

# NAPA Workforce Development Findings:

**Understanding  
the Opportunities  
in Asphalt**





## Introduction

Across all construction sectors, there is a growing labor shortage that threatens the ability of contractors to complete projects. Companies are seeing long-tenured employees retire but are having trouble attracting younger workers. According to the Associated General Contractors of America's annual workforce survey in 2019, 91% of companies said they were looking to hire new employees, but more than 80% of them — both unionized and non-unionized companies



— reported difficulty in finding qualified workers (AGC, 2019). A 2019 U.S. Chamber of Commerce report similarly found that 94% of construction companies were having trouble recruiting skilled workers and that this shortage was contributing to delays in project completion or a decline in willingness to bid on new projects (USG, 2019).

To address this critical issue facing the asphalt industry, 2019 NAPA Chairman John Harper unveiled a new strategic focus — Workforce Development. A new committee and three task groups were established to develop long-term solutions to one of the industry's most critical challenges. To shape the direction of this effort and ensure the correct challenges and opportunities were identified, the committee's Communications Task Group focused its 2019 activities on market research, consisting of public opinion surveys and focus groups, to learn from teachers, guidance counselors, and the general public about the concerns and motivations of students, parents, educators, and future workers.

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## About GollINTEL

GollINTEL is Golin's research hub; the expert team provides brands with customized primary research to address specific issues or better understand target audiences. Research can be qualitative, using in-depth interviews and focus groups, or quantitative, using statistically representative sampling. GollINTEL manages the entire research process from research methodology, design, creation of survey or qualitative guide instrument and analysis of data to crafting insights and recommendations.

## About the National Asphalt Pavement Association (NAPA)

The National Asphalt Pavement Association works to support, advocate, and advance the asphalt pavement industry.

- We **support** our members through education, technical advice, recognition programs, and peer engagement.
- We **advocate** by engaging, collaborating with, and educating decision makers.
- We **advance** the industry through innovation and research, thought leadership, and promoting safe, efficient, sustainable operations.

## Methodology

Between March and October 2019, GoINTEL worked with NAPA to conduct an in-depth research project that identified audiences and messages for a future Workforce Development Campaign.

The research approach consisted of three distinct phases:

- 1. Pilot Survey:** To establish a baseline for external perceptions of the Road Construction industry compared to five additional industries that have similar perceptions or are seen as direct competitors (Agriculture, General Construction, Manufacturing, Mining, and Transportation). This was a national survey conducted via an online questionnaire.
- 2. Focus Groups:** To explore underlying reasons for perceptions and assess what message themes would move perceptions and dispel misperceptions about the industry. The focus groups consisted of two face-to-face sessions in five metro areas: one for members of the General Public, and one specifically for

Educators (teachers and guidance counsellors). Although the focus groups were held in larger cities, significant efforts were made to draw in participants from surrounding suburban and rural areas to ensure a wide range of ages and experiences, including parents, varying educational backgrounds, and diverse races.

- 3. Robust Survey:** To test final messages and assess which messages are likely to change each audience’s mind about their favorability levels, their willingness to recommend the industry as a career option, and the attributes they associate with the industry. To blind the survey, the researchers asked the same aforementioned perceptions to the five additional industries, too. The survey also asked about the communications channels and platforms used when seeking news and information about career opportunities. As with the Pilot Survey, this was a national online survey.

Detailed data regarding the three phases, such as the recruitment source, time interval, and sample details are presented in Table 1.

Phase	Data/Recruit Source	Time Interval	Sample Details
<b>Pilot Survey</b>	Dynata	June 12 – June 24, 2019	N=1,500 General Public (16+ years) N=250 Educators/Counselors  General Public Margin of Error: ±2.53 Educators Margin of Error: ±6.20 <i>95 percent confidence level</i>
<b>Focus Groups</b>	Focus Pointe Global	July 8 – July 16, 2019	10 focus groups: N=47 (General Public) N=54 (Educators/Counselors)
<b>5 research markets: Atlanta; Boston; Columbus, Ohio; Denver; and Phoenix</b>			
<b>Robust Survey</b>	Dynata	August 30 – September 1, 2019	N=3,018 General Public (16+ years) N=1,006 Educators/Counselors (elementary to high school)  Gen Public Margin of Error: ±1.78 Educators Margin of Error: ±3.09 <i>95 percent confidence level</i>

**Table 1: Survey Methodology and Details**

# KEY FINDINGS

## Americans don't know enough about road construction

Both the General Public and Educators started off with generally negative perceptions of road construction. But this should be taken at face value; when conducting the focus groups, the researchers found that while there seemed to be strong negative perceptions, they were due to both audience groups linking the road construction industry directly to orange vests, traffic delays, and crews on the side of the road, specifically the flagger.

Overall, most people have little awareness about what the road construction industry entails. Respondents were asked to detail their familiarity, favorability, likeliness to consider a job, and likeliness to recommend a job to others in road construction and five other industries with similar labor profiles: agriculture (e.g. farming, ranching, forestry, etc.), mining (oil and gas, coal, ore, quarrying, etc.), general construction (residential and commercial buildings), road construction (roads, bridges, etc.), manufacturing (factory assembly, fabrication, etc.), and transportation (trucking, rail, barges, transit, etc.). When compared to these other industries, road construction ranked fifth in respondent familiarity (Figure 1).



