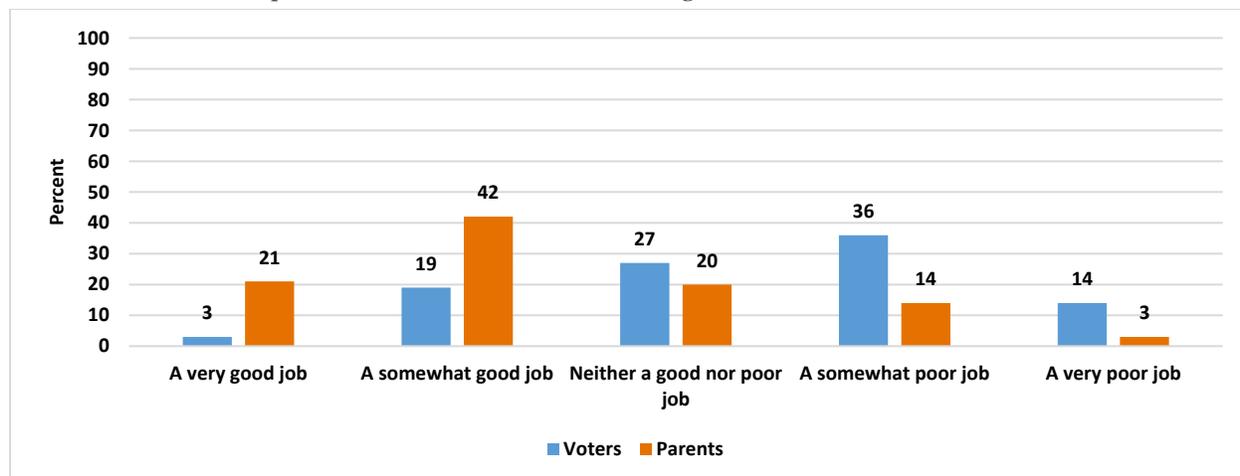
Question: When it comes to preparing you for success in life, would you say you/your child's high school is doing...?

Source: Surveys of 1,687 high school students age 13-18 June 6-August 18, 2019, and of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

When asked about high schools in general, voters are significantly less likely to say they are doing a good job. While parents were asked about their child's school in particular, voters were asked about schools more generally. Though there is a tendency for survey respondents to evaluate local or personal conditions more positively than they would national conditions across a variety of topics, such as the economy or political representation, the gap between parents who say their child's school does a good job and voters who say schools in general do a good job is particularly large. Just 36% of voters say high schools do a very or somewhat good job preparing students for success in life. That total is 44 percentage points less than the share among parents and 40 points less than the share among students. Thirty-five percent of voters say high schools are doing a poor job.

The gap of perspective between parents and voters continues when looking at attitudes about how high schools are doing at teaching real-world skills. Half of voters say high schools do a somewhat or very poor job.

Parents are much more optimistic than voters about how well high schools teach students real-world skills.



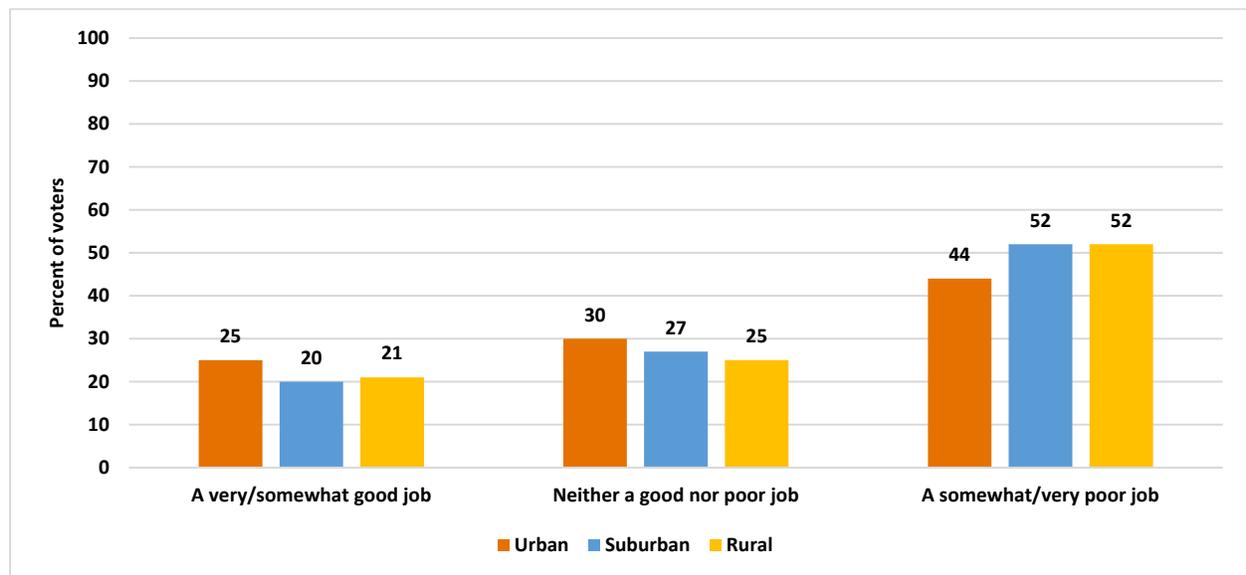
Question: When it comes to teaching kids real-world skills, would you say high schools/your child's high school are doing...?

Source: Surveys of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Geographical differences in perspective emerge among parents and voters. Rural parents are less likely to say that their child’s school does a good job at teaching them real-world skills (55%), compared to urban or suburban parents (65% and 66%, respectively).

Among voters, perspectives vary based on geography: voters in suburban and rural areas are more likely than those in urban areas to say high schools are doing a poor job teaching students real-world skills.

Suburban and urban voters are more likely than rural voters to say high schools do a poor job teaching real-world skills.



Question: When it comes to teaching kids real-world skills, would you say high schools are doing...?

Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

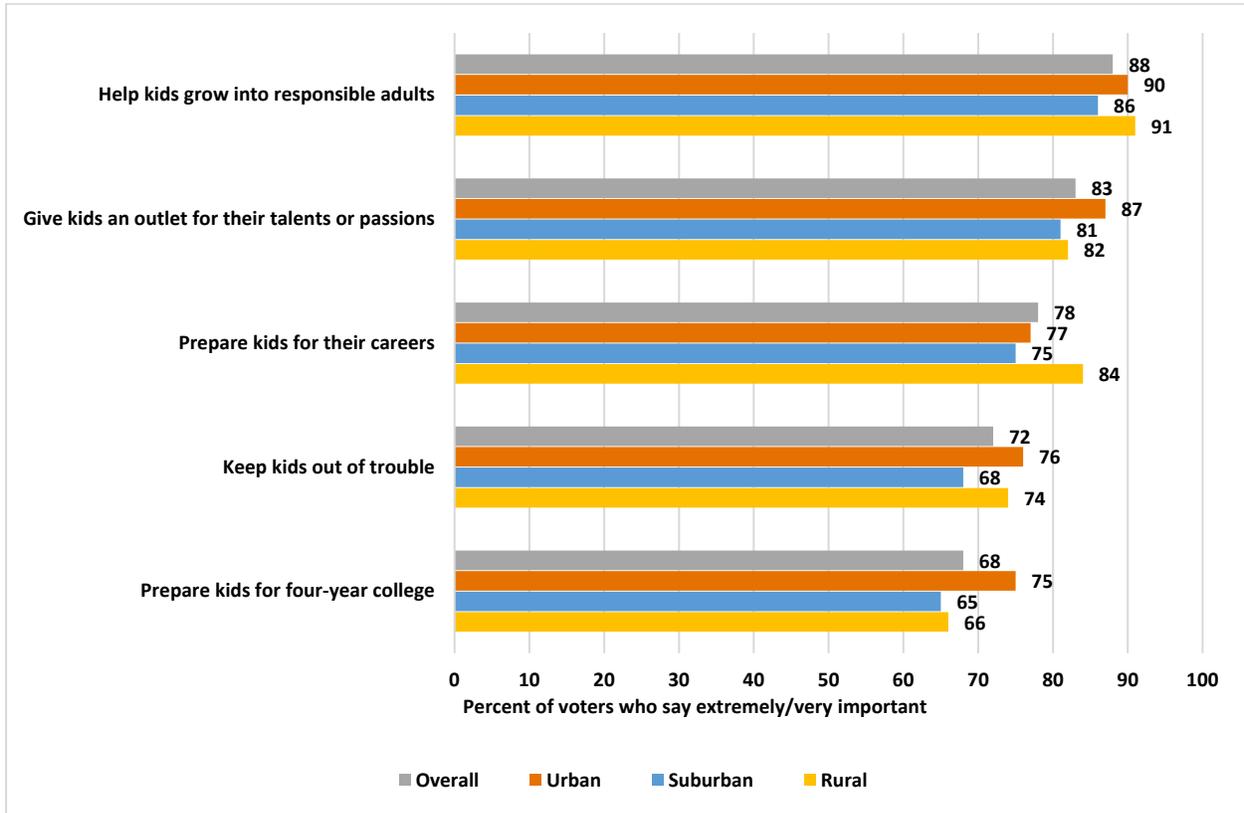
Rural voters and rural parents value skilled trades, but perceive trades jobs as less available.

Among voters, those in rural areas are more likely than urban or suburban voters to view hands-on learning as much more effective than traditional lecture-style classes. Sixty-five percent of rural voters view hands-on learning as much more effective than traditional lectures, compared to 57% of urban and 58% of suburban voters. Overall though, a very large majority of each group view them as at least somewhat more effective—9 in 10 of each view hands-on learning as somewhat or much more effective than traditional lectures.

Valuation of college and career preparation also differs amongst rural, suburban, and urban voters. Urban voters tend to value college preparation more than rural voters. Seventy-five percent of urban voters find it important that schools prepare kids for four-year colleges, compared to 65% of suburban and 66% of rural voters. Eighty-four percent of rural voters think it is important that high schools prepare students for their careers, compared to 77% of urban and 75% of suburban voters.

Nonetheless, higher percentages of all groups say it is important that high schools prepare students for careers than say the same about schools preparing them for four-year college.