*“The first thing I think of is always the workers on the road, and I’m never willing to be one of them.”*

**Boston, General Public**



*“[Road construction is] just dangerous and hot. You always see them out there paving the roads. It’s 100 degrees outside, they’re wearing long pants, PPE [personal protective equipment], the safety vest, which is a DOT [Department of Transportation] requirement, and they’re pouring asphalt, which is another 20 degrees on top of that.”*

**Atlanta, General Public**

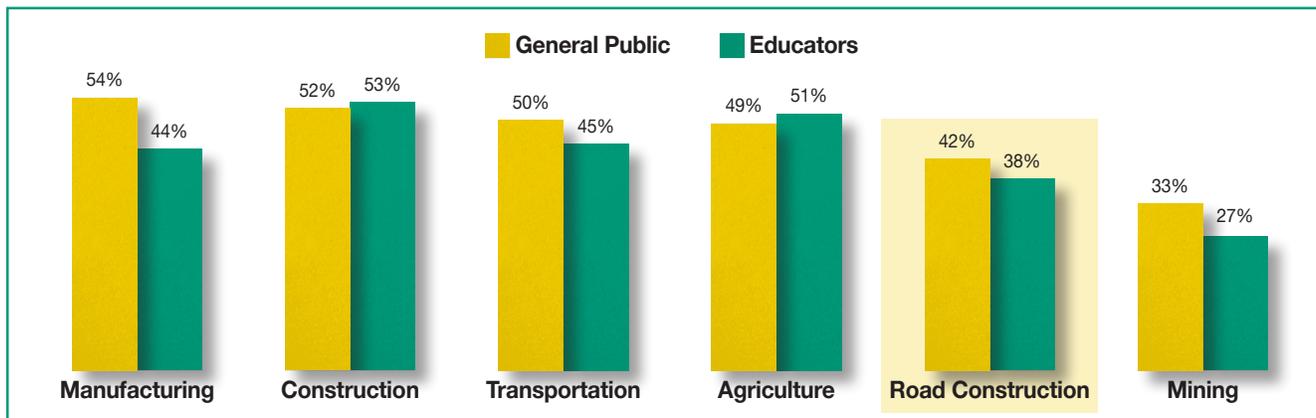


Figure 1: General Public and Educator Familiarity with Industries (Source: Robust Survey)

However, after exposure to messages, road construction was more likely to be recommended and even considered as a career path. Between pre- and post-messages (Figure 2), there were double-digit percentage increases for favorability (+15%), likelihood to recommend a job in road

construction (+20%), and likelihood to consider a job in road construction (+17%) for the General Public. Educators had similar increases in favorability (+14%) and in likelihood to recommend a job in road construction (+19%).

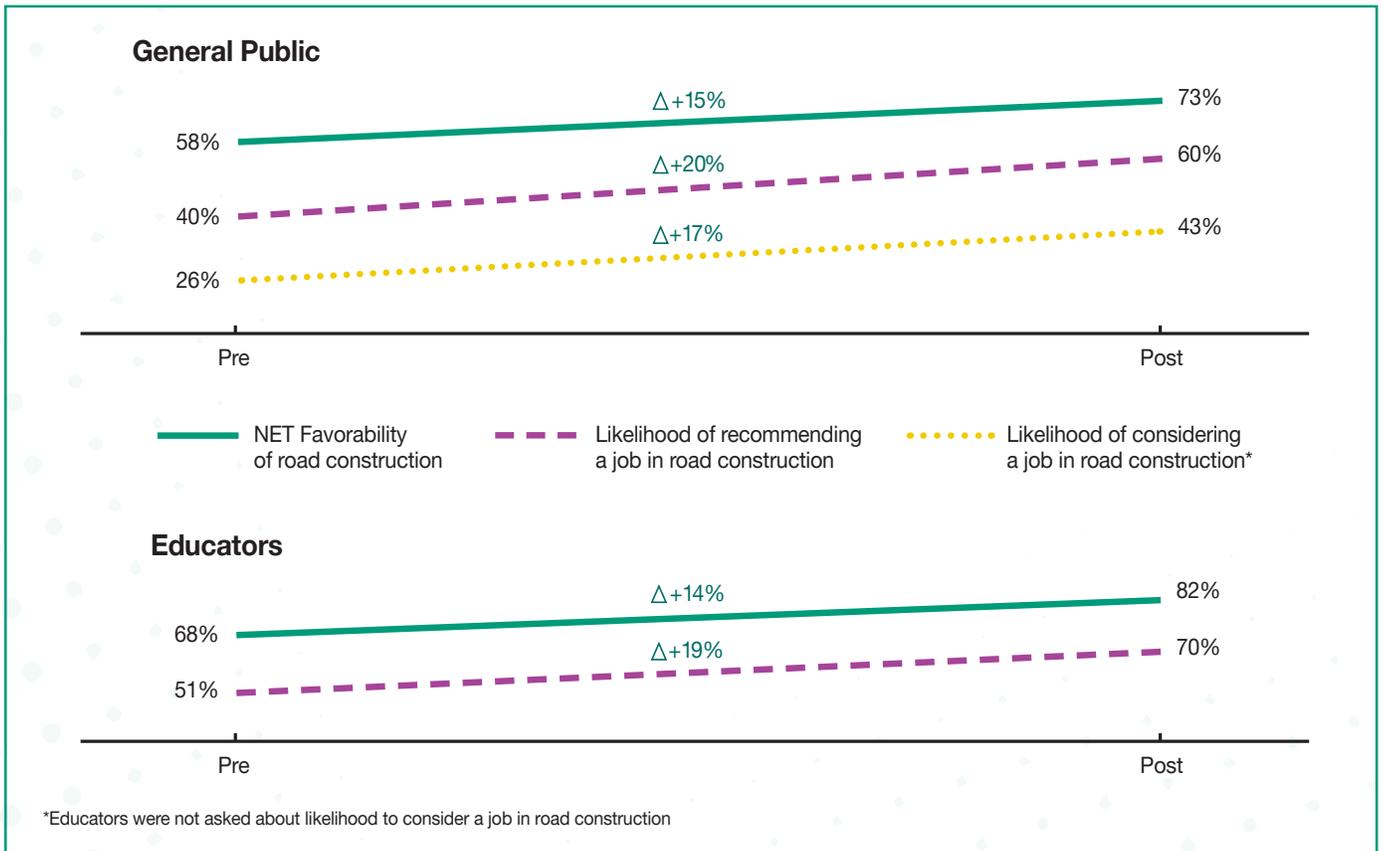


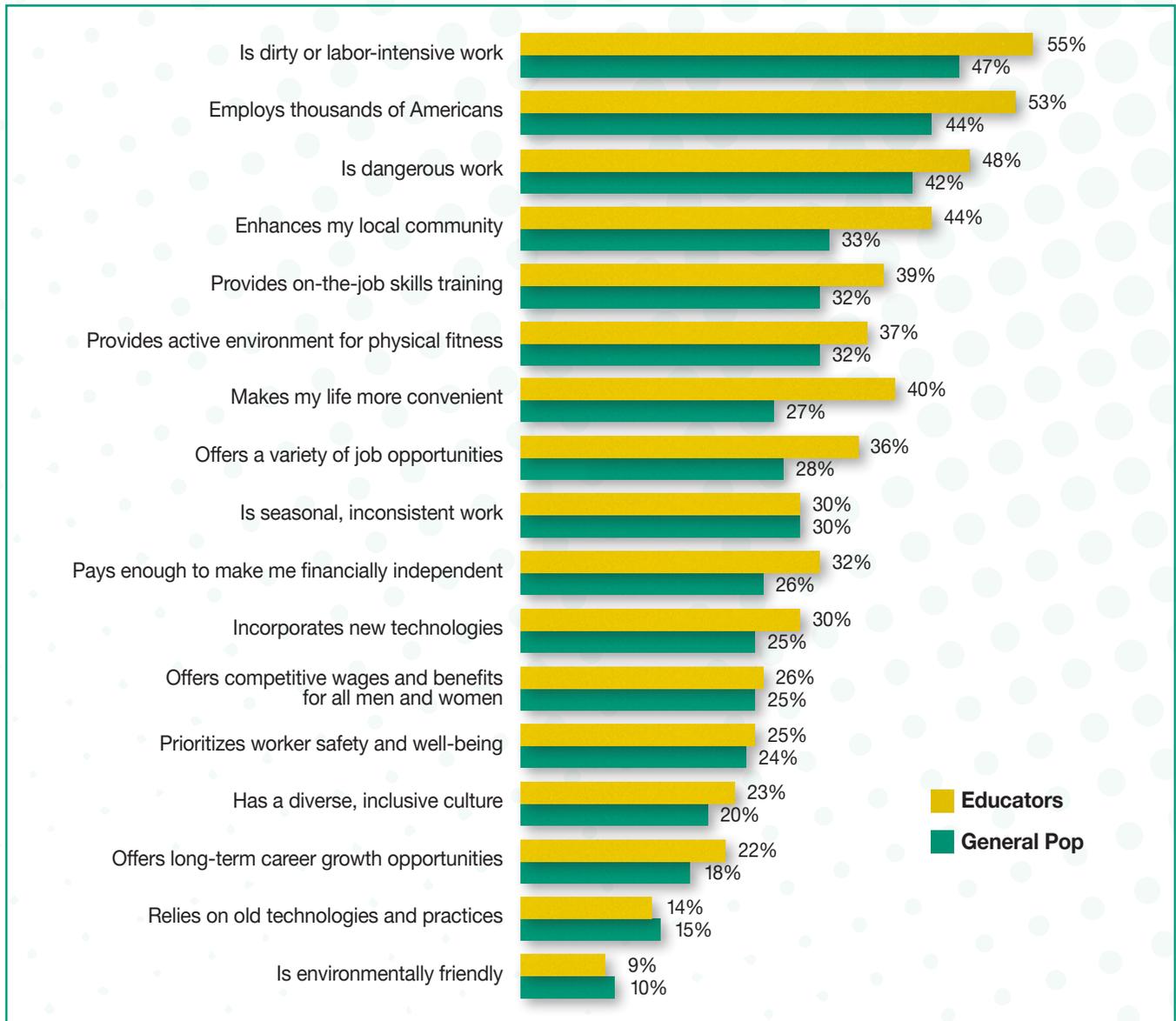
Figure 2: General Public and Educator Perception Before and After Message Exposure (Source: Robust Survey)