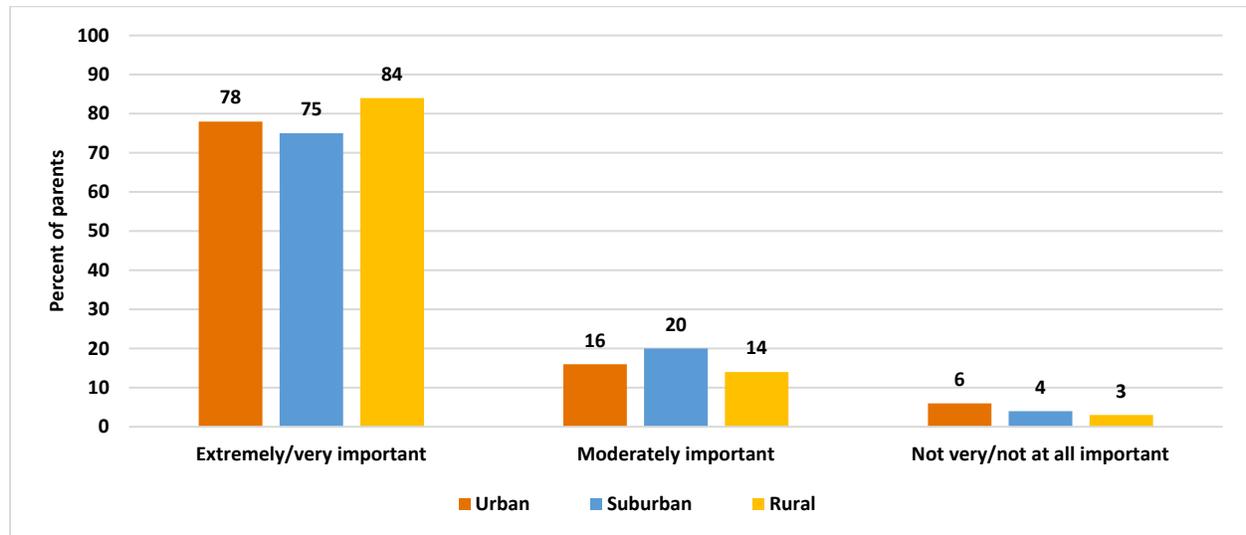
Rural voters are most likely to say high schools should prepare students for careers, while urban voters place the most emphasis on college preparation.



Question: How important do you think it is that high schools do each of the following for their students?
 Source: Survey of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Supermajorities of urban (78%), suburban (75%), and rural (84%) parents believe it is extremely or very important that high schools offer skilled trades courses.

Parents, no matter where they live, believe it is important that high schools offer trades classes.



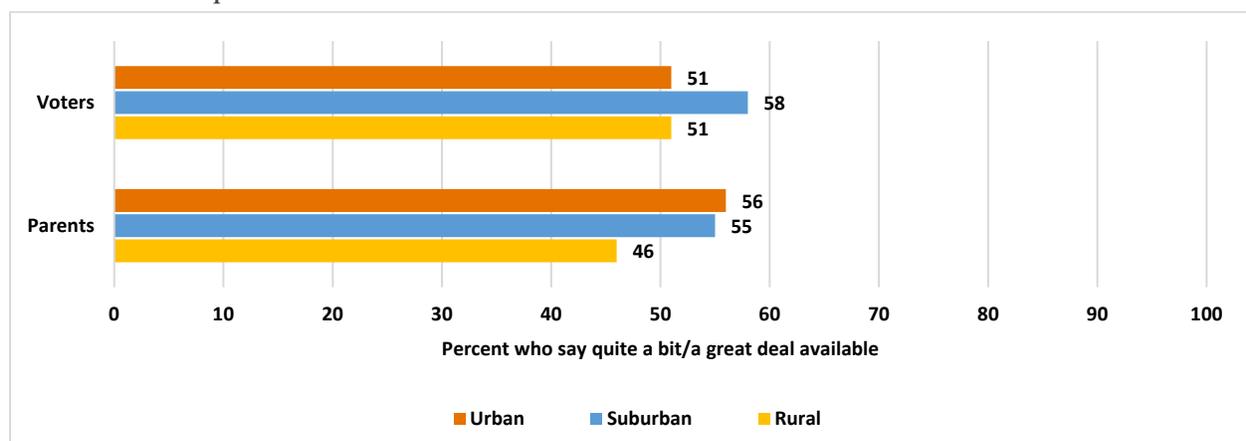
Question: How important is it that high schools offer classes in skilled trades in addition to traditional academic subjects?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Rural parents are strongest in their demand for high school skilled trades education, but worry there are fewer trades jobs available in their area.

Rural parents perceive fewer skilled trades jobs as being available than suburban and urban parents. Just 46% of rural parents say there are a great deal or quite a bit of skilled trades jobs available, compared to 55% of suburban and 56% of urban parents.

Among voters, all three groups place significant importance on high schools offering skilled trades courses; however, urban and rural voters are less likely to perceive availability of skilled trades jobs in their area than are suburban voters.

Among voters, suburbanites are most confident that skilled trades jobs are available in their area. Among parents, suburban and rural parents are more certain.



Question: Thinking about skilled trades jobs in your local area, would you say there are quite a bit available, a great deal available, only a few available, or none available?
 Source: Surveys of 2,029 parents with a child in high school May 21-June 11, 2019, and of 2,033 voters age 18 and older May 17-30, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

SECTION 3: THE MORE HIGH SCHOOL STUDENTS ARE EXPOSED TO THE SKILLED TRADES, THE GREATER THEIR INTEREST IN TRADES CLASSES AND CAREERS.

Exposure to skilled trades—either through family or at school—improves students’ perceptions of skilled trades education and careers. The 51% of students with parents or family members in the skilled trades are more likely to take a skilled trades course themselves and tend to have more positive views of students in trades courses and to think skilled trades jobs are creative, important, and respected. The availability of skilled trades courses in high school is associated with more positive perceptions as well, as those in schools that offer trades classes are more likely to view students who take them as smart.

Students with family in the skilled trades and those who have friends who have taken skilled trades courses are more likely to take trades courses themselves.

A majority of students say their high school offers skilled trades courses. Overall, 53% say their high school offers trades courses, 20% say their high school does not offer them, and 28% do not know if their high school offers them.

Among all students, 19% report having taken a skilled trades course in one of the 10 areas asked about on the survey.¹ Male students make up a large majority of those who reported taking a skilled trades course. Twenty-seven percent of male high school students say they have taken a skilled trades course, compared to just 10% of female high school students.

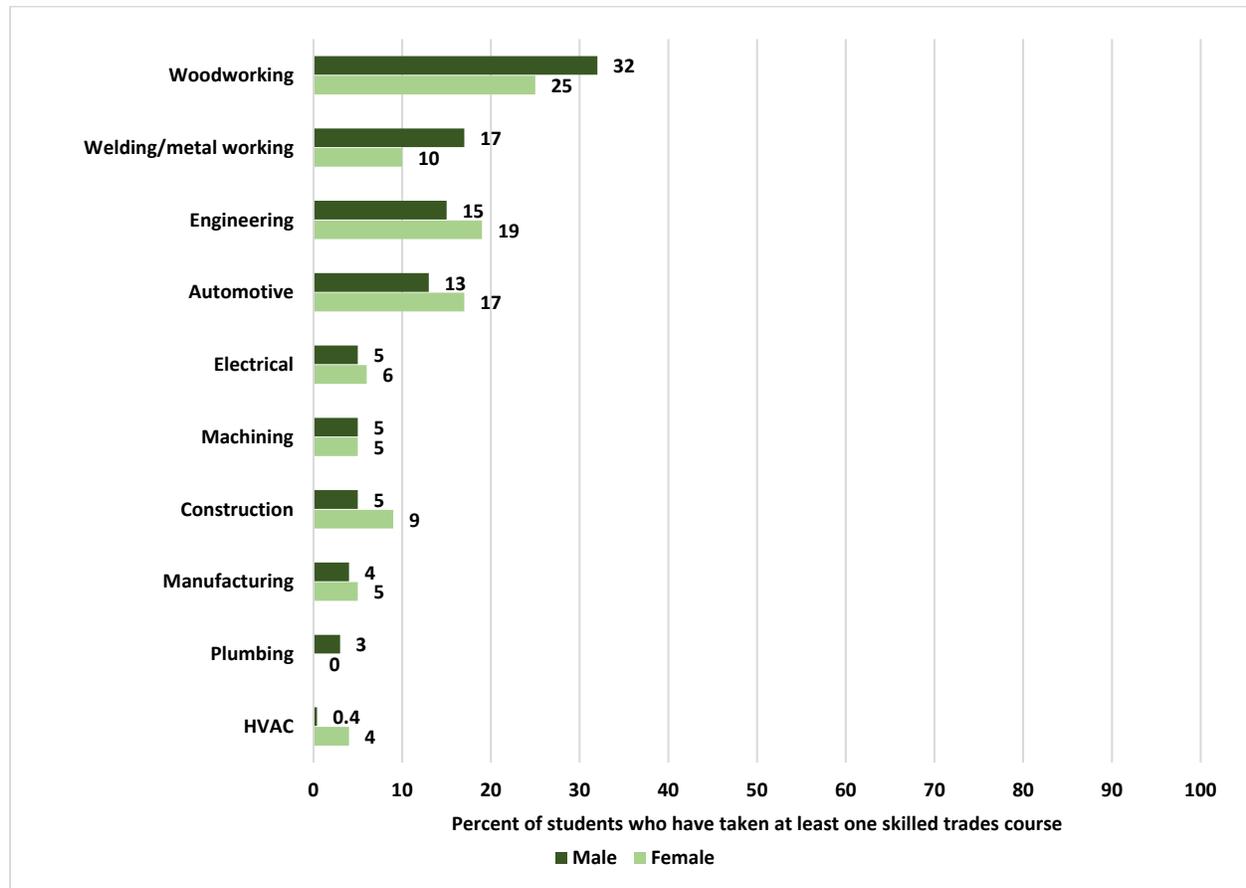
Differences in self-reported enrollment emerge based on whether or not students have parents or family in skilled trades jobs. Of the 51% of students who report having a parent or extended family in the skilled trades, 24% have taken a skilled trades course, while just 14% of those who do not have family in the trades have done so.

Those with friends in the skilled trades are more likely to report also having taken a skilled trades course. Forty-three percent of those with friends in skilled trades classes also have taken one of these courses, compared to just 8% who do not have friends who have taken any trades courses.