### The initial perceptions of road construction are that it is dirty, labor-intensive, employs thousands of Americans, and dangerous

For both the General Public and Educators, road construction was generally associated with largely negative perceptions surrounding the nature of the work. In the pre-focus group screening process, participants were asked to identify descriptions that they associated with road construction. Most participants focused on danger and the work being “dirty”. But these negative perceptions aren’t necessarily tied solely to the road construction

industry — the researchers saw these same perceptions dominate conversations for the comparative industries discussed, too.

Prior to message exposure about the industry, nearly half (47%) of the General Public perceived road construction as dirty and labor-intensive, while 42% said it was dangerous work. While these sorts of “negative” statements were some of the ideas most frequently associated with the road construction industry, the General Public was also well aware (44%) of the jobs the industry creates for Americans, which was considered an industry benefit (Figure 3).



**Figure 3: General Public and Educator Initial Perception of Road Construction (Source: Robust Survey)**

However, after learning more about the industry through the tested messages, the increase in positive attributes and decrease in negative attributes was significant (Figure 4). The General Public saw shifts in perception around skills training (+19%), the variety of job opportunities (+18%), and long-term career growth opportunities (+17%). Similarly, Educators saw the greatest change in perception of the road construction as a skill-based career (+23%) with a variety of job

opportunities (+22%), offering long-term career growth opportunities (+20%) and competitive wages and benefits (+20%). The messages tested that spoke to these attributes include:

**Skills-Based Career**

*“Road construction is a skilled profession. You acquire specialized knowledge through on-the-job training and can gain expertise in new areas over the course of your career.”*

**Growth & Opportunity**

“Building and maintaining roads involves a lot of different skills — both on the road and in the office — and there is always a path for career growth. Building America’s roads requires construction laborers, equipment operators, maintenance crews, sales and marketing, accounting, engineers, IT professionals, and more. You can start anywhere and grow into a management role or follow your passion into other areas within the industry.”

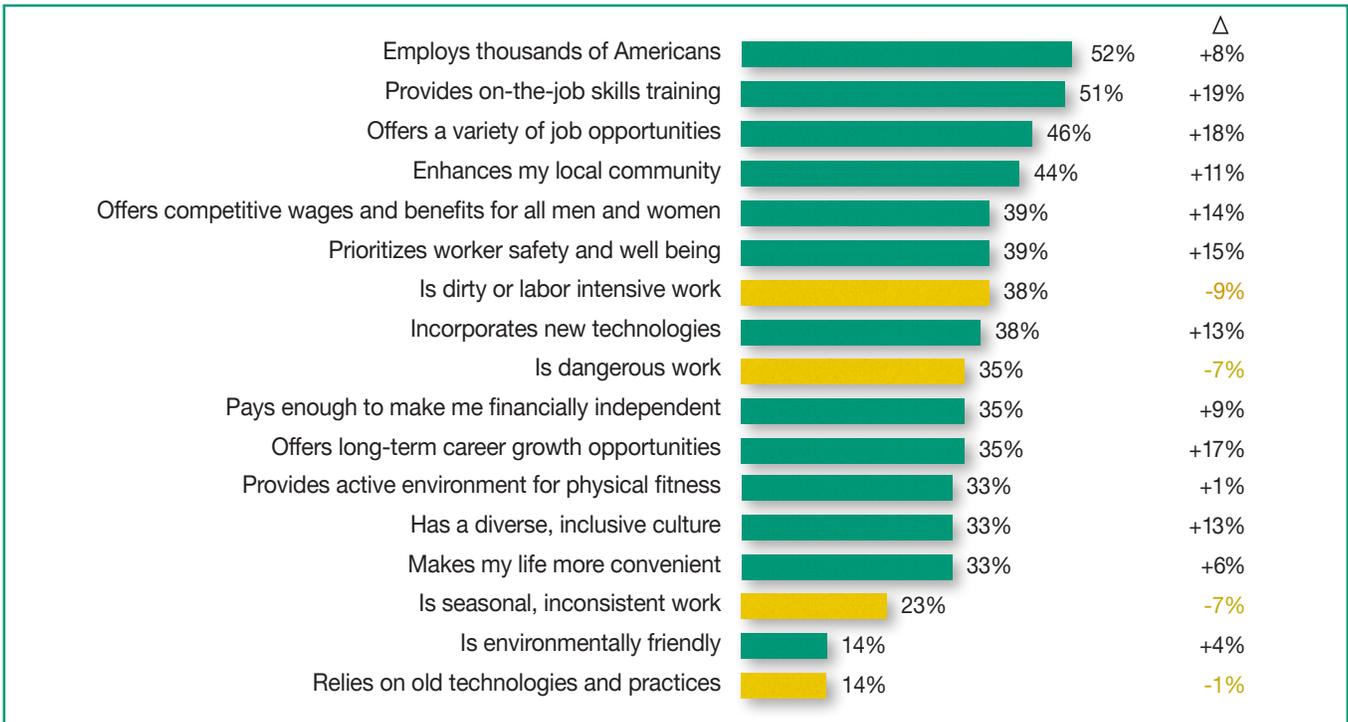
**Salary & Financial Security**

“Working in road construction gives you financial security and freedom. It’s a job that you can do for the long haul with a salary and benefits to support your family, live the life you want, and save for the future.”

**Diversity & Equal Pay**

“The road construction industry is made up of people of all genders, races, and backgrounds. People are treated fairly, and road construction is one of the industries closest to achieving equal pay for women and men. On the road, crews come together and often form a family-like bond.”

This change in perception highlights the road construction industry’s need to discuss the variety of opportunities for skills training, job advancement, and long-term career potential to break initial perceptions and educate future workers and influencers about the industry.



**Figure 4: General Public Change in Attribute Association with the Road Construction Industry after Exposure to Messages (Source: Robust Survey)**

## **Educators are especially receptive to the messages**

Through the focus groups, Educators were identified as the audience most willing to listen to the industry. However, this group needs greater industry exposure, as well as supporting materials, to talk knowledgeably with students and their parents. One key finding was that in order to use educators as advocates, the road

construction industry needs to make employees and spokespersons available to educators, in addition to developing educational and informational material about the industry. Teachers are very busy teaching the prescribed curricula. They feel pressured to complete assigned coursework, and expressed little room for adding in materials not already aligned with state and school district requirements.



*“The first time I talked to my plumber when I was 25, I found out how much money I was paying him, how much money he was making. I was like, what am I doing? I don’t want to be a plumber, but maybe there were some other jobs that I should have thought about.”*

**Atlanta Educator**

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*“Bring those people, bring those businesses so they [students] get exposure to that [the industry] or the college students that are going to [study] those areas. That would do a ton to expose kids at any age to those ideas.”*

**Phoenix Educator**

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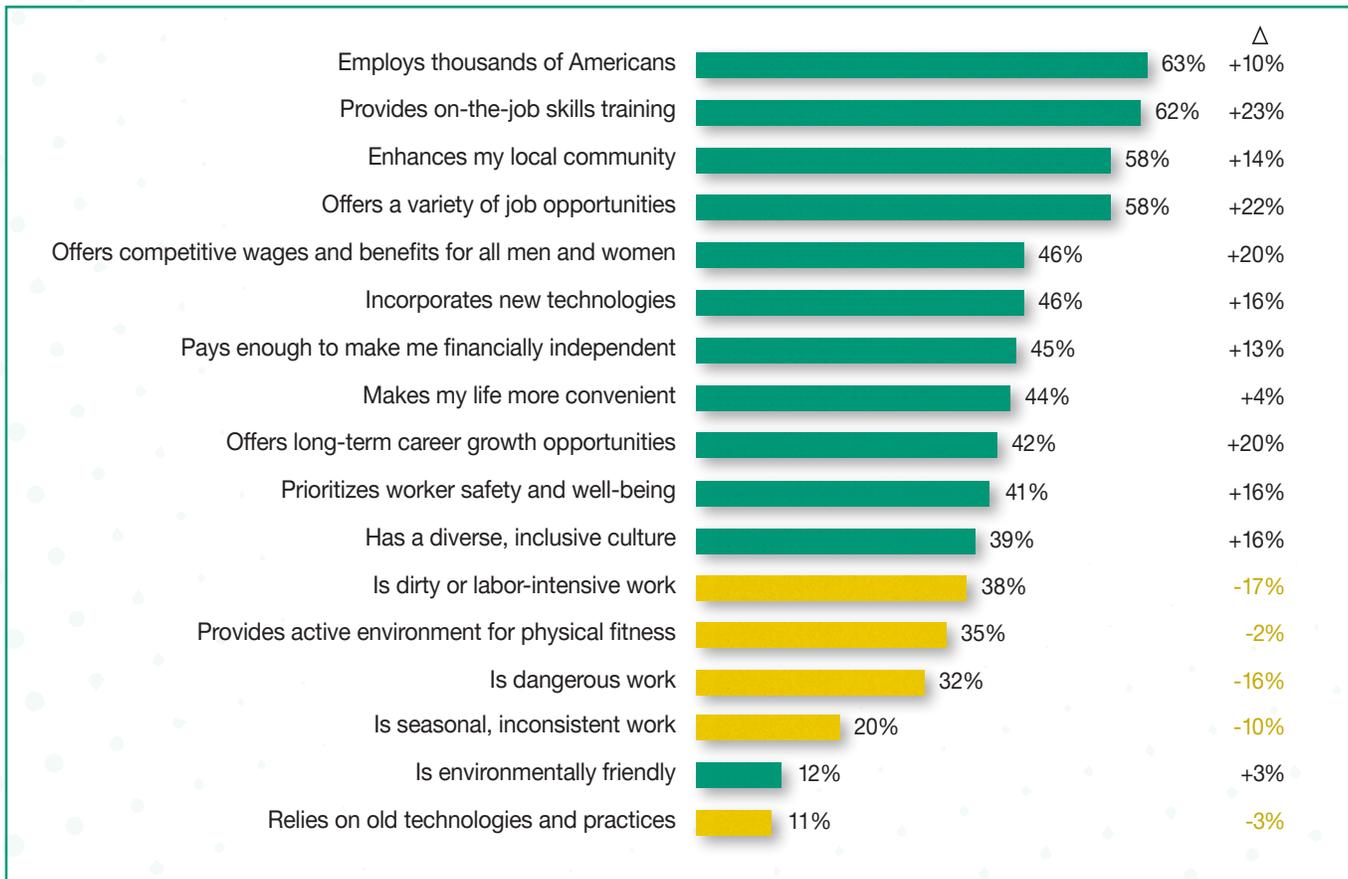