The four most-cited types of skilled trades courses taken were woodworking, welding/metal working, engineering, and automotive courses. This is true across both male and female students. However, male students are more likely than female students to have taken woodworking (32% vs. 25%) and welding (17% vs. 10%).

¹ The survey asked students if they have taken any of the following classes: construction, woodworking/carpentry, welding/metal working, machining, manufacturing, automotive, plumbing, electrical, HVAC (heating, ventilation, air conditioning), or engineering (with hands-on work). It also provided an option for “other.” While 19% of students say they have taken one of these 10 classes, 22% answered as having taken an “other” class. In this report, experience with skilled trades courses is limited to those who say they took a course in one of the 10 areas listed on the survey. The 22% who say they only have taken an “other” class have been excluded from this group for analysis purposes. This will exclude some other key areas of skilled trades learning in high school, such as some agriculture coursework.

The four most popular skilled trades courses are woodworking, welding/metal working, engineering, and automotive for both male and female students.



Question: Which of the following skilled trades classes have you taken?²

Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Among all students, 9% of male students and 3% of female students reported taking a woodworking course, and 4% of males and 2% of females took an engineering course.

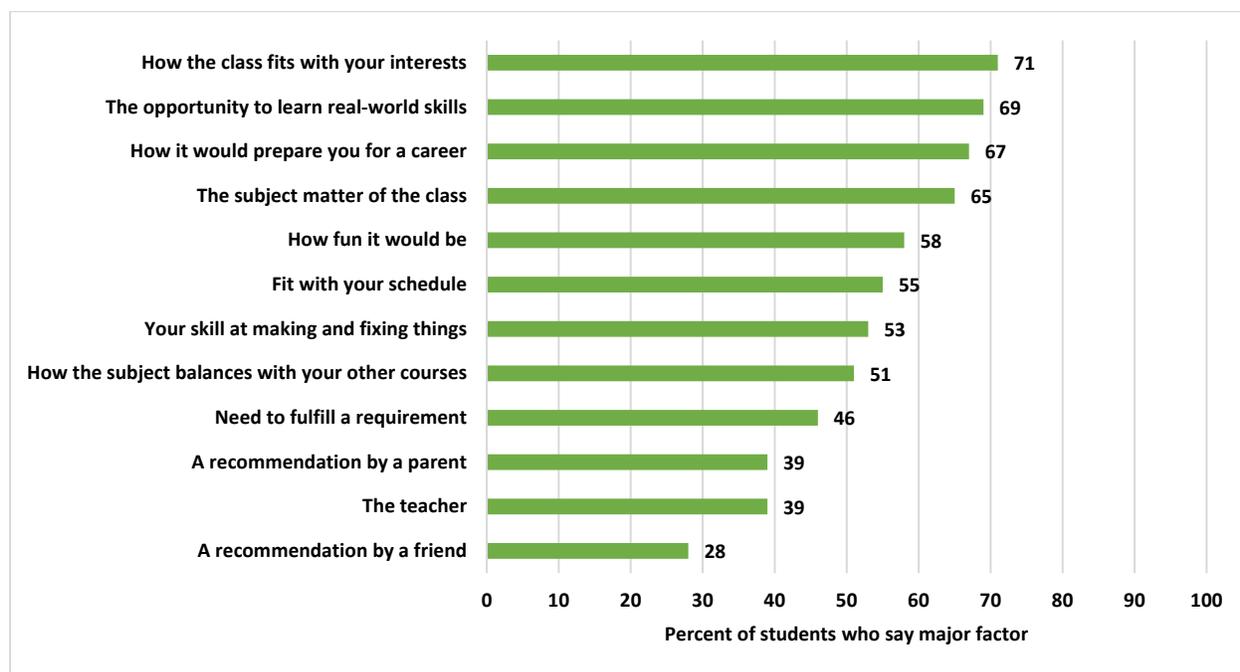
A majority of students (59%) who have not taken a skilled trades course say they have at least considered doing so. Boys and younger students are more likely to report considering taking a skilled trades course. Sixty-seven percent of boys who haven't taken a skilled trades course have considered taking one, compared to 52% of girls. Sixty-four percent of those age 13-15 who have yet to take a skilled trades course report considering taking one, compared to just 50% of those age 16-18.

Having a parent or other family member in the skilled trades also increases students' likelihood of considering these classes. Of students who have not taken a skilled trades course, 67% of those who have a parent or family member working in the trades have considered taking one, compared to just 50% of those without familial experience.

² Definitions of skilled trades courses vary widely, and some categories in this question might include multiple disciplines leading to some inflation of that category.

Students who have taken or considered taking skilled trades coursework report a wide variety of reasons for doing so, or for considering it. The most common reasons are: the class fits with their interests, in order to learn real-world skills, it would prepare them for a career, because they like the subject matter, and because they think the class will be fun. Far fewer take skilled trades courses at the recommendation of friends or parents, to fill a requirement, or because of the teachers themselves.

Students say they took a skilled trades course because of the opportunity to learn real-world skills and because of their interests.



Question: How big of a factor was each of the following in your decision to take or not take a skilled trades class in high school?

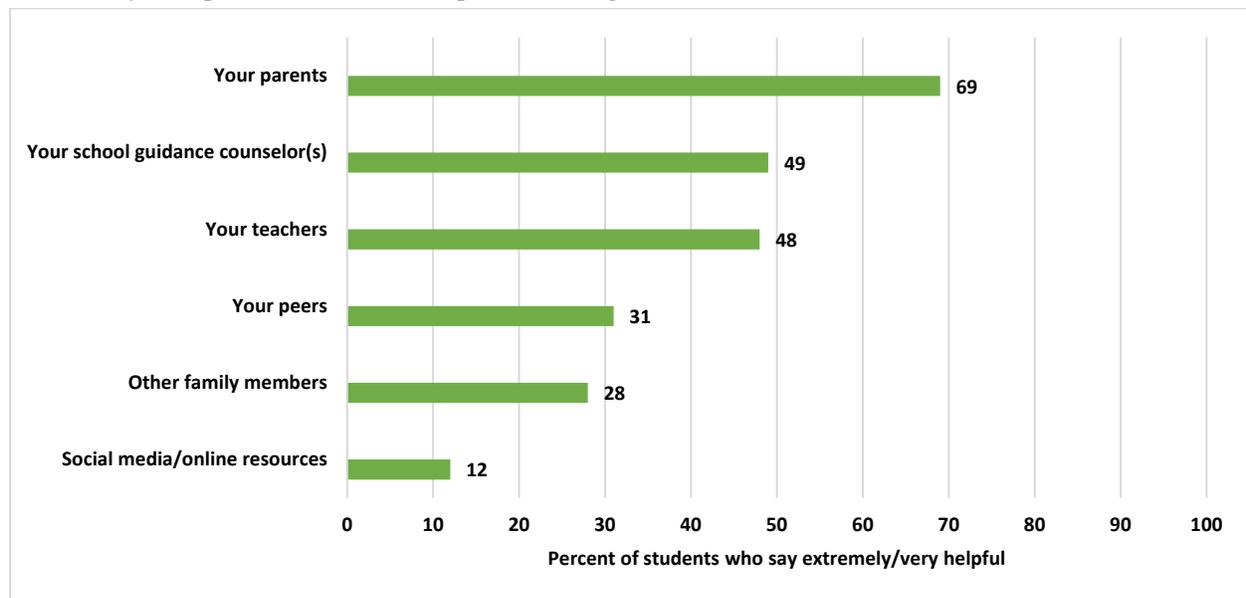
Source: Survey of 1,687 high school students age 13–18 June 6–August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Girls most often chose a skilled trades course because of the subject matter (66%), while boys most often cited the opportunity to learn real-world skills. Boys are more likely than girls to cite learning real-world skills as a reason for selecting skilled trades coursework (73% vs. 62%).

Students turn to a variety of sources for help in deciding their coursework. Overall, a majority (69%) find their parents to be extremely or very helpful in influencing which classes they take. Forty-nine percent say the same about their school counselors, and 48% say so about their teachers. Fewer rely on their peers, other family members, or social media to make course decisions.

School counselors, however, were influential in some students' decisions to take skilled trades coursework. Twenty-six percent of those who found their school counselor helpful have taken a trades course, compared to just 13% of those who view their school counselor as less helpful.

Students say their parents are the most helpful source of guidance in their selection of classes.

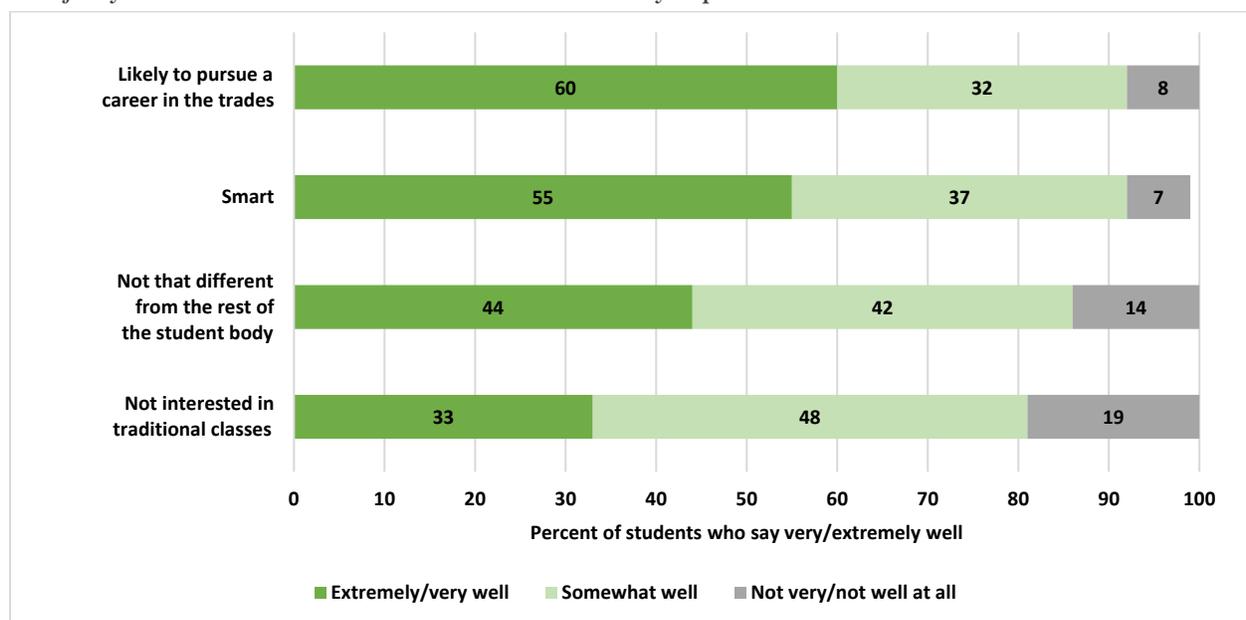


Question: How important are each of the following people in guiding or influencing which classes you take?
 Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Increased exposure to skilled trades is related to awareness, interest, and favorability among students: the greater the exposure, the more likely they are to view trades students positively and to perceive trades jobs as available in the area.

The vast majority of students view trades students as smart. Most think those in skilled trades courses are likely to pursue a career in trades.

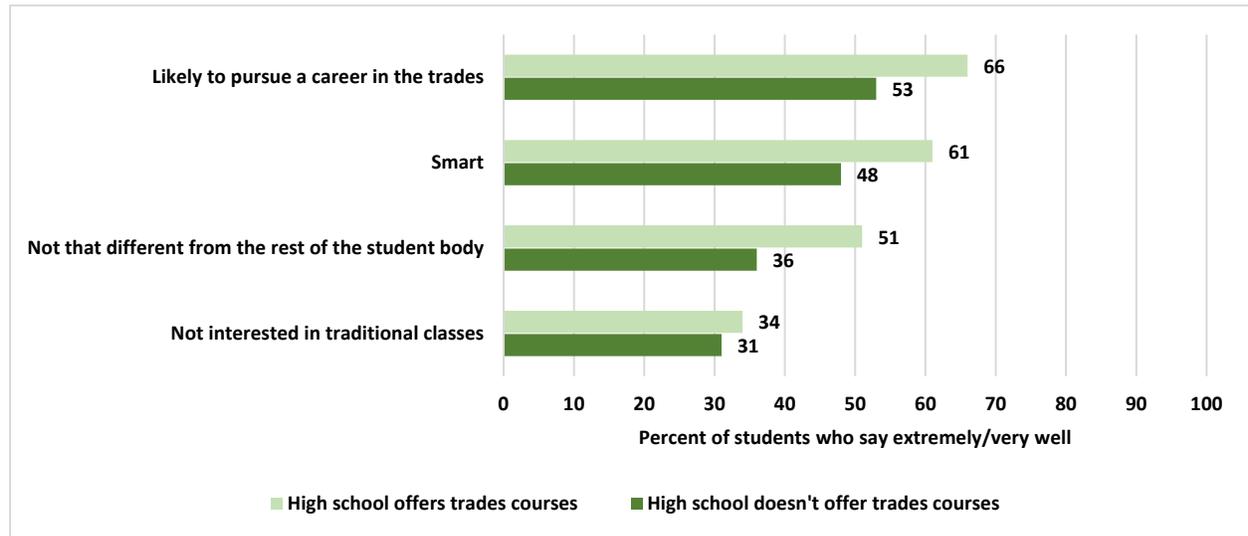
A majority of students view trades students as smart and likely to pursue a career in the skilled trades.



Question: In general, how well does each of the following describe the kids who take skilled trades classes?
 Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Students with exposure to skilled trades have more positive attitudes toward them. Attending schools that offer skilled trades courses increases the likelihood that one views trades students as smart. Sixty-one percent of those whose high schools offer skilled trades consider the students who take them to be smart, compared to only 48% of those who come from schools that do not offer skilled trades courses.

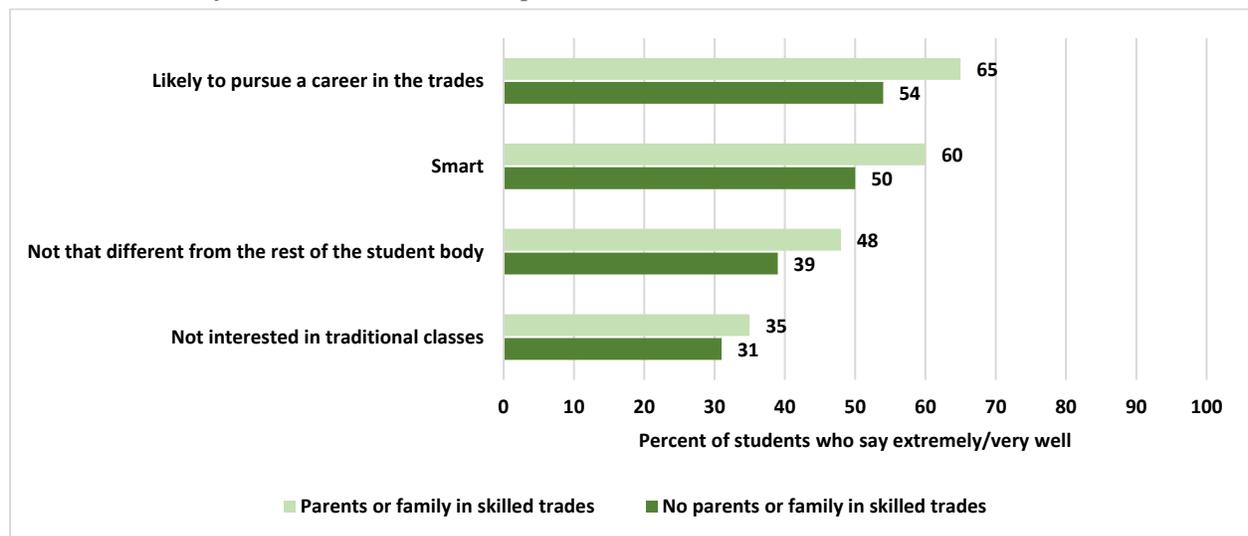
Students in high schools that offer skilled trades courses have more positive views of students who take those courses.



Question: In general, how well does each of the following describe the kids who take skilled trades classes?
 Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Familial exposure is also related to views toward skilled trades students. Sixty percent of students with parents or family members in skilled trades say “smart” describes skilled trades students very or extremely well, compared to 50% of those that do not have family in the trades.

Students with family in skilled trades have more positive views of students in skilled trades courses.



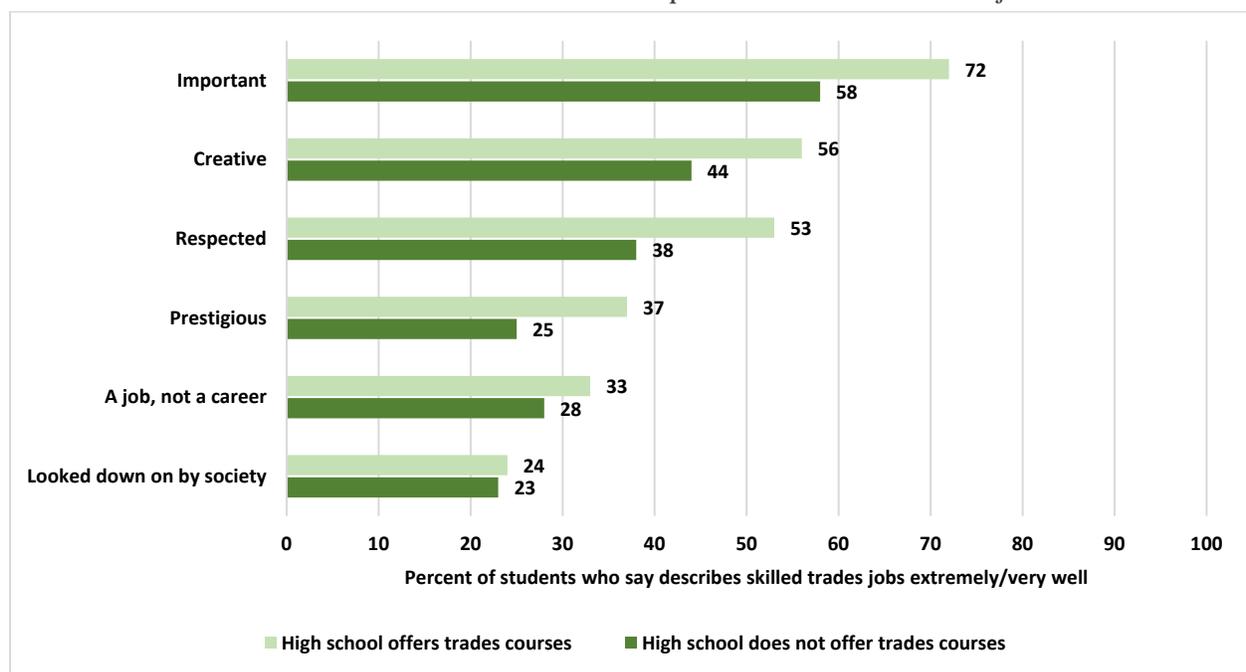
Question: In general, how well does each of the following describe the kids who take skilled trades classes?
 Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Exposure also is related to perceptions of availability of jobs. Students from schools that offer skilled trades courses are significantly more likely to perceive skilled trades jobs as available (47%) than are those at schools that do not offer them (26%).

Nearly two-thirds of students view skilled trades careers as important and creative. However, exposure further increases the likelihood of students to view skilled trades jobs as important, creative, respected, and prestigious.

Those from high schools offering trades courses are more likely than those from schools that do not to view trades jobs as prestigious (37% vs. 25%), respected (53% vs. 38%), important (72% vs. 58%), and creative (56% vs. 44%).

Students in schools that offer skilled trades courses have more positive views of skilled trades jobs.