*“When you’re in high school, the colleges come to the school. They come, they work the school, they call us, they set appointments, and they want to come two or three times a year. The industries for the most part don’t.”*

**Denver Educator**

While both audiences were more likely to associate positive things with road construction after reading the messages, the Educator audience saw double-digit percentage decreases in negative attributes (-17% for dirty and labor intensive). In fact, for

Educators, the negative perceptions dropped to the bottom of perceptions — meaning that Educators are the most persuadable audience (Figure 5).



**Figure 5: Educator Change in Attribute Association with the Road Construction Industry after Exposure to Messages (Source: Robust Survey)**

### Teachers are the most valuable resource: Create partnerships to strengthen reception

Teachers are extremely important, trusted resources that younger generations rely upon to learn about job opportunities. While parents will be a big influencer, they are also a major obstacle. They consider themselves gatekeepers to their children’s future, and many of them are skeptical

of the long-term career prospects in the road construction industry or other trades. However, Educators are eager to provide more resources to their students, have tremendous impact on future career pathways, reach an annually renewing cross-section of future workers, are a smaller audience that is easier to reach, and have careers that span decades providing the opportunity to build constructive life-long relationships.

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*“Parents are the ones you’re supposed to trust. You’re supposed to trust your parent or your guardian blindly. So, if they lead us in one way, most people will try to follow.”*

**Boston Educator**

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*“I truly believe that parents like to tell people, ‘my kid goes to BU [Boston University]; my kid goes to Harvard.’ They will put themselves in debt just to say, ‘my kid graduated from BU.’”*

**Boston Educator**

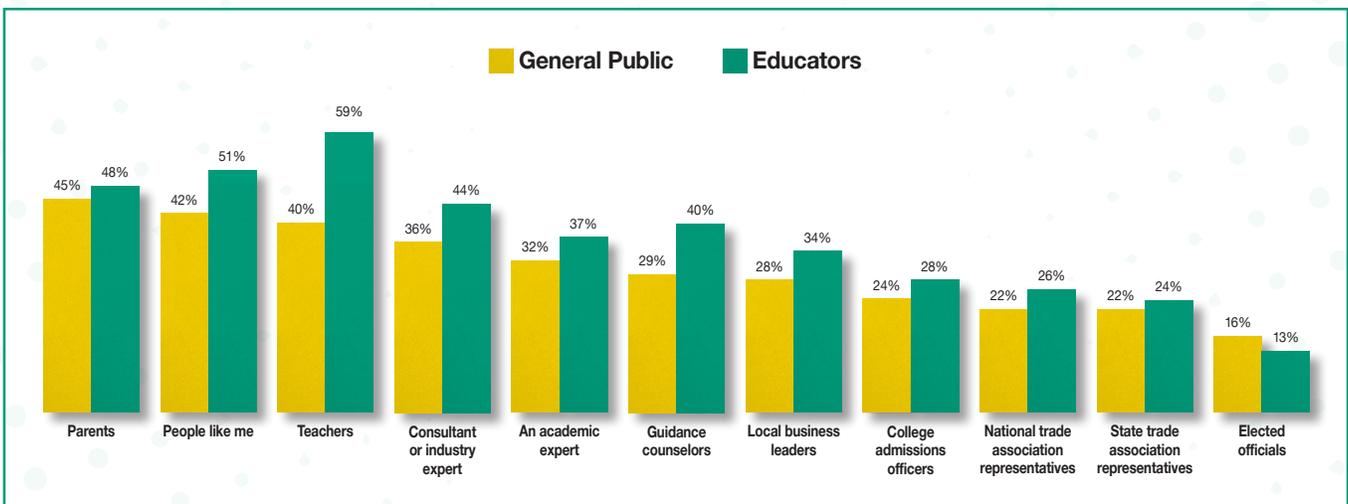
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*“If you tell your parents you are going to be a plumber, they are probably not going to be proud of you.”*

**Columbus General Public**

Both Educators and the General Public answered that they trusted teachers (59%, 40%) and parents (48%, 45%) the most, respectively (Figure 6). This indicates the need to take a broad approach to raise awareness of

opportunities in the road construction industry, but it is also especially important to seek out partnerships with parents and educators to gain trust and enhance messaging.