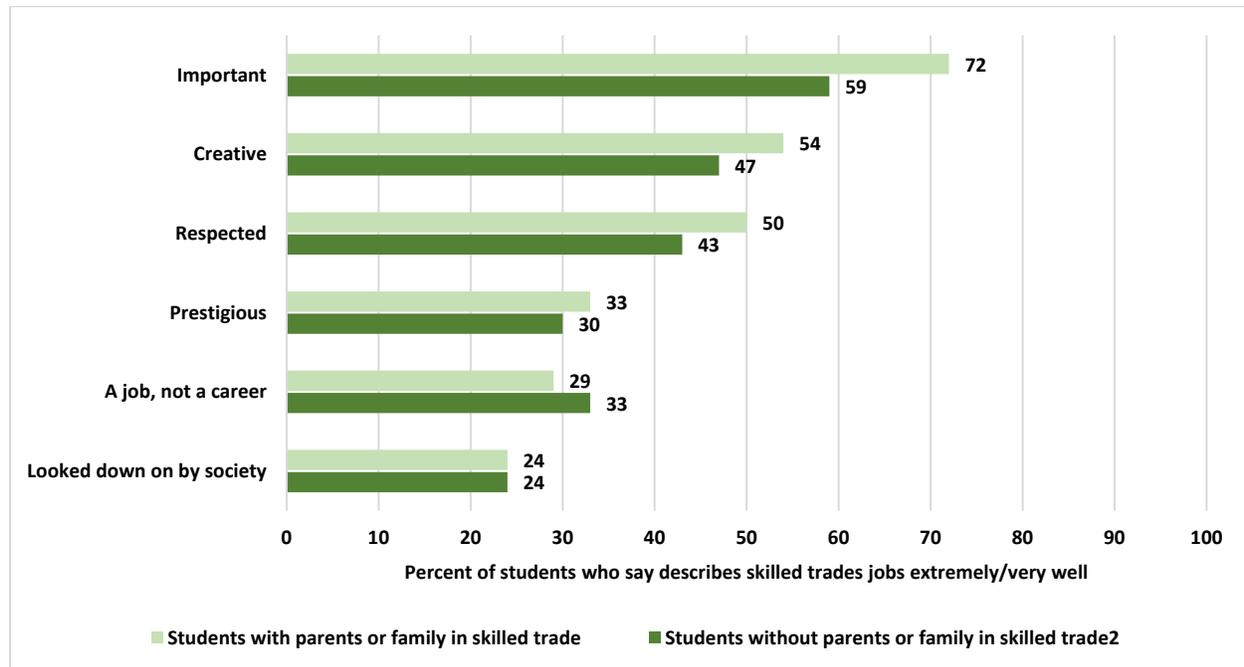


Question: How well would you say each of the following describes skilled trades?

Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Having parents or family in the skilled trades is also associated with more positive views of skilled trades jobs. Seventy-two percent of those with a parent or family member working in skilled trades say skilled trades jobs are important, compared to 59% of those without a parent or family member in a skilled trades job.

Students with a parent or family member in the trades have more positive perceptions of skilled trades jobs.



Question: How well would you say each of the following describes skilled trades?

Source: Survey of 1,687 high school students age 13-18 June 6-August 18, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

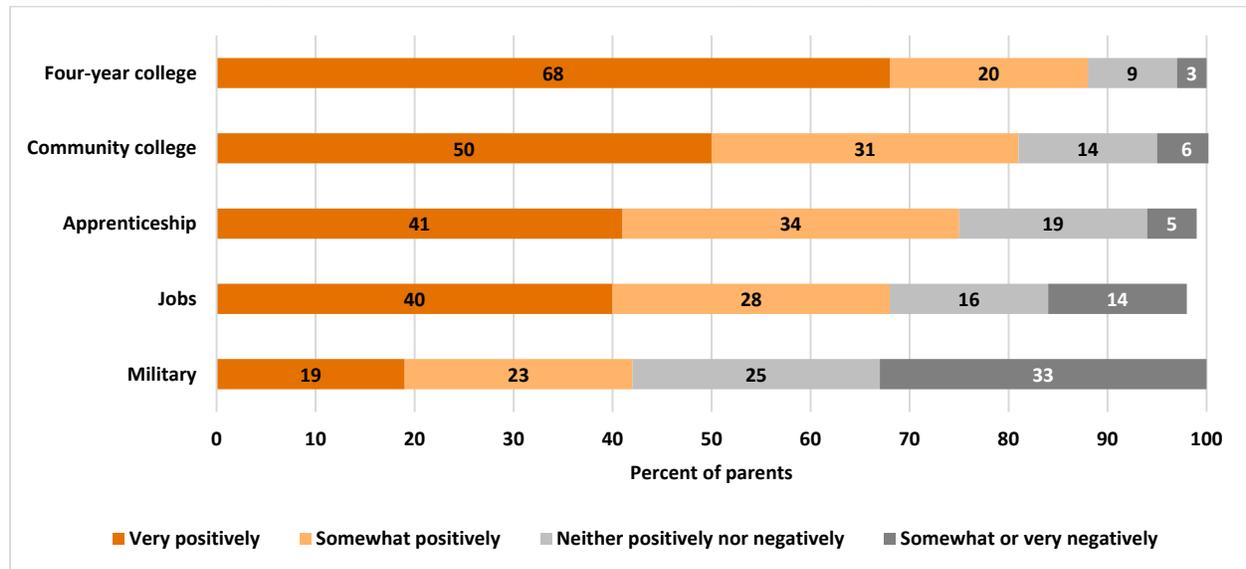
SECTION 4: PARENTS SEE SKILLED TRADES CLASSES AS INDISPENSABLE. THEY VALUE LEARNING REAL-WORLD SKILLS, AND BELIEVE MORE STUDENTS WOULD BE PREPARED FOR A CAREER WITH ACCESS TO TRADES CLASSES.

Parents think deeply about their children's futures and are engaged in considerations of their lives after high school. Many parents have positive feelings about their child pursuing college, though concerns are common about access to college, debt, and preparing for the future of work. Large percentages of parents say it is important that high schools offer skilled trades classes, and that students would be more prepared for a career if they had more opportunities to take them. Parents report that nurturing their child's interests and the opportunity to learn real-world skills are some of the most significant reasons for their support of the trades for their own child.

Parents are concerned about their children's futures, but feel positively about a variety of paths after high school, including entering the workforce.

Nearly all parents (94%) say that they talk with their child about their future career, but not all parents agree on what path this future career should follow. Parents feel best about their child pursuing a four-year college directly after high school, with 88% saying they would feel somewhat positive about their child doing so, with 68% feeling very positive. Eighty percent say the same about community college, with 50% feeling very positive. Seventy-five percent feel positive about an apprenticeship and 69% about a job. Forty-two percent say that they would feel very or somewhat positive about their child joining the military in the year after high school.

Parents feel most positive about their children attending a four-year or community college directly after high school, with smaller numbers supporting direct entry into the workforce or apprenticeship.



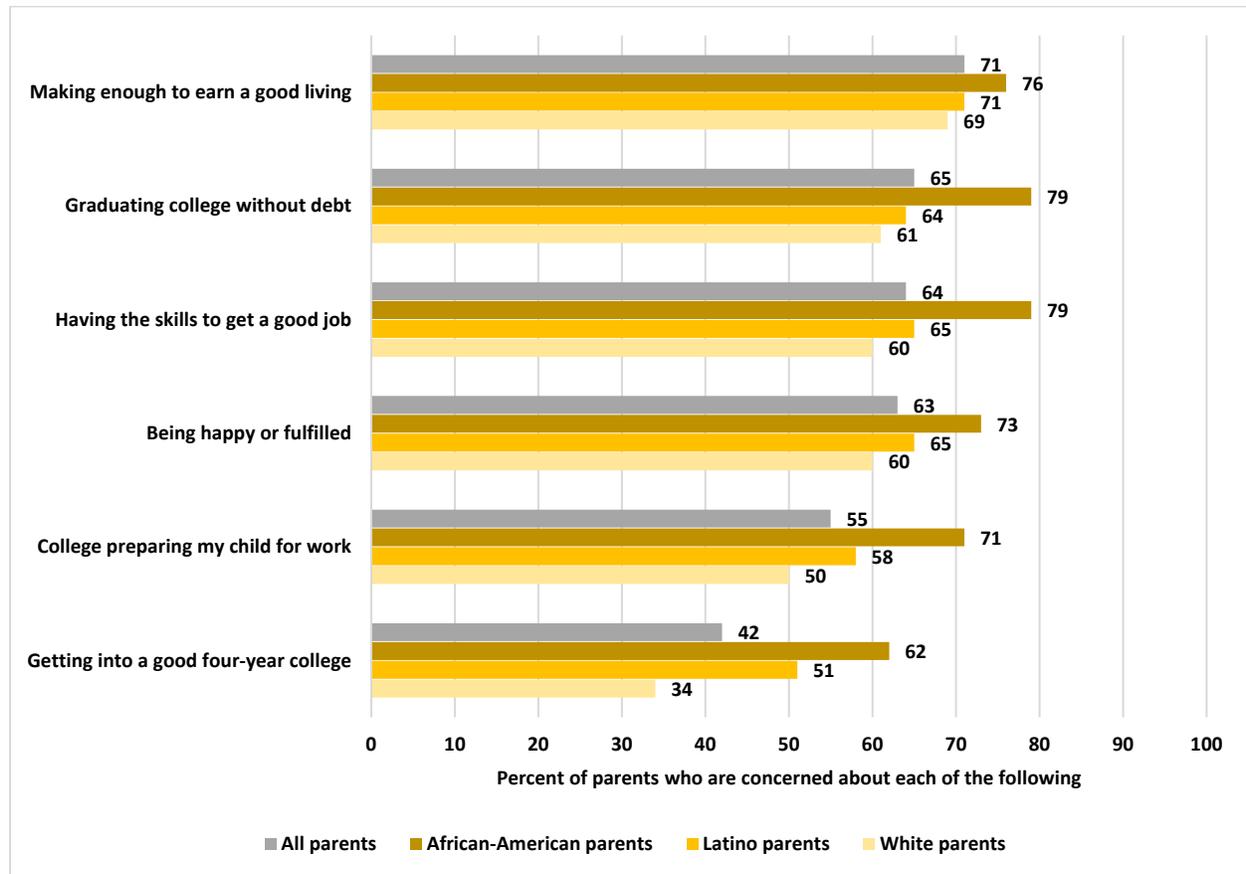
Question: How would you feel about your child pursuing each of the following the year after high school?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

While there are no racial differences that emerge in preferences toward a four-year college for their children, African-American parents are more likely than white parents to feel positive about their child pursuing a job after high school. Eighty-two percent of African-American parents say they would feel somewhat or very positive if their child did so, compared to 65% of white parents. Latino parents fall in the middle, with 72% saying they would feel positive toward their child pursuing a job immediately after high school.

When it comes to their child’s future work and career, 71% of all parents are extremely or very concerned about their child making a good living, and more than 6 in 10 about their child being happy or fulfilled and graduating from college without debt. Fewer parents were worried about college preparing their child for work (55%) or about their child getting into a good four-year college (42%).

African-American and Latino parents, however, have greater concerns about college than their white counterparts. Sixty-two percent of African-American parents and 51% of Latino parents say they are extremely or very concerned about their child getting into a good four-year college, compared to 34% of white parents. Nearly 8 in 10 African-Americans are concerned with their child graduating college without debt, compared to 64% and 61% of Latinos and whites, respectively. A further 71% of African-American parents report being extremely or very concerned about college preparing their child for work, compared to 58% of Latinos and 50% of whites.

African-American and Latino parents are more worried about their children's post-high school careers than are white parents.



Question: Thinking about your child's future in terms of their work and career, how concerned are you about each of the following?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents say it is important that high schools offer classes in skilled trades and that students would be more prepared for a career if they did so.

Seventy-eight percent of parents surveyed agree that it is very or extremely important for high schools to offer classes in the skilled trades. Parents living in rural areas are more supportive of skilled trades classes than are those living in urban or suburban areas; 47% of rural parents say these classes are extremely important, compared to 38% of urban parents and 37% of suburban parents.

There is even more agreement that these classes would lead to better prepared students, with a massive 89% of parents who say studying skilled trades would make students more prepared for a future career.

Only 2 in 10 parents view opportunities to study skilled trades as being more helpful to other children than to their own.

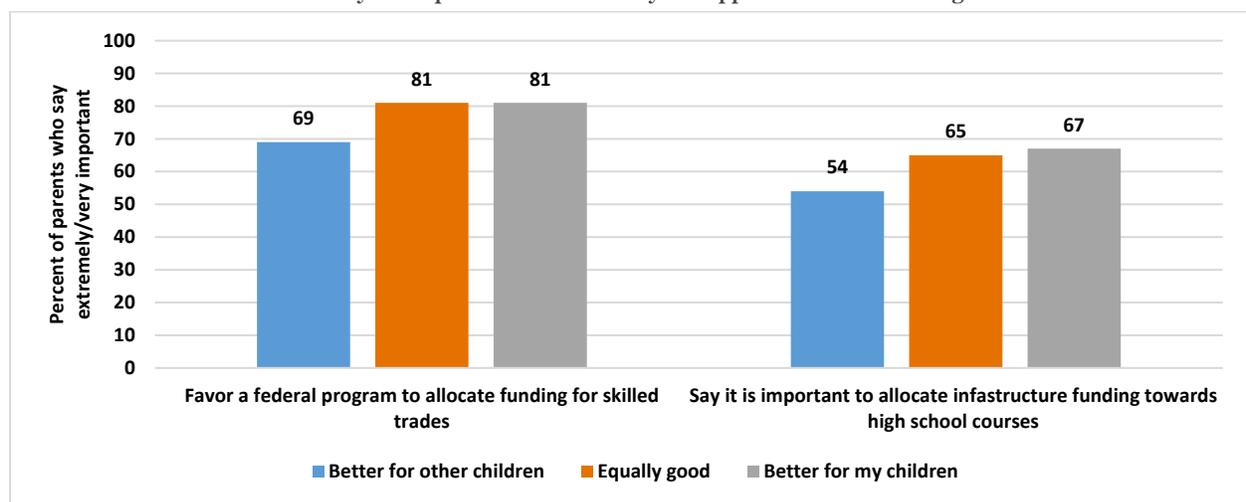
Most parents see the benefits of studying skilled trades for all American students—including their own child. Seventy-one percent of parents view the opportunity to study skilled trades as equally valuable for their own child and American students in general, and just 8% say it would be more

valuable for their own children than other children. Just 2 in 10 parents view opportunities to study skilled trades as being more likely to prepare other children other than their own for careers.

Suburban parents are less likely to think that these classes will help their own child in particular. Forty-one percent of suburban parents say skilled trades classes would make their own child much more prepared for a career, compared to 53% of rural parents and 51% of urban parents.

The small percentage of parents who view opportunities to study skilled trades as being more likely to prepare children other than their own for careers are also less likely to support allocated funding to skilled trades. Sixty-nine percent would support a federal program to allocate additional funding to train high school students in skilled trades, compared to 81% of other parents.

“Better for children other than my own” parents are less likely to support allocated funding for skilled trades.



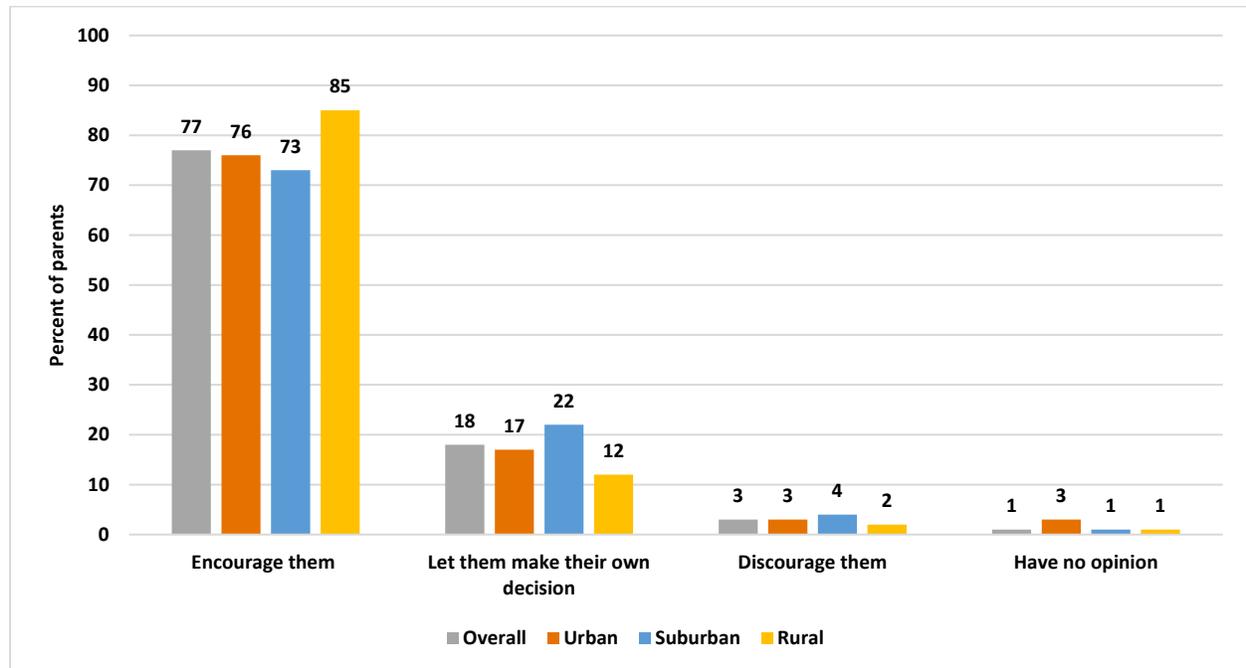
Questions: Do you favor, oppose, or neither favor nor oppose a federal program to allocate additional funding to train high school students and others in the skilled trades? / If a federal program were proposed to rebuild infrastructure like bridges, roads, and ports in the United States, how important would it be that such a program also allocates additional funding to train high school students and others with the skills to do that work?

Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents want their children to take skilled trades courses so they can learn real-world skills and develop their interests.

The majority of parents say they would support their child taking a skilled trades course in high school; 77% say they would encourage their child to take the course if they were interested, and only 3% say they would discourage their child from taking one. Rural parents are more likely to encourage their children to take skilled trades classes, with 85% saying that they would do so, than are urban (76%) and suburban (73%) parents.

The majority of parents would encourage their child to take a skilled trades course, and many say that they would let them make their own decision.

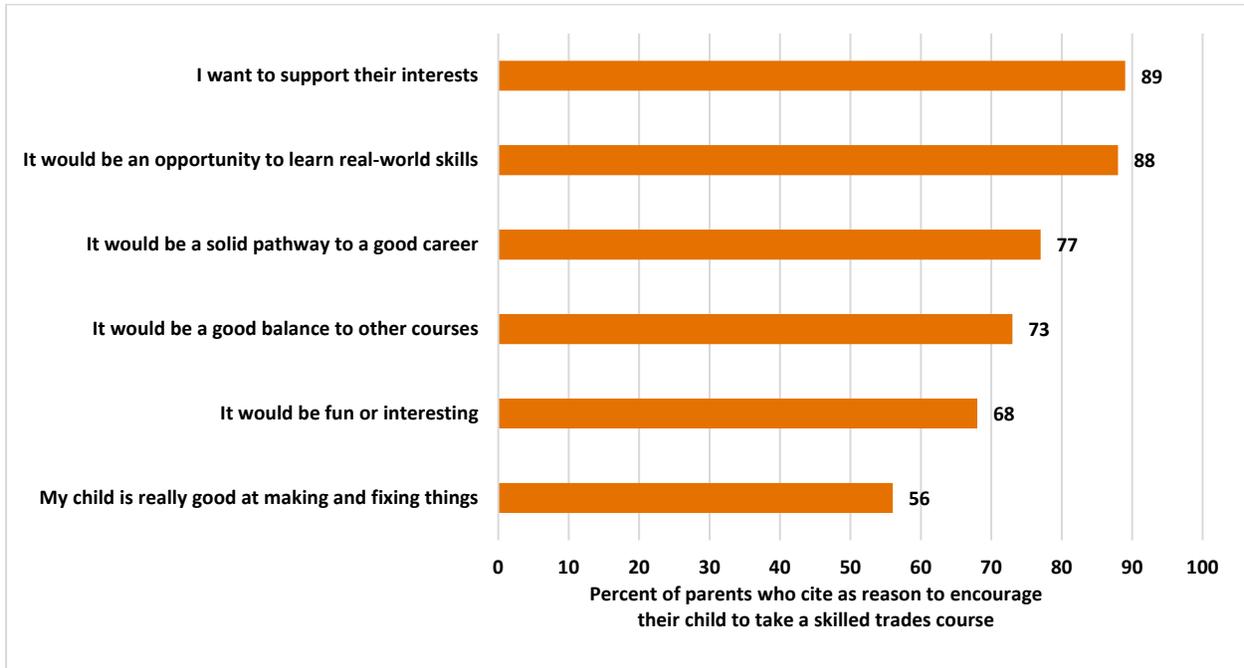


Question: If your child told you they were interested in taking a skilled trades course in high school, would you:
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Although “better for children other than my own” parents are less likely than other parents to encourage their child to take a skilled trades class in high school, 63% say that they would encourage their kids to take the course if they were interested. Eighty percent of parents who say that these courses help both their own child and other students equally would encourage their child to take the course if interested, along with 85% who think they would help their own student more than the average student.