**Figure 6: Trusted Sources of Information among the General Public and Educators (Source: Robust Survey)**

## Different ages rely on different media: Need to make use of the platforms youths embrace

When asked what mediums people relied upon for information, the general public listed television and online news sites as the main resource (55% for local television; 48% for cable television; and 41% for online news sites). A third of the general

public's respondents highlighted social media as an important information source, but there was significant generational variation in platform preference (Figure 7). Facebook is the most universal platform. However, Generation Z, the generation of workers born between 1997–2012 who are now starting to enter the workforce, rely significantly more on Instagram, Snapchat, and TikTok than other generational cohorts.

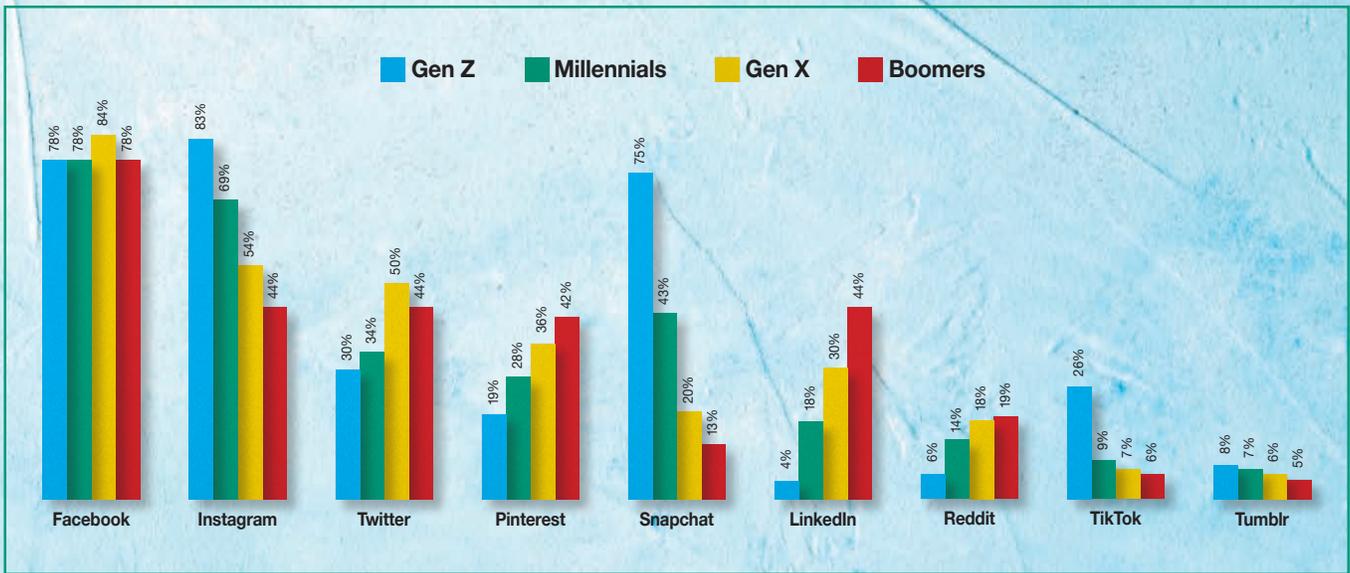


Figure 7: Social Media Platform Use Varies Greatly Among Generations (Source: Robust Survey)



## As part of educating different audiences, the road construction industry needs to discuss growth and opportunity

To create the messages for the robust survey, GollINTEL drew upon information and attitudes gleaned from the focus group participants, who were very clear that they wanted details about the growth pathways and career opportunities within

the industry. As focus group participants learned more about the different roles and responsibilities that exist within the industry, they were more likely to start shifting from the perception that the road construction industry is only about the paving crew on the side of the roadway.

The message that was identified as the most effective, across both the General Public and Educators, was “Growth & Opportunity” (Figure 8).



*“We don’t know what the jobs are, we don’t know what the options are, because we’re all only thinking of the guy with a cone. I think the first step has to be, there’s more than a guy with a cone that goes into this. These are all the other jobs that we need to fill, and we’re going to make this industry real.”*