Parents cite a variety of reasons for encouraging their child to take these skilled trades courses. More than 8 in 10 cite supporting their children’s interests and the classes offering a good opportunity to learn real-world skills as very or extremely important; more than 7 in 10 say skilled trades courses would offer a solid pathway to a career and would be a good balance to other courses.

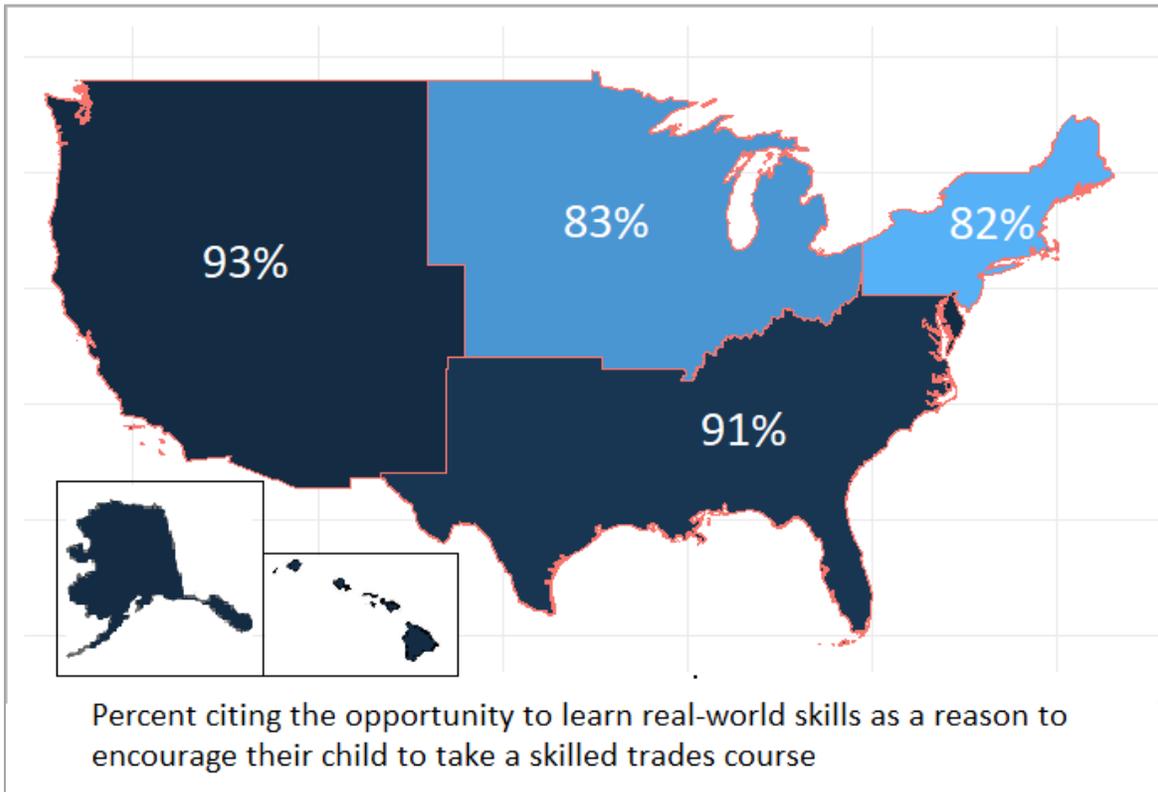
Supporting their child’s interests and the chance to learn real-world skills are the most common reasons parents give for encouraging them to take skilled trades courses.



Question: How important would each of the following be in your decision to encourage them to take a skilled trades course?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

Parents in different regions of the country cite varying reasons for encouraging their children to take skilled trades classes. Seventy-three percent of parents in the South and West say that they would encourage their child because it would be fun or interesting, compared to 66% of parents in the Northeast and 59% in the Midwest. Southern and western parents are also more likely to say the classes would be an opportunity to learn life skills (91% and 93%, respectively) than are those in the Northeast (82%) and the Midwest (83%).

Parents in the South and West are most likely to say skilled trades courses offer an opportunity for students to learn life skills.



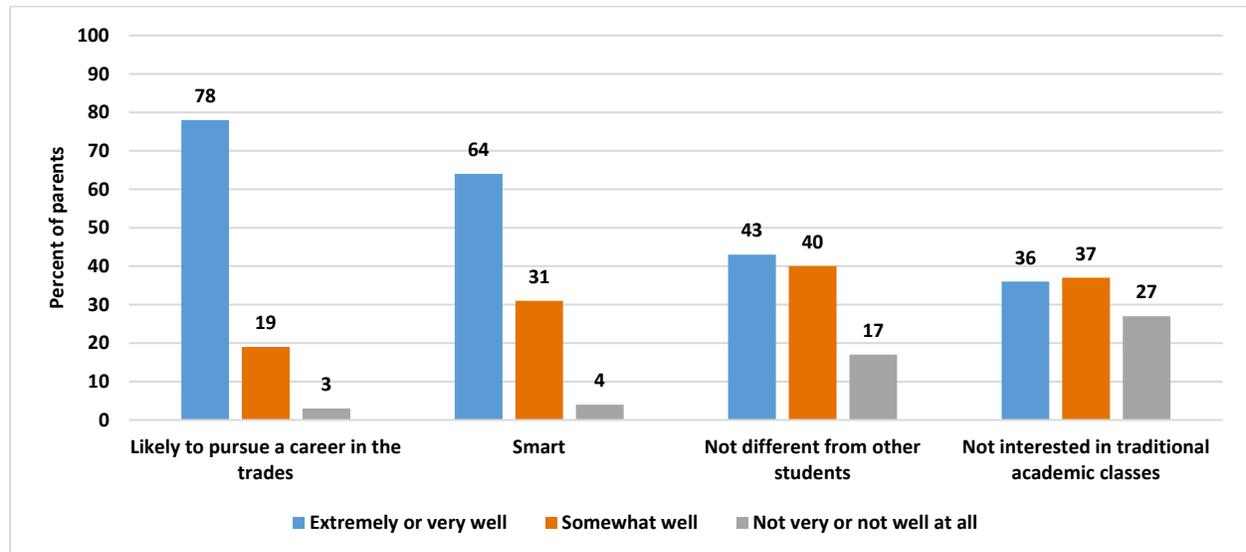
Question: How important would each of the following be in your decision to encourage them to take a skilled trades course? [It would be an opportunity to learn real-world skills.]

Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

A majority of parents view students who take skilled trades classes as smart.

Parents have mostly positive views of students who take skilled trades courses. Sixty-four percent of parents consider students who take skilled trades classes as smart, and 78% think that they are likely to pursue a career in the trades. Thirty-six percent of parents believe that skilled trades students are not interested in traditional academic classes.

A majority of parents describe students who take skilled trades classes as smart and likely to pursue a career in the trades.

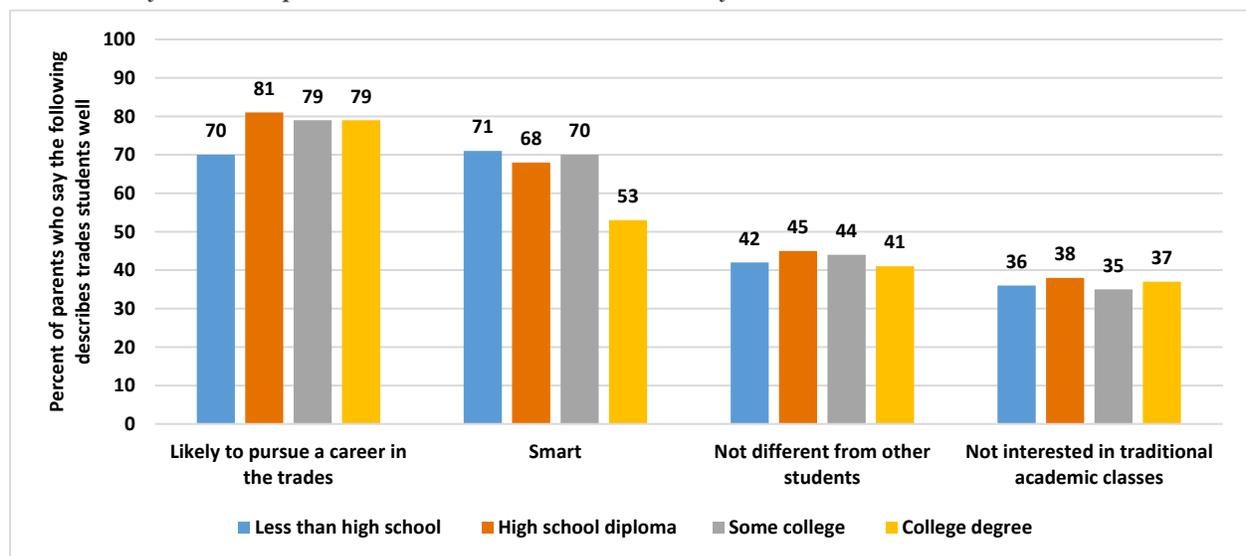


Question: In general, how well does each of the following describe the kids who take skilled trades classes?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

There are no significant differences in the attitudes toward those who take skilled trades between parents who are employed in the skilled trades versus those who are not, but there are differences between parents based on their educational attainment.

Parents with a college degree are less likely than other parents to say that students who study skilled trades are smart, but still a majority believe “smart” describes trades very or extremely well. Differences by education levels are less stark for parents’ other descriptions of skilled trades students.

A majority of parents with a college degree think smart is a very good descriptor for skilled trades students, but are still less likely than other parents to describe these students this way.



Question: In general, how well does each of the following describe the kids who take skilled trades classes?
 Source: Survey of 2,029 parents with a child in high school May 21-June 11, 2019. Conducted by NORC at the University of Chicago for Harbor Freight Tools for Schools.

CONCLUSION

This study finds that voters, parents, and high school students share an extremely positive view of skilled trades courses and jobs. They support greater investment in skilled trades courses and believe these courses prepare students well for life after high school.

This nationally representative study finds that broad bipartisan support exists among voters for policies that yield increased investment in skilled trades education. Two-thirds of voters say they would be more likely to support a candidate who favored increased government funding for skilled trades.

The study also finds high support among high school students for skilled trades classes and careers. Students who are exposed to skilled trades via friends and family in skilled trades or via attending a high school that offers such courses are more likely to view skilled trades jobs as important and respected, as well as to describe skilled trades students as smart.

Overall, a majority of voters, parents, and high school students see skilled trades coursework as an integral part of a high school education. When choosing a career, students value job security and love of the work, and parents say skilled trades jobs can offer enjoyment and security at high levels. Parents and voters tend to believe that increasing investment in skilled trades education will prepare students for their futures and offer the types of rewarding work that students value most.

STUDY METHODOLOGY

This study from Harbor Freight Tools for Schools was conducted by NORC at the University of Chicago. Staff at NORC and Harbor Freight Tools for Schools collaborated on all aspects of the study design. The study includes three surveys. Methodological details on each can be found below.

Survey of High School Students

Interviews were conducted between June 6 and August 18, 2019, with 1,687 teens age 13-18 representing the 50 states and the District of Columbia. The sample includes those who currently attend a traditional public high school, a charter public high school, a magnet school, a career and technical or vocational high school, or a continuation school. Those who say they attend a private high school or have already graduated high school were excluded.

The survey combined interviews from both probability and nonprobability sample sources. The probability interviews were conducted using AmeriSpeak®, NORC's probability-based panel designed to be representative of the U.S. household population, and nonprobability interviews were provided by Dynata, an opt-in panel.

During the initial recruitment phase of the AmeriSpeak Panel, randomly selected U.S. households were sampled with a known, non-zero probability of selection from the NORC National Sample Frame and then contacted by U.S. mail, email, telephone, and field interviewers (face-to-face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded

from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings.

Panel members were randomly drawn from AmeriSpeak, and 467 completed the survey. Interviews were conducted online and over the phone, with 462 completing via the web and 5 completing via telephone. Interviews were conducted in English. The final stage completion rate is 94.5%, the screener completion rate is 14.0%, the weighted household panel response rate is 30.3%, and the weighted household panel retention rate is 85.4%, for a cumulative response rate of 3.4%.

Dynata provided 1,220 nonprobability interviews. The Dynata sample was derived based on quotas related to age, race and ethnicity, and gender. Interviews were conducted in English and via the web only. For panel recruitment, Dynata uses invitations of all types including email invitations, phone alerts, banners, and messaging on panel community sites to include people with a diversity of motivations to take part in research. Because nonprobability panels do not start with a frame where there is a known probability of selection, standard measures of sampling error and response rates cannot be calculated.

Once the sample has been selected and fielded, and all the study data have been collected and made final, a raking process is used to adjust for any survey nonresponse in the probability sample as well as any noncoverage or under- and oversampling in both probability and nonprobability samples resulting from the study-specific sample design. Raking variables for both the probability and nonprobability samples included age, gender, census division, race/ethnicity, and parents' highest education level. Population control totals for the raking variables were obtained from the 2017 American Community Survey (ACS). The weighted data reflect the U.S. population of children age 13 to 18 in high school, excluding those in private school.

In order to incorporate the nonprobability sample with the probability sample, NORC used TrueNorth®, a calibration approach developed at NORC that features small domain estimation methods to account for potential bias associated with the nonprobability sample. The purpose of TrueNorth calibration is to adjust the weights for the nonprobability sample so as to bring weighted distributions of the nonprobability sample in line with the population distribution for characteristics correlated with the survey variables. Such calibration adjustments help to reduce potential bias, yielding more accurate population estimates.

A small domain model was used with the combined samples to generate estimates at the domain level, where the domains were defined by race/ethnicity, age, and gender. The dependent variables for the models were key survey variables derived from a gradient boosted tree model, and the small domain model included covariates and domain-level random effects. The covariates were external data available from other national surveys such as health insurance, internet access, and housing type from the ACS. The final combined AmeriSpeak and nonprobability sample weights were derived so the weighted estimates of the combined sample were consistent with the small domain model estimates derived for key survey variables.

The overall margin of error for the sample is +/- 3.3 percentage points at the 95% confidence level, including the design effect. The margin of sampling error may be higher for subgroups. Although there is no statistically agreed upon approach for calculating margins of error for nonprobability samples, these margins of error were estimated using a calculation called the root mean squared error, along with other statistical adjustments. A mean square error is a measure of uncertainty that incorporates the variability associated with the estimates, as well as the bias associated with the estimates derived from a nonprobability sample.

Survey of Parents of High School Students

Interviews were conducted between May 21 and June 11, 2019, with 2,029 parents age 18 and older with a child in high school. The sample includes those with a child age 13-18 who is currently attending a traditional public high school, a charter public high school, a magnet school, a career and technical or vocational high school, or a continuation school. Those only with a child or children currently attending a private high school or who has already graduated high school were excluded.

The survey combined interviews from both probability and nonprobability sample sources. The probability interviews were conducted using AmeriSpeak®, NORC's probability-based panel designed to be representative of the U.S. household population, and nonprobability interviews were provided by Dynata, an opt-in panel.

During the initial recruitment phase of the AmeriSpeak Panel, randomly selected U.S. households were sampled with a known, non-zero probability of selection from the NORC National Sample Frame and then contacted by U.S. mail, email, telephone, and field interviewers (face-to-face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings.

Panel members were randomly drawn from AmeriSpeak, and 848 completed the survey. Interviews were conducted online and over the phone, with 835 completing via the web and 13 completing via telephone. Interviews were conducted in English. The final stage completion rate is 95.8%, the screener completion rate is 33.1%, the weighted household panel response rate is 30.3%, and the weighted household panel retention rate is 85.4%, for a cumulative response rate of 8.2%.

Dynata provided 1,181 nonprobability interviews. The Dynata sample was derived based on quotas related to age, race and ethnicity, gender, and education. Interviews were conducted in English and via the web only. For panel recruitment, Dynata uses invitations of all types including email invitations, phone alerts, banners, and messaging on panel community sites to include people with a diversity of motivations to take part in research. Because nonprobability panels do not start with a frame where there is a known probability of selection, standard measures of sampling error and response rates cannot be calculated.

Once the sample has been selected and fielded, and all the study data have been collected and made final, a raking process is used to adjust for any survey nonresponse in the probability sample as well as any noncoverage or under- and oversampling in both probability and nonprobability samples resulting from the study-specific sample design. Raking variables for both the probability and nonprobability samples included age, gender, census division, race/ethnicity, and education. Population control totals for the raking variables were obtained from the 2017 American Community Survey (ACS). The weighted parent data reflect the U.S. population of adults with children age 13 to 18 in high school, excluding those in private school.

In order to incorporate the nonprobability sample with the probability sample, NORC used TrueNorth®, a calibration approach developed at NORC that features small domain estimation methods to account for potential bias associated with the nonprobability sample. The purpose of TrueNorth calibration is to adjust the weights for the nonprobability sample so as to bring weighted distributions of the nonprobability sample in line with the population distribution for characteristics correlated with the survey variables. Such calibration adjustments help to reduce potential bias, yielding more accurate population estimates.

A small domain model was used with the combined samples to generate estimates at the domain level, where the domains were defined by race/ethnicity, age, gender, and education. The dependent variables for the models were key survey variables derived from a gradient boosted tree model, and the small domain model included covariates and domain-level random effects. The covariates were external data available from other national surveys such as health insurance, internet access, and housing type from the ACS. The final combined AmeriSpeak and nonprobability sample weights were derived so the weighted estimates of the combined sample were consistent with the small domain model estimates derived for key survey variables.

The overall margin of error for the sample is +/- 4.0 percentage points at the 95% confidence level, including the design effect. The margin of sampling error may be higher for subgroups. Although there is no statistically agreed upon approach for calculating margins of error for nonprobability samples, these margins of error were estimated using a calculation called the root mean squared error, along with other statistical adjustments. A mean square error is a measure of uncertainty that incorporates the variability associated with the estimates, as well as the bias associated with the estimates derived from a nonprobability sample.

Survey of Voters

Data for this survey were collected using the AmeriSpeak Panel, NORC's probability-based panel designed to be representative of the U.S. household population. During the initial recruitment phase of the panel, randomly selected U.S. households were sampled with a known, non-zero probability of selection from the NORC National Sample Frame and then contacted by U.S. mail, email, telephone, and field interviewers (face-to-face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded from the sample include people with P.O. Box only

addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings.

Interviews for this survey were conducted between May 17-30, 2019, with adults age 18 and older representing the 50 states and the District of Columbia who say they often or always vote. Panel members were randomly drawn from AmeriSpeak, and 2,033 completed the survey—1,858 via the web and 175 via telephone. Interviews were conducted in English. The final stage completion rate is 95.6%, the screener completion rate is 33.4%, the weighted household panel response rate is 30.3%, and the weighted household panel retention rate is 85.4%, for a cumulative response rate of 8.3%. The overall margin of sampling error is +/- 3.0 percentage points at the 95% confidence level, including the design effect. The margin of sampling error may be higher for subgroups.

Once the sample has been selected and fielded, and all the study data have been collected and made final, a poststratification process is used to adjust for any survey nonresponse as well as any noncoverage or under- and oversampling resulting from the study-specific sample design. Poststratification variables included age, gender, census division, race/ethnicity, and education. Weighting variables were obtained from the 2018 Current Population Survey. The weighted data reflect the U.S. population of likely voters age 18 and over.

For more information, please email info@norc.org.

About Harbor Freight Tools for Schools

Harbor Freight Tools for Schools is a program of The Smidt Foundation, established by Harbor Freight Tools Founder Eric Smidt, to advance excellent skilled trades education in public high schools across America. With a deep respect for the dignity of these fields and for the intelligence and creativity of people who work with their hands, Harbor Freight Tools for Schools aims to drive a greater understanding of and investment in skilled trades education, believing that access to quality skilled trades education gives high school students pathways to graduation, opportunity, good jobs and a workforce our country needs. For more information, visit us at www.harborfreighttoolsforschools.org.

About NORC at the University of Chicago

NORC at the University of Chicago is an independent research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions. Since 1941, NORC has conducted groundbreaking studies, created and applied innovative methods and tools, and advanced principles of scientific integrity and collaboration. Today, government, corporate, and nonprofit clients around the world partner with NORC to transform increasingly complex information into useful knowledge.

NORC conducts research in five main areas: Economics, Markets, and the Workforce; Education, Training, and Learning; Global Development; Health and Well-Being; and Society, Media, and Public Affairs.

NORC contributing researchers include David Sterrett, Dan Malato, Will Bonnell, Mia Stripp, and Jennifer Benz.