**Boston General Public**



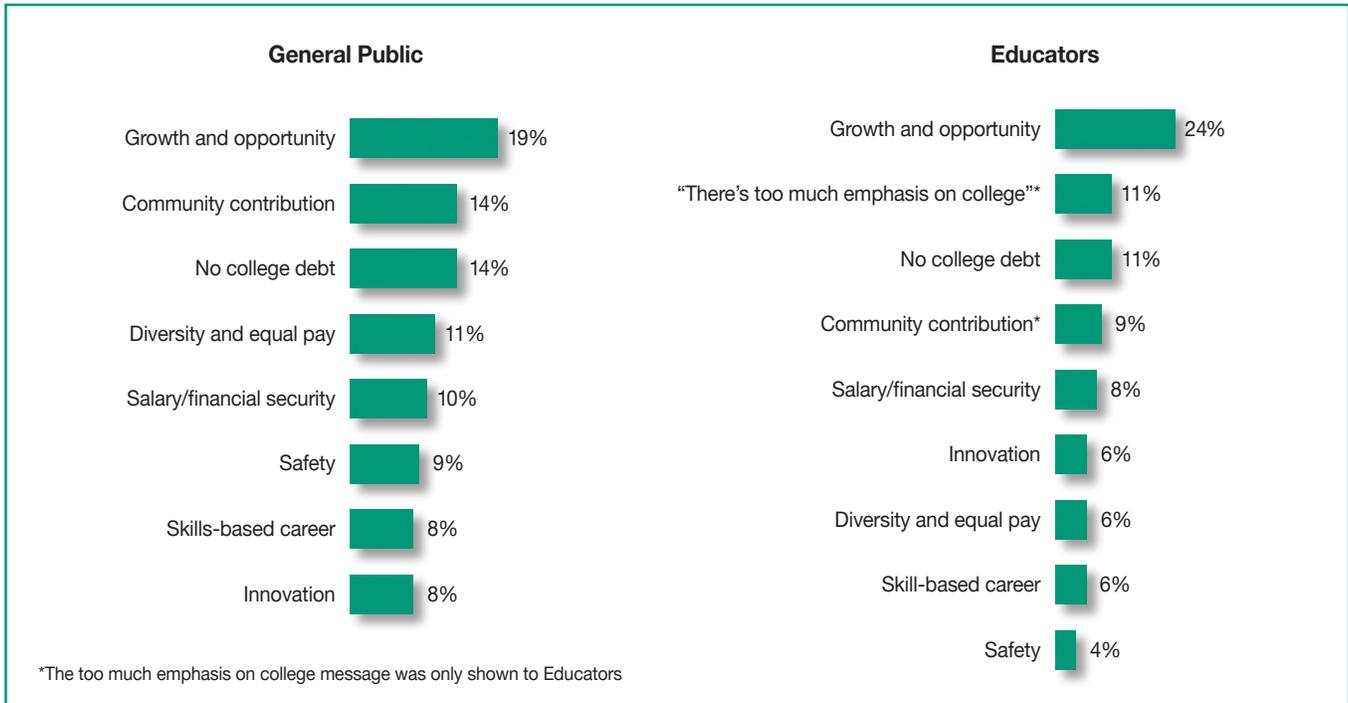
*“I think if it was marketed as the country is going to do a major overhaul of infrastructure and this is where you want to get in, this is where you want to be. Talk about the infrastructure as it is and the logistics of it.”*

**Columbus  
General Public**



*“I think it just comes down to awareness. ... The first thing that comes to our mind, like I said, like everyone else said, was people in hardhats and things on the roads. ... Had I known about, or students in general know about the behind the scenes, I think that would change their mind, or at least make them think and further research what it really consists of.”*

**Phoenix General Public**



**Figure 8: Most Impactful Messages for the General Public and Educators (Source: Robust Survey)**

Interestingly, the General Public and Educators both reacted favorably toward messages around “no college debt.” Specifically, they liked the message: “Working in road construction lets workers start a good career without the burden of college debt. With on-the-job training, workers can earn while they learn, and quickly gain the financial independence to start living the lifestyle they want.” Educators also believe that, “There’s too much emphasis on college in today’s educational system. For some students, the best, most fulfilling career may not require college — or the debt that comes with it. Road construction is a skilled career that can offer new challenges and financial rewards for a lifetime.” Despite this, two-thirds of parents in the survey still felt their child needed to earn a college degree.

Additional messages that resonated well with both the General Public and Educators surrounded “Community Contribution.” There were different messages depending on the audience.

**Community Contribution (General Public)**

*“Road construction allows workers to build something that truly benefits their community and country. Building the roads that connect society makes them a part of something bigger. Their work helps families get to work and school — and ultimately makes their community a better place to live.”*

**Community Contribution (Educators)**

*“Roads are an essential part of everyday life, helping to connect people to work and school. By choosing a career in the road construction industry, students can make positive contributions to their community while earning good wages.”*

By pulling together a messaging architecture around these key themes and messages, the asphalt pavement industry will be able to begin educating each audience about the life-long career opportunities that exist in the road construction industry.

# RECOMMENDATIONS

Based upon the findings of this multifaceted research effort, it is clear there are opportunities to educate and inform the public about the many opportunities for well paying, stable jobs in road construction. However, NAPA and its Contractor Members must employ multiple strategies and approaches to be effective.

## NAPA

- **Create partnerships with parent organizations/groups** to increase knowledge about the industry and showcase the growth, salary benefits, and long-term stability for their children.
- **Messages should have a two-pronged approach:** 1) focus on how the individual will grow and showcase career pathways and development opportunities within the industry, and 2) focus on how working for the industry contributes to the community.

## CONTRACTORS

- **Education efforts should focus on younger generations and educators**, as they are most receptive to what the messages and the industry offers. While parents show some changes in perceptions after messaging, they do not show the largest change.
- **Become more visible in the education system and create partnerships with teachers and school counselors** to increase knowledge about the industry and the opportunities available for their students.

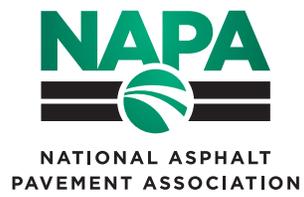
## NAPA AND CONTRACTORS

- **Meet different audiences on their own platforms.** When communicating with younger audiences, use digital and targeted communications that increase awareness of the industry. For educators, we need to work directly with them and play a supportive role for message dissemination.

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